



Valves, controllers and accessories



Pressure vessels and accessories



Cabinets



Brine tanks



Membranes reverse osmosis and Ultra Filtration



Vessels, accessories, rotary pumps



UV sterilizers and spare parts



Filter housings, cartridges and polyphosphate feeders



Ion exchange resins and filtering media



Residential R.O. components

EUROTR**L**[®]

WATER TREATMENT COMPONENTS



EUROTROL is an Italian Family Company, leader in the water treatment components. It operating on the international market, in over 50 countries, as distributor of a wide range of components for water treatment systems, both residential and industrial.

The long experience on this job allows us to know thoroughly the reality and requirements of the market and to meet our Customer's needs with customized solution too.

Our business philosophy is based on service, respect and attention to Customers, swiftness in replying and delivering.

EUROTROL does not manufacture complete water treatment systems, this is our Customer's job: we just sell components and solutions.

Kindness, quality, service: we hope to have the opportunity to show you that these are our peculiarities.

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Valves,
controllers
and accessories



Autotrol Residential Valves Series 368



- For automatic and residential water softening systems;
- Valve body in NSF listed Noryl plastic material;
- Valve rubber compounded for cold water, NSF listed material;
- Operating flow rate $K_v = 3,68$;
- Backwash flow rate = 10 lpm @ Δp 1,72 bar;
- Resin volume range = 5 ÷ 25 litres;
- Available with the following controllers:
 - 604 electronic chronometric;
 - 606 electronic volumetric;
- With European transformer 12/230V – 50Hz;
- Accessories (e.g. upper screen, etc.) not included;
- Programmable chronometric regeneration (calendar override) and consumption statistical data memory.



Characteristics	
Pressure vessel connection	Threaded 2 ½" - 8 UN male
Brine line connection	Threaded ⅜" BSPT male
Distributor tube O. D. diameter	1,05" (= 27 mm)
Distributor tube length above pressure vessel	± ½" (= ± 13 mm)
Weight (valve + controller)	1,7 kg
Operating pressure	1,38 ÷ 8,27 bar
Water temperature	2°C ÷ 38°C

Ref.	Model	Description	Price EURO
AB300	368 / 604	VAL.368/604 3/4" M REFILL.14 INJ E DLFC 0.9 GPM 12/230V 50HZ EURO PLUG	276,50
AB301	368 / 604	VAL.368/604 3/4" M REFILL.14 INJ F DLFC 1.20 GPM 12/230V 50HZ EURO PLUG	276,50
AB302	368 / 604	VAL.368/604 3/4" M REFILL.14 INJ G DLFC 1.60 GPM 12/230V 50HZ EURO PLUG	276,50
AB303	368 / 604	VAL.368/604 3/4" M REFILL.14 INJ H DLFC 2.00 GPM 12/230V 50HZ EURO PLUG	276,50
AB400 (*)	368 / 606	VAL.368/606 3/4" M REFILL.14 INJ E DLFC 0.9 GPM 12/230V 50HZ EURO PLUG	370,02
AB401 (*)	368 / 606	VAL.368/606 3/4" M REFILL.14 INJ F DLFC 1.20 GPM 12/230V 50HZ EURO PLUG	370,02
AB402 (*)	368 / 606	VAL.368/606 3/4" M REFILL.14 INJ G DLFC 1.60 GPM 12/230V 50HZ EURO PLUG	370,02
AB403 (*)	368 / 606	VAL.368/606 3/4" M REFILL.14 INJ H DLFC 2.00 GPM 12/230V 50HZ EURO PLUG	370,02
AB500	368 / 606 B	VAL.368/606 3/4" M REF.14 INJ E DLFC 0.9 GPM 12/230V 50HZ EUR P+ BYPASS	445,70
AB501	368 / 606 B	VAL.368/606 3/4" M REF.14 INJ F DLFC 1.20 GPM 12/230V 50HZ EUR P+ BYPASS	445,70
AB502	368 / 606 B	VAL.368/606 3/4" M REF.14 INJ G DLFC 1.60 GPM 12/230V 50HZ EUR P+ BYPASS	445,70
AB503	368 / 606 B	VAL.368/606 3/4" M REF.14 INJ H DLFC 2.00 GPM 12/230V 50HZ EUR P+ BYPASS	445,70

(*) NOTE: It's not possible to coupling the bypass with a valve shipped without bypass



Autotrol Residential Valves Series 255 with Series 400 Controller



- for automatic and residential water softening systems;
- valve body in NSF listed Noryl plastic material;
- valve rubber compounded for cold water, NSF listed material;
- operating flow rate $K_v = 3,4$;
- backwash flow rate = 22,7 lpm @ Δp 1,72 bar;
- resin volume range = 5 ÷ 75 litres;
- available with series 400 controller (see 01-03-01-EN data sheet):
 - 460tc electronic chronometric;
 - 460i electronic volumetric;
- with European transformer 12/230V – 50Hz, except models with 450i pulse controller which need separate alimentation 24V – 50Hz;
- adapters and manifold kit not included, to order separately: see 01-04-01-EN and 01-04-05-EN data sheets;
- accessories (e.g. upper screen, etc.) not included.



Characteristics	
Pressure vessel connection	Threaded 2 ½" - 8 UN male
Brine line connection	Threaded ¼" NPT male
Distributor tube O. D. diameter	1,05" (= 27 mm)
Distributor tube length above pressure vessel	29 ± 3 mm
Weight (valve + controller)	1,8 kg
Operating pressure	1,38 ÷ 8,27 bar
Water temperature	2°C ÷ 38°C

Ref.	Model	Description	Price EURO
AA310	255 / 460tc	VALV. 255/460tc 59' A-A 07 12/220V 50HZ SYM	320,17
AA311	255 / 460tc	VALV. 255/460tc 59' A-A 08 12/220V 50HZ SYM	320,17
AA313	255 / 460tc	VALV. 255/460tc 118' A-A 08 12/220V 50HZ SYM	320,17
AA315	255 / 460tc	VALV. 255/460tc 118' B-B 10 12/220V 50HZ SYM	320,17

Autotrol Residential Valves Series 255 with Series Logix Controller



- for automatic and residential water softening systems;
- valve body in NSF listed Noryl plastic material;
- valve rubber compounded for cold water, NSF listed material;
- operating flow rate $K_v = 3,4$;
- backwash flow rate = 22,7 lpm @ Δp 1,72 bar;
- resin volume range = 5 ÷ 75 litres;
- available with series LOGIX controller (see 01-03-02-EN data sheet):
 - 740 C electronic chronometric;
 - 760 C electronic volumetric;
 - 742 C electronic chronometric programmable;
 - 762 C electronic volumetric programmable;
- with European transformer 12/230V – 50Hz;
- adapters and manifold kit not included, to order separately:
see 01-04-01-EN and 01-04-05-EN data sheets;
- accessories (e.g. upper screen, etc.) not included.



Characteristics	
Pressure vessel connection	Threaded 2 1/2" - 8 UN male
Brine line connection	Threaded 1/4" NPT male
Distributor tube O. D. diameter	1,05" (= 27 mm)
Distributor tube length above pressure vessel	29 ± 3 mm
Weight (valve + controller)	1,8 kg
Operating pressure	1,38 ÷ 8,27 bar
Water temperature	2°C ÷ 38°C

Ref.	Model	Description	Price EURO
AA203E	255 / 740C	VALV. 255/740C BW 07 INJ F SYMBOL 12/230V 50HZ EURO PLUG	323,79
AA212E	255 / 740C	VALV. 255/740C BW 10 INJ J SYMBOL 12/230V 50HZ EURO PLUG	323,79
AA212EE	255 / 740C	VALV. 255/740C BW 10 INJ J SYMBOL 12/230V 50HZ ENG. PLUG	323,79
AA101E	255 / 742C	VALV. 255/742C .33 F 07 SYMBOL 12/230V 50HZ EURO PLUG	350,93
AA104E	255 / 742C	VALV. 255/742C .33 J 10 SYMBOL 12/230V 50HZ EURO PLUG	350,93
AC203E	255 / 760C	VALV. 255/760C BW 07 INJ F SYMBOL 12/230V 50HZ EURO PLUG	410,79
AC206E	255 / 760C	VALV. 255/760C BW 08 INJ G SYMBOL 12/230V 50HZ EURO PLUG	410,79
AC209E	255 / 760C	VALV. 255/760C BW 09 INJ H SYMBOL 12/230V 50HZ EURO PLUG	410,79
AC212E	255 / 760C	VALV. 255/760C BW 10 INJ J SYMBOL 12/230V 50HZ EURO PLUG	410,79
AC212EE	255 / 760C	VALV. 255/760C BW 10 INJ J SYMBOL 12/230V 50HZ ENG. PLUG	410,79
AC215E	255 / 760C	VALV. 255/760C BW 12 INJ K SYMBOL 12/230V 50HZ EURO PLUG	410,79
AC218E	255 / 760C	VALV. 255/760C BW 13 INJ L SYMBOL 12/230V 50HZ EURO PLUG	410,79
AC221E	255 / 760C	VALV. 255/760C BW 14 INJ L SYMBOL 12/230V 50HZ EURO PLUG	410,79
AC101E	255 / 762C	VALV. 255/762C .33 F 07 SYMBOL 12/230V 50HZ EURO PLUG	447,46
AC102E	255 / 762C	VALV. 255/762C .33 G 08 SYMBOL 12/230V 50HZ EURO PLUG	447,46
AC104E	255 / 762C	VALV. 255/762C .33 J 10 SYMBOL 12/230V 50HZ EURO PLUG	447,46
AC105E	255 / 762C	VALV. 255/762C .33 K 12 SYMBOL 12/230V 50HZ EURO PLUG	447,46
AC106E	255 / 762C	VALV. 255/762C .33 L 13 SYMBOL 12/230V 50HZ EURO PLUG	447,46

Residential Duplex Systems with Autotrol Valves Series 255 Twin and 764 Controller



- for automatic and residential / commercial water softening systems;
- for twin alternating and twin parallel systems;
- consisting of n.2 valves (one “main” and another one “secondary”) with 764 electronic volumetric (see 01-03-02-EN data sheet);
- with European transformer 12/230V – 50Hz;
- valve body in NSF listed Noryl plastic material;
- valve rubber compounded for cold water, NSF listed material;
- operating flow rate for each tank $K_v = 3,4$;
- backwash flow rate for each tank = 22,7 lpm @ Δp 1,72 bar;
- resin volume range for each tank = 5 ÷ 75 litres;
- interconnection kit (REF. AV119, see 01-04-01-EN data sheet) and accessories (e.g. upper screen, etc.) not included, to order separately: see 01-04-05-EN data sheet



Characteristics	
Pressure vessel connection	Threaded 2 ½" - 8 UN male
Drain line connection	Threaded ½" male, included in interconnection kit
Brine line connection	Threaded ¼" NPT male
Distributor tube O. D. diameter	1,05" (= 27 mm)
Distributor tube length above pressure vessel	29 ± 3 mm
Weight (valve + controller)	1,8 kg
Operating pressure	1,38 ÷ 8,27 bar
Water temperature	2°C ÷ 38°C

Ref.	Model	Description	Price EURO
AF054E	255 / 764 TWIN	VALV. 255/764 TWIN BW 10 INJ J SYMBOL 12/230V 50HZ EURO PLUG	732,17
AF056E	255 / 764 TWIN	VALV. 255/764 TWIN BW 13 INJ L SYMBOL 12/230V 50HZ EURO PLUG	732,17

Autotrol Residential Valves Series 263 with 460tc Controller



- for automatic and residential water filtration systems;
- with 460tc electronic chronometric controller (see 01-03-01-EN data sheet);
- valve body in NSF listed Noryl plastic material;
- valve rubber compounded for cold water, NSF listed material;
- operating flow rate $K_v = 5,6$;
- backwash flow rate = 75,7 lpm @ Δp 1,72 bar;
- with European transformer 12/230V – 50Hz;
- adapters and manifold kit not included, to order separately:
see 01-04-02-EN and 01-04-05-EN data sheets;
- accessories (ex. upper screen, etc.) not included.



Characteristics	
Pressure vessel connection	Threaded 2 1/2" - 8 UN male
Drain line connection	Threaded 3/4" NPT, male
Distributor tube O. D. diameter	1,05" (= 27 mm)
Distributor tube length above pressure vessel	29 ± 3 mm
Weight (valve + controller)	2,00 kg
Pressure vessel connection	Threaded 2 1/2" - 8 UN male
Operating pressure	1,38 ÷ 8,27 bar
Water temperature	2°C ÷ 38°C

Ref.	Model	Description	Price EURO
AL060	263 / 460tc	VALV. 263/460tc 118' BW 12 - 12V.50 HZ SYM	362,57

Autotrol Residential Valves Series 268 with Series Logix Controller



- for automatic and residential water softening systems;
- valve body in NSF listed Noryl plastic material;
- valve rubber compounded for cold water, NSF listed material;
- operating flow rate $K_v = 5,6$;
- backwash flow rate = 75,7 lpm @ Δp 1,72 bar;
- resin volume range = 30 ÷ 125 litres;
- available with series LOGIX controller (see 01-03-02-EN data sheet):
 - 740 C electronic chronometric;
 - 760 C electronic volumetric;
 - 742 C electronic chronometric programmable;
 - 762 C electronic volumetric programmable;
- with European transformer 12/230V – 50Hz;
- adapters and manifold kit not included, to order separately:
see 01-04-02-EN and 01-04-05-EN data sheets;
- accessories (e.g. upper screen, etc.) not included;
- for 268FA/742 and 268FA/762 models see 01-01-10-EN data sheet



Characteristics	
Pressure vessel connection	Threaded 2 1/2" - 8 UN male
Drain line connection	Threaded 3/4" NPT, male
Brine line connection	Threaded 3/8" NPT, male
Distributor tube O. D. diameter	1,05" (= 27 mm)
Distributor tube length above pressure vessel	1/2" ± 1/2" (= 13 ± 13 mm)
Weight (valve + controller)	2,42 kg
Operating pressure	1,38 ÷ 8,27 bar
Water temperature	2°C ÷ 38°C

Ref.	Model	Description	Price EURO
AM218E	268 / 740C	VALV. 268/740C BW 13 INJ L SYMBOL 12/230V 50HZ EURO PLUG	356,75
AM061E	268 / 742C	VALV. 268/742C .33 J 10 SYMBOL 12/230V 50HZ EURO PLUG	384,97
AM062E	268 / 742C	VALV. 268/742C .33 K 12 SYMBOL 12/230V 50HZ EURO PLUG	384,97
AP221E	268 / 760C	VALV. 268/760C BW 14 INJ L SYMBOL 12/230V 50HZ EURO PLUG	480,20
AP042E	268 / 762C	VALV. 268/762C .33 K 12 SYMBOL 12/230V 50HZ EURO PLUG	517,88
AP044E	268 / 762C	VALV. 268/762C .33 L 14 SYMBOL 12/230V 50HZ EURO PLUG	517,88
AP046E	268 / 762C	VALV. 268/762C .33 M 14 SYMBOL 12/230V 50HZ EURO PLUG	517,88

Autotrol Residential Valves Series 263 with Series Logix Controller



- for automatic and residential water filtration systems;
- valve body in NSF listed Noryl plastic material;
- valve rubber compounded for cold water, NSF listed material;
- operating flow rate Kv = 5,6;
- backwash flow rate = 75,7 lpm @ Δp 1,72 bar;
- available with series LOGIX controller (see 01-03-02-EN data sheet):
 - 740 F electronic chronometric;
 - 760 F electronic volumetric;
 - 742 F electronic chronometric programmable;
 - 762 F electronic volumetric programmable;
- with European transformer 12/230V – 50Hz;
- adapters and manifold kit not included, to order separately: see 01-04-02-EN and 01-04-05-EN data sheets;
- accessories (e.g. upper screen, etc.) not included.



Characteristics	
Pressure vessel connection	Threaded 2 ½" - 8 UN male
Drain line connection	Threaded ¾" NPT, male
Distributor tube O. D. diameter	1,05" (= 27 mm)
Distributor tube length above pressure vessel	½" ± ½" (= 13 ± 13 mm)
Weight (valve + controller)	2,42 kg
Pressure vessel connection	Threaded 2 ½" - 8 UN male
Operating pressure	1,38 ÷ 8,27 bar
Water temperature	2°C ÷ 38°C

Ref.	Model	Description	Price EURO
AL209E	263 / 740F	VALV. 263/740F BW 13 INJ H SYMBOL 12/230V 50HZ EURO PLUG	356,75
AL215E-00	263 / 740F	VALV. 263/740F NO BW INJ K SYMBOL 12/230V 50HZ EURO PLUG	335,92
AL073E	263 / 742F	VALV. 263/742F BW 14 INJ L SYMBOL 12/230V 50HZ EURO PLUG	384,97
AL075E-00	263 / 742F	VALV. 263/742F NO BW INJ L SYMBOL 12/230V 50HZ EURO PLUG	364,14

Autotrol Residential Valves Series 268FA with Series Logix Controller



- for automatic and residential water 5 cycles iron removal systems;
- valve body in NSF listed Noryl plastic material;
- valve rubber compounded for cold water, NSF listed material;
- operating flow rate Kv = 5,6;
- backwash flow rate = 75,7 lpm @ Δp 1,72 bar;
- available with series LOGIX controller (see 01-03-02-EN data sheet):
 - 742 F electronic chronometric programmable;
 - 762 F electronic volumetric programmable;
- with European transformer 12/230V – 50Hz;
- adapters and manifold kit not included, to order separately:
see 01-04-02-EN and 01-04-05-EN data sheets;
- accessories (e.g. upper screen, etc.) not included.



Characteristics

Pressure vessel connection	Threaded 2 1/2" - 8 UN male
Drain line connection	Threaded 3/4" NPT, male
Distributor tube O. D. diameter	1,05" (= 27 mm)
Distributor tube length above pressure vessel	1/2" \pm 1/2" (= 13 \pm 13 mm)
Weight (valve + controller)	2,42 kg
Pressure vessel connection	Threaded 2 1/2" - 8 UN male
Operating pressure	1,38 ÷ 8,27 bar
Water temperature	2°C ÷ 38°C

Ref.	Model	Description	Price EURO
AQ066E	268FA / 742	VALV. 268FA/742 BW 10 GPM (13") INJ L SYMBOL 12/230V 50HZ EURO PLUG	384,97

Autotrol Residential Valves Series 278 with Series Logix Controller



- for automatic water softening systems with high resin volume;
- valve body in NSF listed Noryl plastic material;
- valve rubber compounded for cold water, NSF listed material;
- operating flow rate $K_v = 5,6$;
- backwash flow rate = 75,7 lpm @ Δp 1,72 bar;
- resin volume range = 45 ÷ 225 litres;
- available with series LOGIX controller (see 01-03-02-EN data sheet):
 - 742 C electronic chronometric programmable;
 - 762 C electronic volumetric programmable;
- with European transformer 12/230V – 50Hz;
- adapters and manifold kit not included, to order separately: see 01-04-02-EN and 01-04-05-EN data sheets;
- accessories (e.g. upper screen, etc.) not included



Characteristics	
Pressure vessel connection	Threaded 2 ½" - 8 UN male
Drain line connection	Threaded ¾" NPT, male
Brine line connection	Threaded ⅜" NPT, male
Distributor tube O. D. diameter	1,05" (= 27 mm)
Distributor tube length above pressure vessel	½" ± ½" (= 13 ± 13 mm)
Weight (valve + controller)	2,42 kg
Operating pressure	1,38 ÷ 8,27 bar
Water temperature	2°C ÷ 38°C

Ref.	Model	Description	Price EURO
AR104E	278 / 742C	VALV. 278/742C 1.3 M 14 SYMBOL 12/230V 50HZ EURO PLUG	450,76
AR105E	278 / 742C	VALV. 278/742C 1.3 N 16 (7 GPM) SYMBOL 12/230V 50HZ EURO PLUG	450,76
AR106E	278 / 742C	VALV. 278/742C 1.3 Q 18 (9 GPM) SYMBOL 12/230V 50HZ EURO PLUG	450,76
AR114E	278 / 762C	VALV. 278/762C 1.3 M 14 SYMBOL 12/230V 50HZ EURO PLUG	583,89
AR115E	278 / 762C	VALV. 278/762C 1.3 N 16 (7 GPM) SYMBOL 12/230V 50HZ EURO PLUG	583,89
AR116E	278 / 762C	VALV. 278/762C 1.3 Q 18 (9 GPM) SYMBOL 12/230V 50HZ EURO PLUG	583,89
AR117E	278 / 762C	VALV. 278/762C 1.3 R 21 (12 GPM) SYMBOL 12/230V 50HZ EURO PLUG	583,89

Residential Duplex Systems with Autotrol Residential Valves Series 278 Twin and 764 Controller



- for automatic and residential / commercial water softening systems;
- for twin alternating and twin parallel systems;
- consisting of n.2 valves (one “main” and another one “secondary”) with 764 electronic volumetric (see 01-03-02-EN data sheet);
- with European transformer 12/230V – 50Hz;
- valve body in NSF listed Noryl plastic material;
- valve rubber compounded for cold water, NSF listed material;
- operating flow rate for each tank Kv = 5,6;
- backwash flow rate for each tank = 75,7 lpm @ Δp 1,72 bar;
- resin volume range for each tank = 45 ÷ 225 litres;
- interconnection kit (see 01-04-03-EN data sheet) and accessories (e.g. upper screen, etc.) not included, to order separately: see 01-04-02-EN and 01-04-05-EN data sheets.



Characteristics	
Pressure vessel connection	Threaded 2 ½” - 8 UN male
Drain line connection	Threaded ¾” NPT, male
Brine line connection	Threaded ⅜” NPT, male
Distributor tube O. D. diameter	1,05” (= 27 mm)
Distributor tube length above pressure vessel	½” ± ½” (= 13 ± 13 mm)
Weight (valve + controller)	2,42 kg
Operating pressure	1,38 ÷ 8,27 bar
Water temperature	2°C ÷ 38°C

Ref.	Model	Description	Price EURO
AN083E	278 / 764 TWIN	VALV. 278/764 TWIN 1.3 M 14 SYMBOL 12/230V 50HZ EURO PLUG	995,79
AN084E	278 / 764 TWIN	VALV. 278/764 TWIN 1.3 N 16 (7 GPM) SYMBOL 12/230V 50HZ EURO PLUG	995,79
AN085E	278 / 764 TWIN	VALV. 278/764 TWIN 1.3 Q 18 (9 GPM) SYMBOL 12/230V 50HZ EURO PLUG	995,79
AN086E	278 / 764 TWIN	VALV. 278/764 TWIN 1.3 R 21 (12 GPM) SYMBOL 12/230V 50HZ EURO PLUG	995,79

Autotrol Residential Valves Series 278 with 764 Controller for Multitank Systems



- for automatic and residential / commercial water softening systems;
- with electronic volumetric 764 controller (see 01-03-02-EN data sheet);
- for parallel systems;
- valve body in NSF listed Noryl plastic material;
- valve rubber compounded for cold water, NSF listed material;
- operating flow rate for each tank $K_v = 5,6$;
- backwash flow rate for each tank = 75,7 lpm @ Δp 1,72 bar;
- resin volume range for each tank = 45 ÷ 225 litres;
- with European transformer 12/230V – 50Hz for each valve;
- adapters and manifold kit not included, to order separately:
see 01-04-02-EN and 01-04-05-EN data sheets;
- accessories (e.g. upper screen, etc.) not included.



Characteristics

Pressure vessel connection	Threaded 2 ½" - 8 UN male
Conessione linea di scarico	Threaded ¾" NPT, male
Brine line connection	Threaded ⅜" NPT, male
Distributor tube O. D. diameter	1,05" (= 27 mm)
Distributor tube length above pressure vessel	½" ± ½" (= 13 ± 13 mm)
Weight (valve + controller)	2,42 kg
Operating pressure	1,38 ÷ 8,27 bar
Water temperature	2°C ÷ 38°C

Ref.	Model	Description	Price EURO
AN103E	278 / 764 SIN	VALV. 278/764L 1.3 M 14 SYMBOL 12/230V 50HZ EURO PLUG	605,64

Autotrol Industrial Softening Magnum CV 1,5" Valves with Series Logix Controller



- for automatic and industrial water softening systems;
- valve body in NSF listed Noryl plastic material with 304 Stainless Steel tank adapter (for heavy applications, like iron removal using $KMnO_4$ or decarbonisation using HCl, the Noryl tank adapter is available on request);
- o-rings in EPDM material;
- operating flow rate $K_v = 17$;
- backwash flow rate = 337 lpm @ Δp 1,72 bar;
- resin volume range = 100 ÷ 700 litres;
- available with series LOGIX controller (see 01-03-02-EN data sheet):
 - 742 electronic chronometric programmable;
 - 762 electronic volumetric programmable;
- with European transformer 12/230V – 50/60 Hz;
- available with or without by-pass;
- adapters, manifold kit and accessories (e.g. upper screen, etc.) not included, to order separately: see 01-04-04-EN and 01-04-05-EN data sheets;
- brine tank refill system doesn't need a brine valve, but just an air-check;
- PVC 2" side mounting adapter available on demand (REF. CC084, see 01-04-04-EN data sheet).



Characteristics	
Pressure vessel connection	Threaded 4" - 8 UN male
Drain line connection	1,5" brass – NPT/BSPT male D50 CPVC to glue
Brine line connection	Threaded ¾" NPT male
Distributor tube O. D. diameter	1,5" (= 48,3 mm)
Pilot drain and auxiliary hydraulic out	¼" tube fitting
Distributor tube length above pressure vessel	16 ± 3 mm
Weight (valve + controller)	12,3 kg
Operating pressure	1,72 ÷ 6,90 bar
Water temperature	1°C ÷ 36°C

Ref.	Model	Description	Price EURO
CA201E	298 CV/742	MAGNUM 1.5" 298/742 16" (6 GPM) HWB SYMBOL 12/230V 50HZ EURO PLUG	986,46
CA205E	298 CV/742	MAGNUM 1.5" 298/742 30" (20 GPM) HWB SYMBOL 12/230V 50HZ EURO PLUG	986,46
CA215E	298 CV/742	MAGNUM 1.5" 298/742 30" (20 GPM) NHB SYMBOL 12/230V 50HZ EURO PLUG	1.047,53
CA216E	298 CV/742	MAGNUM 1.5" 298/742 36" (30 GPM) NHB SYMBOL 12/230V 50HZ EURO PLUG	1.047,53
CA221E	298 CV/762	MAGNUM 1.5" 298/762 16" (6 GPM) HWB SYMBOL 12/230V 50HZ EURO PLUG	1.339,59
CA222E	298 CV/762	MAGNUM 1.5" 298/762 18" (8 GPM) HWB SYMBOL 12/230V 50HZ EURO PLUG	1.339,59
CA236E	298 CV/762	MAGNUM 1.5" 298/762 36" (30 GPM) NHB SYMBOL 12/230V 50HZ EURO PLUG	1.419,45

Autotrol Industrial Magnum CV 1,5" Valves for Filtration with Series Logix Controller



- for automatic and industrial water filtration systems;
- valve body in NSF listed Noryl plastic material with 304 Stainless Steel tank adapter (for heavy applications, like sea water, the Noryl tank adapter is available on request);
- o-rings in EPDM material;
- operating flow rate Kv = 17;
- backwash flow rate = 337 lpm @ Δp 1,72 bar;
- available with series LOGIX controller (see 01-03-02-EN data sheet):
 - 742 F electronic chronometric programmable;
 - 762 F electronic volumetric programmable;
- with European transformer 12/230V – 50/60 Hz;
- available with or without by-pass;
- adapters, manifold kit and accessories (e.g. upper screen, etc.) not included, to order separately: see 01-04-04-EN and 01-04-05-EN data sheets;
- PVC 2" side mounting adapter available on demand (REF. CC084, see 01-04-04-EN data sheet).



Characteristics	
Pressure vessel connection	Threaded 4" - 8 UN male
Drain line connection	1,5" brass – NPT/BSPT male D50 CPVC to glue
Brine line connection	Threaded ¾" NPT male
Distributor tube O. D. diameter	1,5" (= 48,3 mm)
Pilot drain and auxiliary hydraulic out	¼" tube fitting
Distributor tube length above pressure vessel	16 ± 3 mm
Weight (valve + controller)	12,3 kg
Operating pressure	1,72 ÷ 6,90 bar
Water temperature	1°C ÷ 36°C

Ref.	Model	Description	Price EURO
CA240E	293 CV/742F	MAGNUM 1.5" 293/742F (5 GPM) UWB SYMBOL 12/230V 50HZ EURO PLUG	986,46
CA241E	293 CV/742F	MAGNUM 1.5" 293/742F (5 GPM) NUB SYMBOL 12/230V 50HZ EURO PLUG	1.047,53

Autotrol Industrial Softening Magnum IT 2" Valves with Series Logix Controller



- for automatic and industrial water softening systems;
- valve body in NSF listed Noryl plastic material with 304 Stainless Steel tank adapter (for heavy applications, like iron removal using $KMnO_4$ or decarbonisation using HCl, the Noryl tank adapter is available on request);
- o-rings in EPDM material;
- operating flow rate $K_v = 17$;
- backwash flow rate = 337 lpm @ Δp 1,72 bar;
- resin volume range = 100 ÷ 700 litres;
- available with series LOGIX controller (see 01-03-02-EN data sheet):
 - 742 electronic chronometric programmable;
 - 762 electronic volumetric programmable;
- with European transformer 12/230V – 50/60 Hz;
- available with or without by-pass;
- adapters, manifold kit and accessories (e.g. upper screen, etc.) not included, to order separately: see 01-04-04-EN and 01-04-05-EN data sheets;
- brine tank refill system doesn't need a brine valve, but just an air-check;
- PVC 2" side mounting adapter available on demand (REF. CC084, see 01-04-04-EN data sheet).



Characteristics	
Pressure vessel connection	Threaded 4" - 8 UN male
Drain line connection	1,5" brass – NPT/BSPT male D50 CPVC to glue
Brine line connection	Threaded 3/4" NPT male
Distributor tube O. D. diameter	1,5" (= 48,3 mm)
Pilot drain and auxiliary hydraulic out	1/4" tube fitting
Distributor tube length above pressure vessel	16 ± 3 mm
Weight (valve + controller)	12,3 kg
Operating pressure	1,72 ÷ 6,90 bar
Water temperature	1°C ÷ 36°C

Ref.	Model	Description	Price EURO
CB202E	298/742	MAGNUM IT 2" 298/742 18" (8 GPM) HWB SYMBOL 12/230V 50HZ EURO PLUG	1.077,08
CB221E	298/762	MAGNUM IT 2" 298/762 16" (6 GPM) HWB SYMBOL 12/230V 50HZ EURO PLUG	1.450,19
CB222E	298/762	MAGNUM IT 2" 298/762 18" (8 GPM) HWB SYMBOL 12/230V 50HZ EURO PLUG	1.450,19
CB223E	298/762	MAGNUM IT 2" 298/762 21" (10 GPM) HWB SYMBOL 12/230V 50HZ EURO PLUG	1.450,19
CB224E	298/762	MAGNUM IT 2" 298/762 24" (14 GPM) HWB SYMBOL 12/230V 50HZ EURO PLUG	1.450,19
CB226E	298/762	MAGNUM IT 2" 298/762 36" (30 GPM) HWB SYMBOL 12/230V 50HZ EURO PLUG	1.450,19
CB234E	298/762	MAGNUM IT 2" 298/762 24" (14 GPM) NHB SYMBOL 12/230V 50HZ EURO PLUG	1.530,16
CB236E	298/762	MAGNUM IT 2" 298/762 36" (30 GPM) NHB SYMBOL 12/230V 50HZ EURO PLUG	1.530,16

Autotrol Industrial Magnum IT 2" Valves for Filtration with Series Logix Controller



- for automatic and industrial water filtration systems;
- valve body in NSF listed Noryl plastic material with 304 Stainless Steel tank adapter (for heavy applications, like sea water, the Noryl tank adapter is available on request);
- o-rings in EPDM material;
- operating flow rate Kv = 17;
- backwash flow rate = 337 lpm @ Δp 1,72 bar;
- available with series LOGIX controller (see 01-03-02-EN data sheet):
 - 742 F electronic chronometric programmable;
 - 762 F electronic volumetric programmable;
- with European transformer 12/230V – 50/60 Hz;
- available with or without by-pass;
- adapters, manifold kit and accessories (e.g. upper screen, etc.) not included, to order separately: see 01-04-04-EN and 01-04-05-EN data sheets;
- PVC 2" side mounting adapter available on demand (REF. CC084, see 01-04-04-EN data sheet).



Characteristics	
Pressure vessel connection	Threaded 4" - 8 UN male
Drain line connection	1,5" brass – NPT/BSPT male D50 CPVC to glue
Brine line connection	Threaded 3/4" NPT male
Distributor tube O. D. diameter	1,5" (= 48,3 mm)
Pilot drain and auxiliary hydraulic out	1/4" tube fitting
Distributor tube length above pressure vessel	16 ± 3 mm
Weight (valve + controller)	12,3 kg
Operating pressure	1,72 ÷ 6,90 bar
Water temperature	1°C ÷ 36°C

Ref.	Model	Description	Price EURO
CB240E	293/742F	MAGNUM IT 2" 293/742F (5 GPM) UWB SYMBOL 12/230V 50HZ EURO PLUG	1.077,08
CB241E	293/742F	MAGNUM IT 2" 293/742F (5 GPM) NUB SYMBOL 12/230V 50HZ EURO PLUG	1.158,24
CB245E	293/762F	MAGNUM IT 2" 293/762F (5 GPM) NUB SYMBOL 12/230V 50HZ EURO PLUG	1.530,16

Industrial Duplex Systems with Autotrol Softening Magnum IT 2" Valves and 764 Controller



- for automatic and industrial water softening systems;
- for twin alternating and twin parallel systems;
- consisting of n.2 valves (one "main" and another one "secondary") with 764 electronic volumetric (see 01-03-02-EN data sheet);
- valve body in NSF listed Noryl plastic material with 304 Stainless Steel tank adapter (for heavy applications, like iron removal using $KMnO_4$ or decarbonisation using HCl, the Noryl tank adapter is available on request);
- o-rings in EPDM material;
- operating flow rate for each tank $K_v = 17$;
- backwash flow rate for each tank = 337 lpm @ Δp 1,72 bar;
- resin volume range for each tank = 100 ÷ 700 litres;
- with European transformer 12/230V – 50/60 Hz;
- available with or without by-pass;
- adapters, manifold kit and accessories (e.g. upper screen, etc.) not included, to order separately: see 01-04-04-EN and 1-04-05-EN data sheets;
- brine tank refill system doesn't need a brine valve, but just an air-check;
- PVC 2" side mounting adapter available on demand (REF. CC084, see 01-04-04-EN data sheet);
- interconnection not included.



Characteristics	
Pressure vessel connection	Threaded 4" - 8 UN male
Drain line connection	1,5" brass – NPT/BSPT male D50 CPVC to glue
Brine line connection	Threaded 3/4" NPT male
Distributor tube O. D. diameter	1,5" (= 48,3 mm)
Pilot drain and auxiliary hydraulic out	1/4" tube fitting
Distributor tube length above pressure vessel	16 ± 3 mm
Weight (valve + controller)	12,3 kg
Operating pressure	1,72 ÷ 6,90 bar
Water temperature	1°C ÷ 36°C

Ref.	Model	Description	Price EURO
CB250E	298 764 TWIN	MAGNUM 298 2" MIT-TWS-764-14" (5 GPM) NHB SYMBOL 12/230V 50HZ EURO PLUG	3.036,85
CB251E	298 764 TWIN	MAGNUM 298 2" MIT-TWS-764-16" (6 GPM) NHB SYMBOL 12/230V 50HZ EURO PLUG	3.036,85
CB252E	298 764 TWIN	MAGNUM 298 2" MIT-TWS-764-18" (8 GPM) NHB SYMBOL 12/230V 50HZ EURO PLUG	3.036,85
CB253E	298 764 TWIN	MAGNUM 298 2" MIT-TWS-764-21" (10 GPM) NHB SYMBOL 12/230V 50HZ EURO PLUG	3.036,85
CB254E	298 764 TWIN	MAGNUM 298 2" MIT-TWS-764-24" (14 GPM) NHB SYMBOL 12/230V 50HZ EURO PLUG	3.036,85
CB255E	298 764 TWIN	MAGNUM 298 2" MIT-TWS-764-30" (20 GPM) NHB SYMBOL 12/230V 50HZ EURO PLUG	3.036,85
CB256E	298 764 TWIN	MAGNUM 298 2" MIT-TWS-764-36" (30 GPM) NHB SYMBOL 12/230V 50HZ EURO PLUG	3.036,85

Autotrol Industrial Softening Magnum IT 2" Valves with 764 Controller for Multitank Systems



- for automatic and industrial water softening systems;
- with electronic volumetric 764 controller (see 01-03-02-EN data sheet);
- for parallel systems;
- valve body in NSF listed Noryl plastic material with 304 Stainless Steel tank adapter (for heavy applications, like iron removal using $KMnO_4$ or decarbonisation using HCl, the Noryl tank adapter is available on request);
- o-rings in EPDM material;
- operating flow rate for each tank $K_v = 17$;
- backwash flow rate for each tank = 337 lpm @ Δp 1,72 bar;
- resin volume range for each tank = 100 ÷ 700 litres;
- with European transformer 12/230V – 50/60 Hz for each valve;
- available with or without by-pass;
- adapters, manifold kit and accessories (e.g. upper screen, etc.) not included, to order separately: see 01-04-04-EN and 01-04-05-EN data sheets;
- brine tank refill system doesn't need a brine valve, but just an air-check;
- PVC 2" side mounting adapter available on demand (REF. CC084, see 01-04-04-EN data sheet);
- interconnection not included.



Characteristics	
Pressure vessel connection	Threaded 4" - 8 UN male
Drain line connection	1,5" brass – NPT/BSPT male D50 CPVC to glue
Brine line connection	Threaded ¾" NPT male
Distributor tube O. D. diameter	1,5" (= 48,3 mm)
Pilot drain and auxiliary hydraulic out	¼" tube fitting
Distributor tube length above pressure vessel	16 ± 3 mm
Weight (valve + controller)	12,3 kg
Operating pressure	1,72 ÷ 6,90 bar
Water temperature	1°C ÷ 36°C

Ref.	Model	Description	Price EURO
CB266E	298 764 L	MAGNUM 298 2" MIT-SN-764-36" (30 GPM) NHB SYMBOL 12/230V 50HZ EURO PLUG	1.551,36

Series 400 Controllers for Autotrol Valves Series 255 - 263 – 268



440i



460tc / 460i



Controllers for softeners characteristics			
Characteristic	440i	460tc	460i
Controller type	Electromechanical	Electronic	Electronic
Regeneration mode	Chronometric: 7 or 6 days	Chronometric	Volumetric
Regeneration frequency	Daily	Daily	Daily
Regeneration cycle length	59' or 118'	59' or 118'	59' or 118'
Cycle length	Fixed not modifiable	Fixed not modifiable	Fixed not modifiable
Salt setting	Pounds of salt	Pounds of salt	Pounds of salt

Controllers for filtration characteristics		
Characteristic	440i	460tc
Controller type	Electromechanical	Electronic
Backwash mode	Chronometric: 7 or 6 days	Chronometric
Backwash frequency	Daily	Daily
Filter cycle length	Fixed not modifiable	Fixed not modifiable

Logix Controllers for Autotrol Valves

Series 255 – 263 – 268 – 273 – 278 – 293 – 298



Controllers for softeners characteristics

CHARACT.	740 C	760 C	742 C	762 C	764
Controller type	Electronic	Electronic	Electronic	Electronic	Electronic
Regeneration mode	Chronometric	Volumetric	Chronometric	Volumetric	Volumetric
Regeneration frequency	Fixed day or 0,5 ÷ 99 days calendar override	0,5 ÷ 99 days calendar override	Fixed day or 0,5 ÷ 99 days calendar override	0,5 ÷ 99 days calendar override	0,5 ÷ 99 days calendar override
Adjustable regeneration time	Yes	Yes	Yes	Yes	Yes
Cycle length	Computer calculated	Computer calculated	Fully programmable	Fully programmable	Fully programmable
Salt setting	3 options	3 options	Fully adjustable	Fully adjustable	Fully adjustable

Controllers for filtration characteristics

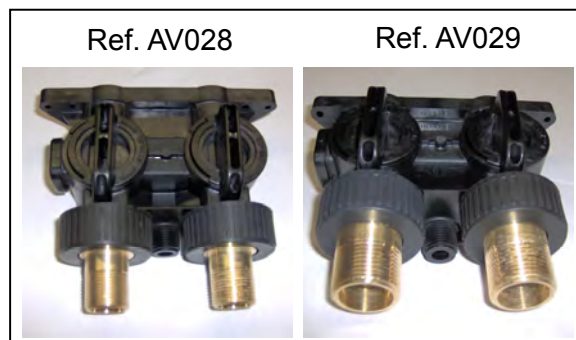
CHARACT.	740 F	760 F	742 F	762 F	764 F
Controller type	Electronic	Electronic	Electronic	Electronic	Electronic
Backwash mode	Chronometric	Volumetric	Chronometric	Volumetric	Volumetric
Backwash frequency	Fixed day or 0,5 ÷ 99 days calendar override	0,5 ÷ 99 days calendar override	Fixed day or 0,5 ÷ 99 days calendar override	0,5 ÷ 99 days calendar override	0,5 ÷ 99 days calendar override
Adjustable cycle time	Programmable backwash time	Programmable backwash time	Fully programmable	Fully programmable	Fully programmable
Filter cycle length	Computer calculated	Computer calculated	Fully adjustable	Fully adjustable	Fully adjustable



256 bypass kits

- with gaskets, brass adapters, screws and nuts.

REF.	IN/OUT CONNECTION	DRAIN LINE	PRICE EURO
AV028	3/4"	1/2"	58,11
AV029	1"	1/2"	58,75



Female manifold kits

- with o-rings, screws and nuts.

REF.	IN/OUT CONNECTION	DRAIN LINE	MATERIAL	PRICE EURO
AV013	3/4"	1/2"	NORYL	13,85
AV010	3/4"	3/8"	BRASS	22,93
AV011	1"	1/2"	BRASS	23,38



Female mixing manifold kits

- with o-rings, screws and nuts.

REF.	IN/OUT CONNECTION	DRAIN LINE	MATERIAL	PRICE EURO
AV007	3/4"	3/8"	BRASS	30,33
AV012	1"	1/2"	BRASS	32,56



Autotrol Valves Series 255 Accessories



Male manifold kits

- in plastic material Noryl;
- with o-rings, screws and nuts.

REF.	CONNECTIONS IN/OUT	DRAIN LINE	OPTION	PRICE EURO
AV001	3/4"	3/4"	WITH TURBINE	54,34
AV001A	3/4"	3/4"	WITHOUT TURBINE	19,62
AV022	1"	1/2"	WITH TURBINE	54,34
AV022A	1"	1/2"	WITHOUT TURBINE	19,62

Ref. AV022



Slim cover for valve 255 Logix

- in plastic material.

REF.	PRICE EURO
AW145	18,91

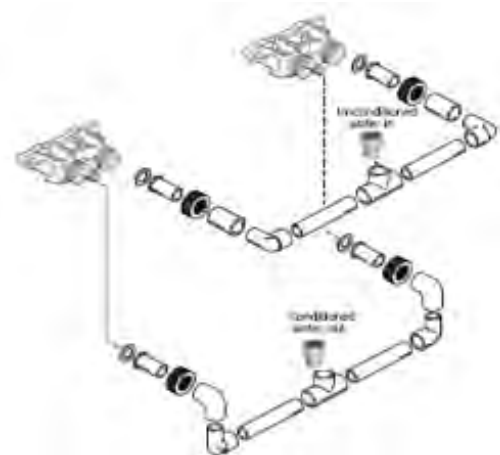
Ref. AW145



D. 32 interconnection kit for 255/764twin residential duplex systems

- special manifold for AUTOTROL 255 valves included;
- for twin alternating and twin parallel systems;
- consisting of:

QUANTITY	DESCRIPTION
2	Adapter PVC-U D = 32 mm - 1"
2	Tee connection PVC-U D = 32 mm
4	Elbow PVC-U D = 32 mm D1 = 25 mm
4	Tube PVC-U D = 32 mm
2	Elbow D = 32 mm
2	Coupling sleeve D = 32 mm
2	Manifold kit with adapter D. 32 to glue
2	256 by-pass with o-rings, screws and nuts



REF.

PRICE EURO

AV119

187,79

Autotrol Valves Series 263 – 268 – 278 Accessories



1265 bypass Kits

- special manifold for AUTOTROL valves series 263, 268 and 278;
- with gaskets, brass adapters and nuts.

REF.	IN/OUT CONNECTIONS	PRICE EURO
AV039	1"	79,00
AV040	1 1/4"	105,84

Ref. AV039



Ref. AV040



Manifold Kits

- special manifold for AUTOTROL valves series 263, 268 and 278;
- with 2 gaskets, 2 adapters and 2 nuts.

REF.	IN/OUT CONNECTION	MATERIAL ADAPTERS	PRICE EURO
AV030B	3/4"	BRASS	15,20
AV031B	1"	BRASS	15,85
AV032	D.32	PVC	22,50
AV038	1 1/4"	BRASS	43,28

Ref. AV031B

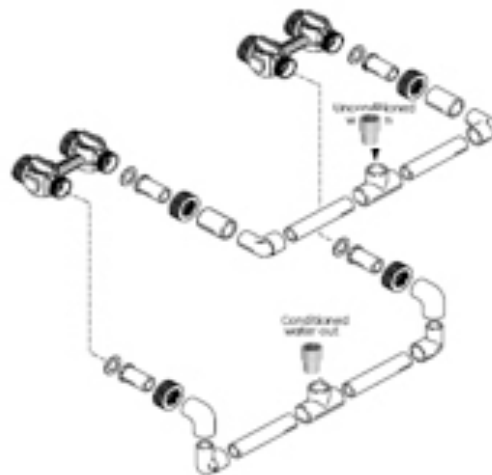




D. 32 interconnection kit for 278/764twin residential duplex systems

- special manifold for AUTOTROL 278 valves included;
- for twin alternating and twin parallel systems;
- with IN/OUT connection D.32;
- consisting of:

Q.TY	DESCRIPTION
2	Adapter PVC-U D = 32mm - 1"
2	Tee connection PVC-U D = 32 mm
4	Elbow PVC-U D = 32 mm D1 = 25 mm
4	Tube PVC-U D = 32 mm
2	Elbow D = 32 mm
2	Coupling sleeve D = 32 mm
2	Manifold kit with adapter D. 32 to glue
2	1265 by-pass with o-rings, screws and nuts

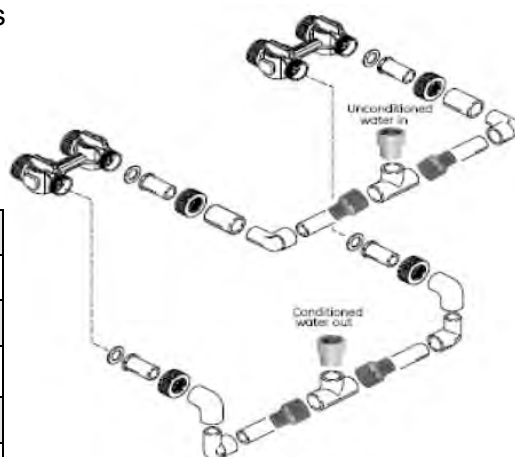


REF.	PRICE EURO
AV128	224,09

D. 40 interconnection kit for 278/764twin residential duplex systems

- special manifold for AUTOTROL 278 valves included;
- for twin alternating and twin parallel systems;
- with IN/OUT connection D.40;
- consisting of:

Q.TY	DESCRIPTION
2	Adapter PVC-U D = 40mm - 1 1/4"
2	Tee connection PVC-U D = 40 mm
4	Reducing socket PVC-U D = 40 mm D2 = 32 mm
4	Elbow PVC-U D = 32 mm D1 = 25 mm
4	Tube PVC-U D = 32 mm
2	Elbow D = 32 mm
2	Coupling sleeve D = 32 mm
2	Manifold kit with adapter D. 32 to glue
2	1265 by-pass with o-rings, screws and nuts



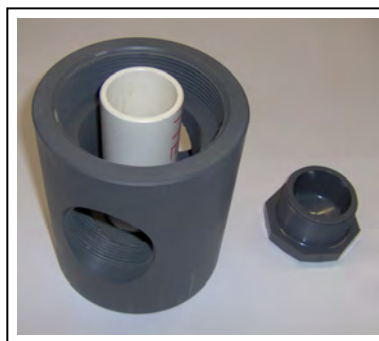
REF.	PRICE EURO
AV129	242,09



Magnum side mounting adapters

- in PVC material

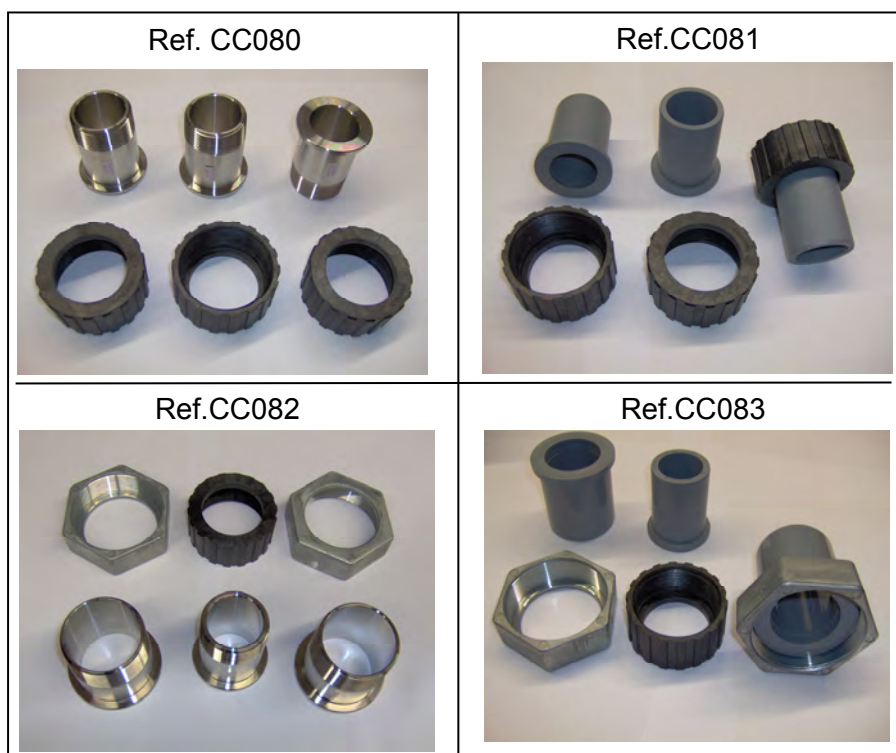
REF.	CONNECTIONS	PRICE EURO
CC084	2" BSPT Female	213,50
CC084A	D.63 Male to glue	209,96



Manifold kits

- with 3 nuts, 3 gaskets and 3 adapters.

REF.	IN/OUT CONNECTION	MATERIAL ADAPTER	FOR AUTOTROL VALVE	PRICE EURO
CC080	1 1/2" BSPT	STAINLESS STEEL	MAGNUM CV 1,5" SERIES	77,38
CC081	D.50	PVC	MAGNUM CV 1,5" SERIES	46,15
CC082	2" BSPT	STAINLESS STEEL	MAGNUM IT 2" SERIES	102,73
CC083	D.63	PVC	MAGNUM IT 2" SERIES	77,38





D.25 NPT 3/4" Pipe Union



REF.	PRICE EURO
CC085	16,93

- Suitable for brine line connection of the Magnum valves, alone or in coupling with a bonding hose connection (REF. CC086);
- In PVC-U.

D.25 Drain Fitting to glue

- Suitable for brine line connection of the Magnum valves, in coupling with D.25 NPT 3/4" pipe union (REF. CC085);
- In PVC-U.



REF.	PRICE EURO
CC086	2,77



Blending kit for Autotrol valves

- kit of nut and screw to install on 255 and 268 valves for blending of hard and softened water;
- insert the nut into the blending valve orifice located near the bypass flapper (fig.1). Insert the screw through the top plate and the nut, and the screw until it touch the bypass flapper (fig.2);
- tightening the screw will force the bypass flapper open witch will blend hard water into the softened water supply (fig. 3). Loosening the screw will allow the bypass flapper to close reducing the blending;
- test the water and adjust the screw until the desired hardness level is reached.

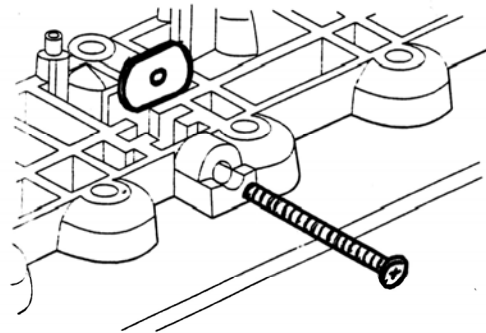


Fig. 1

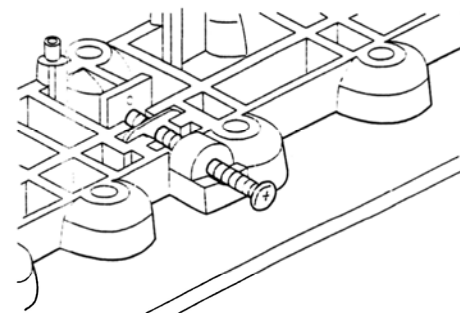


Fig. 2

REF.	DESCRIPTION	PRICE EURO
AV037	Kit for 255-268-278 valves	3,41
AV185	Kit for 366-368 valves	3,41

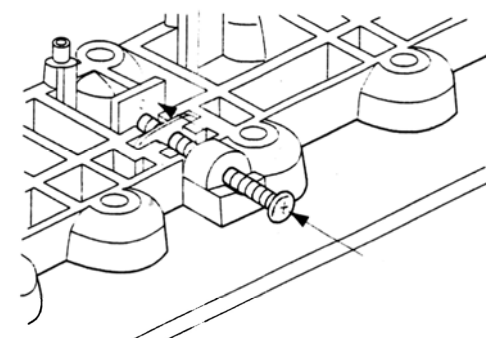


Fig. 3



Twist lock upper screens

- in ABS;
- max diameter 60 mm, length 64 mm;
- slots 0,3 mm.

REF.	FOR TUBE (inch)	FOR AUTOTROL VALVE	PRICE EURO
AV070	13/16"	255	2,60
AV071	1,05"	255, 263, G1 1/2, G1 3/4	2,60



Upper screen

- in ABS;
- max diameter 60 mm, length 64 mm;
- slots 0,3 mm.

REF.	FOR TUBE (inch)	PRICE EURO
AV072	13/16"	N.A.
AV073	1,05"	2,60



Upper screens to glue

- in ABS;
- diameter 88 mm;
- slots 0,3 mm.

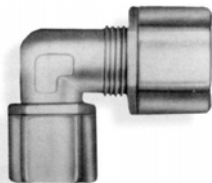
REF.	LENGTH (mm)	FOR TUBE (mm)	FOR AUTOTROL VALVE	PRICE EURO
CF010	98	41,8 (1 1/4")	180 old model	52,79
CF013	98	48,3	180 new model	52,79
CC050	150	48,3	Magnum	68,33
PV407	150	41,8 (1 1/4")	Adapter 4" PV402	68,33





Fittings for valves

- Jaco Style elbow fittings for $\frac{3}{8}$ " tubing;
- material PP.



REF.	THREADED CONNECTION (inch)	FOR AUTOTROL VALVE	PRICE EURO
AV150	$\frac{1}{4}$ " F	255	3,15
AV154	$\frac{3}{8}$ " F	268 366 – 368	3,42

Fittings for valves

- Jaco Style straight fittings for $\frac{3}{8}$ " tubing;
- material PP.



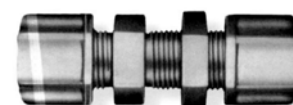
REF.	THREADED CONNECTION (inch)	PRICE EURO
AV161	$\frac{1}{8}$ " M	2,12
AV152	$\frac{1}{4}$ " M	1,89
AV153	$\frac{3}{8}$ " M	2,00

- Jaco Style elbow fittings for $\frac{3}{8}$ " tubing;
- material PP.



REF.	THREADED CONNECTION (inch)	FOR AUTOTROL VALVE	PRICE EURO
AV151	$\frac{1}{4}$ " M	155	2,50
AV159	$\frac{3}{8}$ " M	-	3,02

- Jaco Style bulkhead union for $\frac{3}{8}$ " tubing;
- material PP.



REF.	PRICE EURO
AV156	3,92

- Jaco Style union elbow for $\frac{3}{8}$ " tubing;
- material PP.



REF.	PRICE EURO
AV155	3,78

- Jaco Style union TEE for $\frac{3}{8}$ " tubing;
- material PP.



REF.	PRICE EURO
AV158	5,05

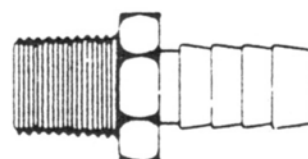


Barbed drain fittings – overflow

Straight drain fittings

- suitable for flexible hose 12,7 mm internal diameter;
- material nylon.

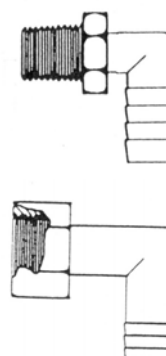
REF.	CONNECTION	PRICE EURO
AV170	3/8" M	2,14
AV171	1/2" M	1,91
AV169	1/2" F	2,37



Elbowed drain fittings

- suitable for flexible hose 12,7 mm internal diameter;
- material nylon / polyethylene.

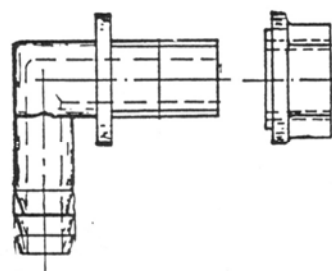
REF.	CONNECTION	PRICE EURO
AV172	3/8" M	2,28
AV173	1/2" M	2,23
AV174	1/2" F	3,25
AV175	3/4" F	4,52



Overflow elbows with nut

- material nylon.

REF.	THREADED CONNECTION	FOR HOSE INT. Ø (MM)	PRICE EURO
AV180	3/8"	12,7	2,64
AV181	1/2"	15,5	4,59





Pvc tubes to glue

- for lower diffusers and lower lateral systems;
- to glue;
- in PVC.

REF.	DIAMETER (inch)	DIAMETER (mm)	LENGTH (mm)	PRICE EURO
AV083	1 ³ / ₁₆ "	20,6	890	0,95
AV084	1 ³ / ₁₆ "	20,6	1400	1,52
AV087	1,05"	26,7	1830	4,70
AV632	D32	32,0	2000	7,27
CF012	1 1/4"	41,8	2000	12,03
CC052	1,90"	48,3	2000	14,12
CF050	D50	50,0	2000	16,64
CF063	D63	63,0	2000	22,78



Diffusers with tube

- 1,05" hi-flow lower diffuser;
- PVC tube included;
- slots 0,3 mm.

REF.	TUBE LENGTH (inch)	PRICE EURO
AV116M	17"	4,91
AV117M	35"	5,91
AV103M	55"	7,11
AV104M	72"	8,22





Lower diffusors to glue

- lower diffusors in ABS;
- max diameter 60 mm;
- slots 0,3 mm;
- connection to glue.



REF.	FOR TUBE (inch)	LENGTH (mm)	FLOW (lpm) Δp 30 mbar	PRICE EURO
AV098	1 $\frac{3}{16}$ "	70	24	3,71
AV098A	1,05"	80	32	3,24
AV097	1,05"	90 high flow	40	3,71

Cylindrical lower diffusors

- cylindrical lower diffuser in ABS, diameter 88 mm;
- slots 0,3 mm;
- connection to glue.



ITEM	REF.	LENGTH (mm)	FOR TUBE (mm)	FOR AUTOTROL VALVE	PRICE EURO
1	PV315	72	26,7 (1,05")	PERFORMA	39,78
1	CF011	98	41,8 (1 $\frac{1}{4}$ ")	180 old model – PV402	36,86
1	CF014	98	48,3	180 new model	36,86
2	CC051	150	48,3	Magnum	68,33

Segmented lower diffusors

- segmented lower diffuser in ABS;
- diameter 66 mm;
- slots 0,3 mm;
- to glue on tube 1,05";
- flow = 50 lpm @ Δp 30 mbar.



REF.	LENGTH (mm)	FOR TUBE (mm)	PRICE EURO
AV099A	102	26,7 (1,05")	14,42
AV099C	98,5	32	13,85



Lower lateral systems for top mounted valves

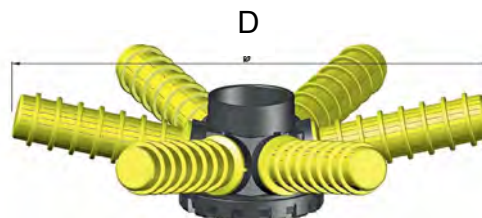
- For top mounted valves;
- ABS material;
- With 8 laterals (**threaded connection**) slots 0,3 mm;
- Hub connection to glue.



REF.	USEFUL FOR VESSEL (inch)	HUB CONNECT FOR TUBE (mm)	FOR AUTOTROL VALVE	PRICE EURO
PV316	14" - 16"	26,7 (1,05")	PERFORMA	91,18
PV317	18" - 21" - 24"	26,7 (1,05")	PERFORMA	96,21
PV318	14" - 16"	41,8 (1 ¼")	PV402	91,18
PV319	18" - 21" - 24"	41,8 (1 ¼")	PV402	94,35
PV320	14" - 16"	48,3 (1,90")	MAGNUM	91,18
PV321	18" - 21" - 24"	48,3 (1,90")	MAGNUM	94,35
PV322	30"	48,3 (1,90")	MAGNUM	99,30
PV323	36"	48,3 (1,90")	MAGNUM	104,22

Lower lateral systems for top mounted valves

- For top mounted valves;
- ABS material;
- With 6 **twist lock** laterals, slots 0,25 mm;
- Hub connection to glue.



REF.	USEFUL FOR VESSEL (inch)	HUB CONNECT FOR TUBE (mm)	DIAMETER D (mm)	FOR AUTOTROL VALVE	PRICE EURO
PV316B	14" - 16"	26,7 (1,05")	260	PERFORMA	30,33
PV317B	18" - 21" - 24"	26,7 (1,05")	373	PERFORMA	31,93
PV318B	14" - 16"	41,8 (1 ¼")	260	PV402	30,33
PV319B	18" - 21" - 24"	41,8 (1 ¼")	373	PV402	31,93
PV320B	14" - 16"	48,3 (1,90")	260	MAGNUM	30,33
PV321B	18" - 21" - 24"	48,3 (1,90")	373	MAGNUM	28,69
PV322B	30"	48,3 (1,90")	563	MAGNUM	52,73
PV323B	36"	48,3 (1,90")	705	MAGNUM	57,77
PV320B50	14" - 16"	50 (2")	260		30,33
PV321B50	18" - 21" - 24"	50 (2")	373		28,69
PV322B50	30"	50 (2")	563		52,23
PV323B50	36"	50 (2")	705		57,22



Diffusor for brine draw

- connection for rigid or flexible tube $\frac{3}{8}$ ".



REF.	PRICE EURO
AV118	3,25

Mesh type screen with tube

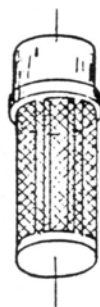
- mesh type screen for brine complete with $\frac{3}{8}$ " PVC tube length 42".



REF.	PRICE EURO
AV090M	3,18

Mesh type screen for brine

- for $\frac{3}{8}$ " tube to glue.



REF.	PRICE EURO
AV075	3,00

Polyethylene flexible tube

- flexible tube $\frac{3}{8}$ " (= 9,52 mm) diameter;
- transparent;
- hanks of 30 m.
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;



REF.	PRICE EURO
AV140	28,48



J-tube air-check with tube

- J-tube with air-check, complete with PVC tube.

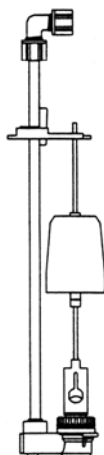
REF.	TUBE DIAMETER (inch)	LENGTH (mm)	PRICE EURO
AV093M	$\frac{3}{8}$ "	1060	6,07
CC064M	$\frac{3}{4}$ "	1200	46,85



Model 464

- model 464 Standard version (for no timed refill controls) and High Flow (for timed refill controls);
- connection for 3/8" tubing;
- length tube 42" (1060 mm);
- length float rod 600 mm;
- brine draw rate 3,8 l/min @ 152 mm Hg vacuum;
- max operating pressure 8,5 bar @ 40°C;
- brine well diameter 90 mm min.

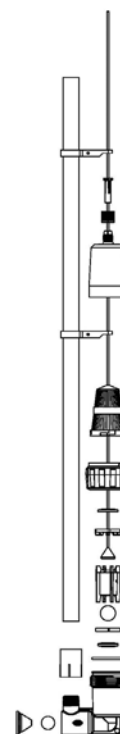
REF.	MODEL	Refill flow rate (l/min) @ 3,5 bar	PRICE EURO
AV096	464 Standard	1,3	28,42
AV125	464 High Flow	3,8	28,42



Model 484

- complete with 3/4" tube length 1200 mm;
- length float rod 915 mm;
- refill flow rate 15 l/min @ 3,5 bar;
- brine draw rate 38 l/min @ 66 mm Hg vacuum;
- max operating pressure 8,5 bar @ 40°C;
- brine well diameter 130 mm.

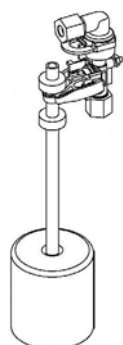
REF.	PRICE EURO
CC059	118,15



Model 2310

- length float rod 774 mm;
- refill flow rate 4,5 l/min;
- brine draw rate 2,1 l/min;
- max operating pressure 8,6 bar @ 40°C;
- brine well diameter 100 mm;
- without air check.

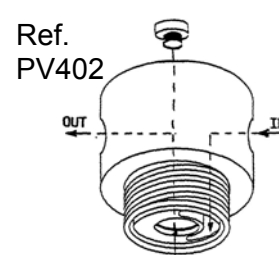
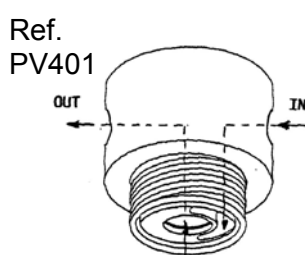
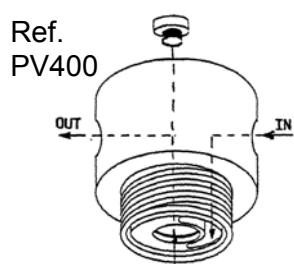
REF.	PRICE EURO
FVA060067-03	29,55





Heads for tank

- PVC heads for tank complete with NBR o-ring;
- max operating pressure 8 bar;
- max operating temperature 25°C;
- REF. PV400 and REF. PV401 are to use with upper screen REF. AV073 (see 01-04-05.02-EN data sheet) and with lower diffusors on catalogue (see 01-04-05.06-EN data sheet);
- REF. PV402 is to use with upper screen REF. PV407 (see 01-04-05.02-EN data sheet) and with lower diffusor REF. CF011 (see 01-04-05.06-EN data sheet).



REF.	IN / OUT CONNECTION	OPTION PLUG	RISER TUBE DIAMETER	MAX FLOW RATE SUGGESTED	FIT THREADED TANKS	PRICE EURO
PV400	3/4" GAS	1/2" on outlet	1,05"	2,5 m ³ /h	2 1/2" – 8NPSM	64,83
PV401	3/4" GAS	no plug	1,05"	2,5 m ³ /h	2 1/2" – 8NPSM	57,89
PV402	1 1/4" GAS	1/2" on outlet	1 1/4"	6,0 m ³ /h	4" – 8UN	144,58

- PP molded heads for tank with connection threaded 2 1/2" – 8NPSM;
- complete with NBR o-ring;
- without plug;
- max operating pressure 8 bar;
- max operating temperature 45°C; it is to use with upper screen REF. AV070 (see 01-04-05.02-EN data sheet) and with lower diffusor REF. AV098 (see 01-04-05.06-EN data sheet).



REF.	IN / OUT CONNECTION	RISER TUBE DIAMETER	MAX SUGGESTED FLOW RATE	PRICE EURO
PV409	3/4" NPT	13/16"	2,5 m ³ /h	35,12



Conductivity Meter Resilight

- positive, reliable and economical method of monitoring water quality via conductivity;
- bright green/red visual output easy to read:
 - Green: conductivity below the threshold value;
 - Red: conductivity above the threshold value;
 - set point conductivity adjustable from 1,5 to 200 microsiemens;
- probe with threaded $\frac{3}{8}$ " connection, probe constant K=5;
- with reduction in PVC M/F $\frac{1}{2}$ " x $\frac{3}{8}$ ";
- complete with transformer 230/5V - 50 Hz and 1,5 m cable;
- for installation on piping at system outlet, or directly on the heads REF. PV400 and REF. PV402 (see 01-04-05.10-EN data sheet).

ATTENTION: for greatest accuracy it is required that the water be flowing on probe.



REF.	PRICE EURO
PV425	97,12

Chlorgen Chlorin Generator

- positive, reliable and economical method of chlorine generation;
- n.1 Titanium Probe for chlorine generation, n.1 TEE $\frac{3}{8}$ " connection and n.2 Jaco straight fitting for $\frac{3}{8}$ " x $\frac{3}{8}$ " tube included;
- bright green/yellow visual output easy to read:
 - Green: the system is on;
 - Yellow: the system is working in disinfection;
- with time generation adjust;
- 230V - 50 Hz power supply and 1,8 m cable;
- Power 2 W;
- The Chlorin Generator can disinfect up to 140 litres of resin.



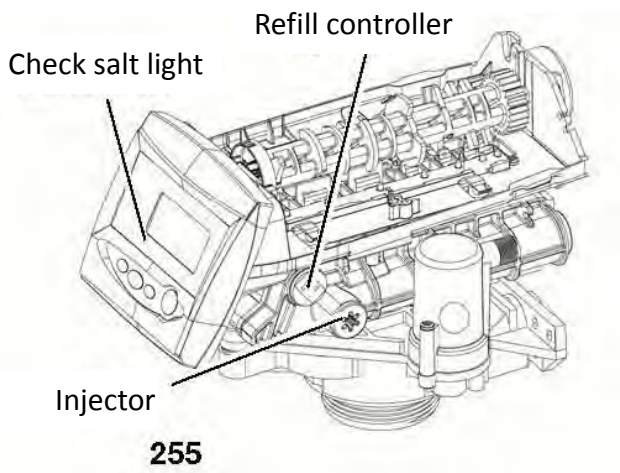
REF.	PRICE EURO
AX210	107,18



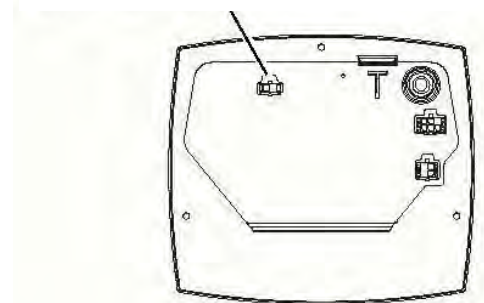
Chlorine generator suitable for valve 255 and Performa 268 with Logix 740/760 and 742/762 controller

- Simple, reliable and cheap disinfection device;
- Delivery includes n.1 electrode and n.1 connection cable;
- Logix 740/760 and 742/762 controllers provide to make a low chlorine level in order to sanitize resin bed during regeneration;
- Logix controller has a light check salt that indicates to end user when salt has to be added into brine tank;
- Potassium chloride or sodium chloride can be used.

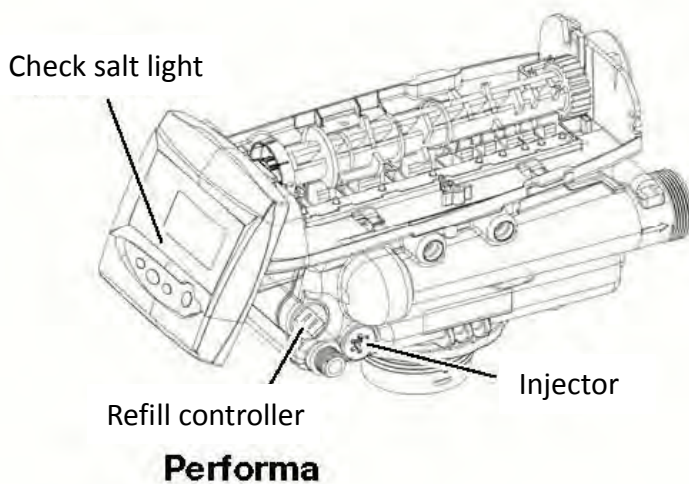
REF.	PRICE EURO
AX040	78,08



Chlorine generator connection



Logix controller - Rear





Test kit for hardness

- kit for hardness testing with indicator and titrant complete with test tube;
- definition 0,5 °F;
- number of tests 400°F;
- available No 6 blister of indicator 15 ml (REF. AV203) and No 6 blister of titrant 25 ml (REF. AV204).

Ref. AV200

REF.	PRICE EURO
AV200	19,70
AV203	42,30
AV204	37,30



- kit for hardness testing with single reagent packaged in blister, with test tube;
- available for definition with French (REF. AV202) or German (REF. AV207) degrees.

Ref. AV202

REF.	DEFINITION	NUMBER OF TESTS	PRICE EURO
AV202	1°F	700°F	12,27
AV207	1°D	600°D	12,27



- kit for hardness testing with single reagent packaged in blister, with test tube;
- available for definition with French (REF. AV201) or German (REF. AV206) degrees.

Ref. AV201

REF.	DEFINITION	NUMBER OF TESTS	PRICE EURO
AV201	1°F	350°F	8,12
AV206	1°D	300°D	8,12





TOTAL CHLORINE KIT

- Color comparison kit for Chlorine reaction;
- Ideal for water with low content of organics, like drink water.

REF.	MODEL	RANGE (ppm Cl ₂)	TEST QUANTITY	PRICE EURO
AV205	O-TOL	0,10 - 0,25 - 0,50 - 0,75 - 1,0 - 2,0	75	19,92

CHLORINE DPD KIT

- Color comparison kit for Chlorine reaction;
- This kit measures the free chlorine and the total chlorine. The difference is given by the combined chlorine (for water with high total organic carbon);
- IPT kits are ideal for few analyzes with discrete precision. For higher precision, we suggest the HYDROCHECK DPD (ideal for waste water, purified drinking water and swimming pool).

REF.	MODEL	RANGE		TEST QUANTITY	PRICE EURO
		SAMPLE	(ppm Cl ₂)		
AV208	IPT DPD	5 ml	0,1 - 0,2 - 0,3 - 0,4 - 0,5 - 0,75 - 1,0 - 1,5	150	27,97
AV220	HYDROCHECK DPD	I	0,1 - 0,2 - 0,3 - 0,4 - 0,5 - 0,75 - 1,0 - 1,5	350	162,36
		II	0,025 - 0,050 - 0,075		

AMMONIA KIT

- Color comparison kit for Ammonia reaction;
- IPT kits are ideal for few analyzes with discrete precision. For higher precision, we suggest the HYDROCHECK.

REF.	MODEL	RANGE (ppm NH ₃)	TEST QUANTITY	PRICE EURO
AV209	IPT	0,25 - 0,50 - 0,75 - 1,0 - 2,0 - 8,0	200	32,68
AV221	HYDROCHECK	0,0 - 0,10 - 0,25 - 0,5 - 1,0 - 2,0 - 4,0	180	162,36



IRON KIT

- Color comparison kit for Iron reaction;
- IPT kits are ideal for few analyzes with discrete precision. For higher precision, we suggest the HYDROCHECK HIGH.

REF.	MODEL	RANGE		TEST QUANTITY	PRICE EURO
		SAMPLE	(ppm Fe)		
AV210	IPT	5 ml	0,25 - 0,50 - 1,0 - 2,0 - 5,0 - 7,5 - 10 - 15	100	44,44
		20 ml	0,05 - 0,10 - 0,15 - 0,20		
AV222	HYDROCHECK HIGH	I	0,25 - 0,50 - 1,0 - 2,0 - 5,0 - 7,5 - 10 - 15	400	162,36
		II	0,05 - 0,10 - 0,15 - 0,20		

MANGANESE KIT

- Color comparison kit for Manganese reaction;
- IPT kits are ideal for few analyzes with discrete precision. For higher precision, we suggest the HYDROCHECK.

REF.	MODEL	RANGE		TEST QUANTITY	PRICE EURO
		SAMPLE	(ppm Mn)		
AV211	IPT	5 ml	0,1 - 0,2 - 0,25 - 0,5 - 0,75 - 1,0 - 1,25 - 1,5	70	65,80
AV223	HYDROCHECK	I	0,1 - 0,2 - 0,25 - 0,5 - 0,75 - 1,0 - 1,25 - 1,5	130	194,84
		II	0,025 - 0,050 - 0,100		



NITRATE KIT

- Color comparison kit for Nitrate reaction;
- IPT kits are ideal for few analyzes with discrete precision. For higher precision, we suggest the HYDROCHECK (ideal for waste water, superficial water and drinking water).

REF.	MODEL	RANGE (ppm NO ₃)	TEST QUANTITY	PRICE EURO
AV212	IPT	10 - 20 - 40 - 60 - 80 - 100 - 120 - 140	50	53,34
AV224	HYDROCHECK	5 - 10 - 20 - 40 - 60 - 80 - 100 - 120 - 140	100	185,55

PH KIT

- Color comparison kit for pH;
- IPT kits are ideal for few analyzes with discrete precision. For higher precision, we suggest pH meters.

REF.	MODEL	RANGE (pH)	TEST QUANTITY	PRICE EURO
AV213	IPT	1-2-3-4-5-5,5-6-6,5-7-7,5-8-8,5-9-9,5-10-11	200	19,16

SULPHATE KIT

- Color comparison kit for Sulphate by turbidimetric method.

REF.	MODEL	RANGE (ppm SO ₄)	TEST QUANTITY	PRICE EURO
AV214	IPT	50 - 75 - 100 - 150 - 200 - 250 - 300 - 400	70	43,42

F65 Runxin Residential Down Flow Valves



- Electronic programmable valve, suitable for automatic and residential water softening systems;
- Valve body in NSF listed Noryl plastic material;
- Operating system based on two high design ceramic discs;
- Regeneration DF;
- Operating flow rate Kv = 1,08;
- Backwash flow rate Kv = 0,50;
- Resin volume range = 5 ÷ 40 liters;
- Available in chronometric or volumetric versions;
- With White Injector mounted (Pink,



REF.
RF65B1



REF.
RF65D1

Yellow and Blue Injectors included),
European transformer 12/230V – 50Hz, upper screen, n.1 Base Seal O-ring, n.1 Drain Hose Connector, n.1 Brine Tube Hose Connector, n.1 Tube Bushing and n.1 Brine Line Flow Control);

- Others injectors (6800 Series) and accessories not included, to order separately (please, see the data sheet (01-06-01-EN).

Characteristics	
Tank size	6" ÷ 10"
In / Out connections	Threaded ¾" female (male optional included)
Pressure vessel connection	Threaded 2 ½" - 8 UN male
Drain line connection	Threaded ½" male
Brine line connection	Threaded ¾" BSPT male
Distributor tube O. D. diameter	1,05" (= 27 mm)
Distributor tube length above pressure vessel	0 ± 2 mm
Weight (valve + controller)	1,66 kg
Operating pressure	1,5 ÷ 6,0 bar
Water temperature	5°C ÷ 50°C

REF.	DESCRIPTION	PRICE EURO
RF65B1	Electronic Chronometric Softening Valve (LED)	167,61
RF65D1	Electronic Chronometric Softening Valve (LCD)	195,90
RF65D1/F70B (*)	Electronic Chronometric Softening Valve (LCD) with By-pass	223,16
RF65D3/F70BL (*)	Electronic Volumetric Softening Valve (LCD) with By-pass with Turbine	257,61

SPECIFIC ACCESSORIES

REF.	DESCRIPTION	PRICE EURO
RF70B (*)	By-pass for RF65 and RF69 Valves	27,46
RF70BL (*)	By-pass with Turbine for RF65 and RF69 Valves	32,48
RF09959	Floating valve 35"	18,74

SPARE PARTS

REF.	DESCRIPTION	PRICE EURO
RF09967	European Power Adapter	19,17
RFP9999	Upper Screen ¾" Bajonet	2,50

Note: If you use a by-pass (*), you must install a floating valve (our ref. RF09959).

F79B-LCD Runxin Residential Volumetric Valve



- Electronic volumetric programmable valve multilanguage, suitable for automatic and residential water softening systems;
- Valve body in NSF listed Noryl plastic material;
- Operating system based on two high design ceramic discs;
- Regeneration DF or UF;
- Operating flow rate Kv = 1,14; Backwash flow rate Kv = 0,5;
- Resin volume range = 5 ÷ 40 liters;
- With Pink Injector mounted (Yellow, Blue and White Injectors included), European transformer 12/230V – 50Hz, upper screen, n.1 Base Seal O-ring, n.1 Drain Hose Connector, n.1 Brine Tube Hose Connector, n.1 Tube Bushing and n.1 red Brine Line Flow Control), Meter and Bypass Adjusting Bolt;
- Others injectors (6800 Series) and accessories not included, to order separately (please, see the data sheet (01-06-01-EN).



REF.
RF79B-LCD

Characteristics	
Tank size	6" ÷ 10"
In / Out connections	Threaded 3/4" male
Pressure vessel connection	Threaded 2 1/2" - 8 UN male
Drain line connection	Threaded 1/2" male
Brine line connection	Threaded 3/8" BSPT male
Distributor tube O. D. diameter	1,05" (= 27 mm)
Distributor tube length above pressure vessel	0 ± 2 mm
Weight (valve + controller)	2,25 kg
Operating pressure	1,5 ÷ 6,0 bar
Water temperature	5°C ÷ 50°C

REF.	DESCRIPTION	PRICE EURO
RF79B-LCD	Electronic Volumetric Softening Valve	259,89

SPECIFIC ACCESSORIES

REF.	DESCRIPTION	PRICE EURO
RF70D	By-pass for RF79B-LCD Valve	27,46

SPARE PARTS

REF.	DESCRIPTION	PRICE EURO
RF09962	O-R CONNECTOR 3/4" FOR FLOW METER	1,02
RF09963	CONNECTOR 3/4" FLOW METER	15,09
RF09964	ELECTRONIC CONTROL BOARD	48,14
RF09965	ELECTRONIC POSITIONING BOARD	26,52
RF09966	ELECTRONIC BOARD FOR DISPLAY	73,44
RF09967	EUROPEAN POWER ADAPTER	19,17
RF09968	TURBINE FLOW METER	15,09
RF09969	SEMI-TRANSPARENT COVER	6,48
RF09970	PIPE CONNECTIONS 3/4"	24,48
RFP9999	Upper Screen 3/4" Bajonet	2,50

F69 Runxin Residential Up Flow Softening Valves



- Electronic programmable valve, suitable for residential water softening systems;
- Valve body in NSF listed Noryl plastic material;
- Operating system based on two high design ceramic discs;
- Regeneration UF;
- Operating flow rate Kv = 1,08;
- Backwash flow rate Kv = 0,5;
- Resin volume range = 5 ÷ 40 liters;
- Available in chronometric or volumetric versions;
- F69C Valve is with Brown Injector mounted;
- F69P Valves are with Pink Injector mounted (Yellow, Blue and White Injectors included);
- European transformer 12/230V – 50Hz, upper screen, n.1 Base Seal O-ring, n.1 Drain Hose Connector, n.1 Brine Tube Hose Connector, n.1 Tube Bushing and n.1 Brine Line Flow Control);
- Others injectors (6800 Series) and accessories not included, to order separately (please, see the data sheet 01-06-01-EN).



REF.
RF69P3Y

Characteristics	
Tank size	6" ÷ 10"
In / Out connections	Threaded 3/4" female (male optional included)
Pressure vessel connection	Threaded 2 1/2" - 8 UN male
Drain line connection	Threaded 1/2" male
Brine line connection	Threaded 3/8" BSPT male
Distributor tube O. D. diameter	1,05" (= 27 mm)
Distributor tube length above pressure vessel	0 ± 2 mm
Weight (valve + controller)	2,04 kg
Operating pressure	1,5 ÷ 6,0 bar
Water temperature	5°C ÷ 50°C

REF.	DESCRIPTION	PRICE EURO
RF69C	Electronic Chronometric Semi-Automatic Valve	114,24
RF69P1Y	Electronic Chronometric Valve (Indicator)	129,05
RF69P3Y	Electronic Volumetric Valve (Indicator)	156,04
RF69P3Y/F70BL	Electronic Volumetric Valve (Indicator) with By-pass with Turbine	188,49

SPECIFIC ACCESSORIES

REF.	DESCRIPTION	PRICE EURO
RF70B	By-pass for RF65 and RF69 Valves	27,46
RF70BL	By-pass with Turbine for RF65 and RF69 Valves	32,48
RF09960	USB Programmer for RF69C Valves	59,40

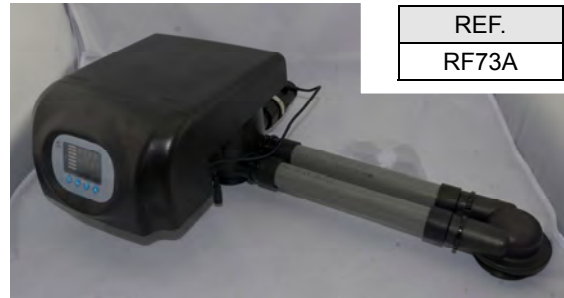
SPARE PARTS

REF.	DESCRIPTION	PRICE EURO
RF09967	European Power Adapter	19,17
RFP9999	Upper Screen 3/4" Bajonet	2,50

F73A Runxin Residential Volumetric Valve on a Duplex Tanks



- Electronic volumetric programmable valve, suitable for automatic and residential water softening systems;
- Valve body in NSF listed Noryl plastic material;
- Operating system based on two high design ceramic discs;
- Regeneration DF or UF;
- Operating flow rate Kv = 2,33;
- Backwash flow rate Kv = 0,88;
- Resin volume range = 45 ÷ 100 liters;
- With Red Injector mounted (Black Injector included), European transformer 12/230V – 50Hz, upper screen, n.1 Base Seal O-ring, n.1 Drain Hose Connector, n.1 Brine Tube Hose Connector, n.1 Tube Bushing, n.1 Brine Line Flow Control, Meter and Bypass Adjusting Bolt;
- Others injectors (6800 Series) and accessories not included, to order separately (please, see the data sheet 01-06-01-EN).



REF.
RF73A

Characteristics	
Tank size	10" ÷ 14"
In / Out connections	Threaded 1" male
Pressure vessel connection	Threaded 2 ½" - 8 UN male
Drain line connection	Threaded ¾" male
Brine line connection	Threaded ⅜" BSPT male
Distributor tube O. D. diameter	1,05" (= 27 mm)
Distributor tube length above pressure vessel	0 ± 2 mm
Weight (valve + controller)	4,75 kg
Operating pressure	1,5 ÷ 6,0 bar
Water temperature	5°C ÷ 50°C

REF.	DESCRIPTION	PRICE EURO
RF73A	Electronic Volumetric Softening Valve (LED)	550,80

SPARE PARTS

REF.	DESCRIPTION	PRICE EURO
RF09967	European Power Adapter	19,17
RFP9999	Upper Screen ¾" Bajonet	2,50

F63 Runxin Residential Down Flow Softening Valves



- Electronic programmable valve, suitable for automatic and residential water softening systems;
- Valve body in NSF listed Noryl plastic material;
- Operating system based on two high design ceramic discs;
- Regeneration DF; Resin volume range = 40 ÷ 150 liters;
- Operating flow rate Kv = 3,13; Backwash flow rate Kv = 1,25;
- Available in chronometric or volumetric versions;
- With Green Injector mounted (Purple and White Injectors included), European transformer 12/230V – 50Hz, upper screen, n.1 Base Seal O-ring, n.1 Drain Hose Connector, n.1 Brine Tube Hose Connector, n.1 Tube Bushing and n.1 Brine Line Flow Control);
- Others injectors (6800 Series) and accessories not included, to order separately (please, see the data sheet 01-06-01-EN).



REF.

RF63B1

Characteristics	
Tank size	10" ÷ 18"
In / Out connections	Threaded 1" female (male optional included)
Pressure vessel connection	Threaded 2 ½" - 8 UN male
Drain line connection	Threaded ½" male
Brine line connection	Threaded ¾" BSPT male
Distributor tube O. D. diameter	1,05" (= 27 mm)
Distributor tube length above pressure vessel	0 ± 2 mm
Weight (valve + controller)	2,34 kg
Operating pressure	1,5 ÷ 6,0 bar
Water temperature	5°C ÷ 50°C

REF.	DESCRIPTION	PRICE EURO
RF63B1 (*)	Electronic Chronometric Softening Valve (LED)	226,98
RF63D1	Electronic Chronometric Softening Valve (LCD)	235,47
RF63P1Y	Electronic Chronometric Softening Valve (Indicator)	156,04
RF63B3 (*)	Electronic Volumetric Softening Valve (LED)	251,78
RF63C3	Electronic Volumetric Softening Valve (LED)	249,97
RF63C3/F70AL	Electronic Volumetric Softening Valve (LED) with By-pass	285,48
RF63D3	Electronic Volumetric Softening Valve (LCD)	268,67
RF63D3/F70AL	Electronic Volumetric Softening Valve (LCD) with By-pass	296,62

(*) available till it will be out-of-stock.

SPECIFIC ACCESSORIES

REF.	DESCRIPTION	PRICE EURO
RF70A	By-pass for RF63 and RF68 Valves	33,43
RF70AL	By-pass with Turbine for RF63 and RF68 Valves	44,26

SPARE PARTS

REF.	DESCRIPTION	PRICE EURO
RF09967	European Power Adapter	19,17
RFP9999	Upper Screen ¾" Bajonet	2,50

F82B-LCD Runxin Residential Volumetric Valves



- Electronic volumetric programmable valve multilanguage, suitable for automatic and residential water softening systems;
- Valve body in NSF listed Noryl plastic material;
- Operating system based on two high design ceramic discs;
- Regeneration DF or UF;
- Operating flow rate Kv = 3,13;
- Backwash flow rate Kv = 1,25;
- Resin volume range = 40 ÷ 150 liters;
- With White Injector mounted (Red, Black and Orange Injectors included), European transformer 12/230V – 50Hz, upper screen, n.1 Base Seal O-ring, n.1 Drain Hose Connector, n.1 Brine Tube Hose Connector, n.1 Tube Bushing and n.1 Brine Line Flow Control), Meter and Bypass Adjusting Bolt;
- Others injectors (6800 Series) and accessories not included, to order separately (please, see the data sheet 01-06-01-EN).



REF.
RF82B-LCD

Characteristics	
Tank size	10" ÷ 18"
In / Out connections	Threaded 1" male
Pressure vessel connection	Threaded 2 1/2" - 8 UN male
Drain line connection	Threaded 1/2" male
Brine line connection	Threaded 3/8" BSPT male
Distributor tube O. D. diameter	1,05" (= 27 mm)
Distributor tube length above pressure vessel	0 ± 2 mm
Weight (valve + controller)	2,72 kg
Operating pressure	1,5 ÷ 6,0 bar
Water temperature	5°C ÷ 50°C

REF.	DESCRIPTION	PRICE EURO
RF82B-LCD	Electronic Volumetric Softening Valve (LCD)	304,63
RF82B-LCD/F70CL (*)	Electronic Volumetric Softening Valve (LCD) with Bypass CL	330,46

ACCESSORIES

REF.	DESCRIPTION	PRICE EURO
RF70CL	By-pass with Turbine for RF63, RF68 and RF82 Valves	28,74

SPARE PARTS

REF.	DESCRIPTION	PRICE EURO
RF09967	EUROPEAN POWER ADAPTER	19,17
RFP9999	Upper Screen 3/4" Bajonet	2,50

F68 Runxin Residential Up Flow Valves



- Electronic programmable valve, suitable for automatic and residential water softening systems;
- Valve body in NSF listed Noryl plastic material;
- Operating system based on two high design ceramic discs;
- Regeneration UF;
- Operating flow rate Kv = 3,13;
- Backwash flow rate Kv = 1,25;
- Resin volume range = 18 ÷ 150 liters;
- Available in volumetric version;
- With Yellow Injector mounted (Red, Black and Orange Injectors included), European transformer 12/230V – 50Hz, upper screen, n.1 Base Seal O-ring, n.1 Drain Hose Connector, n.1 Brine Tube Hose Connector, n.1 Tube Bushing and n.1 Brine Line Flow Control);
- Others injectors (Series 6800) and accessories not included, to order separately (please, see the data sheet 01-06-01-EN).



REF.
RF68C3/F70AL

Characteristics	
Tank size	10" ÷ 18"
In / Out connections	Threaded 1" male
Pressure vessel connection	Threaded 2 ½" - 8 UN male
Drain line connection	Threaded ½" male
Brine line connection	Threaded ⅜" BSPT male
Distributor tube O. D. diameter	1,05" (= 27 mm)
Distributor tube length above pressure vessel	0 ± 2 mm
Weight (valve + controller)	2,90 kg
Operating pressure	1,5 ÷ 6,0 bar
Water temperature	5°C ÷ 50°C

REF.	DESCRIPTION	PRICE EURO
RF68C3/F70AL	RF68C3 Electronic Volumetric Softening Valve (LED) with By-pass AL	309,01
RF68P3Y/F70AL	RF68P3Y Electronic Volumetric Softening Valve (Indicator) with By-pass AL	231,55
RF68P3Y/F70CL	RF68P3Y Electronic Volumetric Softening Valve (Indicator) with By-pass CL	188,49

SPECIFIC ACCESSORIES

REF.	DESCRIPTION	PRICE EURO
RF70AL	By-pass with Turbine for RF63 and RF68 Valves	44,26
RF70CL	By-pass with Turbine for RF63, RF68 and RF82 Valves	28,74

SPARE PARTS

REF.	DESCRIPTION	PRICE EURO
RF09967	European Power Adapter	19,17
RFP9999	Upper Screen ¾" Bajonet	2,50

F92A-LED Runxin Residential Up Flow Valve



- Electronic programmable valve, suitable for automatic and residential water softening systems;
- Valve body in NSF listed Noryl plastic material;
- Operating system based on two high design ceramic discs;
- Regeneration UF;
- Operating flow rate Kv = 4,77;
- Backwash flow rate Kv = 1,35;
- Resin volume range = 120 ÷ 300 liters;
- Available in volumetric version;
- With Red Injector mounted (Purple, Green, Yellow and Orange Injectors included), European transformer 12/230V – 50Hz, upper screen, n.1 Base Seal O-ring, n.1 Drain Hose Connector, n.1 Brine Tube Hose Connector, n.1 Tube Bushing and n.1 Brine Line Flow Control).



REF.
RF92A-LED

Characteristics	
Tank size	16" ÷ 24"
In / Out connections	Threaded 1" male
Pressure vessel connection	Threaded 2 ½" - 8 UN male
Drain line connection	Threaded ½" male
Brine line connection	Threaded ¾" BSPT male
Distributor tube O. D. diameter	32 mm
Distributor tube length above pressure vessel	0 ± 2 mm
Weight (valve + controller)	2,72 kg
Operating pressure	1,5 ÷ 6,0 bar
Water temperature	5°C ÷ 50°C

REF.	DESCRIPTION	PRICE EURO
RF92A-LED	Electronic Volumetric Softening Valve (LED)	296,63

SPARE PARTS

REF.	DESCRIPTION	PRICE EURO
RF09967	European Power Adapter	19,17
RF09949	Upper Screen 32mm	2,50

Runxin Residential Valves Accessories



- Injectors and Accessories not included in the Runxin Residential Valves, to order separately.

SPECIFIC ACCESSORIES

REF.	DESCRIPTION	PRICE EURO
RF06801	INJECTOR BROWN + DLFC FOR RUNXIN VALVES - 6301	1,85
RF06802	INJECTOR PINK + DLFC FOR RUNXIN VALVES - 6302	1,85
RF06803	INJECTOR YELLOW + DLFC FOR RUNXIN VALVES - 6303	1,85
RF06804	INJECTOR BLUE + DLFC FOR RUNXIN VALVES - 6304	1,85
RF06805	INJECTOR WHITE + DLFC FOR RUNXIN VALVES - 6305	1,85
RF06806	INJECTOR BLACK + DLFC FOR RUNXIN VALVES - 6306	1,85
RF06807	INJECTOR PURPLE + DLFC FOR RUNXIN VALVES - 6307	1,85
RF06808	INJECTOR RED + DLFC FOR RUNXIN VALVES - 6308	1,85
RF06809	INJECTOR GREEN FOR RUNXIN VALVES - 6309	1,85
RF06810	INJECTOR ORANGE FOR RUNXIN VALVES - 6310	1,85
RF06301	INJECTOR BROWN + DLFC #1 FOR RUNXIN VALVES - 6301	1,85
RF06302	INJECTOR PINK + DLFC #1 FOR RUNXIN VALVES - 6302	1,85
RF06303	INJECTOR YELLOW + DLFC #2 FOR RUNXIN VALVES - 6303	1,85
RF06304	INJECTOR BLUE + DLFC #2 FOR RUNXIN VALVES - 6304	1,85
RF06305	INJECTOR WHITE + DLFC #3 FOR RUNXIN VALVES - 6305	1,85
RF06306	INJECTOR BLACK + DLFC #3 FOR RUNXIN VALVES - 6306	1,85
RF06307	INJECTOR PURPLE + DLFC #4 FOR RUNXIN VALVES - 6307	1,85
RF06308	INJECTOR RED + DLFC #4 FOR RUNXIN VALVES - 6308	1,85
RF06309	INJECTOR GREEN + DLFC #5 FOR RUNXIN VALVES - 6309	1,85
RF06310	INJECTOR ORANGE + DLFC #5 FOR RUNXIN VALVES - 6310	1,85
RF09995	Service Wrench for Valves - 8484003	6,93
RF47010	Runxin Chlorine Generator F79 and F82	69,05
RF09998	2.5" M/F Adapter with O-ring with Wrench	9,18
RF09997	Adapter Wrench	9,90
RF09971	English Power Adapter	19,17
RF43010	Brine Well D.60 mm H=396 mm with Brine Valve	39,74
RF43011	Brine Well D.60 mm H=308 mm with Brine Valve	37,81

F74 Runxin Industrial Down Flow Valve



- Electronic programmable valve, suitable for automatic and industrial water softening systems;
- Valve body in NSF listed Noryl plastic material;
- Operating system based on two high design ceramic discs;
- Regeneration DF;
- Operating flow rate Kv = 6,50;
- Backwash flow rate Kv = 3,57;
- Resin volume range = 120 ÷ 450 liters;
- With Pink Injector mounted (Brown and Blue Injectors included), European transformer 12/230V – 50Hz, upper screen, n.1 Base Seal O-ring, n.1 Drain Hose Connector, n.1 Brine Tube Hose Connector, n.1 Tube Bushing and n.1 Brine Line Flow Control);
- Others injectors (series 7400) and accessories not included, to order separately (please, see the data sheet 01-08-01 EN)



REF.
RF74A3

Characteristics	
Tank size	21" ÷ 30"
In / Out connections	Threaded 2" male
Pressure vessel connection	Threaded 4" - 8 UN male
Drain line connection	Threaded 1" male
Brine line connection	Threaded ½" BSPT male
Distributor tube O. D. diameter	50 mm
Distributor tube length above pressure vessel	0 ± 2 mm
Weight (valve + controller)	5,88 kg
Operating pressure	2,0 ÷ 6,0 bar
Water temperature	5°C ÷ 50°C

REF.	DESCRIPTION	PRICE EURO
RF74A3	Electronic Volumetric Softening Valve (LED)	588,47

SPARE PARTS

REF.	DESCRIPTION	PRICE EURO
RF09974	European Power Adapter for Industries Valves	31,64
RF09950	Upper Screen 50mm	25,64

F99 Runxin Industrial Down Flow Valves



- Electronic programmable valve, suitable for automatic and industrial water softening systems;
- Valve body in NSF listed Noryl plastic material;
- Operating system based on two high design ceramic discs;
- Regeneration DF;
- Operating flow rate Kv = 14,4;
- Backwash flow rate Kv = 5,72;
- Resin volume range = 450 ÷ 800 liters;
- With Yellow Injector mounted (Pink Injectors included), European transformer 12/230V – 50Hz, upper screen, n.1 Base Seal O-ring, n.1 Drain Hose Connector, n.1 Brine Tube Hose Connector, n.1 Tube Bushing and n.1 Brine Line Flow Control);
- Others injectors (7700 Series) and accessories not included, to order separately (please, see the data sheet 01-08-01 EN).



REF.
RF99A3

Characteristics	
Tank size	30" ÷ 42"
In / Out connections	Threaded 2" male
Pressure vessel connection	Threaded 4" - 8 UN male
Drain line connection	Threaded 1,5" male
Brine line connection	Threaded ¾" BSPT male
Distributor tube O. D. diameter	48,3 mm
Distributor tube length above pressure vessel	0 ± 2 mm
Weight (valve + controller)	11,50 kg
Operating pressure	2,0 ÷ 6,0 bar
Water temperature	5°C ÷ 50°C

REF.	DESCRIPTION	PRICE EURO
RF99A1	Electronic Chronometric Softening Valve (LED)	723,79
RF99A3	Electronic Volumetric Softening Valve (LED)	776,68

SPARE PARTS

REF.	DESCRIPTION	PRICE EURO
RF09974	European Power Adapter	31,65

F111 Runxin Industrial Down Flow Valves



- Electronic programmable valve, suitable for automatic and industrial water softening systems;
- Valve body in NSF listed Noryl plastic material;
- Operating system based on two high design ceramic discs;
- Regeneration DF;
- Operating flow rate Kv = 16,71;
- Backwash flow rate Kv = 18,97;
- Resin volume range = 450 ÷ 800 liters;
- Available in chronometric or volumetric versions;
- With Blue Injector mounted (Yellow and White Injectors included), European transformer 12/230V – 50Hz, upper screen, n.1 Base Seal O-ring, n.1 Drain Hose Connector, n.1 Brine Tube Hose Connector, n.1 Tube Bushing and n.1 Brine Line Flow Control);
- Others injectors (7700 Series) and accessories not included, to order separately (please, see the data sheet



REF.
RF111A3

Characteristics	
Tank size	30" ÷ 48"
In / Out connections	Threaded 2" male
Pressure vessel connection	Threaded 4"- 8 UN male
Drain line connection	Threaded 1,5" male
Brine line connection	Threaded ¾" BSPT male
Distributor tube O. D. diameter	63 mm
Distributor tube length above pressure vessel	0 ± 2 mm
Weight (valve + controller)	11,50 kg
Operating pressure	2,0 ÷ 6,0 bar
Water temperature	5°C ÷ 50°C

REF.	DESCRIPTION	PRICE EURO
RF111A1	Electronic Chronometric Softening Valve (LED)	1.248,25
RF111A3	Electronic Volumetric Softening Valve (LED)	1.300,55

SPARE PARTS

REF.	DESCRIPTION	PRICE EURO
RF09974	European Power Adapter	31,65
RF09951	Upper Screen 63mm	32,38

Runxin Industrial Valves Accessories



- Injectors and Accessories not included in the Runxin Industrial Valves, to order separately.

SPECIFIC ACCESSORIES

REF.	DESCRIPTION	PRICE EURO
RF07401	Injector Brown for Runxin Valves - 7401	7,17
RF07402	Injector Pink for Runxin Valves - 7402	7,17
RF07403	Injector Yellow for Runxin Valves - 7403	7,17
RF07404	Injector Blue for Runxin Valves - 7404	7,17
RF07701	Injector Brown for Runxin Valves - 7701	41,89
RF07702	Injector Pink for Runxin Valves - 7702	41,89
RF07703	Injector Yellow for Runxin Valves - 7703	41,89
RF07704	Injector Blue for Runxin Valves - 7704	41,89
RF07705	Injector White for Runxin Valves - 7705	41,89
RF09995	Service Wrench for Valves - 8484003	7,06

F75 Runxin Industrial Filter Valve



- Electronic valve, suitable for automatic and industrial water filtering systems;
- Valve body in NSF listed Noryl plastic material;
- Operating system based on two high design ceramic discs;
- Operating flow rate Kv = 8,7;
- Backwash flow rate Kv = 8,0;
- With European transformer 12/230V – 50Hz, upper screen, n.1 Base Seal O-ring, n.1 Drain Hose Connector.



REF.
RF75A

Characteristics	
Tank size	16" ÷ 24"
In / Out connections	Threaded 2" male
Pressure vessel connection	Threaded 4" - 8 UN male
Drain line connection	Threaded 2" male
Distributor tube O. D. diameter	50 mm
Distributor tube length above pressure vessel	0 ± 2 mm
Weight (valve + controller)	4,4 kg
Operating pressure	2,0 ÷ 6,0 bar
Water temperature	5°C ÷ 50°C

REF.	DESCRIPTION	PRICE EURO
RF75A	Electronic Filtering Valve (LED)	551,31

SPARE PARTS

REF.	DESCRIPTION	PRICE EURO
RF09974	European Power Adapter for Industries Valves	31,64
RF09950	Upper Screen 50mm	25,64

Runxin Manual Softening Valves



- Multi-way valves having five functions: service, backwash, brine, fast rinse and refill;
- IN/OUT connections 3/4" BSPP female;
- Drain line connection 1/2" BSPP female;
- Brine line connection 3/8" BSPT male;
- Riser tube diameter 1,05" (26,7 mm);
- Max suggested flow 1,5 m³/h (only valve) @ Δp = 1,75 bar;
- Operating flow rate Kv = 1,09;
- Backwash flow rate Kv = 0,55;
- Max operating pressure 6 bar @ 20°C;
- Max operating temperature 50°C;
- Upper screen included.



REF.
RF64B

REF.
RF64BC



REF.	DF / UF	MOUNTING	PRICE EURO
RF64B	DF	Vertical	31,62
RF64BC	DF	Side	29,70
RF64C (*)	UF	Vertical	27,67



REF.
RF64C

- Multi-way valves having five functions: service, backwash, brine, fast rinse and refill;
- IN/OUT connections 1" BSPP female;
- Drain line connection 1/2" BSPP female;
- Brine line connection 3/8" BSPT male;
- Riser tube diameter 1,05" (26,7 mm);
- Max suggested flow 4,5 m³/h (only valve) @ Δp = 1,75 bar;
- Operating flow rate Kv = 3,13;
- Backwash flow rate Kv = 1,25;
- Max operating pressure 6 bar @ 20°C;
- Max operating temperature 50°C;
- Upper screen included.



REF.
RF64A1

REF.
RF64A2



REF.
RF64AC

REF.	DF / UF	MOUNTING	HANDLE MATERIAL	PRICE EURO
RF64A1	DF	Vertical	Metal	49,44
RF64A2	DF	Vertical	Plastic	43,41
RF64AC	DF	Side	Plastic	46,41

ATTENTION: this multi-way valve is prohibited to change working position with pressure; make sure to shut down pump or close feed valve before rotating the handle to other working position.

(*) available till it will be out-of-stock.

Runxin Manual Filter Valves



Max 4 m³/h Multi-way Manual Valve

- Multi-way valve having three functions: filtration, backwash, rinse;
- Fits threaded tanks 2 ½" – 8NPSM;
- IN/OUT connections and drain 1" BSPP female;
- Riser tube diameter 1,05" (26,7 mm);
- Max suggested flow 4 m³/h (only valve);
- Max operating pressure 6 bar @ 20°C;
- Max operating temperature 50°C;
- Upper screen included.



ATTENTION: this multi-way valve is prohibited to change working position with pressure; make sure to shut down pump or close feed valve before rotating the handle to other working position.

REF.	PRICE EURO
PV410	69,16

Max 10 m³/h Multi-way Manual Valves

- Multi-way valve having three functions: filtration, backwash, rinse;
- Fits threaded tanks 4" – 8UN;
- IN/OUT connections 2" BSPP female;
- Drain line connection 1,5" BSPP female;
- Riser tube diameter 50 mm;
- Max suggested flow 10 m³/h (only valve) @ Δp = 1,75 bar;
- Operating flow rate Kv = 8,2;
- Backwash flow rate Kv = 6,1;
- Max operating pressure 6 bar @ 20°C;
- Max operating temperature 50°C;
- Upper screen included.



REF.
RF56D1



REF.
RF56D2

REF.	HANDLE MATERIAL	PRICE EURO
RF56D1	Metal	165,53
RF56D2	Plastic	143,94

ATTENTION: this multi-way valve is prohibited to change working position with pressure; make sure to shut down pump or close feed valve before rotating the handle to other working position.



Pressure
vessels and
accessories



EUROTR**L**[®]
WATER TREATMENT COMPONENTS

MWG[®]
ITALIAN WATER TECHNOLOGY

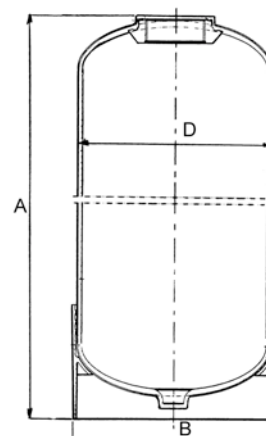
Exclusive distributor worldwide

STRUCTURAL

MWG Residential Pressure Vessels with Base



- Made in China;
- Composite pressure vessels PE liner reinforced with fiberglass and epoxy resin;
- For industrial and potable water treatment systems;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- Certification for contact with drinking water following EC directives and KTW (for Germany) recommendations;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- In compliance with the sanitary certification ACS (France);
- Max operating pressure 10 bar; max operating temperature 50°C;
- Top connection threaded 2 ½" – 8NPSM or 4" – 8UN;
- Cycle test 250.000 times from 0,7 to 10 bar;
- Burst test to 4 times max operating pressure;
- Blue colour; warranty 10 years.

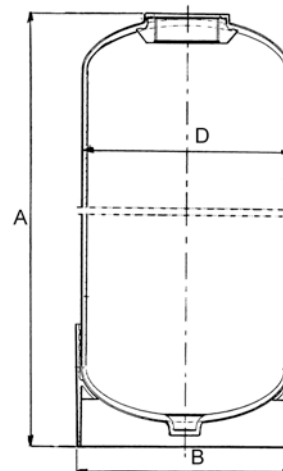


REF.	MODEL	VOLUME (liters)	EXTERNAL D (mm)	A (mm)	B (mm)	CONNECTION	PRICE EURO
BMWG05013BB	5 x 13	3,2	130	335 ± 6	135	2 ½"	24,65
BMWG06013BB	6 x 13	4,9	159	335 ± 6	165	2 ½"	28,43
BMWG06018BB	6 x 18	7,2	159	462 ± 6	165	2 ½"	29,29
BMWG06035BB	6 x 35	15,0	159	896 ± 6	165	2 ½"	46,35
BMWG07013BB	7 x 13	6,3	180	333 ± 6	188	2 ½"	28,92
BMWG07017BB	7 x 17	8,6	180	434 ± 6	188	2 ½"	31,54
BMWG07024BB	7 x 24	13,2	180	605 ± 6	188	2 ½"	40,62
BMWG07030BB	7 x 30	16,4	180	768 ± 6	188	2 ½"	45,07
BMWG07035BB	7 x 35	20,1	180	891 ± 6	188	2 ½"	48,25
BMWG08013BB	8 x 13	8,5	207	338 ± 6	216	2 ½"	31,31
BMWG08017BB	8 x 17	10,9	207	439 ± 6	216	2 ½"	33,93
BMWG08024BB	8 x 24	15,9	207	627 ± 6	216	2 ½"	42,21
BMWG08030BB	8 x 30	20,9	207	773 ± 6	216	2 ½"	45,38
BMWG08035BB	8 x 35	25,0	207	898 ± 6	216	2 ½"	50,46
BMWG08044BB	8 x 44	32,6	207	1130 ± 6	216	2 ½"	55,10
BMWG09017BB	9 x 17	13,8	231	456 ± 6	240	2 ½"	34,71
BMWG09030BB	9 x 30	26,9	231	776 ± 6	240	2 ½"	47,88
BMWG09035BB	9 x 35	32,1	231	900 ± 6	240	2 ½"	53,68
BMWG09042BB	9 x 42	38,4	231	1076 ± 6	240	2 ½"	59,17
BMWG09048BB	9 x 48	44,4	231	1227 ± 6	240	2 ½"	64,98
BMWG10017BB	10 x 17	16,7	258	445 ± 6	266	2 ½"	38,34
BMWG10019BB	10 x 19	19,3	258	482 ± 6	266	2 ½"	43,66
BMWG10024BB	10 x 24	25,2	258	611 ± 6	266	2 ½"	47,73
BMWG10030BB	10 x 30	33,0	258	780 ± 6	266	2 ½"	48,41
BMWG10035BB	10 x 35	39,4	258	902 ± 6	266	2 ½"	62,31
BMWG10044BB	10 x 44	51,0	258	1132 ± 6	266	2 ½"	66,69
BMWG10047BB	10 x 47	54,1	258	1197 ± 6	266	2 ½"	68,23
BMWG10054BB	10 x 54	63,5	258	1391 ± 6	266	2 ½"	69,76
BMWG10054GB	10 x 54	63,5	258	1390 ± 6	266	4"	79,57
BMWG12048BB	12 x 48	78,9	308	1234 ± 6	318	2 ½"	82,89
BMWG12052BB	12 x 52	85,9	308	1334 ± 6	318	2 ½"	101,93
BMWG13044BB	13 x 44	83,1	335	1118 ± 6	343	2 ½"	97,85
BMWG13054BB	13 x 54	104,3	335	1375 ± 6	343	2 ½"	104,88
BMWG13054GB	13 x 54	104,3	335	1375 ± 6	343	4"	117,08

Structural Residential Pressure Vessels with Base



- Made in European Union (Belgium);
- Composite pressure vessels PE liner reinforced with fiberglass and epoxy resin;
- For industrial and potable water treatment systems;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- Certification for contact with drinking water following EC directives and KTW (for Germany) recommendations;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- In compliance with the sanitary certification ACS (France);
- Max operating pressure 10 bar;
- Max operating temperature 50°C;
- Top connection threaded 2 1/2" – 8NPSM or 4" – 8UN;
- Cycle test 250.000 times from 0,7 to 10 bar;
- Burst test to 4 times max operating pressure;
- Blue colour;
- Warranty 5 years.

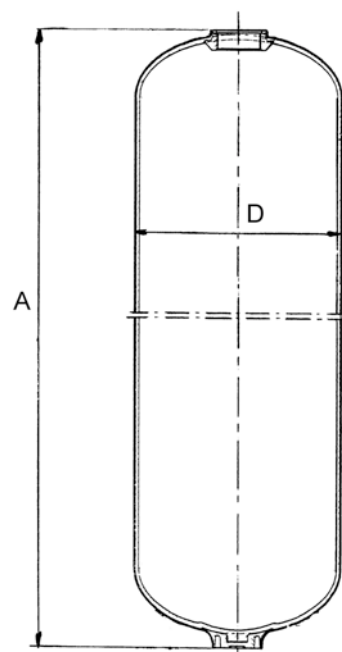


REF.	MODEL	VOLUME (liters)	EXTERNAL D (mm)	A (mm)	B (mm)	CONNECTION	PRICE EURO
BSQ0613A3	6 x 13	4,6	159	342 ± 2	170	2 1/2"	36,99
BSQ0618A3	6 x 18	6,9	159	475 ± 2	170	2 1/2"	38,11
BSRT0635P3E	6 x 35	14,4	159	907 ± 2	170	2 1/2"	60,31
BSQ0713A3	7 x 13	6,3	184	341 ± 2	195	2 1/2"	37,62
BSQ0717A3	7 x 17	8,8	184	446 ± 2	195	2 1/2"	41,03
BSRT0724A3E	7 x 24	13,5	184	613 ± 2	195	2 1/2"	52,86
BSQ0730A3	7 x 30	16,8	184	778 ± 2	195	2 1/2"	58,65
BSQ0735A3	7 x 35	20,4	184	901 ± 2	195	2 1/2"	62,79
BSQ0817A3	8 x 17	11,0	208	435 ± 2	220	2 1/2"	44,15
BSRT0824A3E	8 x 24	16,6	208	612 ± 4	220	2 1/2"	52,82
BSQ0830A3	8 x 30	22,0	208	783 ± 2	220	2 1/2"	59,04
BSQ0835A3	8 x 35	25,7	208	902 ± 2	220	2 1/2"	65,67
BSQ0844P3	8 x 44	33,6	208	1124 ± 2	220	2 1/2"	71,70
BSRT0917A3E	9 x 17	13,7	233	431 ± 4	240	2 1/2"	45,17
BSRT0930A3E	9 x 30	26,6	233	766 ± 5	240	2 1/2"	62,30
BSQ0935A3	9 x 35	31,3	233	903 ± 2	240	2 1/2"	69,85
BSRT0942A3E	9 x 42	38,2	233	1074 ± 5	240	2 1/2"	77,01
BSRT0948A3E	9 x 48	44,6	233	1228 ± 5	240	2 1/2"	84,55
BSRT1017A3E	10 x 17	16,8	257	436 ± 4	269	2 1/2"	49,89
BSQ1019A3	10 x 19	19,1	257	502 ± 2	269	2 1/2"	56,80
BSRT1022A3E	10 x 22	22,9	257	559 ± 4	269	2 1/2"	58,12
BSRT1024A3E	10 x 24	25,1	257	605 ± 4	269	2 1/2"	62,11
BSRT1030A3E	10 x 30	32,4	257	766 ± 4	269	2 1/2"	60,21
BSQ1035A3	10 x 35	38,9	257	903 ± 2	269	2 1/2"	81,09
BSQ1044P3	10 x 44	48	257	1122 ± 2	269	2 1/2"	86,79
BSRT1047P3E	10 x 47	54	257	1188 ± 5	269	2 1/2"	88,79
BSQ1054P3	10 x 54	61	257	1385 ± 2	269	2 1/2"	90,78
BSRT1055P3EN	10 x 55	62	257	1382 ± 5	269	4"	103,68
BSQ1248P3	12 x 48	76	304	1232 ± 3	315	2 1/2"	107,87
BSQ1252P3	12 x 52	84	304	1335 ± 3	315	2 1/2"	132,65
BSRT1344A3E	13 x 44	85	334	1145 ± 6	330	2 1/2"	127,34
BSQ1354A3	13 x 54	103	334	1371 ± 3	330	2 1/2"	136,49
BSRT1355A3EN	13 x 55	103	334	1371 ± 3	330	4"	152,36

MWG Residential Pressure Vessels without Base



- Made in China;
- Composite pressure vessels PE liner reinforced with fiberglass and epoxy resin;
- For industrial and potable water treatment systems;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- Certification for contact with drinking water following EC directives and KTW (for Germany) recommendations;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- In compliance with the sanitary certification ACS (France);
- Max operating pressure 10 bar;
- Max operating temperature 50°C;
- Top connection threaded 2 ½" – 8NPSM or 4"– 8UN;
- Cycle test 250.000 times from 0,7 to 10 bar;
- Burst test to 4 times max operating pressure;
- Blue colour;
- Warranty 10 years.

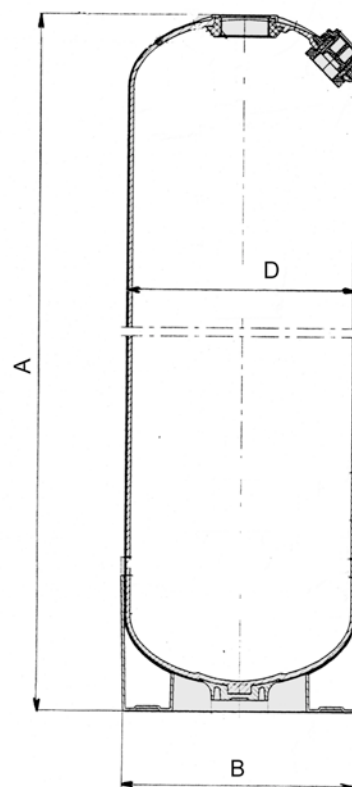


REF.	MODEL	VOLUME (liters)	EXTERNAL D (mm)	A (mm)	CONNECTION (inch)	PRICE EURO
BMWG05013AB	5 x 13	3,1	129	329 ± 3	2 ½"	23,07
BMWG06013AB	6 x 13	4,7	159,5	329 ± 3	2 ½"	24,80
BMWG07013AB	7 x 13	5,9	180	329 ± 3	2 ½"	26,63
BMWG07017AB	7 x 17	8,2	180	431 ± 3	2 ½"	29,07
BMWG07019AB	7 x 19	9,4	180	483 ± 3	2 ½"	30,52
BMWG07024AB	7 x 24	12,4	180	611 ± 3	2 ½"	37,70
BMWG07030AB	7 x 30	16,01	180	771 ± 3	2 ½"	42,23
BMWG07035AB	7 x 35	18,09	180	891 ± 3	2 ½"	44,03
BMWG08013AB	8 x 13	7,6	207	329 ± 3	2 ½"	28,77
BMWG08017AB	8 x 17	10,7	207	431 ± 3	2 ½"	31,49
BMWG08024AB	8 x 24	16,03	207	611 ± 3	2 ½"	39,09
BMWG08030AB	8 x 30	21,2	207	771 ± 3	2 ½"	44,18
BMWG08035AB	8 x 35	25,0	207	891 ± 3	2 ½"	47,43
BMWG09017AB	9 x 17	13,3	230	431 ± 3	2 ½"	32,28
BMWG09024AB	9 x 24	20,3	230	611 ± 3	2 ½"	39,86
BMWG09030AB	9 x 30	26,5	230	771 ± 3	2 ½"	44,73
BMWG09035AB	9 x 35	31,1	230	891 ± 3	2 ½"	50,72
BMWG10017AB	10 x 17	16,4	257,5	431 ± 3	2 ½"	35,73
BMWG10019AB	10 x 19	19,0	257,5	483 ± 3	2 ½"	40,32
BMWG10024AB	10 x 24	25,2	257,5	611 ± 3	2 ½"	41,97
BMWG10030AB	10 x 30	33,0	257,5	771 ± 3	2 ½"	45,92
BMWG10035AB	10 x 35	38,8	257,5	891 ± 3	2 ½"	58,13

Structural Dome-Hole Residential Pressure Vessels



- Made in U.S.A.;
- Composite pressure vessels PE liner reinforced with fiberglass and epoxy resin;
- 1 ¼" opening on the dome top of the tank with Noryl plug;
- For industrial and potable water treatment systems;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- Certification for contact with drinking water following EC directives and KTW (for Germany) recommendations;
- Max operating pressure 10 bar;
- Max operating temperature 50°C;
- Top connection threaded 2 ½" – 8NPSM;
- Cycle test 250.000 times from 0,7 to 10 bar;
- Burst test to 4 times max operating pressure;
- Natural colour;
- Warranty 5 years.



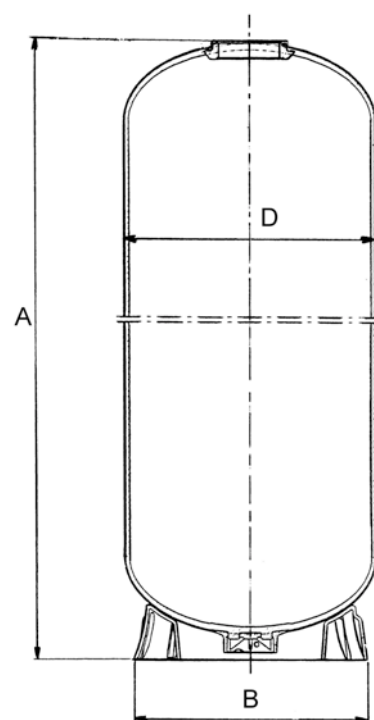
REF.	MODEL	VOLUME (liters)	EXTERNAL D (mm)	A (mm)	B (mm)	CONNECTION (inch)	PRICE EURO
B10044QN(*)	10 x 44 DH	48	257	1122	269	2 ½"	163,59
B10054QN(*)	10 x 54 DH	61	257	1378	269	2 ½"	172,68
B12052QN(*)	12 x 52 DH	84	306	1346	312	2 ½"	255,62
B13054QN(*)	13 x 54 DH	103	364	1370	375	2 ½"	287,42

(*) not available in stock.

MWG Industrial Pressure Vessels With Threaded Top Opening



- Made in China;
- Composite pressure vessels PE liner reinforced with fiberglass and epoxy resin;
- For industrial and potable water treatment systems;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- Certification for contact with drinking water following EC directives and KTW (for Germany) recommendations;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- In compliance with the sanitary certification ACS (France);
- Max operating pressure 10 bar;
- Max operating temperature 50°C;
- Threaded top connection 4"– 8UN;
- Cycle test 250.000 times from 0,7 to 10 bar;
- Burst test to 4 times max operating pressure;
- Blue colour;
- Warranty 5 years.



REF.	MODEL	VOLUME (liters)	EXTERNAL DIAMETER (mm)	A (mm)	B (mm)	CONNECTION (inch)	PRICE EURO
BMWG14052GB	14 x 52	115,4	360	1325 ± 6	369	4" (**)	144,12
BMWG14065GB	14 x 65	147	360	1655 ± 6	369	4" (**)	173,74
BMWG16052GB	16 x 52	150,0	410	1316 ± 6	420	4" (**)	168,10
BMWG16065GB	16 x 65	191,3	410	1648 ± 6	420	4" (**)	191,14
BMWG18053GB	18 x 53	193,6	464	1366 ± 6	451	4"	298,15
BMWG18065GB	18 x 65	242,3	464	1670 ± 6	451	4"	336,33
BMWG21036GB	21 x 36	168,2	541	958 ± 10	532	4"	370,56
BMWG21053GB	21 x 53	262,4	541	1390 ± 10	532	4"	412,12
BMWG21062GB	21 x 62	312,7	541	1620 ± 10	532	4"	427,33
BMWG24065GB	24 x 65	426,5	615	1730 ± 10	612	4"	671,15
BMWG24072GB	24 x 72	477,5	615	1910 ± 10	612	4"	696,63
BMWG30072GB (*)	30 x 72	725,9	767	1890 ± 10	752	4"	1.016,63
BMWG36072GB (*)	36 x 72	1030,2	919	1965 ± 10	910	4"	1.372,99

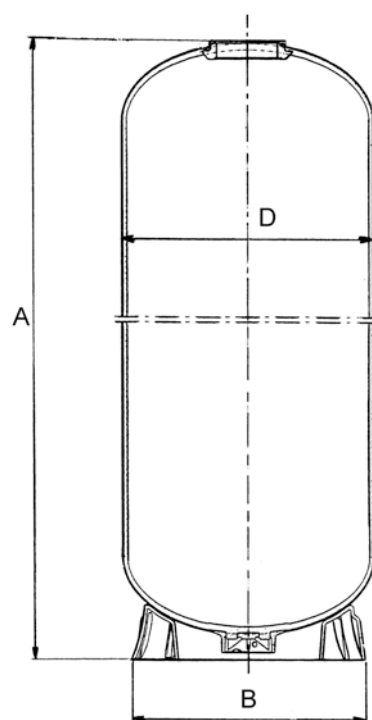
(*) Vacuum breaker included.

(**) with reduction 2,5"

Structural Industrial Pressure Vessels With Threaded Top Opening



- Made in European Union (Belgium);
- composite pressure vessels PE liner reinforced with fiberglass and epoxy resin;
- for industrial and potable water treatment systems;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- Certification for contact with drinking water following EC directives and KTW (for Germany) recommendations;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- In compliance with the sanitary certification ACS (France);
- Max operating pressure 10 bar;
- max operating temperature 50°C;
- threaded top connection 4"– 8UN;
- cycle test 250.000 times from 0,7 to 10 bar;
- burst test to 4 times max operating pressure;
- blue colour;
- Warranty 5 years.



REF.	MODEL	VOLUME (liters)	EXTERNAL DIAMETER (mm)	A (mm)	B (mm)	CONNECTION (inch)	PRICE EURO
BSRT1452A3REN	14 x 52	122	369	1360 ± 20	330	4" (**)	187,56
BSRT1465A3REN	14 x 65	140	369	1645 ± 20	380	4" (**)	226,12
BSRT1649A3REN	16 x 49	125	406	1269 ± 20	420	4" (**)	218,76
BSRT1665A3REN	16 x 65	170	406	1632 ± 20	420	4" (**)	248,75
BSRT1856A3E	18 x 56	211	469	1432 ± 20	510	4"	405,04
BSRT1865A3EN	18 x 65	250	469	1726 ± 20	510	4"	456,93
BSRT2153A3E	21 x 53	277	552	1434 ± 20	510	4"	559,87
BSRT2160A3E	21 x 60	310	552	1625 ± 20	510	4"	581,62
BSRT2469A3E	24 x 69	440	610	1870 ± 20	510	4"	933,41
BSRT3072A3E (*)	30 x 72	710	770	2030 ± 30	730	4"	1.416,45
BSRT3672A3E (*)	36 x 72	1020	930	2130 ± 30	730	4"	1.914,79

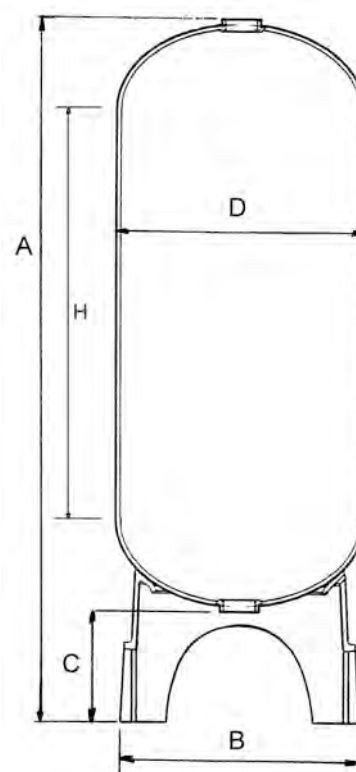
(*) Vacuum breaker included.

(**) with reduction 2,5"

MWG Industrial Pressure Vessels With Top&Bottom Threaded Openings



- Made in China;
- Composite pressure vessels PE liner reinforced with fiberglass and epoxy resin;
- For industrial and potable water treatment systems;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- Certification for contact with drinking water following EC directives and KTW (for Germany) recommendations;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- In compliance with the sanitary certification ACS (France);
- Max operating pressure 10 bar;
- Max operating temperature 50°C;
- Top and bottom threaded connection 4" – 8UN;
- Cycle test 250.000 times from 0,7 to 10 bar;
- Burst test to 4 times max operating pressure;
- Blue colour;
- Warranty 5 years.



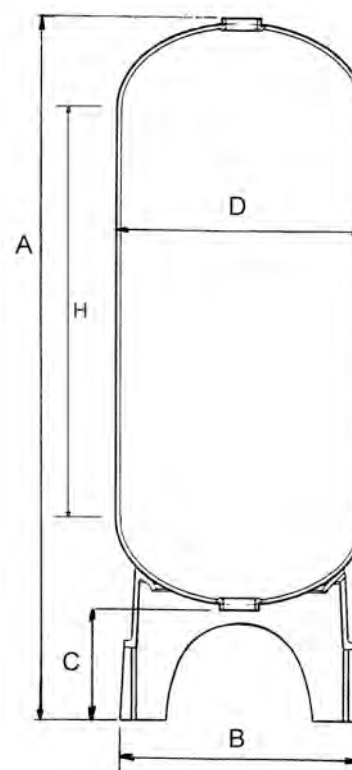
REF.	MODEL	VOLUME (liters)	EXTERNAL DIAMETER (mm)	A (mm)	B (mm)	C (mm)	H (mm)	CONNECTION (inch)	PRICE EURO
BMWG14065HB	14 x 65	147,0	360	1856 ± 6	369	230	1386	4"	194,02
BMWG16065HB	16 x 65	191,3	410	1880 ± 6	430	250	1365	4"	218,44
BMWG18065HB	18 x 65	242,3	464	1950 ± 10	480	320	1330	4"	356,73
BMWG21062HB	21 x 62	312,7	541	1902 ± 10	555	330	1220	4"	455,32
BMWG24065HB	24 x 65	426,5	615	1916 ± 10	610	246	1220	4"	791,03
BMWG24072HB	24 x 72	477,5	615	2095 ± 10	610	240	1400	4"	837,17
BMWG30072HB (*)	30 x 72	726	750	2075 ± 10	762	235	1270	4"	1.075,54
BMWG36072HB (*)	36 x 72	1030,2	922	2190 ± 10	930	350	1170	4"	1.458,47

(*) Vacuum breaker included.

Structural Industrial Pressure Vessels With Top&Bottom Threaded Openings



- Made in European Union (Belgium);
- Composite pressure vessels PE liner reinforced with fiberglass and epoxy resin;
- For industrial and potable water treatment systems;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- Certification for contact with drinking water following EC directives and KTW (for Germany) recommendations;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- In compliance with the sanitary certification ACS (France);
- Max operating pressure 10 bar;
- Max operating temperature 50°C;
- Top and bottom threaded connection 4"– 8UN;
- Cycle test 250.000 times from 0,7 to 10 bar;
- Burst test to 4 times max operating pressure;
- Blue colour;
- Warranty 5 years.



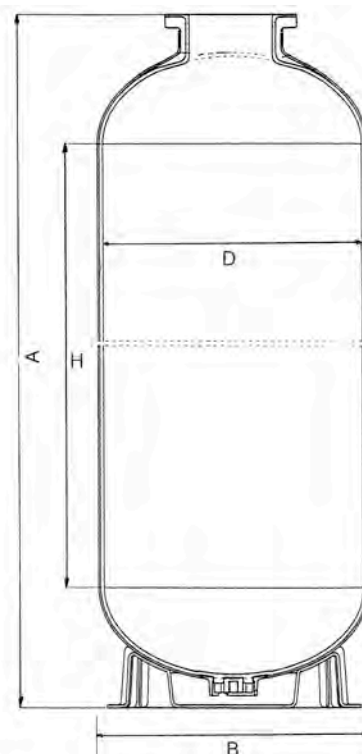
REF.	MODEL	VOLUME (liters)	EXTERNAL DIAMETER (mm)	A (mm)	B (mm)	C (mm)	H (mm)	CONNECTION (inch)	PRICE EURO
BSRT1465F7E	14 x 65	140	369	2031 ± 20	488	381	1378	4"	252,50
BSRT1665F7E	16 x 65	170	406	2031 ± 20	497	384	1371	4"	284,28
BSRT1865F7E	18 x 65	250	469	2080 ± 20	554	404	1350	4"	484,61
BSRT2160F7E	21 x 60	310	552	1923 ± 20	554	389	1155	4"	618,56
BSRT2469F7E	24 x 69	440	610	2169 ± 20	620	422	1327	4"	1.093,17
BSRT3072F7E (*)	30 x 72	710	770	2248 ± 30	816	413	1313	4"	1.492,06
BSRT3672F7E (*)	36 x 72	1020	927	2305 ± 30	1001	408	1266	4"	2.015,60

(*) Vacuum breaker included.

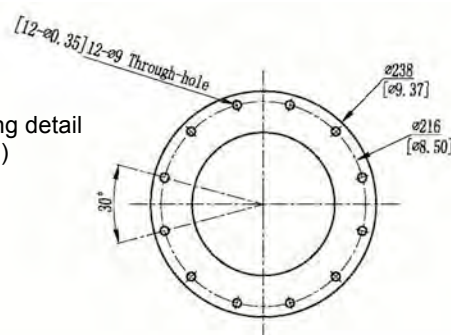
Structural Industrial Pressure Vessels With Flanged Top Opening



- Made in European Union (Belgium);
- Composite pressure vessels PE liner reinforced with fiberglass and epoxy resin;
- For industrial and potable water treatment systems;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- Certification for contact with drinking water following EC directives and KTW (for Germany) recommendations;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- In compliance with the sanitary certification ACS (France);
- Max operating pressure 10 bar;
- Max operating temperature 65°C;
- 6" top connection;
- Cycle test 250.000 times from 0,7 to 10 bar;
- Burst test to 4 times max operating pressure;
- Blue colour;
- Warranty 5 years.



Flanged top opening detail
(dimensions in mm)



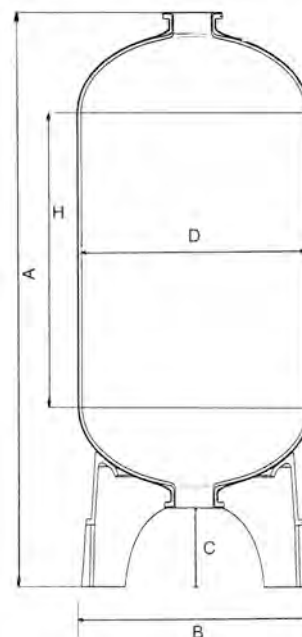
REF.	MODEL	VOLUME (liters)	EXTERNAL DIAMETER (mm)	A (mm)	B (mm)	H (mm)	CONNECTION (inch)	PRICE EURO
BSRT1868A3E	18 x 68	250	469	1777 ± 20	510	1344	6"	571,15
BSRT2166A3E	21 x 66	310	552	1673 ± 20	510	1159	6"	869,26
BSRT2475A3E	24 x 75	450	610	1908 ± 20	510	1320	6"	1.124,87
BSRT3078A3E (*)	30 x 78	710	770	2058 ± 30	768	1282	6"	1.489,32
BSRT3678A3E (*)	36 x 78	1020	927	2155 ± 30	768	1235	6"	1.968,04

(*) Vacuum breaker included.

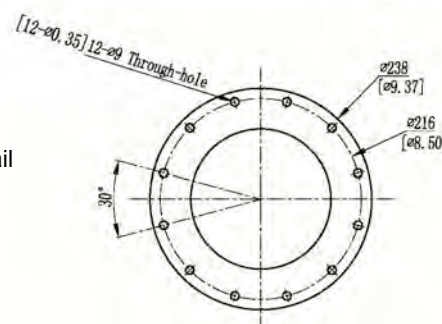
MWG Industrial Pressure Vessels With Flanged Top&Bottom Openings



- Made in China;
- Composite pressure vessels PE liner reinforced with fiberglass and epoxy resin;
- For industrial and potable water treatment systems;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- Certification for contact with drinking water following EC directives and KTW (for Germany) recommendations;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- In compliance with the sanitary certification ACS (France);
- Max operating pressure 10 bar;
- Max operating temperature 65°C;
- Top and bottom 6" flange connection;
- Cycle test 250.000 times from 0,7 to 10 bar;
- Burst test to 4 times max operating pressure;
- Blue colour;
- Warranty 5 years.



Flanged top opening detail
(dimensions in mm)



(*) Vacuum breaker included.

REF.	MODEL	VOLUME (liters)	EXTERNAL DIAMETER (mm)	A (mm)	B (mm)	C (mm)	H (mm)	CONN. (inch)	PRICE EURO
BMWG30072MB (*)	30 x 72	736	772	2245 ± 25	815	265	1260	6"	1.245,67
BMWG36072MB (*)	36 x 72	1045	925	2270 ± 25	920	285	1195	6"	1.609,30
BMWG42063MB (*)	42 x 63	1235	1085	2055 ± 25	1070	270	955	6"	1.813,50
BMWG42072MB (*)	42 x 72	1437	1085	2290 ± 25	1070	275	1185	6"	2.398,87
BMWG48072MB (*)	48 x 72	1784	1218	2275 ± 25	1230	260	1110	6"	2.820,94
BMWG63067MB (*)	63 x 67	2630	1608	2050 ± 25	1620	260	660	6"	3.652,64
BMWG63086MB (*)	63 x 86	3425	1608	2460 ± 25	1620	260	1100	6"	4.079,06

ATTENTION: for 63" pressure vessels, when you use a DN100 lower system, you have to raise the pressure vessel.

Structural Industrial Pressure Vessels With Flanged Top&Bottom Openings

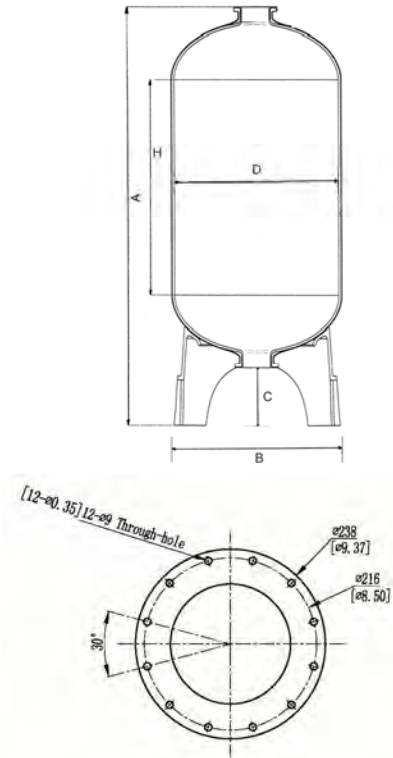


- Made in European Union (Belgium);
- Composite pressure vessels PE liner reinforced with fiberglass and epoxy resin;
- For industrial and potable water treatment systems;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- Certification for contact with drinking water following EC directives and KTW (for Germany) recommendations;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- In compliance with the sanitary certification ACS (France);
- Max operating pressure 10 bar;
- Max operating temperature 65°C;
- Top and bottom 6" flange connection;
- Cycle test 250.000 times from 0,7 to 10 bar;
- Burst test to 4 times max operating pressure;
- Blue colour;
- Warranty 5 years.

(*) Vacuum breaker included.

(**) not available in stock.

Flanged top opening detail
(dimensions in mm)



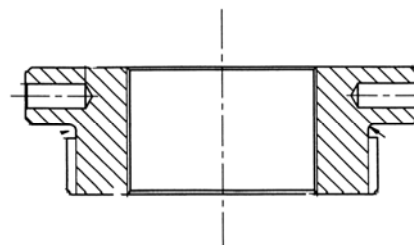
REF.	MODEL	VOLUME (liters)	EXTERNAL DIAMETER (mm)	A (mm)	B (mm)	C (mm)	H (mm)	CONN: (inch)	PRICE EURO
BSC1868F7	18 x 68	250	469	2129 ± 15	545	349	1345	6"	722,07
BSC2166F7	21 x 66	310	552	1995 ± 10	545	353	1158	6"	850,02
BSC2475F7	24 x 75	450	610	2224 ± 10	698	358	1320	6"	1.305,93
BSC3078F7 (*)	30 x 78	712	770	2284 ± 15	777	360	1284	6"	1.692,27
BSC3678F7 (*)	36 x 78	1020	927	2345 ± 20	952	370	1250	6"	2.196,20
BSRT4264F7E (*)	42 x 64	1047	1074	2065 ± 30	1110	440	775	6"	2.784,63
BSC4278F7 (*)	42 x 78	1345	1074	2419 ± 20	1092	439	1130	6"	3.330,83
BSC4882F7 (*)	48 x 82	1830	1226	2441 ± 15	1270	408	1125	6"	3.902,34
BSC55104F7 (*) (**)	55 x 104	2619	1429	2740 ± 20	1570	618	1087	6"	9.752,82
BSC55120F7 (*) (**)	55 x 120	3220	1429	3134 ± 20	1570	618	1481	6"	12.102,27
BSC55130F7 (*) (**)	55 x 130	3602	1429	3384 ± 20	1570	618	1731	6"	13.570,70
BSC55140F7 (*) (**)	55 x 140	3984	1429	3634 ± 20	1570	618	1981	6"	15.039,05
BSRT6367F7E (*)	63 x 67	2484	1623	2075 ± 30	1570	355	594	6"	4.962,69
BSRT6386F7E (*)	63 x 86	3200	1623	2475 ± 30	1570	355	996	6"	5.658,54
BSC63103F7 (*) (**)	63 x 103	4265	1623	3269 ± 20	1570	646	1501	6"	15.740,34
BSC63113F7 (*) (**)	63 x 113	4760	1623	3519 ± 20	1570	646	1751	6"	16.518,98
BSC63123F7 (*) (**)	63 x 123	5255	1623	3769 ± 20	1570	646	2001	6"	16.739,73



Adapters

- adapter 4" – 8UN to 2 1/2" – 8NPSM;
- with O-ring.

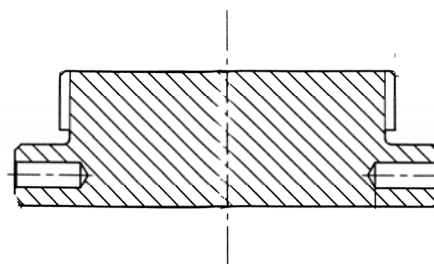
REF.	MODEL	REDUCTION TO	PRICE EURO
PV300	PVC machined	2 1/2" – 8 NPSM	30,53
PV307	PVC machined	2" BSP	49,40



Closures

- closure for 4" – 8UN tanks thread;
- with O-ring.

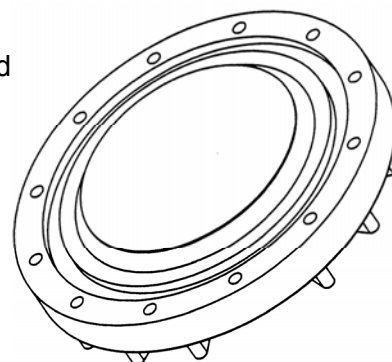
REF.	MATERIAL	PRICE EURO
PV301	PVC machined	39,56



6" closed flange

- 6" closed flange complete with bolts, nuts, washer and O-ring;
- flange material PVC;
- bolts material AISI 304.

REF.	PRICE EURO
PV510B	80,84

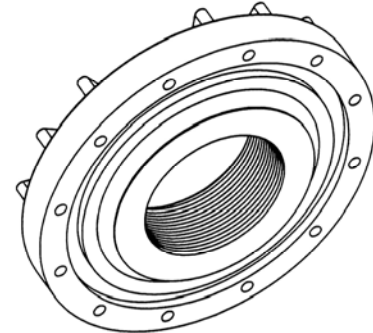




6" - 4" adapter

- 6" flanged adapter 4"-8UN, complete with bolts, nuts, washer and O-ring;
- bolts material AISI 304.

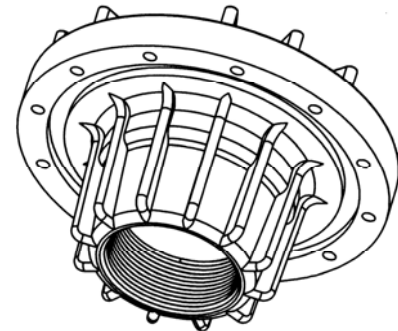
REF.	ADAPTER MATERIAL	PRICE EURO
PV511B	PVC	95,03



6" - 3" - 3" adapter

- 6" flanged x 3" x 3" BSP threaded adapter complete with bolts, nuts, washer and O-ring.;
- flange material PPO;
- bolts material AISI 304.

REF.	PRICE EURO
PV509 (*)	131,28

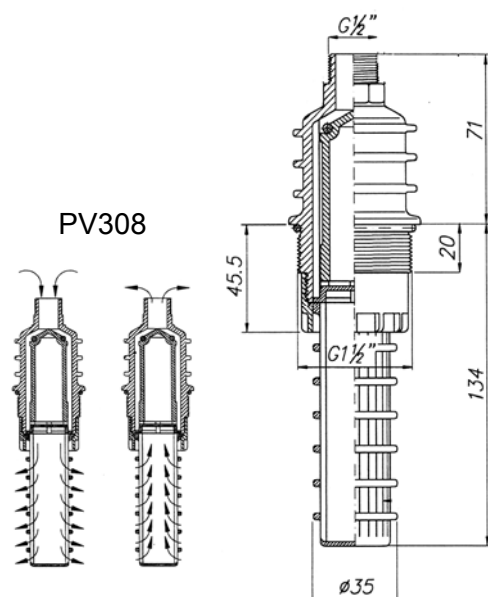


(*) available till it will be out-of-stock.

Aeration valve & vacuum breaker

- aeration valve and vacuum breaker in PP;
- connection 1 1/2", drain 1/2";
- max pressure 10 bar;
- max temperature 65°C.

REF.	PRICE EURO
PV308	94,18
PV308B	87,21

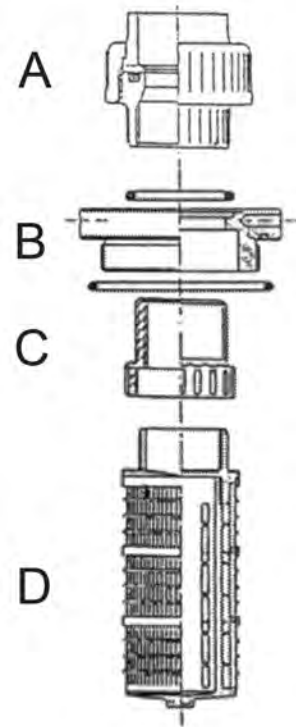




Cylindrical diffusors

- cylindrical diffuser for vessels with 4"- 8UN, for upper or lower installation;
- outlet connection to glue D.63;
- 0,2 mm slots or 0,5 mm;
- materials: adapter PVC, diffuser PP;
- flow 20 m³/h at Δp 0,2 bar;
 - A. union D63 (REF. PV329);
 - B. adapter 4" with gasket (REF. PV332);
 - C. reduction 2" M/F (REF. PV335);
 - D. diffuser diameter 85 mm length 180 mm.(REF. PV340 0,2 mm slots – REF. PV342 0,5 mm slots).

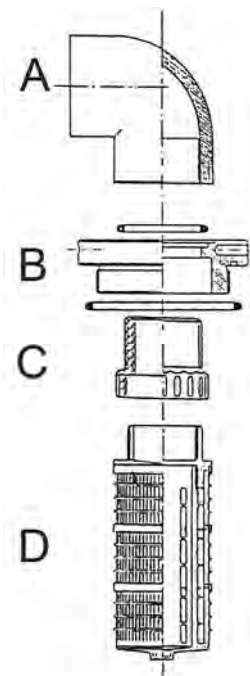
REF.	SLOTS (mm)	VESSEL	PRICE EURO
PV351	0,2	14" ÷ 36"	130,51
PV352	0,5	14" ÷ 36"	130,51



Cylindrical diffusors with elbow

- cylindrical diffuser for vessel 4"-8UN, for upper installation;
- outlet connection with elbow to glue D63;
- 0,2 mm slots or 0,5 mm
- materials: adapter and elbow PVC, diffuser PP;
- flow 20 m³/h at Δp 0,2 bar;
- including:
 - A. elbow D63 (REF. PV331);
 - B. adapter 4" with gasket (REF. PV332);
 - C. reduction 2" M/F (REF. PV335);
 - D. diffuser con diameter 85 mm length 180 mm (REF.PV340 0,2 mm slots – REF. PV342 0,5 mm slots).

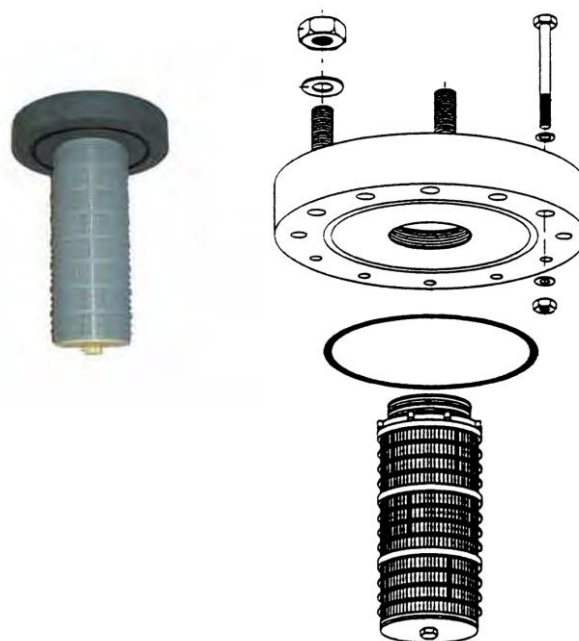
REF.	SLOTS (mm)	VESSEL	PRICE EURO
PV350	0,2	14" ÷ 36"	118,57
PV349	0,5	14" ÷ 36"	118,57





Flanged upper diffusors

- upper diffusor 6" flanged, complete with bolts, nuts, washer and O-ring;
- flange material PVC;
- PP cylindrical diffusor 0,2 mm slots or 0,5 mm slots – see data sheet 02-03-05-EN;
- bolts material AISI 304.

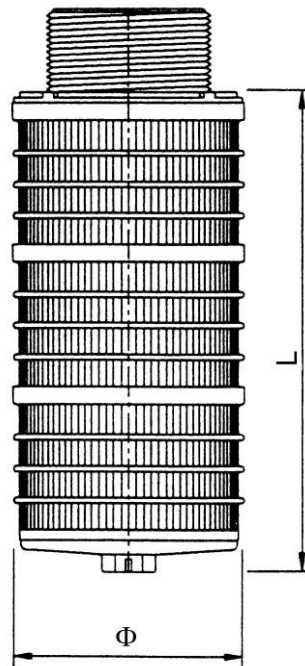


REF.	VESSEL	OUTLET	CYLINDRICAL DIFFUSOR DIAMETER (mm)	CYLINDRICAL DIFFUSOR LENGTH (mm)	SLOTS (mm)	FLOW (m ³ /h) Δp 0,2 bar	PRICE EURO
PV512	18" ÷ 36"	DN65	85	284	0,2	20	192,36
PV514	24" ÷ 36"	DN80	120	240	0,2	30	203,05
PV515	42" ÷ 48"	DN80	120	312	0,2	36	217,34
PV553	63"	DN80	120	384	0,2	50	247,37
PV518	63"	DN100	120	384	0,2	60	231,63
PV513	18" ÷ 36"	DN65	85	284	0,5	20	192,36
PV516	24" ÷ 36"	DN80	120	240	0,5	30	203,05
PV517	42" ÷ 48"	DN80	120	312	0,5	36	217,34
PV554	63"	DN80	120	384	0,5	50	247,37
PV519	63"	DN100	120	384	0,5	60	231,63



Cylindrical diffusors

- PP cylindrical diffuser with thread connection 2", 3" or 4";
- slots 0,2 or 0,5 mm.

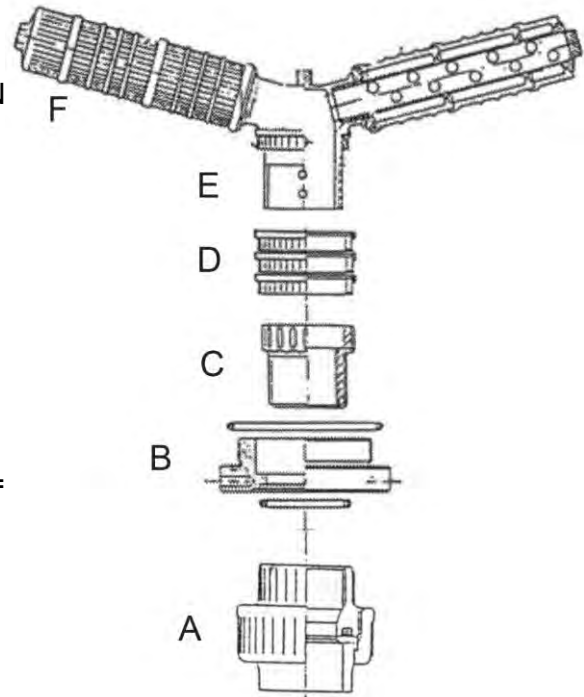


REF.	CONNECTION	DIAMETER (mm)	LENGTH (mm)	SLOTS (mm)	PRICE EURO
PV340	2"	85	180	0,2	36,12
PV339	2"	85	284	0,2	54,19
PV341	2"	85	338	0,2	61,96
PV342	2"	85	180	0,5	36,12
PV343	2"	85	284	0,5	54,19
PV344	2"	85	338	0,5	61,96
PV364	3"	120	240	0,2	76,20
PV365	3"	120	312	0,2	90,92
PV366	3"	120	384	0,2	105,74
PV367	3"	120	240	0,5	76,20
PV368	3"	120	312	0,5	90,92
PV369	3"	120	384	0,5	105,74
PV393	4"	120	384	0,2	105,74
PV394	4"	120	384	0,5	105,74



Lower lateral system

- lower lateral system for vessels with 4" – 8UN opening;
- outlet connection to glue D63;
- slots 0,2 or 0,5 mm;
- materials: adapter PVC, hub and laterals PP;
- including:
 - A. union D63 (REF. PV329);
 - B. adapter 4" with O-rings (REF. PV332);
 - C. reduction 2" M/F (REF. PV335);
 - D. n.3 spacers (REF. PV337);
 - E. hub (REF. PV336);
 - F. N.5 laterals diameter 54 mm, length = see table.

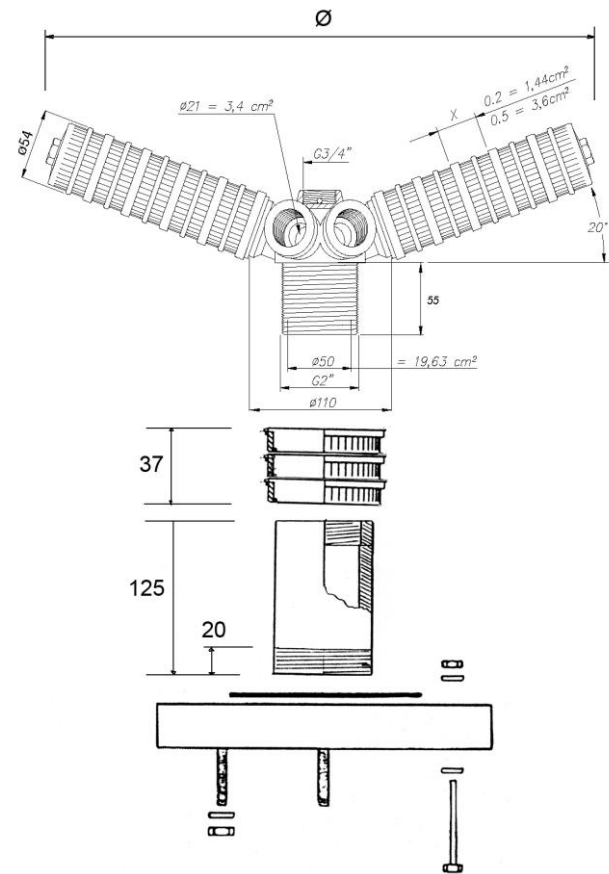


REF.	VESSEL	LATERALS LENGHT (mm)	SLOTS (mm)	FLOW (m ³ /h) Δp 0,2 bar	PRICE EURO
PV353	14" - 16" - 18"	113	0,2	16	141,02
PV354	21" - 24"	175	0,2	17	151,36
PV355	30"	237	0,2	18	160,91
PV356	36"	299	0,2	20	171,25
PV360	14" - 16" - 18"	113	0,5	16	141,02
PV361	21" - 24"	175	0,5	17	151,36
PV362	30"	237	0,5	18	160,91
PV363	36"	299	0,5	20	171,25



Lower lateral systems with 6 laterals hub for flanged pressure vessels

- lower lateral system for 6" flanged pressure vessels;
- flange material PVC;
- complete with AISI 304 bolts and washer;
- hub at 6 laterals;
- laterals in PP, slots 0,2 or 0,5 mm, length as table below.

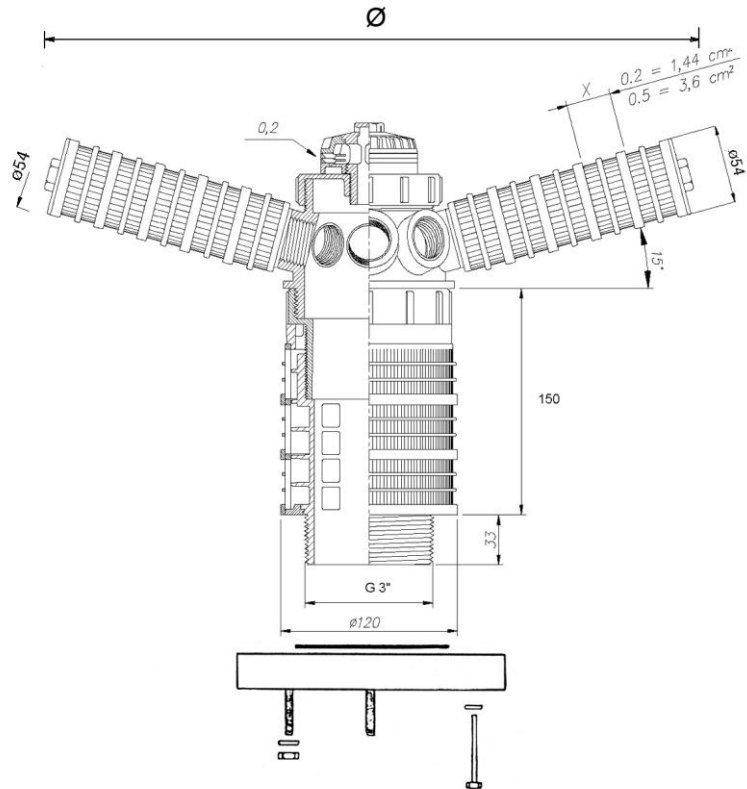


REF.	VESSEL	CONNECTION	LATERALS LENGTH (mm)	DIAMETER Ø (mm)	SLOTS (mm)	FLOW (m³/h) Δp 0,2 bar	PRICE EURO
PV520	18" - 21"	DN 65	144	374	0,2	16	215,87
PV521	24"	DN 65	175	432	0,2	17	222,40
PV522	30"	DN 65	237	549	0,2	18	233,89
PV523	36"	DN 65	299	665	0,2	20	246,04
PV524	18" - 21"	DN 65	144	374	0,5	16	215,87
PV525	24"	DN 65	175	432	0,5	17	222,40
PV526	30"	DN 65	237	549	0,5	18	233,89
PV527	36"	DN 65	299	665	0,5	20	246,04



Lower lateral systems with 8 laterals hub for flanged pressure vessels

- lower lateral system for 6" flanged pressure vessels;
- flange material PVC;
- complete with AISI 304 bolts and washer;
- hub at 8 laterals;
- laterals in PP, slots 0,2 or 0,5 mm, length as table below.

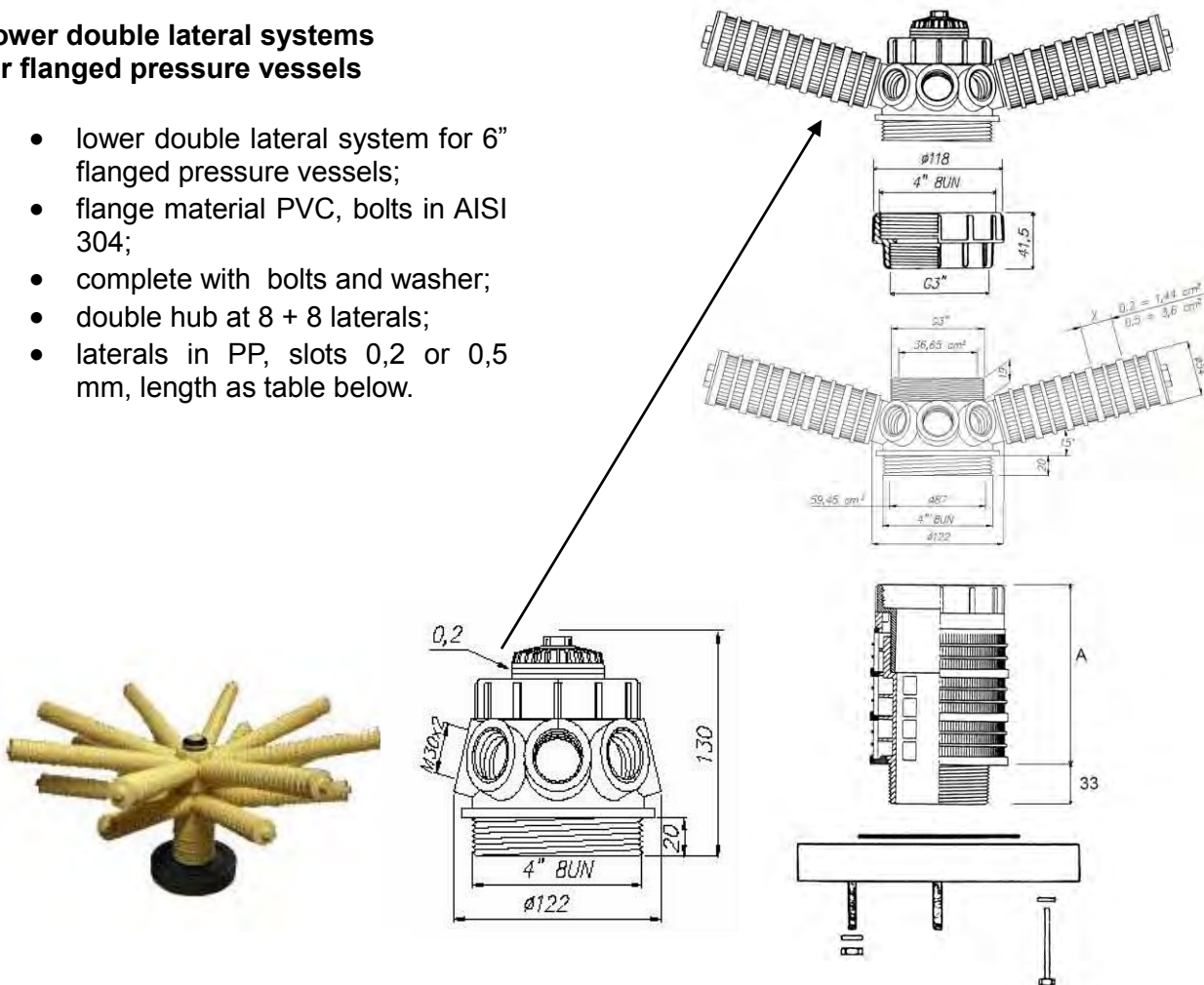


REF.	VESSEL	CONNECTION	LATERALS LENGTH (mm)	DIAMETER Ø (mm)	SLOTS (mm)	FLOW (m ³ /h) Δp 0,2 bar	PRICE EURO
PV522A	30"	DN 65	237	580	0,2	28	381,47
PV523A	36"	DN 65	299	699	0,2	30	397,67
PV528	24"	DN 80	175	461	0,2	26	369,74
PV529	30"	DN 80	237	580	0,2	28	385,06
PV530	36"	DN 80	299	699	0,2	30	401,26
PV526A	30"	DN 65	237	580	0,5	28	381,47
PV527A	36"	DN 65	299	699	0,5	30	397,67
PV531	24"	DN 80	175	461	0,5	26	369,74
PV532	30"	DN 80	237	580	0,5	28	385,06
PV533	36"	DN 80	299	699	0,5	30	401,26



Lower double lateral systems for flanged pressure vessels

- lower double lateral system for 6" flanged pressure vessels;
- flange material PVC, bolts in AISI 304;
- complete with bolts and washer;
- double hub at 8 + 8 laterals;
- laterals in PP, slots 0,2 or 0,5 mm, length as table below.

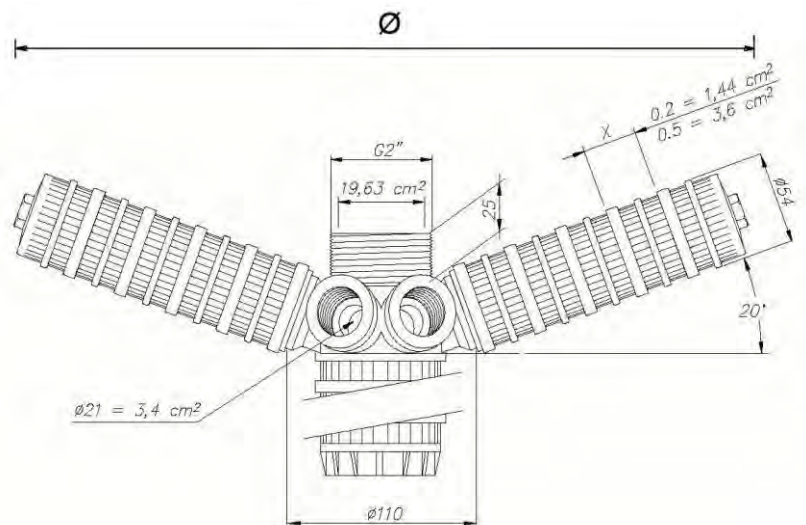


REF.	VESSEL	CONNECTION	LATERALS QUANTITY	A (mm)	LATERALS LENGTH (mm)	SYSTEMS DIAMETERS (mm)	SLOTS (mm)	FLOW (m3/h) Δp 0,2 bar	PRICE EURO
PV534	42"	DN 80	8 + 8	150	361 423	819 939	0,2	32	661,74
PV535	48"	DN 80	8 + 8	150	423 485	939 1059	0,2	36	727,70
PV555	63"	DN 80	8 + 8	190	578 640	1239 1359	0,2	50	807,05
PV538	63"	DN 100	8 + 8	190	578 640	1239 1359	0,2	60	816,06
PV536	42"	DN 80	8 + 8	150	361 423	819 939	0,5	32	661,74
PV537	48"	DN 80	8 + 8	150	423 485	939 1059	0,5	36	727,70
PV556	63"	DN 80	8 + 8	190	578 640	1239 1359	0,5	50	807,05
PV539	63"	DN 100	8 + 8	190	578 640	1239 1359	0,5	60	816,06



Top mount lower lateral systems for flanged pressure vessels

- lower lateral system for 6" flanged pressure vessels for top mount valve, with 6 laterals;
- material hub and laterals PP, length as table below;
- slots 0,2 or 0,5 mm;
- to install with 2" adapter for the needed riser tube diameter.

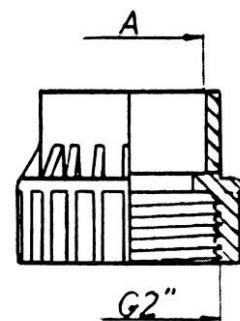


REF.	VESSEL	LATERALS LENGTH (mm)	DIAMETER Ø (mm)	SLOTS (mm)	FLOW (m³/h) Δp 0,2 bar	PRICE EURO
PV540	18" - 21"	144	374	0,2	16	73,49
PV541	24"	175	432	0,2	17	80,02
PV542	30"	237	549	0,2	18	91,50
PV543	36"	299	665	0,2	20	103,65
PV544	18" - 21"	144	374	0,5	16	73,49
PV545	24"	175	432	0,5	17	80,02
PV546	30"	237	549	0,5	18	91,50
PV547	36"	299	665	0,5	20	103,65

2" gas adapter

- 2" GAS adapters with connection to glue;
- material PVC.

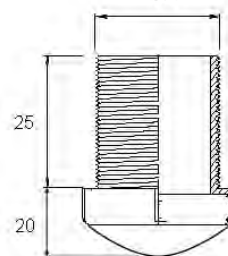
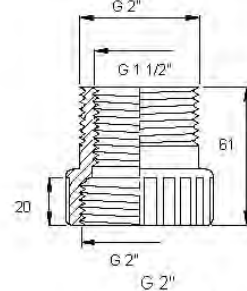
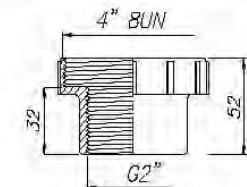
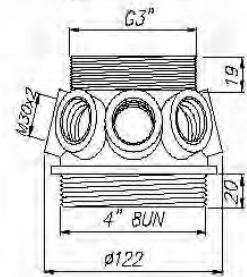
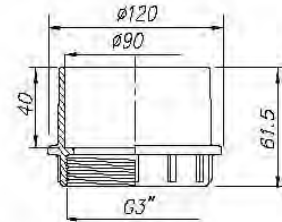
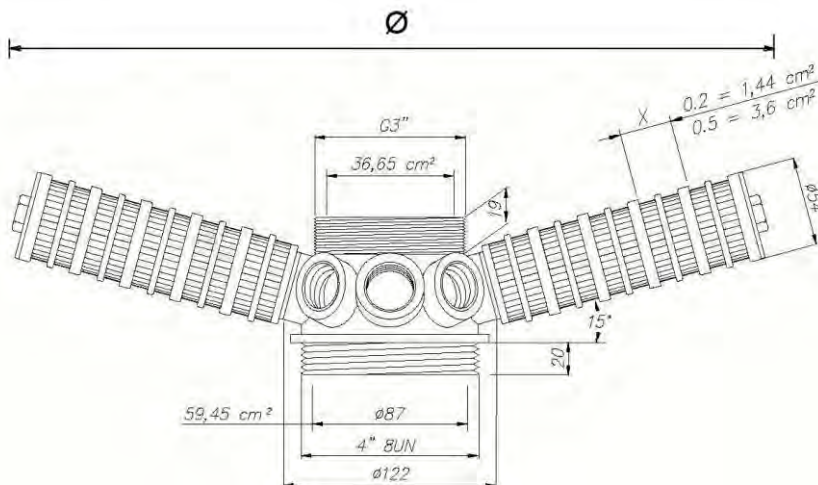
REF.	CONNECTION TO GLUE (mm)	PRICE EURO
PV384	41,8	20,06
PV385	48,3	20,06
PV386	50,0	12,26
PV387	63,0	12,26





Top mount lower lateral systems for tubes diameter 90 mm

- lower lateral system for 6" flanged pressure vessels for top mount valve, with 8 laterals;
- material hub and laterals PP, length as table below;
- slots 0,2;
- to glue on tube diameter 90 mm.

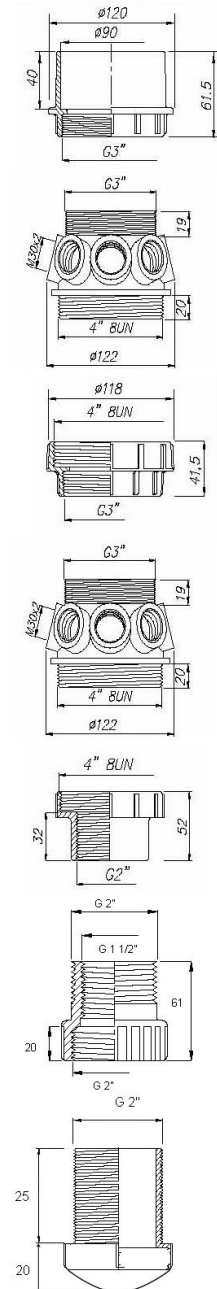
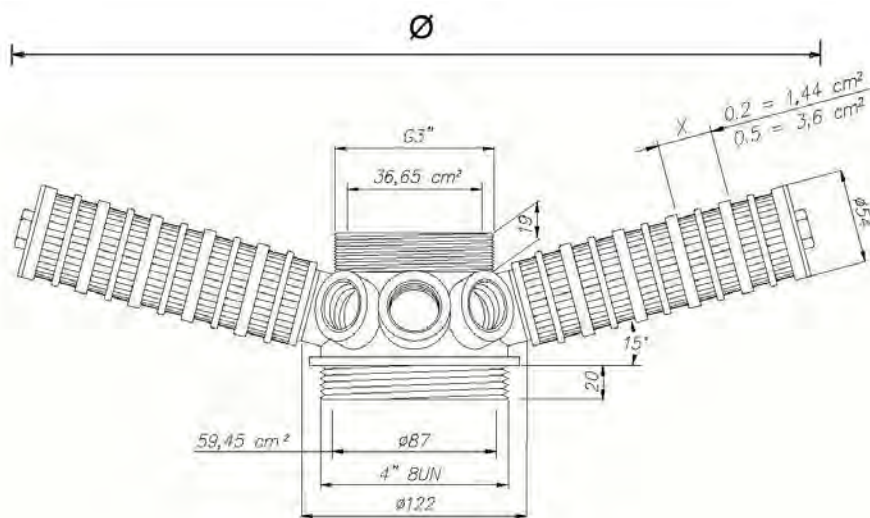


REF.	PRESSURE VESSEL	LATERALS LENGTH (mm)	DIAMETER \emptyset (mm)	SLOTS (mm)	FLOW (m3/h) $\Delta p 0,2 \text{ bar}$	PRICE EURO
PV548	30"	237	580	0,2	28	200,01
PV549	36"	299	699	0,2	30	216,21



Top mount lower double lateral systems for tubes diameter 90 mm

- lower lateral system for 6" flanged pressure vessels for top mount valve, with 8+8 laterals;
- material hub and laterals PP, length as table below;
- slots 0,2;
- to glue on tube diameter 90 mm.

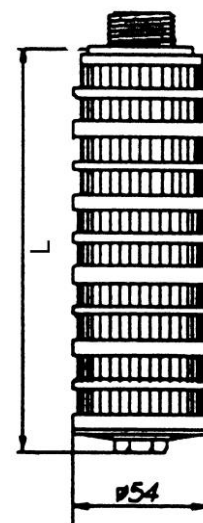


REF.	PRESSURE VESSEL	LATERALS QUANTITY	LATERALS LENGTH (mm)	DIAMETERS \varnothing (mm)	SLOTS (mm)	FLOW (m3/h) Δp 0,2 bar	PRICE EURO
PV550	42"	8 + 8	299 423	699 939	0,2	31	411,90
PV551	48"	8 + 8	361 485	819 1059	0,2	34	446,83



Cylindrical laterals

- cylindrical laterals with threaded connection
- M 30x2;
- material PP;
- diameter 54 mm;
- slots 0,2 or 0,5 mm.



Laterals with 0,2 mm slots											
REF.	PV345	PV370	PV346	PV371	PV347	PV348	PV372	PV373	PV374	PV389	PV391
LENGTH (mm)	113	144	175	206	237	299	361	423	485	578	640
PRICE EURO	5,92	6,95	8,10	9,01	10,17	12,37	14,67	21,39	23,60	26,69	28,87

Laterals with 0,5 mm slots											
REF.	PV375	PV376	PV377	PV378	PV379	PV380	PV381	PV382	PV383	PV390	PV392
LENGTH (mm)	113	144	175	206	237	299	361	423	485	578	640
PRICE EURO	5,92	6,95	8,10	9,01	10,17	12,37	14,67	21,39	23,60	26,69	28,87

Flange coupling kit

- for 6" flanged pressure vessels;
- including flange adaptor and coupling flange in PVC;
- with gasket in EPDM.

REF.	CONNECTION	PRICE EURO
PV594M	DN65	69,48
PV595M	DN80	82,04
PV596M	DN100	102,97





Mineral tank funnels

- The tank funnels are designed for filling mineral tanks with granular media and ion exchange resin;
- the funnels are designed to fit 2,5", 4" and 6" mineral tank openings;
- these economical funnels are nestable to reduce shipping and storage costs;
- the funnel ref. PV395 snaps into a 4" or 6" mineral tank opening for stability when pouring media. The neck of the funnel has been carefully designed to allow trapped air inside the mineral tank to escape when media is poured in. This heavy duty part is blow molded out of high density polyethylene for exceptional strength and durability. The oval design provides an extra wide opening for ease of use when pouring. Handles are molded into the funnel for added convenience.



REF.	DESCRIPTION	PRICE EURO
PV295	Funnel 2,5" openings	4,64
PV395	Funnel 4" and 6" openings	25,49

WELLMATE Pressure Vessels



- Pressure Vessels, suitable for industrial and potable water treatment systems;
- Made in U.S.A.;
- In Polyether Urethane (PEU);
- CE and NSF/ANSI 61 certified;
- European 97/23/EC Directive compliant for pressure equipment (PED);
- Max operating external temperature 50°C;
- Max operating internal temperature 38°C;
- Min. operating temperature 4°C;
- Grey colour;
- Warranty 5 years.



REF.	VOLUME (liters)	MAX OPERATING PRESSURE (bar)	DIAMETER (mm)	TOTAL HEIGHT (mm)	IN-OUT HEIGHT FROM THE FLOOR (mm)	CONNECTION (inch)	WEIGHT (kg)	PRICE EURO
BWM0060	55	8,5	410	660	44	1" NPT M	7	421,28
BWM0075	75	8,5	410	810	44	1" NPT M	8	471,03
BWM0120	112	8,5	410	1120	44	1" NPT M	11	667,81
BWM0150	153	8,5	530	1570	57	1" NPT M	30	794,02
BWM0180	178	8,5	610	1050	57	1 ¼" NPT M	23	963,98
BWM0235	235	8,5	610	1400	57	1 ¼" NPT M	33	1.136,39
BWM0330	328	8,5	610	1400	57	1 ¼" NPT M	33	1.429,01
BWM0450	453	8,5	610	1890	57	1 ¼" NPT M	43	1.868,41
BWM-LP-075	73	8,5	610	510	57	1" NPT M	11	730,02
BWM-LP-130	131	8,5	610	710	57	1" NPT M	14	872,89
BWM0600	606	10,0	760	1740	150	2" NPT M	76	3.861,21
BWM-HP-110	114	5,0	410	1110	38	1 ¼" NPT M	12	667,81
BWM-HP-150	151	5,0	410	1440	38	1 ¼" NPT M	13	794,02
BWM-HP-300	303	5,0	530	1570	51	1 ¼" NPT M	16	1.429,01
BWM-HP-450	454	5,0	610	1840	51	1 ¼" NPT M	29	1.867,27

Note: Diameter, height and weight could change without prior advice.
Not available in stock.



Accessories and Spare Parts:

REF.	DESCRIPTION	PRICE EURO
BWM-AC-0600	AIRCELL REPLACEMENT KIT FOR BWM0600	1.104,56
BWM-AC-0750	AIRCELL REPLACEMENT KIT FOR BWM-IN-0750	1.343,80
BWM-AC-1000	AIRCELL REPLACEMENT KIT FOR BWM-IN-1000	1.664,51
BWM-AVC-20290	AIR VOLUME CONTROL ASSEMBLY FOR BWM-HP-110	232,09
BWM-AVC-20288	AIR VOLUME CONTROL ASSEMBLY FOR BWM-HP-150	191,47
BWM-AVC-20287	AIR VOLUME CONTROL ASSEMBLY FOR BWM-HP-300	245,84
BWM-AVC-20291	AIR VOLUME CONTROL ASSEMBLY FOR BWM-HP-450	255,51
BWM-AVC-1	AIR VOLUME CONTROL ASSEMBLY FOR BWM-HP/UT	117,76
BWM-BA-20513	WELLMATE BASE 180/300	72,83
BWM-DA-3174	WM SCREEN & ADAPT. ASSY + O-RING - 4" X 2" NPSM	200,34
BWM-DA-HU79	WM BOTTOM DRAIN + 1 1/4" NPT THREADED PIPES HP110-150	138,81
BWM-DA-HU86	WM BOTTOM DRAIN + 1 1/4" NPT THREADED PIPES HP300-450	131,11
BWM-PB-001	WM PUMP MOUNT BRACKET	134,66
BWM-AI-01	WM AIR INJECTOR/MICRONIZER-HP	199,42
BWM-VB-10724	WM VACUUM BREAKER UT/HP	275,43
BWM-CL-0002	WM "H" CLIP	3,33



Cabinets



MWVG
ITALIAN WATER TECHNOLOGY

Made by Eurotrol S.p.A.

Cabinets for Softeners Mini Cab Series



- Tanks and covers made in European Union (Italy);
- Cabinets for residential softeners, complete with salt lid and cover of exclusive design;
- Materials: tank in HDPE, cover in polystyrene;
- Standard colours: white tank and blue, white or black cover;
- On demand and for quantities we can realize customized colours;
- EU design patent no. 003156272.

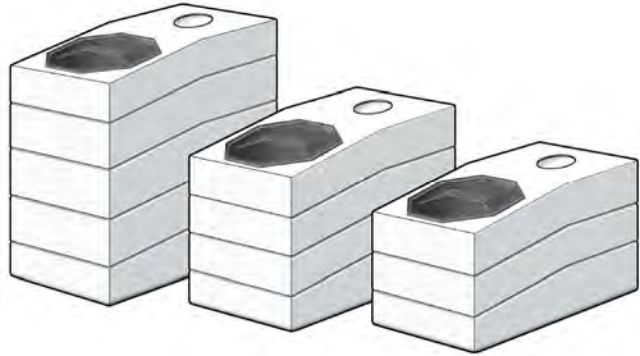


REF. WITH WHITE TANK AND <u>BLUE</u> COVER	C0513MWMAS	C0613MWMAS	C0713MWMAS
REF. WITH WHITE TANK AND <u>WHITE</u> COVER	C0513MWMWS	C0613MWMWS	C0713MWMWS
REF. WITH WHITE TANK AND <u>BLACK</u> COVER	C0513MWMDS	C0613MWMDS	C0713MWMDS
MODEL	MINI CAB 13	MINI CAB 13	MINI CAB 13
WIDTH (mm)	220	220	220
LENGTH (mm)	365	365	365
HEIGHT (mm)	333	333	333
WITH MWG TANK	5 x 13	6 x 13	7 x 13
PRICE EURO	70,16	73,55	75,77

Cabinets for Softeners New Junior Series



- Tanks and covers made in European Union (Italy);
- Cabinets for residential softeners, complete with salt lid;
- Materials: tank in HDPE, salt lid in polystyrene;
- Standard colours: tank white, salt lid black;
- Different colours available on demand ;
- EU design patent no. 003156272.



REF.	MODEL	WIDTH (mm)	LENGTH (mm)	HEIGHT (mm)	WITH MWG TANK	PRICE EURO
C0513GWGDX	NEW JUNIOR 13	240	435	330	5 x 13	57,02
C0613GWGDX	NEW JUNIOR 13	240	435	330	6 x 13	60,40
C0713GWGDX	NEW JUNIOR 13	240	435	330	7 x 13	62,30
C0813GWGDX	NEW JUNIOR 13	240	435	330	8 x 13	64,53
C0717GWGDX	NEW JUNIOR 17	240	435	432	7 x 17	68,19
C0817GWGDX	NEW JUNIOR 17	240	435	432	8 x 17	70,71
C0724GWGDX	NEW JUNIOR 24	240	435	610	7 x 24	86,10
C0824GWGDX	NEW JUNIOR 24	240	435	610	8 x 24	87,56

ACCESSORIES

REF.	DESCRIPTION	DIAMETER (mm)	HEIGHT (mm)	PRICE EURO
PA012	BRINE WELL FOR 13"	100	220	6,50
PA003	BRINE WELL FOR 17"	100	342	6,87
PA075	BRINE WELL FOR 24"	100	520	7,70

Cabinets for Softeners Slim Line Series



- Tanks and covers made in European Union (Italy);
- Cabinets for residential softeners, complete with salt lid and cover of exclusive design;
- Materials: tank in HDPE, cover in polystyrene;
- Standard colours: white tank and blue, white or black cover;
- On demand and for quantities we can realize customized colours;
- EU design patent no. 003156272.



REF. WITH WHITE TANK AND ...			SLIM LINE MODEL	WIDTH (mm)	LENGTH (mm)	HEIGHT (mm)	WITH MWG TANK	PRICE EURO
BLUE COVER	WHITE COVER	BLACK COVER						
C0717LWSAS	C0717LWSWS	C0717LWSDS	17	320	500	440	7 x 17	91,59
C0817LWSAS	C0817LWSWS	C0817LWSDS	17	320	500	440	8 x 17	94,13
C0917LWSAS	C0917LWSWS	C0917LWSDS	17	320	500	440	9 x 17	94,95
C1017LWSAS	C1017LWSWS	C1017LWSDS	17	320	500	440	10 x 17	98,54
C0724LWSAS	C0724LWSWS	C0724LWSDS	24	320	500	620	7 x 24	117,32
C0824LWSAS	C0824LWSWS	C0824LWSDS	24	320	500	620	8 x 24	118,77
C0924LWSAS	C0924LWSWS	C0924LWSDS	24	320	500	620	9 x 24	119,57
C1024LWSAS	C1024LWSWS	C1024LWSDS	24	320	500	620	10 x 24	121,76
C0735LWSAS	C0735LWSWS	C0735LWSDS	35	320	500	900	7 x 35	135,06
C0835LWSAS	C0835LWSWS	C0835LWSDS	35	320	500	900	8 x 35	138,60
C0935LWSAS	C0935LWSWS	C0935LWSDS	35	320	500	900	9 x 35	142,03
C1035LWSAS	C1035LWSWS	C1035LWSDS	35	320	500	900	10 x 35	149,77

ACCESSORIES				
REF.	DESCRIPTION	DIAMETER (mm)	HEIGHT (mm)	PRICE EURO
PA003	BRINE WELL FOR 17"	100	340	6,87
PA075	BRINE WELL FOR 24"	100	520	7,70
PA077	BRINE WELL FOR 35"	100	780	9,64

Cabinets for Softeners Slim Surf Series



- Tanks and covers made in European Union (Italy);
- Cabinets for residential softeners, complete with salt lid and cover of exclusive design;
- Materials: tank in HDPE, cover in polystyrene;
- Standard colours: white tank and blue, white or black cover;
- On demand and for quantities we can realize customized colours;
- EU design patent no. 003156272.



REF. WITH WHITE TANK AND ...			SLIM SURF MODEL	WIDTH (mm)	LENGTH (mm)	HEIGHT (mm)	WITH MWG TANK	PRICE EURO
<u>BLUE COVER</u>	<u>WHITE COVER</u>	<u>BLACK COVER</u>						
C0717SWSAS	C0717SWSWS	C0717SWSDS	17	320	500	440	7 x 17	91,59
C0817SWSAS	C0817SWSWS	C0817SWSDS	17	320	500	440	8 x 17	94,13
C0917SWSAS	C0917SWSWS	C0917SWSDS	17	320	500	440	9 x 17	94,95
C1017SWSAS	C1017SWSWS	C1017SWSDS	17	320	500	440	10 x 17	98,54
C0724SWSAS	C0724SWSWS	C0724SWSDS	24	320	500	620	7 x 24	117,32
C0824SWSAS	C0824SWSWS	C0824SWSDS	24	320	500	620	8 x 24	118,77
C0924SWSAS	C0924SWSWS	C0924SWSDS	24	320	500	620	9 x 24	119,57
C1024SWSAS	C1024SWSWS	C1024SWSDS	24	320	500	620	10 x 24	121,76
C0735SWSAS	C0735SWSWS	C0735SWSDS	35	320	500	900	7 x 35	135,06
C0835SWSAS	C0835SWSWS	C0835SWSDS	35	320	500	900	8 x 35	138,60
C0935SWSAS	C0935SWSWS	C0935SWSDS	35	320	500	900	9 x 35	142,03
C1035SWSAS	C1035SWSWS	C1035SWSDS	35	320	500	900	10 x 35	149,77

ACCESSORIES				
REF.	DESCRIPTION	DIAMETER (mm)	HEIGHT (mm)	PRICE EURO
PA003	BRINE WELL FOR 17"	100	340	6,87
PA075	BRINE WELL FOR 24"	100	520	7,70
PA077	BRINE WELL FOR 35"	100	780	9,64

Cabinets for Softeners Top Line Series



- Tanks and covers made in European Union (Italy);
- Cabinets for residential softeners, complete with salt lid and cover of exclusive design;
- Materials: tank in HDPE, cover in polystyrene;
- Standard colours: white tank and blue, white or black cover;
- On demand and for quantities we can realize customized colours;
- EU design patent no. 003156272.



REF. WITH WHITE TANK AND ...			TOP LINE MODEL	WIDTH (mm)	LENGTH (mm)	HEIGHT (mm)	WITH MWG TANK	PRICE EURO
BLUE COVER	WHITE COVER	BLACK COVER						
C0717LWTAS	C0717LWTWS	C0717LWTDS	17	320	500	670	7 x 17	106,07
C0817LWTAS	C0817LWTWS	C0817LWTDS	17	320	500	670	8 x 17	108,61
C0917LWTAS	C0917LWTWS	C0917LWTDS	17	320	500	670	9 x 17	109,44
C1017LWTAS	C1017LWTWS	C1017LWTDS	17	320	500	670	10 x 17	113,03
C0724LWTAS	C0724LWTWS	C0724LWTDS	24	320	500	840	7 x 24	131,80
C0824LWTAS	C0824LWTWS	C0824LWTDS	24	320	500	840	8 x 24	133,26
C0924LWTAS	C0924LWTWS	C0924LWTDS	24	320	500	840	9 x 24	134,06
C1024LWTAS	C1024LWTWS	C1024LWTDS	24	320	500	840	10 x 24	136,25
C0735LWTAS	C0735LWTWS	C0735LWTDS	35	320	500	1140	7 x 35	149,54
C0835LWTAS	C0835LWTWS	C0835LWTDS	35	320	500	1140	8 x 35	153,09
C0935LWTAS	C0935LWTWS	C0935LWTDS	35	320	500	1140	9 x 35	156,51
C1035LWTAS	C1035LWTWS	C1035LWTDS	35	320	500	1140	10 x 35	164,25

ACCESSORIES				
REF.	DESCRIPTION	DIAMETER (mm)	HEIGHT (mm)	PRICE EURO
PA003	BRINE WELL FOR 17"	100	340	6,87
PA075	BRINE WELL FOR 24"	100	520	7,70
PA077	BRINE WELL FOR 35"	100	780	9,64

Cabinets for Softeners Top Surf Series



- Tanks and covers made in European Union (Italy);
- Cabinets for residential softeners, complete with salt lid and cover of exclusive design;
- Materials: tank in HDPE, cover in polystyrene;
- Standard colours: white tank and blue, white or black cover;
- On demand and for quantities we can realize customized colours;
- EU design patent no. 003156272.



REF. WITH WHITE TANK AND ...			TOP SURF MODEL	WIDTH (mm)	LENGTH (mm)	HEIGHT (mm)	WITH MWG TANK	PRICE EURO
BLUE COVER	WHITE COVER	BLACK COVER						
C0717SWTAS	C0717SWTWS	C0717SWTDS	17	320	500	670	7 x 17	106,07
C0817SWTAS	C0817SWTWS	C0817SWTDS	17	320	500	670	8 x 17	108,61
C0917SWTAS	C0917SWTWS	C0917SWTDS	17	320	500	670	9 x 17	109,44
C1017SWTAS	C1017SWTWS	C1017SWTDS	17	320	500	670	10 x 17	113,03
C0724SWTAS	C0724SWTWS	C0724SWTDS	24	320	500	840	7 x 24	131,80
C0824SWTAS	C0824SWTWS	C0824SWTDS	24	320	500	840	8 x 24	133,26
C0924SWTAS	C0924SWTWS	C0924SWTDS	24	320	500	840	9 x 24	134,06
C1024SWTAS	C1024SWTWS	C1024SWTDS	24	320	500	840	10 x 24	136,25
C0735SWTAS	C0735SWTWS	C0735SWTDS	35	320	500	1140	7 x 35	149,54
C0835SWTAS	C0835SWTWS	C0835SWTDS	35	320	500	1140	8 x 35	153,09
C0935SWTAS	C0935SWTWS	C0935SWTDS	35	320	500	1140	9 x 35	156,51
C1035SWTAS	C1035SWTWS	C1035SWTDS	35	320	500	1140	10 x 35	164,25

ACCESSORIES				
REF.	DESCRIPTION	DIAMETER (mm)	HEIGHT (mm)	PRICE EURO
PA003	BRINE WELL FOR 17"	100	340	6,87
PA075	BRINE WELL FOR 24"	100	520	7,70
PA077	BRINE WELL FOR 35"	100	780	9,64

Cabinets for Softeners Top Line Clear Series



- Tanks and covers made in European Union (Italy);
- Cabinets for residential softeners, complete with salt lid and cover of exclusive design with transparent insert;
- Materials: tank in HDPE, cover in polystyrene;
- Standard colours: white tank and blue, white or black cover;
- On demand and for quantities we can realize customized colours;
- EU design patent no. 003156272.



REF. WITH WHITE TANK AND ...			TOP LINE CLEAR MODEL	WIDTH (mm)	LENGTH (mm)	HEIGHT (mm)	WITH MWG TANK	PRICE EURO
<u>BLUE</u> COVER AND TRANSPARENT INSERT	<u>WHITE</u> COVER AND TRANSPARENT INSERT	<u>BLACK</u> COVER AND TRANSPARENT INSERT						
C0717LWTPS	C0717LWTZS	C0717LWTTS	17	320	500	670	7 x 17	106,07
C0817LWTPS	C0817LWTZS	C0817LWTTS	17	320	500	670	8 x 17	108,61
C0917LWTPS	C0917LWTZS	C0917LWTTS	17	320	500	670	9 x 17	109,43
C1017LWTPS	C1017LWTZS	C1017LWTTS	17	320	500	670	10 x 17	113,03
C0724LWTPS	C0724LWTZS	C0724LWTTS	24	320	500	840	7 x 24	131,80
C0824LWTPS	C0824LWTZS	C0824LWTTS	24	320	500	840	8 x 24	133,25
C0924LWTPS	C0924LWTZS	C0924LWTTS	24	320	500	840	9 x 24	134,06
C1024LWTPS	C1024LWTZS	C1024LWTTS	24	320	500	840	10 x 24	136,25
C0735LWTPS	C0735LWTZS	C0735LWTTS	35	320	500	1140	7 x 35	149,54
C0835LWTPS	C0835LWTZS	C0835LWTTS	35	320	500	1140	8 x 35	153,09
C0935LWTPS	C0935LWTZS	C0935LWTTS	35	320	500	1140	9 x 35	156,53
C1035LWTPS	C1035LWTZS	C1035LWTTS	35	320	500	1140	10 x 35	164,25

ACCESSORIES				
REF.	DESCRIPTION	DIAMETER (mm)	HEIGHT (mm)	PRICE EURO
PA003	BRINE WELL FOR 17"	100	340	6,87
PA075	BRINE WELL FOR 24"	100	520	7,70
PA077	BRINE WELL FOR 35"	100	780	9,64

Cabinets for Softeners Top Surf Clear Series



- Tanks and covers made in European Union (Italy);
- Cabinets for residential softeners, complete with salt lid and cover of exclusive design with transparent insert;
- Materials: tank in HDPE, cover in polystyrene;
- Standard colours: white tank and blue, white or black cover;
- On demand and for quantities we can realize customized colours;
- EU design patent no. 003156272.



REF. WITH WHITE TANK AND ...			TOP SURF CLEAR MODEL	WIDTH (mm)	LENGTH (mm)	HEIGHT (mm)	WITH MWG TANK	PRICE EURO
BLUE COVER AND TRANSPARENT INSERT	WHITE COVER AND TRANSPARENT INSERT	BLACK COVER AND TRANSPARENT INSERT						
C0717SWTPS	C0717SWTZS	C0717SWTTS	17	320	500	670	7 x 17	106,07
C0817SWTPS	C0817SWTZS	C0817SWTTS	17	320	500	670	8 x 17	108,61
C0917SWTPS	C0917SWTZS	C0917SWTTS	17	320	500	670	9 x 17	109,43
C1017SWTPS	C1017SWTZS	C1017SWTTS	17	320	500	670	10 x 17	113,03
C0724SWTPS	C0724SWTZS	C0724SWTTS	24	320	500	840	7 x 24	131,80
C0824SWTPS	C0824SWTZS	C0824SWTTS	24	320	500	840	8 x 24	133,25
C0924SWTPS	C0924SWTZS	C0924SWTTS	24	320	500	840	9 x 24	134,06
C1024SWTPS	C1024SWTZS	C1024SWTTS	24	320	500	840	10 x 24	136,25
C0735SWTPS	C0735SWTZS	C0735SWTTS	35	320	500	1140	7 x 35	149,54
C0835SWTPS	C0835SWTZS	C0835SWTTS	35	320	500	1140	8 x 35	153,09
C0935SWTPS	C0935SWTZS	C0935SWTTS	35	320	500	1140	9 x 35	156,53
C1035SWTPS	C1035SWTZS	C1035SWTTS	35	320	500	1140	10 x 35	164,25

ACCESSORIES				
REF.	DESCRIPTION	DIAMETER (mm)	HEIGHT (mm)	PRICE EURO
PA003	BRINE WELL FOR 17"	100	340	6,87
PA075	BRINE WELL FOR 24"	100	520	7,70
PA077	BRINE WELL FOR 35"	100	780	9,64

Cabinets for Softeners New Crystal



- Tanks and covers made in European Union (Italy);
- Cabinets for residential softeners, complete with salt lid and cover of exclusive design with clear insert;
- Materials:
 - tank and salt lid in HDPE;
 - cover in polystyrene;
- Standard colours: white tank and blue, white or black cover;
- On demand and for quantities we can realize customized colours;
- EU design patent no. 003156272.



REF. WITH WHITE TANK AND ...			NEW CRYSTAL MODEL	WIDTH (mm)	LENGTH (mm)	HEIGHT (mm)	WITH MWG TANK	PRICE EURO
<u>BLUE COVER</u>	<u>WHITE COVER</u>	<u>BLACK COVER</u>						
C0717NWCAS	C0717NWCWS	C0717NWCDS	NEWMINI	320	500	670	7 x 17	99,40
C0817NWCAS	C0817NWCWS	C0817NWCDS	NEWMINI	320	500	670	8 x 17	101,93
C0917NWCAS	C0917NWCWS	C0917NWCDS	NEWMINI	320	500	670	9 x 17	102,75
C1017NWCAS	C1017NWCWS	C1017NWCDS	NEWMINI	320	500	670	10 x 17	106,34
C0730NWCAS	C0730NWCWS	C0730NWCDS	NEWMIDI	320	500	1010	7 x 30	133,18
C0830NWCAS	C0830NWCWS	C0830NWCDS	NEWMIDI	320	500	1010	8 x 30	135,21
C0930NWCAS	C0930NWCWS	C0930NWCDS	NEWMIDI	320	500	1010	9 x 30	135,79
C1030NWCAS	C1030NWCWS	C1030NWCDS	NEWMIDI	320	500	1010	10 x 30	137,03
C0735NWCAS	C0735NWCWS	C0735NWCDS	NEWMAXI	320	500	1140	7 x 35	142,86
C0835NWCAS	C0835NWCWS	C0835NWCDS	NEWMAXI	320	500	1140	8 x 35	146,40
C0935NWCAS	C0935NWCWS	C0935NWCDS	NEWMAXI	320	500	1140	9 x 35	149,84
C1035NWCAS	C1035NWCWS	C1035NWCDS	NEWMAXI	320	500	1140	10 x 35	157,55

ACCESSORIES				
REF.	DESCRIPTION	DIAMETER (mm)	HEIGHT (mm)	PRICE EURO
PA003	BRINE WELL FOR NEWMINI	100	342	6,87
PA010	BRINE WELL FOR NEWMIDI	100	690	9,04
PA005	BRINE WELL FOR NEWMAXI	100	820	10,00

Cabinets for Softeners New Iceberg



- Tanks and covers made in European Union (Italy);
- Cabinets for residential softeners, complete with salt lid and cover of exclusive design;
- Materials:
 - tank and salt lid in HDPE;
 - cover in polystyrene;
- Standard colours: white tank and blue (or white or black) cover with white insert;
- On demand and for quantities we can realize customized colours;
- EU design patent no. 003156272.



REF. WITH WHITE TANK AND ...			NEW ICEBERG MODEL	WIDTH (mm)	LENGTH (mm)	HEIGHT (mm)	WITH MWG TANK	PRICE EURO
<u>BLUE</u> COVER WITH WHITE INSERT	<u>WHITE</u> COVER WITH WHITE INSERT	<u>BLACK</u> COVER WITH WHITE INSERT						
C0717NWIQS	C0717NWIWS	C0717NWISS	NEWMINI	320	500	670	7 x 17	99,40
C0817NWIQS	C0817NWIWS	C0817NWISS	NEWMINI	320	500	670	8 x 17	101,93
C0917NWIQS	C0917NWIWS	C0917NWISS	NEWMINI	320	500	670	9 x 17	102,75
C1017NWIQS	C1017NWIWS	C1017NWISS	NEWMINI	320	500	670	10 x 17	106,34
C0730NWIQS	C0730NWIWS	C0730NWISS	NEWMIDI	320	500	1010	7 x 30	133,18
C0830NWIQS	C0830NWIWS	C0830NWISS	NEWMIDI	320	500	1010	8 x 30	135,21
C0930NWIQS	C0930NWIWS	C0930NWISS	NEWMIDI	320	500	1010	9 x 30	135,79
C1030NWIQS	C1030NWIWS	C1030NWISS	NEWMIDI	320	500	1010	10 x 30	137,03
C0735NWIQS	C0735NWIWS	C0735NWISS	NEWMAXI	320	500	1140	7 x 35	142,86
C0835NWIQS	C0835NWIWS	C0835NWISS	NEWMAXI	320	500	1140	8 x 35	146,40
C0935NWIQS	C0935NWIWS	C0935NWISS	NEWMAXI	320	500	1140	9 x 35	149,84
C1035NWIQS	C1035NWIWS	C1035NWISS	NEWMAXI	320	500	1140	10 x 35	157,55

ACCESSORIES				
REF.	DESCRIPTION	DIAMETER (mm)	HEIGHT (mm)	PRICE EURO
PA003	BRINE WELL FOR NEWMINI	100	342	6,87
PA010	BRINE WELL FOR NEWMIDI	100	690	9,04
PA005	BRINE WELL FOR NEWMAXI	100	820	10,00

Cabinet for Softeners Ocean Series



- Tanks and covers made in European Union (Italy);
- Cabinets for residential softeners, complete with salt lid and cover of exclusive design with clear insert;
- Materials:
 - tank and salt lid in HDPE;
 - cover in polystyrene;
- Standard colours: white tank and blue, white or black cover;
- On demand and for quantities we can realize customized colours;
- EU design patent no. 003156272.



REF. WITH WHITE TANK AND ...			OCEAN MODEL	WIDTH (mm)	LENGTH (mm)	HEIGHT (mm)	WITH MWG TANK	PRICE EURO
BLUE COVER	WHITE COVER	BLACK COVER						
C0717NWOAS	C0717NWOWS	C0717NWODS	NEWMINI	320	500	670	7 x 17	106,77
C0817NWOAS	C0817NWOWS	C0817NWODS	NEWMINI	320	500	670	8 x 17	108,61
C0917NWOAS	C0917NWOWS	C0917NWODS	NEWMINI	320	500	670	9 x 17	109,44
C1017NWOAS	C1017NWOWS	C1017NWODS	NEWMINI	320	500	670	10 x 17	113,03
C0730NWOAS	C0730NWOWS	C0730NWODS	NEWMIDI	320	500	1010	7 x 30	139,88
C0830NWOAS	C0830NWOWS	C0830NWODS	NEWMIDI	320	500	1010	8 x 30	141,91
C0930NWOAS	C0930NWOWS	C0930NWODS	NEWMIDI	320	500	1010	9 x 30	142,49
C1030NWOAS	C1030NWOWS	C1030NWODS	NEWMIDI	320	500	1010	10 x 30	143,72
C0735NWOAS	C0735NWOWS	C0735NWODS	NEWMAXI	320	500	1140	7 x 35	149,54
C0835NWOAS	C0835NWOWS	C0835NWODS	NEWMAXI	320	500	1140	8 x 35	153,09
C0935NWOAS	C0935NWOWS	C0935NWODS	NEWMAXI	320	500	1140	9 x 35	156,51
C1035NWOAS	C1035NWOWS	C1035NWODS	NEWMAXI	320	500	1140	10 x 35	164,25

ACCESSORIES				
REF.	DESCRIPTION	DIAMETER (mm)	HEIGHT (mm)	PRICE EURO
PA003	BRINE WELL FOR NEWMINI	100	342	6,87
PA010	BRINE WELL FOR NEWMIDI	100	690	9,04
PA005	BRINE WELL FOR NEWMAXI	100	820	10,00

Cabinets for Softeners Logix Series



- Tanks and covers made in European Union (Italy);
- Cabinets for residential softeners, complete with salt lid and cover for integrate installation of LOGIX control AUTOTROL valves;
- Materials:
 - tank and salt lid in HDPE;
 - cover in polystyrene;
- Standard colours: white tank and blue, white or black cover;
- On demand and for quantities we can realize customized colours;
- EU design patent no. 003156272.



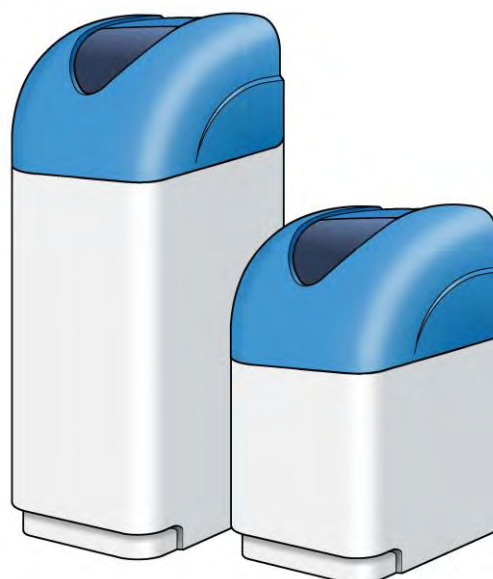
REF. WITH WHITE TANK AND ...			LOGIX MODEL	WIDTH (mm)	LENGTH (mm)	HEIGHT (mm)	WITH MWG TANK	PRICE EURO
BLUE COVER	WHITE COVER	BLACK COVER						
C0717NWLAS	C0717NWLWS	C0717NWLDS	NEWMINI	320	500	670	7 x 17	106,07
C0817NWLAS	C0817NWLWS	C0817NWLDS	NEWMINI	320	500	670	8 x 17	108,61
C0917NWLAS	C0917NWLWS	C0917NWLDS	NEWMINI	320	500	670	9 x 17	109,44
C1017NWLAS	C1017NWLWS	C1017NWLDS	NEWMINI	320	500	670	10 x 17	113,03
C0730NWLAS	C0730NWLWS	C0730NWLDS	NEWMIDI	320	500	1010	7 x 30	139,88
C0830NWLAS	C0830NWLWS	C0830NWLDS	NEWMIDI	320	500	1010	8 x 30	141,91
C0930NWLAS	C0930NWLWS	C0930NWLDS	NEWMIDI	320	500	1010	9 x 30	142,49
C1030NWLAS	C1030NWLWS	C1030NWLDS	NEWMIDI	320	500	1010	10 x 30	143,72
C0735NWLAS	C0735NWLWS	C0735NWLDS	NEWMAXI	320	500	1140	7 x 35	149,54
C0835NWLAS	C0835NWLWS	C0835NWLDS	NEWMAXI	320	500	1140	8 x 35	153,09
C0935NWLAS	C0935NWLWS	C0935NWLDS	NEWMAXI	320	500	1140	9 x 35	156,51
C1035NWLAS	C1035NWLWS	C1035NWLDS	NEWMAXI	320	500	1140	10 x 35	164,25

ACCESSORIES				
REF.	DESCRIPTION	DIAMETER (mm)	HEIGHT (mm)	PRICE EURO
PA003	BRINE WELL FOR NEWMINI	100	342	6,87
PA010	BRINE WELL FOR NEWMIDI	100	690	9,04
PA005	BRINE WELL FOR NEWMAXI	100	820	10,00

Cabinets for Softeners Crystal Series



- Tanks and covers made in European Union (Italy);
- Cabinets for residential softeners, complete with salt lid and cover of exclusive design with clear insert;
- Materials:
 - tank and salt lid in HDPE;
 - cover in polystyrene;
- Standard colours: white tank and blue, white or black cover;
- On demand and for quantities we can realize customized colours;
- EU design patent no. 003156272.



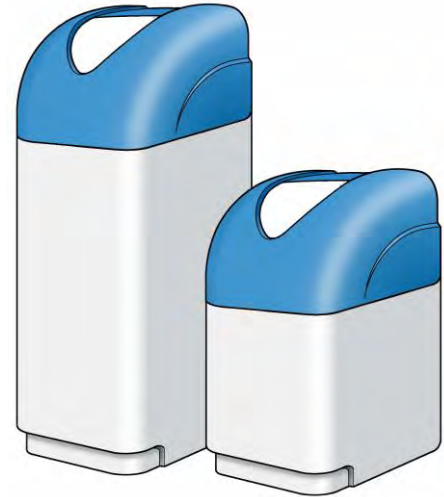
REF. WITH WHITE TANK AND ...			CRYSTAL MODEL	WIDTH (mm)	LENGTH (mm)	HEIGHT (mm)	WITH MWG TANK	PRICE EURO
BLUE COVER	WHITE COVER	BLACK COVER						
C0717EWCAS	C0717EWCWS	C0717EWCDs	MINI	320	500	670	7 x 17	99,40
C0817EWCAS	C0817EWCWS	C0817EWCDs	MINI	320	500	670	8 x 17	101,93
C0917EWCAS	C0917EWCWS	C0917EWCDs	MINI	320	500	670	9 x 17	102,75
C1017EWCAS	C1017EWCWS	C1017EWCDs	MINI	320	500	670	10 x 17	106,34
C0735EWCAS	C0735EWCWS	C0735EWCDs	MAXI	320	500	1140	7 x 35	142,86
C0835EWCAS	C0835EWCWS	C0835EWCDs	MAXI	320	500	1140	8 x 35	146,40
C0935EWCAS	C0935EWCWS	C0935EWCDs	MAXI	320	500	1140	9 x 35	149,84
C1035EWCAS	C1035EWCWS	C1035EWCDs	MAXI	320	500	1140	10 x 35	157,55

ACCESSORIES				
REF.	DESCRIPTION	DIAMETER (mm)	HEIGHT (mm)	PRICE EURO
PA003	BRINE WELL FOR MINI	100	342	6,87
PA005	BRINE WELL FOR MAXI	100	820	10,00

Cabinets for Softeners Iceberg Series



- Tanks and covers made in European Union (Italy);
- Cabinets for residential softeners, complete with salt lid and cover of exclusive design;
- Materials:
 - tank and salt lid in HDPE;
 - cover in polystyrene;
- Standard colours: white tank and blue (or white or black) cover with white insert;
- On demand and for quantities we can realize customized colours;
- EU design patent no. 003156272.



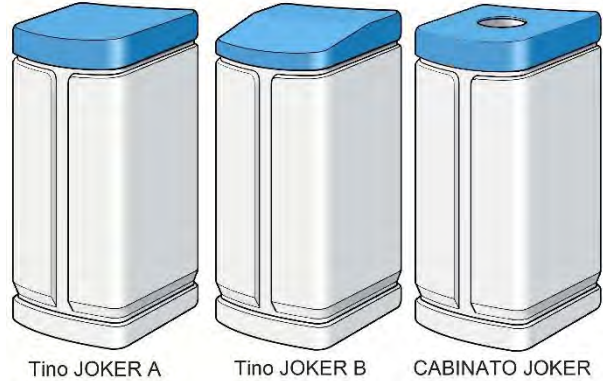
REF. WITH WHITE TANK AND ...			ICEBERG MODEL	WIDTH (mm)	LENGTH (mm)	HEIGHT (mm)	WITH MWG TANK	PRICE EURO
<u>BLUE</u> COVER WITH WHITE INSERT	<u>WHITE</u> COVER WITH WHITE INSERT	<u>BLACK</u> COVER WITH WHITE INSERT						
C0717EWIQS	C0717EWIWS	C0717EWISS	MINI	320	500	670	7 x 17	99,40
C0817EWIQS	C0817EWIWS	C0817EWISS	MINI	320	500	670	8 x 17	101,93
C0917EWIQS	C0917EWIWS	C0917EWISS	MINI	320	500	670	9 x 17	102,75
C1017EWIQS	C1017EWIWS	C1017EWISS	MINI	320	500	670	10 x 17	106,34
C0735EWIQS	C0735EWIWS	C0735EWISS	MAXI	320	500	1140	7 x 35	142,86
C0835EWIQS	C0835EWIWS	C0835EWISS	MAXI	320	500	1140	8 x 35	146,40
C0935EWIQS	C0935EWIWS	C0935EWISS	MAXI	320	500	1140	9 x 35	149,84
C1035EWIQS	C1035EWIWS	C1035EWISS	MAXI	320	500	1140	10 x 35	157,55

ACCESSORIES				
REF.	DESCRIPTION	DIAMETER (mm)	HEIGHT (mm)	PRICE EURO
PA003	BRINE WELL FOR MINI	100	342	6,87
PA005	BRINE WELL FOR MAXI	100	820	10,00

Cabinets for Softeners Joker Series



- Tanks and covers made in European Union (Italy);
- JOKER brine/resin tanks that can be combined in special bi-blocs cabinets;
- Capacity as brine tank 82 liters;
- Suitable to fit 7" - 8" - 9" - 10" x 35" tanks as resin tank;
- Overall dimensions 310 x 310 mm height 900 mm;
- Materials:
 - tank in HDPE;
 - cover in ABS;
- Standard colours: white tank and blue, white or black cover;
- On demand and for quantities we can realize customized colours;
- EU design patent no. 003156272.



REF. WITH WHITE TANK AND ...			MODEL	WITH MWG TANK	PRICE EURO
BLUE COVER	WHITE COVER	BLACK COVER			
C0735AWJAX	C0735AWJWX	C0735AWJDX	JOKER	7 x 35	87,13
C0835AWJAX	C0835AWJWX	C0835AWJDX	JOKER	8 x 35	90,68
C0935AWJAX	C0935AWJWX	C0935AWJDX	JOKER	9 x 35	94,12
C1035AWJAX	C1035AWJWX	C1035AWJDX	JOKER	10 x 35	101,83

JOKER BRINE TANKS				
REF. WITH WHITE TANK AND ...			MODEL	PRICE EURO
BLUE COVER	WHITE COVER	BLACK COVER		
T0082AWAA	T0082AWAW	T0082AWAD	JOKER A	41,22
T0082BWBA	T0082BWBW	T0082BWBD	JOKER B	41,22

ACCESSORIES				
REF.	DESCRIPTION	DIAMETER (mm)	HEIGHT (mm)	PRICE EURO
PA005	BRINE WELL	100	820	10,00

Cabinets for Softeners New Series



- Tanks and salt lids made in European Union (Italy);
- Cabinets for residential softeners;
- Materials:
 - tank in HDPE;
 - salt lid in polystyrene;
- Standard colours: tank and salt lid white;
- On demand and for quantities we can realize customized colours;
- EU design patent no. 003156272.



REF.	MODEL	WIDTH (mm)	LENGTH (mm)	HEIGHT (mm)	WITH MWG TANK	PRICE EURO
C0717NWXXS	NEWMINI	320	500	435	7 x 17	77,10
C0817NWXXS	NEWMINI	320	500	435	8 x 17	79,63
C0917NWXXS	NEWMINI	320	500	435	9 x 17	80,47
C1017NWXXS	NEWMINI	320	500	435	10 x 17	84,05
C0730NWXXS	NEWMIDI	320	500	775	7 x 30	110,91
C0830NWXXS	NEWMIDI	320	500	775	8 x 30	112,93
C0930NWXXS	NEWMIDI	320	500	775	9 x 30	113,51
C1030NWXXS	NEWMIDI	320	500	775	10 x 30	114,75
C0735NWXXS	NEWMAXI	320	500	895	7 x 35	120,57
C0835NWXXS	NEWMAXI	320	500	895	8 x 35	124,12
C0935NWXXS	NEWMAXI	320	500	895	9 x 35	127,54
C1035NWXXS	NEWMAXI	320	500	895	10 x 35	135,28

ACCESSORIES				
REF.	DESCRIPTION	DIAMETER (mm)	HEIGHT (mm)	PRICE EURO
PA003	BRINE WELL FOR NEWMINI	100	342	6,87
PA010	BRINE WELL FOR NEWMIDI	100	690	9,04
PA005	BRINE WELL FOR NEWMAXI	100	820	10,00

Cabinets for Softeners “Mini” - “Maxi” Series



- Tanks and salt lids made in European Union (Italy);
- Cabinets for residential softeners;
- Materials:
 - tank in HDPE;
 - salt lid in polystyrene;
- Standard colours: tank and salt lid white;
- On demand and for quantities we can realize customized colours;
- EU design patent no. 003156272.



REF.	MODEL	WIDTH (mm)	LENGTH (mm)	HEIGHT (mm)	WITH MWG TANK	PRICE EURO
C0717EWXXS	MINI	320	500	435	7 x 17	77,10
C0817EWXXS	MINI	320	500	435	8 x 17	79,63
C0917EWXXS	MINI	320	500	435	9 x 17	80,47
C1017EWXXS	MINI	320	500	435	10 x 17	84,05
C0735EWXXS	MAXI	320	500	895	7 x 35	120,57
C0835EWXXS	MAXI	320	500	895	8 x 35	124,12
C0935EWXXS	MAXI	320	500	895	9 x 35	127,54
C1035EWXXS	MAXI	320	500	895	10 x 35	135,28

ACCESSORIES

REF.	DESCRIPTION	DIAMETER (mm)	HEIGHT (mm)	PRICE EURO
PA003	BRINE WELL FOR MINI	100	342	6,87
PA005	BRINE WELL FOR MAXI	100	820	10,00



Brine tanks



MWVG
ITALIAN WATER TECHNOLOGY

Made by Eurotrol S.p.A.

Residential Square Brine Tank



- Made in European Union (Italy);
- Brine tank material HDPE;
- Complete with cover in ABS;
- Dimensions 380 x 380 mm, height 790 mm;
- Capacity 85 liters;
- Available multiple packaging of 30 pcs per pallet;
- EU design patent no. 003156272.



REF.	TANK COLOUR	COVER COLOUR	PRICE EURO
T0085QWQA	White	Blue	33,86
T0085QWQW	White	White	33,86
T0085QWQD	White	Black	33,86

Accessories:

Salt Grid

- Made in European Union (Italy);
- Material HDPE;
- Height 200 mm;
- Hole for brine well diameter 100 mm;
- Salt gride holes \square 3 mm.



REF.	PRICE EURO
PC006	16,28

Brine well

- Material PVC with cover;
- Diameter 100 mm;
- Height 640 mm.

REF.	PRICE EURO
PA007	8,31

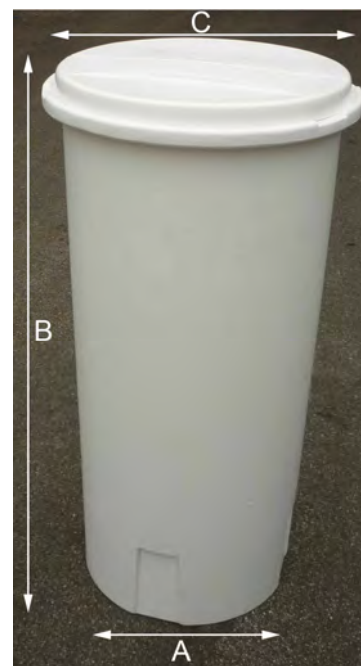


Residential Round Brine Tanks



- Made in European Union (Italy);
- Brine tanks complete with cover;
- Material PE medium density, rotomolded;
- Single or multiple packaging of 20 pcs per pallet for 100 liters and 140 liters brine tanks and 16 pcs per pallet for 190 liters brine tanks;
- Colour white opaque UVA ray resistant;
- Cover colours available: white, blue or black;
- EU design patent no. 003156272.

REF.	CAPACITY (LITERS)	COVER COLOUR	OVERALL DIMENSIONS			PRICE EURO
			A (mm)	B (mm)	C (mm)	
T0100CWCW	100	White	460	616	565	73,48
T0100CWCA	100	Blue	460	616	565	73,48
T0100CWCD	100	Black	460	616	565	73,48
T0140CWCW	140	White	460	843	565	86,31
T0140CWCA	140	Blue	460	843	565	86,31
T0140CWCD	140	Black	460	843	565	86,31
T0190CWCW	190	White	460	1123	565	113,62
T0190CWCA	190	Blue	460	1123	565	113,62
T0190CWCD	190	Black	460	1123	565	113,62



Accessories:

Salt grids

- Made in European Union (Italy);
- Material PE medium density;
- Hole for brine well diameter 100 mm;
- Salt gride holes ~ 3 mm.



REF.	HEIGHT (mm)	DIAMETER (mm)	PRICE EURO
PC031	130	475	13,46
PC032	200	475	21,29
PC033	270	475	32,54



Brine well

- Material PVC with cover;
- Diameter 100 mm.

REF.	HEIGHT (mm)	FOR BRINE TANKS (liters)	PRICE EURO
PA075	520	100	7,70
PA010	690	140	9,04
PA015	970	190	10,83

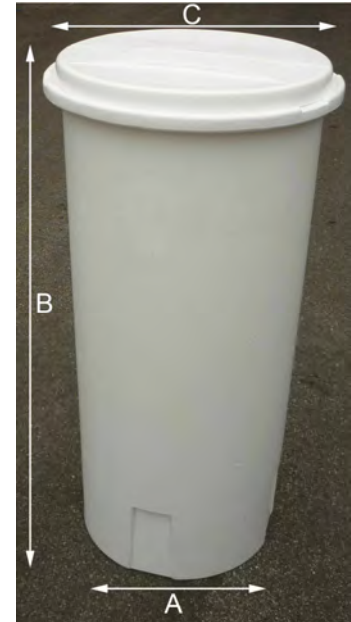


Industrial Round Brine Tanks



- Made in European Union (Italy);
- Brine tanks complete with cover;
- Material PE medium density, rotomolded;
- Single or multiple packaging of 3 pcs per pallet;
- Colour white opaque UVA ray resistant;
- Cover colours available: white, blue or black;
- EU design patent no. 003156272.

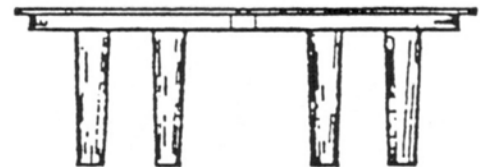
REF.	CAPACITY (LITERS)	COVER COLOUR	OVERALL DIMENSIONS			PRICE EURO
			A (mm)	B (mm)	C (mm)	
T0340CWCW	340	White	594	1200	723	184,64
T0340CWCA	340	Blue	594	1200	723	184,64
T0340CWCD	340	Black	594	1200	723	184,64
T0460CWCW	460	White	703	1196	833	265,50
T0460CWCA	460	Blue	703	1196	833	265,50
T0460CWCD	460	Black	703	1196	833	265,50



Accessories:

Salt grids

- Made in European Union (Italy);
- Material PE medium density;
- Hole for brine well diameter 160 mm;
- Salt gride holes $\varnothing = 5$ mm.



REF.	HEIGHT (mm)	DIAMETER (mm)	FOR BRINE TANKS (liters)	PRICE EURO
PC070	375	600	340	80,30
PC071	375	700	460	85,10

Brine well

- Material PVC with cover;
- Diameter 160 mm;
- Height 1050 mm.

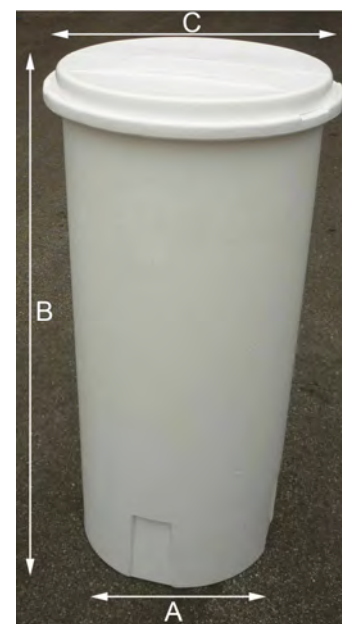
REF.	PRICE EURO
PA016	22,06



Industrial Round Brine Tanks



- Made in European Union (Italy);
- Brine tanks complete with cover;
- Material PE medium density, rotomolded;
- Single or multiple packaging of 3 pcs per pallet;
- Colour white opaque UVA ray resistant;
- Cover colours available: white, blue or black;
- EU design patent no. 003156272.

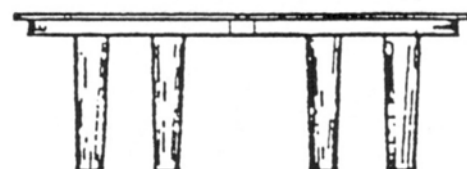


REF.	CAPACITY (LITERS)	COVER COLOUR	OVERALL DIMENSIONS			PRICE EURO
			A (mm)	B (mm)	C (mm)	
T0670CWCW	670	White	847	1196	973	371,49
T0670CWCA	670	Blue	847	1196	973	371,49
T0670CWCD	670	Black	847	1196	973	371,49
T0920CWCW	920	White	997	1206	1123	488,39
T0920CWCA	920	Blue	997	1206	1123	488,39
T0920CWCD	920	Black	997	1206	1123	488,39

Accessories:

Salt grids

- Made in European Union (Italy);
- Material PE medium density;
- Hole for brine well diameter 160 mm;
- Salt gride holes $\varnothing = 5$ mm.



REF.	HEIGHT (mm)	DIAMETER (mm)	FOR BRINE TANKS (liters)	PRICE EURO
PC072	375	835	670	137,12
PC073	375	1010	920	146,51

Brine well

- Material PVC with cover;
- Diameter 160 mm;
- Height 1050 mm.

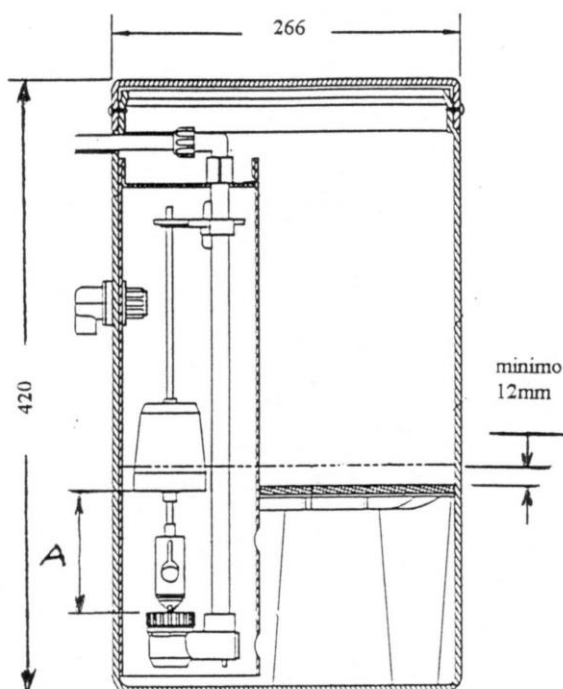


REF.	PRICE EURO
PA016	22,06

Potassium Permanganate Feeder



- feeder for potassium permanganate solution, to realize automatic iron removal systems with manganese greensand;
- complete with floating valve, well, special grid for permanganate, overflow, safety screw for cover;
- material: polyethylene;
- dimensions: diameter 266 mm, height 420 mm;
- storage KMnO_4 capacity: 13,6 kg;
- connection for $\frac{3}{8}$ " tubing;
- colour black.



REF.	PRICE EURO
AV120	121,69

Float setting:

Suggested dose of regenerant: $2 \div 4$ g KMnO_4 per greensand liter

KMnO_4 solution: 30 g/l at 10°C
60 g/l at 22°C

Minimum A floating setting at 108 mm is equivalent to 4 liters of solution.



Membranes reverse osmosis and Ultra Filtration



MWG Membranes



Ref.	Mod.	Description	Permeate Flow Rate GPD (m ³ /d)	Rejection NaCl Rate (%)	Effective Area m ² (ft ²)	Spacer (mil)	Test	NSF	Price Euro
MMRO1812-50	TW RO	MWG 1.8" MEMBRANE RO1812-50	50 (0,19)	98,0	0,37 (4)	X	1	58	12,04
MMRO1812-75	TW RO	MWG 1.8" MEMBRANE RO1812-75	75 (0,28)	98,0	0,37 (4)	X	1	58	12,66
MMRO2012-100	TW RO	MWG 2" MEMBRANE RO2012-100	100 (0,38)	98,0	0,56 (6)	X	1	58	15,12
MMRO2012-150	TW RO	MWG 2" MEMBRANE RO2012-150	150 (0,57)	98,0	0,56 (6)	X	1	58	19,14
MMRO2812-200	TW RO	MWG 2.8" MEMBRANE RO2812-200	200 (0,76)	98,0	0,93 (10)	X	1	58	40,13
MMRO3012-300	TW RO	MWG 3" MEMBRANE RO3012-300	300 (1,14)	98,0	1,3 (14)	X	1	58	46,30
MMRO3012-400	TW RO	MWG 3" MEMBRANE RO3012-400	400 (1,52)	98,0	1,3 (14)	X	1	58	52,47
MMNF1812	TW NF	MWG 1.8" MEMBRANE NF-1812 (MgSO ₄)	100 (0,38) 100 (0,38)	30-50 96,0	0,37 (4)	X	2	X	20,07
MMNF2012	TW NF	MWG 2" MEMBRANE NF-2012 (MgSO ₄)	150 (0,57) 150 (0,57)	30-50 96,0	0,56 (6)	X	2	X	24,70
MMNF3012	TW NF	MWG 3" MEMBRANE NF-3012 (MgSO ₄)	350 (1,32) 350 (1,32)	30-50 96,0	1,3 (14)	X	2	X	56,79
MMXLP2521	XLP	MWG 2.5" MEMBRANE XLP-2521	300 (1,13)	99,2	1,3 (14)	X	3	X	138,89
MMXLP2540	XLP	MWG 2.5" MEMBRANE XLP-2540	600 (2,27)	99,2	2,5 (27)	X	3	X	154,32
MMXLP4021	XLP	MWG 4" MEMBRANE XLP-4021	800 (3,04)	99,2	3,4 (36)	X	3	X	160,50
MMXLP4040	XLP	MWG 4" MEMBRANE XLP-4040	2.400 (9,1)	99,2	7,9 (85)	X	4	X	216,05
MMXLP8040	XLP	MWG 8" MEMBRANE XLP-8040	11.000 (41,6)	99,2	37,2 (400)	X	4	X	839,50
MMXLP8040HR	XLP	MWG 8" MEMBRANE XLP-8040HR	9.000 (34,1)	99,3	35,3 (380)	X	4	X	839,50
MMULP2540	LP	MWG 2.5" MEMBRANE ULP-2521	750 (2,84)	99,3	2,5 (27)	X	5	X	154,32
MMULP4021	LP	MWG 4" MEMBRANE ULP-4021	950 (3,6)	99,3	3,4 (36)	X	5	61	160,50
MMULP4040	LP	MWG 4" MEMBRANE ULP-4040	2.600 (9,8)	99,3	7,9 (85)	X	5	61	216,05
MMULP4040HR	LP	MWG 4" MEMBRANE ULP-4040HR	1.800 (6,8)	99,7	7,9 (85)	X	5	61	216,05
MMULP4040MR	LP	MWG 4" MEMBRANE ULP-4040MR	2.200 (8,3)	99,6	7,9 (85)	X	5	61	216,05
MMULP8040	LP	MWG 8" MEMBRANE ULP-8040	12.000 (45,4)	99,3	39 (420)	X	5	61	839,50
MMULP8040MR	LP	MWG 8" MEMBRANE ULP-8040MR	10.000 (37,8)	99,6	37,2 (400)	X	5	X	827,15
MMBW4040	BW	MWG 4" MEMBRANE BW-4040	2.400 (9,1)	99,6	7,9 (85)	X	6	61	216,05
MMBW4040FR	BW	MWG 4" MEMBRANE BW-4040FR	2.000 (7,6)	99,7	7,2 (78)	X	6	X	324,07
MMBW8040	BW	MWG 8" MEMBRANE BW-8040	10.500 (39,7)	99,6	37,2 (400)	X	6	61	839,50
MMBW8040FR	BW	MWG 8" MEMBRANE BW-8040FR	9.000 (34,1)	99,7	34 (365)	X	6	X	925,91
MMBW8040HR	BW	MWG 8" MEMBRANE BW-8040HR	9.500 (35,9)	99,7	35,5 (380)	X	6	X	839,50



Ref.	Mod.	Description	Permeate Flow Rate GPD (m ³ /d)	Rejection NaCl Rate (%)	Effective Area m ² (ft ²)	Spacer (mil)	Test	NSF	Price Euro
MMSW2521	SW	MWG 2.5" MEMBRANE SW-2521	300 (1,13)	99,7	1,3 (14)	X	7	X	209,87
MMSW2540	SW	MWG 2.5" MEMBRANE SW-2540	600 (2,27)	99,7	2,5 (27)	X	7	X	240,74
MMSW4021	SW	MWG 4" MEMBRANE SW-4021	800 (3,04)	99,7	3,4 (36)	X	7	X	256,17
MMSW4040	SW	MWG 4" MEMBRANE SW-4040	1.800 (6,8)	99,7	7,9 (85)	X	7	X	333,33
MMSW4040HR	SW	MWG 4" MEMBRANE SW-4040HR	1.500 (5,7)	99,7	7,2 (78)	X	7	X	333,33
MMSW8040	SW	MWG 8" MEMBRANE SW-8040	8.500 (32,1)	99,7	37,2 (400)	X	7	X	1.148,13
MMSW8040HR	SW	MWG 8" MEMBRANE SW-8040HR	6.500 (24,6)	99,7	35,3 (380)	X	7	X	1.148,13
MMSW8040MR	SW	MWG 8" MEMBRANE SW-8040MR	7.500 (28,3)	99,7	37,2 (400)	X	7	X	1.148,13
MMNF2-2540	NF	MWG 2.5" MEMBRANE NF2-2540 (MgSO ₄)	800 (3,04) 800 (3,04)	30-50 96,0	2,5 (27)	X	8	X	179,01
MMNF1-4040R	NF	MWG 4" MEMBRANE NF1-4040R (MgSO ₄)	1.800 (6,8) 1.800 (6,8)	> 85 99,0	7,9 (85)	X	8	X	385,80
MMNF2-4040	NF	MWG 4" MEMBRANE NF2-4040 (MgSO ₄)	2.400 (9,1) 2.400 (9,1)	30-50 97,0	7,9 (85)	X	8	X	385,80
MMNF2-8040	NF	MWG 8" MEMBRANE NF2-8040 (MgSO ₄)	12.000 (45,4) 12.000 (45,4)	30-50 97,0	37,2 (400)	X	8	X	1.419,73

Test Condition	Pressure (psi)	Temperature of Solution (°C)	Concentration of NaCl Solution (ppm)	Concentration of MgSO ₄ Solution (ppm)	pH	Recovery Rate (%)
1	60	25	250	-	7,5 - 8,0	15
2	60	25	250	250	7,5 - 8,0	15
3	100	25	500	-	7,5 - 8,0	8
4	100	25	500	-	7,5 - 8,0	15
5	150	25	500	-	7,5 - 8,0	15
6	225	25	2000	-	7,5 - 8,0	15
7	800	25	32000	-	7,5 - 8,0	8
8	70	25	500	2000	7,5 - 8,0	15

- **TW RO:** RESIDENTIAL RO
- **XLP:** EXTRA LOW PRESSURE
- **BW:** BRACKISH WATER
- **NF:** NANO FILTRATION
- **TW NF:** INDUSTRIAL NF
- **LP:** LOW PRESSURE
- **SW:** SEA WATER

Certification: **DM 174**

Manufacturer: **MWG**

Vontron Membranes



Ref.	Mod.	Description	Permeate Flow Rate GPD (m ³ /d)	Rejection NaCl Rate (%)	Effective Area m2 (ft2)	Spacer (mil)	Test	NSF	Price Euro
MVULP1812-50	TW RO	VONTRON 1.8" MEMBRANE ULP1812-50	50 (0,19)	97,5	x x	x	1	58	12,35
MVULP1812-75	TW RO	VONTRON 1.8" MEMBRANE ULP1812-75	75 (0,28)	97,5	x x	x	1	58	13,89
MVULP2012-100	TW RO	VONTRON 2" MEMBRANE ULP2012-100	100 (0,38)	95,0	x x	x	1	58	18,52
MVULP2812	TW RO	VONTRON 2.8" MEMBRANE ULP2812	200 (0,76)	97,0	x x	x	3	58	46,30
MVULP3012	TW RO	VONTRON 3" MEMBRANE ULP3012	300 (1,14)	97,0	x x	x	3	58	49,38
MVVNF1-1812	TW NF	VONTRON 1.8" MEMBRANE VNF1-1812 (CaCl ₂)	100 (0,8) 100 (0,8)	30,0 ± 10 ≥ 85	x x	x	2	58	30,86
MVVNF1-2012	TW NF	VONTRON 2" MEMBRANE VNF1-2012 (CaCl ₂)	120 (0,45) 120 (0,45)	30,0 ± 10 ≥ 85	x x	x	2	58	49,38
MVVNF2812	TW NF	VONTRON 2.8" MEMBRANE VNF-2812 (CaCl ₂)	300 (1,14) 300 (1,14)	30,0 ± 10 ≥ 85	x x	x	2	58	104,94
MVXLP11-4040	XLP RO	VONTRON 4" MEMBRANE XLP11-4040	2.000 (7,6)	98,0	8,4 (90)	x	3	61	209,87
MVXLP12-8040	XLP RO	VONTRON 8" MEMBRANE XLP12-8040	9.000 (34)	98,0	37,2 (400)	x	3	x	833,32
MVULP21-2540	LP	VONTRON 2.5" MEMBRANE ULP21-2540	750 (2,84)	99,0	2,8 (30)	x	4	61	154,32
MVULP21-4021	LP	VONTRON 4" MEMBRANE ULP21-4021	950 (3,6)	99,0	3,3 (36)	x	4	61	141,97
MVULP21-4040	LP	VONTRON 4" MEMBRANE ULP21-4040	2.400 (9,1)	99,0	8,4 (90)	x	5	61	209,87
MVULP31-4040	LP	VONTRON 4" MEMBRANE ULP31-4040	1.900 (7,2)	99,4	8,4 (90)	x	5	61	209,87
MVULP22-8040	LP	VONTRON 8" MEMBRANE ULP22-8040	12.100 (45,7)	99,0	37,2 (400)	x	5	61	833,32
MVULP32-8040	LP	VONTRON 8" MEMBRANE ULP32-8040	10.500 (39,7)	99,5	37,2 (400)	x	5	61	833,32
MVULP440	LP	VONTRON 8" MEMBRANE ULP440	12.000 (45,4)	99,5	40,9 (440)	x	6	x	925,91
MVLP100	BW	VONTRON 4" MEMBRANE LP100	2.500 (9,5)	99,7	9,3 (100)	x	7	x	246,91
MVLP21-4040	BW	VONTRON 4" MEMBRANE LP21-4040	2.400 (9,1)	99,5	8,4 (90)	x	7	61	209,87
MVLP21-8040	BW	VONTRON 8" MEMBRANE LP21-8040	9.600 (36,3)	99,5	33,9 (365)	x	7	61	833,32
MVLP22-8040	BW	VONTRON 8" MEMBRANE LP22-8040	10.500 (39,7)	99,5	37,2 (400)	x	7	61	833,32
MVFR11-4040	FR	VONTRON 4" MEMBRANE FR11-4040	2.200 (8,3)	99,5	8,4 (90)	x	7	61	339,50
MVFR11-8040	FR	VONTRON 8" MEMBRANE FR11-8040	9.600 (36,3)	99,5	33,9 (365)	34	7	61	1.064,80
MVFR12-8040	FR	VONTRON 8" MEMBRANE FR12-8040	10.500 (39,7)	99,5	37,2 (400)	34	7	x	1.018,50
MVPURO-LE	FR	VONTRON 8" MEMBRANE PURO-LE	10.000 (37,9)	99,5	37,2 (400)	34	8	x	1.018,50

Vontron Membranes



Ref.	Mod.	Description	Permeate Flow Rate GPD (m ³ /d)	Rejection NaCl Rate (%)	Effective Area m ² (ft ²)	Spacer (mil)	Test	NSF	Price Euro
MVSW11-2521	SW	VONTRON 2.5" MEMBRANE SW11-2521	270 (1,0)	99,5	1,1 (12)	x	9	61	253,08
MVSW11-4021	SW	VONTRON 4" MEMBRANE SW11-4021	750 (2,8)	99,5	3,1 (33)	x	9	61	308,64
MVSW4040HR	SW	VONTRON 4" MEMBRANE SW4040HR	1.600 (6,1)	99,8	7,9 (85)	x	10	61	493,82
MVSW4040LE	SW	VONTRON 4" MEMBRANE SW4040LE	1.900 (7,2)	99,7	7,9 (85)	x	10	61	493,82
MVSW8040HR-400	SW	VONTRON 8" MEMBRANE SW8040HR-400	7.500 (28,4)	99,8	37,2 (400)	x	10	61	1.188,25
MVSW8040LE-400	SW	VONTRON 8" MEMBRANE SW8040LE-400	9.000 (34,1)	99,8	37,2 (400)	x	10	61	1.188,25
MVVNF1-2540	NF	VONTRON 2.5" MEMBRANE VNF1-2540 (MgSO ₄)	800 (3,03)	30-50	2,6 (28)	x	11	x	246,91
			650 (2,46)	≥ 96					
MVVNF1-4040	NF	VONTRON 4" MEMBRANE VNF1-4040 (MgSO ₄)	2.400 (9,1)	30-50	7,4 (80)	x	11	x	370,36
			2.000 (7,5)	≥ 96					
MVVNF1-8040	NF	VONTRON 8" MEMBRANE VNF1-8040 (MgSO ₄)	12.000 (45,4)	30-50	37,2 (400)	x	11	x	1.450,59
			10.000 (37,9)	≥ 98					

Test Condition	Pressure (psi)	Temperature of Solution (°C)	Concentration of NaCl Solution (ppm)	Concentration of MgSO ₄ Solution (ppm)	pH	Recovery Rate (%)
1	60	25	250	-	6,5 - 8,5	15
2	60	25	250	CaCl ₂ 250	6,5 - 8,5	15
3	100	25	500	-	7,5	15
4	150	25	1500	-	7,5	8
5	150	25	1500	-	7,5	15
6	150	25	500	-	7,5	15
7	225	25	2000	-	7,5	15
8	150	25	2000	-	7,5	15
9	800	25	32800	-	7,5	4
10	800	25	32800	-	7,5	8
11	100	25	2000	MgSO ₄ 2000	7,5	15

- **TW RO:** RESIDENTIAL RO
- **XLP RO:** EXTRA LOW PRESSURE
- **BW:** BRACKISH WATER
- **SW:** SEA WATER
- **TW NF:** INDUSTRIAL NF
- **LP:** LOW PRESSURE
- **FR:** FOULING RESISTANT
- **NF:** NANO FILTRATION

Certification: **DM 174**

Manufacturer: **VONTRON**



LOW PRESSURE LPM MEMBRANES				
REF.	MODEL	NSF/ANSI	DM174-2004	PRICE EURO
MCRE2514-TL	RE2514-TL	-	Compliant	120,12
MCRE2514-TLF	RE2514-TLF	-	Compliant	120,12
MCRE2521-BLN	RE2521-BLN	-	Compliant	152,77
MCRE2521-BLF	RE2521-BLF	-	Compliant	152,77
MCRE2540-BLN	RE2540-BLN	-	Compliant	208,28
MCRE2540-BLF	RE2540-BLF	-	Compliant	213,90
MCRE2540-BLR	RE2540-BLR	-	Compliant	213,90

BRACKISH WATER BWM MEMBRANES				
REF.	MODEL	NSF/ANSI	DM174-2004	PRICE EURO
MCRE2521-BE	RE2521-BE	-	Compliant	152,77
MCRE2540-BE	RE2540-BE	-	Compliant	208,28

FOULING RESISTANT FRM MEMBRANES				
REF.	MODEL	NSF/ANSI	DM174-2004	PRICE EURO
MCRE2540-FEN	RE2540-FEn	-	Compliant	236,09

SEA WATER SWM MEMBRANES				
REF.	MODEL	NSF/ANSI	DM174-2004	PRICE EURO
MCRE2521-SHF	RE2521-SHF	-	Compliant	186,09
MCRE2540-SHN	RE2540-SHN	-	Compliant	266,60
MCRE2540-SHF	RE2540-SHF	-	Compliant	272,23

NANOFILTRATION NFM MEMBRANES				
REF.	MODEL	NSF/ANSI	DM174-2004	PRICE EURO
MCNE2540-90	NE2540-90	-	Compliant	260,67

CSM 2 1/2" Membranes



Ref. MCRE2514-TL

RE2514-TL

RO element for brackish water

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate:	250 GPD (0.94 m ³ /day)
	Stabilized salt rejection:	97.5%
	Effective membrane area:	7 ft ² (0.65 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 1,500 mg/L NaCl solution at 150 psig (1.0 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.0%.

3. Permeate flow rate for each element may vary but will be no more than 15%.

4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D	E	Part Number	
						Inter-connector	Brine Seal
RE2514-TL	14.0 inch (356 mm)	2.4 inch (61 mm)	0.75 inch (19.1 mm)	1.18 inch (30 mm)	1.18 inch (30 mm)	DD004 (*)	DC005 (*)

(*) see 05-03-99-EN data sheet.



1. Each membrane element comes with one brine seal, one interconnector (coupler) and four o-rings.

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RE25 I4-TL

RO element for brackish water

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	6 gpm (1.36 m ³ /hr)
· Min. Concentrate Flow Rate	1 gpm (0.23 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 2 1/2" Membranes



Ref. MCRE2514-TLF

RE2514-TLF

RO element for brackish water

CSM

SPECIFICATIONS:

General Features	Permeate flow rate:	250 GPD (0.94 m ³ /day)
	Stabilized salt rejection:	96.5%
	Effective membrane area:	7 ft ² (0.65 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 500 mg/L NaCl solution at 100 psig (0.7 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.0%.

3. Permeate flow rate for each element may vary but will be no more than 15%.

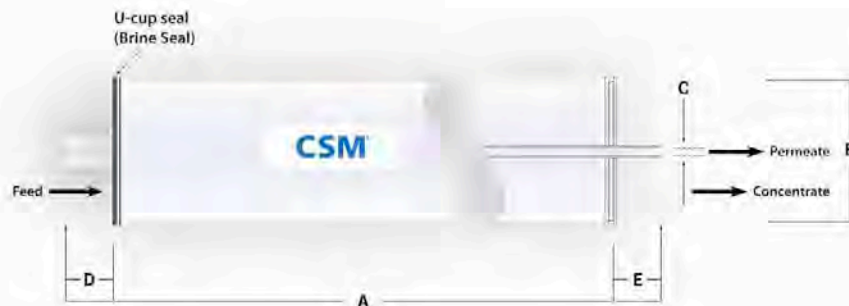
4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRPW wrapping

Dimensions

Model Name	A	B	C	D	E	Part Number	
						Inter-connector	Brine Seal
RE2514-TLF	14.0 inch (356 mm)	2.4 inch (61 mm)	0.75 inch (19.1 mm)	1.18 inch (30 mm)	1.18 inch (30 mm)	DD004 (*)	DC005 (*)

(*) see 05-03-99-EN data sheet.



1. Each membrane element comes with one brine seal, one interconnector (coupler) and four o-rings.

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RE25 I4-TLF

RO element for brackish water

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	6 gpm (1.36 m ³ /hr)
· Min. Concentrate Flow Rate	1 gpm (0.23 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 2 ½" Membranes



Ref. MCRE2521-BLN

RE2521- BLN

Low pressure grade RO element for brackish water

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate:	400 GPD (1.5 m ³ /day)
	Nominal salt rejection:	99.2%
	Effective membrane area:	12 ft ² (1.1 m ²)

- The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:
 - 1,500 mg/L NaCl solution at 150 psig (1.03 MPa) applied pressure
 - 8% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- Minimum salt rejection is 99.0%.
- Permeate flow rate for each element may vary +25 / -25%.
- All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D / E	Part Number	
					Inter-connector	Brine Seal
RE2521-BLN	21.0 inch (533.4 mm)	2.4 inch (60.8 mm)	0.75 inch (19.1 mm)	1.1 inch (28.0 mm)	DD004 (*)	DC005 (*)

(*) see 05-03-99-EN data sheet.



- Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
- All RE2521 elements fit nominal 2.5 inch (63.5 mm) I.D. pressure vessels.

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RE252I- BLN

Low pressure grade RO element for brackish water

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	6 gpm (1.36 m ³ /hr)
· Min. Concentrate Flow Rate	1 gpm (0.23 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+ 1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 2 1/2" Membranes



Ref. MCRE2521-BLF

RE2521- BLF

Ultra-low pressure grade RO element for low TDS water

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate:	400 GPD (1.5 m ³ /day)
	Nominal salt rejection:	99.0%
	Effective membrane area:	12 ft ² (1.1 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 500 mg/L NaCl solution at 100 psig (0.69 MPa) applied pressure
- 8% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.0%.

3. Permeate flow rate for each element may vary +25 / -25%.

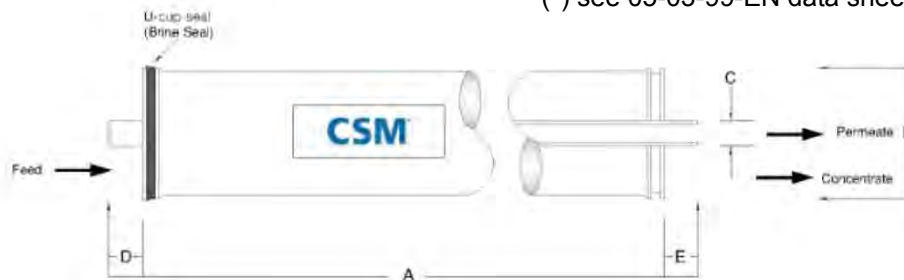
4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D / E	Part Number	
					Inter-connector	Brine Seal
RE2521-BLF	21.0 inch (533.4 mm)	2.4 inch (60.8 mm)	0.75 inch (19.1 mm)	1.1 inch (28.0 mm)	DD004 (*)	DC005 (*)

(*) see 05-03-99-EN data sheet.



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE2521 elements fit nominal 2.5 inch (63.5 mm) I.D. pressure vessels.

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RE252I- BLF

Ultra-low pressure grade RO element for low TDS water

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 Mpa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	6 gpm (1.36 m ³ /hr)
· Min. Concentrate Flow Rate	1 gpm (0.23 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+ 1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 2 1/2" Membranes



Ref. MCRE2540-BLN

RE2540-BLN

Low pressure grade RO element for brackish water

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate:	930 GPD (3.5 m ³ /day)
	Nominal salt rejection:	99.2%
	Effective membrane area:	27 ft ² (2.5 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 1,500 mg/L NaCl solution at 150 psig (1.03 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.0%.

3. Permeate flow rate for each element may vary +25 / -25%.

4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D / E	Part Number	
					Inter-connector	Brine Seal
RE2540-BLN	40.0 inch (1,016 mm)	2.4 inch (60.8 mm)	0.75 inch (19.1 mm)	1.05 inch (26.7 mm)	SWA01050	SWA01047



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE2540 elements fit nominal 2.5 inch (63.5 mm) I.D. pressure vessels.

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RE2540-BLN

Low pressure grade RO element for brackish water

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 Mpa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	6 gpm (1.36 m ³ /hr)
· Min. Concentrate Flow Rate	1 gpm (0.23 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+ 1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· Sr-SO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 2 1/2" Membranes



Ref. MCRE2540-BLF

RE2540-BLF

Ultra-low pressure grade RO element for low TDS water

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate:	930 GPD (3.5 m ³ /day)
	Nominal salt rejection:	99.2%
	Effective membrane area:	27 ft ² (2.5 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 500 mg/L NaCl solution at 100 psig (0.69 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.0%.

3. Permeate flow rate for each element may vary +25 / -25%.

4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D / E	Part Number	
					Inter-connector	Brine Seal
RE2540-BLF	40.0 inch (1,016 mm)	2.4 inch (60.8 mm)	0.75 inch (19.1 mm)	1.05 inch (26.7 mm)	SWA01050	SWA01047



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE2540 elements fit nominal 2.5 inch (63.5 mm) I.D. pressure vessels.

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RE2540-BLF

Ultra-low pressure grade RO element for low TDS water

CSM®

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	6 gpm (1.36 m ³ /hr)
· Min. Concentrate Flow Rate	1 gpm (0.23 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 2 1/2" Membranes



Ref. MCRE2540-BLR

RE2540-BLR

Low pressure grade RO element with high salt rejection for brackish water

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate:	740 GPD (2.8 m ³ /day)
	Nominal salt rejection:	99.6%
	Effective membrane area:	27 ft ² (2.5 m ²)

- The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:
 - 1,500 mg/L NaCl solution at 150 psig (1.03 MPa) applied pressure
 - 15% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- Minimum salt rejection is 99.4%.
- Permeate flow rate for each element may vary but will be no more than -15%.
- All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D / E	Part Number	
					Inter-connector	Brine Seal
RE2540-BLR	40.0 inch (1,016 mm)	2.4 inch (60.8 mm)	0.75 inch (19.1 mm)	1.05 inch (26.7 mm)	SWA01050	SWA01047



- Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
- All RE2540 elements fit nominal 2.5 inch (63.5 mm) I.D. pressure vessels.

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RE2540-BLR

Low pressure grade RO element with high salt rejection for brackish water

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	6 gpm (1.36 m ³ /hr)
· Min. Concentrate Flow Rate	1 gpm (0.23 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langlier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 2 1/2" Membranes



Ref. MCRE2521-BE

RE2521- BE

High productivity RO element with extended area for brackish water

SPECIFICATIONS:

General Features	Permeate flow rate:	400 GPD (1.5 m ³ /day)
	Nominal salt rejection:	99.5%
	Effective membrane area:	12 ft ² (1.1 m ²)

- The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:
 - 5
 - 2,000 mg/L NaCl solution at 225 psig (1.55 MPa) applied pressure
 - 8% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- Minimum salt rejection is 99.0%.
- Permeate flow rate for each element may vary +25 / -25%.
- All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D / E	Part Number	
					Inter-connector	Brine Seal
RE2521-BE	21.0 inch (533.4 mm)	2.4 inch (60.8 mm)	0.75 inch (19.1 mm)	1.1 inch (28.0 mm)	DD004 (*)	DC005 (*)

(*) see 05-03-99-EN data sheet.



- Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
- All RE2521 elements fit nominal 2.5 inch (63.5 mm) I.D. pressure vessels.

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RE252I- BE

High productivity RO element with extended area for brackish water

CSM

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	6 gpm (1.36 m ³ /hr)
· Min. Concentrate Flow Rate	1 gpm (0.23 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+ 1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 2 1/2" Membranes



Ref. MCRE2540-BE

RE2540-BE

High productivity RO element with extended area for brackish water

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate:	1,000 GPD (3.8 m ³ /day)
	Nominal salt rejection:	99.5%
	Effective membrane area:	27 ft ² (2.5 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 2,000 mg/L NaCl solution at 225 psig (1.55 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.0%.

3. Permeate flow rate for each element may vary +25 / -25%.

4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D / E	Part Number	
					Inter-connector	Brine Seal
RE2540-BE	40.0 inch (1,016 mm)	2.4 inch (60.8 mm)	0.75 inch (19.1 mm)	1.05 inch (26.7 mm)	SWA01050	SWA01047



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE2540 elements fit nominal 2.5 inch (63.5 mm) I.D. pressure vessels.

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RE2540-BE

High productivity RO element with extended area for brackish water

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	6 gpm (1.36 m ³ /hr)
· Min. Concentrate Flow Rate	1 gpm (0.23 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 2 ½” Membranes



Ref. MCRE2540-FEN

RE2540-FEⁿ

Enhanced fouling resistant RO element for brackish water and wastewater reuse

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate:	1,000 GPD (3.8 m ³ /day)
	Nominal salt rejection:	99.5%
	Effective membrane area:	27 ft ² (2.5 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 2,000 mg/L NaCl solution at 225 psig (1.55 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.0%.

3. Permeate flow rate for each element may vary +25 / -25%.

4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D / E	Part Number	
					Inter-connector	Brine Seal
RE2540-FEn	40.0 inch (1,016 mm)	2.4 inch (60.8 mm)	0.75 inch (19.1 mm)	1.05 inch (26.7 mm)	SWA01050	SWA01047



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE2540 elements fit nominal 2.5 inch (63.5 mm) I.D. pressure vessels.

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RE2540-FEⁿ

Enhanced fouling resistant RO element for brackish water and wastewater reuse

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	6 gpm (1.36 m ³ /hr)
· Min. Concentrate Flow Rate	1 gpm (0.23 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 2 1/2" Membranes



Ref. MCRE2521-SHF

RE2521-SHF

High productivity RO element for seawater and high salinity well water

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate:	300 GPD (1.14 m ³ /day)
	Nominal salt rejection:	99.7%
	Effective membrane area:	12 ft ² (1.1 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 32,000 mg/L NaCl solution at 800 psig (5.5 MPa) applied pressure
- 8% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.6%.

3. Permeate flow rate for each element may vary but will be no more than 20%.

4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D	E	Part Number	
						Inter-connector	Brine Seal
RE2521-SHF	21.0 inch (534 mm)	2.5 inch (64 mm)	0.75 inch (19.1 mm)	1.1 inch (28 mm)	1.1 inch (28 mm)	DD004 (*)	DC005 (*)

(*) see 05-03-99-EN data sheet.



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE2521 elements fit nominal 2.5 inch (64 mm) I.D. pressure vessels.

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RE252I-SHF

High rejection RO element for seawater and high salinity well water

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 Mpa)
· Max. Operating Pressure	1,200 psi (8.27 MPa)
· Max. Feed Flow Rate	6 gpm (1.36 m ³ /hr)
· Min. Concentrate Flow Rate	1 gpm (0.23 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 2 ½” Membranes



Ref. MCRE2540-SHN

RE2540-SHN

High Rejection RO element for seawater and high salinity well water

CSM

SPECIFICATIONS:

General Features	Permeate flow rate:	500 GPD (1.9 m ³ /day)
	Stabilized salt rejection:	99.75%
	Effective membrane area:	24 ft ² (2.2 m ²)

- The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:
 - 32,000 mg/L NaCl solution at 800 psig (5.5 MPa) applied pressure
 - 8% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- Minimum salt rejection is 99.6%.
- Permeate flow rate for each element may vary but will be no more than 15%.
- All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D	E
RE2540-SHN	40.0 inch (1,016 mm)	2.5 inch (64 mm)	0.75 inch (19.1 mm)	1.61 inch (41 mm)	1.61 inch (41 mm)



- Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
- All RE2540 elements fit nominal 2.5 inch (64 mm) I.D. pressure vessels.

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RE2540-SHN

High rejection RO element for seawater and high salinity well water

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 Mpa)
· Max. Operating Pressure	1,200 psi (8.27 MPa)
· Max. Feed Flow Rate	6 gpm (1.36 m ³ /hr)
· Min. Concentrate Flow Rate	1 gpm (0.23 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 2 1/2" Membranes



Ref. MCRE2540-SHF

RE2540-SHF

High productivity RO element for seawater and high salinity well water

CSM

SPECIFICATIONS:

General Features	Permeate flow rate:	600 GPD (2.3 m ³ /day)
	Stabilized salt rejection:	99.7%
	Effective membrane area:	24 ft ² (2.2 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 32,000 mg/L NaCl solution at 800 psig (5.5 MPa) applied pressure
- 8% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.6%.

3. Permeate flow rate for each element may vary but will be no more than 15%.

4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D	E
RE2540-SHF	40.0 inch (1,016 mm)	2.5 inch (64 mm)	0.75 inch (19.1 mm)	1.61 inch (41 mm)	1.61 inch (41 mm)



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE2540 elements fit nominal 2.5 inch (64 mm) I.D. pressure vessels.

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RE2540-SHF

High productivity RO element for seawater and high salinity well water

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 Mpa)
· Max. Operating Pressure	1,200 psi (8.27 MPa)
· Max. Feed Flow Rate	6 gpm (1.36 m ³ /hr)
· Min. Concentrate Flow Rate	1 gpm (0.23 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 2 ½" Membranes



Ref. MCNE2540-90

NE2540-90

Normal grade NF element with high monovalent ion rejection

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate ¹ :	500 GPD (1.9 m ³ /day)
	Monovalent ion rejection (NaCl) ¹ :	85.0 – 95.0%
	Divalent ion rejection (CaCl ₂) ² :	90.0 – 95.0%
	Effective membrane area:	27 ft ² (2.5 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following monovalent test conditions:

- 2,000 mg/L NaCl solution at 75 psig (0.5 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. The stated product performance is based on data taken after 30 minutes of operation at the following divalent test conditions:

- 500 mg/L CaCl₂ solution at 75 psig (0.5 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

3. MgSO₄ rejection is 97.0%. (Test conditions are equivalent with NaCl)

4. Permeate flow rate for each element may vary but will be no more than 15%.

5. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRPWrapping

Dimensions

Model Name	A	B	C	D	E
NE2540-90	40.0 inch (1,016 mm)	2.5 inch (64 mm)	0.75 inch (19.1 mm)	1.61 inch (41 mm)	1.61 inch (41 mm)



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All NE2540 elements fit nominal 2.5 inch (64 mm) I.D. pressure vessels.

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NE2540-90

Normal grade NF element with high monovalent ion rejection

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	6 gpm (1.36 m ³ /hr)
· Min. Concentrate Flow Rate	1 gpm (0.23 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.



LOW PRESSURE LPM MEMBRANES				
REF.	MODEL	NSF/ANSI	DM174-2004	PRICE EURO
MCRE4021-BLN	RE4021-BLN	-	Compliant	222,23
MCRE4021-BLF	RE4021-BLF	-	Compliant	227,76
MCRE4040-BLN	RE4040-BLN	Standard 61	Compliant	299,92
MCRE4040-BLF	RE4040-BLF	Standard 61	Compliant	308,25
MCRE4040-BLR	RE4040-BLR	Standard 61	Compliant	308,25
MTMG10D	TMG10D	-	Compliant	411,80

BRACKISH WATER BWM MEMBRANES				
REF.	MODEL	NSF/ANSI	DM174-2004	PRICE EURO
MCRE4021-BE	RE4021-BE	-	Compliant	205,57
MCRE4040-BE	RE4040-BE	-	Compliant	291,59
MTM710D	TM710D	-	Compliant	411,80

CHLORINE RESISTANT CRM MEMBRANES				
REF.	MODEL	NSF/ANSI	DM174-2004	PRICE EURO
MCRE4040-CE (*)	RE4040-CE	-	Compliant	386,14

FOULING RESISTANT FRM MEMBRANES				
REF.	MODEL	NSF/ANSI	DM174-2004	PRICE EURO
MCRE4040-FEN	RE4040-FEn	-	Compliant	333,25
MCRE4040-FLR	RE4040-FLR	-	Compliant	341,58
MTML10D	TML10D	-	Compliant	429,20

SEA WATER SWM MEMBRANES				
REF.	MODEL	NSF/ANSI	DM174-2004	PRICE EURO
MCRE4021-SHN	RE4021-SHN	-	Compliant	291,63
MTM810C	TM810C	-	Compliant	472,12
MTM810V	TM810V	-	Compliant	461,10

NANOFILTRATION NFM MEMBRANES				
REF.	MODEL	NSF/ANSI	DM174-2004	PRICE EURO
MCNE4040-90	NE4040-90	-	Compliant	413,86
MCNE4040-70 (*)	NE4040-70	-	Compliant	438,85
MCNE4040-40 (*)	NE4040-40	-	Compliant	467,93

(*) not available in stock.

CSM 4" Membranes



Ref. MCRE4021-BLN

RE4021-BLN

Low pressure grade RO element for brackish water

CSM

SPECIFICATIONS:

General Features	Permeate flow rate:	1,200 GPD (4.5 m ³ /day)
	Nominal salt rejection:	99.2%
	Effective membrane area:	35 ft ² (3.3 m ²)

The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 1,500 mg/L NaCl solution at 150 psig (1.03 MPa) applied pressure
- 8% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

1. Minimum salt rejection is 99.0%.
2. Permeate flow rate for each element may vary +25 /-25%.
3. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D / E	Part Number	
					Inter-connector	Brine Seal
RE4021-BLN	21.0 inch (533.4 mm)	3.9 inch (99 mm)	0.75 inch (19.1 mm)	1.1 inch (28.0 mm)	SWA01050	SWA01046



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE4021 elements fit nominal 4.0 inch (101.6 mm) I.D. pressure vessels.

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RE402I-BLN

Low pressure grade RO element for brackish water

APPLICATION DATA:

Operating Limits

• Max. Pressure Drop / Element	15 psi (0.1 MPa)
• Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
• Max. Operating Pressure	600 psi (4.14 MPa)
• Max. Feed Flow Rate	13 gpm (2.95 m ³ /hr)
• Min. Concentrate Flow Rate	3 gpm (0.68 m ³ /hr)
• Max. Operating Temperature	113 °F (45 °C)
• Operating pH Range	2.0–11.0
• CIP pH Range	1.0–13.0
• Max. Turbidity	1.0 NTU
• Max. SDI (15 min)	5.0
• Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

• Wastewater Conventional (SDI < 5)	8–12 gfd
• Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
• Seawater, Open Intake (SDI < 5)	7–10 gfd
• Seawater, Beach Well (SDI < 3)	8–12 gfd
• Surface Water (SDI < 5)	12–16 gfd
• Surface Water (SDI < 3)	13–17 gfd
• Well water (SDI < 3)	13–17 gfd
• RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

• Langelier Saturation Index (LSI)	<+1.5
• Stiff and Davis Saturation Index (SDSI)	<+0.5
• CaSO ₄	230% saturation
• SrSO ₄	800% saturation
• BaSO ₄	6,000% saturation
• SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 4" Membranes



Ref. MCRE4021-BLF

RE4021-BLF

Ultra-low pressure grade RO element for low TDS water

CSM

SPECIFICATIONS:

General Features	Permeate flow rate:	1,200 GPD (4.5 m ³ /day)
	Nominal salt rejection:	99.2%
	Effective membrane area:	35 ft ² (3.3 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 500 mg/L NaCl solution at 100 psig (0.69 MPa) applied pressure
- 8% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.0%.

3. Permeate flow rate for each element may vary +25 /-25%.

4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D / E	Part Number	
					Inter-connector	Brine Seal
RE4021-BLF	21.0 inch (533.4 mm)	3.9 inch (99 mm)	0.75 inch (19.1 mm)	1.1 inch (28.0 mm)	DD004 (*)	DD003 (*)

(*) see 05-03-99-EN data sheet.



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE4021 elements fit nominal 4.0 inch (101.6 mm) I.D. pressure vessels.

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RE4021-BLF

Ultra-low pressure grade RO element for low TDS water

APPLICATION DATA:

Operating Limits

• Max. Pressure Drop / Element	15 psi (0.1 MPa)
• Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
• Max. Operating Pressure	600 psi (4.14 MPa)
• Max. Feed Flow Rate	13 gpm (2.95 m ³ /hr)
• Min. Concentrate Flow Rate	3 gpm (0.68 m ³ /hr)
• Max. Operating Temperature	113 °F (45 °C)
• Operating pH Range	2.0–11.0
• CIP pH Range	1.0–13.0
• Max. Turbidity	1.0 NTU
• Max. SDI (15 min)	5.0
• Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

• Wastewater Conventional (SDI < 5)	8–12 gfd
• Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
• Seawater, Open Intake (SDI < 5)	7–10 gfd
• Seawater, Beach Well (SDI < 3)	8–12 gfd
• Surface Water (SDI < 5)	12–16 gfd
• Surface Water (SDI < 3)	13–17 gfd
• Well water (SDI < 3)	13–17 gfd
• RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

• Langelier Saturation Index (LSI)	<+1.5
• Stiff and Davis Saturation Index (SDSI)	<+0.5
• CaSO ₄	230% saturation
• SrSO ₄	800% saturation
• BaSO ₄	6,000% saturation
• SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 4" Membranes



Ref. MCRE4040-BLN

RE4040-BLN

Low pressure grade RO element for brackish water

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate:	2,600 GPD (9.8 m ³ /day)
	Nominal salt rejection:	99.4%
	Effective membrane area:	85 ft ² (7.9 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 1,500 mg/L NaCl solution at 150 psig (1.03 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.3%.

3. Permeate flow rate for each element may vary +25 /-15%.

4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D / E	Part Number	
					Inter-connector	Brine Seal
RE4040-BLN	40.0 inch (1,016 mm)	3.9 inch (99 mm)	0.75 inch (19 mm)	1.05 inch (26.7 mm)	SWA01050	SWA01046



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE4040 elements fit nominal 4.0 inch (101.6 mm) I.D. pressure vessels.

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RE4040-BLN

Low pressure grade RO element for brackish water

CSM

APPLICATION DATA:

Operating Limits

• Max. Pressure Drop / Element	15 psi (0.1 MPa)
• Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
• Max. Operating Pressure	600 psi (4.14 MPa)
• Max. Feed Flow Rate	18 gpm (4.09 m ³ /hr)
• Min. Concentrate Flow Rate	4 gpm (0.91 m ³ /hr)
• Max. Operating Temperature	113 °F (45 °C)
• Operating pH Range	2.0–11.0
• CIP pH Range	1.0–13.0
• Max. Turbidity	1.0 NTU
• Max. SDI (15 min)	5.0
• Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

• Wastewater Conventional (SDI < 5)	8–12 gfd
• Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
• Seawater, Open Intake (SDI < 5)	7–10 gfd
• Seawater, Beach Well (SDI < 3)	8–12 gfd
• Surface Water (SDI < 5)	12–16 gfd
• Surface Water (SDI < 3)	13–17 gfd
• Well water (SDI < 3)	13–17 gfd
• RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

• Langlier Saturation Index (LSI)	<+1.5
• Stiff and Davis Saturation Index (SDSI)	<+0.5
• CaSO ₄	230% saturation
• SrSO ₄	800% saturation
• BaSO ₄	6,000% saturation
• SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 4" Membranes



Ref. MCRE4040-BLF

RE4040-BLF

Ultra-low pressure grade RO element for low TDS water

CSM

SPECIFICATIONS:

General Features	Permeate flow rate:	2,500 GPD (9.5 m ³ /day)
	Nominal salt rejection:	99.2%
	Effective membrane area:	85 ft ² (7.9 m ²)

- The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:
 - 500 mg/L NaCl solution at 100 psig (0.69 MPa) applied pressure
 - 15% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- Minimum salt rejection is 99.0%.
- Permeate flow rate for each element may vary +25 /-15%.
- All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D / E	Part Number	
					Inter-connector	Brine Seal
RE4040-BLF	40.0 inch (1,016 mm)	3.9 inch (99 mm)	0.75 inch (19 mm)	1.05 inch (26.7 mm)	SWA01050	SWA01046



- Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
- All RE4040 elements fit nominal 4.0 inch (101.6 mm) I.D. pressure vessels.

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RE4040-BLF

Ultra-low pressure grade RO element for low TDS water

CSM[®]

APPLICATION DATA:

Operating Limits

• Max. Pressure Drop / Element	15 psi (0.1 MPa)
• Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
• Max. Operating Pressure	600 psi (4.14 MPa)
• Max. Feed Flow Rate	18 gpm (4.09 m ³ /hr)
• Min. Concentrate Flow Rate	4 gpm (0.91 m ³ /hr)
• Max. Operating Temperature	113 °F (45 °C)
• Operating pH Range	2.0–11.0
• CIP pH Range	1.0–13.0
• Max. Turbidity	1.0 NTU
• Max. SDI (15 min)	5.0
• Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

• Wastewater Conventional (SDI < 5)	8–12 gfd
• Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
• Seawater, Open Intake (SDI < 5)	7–10 gfd
• Seawater, Beach Well (SDI < 3)	8–12 gfd
• Surface Water (SDI < 5)	12–16 gfd
• Surface Water (SDI < 3)	13–17 gfd
• Well water (SDI < 3)	13–17 gfd
• RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

• Langlier Saturation Index (LSI)	<+1.5
• Stiff and Davis Saturation Index (SDSI)	<+0.5
• CaSO ₄	230% saturation
• SrSO ₄	800% saturation
• BaSO ₄	6,000% saturation
• SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.



Ref. MCRE4040-BLR

RE4040-BLR

Low pressure grade RO element with high salt rejection for brackish water

SPECIFICATIONS:

General Features	Permeate flow rate:	2,100 GPD (7.9 m ³ /day)
	Nominal salt rejection:	99.6%
	Effective membrane area:	85 ft ² (7.9 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 1,500 mg/L NaCl solution at 150 psig (1.03 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.5%.

3. Permeate flow rate for each element may vary but will be no more than -5%.

4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D/E	Part Number	
					Inter-connector	Brine Seal
RE4040-BLR	40.0 inch (1,016 mm)	3.9 inch (99 mm)	0.75 inch (19 mm)	1.05 inch (26.7 mm)	SWA01050	SWA01046



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE4040 elements fit nominal 4.0 inch (101.6 mm) I.D. pressure vessels.

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RE4040-BLR

Low pressure grade RO element with extended area for brackish water

CSM[®]

APPLICATION DATA:

Operating Limits

• Max. Pressure Drop / Element	15 psi (0.1 MPa)
• Max. Pressure Drop / 240" Vessel	60 psi (0.41 Mpa)
• Max. Operating Pressure	600 psi (4.14 MPa)
• Max. Feed Flow Rate	18 gpm (4.09 m ³ /hr)
• Min. Concentrate Flow Rate	4 gpm (0.91 m ³ /hr)
• Max. Operating Temperature	113 °F (45 °C)
• Operating pH Range	2.0–11.0
• CIP pH Range	1.0–13.0
• Max. Turbidity	1.0 NTU
• Max. SDI (15 min)	5.0
• Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

• Wastewater Conventional (SDI < 5)	8–12 gfd
• Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
• Seawater, Open Intake (SDI < 5)	7–10 gfd
• Seawater, Beach Well (SDI < 3)	8–12 gfd
• Surface Water (SDI < 5)	12–16 gfd
• Surface Water (SDI < 3)	13–17 gfd
• Well water (SDI < 3)	13–17 gfd
• RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

• Langelier Saturation Index (LSI)	<+1.5
• Stiff and Davis Saturation Index (SDSI)	<+0.5
• CaSO ₄	230% saturation
• SrSO ₄	800% saturation
• BaSO ₄	6,000% saturation
• SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

TORAY 4" Membranes



Ref. MTMG10D

TORAY
Innovation by Chemistry

Ultra low pressure BWRO, enhanced chemical tolerance

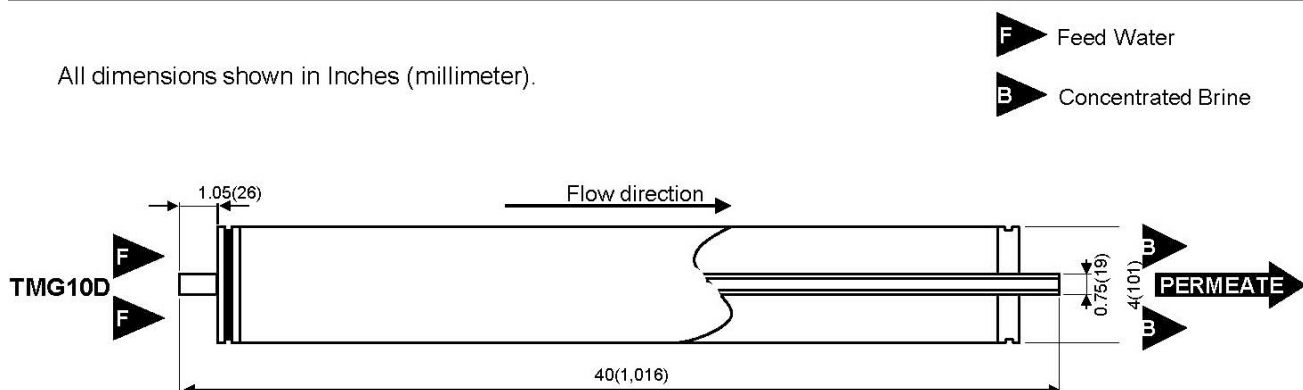
TMG (D)

Type	Diameter Inch	Membrane Area ft ² (m ²)	Salt Rejection %	Product Flow Rate gpd(m ³ / d)	Feed Spacer Thickness mil
TMG10D	4"	87(8)	99.7	2,850(10.8)	34

1. Membrane Type		Cross Linked Fully Aromatic Polyamide Composite
2. Test Conditions	Feed Water Pressure Feed Water Temperature Feed Water Concentration Recovery Rate Feed Water pH	150 psi(1.03MPa) 77° F(25°C) 2000 mg/l Nacl 15% 7
3. Minimum Salt Rejection		99.5%
4. Minimum Product Flow Rate		2,400gpd(9.1m ³ /d)

Dimensions

All dimensions shown in Inches (millimeter).





Operating Limits

Maximum Operating Pressure	_____	365psi (2.5 MPa)
Maximum Feed Water Temperature	_____	113° F (45°C)
Maximum Feed Water SDI15	_____	5
Feed Water Chlorine Concentration	_____ <small>*See below 3 of Operating Information</small>	< 0.1ppm
Feed Water pH Range, Continuous Operation	_____	2-11
Feed Water pH Range, Chemical Cleaning	_____	1-13
Maximum Pressure Drop per Element	_____	15psi (0.10 MPa)
Maximum Pressure Drop per Vessel	_____	50psi (0.34 MPa)

Operating Information

1. For the recommended design range, please consult the latest Toray technical bulletin, design guide lines, computer design program, and/ or call an application specialist. If the operating limits given in this Product Information Bulletin are not strictly followed, the Limited Warranty will be null and void.
 2. All elements are wet tested, treated with a 1% by weight percent sodium bisulfite storage solution, and then vacuum packed in oxygen barrier bags, or treated with tested feed water solution, and then vacuum packed in oxygen barrier bags with deoxidant inside. To prevent biological growth during short term storage, shipment, or system shutdown, it is recommended that Toray elements be immersed in a protective solution containing 500 - 1,000 ppm of sodium bisulfite (food grade) dissolved in permeate.
 3. The presence of free chlorine and other oxidizing agents under certain conditions, such as heavy metals which acts as oxidation catalyst in the feed water will cause unexpected oxidation of the membrane. Since oxidation damage is not covered under warranty, it is strongly recommended to remove these oxidizing agents contained in feed water before operating RO system.
 4. Permeate from the first hour of operation shall be discarded.
 5. The customer is fully responsible for the effects of chemicals that are incompatible with the elements. Their use will void the element Limited Warranty.
-

Notice

1. Toray accepts no responsibility for results obtained by the application of this information or the safety or suitability of Toray's products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product combination for their own purposes.
2. All data may change without prior notice, due to technical modifications or production changes.

CSM 4" Membranes



Ref. MCRE4021-BE

RE4021-BE

High productivity RO element with extended area for brackish water

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate:	1,200 GPD (4.5 m ³ /day)
	Nominal salt rejection:	99.5%
	Effective membrane area:	35 ft ² (3.3 m ²)

The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 2,000 mg/L NaCl solution at 225 psig (1.55 MPa) applied pressure
- 8% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

1. Minimum salt rejection is 99.0%.
2. Permeate flow rate for each element may vary +25 /-25%.
3. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D / E	Part Number	
					Inter-connector	Brine Seal
RE4021-BE	21.0 inch (533.4 mm)	3.9 inch (99 mm)	0.75 inch (19.1 mm)	1.1 inch (28.0 mm)	SWA01050	SWA01046



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE4021 elements fit nominal 4.0 inch (101.6 mm) I.D. pressure vessels.

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RE402I-BE

High productivity RO element with extended area for brackish water

CSM®

APPLICATION DATA:

Operating Limits

• Max. Pressure Drop / Element	15 psi (0.1 MPa)
• Max. Pressure Drop / 240" Vessel	60 psi (0.41 Mpa)
• Max. Operating Pressure	600 psi (4.14 MPa)
• Max. Feed Flow Rate	13 gpm (2.95 m ³ /hr)
• Min. Concentrate Flow Rate	3 gpm (0.68 m ³ /hr)
• Max. Operating Temperature	113 °F (45 °C)
• Operating pH Range	2.0–11.0
• CIP pH Range	1.0–13.0
• Max. Turbidity	1.0 NTU
• Max. SDI (15 min)	5.0
• Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

• Wastewater Conventional (SDI < 5)	8–12 gfd
• Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
• Seawater, Open Intake (SDI < 5)	7–10 gfd
• Seawater, Beach Well (SDI < 3)	8–12 gfd
• Surface Water (SDI < 5)	12–16 gfd
• Surface Water (SDI < 3)	13–17 gfd
• Well water (SDI < 3)	13–17 gfd
• RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

• Langlier Saturation Index (LSI)	<+1.5
• Stiff and Davis Saturation Index (SDSI)	<+0.5
• CaSO ₄	230% saturation
• SrSO ₄	800% saturation
• BaSO ₄	6,000% saturation
• SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 4" Membranes



Ref. MCRE4040-BE

RE4040-BE

High productivity RO element with extended area for brackish water

SPECIFICATIONS:

General Features	Permeate flow rate:	2,400 GPD (9.1 m ³ /day)
	Nominal salt rejection:	99.7%
	Effective membrane area:	85 ft ² (7.9 m ²)

- The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:
 - 2,000 mg/L NaCl solution at 225 psig (1.55 MPa) applied pressure
 - 15% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- Minimum salt rejection is 99.4%.
- Permeate flow rate for each element may vary +25 /-15%.
- All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D / E	Part Number	
					Inter-connector	Brine Seal
RE4040-BE	40.0 inch (1,016 mm)	3.9 inch (99 mm)	0.75 inch (19 mm)	1.05 inch (26.7 mm)	SWA01050	SWA01046



- Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
- All RE4040 elements fit nominal 4.0 inch (101.6 mm) I.D. pressure vessels.

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RE4040-BE

High productivity RO element with extended area for brackish water

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	18 gpm (4.09 m ³ /hr)
· Min. Concentrate Flow Rate	4 gpm (0.91 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+ 1.5
· Stiff and Davis Saturation Index (SDSI)	<+ 0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

TORAY 4" Membranes



Ref. MTM710D

TORAY
Innovation by Chemistry

High rejection BWRO, enhanced chemical tolerance

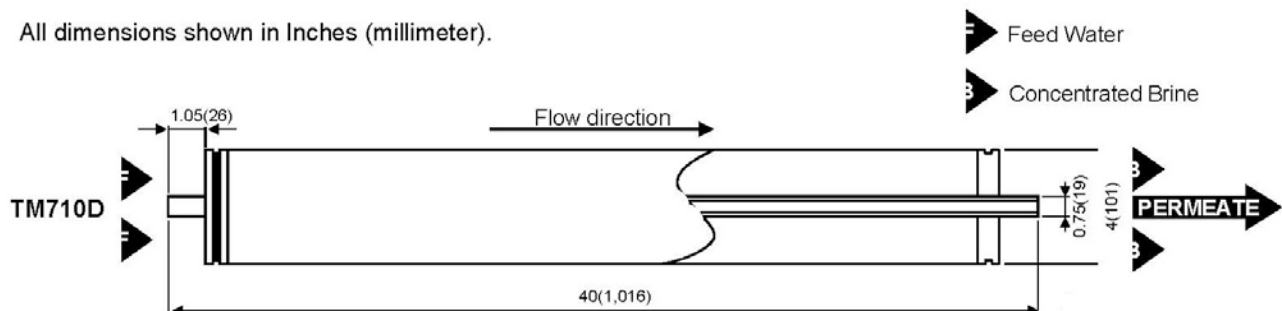
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Type	Diameter Inch	Membrane Area ft ² (m ²)	Salt Rejection %	Product Flow Rate gpd(m ³ / d)	Feed Spacer Thickness mil
TM710D	4"	87(8)	99.8	2,600(9.8)	31

1. Membrane Type		Cross Linked Fully Aromatic Polyamide Composite
2. Test Conditions	Feed Water Pressure Feed Water Temperature Feed Water Concentration Recovery Rate Feed Water pH	225 psi(1.55MPa) 77° F(25°C) 2,000 mg/l NaCl 15% 7
3. Minimum Salt Rejection		99.65%
4. Minimum Product Flow Rate		2,150gpd(8.2m ³ /d)

Dimensions

All dimensions shown in Inches (millimeter).





Operating Limits

Maximum Operating Pressure	600psi (4.1 MPa)
Maximum Feed Water Temperature	113° F (45°C)
Maximum Feed Water SDI ₁₅	5
Feed Water Chlorine Concentration <small>*See below 3 of Operating Information</small>	<0.1 ppm
Feed Water pH Range, Continuous Operation	2-11
Feed Water pH Range, Chemical Cleaning	1-13
Maximum Pressure Drop per Element	15 psi (0.10 MPa)
Maximum Pressure Drop per Vessel	50 psi (0.34 MPa)

Operating Information

1. For the recommended design range, please consult the latest Toray technical bulletin, design guide lines, computer design program, and/ or call an application specialist. If the operating limits given in this Product Information Bulletin are not strictly followed, the Limited Warranty will be null and void.
 2. All elements are wet tested, treated with a 1% by weight percent sodium bisulfite storage solution, and then vacuum packed in oxygen barrier bags, or treated with tested feed water solution, and then vacuum packed in oxygen barrier bags with deoxidant inside. To prevent biological growth during short term storage, shipment, or system shutdown, it is recommended that Toray elements be immersed in a protective solution containing 500 - 1,000 ppm of sodium bisulfite (food grade) dissolved in permeate.
 3. The presence of free chlorine and other oxidizing agents under certain conditions, such as heavy metals which acts as oxidation catalyst in the feed water will cause unexpected oxidation of the membrane. It is strongly recommended to remove these oxidizing agents contained in feed water before operating RO system.
 4. Permeate from the first hour of operation shall be discarded.
 5. The customer is fully responsible for the effects of chemicals that are incompatible with the elements. Their use will void the element Limited Warranty.
-

Notice

1. Toray accepts no responsibility for results obtained by the application of this information or the safety or suitability of Toray's products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product combination for their own purposes.
2. All data may change without prior notice, due to technical modifications or production changes.



Ref. MCRE4040-CE

RE4040-CE

Innovative chlorine resistant RO element for prolonged membrane lifetime

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate:	1,900 GPD (7.2 m ³ /day)
	Nominal salt rejection:	99.5%
	Effective membrane area:	85ft ² (7.9m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 2,000 mg/L NaCl solution at 225 psig (1.5 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.0%

3. Permeate flow rate for each element may vary but will be no more than 10%.

4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D	E
RE4040-CE	40.0 inch (1,016 mm)	4.0 inch (102 mm)	0.75 inch (19.1 mm)	1.06 inch (27 mm)	1.06 inch (27 mm)



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE4040 elements fit nominal 4.0 inch (102 mm) I.D. pressure vessels.

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RE4040-CE

Innovative chlorine resistant RO element for prolonged membrane lifetime

CSM[®]

APPLICATION DATA:

Operating Limits

• Max. Pressure Drop / Element	15 psi (0.1 MPa)
• Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
• Max. Operating Pressure	600 psi (4.14 MPa)
• Max. Feed Flow Rate	18 gpm (4.09 m ³ /hr)
• Min. Concentrate Flow Rate	4 gpm (0.91 m ³ /hr)
• Max. Operating Temperature	113 °F (45 °C)
• Operating pH Range	2.0–11.0
• CIP pH Range	1.0–13.0
• Max. Turbidity	1.0 NTU
• Max. SDI (15 min)	5.0
• Free Chlorine Tolerance	5,000 ppm hr

Design Guidelines for Various Water Sources

• Wastewater Conventional (SDI < 5)	8–12 gfd
• Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
• Seawater, Open Intake (SDI < 5)	7–10 gfd
• Seawater, Beach Well (SDI < 3)	8–12 gfd
• Surface Water (SDI < 5)	12–16 gfd
• Surface Water (SDI < 3)	13–17 gfd
• Well water (SDI < 3)	13–17 gfd
• RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

• Langelier Saturation Index (LSI)	<+1.5
• Stiff and Davis Saturation Index (SDSI)	<+0.5
• CaSO ₄	230% saturation
• SrSO ₄	800% saturation
• BaSO ₄	6,000% saturation
• SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.
- Keep elements moist at all times after initial wetting.

CSM 4" Membranes



Ref. MCRE4040-FEN

RE4040-FEⁿ

Enhanced fouling resistant RO element for brackish water and wastewater reuse

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate:	2,400 GPD (9.1 m ³ /day)
	Nominal salt rejection:	99.7%
	Effective membrane area:	85 ft ² (7.9 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 2,000 mg/L NaCl solution at 225 psig (1.55 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.4%.

3. Permeate flow rate for each element may vary +25 /-15%.

4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D/E	Part Number	
					Inter-connector	Brine Seal
RE4040-FE ⁿ	40.0 inch (1,016 mm)	3.9 inch (99 mm)	0.75 inch (19 mm)	1.05 inch (26.7 mm)	SWA01050	SWA01046



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE4040 elements fit nominal 4.0 inch (101.6 mm) I.D. pressure vessels.

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RE4040-FEⁿ

Enhanced fouling resistant RO element for brackish water and wastewater reuse

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	18 gpm (4.09 m ³ /hr)
· Min. Concentrate Flow Rate	4 gpm (0.91 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 4" Membranes



Ref. MCRE4040-FLR

RE4040-FLR

Fouling resistant RO element with low pressure for brackish water and wastewater reuse

CSM

SPECIFICATIONS:

General Features	Permeate flow rate:	2,100 GPD (7.9 m ³ /day)
	Nominal salt rejection:	99.6%
	Effective membrane area:	85 ft ² (7.9 m ²)

- The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:
 - 1,500 mg/L NaCl solution at 150 psig (1.03 MPa) applied pressure
 - 15% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- Minimum salt rejection is 99.5%.
- Permeate flow rate for each element may vary but will be no more than -5%
- All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D/E	Part Number	
					Inter-connector	Brine Seal
RE4040-FLR	40.0 inch (1,016 mm)	3.9 inch (99 mm)	0.75 inch (19 mm)	1.05 inch (26.7 mm)	SWA01050	SWA01046



- Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
- All RE4040 elements fit nominal 4.0 inch (101.6 mm) I.D. pressure vessels.

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RE4040-FLR

CSM[®]

Fouling resistant RO element with low pressure for brackish water and wastewater reuse

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	18 gpm (4.09 m ³ /hr)
· Min. Concentrate Flow Rate	4 gpm (0.91 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

TORAY 4" Membranes



Ref. MTML10D

TORAY

Low fouling and high tolerance RO

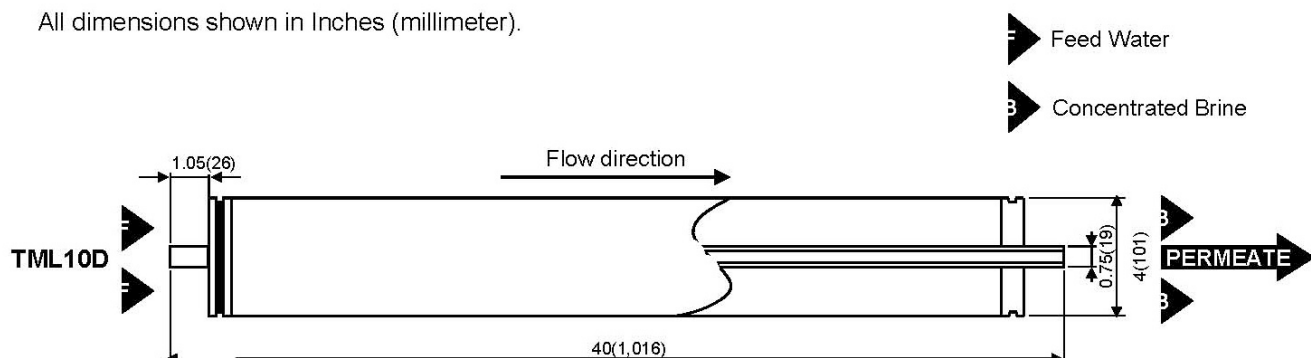
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Type	Diameter Inch	Membrane Area ft ² (m ²)	Salt Rejection %	Product Flow Rate gpd(m ³ /d)	Feed Spacer Thickness mil
TML10D	4"	73(7)	99.8	1,900(7.2)	34

1. Membrane Type		Cross Linked Fully Aromatic Polyamide Composite
2. Test Conditions	Feed Water Pressure Feed Water Temperature Feed Water Concentration Recovery Rate Feed Water pH	225 psi(1.55 MPa) 77 ° F(25 °C) 2,000 mg/l NaCl 15 % 7
3. Minimum Salt Rejection		99.65 %
4. Minimum Product Flow Rate		1,500 gpd(5.8 m ³ /d)

Dimensions

All dimensions shown in Inches (millimeter).





Operating Limits

Maximum Operating Pressure	600psi (4.1 MPa)
Maximum Feed Water Temperature	113° F (45°C)
Maximum Feed Water SDI ₁₅	5
Feed Water Chlorine Concentration	<0.1ppm
Feed Water pH Range, Continuous Operation	2-11
Feed Water pH Range, Chemical Cleaning	1-13
Maximum Pressure Drop per Element	15 psi (0.10 MPa)
Maximum Pressure Drop per Vessel	50 psi (0.34 MPa)

Operating Information

1. For the recommended design range, please consult the latest Toray technical bulletin, design guide lines, computer design program, and/ or call an application specialist. If the operating limits given in this Product Information Bulletin are not strictly followed, the Limited Warranty will be null and void.
2. All elements are wet tested, treated with a 1% by weight percent sodium bisulfite storage solution, and then vacuum packed in oxygen barrier bags, or treated with tested feed water solution, and then vacuum packed in oxygen barrier bags with deoxidant inside. To prevent biological growth during short term storage, shipment, or system shutdown, it is recommended that Toray elements be immersed in a protective solution containing 500 - 1,000 ppm of sodium bisulfite (food grade) dissolved in permeate.
3. The presence of free chlorine and other oxidizing agents under certain conditions, such as heavy metals which acts as oxidation catalyst in the feed water will cause unexpected oxidation of the membrane. It is strongly recommended to remove these oxidizing agents contained in feed water before operating RO system.
4. Permeate from the first hour of operation shall be discarded.
5. The customer is fully responsible for the effects of chemicals that are incompatible with the elements. Their use will void the element Limited Warranty.

Notice

1. Toray accepts no responsibility for results obtained by the application of this information or the safety or suitability of Toray's products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product combination for their own purposes.
2. All data may change without prior notice, due to technical modifications or production changes.

CSM 4" Membranes



Ref. MCRE4021-SHN

RE4021-SHN

High Rejection RO element for seawater and high salinity well water

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate:	600 GPD (2.3 m ³ /day)
	Nominal salt rejection:	99.75%
	Effective membrane area:	35 ft ² (3.3 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following divalent test conditions:

- 32,000 mg/L NaCl solution at 800 psig (5.5 MPa) applied pressure
- 8% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.6%

3. Permeate flow rate for each element may vary but will be no more than 15%.

4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions and Weight

Model Name	A	B	C	D	E
RE4021-SHN	21.0 inch (534 mm)	4.0 inch (102 mm)	0.75 inch (19.1 mm)	1.55 inch (39.5 mm)	1.55 inch (39.5 mm)



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE4021 elements fit nominal 4.0 inch (102 mm) I.D. pressure vessels.

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RE402I-SHN

High Rejection RO element for seawater and high salinity well water

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 Mpa)
· Max. Operating Pressure	1,200 psi (8.27 MPa)
· Max. Feed Flow Rate	13 gpm (2.95 m ³ /hr)
· Min. Concentrate Flow Rate	3 gpm (0.68 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

TORAY 4" Membranes



Ref. MTM810C

TORAY
Innovation by Chemistry

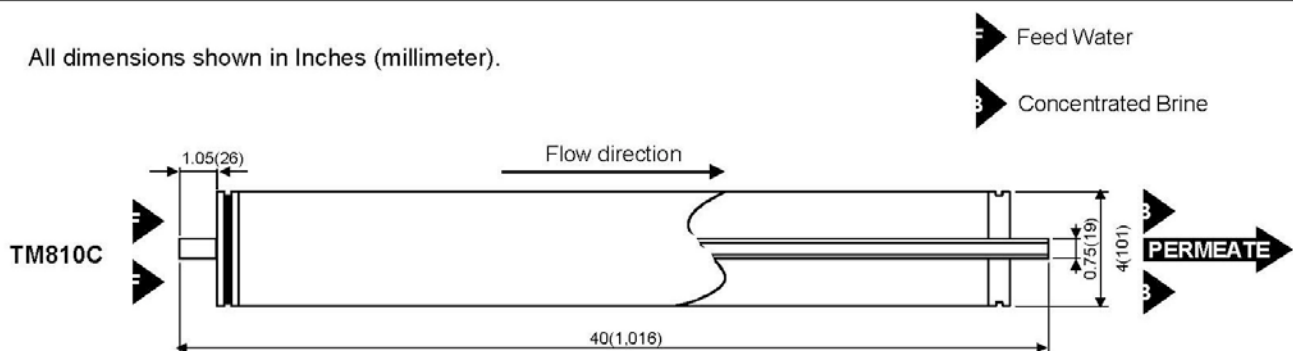
Standard SWRO TM800C

Type	Diameter Inch	Membrane Area ft ² (m ²)	Salt Rejection %	Product Flow Rate gpd(m ³ / d)	Feed Spacer Thickness mil
TM810C	4"	73(7)	99.75	1,200(4.5)	31

1. Membrane Type		Cross Linked Fully Aromatic Polyamide Composite
2. Test Conditions	Feed Water Pressure Feed Water Temperature Feed Water Concentration Recovery Rate Feed Water pH	800 psi(5.52MPa) 77° F(25°C) 32,000 mg/l NaCl 8% 7
3. Minimum Salt Rejection		99.5%
4. Minimum Product Flow Rate		1,000gpd(3.8m ³ /d)
5. Boron Rejection (typical value)		93% at pH 8 (5mg/l Boron added to Feed water)

Dimensions

All dimensions shown in Inches (millimeter).





Operating Limits

Maximum Operating Pressure	1200psi (8.3 MPa)
Maximum Feed Water Temperature	113° F (45°C)
Maximum Feed Water SDI ₁₅	5
Feed Water Chlorine Concentration	Not detectable
Feed Water pH Range, Continuous Operation	2-11
Feed Water pH Range, Chemical Cleaning	1-12
Maximum Pressure Drop per Element	15 psi (0.10 MPa)
Maximum Pressure Drop per Vessel	50 psi (0.34 MPa)

Operating Information

1. For the recommended design range, please consult the latest Toray technical bulletin, design guidelines, computer design program, and/ or call an application specialist. If the operating limits given in this Product Information Bulletin are not strictly followed, the Limited Warranty will be null and void.
 2. All elements are wet tested, treated with tested feed water solution, and then vacuum packed in oxygen barrier bags with deoxidant inside. To prevent biological growth during system shutdown, it is recommended to perform 30-60 minutes flushing of Toray elements with seawater once in every two days.
 3. The presence of free chlorine and other oxidizing agents under certain conditions, such as heavy metals which acts as oxidation catalyst in the feed water will cause unexpected oxidation of the membrane. It is strongly recommended to remove these oxidizing agents contained in feed water before operating RO system.
 4. Permeate from the first hour of operation shall be discarded.
 5. The customer is fully responsible for the effects of chemicals that are incompatible with the elements. Their use will void the element Limited Warranty.
-

Notice

1. Toray accepts no responsibility for results obtained by the application of this information or the safety or suitability of Toray's products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product combination for their own purposes.
2. All data may change without prior notice, due to technical modifications or production changes.

TORAY 4" Membranes



Ref. MTM810V

TORAY
Innovation by Chemistry

Low energy SWRO

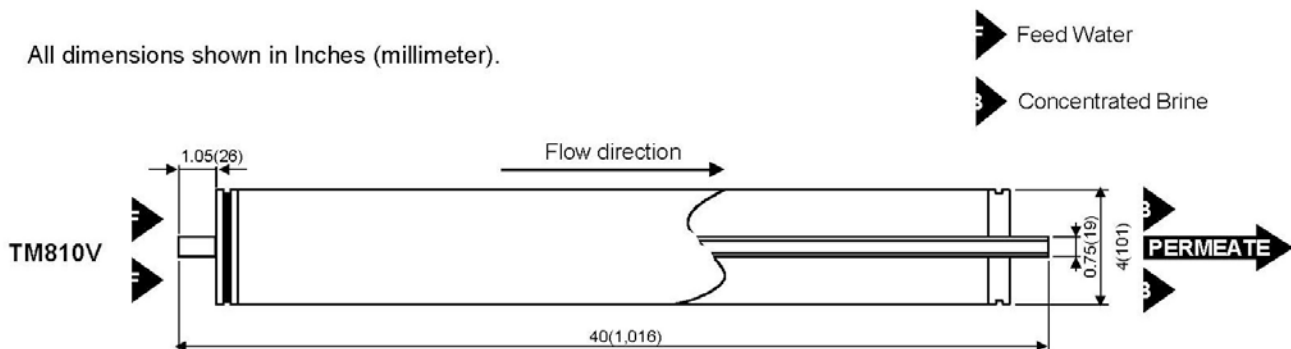
TM800V

Type	Diameter Inch	Membrane Area ft ² (m ²)	Salt Rejection %	Product Flow Rate gpd(m ³ / d)	Feed Spacer Thickness mil
TM810V	4"	87(8)	99.8	1,900(7.2)	28

1. Membrane Type		Cross Linked Fully Aromatic Polyamide Composite
2. Test Conditions	Feed Water Pressure Feed Water Temperature Feed Water Concentration Recovery Rate Feed Water pH	800 psi(5.52MPa) 77° F(25°C) 32,000 mg/l NaCl 8% 7
3. Minimum Salt Rejection		99.5%
4. Minimum Product Flow Rate		1,550gpd(5.9m ³ /d)
5. Boron Rejection (typical value)		92% at pH 8 (5mg/l Boron added to Feed water)

Dimensions

All dimensions shown in Inches (millimeter).





Operating Limits

Maximum Operating Pressure	1200psi (8.3 MPa)
Maximum Feed Water Temperature	113° F (45°C)
Maximum Feed Water SDI ₁₅	5
Feed Water Chlorine Concentration	Not detectable
Feed Water pH Range, Continuous Operation	2-11
Feed Water pH Range, Chemical Cleaning	1-12
Maximum Pressure Drop per Element	15 psi (0.10 MPa)
Maximum Pressure Drop per Vessel	50 psi (0.34 MPa)

Operating Information

1. For the recommended design range, please consult the latest Toray technical bulletin, design guidelines, computer design program, and/ or call an application specialist. If the operating limits given in this Product Information Bulletin are not strictly followed, the Limited Warranty will be null and void.
 2. All elements are wet tested, treated with tested feed water solution, and then vacuum packed in oxygen barrier bags with deoxidant inside. To prevent biological growth during system shutdown, it is recommended to perform 30-60 minutes flushing of Toray elements with seawater once in every two days.
 3. The presence of free chlorine and other oxidizing agents under certain conditions, such as heavy metals which acts as oxidation catalyst in the feed water will cause unexpected oxidation of the membrane. It is strongly recommended to remove these oxidizing agents contained in feed water before operating RO system.
 4. Permeate from the first hour of operation shall be discarded.
 5. The customer is fully responsible for the effects of chemicals that are incompatible with the elements. Their use will void the element Limited Warranty.
-

Notice

1. Toray accepts no responsibility for results obtained by the application of this information or the safety or suitability of Toray's products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product combination for their own purposes.
2. All data may change without prior notice, due to technical modifications or production changes.



Ref. MCNE4040-90

NE4040-90

Normal grade NF element with high monovalent ion rejection

SPECIFICATIONS:

General Features	Permeate flow rate :	1,700 GPD (6.4 m ³ /day)
	Monovalent ion rejection (NaCl) ¹ :	85.0 – 97.0%
	Divalent ion rejection (CaCl ₂) ² :	90.0 – 97.0%
	Effective membrane area :	85 ft ² (7.9 m ²)

- The stated product performance is based on data taken after 30 minutes of operation at the following monovalent test conditions:
 - 2,000 mg/L NaCl solution at 75 psig (0.5 MPa) applied pressure
 - 15% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- The stated product performance is based on data taken after 30 minutes of operation at the following divalent test conditions:
 - 500 mg/L CaCl₂ solution at 75 psig (0.5 MPa) applied pressure
 - 15% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- MgSO₄ rejection is 97.0%. (Test conditions are equivalent with NaCl)
- Permeate flow rate for each element may vary but will be no more than 15%.
- Elements can be supplied as dry or wet-type. Wet-tested elements are soaked in a preservative solution (1.0% food grade SBS) and vacuum sealed in a poly bag. All elements are individually boxed.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D	E	Part Number	
						Inter-connector	Brine Seal
NE4040-70	40.0 inch (1,016 mm)	4.0 inch (102 mm)	0.75 inch (19.1 mm)	1.05 inch (26.7 mm)	1.05 inch (26.7 mm)	40000305	40000306



- Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
- All NE4040 elements fit nominal 4.0 inch (102 mm) I.D. pressure vessels.

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NE4040-90

Normal grade NF element with high monovalent ion rejection

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	18 gpm (4.09 m ³ /hr)
· Min. Concentrate Flow Rate	4 gpm (0.91 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+ 1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Wet elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 4" Membranes



Ref. MCNE4040-70

NE4040-70

Normal grade NF element with high monovalent ion rejection

CSM

SPECIFICATIONS:

General Features	Permeate flow rate¹:	1,500 GPD (5.7 m ³ /day)
	Monovalent ion rejection (NaCl)¹:	40.0 – 70.0%
	Divalent ion rejection (CaCl₂)²:	45.0 – 70.0%
	Effective membrane area:	85 ft ² (7.9 m ²)

- The stated product performance is based on data taken after 30 minutes of operation at the following monovalent test conditions:
 - 2,000 mg/L NaCl solution at 75 psig (0.5 MPa) applied pressure
 - 15% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- The stated product performance is based on data taken after 30 minutes of operation at the following divalent test conditions:
 - 500 mg/L CaCl₂ solution at 75 psig (0.5 MPa) applied pressure
 - 15% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- MgSO₄ rejection is 97.0%. (Test conditions are equivalent with NaCl)
- Permeate flow rate for each element may vary but will be no more than 15%.
- Elements are supplied as dry-type. Dry elements are sealed in a poly bag and individually boxed.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D	E	Part Number	
						Inter-connector	Brine Seal
NE4040-70	40.0 inch (1,016 mm)	4.0 inch (102 mm)	0.75 inch (19.1 mm)	1.05 inch (26.7 mm)	1.05 inch (26.7 mm)	40000305	40000306



- Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
- All NE4040 elements fit nominal 4.0 inch (102 mm) I.D. pressure vessels.

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NE4040-70

Normal grade NF element with medium monovalent ion rejection

CSM[®]

APPLICATION DATA:

Operating Limits

• Max. Pressure Drop / Element	15 psi (0.1 MPa)
• Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
• Max. Operating Pressure	600 psi (4.14 MPa)
• Max. Feed Flow Rate	18 gpm (4.09 m ³ /hr)
• Min. Concentrate Flow Rate	4 gpm (0.91 m ³ /hr)
• Max. Operating Temperature	113 °F (45 °C)
• Operating pH Range	2.0 - 11.0
• CIP pH Range	1.0 - 13.0
• Max. Turbidity	1.0 NTU
• Max. SDI (15 min)	5.0
• Max. Chlorine Concentration	< 0.1 mg/L

Design Guidelines for Various Water Sources

• Wastewater Conventional (SDI < 5)	8-12 gfd
• Wastewater Pretreated by UF/MF (SDI < 3)	10-14 gfd
• Seawater, Open Intake (SDI < 5)	7-10 gfd
• Seawater, Beach Well (SDI < 3)	8-12 gfd
• Surface Water (SDI < 5)	12-16 gfd
• Surface Water (SDI < 3)	13-17 gfd
• Well water (SDI < 3)	13-17 gfd
• RO permeate (SDI < 1)	21-30 gfd

Saturation Limits (Using Antiscalants)[†]

• Langelier Saturation Index (LSI)	< +1.5
• Stiff and Davis Saturation Index (SDSI)	< +0.5
• CaSO ₄	230% saturation
• SrSO ₄	800% saturation
• BaSO ₄	6,000% saturation
• SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7-32°C; 40-95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 4" Membranes



Ref. MCNE4040-40

NE4040-40

High productivity NF element

CSM

SPECIFICATIONS:

General Features	Permeate flow rate:	2,100 GPD (7.9 m ³ /day)
	Monovalent ion rejection (NaCl):	20 – 40%
	Effective membrane area:	85 ft ² (7.9 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 2,000 mg/L NaCl solution at 75 psig (0.5 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Permeate flow rate for each element may vary but will be no more than 20%.

3. Elements are supplied as dry-type. Dry elements are sealed in a poly bag and individually boxed.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions

Model Name	A	B	C	D	E	Part Number	
						Inter-connector	Brine Seal
NE4040-40	40.0 inch (1,016 mm)	4.0 inch (102 mm)	0.75 inch (19.1 mm)	1.05 inch (26.7 mm)	1.05 inch (26.7 mm)	DD004	DD003

(*) see 05-03-99-EN data sheet.



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All NE4040 elements fit nominal 4.0 inch (102 mm) I.D. pressure vessels.

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NE4040-40

High productivity NF element

CSM[®]

APPLICATION DATA:

Operating Limits

• Max. Pressure Drop / Element	15 psi (0.1 MPa)
• Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
• Max. Operating Pressure	600 psi (4.14 MPa)
• Max. Feed Flow Rate	18 gpm (4.09 m ³ /hr)
• Min. Concentrate Flow Rate	4 gpm (0.91 m ³ /hr)
• Max. Operating Temperature	113 °F (45 °C)
• Operating pH Range	2.0–11.0
• CIP pH Range	1.0–13.0
• Max. Turbidity	1.0 NTU
• Max. SDI (15 min)	5.0
• Max. Chlorine Concentration	< 0.1 mg/L

Design Guidelines for Various Water Sources

• Wastewater Conventional (SDI < 5)	8–12 gfd
• Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
• Seawater, Open Intake (SDI < 5)	7–10 gfd
• Seawater, Beach Well (SDI < 3)	8–12 gfd
• Surface Water (SDI < 5)	12–16 gfd
• Surface Water (SDI < 3)	13–17 gfd
• Well water (SDI < 3)	13–17 gfd
• RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

• Langelier Saturation Index (LSI)	<+ 1.5
• Stiff and Davis Saturation Index (SDSI)	<+0.5
• CaSO ₄	230% saturation
• SrSO ₄	800% saturation
• BaSO ₄	6,000% saturation
• SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

TORAY CSM 8" Membranes



LOW PRESSURE LPM MEMBRANES				
REF.	MODEL	NSF/ANSI	DM174-2004	PRICE EURO
MCRE8040-BLN	RE8040-BLN	Standard 61	Compliant	1.030,07
MCRE8040-BLN440	RE8040-BLN440	-	Compliant	1.097,91
MCRE8040-BLR	RE8040-BLR	Standard 61	Compliant	1.030,07
MCRE8040-BLR440	RE8040-BLR440	-	Compliant	1.097,91
MCRE8040-BLF	RE8040-BLF	Standard 61	Compliant	1.030,07
MCRE8040-BLF440	RE8040-BLF440	-	Compliant	1.142,25
MTMH20A-400C	TMH20A-400C	-	Compliant	1.235,40
MTMH20A-440C (*)	TMH20A-440C	-	Compliant	1.284,17
MTMG20D-400	TMG20D-400	-	Compliant	1.203,50
MTMG20D-440 (*)	TMG20D-440	-	Compliant	1.250,81

BRACKISH WATER BWM MEMBRANES				
REF.	MODEL	NSF/ANSI	DM174-2004	PRICE EURO
MCRE8040-BN	RE8040-BN	Standard 61	Compliant	1.003,02
MCRE8040-BE	RE8040-BE	Standard 61	Compliant	1.017,08
MCRE8040-BE440	RE8040-BE440	Standard 61	Compliant	1.084,17
MCRE8040-BR	RE8040-BR	-	Compliant	1.058,16
MCRE8040-BR400 (**)	RE8040-BR400	-	Compliant	1.084,17
MTM720D-400	TM720D-400	-	Compliant	1.154,20
MTM720D-440 (*)	TM720D-440	-	Compliant	1.212,20
MTM720L-440 (*)	TM720L-440	-	Compliant	1.147,00

FOULING RESISTANT FRM MEMBRANES				
REF.	MODEL	NSF/ANSI	DM174-2004	PRICE EURO
MCRE8040-FEN34	RE8040-FEn34	-	Compliant	1.071,18
MCRE8040-FEN	RE8040-FEn	Standard 61	Compliant	1.071,18
MCRE8040-FEN440 (*)	RE8040-FEn440	Standard 61	Compliant	1.162,14
MCRE8040-FL (*)	RE8040-FL	-	Compliant	1.071,18
MCRE8040-FLR (**)	RE8040-FLR	-	Compliant	N.A.
MCRE8040-FLR34	RE8040-FLR34	-	Compliant	1.139,36
MTML20D-400	TML20D-400	-	Compliant	1.235,40

SEA WATER SWM MEMBRANES				
REF.	MODEL	NSF/ANSI	DM174-2004	PRICE EURO
MTM820M-400	TM820M-400	-	Compliant	1.432,60
MTM820M-440 (*)	TM820M-440	-	Compliant	1.481,90
MTM820V-400	TM820V-400	-	Compliant	1.432,60
MTM820V-440 (*)	TM820V-440	-	Compliant	1.482,91

NANOFILTRATION NFM MEMBRANES				
REF.	MODEL	NSF/ANSI	DM174-2004	PRICE EURO
MCNE8040-90	NE8040-90	Standard 61	Compliant	1.340,93
MCNE8040-70 (*)	NE8040-70	Standard 61	Compliant	1.436,91
MCNE8040-40 (*)	NE8040-40	Standard 61	Compliant	1.585,14

(*) not available in stock.

(**) available till it will be out-of-stock.

CSM 8" Membranes



Ref. MCRE8040-BLN

RE8040-BLN

Low pressure grade RO element for brackish water

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate:	12,000 GPD (45.4 m ³ /day)
	Nominal salt rejection:	99.5%
	Effective membrane area:	400 ft ² (37.2 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 1,500 mg/L NaCl solution at 150 psig (1.03 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.4%.

3. Permeate flow rate for each element may vary +25 / -15%.

4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-connector	Brine Seal
RE8040-BLN	40.0 inch (1,016 mm)	7.9 inch (200 mm)	1.12 inch (28.5 mm)	15 kg	SWA01049	SWA01043



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE8040 elements fit nominal 8.0 inch (203.2 mm) I.D. pressure vessels.

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RE8040-BLN

Low pressure grade RO element for brackish water

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	75 gpm (17.0 m ³ /hr)
· Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 8" Membranes



Ref. MCRE8040-BLN440

RE8040-BLN440

Low pressure grade RO element for brackish water

SPECIFICATIONS:

General Features	Permeate flow rate:	13,000 GPD (49.2 m ³ /day)
	Nominal salt rejection:	99.5%
	Effective membrane area:	440 ft ² (40.9 m ²)

- The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:
 - 1,500 mg/L NaCl solution at 150 psig (1.03 MPa) applied pressure
 - 15% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- Minimum salt rejection is 99.4%.
- Permeate flow rate for each element may vary +25 / -15%.
- All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-connector	Brine Seal
RE8040-BLN440	40.0 inch (1,016 mm)	7.9 inch (200 mm)	1.12 inch (28.5 mm)	15 kg	SWA01049	SWA01043



- Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
- All RE8040 elements fit nominal 8.0 inch (203.2 mm) I.D. pressure vessels.

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RE8040-BLN440

Low pressure grade RO element for brackish water

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	75 gpm (17.0 m ³ /hr)
· Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 8" Membranes



Ref. MCRE8040-BLR

RE8040-BLR

Low pressure grade RO element for brackish water

CSM®

SPECIFICATIONS:

General Features	Permeate flow rate:	10,000 GPD (37.9 m ³ /day)
	Nominal salt rejection:	99.6%
	Effective membrane area:	400 ft ² (37.2 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 1,500 mg/L NaCl solution at 150 psig (1.03 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.5%.

3. Permeate flow rate for each element may vary but will be no more than -5%.

4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-connector	Brine Seal
RE8040-BLR	40.0 inch (1,016 mm)	7.9 inch (200 mm)	1.12 inch (28.5 mm)	15 kg	SWA01049	SWA01043



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE8040 elements fit nominal 8.0 inch (203.2 mm) I.D. pressure vessels.

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RE8040-BLR

Low pressure grade RO element for brackish water

CSM®

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	75 gpm (17.0 m ³ /hr)
· Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+ 1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 8" Membranes



Ref. MCRE8040-BLR440

RE8040-BLR440

Low pressure grade RO element for brackish water

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate:	11,000 GPD (41.6 m ³ /day)
	Nominal salt rejection:	99.6%
	Effective membrane area:	440 ft ² (40.9 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 1,500 mg/L NaCl solution at 150 psig (1.03 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.5%.

3. Permeate flow rate for each element may vary but will be no more than -5%.

4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-connector	Brine Seal
RE8040-BLR440	40.0 inch (1,016 mm)	7.9 inch (200 mm)	1.12 inch (28.5 mm)	15 kg	SWA01049	SWA01043



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE8040 elements fit nominal 8.0 inch (203.2 mm) I.D. pressure vessels.

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RE8040-BLR440

Low pressure grade RO element for brackish water

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 Mpa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	75 gpm (17.0 m ³ /hr)
· Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 8" Membranes



Ref. MCRE8040-BLF

RE8040-BLF

Ultra-low pressure grade RO element for low TDS water

CSM

SPECIFICATIONS:

General Features	Permeate flow rate:	11,500 GPD (43.5 m ³ /day)
	Nominal salt rejection:	99.2%
	Effective membrane area:	400 ft ² (37.2 m ²)

The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 500 mg/L NaCl solution at 100 psig (0.69 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

1. Minimum salt rejection is 99.0%.
2. Permeate flow rate for each element may vary +25 / -15%.
3. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-connector	Brine Seal
RE8040-BLF	40.0 inch (1,016 mm)	7.9 inch (200 mm)	1.12 inch (28.5 mm)	15 kg	SWA01049	SWA01043



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE8040 elements fit nominal 8.0 inch (203.2 mm) I.D. pressure vessels.

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RE8040-BLF

Ultra-low pressure grade RO element for low TDS water

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	75 gpm (17.0 m ³ /hr)
· Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32 °C; 40–95 °F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 8" Membranes



Ref. MCRE8040-BLF440

RE8040-BLF440

Ultra-low pressure grade RO element for low TDS water

CSM

SPECIFICATIONS:

General Features	Permeate flow rate:	12,650 GPD (47.9 m ³ /day)
	Nominal salt rejection:	99.2%
	Effective membrane area:	440 ft ² (40.9 m ²)

The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 500 mg/L NaCl solution at 100 psig (0.69 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

1. Minimum salt rejection is 99.0%.
2. Permeate flow rate for each element may vary +25 / -15%.
3. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-connector	Brine Seal
RE8040-BLF440	40.0 inch (1,016 mm)	7.9 inch (200 mm)	1.12 inch (28.5 mm)	15 kg	SWA01049	SWA01043



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE8040 elements fit nominal 8.0 inch (203.2 mm) I.D. pressure vessels.

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RE8040-BLF440

Ultra-low pressure grade RO element for low TDS water

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 Mpa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	75 gpm (17.0 m ³ /hr)
· Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

TORAY 8" Membranes



Ref. MTMH20A-400C

TORAY
Innovation by Chemistry

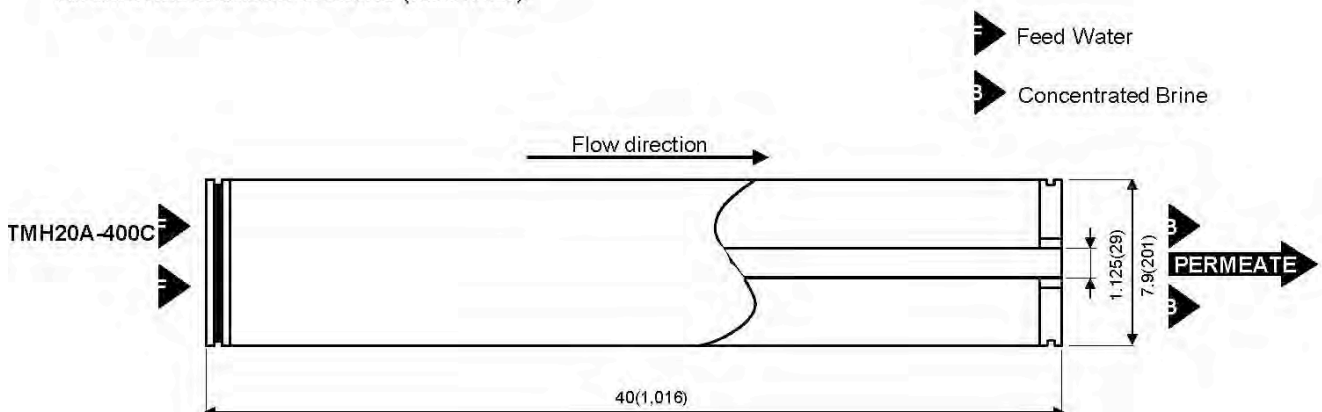
Ultra low pressure BWRO TMHA (C)

Type	Diameter Inch	Membrane Area ft ² (m ²)	Salt Rejection %	Product Flow Rate gpd(m ³ / d)	Feed Spacer Thickness mil
TMH20A-400C	8"	400(37)	99.3	11,000(41.6)	34

1. Membrane Type		Cross Linked Fully Aromatic Polyamide Composite
2. Test Conditions	Feed Water Pressure Feed Water Temperature Feed Water Concentration Recovery Rate Feed Water pH	100 psi(0.69MPa) 77° F(25°C) 500 mg/l Nacl 15% 7
3. Minimum Salt Rejection		99.0%
4. Minimum Product Flow Rate		8,800gpd(33.3m ³ /d)

Dimensions

All dimensions shown in Inches (millimeter).





Operating Limits

Maximum Operating Pressure	365psi (2.5 MPa)
Maximum Feed Water Temperature	113° F (45°C)
Maximum Feed Water SDI15	5
Feed Water Chlorine Concentration	Not Detectable
Feed Water pH Range, Continuous Operation	2-11
Feed Water pH Range, Chemical Cleaning	1-12
Maximum Pressure Drop per Element	15 psi (0.10 MPa)
Maximum Pressure Drop per Vessel	50 psi (0.34 MPa)

Operating Information

1. For the recommended design range, please consult the latest Toray technical bulletin, design guide lines, computer design program, and/ or call an application specialist. If the operating limits given in this Product Information Bulletin are not strictly followed, the Limited Warranty will be null and void.
2. All elements are wet tested, treated with a 1% by weight percent sodium bisulfite storage solution, and then vacuum packed in oxygen barrier bags, or treated with tested feed water solution, and then vacuum packed in oxygen barrier bags with deoxidant inside. To prevent biological growth during short term storage, shipment, or system shutdown, it is recommended that Toray elements be immersed in a protective solution containing 500 - 1,000 ppm of sodium bisulfite (food grade) dissolved in permeate.
3. The presence of free chlorine and other oxidizing agents under certain conditions, such as heavy metals which acts as oxidation catalyst in the feed water will cause unexpected oxidation of the membrane. It is strongly recommended to remove these oxidizing agents contained in feed water before operating RO system.
4. Permeate from the first hour of operation shall be discarded.
5. The customer is fully responsible for the effects of chemicals that are incompatible with the elements. Their use will void the element Limited Warranty.

Notice

1. Toray accepts no responsibility for results obtained by the application of this information or the safety or suitability of Toray's products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product combination for their own purposes.
2. All data may change without prior notice, due to technical modifications or production changes.

TORAY 8" Membranes



Ref. MTMH20A-440C

TORAY
Innovation by Chemistry

Ultra low pressure BWRO

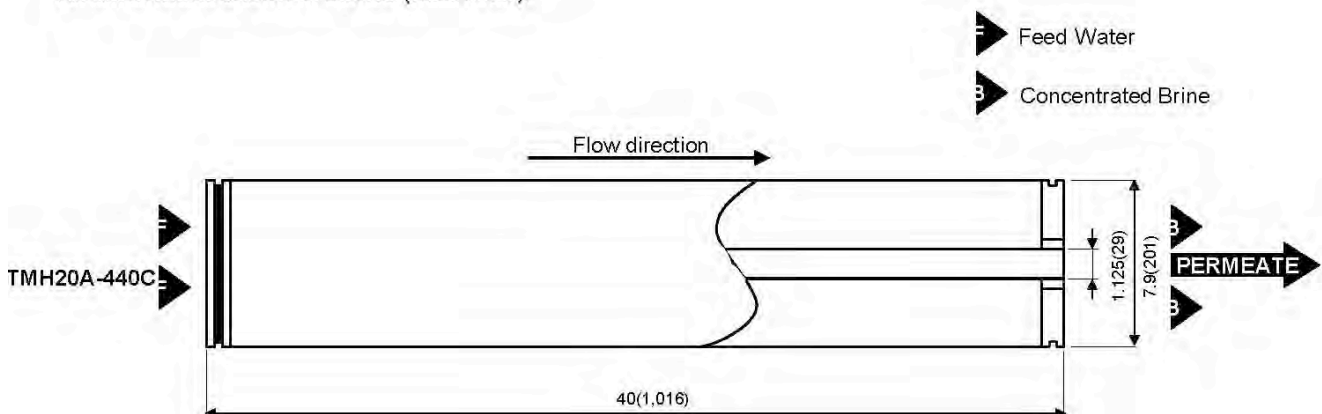
TMHA (C)

Type	Diameter Inch	Membrane Area ft ² (m ²)	Salt Rejection %	Product Flow Rate gpd(m ³ / d)	Feed Spacer Thickness mil
TMH20A-440C	8"	440(41)	99.3	12,100(45.7)	28

1. Membrane Type		Cross Linked Fully Aromatic Polyamide Composite
2. Test Conditions	Feed Water Pressure Feed Water Temperature Feed Water Concentration Recovery Rate Feed Water pH	100 psi(0.69MPa) 77° F(25°C) 500 mg/l NaCl 15% 7
3. Minimum Salt Rejection		99.0%
4. Minimum Product Flow Rate		9,700gpd(36.7m ³ /d)

Dimensions

All dimensions shown in Inches (millimeter).





Operating Limits

Maximum Operating Pressure	365psi (2.5 MPa)
Maximum Feed Water Temperature	113° F (45°C)
Maximum Feed Water SDI15	5
Feed Water Chlorine Concentration	Not Detectable
Feed Water pH Range, Continuous Operation	2-11
Feed Water pH Range, Chemical Cleaning	1-12
Maximum Pressure Drop per Element	15 psi (0.10 MPa)
Maximum Pressure Drop per Vessel	50 psi (0.34 MPa)

Operating Information

1. For the recommended design range, please consult the latest Toray technical bulletin, design guide lines, computer design program, and/ or call an application specialist. If the operating limits given in this Product Information Bulletin are not strictly followed, the Limited Warranty will be null and void.
 2. All elements are wet tested, treated with a 1% by weight percent sodium bisulfite storage solution, and then vacuum packed in oxygen barrier bags, or treated with tested feed water solution, and then vacuum packed in oxygen barrier bags with deoxidant inside. To prevent biological growth during short term storage, shipment, or system shutdown, it is recommended that Toray elements be immersed in a protective solution containing 500 - 1,000 ppm of sodium bisulfite (food grade) dissolved in permeate.
 3. The presence of free chlorine and other oxidizing agents under certain conditions, such as heavy metals which acts as oxidation catalyst in the feed water will cause unexpected oxidation of the membrane. It is strongly recommended to remove these oxidizing agents contained in feed water before operating RO system.
 4. Permeate from the first hour of operation shall be discarded.
 5. The customer is fully responsible for the effects of chemicals that are incompatible with the elements. Their use will void the element Limited Warranty.
-

Notice

1. Toray accepts no responsibility for results obtained by the application of this information or the safety or suitability of Toray's products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product combination for their own purposes.
2. All data may change without prior notice, due to technical modifications or production changes.

TORAY 8" Membranes



Ref. MTMG20D-400

TORAY
Innovation by Chemistry

Ultra low pressure BWRO, enhanced chemical tolerance

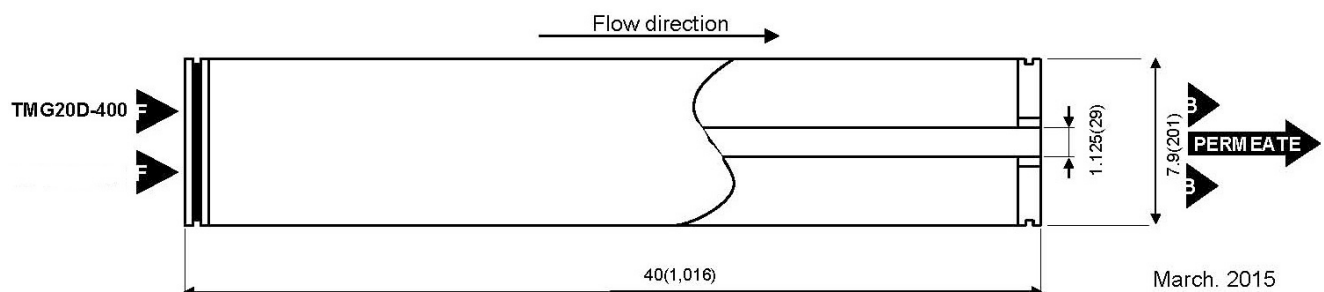
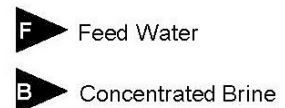
T M G (D)

Type	Diameter Inch	Membrane Area ft ² (m ²)	Salt Rejection %	Product Flow Rate gpd(m ³ / d)	Feed Spacer Thickness mil
TMG20D-400	8"	400(37)	99.7	12,100(45.8)	34

1. Membrane Type	Cross Linked Fully Aromatic Polyamide Composite
2. Test Conditions	Feed Water Pressure 150 psi(1.03MPa) Feed Water Temperature 77° F(25°C) Feed Water Concentration 2000 mg/l Nacl Recovery Rate 15% Feed Water pH 7
3. Minimum Salt Rejection	99.5%
4. Minimum Product Flow Rate	10,300gpd(39.0m ³ /d)

Dimensions

All dimensions shown in Inches (millimeter).





Operating Limits

Maximum Operating Pressure	_____	365psi (2.5 MPa)
Maximum Feed Water Temperature	_____	113° F (45°C)
Maximum Feed Water SDI15	_____	5
Feed Water Chlorine Concentration	_____ <small>*See below 3 of Operating Information</small>	< 0.1ppm
Feed Water pH Range, Continuous Operation	_____	2-11
Feed Water pH Range, Chemical Cleaning	_____	1-13
Maximum Pressure Drop per Element	_____	15psi (0.10 MPa)
Maximum Pressure Drop per Vessel	_____	50psi (0.34 MPa)

Operating Information

1. For the recommended design range, please consult the latest Toray technical bulletin, design guide lines, computer design program, and/ or call an application specialist. If the operating limits given in this Product Information Bulletin are not strictly followed, the Limited Warranty will be null and void.
 2. All elements are wet tested, treated with a 1% by weight percent sodium bisulfite storage solution, and then vacuum packed in oxygen barrier bags, or treated with tested feed water solution, and then vacuum packed in oxygen barrier bags with deoxidant inside. To prevent biological growth during short term storage, shipment, or system shutdown, it is recommended that Toray elements be immersed in a protective solution containing 500 - 1,000 ppm of sodium bisulfite (food grade) dissolved in permeate.
 3. The presence of free chlorine and other oxidizing agents under certain conditions, such as heavy metals which acts as oxidation catalyst in the feed water will cause unexpected oxidation of the membrane. Since oxidation damage is not covered under warranty, it is strongly recommended to remove these oxidizing agents contained in feed water before operating RO system.
 4. Permeate from the first hour of operation shall be discarded.
 5. The customer is fully responsible for the effects of chemicals that are incompatible with the elements. Their use will void the element Limited Warranty.
-

Notice

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TORAY 8" Membranes



Ref. MTMG20D-440

TORAY
Innovation by Chemistry

Ultra low pressure BWRO, enhanced chemical tolerance

TMG (D)

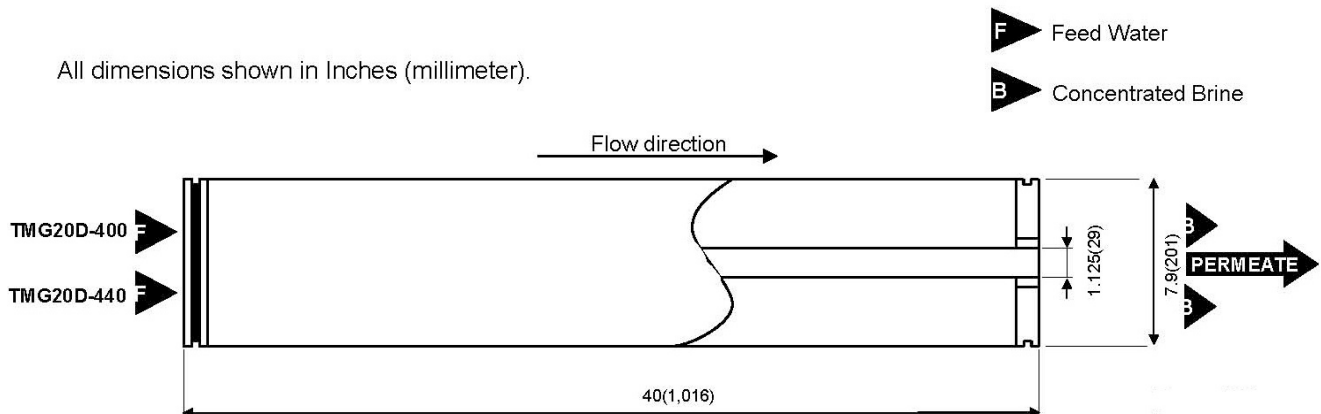
Type	Diameter Inch	Membrane Area ft ² (m ²)	Salt Rejection %	Product Flow Rate gpd(m ³ / d)	Feed Spacer Thickness mil
TMG20D-440	8"	440(41)	99.7	13,300(50.3)	28

* Above two types of TMG20D are with 29mm centerpipe as described in below "Dimensions".
Please note that while *TMG20* series with 29 mm centerpipe are distinguished by "C style",
TMG20D series are only with 29 mm centerpipe and not distinguished by "C style".

1. Membrane Type		Cross Linked Fully Aromatic Polyamide Composite
2. Test Conditions	Feed Water Pressure Feed Water Temperature Feed Water Concentration Recovery Rate Feed Water pH	150 psi(1.03MPa) 77° F(25°C) 2000 mg/l NaCl 15% 7
3. Minimum Salt Rejection		99.5%
4. Minimum Product Flow Rate		11,200gpd(42.4m ³ /d)

Dimensions

All dimensions shown in Inches (millimeter).





Operating Limits

Maximum Operating Pressure	_____	600 psi (4.1 MPa)
Maximum Feed Water Temperature	_____	113° F (45°C)
Maximum Feed Water SDI ₁₅	_____	5
Feed Water Chlorine Concentration	_____ ^{*See below 3 of Operating Information}	< 0.1 ppm
Feed Water pH Range, Continuous Operation	_____	2-11
Feed Water pH Range, Chemical Cleaning	_____	1-13
Maximum Pressure Drop per Element	_____	15psi (0.10 MPa)
Maximum Pressure Drop per Vessel	_____	50psi (0.34 MPa)

Operating Information

1. For the recommended design range, please consult the latest Toray technical bulletin, design guide lines, computer design program, and/ or call an application specialist. If the operating limits given in this Product Information Bulletin are not strictly followed, the Limited Warranty will be null and void.
2. All elements are wet tested, treated with a 1% by weight percent sodium bisulfite storage solution, and then vacuum packed in oxygen barrier bags, or treated with tested feed water solution, and then vacuum packed in oxygen barrier bags with deoxidant inside. To prevent biological growth during short term storage, shipment, or system shutdown, it is recommended that Toray elements be immersed in a protective solution containing 500 - 1,000 ppm of sodium bisulfite (food grade) dissolved in permeate.
3. The presence of free chlorine and other oxidizing agents under certain conditions, such as heavy metals which acts as oxidation catalyst in the feed water will cause unexpected oxidation of the membrane. Since oxidation damage is not covered under warranty, it is strongly recommended to remove these oxidizing agents contained in feed water before operating RO system. Please refer to Toray RO Element Three-Year Prorated Limited Warranty.
4. Permeate from the first hour of operation shall be discarded.
5. The customer is fully responsible for the effects of chemicals that are incompatible with the elements. Their use will void the element Limited Warranty.
6. Recommended Process/ Operation pressure is < 2.0 MPa
 - a) Ultra low pressure elements will perform best with low salinity brackish water
 - b) Above pressure range should be maintained also at low temperature

For more details, and in special cases, please consult the projection design guideline or contact your membrane supplier.

Notice

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2. All data may change without prior notice, due to technical modifications or production changes.



Ref. MCRE8040-BN

RE8040-BN

Low pressure grade RO element with thick feed spacer for brackish water

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate:	9,500 GPD (36.0 m ³ /day)
	Nominal salt rejection:	99.7%
	Effective membrane area:	365 ft ² (33.9 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 2,000 mg/L NaCl solution at 225 psig (1.5 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.4%.

3. Permeate flow rate for each element may vary but will be no more than 10%.

4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions **A** = 40.0 inch (1,016 mm) **B** = 8.0 inch (201 mm) **C** = 1.12 inch (28 mm)



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE8040 elements fit nominal 8.0 inch (201 mm) I.D. pressure vessels.

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RE8040-BN

Low pressure grade RO element with thick feed spacer for brackish water

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	75 gpm (17.0 m ³ /hr)
· Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langlier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 8" Membranes



Ref. MCRE8040-BE

RE8040-BE

High productivity RO element with extended area for brackish water

CSM

SPECIFICATIONS:

General Features	Permeate flow rate:	11,000 GPD (41.6 m ³ /day)
	Nominal salt rejection:	99.7%
	Effective membrane area:	400 ft ² (37.2 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 2,000 mg/L NaCl solution at 225 psig (1.55 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.5%.

3. Permeate flow rate for each element may vary +25 / -15%.

4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-connector	Brine Seal
RE8040-BE	40.0 inch (1,016 mm)	7.9 inch (200 mm)	1.12 inch (28.5 mm)	15 kg	SWA01049	SWA01043



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE8040 elements fit nominal 8.0 inch (203.2 mm) I.D. pressure vessels.

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RE8040-BE

High productivity RO element with extended area for brackish water

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	75 gpm (17.0 m ³ /hr)
· Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 8" Membranes



Ref. MCRE8040-BE440

RE8040-BE440

High productivity RO element with extended area for brackish water

CSM

SPECIFICATIONS:

General Features	Permeate flow rate:	12,000 GPD (45.4 m ³ /day)
	Nominal salt rejection:	99.7%
	Effective membrane area:	440 ft ² (40.9 m ²)

The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 2,000 mg/L NaCl solution at 225 psig (1.55 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

1. Minimum salt rejection is 99.5%.
2. Permeate flow rate for each element may vary +25 / -15%.
3. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-connector	Brine Seal
RE8040-BE440	40.0 inch (1,016 mm)	7.9 inch (200 mm)	1.12 inch (28.5 mm)	15 kg	SWA01049	SWA01043



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE8040 elements fit nominal 8.0 inch (203.2 mm) I.D. pressure vessels.

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RE8040-BE440

High productivity RO element with extended area for brackish water

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	75 gpm (17.0 m ³ /hr)
· Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.



Ref. MCRE8040-BR

RE8040-BR

High Rejection RO element with thick feed spacer for brackish water



SPECIFICATIONS:

General Features	Permeate flow rate:	6,000 GPD (22.7 m ³ /day)
	Nominal salt rejection:	99.75%
	Effective membrane area:	380 ft ² (35.3 m ²)

The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 2,000 mg/L NaCl solution at 225 psig (1.55 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

1. Minimum salt rejection is 99.5%.
2. Permeate flow rate for each element may vary +25 / -15%.
3. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-connector	Brine Seal
RE8040-BR	40.0 inch (1,016 mm)	7.9inch (200 mm)	1.12 inch (28.5 mm)	15 kg	SWA01049	SWA01043



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE8040 elements fit nominal 8.0 inch (203.2 mm) I.D. pressure vessels.

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RE8040-BR

High Rejection RO element with thick feed spacer for brackish water

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	75 gpm (17.0 m ³ /hr)
· Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.05 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+ 1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.



Ref. MCRE8040-BR400

RE8040-BR400

Normal grade RO element with thick feed spacer for brackish water

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate:	6,600 GPD (24.9 m ³ /day)
	Nominal salt rejection:	99.75%
	Effective membrane area:	400 ft ² (37.2 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 2,000 mg/L NaCl solution at 225 psig (1.5 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.4%.

3. Permeate flow rate for each element may vary but will be no more than 10%.

4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions **A** = 40.0 inch (1,016 mm) **B** = 8.0 inch (201 mm) **C** = 1.12 inch (28 mm)



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE8040 elements fit nominal 8.0 inch (201 mm) I.D. pressure vessels.

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RE8040-BR400

CSM[®]

Normal grade RO element with thick feed spacer for brackish water

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 Mpa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	75 gpm (17.0 m ³ /hr)
· Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

TORAY 8" Membranes



Ref. MTM720D-400

TORAY
Innovation by Chemistry

High rejection BWRO, enhanced chemical tolerance

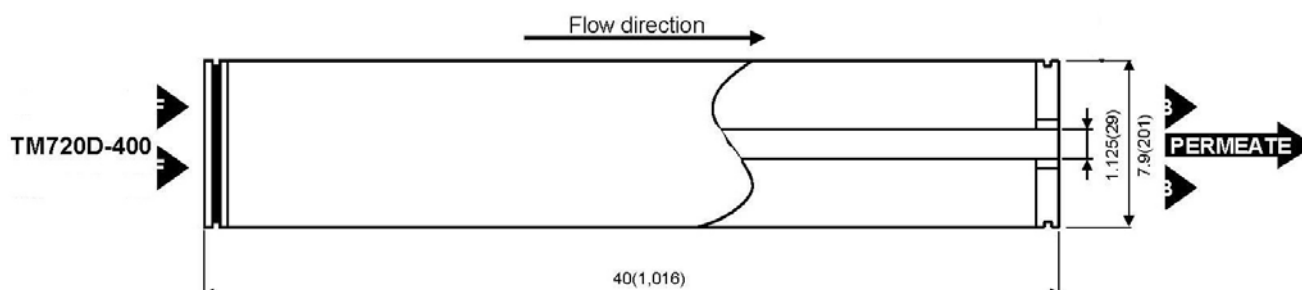
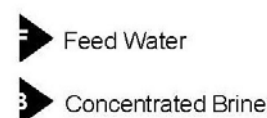
TM700D

Type	Diameter Inch	Membrane Area ft ² (m ²)	Salt Rejection %	Product Flow Rate gpd(m ³ / d)	Feed Spacer Thickness mil
TM720D-400	8"	400(37)	99.8	11,000(41.6)	34

1. Membrane Type		Cross Linked Fully Aromatic Polyamide Composite
2. Test Conditions	Feed Water Pressure Feed Water Temperature Feed Water Concentration Recovery Rate Feed Water pH	225 psi(1.55MPa) 77° F(25°C) 2,000 mg/l NaCl 15% 7
3. Minimum Salt Rejection		99.65%
4. Minimum Product Flow Rate		8,900gpd(33.6m ³ /d)

Dimensions

All dimensions shown in Inches (millimeter).





Operating Limits

Maximum Operating Pressure	600psi (4.1 MPa)
Maximum Feed Water Temperature	113° F (45°C)
Maximum Feed Water SDI ₁₅	5
Feed Water Chlorine Concentration <small>*See below 3 of Operating Information</small>	<0.1 ppm
Feed Water pH Range, Continuous Operation	2-11
Feed Water pH Range, Chemical Cleaning	1-13
Maximum Pressure Drop per Element	15 psi (0.10 MPa)
Maximum Pressure Drop per Vessel	50 psi (0.34 MPa)

Operating Information

1. For the recommended design range, please consult the latest Toray technical bulletin, design guide lines, computer design program, and/ or call an application specialist. If the operating limits given in this Product Information Bulletin are not strictly followed, the Limited Warranty will be null and void.
 2. All elements are wet tested, treated with a 1% by weight percent sodium bisulfite storage solution, and then vacuum packed in oxygen barrier bags, or treated with tested feed water solution, and then vacuum packed in oxygen barrier bags with deoxidant inside. To prevent biological growth during short term storage, shipment, or system shutdown, it is recommended that Toray elements be immersed in a protective solution containing 500 - 1,000 ppm of sodium bisulfite (food grade) dissolved in permeate.
 3. The presence of free chlorine and other oxidizing agents under certain conditions, such as heavy metals which acts as oxidation catalyst in the feed water will cause unexpected oxidation of the membrane. It is strongly recommended to remove these oxidizing agents contained in feed water before operating RO system.
 4. Permeate from the first hour of operation shall be discarded.
 5. The customer is fully responsible for the effects of chemicals that are incompatible with the elements. Their use will void the element Limited Warranty.
-

Notice

1. Toray accepts no responsibility for results obtained by the application of this information or the safety or suitability of Toray's products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product combination for their own purposes.
2. All data may change without prior notice, due to technical modifications or production changes.

TORAY 8" Membranes



Ref. MTM720D-440

TORAY
Innovation by Chemistry

High rejection BWRO, enhanced chemical tolerance

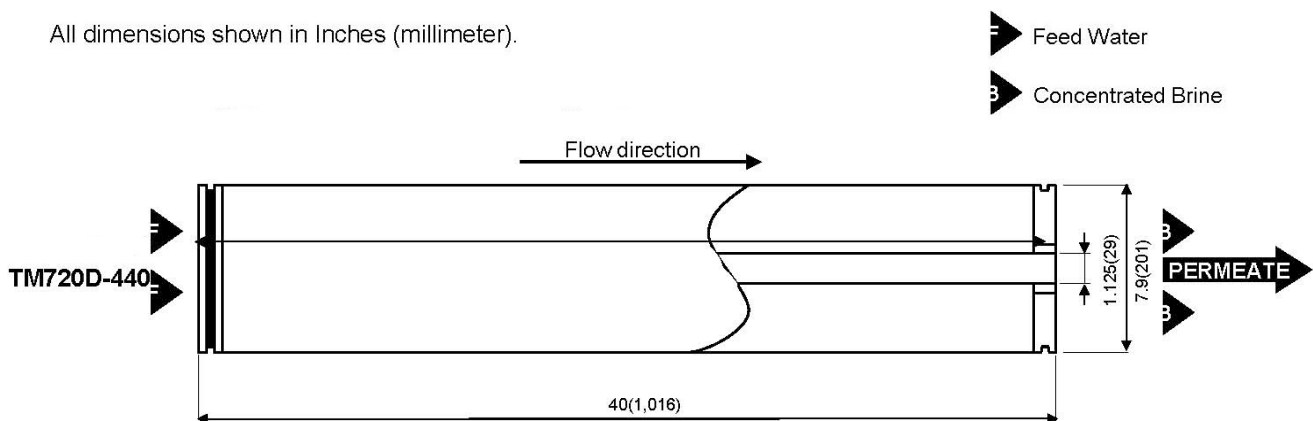
TM700D

Type	Diameter Inch	Membrane Area ft ² (m ²)	Salt Rejection %	Product Flow Rate gpd(m ³ / d)	Feed Spacer Thickness mil
TM720D-440	8"	440(41)	99.8	12,100(45.8)	28

1. Membrane Type		Cross Linked Fully Aromatic Polyamide Composite
2. Test Conditions	Feed Water Pressure Feed Water Temperature Feed Water Concentration Recovery Rate Feed Water pH	225 psi(1.55MPa) 77° F(25°C) 2,000 mg/l NaCl 15% 7
3. Minimum Salt Rejection		99.65%
4. Minimum Product Flow Rate		9,800gpd(37.0m ³ /d)

Dimensions

All dimensions shown in Inches (millimeter).





Operating Limits

Maximum Operating Pressure	600psi (4.1 MPa)
Maximum Feed Water Temperature	113° F (45°C)
Maximum Feed Water SDI ₁₅	5
Feed Water Chlorine Concentration	< 0.1 ppm
Feed Water pH Range, Continuous Operation	2-11
Feed Water pH Range, Chemical Cleaning	1-13
Maximum Pressure Drop per Element	15 psi (0.10 MPa)
Maximum Pressure Drop per Vessel	50 psi (0.34 MPa)

Operating Information

1. For the recommended design range, please consult the latest Toray technical bulletin, design guide lines, computer design program, and/ or call an application specialist. If the operating limits given in this Product Information Bulletin are not strictly followed, the Limited Warranty will be null and void.
2. All elements are wet tested, treated with a 1% by weight percent sodium bisulfite storage solution, and then vacuum packed in oxygen barrier bags, or treated with tested feed water solution, and then vacuum packed in oxygen barrier bags with deoxidant inside. To prevent biological growth during short term storage, shipment, or system shutdown, it is recommended that Toray elements be immersed in a protective solution containing 500 - 1,000 ppm of sodium bisulfite (food grade) dissolved in permeate.
3. The presence of free chlorine and other oxidizing agents under certain conditions, such as heavy metals which acts as oxidation catalyst in the feed water will cause unexpected oxidation of the membrane. It is strongly recommended to remove these oxidizing agents contained in feed water before operating RO system.
4. Permeate from the first hour of operation shall be discarded.
5. The customer is fully responsible for the effects of chemicals that are incompatible with the elements. Their use will void the element Limited Warranty.

Notice

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2. All data may change without prior notice, due to technical modifications or production changes.

TORAY 8" Membranes



Ref. MTM720L-440

TORAY
Innovation by Chemistry

Brackish Water RO Elements

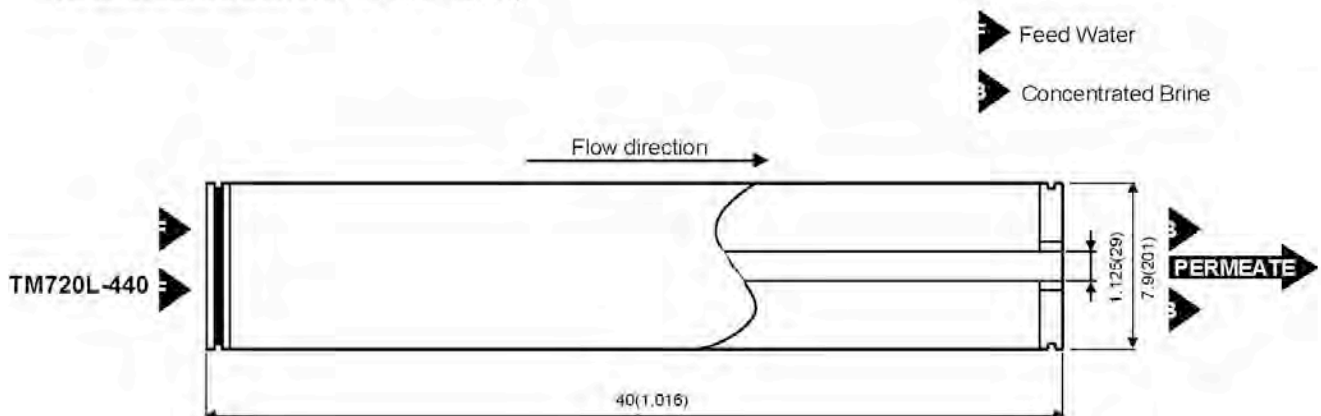
TM700L

Type	Diameter Inch	Membrane Area ft ² (m ²)	Salt Rejection %	Product Flow Rate gpd(m ³ / d)	Feed Spacer Thickness mil
TM720L-440	8"	440(41)	99.5	9,400(35.6)	28

1. Membrane Type		Cross Linked Fully Aromatic Polyamide Composite
2. Test Conditions	Feed Water Pressure Feed Water Temperature Feed Water Concentration Recovery Rate Feed Water pH	150 psi(1.03MPa) 77° F(25°C) 2,000 mg/l NaCl 15% 7
3. Minimum Salt Rejection		99.0%
4. Minimum Product Flow Rate		7,500gpd(28.4m ³ /d)

Dimensions

All dimensions shown in Inches (millimeter).





Operating Limits

Maximum Operating Pressure	600psi (4.1 MPa)
Maximum Feed Water Temperature	113° F (45°C)
Maximum Feed Water SDI15	5
Feed Water Chlorine Concentration	Not Detectable
Feed Water pH Range, Continuous Operation	2-11
Feed Water pH Range, Chemical Cleaning	1-12
Maximum Pressure Drop per Element	15 psi (0.10 MPa)
Maximum Pressure Drop per Vessel	50 psi (0.34 MPa)

Operating Information

1. For the recommended design range, please consult the latest Toray technical bulletin, design guide lines, computer design program, and/ or call an application specialist. If the operating limits given in this Product Information Bulletin are not strictly followed, the Limited Warranty will be null and void.
2. All elements are wet tested, treated with a 1% by weight percent sodium bisulfite storage solution, and then vacuum packed in oxygen barrier bags, or treated with tested feed water solution, and then vacuum packed in oxygen barrier bags with deoxidant inside. To prevent biological growth during short term storage, shipment, or system shutdown, it is recommended that Toray elements be immersed in a protective solution containing 500 - 1,000 ppm of sodium bisulfite (food grade) dissolved in permeate.
3. The presence of free chlorine and other oxidizing agents under certain conditions, such as heavy metals which acts as oxidation catalyst in the feed water will cause unexpected oxidation of the membrane. It is strongly recommended to remove these oxidizing agents contained in feed water before operating RO system.
4. Permeate from the first hour of operation shall be discarded.
5. The customer is fully responsible for the effects of chemicals that are incompatible with the elements. Their use will void the element Limited Warranty.

Notice

1. Toray accepts no responsibility for results obtained by the application of this information or the safety or suitability of Toray's products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product combination for their own purposes.
2. All data may change without prior notice, due to technical modifications or production changes.

CSM 8" Membranes



Ref. MCRE8040-FEN34

RE8040-FEⁿ34

Enhanced fouling resistant RO element for brackish water and wastewater reuse

CSM

SPECIFICATIONS:

General Features	Permeate flow rate:	10,500 GPD (39.7 m ³ /day)
	Nominal salt rejection:	99.7%
	Effective membrane area:	400 ft ² (37.2 m ²)
	Feed spacer thickness:	34mil

- The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:
 - 2,000 mg/L NaCl solution at 225 psig (1.5 MPa) applied pressure
 - 15% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- Minimum salt rejection is 99.4%.
- Permeate flow rate for each element may vary but will be no more than 15%.
- All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-connector	Brine Seal
RE8040-FEn34	40.0 inch (1,016 mm)	8.0inch (201 mm)	1.12 inch (28 mm)	15 kg	40000308	40000309



- Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
- All RE8040 elements fit nominal 8.0 inch (201 mm) I.D. pressure vessels.

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RE8040-FEⁿ34

Enhanced fouling resistant RO element for brackish water and wastewater reuse

CSM

APPLICATION DATA:

Operating Limits

• Max. Pressure Drop / Element	15 psi (0.1 MPa)
• Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
• Max. Operating Pressure	600 psi (4.14 MPa)
• Max. Feed Flow Rate	75 gpm (17.0 m ³ /hr)
• Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /hr)
• Max. Operating Temperature	113 °F (45 °C)
• Operating pH Range	2.0–11.0
• CIP pH Range	1.0–13.0
• Max. Turbidity	1.0 NTU
• Max. SDI (15 min)	5.0
• Max. Chlorine Concentration	< 0.1 mg/L

Design Guidelines for Various Water Sources

• Wastewater Conventional (SDI < 5)	8–12 gfd
• Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
• Seawater, Open Intake (SDI < 5)	7–10 gfd
• Seawater, Beach Well (SDI < 3)	8–12 gfd
• Surface Water (SDI < 5)	12–16 gfd
• Surface Water (SDI < 3)	13–17 gfd
• Well water (SDI < 3)	13–17 gfd
• RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

• Langelier Saturation Index (LSI)	<+1.5
• Stiff and Davis Saturation Index (SDSI)	<+0.5
• CaSO ₄	230% saturation
• SrSO ₄	800% saturation
• BaSO ₄	6,000% saturation
• SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.
- Keep elements moist at all times after initial wetting.



Ref. MCRE8040-FEN

RE8040-FEⁿ

Enhanced fouling resistant RO element for brackish water and wastewater reuse

CSM

SPECIFICATIONS:

General Features	Permeate flow rate:	10,500 GPD (39.7 m ³ /day)
	Nominal salt rejection:	99.7%
	Effective membrane area:	400 ft ² (37.2 m ²)
	Feed spacer thickness:	32 mil

- The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:
 - 2,000 mg/L NaCl solution at 225 psig (1.5 MPa) applied pressure
 - 15% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- Minimum salt rejection is 99.4%.
- Permeate flow rate for each element may vary but will be no more than 15%.
- All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions and Weight	Model Name	A	B	C	Weight	Part Number	
						Inter-connector	Brine Seal
	RE8040-FEn	40.0 inch (1,016 mm)	8.0inch (201 mm)	1.12 inch (28 mm)	15 kg	40000308	40000309



- Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
- All RE8040 elements fit nominal 8.0 inch (201 mm) I.D. pressure vessels.

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RE8040-FEⁿ

CSM[®]

Enhanced fouling resistant RO element for brackish water and wastewater reuse

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	75 gpm (17.0 m ³ /hr)
· Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.



Ref. MCRE8040-FEN440

RE8040-FEⁿ440

Enhanced fouling resistant RO element for brackish water and wastewater reuse

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate:	11,500 GPD (43.5 m ³ /day)
	Nominal salt rejection:	99.7%
	Effective membrane area:	440 ft ² (40.9 m ²)
	Feed spacer thickness:	28mil

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 2,000 mg/L NaCl solution at 225 psig (1.5 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.4%.

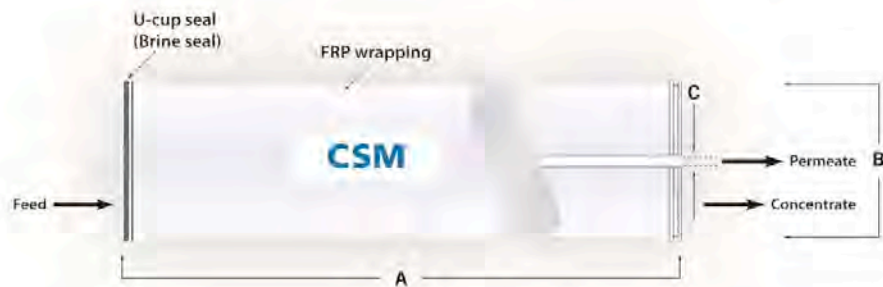
3. Permeate flow rate for each element may vary but will be no more than 15%.

4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-connector	Brine Seal
RE8040-FEn440	40.0 inch (1,016 mm)	8.0inch (201 mm)	1.12 inch (28 mm)	15 kg	40000308	40000309



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE8040 elements fit nominal 8.0 inch (201 mm) I.D. pressure vessels.

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RE8040-FEⁿ440

Enhanced fouling resistant RO element for brackish water and wastewater reuse

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	75 gpm (17.0 m ³ /hr)
· Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.



Ref. MCRE8040-FL

RE8040-FL

Fouling resistant RO element with low pressure for brackish water and wastewater reuse

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate:	11,000 GPD (41.6 m ³ /day)
	Nominal salt rejection:	99.0%
	Effective membrane area:	400 ft ² (37.2 m ²)

- The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:
 - 1,500 mg/L NaCl solution at 150 psig (1.0 MPa) applied pressure
 - 15% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- Minimum salt rejection is 98.5%.
- Permeate flow rate for each element may vary but will be no more than 10%.
- All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions **A** = 40.0 inch (1,016 mm) **B** = 8.0 inch (201 mm) **C** = 1.12 inch (28 mm)



- Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
- All RE8040 elements fit nominal 8.0 inch (201 mm) I.D. pressure vessels.

The information provided in this document is solely for informative purposes. It is the user's responsibility to ensure the appropriate usage of this product. Woongin Chemical assumes no obligation, liability or damages incurred for the misuse of the product or for the information provided in this document. This document does not express or imply any warranty as to the merchantability or fitness of the product.



RE8040-FL

CSM[®]

Fouling resistant RO element with low pressure for brackish water and wastewater reuse

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	75 gpm (17.0 m ³ /hr)
· Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater; Open Intake (SDI < 5)	7–10 gfd
· Seawater; Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.



Ref. MCRE8040-FLR

RE8040-FLR

Fouling resistant RO element with low pressure for brackish water and wastewater reuse

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate:	9,000 GPD (34.0 m ³ /day)
	Nominal salt rejection:	99.6%
	Effective membrane area:	400 ft ² (37.2 m ²)

- The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:
 - 1,500 mg/L NaCl solution at 150 psig (1.0 MPa) applied pressure
 - 15% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- Minimum salt rejection is 99.5%.
- Permeate flow rate for each element may vary but will be no more than 10%.
- All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions **A = 40.0 inch (1,016 mm)** **B = 8.0 inch (201 mm)** **C = 1.12 inch (28 mm)**



- Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
- All RE8040 elements fit nominal 8.0 inch (201 mm) I.D. pressure vessels.

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RE8040-FLR

Fouling resistant RO element with low pressure for brackish water and wastewater reuse

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 Mpa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	75 gpm (17.0 m ³ /hr)
· Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.



Ref. MCRE8040-FLR34

RE8040-FLR34

CSM

Fouling resistant RO element with low pressure for brackish water and wastewater reuse

SPECIFICATIONS:

General Features	Permeate flow rate:	10,000 GPD (37.8 m ³ /day)
	Nominal salt rejection:	99.6%
	Effective membrane area:	400 ft ² (37.2 m ²)
	Feed spacer thickness:	34mil

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 1,500 mg/L NaCl solution at 150 psig (1.0 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 99.4%.

3. Permeate flow rate for each element may vary but will be no more than 15%.

4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individually packaged in a cardboard box.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-connector	Brine Seal
RE8040-FLR34	40.0 inch (1,016 mm)	8.0inch (201 mm)	1.12 inch (28 mm)	15 kg	40000308	40000309



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All RE8040 elements fit nominal 8.0 inch (201 mm) I.D. pressure vessels.

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RE8040-FLR34

CSM[®]

Fouling resistant RO element with low pressure for brackish water and wastewater reuse

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	75 gpm (17.0 m ³ /hr)
· Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

TORAY 8" Membranes



Ref. MTML20D-400



Low fouling and high tolerance RO

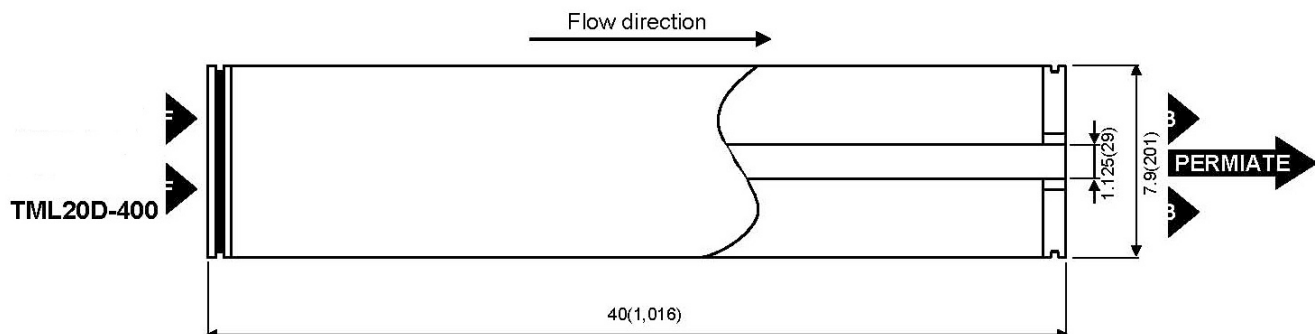
T M L (D)

Type	Diameter Inch	Membrane Area ft ² (m ²)	Salt Rejection %	Product Flow Rate gpd(m ³ /d)	Feed Spacer Thickness mil
TML20D-400	8"	400(37)	99.8	10,500(39.7)	34

1. Membrane Type		Cross Linked Fully Aromatic Polyamide Composite
2. Test Conditions	Feed Water Pressure Feed Water Temperature Feed Water Concentration Recovery Rate Feed Water pH	225 psi(1.55 MPa) 77 ° F(25 °C) 2,000 mg/l NaCl 15 % 7
3. Minimum Salt Rejection		99.65 %
4. Minimum Product Flow Rate		8,400 gpd(31.8 m ³ /d)

Dimensions

All dimensions shown in Inches (millimeter).





Operating Limits

Maximum Operating Pressure	600psi (4.1 MPa)
Maximum Feed Water Temperature	113° F (45°C)
Maximum Feed Water SDI ₁₅	5
Feed Water Chlorine Concentration	<0.1ppm
Feed Water pH Range, Continuous Operation	2-11
Feed Water pH Range, Chemical Cleaning	1-13
Maximum Pressure Drop per Element	15 psi (0.10 MPa)
Maximum Pressure Drop per Vessel	50 psi (0.34 MPa)

Operating Information

1. For the recommended design range, please consult the latest Toray technical bulletin, design guide lines, computer design program, and/ or call an application specialist. If the operating limits given in this Product Information Bulletin are not strictly followed, the Limited Warranty will be null and void.
2. All elements are wet tested, treated with a 1% by weight percent sodium bisulfite storage solution, and then vacuum packed in oxygen barrier bags, or treated with tested feed water solution, and then vacuum packed in oxygen barrier bags with deoxidant inside. To prevent biological growth during short term storage, shipment, or system shutdown, it is recommended that Toray elements be immersed in a protective solution containing 500 - 1,000 ppm of sodium bisulfite (food grade) dissolved in permeate.
3. The presence of free chlorine and other oxidizing agents under certain conditions, such as heavy metals which acts as oxidation catalyst in the feed water will cause unexpected oxidation of the membrane. It is strongly recommended to remove these oxidizing agents contained in feed water before operating RO system.
4. Permeate from the first hour of operation shall be discarded.
5. The customer is fully responsible for the effects of chemicals that are incompatible with the elements. Their use will void the element Limited Warranty.

Notice

1. Toray accepts no responsibility for results obtained by the application of this information or the safety or suitability of Toray's products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product combination for their own purposes.
2. All data may change without prior notice, due to technical modifications or production changes.

TORAY 8" Membranes



Ref. MTM820M-400

TORAY
Innovation by Chemistry

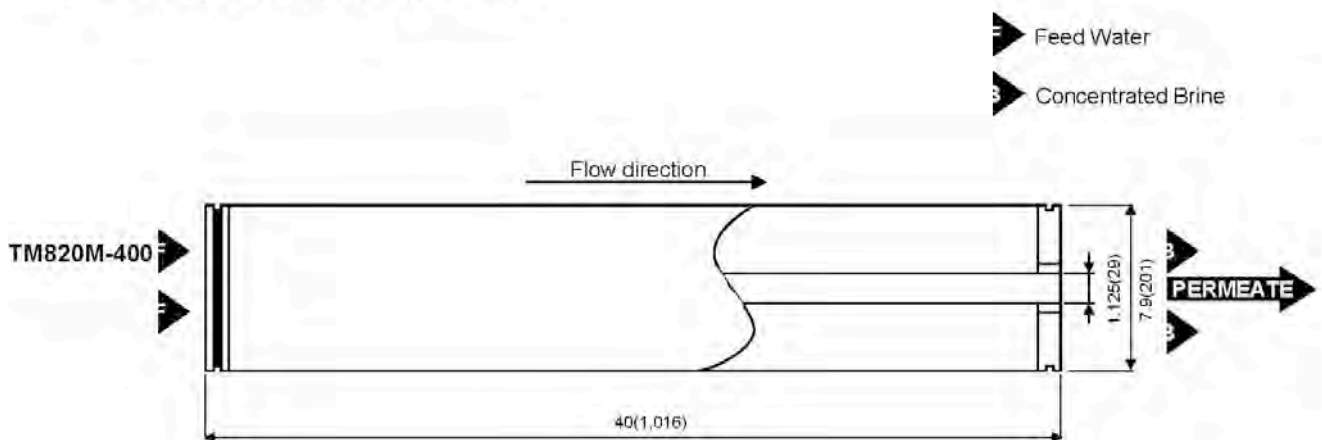
Standard SWRO TM800M

Type	Diameter Inch	Membrane Area ft ² (m ²)	Salt Rejection %	Product Flow Rate gpd(m ³ / d)	Feed Spacer Thickness mil
TM820M-400	8"	400(37)	99.8	7,000(26.5)	34

1. Membrane Type		Cross Linked Fully Aromatic Polyamide Composite
2. Test Conditions	Feed Water Pressure Feed Water Temperature Feed Water Concentration Recovery Rate Feed Water pH	800 psi(5.52MPa) 77° F(25°C) 32,000 mg/l NaCl 8% 7
3. Minimum Salt Rejection		99.5%
4. Minimum Product Flow Rate		5,600gpd(21.2m ³ /d)
5. Boron Rejection (typical value)		95% at pH 8 (5mg/l Boron added to Feed water)

Dimensions

All dimensions shown in Inches (millimeter).





Operating Limits

Maximum Operating Pressure	1200psi (8.3 MPa)
Maximum Feed Water Temperature	113° F (45°C)
Maximum Feed Water SDI ₁₅	5
Feed Water Chlorine Concentration	Not detectable
Feed Water pH Range, Continuous Operation	2-11
Feed Water pH Range, Chemical Cleaning	1-12
Maximum Pressure Drop per Element	15 psi (0.10 MPa)
Maximum Pressure Drop per Vessel	50 psi (0.34 MPa)

Operating Information

1. For the recommended design range, please consult the latest Toray technical bulletin, design guidelines, computer design program, and/ or call an application specialist. If the operating limits given in this Product Information Bulletin are not strictly followed, the Limited Warranty will be null and void.
 2. All elements are wet tested, treated with tested feed water solution, and then vacuum packed in oxygen barrier bags with deoxidant inside. To prevent biological growth during system shutdown, it is recommended to perform 30-60 minutes flushing of Toray elements with seawater once in every two days.
 3. The presence of free chlorine and other oxidizing agents under certain conditions, such as heavy metals which acts as oxidation catalyst in the feed water will cause unexpected oxidation of the membrane. It is strongly recommended to remove these oxidizing agents contained in feed water before operating RO system.
 4. Permeate from the first hour of operation shall be discarded.
 5. The customer is fully responsible for the effects of chemicals that are incompatible with the elements. Their use will void the element Limited Warranty.
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Notice

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TORAY 8" Membranes



Ref. MTM820M-440

TORAY
Innovation by Chemistry

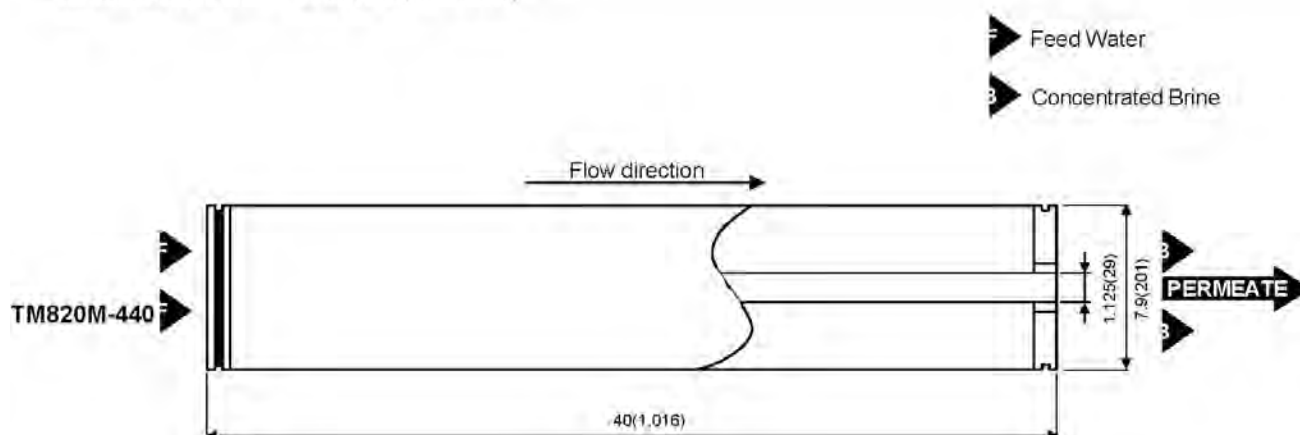
Standard SWRO TM800M

Type	Diameter Inch	Membrane Area ft ² (m ²)	Salt Rejection %	Product Flow Rate gpd(m ³ / d)	Feed Spacer Thickness mil
TM820M-440	8"	440(41)	99.8	7,700(29.2)	28

1. Membrane Type		Cross Linked Fully Aromatic Polyamide Composite
2. Test Conditions	Feed Water Pressure Feed Water Temperature Feed Water Concentration Recovery Rate Feed Water pH	800 psi(5.52MPa) 77° F(25°C) 32,000 mg/l NaCl 8% 7
3. Minimum Salt Rejection		99.5%
4. Minimum Product Flow Rate		6,200gpd(23.5m ³ /d)
5. Boron Rejection (typical value)		95% at pH 8 (5mg/l Boron added to Feed water)

Dimensions

All dimensions shown in Inches (millimeter).





Operating Limits

Maximum Operating Pressure	1200psi (8.3 MPa)
Maximum Feed Water Temperature	113° F (45°C)
Maximum Feed Water SDI15	5
Feed Water Chlorine Concentration	Not detectable
Feed Water pH Range, Continuous Operation	2-11
Feed Water pH Range, Chemical Cleaning	1-12
Maximum Pressure Drop per Element	15 psi (0.10 MPa)
Maximum Pressure Drop per Vessel	50 psi (0.34 MPa)

Operating Information

1. For the recommended design range, please consult the latest Toray technical bulletin, design guidelines, computer design program, and/ or call an application specialist. If the operating limits given in this Product Information Bulletin are not strictly followed, the Limited Warranty will be null and void.
2. All elements are wet tested, treated with tested feed water solution, and then vacuum packed in oxygen barrier bags with deoxidant inside. To prevent biological growth during system shutdown, it is recommended to perform 30-60 minutes flushing of Toray elements with seawater once in every two days.
3. The presence of free chlorine and other oxidizing agents under certain conditions, such as heavy metals which acts as oxidation catalyst in the feed water will cause unexpected oxidation of the membrane. It is strongly recommended to remove these oxidizing agents contained in feed water before operating RO system.
4. Permeate from the first hour of operation shall be discarded.
5. The customer is fully responsible for the effects of chemicals that are incompatible with the elements. Their use will void the element Limited Warranty.

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TORAY 8" Membranes



Ref. MTM820V-400

TORAY
Innovation by Chemistry

Low energy SWRO

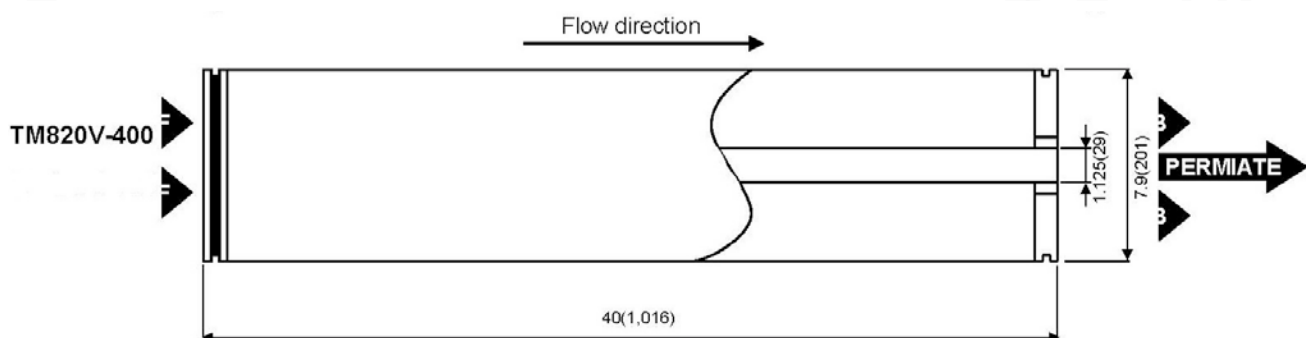
TM800V

Type	Diameter Inch	Membrane Area ft ² (m ²)	Salt Rejection %	Product Flow Rate gpd(m ³ / d)	Feed Spacer Thickness mil
TM820V-400	8"	400(37)	99.8	9,000(34.1)	34

1. Membrane Type		Cross Linked Fully Aromatic Polyamide Composite
2. Test Conditions	Feed Water Pressure Feed Water Temperature Feed Water Concentration Recovery Rate Feed Water pH	800 psi(5.52MPa) 77° F(25°C) 32,000 mg/l NaCl 8% 7
3. Minimum Salt Rejection		99.5%
4. Minimum Product Flow Rate		7,500gpd(28.4m ³ /d)
5. Boron Rejection (typical value)		92% at pH 8 (5mg/l Boron added to Feed water)

Dimensions

All dimensions shown in Inches (millimeter).





Operating Limits

Maximum Operating Pressure	1200psi (8.3 MPa)
Maximum Feed Water Temperature	113° F (45°C)
Maximum Feed Water SDI ₁₅	5
Feed Water Chlorine Concentration	Not detectable
Feed Water pH Range, Continuous Operation	2-11
Feed Water pH Range, Chemical Cleaning	1-12
Maximum Pressure Drop per Element	15 psi (0.10 MPa)
Maximum Pressure Drop per Vessel	50 psi (0.34 MPa)

Operating Information

1. For the recommended design range, please consult the latest Toray technical bulletin, design guidelines, computer design program, and/ or call an application specialist. If the operating limits given in this Product Information Bulletin are not strictly followed, the Limited Warranty will be null and void.
 2. All elements are wet tested, treated with tested feed water solution, and then vacuum packed in oxygen barrier bags with deoxidant inside. To prevent biological growth during system shutdown, it is recommended to perform 30-60 minutes flushing of Toray elements with seawater once in every two days.
 3. The presence of free chlorine and other oxidizing agents under certain conditions, such as heavy metals which acts as oxidation catalyst in the feed water will cause unexpected oxidation of the membrane. It is strongly recommended to remove these oxidizing agents contained in feed water before operating RO system.
 4. Permeate from the first hour of operation shall be discarded.
 5. The customer is fully responsible for the effects of chemicals that are incompatible with the elements. Their use will void the element Limited Warranty.
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Notice

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TORAY 8" Membranes



Ref. MTM820V-440

TORAY
Innovation by Chemistry

Low energy SWRO

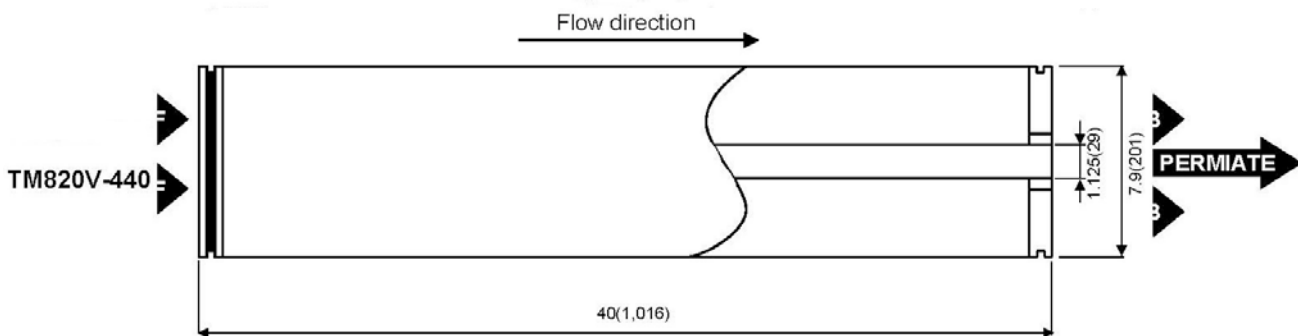
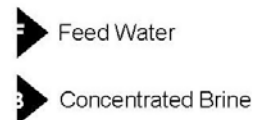
TM800V

Type	Diameter Inch	Membrane Area ft ² (m ²)	Salt Rejection %	Product Flow Rate gpd(m ³ / d)	Feed Spacer Thickness mil
TM820V-440	8"	440(41)	99.8	9,900(37.5)	28

1. Membrane Type		Cross Linked Fully Aromatic Polyamide Composite
2. Test Conditions	Feed Water Pressure Feed Water Temperature Feed Water Concentration Recovery Rate Feed Water pH	800 psi(5.52MPa) 77° F(25°C) 32,000 mg/l NaCl 8% 7
3. Minimum Salt Rejection		99.5%
4. Minimum Product Flow Rate		8,250gpd(31.2m ³ /d)
5. Boron Rejection (typical value)		92% at pH 8 (5mg/l Boron added to Feed water)

Dimensions

All dimensions shown in Inches (millimeter).





Operating Limits

Maximum Operating Pressure	1200psi (8.3 MPa)
Maximum Feed Water Temperature	113° F (45°C)
Maximum Feed Water SDI15	5
Feed Water Chlorine Concentration	Not detectable
Feed Water pH Range, Continuous Operation	2-11
Feed Water pH Range, Chemical Cleaning	1-12
Maximum Pressure Drop per Element	15 psi (0.10 MPa)
Maximum Pressure Drop per Vessel	50 psi (0.34 MPa)

Operating Information

1. For the recommended design range, please consult the latest Toray technical bulletin, design guidelines, computer design program, and/ or call an application specialist. If the operating limits given in this Product Information Bulletin are not strictly followed, the Limited Warranty will be null and void.
2. All elements are wet tested, treated with tested feed water solution, and then vacuum packed in oxygen barrier bags with deoxidant inside. To prevent biological growth during system shutdown, it is recommended to perform 30-60 minutes flushing of Toray elements with seawater once in every two days.
3. The presence of free chlorine and other oxidizing agents under certain conditions, such as heavy metals which acts as oxidation catalyst in the feed water will cause unexpected oxidation of the membrane. It is strongly recommended to remove these oxidizing agents contained in feed water before operating RO system.
4. Permeate from the first hour of operation shall be discarded.
5. The customer is fully responsible for the effects of chemicals that are incompatible with the elements. Their use will void the element Limited Warranty.

Notice

1. Toray accepts no responsibility for results obtained by the application of this information or the safety or suitability of Toray's products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product combination for their own purposes.
2. All data may change without prior notice, due to technical modifications or production changes.

CSM 8" Membranes



Ref. MCNE8040-90

NE8040-90

Normal grade NF element with high monovalent ion rejection

CSM

SPECIFICATIONS:

General Features	Permeate flow rate ¹ :	8,000 GPD (30.3 m ³ /day)
	Monovalent ion rejection (NaCl) ¹ :	85.0 – 97.0%
	Divalent ion rejection (CaCl ₂) ² :	90.0 – 97.0%
	Effective membrane area:	400 ft ² (37.2 m ²)

- The stated product performance is based on data taken after 30 minutes of operation at the following monovalent test conditions:
 - 2,000 mg/L NaCl solution at 75 psig (0.5 MPa) applied pressure
 - 15% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- The stated product performance is based on data taken after 30 minutes of operation at the following divalent test conditions:
 - 500 mg/L CaCl₂ solution at 75 psig (0.5 MPa) applied pressure
 - 15% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- MgSO₄ rejection is 97.0%. (Test conditions are equivalent with NaCl)
- Permeate flow rate for each element may vary but will be no more than 15%.
- Elements can be supplied as dry or wet-type. Wet-tested elements are soaked in a preservative solution (1.0% food grade SBS) and vacuum sealed in a poly bag. All elements are individually boxed.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-connector	Brine Seal
NE8040-90	40.0 inch (1,016 mm)	8.0 inch (201 mm)	1.12 inch (28 mm)	15 kg	40000308	40000309



- Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
- All NE8040 elements fit nominal 8.0 inch (201 mm) I.D. pressure vessels.

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NE8040-90

Normal grade NF element with high monovalent ion rejection

CSM[®]

APPLICATION DATA:

Operating Limits

• Max. Pressure Drop / Element	15 psi (0.1 MPa)
• Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
• Max. Operating Pressure	600 psi (4.14 MPa)
• Max. Feed Flow Rate	75 gpm (17.0 m ³ /hr)
• Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /hr)
• Max. Operating Temperature	113 °F (45 °C)
• Operating pH Range	2.0–11.0
• CIP pH Range	1.0–13.0
• Max. Turbidity	1.0 NTU
• Max. SDI (15 min)	5.0
• Max. Chlorine Concentration	< 0.1 mg/L

Design Guidelines for Various Water Sources

• Wastewater Conventional (SDI < 5)	8–12 gfd
• Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
• Seawater, Open Intake (SDI < 5)	7–10 gfd
• Seawater, Beach Well (SDI < 3)	8–12 gfd
• Surface Water (SDI < 5)	12–16 gfd
• Surface Water (SDI < 3)	13–17 gfd
• Well water (SDI < 3)	13–17 gfd
• RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

• Langlier Saturation Index (LSI)	<+1.5
• Stiff and Davis Saturation Index (SDSI)	<+0.5
• CaSO ₄	230% saturation
• SrSO ₄	800% saturation
• BaSO ₄	6,000% saturation
• SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Wet elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

CSM 8" Membranes



Ref. MCNE8040-70

NE8040-70

Normal grade NF element with high monovalent ion rejection

CSM[®]

SPECIFICATIONS:

General Features	Permeate flow rate ¹ :	7,000 GPD (26.5 m ³ /day)
	Monovalent ion rejection (NaCl) ¹ :	40.0 – 70.0%
	Divalent ion rejection (CaCl ₂) ² :	45.0 – 70.0%
	Effective membrane area:	400 ft ² (37.2 m ²)

- The stated product performance is based on data taken after 30 minutes of operation at the following monovalent test conditions:
 - 2,000 mg/L NaCl solution at 75 psig (0.5 MPa) applied pressure
 - 15% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- The stated product performance is based on data taken after 30 minutes of operation at the following divalent test conditions:
 - 500 mg/L CaCl₂ solution at 75 psig (0.5 MPa) applied pressure
 - 15% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- MgSO₄ rejection is 97.0%. (Test conditions are equivalent with NaCl)
- Permeate flow rate for each element may vary but will be no more than 20%.
- Elements are supplied as dry-type. Dry elements are sealed in a poly bag and individually boxed.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-connector	Brine Seal
NE8040-70	40.0 inch (1,016 mm)	8.0inch (201 mm)	1.12 inch (28 mm)	15 kg	40000308	40000309



- Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
- All NE8040 elements fit nominal 8.0 inch (201 mm) I.D. pressure vessels.

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NE8040-70

Normal grade NF element with high monovalent ion rejection

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	75 gpm (17.0 m ³ /hr)
· Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.



Ref. MCNE8040-40

NE8040-40

High productivity NF element

CSM

SPECIFICATIONS:

General Features	Permeate flow rate:	10,000 GPD (37.9 m ³ /day)
	Nominal salt rejection:	20 – 40%
	Effective membrane area:	400 ft ² (37.2 m ²)

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 2,000 mg/L NaCl solution at 75 psig (0.5 MPa) applied pressure
- 15% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. MgSO₄ rejection is 97.0% (Test conditions are equivalent with NaCl)

3. Permeate flow rate for each element may vary but will be no more than 20%.

4. Elements are supplied as dry-type. Dry elements are sealed in a poly bag and individually boxed.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, FRP Wrapping

Dimensions and Weight

Model Name	A	B	C	Weight	Part Number	
					Inter-connector	Brine Seal
NE8040-40	40.0 inch (1,016 mm)	8.0inch (201 mm)	1.12.inch (28 mm)	15 kg	40000308	40000309



1. Each membrane element supplied with one brine seal, one interconnector (coupler) and four o-rings.
2. All NE8040 elements fit nominal 8.0 inch (201 mm) I.D. pressure vessels.

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NE8040-40

High productivity NF element

CSM

APPLICATION DATA:

Operating Limits

· Max. Pressure Drop / Element	15 psi (0.1 MPa)
· Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)
· Max. Operating Pressure	600 psi (4.14 MPa)
· Max. Feed Flow Rate	75 gpm (17.0 m ³ /hr)
· Min. Concentrate Flow Rate	16 gpm (3.6 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· CIP pH Range	1.0–13.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

Design Guidelines for Various Water Sources

· Wastewater Conventional (SDI < 5)	8–12 gfd
· Wastewater Pretreated by UF/MF (SDI < 3)	10–14 gfd
· Seawater, Open Intake (SDI < 5)	7–10 gfd
· Seawater, Beach Well (SDI < 3)	8–12 gfd
· Surface Water (SDI < 5)	12–16 gfd
· Surface Water (SDI < 3)	13–17 gfd
· Well water (SDI < 3)	13–17 gfd
· RO permeate (SDI < 1)	21–30 gfd

Saturation Limits (Using Antiscalants)[†]

· Langelier Saturation Index (LSI)	<+1.5
· Stiff and Davis Saturation Index (SDSI)	<+0.5
· CaSO ₄	230% saturation
· SrSO ₄	800% saturation
· BaSO ₄	6,000% saturation
· SiO ₂	100% saturation

[†]The above saturation limits are typically accepted by proprietary antiscalant manufacturers. It is the user's responsibility to ensure proper chemical(s) and concentration are dosed ahead of the membrane system to prevent scale formation anywhere within the membrane system. Membrane elements fouled or damaged due to scale formation are not covered by the limited warranty.

GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.



- Each membrane element supplied with one brine seal and one interconnector (excepted for 2,5" membrane element, supplied without interconnector).

BRINE SEAL				
REF.	DESCRIPTION	MATERIAL	FOR MEMBRANES	PRICE EURO
DC005	EPDM BRINE SEAL 2.5" CSM	EPDM	2,5"	3,38
DD003	EPDM BRINE SEAL 4" CSM	EPDM	4"	7,11
EA798	EPDM BRINE SEAL 8" CSM	EPDM	8"	10,80

INTERCONNECTOR					
REF.	DESCRIPTION	MATERIAL	COLOR	FOR MEMBRANES	PRICE EURO
DD004	ABS FEMALE INTERCONNECTOR CSM 2.5" & 4" WITH O-RING	ABS	WHITE	2,5" – 4"	21,33
EA797	ABS MALE INTERCONNECTOR 1.5" CSM WITH O-RING	ABS	WHITE	8"	17,30
EA799	ABS MALE INTERCONNECTOR 1.125" CSM WITH O-RING -BW TYPE	ABS	BLACK	8"	28,45
EA800	NORYL MALE INTERCONNECTOR 1.125" CSM WITH O-RING - SW TYPE	NORYL	BLACK	8"	21,63

Antiscaling for R. O. Membranes Permascale Eut 110



- PERMASCALE EUT110 is a product that prevents scales and iron sediment on R.O. membranes systems;
- for industrial systems and for potable water treatment systems;
- very effective on various kinds of water, minimize the fouling and reduce the frequency of membranes cleaning;
- particularly suitable for big plants with permeate flows higher than 100 m³/day;
- compatible with all kinds of membranes;
- replace totally or partially the acidification;
- easy to use due to the liquid form.

Characteristics	
Formulation	special phosphonated
pH	7,8 ± 0,5
Appearance	light yellow liquid
Density @ 20°C	1,30 ± 0,05 g/ml
Checking	phosphonated value
Solubility in water	complete

REF.	PRICE EURO/kg
EA100	11,36

Use

Injection by dosing pump of pure or diluted product.

The dosage is according to the concentration of scaling salts and iron, and can vary from 2 to 10 cm³/m³ of feed water.

Instructions and Packaging

Handling: following safety data sheet. Take the normal precautions to handle chemical products.

Packaging: 25 kg drum.

Storage: closed on the original packaging, sheltered from cold and heat.

Antiscaling for R.O. Membranes

Permascale EUT 120



- PERMASCALE EUT120 is a product that prevents scales and iron sediment on R.O. membranes systems;
- very effective on various kinds of water, minimize the fouling and reduce the frequency of membranes cleaning;
- particularly suitable for plants with permeate flows lower than 100 m³/day;
- compatible with all kinds of membranes;
- replace totally or partially the acidification;
- easy to use due to the liquid form.

Characteristics	
Formulation	special phosphonated
pH	7,5 ± 0,5
Appearance	light yellow liquid
Density @ 20°C	1,30 ± 0,02 g/ml
Checking	phosphonated value
Solubility in water	complete

REF.	PRICE EURO/kg
EA101	7,60

Use

Injection by dosing pump of pure or diluted product.

The dosage is according to the concentration of scaling salts and iron, and can vary from 3 to 13 cm³/m³ of feed water.

Instructions and Packaging

Handling : following safety data sheet. Take the normal precautions to handle chemical products.

Packaging: 25 kg drum.

Storage: closed on the original packaging, sheltered from cold and heat.

Antiscaling for R. O. Membranes PermaTreat PC-391T



- PermaTreat PC-391T is recommended for systems that produce less than 545 m³/day (100 GPM) of permeate. This program is less concentrated than PermaTreat PC-191T and, therefore, offers the benefits and advantages of neat feed for smaller RO systems;
- PermaTreat PC-391T has exhibited excellent performance against the following foulants: calcium carbonate, calcium sulfate, barium sulfate, strontium sulfate and iron;
- Packaging: 25 kg drum.

Physical & Chemical Properties	
Color	Clear, yellow
Form	Liquid
Odor	Slight ammonia smell
Specific gravity @ 25°C	1,10
pH (Neat)	10,8
Solubility in water	Complete

REF.	PRICE EURO/kg
EA102 (*)	13,92

(*) not available in stock.

Compatible Materials

Stainless Steel 304, CPVC Piping, Polyethylene, Polypropylene, Plasite 4300 and Plasite 7122.

All membrane elements based on Polyamide chemistries including Thin Film Composite (TFC) membranes when used as directed.

Not Compatible Materials

Neoprene, Hypalon elastomer, Buna-N and EPDM: P.S. for all these materials, O-rings are acceptable for static applications. If the fitting is opened, O-ring must be replaced.

Brass, Polyurethane and Viton.

Dosage and Feeding

PermaTreat PC-391T must be fed continuously. The feedpoint location should be as close to the RO membrane as practical but one that ensures good mixing with the feedwater prior to entering the RO system.

PermaTreat PC-391T dosage is dependent on feedwater chemistry, membrane type, system operating parameters (e.g., recovery, temperature and pressure). These parameters determine the potential foulant that is likely to foul the membrane elements.

Please, consult our Technical Department for detailed dosage and feeding information.

Antiscaling for R. O. Membranes PermaTreat PC-391T



CONSEQUENCES OF OVERFEED

Overfeed of PermaTreat PC-391T will result in higher chemical cost.

CONSEQUENCES OF UNDERFEED

Underfeed of PermaTreat PC-391T will result in poor scale inhibition. This will lead to fouled RO membranes and reduce system performance and/or premature membrane replacement. In RO units, scaling is typically seen in the tail-end elements that have the highest reject concentration (4:1 for a 75% recovery system).

Please, consult our Technical Department for detailed dosage and feeding information.

ENVIRONMENTAL AND TOXICITY DATA

Refer to the MSDS for all available mammalian and aquatic toxicity information.

	ppm/ppm product
Biological Oxygen Demand (5-day BOD ₅)	Not Available
Chemical Oxygen Demand (COD)	Not Available
Total Organic Carbon (TOC)	Not Available

SAFETY AND HANDLING

Before using PermaTreat PC-391T, please refer to the Material Safety Data Sheet (MSDS) for proper personal protective equipment (PPE) and for health effects.

STORAGE

PermaTreat PC-391T has a suggested in-plant storage limit of one year. The suggested maximum storage temperature is 38°C.

Refer to the (MSDS) for the most current data.

REMARKS

For Medical and Transportation Emergencies, please see the MSDS.

Antiscaling for R. O. Membranes PermaTreat PC-191T



- PermaTreat PC-191T is a highly effective scale inhibitor whose active components were developed to treat reverse osmosis (RO) systems;
- PermaTreat PC-191T has shown excellent performance against the following scalants: calcium carbonate, calcium sulfate, barium sulfate, strontium sulfate, calcium fluoride, silica and iron;
- **For RO units with a feedwater flowrate of 545 m³/day (100 GPM) or less, the recommended product would be PermaTreat PC-391T (our ref. EA102);**
- PermaTreat PC-191T is used when the silica level in the brine is less than 185 mg/l at a brine pH of 7,5 and temperature 25°C;
- Packaging: 25 kg drum.

Physical & Chemical Properties	
Color	Clear, yellow
Form	Liquid
Odor	Slight ammonia smell
Specific gravity @ 25°C	1,36
pH (Neat)	10,5
Solubility in water	Complete

REF.	PRICE EURO/kg
EA103 (*)	18,52

(*) not available in stock.

Compatible Materials

Stainless Steel 304, CPVC Piping, Polyethylene, Polypropylene, Plasite 4300 and Plasite 7122.

All membrane elements based on Polyamide chemistries including Thin Film Composite (TFC) membranes when used as directed.

Not Compatible Materials

Neoprene, Hypalon elastomer, Buna-N and EPDM: P.S. for all these materials, O-rings are acceptable for static applications. If the fitting is opened, O-ring must be replaced.

Brass, Polyurethane and Viton.

Dosage and Feeding

PermaTreat PC-191T must be fed continuously. The feedpoint location should be as close to the RO membrane as practical but one that ensures good mixing with the feedwater prior to entering the RO system.

PermaTreat PC-191T dosage is dependent on feedwater chemistry, membrane type, system operating parameters (e.g., recovery, temperature and pressure). These parameters determine the potential foulant that is likely to foul the membrane elements.

Please, consult our Technical Department for detailed dosage and feeding information.

Antiscaling for R. O. Membranes PermaTreat PC-191T



CONSEQUENCES OF OVERFEED

Overfeed of PermaTreat PC-191T will result in higher chemical cost.

CONSEQUENCES OF UNDERFEED

Underfeed of PermaTreat PC-191T will result in poor scale inhibition. This will lead to fouled RO membranes and reduce system performance and/or premature membrane replacement. In RO units, scaling is typically seen in the tail-end elements that have the highest reject concentration (4:1 for a 75% recovery system).

Please, consult our Technical Department for detailed dosage and feeding information.

ENVIRONMENTAL AND TOXICITY DATA

Refer to the MSDS for all available mammalian and aquatic toxicity information.

	ppm/ppm product
Biological Oxygen Demand (5-day BOD ₅)	Not Available
Chemical Oxygen Demand (COD)	Not Available
Total Organic Carbon (TOC)	Not Available

SAFETY AND HANDLING

Before using PermaTreat PC-191T, please refer to the Material Safety Data Sheet (MSDS) for proper personal protective equipment (PPE) and for health effects.

STORAGE

PermaTreat PC-191T has a suggested in-plant storage limit of one year. The suggested maximum storage temperature is 38°C.

Refer to the (MSDS) for the most current data.

REMARKS

For Medical and Transportation Emergencies, please see the MSDS.

TORAY PVDF Hollow Fiber Membrane Module HFU series (type N)



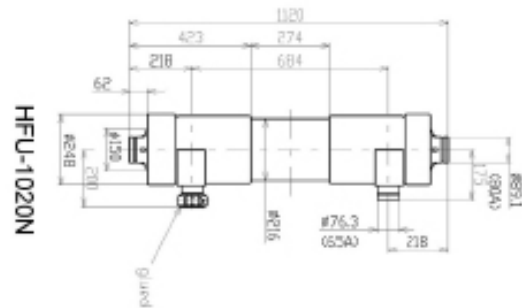
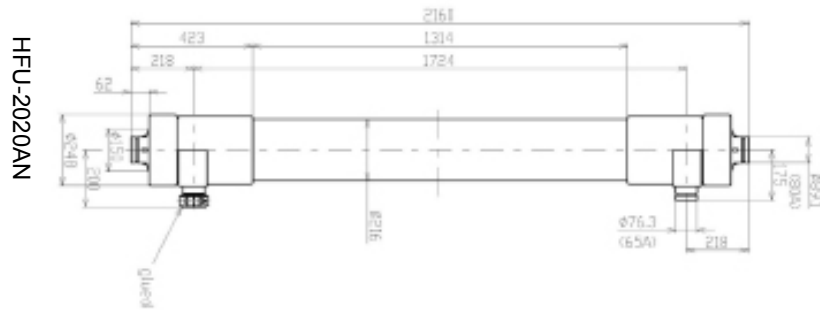
- Membrane Material = PVDF (Polyvinylidene fluoride);
- Housing Material = PVC and/or ABS;
- Potting Material = Epoxy Resin or Urethane Resin;
- Nominal Molecular Weight Cut Off = 150.000;
- Cleaning pH Range 0 ÷ 12;
- Maximum Cleaning Temperature 40°C;
- Maximum Concentration of NaClO Cleaning as Cl₂ = 3.000 mg/liter (10≤pH≤12);
- Maximum NaClO Exposure (lifetime contact time) as Cl₂ = 1.000.000 mg/liter hours;
- Maximum Acid Exposure Contact Time = 1.000 hours (pH≥0).

OPERATING CONDITIONS	
Filtration Method	Outside to inside, dead end
Maximum Inlet Pressure	300 kPa (43,5 psi)
Maximum Trans Membrane Pressure	300 kPa (43,5 psi)
Typical Operating Trans Membrane Pressure	< 200 kPa (<29,0 psi)
Operating Temperature Range	0÷40°C
Operating pH Range	1÷10

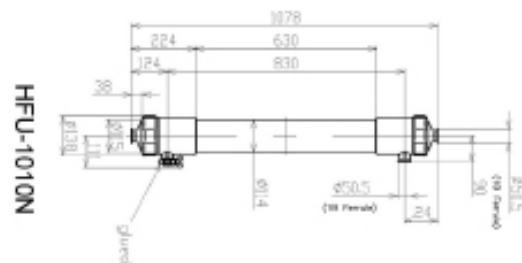
REF.	MODULE TYPE	MEMBRANE SURFACE AREA (OUTER SURFACE)	DIAMETER	LENGTH	WEIGHT (FULL OF WATER)	WEIGHT (DRAINED)	PRICE EURO
		m ² (ft ²)	mm	mm	kg	kg	
MTHFU-2020AN (*)	HFU-2020AN	72 (775)	216	2160	110	67	6.807,71
MTHFU-1020N (*)	HFU-1020N	29 (312)	216	1120	60	40	6.254,16
MTHFU-1010N (*)	HFU-1010N	7 (75)	114	1078	15	9	3.124,33
MTHFU-2008N (*)	HFU-2008N	11,5 (124)	89	2000	18	11	4.230,94

(*) not available in stock.

TORAY PVDF Hollow Fiber Membrane Module HFU series (type N)



Dimensions in mm





Vessels,
accessories,
rotary pumps



EUROTR**L**[®]
WATER TREATMENT COMPONENTS

MWG[®]
ITALIAN WATER TECHNOLOGY

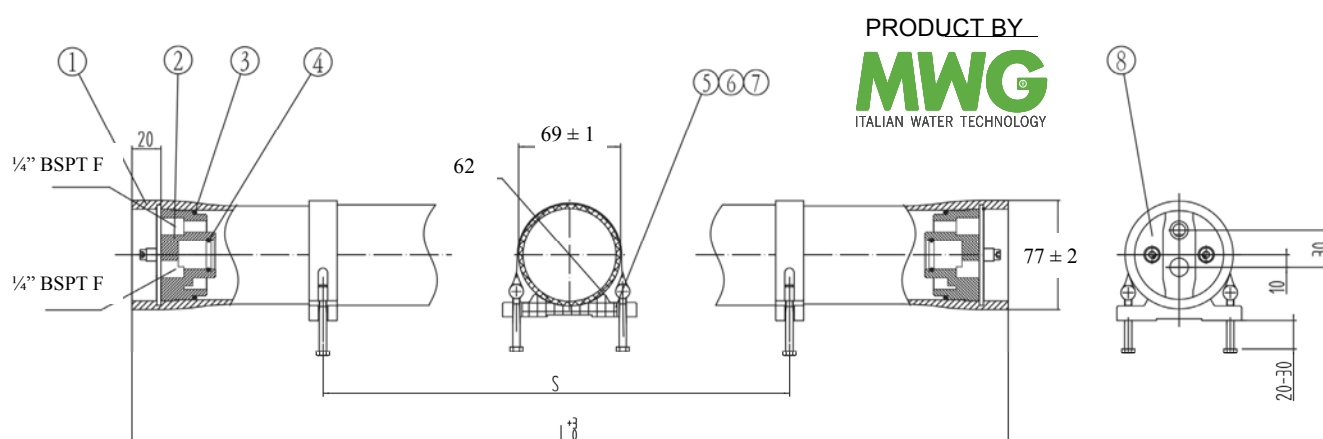
Engineered by Eurotrol S.p.A.

2 ½" Membrane Vessels End Port Series 300 E-2.5



- fiberglass reinforced plastic pressure vessels series 300 E-2.5, D.75" direct connection, white painted, UVA-ray proof material;
- end-cap in ABS;
- max operating pressure 300 psi (21 bar);
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- built in accordance with ASME code section X;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- each vessel is factory tested at 1,5 times max operating pressure;
- connections: feed/concentrate ¼" BSPT F, permeate ¼" BSPT F;
- straps and saddles included.

REF.	MODEL	ELEMENTS	L (mm)	S (mm)	PRICE EURO
H2E1BQ	300 E – 2514	1 x 14"	427	200	95,71
H2E1BV	300 E – 2521	1 x 21"	605	400	105,63
H2E1B1	300 E – 2.5 – 1	1 x 40"	1088	700	126,21



PRODUCT BY
MWG
ITALIAN WATER TECHNOLOGY

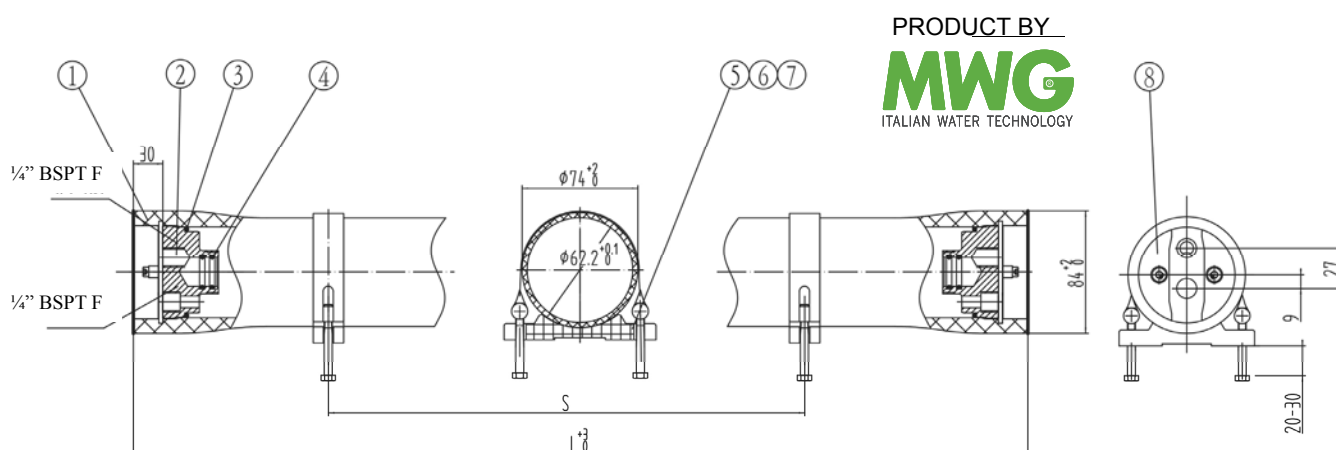
SPARE PARTS						
ITEM	REF.	DESCRIPTION	Q.TY	MATERIAL	REMARK	PRICE EURO
1		Pressure Shell	1	Epoxy FRP	White	
2 + 4	H2R011	End Plate	2	ABS		17,85
3	H2R103	Head Seal	2	EPDM	56x3,55	3,32
4	H2R101	Adapter Seal	2	EPDM	19x2,65	0,82
5	H2R001	Saddle	2	Rubber		2,31
7 + 6	H2R003	Strap	2	AISI 304 - rubber		14,30
8	H2R041	Seeger	4	AISI 304		7,35

2 ½” Membrane Vessels End Port Series 1000 E-2.5



- fiberglass reinforced plastic pressure vessels series 1000 E-2.5, D.75” direct connection, white painted, UVA-ray proof material;
- end-cap in super duplex steel AISI 2507;
- max operating pressure 1000 psi (69 bar);
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- built in accordance with ASME code section X;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- each vessel is factory tested at 1,5 times max operating pressure;
- connections: feed/concentrate ¼” BSPT F, permeate ¼” BSPT F;
- straps and saddles included.

REF.	MODEL	ELEMENTS	L (mm)	S (mm)	PRICE EURO
H2E1GV	1000 E – 2521	1 x 21”	629	400	406,03
H2E1G1	1000 E – 2.5 – 1	1 x 40”	1112	422,54	



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SPARE PARTS						
Item	Ref.	Description	Q.ty	Material	Remark	PRICE EURO
1		Pressure Shell	1	Epoxy FRP	White	
2 + 4	H2R013	End Plate	2	Super Duplex Steel AISI 2507		144,01
3	H2R103	Head Seal	2	EPDM	56x3,55	3,32
4	H2R101	Adapter Seal	4	EPDM	19x2,65	0,82
5	H2R001	Saddle	2	Rubber		2,31
7 + 6	H2R005	Strap	2	AISI 304 - Rubber		14,30
8	H2R041	Seeger	4	AISI 316		7,35

4" Membrane Vessels End Port Series 300 E-4

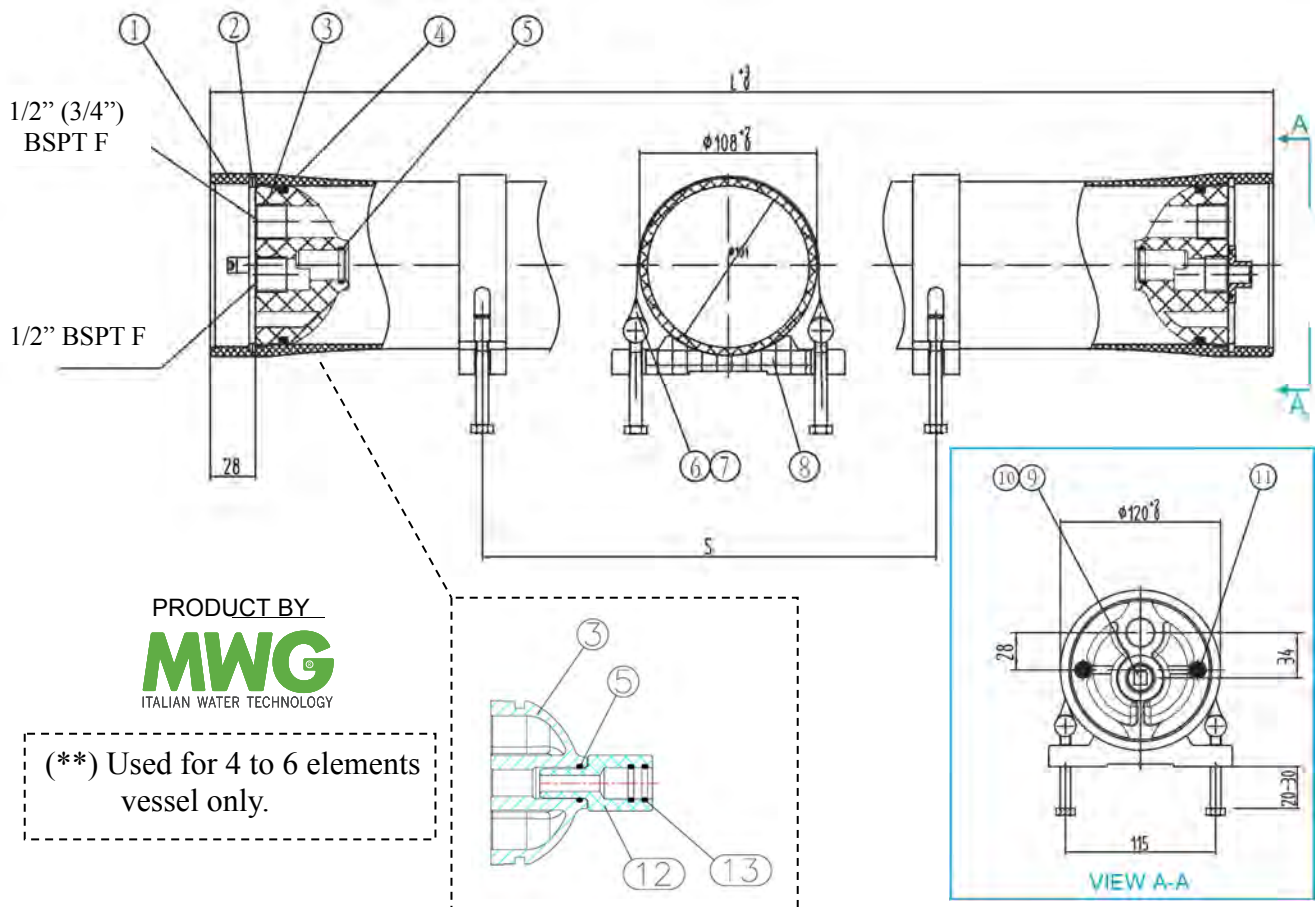


- fiberglass reinforced plastic pressure vessels series 300 E-4, D.75" direct connection, white painted, UVA-ray proof material;
- end-cap in ABS;
- max operating pressure 300 psi (21 bar);
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- built in accordance with ASME code section X;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- each vessel is factory tested at 1,5 times max operating pressure;
- permeate connections 1/2" BSPT F;
- straps and saddles included (n.2 pcs from 1 to 3 elements, n.3 pcs from 4 to 6 elements).

REF.	MODEL	ELEMENTS	L (mm)	S (mm)	CONNECTIONS FEED / CONCENTRATE	PRICE EURO
H4E2BV	300 E – 4021	1 x 21"	658	400	1/2" BSPT F	144,12
H4E3BV	300 E – 4021	1 x 21"	658	400	3/4" BSPT F	144,12
H4E2B1	300 E – 4 – 1	1 x 40"	1140	600	1/2" BSPT F	148,62
H4E3B1	300 E – 4 – 1	1 x 40"	1140	600	3/4" BSPT F	148,62
H4E2B2	300 E – 4 – 2	2 x 40"	2156	1200	1/2" BSPT F	204,94
H4E3B2	300 E – 4 – 2	2 x 40"	2156	1200	3/4" BSPT F	204,94
H4E2B3	300 E – 4 – 3	3 x 40"	3172	2200	1/2" BSPT F	263,26
H4E3B3	300 E – 4 – 3	3 x 40"	3172	2200	3/4" BSPT F	263,26
H4E2B4 (*)	300 E – 4 – 4	4 x 40"	4268	1600x2	1/2" BSPT F	349,53
H4E3B4 (*)	300 E – 4 – 4	4 x 40"	4268	1600x2	3/4" BSPT F	349,53
H4E2B5 (*)	300 E – 4 – 5	5 x 40"	5284	2300x2	1/2" BSPT F	445,65
H4E3B5 (*)	300 E – 4 – 5	5 x 40"	5284	2300x2	3/4" BSPT F	445,65
H4E2B6 (*)	300 E – 4 – 6	6x 40"	6300	2700x2	1/2" BSPT F	544,68
H4E3B6 (*)	300 E – 4 – 6	6 x 40"	6300	2700x2	3/4" BSPT F	544,68

(*) not available in stock – Minimum delivery 10-12 weeks.

4" Membrane Vessels End Port Series 300 E-4



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(**) Used for 4 to 6 elements vessel only.

SPARE PARTS						
Item	Ref.	Description	Quantity	Material	Remark	PRICE EURO
1		Pressure Shell	1	Epoxy FRP	White	
2	H4R041	Seeger	4	AISI 304		5,31
3 + 5	H4R401	End Plate	2	ABS	1/2" 1/2"	23,72
	H4R403	End Plate	2	ABS	3/4" 1/2"	23,72
4	H4R107	Head Seal	2	EPDM	90x5,3	5,16
5	H2R101	Adapter Seal	2	EPDM	19x2,65	0,82
6 + 7	H4R003	Strap	2 - 3	AISI 304 - Rubber		16,28
8	H4R001	Saddle	2 - 3	Rubber		2,31
9	H4R081	Plug	1	ABS		1,82
10	H4R101	O-ring of Plug	1	EPDM	23,6x3,55	1,41
11	H4R209	Seeger Screw	4	AISI 304	M6x14	1,05
12 + 13	H4R601	Adapter	2 (**)	ABS		12,54
13	H2R101	Adapter Seal	4 (**)	EPDM	19x2,65	0,82

4" Membrane Vessels End Port Series 450 E-4

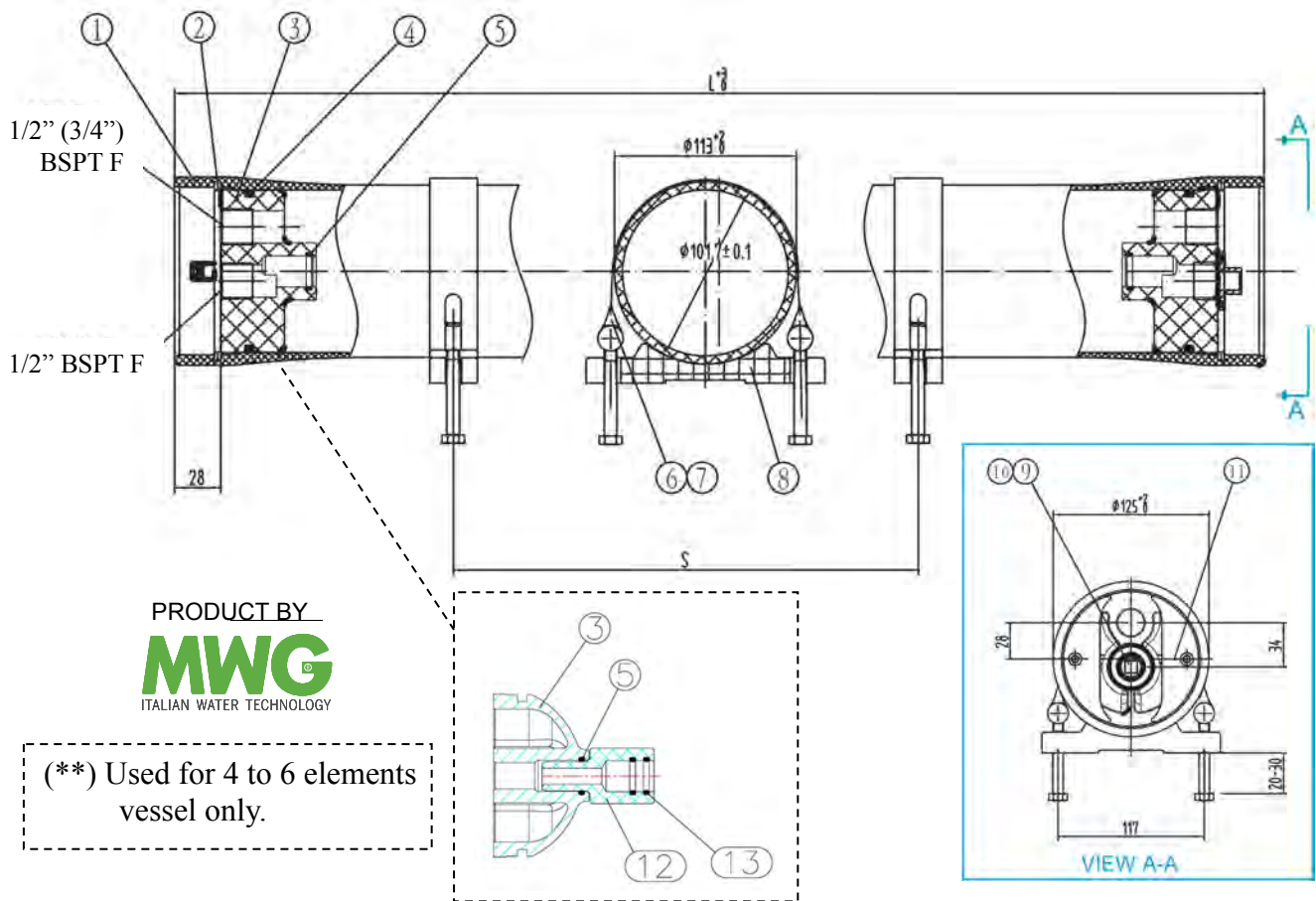


- fiberglass reinforced plastic pressure vessels series 450 E-4, D.75" direct connection, white painted, UVA-ray proof material;
- end-cap in ABS;
- max operating pressure 450 psi (31 bar);
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- built in accordance with ASME code section X;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- each vessel is factory tested at 1,5 times max operating pressure;
- permeate connections ½" BSPT F;
- straps and saddles included (n.2 pcs from 1 to 3 elements, n.3 pcs from 4 to 6 elements).

REF.	MODEL	ELEMENTS	L (mm)	S (mm)	CONNECTIONS FEED / CONCENTRATE	PRICE EURO
H4E2CV	450 E – 4021	1 x 21"	670	400	½" BSPT F	219,90
H4E2C1	450 E – 4 – 1	1 x 40"	1152	600	½" BSPT F	233,94
H4E3C1	450 E – 4 – 1	1 x 40"	1152	600	¾" BSPT F	233,94
H4E2C2	450 E – 4 – 2	2 x 40"	2168	1200	½" BSPT F	336,58
H4E3C2	450 E – 4 – 2	2 x 40"	2168	1200	¾" BSPT F	336,58
H4E2C3	450 E – 4 – 3	3 x 40"	3184	2200	½" BSPT F	422,76
H4E3C3	450 E – 4 – 3	3 x 40"	3184	2200	¾" BSPT F	422,76
H4E2C4 (*)	450 E – 4 – 4	4 x 40"	4280	1600x2	½" BSPT F	532,62
H4E3C4 (*)	450 E – 4 – 4	4 x 40"	4280	1600x2	¾" BSPT F	532,62
H4E2C5 (*)	450 E – 4 – 5	5 x 40"	5296	2300x2	½" BSPT F	638,03
H4E3C5 (*)	450 E – 4 – 5	5 x 40"	5296	2300x2	¾" BSPT F	638,03
H4E2C6 (*)	450 E – 4 – 6	6 x 40"	6312	2700x2	½" BSPT F	749,00
H4E3C6 (*)	450 E – 4 – 6	6 x 40"	6312	2700x2	¾" BSPT F	749,00

(*) not available in stock – Minimum delivery 10-12 weeks.

4" Membrane Vessels End Port Series 450 E-4



SPARE PARTS

ITEM	REF.	DESCRIPTION	Q.TY	MATERIAL	REMARK	PRICE EURO
1		Pressure Shell	1	Epoxy FRP	White	
2	H4R041	Seeger	4	AISI 304		5,31
3 + 5	H4R401	End Plate	2	ABS	1/2" 1/2"	23,72
	H4R403	End Plate	2	ABS	3/4" 1/2"	23,72
4	H4R107	Head Seal	2	EPDM	90x5,3	5,16
5	H2R101	Adapter Seal	2	EPDM	19x2,65	0,82
6 + 7	H4R003	Strap	2 - 3	AISI 304 - Rubber		16,28
8	H4R001	Saddle	2 - 3	Rubber		2,31
9	H4R081	Plug	1	ABS		1,82
10	H4R101	O-ring of Plug	1	EPDM	23,6x3,55	1,41
11	H4R209	Seeger Screw	4	AISI 304	M6x14	1,05
12 + 13	H4R601	Adapter	2 (**)	ABS		12,54
13	H2R101	Adapter Seal	4 (**)	EPDM	19x2,65	0,82

4" Membrane Vessels End Port Series 600 E-4

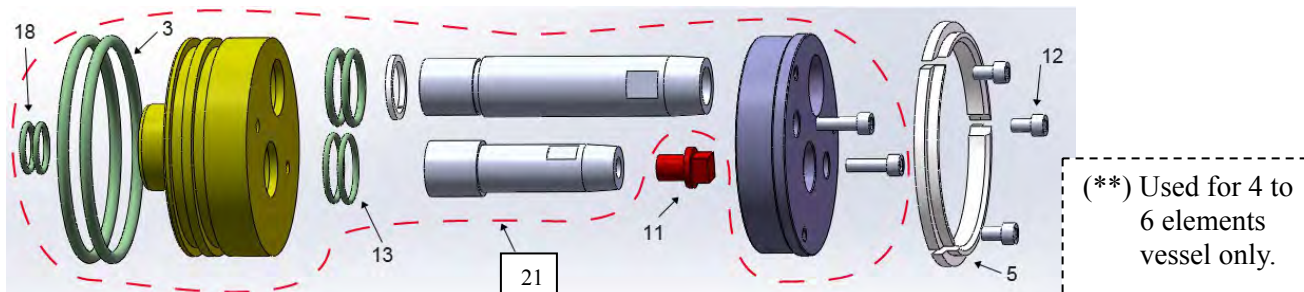


- fiberglass reinforced plastic pressure vessels series 600 E-4, complete with 0,75" adapters, white painted, UVA-ray proof material;
- max operating pressure 600 psi (41 bar);
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- built in accordance with ASME code section X;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- each vessel is factory tested at 1,5 times max operating pressure;
- feed/concentrate connections ¾" BSPT M, in super duplex steel AISI 2507;
- permeate connections ½" BSPT M;
- straps and saddles included (n.2 pcs from 1 to 3 elements, n.3 pcs from 4 to 6 elements).

(*) not available in stock – Minimum delivery 10-12 weeks.

REF.	MODEL	ELEMENTS	L (mm)	S (mm)	PRICE EURO
H4E4DV	600 E-4021	1 x 21"	762	400	628,93
H4E4D1	600 E-4-1	1 x 40"	1244	600	681,11
H4E4D2 (*)	600 E-4-2	2 x 40"	2260	1200	842,93
H4E4D3 (*)	600 E-4-3	3 x 40"	3276	2200	1.020,94
H4E4D4 (*)	600 E-4-4	4 x 40"	4372	1600x2	1.215,13

SPARE PARTS:

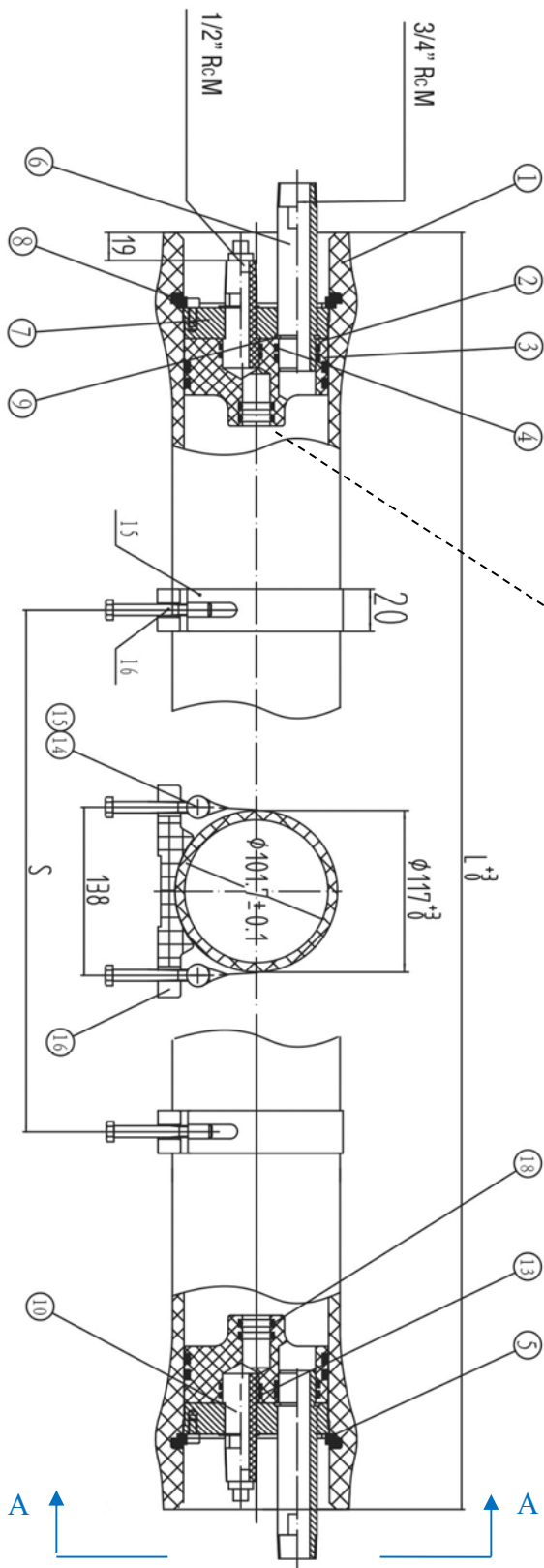


ITEM	REF.	DESCRIPTION	Q.TY	MATERIAL	REMARK	PRICE EURO
3	H4R107	Head Seal	4	EPDM	90x5,3	5,16
5	H4R045	Locking Kit (n.3 Segments)	2	AISI 316		24,33
11	H4R083	Plug	1	ABS		2,12
12	H4R205	Securing Screw	6	AISI 304	M6x20	1,05
13	H4R111	Permeate Port O-ring	4	EPDM	25x2,65	1,21
14 + 15	H4R005	Strap	2-3	AISI 304 - Rubber		17,85
16	H4R001	Saddle	2-3	Rubber		2,31
18	H2R101	Adapter Seal	4	EPDM	19x2,65	0,82
19 + 20	H4R601	Adapter	2 (**)	ABS		12,54
20	H2R101	Adapter Seal	4 (**)	EPDM	19x2,65	0,82
21	H4R707	Head Assembly end port	2			252,18

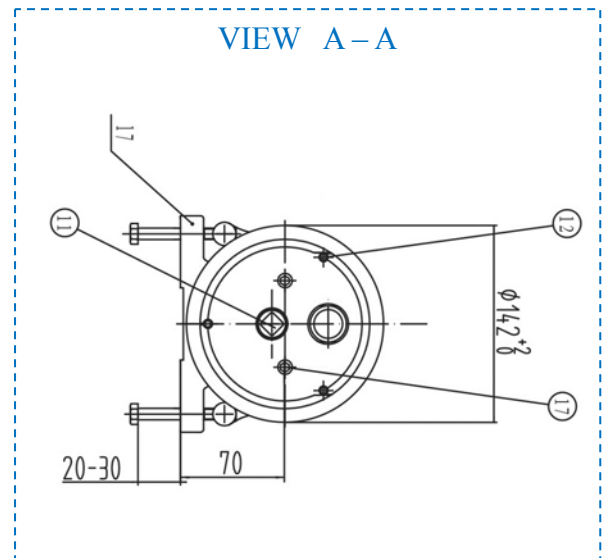
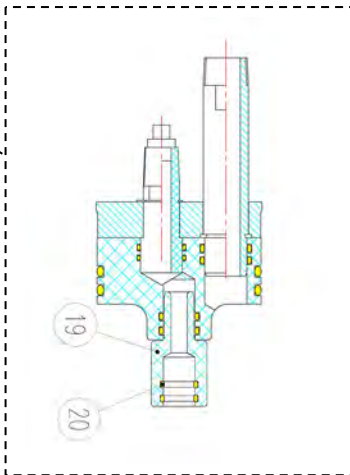
4" Membrane Vessels End Port Series 600 E-4



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(**) Used for 4 to 6 elements vessel only.



4" Membrane Vessels End Port Series 1000 E-4

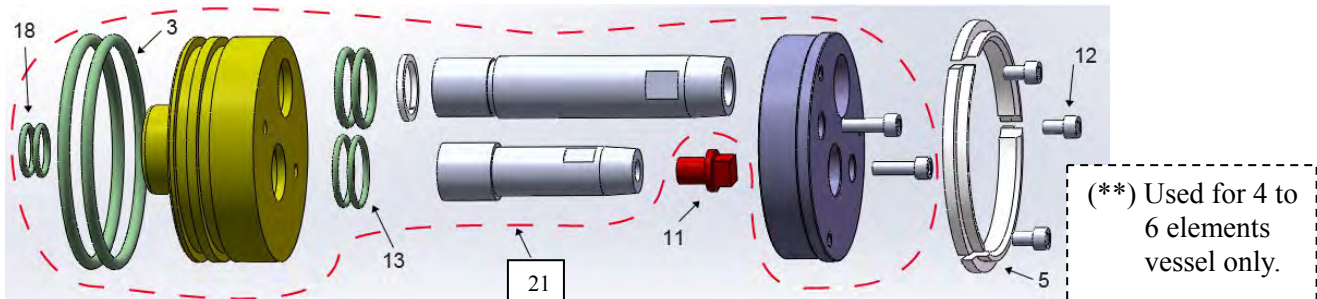


- fiberglass reinforced plastic pressure vessels series 1000 E-4, complete with 0,75" adapters, white painted, UVA-ray proof material;
- max operating pressure 1000 psi (69 bar);
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- built in accordance with ASME code section X;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- each vessel is factory tested at 1,5 times max operating pressure;
- feed/concentrate connections ¾" BSPT M, in super duplex steel AISI 2507;
- permeate connections ½" BSPT M;
- straps and saddles included (n.2 pcs from 1 to 3 elements, n.3 pcs from 4 to 6 elements).

(*) not available in stock – Minimum delivery 10-12 weeks.

REF.	MODEL	ELEMENTS	L (mm)	S (mm)	PRICE EURO
H4E4GV	1000 E-4021	1 x 21"	762	400	676,73
H4E4G1	1000 E-4-1	1 x 40"	1244	600	726,25
H4E4G2	1000 E-4-2	2 x 40"	2260	1200	891,31
H4E4G3	1000 E-4-3	3 x 40"	3276	2200	1.072,88
H4E4G4 (*)	1000 E-4-4	4 x 40"	4372	1600x2	1.270,95
H4E4G5 (*)	1000 E-4-5	5 x 40"	5388	2300x2	1.469,02
H4E4G6 (*)	1000 E-4-6	6 x 40"	6404	2700x2	1.667,09

SPARE PARTS:

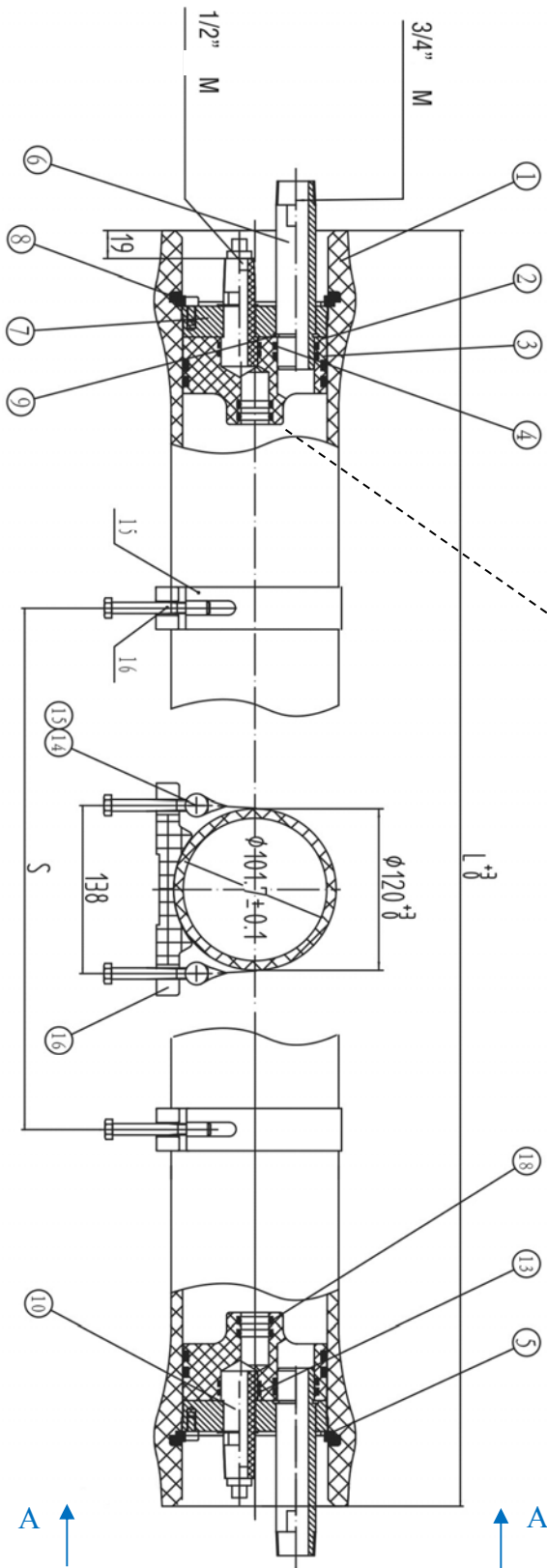


ITEM	REF.	DESCRIPTION	Q.TY	MATERIAL	REMARK	PRICE EURO
3	H4R107	Head Seal	4	EPDM	90x5,3	5,16
5	H4R045	Locking Kit (n.3 Segments)	2	AISI 316		24,33
11	H4R083	Plug	1	ABS		2,12
12	H4R205	Securing Screw	6	AISI 304	M6x20	1,05
13	H4R111	Permeate Port O-ring	4	EPDM	25x2,65	1,21
14 + 15	H4R005	Strap	2-3	AISI 304 - Rubber		17,85
16	H4R001	Saddle	2-3	Rubber		2,31
18	H2R101	Adapter Seal	4	EPDM	19x2,65	0,82
19 + 20	H4R601	Adapter	2 (**)	ABS		12,54
20	H2R101	Adapter Seal	4 (**)	EPDM	19x2,65	0,82
21	H4R707	Head Assembly end port	2			252,18

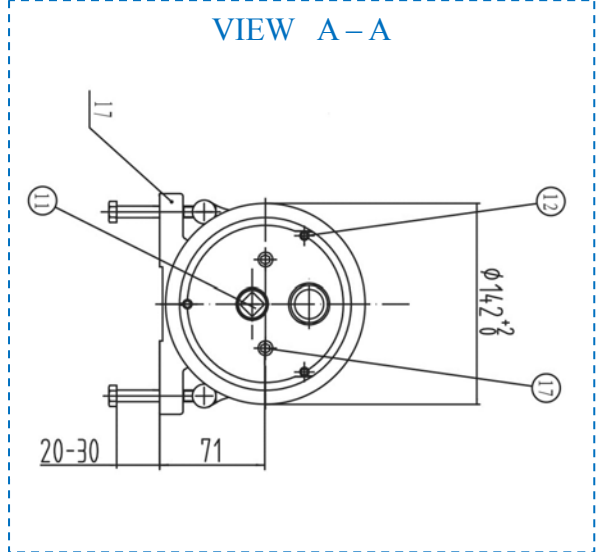
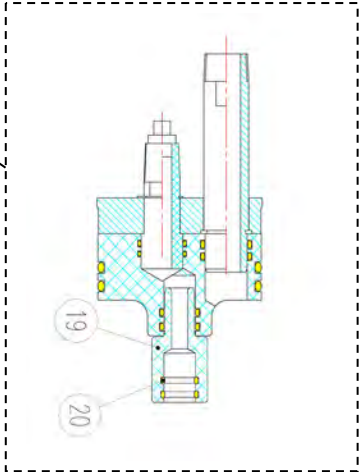
4" Membrane Vessels End Port Series 1000 E-4



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(**) Used for 4 to 6 elements vessel only.



4" Membrane Vessels End Port Series 1200 E-4

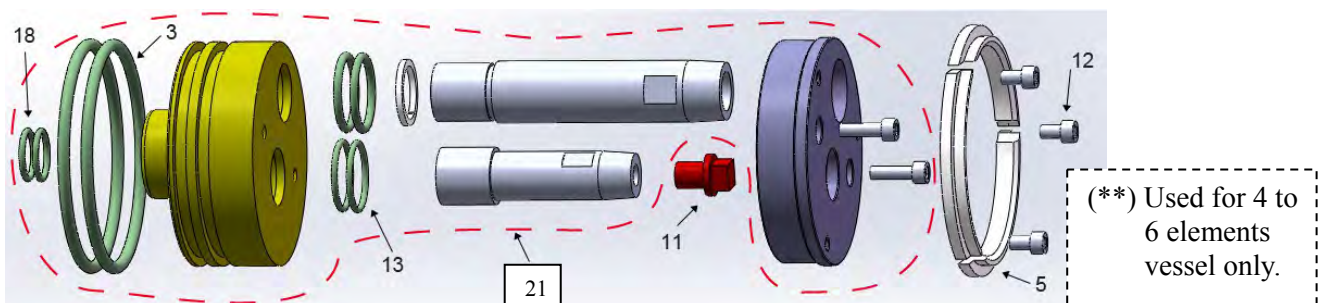


- fiberglass reinforced plastic pressure vessels series 1200 E-4, complete with 0,75" adapters, white painted, UVA-ray proof material;
- max operating pressure 1200 psi (83 bar);
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- built in accordance with ASME code section X;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- each vessel is factory tested at 1,5 times max operating pressure;
- feed/concentrate connections ¾" BSPT M, in super duplex steel AISI 2507;
- permeate connections ½" BSPT M;
- straps and saddles included (n.2 pcs from 1 to 3 elements, n.3 pcs from 4 to 6 elements).

(* not available in stock – Minimum delivery 10-12 weeks.

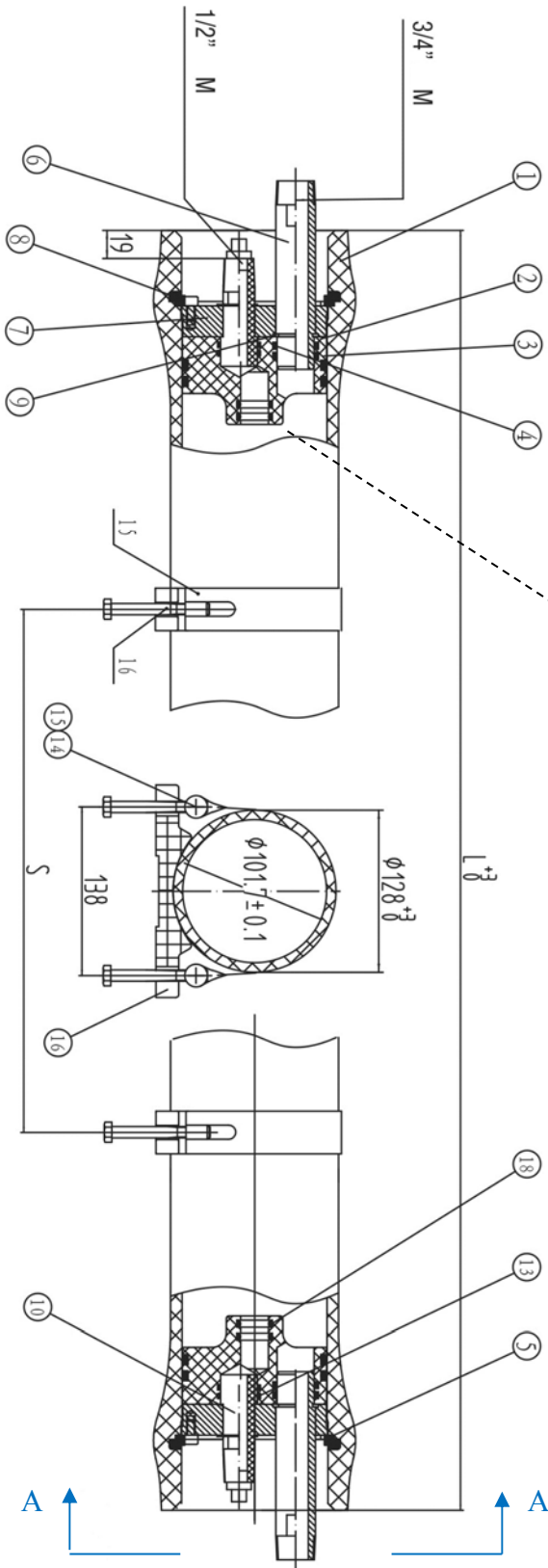
REF.	MODEL	ELEMENTS	L (mm)	S (mm)	PRICE EURO
H4E4H1	1200 E-4-1	1 x 40"	1244	600	794,76
H4E4H2	1200 E-4-2	2 x 40"	2260	1200	964,84
H4E4H3	1200 E-4-3	3 x 40"	3276	2200	1.153,61
H4E4H4 (*)	1200 E-4-4	4 x 40"	4372	1600x2	1.359,51
H4E4H5 (*)	1200 E-4-5	5 x 40"	5388	2300x2	1.565,44
H4E4H6 (*)	1200 E-4-6	6 x 40"	6404	2700x2	1.771,35

SPARE PARTS:



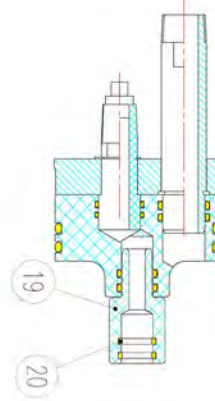
ITEM	REF.	DESCRIPTION	Q.TY	MATERIAL	REMARK	PRICE EURO
3	H4R107	Head Seal	4	EPDM	90x5,3	5,16
5	H4R045	Locking Kit (n.3 Segments)	2	AISI 316		24,33
11	H4R083	Plug	1	ABS		2,12
12	H4R205	Securing Screw	6	AISI 304	M6x20	1,05
13	H4R111	Permeate Port O-ring	4	EPDM	25x2,65	1,21
14 + 15	H4R005	Strap	2-3	AISI 304 - Rubber		17,85
16	H4R001	Saddle	2-3	Rubber		2,31
18	H2R101	Adapter Seal	4	EPDM	19x2,65	0,82
19 + 20	H4R601	Adapter	2 (**)	ABS		12,54
20	H2R101	Adapter Seal	4 (**)	EPDM	19x2,65	0,82
21	H4R707	Head Assembly end port	2			252,18

4" Membrane Vessels End Port Series 1200 E-4

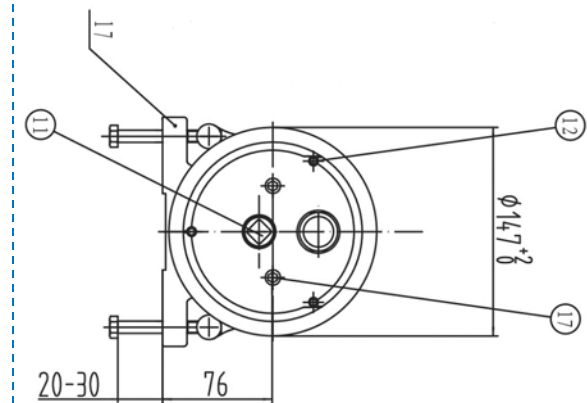


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(**) Used for 4 to 6 elements vessel only.



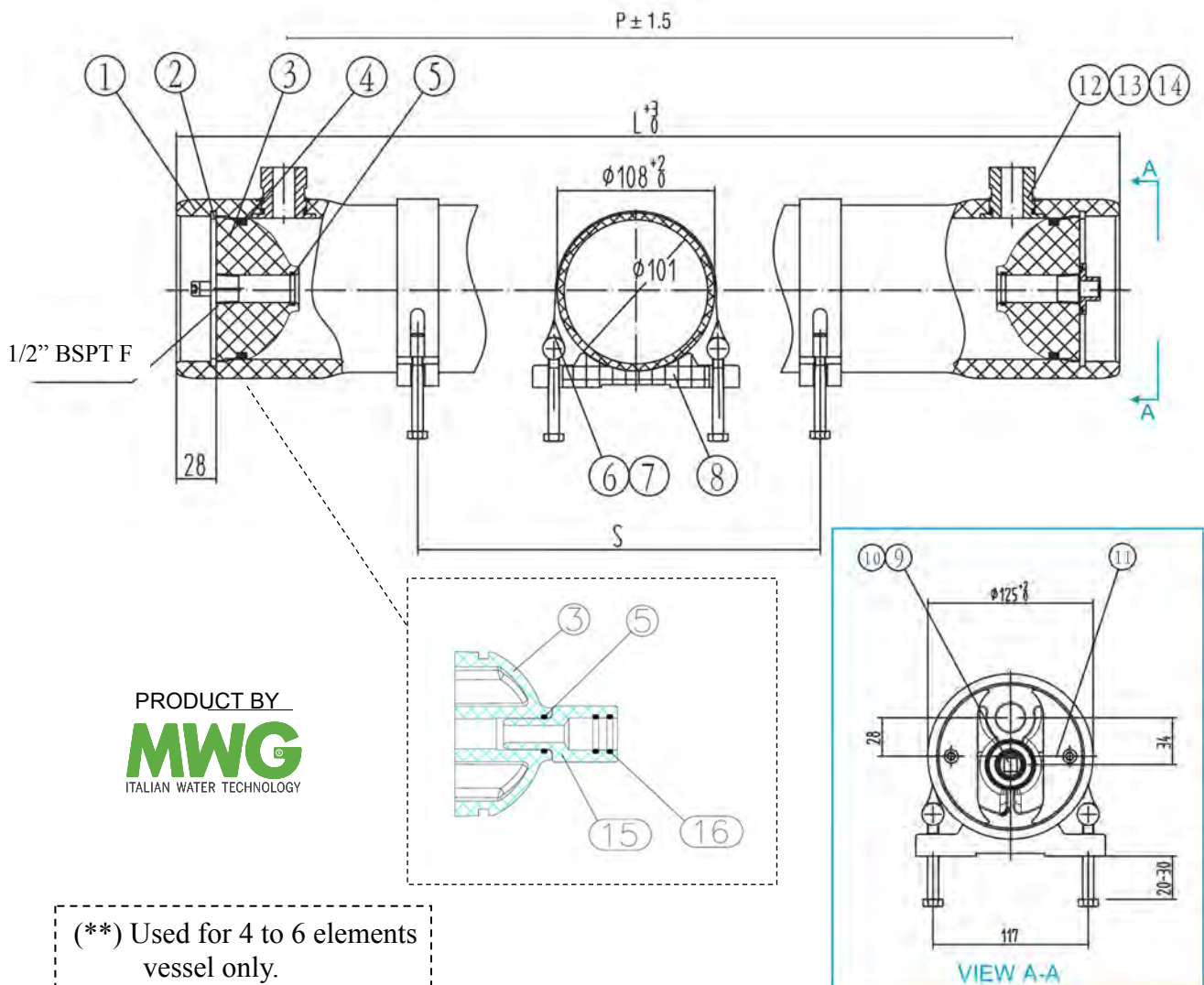
VIEW A-A



4" Membrane Vessels Side Port Series 300 S-4



- fiberglass reinforced plastic pressure vessels series 300 S-4, D.75" direct connection, white painted, UVA-ray proof material;
- max operating pressure 300 psi (21 bar);
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- built in accordance with ASME code section X;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- each vessel is factory tested at 1,5 times max operating pressure;
- feed/concentrate connections 1" Victaulic, 0° or 180° oriented;
- permeate connections 1/2" BSPT F;
- straps and saddles included (n.2 pcs from 1 to 3 elements, n.3 pcs from 4 to 6 elements).



4" Membrane Vessels Side Port Series 300 S-4



REF.	MODEL	ELEMENTS	L (mm)	P (mm)	S (mm)	ORIENT.	PRICE EURO
H410B1 (*)	300 S-4-1D5D-1	1 x 40"	1140	984	600	0°	310,22
H410B2 (*)	300 S-4-1D5D-2	2 x 40"	2156	2000	1200	0°	363,77
H410B3 (*)	300 S-4-1D5D-3	3 x 40"	3172	3016	2200	0°	430,46
H410B4 (*)	300 S-4-1D5D-4	4 x 40"	4268	4112	1600x2	0°	519,31
H410B5 (*)	300 S-4-1D5D-5	5 x 40"	5284	5128	2300x2	0°	649,13
H410B6 (*)	300 S-4-1D5D-6	6 x 40"	6300	6144	2700x2	0°	778,96
H412B1	300 S-4-1D7D-1	1 x 40"	1140	984	600	180°	310,22
H412B2	300 S-4-1D7D-2	2 x 40"	2156	2000	1200	180°	363,77
H412B3	300 S-4-1D7D-3	3 x 40"	3172	3016	2200	180°	430,46
H412B4 (*)	300 S-4-1D7D-4	4 x 40"	4268	4112	1600x2	180°	519,31
H412B5 (*)	300 S-4-1D7D-5	5 x 40"	5284	5128	2300x2	180°	649,13
H412B6 (*)	300 S-4-1D7D-6	6 x 40"	6300	6144	2700x2	180°	778,96

(*) not available in stock – Minimum delivery 10-12 weeks.

SPARE PARTS						
ITEM	REF.	DESCRIPTION	QUANTITY	MATERIAL	REMARK	PRICE EURO
1		Pressure Shell	1	Epoxy FRP	White	
2	H4R041	Seeger	4	AISI 304		5,31
3 + 5	H4R405	End Plate	2	ABS		23,72
4	H4R107	Head Seal	2	EPDM	90x5,3	5,16
5	H2R101	Adapter Seal	2	EPDM	19x2,65	0,82
6 + 7	H4R003	Strap	2 - 3	AISI 304 - Rubber		16,28
8	H4R001	Saddle	2 - 3	Rubber		2,31
9	H4R081	Plug	1	ABS		1,82
10	H4R101	O-ring of Plug	1	EPDM	23,6x3,55	1,41
11	H4R209	Seeger Screw	4	AISI 304	M6x14	1,05
15+16	H4R601	Adapter	2 (**)	ABS		12,54
16	H2R101	Adapter Seal	4 (**)	EPDM	19x2,65	0,82

(**) Used for 4 to 6 elements vessel only.

4" Membrane Vessels Side Port Series 600 S-4



- fiberglass reinforced plastic pressure vessels series 600 S-4, D.75" direct connection, white painted, UVA-ray proof material;
- max operating pressure 600 psi (41 bar);
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- built in accordance with ASME code section X;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- each vessel is factory tested at 1,5 times max operating pressure;
- feed/conc. connections 1" Victaulic, 0° or 180° oriented, in super duplex steel AISI 2507;
- permeate connections ½" BSPT M;
- straps and saddles included (n.2 pcs from 1 to 3 elements, n.3 pcs from 4 to 6 elements).

REF.	MODEL	ELEMENTS	L (mm)	P (mm)	S (mm)	ORIENT.	PRICE EURO
H410D1 (*)	600 S-4-1D5D-1	1 x 40"	1364	1036	600	0°	728,19
H410D2 (*)	600 S-4-1D5D-2	2 x 40"	2380	2052	1200	0°	882,01
H410D3 (*)	600 S-4-1D5D-3	3 x 40"	3396	3068	2200	0°	1.027,22
H410D4 (*)	600 S-4-1D5D-4	4 x 40"	4412	4084	1600x2	0°	1.205,93
H410D5 (*)	600 S-4-1D5D-5	5 x 40"	5428	5100	2300x2	0°	1.441,35
H410D6 (*)	600 S-4-1D5D-6	6 x 40"	6444	6116	2700x2	0°	1.599,85
H412D1	600 S-4-1D7D-1	1 x 40"	1364	1036	600	180°	728,19
H412D2	600 S-4-1D7D-2	2 x 40"	2380	2052	1200	180°	882,01
H412D3	600 S-4-1D7D-3	3 x 40"	3396	3068	2200	180°	1.027,22
H412D4 (*)	600 S-4-1D7D-4	4 x 40"	4412	4084	1600x2	180°	1.205,93
H412D5 (*)	600 S-4-1D7D-5	5 x 40"	5428	5100	2300x2	180°	1.441,35
H412D6 (*)	600 S-4-1D7D-6	6 x 40"	6444	6116	2700x2	180°	1.599,85

(*) not available in stock – Minimum delivery 10-12 weeks.

4" Membrane Vessels Side Port Series 1000 S-4

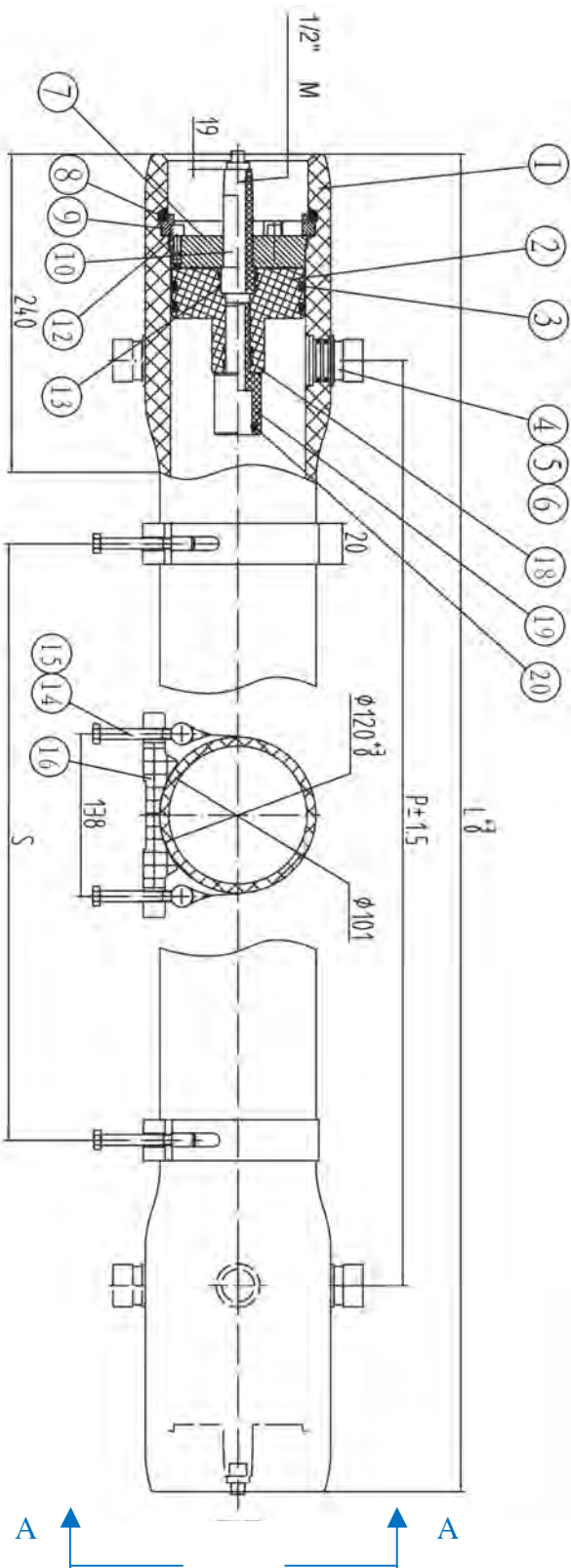


- fiberglass reinforced plastic pressure vessels series 1000 S-4, D.75" direct connection, white painted, UVA-ray proof material;
- max operating pressure 1000 psi (69 bar);
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- built in accordance with ASME code section X;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- each vessel is factory tested at 1,5 times max operating pressure;
- feed/conc. connections 1" Victaulic, 0° or 180° oriented, in super duplex steel AISI 2507;
- permeate connections ½" BSPT M;
- straps and saddles included (n.2 pcs from 1 to 3 elements, n.3 pcs from 4 to 6 elements).

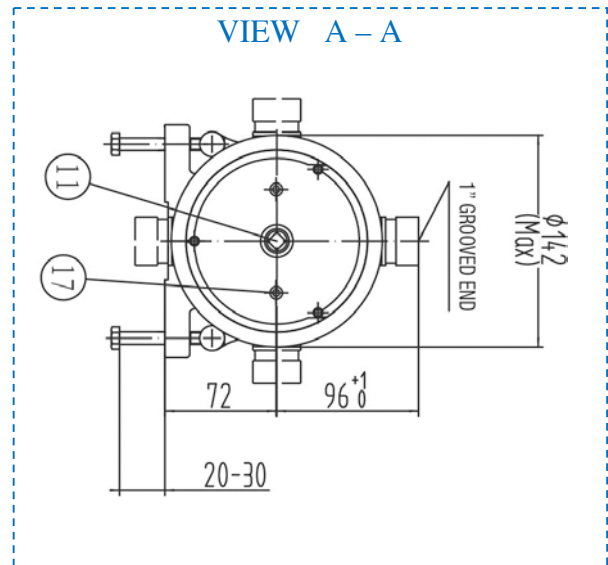
REF.	MODEL	ELEMENTS	L (mm)	P (mm)	S (mm)	ORIENT.	PRICE EURO
H410G1 (*)	1000 S-4-1D5D-1	1 x 40"	1364	1036	600	0°	792,27
H410G2 (*)	1000 S-4-1D5D-2	2 x 40"	2380	2052	1200	0°	957,33
H410G3 (*)	1000 S-4-1D5D-3	3 x 40"	3396	3068	2200	0°	1.138,90
H410G4 (*)	1000 S-4-1D5D-4	4 x 40"	4412	4084	1600x2	0°	1.336,96
H410G5 (*)	1000 S-4-1D5D-5	5 x 40"	5428	5100	2300x2	0°	1.535,04
H410G6 (*)	1000 S-4-1D5D-6	6 x 40"	6444	6116	2700x2	0°	1.733,11
H412G1	1000 S-4-1D7D-1	1 x 40"	1364	1036	600	180°	792,27
H412G2	1000 S-4-1D7D-2	2 x 40"	2380	2052	1200	180°	957,33
H412G3	1000 S-4-1D7D-3	3 x 40"	3396	3068	2200	180°	1.138,90
H412G4 (*)	1000 S-4-1D7D-4	4 x 40"	4412	4084	1600x2	180°	1.336,96
H412G5 (*)	1000 S-4-1D7D-5	5 x 40"	5428	5100	2300x2	180°	1.535,04
H412G6 (*)	1000 S-4-1D7D-6	6 x 40"	6444	6116	2700x2	180°	1.733,11

(*) not available in stock – Minimum delivery 10-12 weeks.

4" Membrane Vessels Side Port Series 1000 S-4



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4" Membrane Vessels Side Port Series 1200 S-4

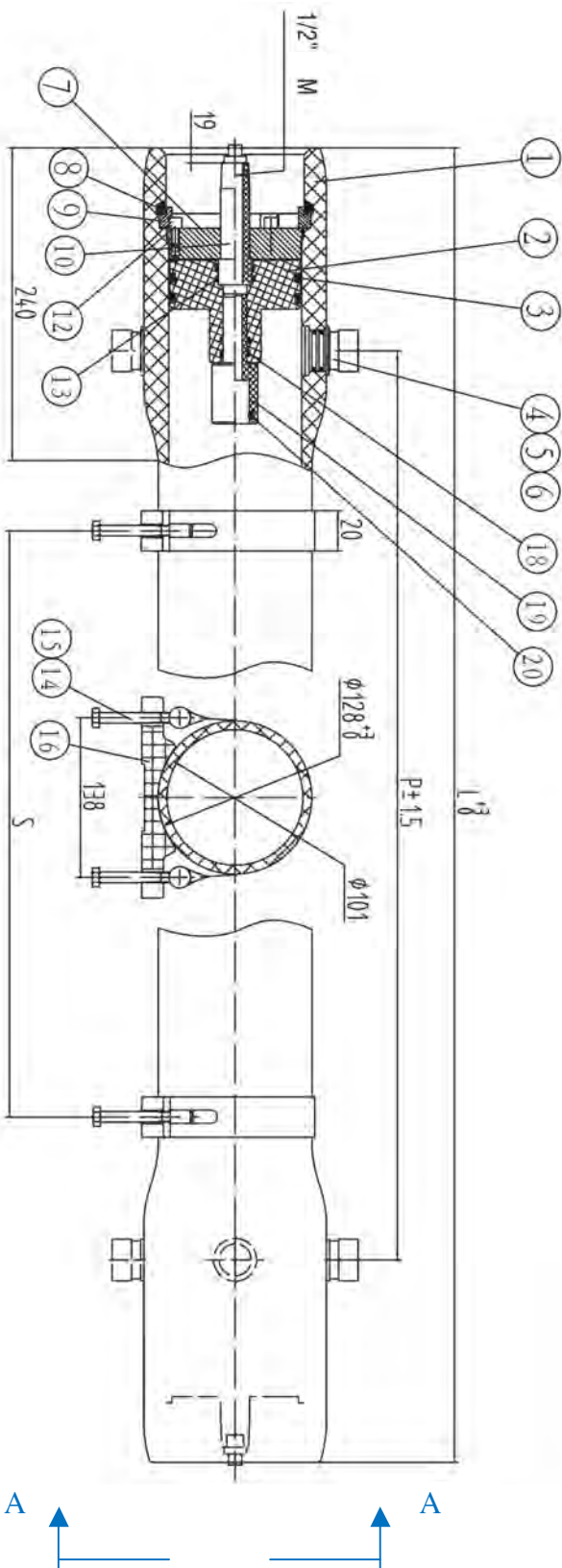


- fiberglass reinforced plastic pressure vessels series 1200 S-4, D.75" direct connection, white painted, UVA-ray proof material;
- max operating pressure 1200 psi (83 bar);
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- built in accordance with ASME code section X;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- each vessel is factory tested at 1,5 times max operating pressure;
- feed/conc. connections 1" Victaulic, 0° or 180° oriented, in super duplex steel AISI 2507;
- permeate connections ½" BSPT M;
- straps and saddles included (n.2 pcs from 1 to 3 elements, n.3 pcs from 4 to 6 elements).

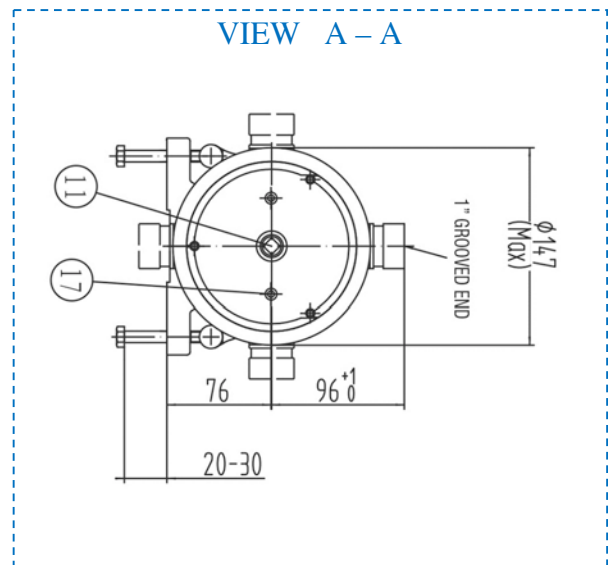
REF.	MODEL	ELEMENTS	L (mm)	P (mm)	S (mm)	ORIENT.	PRICE EURO
H410H1 (*)	1200 S-4-1D5D-1	1 x 40"	1364	1036	600	0°	863,52
H410H2 (*)	1200 S-4-1D5D-2	2 x 40"	2380	2052	1200	0°	1.033,48
H410H3 (*)	1200 S-4-1D5D-3	3 x 40"	3396	3068	2200	0°	1.222,24
H410H4 (*)	1200 S-4-1D5D-4	4 x 40"	4412	4084	1600x2	0°	1.428,14
H410H5 (*)	1200 S-4-1D5D-5	5 x 40"	5428	5100	2300x2	0°	1.634,07
H410H6 (*)	1200 S-4-1D5D-6	6 x 40"	6444	6116	2700x2	0°	1.839,99
H412H1	1200 S-4-1D7D-1	1 x 40"	1364	1036	600	180°	863,52
H412H2	1200 S-4-1D7D-2	2 x 40"	2380	2052	1200	180°	1.033,48
H412H3	1200 S-4-1D7D-3	3 x 40"	3396	3068	2200	180°	1.222,24
H412H4 (*)	1200 S-4-1D7D-4	4 x 40"	4412	4084	1600x2	180°	1.428,14
H412H5 (*)	1200 S-4-1D7D-5	5 x 40"	5428	5100	2300x2	180°	1.634,07
H412H6 (*)	1200 S-4-1D7D-6	6 x 40"	6444	6116	2700x2	180°	1.839,99

(*) not available in stock – Minimum delivery 10-12 weeks.

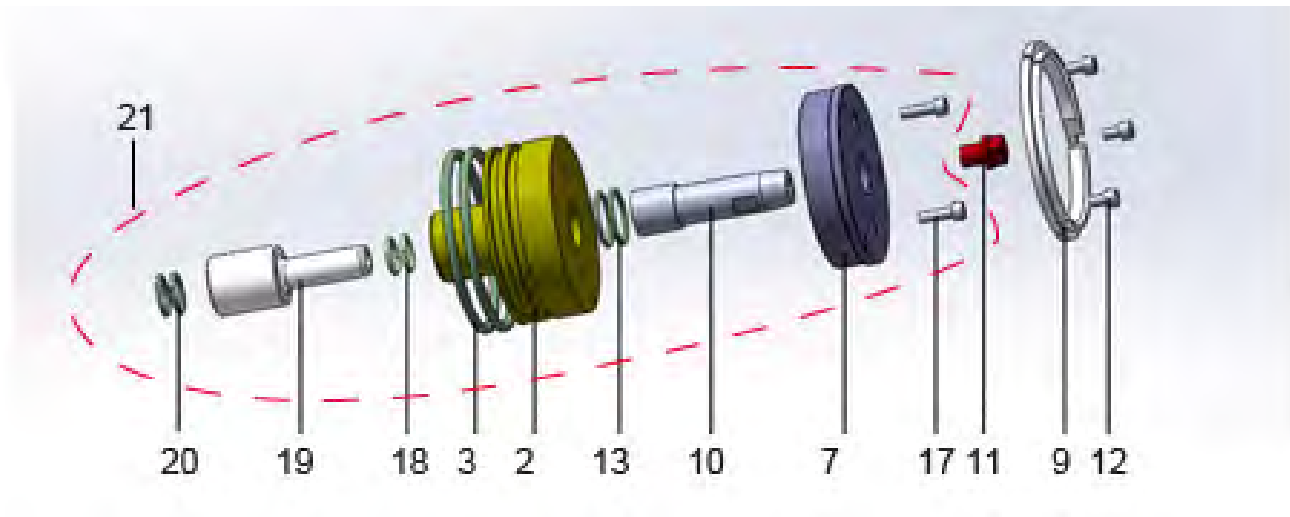
4" Membrane Vessels Side Port Series 1200 S-4



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4" Side Port 600-1000-1200 Psi Vessels Spare Parts



ITEM	REF.	DESCRIPTION	Q.TY	MATERIAL	NOTE	PRICE EURO
3	H4R107	Head Seal	4	EPDM	90x5,3	5,16
9	H4R045	Locking Kit (n.3 Segments)	2	AISI 316		24,33
11	H4R083	Plug	1	ABS		2,12
12	H4R205	Securing Screw	6	AISI 304	M6x20	1,05
13	H4R111	Permeate Port O-ring	4	EPDM	25x2,65	1,21
NOT SHOWN	H4R005	Strap	2-3	AISI 304 - Rubber		17,85
NOT SHOWN	H4R001	Saddle	2-3	Rubber		2,31
18	H4R113	Sealing Plate O-ring	4	EPDM	17x2,65	1,37
19 + 20	H4R603	Adapter	2	ABS		17,77
20	H2R101	Adapter Seal	4	EPDM	19x2,65	0,82
21	H4R717	Head Assembly side port	2			218,56

8" Membrane Vessels End Port Series 300 E-8

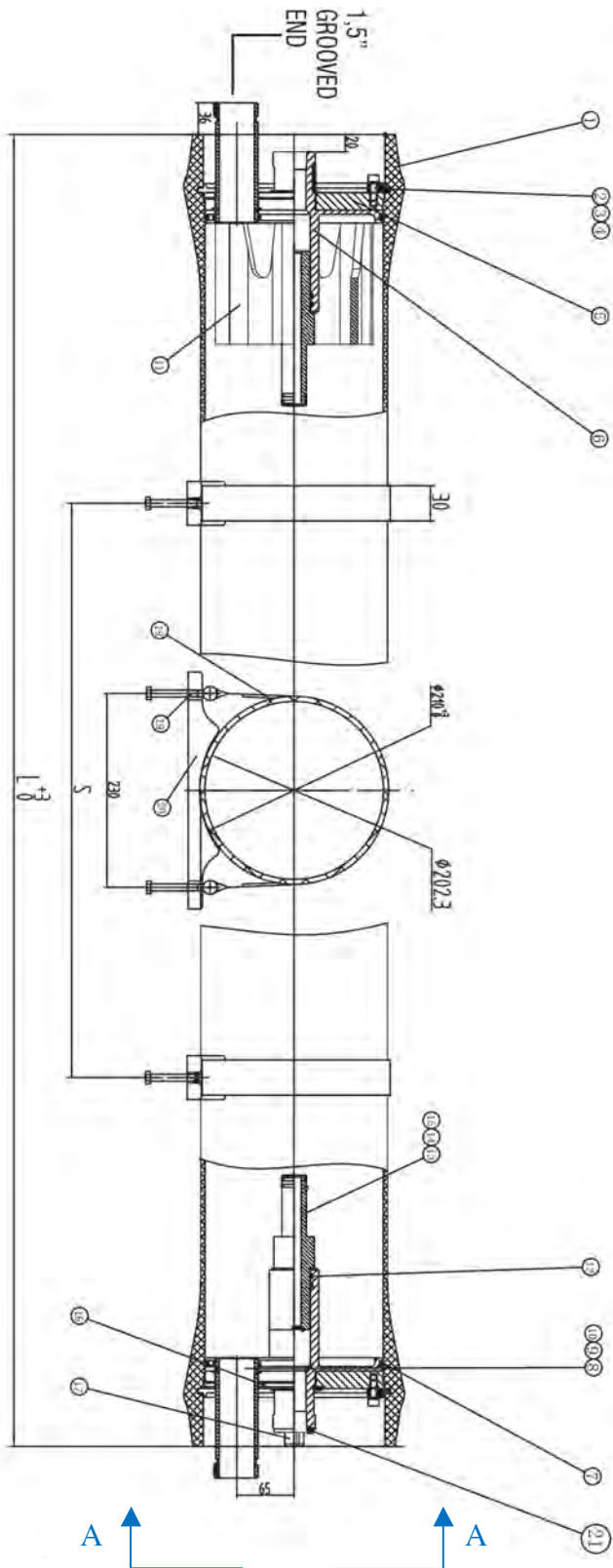


- fiberglass reinforced plastic pressure vessels series 300 E-8, white painted, UVA-ray proof material;
- max operating pressure 300 psi (21 bar);
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- built in accordance with ASME code section X;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- each vessel is factory tested at 1,5 times max operating pressure;
- feed/concentrate connections 1 ½" Victaulic in AISI 316;
- permeate connections 1" BSPT F;
- straps and saddles included (n.2 pcs from 1 to 3 elements, n.3 pcs from 4 to 7 elements);
- 1,125" membrane adapters included.

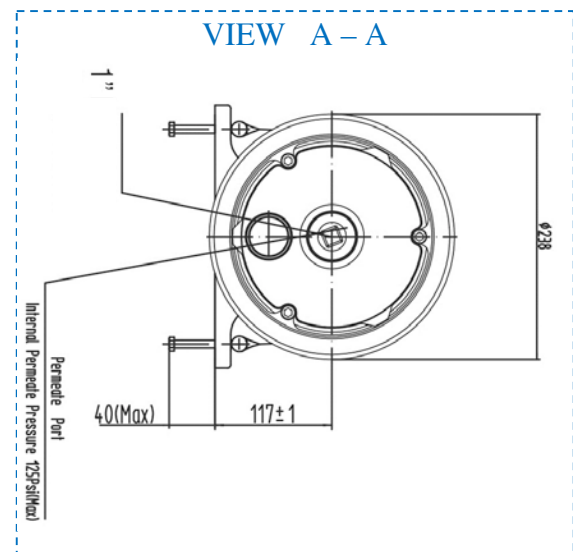
REF.	MODEL	ELEMENTS	L (mm)	S (mm)	PRICE EURO
H8E5B1	300 E – 8040 – 1	1 x 40"	1498	700	835,82
H8E5B2	300 E – 8040 – 2	2 x 40"	2514	1460	887,15
H8E5B3	300 E – 8040 – 3	3 x 40"	3530	2080	995,25
H8E5B4	300 E – 8040 – 4	4 x 40"	4546	1600x2	1.098,20
H8E5B5	300 E – 8040 – 5	5 x 40"	5562	2000x2	1.184,01
H8E5B6	300 E – 8040 – 6	6 x 40"	6578	2360x2	1.286,97
H8E5B7 (*)	300 E – 8040 – 7	7 x 40"	7594	2860x2	1.389,91

(*) not available in stock – Minimum delivery 10-12 weeks.

8" Membrane Vessels End Port Series 300 E-8



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8" Membrane Vessels End Port Series 450 E-8

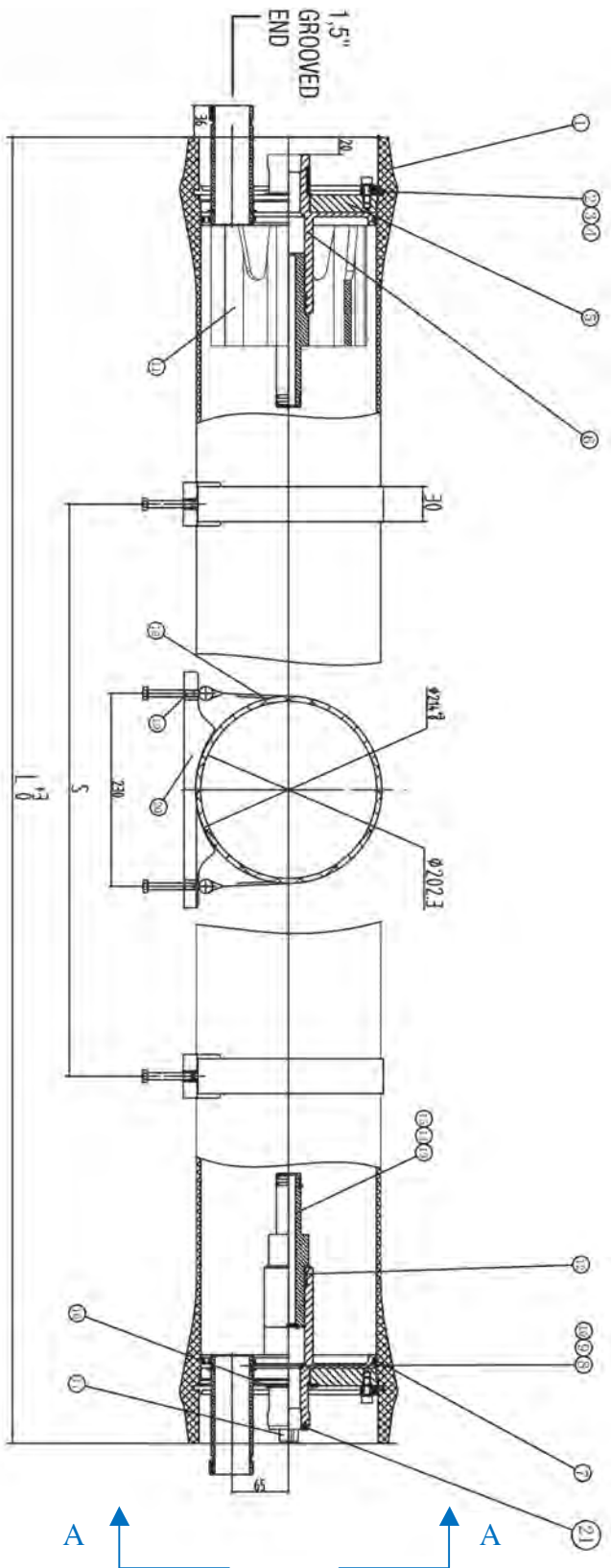


- fiberglass reinforced plastic pressure vessels series 450 E-8, white painted, UVA-ray proof material;
- max operating pressure 450 psi (31 bar);
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- built in accordance with ASME code section X;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- each vessel is factory tested at 1,5 times max operating pressure;
- feed/concentrate connections 1 ½" Victaulic in AISI 316;
- permeate connections 1" BSPT F;
- straps and saddles included (n.2 pcs from 1 to 3 elements, n.3 pcs from 4 to 7 elements);
- 1,125" membrane adapters included.

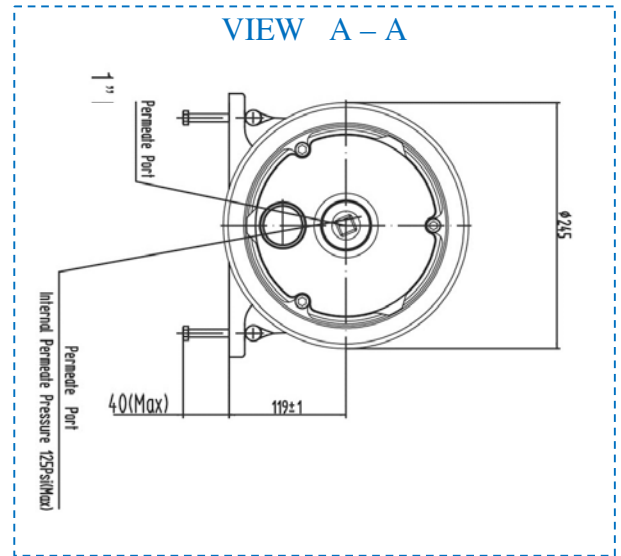
REF.	MODEL	ELEMENTS	L (mm)	S (mm)	PRICE EURO
H8E5C1	450 E – 8040 – 1	1 x 40"	1498	700	999,37
H8E5C2	450 E – 8040 – 2	2 x 40"	2514	1460	1.071,72
H8E5C3	450 E – 8040 – 3	3 x 40"	3530	2080	1.143,06
H8E5C4 (*)	450 E – 8040 – 4	4 x 40"	4546	1600x2	1.239,35
H8E5C5 (*)	450 E – 8040 – 5	5 x 40"	5562	2000x2	1.378,83
H8E5C6 (*)	450 E – 8040 – 6	6 x 40"	6578	2360x2	1.458,56
H8E5C7 (*)	450 E – 8040 – 7	7 x 40"	7594	2860x2	1.561,51

(*) not available in stock – Minimum delivery 10-12 weeks.

8" Membrane Vessels End Port Series 450 E-8



PRODUCT BY
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8" Membrane Vessels End Port Series 600 E-8



- fiberglass reinforced plastic pressure vessels series 600 E-8, white painted, UVA-ray proof material;
- max operating pressure 600 psi (41 bar);
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- built in accordance with ASME code section X;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- each vessel is factory tested at 1,5 times max operating pressure;
- feed/concentrate connections 1 ½" Victaulic in super duplex steel AISI 2507;
- permeate connections 1" BSPT F;
- straps and saddles included (n.2 pcs from 1 to 3 elements, n.3 pcs from 4 to 7 elements);
- 1,125" membrane adapters included.

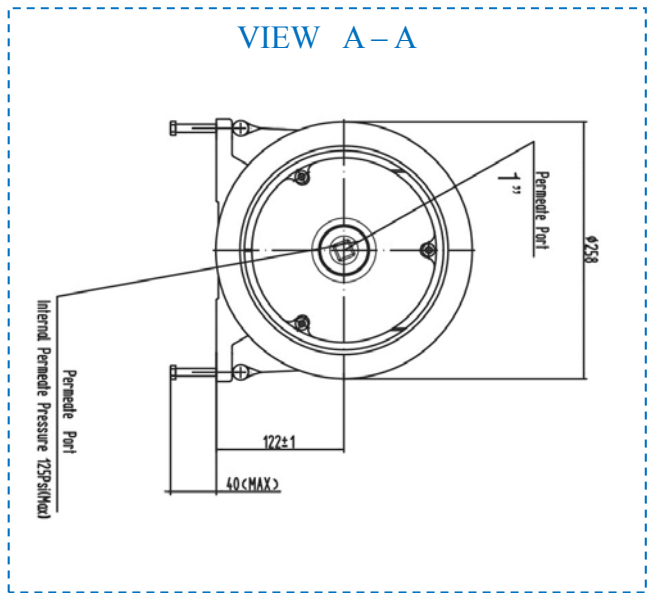
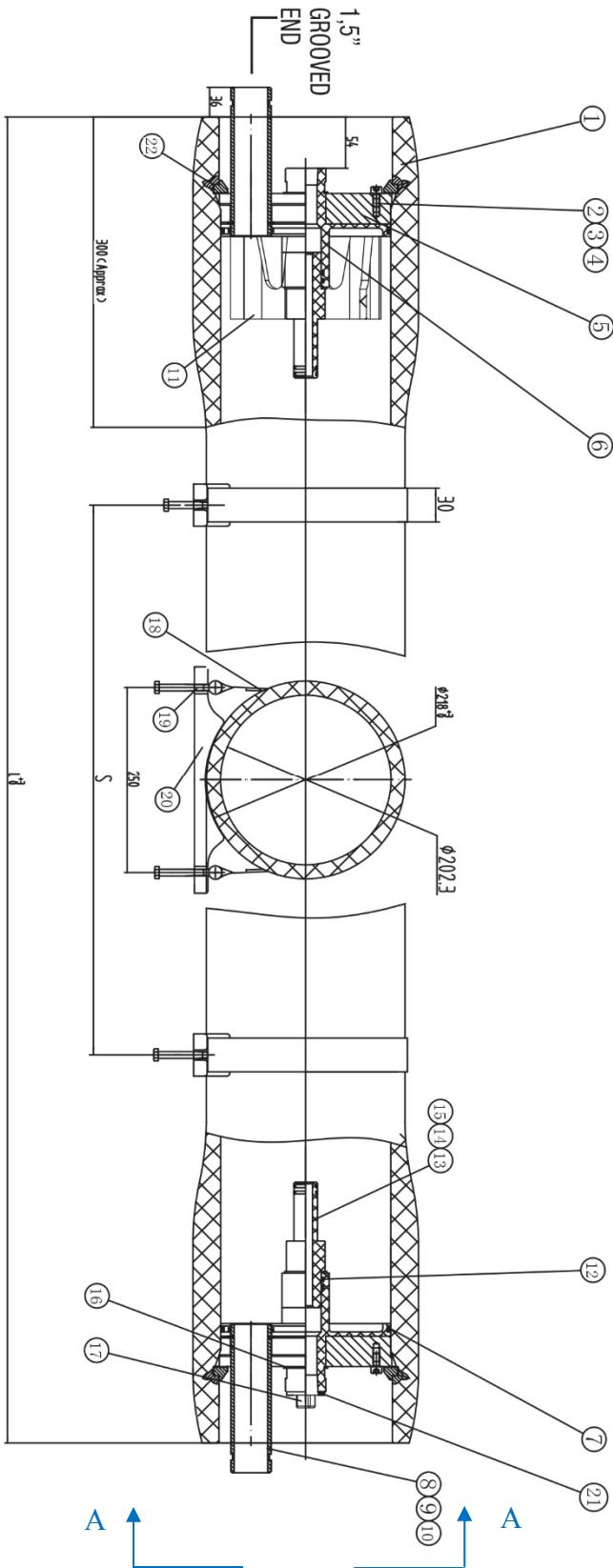
REF.	MODEL	ELEMENTS	L (mm)	S (mm)	PRICE EURO
H8E5D1	600 E – 8040 – 1	1 x 40"	1514	700	1.492,87
H8E5D2	600 E – 8040 – 2	2 x 40"	2530	1460	1.630,16
H8E5D3 (*)	600 E – 8040 – 3	3 x 40"	3546	2080	1.767,43
H8E5D4 (*)	600 E – 8040 – 4	4 x 40"	4562	1600x2	1.921,86
H8E5D5 (*)	600 E – 8040 – 5	5 x 40"	5578	2000x2	2.076,31
H8E5D6 (*)	600 E – 8040 – 6	6 x 40"	6594	2360x2	2.230,75
H8E5D7 (*)	600 E – 8040 – 7	7 x 40"	7610	2860x2	2.402,35

(*) not available in stock – Minimum delivery 10-12 weeks.

8" Membrane Vessels End Port Series 600 E-8



PRODUCT BY
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8" Membrane Vessels End Port Series 1000 E-8



- fiberglass reinforced plastic pressure vessels series 1000 E-8, white painted, UVA-ray proof material;
- max operating pressure 1000 psi (69 bar);
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- built in accordance with ASME code section X;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- each vessel is factory tested at 1,5 times max operating pressure;
- feed/concentrate connections 1 ½" Victaulic in super duplex steel AISI 2507;
- permeate connections 1" BSPT F;
- straps and saddles included (n.2 pcs from 1 to 3 elements, n.3 pcs from 4 to 7 elements);
- 1,125" membrane adapters included.

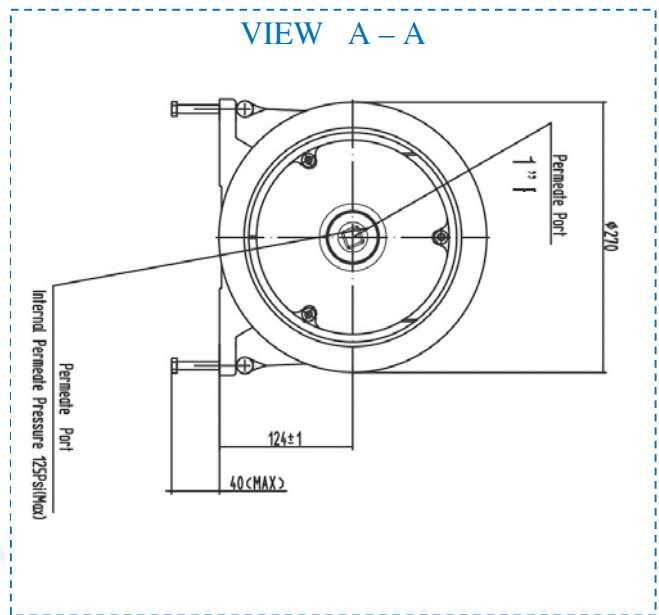
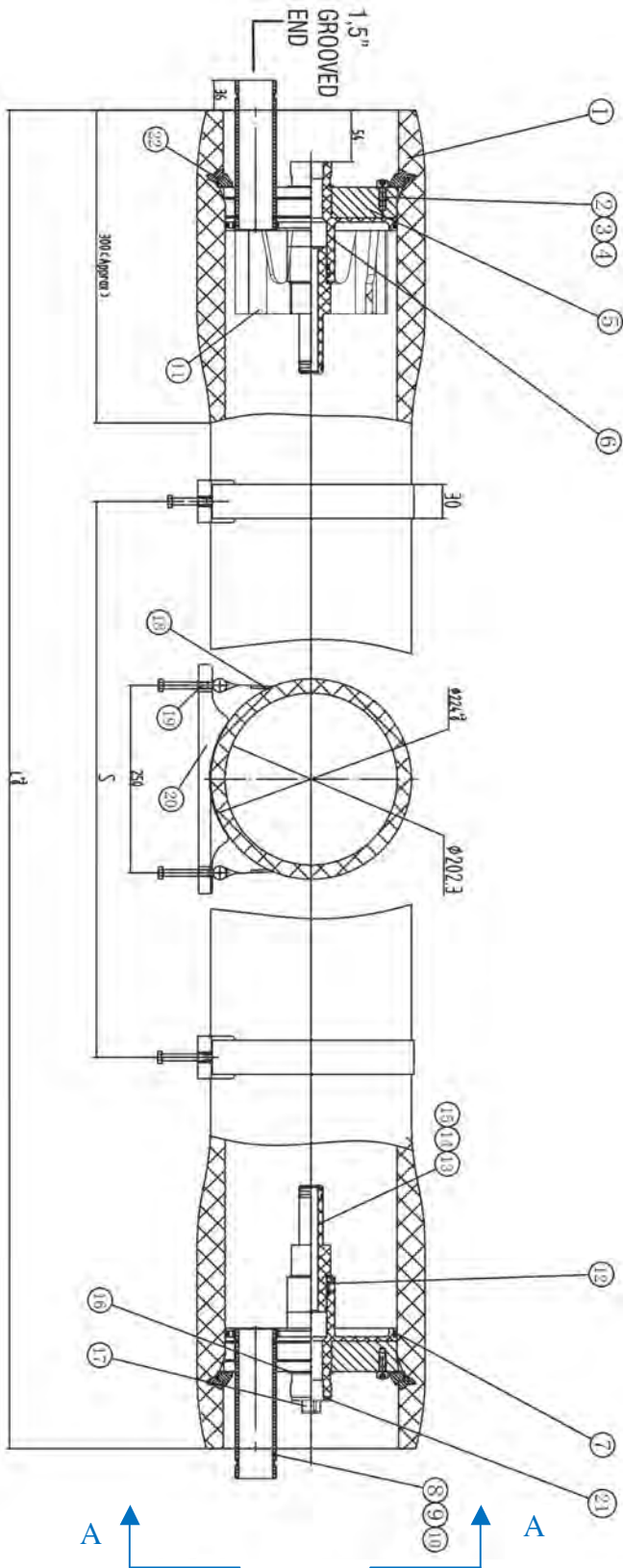
REF.	MODEL	ELEMENTS	L (mm)	S (mm)	PRICE EURO
H8E5G1	1000 E – 8040 – 1	1 x 40"	1514	700	1.681,63
H8E5G2	1000 E – 8040 – 2	2 x 40"	2530	1460	1.853,22
H8E5G3	1000 E – 8040 – 3	3 x 40"	3546	2080	2.024,84
H8E5G4 (*)	1000 E – 8040 – 4	4 x 40"	4562	1600x2	2.230,97
H8E5G5 (*)	1000 E – 8040 – 5	5 x 40"	5578	2000x2	2.453,82
H8E5G6 (*)	1000 E – 8040 – 6	6 x 40"	6594	2360x2	2.676,89
H8E5G7 (*)	1000 E – 8040 – 7	7 x 40"	7610	2860x2	2.899,98

(*) not available in stock – Minimum delivery 10-12 weeks.

8" Membrane Vessels End Port Series 1000 E-8



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8" Membrane Vessels End Port Series 1200 E-8

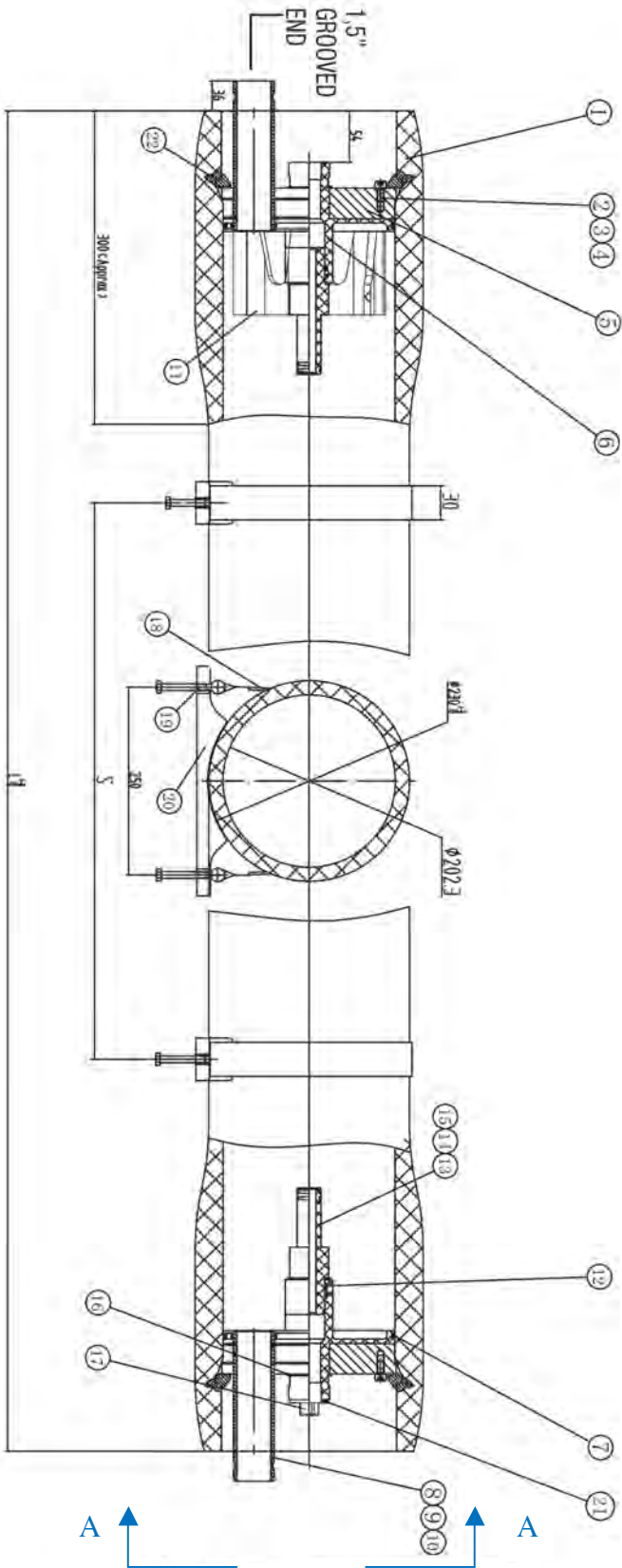


- fiberglass reinforced plastic pressure vessels series 1000 E-8, white painted, UVA-ray proof material;
- max operating pressure 1200 psi (83 bar);
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- built in accordance with ASME code section X;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- each vessel is factory tested at 1,5 times max operating pressure;
- feed/concentrate connections 1 ½" Victaulic in super duplex steel AISI 2507;
- permeate connections 1" BSPT F;
- straps and saddles included (n.2 pcs from 1 to 3 elements, n.3 pcs from 4 to 7 elements);
- 1,125" membrane adapters included.

REF.	MODEL	ELEMENTS	L (mm)	S (mm)	PRICE EURO
H8E5H1	1200 E – 8040 – 1	1 x 40"	1514	700	1.769,33
H8E5H2	1200 E – 8040 – 2	2 x 40"	2530	1460	1.944,19
H8E5H3	1200 E – 8040 – 3	3 x 40"	3546	2080	2.119,07
H8E5H4 (*)	1200 E – 8040 – 4	4 x 40"	4562	1600x2	2.355,25
H8E5H5 (*)	1200 E – 8040 – 5	5 x 40"	5578	2000x2	2.580,12
H8E5H6 (*)	1200 E – 8040 – 6	6 x 40"	6594	2360x2	2.809,55
H8E5H7 (*)	1200 E – 8040 – 7	7 x 40"	7610	2860x2	3.010,88

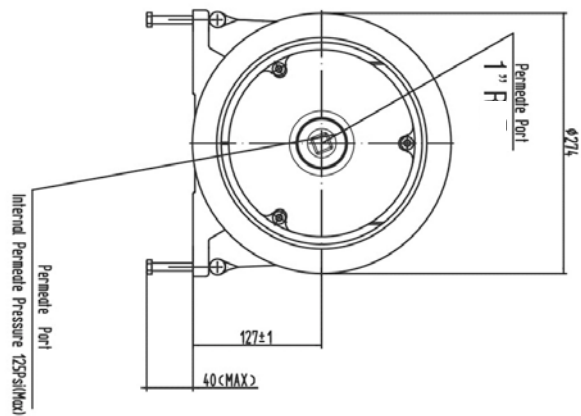
(*) not available in stock – Minimum delivery 10-12 weeks.

8" Membrane Vessels End Port Series 1200 E-8

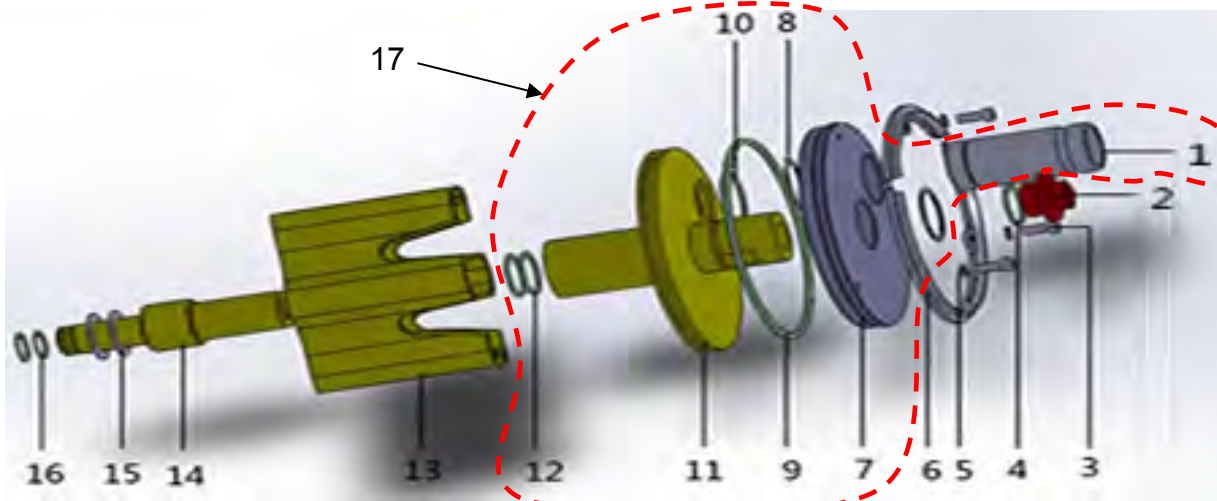


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VIEW A - A

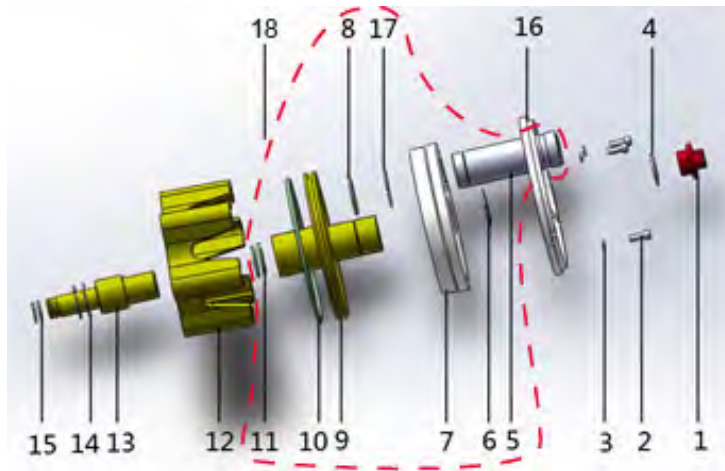


8" End Port 300-450 Psi Vessels Spare Parts



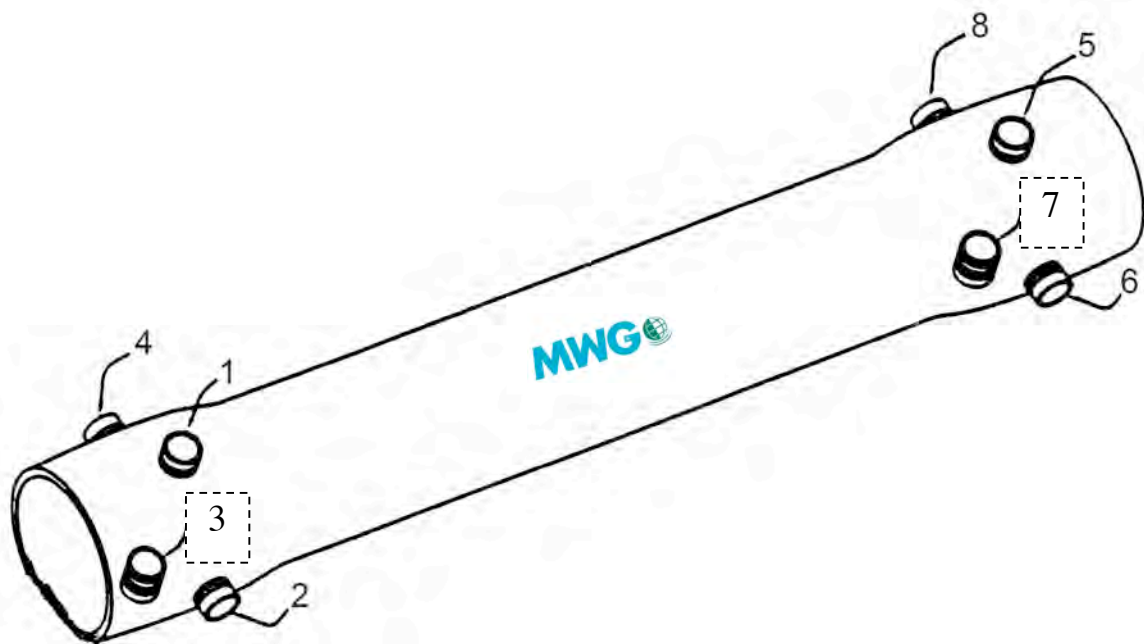
ITEM	REF.	DESCRIPTION	MATERIAL	PRICE EURO
1		FEED CONCENTRATE PORT 1,5" VICTAULIC	AISI 316	
2	H8R081	PLUG	ABS	2,84
3	H8R203	LOCKING SEGMENT SCREW	AISI 304	6,24
4	H8R111	PWT SEAL	EPDM	1,28
5	H8R031	SPRING PAD	AISI 304	0,34
6	H8R041	LOCKING SEGMENT	AISI 304	14,30
7		BEARING PLATE	ALUMINUM	
8		RETAINING RING	AISI 304	
9	H8R107	HEAD SEAL	EPDM	11,45
10	H8R109	FEED CONCENTRATE PORT SEAL	EPDM	3,20
11		SEALING PLATE (PERMEATE PORT)	ABS	
12	H8R111	PWT SEAL	EPDM	1,28
13	H8R061	THRUST CONE	ABS	49,21
14 + 16	H8R601	1,125" ADAPTER	ABS	16,25
15	H8R651	1,125" ADAPTER PAD	ABS	14,76
16	H8R113	1,125" ADAPTER O-RING	EPDM	3,20
17	H8R701	HEAD ASSEMBLY END PORT 300 PSI		383,23
	H8R703	HEAD ASSEMBLY END PORT 450 PSI		515,42
NOT SHOWN	H8R001	SADDLE	RUBBER	7,35
NOT SHOWN	H8R005	STRAP (L = 520 mm)	AISI 304 - RUBBER	20,84

8" End Port 600-1000-1200 Psi Vessels Spare Parts



ITEM	REF.	DESCRIPTION	MATERIAL	PRICE EURO
1	H8R081	PLUG	ABS	2,84
2	H8R203	LOCKING SEGMENT SCREW	AISI 304	6,24
3	H8R031	SPRING PAD	AISI 304	0,34
4	H8R111	PWT SEAL	EPDM	1,28
5		FEED CONC. PORT 1,5" VICTAULIC	SUPER DUPLEX AISI 2507	
8	H8R109	FEED CONCENTRATE PORT SEAL	EPDM	3,20
9		SEALING PLATE (PERMEATE PORT)	ABS	
10	FBEFR11	HEAD SEAL	EPDM	11,45
11	H8R111	PWT SEAL	EPDM	1,28
12	H8R063	THRUST CONE	ABS	52,82
13 + 15	H8R603	1,125" ADAPTER	ABS	21,00
	H8R613	1,5" ADAPTER (OPTIONAL)	ABS	24,72
14	H8R651	1,125" ADAPTER PAD	ABS	14,76
	H8R653	1,5" ADAPTER PAD (OPTIONAL)	ABS	1,64
15	H8R113	1,125" ADAPTER O-RING	EPDM	3,20
	H8R115	1,5" ADAPTER O-RING (OPTIONAL)	EPDM	1,43
16	H8R045	LOCKING KIT (N.3 SEGMENTS)	AISI 304	74,43
18	H8R705	HEAD ASSEMBLY END PORT 600 PSI		587,08
	H8R707	HEAD ASSEMBLY END PORT 1000 PSI		676,06
	H8R709	HEAD ASSEMBLY END PORT 1200 PSI		750,47
NOT SHOWN	H8R001	SADDLE	RUBBER	7,35
NOT SHOWN	H8R009	STRAP (L = 580 mm)	AISI 304 - RUBBER	23,60

8" Side Port Vessels Feed/Concentrate Port Options



Each vessel 8" side port can have maximum 3 ports per each end, located in 4 different positions 90° among them. The drawing shows the numbers of different positions.

Each port can have three different dimensions:

- D = 1 ½" (standard connection)
- E = 2"
- F = 2 ½"
- G = 3"
- I = 4"

Note: a 2 ½" port is not allowed at 90° from any other.

To determine the required configuration, identify the ports starting from N°1 with relevant dimension, complete this side and identify the opposite end.

Example: vessel with ports 1 & 5 connection 1½", ports 2 & 6 connection 2".

The configuration is: 1D 5D 2E 6E

8" Side Port Vessels Feed/Concentrate Port Options



Options for MWG 8" side port vessels

Vessel 8"		Add one extra port			
		1,5"	2"	2,5"	3"
PRESSURE (psi)	MATERIAL	Price EURO	Price EURO	Price EURO	Price EURO
300	AISI 316	30,27	42,04	57,17	73,98
450	AISI 316	36,99	50,44	65,57	80,71
600	Super Duplex 2507	50,44	67,26	84,06	104,23
1000	Super Duplex 2507	57,33	77,34	97,52	127,78
1200	Super Duplex 2507	64,05	84,06	104,23	134,50

Vessel 8"		UPGRADE from 1,5" port to ...		
		2"	2,5"	3"
PRESSURE (psi)	MATERIAL	Price EURO	Price EURO	Price EURO
300	AISI 316	20,59	39,72	51,49
450	AISI 316	23,54	42,66	58,84
600	Super Duplex 2507	32,37	55,90	82,39
1000	Super Duplex 2507	35,31	61,79	88,26
1200	Super Duplex 2507	38,25	67,67	100,03

8" Membrane Vessels Side Port Series 300 S-8



- fiberglass reinforced plastic pressure vessels series 300 S-8, white painted, UVA-ray proof material;
- max operating pressure 300 psi (21 bar);
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- built in accordance with ASME code section X;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- each vessel is factory tested at 1,5 times max operating pressure;
- feed/concentrate connections 1 ½" or 2" Victaulic (optional 2 ½" or 3");
- permeate connections 1" BSPT F;
- straps and saddles included (n.2 pcs from 1 to 3 elements, n.3 pcs from 4 to 7 elements);
- 1,125" membrane adapters included;
- version from 2 to 7 ports (see list of options).

REF. CONNECTIONS 1 ½" ORIENT. 0°	REF. CONNECTIONS 1 ½" ORIENT. 180°	MODEL	ELEMENTS	L (mm)	P (mm)	S (mm)	PRICE EURO
H815B1 (*)	H817B1 (*)	300S-8-1	1 x 40"	1494	1194	700	932,42
H815B2 (*)	H817B2 (*)	300S-8-2	2 x 40"	2510	2210	1460	1.003,62
H815B3 (*)	H817B3 (*)	300S-8-3	3 x 40"	3526	3226	2080	1.073,11
H815B4 (*)	H817B4 (*)	300S-8-4	4 x 40"	4542	4242	1600x2	1.147,87
H815B5 (*)	H817B5 (*)	300S-8-5	5 x 40"	5558	5258	2000x2	1.217,55
H815B6 (*)	H817B6 (*)	300S-8-6	6 x 40"	6574	6274	2360x2	1.291,61
H815B7 (*)	H817B7 (*)	300S-8-7	7 x 40"	7590	7290	2860x2	1.370,40

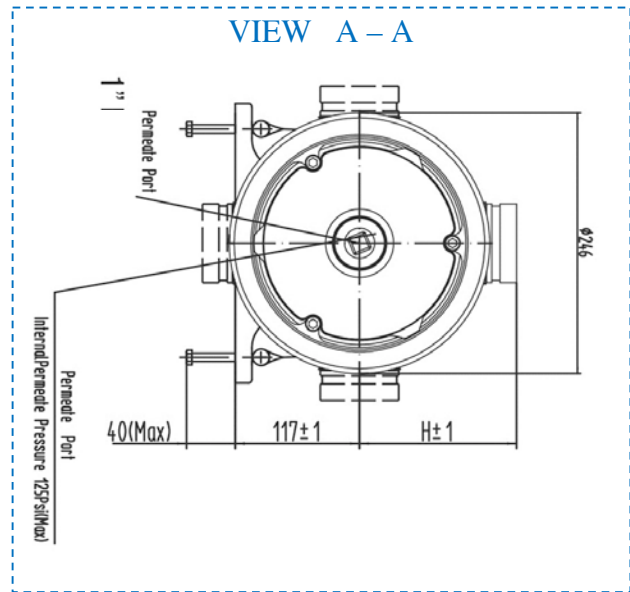
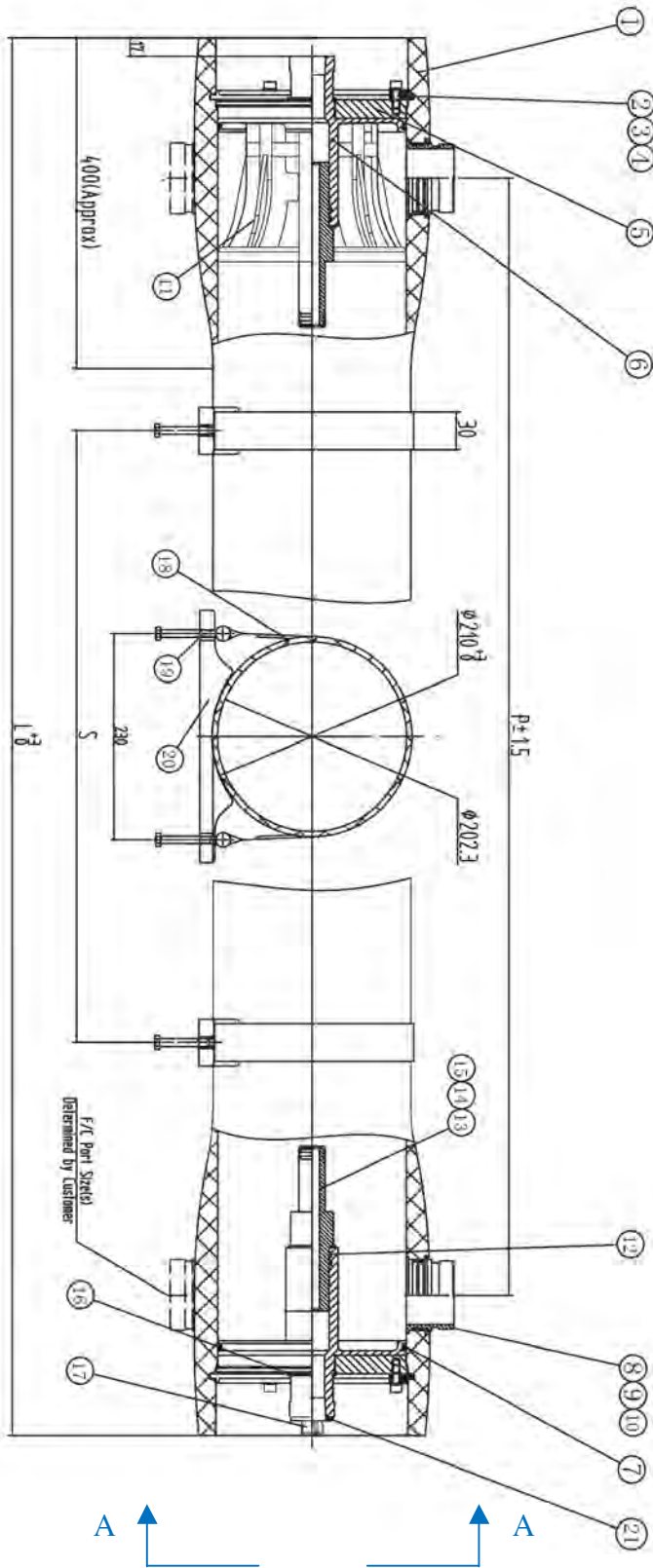
REF. CONNECTIONS 2" ORIENT. 0°	REF. CONNECTIONS 2" ORIENT. 180°	MODEL	ELEMENTS	L (mm)	P (mm)	S (mm)	PRICE EURO
H820B1 (*)	H822B1	300S-8-1	1 x 40"	1494	1194	700	973,60
H820B2 (*)	H822B2	300S-8-2	2 x 40"	2510	2210	1460	1.044,81
H820B3 (*)	H822B3	300S-8-3	3 x 40"	3526	3226	2080	1.114,30
H820B4	H822B4 (*)	300S-8-4	4 x 40"	4542	4242	1600x2	1.189,06
H820B5	H822B5 (*)	300S-8-5	5 x 40"	5558	5258	2000x2	1.258,74
H820B6	H822B6 (*)	300S-8-6	6 x 40"	6574	6274	2360x2	1.332,80

(*) not available in stock – Minimum delivery 10-12 weeks.

8" Membrane Vessels Side Port Series 300 S-8



PRODUCT BY
MWG
 ITALIAN WATER TECHNOLOGY



8" Membrane Vessels Side Port Series 450 S-8



- fiberglass reinforced plastic pressure vessels series 450 S-8, white painted, UVA-ray proof material;
- max operating pressure 450 psi (31 bar);
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- built in accordance with ASME code section X;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- each vessel is factory tested at 1,5 times max operating pressure;
- feed/concentrate connections 1 ½" Victaulic (optional 2", 2 ½" or 3");
- permeate connections 1" BSPT F;
- straps and saddles included (n.2 pcs from 1 to 3 elements, n.3 pcs from 4 to 7 elements);
- 1,125" membrane adapters included;
- version from 2 to 7 ports (see list of options).

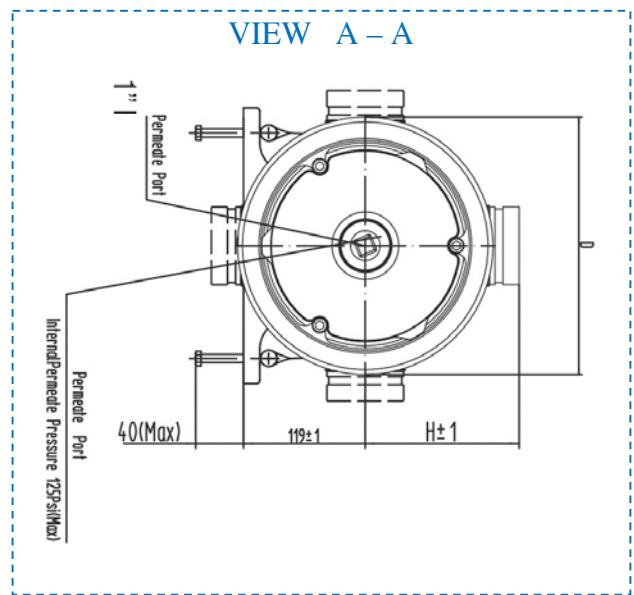
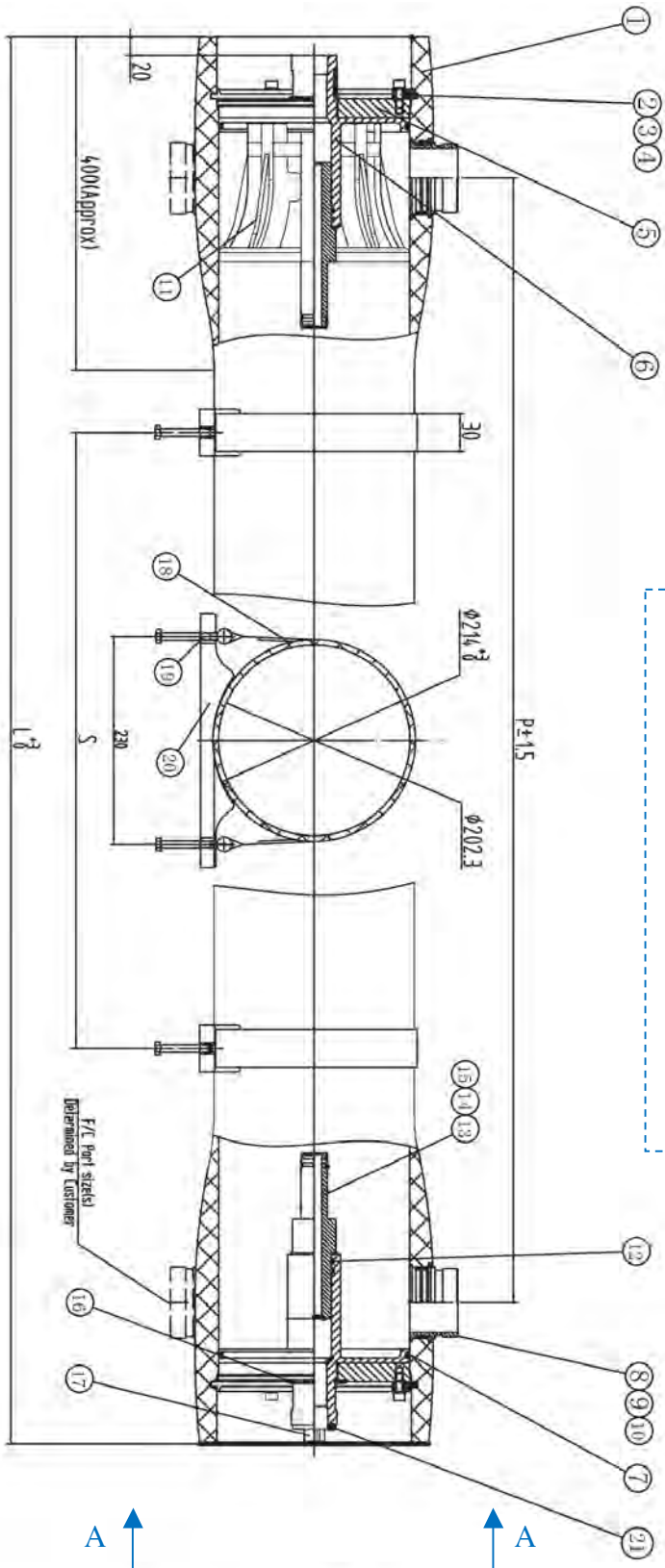
REF. ORIENT. 0°	REF. ORIENT. 180°	MODEL	ELEMENTS	L (mm)	P (mm)	S (mm)	PRICE EURO
H815C1 (*)	H817C1 (*)	450S-8-1	1 x 40"	1498	1194	700	1.151,61
H815C2 (*)	H817C2 (*)	450S-8-2	2 x 40"	2514	2210	1460	1.236,21
H815C3 (*)	H817C3 (*)	450S-8-3	3 x 40"	3530	3226	2080	1.316,77
H815C4 (*)	H817C4 (*)	450S-8-4	4 x 40"	4546	4242	1600x2	1.401,38
H815C5 (*)	H817C5 (*)	450S-8-5	5 x 40"	5562	5258	2000x2	1.493,39
H815C6 (*)	H817C6 (*)	450S-8-6	6 x 40"	6578	6274	2360x2	1.584,75
H815C7 (*)	H817C7 (*)	450S-8-7	7 x 40"	7594	7290	2860x2	1.676,29

(*) not available in stock – Minimum delivery 10-12 weeks.

8" Membrane Vessels Side Port Series 450 S-8



PRODUCT BY
MWG
 ITALIAN WATER TECHNOLOGY



8" Membrane Vessels Side Port Series 600 S-8



- fiberglass reinforced plastic pressure vessels series 600 S-8, white painted, UVA-ray proof material;
- max operating pressure 600 psi (41 bar);
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- built in accordance with ASME code section X;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- each vessel is factory tested at 1,5 times max operating pressure;
- feed/concentrate connections 1 ½" Victaulic (optional 2", 2 ½" or 3") in super duplex steel AISI 2507;
- permeate connections 1" BSPT F;
- straps and saddles included (n.2 pcs from 1 to 3 elements, n.3 pcs from 4 to 7 elements);
- 1,125" membrane adapters included;
- version from 2 to 7 ports (see list of options).

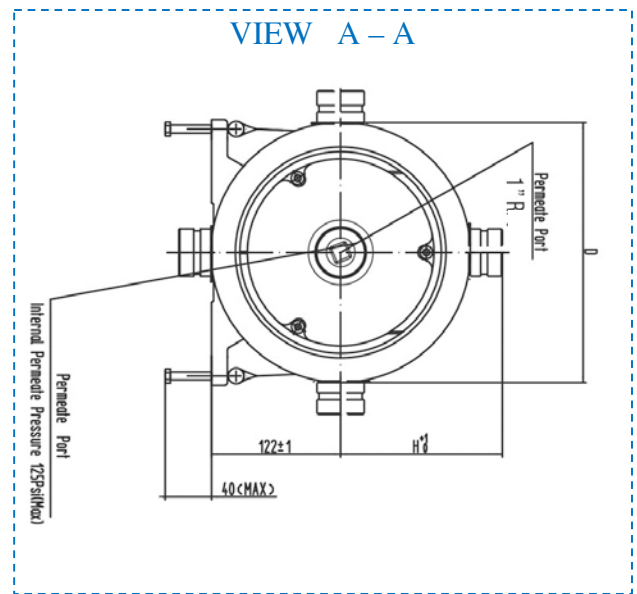
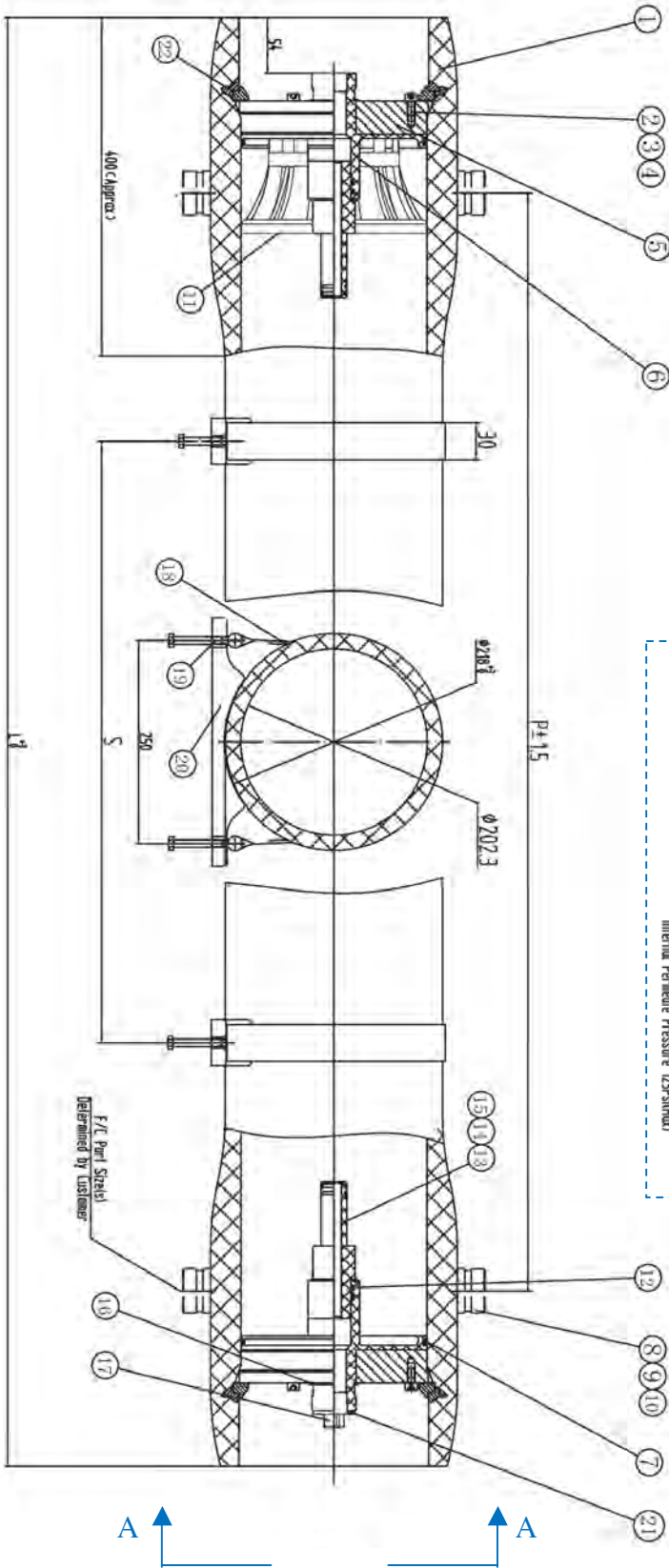
REF. ORIENT. 0°	REF. ORIENT. 180°	MODEL	ELEMENTS	L (mm)	P (mm)	S (mm)	PRICE EURO
H815D1 (*)	H817D1 (*)	600S-8-1	1 x 40"	1514	1143	700	1.424,24
H815D2 (*)	H817D2 (*)	600S-8-2	2 x 40"	2530	2159	1460	1.561,51
H815D3 (*)	H817D3 (*)	600S-8-3	3 x 40"	3546	3175	2080	1.698,80
H815D4 (*)	H817D4 (*)	600S-8-4	4 x 40"	4562	4191	1600x2	1.853,22
H815D5 (*)	H817D5 (*)	600S-8-5	5 x 40"	5578	5207	2000x2	2.007,67
H815D6 (*)	H817D6 (*)	600S-8-6	6 x 40"	6594	6223	2360x2	2.162,10
H815D7 (*)	H817D7 (*)	600S-8-7	7 x 40"	7610	7239	2860x2	2.333,70

(*) not available in stock – Minimum delivery 10-12 weeks.

8" Membrane Vessels Side Port Series 600 S-8



PRODUCT BY
MWG
 ITALIAN WATER TECHNOLOGY



8" Membrane Vessels Side Port Series 1000 S-8



- fiberglass reinforced plastic pressure vessels series 600 S-8, white painted, UVA-ray proof material;
- max operating pressure 600 psi (41 bar);
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- built in accordance with ASME code section X;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- each vessel is factory tested at 1,5 times max operating pressure;
- feed/concentrate connections 1 ½" Victaulic (optional 2", 2 ½" or 3") in super duplex steel AISI 2507;
- permeate connections 1" BSPT F;
- straps and saddles included (n.2 pcs from 1 to 3 elements, n.3 pcs from 4 to 7 elements);
- 1,125" membrane adapters included;
- version from 2 to 7 ports (see list of options).

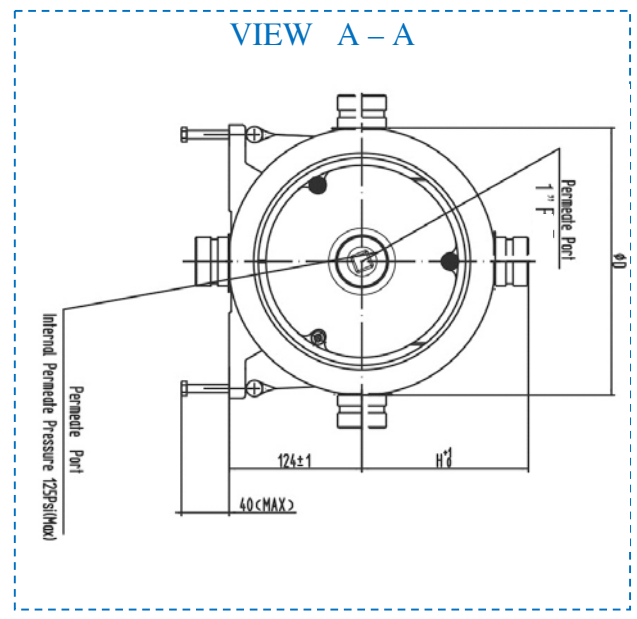
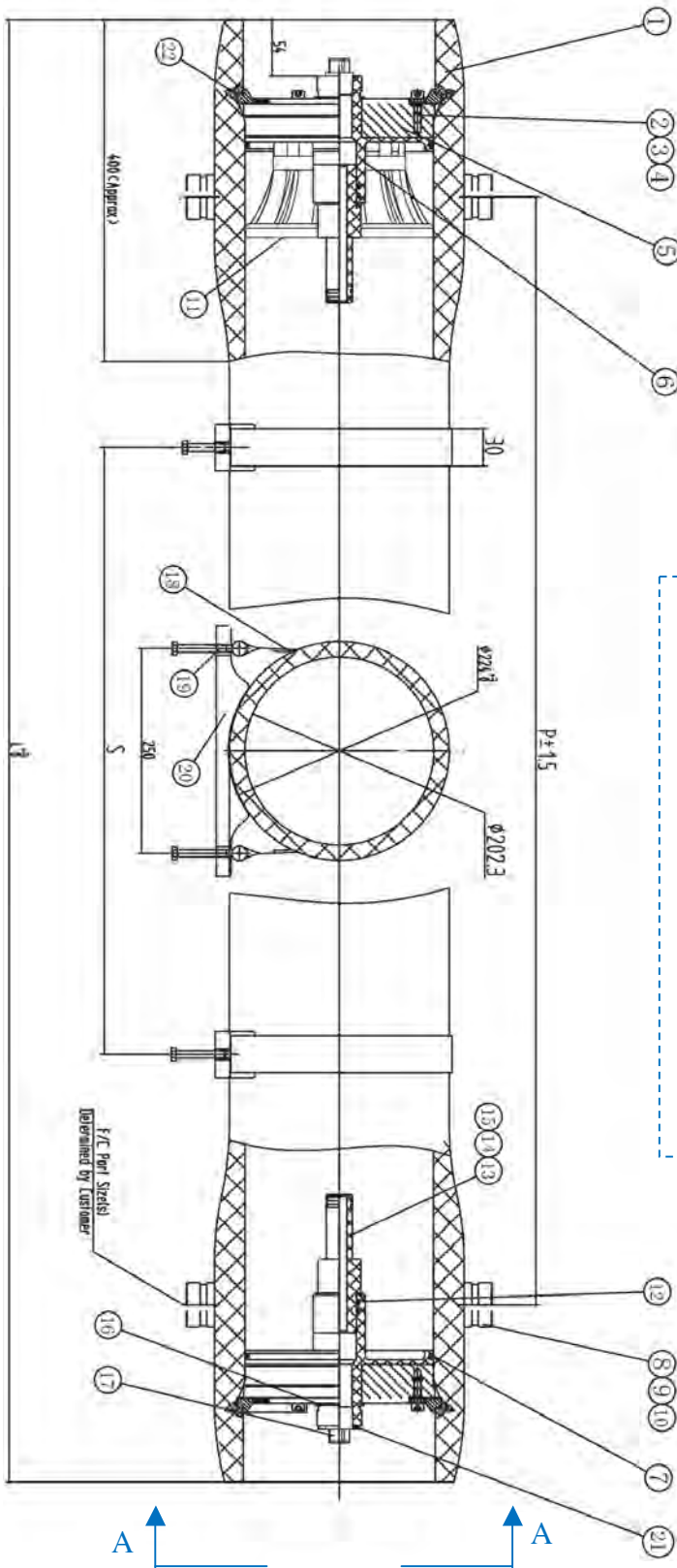
REF. ORIENT. 0°	REF. ORIENT. 180°	MODEL	ELEMENTS	L (mm)	P (mm)	S (mm)	PRICE EURO
H815G1 (*)	H817G1 (*)	1000S-8-1	1 x 40"	1514	1143	700	1.653,52
H815G2 (*)	H817G2 (*)	1000S-8-2	2 x 40"	2530	2159	1460	1.755,84
H815G3 (*)	H817G3 (*)	1000S-8-3	3 x 40"	3546	3175	2080	1.956,20
H815G4 (*)	H817G4 (*)	1000S-8-4	4 x 40"	4562	4191	1600x2	2.162,10
H815G5 (*)	H817G5 (*)	1000S-8-5	5 x 40"	5578	5207	2000x2	2.385,19
H815G6 (*)	H817G6 (*)	1000S-8-6	6 x 40"	6594	6223	2360x2	2.608,26
H815G7 (*)	H817G7 (*)	1000S-8-7	7 x 40"	7610	7239	2860x2	2.831,34

(*) not available in stock – Minimum delivery 10-12 weeks.

8" Membrane Vessels Side Port Series 1000 S-8



PRODUCT BY
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8" Membrane Vessels Side Port Series 1200 S-8



- fiberglass reinforced plastic pressure vessels series 1200 S-8, white painted, UVA-ray proof material;
- max operating pressure 1200 psi (83 bar);
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- built in accordance with ASME code section X;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- each vessel is factory tested at 1,5 times max operating pressure;
- feed/concentrate connections 1 ½" Victaulic (optional 2", 2 ½" or 3") in super duplex steel AISI 2507;
- permeate connections 1" BSPT F;
- straps and saddles included (n.2 pcs from 1 to 3 elements, n.3 pcs from 4 to 7 elements);
- 1,125" membrane adapters included;
- version from 2 to 7 ports (see list of options).

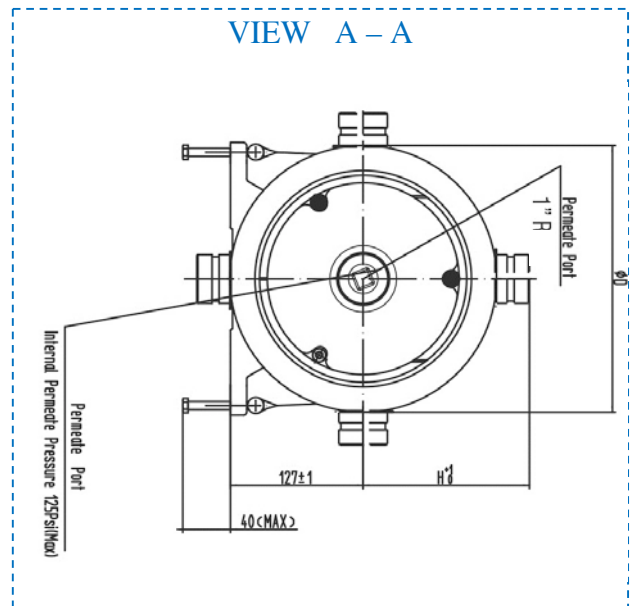
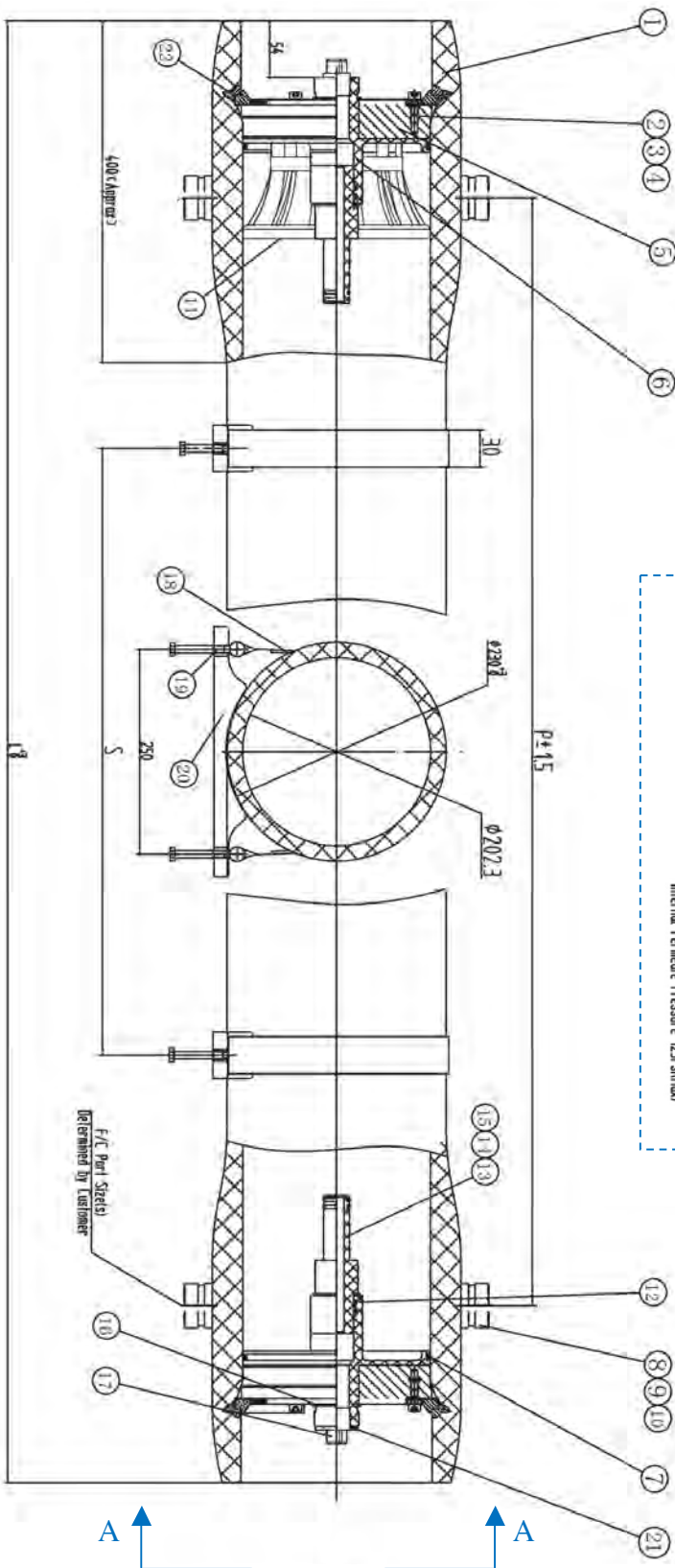
REF. ORIENT. 0°	REF. ORIENT. 180°	MODEL	ELEMENTS	L (mm)	P (mm)	S (mm)	PRICE EURO
H815H1 (*)	H817H1 (*)	1200S-8-1	1 x 40"	1514	1143	700	1.731,39
H815H2 (*)	H817H2 (*)	1200S-8-2	2 x 40"	2530	2159	1460	1.880,00
H815H3 (*)	H817H3 (*)	1200S-8-3	3 x 40"	3546	3175	2080	2.049,12
H815H4 (*)	H817H4 (*)	1200S-8-4	4 x 40"	4562	4191	1600x2	2.280,06
H815H5 (*)	H817H5 (*)	1200S-8-5	5 x 40"	5578	5207	2000x2	2.509,52
H815H6 (*)	H817H6 (*)	1200S-8-6	6 x 40"	6594	6223	2360x2	2.738,96
H815H7 (*)	H817H7 (*)	1200S-8-7	7 x 40"	7610	7239	2860x2	2.968,42

(*) not available in stock – Minimum delivery 10-12 weeks.

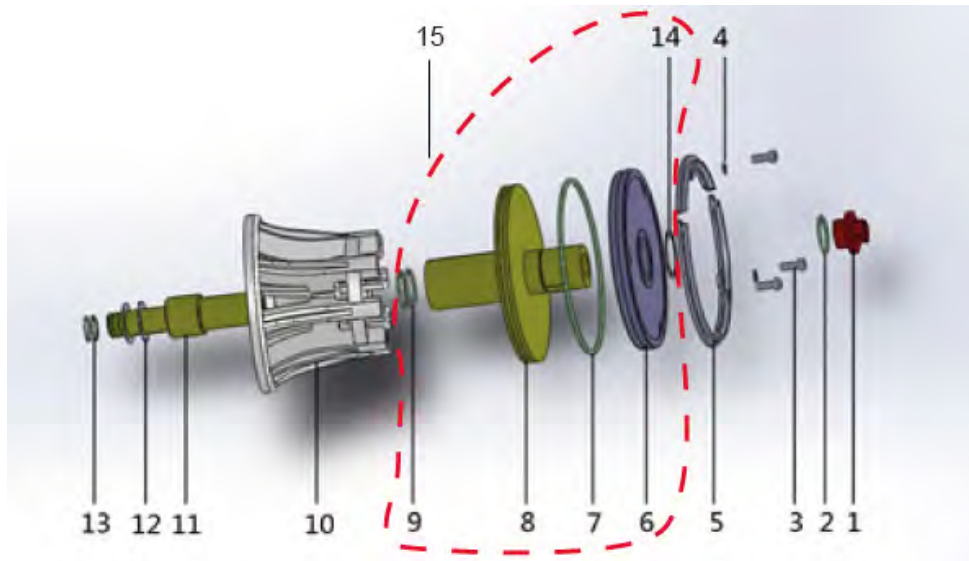
8" Membrane Vessels Side Port Series 1200 S-8



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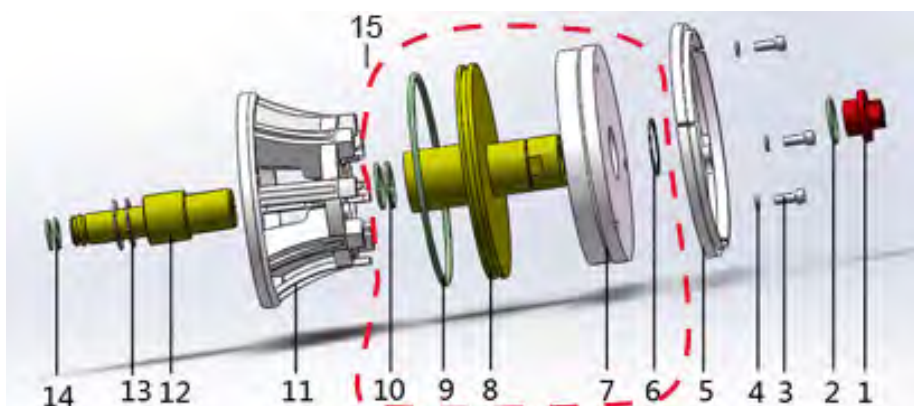


8" Side Port 300-450 Psi Vessels Spare Parts



ITEM	REF.	DESCRIPTION	MATERIAL	PRICE EURO
1	H8R081	PLUG	ABS	2,84
2	H8R111	PWT SEAL	EPDM	1,28
3	H8R203	LOCKING SEGMENT SCREW	AISI 304	6,24
4	H8R031	SPRING PAD	AISI 304	0,34
5	H8R041	LOCKING SEGMENT	AISI 304	14,30
7	H8R107	HEAD SEAL	EPDM	11,45
9	H8R111	PWT SEAL	EPDM	1,28
10	H8R071	THRUST CONE	ABS	48,25
11 + 13	H8R601	1,125" ADAPTER	ABS	16,25
	H8R611	1,5" ADAPTER (OPTIONAL)	ABS	22,18
12	H8R651	1,125" ADAPTER PAD	ABS	14,76
	H8R653	1,5" ADAPTER PAD (OPTIONAL)	ABS	1,64
13	H8R113	1,125" ADAPTER O-RING	EPDM	3,20
	H8R115	1,5" ADAPTER O-RING (OPTIONAL)	EPDM	1,43
15	H8R711	HEAD ASSEMBLY SIDE PORT 300 PSI		439,88
	H8R713	HEAD ASSEMBLY SIDE PORT 450 PSI		488,09
NOT SHOWN	H8R001	SADDLE	RUBBER	7,35
NOT SHOWN	H8R005	STRAP (L = 520 mm)	AISI 304 - RUBBER	20,84

8" Side Port 600-1000-1200 Psi Vessels Spare Parts

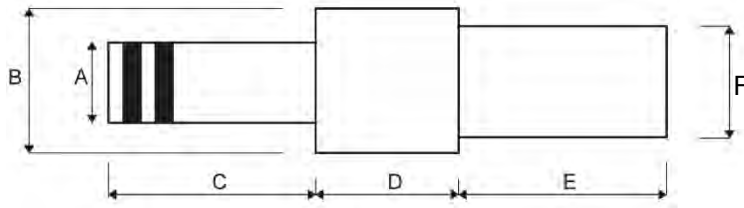


ITEM	REF.	DESCRIPTION	MATERIAL	PRICE EURO
1	H8R081	PLUG	ABS	2,84
2	H8R111	PWT SEAL	EPDM	1,28
3	H8R203	LOCKING SEGMENT SCREW	AISI 304	6,24
4	H8R031	SPRING PAD	AISI 304	0,34
5	H8R045	LOCKING KIT (N.3 SEGMENTS)	AISI 304	74,43
8		SEALING PLATE (PERMEATE PORT)	ABS	
9	FBEFR11	HEAD SEAL	EPDM	11,34
10	H8R111	PWT SEAL	EPDM	1,28
11	H8R073	THRUST CONE	ABS	51,79
12 + 14	H8R603	1,125" ADAPTER	ABS	21,00
	H8R613	1,5" ADAPTER (OPTIONAL)	ABS	24,72
13	H8R651	1,125" ADAPTER PAD	ABS	14,76
	H8R653	1,5" ADAPTER PAD (OPTIONAL)	ABS	1,64
14	H8R113	1,125" ADAPTER O-RING	EPDM	3,20
	H8R115	1,5" ADAPTER O-RING (OPTIONAL)	EPDM	1,43
15	H8R715	HEAD ASSEMBLY SIDE PORT 600 PSI		552,30
	H8R717	HEAD ASSEMBLY SIDE PORT 1000 PSI		636,00
	H8R719	HEAD ASSEMBLY SIDE PORT 1200 PSI		756,16
NOT SHOWN	H8R001	SADDLE	RUBBER	7,35
NOT SHOWN	H8R009	STRAP (L = 580 mm)	AISI 304 - RUBBER	23,60

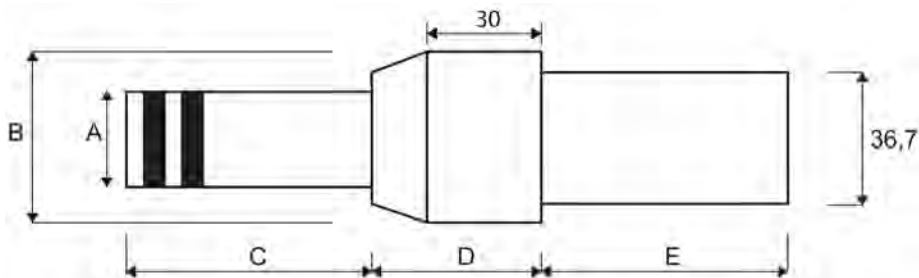
8" Membrane Adapters



- suitable for 8" membranes;
- material PVC complete with o-rings.



REF.	PRICE EURO	MATERIAL	A *	B *	C *	D *	E *	F *	FOR MEMBR.	FOR VESSEL	REF. O-RING	PRICE EURO
H8R601	16,25	ABS	28,3 (1,125")	46	70	38	70	36,5	BW30-400 or similar	MWG	H8R113	3,20
H8R611	22,18	ABS	38 (1,5")	50	70	36	70	36,55	BW30LE440 or similar	MWG	H8R115	1,43
H8R603	21,00	ABS	28,3 (1,125")	46	70	38	53	36,5	BW30-400 or similar	MWG	H8R113	3,20
H8R613	24,72	ABS	38 (1,5")	50	70	36	53	36,55	BW30LE440 or similar	MWG	H8R115	1,43
EA340	21,22	ABS	28,5 (1,125")	48	65	45	67	36,7	BW30-400 or similar	Wave Cyber	EA354	0,57
EA341	37,47	ABS	38 (1,5")	58	50	45	67	36,7	BW30LE440 or similar	Wave Cyber	EA355	0,73
EA025(*)	27,31	PVC	28,5 (1,125")	48	65	27	73	36,7	BW30-400 or similar	Codeline Old Style	EA354	0,57



REF.	PRICE EURO	MATERIAL	A *	B *	C *	D *	E *	FOR MEMBR.	FOR VESSEL	REF. O-RING	PRICE EURO
EA023	34,28	PVC	28,5 (1,125")	50	73	50	64	BW30-400 or similar	Bekaert Style	EA354	0,57

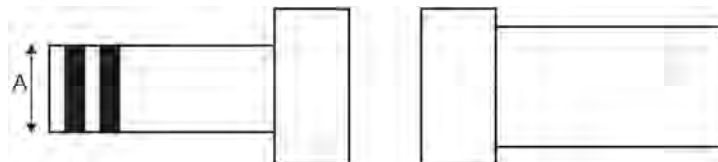
(*) Out-of-production, available till it will be out-of-stock

* Dimensions: mm (inch)



Blank Adapter Kit

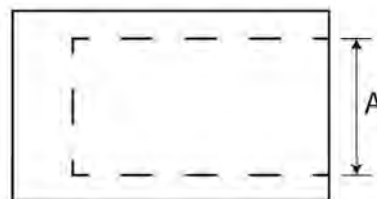
- suitable for 8" membranes;
- material PVC complete with o-rings.



REF.	PRICE EURO	A (mm)	A (inch)	FOR MEMBRANE	FOR VESSEL	O-RING REF.
EA026	38,57	28,5	1,125"	BW30-400 or similar	Wave Cyber	EA264
EA026A	39,78	28,5	1,125"	BW30-400 or similar	MWG	EA264

Blank Adapter

- Material PVC.

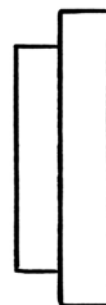


REF.	PRICE EURO	A (mm)	A (inch)	FOR MEMBRANE
EA028	21,43	28,5	1,125"	BW30-400 or similar

Closure disc for permeate connection for 8" vessels

- material PVC.

REF.	PRICE EURO
EA350	5,64



Victaulic Style Couplings



Cast Iron Victaulic Style Couplings – 1000 Psi

- complete with gaskets;
- max operating pressure 1000 psi (69 bar).

REF.	NOMINAL DIAMETER (inch)	NOMINAL DIAMETER (mm)	PRICE EURO
EA030	1"	33,4	21,58
EA032	1 ¼"	42,2	21,69
EA031	1 ½"	48,3	23,85
EA033	2"	60,3	28,06
EA034	2 ½"	73,0	33,97
EA035	3"	88,9	41,70



Aisi 304 Victaulic Style Couplings – 1200 Psi

- complete with gaskets;
- max operating pressure 1200 psi (83 bar).

REF.	NOMINAL DIAMETER (inch)	NOMINAL DIAMETER (mm)	PRICE EURO
EA190	¾"	26,7	31,59
EA191	1"	33,4	32,14
EA192	1 ¼"	42,2	37,84
EA193	1 ½"	48,3	45,79
EA194	2"	60,3	54,43
EA195	2 ½"	73,0	64,44
EA196	3"	88,9	78,07



Aisi 304 Victaulic Style Couplings – 350 Psi

- complete with gaskets;
- max operating pressure 350 psi (23 bar).

REF.	NOMINAL DIAMETER (inch)	NOMINAL DIAMETER (mm)	PRICE EURO
EA070	¾"	26,7	16,12
EA071	1"	33,4	16,70
EA072	1 ¼"	42,2	22,94
EA073	1 ½"	48,3	23,85
EA074	2"	60,3	28,97
EA075A	2 ½"	73,0	37,16
EA075	3" O. D.	76,1	37,16
EA076	3"	88,9	48,29



Victaulic Style Couplings



Nylon Victaulic Style Couplings – 300 psi

- Complete with gaskets in EPDM;
- Max operating pressure 300 psi (21 bar).

REF.	FOR OUR STUB PIPES	NOMINAL DIAMETER (inch)	NOMINAL DIAMETER (mm)	PRICE EURO
EA550	-----	1"	33,4	19,37
EA551	EA601	1 ¼"	42,2	23,24
EA552	EA602	1 ½"	48,3	29,28
EA553	EA603	2"	60,3	31,85
EA554	EA604	2 ½"	73,0	32,71
EA555	EA605	3"	88,9	42,18
EA556	EA606	4"	114,3	75,76



Nylon Victaulic Style Couplings – 150 psi

- Complete with gaskets in EPDM;
- Max operating pressure 150 psi (10 bar).

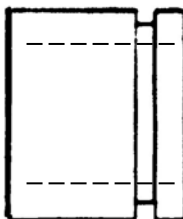
REF.	NOMINAL DIAMETER (inch)	NOMINAL DIAMETER (mm)	PRICE EURO
EA557 (*)	6"	168,3	99,02
EA558 (*)	8"	219,1	241,10

(*) not available in stock.



Stub Pipes to Weld

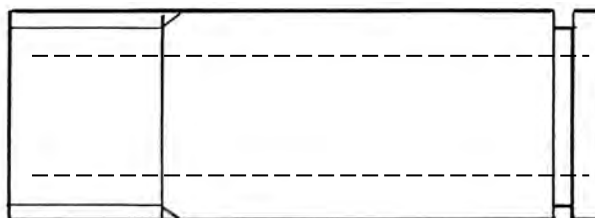
- Stub pipe with end part to weld;
- Material AISI 316;
- P max 600 psi (42 bar).



REF.	ANSI B36.10 SCHEDULE	DIAMETER (inch)	DIAMETER (mm)	LENGTH (mm)	PRICE EURO
EA080	40	¾"	26,7	60	8,05
EA081	40	1"	33,4	60	9,65
EA082	40	1 ¼"	42,2	60	12,83
EA083	40	1 ½"	48,3	60	17,04
EA084	40	2"	60,3	80	25,79
EA085A	40	2 ½"	73,0	90	35,45
EA086	40	3"	88,9	100	46,82

Threaded Stub Pipes

- Stub pipe with end part threaded;
- Material AISI 316;
- P max 600 psi (42 bar).

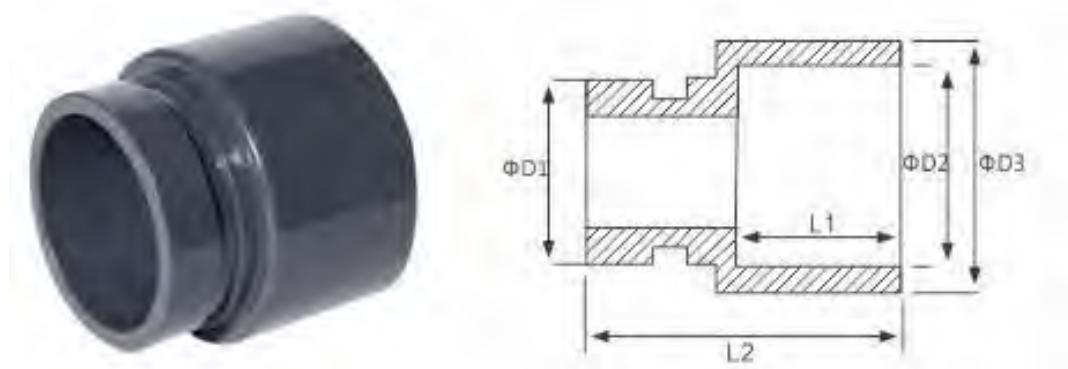


REF.	DIAMETER (inch)	LENGTH (mm)	PRICE EURO
EA050	¾" BSPP male	65	14,54
EA051	1" BSPP male	65	16,46
EA052	1 ¼" BSPP male	80	24,19
EA053	1 ½" BSPP male	100	28,97
EA054	2" BSPP male	100	37,50
EA055	2 ½" BSPP male (external diameter 76,1 mm)	100	51,03



Stub Pipes to Glue

- Stub pipes with end part to glue and the other end part for Victaulic Style couplings;
- In PVC-U.
- PN = 4 bar.



REF.	FOR OUR VICTAULIC STYLE COUPLINGS	D1 (mm)	D2 (mm)	D3 (mm)	L1 (mm)	L2 (mm)	PRICE EURO
EA601	EA551	42	32	40	22	64	6,88
EA602	EA552	48	50	60	31	66	8,61
EA603	EA553	60	63	74	38	76	12,06
EA604	EA554	73	75	87	43	79	13,77
EA605	EA555	89	90	104	51	85	18,07
EA606	EA556	114	110	125	61	96	31,00

R.O.PLUS Electric Control Panel for R.O. Systems



- With double conductivity meter (feed and permeate);
- In this way you can:
 - Command the high pressure pump and the two solenoid valves for feed interception and flushing;
 - Manage and program the most common measurement and signal instruments installed on the system, with highly flexible ways of working;
 - Manage and setting the automatic cleaning system;
- Conform to CE Directives;
- Microprocessor;
- LCD display 2 x 16 digit;
- Power supply 230VAC 50-60Hz;
- Available in ABS box with protection class IP65 (ref. DG101 and ref. DG103) or Rack version (ref. DG101R and ref. DG103R);
- Supplied without conductivity probes.

Operated functions:

- High pressure pump (max power 736 W);
- Feed electric valve;
- Fluxing electric valve;
- Cleaning electric valve;
- Pump for antiscaling.

Conductivity meter:

RO PLUS is available in the following 2 versions
(supplied without conductivity probes)

VERSION 1: RO PLUS LC (ref. **DG101** ABS box IP65
and ref. **DG101R** Rack version)

With conductivity meter for feed $000 \div 9,99$ mS/cm
and conductivity meter for permeate $00,0 \div 99,9$ μ S/cm

Warning: with this model you must use one Stainless Steel probe

K=1 (ref. **DG121**) for feed and one Stainless Steel probe
for permeate (ref. **DG122**), to buy separately.

VERSION 2: RO PLUS HC (ref. **DG103** ABS box IP65
and ref. **DG103R** Rack version)

With conductivity meter for feed $00,0 \div 9,99$ mS/cm
and conductivity meter for permeate $00,0 \div 999$ μ S/cm

Warning: with this model you must use n.2 graphite
probes K=1 (ref. **DG123**), one for the feed and one for the
permeate, to buy separately.

The version is displayed turning on the instrument.



Rack version

Height 180 mm
Width 220 mm
Depth 80 mm



R.O.PLUS Electric Control Panel for R.O. Systems



External input receivable:

- Low permeate storage tank level;
- High permeate storage tank level;
- Minimum pressure meter;
- Maximum pressure meter;
- Pretreatment (filter or softener) in service;
- Heat pump;
- Failed dosage alarm;
- Stand-by.

Alarms:

- High conductivity;
- Low pressure;
- High pressure;
- Heat pump;
- HIGH LOW CONTACT.



REF.
DG121



REF.
DG123



REF.
DG122

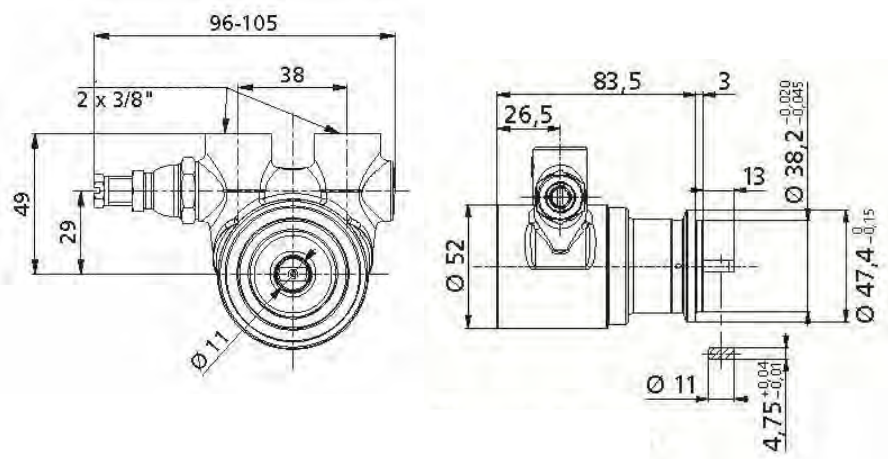
REF.	DESCRIPTION	PRICE EURO
DG101	RO PLUS LC	585,14
DG103	RO PLUS HC	585,14
DG101R	RO PLUS LC Rack	585,14
DG103R	RO PLUS HC Rack	585,14
DG121	Inox probe K=1, 3/4" connection	89,30
DG122	Inox probe K=0.1, 3/4" connection	89,30
DG123	Graphite probe K=1, 3/4" connection	97,01

In-Out $\frac{3}{8}$ " Rotary Pumps for R.O.

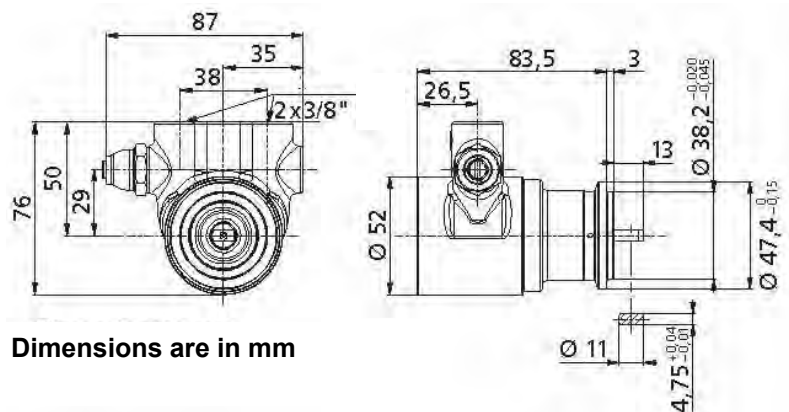


- Rotary vane pumps for R.O. systems, direct connection V-band clamp to motor;
- Housing material brass or AISI 303, security by-pass on show models;
- IN-OUT connections $\frac{3}{8}$ " F BSPT (or NPT on demand);
- Conforms to D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- WRAS approved products (for UK);
- Conforms to NSF/ANSI standard 169.

Brass Pumps



Aisi 303 Pumps



Dimensions are in mm

In-Out 3/8" Rotary Pumps for R.O.



REF.	MODEL	CONNECTIONS	BY-PASS	MATERIAL	FLOW (**) @ 7 bar (l/h)	FLOW (**) @ 14 bar (l/h)	PRICE EURO
DE804A	RO 50 OT	BSPT	w/ By-Pass	Brass	65	55	87,77
DE805A	RO 150 OT	BSPT	w/ By-Pass	Brass	165	150	87,77
DE806A	RO 200 OT	BSPT	w/ By-Pass	Brass	225	206	87,77
DE807A	RO 300 OT	BSPT	w/ By-Pass	Brass	334	315	87,77
DE808A	RO 400 OT	BSPT	w/ By-Pass	Brass	434	415	87,77
DE827A	RO 300 AISI	BSPT	w/ By-Pass	AISI 303	334	315	148,11
DE828A	RO 400 AISI	BSPT	w/ By-Pass	AISI 303	434	415	148,11
DE811A	RO 200 OT	BSPT	w/o By-Pass	Brass	225	206	86,05
DE812A	RO 300 OT	BSPT	w/o By-Pass	Brass	334	315	86,05
DE813A	RO 400 OT	BSPT	w/o By-Pass	Brass	434	415	86,05
DE832A	RO 300 AISI	BSPT	w/o By-Pass	AISI 303	334	315	145,87
DE833A	RO 400 AISI	BSPT	w/o By-Pass	AISI 303	434	415	145,87
DE804 (*)	RO 50 OT	NPT	w/ By-Pass	Brass	65	55	87,77
DE805 (*)	RO 150 OT	NPT	w/ By-Pass	Brass	165	150	87,77
DE806 (*)	RO 200 OT	NPT	w/ By-Pass	Brass	225	206	87,77
DE807 (*)	RO 300 OT	NPT	w/ By-Pass	Brass	334	315	87,77
DE808 (*)	RO 400 OT	NPT	w/ By-Pass	Brass	434	415	87,77
DE827 (*)	RO 300 AISI	NPT	w/ By-Pass	AISI 303	334	315	148,11
DE828 (*)	RO 400 AISI	NPT	w/ By-Pass	AISI 303	434	415	148,11
DE811 (*)	RO 200 OT	NPT	w/o By-Pass	Brass	225	206	86,05
DE812 (*)	RO 300 OT	NPT	w/o By-Pass	Brass	334	315	86,05
DE813 (*)	RO 400 OT	NPT	w/o By-Pass	Brass	434	415	86,05
DE832 (*)	RO 300 AISI	NPT	w/o By-Pass	AISI 303	334	315	145,87
DE833 (*)	RO 400 AISI	NPT	w/o By-Pass	AISI 303	434	415	145,87

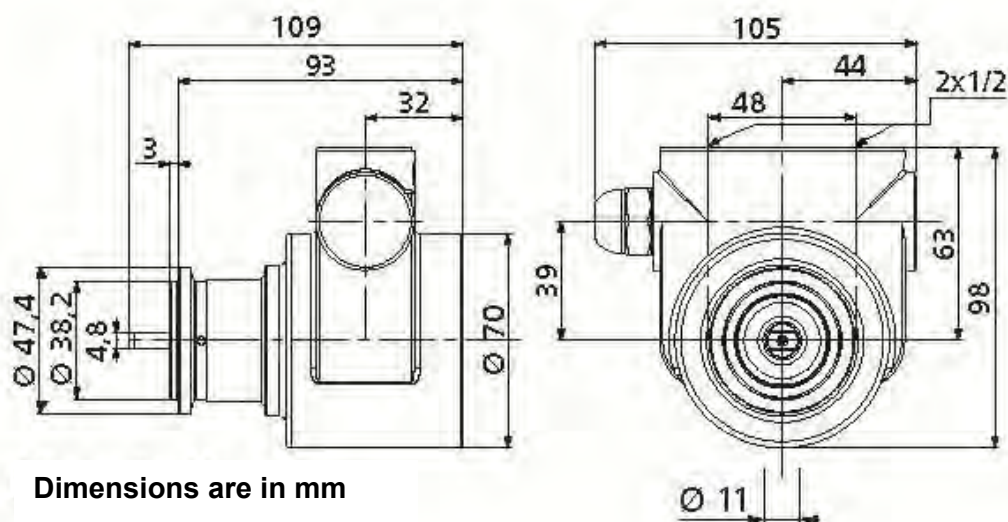
(*) not available in stock.

(**) average flow rate with motor 1.450 rpm.

In-Out 1/2" Rotary Pumps for R.O.



- rotary vane pumps for R.O. systems, direct connection V-band clamp to motor;
- housing material brass or AISI 303;
- IN-OUT Gas connections 1/2" F BSPT (or NPT on demand);
- Conforms to D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- WRAS approved products (for UK);
- Conforms to NSF/ANSI standard 169.



In-Out 1/2" Rotary Pumps for R.O.



REF.	MODEL	CONNECTIONS	BY-PASS	MATERIAL	FLOW (**) @ 7 bar (l/h)	FLOW (**) @ 14 bar (l/h)	PRICE EURO
DE809A	RO 600 OT	BSPT	w/ By-Pass	Brass	620	597	168,79
DE810A	RO 800 OT	BSPT	w/ By-Pass	Brass	820	797	168,79
DE814A	RO 1000 OT	BSPT	w/ By-Pass	Brass	1020	997	168,79
DE817A	RO 600 OT	BSPT	w/o By-Pass	Brass	620	597	162,04
DE818A	RO 800 OT	BSPT	w/o By-Pass	Brass	820	797	162,04
DE819A	RO 1000 OT	BSPT	w/o By-Pass	Brass	1020	997	162,04
DE801A	RO 600 AISI	BSPT	w/ By-Pass	AISI 303	620	597	242,36
DE802A	RO 800 AISI	BSPT	w/ By-Pass	AISI 303	820	797	242,36
DE803A	RO 1000 AISI	BSPT	w/ By-Pass	AISI 303	1020	997	242,36
DE837A	RO 600 AISI	BSPT	w/o By-Pass	AISI 303	620	597	219,49
DE838A	RO 800 AISI	BSPT	w/o By-Pass	AISI 303	820	797	219,49
DE839A	RO 1000 AISI	BSPT	w/o By-Pass	AISI 303	1020	997	219,49
DE809 (*)	RO 600 OT	NPT	w/ By-Pass	Brass	620	597	168,79
DE810 (*)	RO 800 OT	NPT	w/ By-Pass	Brass	820	797	168,79
DE814 (*)	RO 1000 OT	NPT	w/ By-Pass	Brass	1020	997	168,79
DE817 (*)	RO 600 OT	NPT	w/o By-Pass	Brass	620	597	162,04
DE818 (*)	RO 800 OT	NPT	w/o By-Pass	Brass	820	797	162,04
DE819 (*)	RO 1000 OT	NPT	w/o By-Pass	Brass	1020	997	162,04
DE801 (*)	RO 600 AISI	NPT	w/ By-Pass	AISI 303	620	597	242,36
DE802 (*)	RO 800 AISI	NPT	w/ By-Pass	AISI 303	820	797	242,36
DE803 (*)	RO 1000 AISI	NPT	w/ By-Pass	AISI 303	1020	997	242,36
DE837 (*)	RO 600 AISI	NPT	w/o By-Pass	AISI 303	620	597	219,49
DE838 (*)	RO 800 AISI	NPT	w/o By-Pass	AISI 303	820	797	219,49
DE839 (*)	RO 1000 AISI	NPT	w/o By-Pass	AISI 303	1020	997	219,49

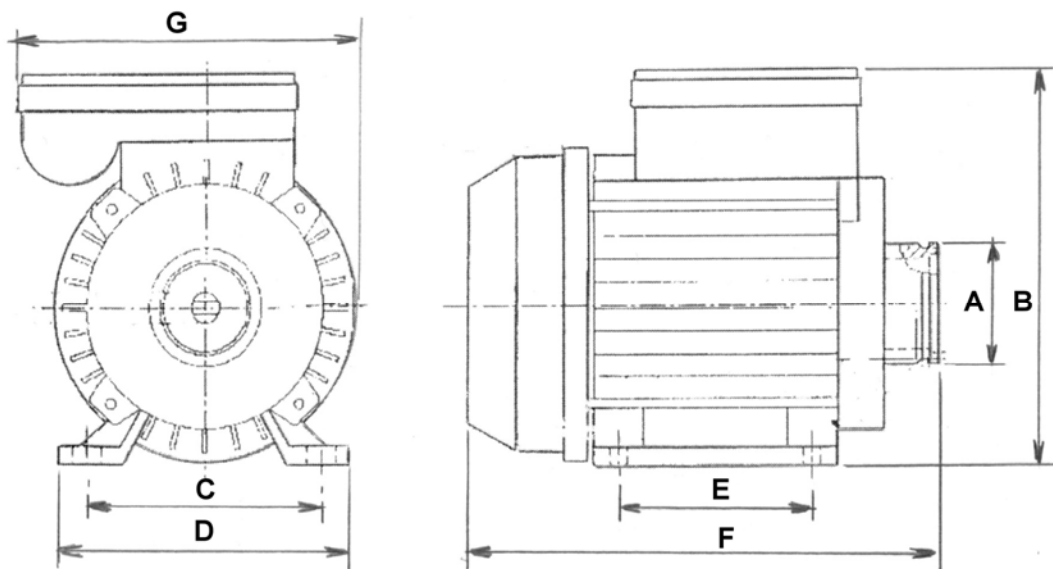
(*) not available in stock.

(**) average flow rate with motor 1.450 rpm.

Motors Direct Connection for Rotary Pumps



- Single phase motors direct connection for rotary vane pumps;
- Complete with thermic protection (our ref. DE845 has an automatic reset thermal protection when the temperature decreases);
- Power supply 220V – 50 Hz.



REF.	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)
DE850	47	156	97	120	80	200	138
DE845	44	205	*	172	*	241	*

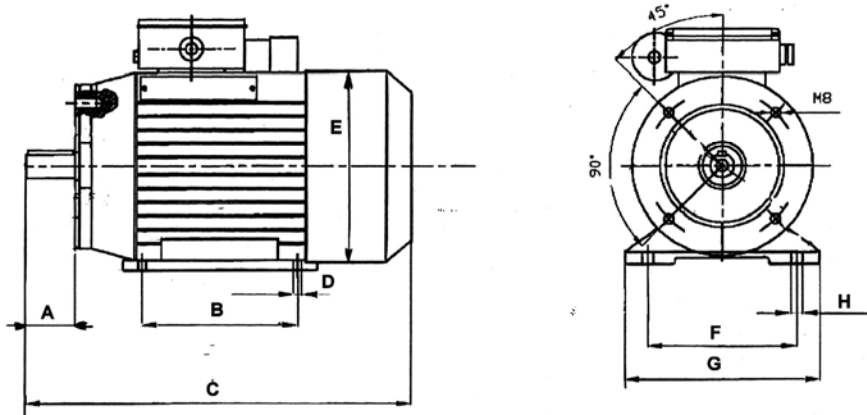
* Not applicable: for further details, please consult our Technical Department.

REF.	POWER (W)	ELECTRICAL INPUT (A)	RPM	IP PROTECTION	FOR PUMPS	PRICE EURO
DE850	300	1,6	1.300	IP44	RO 200 RO 300	140,32
DE845	550	4,2	1.360	IP55	RO 600 RO 800	245,31

Motors for Rotary Pumps for R.O. 300-400-600-800-1000



- range of single and three phase motors for application with rotary vane pumps, using coupling and adapter;
- 4 poles motor, power supply 220V – 50 Hz single phase, 380V – 50 Hz three phase;
- protection class IP55;
- for couplings and adapters see 06-04-08-EN data sheet.



REF.	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)
0,5 CV	30	90	222	7	141	112	142	10
0,75 CV	40	100	255	10	157	125	160	13
1 CV	40	100	255	10	157	125	160	13

REF.	DE860	DE861	DE862	DE863	DE864	DE865
PRICE EURO	214,36	236,32	304,74	178,29	182,53	239,63
MODEL	0,5 CV-M71-MONO	0,75 CV-M80-MONO	1 CV-M80-MONO	0,5 CV-M71-TRI	0,75 CV-M80-TRI	1 CV-M80-TRI
POWER (CV)	0,5	0,75	1	0,5	0,75	1
POWER (W)	370	550	750	370	550	750
ELECTR. INPUT (A)	3,1	3,9	5,6	2,2	2,8	3,5
RPM	1360	1360	1370	1360	1360	1360
SINGLE PHASE/ THREE PHASE	SINGLE PHASE	SINGLE PHASE	SINGLE PHASE	THREE PHASE	THREE PHASE	THREE PHASE
FOR PUMP	RO 300 RO 400	RO 600 RO 800	RO 1000	RO 300 RO 400	RO 600 RO 800	RO 1000
ADAPTER REF	DE871	DE873	DE873	DE871	DE873	DE873
COUPLING REF.	DE872	DE874	DE874	DE872	DE874	DE874

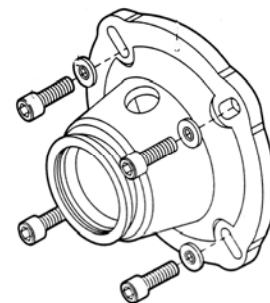
NOTE: It's absolutely necessary to provide an adequate electric protection to avoid further overloaded.

Adapter Couplings and Adapters for Rotary Pumps Models R.O. 300-400-600-800-1000

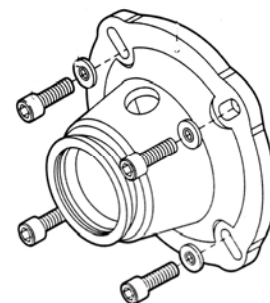


- for relative motors coupling see 06-04-07-EN data sheet.

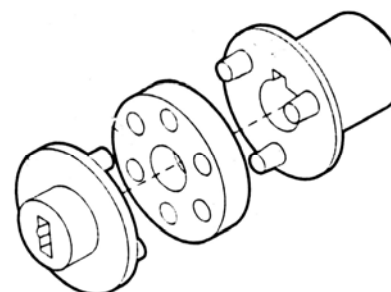
REF.	DESCRIPTION	PRICE EURO
DE871	Adapter M71	14,67



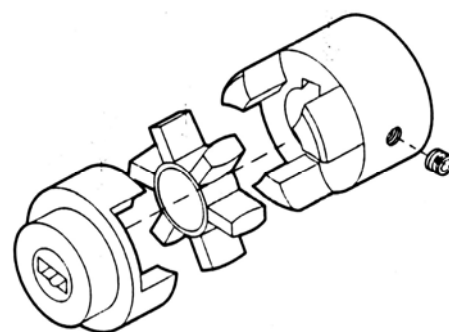
REF.	DESCRIPTION	PRICE EURO
DE873	Adapter M80	17,56



REF.	DESCRIPTION	PRICE EURO
DE872	Coupling M71	16,92



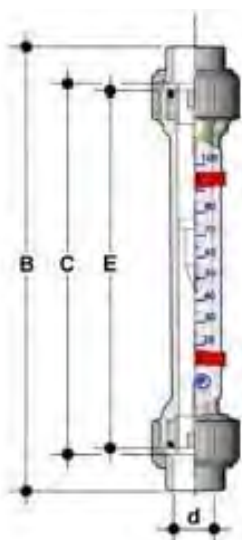
REF.	DESCRIPTION	PRICE EURO
DE874	Coupling M80	30,96



Flowmeters



- Flowmeters (the reading is taken in correspondence with the top edge of the float) with wide range of measuring scale and of end connections (d20 ÷ d75), good level of accuracy with simple operation and very limited maintenance;
- Standard fluid = water;
- Measuring tube in transparent PVC-U, Float in PP and O-ring in EPDM;
- Isolating or control valves may be mounted both upstream or downstream the flowmeter;
- Maximum working pressure with water up to 25°C = 10 bar;
- Maximum working pressure with water up to 60°C = 1,5 bar
- Temperature range = 5 ÷ 60°C.



FCIV

d	B	C	E
20	208	176	170
25	229	191	185
32	250	206	200

FSIV

d	B	C	E
40	408	356	350
63	432	356	350
75	444	356	350



REF.	MODEL	MEASURING RANGE (L/H)	CONNECTION	PRICE EURO
DG030	FCIV	20 ÷ 200	d20	170,14
DG032	FCIV	30 ÷ 350	d25	178,03
DG034	FCIV	60 ÷ 600	d32	198,52
DG036	FCIV	100 ÷ 1.000	d32	198,52
DG038	FSIV	160 ÷ 1.600	d40	357,66
DG040	FSIV	200 ÷ 2.500	d40	357,66
DG042	FSIV	350 ÷ 3.500	d63	560,90
DG044	FSIV	500 ÷ 5.000	d63	560,90
DG046	FSIV	1.000 ÷ 8.000	d75	978,42
DG048	FSIV	1.000 ÷ 10.000	d75	978,42
DG050	FSIV	5.000 ÷ 25.000	d75	978,42



ACCESSORIES:

- Threaded connections not included, to order separately;
- Material not available in stock.

REF.	DESCRIPTION	FOR FLOWMETER	PRICE EURO
DG061	BFV THREADED COUPLING BSP 1/2" PVC-U	DG030	4,00
DG063	BFV THREADED COUPLING BSP 3/4" PVC-U	DG032	4,73
DG065	BFV THREADED COUPLING BSP 1" PVC-U	DG034 – DG036	8,72
DG067	BFV THREADED COUPLING BSP 1 1/4" PVC-U	DG038 – DG040	9,09
DG069	BFV THREADED COUPLING BSP 2" PVC-U	DG042 – DG044	14,08
DG071	BFV THREADED COUPLING BSP 2 1/2" PVC-U	DG046 – DG048 –DG050	33,82

Accessories and Spare Parts 2,5" WAVE CYBER Vessels



REF.	DESCRIPTION	PRICE EURO
DE510 (*)	Plastic clip for 2,5" vessels	N.A.
DE420 (*)	Baffle 300 psi	8,73
DE421 (*)	Head 300 psi	14,35
DE422 (*)	Head seal	3,61
DE423 (*)	Allen screw	1,10
DE424 (*)	Baffle 1000 psi	9,48
DE425 (*)	Head 1000 psi	107,45
DE616 (*)	Adapter seal	0,80

(*) Available till it will be out-of-stock

Accessories and Spare Parts 4" WAVE CYBER Vessels



REF.	DESCRIPTION	PRICE EURO
DE610 (*)	Saddle and strap assembly	23,33
DE613 (*)	Baffle	11,85
DE614 (*)	Head 1/2" BSPP (300 psi) PP/FG	39,97
DE618 (*)	Head 3/4" BSPP (300 psi) PP/FG	39,87
DE614A (*)	Head 1/2" BSPP (450 psi) nylon	67,46
DE618A (*)	Head 3/4" BSPP (450 psi) nylon	64,25
DE615 (*)	Head seal	1,38
DE616 (*)	Adapter seal	0,80
DE617 (*)	Allen screw	1,38

(*) Available till it will be out-of-stock

Spare Parts for 8" End Port WAVE CYBER Vessels



REF.	DESCRIPTION	PRICE EURO
EA392 (*)	Head Assembly H "E Series" 250-300 psi p/n 70531	N.A.
EA393 (*)	Head Assembly H "E Series" 400-450 psi p/n 70532	465,09
EA394 (*)	Head Assembly H "E Series" 600 psi p/n 70533	587,30
EA395 (*)	Head Assembly H "E Series" 1000-1200 psi p/n 70534	746,00
EA371 (*)	Three-turn locking ring 150-600 psi	59,10
EA371A (*)	Three-turn locking ring 1000-1200 psi	77,45
EA372 (*)	Permeate port retaining ring	6,23
EA375 (*)	Bearing plate 300 psi	221,16
EA376 (*)	Bearing plate 400-450 psi	239,91
EA377 (*)	Bearing plate 600 psi	309,88
EA378 (*)	Bearing plate 1000 psi	478,59
EA358 (*)	Head seal	6,48
EA367 (*)	Permeate port H 300 psi	36,97
EA368 (*)	Permeate port H 400-450 psi	71,79
EA369 (*)	Permeate port H 600 psi	36,97
EA370 (*)	Permeate port H 1000 psi	36,97
EA356 (*)	PWT seal	1,71
EA365 (*)	Thrust cone	42,25
EA361 (*)	Feed / concentrate port 300 psi	95,95
EA362 (*)	Feed / concentrate port 400-450 psi	118,06
EA363 (*)	Feed / concentrate port 600 psi	143,93
EA364 (*)	Feed / concentrate port 1000 psi	206,16
EA379 (*)	Retaining ring 300 psi	7,23
EA380 (*)	Retaining ring 400-450 psi	7,23
EA381 (*)	Retaining ring 600 psi	29,97
EA382 (*)	Retaining ring 1000 psi	29,97
EA357 (*)	Feed / concentrate port seal	2,00
EA373 (*)	Strap	N.A.
EA374 (*)	Saddle	28,72
EA347 (*)	Permeate nut 1 1/2" G	4,47
EA348 (*)	Permeate adapter D32 to glue	2,47
EA351 (*)	Permeate port H o-ring	N.A.
EA351A (*)	Permeate port H flat gasket	1,85

(*) Available till it will be out-of-stock

Spare Parts for 8" Side Port WAVE CYBER Vessels



REF.	DESCRIPTION	PRICE EURO
EA492 (*)	Head Assembly H –“P Series” 300 psi p/n 70525	332,38
EA493 (*)	Head Assembly H –“P Series” 450 psi p/n 70526	351,13
EA494 (*)	Head Assembly H –“P Series” 600 psi p/n 70527	424,35
EA495 (*)	Head Assembly H –“P Series” 1000 psi p/n 70528	N.A.
EA496 (*)	Head Assembly H –“P Series” 1200 psi p/n 70529	N.A.
EA371 (*)	Three-turn locking ring 150-600 psi	49,25
EA371A (*)	Three-turn locking ring 1000-1200 psi	73,77
EA372 (*)	Permeate port retaining ring	5,94
EA471 (*)	Bearing plate 300 psi	221,41
EA472 (*)	Bearing plate 450 psi	N.A.
EA473 (*)	Bearing plate 600 psi	309,88
EA474 (*)	Bearing plate 1000 psi	N.A.
EA476 (*)	Permeate port H 300 psi	N.A.
EA477 (*)	Permeate port H 450 psi	36,97
EA478 (*)	Permeate port H 600 psi	39,97
EA479 (*)	Permeate port H 1000 psi	N.A.
EA358 (*)	Head seal	6,18
EA356 (*)	PWT seal	0,57
EA480 (*)	Thrust cone	47,00
EA373 (*)	Strap	N.A.
EA374 (*)	Saddle	27,36
EA347 (*)	Permeate nut 1 1/2" G	4,26
EA348 (*)	Permeate adapter D32 to glue	2,36
EA351 (*)	Permeate port H o-ring	N.A.
EA351A (*)	Permeate port H flat gasket	1,77

(*) Available till it will be out-of-stock

PL Series Metering Pumps Horizontal Mounting



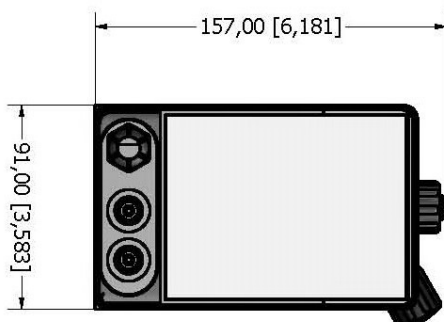
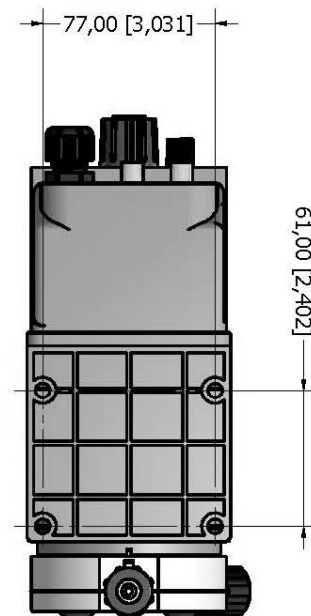
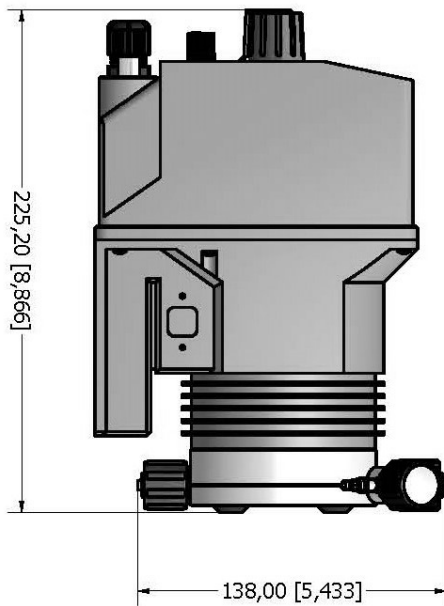
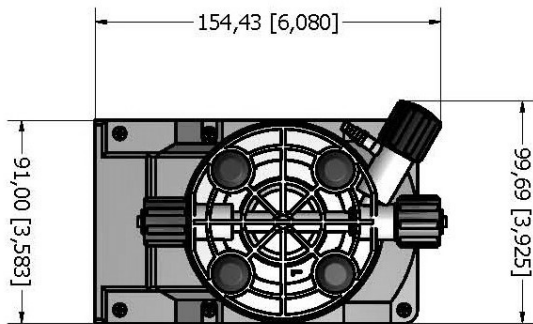
- PL series metering pumps horizontal mounting;
- Constant or proportional feeding, with pulse multiplier or pulse divider, dosage based on a mA signal or a digital signal (from 1 pulse/minute at 180 pulses/minute);
- Microprocessor technology;
- Manual stroke length adjustment;
- Body pump's in PVDF (and o-rings in VITON) or PP (and o-rings in EPDM), with manual venting;
- Black enclosure in PP material;
- Protection class IP65;
- Audible noise 73,4 dB(A);
- Environment temperature 10 ÷ 45°C;
- Chemical temperature 0 ÷ 50°C;
- Power supply 230Vac 50/60hz with European transformer;
- Each pump is shipped with a Kit Assembly, delayed fuse, level probe with axial foot filter (PVDF), 5 bar injection valve (PVDF), PVDF delivery hose (length 2 m), PVC suction hose (length 2 m), discharge hose (length 2 m), input signal cable (length 2,5 m);
- Conform with CE safety Directives;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- Available also the self-venting version (see the following table).



REF.	FLOW RATE	SELF-VENTING VERSION	PUMP HEAD	O-RING	PRICE EURO
DG299	1 l/h at 18 bar	YES	PVDF	VITON	532,93
DG300	2 l/h at 18 bar	NO	PVDF	VITON	532,93
DG300A (*)	2 l/h at 18 bar	NO	PP	EPDM	532,93
DG303	5,5 l/h at 8 bar	YES	PVDF	VITON	532,93
DG304	8 l/h at 8 bar	NO	PVDF	VITON	532,93
DG304A (*)	8 l/h at 8 bar	NO	PP	EPDM	532,93

(*) suitable for alkaline liquid chemicals;
not available in stock – Delivery 3 weeks.

PL Series Metering Pumps Horizontal Mounting



Dimensions are in mm [inches]

MF Series Metering Pumps Horizontal Mounting

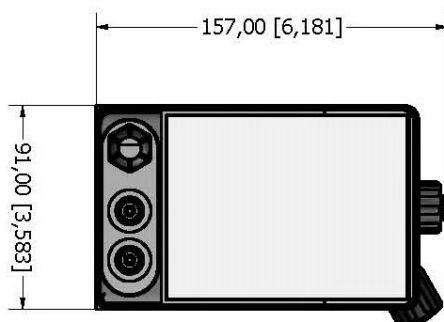
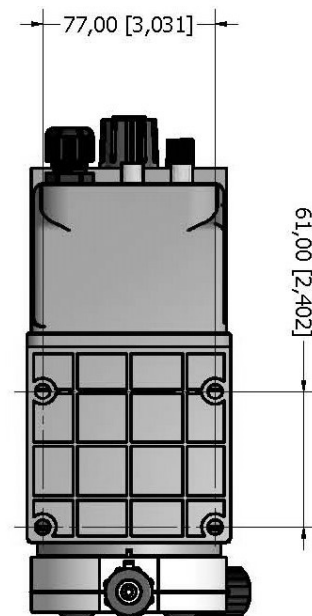
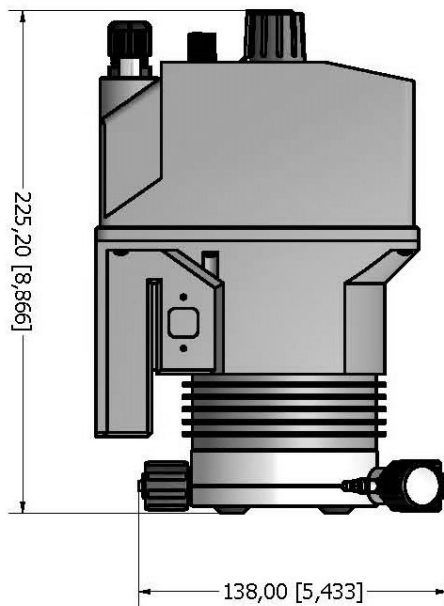
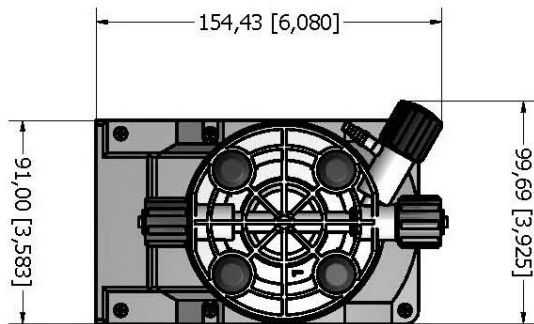


- MF series metering digital pumps horizontal mounting;
- Microprocessor technology (Constant, Divide, Multiply, PPM, Batch, Volt, mA, %, MLQ), stand-by and flow sensor input, alarm output and level control. Recovery fault mode, work-pause mode and upkeep mode (from 1 pulse/minute at 180 pulses/minute);
- Body pump's in PVDF (and o-rings in VITON) or PP (and o-rings in EPDM), with manual venting;
- Black enclosure in PP material, protection class IP65;
- Audible noise 73,4 dB(A);
- Environment temperature 10 ÷ 45°C, chemical temperature 0 ÷ 50°C;
- Power supply 230Vac 50/60hz with European transformer;
- Each pump is shipped with a Kit Assembly, delayed fuse, level probe with axial foot filter (PVDF), 5 bar injection valve (PVDF), PVDF delivery hose (length 2 m), PVC suction hose (length 2 m), discharge hose (length 2 m), input signal cable (length 2,5 m);
- Conform with CE safety Directives;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- Available also the self-venting version (see the following table).

REF.	FLOW RATE	SELF-VENTING VERSION	PUMP HEAD	O-RING	PRICE EURO
DG309	1 l/h at 18 bar	YES	PVDF	VITON	753,35
DG310	2 l/h at 18 bar	NO	PVDF	VITON	753,35
DG310A (*)	2 l/h at 18 bar	NO	PP	EPDM	753,35
DG313	5,5 l/h at 8 bar	YES	PVDF	VITON	753,35
DG314	8 l/h at 8 bar	NO	PVDF	VITON	753,35
DG314A (*)	8 l/h at 8 bar	NO	PP	EPDM	753,35

(*) suitable for alkaline liquid chemicals;
not available in stock – Delivery 3 weeks.

MF Series Metering Pumps Horizontal Mounting



Dimensions are in mm [inches]

MF Series Metering Pumps Vertical Mounting



- MF series metering digital pumps vertical mounting;
- Microprocessor technology (Constant, Divide, Multiply, PPM, Batch, Volt, mA, %, ml/q), with level control. Recovery fault mode, work-pause mode and upkeep mode (from 1 pulse/hour at 180 pulses/minute);
- Body pump's in PVDF (and o-rings in VITON) or PP (and o-rings in EPDM), with manual venting;
- Black enclosure in PP material;
- Protection class IP65;
- Audible noise 70,4 dB(A);
- Environment temperature 10 ÷ 45°C;
- Chemical temperature 0 ÷ 50°C;
- Power supply 230Vac 50/60hz with European transformer;
- Each pump is shipped with a Kit Assembly, delayed fuse, level probe with axial foot filter (PVDF), 5 bar injection valve (PVDF), PVDF delivery hose (length 2 m), PVC suction hose (length 2 m), discharge hose (length 2 m), input signal cable (length 2,5 m);
- Conform with CE safety Directives;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- Available also the self-venting version (see the following table).



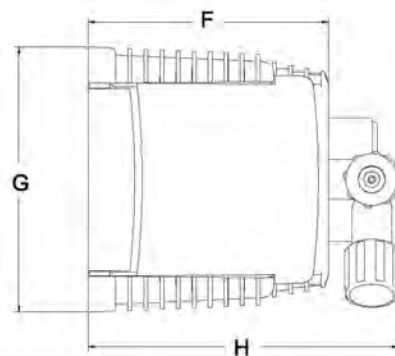
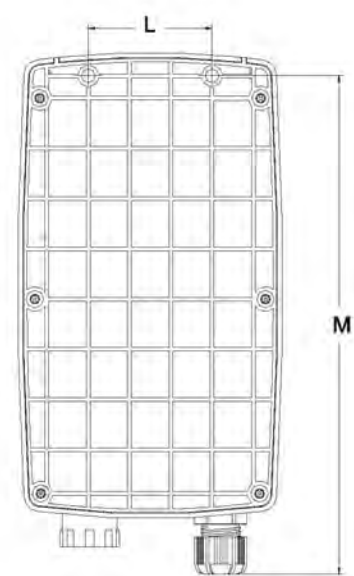
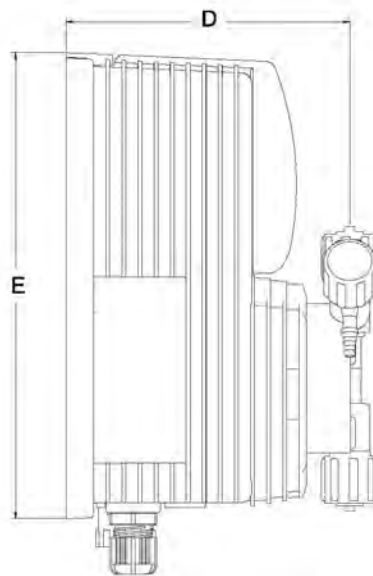
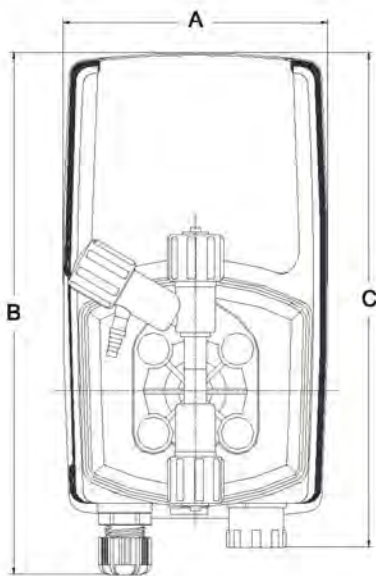
REF.	FLOW RATE	SELF-VENTING VERSION	PUMP HEAD	O-RING	PRICE EURO
DG319	1 l/h at 15 bar	YES	PVDF	VITON	466,50
DG320	2 l/h at 15 bar	NO	PVDF	VITON	466,50
DG320A (*)	2 l/h at 15 bar	NO	PP	EPDM	466,50
DG323	4 l/h at 7 bar	YES	PVDF	VITON	466,50
DG324	6 l/h at 7 bar	NO	PVDF	VITON	466,50
DG324A (*)	6 l/h at 7 bar	NO	PP	EPDM	466,50

(*) suitable for alkaline liquid chemicals;
not available in stock – Delivery 3 weeks.

MF Series Metering Pumps Vertical Mounting



DIMENSIONI		
	<i>mm</i>	<i>inches</i>
<i>A</i>	106.96	4.21
<i>B</i>	210.44	8.28
<i>C</i>	199.44	7.85
<i>D</i>	114.50	4.50
<i>E</i>	187.96	7.40
<i>F</i>	97.00	3.81
<i>G</i>	106.96	4.21
<i>H</i>	125.47	4.93
<i>L</i>	50.00	1.96
<i>M</i>	201.00	7.91



CL Series Metering Pumps Vertical Mounting



- CL series metering pumps vertical mounting;
- Microprocessor technology; constant pump with level control, flow rate control and 0-10% divider (from 1 pulse/minute at 180 pulses/minute);
- Body pump's in PVDF (and o-rings in VITON) or PP (and o-rings in EPDM), with manual venting;
- Black enclosure in PP material;
- Protection class IP65;
- Audible noise 74 dB(A);
- Environment temperature 10 ÷ 45°C;
- Chemical temperature 0 ÷ 50°C;
- Power supply 230Vac 50/60hz with European transformer;
- Each pump is shipped with a Kit Assembly, delayed fuse, level probe with axial foot filter (PVDF), 5 bar injection valve (PVDF), PVDF delivery hose (length 2 m), PVC suction hose (length 2 m), discharge hose (length 2 m), input signal cable (length 2,5 m);
- Conform with CE safety Directives;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- Available also the self-venting version (see the following table).



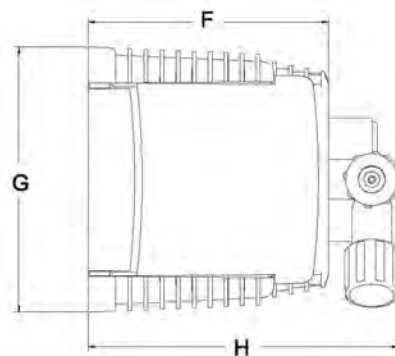
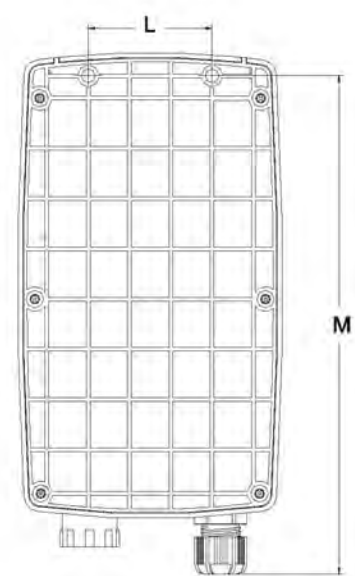
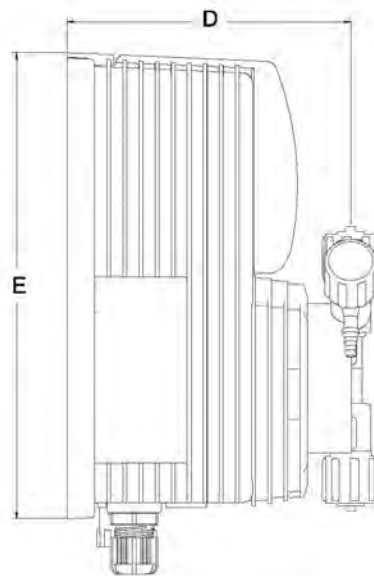
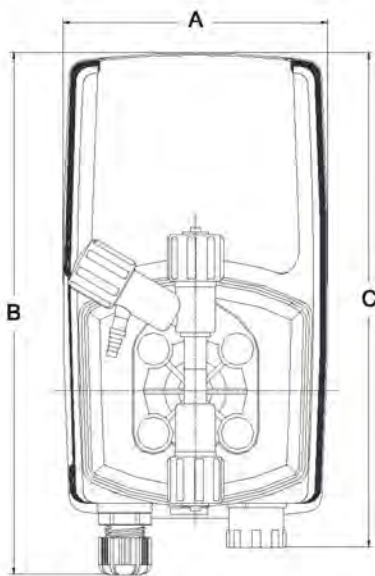
REF.	FLOW RATE	SELF-VENTING VERSION	PUMP HEAD	O-RING	PRICE EURO
DG329	1 l/h at 15 bar	YES	PVDF	VITON	363,84
DG330	2 l/h at 15 bar	NO	PVDF	VITON	363,84
DG330A (*)	2 l/h at 15 bar	NO	PP	EPDM	363,84
DG333	4 l/h at 7 bar	YES	PVDF	VITON	363,84
DG334	6 l/h at 7 bar	NO	PVDF	VITON	363,84
DG334A (*)	6 l/h at 7 bar	NO	PP	EPDM	363,84

(*) suitable for alkaline liquid chemicals;
not available in stock – Delivery 3 weeks.

CL Series Metering Pumps Vertical Mounting



DIMENSIONI		
	<i>mm</i>	<i>inches</i>
A	106.96	4.21
B	210.44	8.28
C	199.44	7.85
D	114.50	4.50
E	187.96	7.40
F	97.00	3.81
G	106.96	4.21
H	125.47	4.93
L	50.00	1.96
M	201.00	7.91





SPARE PARTS

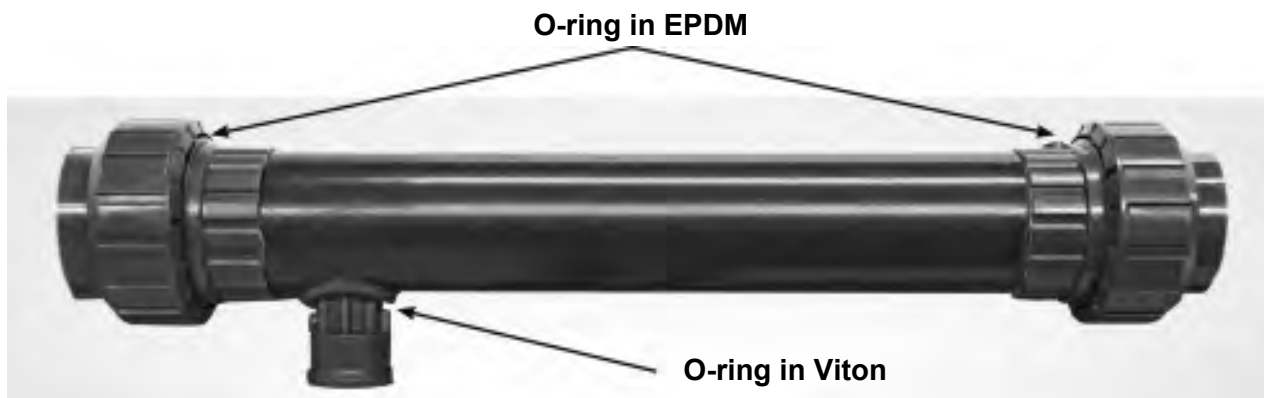
REF.	DESCRIPTION	PRICE EURO
DG452	5 m delivery hose in PVDF 6x4	31,94
DG453	100 m hose in PVC 6x4	73,97
DG454	100 m hose in PE 6x4	81,51
DG460	Kit Assembly for pumps horizontal mounting, o-ring in VITON	141,91
DG461 (*)	Kit Assembly for pumps horizontal mounting, o-ring in EPDM	141,91
DG462	Kit Assembly for pumps vertical mounting, o-ring in VITON	117,75
DG463 (*)	Kit Assembly for pumps vertical mounting, o-ring in EPDM	117,75

(*) not available in stock.



STATIC MIXERS

- PVC-U static mixer filled with PP mixing elements;
- With injection valve 1/2" - 4x6 0,3 bar.



REF.	INSPECTIONABLE	FITTING	PRICE EURO
DG470	YES	1 ¼"	244,57
DG472	YES	1 ½"	384,98
DG473	YES	2"	323,07

ACCESSORIE

REF.	DESCRIPTION	PRICE EURO
DG450	Fixing bracket for vertical pumps	18,86



TURBINE PULSE EMITTER WATER METER

- Threaded pulse emitter water meter for cold and hot water, single (mod. 15 - 20 - 25 - 30 - 40) and multiple (mod. 50) jet counter with wet or dry dial;
- Thread sizes range: from ½" to 2";
- Brass case and head (except for 50 mm 2" model with cast iron case and head);
- Range temperature = 4 ÷ 30°C;
- Max operating pressure = 16 bar;
- Constant K = 4 pulses/liter;
- 2m cable length (RG58), equipped with BNC connector;
- Reed contact with 10⁹ closing operations;
- Max voltage 250 VAC, 200 VDC;
- Max current 1 A;
- Max power 10 VA.



REF.	GAUGE (mm)	GAUGE (inches)	WITH DIAL ...	PRICE EURO
DG480	15	½	WET	77,27
DG481	20	¾	WET	97,01
DG482	25	1	WET	135,23
DG483	30	1 ¼	WET	173,46
DG484	40	1 ½	WET	361,74
DG485	50	2	WET	846,80
DG490 (*)	15	½	DRY	115,09
DG491 (*)	20	¾	DRY	135,23
DG492 (*)	25	1	DRY	230,19
DG493 (*)	30	1 ¼	DRY	279,52
DG494 (*)	40	1 ½	DRY	476,84
DG495 (*)	50	2	DRY	781,03

(*) not available in stock – Delivery 3 weeks.

ACCESSORY

- KDPV Kit, Signal Splitter.

REF.	PRICE EURO
DG467	62,78

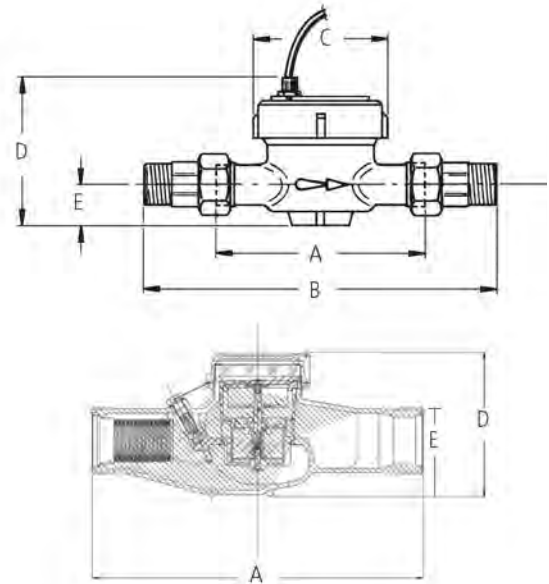




TURBINE PULSE EMITTER WATER METER

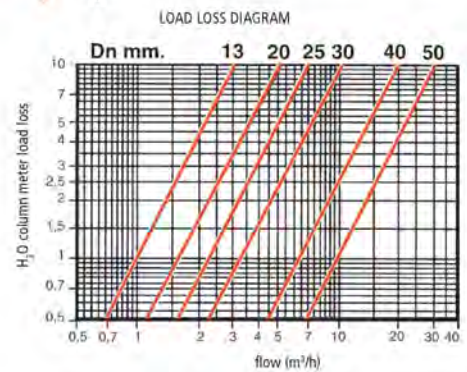
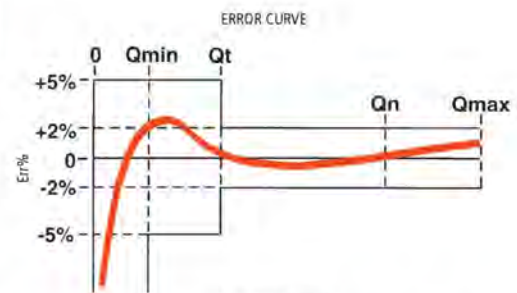
DIMENSIONS

Gauge	mm inch	15 1/2	20 3/4	25 1	30 1.1/4	40 1.1/2	50 2
Length without hose fittings	A mm	110	130	160	160	200	300
Length with hose fittings	B mm	190	228	260	280	340	460
Width	C mm	80	80	100	100	110	108
Height	D mm	110	110	132	132	137	130.5
Height from hose	E mm	24	24	34	34	42	50.5
Weight with hose fitting	Kg	0,850	1,100	1,750	2,000	3,460	-
CEE approval number		B93 320 01	B93 320 02	B97 320 03	B97 320 04	B99 320 11	B02 320 13



FEATURES

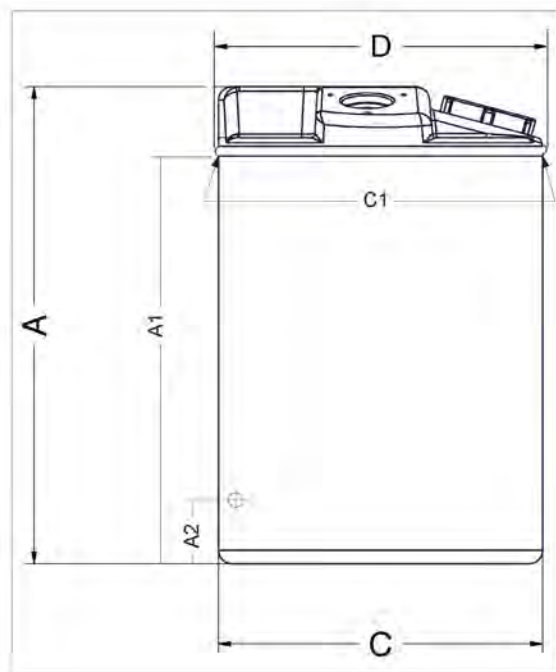
Gauge	mm inch	15 1/2	20 3/4	25 1	30 1.1/4	40 1.1/2	50 2
Inertial breaking	l/h	10	15	20	20	25	50
Max temporary flow delivery	m ³ /h	3	5	7	10	20	30
Flow delivery with 10m of load loss	m ³ /h	3	5	7	10	20	30
Nominal flow rate	m ³ /h	1.5	2.5	3.5	5	10	15
First precision delivery ± 5%	l/h	30	50	70	100	200	450
Second precision delivery ± 2%	l/h	120	200	280	400	800	3000
Max operation pressure	bar	16	16	16	16	16	16
Minimum reading	l	0.1	0.1	0.1	0.1	0.1	0.5
Maximum reading	m ³	10 ⁶	10 ⁶	10 ⁶	10 ⁶	10 ⁶	10 ⁶
Turbine revs per liter	g/l	34.8	22.5	11.7	11.7	4.5	3.16





- Suitable to be assembled with dosing pumps on catalogue;
- Each dosing system consisting in:
 - nr.1 tank in polyethylene (HDPE) for chemical mixing;
 - nr.1 suction lances with o-ring in VITON (optional in EPDM);
 - nr.1 manual stirrer;
- All dosing station components assembled on are enclosed into tank diameter;
- Stirrers screwed on thread metal insert are tilted for better central mixing;
- Stainless Steel (AISI 316) fixing screws with rubber cap;
- With level indicator;
- Tanks can be assembled with:
 - nr.1 metering pump (not included in the dosing system);
 - nr.1 manual stirrer;
 - nr.1 feed water valve;
 - nr.1 outgassing pump hose;
 - nr.1 outgassing valve (on the higher top side);
 - nr.1 bleed water valve (on the lower side);
 - nr.1 suction lance;
- Range temperature = 4 ÷ 40°C;
- On demand are available safety bunds.





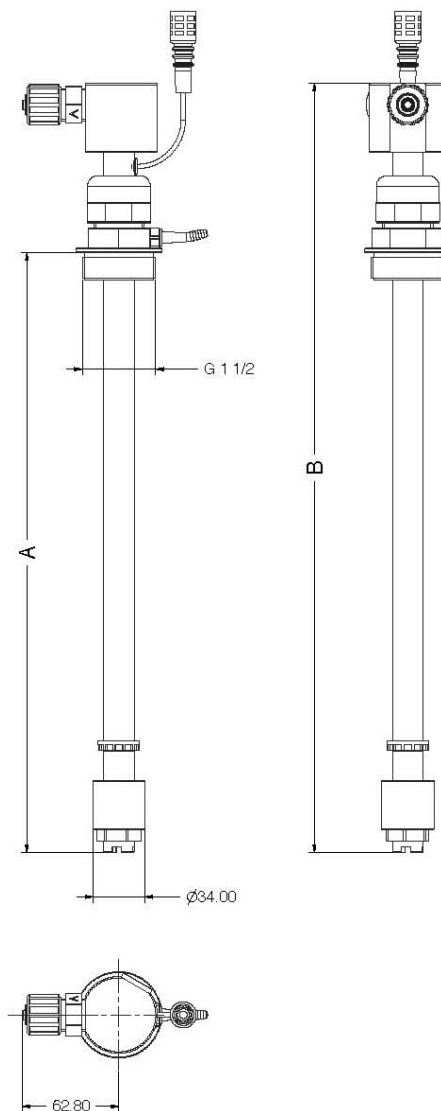
REF.	VOLUME (liters)	O-RING MATERIAL	A (mm)	A1 - FEED WATER VALVE HEIGHT (mm)	C (mm)	C1 (mm)	D (mm)	FEED WATER (mm)	PRICE EURO
DG400	50	VITON	505	425	420	420	420	95	443,86
DG400A (*)	50	EPDM	505	425	420	420	420	95	443,86
DG402	120	VITON	735	650	475	485	495	650	501,23
DG402A (*)	120	EPDM	735	650	475	485	495	650	501,23
DG404	250	VITON	850	780	610	610	610	120	745,81
DG404A (*)	250	EPDM	850	780	610	610	610	120	745,81

(*) not available in stock – Delivery 3 weeks.



SUCTION LANCES FOR DOSING SYSTEMS

- For pumps up to 10 l/h;
- Level switch;
- Foot valve and foot filter;
- Adjustable height;
- 1 1/2" pipe fitting;
- Lateral output (1/2" fitting);
- PVC body.



(*) suitable for alkaline liquid chemicals;
not available in stock – Delivery 3 weeks.

REF.	DOSING SYSTEM	O-RING MATERIAL	A (mm)	B (mm)	PRICE EURO
DG430	DG400 – DG402	VITON	630	740	131,34
DG430A (*)	DG400A – DG402A	EPDM	630	740	131,34
DG434	DG404	VITON	1080	1190	150,97
DG434A (*)	DG404A	EPDM	1080	1190	150,97

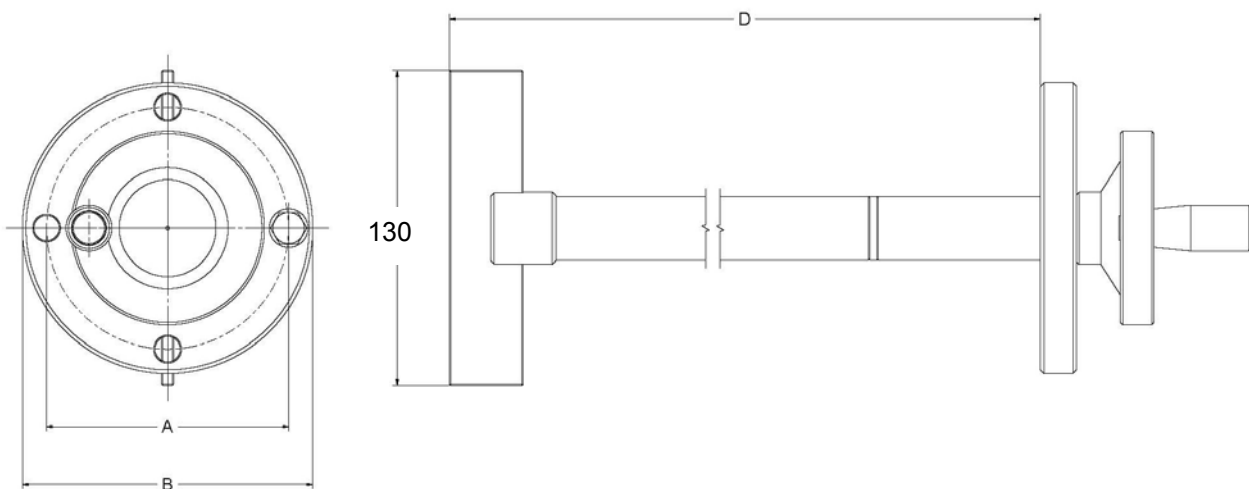


MANUAL STIRRER FOR DOSING SYSTEM

- PVC-U shaft;
- 2-blade impeller;
- Impeller diameter = 130 mm
- Holes diameter = 8,5 mm.



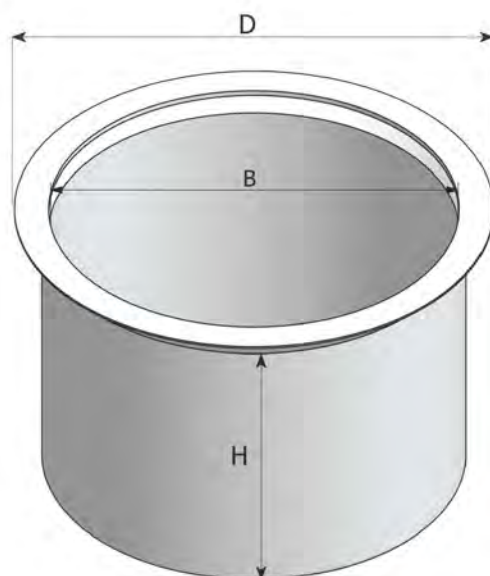
REF.	DOSING SYSTEM	A (mm)	Ø B (mm)	D (mm)	HOLES NUMBER AND POSITION	PRICE EURO
DG440	DG400 DG400A	100	120	450	4 at 90°	155,49
DG442	DG402 DG402A	125	145	650	3 at 120°	170,59
DG444	DG404 DG404A	125	145	770	3 at 120°	187,20





SAFETY BUNDS

- Material in polyethylene (HDPE), with reinforced collar for increasing security;
- Range temperature = 4 ÷ 40°C.



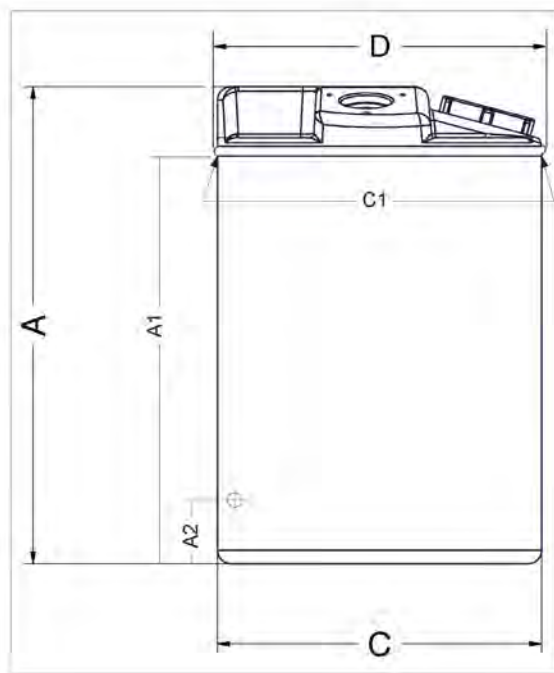
REF.	MODEL	VOLUME (liters)	B (mm)	D (mm)	H (mm)	PRICE EURO
DG410 (*)	50	60	430	510	425	157,00
DG412 (*)	120	120	520	545	615	199,28
DG414 (*)	250	300	660	695	875	407,62

(*) not available in stock – Delivery 3 weeks.



TANK FOR CHEMICAL

- Material in polyethylene (HDPE), suitable for chemical mixing;
- Tanks can be assembled with:
 - nr.1 metering pump (not included in the dosing system);
 - nr.1 manual stirrer;
 - nr.1 feed water valve;
 - nr.1 outgassing pump hose;
 - nr.1 outgassing valve (on the higher top side);
 - nr.1 bleed water valve (on the lower side);
 - nr.1 suction lance;
- Range temperature = 4 ÷ 40°C.



REF.	VOLUME (liters)	A (mm)	A1 - FEED WATER VALVE HEIGHT (mm)	C (mm)	C1 (mm)	D (mm)	FEED WATER (mm)	PRICE EURO
DG420	50	505	425	420	420	420	95	157,00
DG422	120	735	650	475	485	495	650	199,28
DG424	250	850	780	610	610	610	120	407,62



UV sterilizers and spare parts



EUROTRON[®]
WATER TREATMENT COMPONENTS

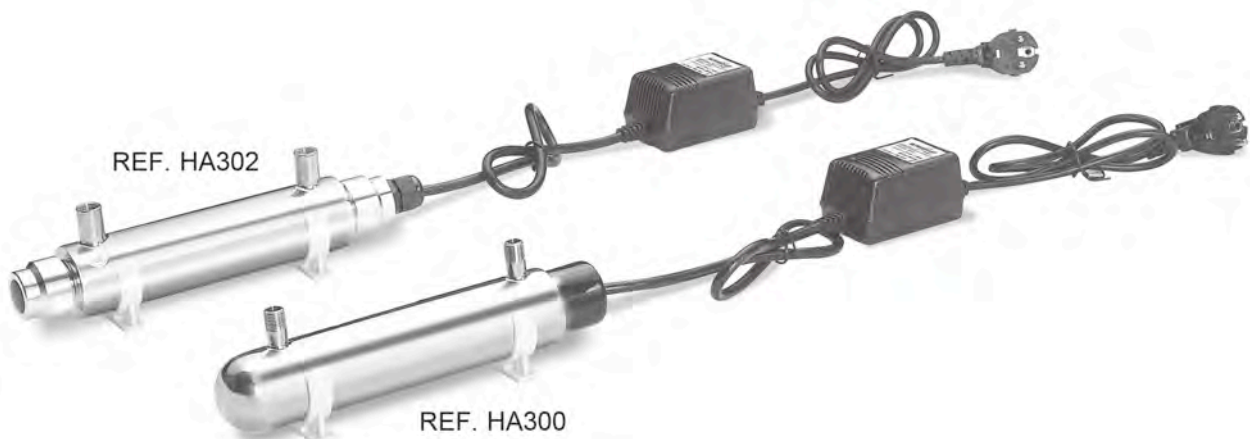
MWG[®]
ITALIAN WATER TECHNOLOGY

Engineered by Eurotrol S.p.A.

Residential U.V. Sterilizers Inox



- monolamp U.V. sterilizer of close construction in AISI 304 polished material for point-of-use treatment devices;
- conform with CE safety Directives;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- complete with n.2 diameter 2" fixing clips and with n.2 JACO 1/4" elbows;
- power box with electronic circuit, cable and plug;
- failure led and alarm system;
- lamp quartz sheath;
- max operating pressure 7 bar;
- temperature 2 ÷ 40°C;
- power supply 230 V – 50 Hz;
- irradiation > 30 mJ/cm²;
- lamp life 8.000 hours;
- protection class IP42;
- for relative spare parts see 07-02-01-EN data sheet.



REF.	MODEL	MAX FLOW (l/h)	LAMPS NUMBER	POWER (W)	CONNECTIONS	DIAMETER (mm)	LENGTH (mm)	PRICE EURO
HA300	HR-60	240	1	10	1/4" BSP M	50,8	260	94,15
HA302	PC-1	240	1	10	1/4" BSP M	50,8	268	100,11

Residential U.V. Sterilizers W Series



- to be used for residential water disinfection systems;
- monolamp U.V. sterilizer of close construction in AISI 304 polished material;
- power box with electronic circuit, cable and plug;
- failure led and alarm system;
- conform with CE safety Directives;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- lamp quartz sheath;
- max operating pressure 7 bar;
- temperature $2 \div 40^{\circ}\text{C}$;
- power supply 230 V – 50 Hz;
- irradiation $> 30 \text{ mJ/cm}^2$;
- lamp life 10.000 hours;
- protection class IP42;
- for relative spare parts see 07-02-01-EN data sheet.

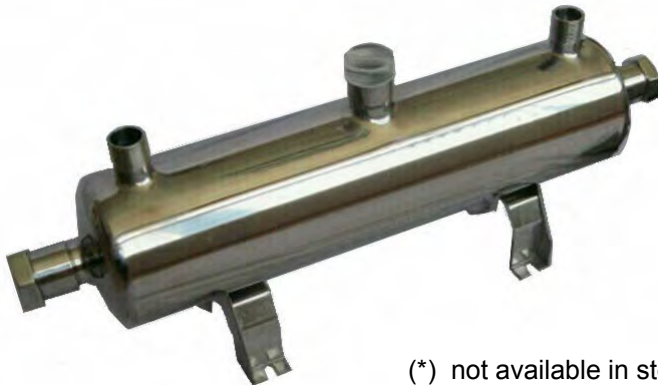


REF.	MODEL	MAX FLOW (l/h)	LAMPS NUMBER	POWER (W)	CONNECTIONS	DIAMETER (mm)	LENGTH (mm)	PRICE EURO
HA310	W-180	680	1	15	½" BSP M	63,5	364	145,02
HA315	W-360	1360	1	21	½" BSP M	63,5	544	245,68
HA320	W-480	1810	1	29	½" BSP M	63,5	694	294,39
HA325	W-720	2720	1	40	¾" BSP M	63,5	924	346,34

Industrial U.V. Sterilizers FC Series



- to be used for commercial and industrial water disinfection systems;
- monolamp U.V. sterilizer with polished AISI 304 sterilizing chamber (option in AISI 316L not available in stock) with inspection window and drain connection;
- electric box with electronic circuit, connection cable, operating time meter and switch;
- operating and failure led, with alarm system (excepted models FC-35 and FC-45);
- conform with CE safety Directives;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- lamp quartz sheath;
- max operating pressure 7 bar, temperature $2 \div 40^{\circ}\text{C}$;
- power supply 230 V – 50 Hz, irradiation $> 40 \text{ mJ/cm}^2$, lamp life 10.000 hours;
- protection class IP43;
- possibility of connection with shut down solenoid valve (only for models FC-35 and FC-45);
- for relative spare parts see 07-02-01-EN data sheet.



(*) not available in stock.

REF.	MOD.	AISI	MAX FLOW (l/h)	POWER (W)	CONNECTIONS	DIAMETER (mm)	LENGHT (mm)	PRICE EURO
HA350	FC-8	304	1.810	29	¾" BSP M	114	710	654,79
HA350A (*)	FC-8	316L	1.810	29	¾" BSP M	114	710	852,28
HA355	FC-12	304	2.720	40	1" BSP M	133	940	795,50
HA355A (*)	FC-12	316L	2.720	40	1" BSP M	133	940	1.032,95
HA360	FC-15	304	3.400	65	1" BSP M	133	940	874,51
HA360A (*)	FC-15	316L	3.400	65	1" BSP M	133	940	1.135,53
HA365	FC-20	304	4.536	65	1 ½" BSP M	160	940	1.090,98
HA365A (*)	FC-20	316L	4.536	65	1 ½" BSP M	160	940	1.418,44
HA370	FC-24	304	5.443	85	1 ½" BSP M	160	940	1.147,26
HA370A (*)	FC-24	316L	5.443	85	1 ½" BSP M	160	940	1.491,88
HA375	FC-35	304	7.938	100	2" BSP M	160	1.235	1.720,89
HA375A (*)	FC-35	316L	7.938	100	2" BSP M	160	1.235	2.239,87
HA380	FC-45	304	10.200	120	2" BSP M	160	1.235	1.775,01
HA380A (*)	FC-45	316L	10.200	120	2" BSP M	160	1.235	2.307,07

Industrial Flanged Multilamp U.V. Sterilizers FC-D Series



- to be used for industrial water disinfection systems;
- multilamp U.V. sterilizer with polished AISI 304 sterilizing chamber (option in AISI 316L not available in stock) with inspection window and drain connection;
- electric box with electronic circuit, connection cable, operating time meter and switch;
- operating and service/failure led;
- conform with CE safety Directives;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- lamp quartz sheath;
- max operating pressure 7 bar;
- temperature $2 \div 40^{\circ}\text{C}$;
- power supply 230 V – 50 Hz;
- irradiation $> 40 \text{ mJ/cm}^2$;
- lamp life 10.000 hours;
- protection class IP43;
- possibility of connection with shut down solenoid valve;
- for relative spare parts see 07-02-01-EN data sheet.



(*) not available in stock.

REF.	MODEL	AISI	MAX FLOW (l/h)	LAMP NUMBER	POWER (W)	CONNECTIONS	DIAMETER (mm)	LENGTH (mm)	PRICE EURO
HA400	FC-70D	304	15.900	2	200	DN50 FLANGED	220	1.250	2.994,80
HA400A (*)	FC-70D	316L	15.900	2	200	DN50 FLANGED	220	1.250	3.893,67
HA410	FC-120D	304	27.250	3	360	DN65 FLANGED	273	1.250	4.773,05
HA410A (*)	FC-120D	316L	27.250	3	360	DN65 FLANGED	273	1.250	6.206,03
HA420	FC-180D	304	40.880	5	600	DN80 FLANGED	323	1.250	5.969,02
HA420A (*)	FC-180D	316L	40.880	5	600	DN80 FLANGED	323	1.250	7.761,03
HA430	FC-250D	304	56.780	7	840	DN100 FLANGED	400	1.250	7.635,82
HA430A (*)	FC-250D	316L	56.780	7	840	DN100 FLANGED	400	1.250	9.928,62

U.V. Sterilizers HR - PC - W - FC - FC/D Spare Parts



REF.	DESCRIPTION	STERILIZERS UV			PRICE EURO
HA500	LAMP UV - T5L10 W - D.18 x L.219 mm	HR-60	PC-1		31,65
HA502	LAMP UV - T5L15 W - D.18 x L.310 mm	W-180			56,27
HA504	LAMP UV - T5L21 W - D.18 x L.444 mm	W-360			61,36
HA506	LAMP UV - T5L29 W - D.18 x L.630 mm	W-480	FC-8		64,07
HA508	LAMP UV - T5L40 W - D.18 x L.850 mm	W-720	FC-12		71,10
HA510	LAMP UV - T5L65 W - D.18 x L.850 mm	FC-15	FC-20		86,47
HA512	LAMP UV - T5L85 W - D.18 x L.850 mm	FC-24			91,66
HA514	LAMP UV - T6L100 W - D.23 x L.1160 mm	FC-35 2x FC-70D			107,03
HA516	LAMP UV - T6L120 W - D.18 x L.1150 mm	FC-45 3x FC-120D 5x FC-180D 7x FC-250D			107,03
HA530	LAMP UV - T5L10 W QUARTZ SHEATH D.24,5 x L.250 mm ONE OPEN END	HR-60			12,43
HA531	LAMP UV - T5L10 W QUARTZ SHEATH D.24,5 x L.250 mm	PC-1			14,28
HA532	LAMP UV - T5L15 W QUARTZ SHEATH D.24,5 x L.350 mm	W-180			16,45
HA534	LAMP UV - T5L21 W QUARTZ SHEATH D.24,5 x L.530 mm	W-360			22,93
HA536	LAMP UV - T5L29 W QUARTZ SHEATH D.24,5 x L.680 mm	W-480	FC-8		29,21
HA538	LAMP UV - T5L40-65 W QUARTZ SHEATH D.24,5 x L.910 mm	W-720 FC-12	FC-15		38,85
HA540	LAMP UV - T5L65W - T6L80W QUARTZ SHEATH D.30,0 x L.910 mm	FC-20	FC-24		62,01
HA542	LAMP UV - T6L100-120 W QUARTZ SHEATH D.30,0 x L.1205 mm	FC-35 3x FC-120D	FC-45 5x FC-180D	2x FC-70D 7x FC-250D	71,97

U.V. Sterilizers HR - PC - W - FC - FC/D Spare Parts



REF.	DESCRIPTION	STERILIZERS UV				PRICE EURO
HA550	QUARTZ O-RING SILICONE FOR TUBE D.24,5 mm	HR-60 W-180	PC-1 W-360	W-480	W-720	2,16
HA550A	QUARTZ O-RING VITON FOR TUBE D.24,5 mm	FC-8	FC-12	FC-15		2,08
HA552A	QUARTZ O-RING VITON FOR TUBE D.30,0 mm	FC-20 FC-70D	FC-24 FC-120D	FC-35 FC-180D	FC-45 FC-250D	12,24
HA560	ELECTRONIC BALLAST UV-3 230V/50Hz FOR LAMP 10 - 16 W	HR-60	PC-1	W-180		43,28
HA562	ELECTRONIC BALLAST UV-6 90-264V/50-60Hz FOR LAMP 20 - 40 W	W-360	W-480	W-720		99,57
HA563	INSIDE ELECTRONIC BALLAST UV-6 90-264V/50-60Hz FOR LAMP 20 - 40 W	FC-8	FC-12			99,57
HA564	INSIDE ELECTRONIC BALLAST UV-8 90-264V/50-60Hz FOR LAMP 65 - 80 W	FC-15	FC-20	FC-24		122,29
HA566	INSIDE ELECTRONIC BALLAST UV-12 100-240V/50Hz 100 - 120 W SINGLE-LAMP	FC-35 FC-70D	FC-45 FC-120D	FC-180D	FC-250D	324,69
HA570	ELECTRICAL PANEL COMPLETE	FC-8	FC-12			166,58
HA572	ELECTRICAL PANEL COMPLETE	FC-15	FC-20	FC-24		173,37
HA574	ELECTRICAL PANEL COMPLETE	FC-35	FC-45			361,46
HA576	ELECTRICAL PANEL COMPLETE	FC-70D				636,78
HA577	ELECTRICAL PANEL COMPLETE	FC-120D				863,75
HA578	ELECTRICAL PANEL COMPLETE	FC-180D				1.254,65
HA579	ELECTRICAL PANEL COMPLETE	FC-250D				1.849,41

Old U.V. Sterilizers Spare Parts



REF.	DESCRIPTION	PRICE EURO
HA055 (*)	Plastic Lamp UV 6 W D.16,0 x L.210 mm	36,53
HA049 (*)	Lamp UV 6 W Inox 2+2 pin D.16,0 x L.225 mm	21,26
HA051	Lamp 12 W D.18,0 x L.210 mm (green base)	46,82
HA052	Lamp 16 W D.18,0 x L.330 mm	57,76
HA053	Lamp 30 W D.18,0 x L.450 mm	73,76
HA054	Lamp 40 W D.18,0 x L.850 mm	75,85
HA056	Lamp 80 W D.18,0 x L.850 mm	152,08
HA065 (*)	Quartz for plastic lamp 6 W UV D.22,0 x L.249 mm	31,39
HA067 (*)	Quartz for lamp 6 W UV Inox D.22,0 x L.251 mm	35,29
HA060	Quartz for lamp 10 W D.22,0 x L.204 mm	40,99
HA061	Quartz for lamp 12 W D.22,0 x L.238 mm	40,99
HA062	Quartz for lamp 16 W D.22,0 x L.370 mm	48,02
HA063	Quartz for lamp 30 W D.22,0 x L.500 mm	53,75
HA064	Quartz for lamp 40 W and 80 W D.22,0 x L.900 mm	69,11
HA074	Quartz o-ring silicone D.22,0 mm	6,48
HA069 (*)	Electronic Ballast UV 6 W plastic	21,29
HA070 (**)	Transformer UV 12-16	121,68
HA073 (**)	Power electrical board UV 30-40-240-340	265,65
HA073A (**)	Power electrical board UV 440-540	265,65

(*) available till it will be out-of-stock.

(**) not available in stock.

Industrial U.V. Sterilizers in HDPE



- Made in European Union (Italy); - To be used for industrial water disinfection systems;
- With reactor in HDPE, available on demand with sensor;
- Electric box with electronic circuit, connection cable, operating time meter and switch;
- Operating and failure led; - With lamp quartz sheath;
- Conform with CE safety Directives and D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- Available on request with UL certificate (for USA and Canada);
- Conform with EAC certificate for Russia and near-by Countries;
- Conform with Norwegian Restrictive Quality Certification for drinking water in Norway;
- Conform with a Norwegian certification of National Veterinary Institute, which gives the leading rules applied world wide in the sector of the fish farm;
- Max operating pressure 6 bar (4 bar for HA830 and HA832); - Temperature: 5 ÷ 35°C;
- UVC transmittance 99% - 1cm, UVC dose 400 J/m² ;
- Power supply 230 V – 50/60 Hz; Reactor protection class IP65;
- Control panel protection class IP54 (IP55 for models less than 15 m³/h);
- Possibility of connection with shut down solenoid valve;
- Optional cleaning system.

↑	From bottom to top.
↔	Both directions.

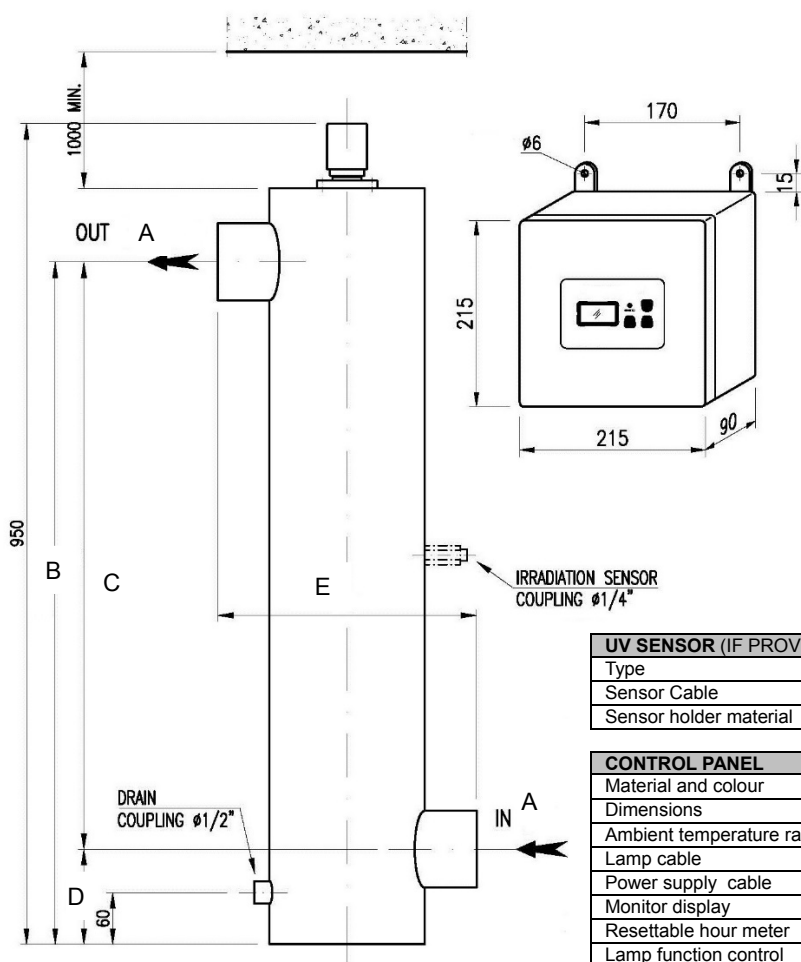
(*) not available in stock.

REF.	MAX FLOW RATE (m ³ /h)	TOTAL CONSUMPTION (W)	No. LAMPS	LAMP POWER (W)	LIFESPAN OF LAMP	IN/OUT CONNECTIONS	SENSOR	MOUNTING	FLOW DIRECTION	PRICE EURO
HA800N (*)	3	40	1	40	9.000	1 ½" F	NO	Vert.	↑	1.594,00
HA800 (*)	3	40	1	40	9.000	1 ½" F	YES	Vert.	↑	2.568,38
HA802N (*)	5	80	1	80	9.000	1 ½" F	NO	Vert.	↑	1.671,94
HA802 (*)	5	80	1	80	9.000	1 ½" F	YES	Vert.	↑	2.618,11
HA804N (*)	8	80	2	40	9.000	2 ½" F	NO	Vert.	↑	2.329,15
HA804 (*)	8	80	2	40	9.000	2 ½" F	YES	Vert.	↑	3.316,99
HA806N (*)	15	160	2	80	9.000	2 ½" F	NO	Vert.	↑	2.427,26
HA806 (*)	15	160	2	80	9.000	2 ½" F	YES	Vert.	↑	3.612,67
HA808 (*)	22	260	3	80	9.000	DN65	YES	Vert.	↑	5.308,80
HA810 (*)	35	335	4	80	9.000	DN80	YES	Vert.	↑	7.201,15
HA812 (*)	45	440	5	80	9.000	DN100	YES	Vert.	↑	7.620,48
HA814 (*)	61	440	2	200	12.000	DN100	YES	Vert.	↑	10.243,97
HA816 (*)	90	660	3	200	12.000	DN100	YES	Vert.	↑	12.902,40
HA818 (*)	110	880	2	400	16.000	DN150	YES	Horiz.	↔	16.611,84
HA820 (*)	150	1300	3	400	16.000	DN200	YES	Horiz.	↔	20.764,80
HA822 (*)	250	1760	4	400	16.000	DN250	YES	Horiz.	↔	25.374,72
HA824 (*)	340	2180	5	400	16.000	DN250	YES	Horiz.	↔	28.936,32
HA826 (*)	470	3100	7	400	16.000	DN300	YES	Horiz.	↔	36.543,36
HA828 (*)	600	3500	8	400	16.000	DN350	YES	Horiz.	↔	44.150,40
HA830 (*)	830	4400	10	400	16.000	DN400	YES	Horiz.	↔	54.472,32
HA832 (*)	980	5300	12	400	16.000	DN450	YES	Horiz.	↔	66.864,00

Industrial U.V. Sterilizers in HDPE



REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)	IN-OUT	B (mm)	C (mm)	D (mm)	E (mm)
HA800N	6	4	1 1/2" F	807	727	80	200
HA800	6	4	1 1/2" F	807	727	80	200
HA802N	6	4	1 1/2" F	807	727	80	200
HA802	6	4	1 1/2" F	807	727	80	200
HA804N	12,4	8	2 1/2" F	790	680	110	300
HA804	12,4	8	2 1/2" F	790	680	110	300
HA806N	12,4	11	2 1/2" F	790	680	110	300
HA806	12,4	11	2 1/2" F	790	680	110	300



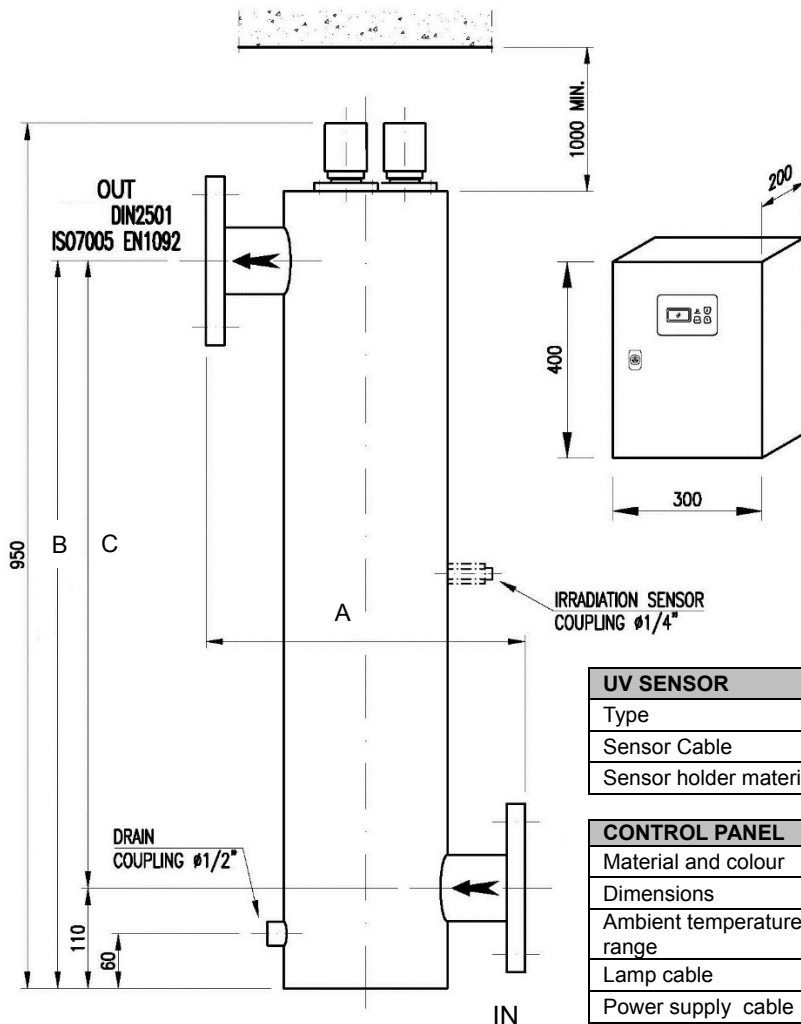
UV SENSOR (IF PROVIDED)	
Type	UVC selective sensor Mod. UV737TF
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Teflon

CONTROL PANEL	LCD
Material and colour	Black Polypropylene
Dimensions	215 x 215 x 90 mm
Ambient temperature range	5 – 45 °C
Lamp cable	1 m
Power supply cable	1 m
Monitor display	LCD
Resettable hour meter	Yes for lamp life control
Lamp function control	Si
Free contact (NO - NC)	Yes – general alarm (max 2 A)
230 V output (NO - NC)	Yes – general alarm (max 2 A)
Remote ON/OFF contact	Yes (settable)
ON/OFF Timer	Yes (settable)
Reactor temperature measurement and alarm	Yes (°C) – settable value (shut off for high temperature) on Models with Sensor
UV Irradiance measurement and alarm	Yes (% or W/m ² optional) – settable value on Models with Sensor
4/20 mA output	Optional – for Irradiance and water temperature on Models with Sensor

Industrial U.V. Sterilizers in HDPE



REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)	IN/OUT CONNECTIONS	A (mm)	B (mm)	C (mm)
HA808	12,7	11	Flange DN65	350	799	689
HA810	20,1	16	Flange DN80	400	790	680



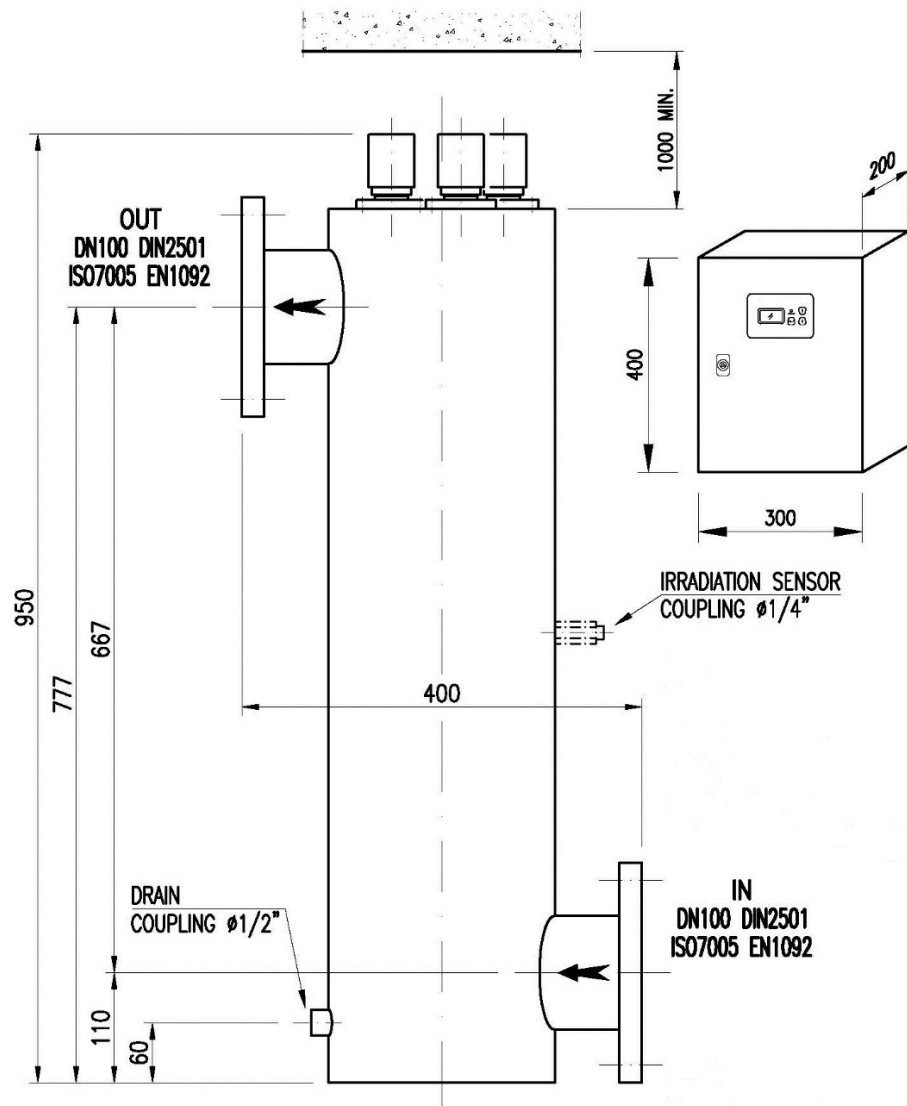
UV SENSOR	
Type	UVC selective sensor Mod. UV737TF
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Teflon

CONTROL PANEL	RACK LCD PLUS
Material and colour	Painted Steel – RAL 7035
Dimensions	400 x 300 x 200 mm
Ambient temperature range	5 – 45 °C
Lamp cable	1 m
Power supply cable	1 m
Monitor display	LCD
Resettable hour meter	Yes for lamp life control
Lamp function control	Si
Free contact (NO - NC)	Yes – general alarm (max 2 A)
230 V output (NO - NC)	Yes – general alarm (max 2 A)
Remote ON/OFF contact	Yes (settable)
ON/OFF Timer	Yes (settable)
Reactor temperature measurement and alarm	Yes (°C) – settable value (shut off for high temperature)
UV Irradiance measurement and alarm	Yes (% or W/m ² optional) – settable value
4/20 mA output	Optional – for Irradiance and water temperature

Industrial U.V. Sterilizers in HDPE



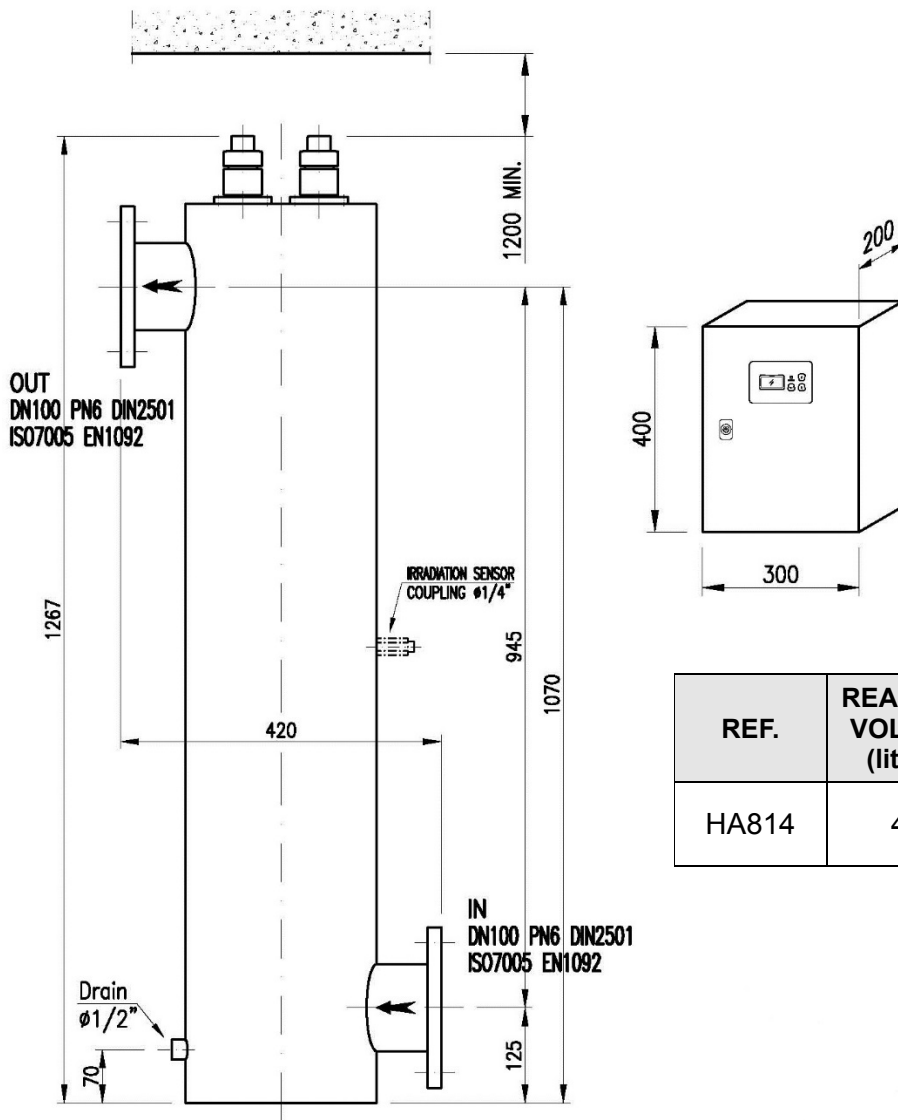
REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)
HA812	20,5	19



UV SENSOR	
Type	UVC selective sensor Mod. UV737TF
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Teflon

CONTROL PANEL	RACK LCD PLUS
Material and colour	Painted Steel – RAL 7035
Dimensions	400 x 300 x 200 mm
Ambient temperature range	5 – 45 °C
Lamp cable	1 m
Power supply cable	1 m
Monitor display	LCD
Resettable hour meter	Yes for lamp life control
Lamp function control	Si
Free contact (NO - NC)	Yes – general alarm (max 2 A)
230 V output (NO - NC)	Yes – general alarm (max 2 A)
Remote ON/OFF contact	Yes (settable)
ON/OFF Timer	Yes (settable)
Reactor temperature measurement and alarm	Yes (°C) – settable value (shut off for high temperature)
UV Irradiance measurement and alarm	Yes (% or W/m ² optional) – settable value
4/20 mA output	Optional – for Irradiance and water temperature

Industrial U.V. Sterilizers in HDPE

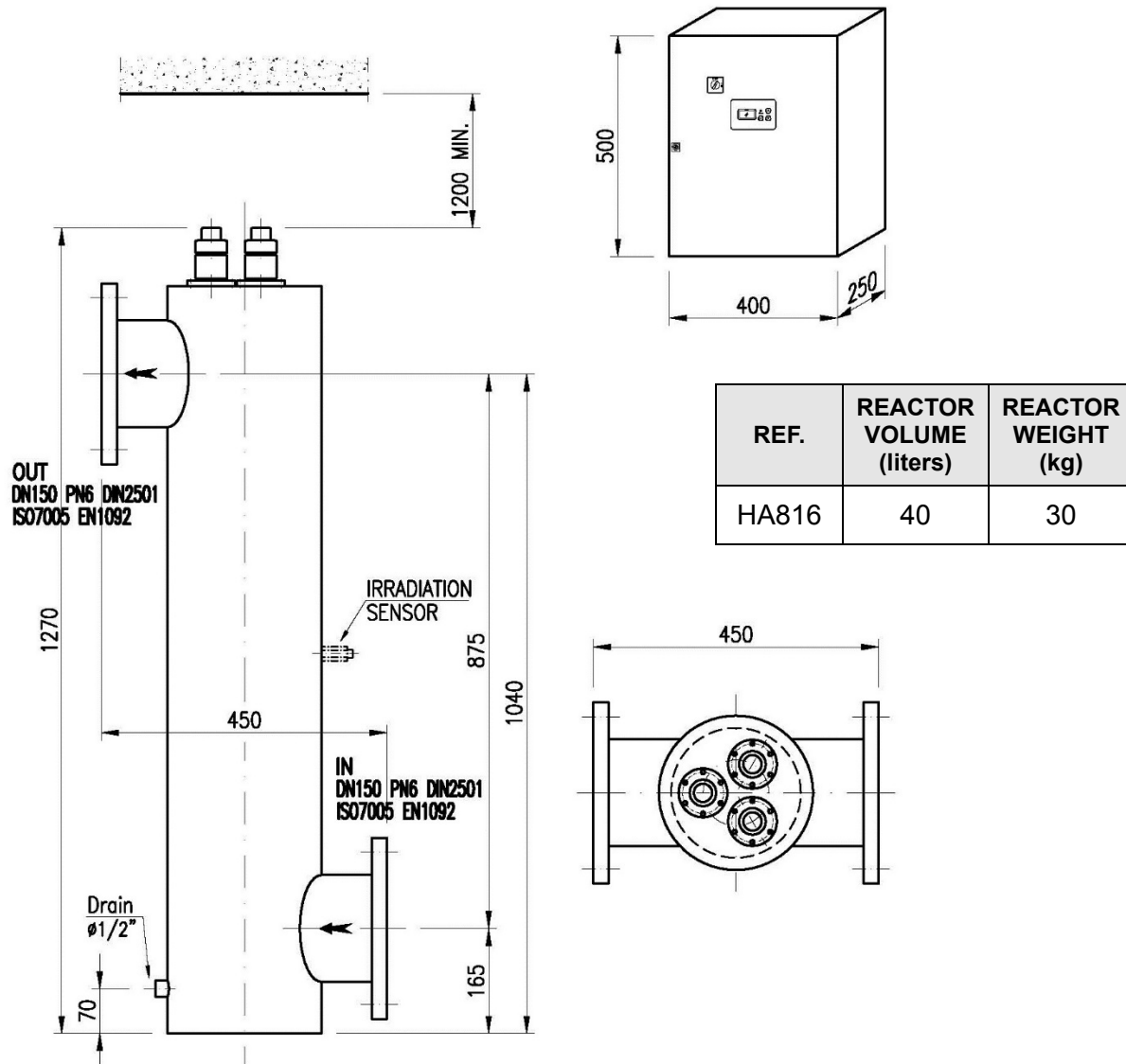


REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)
HA814	40	30

UV SENSOR	
Type	UVC selective sensor Mod. UV737TF
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Teflon

CONTROL PANEL	RACK LCD PLUS
Material and colour	Painted Steel – RAL 7035
Dimensions	400 x 300 x 200 mm
Ambient temperature range	5 – 45 °C
Lamp cable	1 m
Power supply cable	1 m
Monitor display	LCD
Resettable hour meter	Yes for lamp life control
Lamp function control	Si
Free contact (NO - NC)	Yes – general alarm (max 2 A)
230 V output (NO - NC)	Yes – general alarm (max 2 A)
Remote ON/OFF contact	Yes (settable)
ON/OFF Timer	Yes (settable)
Reactor temperature measurement and alarm	Yes (°C) – settable value (shut off for high temperature)
UV Irradiance measurement and alarm	Yes (% or W/m ² optional) – settable value
4/20 mA output	Optional – for Irradiance and water temperature

Industrial U.V. Sterilizers in HDPE



UV SENSOR	
Type	UVC selective sensor Mod. UV737TF
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Teflon

CONTROL PANEL	RACK LCD PLUS
Material and colour	Painted Steel – RAL 7035
Dimensions	400 x 300 x 200 mm
Ambient temperature range	5 – 45 °C
Lamp cable	1 m
Power supply cable	1 m
Monitor display	LCD
Resettable hour meter	Yes for lamp life control
Lamp function control	Si
Free contact (NO - NC)	Yes – general alarm (max 2 A)
230 V output (NO - NC)	Yes – general alarm (max 2 A)
Remote ON/OFF contact	Yes (settable)
ON/OFF Timer	Yes (settable)
Reactor temperature measurement and alarm	Yes (°C) – settable value (shut off for high temperature)
UV Irradiance measurement and alarm	Yes (% or W/m ² optional) – settable value
4/20 mA output	Optional – for Irradiance and water temperature

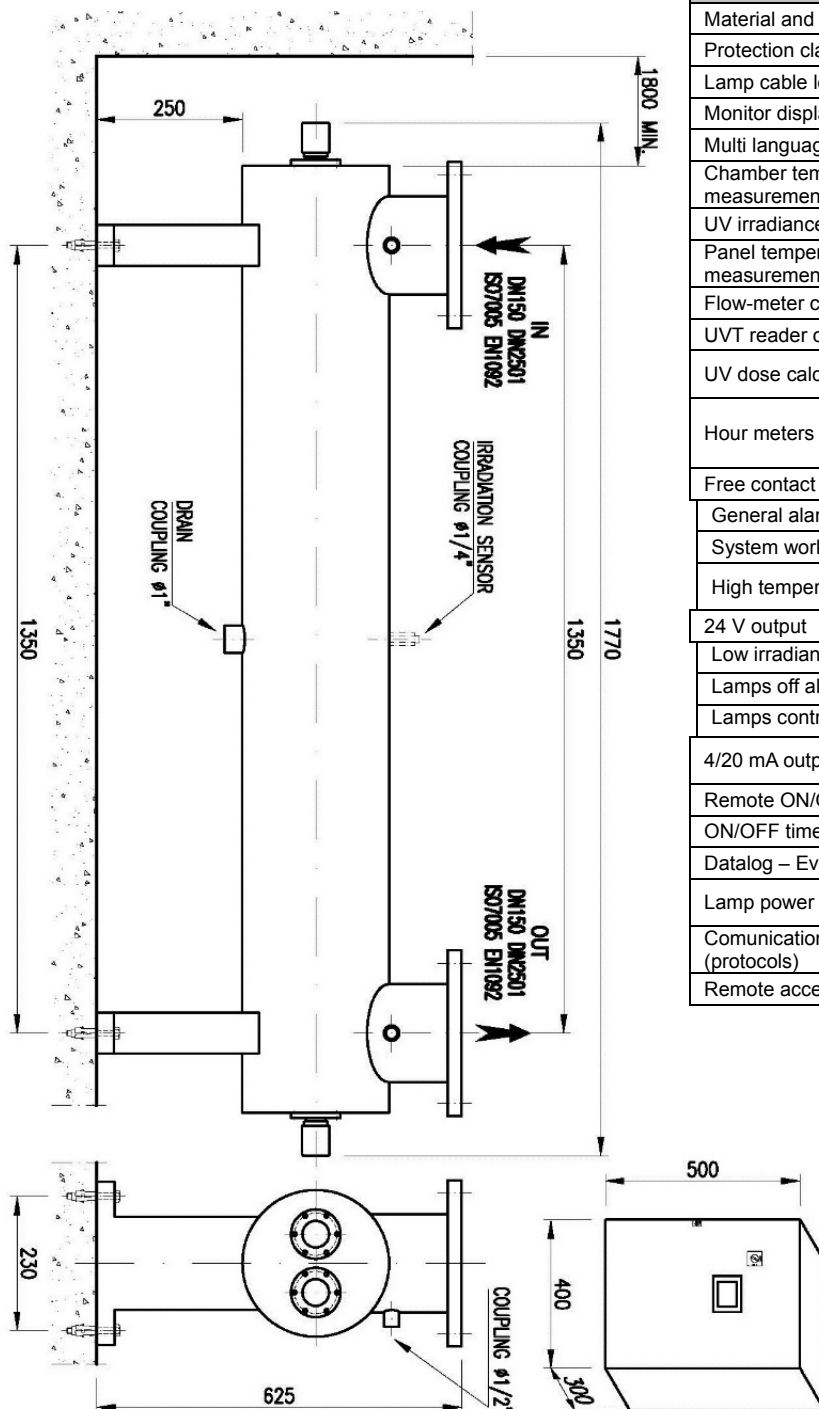
Industrial U.V. Sterilizers in HDPE



REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)
HA818	50	42

UV SENSOR	
Type	UVC selective sensor Mod. UV737TF
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Teflon

CONTROL PANEL	TC
Material and colour	Painted Steel – RAL 7035
Protection class	IP 54
Lamp cable length	2,5 m
Monitor display	Touch-Screen (65000 colours)
Multi language display	Yes
Chamber temperature measurement	Yes (°C)
UV irradiance measurement	Yes (% or W/m ²)
Panel temperature measurement	Yes (°C)
Flow-meter connection	Yes (4-20 mA)
UVT reader connection	Yes (4-20 mA)
UV dose calculation	Optional (only with external flow meter)
Hour meters	For total system life – Resettable for lamp life control
Free contact alarms (N/O)	Yes (max 1.3 A)
General alarm	Yes (settable contact working)
System working signal	Yes
High temperature alarm	Yes for panel and reactor (shut off for high temperature)
24 V output	Yes
Low irradiance alarm	Yes (settable value)
Lamps off alarm	Yes
Lamps control on/off	Yes
4/20 mA output	Yes for irradiance and temperature
Remote ON/OFF	Yes (settable contact working)
ON/OFF timer	Yes
Datalog – Events	Yes
Lamp power regulation	Manual or Automatic (dose or flow pacing)
Communication ports (protocols)	CAN, Ethernet, USB, Seriale (Modbus, TCP/IP, CANopen)
Remote access	with specific App or WebGate



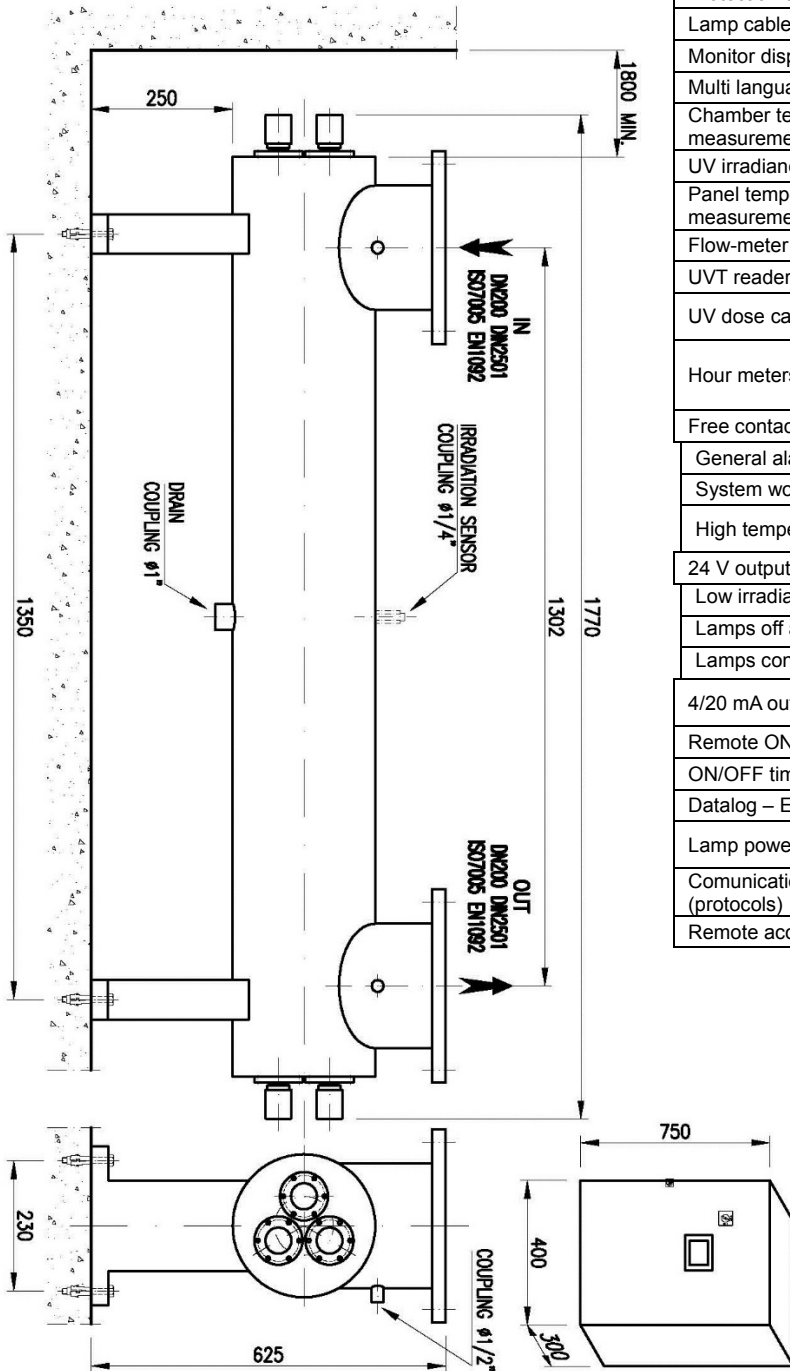
Industrial U.V. Sterilizers in HDPE



REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)
HA820	52,3	42

UV SENSOR	
Type	UVC selective sensor Mod. UV737TF
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Teflon

CONTROL PANEL	TC
Material and colour	Painted Steel – RAL 7035
Protection class	IP 54
Lamp cable length	2,5 m
Monitor display	Touch-Screen (65000 colours)
Multi language display	Yes
Chamber temperature measurement	Yes (°C)
UV irradiance measurement	Yes (% or W/m ²)
Panel temperature measurement	Yes (°C)
Flow-meter connection	Yes (4-20 mA)
UVT reader connection	Yes (4-20 mA)
UV dose calculation	Optional (only with external flow meter)
Hour meters	For total system life – Resettable for lamp life control
Free contact alarms (N/O)	Yes (max 1.3 A)
General alarm	Yes (settable contact working)
System working signal	Yes
High temperature alarm	Yes for panel and reactor (shut off for high temperature)
24 V output	Yes
Low irradiance alarm	Yes (settable value)
Lamps off alarm	Yes
Lamps control on/off	Yes
4/20 mA output	Yes for irradiance and temperature
Remote ON/OFF	Yes (settable contact working)
ON/OFF timer	Yes
Datalog – Events	Yes
Lamp power regulation	Manual or Automatic (dose or flow pacing)
Communication ports (protocols)	CAN, Ethernet, USB, Seriale (Modbus, TCP/IP, CANopen)
Remote access	with specific App or WebGate



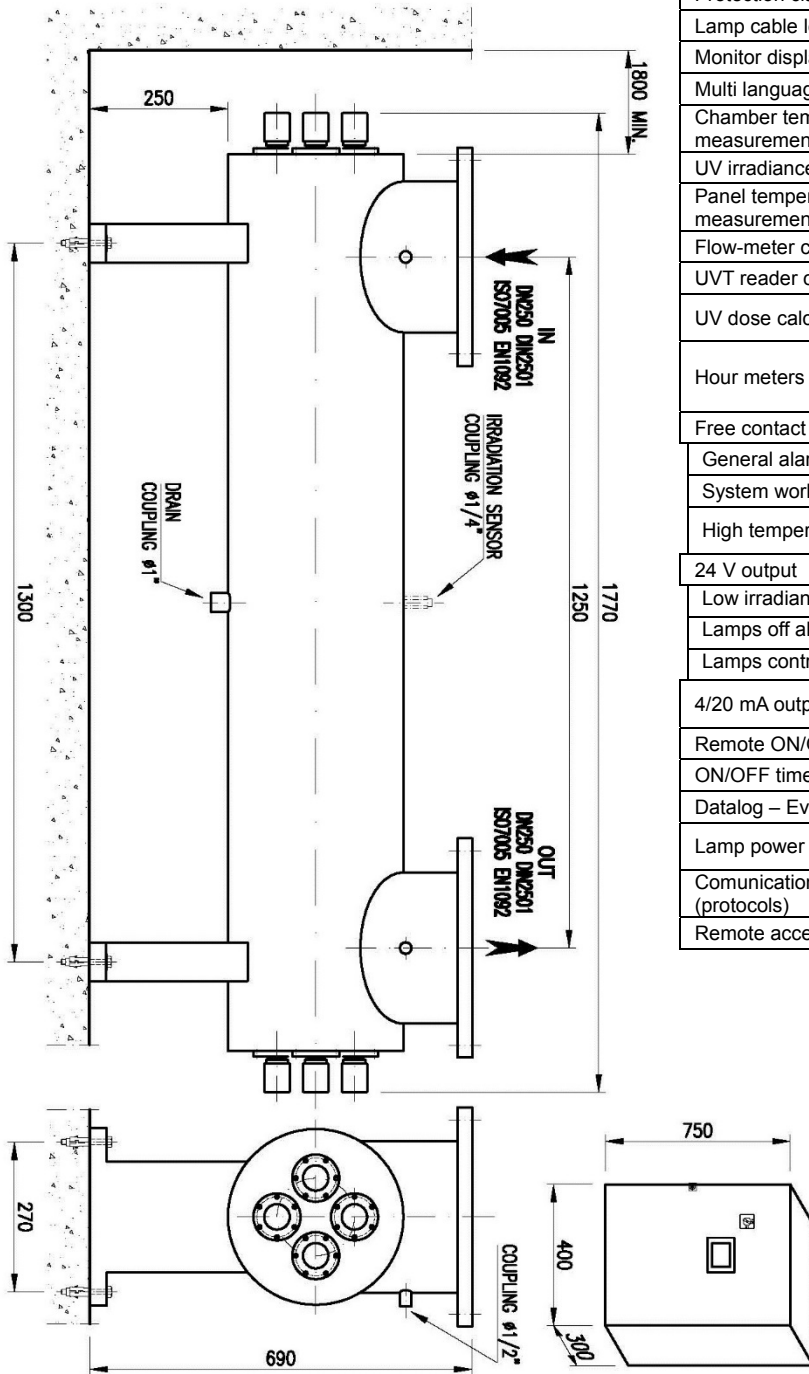
Industrial U.V. Sterilizers in HDPE



REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)
HA822	84	52

UV SENSOR	
Type	UVC selective sensor Mod. UV737TF
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Teflon

CONTROL PANEL	TC
Material and colour	Painted Steel – RAL 7035
Protection class	IP 54
Lamp cable length	2,5 m
Monitor display	Touch-Screen (65000 colours)
Multi language display	Yes
Chamber temperature measurement	Yes (°C)
UV irradiance measurement	Yes (% or W/m ²)
Panel temperature measurement	Yes (°C)
Flow-meter connection	Yes (4-20 mA)
UVT reader connection	Yes (4-20 mA)
UV dose calculation	Optional (only with external flow meter)
Hour meters	For total system life – Resettable for lamp life control
Free contact alarms (N/O)	Yes (max 1.3 A)
General alarm	Yes (settable contact working)
System working signal	Yes
High temperature alarm	Yes for panel and reactor (shut off for high temperature)
24 V output	Yes
Low irradiance alarm	Yes (settable value)
Lamps off alarm	Yes
Lamps control on/off	Yes
4/20 mA output	Yes for irradiance and temperature
Remote ON/OFF	Yes (settable contact working)
ON/OFF timer	Yes
Datalog – Events	Yes
Lamp power regulation	Manual or Automatic (dose or flow pacing)
Communication ports (protocols)	CAN, Ethernet, USB, Seriale (Modbus, TCP/IP, CANopen)
Remote access	with specific App or WebGate



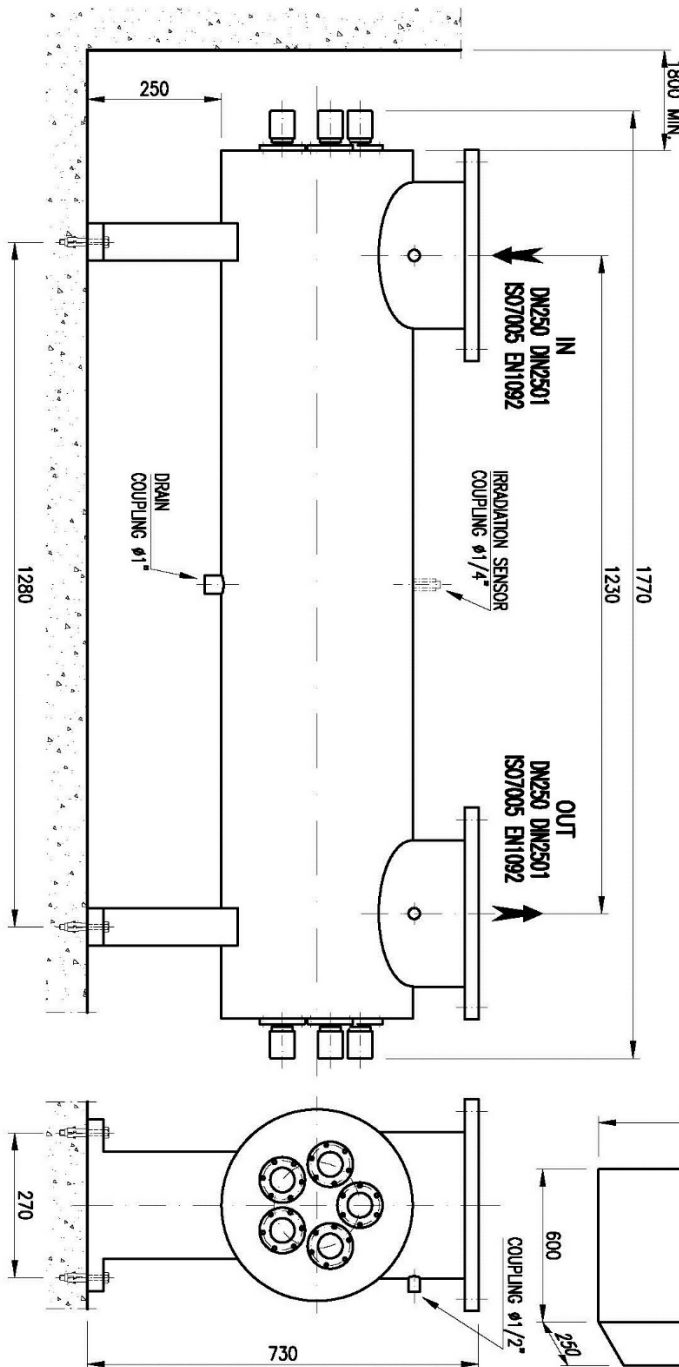
Industrial U.V. Sterilizers in HDPE



REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)
HA824	101	80

UV SENSOR	
Type	UVC selective sensor Mod. UV737TF
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Teflon

CONTROL PANEL	TC
Material and colour	Painted Steel – RAL 7035
Protection class	IP 54
Lamp cable length	2,5 m
Monitor display	Touch-Screen (65000 colours)
Multi language display	Yes
Chamber temperature measurement	Yes (°C)
UV irradiance measurement	Yes (% or W/m ²)
Panel temperature measurement	Yes (°C)
Flow-meter connection	Yes (4-20 mA)
UVT reader connection	Yes (4-20 mA)
UV dose calculation	Optional (only with external flow meter)
Hour meters	For total system life – Resettable for lamp life control
Free contact alarms (N/O)	Yes (max 1.3 A)
General alarm	Yes (settable contact working)
System working signal	Yes
High temperature alarm	Yes for panel and reactor (shut off for high temperature)
24 V output	Yes
Low irradiance alarm	Yes (settable value)
Lamps off alarm	Yes
Lamps control on/off	Yes
4/20 mA output	Yes for irradiance and temperature
Remote ON/OFF	Yes (settable contact working)
ON/OFF timer	Yes
Datalog – Events	Yes
Lamp power regulation	Manual or Automatic (dose or flow pacing)
Communication ports (protocols)	CAN, Ethernet, USB, Seriale (Modbus, TCP/IP, CANopen)
Remote access	with specific App or WebGate



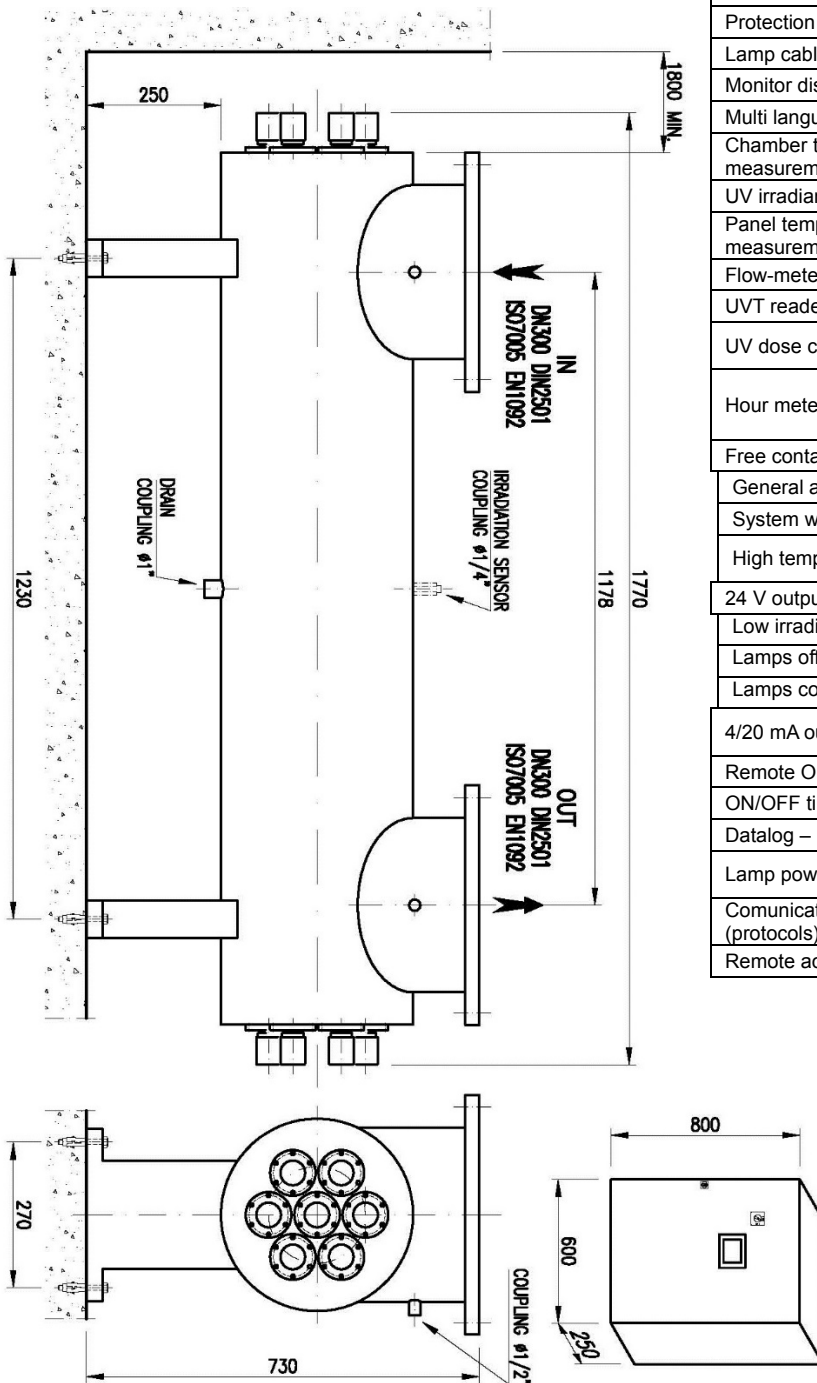
Industrial U.V. Sterilizers in HDPE



REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)
HA826	104	100

UV SENSOR	
Type	UVC selective sensor Mod. UV737TF
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Teflon

CONTROL PANEL	TC
Material and colour	Painted Steel – RAL 7035
Protection class	IP 54
Lamp cable length	2,5 m
Monitor display	Touch-Screen (65000 colours)
Multi language display	Yes
Chamber temperature measurement	Yes (°C)
UV irradiance measurement	Yes (% or W/m ²)
Panel temperature measurement	Yes (°C)
Flow-meter connection	Yes (4-20 mA)
UVT reader connection	Yes (4-20 mA)
UV dose calculation	Optional (only with external flow meter)
Hour meters	For total system life – Resettable for lamp life control
Free contact alarms (N/O)	Yes (max 1.3 A)
General alarm	Yes (settable contact working)
System working signal	Yes
High temperature alarm	Yes for panel and reactor (shut off for high temperature)
24 V output	Yes
Low irradiance alarm	Yes (settable value)
Lamps off alarm	Yes
Lamps control on/off	Yes
4/20 mA output	Yes for irradiance and temperature
Remote ON/OFF	Yes (settable contact working)
ON/OFF timer	Yes
Datalog – Events	Yes
Lamp power regulation	Manual or Automatic (dose or flow pacing)
Communication ports (protocols)	CAN, Ethernet, USB, Seriale (Modbus, TCP/IP, CANopen)
Remote access	with specific App or WebGate



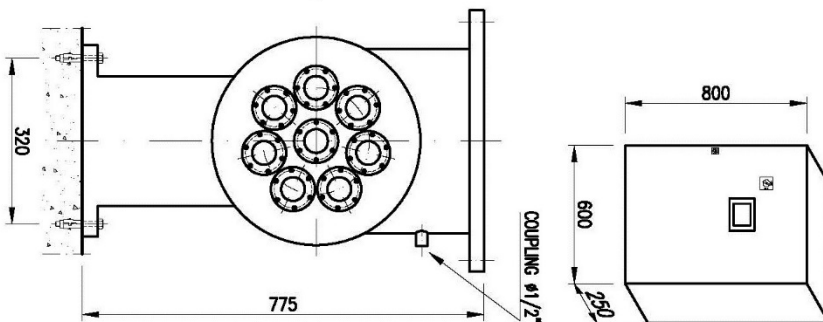
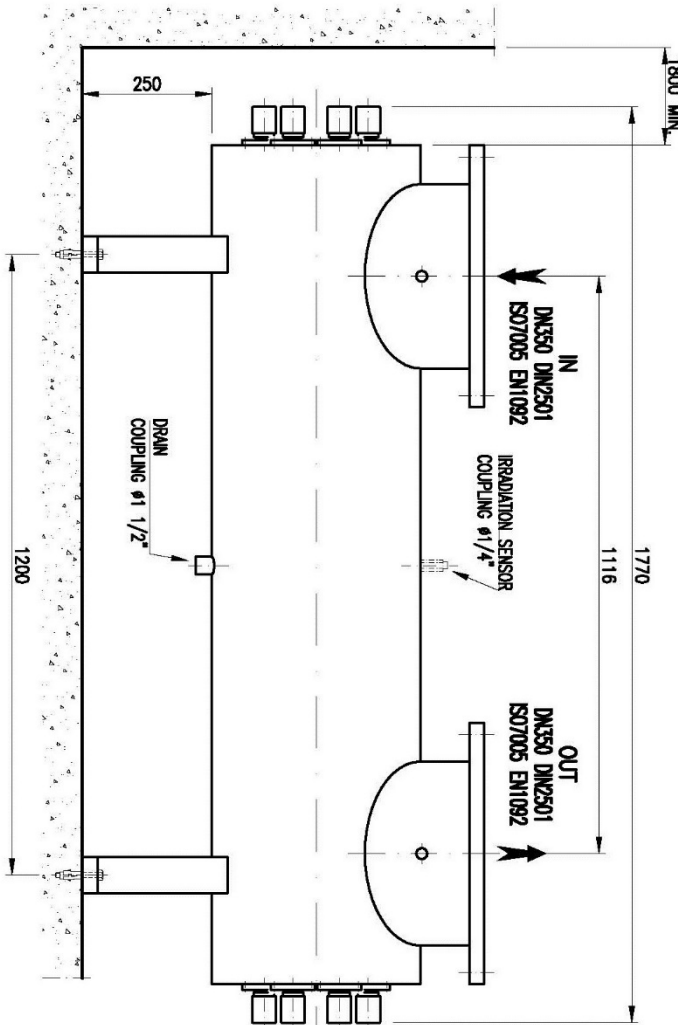
Industrial U.V. Sterilizers in HDPE



REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)
HA828	130	165

UV SENSOR	
Type	UVC selective sensor Mod. UV737TF
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Teflon

CONTROL PANEL	TC
Material and colour	Painted Steel – RAL 7035
Protection class	IP 54
Lamp cable length	2,5 m
Monitor display	Touch-Screen (65000 colours)
Multi language display	Yes
Chamber temperature measurement	Yes (°C)
UV irradiance measurement	Yes (% or W/m ²)
Panel temperature measurement	Yes (°C)
Flow-meter connection	Yes (4-20 mA)
UVT reader connection	Yes (4-20 mA)
UV dose calculation	Optional (only with external flow meter)
Hour meters	For total system life – Resettable for lamp life control
Free contact alarms (N/O)	Yes (max 1.3 A)
General alarm	Yes (settable contact working)
System working signal	Yes
High temperature alarm	Yes for panel and reactor (shut off for high temperature)
24 V output	Yes
Low irradiance alarm	Yes (settable value)
Lamps off alarm	Yes
Lamps control on/off	Yes
4/20 mA output	Yes for irradiance and temperature
Remote ON/OFF	Yes (settable contact working)
ON/OFF timer	Yes
Datalog – Events	Yes
Lamp power regulation	Manual or Automatic (dose or flow pacing)
Communication ports (protocols)	CAN, Ethernet, USB, Seriale (Modbus, TCP/IP, CANopen)
Remote access	with specific App or WebGate



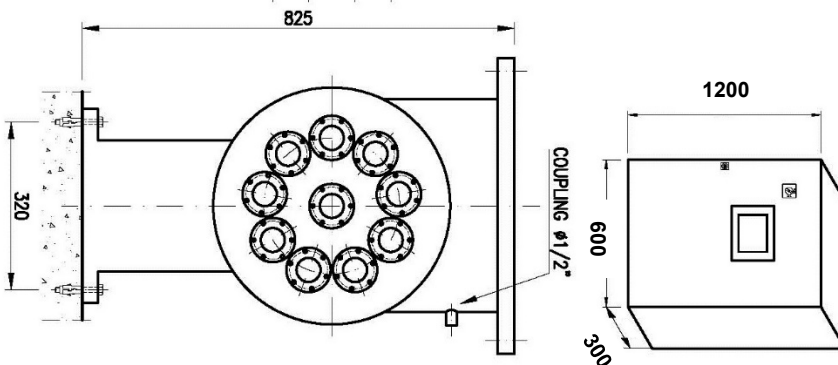
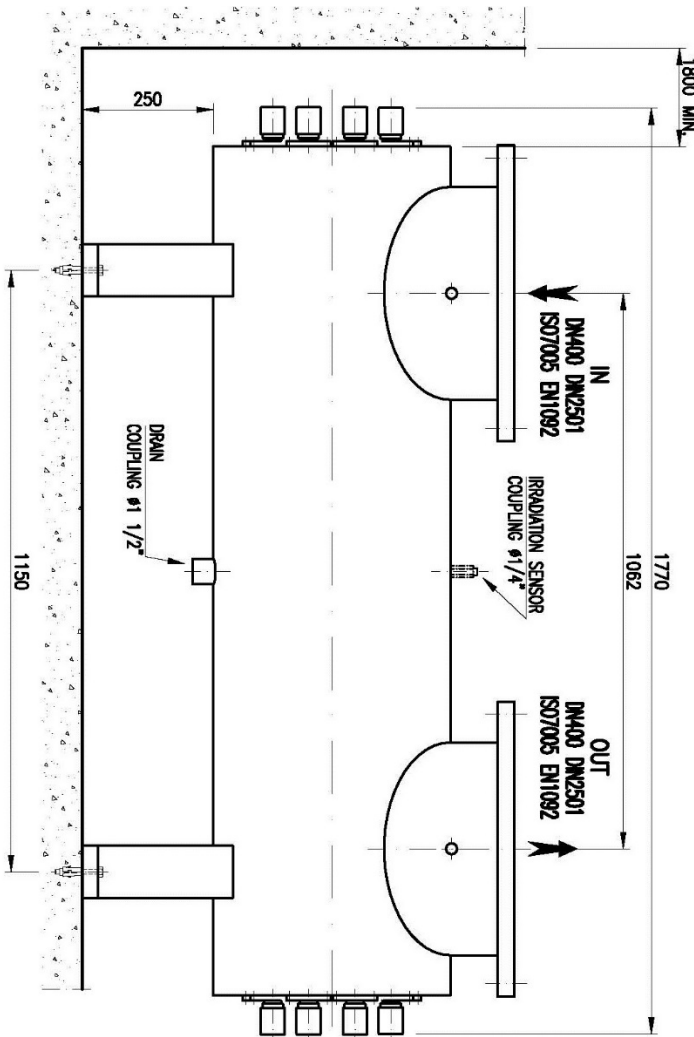
Industrial U.V. Sterilizers in HDPE



REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)
HA830	165	180

UV SENSOR	
Type	UVC selective sensor Mod. UV737TF
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Teflon

CONTROL PANEL	TC
Material and colour	Painted Steel – RAL 7035
Protection class	IP 54
Lamp cable length	2,5 m
Monitor display	Touch-Screen (65000 colours)
Multi language display	Yes
Chamber temperature measurement	Yes (°C)
UV irradiance measurement	Yes (% or W/m ²)
Panel temperature measurement	Yes (°C)
Flow-meter connection	Yes (4-20 mA)
UVT reader connection	Yes (4-20 mA)
UV dose calculation	Optional (only with external flow meter)
Hour meters	For total system life – Resettable for lamp life control
Free contact alarms (N/O)	Yes (max 1.3 A)
General alarm	Yes (settable contact working)
System working signal	Yes
High temperature alarm	Yes for panel and reactor (shut off for high temperature)
24 V output	Yes
Low irradiance alarm	Yes (settable value)
Lamps off alarm	Yes
Lamps control on/off	Yes
4/20 mA output	Yes for irradiance and temperature
Remote ON/OFF	Yes (settable contact working)
ON/OFF timer	Yes
Datalog – Events	Yes
Lamp power regulation	Manual or Automatic (dose or flow pacing)
Communication ports (protocols)	CAN, Ethernet, USB, Seriale (Modbus, TCP/IP, CANopen)
Remote access	with specific App or WebGate



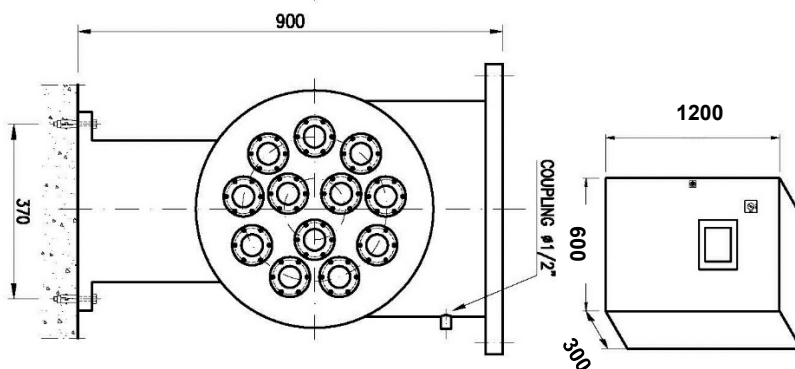
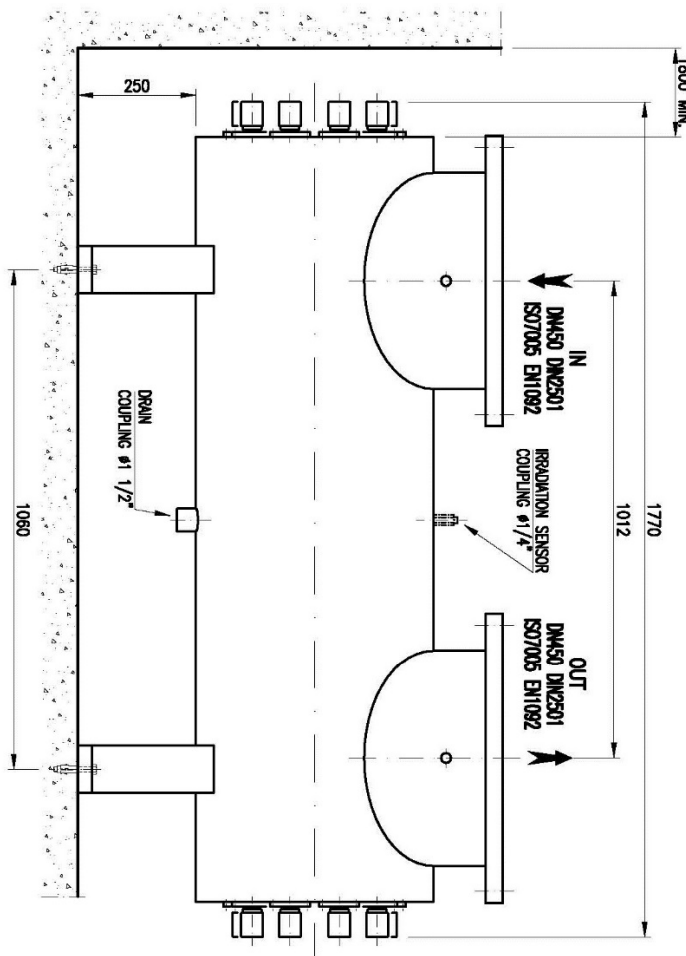
Industrial U.V. Sterilizers in HDPE



REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)
HA832	214	220

UV SENSOR	
Type	UVC selective sensor Mod. UV737TF
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Teflon

CONTROL PANEL	TC
Material and colour	Painted Steel – RAL 7035
Protection class	IP 54
Lamp cable length	2,5 m
Monitor display	Touch-Screen (65000 colours)
Multi language display	Yes
Chamber temperature measurement	Yes (°C)
UV irradiance measurement	Yes (% or W/m ²)
Panel temperature measurement	Yes (°C)
Flow-meter connection	Yes (4-20 mA)
UVT reader connection	Yes (4-20 mA)
UV dose calculation	Optional (only with external flow meter)
Hour meters	For total system life – Resettable for lamp life control
Free contact alarms (N/O)	Yes (max 1.3 A)
General alarm	Yes (settable contact working)
System working signal	Yes
High temperature alarm	Yes for panel and reactor (shut off for high temperature)
24 V output	Yes
Low irradiance alarm	Yes (settable value)
Lamps off alarm	Yes
Lamps control on/off	Yes
4/20 mA output	Yes for irradiance and temperature
Remote ON/OFF	Yes (settable contact working)
ON/OFF timer	Yes
Datalog – Events	Yes
Lamp power regulation	Manual or Automatic (dose or flow pacing)
Communication ports (protocols)	CAN, Ethernet, USB, Seriale (Modbus, TCP/IP, CANopen)
Remote access	with specific App or WebGate



Industrial U.V. Sterilizers in AISI 316L 200 W Series



- Made in European Union (Italy);
- To be used for industrial water disinfection systems;
- Single-lamp or multi-lamp systems, with single lamp 200 W;
- With reactor in AISI 316L, with sensor;
- Electric box with electronic circuit, connection cable, operating time meter and switch;
- Operating and failure led;
- Conform with CE safety Directives and D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- Available on request with UL certificate (for USA and Canada);
- WRAS approved products (for UK);
- Conform with EAC certificate for Russia and near-by Countries;
- Conform with Polish Quality Certification for Poland;
- With lamp quartz sheath;
- Max operating pressure 10 bar; Temperature: 5 ÷ 50°C;
- UVC transmittance 98% - 1cm, UVC dose 400 J/m² ;
- Power supply 230 V – 50/60 Hz and life span of lamp 12.000 hours;
- Reactor protection class IP65;
- Control panel protection class IP54;
- Possibility of connection with shut down solenoid valve;
- Optional cleaning system (manual or automatic);
- Vertical mounting (horizontal for automatic cleaning systems).

↑ From bottom to top.
↔ Both directions.

Temperature: 5 ÷ 50°C;

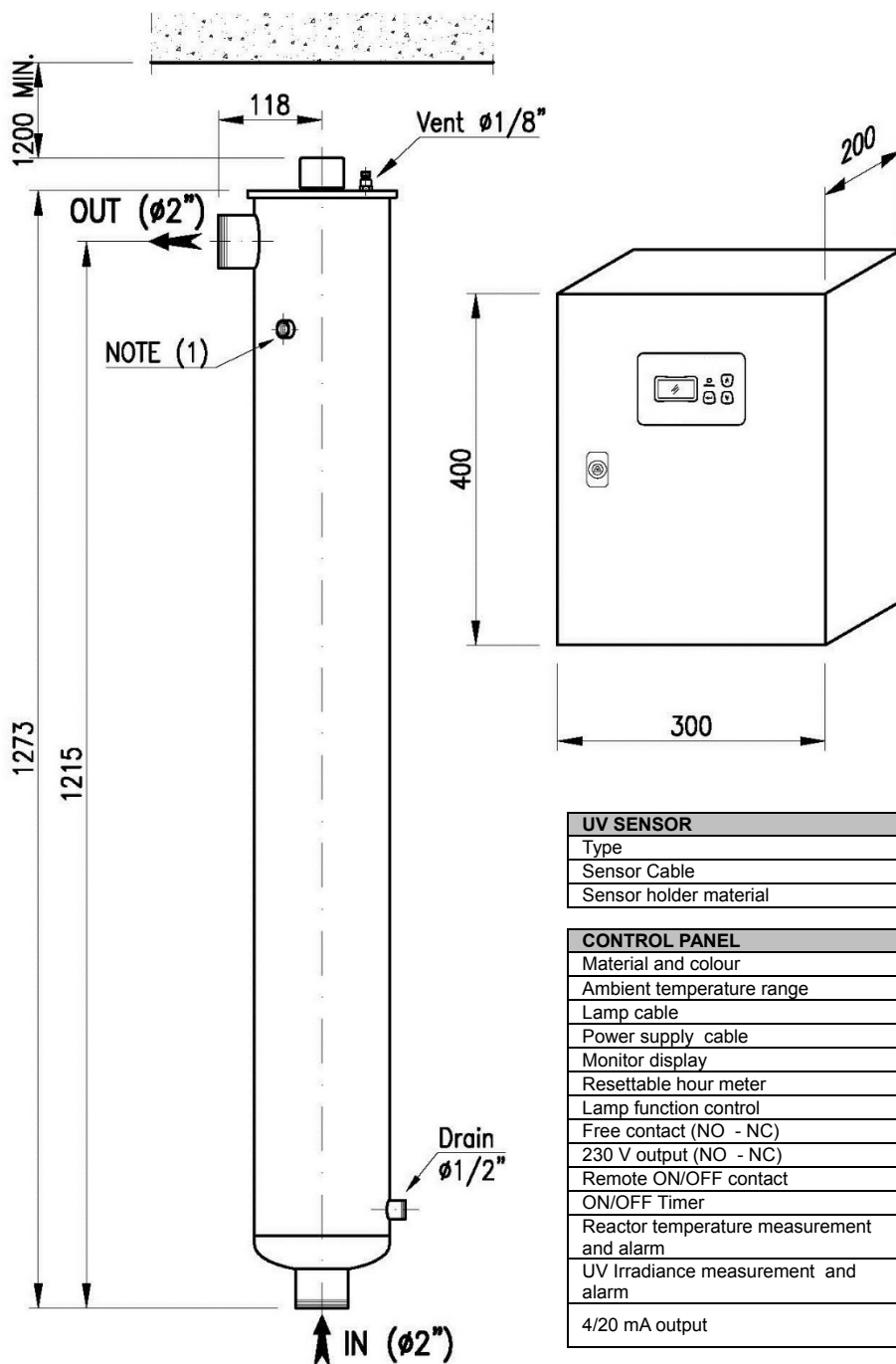
(*) not available in stock.

REF.	MAX FLOW RATE (m ³ /h)	TOTAL CONSUMPTION (W)	No. LAMPS	LAMP POWER (W)	IN/OUT CONNECTIONS	CLEANING SYSTEM	FLOW DIRECTION	PRICE EURO
HA840 (*)	24	222	1	200	2" M	NO	↑	5.619,20
HA840M (*)	24	222	1	200	2" M	Manual	↑	6.720,00
HA840A (*)	24	222	1	200	2" M	Automatic	↔	10.880,00
HA842 (*)	60	444	2	200	DN80	NO	↑	9.953,28
HA842M (*)	60	444	2	200	DN80	Manual	↑	11.008,00
HA842A (*)	60	444	2	200	DN80	Automatic	↔	14.713,60
HA844 (*)	96	666	3	200	DN100	NO	↑	14.712,32
HA844A (*)	96	666	3	200	DN100	Automatic	↔	18.560,00
HA846 (*)	125	888	4	200	DN150	NO	↑	15.616,00
HA848 (*)	160	888	4	200	DN150	NO	↑	17.139,20
HA848A (*)	160	888	4	200	DN150	Automatic	↔	21.094,40

Industrial U.V. Sterilizers in AISI 316L 200 W Series



REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)	IN-OUT
HA840	21,5	13	2" M
HA840M	21,5	13	2" M



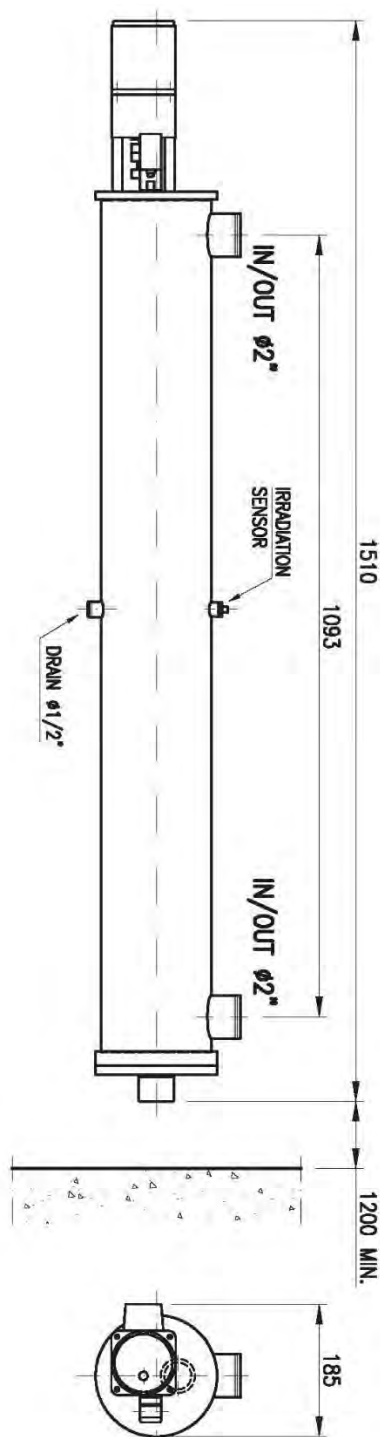
UV SENSOR	
Type	UVC selective sensor Mod. UV737
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Stainless steel 316L

CONTROL PANEL	RACK LCD PLUS
Material and colour	Black Painted Steel – RAL 7035
Ambient temperature range	5 – 45 °C
Lamp cable	2,5 m
Power supply cable	1 m
Monitor display	LCD
Resettable hour meter	Yes for lamp life control
Lamp function control	Yes
Free contact (NO - NC)	Yes – general alarm (max 2 A)
230 V output (NO - NC)	Yes – general alarm (max 2 A)
Remote ON/OFF contact	Yes (settable)
ON/OFF Timer	Yes (settable)
Reactor temperature measurement and alarm	Yes (°C) – settable value (shut off for high temperature)
UV Irradiance measurement and alarm	Yes (% or W/m2 optional) – settable value
4/20 mA output	Optional – for Irradiance and water temperature

Industrial U.V. Sterilizers in AISI 316L 200 W Series

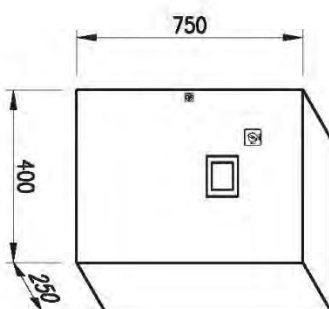


REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)	IN-OUT
HA840A	21,5	13	2" M



UV SENSOR	
Type	UVC selective sensor Mod. UV737
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Stainless steel 316L

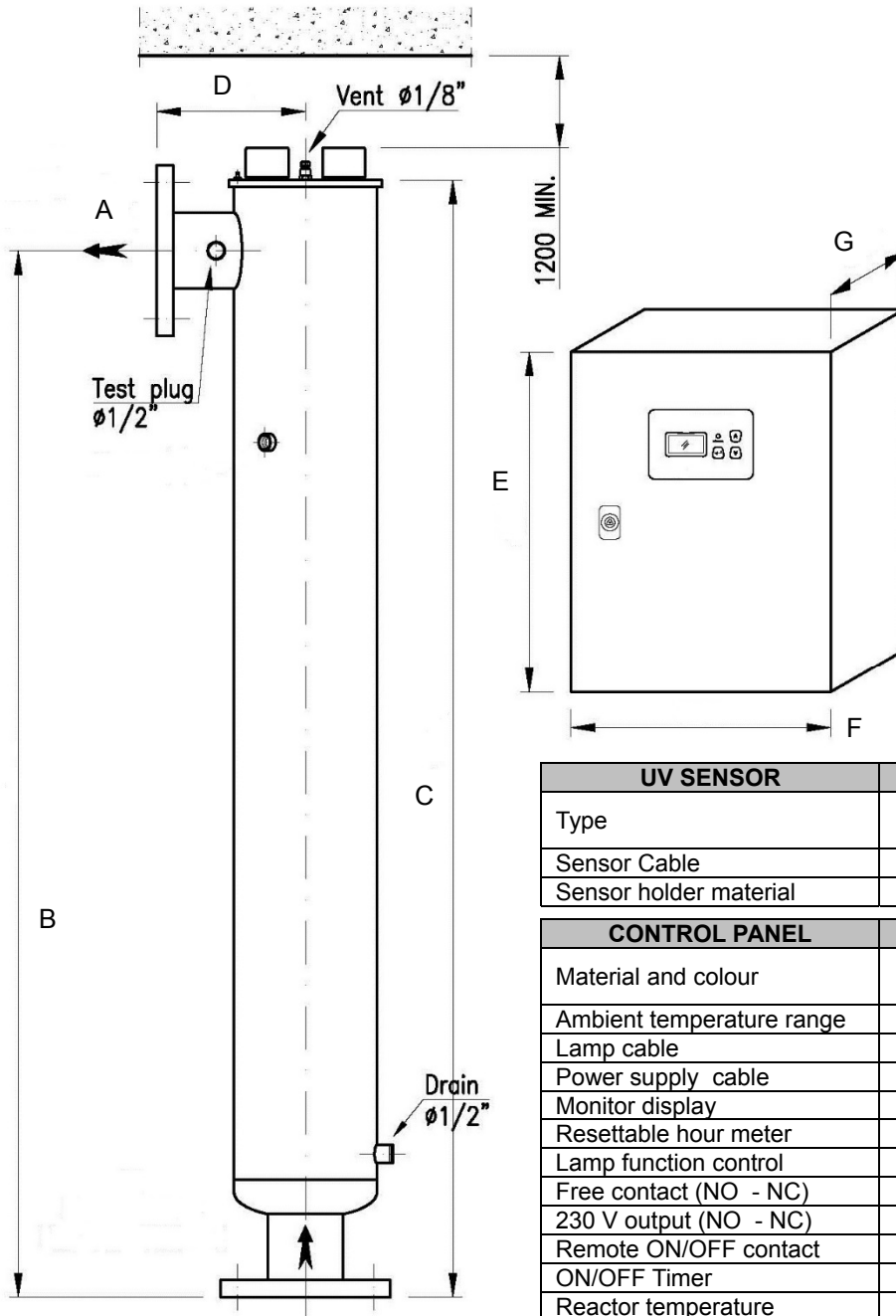
CONTROL PANEL	TC
Material and colour	Black Painted Steel – RAL 7035
Ambient temperature range	5 – 45 °C
Lamp cable	4 m
Monitor display	TOUCH SCREEN (65.000 colors)
Multilanguage display	IT-EN-FR-ES
Resettable hour meter	Yes for lamp life control
Lamp function control	Yes
Free contact (NO - NC)	Yes – general alarm (max 1,3 A)
Remote ON/OFF contact	Yes (settable)
ON/OFF Timer	Yes
Reactor temperature measurement and alarm	Yes (°C) (shut off for high temperature)
UV Irradiance measurement and alarm	Yes (% or W/m ²)
4/20 mA output	Yes for irradiance and water temperature



Industrial U.V. Sterilizers in AISI 316L 200 W Series



REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)	A IN-OUT	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)
HA842	39	25	DN80	1230	1313	175	400	300	200
HA842M	39	25	DN80	1230	1313	175	400	300	200



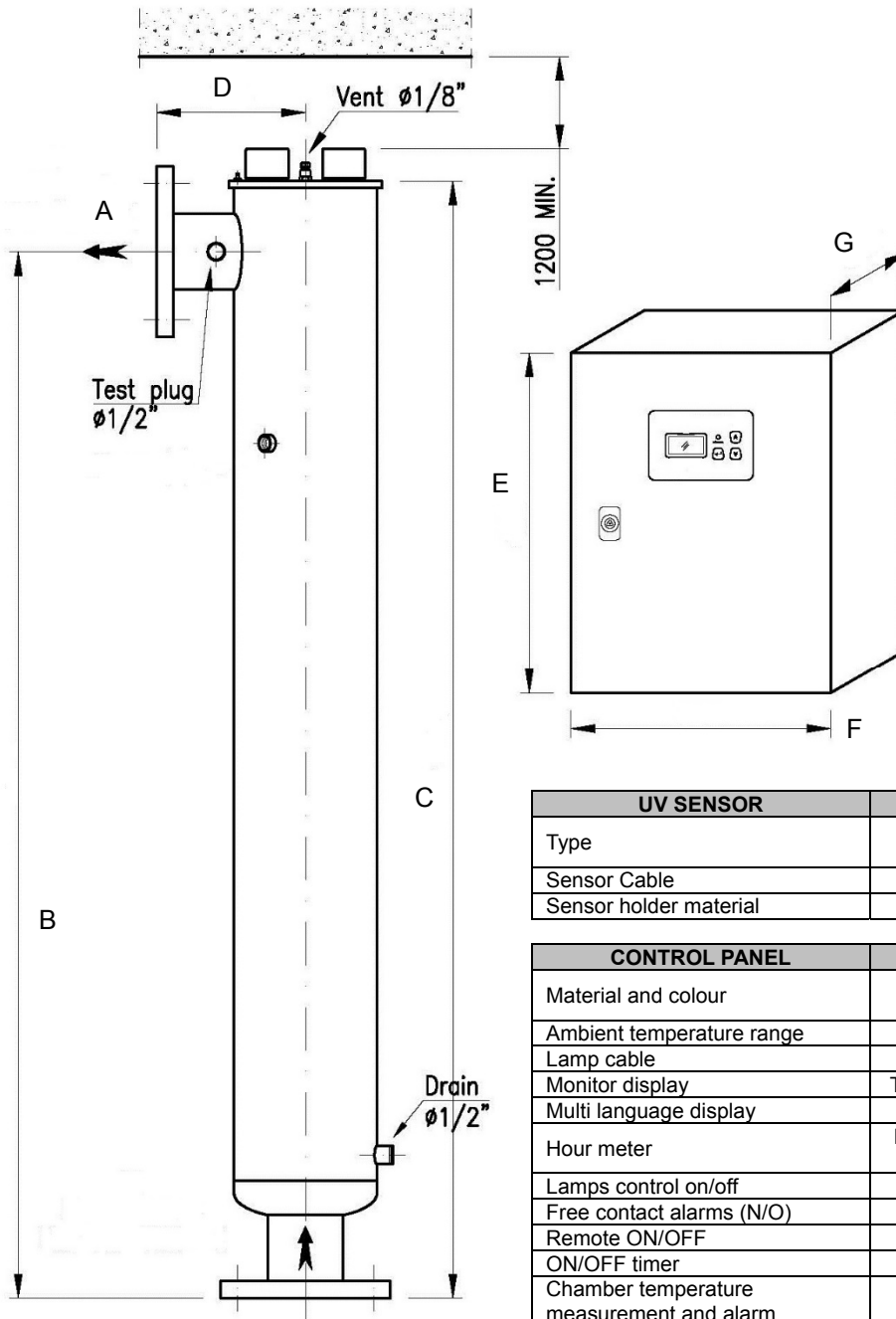
UV SENSOR	
Type	UVC selective sensor Mod. UV737
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Stainless steel 316L

CONTROL PANEL	RACK LCD PLUS
Material and colour	Black Painted Steel (RAL 7035)
Ambient temperature range	5 – 45 °C
Lamp cable	2,5 m
Power supply cable	1 m
Monitor display	LCD
Resettable hour meter	Yes for lamp life control
Lamp function control	Yes
Free contact (NO - NC)	Yes – general alarm (max 2 A)
230 V output (NO - NC)	Yes – general alarm (max 2 A)
Remote ON/OFF contact	Yes (settable)
ON/OFF Timer	Yes (settable)
Reactor temperature measurement and alarm	Yes (°C) – settable value (shut off for high temperature)
UV Irradiance measurement and alarm	Yes (% or W/m ² optional) – settable value
4/20 mA output	Optional – for irradiance and water temperature

Industrial U.V. Sterilizers in AISI 316L 200 W Series



REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)	A IN-OUT	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)
HA844	50	31	DN100	1200	1321	210	500	400	250
HA846	47	37	DN150	1175	1321	210	750	400	250
HA848	70	48	DN150	1200	1346	235	750	400	250



UV SENSOR	
Type	UVC selective sensor Mod. UV737
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Stainless steel 316L

CONTROL PANEL	TC
Material and colour	Black Painted Steel (RAL 7035)
Ambient temperature range	5 – 45 °C
Lamp cable	4 m
Monitor display	TOUCH SCREEN (65.000 colors)
Multi language display	IT-EN-FR-ES
Hour meter	For total system life – Resettable for lamp life control
Lamps control on/off	Yes
Free contact alarms (N/O)	Yes (max 1.3 A)
Remote ON/OFF	Yes (settable contact working)
ON/OFF timer	Yes
Chamber temperature measurement and alarm	Yes (°C) (shut off for high temperature)
UV irradiance measurement and alarm	Yes (% or W/m ²)
4/20 mA output	Yes for irradiance and temperature

Industrial Flanged Multilamp U.V. Sterilizers in AISI 316L 400 W Series



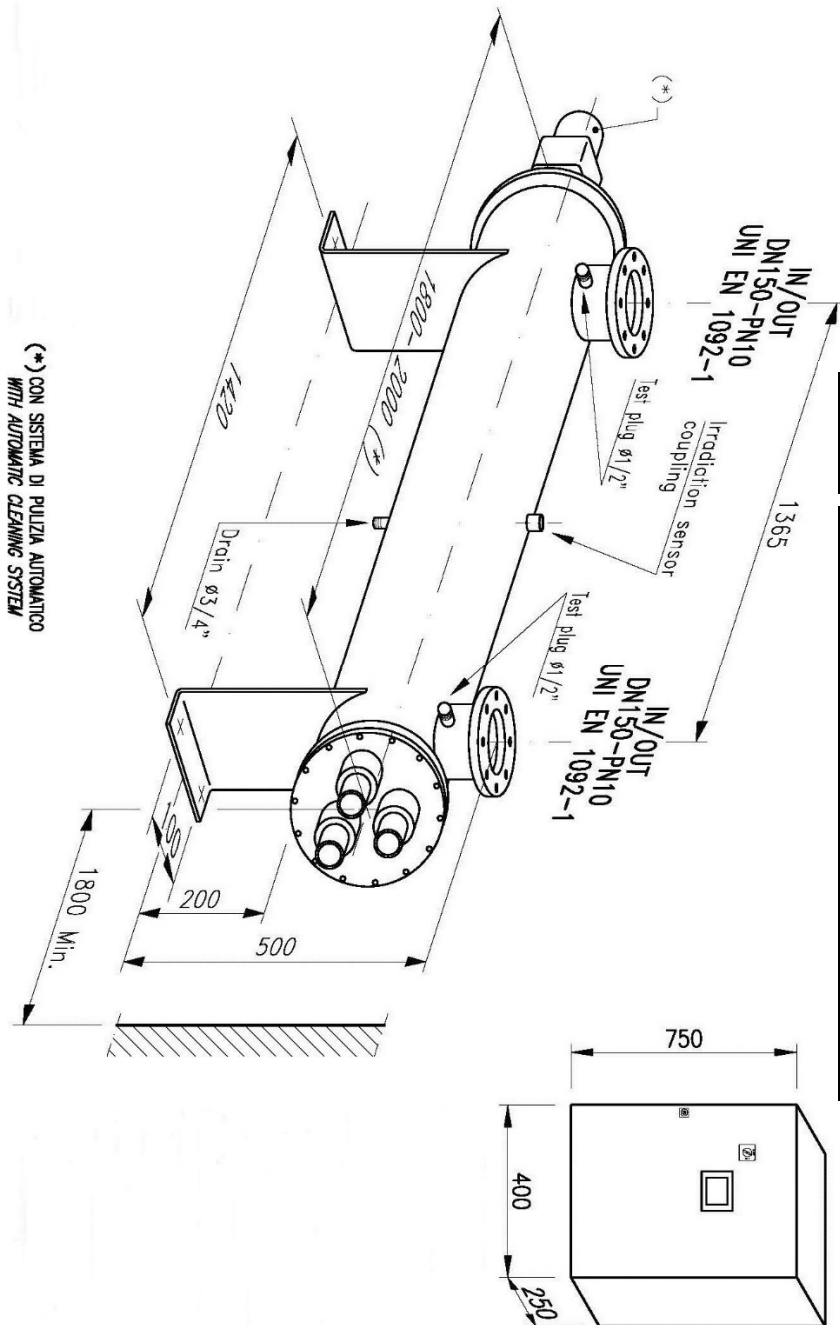
- Made in European Union (Italy);
 - To be used for industrial water disinfection systems;
 - Multi-lamp systems with single lamp 400 W;
 - With reactor in AISI 316L, with sensor;
 - Electric box with electronic circuit, connection cable, operating time meter and switch;
 - Operating and failure led;
 - Conform with CE safety Directives and D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
 - Available on request with UL certificate (for USA and Canada);
 - WRAS approved products (for UK);
 - Conform with EAC certificate for Russia and near-by Countries;
 - Conform with Polish Quality Certification for Poland;
 - Conform with a Norwegian certification of National Veterinary Institute, which gives the leading rules applied world wide in the sector of the fish farm;
 - With lamp quartz sheath;
 - Max operating pressure 10 bar;
 - Temperature: 5 ÷ 50°C;
 - UVC transmittance 97% - 1cm, UVC dose 400 J/m² ;
 - Power supply 230 V – 50/60 Hz and life span of lamp 16.000 hours;
 - Reactor protection class IP65;
 - Control panel protection class IP54;
 - Possibility of connection with shut down solenoid valve;
 - Alarm system;
 - Horizontal mounting and flow both directions;
 - Automatic cleaning systems.
- (*) not available in stock.

REF.	MAX FLOW RATE (m ³ /h)	TOTAL CONSUMPTION (W)	No. LAMPS	LAMP POWER (W)	IN/OUT CONNECTIONS	PRICE EURO
HA860A (*)	150	1.300	3	400	DN150	20.608,00
HA862A (*)	250	1.760	4	400	DN200	25.313,28
HA864A (*)	300	2.180	5	400	DN200	29.664,00
HA866A (*)	420	2.650	6	400	DN250	33.619,20
HA868A (*)	600	3.500	8	400	DN250	40.211,20
HA870A (*)	830	4.400	10	400	DN300	44.166,40
HA872A (*)	980	5.300	10	400	DN350	52.076,80

Industrial Flanged Multilamp U.V. Sterilizers in AISI 316L 400 W Series



REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)	IN-OUT
HA860A	56	50	DN150



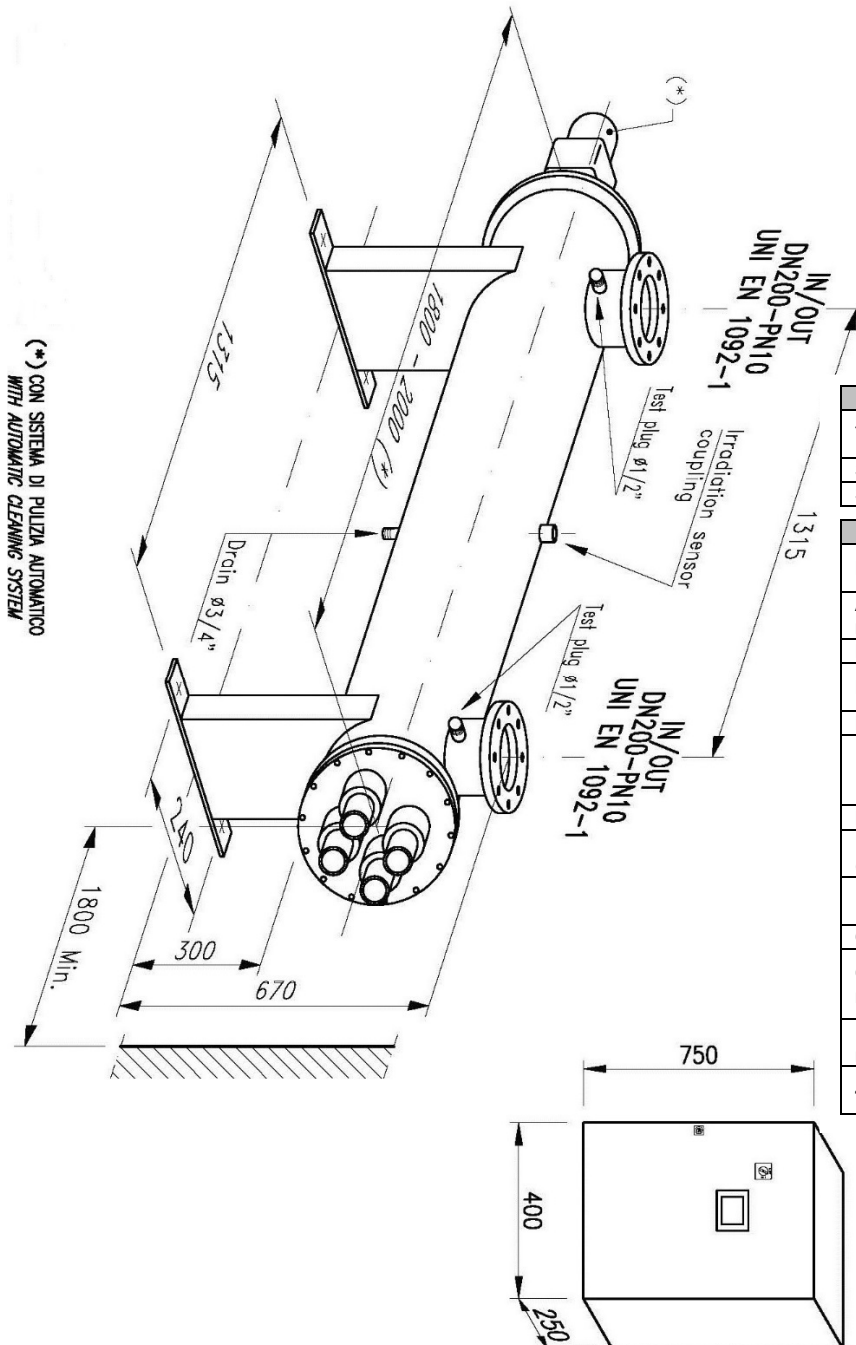
UV SENSOR	
Type	UVC selective sensor Mod. UV737
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Stainless steel 316L

CONTROL PANEL	TC
Material and colour	Black Painted Steel (RAL 7035)
Ambient temperature range	5 – 45 °C
Lamp cable	4 m
Monitor display	TOUCH SCREEN (65.000 colors)
Multi language display	IT-EN-FR-ES
Hour meter	For total system life – Resettable for lamp life control
Lamps control on/off	Yes
Free contact alarms (N/O)	Yes (max 1.3 A)
Remote ON/OFF	Yes (settable contact working)
ON/OFF timer	Yes
Chamber temperature measurement and alarm	Yes (°C) (shut off for high temperature)
UV irradiance measurement and alarm	Yes (% or W/m ²)
4/20 mA output	Yes for irradiance and temperature

Industrial Flanged Multilamp U.V. Sterilizers in AISI 316L 400 W Series



REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)	IN-OUT
HA862A	82	80	DN200



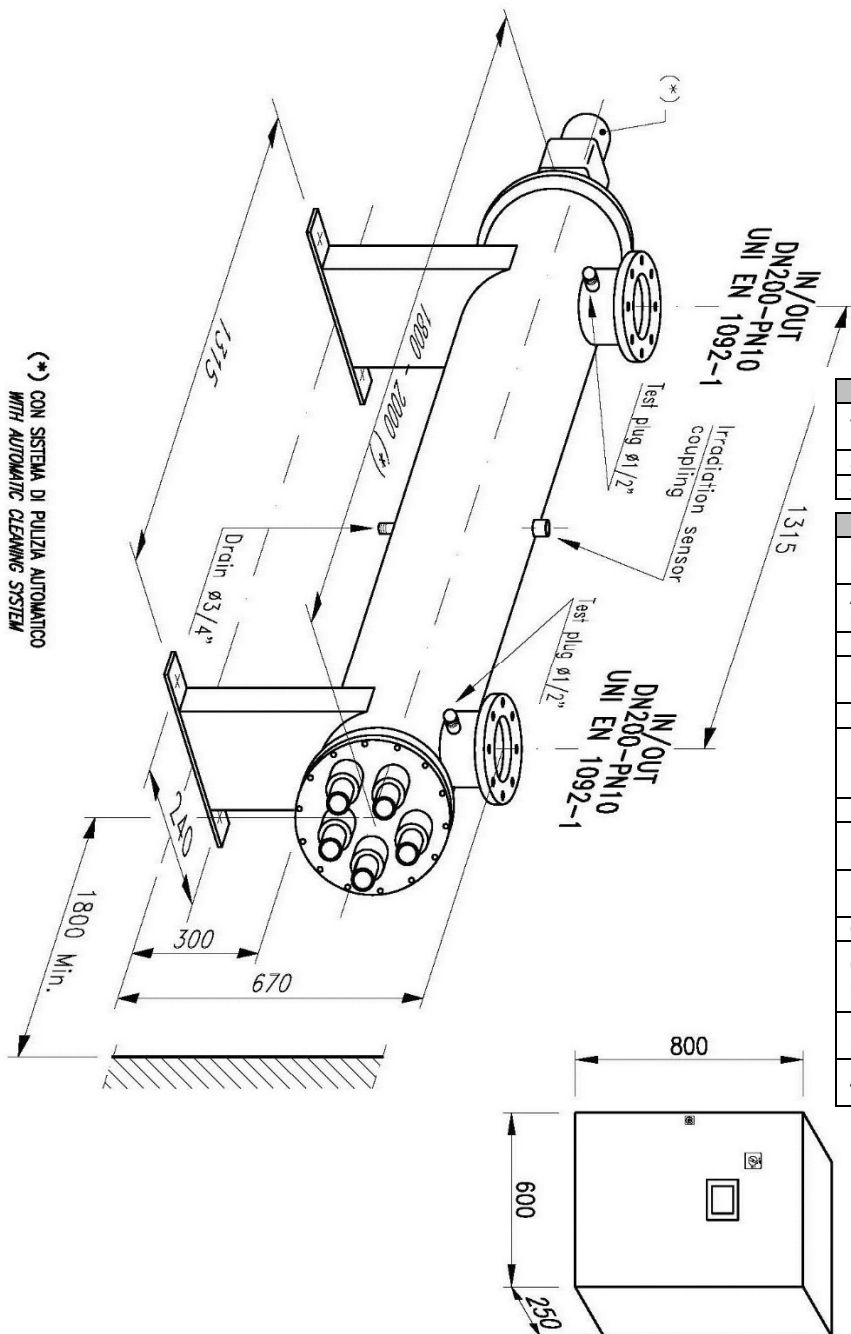
UV SENSOR	
Type	UVC selective sensor Mod. UV737
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Stainless steel 316L

CONTROL PANEL	TC
Material and colour	Black Painted Steel (RAL 7035)
Ambient temperature range	5 – 45 °C
Lamp cable	4 m
Monitor display	TOUCH SCREEN (65.000 colors)
Multi language display	IT-EN-FR-ES
Hour meter	For total system life – Resettable for lamp life control
Lamps control on/off	Yes
Free contact alarms (N/O)	Yes (max 1.3 A)
Remote ON/OFF	Yes (settable contact working)
ON/OFF timer	Yes
Chamber temperature measurement and alarm	Yes (°C) (shut off for high temperature)
UV irradiance measurement and alarm	Yes (% or W/m ²)
4/20 mA output	Yes for irradiance and temperature

Industrial Flanged Multilamp U.V. Sterilizers in AISI 316L 400 W Series



REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)	IN-OUT
HA864A	87	100	DN200



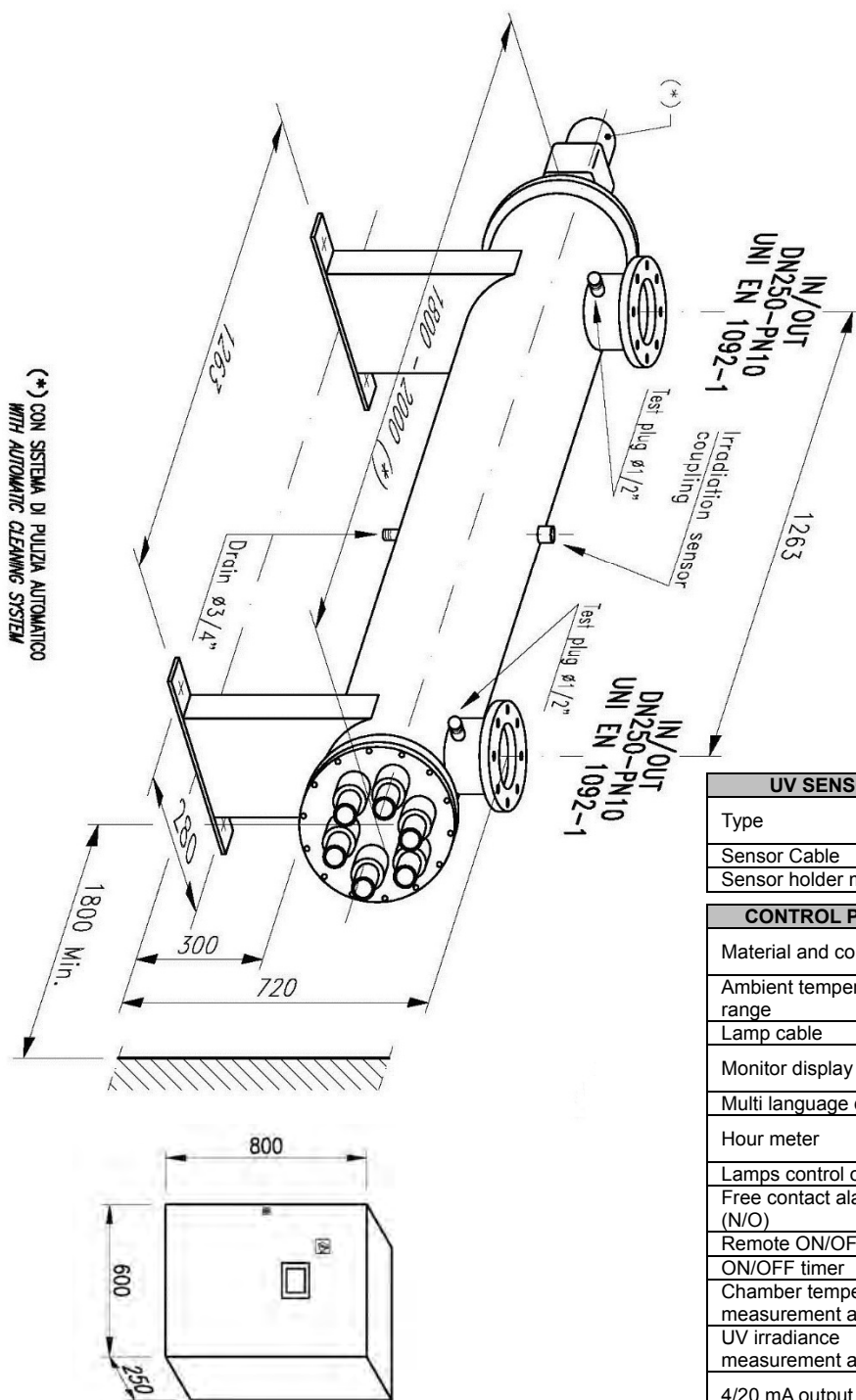
UV SENSOR	
Type	UVC selective sensor Mod. UV737
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Stainless steel 316L

CONTROL PANEL		TC
Material and colour	Black Painted Steel (RAL 7035)	
Ambient temperature range	5 – 45 °C	
Lamp cable	4 m	
Monitor display	TOUCH SCREEN (65.000 colors)	
Multi language display	IT-EN-FR-ES	
Hour meter	For total system life – Resettable for lamp life control	
Lamps control on/off	Yes	
Free contact alarms (N/O)	Yes (max 1.3 A)	
Remote ON/OFF	Yes (settable contact working)	
ON/OFF timer	Yes	
Chamber temperature measurement and alarm	Yes (°C) (shut off for high temperature)	
UV irradiance measurement and alarm	Yes (% or W/m ²)	
4/20 mA output	Yes for irradiance and temperature	

Industrial Flanged Multilamp U.V. Sterilizers in AISI 316L 400 W Series



REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)	IN-OUT
HA866A	126	110	DN250



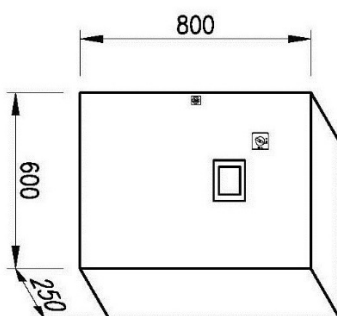
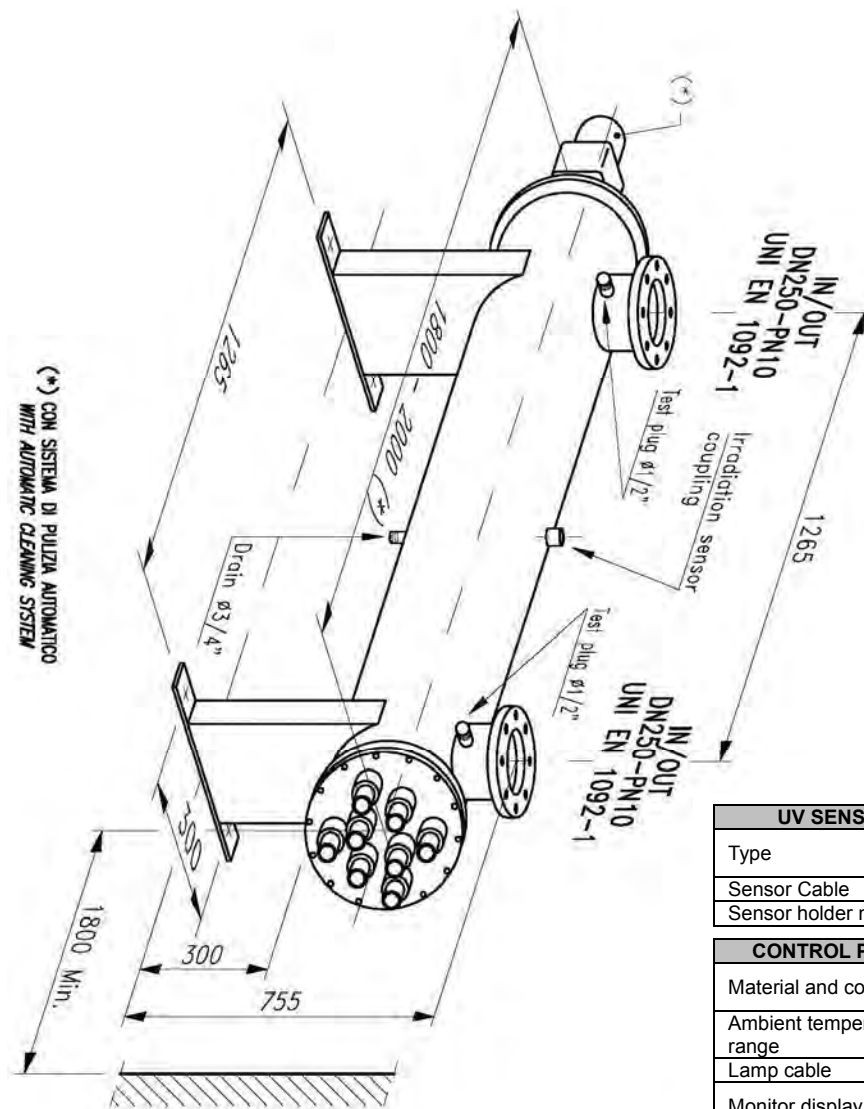
UV SENSOR	
Type	UVC selective sensor Mod. UV737
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Stainless steel 316L

CONTROL PANEL	TC
Material and colour	Black Painted Steel (RAL 7035)
Ambient temperature range	5 – 45 °C
Lamp cable	4 m
Monitor display	TOUCH SCREEN (65.000 colors)
Multi language display	IT-EN-FR-ES
Hour meter	For total system life – Resettable for lamp life control
Lamps control on/off	Yes
Free contact alarms (N/O)	Yes (max 1.3 A)
Remote ON/OFF	Yes (settable contact working)
ON/OFF timer	Yes
Chamber temperature measurement and alarm	Yes (°C) (shut off for high temperature)
UV irradiance measurement and alarm	Yes (% or W/m ²)
4/20 mA output	Yes for irradiance and temperature

Industrial Flanged Multilamp U.V. Sterilizers in AISI 316L 400 W Series



REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)	IN-OUT
HA868A	150	125	DN250



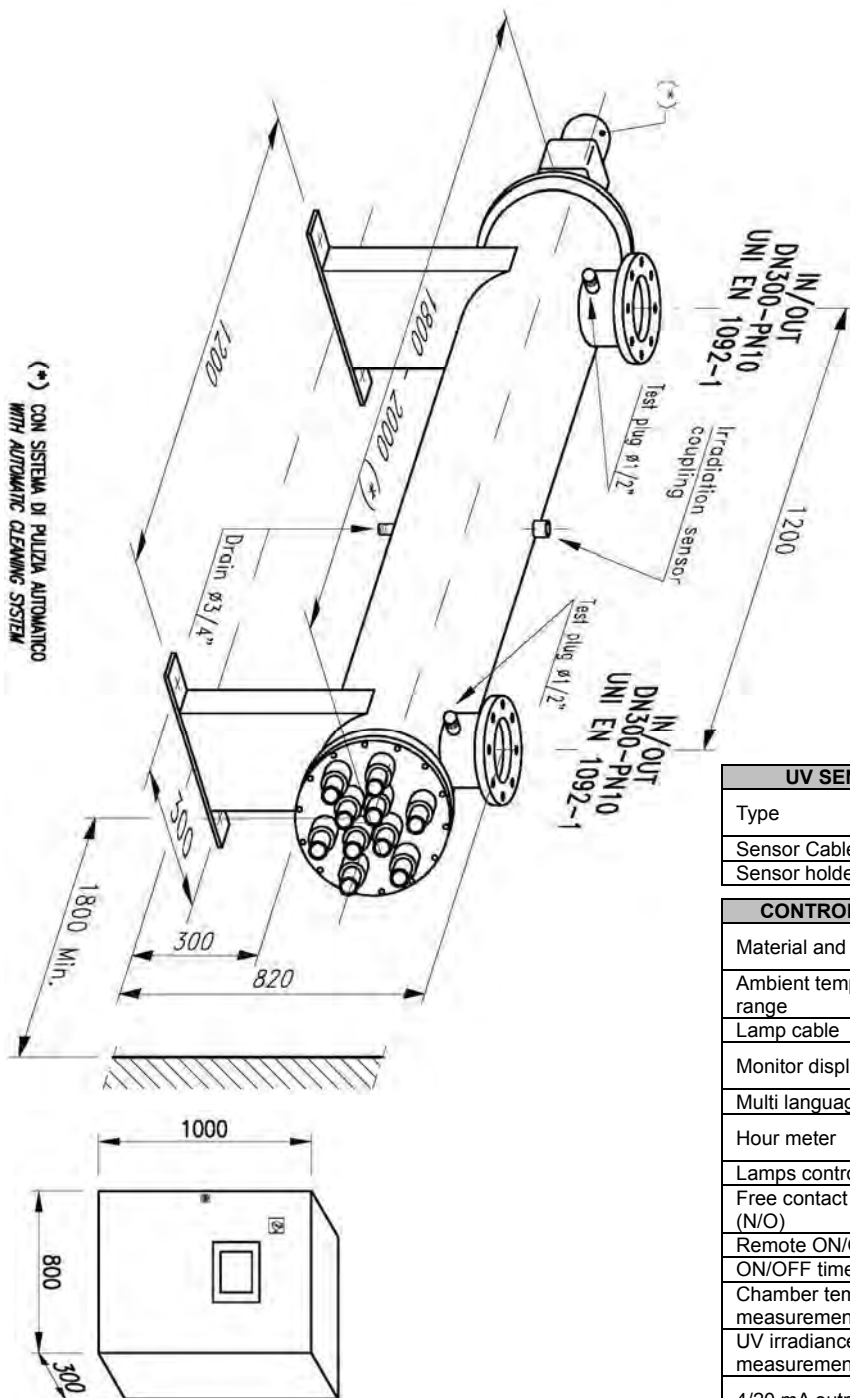
UV SENSOR	
Type	UVC selective sensor Mod. UV737
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Stainless steel 316L

CONTROL PANEL	TC
Material and colour	Black Painted Steel (RAL 7035)
Ambient temperature range	5 - 45 °C
Lamp cable	4 m
Monitor display	TOUCH SCREEN (65.000 colors)
Multi language display	IT-EN-FR-ES
Hour meter	For total system life - Resettable for lamp life control
Lamps control on/off	Yes
Free contact alarms (N/O)	Yes (max 1.3 A)
Remote ON/OFF	Yes (settable contact working)
ON/OFF timer	Yes
Chamber temperature measurement and alarm	Yes (°C) (shut off for high temperature)
UV irradiance measurement and alarm	Yes (% or W/m ²)
4/20 mA output	Yes for irradiance and temperature

Industrial Flanged Multilamp U.V. Sterilizers in AISI 316L 400 W Series



REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)	IN-OUT
HA870A	197	175	DN300

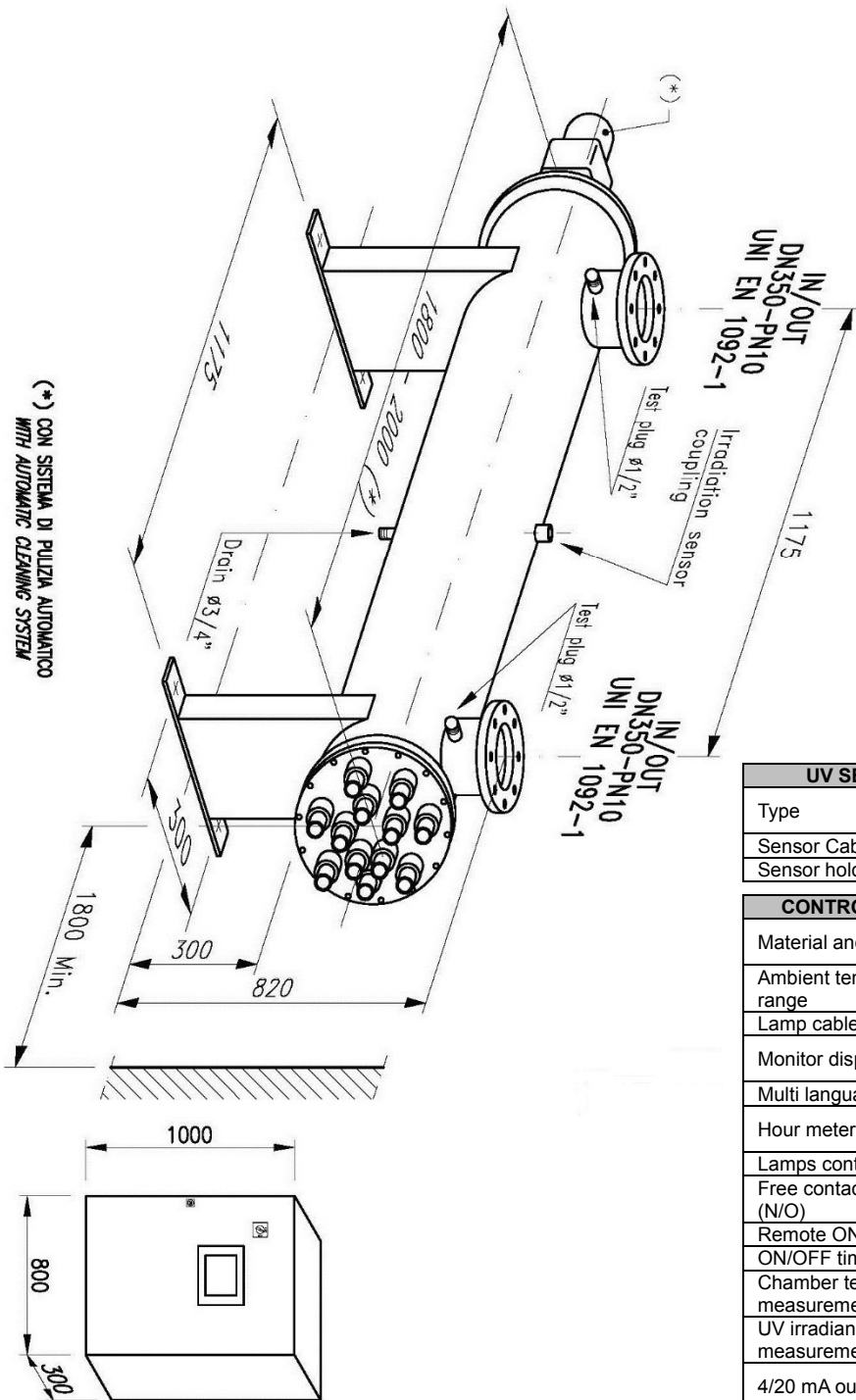


UV SENSOR	
Type	UVC selective sensor Mod. UV737
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Stainless steel 316L
CONTROL PANEL	
TC	
Material and colour	Black Painted Steel (RAL 7035)
Ambient temperature range	5 – 45 °C
Lamp cable	4 m
Monitor display	TOUCH SCREEN (65.000 colors)
Multi language display	IT-EN-FR-ES
Hour meter	For total system life – Resettable for lamp life control
Lamps control on/off	Yes
Free contact alarms (N/O)	Yes (max 1.3 A)
Remote ON/OFF	Yes (settable contact working)
ON/OFF timer	Yes
Chamber temperature measurement and alarm	Yes (°C) (shut off for high temperature)
UV irradiance measurement and alarm	Yes (% or W/m ²)
4/20 mA output	Yes for irradiance and temperature

Industrial Flanged Multilamp U.V. Sterilizers in AISI 316L 400 W Series



REF.	REACTOR VOLUME (liters)	REACTOR WEIGHT (kg)	IN-OUT
HA872A	197	200	DN350



UV SENSOR	
Type	UVC selective sensor Mod. UV737
Sensor Cable	Shielded cable 4 meters
Sensor holder material	Stainless steel 316L

CONTROL PANEL	TC
Material and colour	Black Painted Steel (RAL 7035)
Ambient temperature range	5 – 45 °C
Lamp cable	4 m
Monitor display	TOUCH SCREEN (65.000 colors)
Multi language display	IT-EN-FR-ES
Hour meter	For total system life – Resettable for lamp life control
Lamps control on/off	Yes
Free contact alarms (N/O)	Yes (max 1.3 A)
Remote ON/OFF	Yes (settable contact working)
ON/OFF timer	Yes
Chamber temperature measurement and alarm	Yes (°C) (shut off for high temperature)
UV irradiance measurement and alarm	Yes (% or W/m ²)
4/20 mA output	Yes for irradiance and temperature



Filter housings,
cartridges
and polyphosphate
feeders



PP String Wound Filtering Cartridges



- string wound filtering cartridges with core;
- string and core in polypropylene;
- double/triple retention capacity than a compact structure cartridge;
- dimensions external diameter 60 mm, internal diameter 28 mm;
- nominal length 10" or 20";
- suggested filtering flow rate for 10" length: 18÷24 lpm;
- max filtering flow rate for 20" length : 30 lpm;
- max ΔP recommended 1 bar;
- max operating temperature = 60°C.

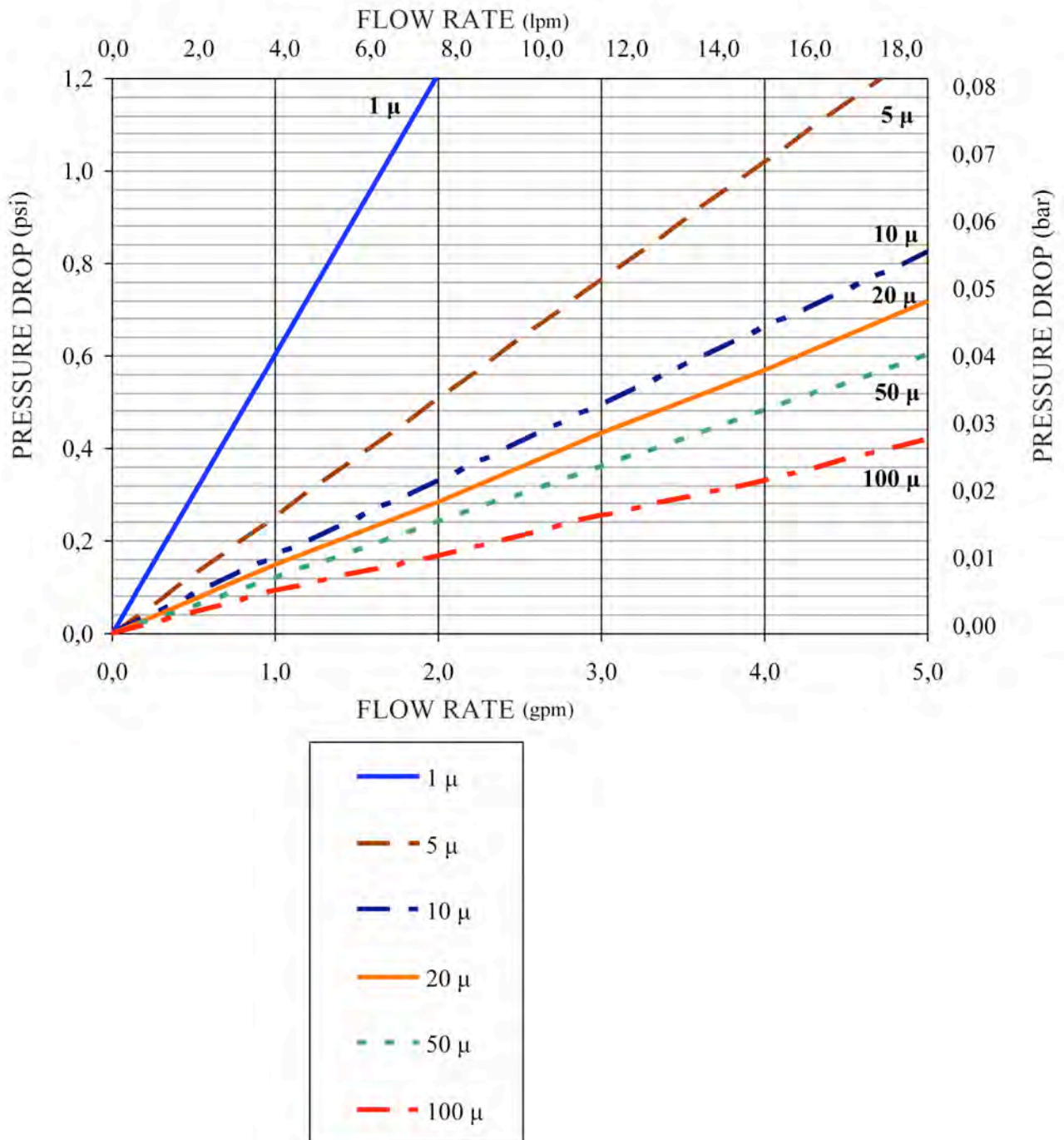


REF.	MODEL	NOMINAL LENGTH (inch)	LENGTH (mm)	MICRON	PRICE EURO
FC100	DLSW-10-01	10"	251	1	2,56
FC101	DLSW-10-05	10"	251	5	2,50
FC102	DLSW-10-10	10"	251	10	2,46
FC103	DLSW-10-20	10"	251	20	2,42
FC104	DLSW-10-50	10"	251	50	2,39
FC105	DLSW-10-100	10"	251	100	2,42
FC110	DLSW-20-01	20"	505	1	5,13
FC111	DLSW-20-05	20"	505	5	5,03
FC112	DLSW-20-10	20"	505	10	4,95
FC113	DLSW-20-20	20"	505	20	4,87
FC114	DLSW-20-50	20"	505	50	4,80
FC115	DLSW-20-100	20"	505	100	4,81

PP String Wound Filtering Cartridges



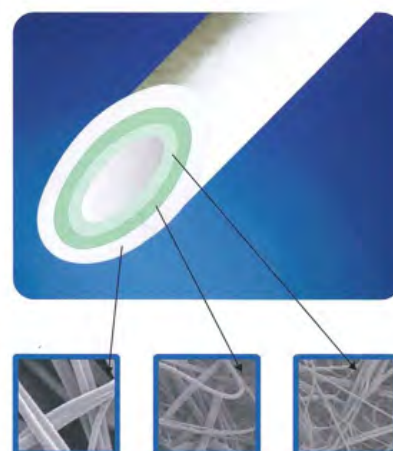
Flow rate – pressure drop diagram (Per single 10-inch equivalent)



Melt Blown Filtering Cartridges



- Thermowelded polypropylene fibers cartridges with no lubricants or antistatic additives;
- Any migration into the filtered water;
- In compliance with DM 174/2004;
- Wide chemical compatibility;
- High retention capacity & filtration efficiency multilayer structure;
- Filtration efficiency 96 % minimum;
- High retention capacity extends cartridge life;
- External diameter 63 mm, internal 28 mm;
- Nominal length: 10" – 20" – 30" – 40".
- Suggested filtration flow rate for 10" length: 15 ÷ 20 lpm;
- Max filtration flow rate for 40" length: 60 lpm;
- Max ΔP recommended 1,4 bar;
- Max operating temperature = 80°C.

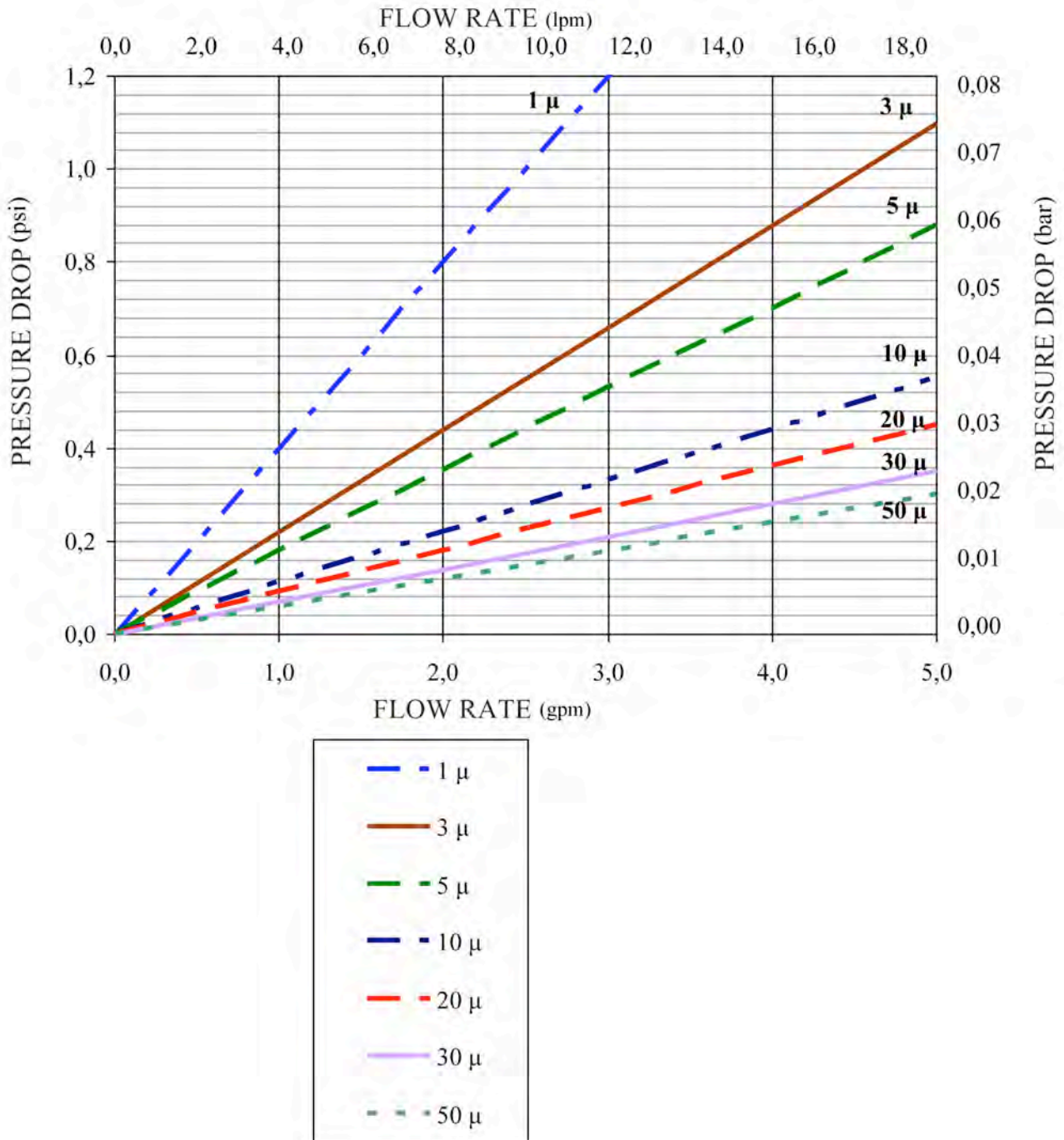


REF.	MODEL	NOMINAL LENGTH (inch)	LENGTH (mm)	MICRON	PRICE EURO
FC050	DLPP-01-10	10"	251	1	1,86
FC051	DLPP-05-10	10"	251	5	1,82
FC052	DLPP-10-10	10"	251	10	1,79
FC053	DLPP-20-10	10"	251	20	1,76
FC054	DLPP-30-10	10"	251	30	1,73
FC055	DLPP-50-10	10"	251	50	1,70
FC060	DLPP-01-20	20"	508	1	3,74
FC061	DLPP-05-20	20"	508	5	3,67
FC062	DLPP-10-20	20"	508	10	3,61
FC063	DLPP-20-20	20"	508	20	3,53
FC064	DLPP-30-20	20"	508	30	3,47
FC065	DLPP-50-20	20"	508	50	3,41
FC070	DLPP-01-30	30"	764	1	5,61
FC071	DLPP-05-30	30"	764	5	5,51
FC072	DLPP-10-30	30"	764	10	5,41
FC073	DLPP-20-30	30"	764	20	5,32
FC074	DLPP-30-30	30"	764	30	5,22
FC075	DLPP-50-30	30"	764	50	5,12
FC080	DLPP-01-40	40"	1018	1	7,49
FC081	DLPP-05-40	40"	1018	5	7,36
FC082	DLPP-10-40	40"	1018	10	7,23
FC083	DLPP-20-40	40"	1018	20	7,09
FC084	DLPP-30-40	40"	1018	30	6,95
FC085	DLPP-50-40	40"	1018	50	6,83

Melt Blown Filtering Cartridges



Flow rate – pressure drop diagram (Per single 10-inch equivalent)



PP Big Sediment Filter Cartridges



- melt-blown polypropylene fibers;
- dimensions 114 mm external diameter;
- In compliance with DM 174/2004;
- dimensions 28 mm internal diameter.

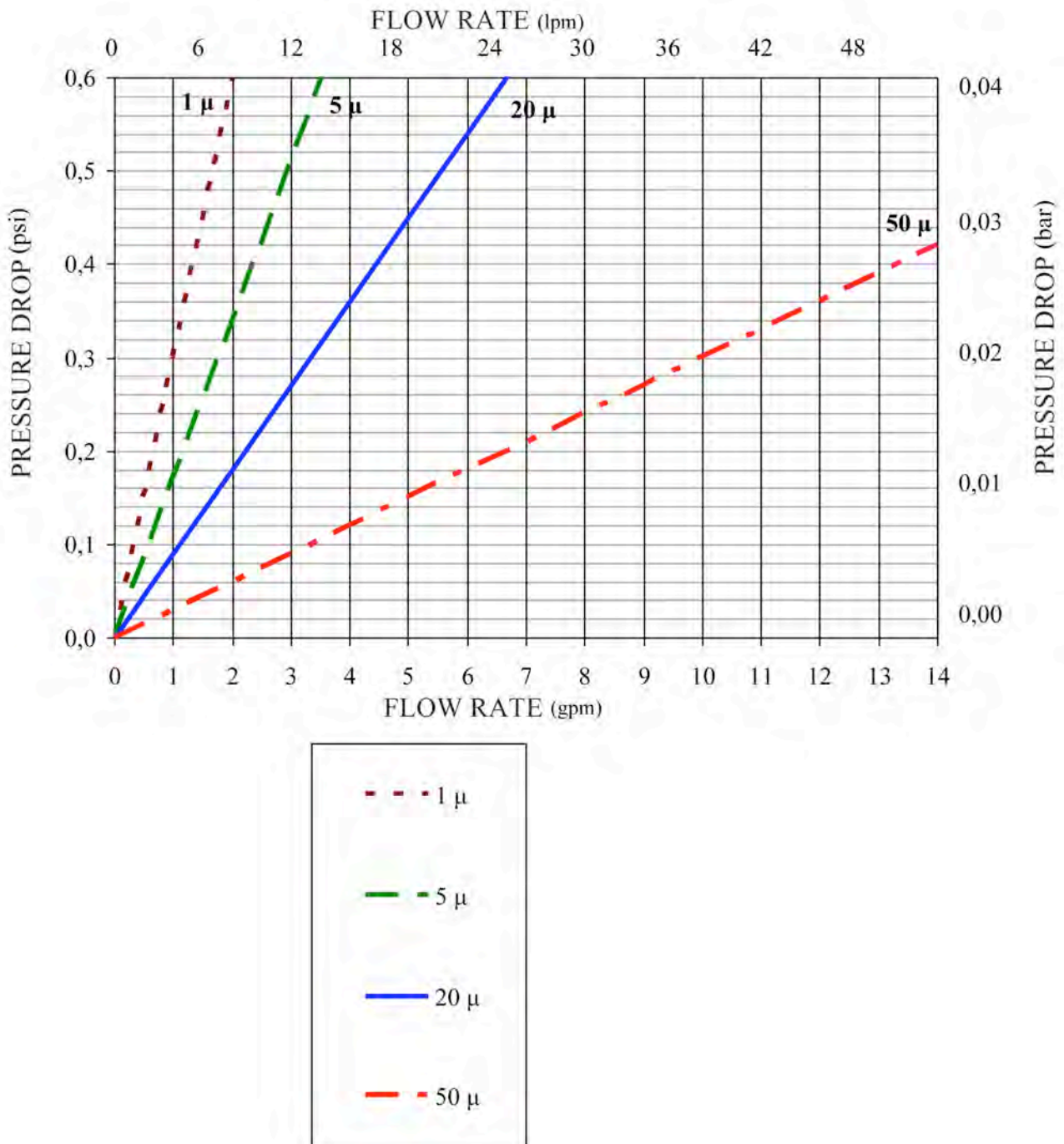


REF.	MODEL	NOMINAL LENGTH (inch)	LENGTH (mm)	MICRON	PRICE EURO
FA038	DLPPBB-1-10	10"	251	1	8,92
FA034	DLPPBB-5-10	10"	251	5	8,04
FA035	DLPPBB-20-10	10"	251	20	7,62
FA036	DLPPBB-50-10	10"	251	50	7,31
FA039	DLPPBB-1-20	20"	508	1	17,97
FA028	DLPPBB-5-20	20"	508	5	16,01
FA029	DLPPBB-20-20	20"	508	20	15,37
FA037	DLPPBB-50-20	20"	508	50	14,63

PP Big Sediment Filter Cartridges



Flow – pressure drops diagram (Per single 10-inch equivalent)



Purtrex Filtering Cartridges



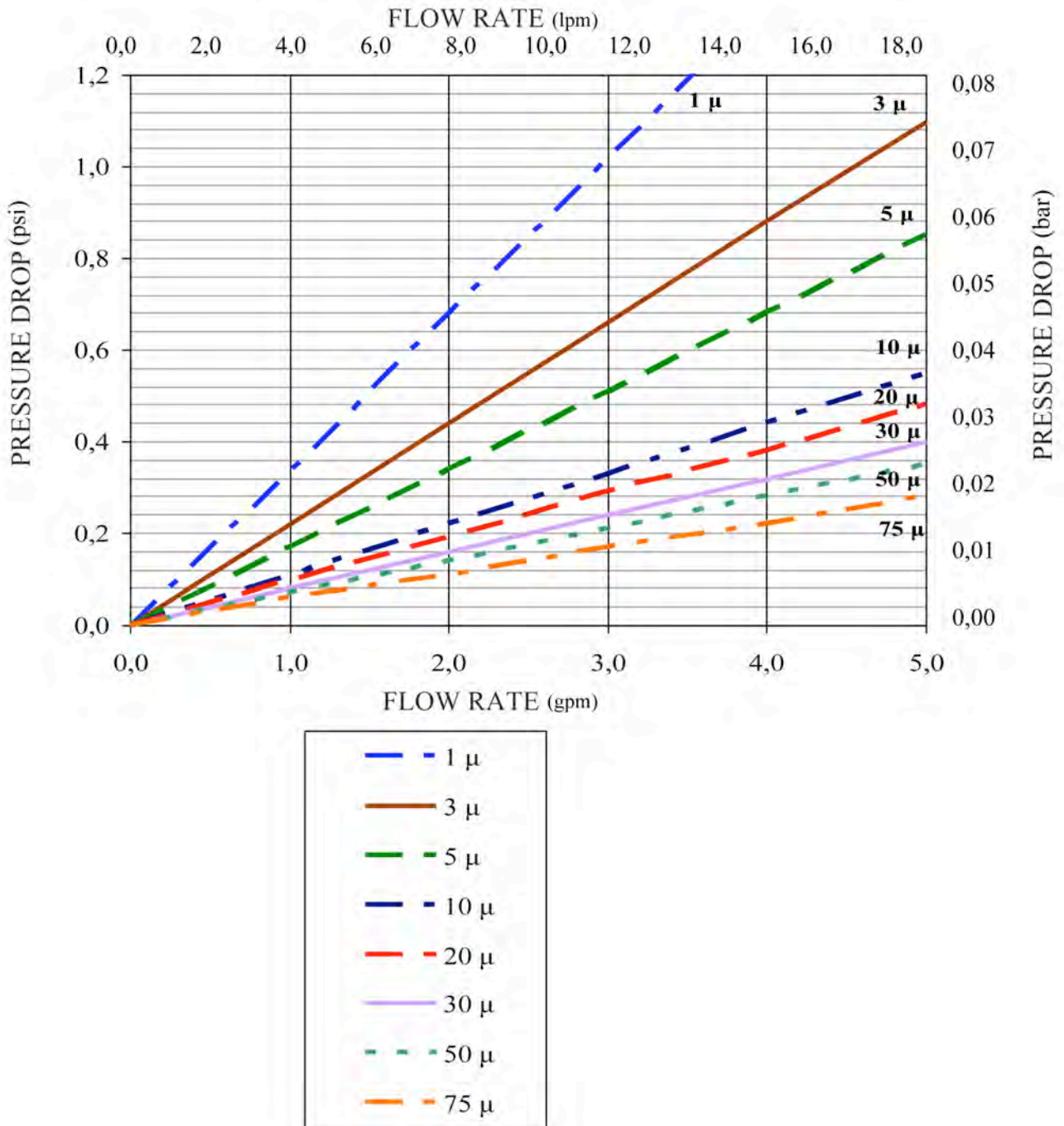
- in melt-blown polypropylene fibers;
- any microfibers migration in filtered water;
- FDA materials compliant;
- graduated density from external to internal side improves filter efficiency;
- high retention capacity extends cartridge life;
- external diameter 63 mm, internal 28 mm;
- nominal length 10" – 20" – 30" – 40".
- suggested filtration flow rate for 10" length: 15 ÷ 20 lpm;
- max filtration flow rate for 40" length: 60 lpm;
- max operating temperature = 80°C.



REF.	MODEL	NOMINAL LENGTH (inch)	LENGTH (mm)	MICRON	PRICE EURO
FC010	PX 01 – 9 7/8"	10"	251	1	3,59
FC011	PX 03 – 9 7/8"	10"	251	3	3,64
FC012	PX 05 – 9 7/8"	10"	251	5	3,30
FC013	PX 10 – 9 7/8"	10"	251	10	3,14
FC014	PX 20 – 9 7/8"	10"	251	20	3,00
FC015	PX 30 – 9 7/8"	10"	251	30	2,85
FC016	PX 50 – 9 7/8"	10"	251	50	2,71
FC017	PX 75 – 9 7/8"	10"	251	75	2,55
FC020	PX 01 – 20"	20"	508	1	6,96
FC021	PX 03 – 20"	20"	508	3	6,67
FC022	PX 05 – 20"	20"	508	5	6,38
FC023	PX 10 – 20"	20"	508	10	6,09
FC024	PX 20 – 20"	20"	508	20	5,78
FC025	PX 30 – 20"	20"	508	30	5,52
FC026	PX 50 – 20"	20"	508	50	5,22
FC030	PX 01 – 30"	30"	764	1	10,45
FC031	PX 03 – 30"	30"	764	3	10,00
FC032	PX 05 – 30"	30"	764	5	9,57
FC033	PX 10 – 30"	30"	764	10	9,13
FC034	PX 20 – 30"	30"	764	20	8,69
FC035	PX 30 – 30"	30"	764	30	8,27
FC036	PX 50 – 30"	30"	764	50	7,84
FC040	PX 01 – 40"	40"	1018	1	13,95
FC041	PX 03 – 40"	40"	1018	3	13,34
FC042	PX 05 – 40"	40"	1018	5	12,78
FC043	PX 10 – 40"	40"	1018	10	12,18
FC044	PX 20 – 40"	40"	1018	20	11,60
FC045	PX 30 – 40"	40"	1018	30	11,03
FC046	PX 50 – 40"	40"	1018	50	10,45



Flow – pressure drops diagram (Per single 10-inch equivalent)



Activated Carbon Filtering Cartridges



Carbon Block End Cap 70

- Extruded activated carbon of Bituminous origin;
- Recommended for pre-filtration applications and for Chlorine removal;
 Dimensions:
 - external diameter = 64 mm (2 1/2");
 - internal diameter = 26 mm (1");
 - end-cap diameter = 70 mm.



REF.	MODEL	NOMINAL LENGTH (inch)	LENGTH (mm)	MICRON	SUGGESTED FLOW RATE (l/h)	EXTRUDED ACTIVATED CARBON	CAP	PRICE EURO
FA012	CBC 5"	5"	124	1	120	Bituminous	White	4,85
FA013	EB-CB 9 7/8"	10"	249	10	240	Bituminous	White	3,55
FA014	CBC 20"	20"	508	10	480	Bituminous	White	6,87

Carbon Block End Cap 65

- Extruded activated carbon of Bituminous origin;
- Recommended for pre-filtration applications and for Chlorine removal;
 Dimensions:
 - external diameter = 62 mm;
 - internal diameter = 30 mm;
 - end-cap diameter = 65 mm.



REF.	MODEL	NOMINAL LENGTH (inch)	LENGTH (mm)	MICRON	SUGGESTED FLOW RATE (l/h)	EXTRUDED ACTIVATED CARBON	CAP	PRICE EURO
FA018	DLCTO651010	10"	249	10	240	Bituminous	White	3,55
FA019	DLCTO651020	20"	508	10	480	Bituminous	White	6,87

Big Carbon Block

- Bituminous carbon block.
- Suitable for pre-filtration applications and for Chlorine removal.
 Dimensions:
 - external diameter = 108 mm (4 1/4");
 - internal diameter = 25 mm (1");
 - end-cap diameter = 113 mm.



REF.	MODEL	NOMINAL LENGTH (inch)	LENGTH (mm)	MICRON	SUGGESTED FLOW RATE (l/h)	PRICE EURO
FA016	CBC 10 BIG	10"	254	5	800	11,02
FA015	CBC 20 BIG	20"	508	5	1600	22,05

Conform with CE safety Directives and D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;



Wound PP & activated carbon

wound polypropylene cartridge with granular activated carbon inside;
 10 micron;
 external diameter 64 mm, internal 27 mm;
 nominal length 10";
 length 251 mm.
 medium flow = 800 l/h

REF.	PRICE EURO
FA058	13,06



Granular activated carbon

- PE container cartridge empty or with granular activated carbon;
- external diameter 72 mm;
- nominal length 10";
- length 256 mm.

REF.	MODEL	DESCRIPTION	PRICE EURO
FA007	GAC 10 N	WITH ACTIVATED CARBON	7,85
FA008	10 N	EMPTY	3,64



AISI 304 Cartridges for OTC Housings



AISI 304 Cartridges for OTC 12 Housings

- washable;
- to install with washable cartridge filters OTC 12 on catalogue (see 08-02-12-EN data sheet).

REF.	FILTRATION DEGREE (micron)	MATERIAL	PRICE EURO
FB221	60	NYLON	6,73

AISI 304 Cartridges for OTC 34 - 1 - 114 Housings

- washable;
- to install with:
 - washable cartridge filters OTC 34 – 1 - 114 on catalogue (see 08-02-12-EN data sheet);
 - 10" hot water filters (see 08-02-13-EN data sheet), except for nylon filtering cartridge REF. FB224.

REF.	FILTRATION DEGREE (micron)	MATERIAL	PRICE EURO
FB224	60	NYLON	12,51
FB225	25	AISI 304	163,33
FB228	60	AISI 304	84,50
FB231	100	AISI 304	84,50
FB234	200	AISI 304	84,50
FB237	300	AISI 304	84,50

AISI 304 Cartridges for OTC 112 - 2 Housings

- washable;
- to install with washable cartridge filters OTC 112 – 2 on catalogue (see 08-02-12-EN data sheet).

REF.	FILTRATION DEGREE (micron)	MATERIAL	PRICE EURO
FB226	25	AISI 304	249,86
FB229	60	AISI 304	136,86
FB232	100	AISI 304	136,86
FB235	200	AISI 304	136,86
FB238	300	AISI 304	136,86



DOE Polyester Filtering Cartridges for MT, MD & OTS Housings

- In compliance with ACS (France), DM 174/2004 and DM25/2012 (Italy);
- Washable, with filtration degree 50 micron;
- External diameter 70 mm, internal 30 mm;
- Max operating temperature 45°C.

REF.	NOMINAL LENGTH (inch)	LENGTH (mm)	PRICE EURO
FARP1050	10"	250	10,04
FARP2050	20"	510	21,09



DOE Nylon Filtering Cartridges for OTS Housings

- Washable, with filtration degree 60 micron;
- External diameter 62 mm, internal 27 mm.

REF.	MODEL	NOMINAL L. (inch)	LENGTH (mm)	PRICE EURO
FA067	NL 60 - 9	10"	248	8,20
FA068 (*)	NL 60 - 20	20"	505	16,65



(*) This cartridge is not suitable for the MD and MT housings of our catalogue.

OR222 Nylon Filtering Cartridges for OTS Housings

- In compliance with ACS (France), DM 174/2004 and DM25/2012 (Italy);
- Washable, with filtration degree 60 micron;
- To fit into OTS brass head housings 1 ¼" – 1 ½" – 2" models (see 08-02-14-EN data sheet);
- External diameter 61 mm;
- With 222 O-rings;
- Max ΔP recommended 1,4 bar.

REF.	NOMINAL LENGTH (inch)	LENGTH (mm)	Flow @ $\Delta p=0,2$ bar (l/h)	PRICE EURO
FB067	10"	250	1800	9,04
FB068	20"	505	3600	26,10





AISI 316 Filtering Cartridges for Hot Water Filter Housings

- Washable and suitable for Hot Water Filter Housings on catalog (see 08-02-13-EN data sheet);
- Dimensions external diameter 70 mm, internal 30 mm;
- Length 250 mm and nominal length 10";
- in compliance with ACS (France), DM 174/2004 and DM25/2012 (Italy);
- max operating temperature 80°C.

Ref. FAAL1070 FAAP1050



REF.	MODEL	MICRON	PRICE EURO
FAAL1070	SMOOTH	70	48,79
FAAP1050	PLEATED	50	75,96

Nylon Mesh Filtering Cartridge with PP Reinforcement

- Washable cartridge with closing rings;
- Filtration degree 60 micron;
- Dimensions external diameter 62 mm, internal 27 mm;
- Length 250 mm and nominal length 10";
- Nylon mesh spare (REF. FB222).

REF.	PRICE EURO
FA060	12,52



Wound Polypropylene Cartridge with AISI 316 Core for Hot Water Filters

- To install with our Hot Water Filters on catalogue (see 08-02-13-EN data sheet);
- dimensions external diameter 56 mm, internal 27 mm;
- length 250 mm, nominal length 10";
- max operating temperature 80°C.

REF.	MODEL	MICRON	PRICE EURO
FA071	PAX 05 – 9 ¾	5	7,94
FA072	PAX 10 – 9 ¾	10	7,94
FA073	PAX 20 – 9 ¾	20	7,52
FA074	PAX 50 – 9 ¾	50	7,52





Empty Cartridges

- plastic empty cartridge;
- external diameter 70 mm;
- useful to fill with polyphosphate crystals – activated carbon - resins.

REF.	NOMINAL LENGTH (inch)	LENGTH (mm)	VOLUME (litres)	PRICE EURO
FAVP10	10"	252	0,6	6,32
FAVP20	20"	510	1,2	21,75



Anti-scale Cartridges with Polyphosphate Crystals.

- Plastic cartridge;
- External diameter 70 mm;
- Shipped with polyphosphate crystals 10 ÷ 20 mm;
- Maximum temperature = 35°C;
- Maximum total hardness = 50°f (500 ppm CaCO₃) ;
- The polyphosphate complies with the standard UNI EN 1208:2005.

REF	NOMINAL LENGTH (inch)	LENGTH (mm)	PRICE EURO
FAPP1012	10"	252	24,50
FAPP2012	20"	510	48,65



PP Melt Blown 5" Filtering Cartridge

- melt blown polypropylene fibers cartridge;
- dimensions external diameter 64 mm, internal 25 mm.

REF.	MODEL	NOMINAL LENGTH (inch)	LENGTH (mm)	MICRON	PRICE EURO
FA021	PP SED 05	5"	126	5	1,99



MM Mini Three Pieces Filter Housings



- Made in European Union (Italy);
- Suitable for MINI filtering cartridges 5" length;
- Head and nut material ABS blue colour;
- IN/OUT connections 1/2" with brass inserts;
- Sump in SAN clear and O-ring in EPDM material;
- Max operating pressure 8 bar;
- Temperature range = 4 ÷ 45°C;
- DM 174 (Italy) dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- In compliance with DM 25 (Italy);
- With the sanitary certification ACS (France).



REF.	PRICE EURO
FBMM0505T	10,82

Cartridges to coupling (D.M. n.174 and ACS compliant):

MINI Wound PP Thread Filtering Cartridge

- Filtering degree 25 micron;
- Dimensions external diameter 45 mm, internal 18 mm;
- Length 5" (= 122 mm).

REF.	PRICE EURO
FAMM0525	1,76



Washable MINI Filtering Cartridge with Net in Polyester

- Washable MINI cartridge in Polyester;
- Filtering degree 50 micron;
- Dimensions external diameter 50 mm, internal 20 mm;
- Length 5" (= 122 mm).

REF.	PRICE EURO
FAMM0550	4,11



Accessories

REF.	DESCRIPTION	PRICE EURO
FBMMR11	PLASTIC WRENCH FOR MM FILTER HOUSINGS	1,94
FBMMR41	5" DIFFUSER TUBE FOR MM FILTER HOUSINGS	1,00
FBMDR31	3/4" BSPP PLASTIC NIPPLE WITH O-RINGS FOR MD, MM & MT FILTER HOUSINGS	0,90

Residential Cintropur Filters



- range of filters for drinking water entirely made in synthetic material;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- the particular centrifugal effect causes the precipitation of larger particles, while the final filtration is assured by the filter sleeve;
- the filters include the sleeve at 25 micron;
- also available sleeves at 1, 10, 50 and 100 micron as spare parts;
- wrench and two complete connections included;
- max operating pressure 10 bar;
- max operating temperature 50°C.



REF.	MODEL	CONNECTIONS (inch)	Flow m ³ /h Δp 0,2 bar	HEIGHT (mm)	WIDTH (mm)	PRICE EURO
FB400	NW 18 – ¾	¾"	3,5	240	270	99,32
FB401	NW 25 – ¾	¾"	5,5	355	270	120,42
FB402	NW 25 – 1	1"	5,5	355	270	120,42
FB403	NW 32 – 1 ¼	1 ¼"	6,5	540	270	168,22

Accessories and spare parts

REF.	DESCRIPTION	PRICE EURO
FB470	Wrench	4,48
FB471	Drain cock ¼"	22,63
FB472	Pressure gauge 1-10 bar - ⅛"	17,40
FB473	Wall bracket in PP	16,91
FB444	Set of 5 sleeves 1 micron for NW25	22,20
FB426	Set of 5 sleeves 10 micron for NW25	18,59
FB427	Set of 5 sleeves 25 micron for NW25	15,64
FB428	Set of 5 sleeves 50 micron for NW25	16,07
FB429	Set of 5 sleeves 100 micron for NW25	15,86
FB445	Set of 5 sleeves 1 micron for NW32	31,08
FB432	Set of 5 sleeves 10 micron for NW32	25,74
FB433	Set of 5 sleeves 25 micron for NW32	22,34
FB434	Set of 5 sleeves 50 micron for NW32	23,89
FB435	Set of 5 sleeves 100 micron for NW32	17,53

Commercial Cintropur Filters

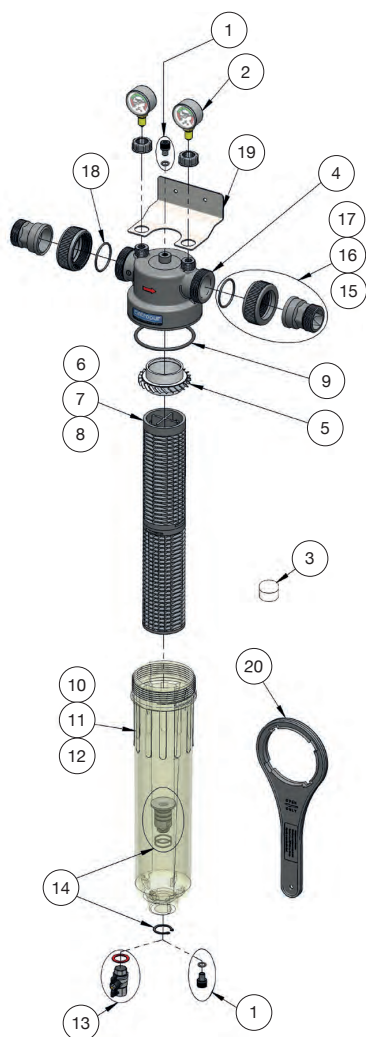


- range of filters for drinking water entirely made in synthetic material;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- the particular centrifugal effect causes the precipitation of larger particles, while the final filtration is assured by the filter sleeve;
- the filters include the sleeve at 25 micron;
- also available sleeves at 1, 5, 10, 50, 100, 150 and 300 micron as spare parts;
- wrench, pressure gauge and drain cock included;
- max operating pressure 10 bar;
- max pressure 16 bar;
- max operating temperature 50°C.



REF.	MODEL	Flow m ³ /h Δp 0,2 bar	WEIGHT (kg)	CONN.	Ø OF PIPE	A (mm)	B (mm)	PRICE EURO
FB404	NW 280- 1	7	2,2	1" BSPT	1"	284	472	278,39
FB405	NW 340 - 1 ¼	10	2,7	1 ¼" BSPT	1 ¼"	284	573	310,40
FB406	NW 400 - 1 ½	12	2,9	1 ½" BSPT	1 ½"	284	675	360,32

Commercial Cintropur Filters



Item..	Ref.	Description	Price Euro
1	FB487C	NW280/340/400 air valve kit (with o-ring)	4,50
2	FB492C	NW280/340/400 1/4" pressure gauges 0÷20 bar (2 pcs)	27,38
3	FB450C	Grease for o-ring (20g)	23,25
4	FB480C	NW280/340/400 filter head	58,13
5	FB483C	NW280/340/400 centrifugal vane	11,63
6	FB452C	NW280 PVC filtering support arm	21,38
7	FB453C	NW340 PVC filtering support arm	36,75
8	FB454C	NW400 PVC filtering support arm	49,13
9	FB486C	NW280/340/400 head o-ring	4,50
10	FB465C	NW280 clear bowl	73,50
11	FB488C	NW340 clear bowl	85,50
12	FB489C	NW400 clear bowl	102,38
13	FB471C	NW280/340/400 drain cock 1/2" + gasket	23,63
14	FB491C	NW280/340/400 drain valve adapter + 2 o-ring + clips	16,13
15	FB494C	NW280 set of 2 complete couplings 1" M	27,38
16	FB495C	NW340 set of 2 complete couplings 1 1/4" M	33,75
17	FB496C	NW400 set of 2 complete couplings 1 1/2" M	52,13
18	FB499C	O-ring for NW280/340/400 connections	1,50
19	FB497C	NW280/340/400 wall bracket in stainless steel	60,38
20	FB479C	NW280/340/400 wrench	12,00
Not Viewed	FB444C	N. 5 SPARE SLEEVES KIT 1 MICRON NW 280	24,75
Not Viewed	FB437C	N. 5 SPARE SLEEVES KIT 5 MICRON NW 280	24,00
Not Viewed	FB438C	N. 5 SPARE SLEEVES KIT 10 MICRON NW 280	22,13
Not Viewed	FB439C	N. 5 SPARE SLEEVES KIT 25 MICRON NW 280	20,25
Not Viewed	FB440C	N. 5 SPARE SLEEVES KIT 50 MICRON NW 280	21,00
Not Viewed	FB441C	N. 5 SPARE SLEEVES KIT 100 MICRON NW 280	21,75
Not Viewed	FB442C	N. 5 SPARE SLEEVES KIT 150 MICRON WASHABLE NW 280	78,75
Not Viewed	FB443C	N. 5 SPARE SLEEVES KIT 300 MICRON WASHABLE NW 280	74,25
Not Viewed	FB444D	N. 5 SPARE SLEEVES KIT 1 MICRON NW 340	35,63
Not Viewed	FB437D	N. 5 SPARE SLEEVES KIT 5 MICRON NW 340	34,50
Not Viewed	FB438D	N. 5 SPARE SLEEVES KIT 10 MICRON NW 340	33,75
Not Viewed	FB439D	N. 5 SPARE SLEEVES KIT 25 MICRON NW 340	31,13
Not Viewed	FB440D	N. 5 SPARE SLEEVES KIT 50 MICRON NW 340	32,25
Not Viewed	FB441D	N. 5 SPARE SLEEVES KIT 100 MICRON NW 340	32,25
Not Viewed	FB442D	N. 5 SPARE SLEEVES KIT 150 MICRON WASHABLE NW 340	96,75
Not Viewed	FB443D	N. 5 SPARE SLEEVES KIT 300 MICRON WASHABLE NW 340	93,38
Not Viewed	FB444E	N. 5 SPARE SLEEVES KIT 1 MICRON NW 400	47,25
Not Viewed	FB437E	N. 5 SPARE SLEEVES KIT 5 MICRON NW 400	44,63
Not Viewed	FB438E	N. 5 SPARE SLEEVES KIT 10 MICRON NW 400	43,50
Not Viewed	FB439E	N. 5 SPARE SLEEVES KIT 25 MICRON NW 400	37,88
Not Viewed	FB440E	N. 5 SPARE SLEEVES KIT 50 MICRON NW 400	39,75
Not Viewed	FB441E	N. 5 SPARE SLEEVES KIT 100 MICRON NW 400	40,88
Not Viewed	FB442E	N. 5 SPARE SLEEVES KIT 150 MICRON WASHABLE NW 400	108,75
Not Viewed	FB443E	N. 5 SPARE SLEEVES KIT 300 MICRON WASHABLE NW 400	112,88

Industrial Cintropur Filters



- range of filters for drinking water entirely made in synthetic material;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- the particular centrifugal effect causes the precipitation of larger particles, while the final filtration is assured by the filter sleeve;
- the filters include the sleeve at 25 micron;
- also available sleeves at 5, 10, 50, 100, 150 and 300 micron as spare parts;
- wrench, pressure gauge and drain cock included;
- max operating pressure 10 bar;
- max pressure 16 bar;
- max operating temperature 50°C.



REF.	MODEL	Flow m ³ /h Δp 0,2 bar	WEIGHT (kg)	CONN.	Ø OF PIPE	A (mm)	B (mm)	PRICE EURO
FB408A	NW 500 – 2	18	6,4	2" BSPT	2"	363	770	533,83
FB408TE	NW 500 – 2 TE	2	6,4	2" BSPT	2"	363	770	598,26
FB409A	NW 650 – 2 ½	25	7,0	DN65	2 ½"	304	770	620,86
FB410A	NW 800 – 3	32	7,4	DN80	3"	313	770	724,16

Industrial Cintropur Filters



Accessories:



ITEM	REF.	DESCRIPTION	PRICE EURO
33	FB487	NW500/650/800 air valve kit (with o-ring)	4,31
50	FB480A	NW500/650 head	176,34
51	FB482A	NW800 head	232,55
52	FB483A	Turbine + screw	19,71
53	FB484A	Filtering support armor	46,69
54	FB485A	Cap cartridge	16,90
55	FB486A	Head o-ring	4,13
56	FB488A	Clear bowl	148,78
58	FB489A	Black bowl	158,38
59	FB490A	Diffusor kit	158,71
60	FB491A	Drain valve adapter with o-ring	18,53
61	FB491B	Drain cock 3/4"	41,48
62	FB479	Wrench	18,07
63	FB494A	Connection kit in plastic material + NW500 2" M adapter	82,37
64	FB495A	NW650 DN65 flanged connection kit in plastic material	102,27
65	FB496A	NW800 DN80 flanged connection kit in plastic material	162,51
66	FB497A	Wall bracket in S.S.	81,71
69	FB492	1/4" pressure gauge 0 ÷ 20 bar	26,11
70	FB499	O-ring for NW500/650 connections	1,48
71	FB499A	O-ring for NW800 connections	1,86
NOT VIEWED	FB498	NW650 DN65 gasket in EPDM material	6,28
NOT VIEWED	FB498A	NW800 DN80 gasket in EPDM material	8,65
NOT VIEWED	FB437	Set of 5 sleeves 5 micron	49,80
NOT VIEWED	FB438	Set of 5 sleeves 10 micron	47,59
NOT VIEWED	FB439	Set of 5 sleeves 25 micron	31,30
NOT VIEWED	FB440	Set of 5 sleeves 50 micron	33,30
NOT VIEWED	FB441	Set of 5 sleeves 100 micron	28,62
NOT VIEWED	FB442	Set of 5 sleeves 150 micron washable	136,38
NOT VIEWED	FB443	Set of 5 sleeves 300 micron washable	133,13

MD Two Pieces Filter Housings IN/OUT connections 3/4"



- Made in European Union (Italy);
- Two pieces filter housings for standard filtering cartridges length 10" or 20";
- Fixable head in material PP reinforced blue colour;
- Sump in PET;
- O-ring in EPDM;
- IN/OUT connections 3/4" BSPP F;
- With air valve;
- Max operating pressure 8 bar;
- Temperature 4 ÷ 45°C;
- D.M. n.174/2004 compliant about materials suitable for contact with water for human consumption;
- D.M. n.25/2012 compliant about technical provisions for equipment intended for water treatment for human consumption;
- In compliance with the sanitary certification ACS (France).



REF.	MODEL	CARTRIDGE LENGTH (inch)	SUMP MATERIAL AND COLOUR	HEAD DIMENSION (mm)	TOTAL LENGTH (mm)	PRICE EURO
FBMD1007T	MD1007T	10"	Clear	122	325	18,38
FBMD1007B	MD1007B	10"	Blue	122	325	16,79
FBMD2007T	MD2007T	20"	Clear	122	577	57,36
FBMD2007B	MD2007B	20"	Blue	122	577	43,60

Accessories

REF.	DESCRIPTION	PRICE EURO
FBMDR11	PLASTIC WRENCH FOR MD FILTER HOUSINGS	1,26
FBMDR21	BLUE BRACKET WITH SCREWS FOR MD AND MT FILTER HOUSINGS	1,65
FBMDR31	3/4" BSPP PLASTIC NIPPLE W/ O-RINGS FOR MD, MM & MT FILTER HOUSINGS	0,90

BG Plastic BIG Filter Housings



- Made in European Union (Italy);
- Suitable for 4 ½" diameter DOE high flow cartridges;
- Fixable head;
- Material in PP;
- O-ring in EPDM;
- complete with air valve
- Max operating pressure 8,3 bar;
- Temperature 4 ÷ 45°C;
- IN/OUT connections BSPP;
- D.M. n.174/2004 compliant about materials suitable for contact with water for human consumption;
- D.M. n.25/2012 compliant about technical provisions for equipment intended for water treatment for human consumption;
- With plastic wrench (ref. FBBGR11).



NOTE: a set pressure gauge installation is recommended.

REF.	MODEL	CARTRIDGE LENGTH (inch)	IN/OUT CONNECTIONS (inch)	HEAD DIMENSION (mm)	TOTAL LENGTH (mm)	PRICE EURO
FBBG1010B	BG 1010	10"	1" F	190	360	48,70
FBBG1015B	BG 1015	10"	1 ½" F	190	360	51,04
FBBG2010B	BG 2010	20"	1" F	190	617	72,16
FBBG2015B	BG 2015	20"	1 ½" F	190	617	74,70

REF.	DESCRIPTION	PRICE EURO
FBBGR11	PLASTIC WRENCH FOR BG FILTER HOUSINGS	4,73

Cartridges to coupling

- BIG PP microfiber filtering cartridges, see 08-01-03-EN data sheet;
- BIG CARBON BLOCK filtering cartridges see 08-01-05-EN data sheet.

Accessories

REF.	DESCRIPTION	PRICE EURO
FBBGR21	MOUNTING BRACKET FOR BG FILTER HOUSINGS, WITH SCREWS	29,44
FBBGR31	1" BSPP NIPPLES WITH O-RINGS (PAIR) FOR BG AND MT FILTER HOUSINGS	12,67

MT Three Pieces Filter Housings



- Made in European Union (Italy);
- Three pieces filter housings for standard filtering cartridges length 10" or 20";
- Fixable head and nut in material PP reinforced blue colour;
- Sump in PET clear;
- O-ring in EPDM;
- IN/OUT connections BSPP F 3/4" or 1", with brass inserts;
- With air valve;
- Max operating pressure 8 bar;
- Temperature 4 ÷ 45°C;
- D.M. n.174/2004 compliant about materials suitable for contact with water for human consumption;
- D.M. n.25/2012 compliant about technical provisions for equipment intended for water treatment for human consumption;
- In compliance with the sanitary certification ACS (France).



(*) **WARNING! FA064A and FA068 cartridges are not suitable for this housing.**

REF.	MODEL	CARTRIDGE LENGTH (inch)	CONNECTIONS (inch)	HEAD DIMENSION (mm)	TOTAL LENGTH (mm)	PRICE EURO
FBMT1007T	MT1007T	10"	3/4"	133	315	19,66
FBMT1010T	MT1010T	10"	1"	145	321	19,85
FBMT2010T (*)	MT2010T	20"	1"	145	577	49,64

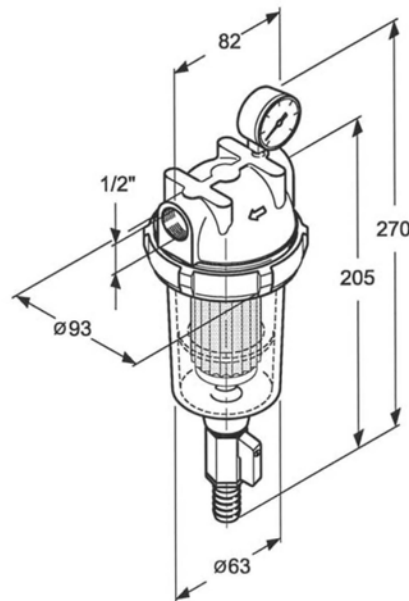
Accessories

REF.	DESCRIPTION	PRICE EURO
FBMTR11	PLASTIC WRENCH FOR MT FILTER HOUSINGS	2,40
FBMTR41	10" DIFFUSER TUBE FOR MT FILTER HOUSINGS	2,98
FBMDR21	BLUE MOUNTING BRACKET FOR MD AND MT FILTER HOUSINGS WITH SCREWS	1,65
FBMDR31	3/4" BSPP PLASTIC NIPPLE W/ O-RINGS FOR MD, MM & MT FILTER HOUSINGS	0,90
FBBGR31	1" BSPP NIPPLES WITH O-RINGS (PAIR) FOR BG & MT FILTER HOUSINGS	12,67

Self Cleaning Filters

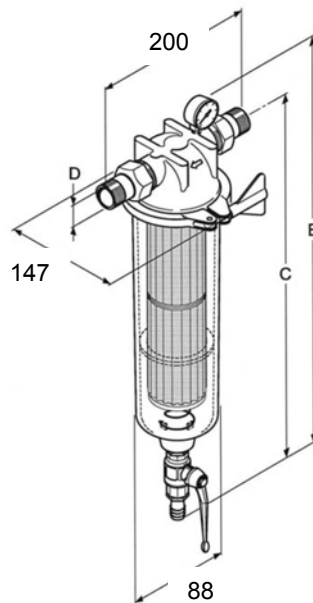


- range of sediment self clearing filters, chrome plated brass head and trogamid sump, with pleated AISI 304 cartridge at 100 micron (on request available also at 25, 60, 200 and 300 micron);
- complete with manometer on inlet;
- opening the drain valve, a depression is created inside the sump, that lowers the cartridge and reverts the clearing water flow. Closing the valve, the cartridge rises and places the filter in service again. Repeat the action 4-5 times for about 10 seconds each time;
- easy cartridge disassembly in case of inspection or replacement;
- for 3/4" ÷ 2" models, on demand available models with automatic cleaning controller (AOTC AUT Models);
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- IN/OUT connections 1/2" F;
- max operating pressure 16 bar;
- temperature 0 ÷ 40° C;
- max ΔP recommended 1 bar.



REF.	MODEL	IN-OUT connection	Flow @ Δp=0,2 bar (l/h)	PRICE EURO
FB210B	AOTC 12	1/2" F	1500	149,98

Self Cleaning Filters

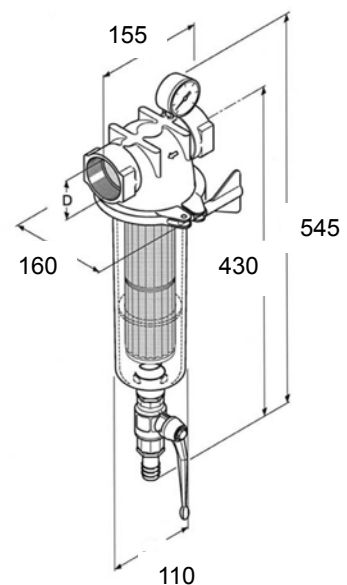


REF.	MODEL	C	D IN-OUT connection GAS	E	Flow @ $\Delta p=0,2$ bar (l/h)	PRICE EURO
FB211B	AOTC 34	365	3/4"	460	3000	335,79
FB211BT (*)	AOTC 34 AUT	365	3/4"	460	3000	1.334,32
FB212B	AOTC 1	365	1"	460	3500	335,79
FB212BT (*)	AOTC 1 AUT	365	1"	460	3500	1.334,32
FB213B	AOTC 114	375	1 1/4"	470	4500	380,82
FB213BT (*)	AOTC 114 AUT	375	1 1/4"	470	4500	1.366,56

- max operating pressure 10 bar;
- temperature 0 ÷ 40°C;
- max ΔP recommended 1 bar.

REF.	MODEL	D IN-OUT connection GAS	Flow @ $\Delta p=0,2$ bar (l/h)	PRICE EURO
FB214B	AOTC 112	1 1/2" F	10000	511,92
FB214BT (*)	AOTC 112 AUT	1 1/2" F	10000	1.621,70
FB215B	AOTC 2	2" F	15000	511,92
FB215BT (*)	AOTC 2 AUT	2" F	15000	1.621,70

(*) not available in stock.



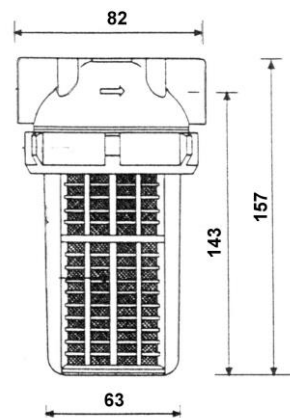
Filters with Washable Cartridge



- range of sediment filters, chrome plated brass head and trogamid sump, complete with washable cartridge;
- available AISI 304 cartridges and versions with AISI 316 sump for temperature up to 80°C (only ¾" – 1" – 1 ¼" models): please see 08-01-07-EN data sheet.

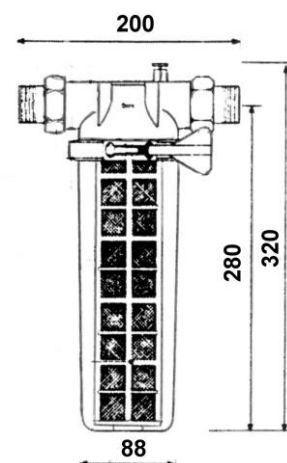
- max operating pressure 16 bar;
- temperature 0 ÷ 40° C;
- nylon cartridge 60 micron (REF. FB221).

REF.	MODEL	IN-OUT connection	Flow at $\Delta p=0,2$ bar (l/h)	PRICE EURO
FB200	OTC 12	½" F	1200	79,45



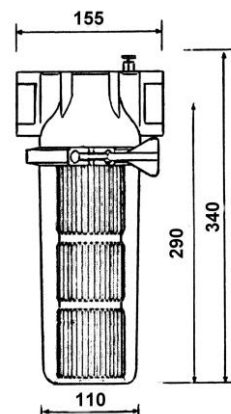
- max operating pressure 16 bar;
- temperature 0 ÷ 40° C;
- nylon cartridge 60 micron (REF. FB224).

REF.	MODEL	IN-OUT connection	Flow at $\Delta p=0,2$ bar (l/h)	PRICE EURO
FB201	OTC 34	¾"	3000	186,16
FB202	OTC 1	1"	3500	186,16
FB203	OTC 114	1¼"	5000	236,07



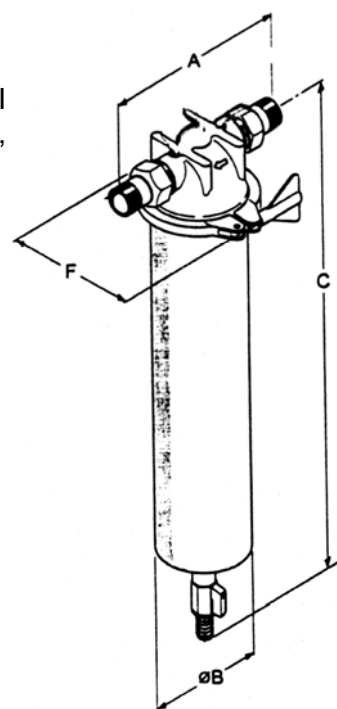
- max operating pressure 10 bar;
- temperature 0 ÷ 40° C;
- AISI 304 cartridge 100 micron (REF. FB232).

REF.	MODEL	IN-OUT connection	Flow at $\Delta p=0,2$ bar (l/h)	PRICE EURO
FB204B	OTC 112	1½" F	10000	371,02
FB205B	OTC 2	2" F	15000	371,02





- Filter housing brass chromium-pleated head with sump in AISI 304, for standard filtering cartridges external diameter max 67 mm, and nominal length 10" or 20";
- Complete with internal tie-rod in AISI 304 to fit cartridges;
- Max operating temperature 80°C;
- Max operating pressure 16 bar;
- With air valve.



REF.	MODEL	CONNECTIONS (inch)	NOMINAL LENGTH (inch)	A (mm)	B (mm)	C (mm)	F (mm)	PRICE EURO
FB217	OTC-HW 34	3/4"	10"	200	88	375	147	307,67
FB218	OTC-HW 1	1"	10"	200	88	375	147	307,67
FB219	OTC-HW 114	1 1/4"	10"	200	88	385	147	353,29
FB217A	OTC-HW 34-20	3/4"	20"	200	88	630	147	539,21
FB218A	OTC-HW 1-20	1"	20"	200	88	630	147	539,21
FB219A	OTC-HW 114-20	1 1/4"	20"	200	88	640	147	584,84

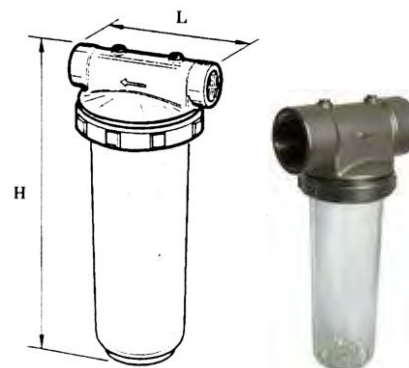
Cartridges to coupling:

- AISI 304 pleated filtering cartridges, REF. FB225, FB228, FB231, FB234 and FB237 (see 08-01-07-EN data sheet); Note: for MODEL 20", you can't put one 10" filtering cartridge on another;
- AISI 304 filtering cartridges, smooth or pleated (see 08-01-09-EN data sheet);
- Wound Polypropylene cartridges with AISI 316 core (see 08-01-09-EN data sheet).

Filter Housings Brass Head



- three pieces filter housings;
- head and nut material brass nickel-pleated, sump in SAN clear;
- max operating pressure 8 bar;
- max operating temperature 40° C;
- complete with air valve.



REF.	MODEL	CONNECTIONS (inch)	FOR CARTRIDGE	L (mm)	H (mm)	CARTRIDGE TYPE	PRICE EURO
FB060	OTS 34- 9	¾"	10"	135	330	DOE	100,45
FB061	OTS 1- 9	1"	10"	135	330	DOE	101,73
FB062	OTS 1-20	1"	20"	135	600	DOE	112,24
FB063	OTS 114-10	1 ¼"	10"	150	340	OR222	121,81
FB064	OTS 114-20	1 ¼"	20"	150	620	OR222	136,16
FB072	OTS 112-10	1 ½"	10"	150	340	OR222	122,01
FB065	OTS 112-20	1 ½"	20"	150	620	OR222	127,50
FB073	OTS 2-10	2"	10"	162	360	OR222	132,70
FB066	OTS 2-20	2"	20"	162	640	OR222	144,28

Suitable cartridges

- for cartridges for OTS filter housings, see 08-01-08-EN data sheet.

Accessories

Wrench

- galvanised steel material.

REF.	PRICE EURO
FB069	7,66



MWG AISI 316L Filter Housings



- Multicartridges filter housings flanged top opening AISI 316L for 3 cartridges, In/Out connections 2" BSP M or DN50 flange;
- ½" BSP F connection for drain filter;
- ¼" BSP F connection for air valve pressure gauge;
- High resistance and strength electrowelded construction, complete with AISI 316 fixing cartridges accessories, mechanical polishing outside treatment;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- D.M. n.174/2004 compliant about materials suitable for contact with water for human consumption;
- Max pressure @ 20°C = 10 bar;
- Max pressure @ 40°C = 9 bar;
- Max pressure @ 80°C = 8 bar;
- Hydraulic test pressure = 12 bar;
- Max temperature 80 °C;
- Gasket material EPDM (option in Viton not included, to order separately);
- Suitable for DOE cartridges;
- Cartridges dimensions: ID min/max 28÷30 mm, OD max 65 mm and length 20"-30"-40".

WARNING!

For these housings the suitable Carbon Block cartridges are FA018 and FA019.
The FA013 and FA014 cartridges of our catalogue are not suitable for these housings.

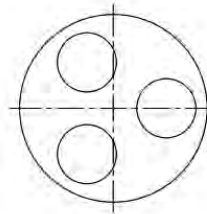
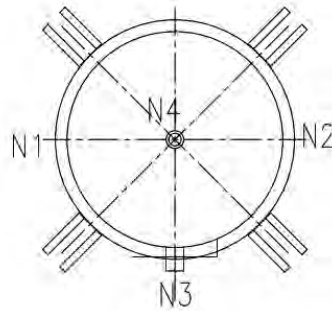
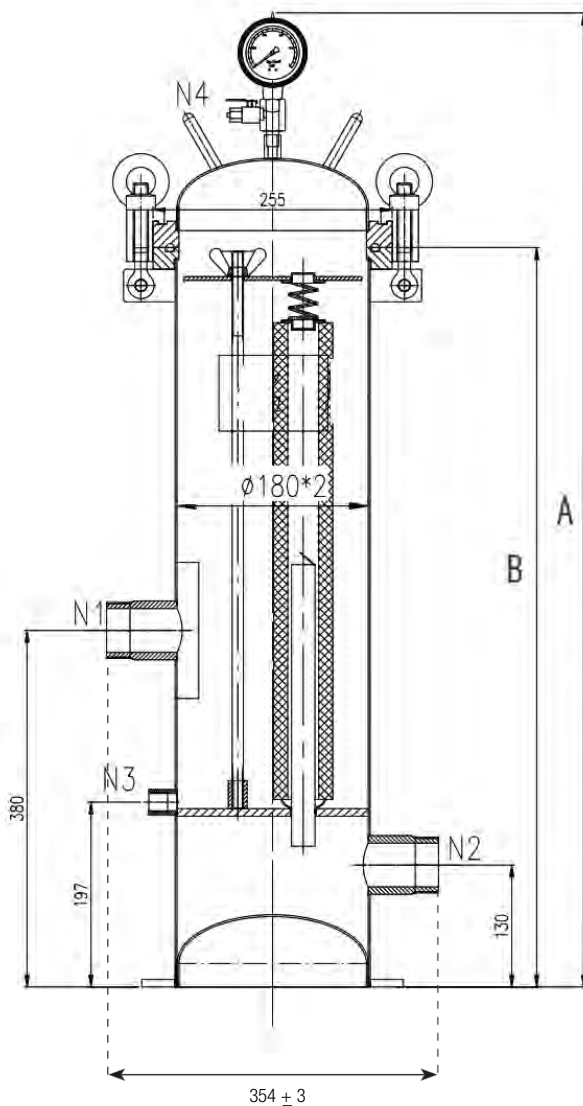
REF.	MODEL	CARTRIDGES NUMBER	IN/OUT CONNECTIONS	A (mm)	B (mm)	PRICE EURO
FBS0320	FBS 3 x 20"	3 x 20"	2" BSP M	1038	788	988,50
FBS0320FL (*)	FBS 3 x 20"	3 x 20"	DN50 Flange	1038	788	1.153,50
FBS0330	FBS 3 x 30"	3 x 30"	2" BSP M	1292	1042	1.183,50
FBS0330FL (*)	FBS 3 x 30"	3 x 30"	DN50 Flange	1292	1042	1.333,50
FBS0340	FBS 3 x 40"	3 x 40"	2" BSP M	1546	1296	1.261,50
FBS0340FL (*)	FBS 3 x 40"	3 x 40"	DN50 Flange	1546	1296	1.423,50

(*) not available in stock – Minimum delivery 10-12 weeks.

MWG AISI 316L Filter Housings



FBS 3 x -- MODEL



N1	Inlet	2" BSP Male
N2	Outlet	2" BSP Male
N3	Drain	1/2" Female
N4	Pressure Gauge/Vent	1/4" Female

MWG AISI 316L Filter Housings



- Multicartridges filter housings flanged top opening AISI 316L for 5 cartridges, In/Out connections 2" BSP M or DN50 flange;
- 1/2" BSP F connection for drain filter;
- 1/4" BSP F connection for air valve pressure gauge;
- High resistance and strength electrowelded construction, complete with AISI 316 fixing cartridges accessories, mechanical polishing outside treatment;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- D.M. n.174/2004 compliant about materials suitable for contact with water for human consumption;
- Max pressure @ 20°C = 10 bar;
- Max pressure @ 40°C = 9 bar;
- Max pressure @ 80°C = 8 bar;
- Hydraulic test pressure = 12 bar;
- Max temperature 80 °C;
- Gasket material EPDM (option in Viton not included, to order separately);
- Suitable for DOE cartridges;
- Cartridges dimensions: ID min/max 28÷30 mm, OD max 65 mm and length 20"- 30"- 40".



WARNING!

For these housings the suitable Carbon Block cartridges are FA018 and FA019.

The FA013 and FA014 cartridges of our catalogue are not suitable for these housings.

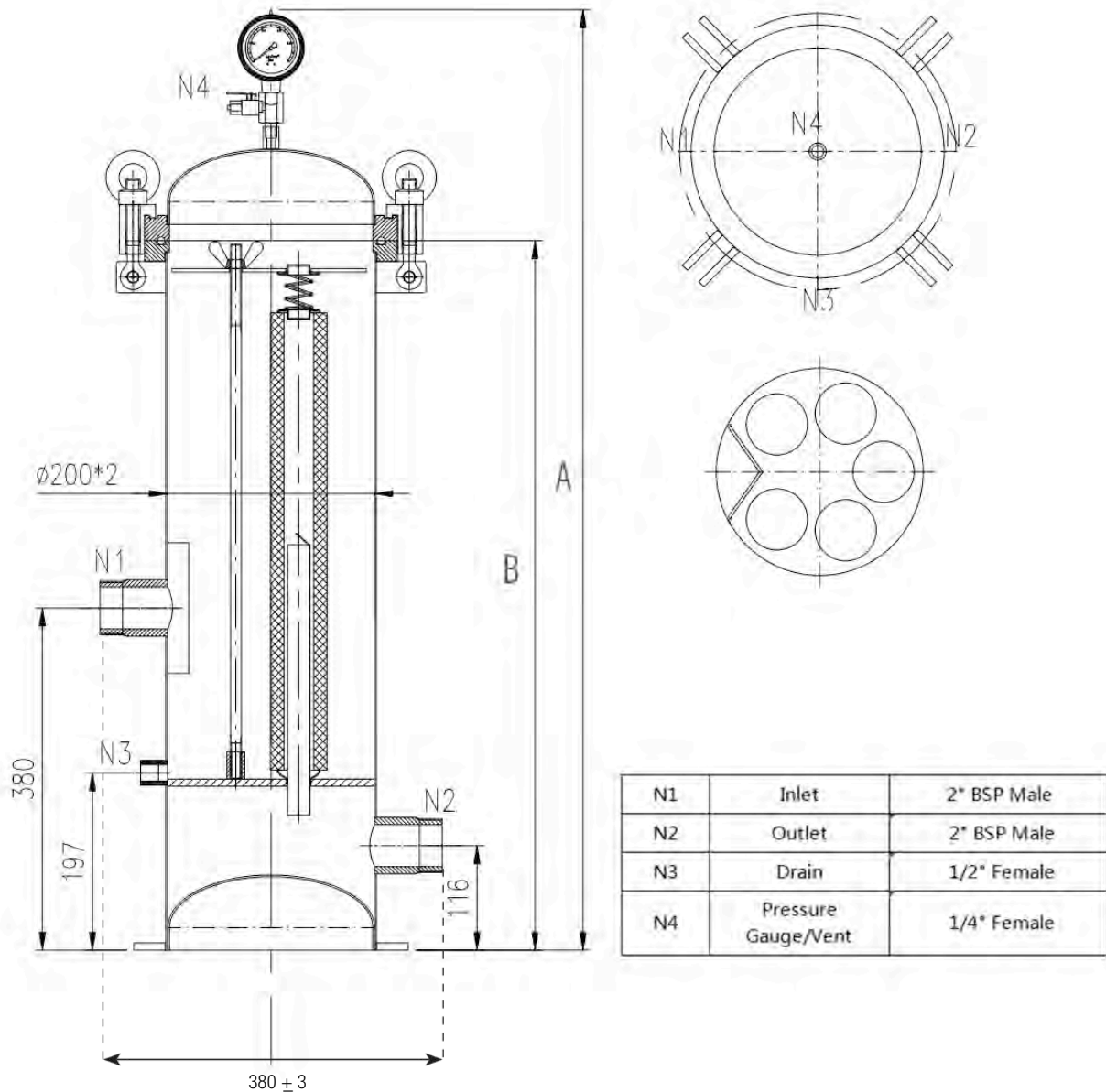
REF.	MODEL	CARTRIDGES NUMBER	IN/OUT CONNECTIONS	A (mm)	B (mm)	PRICE EURO
FBS0520	FBS 5 x 20"	5 x 20"	2" BSP M	1045	788	997,50
FBS0520FL (*)	FBS 5 x 20"	5 x 20"	DN50 Flange	1045	788	1.162,50
FBS0530	FBS 5 x 30"	5 x 30"	2" BSP M	1042	1299	1.192,50
FBS0530FL (*)	FBS 5 x 30"	5 x 30"	DN50 Flange	1042	1299	1.342,50
FBS0540	FBS 5 x 40"	5 x 40"	2" BSP M	1553	1296	1.270,50
FBS0540FL (*)	FBS 5 x 40"	5 x 40"	DN50 Flange	1553	1296	1.432,50

(*) not available in stock – Minimum delivery 10-12 weeks.

MWG AISI 316L Filter Housings



FBS 5 x -- MODEL



MWG AISI 316L Filter Housings



- Multicartridges filter housings flanged top opening AISI 316L for 7 cartridges, In/Out connections 2 ½" BSP M or DN65 flange;
- ½" BSP F connection for drain filter;
- ¼" BSP F connection for air valve pressure gauge;
- High resistance and strength electrowelded construction, complete with AISI 316 fixing cartridges accessories, mechanical polishing outside treatment;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- D.M. n.174/2004 compliant about materials suitable for contact with water for human consumption;
- Max pressure @ 20°C = 10 bar;
- Max pressure @ 40°C = 9 bar;
- Max pressure @ 80°C = 8 bar;
- Hydraulic test pressure = 12 bar;
- Max temperature 80 °C;
- Gasket material EPDM (option in Viton not included, to order separately);
- Suitable for DOE cartridges;
- Cartridges dimensions: ID min/max 28÷30 mm, OD max 65 mm and length 20"- 30"- 40".

WARNING!

For these housings the suitable Carbon Block cartridges are FA018 and FA019.

The FA013 and FA014 cartridges of our catalogue are not suitable for these housings.

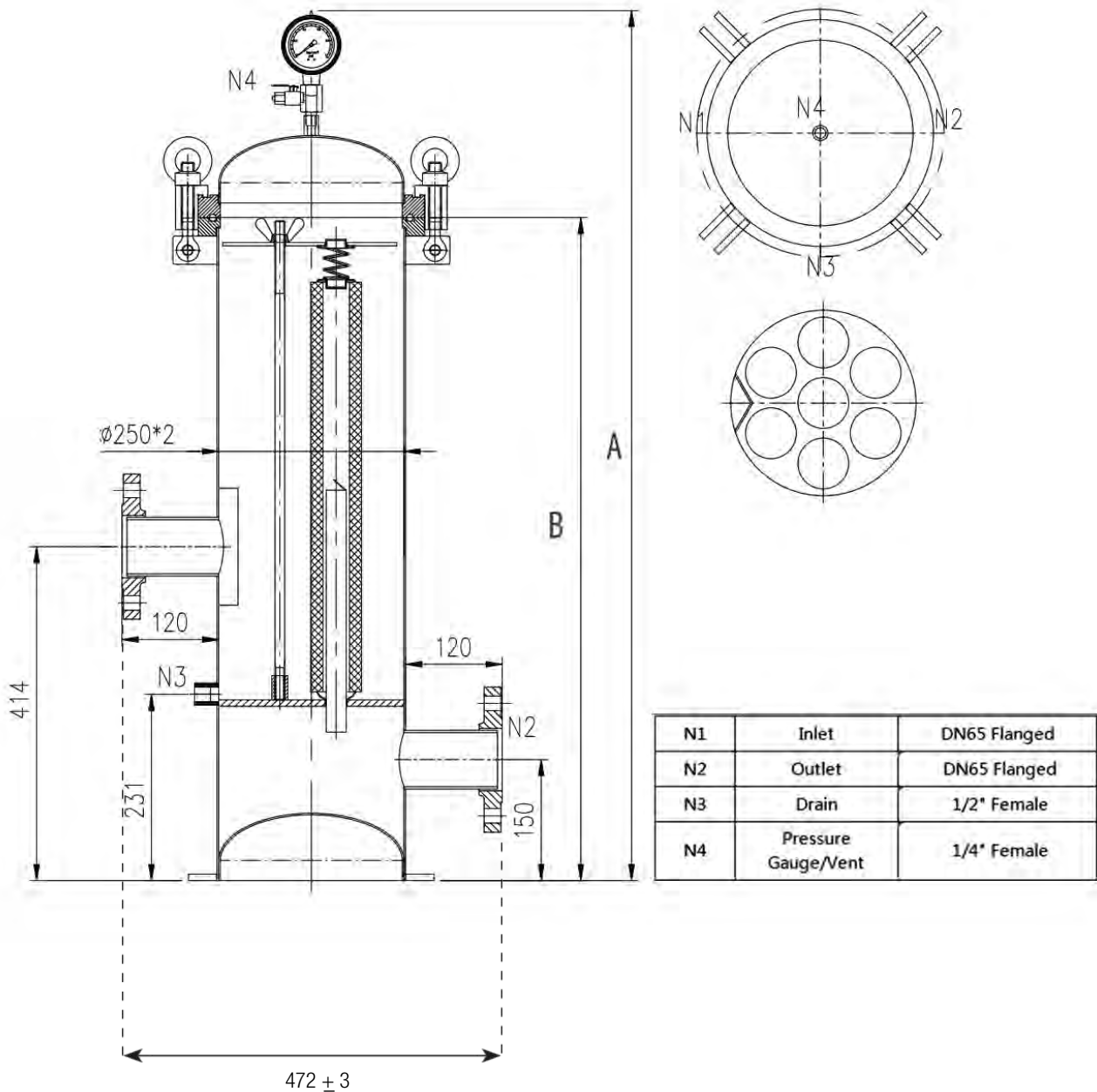
REF.	MODEL	CARTRIDGES NUMBER	IN/OUT CONNECTIONS	A (mm)	B (mm)	PRICE EURO
FBS0720 (*)	FBS 7 x 20"	7 x 20"	2 ½" BSP M	1079	822	1.711,50
FBS0720FL	FBS 7 x 20"	7 x 20"	DN65 Flange	1079	822	1.861,50
FBS0730 (*)	FBS 7 x 30"	7 x 30"	2 ½" BSP M	1076	1333	1.792,50
FBS0730FL	FBS 7 x 30"	7 x 30"	DN65 Flange	1076	1333	1.951,50
FBS0740 (*)	FBS 7 x 40"	7 x 40"	2 ½" BSP M	1330	1587	1.951,50
FBS0740FL	FBS 7 x 40"	7 x 40"	DN65 Flange	1330	1587	2.101,50

(*) not available in stock – Minimum delivery 10-12 weeks.

MWG AISI 316L Filter Housings



FBS 7 x -- MODEL



MWG AISI 316L Filter Housings



- Multicartridges filter housings flanged top opening AISI 316L for 15 cartridges, In/Out connections DN100;
- 1/2" BSP F connection for drain filter;
- 1/4" BSP F connection for air valve pressure gauge;
- High resistance and strength electrowelded construction, complete with AISI 316 fixing cartridges accessories, mechanical polishing outside treatment;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- D.M. n.174/2004 compliant about materials suitable for contact with water for human consumption;
- Max pressure @ 20°C = 10 bar;
- Max pressure @ 40°C = 9 bar;
- Max pressure @ 80°C = 8 bar;
- Hydraulic test pressure = 12 bar;
- Max temperature 80 °C;
- Gasket material EPDM (option in Viton not included, to order separately);
- Suitable for DOE cartridges;
- Cartridges dimensions: ID min/max 28÷30 mm, OD max 65 mm and length 30"- 40".

WARNING!

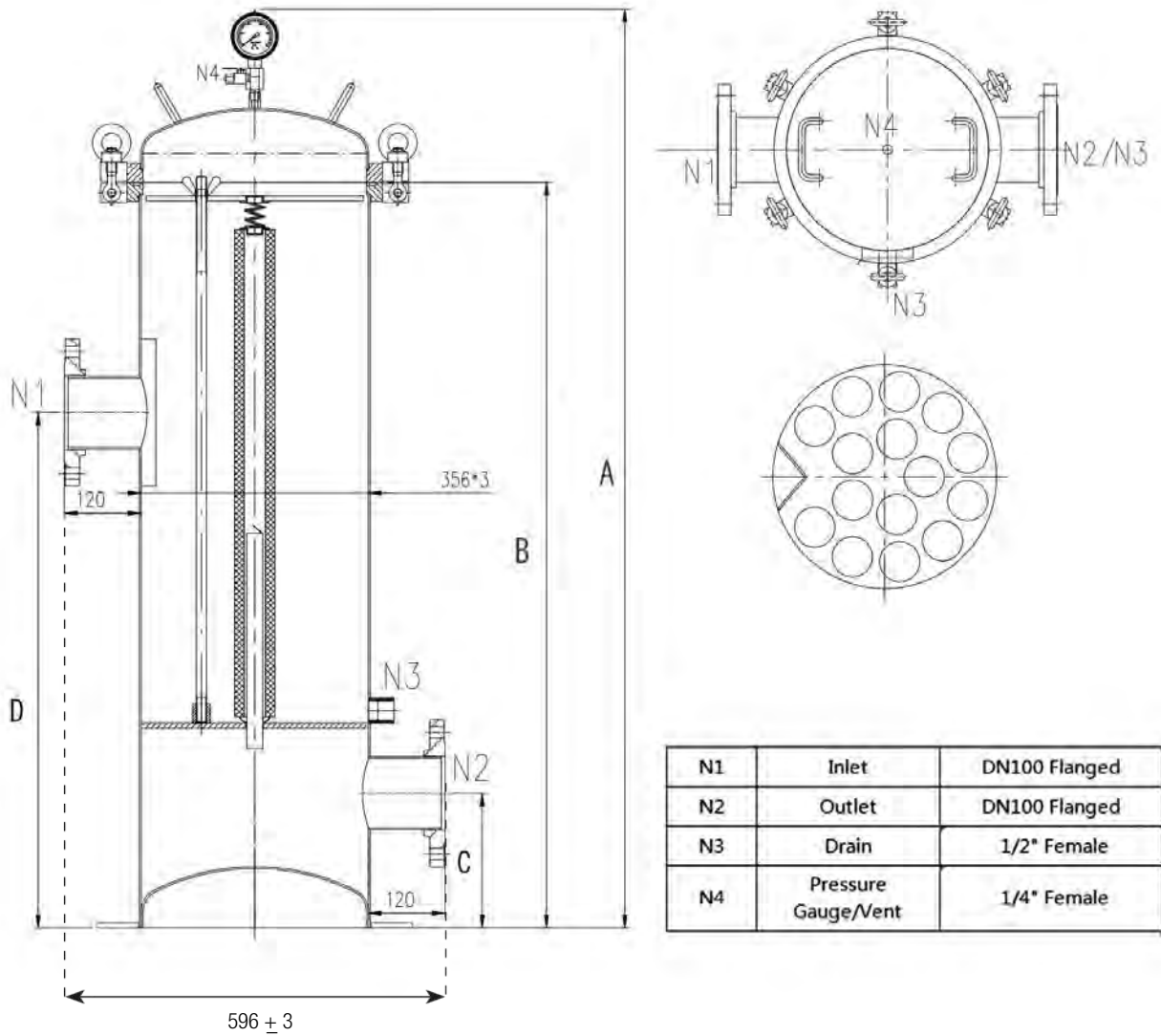
For these housings the suitable Carbon Block cartridges are FA018 and FA019.
The FA013 and FA014 cartridges of our catalogue are not suitable for these housings.

REF.	MODEL	CARTRIDGES NUMBER	IN/OUT CONNECTIONS	A (mm)	B (mm)	C (mm)	D (mm)	PRICE EURO
FBS1530FL	FBS 15 x 30"	15 x 30"	DN100 Flange	1437	1166	211	806	5.197,50
FBS1540FL	FBS 15 x 40"	15 x 40"	DN100 Flange	1661	1390	181	1030	5.536,50

MWG AISI 316L Filter Housings



FBS 15 x -- MODEL



N1	Inlet	DN100 Flanged
N2	Outlet	DN100 Flanged
N3	Drain	1/2" Female
N4	Pressure Gauge/Vent	1/4" Female

MWG AISI 316L Filter Housings



- Multicartridges filter housings flanged top opening AISI 316L for 20 cartridges, In/Out connections DN150;
- ½" BSP F connection for drain filter;
- ¼" BSP F connection for air valve pressure gauge;
- High resistance and strength electrowelded construction, complete with AISI 316 fixing cartridges accessories, mechanical polishing outside treatment;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- D.M. n.174/2004 compliant about materials suitable for contact with water for human consumption;
- Max pressure @ 20°C = 10 bar;
- Max pressure @ 40°C = 9 bar;
- Max pressure @ 80°C = 8 bar;
- Hydraulic test pressure = 12 bar;
- Max temperature 80 °C;
- Gasket material EPDM (option in Viton not included, to order separately);
- Suitable for DOE cartridges;
- Cartridges dimensions: ID min/max 28÷30 mm, OD max 65 mm and length 40".

WARNING!

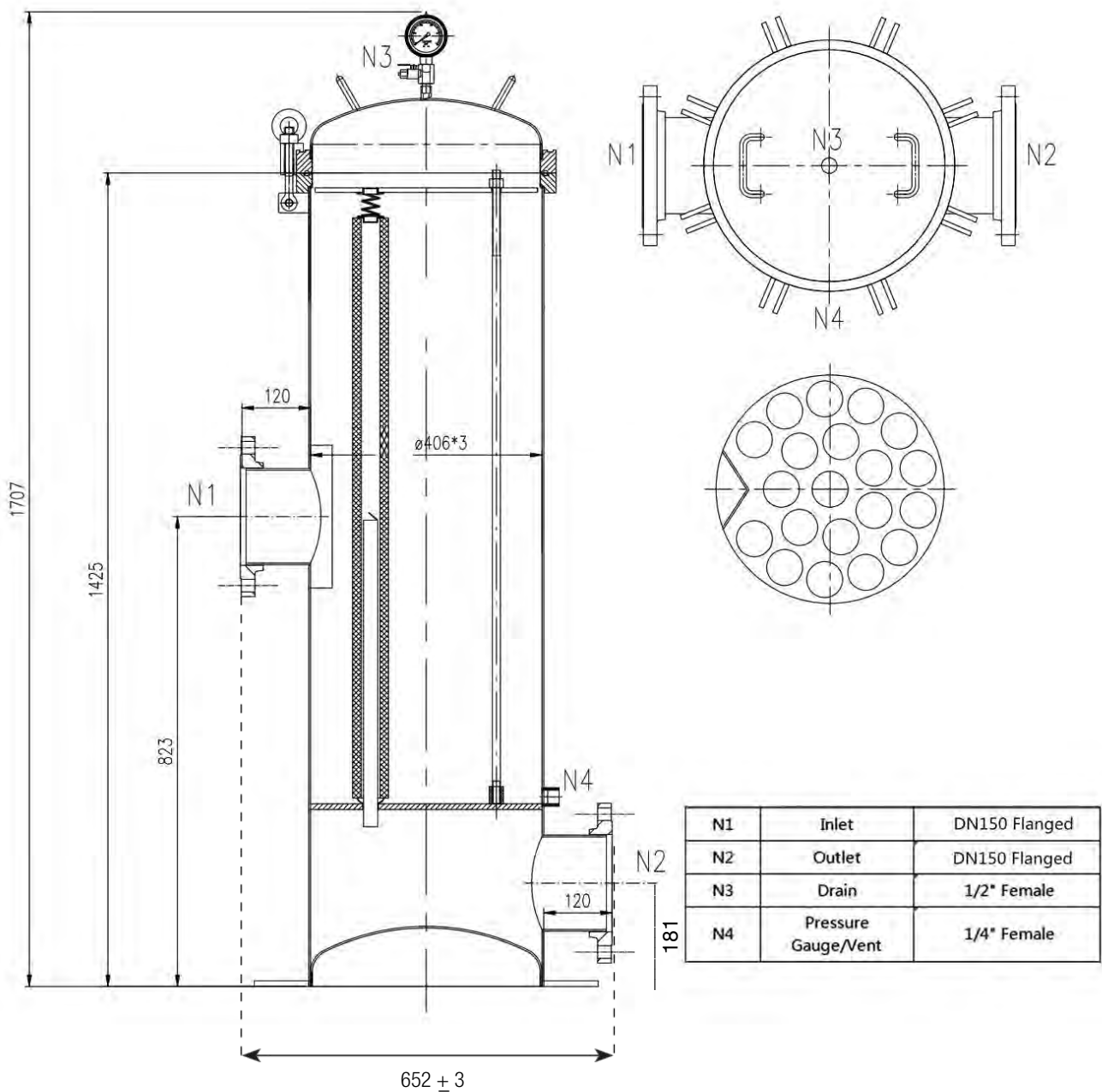
For these housings the suitable Carbon Block cartridges are FA018 and FA019.
The FA013 and FA014 cartridges of our catalogue are not suitable for these housings.

REF.	MODEL	CARTRIDGES NUMBER	IN/OUT CONNECTIONS	PRICE EURO
FBS2040FL	FBS 20 x 40"	20 x 40"	DN150 Flange	6.411,00

MWG AISI 316L Filter Housings



FBS 20 x 40 MODEL



AISI 316L Filter Housings



- Multicartridges filter housings flanged top opening AISI 316L for 3 cartridges, support legs, In/Out connections 2" BSP M or DN50 flange;
- Two ½" BSP connections for air valve pressure gauge and for drain filter;
- High resistance and strength electrowelded construction, complete with AISI 316L fixing cartridges accessories, glass blasted internal and outside treatment;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- D.M. n.174/2004 compliant about materials suitable for contact with water for human consumption;
- Max operating pressure @ 40°C = 8 bar;
- Max operating pressure @ 80°C = 2 bar;
- Hydraulic test pressure = 12 bar;
- Max operating temperature 80 °C;
- Gasket material EPDM;
- Suitable for DOE cartridges;
- Cartridges dimensions: ID min/max 26÷30 mm, OD max 65 mm and length 20"- 30"- 40".



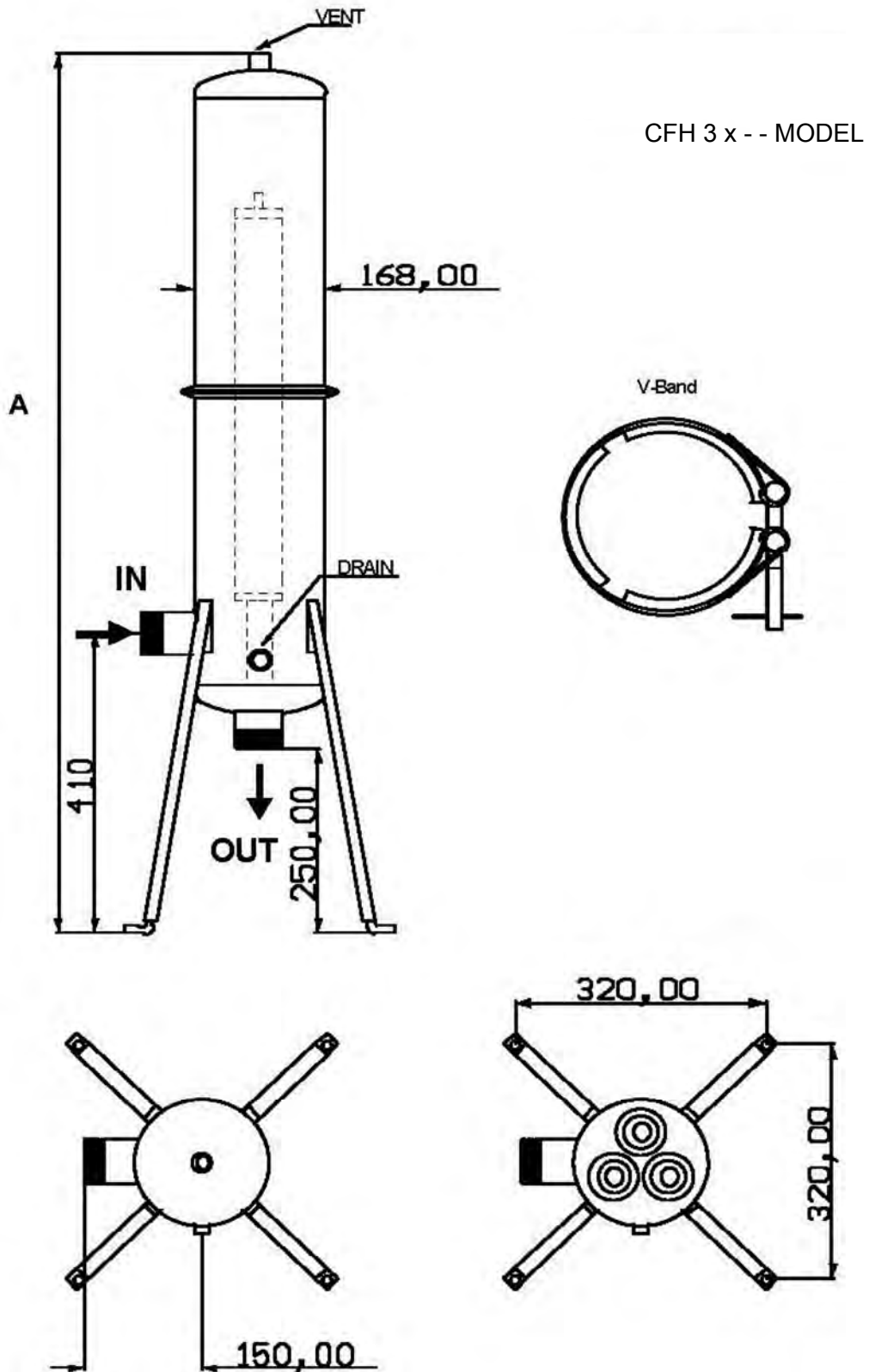
WARNING!

For these housings the suitable Carbon Block cartridges are FA018 and FA019.
The FA013 and FA014 cartridges of our catalogue are not suitable for these housings.

REF.	MODEL	CARTRIDGES NUMBER	IN/OUT CONNECTIONS	A (mm)	WEIGHT (kg)	PRICE EURO
FB040 (*)	CFH 3 x 20"	3 x 20"	2" BSP M	1200	20	1.371,10
FB040A (*)	CFH 3 x 20"	3 x 20"	DN50 Flange	1200	22	1.437,13
FB041 (*)	CFH 3 x 30"	3 x 30"	2" BSP M	1500	21	1.406,75
FB041A (*)	CFH 3 x 30"	3 x 30"	DN50 Flange	1500	23	1.553,05
FB041/1 (*)	CFH 3 x 40"	3 x 40"	2" BSP M	1600	22	1.522,66
FB041/1A (*)	CFH 3 x 40"	3 x 40"	DN50 Flange	1600	24	1.667,84

(*) product on demand not available in stock – Delivery 2-3 weeks.

AISI 316L Filter Housings



AISI 316L Filter Housings



- Multicartridges filter housings flanged top opening AISI 316L for 7 cartridges, support legs, In/Out connections 2 ½” BSP M or DN65 flange;
- Two ½” BSP connections for air valve pressure gauge and for drain filter;
- High resistance and strength electrowelded construction, complete with AISI 316L fixing cartridges accessories, glass blasted internal and outside treatment;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- D.M. n.174/2004 compliant about materials suitable for contact with water for human consumption;
- Max operating pressure @ 40°C = 8 bar;
- Max operating pressure @ 80°C = 2 bar;
- Hydraulic test pressure = 12 bar;
- Max operating temperature 80 °C;
- Gasket material EPDM;
- Suitable for DOE cartridges;
- Cartridges dimensions: ID min/max 26÷30 mm, OD max 65 mm and length 20”- 30”- 40”.



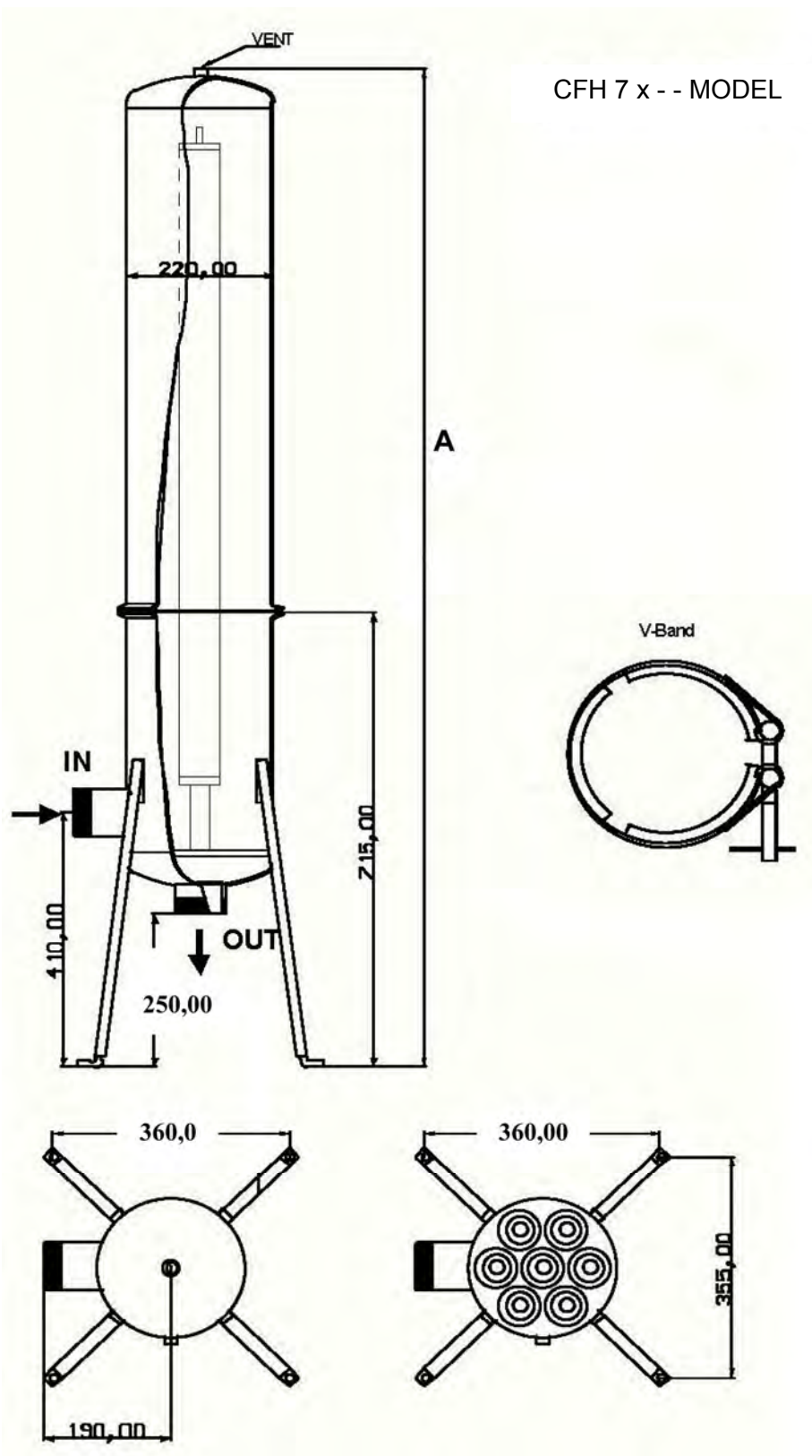
WARNING!

For these housings the suitable Carbon Block cartridges are FA018 and FA019.
The FA013 and FA014 cartridges of our catalogue are not suitable for these housings.

REF.	MODEL	CARTRIDGES NUMBER	IN/OUT CONNECTIONS	A (mm)	WEIGHT (kg)	PRICE EURO
FB042 (*)	CFH 7 x 20”	7 x 20”	2 ½” BSP M	1190	27	1.780,38
FB042A (*)	CFH 7 x 20”	7 x 20”	DN65 Flange	1190	30	1.926,68
FB043 (*)	CFH 7 x 30”	7 x 30”	2 ½” BSP M	1495	29	1.869,29
FB043A (*)	CFH 7 x 30”	7 x 30”	DN65 Flange	1495	32	2.011,08
FB044 (*)	CFH 7 x 40”	7 x 40”	2 ½” BSP M	1610	34	1.953,69
FB044A (*)	CFH 7 x 40”	7 x 40”	DN65 Flange	1610	37	2.100,00

(*) product on demand not available in stock – Delivery 2-3 weeks.

AISI 316L Filter Housings



AISI 316L Filter Housings



- Multicartridges filter housings flanged top opening AISI 316L for 15 cartridges, support legs, In/Out connections DN100;
- Two ½" BSP connections for air valve pressure gauge and for drain filter;
- High resistance and strength electrowelded construction, complete with AISI 316L fixing cartridges accessories, glass blasted internal and outside treatment;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- D.M. n.174/2004 compliant about materials suitable for contact with water for human consumption;
- Max operating pressure @ 40°C = 8 bar;
- Max operating pressure @ 80°C = 2 bar;
- Hydraulic test pressure = 12 bar;
- Max operating temperature 80 °C;
- Gasket material EPDM;
- Suitable for DOE cartridges;
- Cartridges dimensions: ID min/max 26÷30 mm, OD max 65 mm and length 30"- 40".

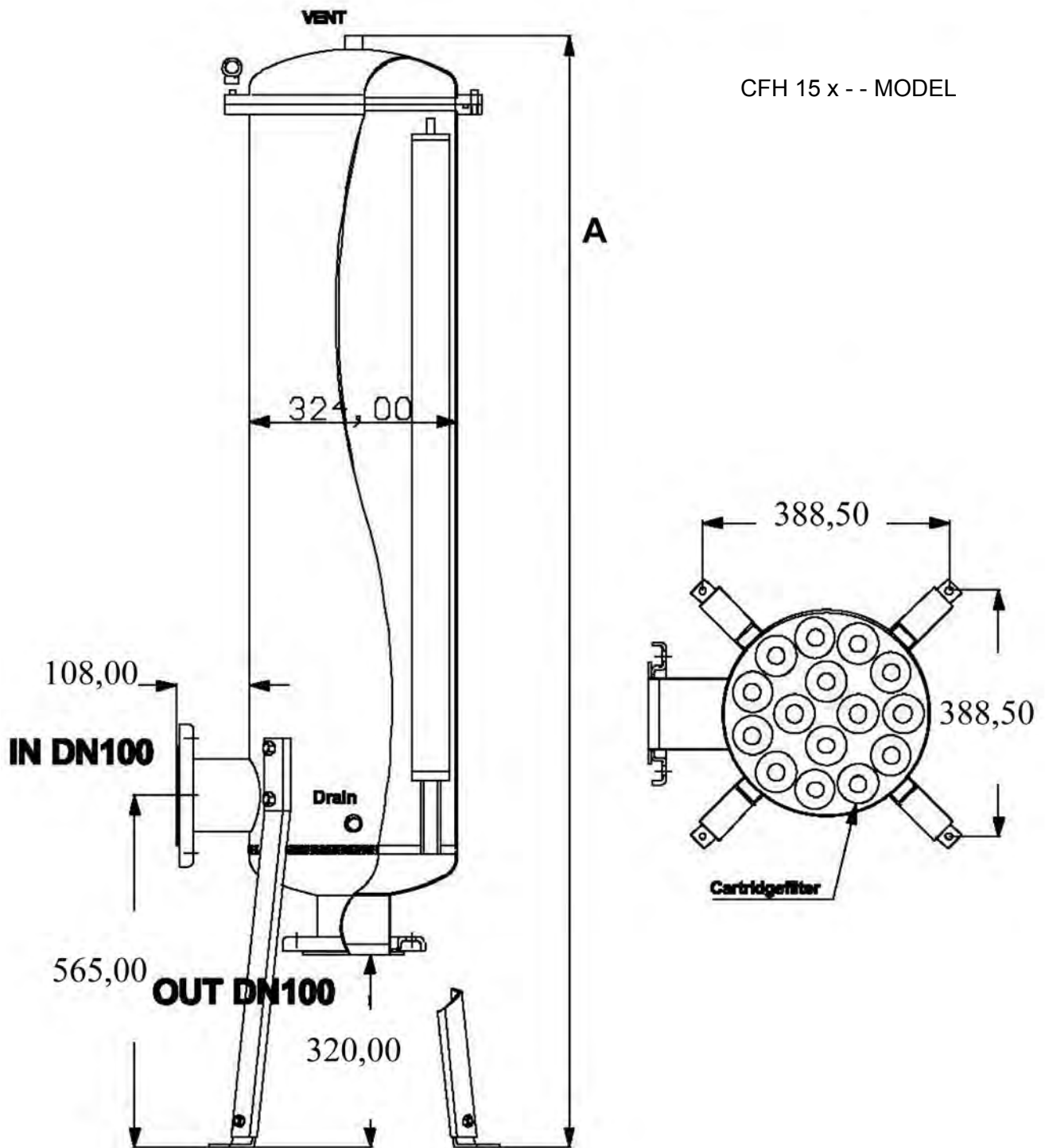


WARNING!

For these housings the suitable Carbon Block cartridges are FA018 and FA019.
The FA013 and FA014 cartridges of our catalogue are not suitable for these housings.

REF.	MODEL	CARTRIDGES NUMBER	IN/OUT CONNECTIONS	A (mm)	WEIGHT (kg)	PRICE EURO
FB046 (*)	CFH 15 x 40"	15 x 40"	DN100 Flange	1750	80	5.083,59

(*) product on demand not available in stock – Delivery 2-3 weeks.



AISI 316L Filter Housings



- Multicartridges filter housings flanged top opening AISI 316L for 22 cartridges, In/Out connections DN150;
- Three ½" BSP connections for air valve pressure gauge and for drain filter;
- High resistance and strength electrowelded construction, complete with AISI 316L fixing cartridges accessories, glass blasted internal and outside treatment;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- D.M. n.174/2004 compliant about materials suitable for contact with water for human consumption;
- Max operating pressure @ 40°C = 8 bar;
- Max operating pressure @ 80°C = 2 bar;
- Hydraulic test pressure = 12 bar;
- Max operating temperature 80 °C;
- Gasket material EPDM;
- Suitable for DOE cartridges;
- Cartridges dimensions: ID min/max 26÷30 mm, OD max 65 mm and length 40".



WARNING!

For these housings the suitable Carbon Block cartridges are FA018 and FA019.

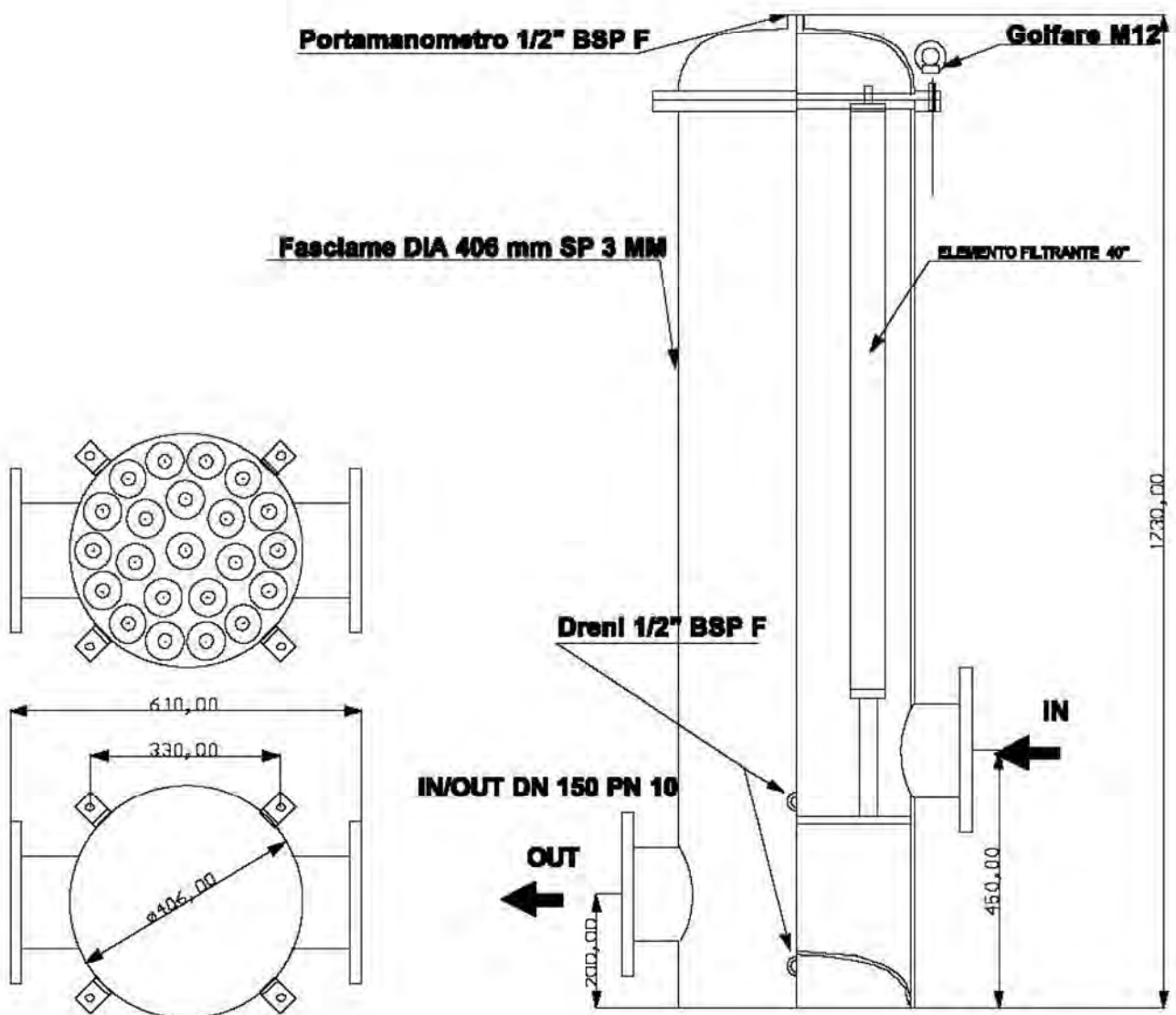
The FA013 and FA014 cartridges of our catalogue are not suitable for these housings.

REF.	MODEL	CARTRIDGES NUMBER	IN/OUT CONNECTIONS	WEIGHT (kg)	PRICE EURO
FB046/1 (*)	CFH 22 x 40"	22 x 40"	DN150 Flange	138	7.883,00

(*) product on demand not available in stock – Delivery 2-3 weeks.



CFH 22 x 40 MODEL



Chemical High Resistance PVC-U Multicartridges Filter Housings HPCF Series



- PVC-U multicartridges filter housings for 5 cartridges flanged top opening;
- With three pieces in / out female socket weld connections;
- With two 1/4" threaded connections for air valve pressure gauges and for drain filter;
- All filter housing internal material and all internal spare parts are in PVC-U for high chemical corrosion resistance;
- Opening gasket in EPDM material;
- Connection gasket in EPDM material;
- With aeration valve and pressure gauge;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- Design pressure = 6,0 bar @ 25°C;
- Hydraulic test pressure = 7,8 bar;
- Max Δp = 1,4 bar;
- Operating temperature = 5 ÷ 40 °C;
- In/Out connections DN50 / D. 63 mm;
- Suitable for DOE cartridges;
- Cartridges dimensions: ID 28÷30 mm, OD 65 mm and length 20"- 30"- 40".

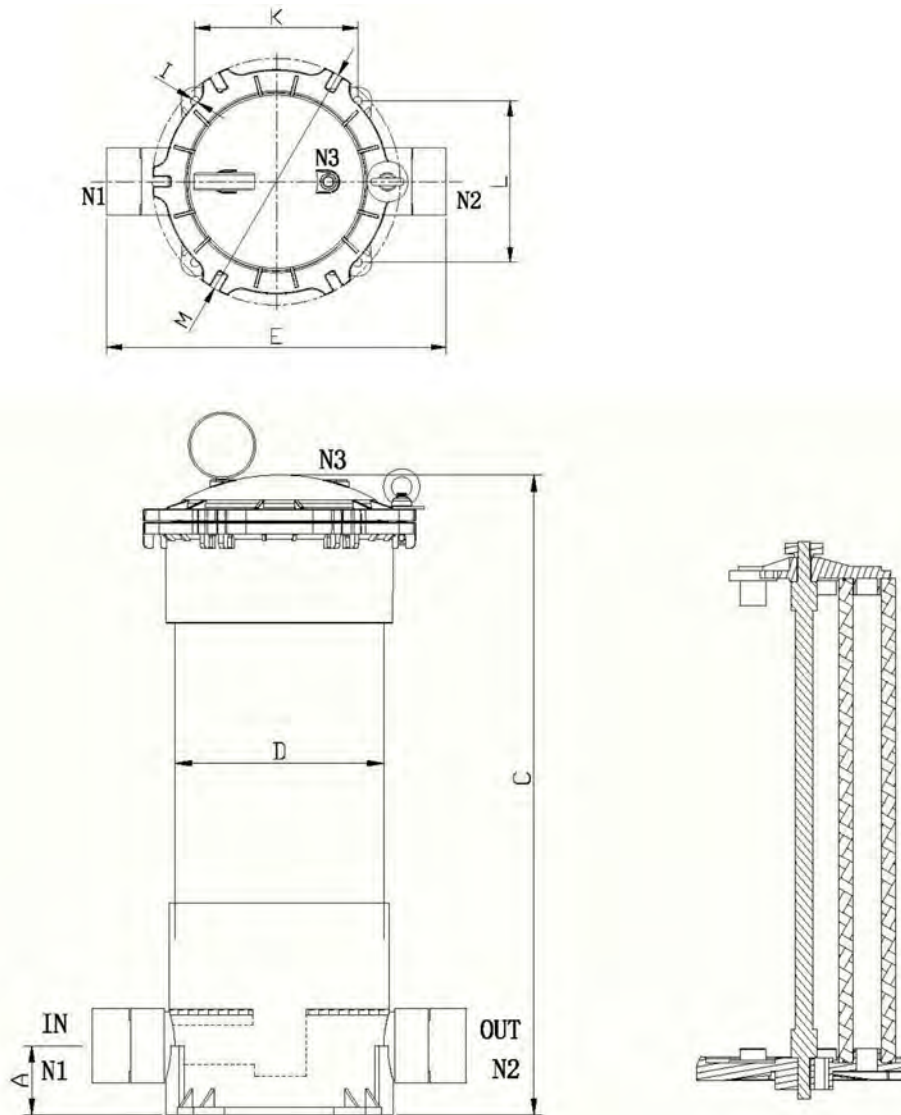


WARNING!

The FA013 and FA014 cartridges of our catalogue are not suitable for these housings.

REF.	MODEL	CARTRIDGES NUMBER	WEIGHT (kg)	CAPACITY (litres)	NOMINAL FLOW RATE (lpm)	PRICE EURO
FB560	HPCF/B-5DC2	n.5 2,5" x 20"	11,0	20,6	300	432,92
FB561	HPCF/B-5DC3	n.5 2,5" x 30"	12,7	29,4	300	519,08
FB562	HPCF/B-5DC4	n.5 2,5" x 40"	14,4	38,2	300	606,30

Chemical High Resistance PVC-U Multicartridges Filter Housings HPCF Series



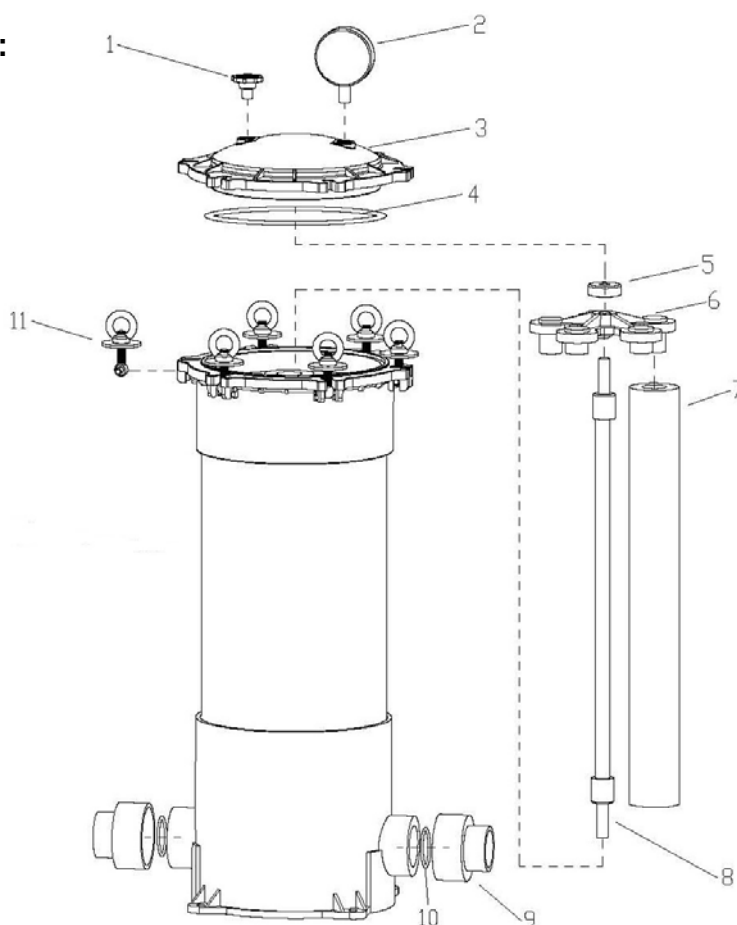
REF.	MODEL	A *	C *	D *	E *	I *	K *	L *	M *	N1 N2 *	N3
FB560	HPCF/B-5DC2	75	730	225	482	10	187,5	186	290	63	G ¼"
FB561	HPCF/B-5DC3	75	980	225	482	10	187,5	186	290	63	G ¼"
FB562	HPCF/B-5DC4	75	1230	225	482	10	187,5	186	290	63	G ¼"

* Dimensions are in mm.

Chemical High Resistance PVC-U Multicartridges Filter Housings HPCF Series



SPARE PARTS:



ITEM	REF.	DESCRIPTION	Q.TY	MATERIAL	PRICE EURO
1	FB366	PURGE CAP	1		1,62
2	FB367	PRESSURE GAUGE 0-10 BAR 1/4"	1		14,01
1+3+4	FB580	FLANGED TOP COVER + PURGE CAP + O-RING	1		42,86
4	FB363	O-RING FOR FLANGED TOP COVER	1	EPDM	6,48
5	FB574	CLOSURE CARTRIDGE NUT	3		2,16
6	FB578	5DC CARTRIDGE FIXING STAR	1		8,64
7		CARTRIDGE (NOT INCLUDED)			
8	FB575	ROD 20"	1		5,83
	FB576	ROD 30"	1		7,14
	FB577	ROD 40"	1		8,64
10	FB371	T GASKET FOR MANIFOLD KIT D.63 MM	2		2,72
9 + 10	FB572	MANIFOLD KIT D.63 MM WITH O-RING	2		25,96
11	FB364	BOLT KIT M10	6	AISI	10,82

Chemical High Resistance PVC-U Multicartridges Filter Housing HPCF Series



- PVC-U multicartridges filter housings for 9 cartridges flanged top opening;
- With three pieces in / out female socket weld connections;
- With two 1/4" threaded connections for air valve pressure gauges and for drain filter;
- All filter housing internal material and all internal spare parts are in PVC-U for high chemical corrosion resistance;
- Opening gasket in EPDM material;
- Connection gasket in EPDM material;
- With aeration valve and pressure gauge;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- Design pressure = 6,0 bar @ 25°C;
- Hydraulic test pressure = 7,8 bar;
- Max Δp = 1,4 bar;
- Operating temperature = 5 ÷ 40 °C;
- In/Out connections DN80 / D. 90 mm;
- 1" BSPT M (+ F 20 mm to glue) drain connection;
- Suitable for DOE cartridges;
- Cartridges dimensions: ID 28÷30 mm, OD 65 mm and length 20"- 30"- 40".

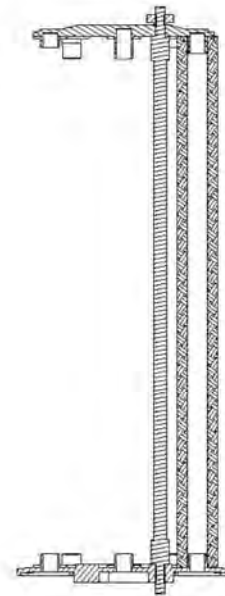
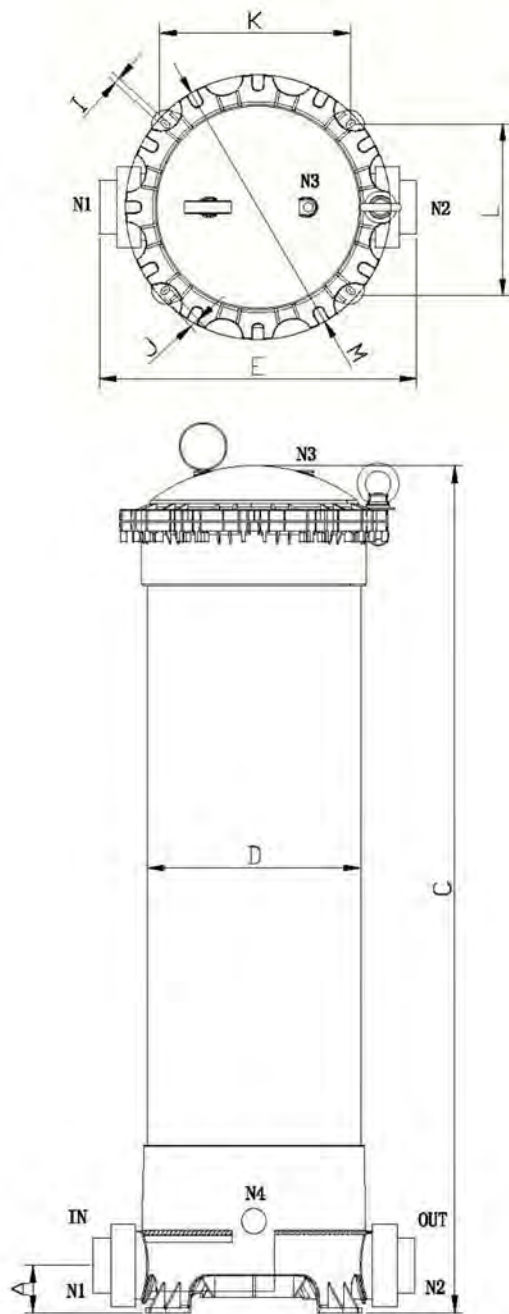


WARNING!

The FA013 and FA014 cartridges of our catalogue are not suitable for these housings.

REF.	MODEL	CARTRIDGES NUMBER	WEIGHT (kg)	CAPACITY (litres)	NOMINAL FLOW RATE (lpm)	PRICE EURO
FB564	HPCF/B-9DC2	n.9 2,5" x 20"	20,0	39,7	250	779,68
FB565	HPCF/B-9DC3	n.9 2,5" x 30"	23,0	57,0	350	865,85
FB566	HPCF/B-9DC4	n.9 2,5" x 40"	26,0	74,3	550	996,15

Chemical High Resistance PVC-U Multicartridges Filter Housings HPCF Series



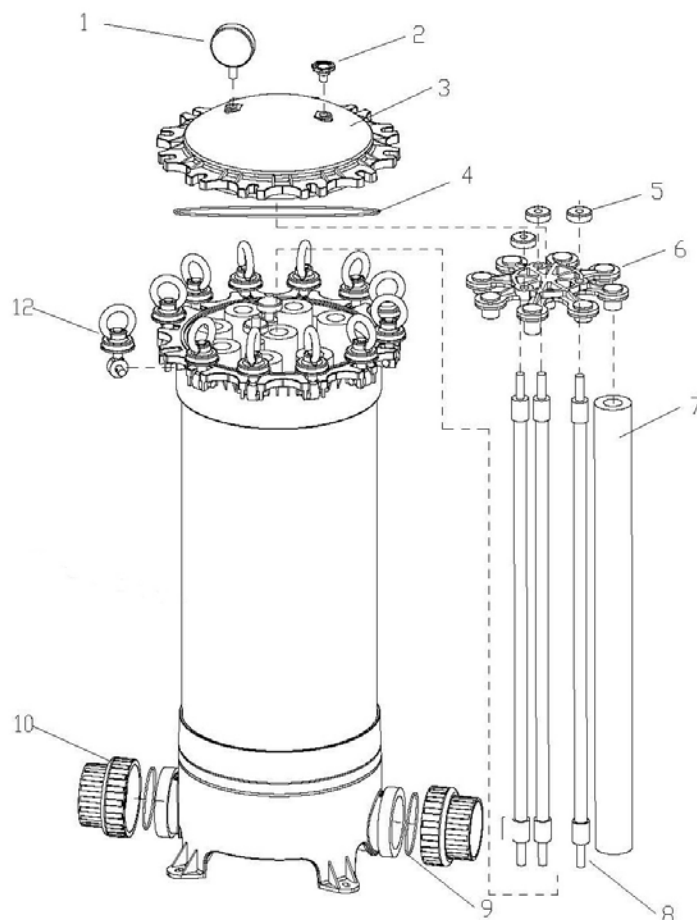
* Dimensions are in mm.

REF.	MODEL	A *	C *	D *	E *	I *	J *	K *	L *	M *	N1 N2 *	N3	N4
FB564	HPCF/B-9DC2	69	765	315	520	9	15	276	249	372	90	G ¼"	1"
FB565	HPCF/B-9DC3	69	1015	315	520	9	15	276	249	372	90	G ¼"	1"
FB566	HPCF/B-9DC4	69	1265	315	520	9	15	276	249	372	90	G ¼"	1"

Chemical High Resistance PVC-U Multicartridges Filter Housings HPCF Series



SPARE PARTS:



ITEM	REF.	DESCRIPTION	Q.TY	MATERIAL	PRICE EURO
1	FB367	PRESSURE GAUGE 0-10 BAR ¼"	1		14,01
2	FB366	PURGE CAP	1		1,62
2+3+4	FB581	FLANGED TOP COVER + PURGE CAP + O-RING	1		86,57
4	FB571	O-RING FOR FLANGED TOP COVER	1	EPDM	6,48
5	FB574	CLOSURE CARTRIDGE NUT	3		2,16
6	FB579	9DC CARTRIDGE FIXING STAR	1		11,90
7		CARTRIDGE (NOT INCLUDED)			
8	FB575	ROD 20"	3		5,83
	FB576	ROD 30"	3		7,14
	FB577	ROD 40"	3		8,64
9	FB583	T GASKET FOR MANIFOLD KIT D.90 MM	2		4,08
9+10	FB573	MANIFOLD KIT D.90 MM WITH O-RING	2		44,88
12	FB582	BOLT KIT M12	12	AISI	12,98

High Flow PVC-U Single Cartridge Filter Housings PF Series



- PVC-U single cartridge filter housings, with flanged top opening, support legs, in/out female socket weld connections and two 1/4" threaded connections for air valve pressure gauges and for drain filter;
- all filter housing internal material and all internal spare parts are in PVC-U for high chemical corrosion resistance;
- opening gasket in EPDM material;
- connection gasket in EPDM material;
- with aeration valve and pressure gauge;
- European 2014/68/EU Directive compliant for pressure equipment (PED);
- design pressure = 7,0 bar @ 25°C;
- hydraulic test pressure = 9,1 bar;
- max Δp = 1,4 bar;
- operating temperature = 5 ÷ 40 °C;
- In/Out flanged connections DN50;
- suitable for high flow "special pleated cartridges";
- cartridges dimensions: 6" x 20" and 6" x 40".



REF.	MODEL	CARTRIDGES NUMBER	WEIGHT (kg)	CAPACITY (litres)	NOMINAL FLOW RATE (lpm)	PRICE EURO
FB360	PF20	n.1 6" x 20"	18,0	24,8	300	757,62
FB361	PF40	n.1 6" x 40"	22,3	41,0	300	865,85

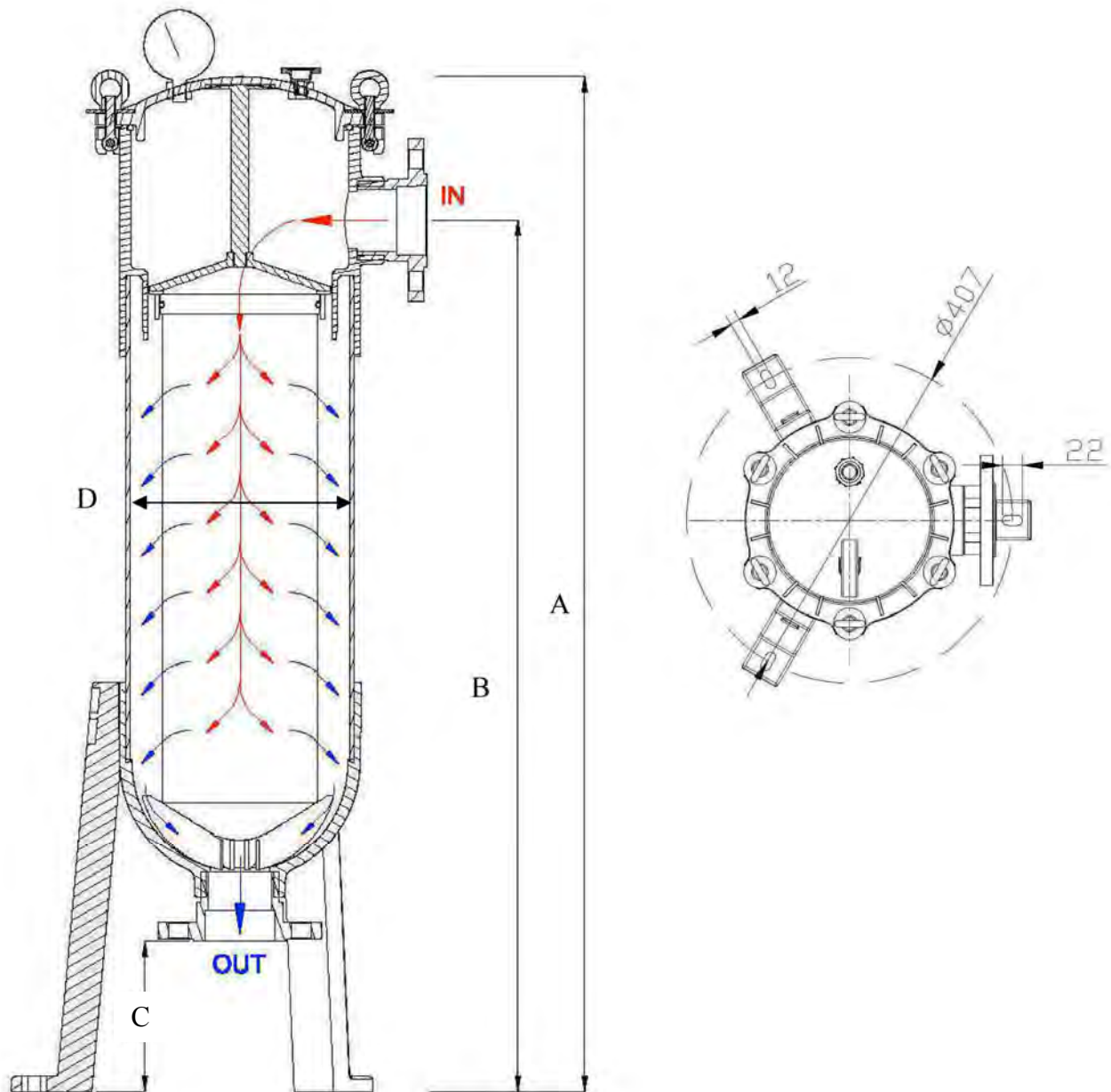
Cartridge to coupling

- high flow "special pleated cartridges" single open-ended;
- filter media and support in PP, o-ring seal in EPDM;
- end caps in fiberglass reinforced PP;
- inside to outside flow pattern;
- external diameter = 6" (152 mm);
- recommended maximum ΔP 1,0 bar at 20°C.



REF.	MODEL	LENGTH (inch)	MICRON	NOMINAL FLOW RATE (lpm)	PRICE EURO
FB376	DLHF620PP4.5E	20"	4,5	660	159,80
FB379	DLHF620PP20E	20"	20	660	146,45
FB381	DLHF620PP70E	20"	70	660	144,32
FB382	DLHF620PP100E	20"	100	660	143,15
FB386	DLHF640PP4.5E	40"	4,5	1300	284,20
FB389	DLHF640PP20E	40"	20	1300	275,49
FB391	DLHF640PP70E	40"	70	1300	271,05
FB392	DLHF640PP100E	40"	100	1300	268,93

High Flow PVC-U Single Cartridge Filter Housings PF Series



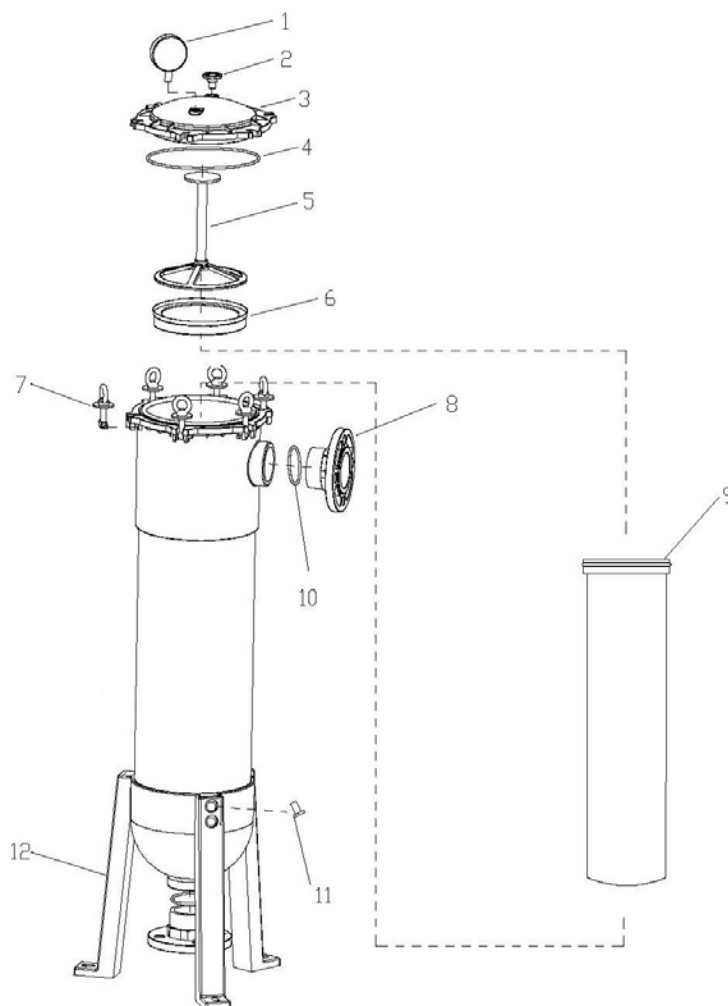
REF.	MODEL	A *	B *	C *	D *
FB360	PF20	1070	905	165	225
FB361	PF40	1560	1395	165	225

* Dimensions are in mm.

High Flow PVC-U Single Cartridge Filter Housings PF Series



SPARE PARTS:



ITEM	REF.	DESCRIPTION	Q.TY	MATERIAL	PRICE
1	FB367	PRESSURE GAUGE 0-10 BAR 1/4"	1		14,01
2	FB366	PURGE CAP	1		1,62
2+3+4	FB580	FLANGED TOP COVER + PURGE CAP + O-RING	1		42,86
4	FB363	O-RING FOR FLANGED TOP COVER	1	EPDM	6,48
5	FB368	SPACER	1	PVC	16,35
6	FB359	SINGLE CARTRIDGE SEAL RING	1		30,30
7	FB364	BOLT KIT M10	6	AISI	10,82
8	FB370	DN50 FLANGE	2		19,58
9		SINGLE CARTRIDGE (NOT INCLUDED)			
10	FB362	O-RING DN50 FLANGE	2		0,42
11	FB374	SUPPORT LEG FIXING SCREW	6		0,54
12	FB373	SUPPORT LEG	3		16,35

PVC-U Bag Filter System



- PVC-U bag filter housings, with flanged top opening, support legs, in/out female socket weld connections and two 1/4" threaded connections for air valve pressure gauges and for drain filter;
- all filter housing internal material and all internal spare parts are in PVC-U for high chemical corrosion resistance;
- Opening gasket in EPDM material;
- Connection gasket in EPDM material;
- With aeration valve and pressure gauge;
- European 2014/68/EU Dir. compliant for pressure equipment (PED);
- Nominal flow rate = 300 lpm;
- Design pressure = 7,0 bar @ 25°C;
- Hydraulic test pressure = 9,1 bar;
- Max Δp = 1,0 bar;
- Operating temperature = 5 ÷ 40 °C;
- In/Out flanged connections DN50;
- Suitable for bag filter;
- Bag filters dimensions: 7" x 16" and 7" x 32".



REF.	MODEL	BAG SIZE	WEIGHT (kg)	CAPACITY (litres)	NOMINAL FLOW RATE (lpm)	PRICE EURO
FB355	HXP-BF-1-1-B	7" x 16"	15	17	300	800,71
FB356	HXP-BF-1-2-B	7" x 32"	20	30	300	931,00

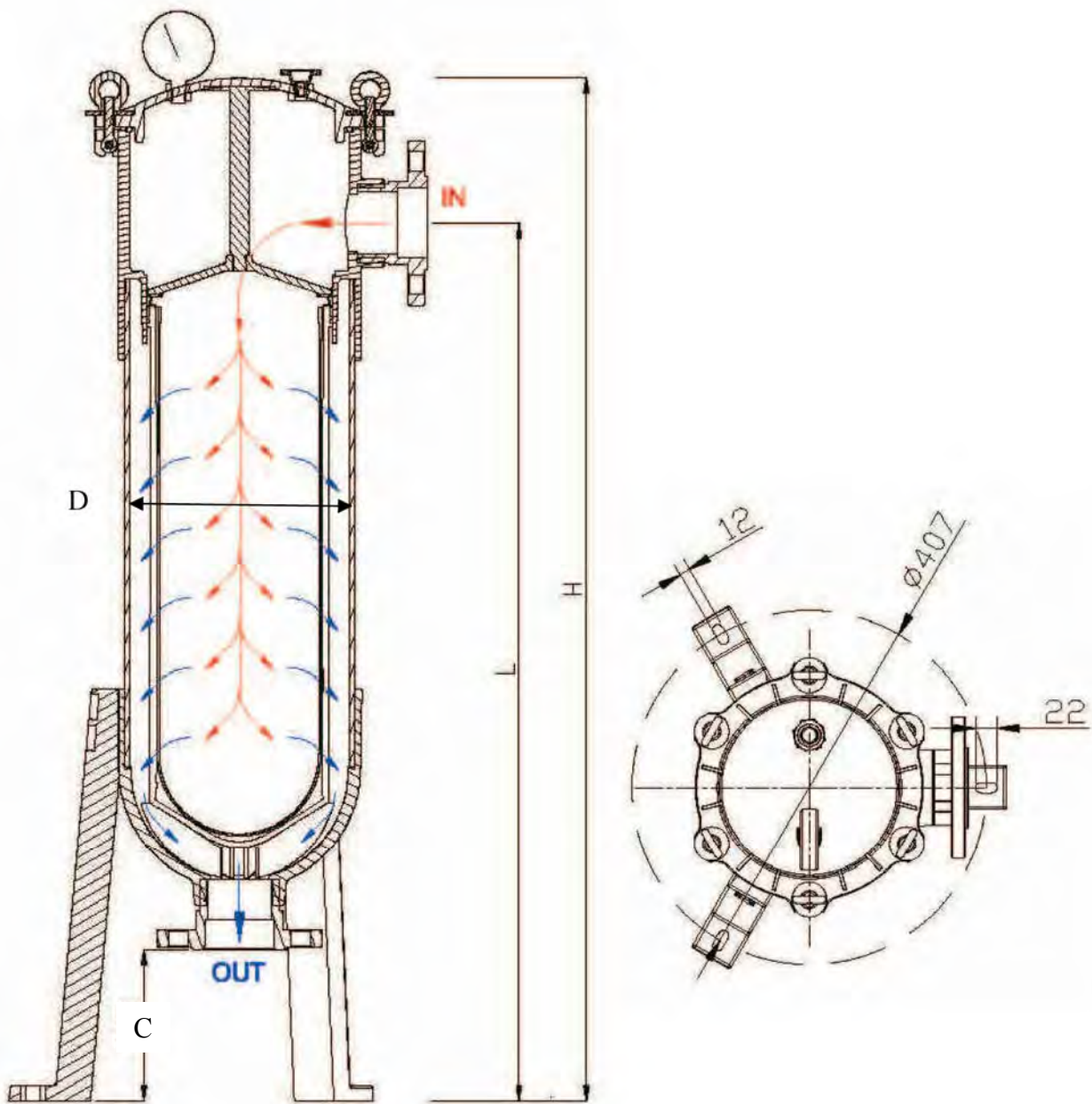
Bag filters to coupling

- Inside to outside flow pattern;
- In PP material;
- External diameter = 7" (178 mm);
- Recommended maximum Δp = 1,0 bar at 20°C.



REF.	MODEL	LENGTH (inch)	MICRON	NOMINAL FLOW RATE (lpm)	PRICE EURO
FB357A	BAG FILTER 1	16"	1	330	15,64
FB357B	BAG FILTER 1	16"	5	330	15,64
FB357C	BAG FILTER 1	16"	10	330	15,64
FB357D	BAG FILTER 1	16"	25	330	15,64
FB357E	BAG FILTER 1	16"	50	330	15,64
FB357F	BAG FILTER 1	16"	100	330	15,64
FB358A	BAG FILTER 2	32"	1	660	21,11
FB358B	BAG FILTER 2	32"	5	660	21,11
FB358C	BAG FILTER 2	32"	10	660	21,11
FB358D	BAG FILTER 2	32"	25	660	21,11
FB358E	BAG FILTER 2	32"	50	660	21,11
FB358F	BAG FILTER 2	32"	100	660	21,11

PVC-U Bag Filter System



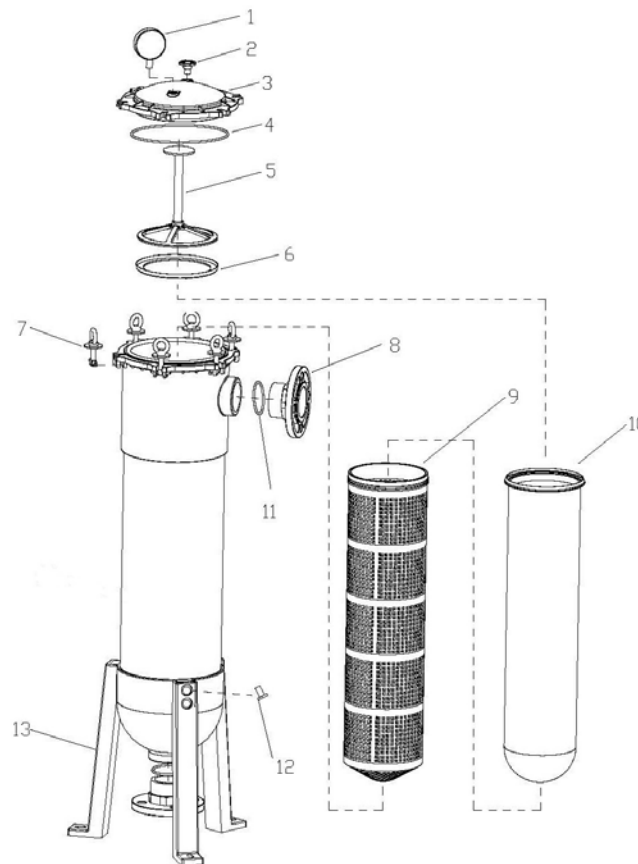
REF.	MODEL	C *	D *	H *	L *
FB355	HXP-BF-1-1-B	165	225	845	685
FB356	HXP-BF-1-2-B	165	225	1225	1065

* Dimensions are in mm.

PVC-U Bag Filter System



SPARE PARTS:



ITEM	REF.	DESCRIPTION	Q.TY	MATERIAL	PRICE EURO
1	FB367	PRESSURE GAUGE 0-10 BAR ¼"	1		14,01
2	FB366	PURGE CAP	1		1,62
2+3+4	FB580	FLANGED TOP COVER + PURGE CAP + O-RING	1		42,86
4	FB363	O-RING FOR FLANGED TOP COVER	1	EPDM	6,48
5	FB368	SPACER	1	PVC	16,35
6	FB359A	BAG FILTER SEAL RING	1		29,99
7	FB364	BOLT KIT M10	6	AISI	10,82
8	FB370	DN50 FLANGE	2		19,58
9	FB383	16" FILTER SUPPORT ARMOR	1	PVC	171,66
	FB383A	32" FILTER SUPPORT ARMOR	1	PVC	343,33
10		BAG FILTER (NOT INCLUDED)			
11	FB362	DN50 FLANGE O-RING	2		0,42
12	FB374	SUPPORT LEG FIXING SCREW	6		0,54
13	FB373	SUPPORT LEG	3		16,35

High Flow Single 20" Cartridge MWG EuroFlow Filter Housings EF Series



- Single cartridge filter housings with fiberglass reinforced plastic pressure vessels;
- White painted, UVA-ray proof material;
- Suitable for industrial applications, for high chemical corrosion resistance;
- Compact and modular design;
- Ease of installation and maintenance;
- O-ring in EPDM;
- Max operating pressure 150 psi (10 bar);
- Max $\Delta p = 2$ bar;
- Operating temperature $5 \div 49$ °C;
- Operating pH range $3 \div 11$;
- With 3" DN80 Victaulic In/Out coupling connections and stub pipes in PVC-U PN = 4 bar;
- Straps and saddles included;
- 2014/68/EU Directive compliant for pressure equipment (PED);
- Suitable for high flow "special pleated cartridges", with guiding ring;
- Cartridges dimensions: 6" x 20".

REF.	MODEL	CARTRIDGES NUMBER	WEIGHT (kg)	CAPACITY (liters)	NOMINAL FLOW RATE (lpm)	PRICE EURO
FBEF20S3	EF20	n.1 6" x 20"	24	25	330	1.037,46



High Flow Single 20" Cartridge MWG EuroFlow Filter Housings EF Series

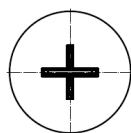
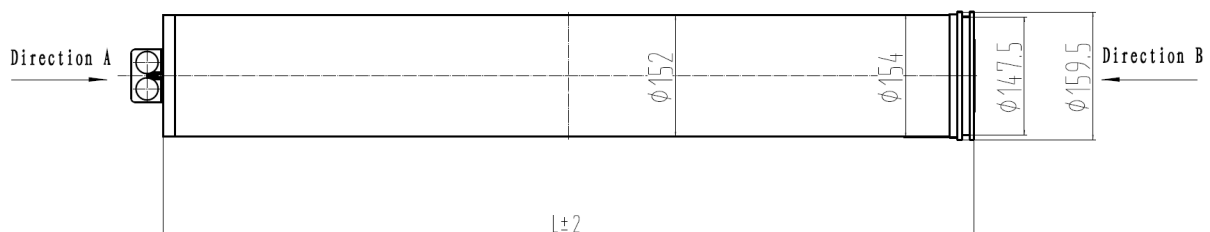


Cartridge to coupling

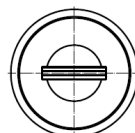
- High flow 6 layers "special pleated cartridges" single open-ended;
 - Filter media and support in PP, o-ring seal in EPDM;
 - End caps in fiberglass reinforced PP;
 - Inside to outside flow pattern;
 - External diameter = 6" (152 mm);
 - Recommended maximum ΔP 1,0 bar at 20°C.
 - T max = 80°C.
- Membrane area = 2,1m²



REF.	LENGTH	MICRON	NOMINAL FLOW RATE (lpm)	PRICE EURO
FAEF2001	20"	1	330	352,33
FAEF2005	20"	5	330	352,33
FAEF2010	20"	10	330	352,33
FAEF2020	20"	20	330	352,33
FAEF2050	20"	50	330	352,33
FAEF20C1	20"	100	330	352,33
FAEF20CL	20"	150	330	352,33
FAEF20C2	20"	200	330	352,33



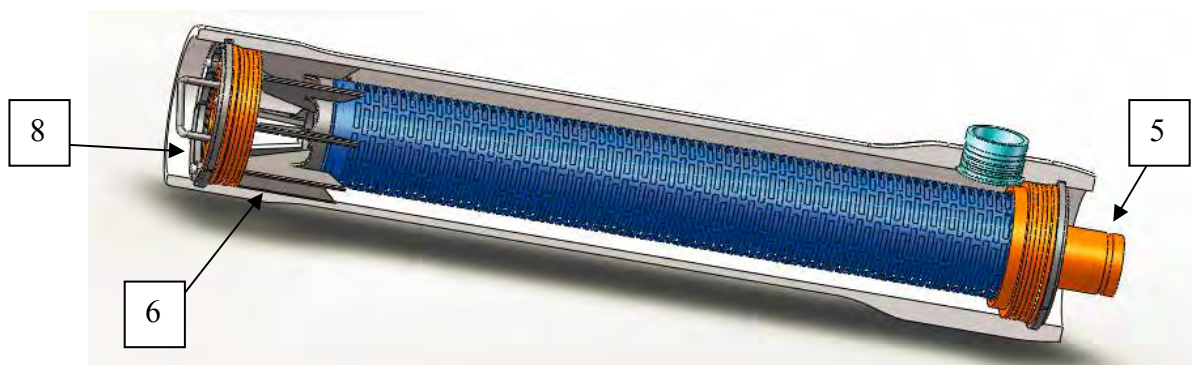
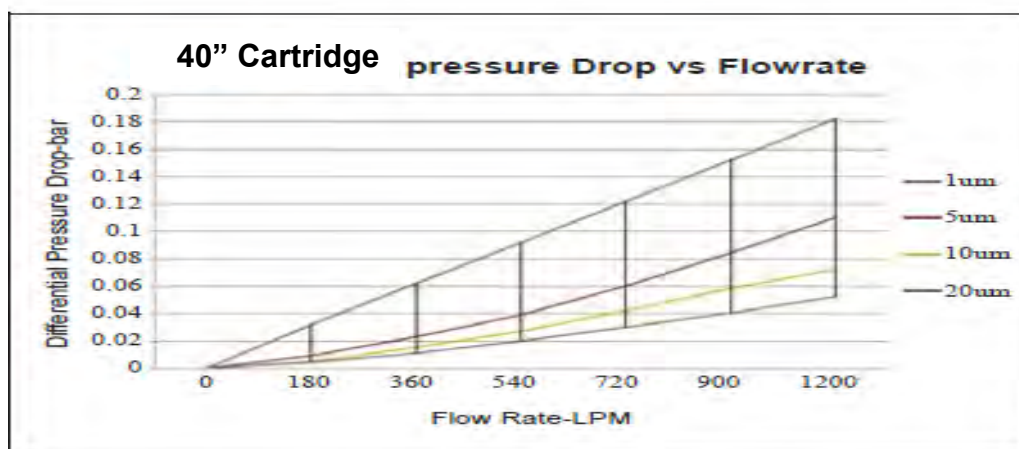
Direction A



Direction B

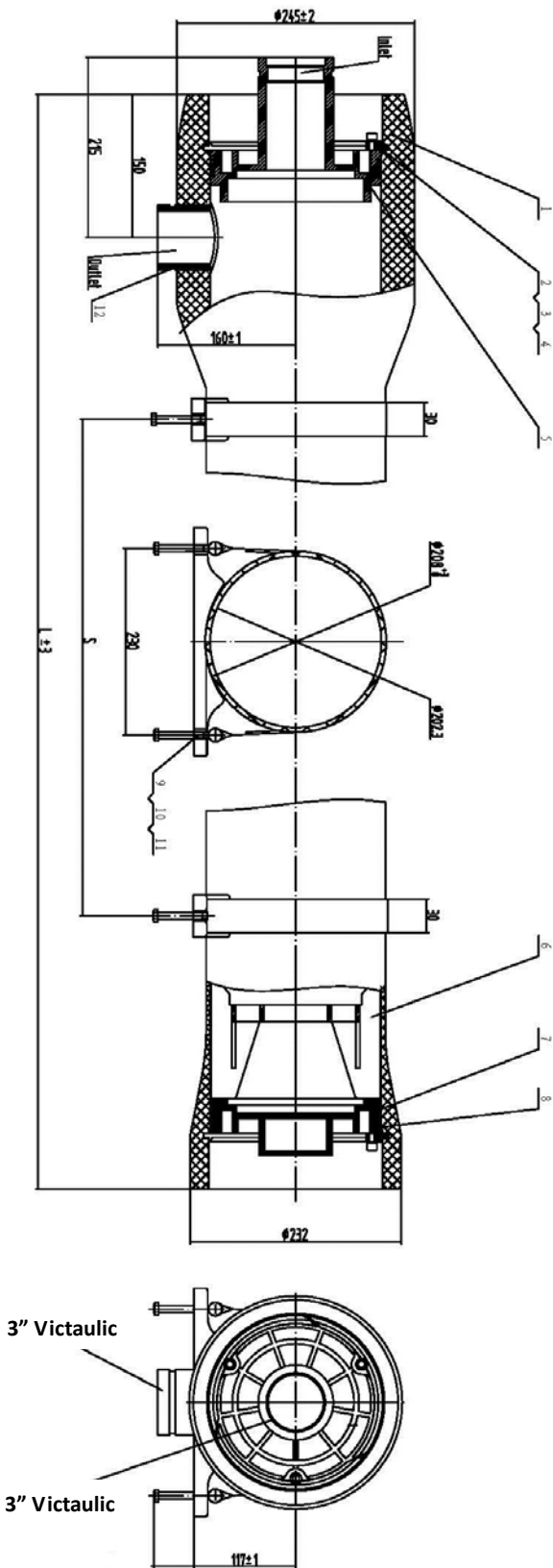
Ref.	L (MM)
20"	508
40"	1016

High Flow Single 20" Cartridge MWG EuroFlow Filter Housings EF Series



ITEM	REF.	DESCRIPTION	Q.TY	MATERIAL	NOTE	PRICE EURO
2+3+4	FBEFR27	LOCKING KIT SEGMENT	6	AISI 304	M8x16	14,14
5	FBEFR23	END CAP WITH CONNECTION	1	ABS		158,40
6	FBEFR15	THRUST CONE	1	ABS		56,00
7	FBEFR11	O-RING	3	EPDM	190x5,3	11,45
8	FBEFR21	HANDLED CLOSURE	1	ABS		158,40
9+10	FBEFR13	STRAP	2	AISI 304 - Rubber		20,60
11	H8R001	SADDLE	2	Rubber		7,28
NOT SHOWN	FBEFR17	GUIDING RING	1			14,14
NOT SHOWN	EA555	3" 300 PSI VICTAULIC COUPLING	2	NYLON		42,18
NOT SHOWN	EA605	DN80-DN90 COUPLING ADAPTOR	2	PVC-U		18,07

High Flow Single 20" Cartridge MWG EuroFlow Filter Housings EF Series



REF.	MODEL	L *	S *
FBEF20S3	EF20	792	350

* Dimensions are in mm.



High Flow Single 40" Cartridge MWG EuroFlow Filter Housings EF Series



- Single cartridge filter housings with fiberglass reinforced plastic pressure vessels;
- White painted, UVA-ray proof material;
- Suitable for industrial applications, for high chemical corrosion resistance;
- Compact and modular design;
- With n.1 aeration valve and n.1 drain connection;
- Ease of installation and maintenance;
- O-ring in EPDM;
- Max operating pressure 150 psi (10 bar);
- Max $\Delta p = 2$ bar;
- Operating temperature $5 \div 49$ °C;
- Operating pH range $3 \div 11$;
- With 3" DN80 Victaulic In/Out coupling connections and stub pipes in PVC-U PN = 4 bar;
- Straps and saddles included;
- 2014/68/EU Directive compliant for pressure equipment (PED);
- D.M. n.174/2004 compliant about materials suitable for contact with water for human consumption;
- Suitable for high flow "special pleated cartridges", with guiding ring;
- Cartridges dimensions 6" x 40".

REF.	MODEL	CARTRIDGES NUMBER	WEIGHT (kg)	CAPACITY (liters)	NOMINAL FLOW RATE (lpm)	PRICE EURO
FBEF40S3	EF40	n.1 6" x 40"	27	41	660	1.272,35



High Flow Single 40" Cartridge MWG EuroFlow Filter Housings EF Series

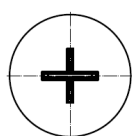
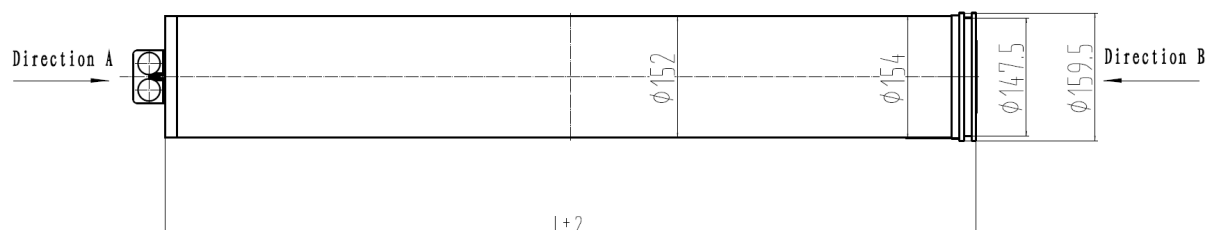


Cartridge to coupling

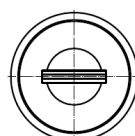
- High flow 6 layers "special pleated cartridges" single open-ended;
 - Filter media and support in PP, o-ring seal in EPDM;
 - End caps in fiberglass reinforced PP;
 - Inside to outside flow pattern;
 - External diameter = 6" (152 mm);
 - Recommended maximum ΔP 1,0 bar at 20°C.
 - T max = 80°C.
- Membrane area = 4,5m²



REF.	LENGTH	MICRON	NOMINAL FLOW RATE (lpm)	PRICE EURO
FAEF4001	40"	1	660	450,21
FAEF4005	40"	5	660	450,21
FAEF4010	40"	10	660	450,21
FAEF4020	40"	20	660	450,21
FAEF4050	40"	50	660	450,21
FAEF40C1	40"	100	660	450,21
FAEF40CL	40"	150	660	450,21
FAEF40C2	40"	200	660	450,21



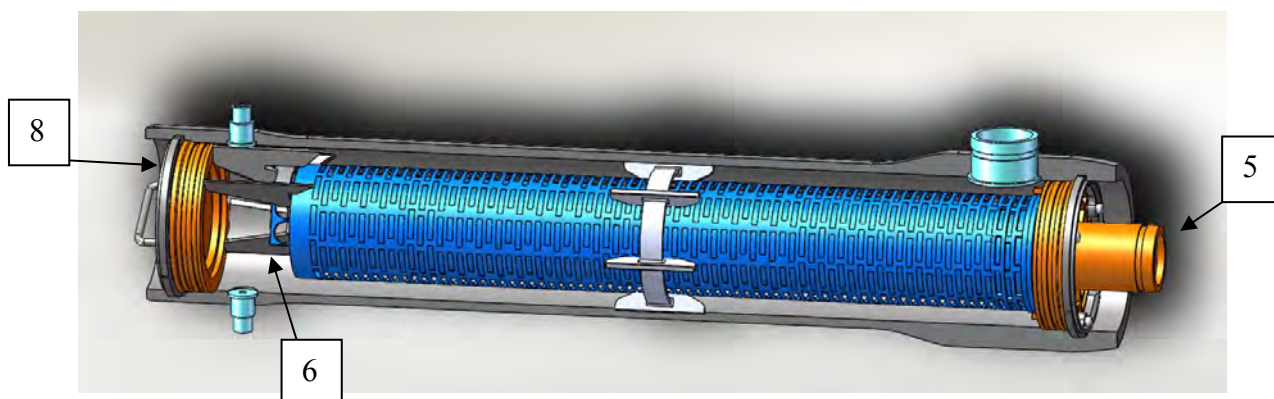
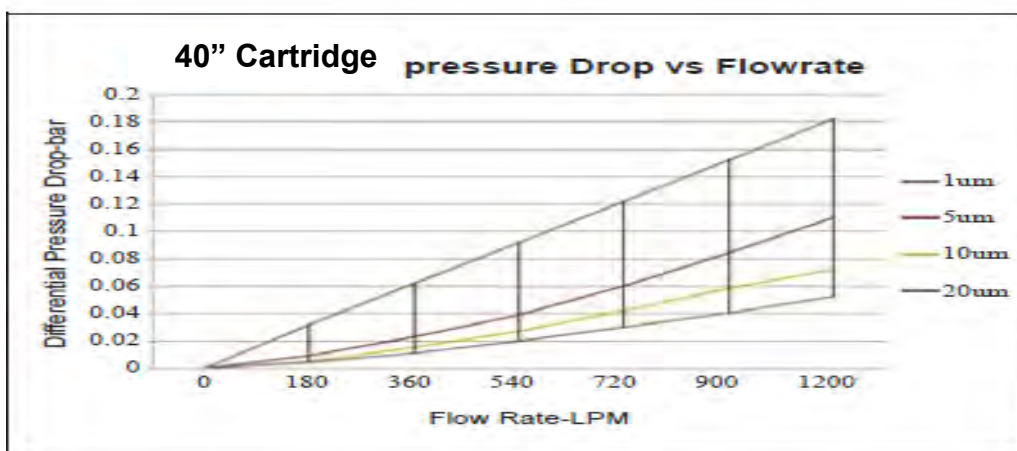
Direction A



Direction B

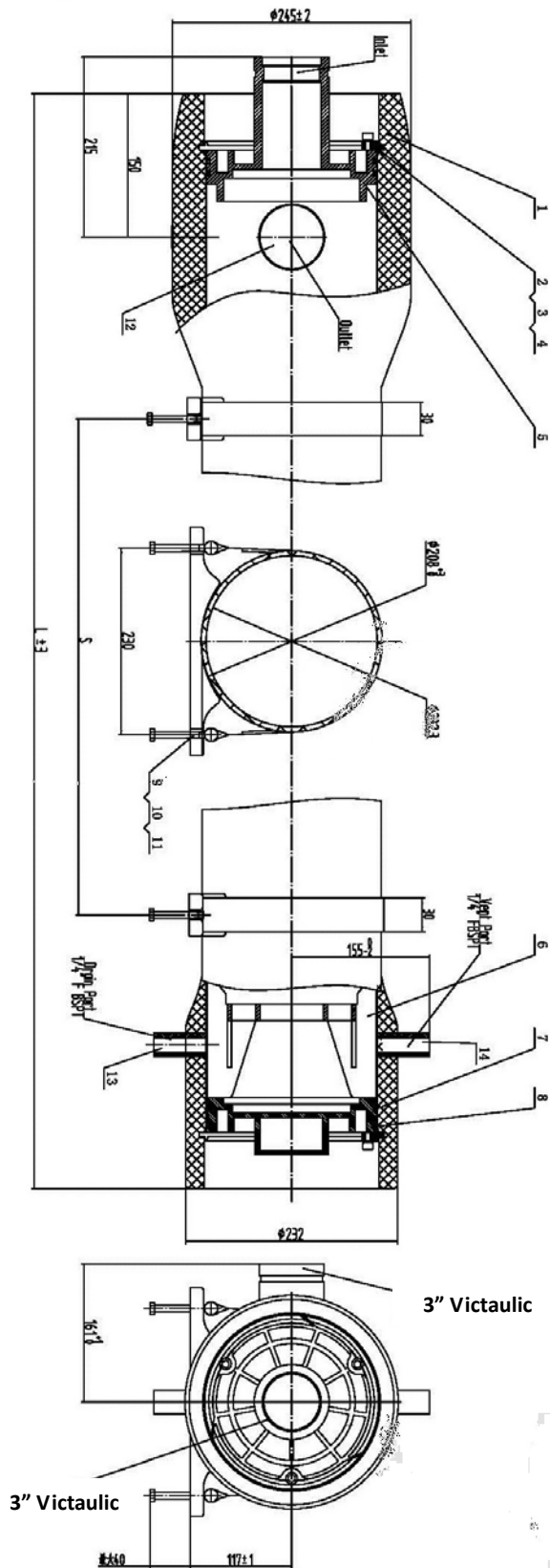
Ref.	L (MM)
20"	508
40"	1016

High Flow Single 40" Cartridge MWG EuroFlow Filter Housings EF Series



ITEM	REF.	DESCRIPTION	Q.TY	MATERIAL	NOTE	PRICE EURO
2+3+4	FBEFR27	LOCKING KIT SEGMENT	6	AISI 304	M8x16	14,14
5	FBEFR23	END CAP WITH CONNECTION	1	ABS		158,40
6	FBEFR15	THRUST CONE	1	ABS		56,56
7	FBEFR11	O-RING	3	EPDM	190x5,3	11,45
8	FBEFR21	HANDLED CLOSURE	1	ABS		158,40
9+10	FBEFR13	STRAP	2	AISI 304 - Rubber		20,60
11	H8R001	SADDLE	2	Rubber		7,28
NOT SHOWN	FBEFR17	GUIDING RING	1			14,14
NOT SHOWN	EA555	3" 300 PSI VICTAULIC COUPLING	2	NYLON		42,18
NOT SHOWN	EA605	DN80-DN90 COUPLING ADAPTOR	2	PVC-U		18,07

High Flow Single 40" Cartridge MWG EuroFlow Filter Housings EF Series



REF.	MODEL	L *	S *
FBEF40S3	EF40	1300	580

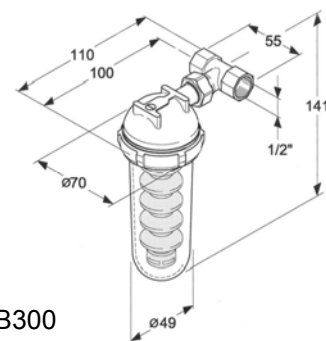
* Dimensions are in mm.



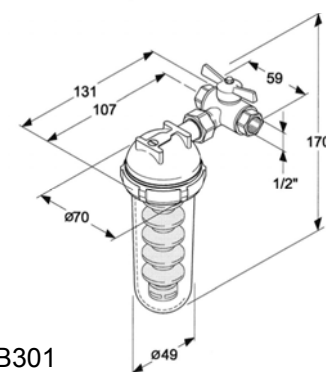
Poliphosphate Proportioning Feeders



- proportional dosage to water flow through Venturi system;
- neutralizes the precipitation of calcium and magnesium carbonate up to 70°C making a protective coat over metallic share in contact with water;
- average dosage 3 ppm of P₂O₅;
- chrome plated brass head, trogamid sump;
- each feeder includes a polyphosphate package.
- IN-OUT connections 1/2" F;
- max operating pressure 10 bar;
- max operating temperature 40°C;
- flow rate 1.500 l/h;
- N.2 PF/H polyphosphate refills 80 g for hard water.



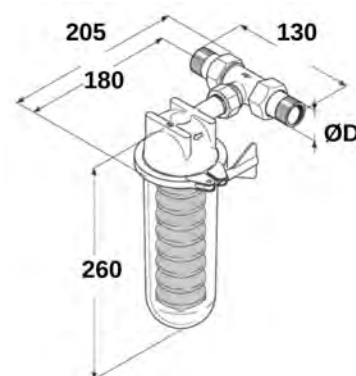
REF. FB300



REF. FB301

REF.	MODEL	BY-PASS OPTION	PRICE EURO
FB300	DP 12 OR	WITHOUT BY-PASS	76,51
FB301	DP 12 OR BP	WITH BY-PASS	90,97

- max operating pressure 10 bar;
- max operating temperature 40°C;
- N.2 PF/H polyphosphate refills 400 g for hard water.



REF.	MODEL	IN-OUT CONNECTIONS	FLOW (l/h)	PRICE EURO
FB302	DP 34 OR	3/4" M	2500	288,16
FB303	DP 1 OR	1" M	3500	288,16
FB304	DP 114 OR	1 1/4" M	4400	350,68

Available polyphosphate packages as spare.

NOTE: PF/H type for hard water (> 15°F)

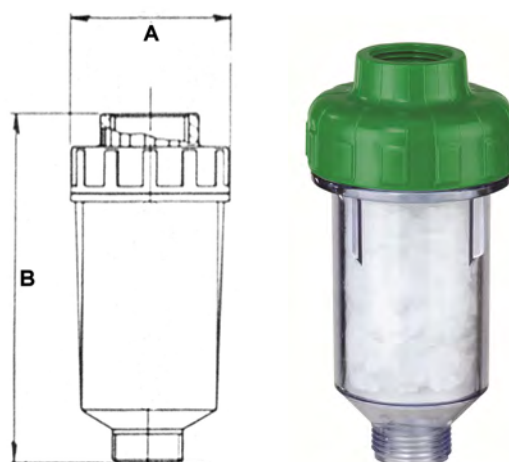
PF/S type for soft or softened (3 ÷ 15° F)

REF.	DESCRIPTION	PACKAGE (g)	PRICE EURO
FB340	Polyphosphate PF/H for hard water	160	4,24
FB341	Polyphosphate PF/H for hard water	400	8,99
FB342	Polyphosphate PF/H for hard water	1000	19,58
FB343	Polyphosphate PF/S for soft or softened	160	4,24
FB344	Polyphosphate PF/S for soft or softened	400	8,99
FB345	Polyphosphate PF/S for soft or softened	1000	19,58

Polyphosphate Crystals Feeder



- polyphosphate crystals feeder antiscaling;
- particular suitable for washing machines – dish washers – boilers;
- initial filling of polyphosphate included;
- max operating pressure 7 bar;
- max operating temperature 35°C.



REF.	CONNECTIONS (inch)	A (mm)	B (mm)	POLYPHOSPHATE FILLING (g)	PRICE EURO
FBDC07	3/4"	68	130	160	14,70

Polyphosphate Crystals

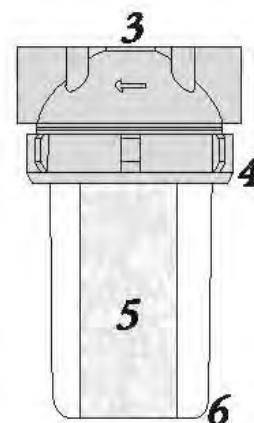
- based on a mixture of selected high polymerization metaphosphates, in transparent vitreous state white colour;
- typical composition: $P_2O_5 > 60\%$ and $Na_2O = 30\%$ av.;
- to be used as antiscaling and corrosion inhibitor with water for potable and industrial applications;
- slow dissolution crystals, proportional to crystal size, temperature, pH and water hardness.

REF.	DIMENSIONS (mm)	PACKAGE (kg)	PRICE EURO
FB350	5 ÷ 15	25	241,18
FB351	10 ÷ 20	25	241,18

Polyphosphate Feeders with Cartridges



- Particular suitable for washing machines – dish washers – boilers;
- Chrome plated brass head (item 3 and 4);
- IN/OUT connections 1/2";
- Grilamid sump (item 6);
- Supplied with the first charge of polyphosphate (170 g);
- Operating flow rate 1200 l/h;
- Max operating temperature= 20°C;
- Max operating pressure = 16 bar;
- Test pressure = 50 bar;
- Empty weight 1.2 kg;
- Conform with the Italian DM25/2012 and DM174/2004;
- The presence of silicate ensures greater protection of metal parts against corrosion;
- The spherical shape of the polyphosphate in our FB701 allows a greater regularity of the product consumption and consequently a more regular dosage.



REF.	MODEL	PRICE EURO
FB700 (*)	DP 12 WITH CARTRIDGE	94,39
FB701 (*)	DP 12 SPHERICAL WITH CARTRIDGE	114,07

(*) not available in stock.

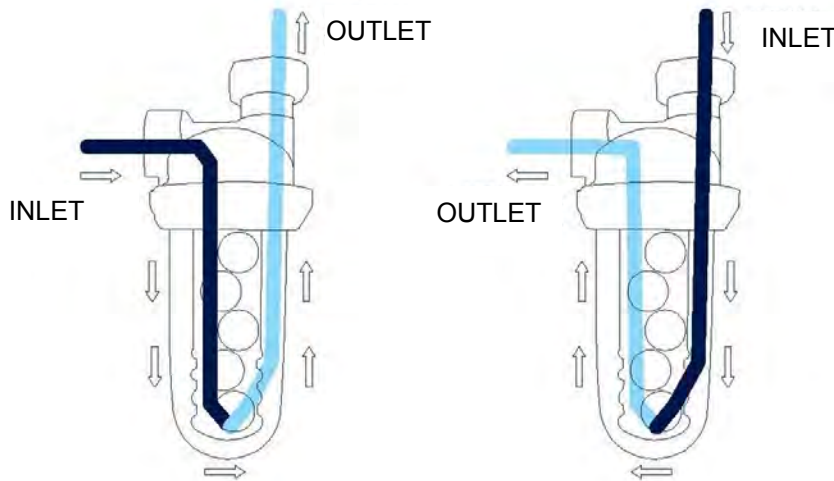
Spare Parts and Accessories

ITEM	REF.	DESCRIPTION	PRICE EURO
5	FB730 (*)	CARTRIDGE FOR FB700	14,15
5	FB731 (*)	CARTRIDGE FOR FB701	21,63
NOT SHOWN	FB317A (*)	WRENCH FOR FB700 AND FOR FB701	7,94

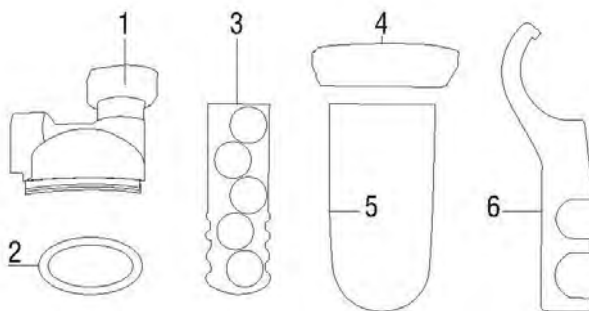
Polyphosphate Feeders with Cartridges



- Particular suitable for washing machines – dish washers – boilers;
- Chrome plated brass head (item 1 and 4), Grilamid sump (item 5);
- 1/2" inlet and 1/2" outlet can be either vertical or horizontal connection: a kit provides a reduction from 3/4" to 1/2";
- Supplied with the first charge of polyphosphate (item 3);
- Operating flow rate 1200 l/h;
- Max operating temperature = 40°C;
- Max operating pressure = 10 bar, Test pressure = 30 bar;
- Empty weight 700 g;
- Conform with the Italian DM25/2012 and DM174/2004;
- Available on demand a wrench (our ref. FB317) to facilitate the disassembly of the housing.



REF.	MODEL	PRICE EURO
FB702 (*)	DP 12 34 WITH CARTRIDGE	82,59



(*) not available in stock.

Spare Parts and Accessories

ITEM	REF.	DESCRIPTION	PRICE EURO
3	FB732 (*)	N.2 CARTRIDGES FOR FB702	28,31
6	FB317 (*)	WRENCH DP 12	7,94



Ion exchange
resins and filtering
media





- Gel Strong Acid Cation Exchange Resin;
- Light coloured;
- Gel type Strongly Acidic unfunctional cross linked polystyrene structure containing Sulphonic Acid groups. It is a high capacity gel type resin with excellent physical and chemical properties;
- It is specially designed for the treatment of potable water. The resin is extremely robust and has excellent physical and chemical characteristics;
- Due to its high exchange capacity, it is recommended where hardness of Calcium and Magnesium salts are high. The resin is primarily used in industrial water softening application in Na⁺ form;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- Shipped in 25 liter bags.



Typical Physical & Chemical Characteristics	
Polymer Matrix Structure	Polystyrene
Functional Group	R-(SO ₃)M ⁺
Ionic Form, as shipped	Sodium (Na ⁺)
Physical Form and Appearance	Spherical Beads
Particle Size Range	+1,2 mm < 5%, - 0,3 mm < 1%
Uniformity Coefficient	1,7 max.
Water Retention, Na ⁺ form	47 ÷ 53%
Swelling Na ⁺ → H ⁺	10% max.
Shipping Weight, Na ⁺ form	820 g/l (50 lbs/cu.ft, approx.)
Total Exchange Capacity, Na ⁺ form	1,9 eq/l min.
pH Range	0 ÷ 14

REF.	PRICE EURO / LITER
RA600	2,90



Suggested Operating Conditions	
Maximum Temperature	140°C (284°F) max.
Minimum Bed Depth	0,75 m (30 inches)
Backwash Rate	40% bed expansion
Regeneration Regenerant Concentration Flow Rate Contact Time	10% NaCl or saturated salt water 2 ÷ 8 BV/h (0,25 ÷ 1,00 gpm/cu.ft) At least 30 Minutes
Displacement Rinse Rate	Same as Regenerant Flow Rate
Displacement Rinse Volume	2 BV (15 gallons/cu.ft)
Fast Rinse Rate	Same as Service Flow Rate
Fast Rinse Volume	5 BV (37,5 gallons/cu.ft)
Service Flow Rate	15 ÷ 30 BV/h (1,85 ÷ 3,70 gpm/cu.ft)

Pure Resin PC002



- Gel Strong Acid Cation Exchange Resin;
- Light coloured;
- Gel type sulfonated polystyrene cation resin supplied in the sodium form as moist, tough uniform spherical beads.
- Well suited for industrial, commercial or residential softening applications;
- High capacity and good physical stability;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- NSF/ANSI 44&61 certified;
- Shipped in 25 liter bags.



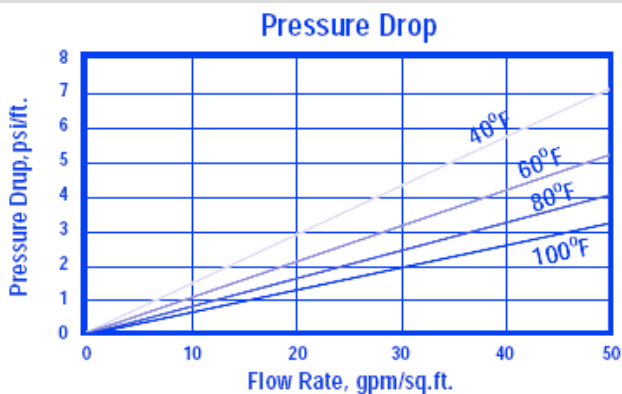
Typical Physical & Chemical Characteristics	
Polymer Matrix Structure	Polystyrene crosslinked with 7% DVB
Functional Group	R-(SO ₃)M ⁺
Ionic Form, as shipped	Sodium (Na ⁺)
Physical Form and Appearance	Clear Spherical Beads
Sphericity	95% min.
Screen Size Range --- U.S. Standard Screen	16 ÷ 50 mesh, wet
Particle Size Range	+1,2 mm < 5%, - 0,3 mm < 1%
Uniformity Coefficient	1,6 max.
Water Retention, Na ⁺ form	45 ÷ 50%
Swelling Na ⁺ → H ⁺ Ca ²⁺ → Na ⁺	10% max. 5% max.
Shipping Weight, Na ⁺ form	770 ÷ 870 g/l (50 lbs/cu.ft, approx.)
Total Exchange Capacity, Na ⁺ form	1,9 eq/l min.
pH Range	0 ÷ 14

REF.	PRICE EURO / LITER
RA300	3,09

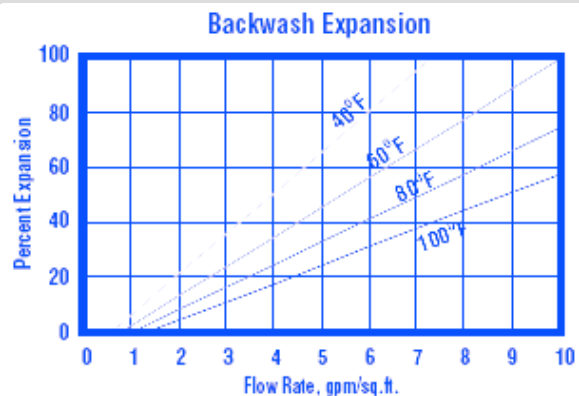


Suggested Operating Conditions	
Maximum Temperature Na ⁺ form H ⁺ form	120°C (248°F) max. 100°C (212°F) max.
Minimum Bed Depth	0,6 m (24 inches)
Backwash Rate	25 ÷ 50% bed expansion
Regeneration Regenerant Concentration Flow Rate Contact Time	8 ÷ 20% NaCl or saturated salt water 2 ÷ 4 BV/h (0,25 ÷ 0,50 gpm/cu.ft) At least 30 Minutes
Displacement Rinse Rate	Same as Regenerant Flow Rate
Displacement Rinse Volume	1 ÷ 2 BV (7,5 ÷ 15 gallons/cu.ft)
Fast Rinse Rate	Same as Service Flow Rate
Fast Rinse Volume	3 ÷ 4 BV (22,5 ÷ 30 gallons/cu.ft)
Service Flow Rate	10 ÷ 50 BV/h (1,25 ÷ 6,25 gpm/cu.ft)

Hydraulic Properties



Pressure Drop: The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.



Backwash: After each cycle the resin bed should be backwashed at a rate that expands the bed 25 to 50 percent. That will remove any foreign matter and reclassify the bed. The graph above shows the expansion characteristics of Pure PC002 in the sodium form.

Pure Resin PC003



- Gel Strong Acid Cation Exchange Resin;
- High capacity premium grade bead form, conventional gel polystyrene sulphonate cation exchange resin supplied in the sodium or hydrogen form;
- Intended for use in all water softening, dealcalisation, deionization and chemical processing applications, such as the following:
- In H form (PC003H), can be used in multiple and mixed bed demineralizers with strong base;
- Anion exchangers such as Pure PA101, PA102 and PA103 in OH-form.
- Well suited for industrial, commercial or residential softening applications because of its high capacity and good physical stability;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- NSF/ANSI 44&61 certified;
- Shipped in 25 liter bags.



Typical Physical & Chemical Characteristics	
Polymer Matrix Structure	Polystyrene crosslinked with 8% DVB
Functional Group	R-(SO ₃)M ⁺
Ionic Form, as shipped	Na ⁺ / H ⁺
Physical Form and Appearance	Clear Spherical Beads
Sphericity	95% min.
Screen Size Range US Standard Screen	16 ÷ 50 mesh, wet
Particle Size Range	+1,2 mm < 5%, - 0,3 mm < 1%
Uniformity Coefficient	1,6 max.
Water Retention, Na ⁺ form H ⁺ form	43 ÷ 48% 50 ÷ 56%
Swelling Na ⁺ → H ⁺ Ca ²⁺ → Na ⁺	10% max. 5% max.
Shipping Weight, Na ⁺ form H ⁺ form	780 ÷ 880 g/l (51 lbs/cu.ft, approx.) 770 ÷ 870 g/l (50 lbs/cu.ft, approx.)
Total Exchange Capacity, Na ⁺ form H ⁺ form	2,0 eq/l min. 1,9 eq/l min.
pH Range	0 ÷ 14

REF.	PRICE EURO / LITER
RA310	3,27



Suggested Operating Conditions	
Maximum Temperature Na ⁺ form H ⁺ form	150°C (300°F) max. 100°C (212°F) max.
Minimum Bed Depth	0,6 m (24 inches)
Backwash Rate	25 ÷ 50% Bed Expansion
Regeneration Sodium Cycle Hydrogen Cycle Flow Rate	8 ÷ 20% NaCl 5 ÷ 10% HCl, 2-8% H ₂ SO ₄ 2 ÷ 7 BV/h (0,25 ÷ 0,90 gpm/cu.ft)
Displacement Rinse Rate	Same as Regenerant Flow Rate
Displacement Rinse Volume	1,4 ÷ 2,0 BV (10 ÷ 15 gallons/cu.ft)
Fast Rinse Rate	Same as Service Flow Rate
Fast Rinse Volume	4 ÷ 8 BV (30 ÷ 60 gallons/cu.ft)
Service Flow Rate	10 ÷ 50 BV/h (1,25 ÷ 6,25 gpm/cu.ft)
Hydraulic Properties	
<p>Pressure Drop</p> <p>Pressure Drop: The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various Temperatures.</p>	<p>Backwash Expansion</p> <p>Backwash: After each cycle the resin bed should be backwashed at a rate that expands the bed 25 to 50 percent. That will remove any foreign matter and reclassify the bed. The graph above shows the expansion characteristics of Pure PC003 in the sodium form.</p>

Pure Resin PC003 UN-NA



- Gel Strong Acid Cation Exchange Resin with high uniformity coefficient;
- High capacity premium grade bead form, conventional gel polystyrene sulphonate cation exchange resin supplied in the sodium or hydrogen form;
- Intended for use in all water softening, dealcalisation, deionization and chemical processing applications, such as the following:
- In H form (PC003HUN), can be used in multiple and mixed bed demineralizers with strong base;
- Anion exchangers such as Pure PA101, PA102 and PA103 in OH-form.
- Well suited for industrial, commercial or residential softening applications because of its high capacity and good physical stability;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- NSF/ANSI 44&61 certified;
- Shipped in 25 liter bags.



Typical Physical & Chemical Characteristics	
Polymer Matrix Structure	Polystyrene crosslinked with 8% DVB
Functional Group	R-(SO ₃) ⁻ M ⁺
Ionic Form, as shipped	Na ⁺
Physical Form and Appearance	Clear Spherical Beads
Sphericity	95% min.
Screen Size Range US Standard Screen	25 ÷ 35 mesh, wet
Particle Size Range	0,5 ÷ 0,84 mm ≥ 95%
Uniformity Coefficient	1,20 max.
Water Retention, Na ⁺ form	43 ÷ 48%
H ⁺ form	47 ÷ 54%
Swelling Na ⁺ → H ⁺	10% max.
Ca ²⁺ → Na ⁺	5% max.
Shipping Weight, Na ⁺ form	780 ÷ 880 g/l (51 lbs/cu.ft, approx.)
H ⁺ form	770 ÷ 870 g/l (50 lbs/cu.ft, approx.)
Total Exchange Capacity, Na ⁺ form	2,0 eq/l min.
H ⁺ form	1,9 eq/l min.
pH Range	0 ÷ 14

REF.	PRICE EURO / LITER
RA312	3,94



Suggested Operating Conditions	
Maximum Temperature Na ⁺ form H ⁺ form	150°C (300°F) max. 100°C (212°F) max.
Minimum Bed Depth	0,6 m (24 inches)
Backwash Rate	25 ÷ 50% Bed Expansion
Regeneration Sodium Cycle Hydrogen Cycle Flow Rate	8 ÷ 20% NaCl 5 ÷ 10% HCl, 2-8% H ₂ SO ₄ 2 ÷ 7 BV/h (0,25 ÷ 0,90 gpm/cu.ft)
Displacement Rinse Rate	Same as Regenerant Flow Rate
Displacement Rinse Volume	1,4 ÷ 2,0 BV (10 ÷ 15 gallons/cu.ft)
Fast Rinse Rate	Same as Service Flow Rate
Fast Rinse Volume	4 ÷ 8 BV (30 ÷ 60 gallons/cu.ft)
Service Flow Rate	10 ÷ 50 BV/h (1,25 ÷ 6,25 gpm/cu.ft)
Hydraulic Properties	
<p>The graph shows Pressure Drop (m) on the y-axis (0.0 to 18.4) versus Flow Rate (m/h) on the x-axis (0 to 122). Five lines represent different temperatures: 22°C, 33°C, 44°C, and 55°C. Pressure drop increases linearly with flow rate and temperature.</p>	<p>The graph shows Percent Expansion on the y-axis (0 to 100) versus Flow Rate (m/h) on the x-axis (0 to 24.4). Four lines represent different temperatures: 22°C, 39°C, 50°C, and 61°C. Expansion increases linearly with flow rate and temperature.</p>
<p>(*) = m of water / m of bed</p>	<p>Backwash: After each cycle the resin bed should be backwashed at a rate that expands the bed 25 to 50 percent. That will remove any foreign matter and reclassify the bed. The graph above shows the expansion characteristics of Pure PC003UN in the sodium form.</p>

Pure Resin PC003 IND-2



- Gel Strong Acid Cation Exchange Resin, with indicator high purity premium grade bead form, high capacity;
- Conventional gel polystyrene sulphonate cation exchange resin supplied in the hydrogen form;
- It can be well used in multiple and mixed bed demineralizers to inform customer when the resin is exhausted or not;
- Shipped in 25 liter bags.



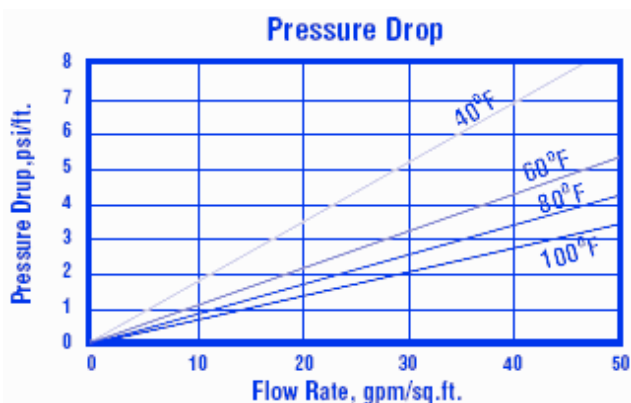
Typical Physical & Chemical Characteristics	
Polymer Matrix Structure	Polystyrene crosslinked with DVB
Functional Group	R-(SO ₃) ⁻ M ⁺ (color : Violet → Yellow)
Ionic Form, as shipped	Na ⁺ / H ⁺
Physical Form and Appearance	Clear Spherical Beads
Sphericity	95% min.
Screen Size Range US Standard Screen	16 ÷ 50 mesh, wet
Particle Size Range	+1,2 mm < 5%, - 0,3 mm < 1%
Uniformity Coefficient	1,6 max.
Water Retention, Na ⁺ form H ⁺ form	43 ÷ 48% 47 ÷ 54%
Swelling Na ⁺ → H ⁺ Ca ²⁺ → Na ⁺	10% max. 5% max.
Shipping Weight, Na ⁺ form H ⁺ form	780 ÷ 880 g/l (51 lbs/cu.ft, approx.) 770 ÷ 870 g/l (50 lbs/cu.ft, approx.)
Total Exchange Capacity, Na ⁺ form H ⁺ form	2,0 eq/l min. 1,9 eq/l min.
pH Range	0 ÷ 14

REF.	PRICE EURO / LITER
RA316	14,05

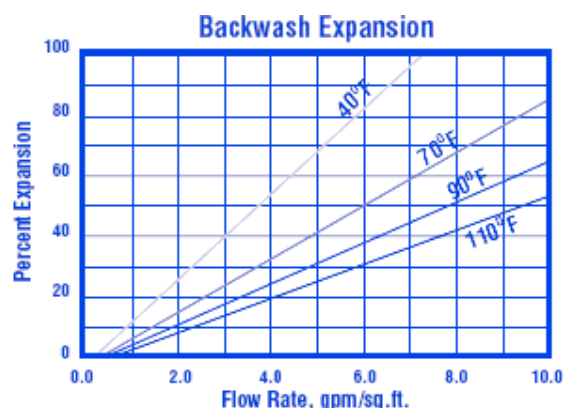


Suggested Operating Conditions	
Maximum Temperature Na ⁺ form H ⁺ form	120°C (248°F) max. 100°C (212°F) max.
Minimum Bed Depth	0,6 m (24 inches)
Backwash Rate	25 ÷ 50% Bed Expansion
Regeneration Sodium Cycle Hydrogen Cycle Flow Rate	10 ÷ 15% NaCl 10% HCl, 1-8% H ₂ SO ₄ 2 ÷ 7 BV/h (0,25 ÷ 0,90 gpm/cu.ft)
Displacement Rinse Rate	Same as Regenerant Flow Rate
Displacement Rinse Volume	1,4 ÷ 2,0 BV (10 ÷ 15 gallons/cu.ft)
Fast Rinse Rate	8 ÷ 40 BV/h (1 ÷ 5 gpm/cu.ft)
Fast Rinse Volume	3 ÷ 10 BV (22,5 ÷ 75 gallons/cu.ft)
Service Flow Rate	4 ÷ 8 BV/h (0,5 ÷ 1 gpm/cu.ft)

Hydraulic Properties



Pressure Drop: The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various Temperatures.



Backwash: After each cycle the resin bed should be backwashed at a rate that expands the bed 25 to 50 percent. That will remove any foreign matter and reclassify the bed. The graph above shows the expansion characteristics of Pure PC003 IND-2.

Pure Resin PC100NA



- Macroporous Strong Acid Cation Exchange Resin;
- Macroporous poly (styrene sulphonate) cation exchange resin with excellent resistance to both osmotic and thermal shock;
- Supplied as spherical beads;
- Used for water softening with high level of DVB;
- Also widely used in mixed bed demineralizers where high hydraulic demands exist and high resistance to mechanical thermal and oxidative stresses are required, such as condensate polishing, chemical processing, hydrometallurgy, sugar treatment;
- D.M. n.174/2004 compliant about materials suitable for contact with water for human consumption;
- Shipped in 25 liter bags.



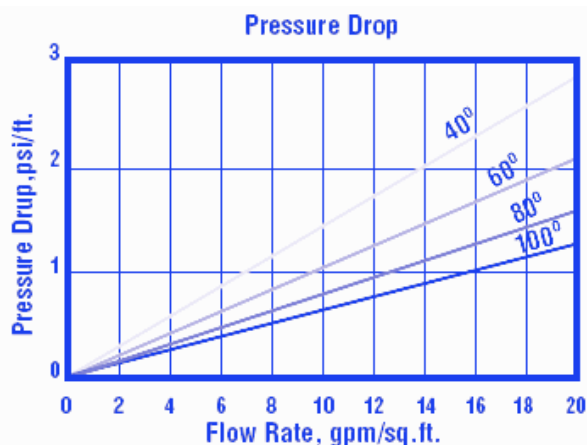
Typical Physical & Chemical Characteristics	
Polymer Matrix Structure	Polystyrene crosslinked with 8% DVB
Functional Group	R-(SO ₃) ⁻ M ⁺
Ionic Form, as shipped	Na ⁺
Physical Form and Appearance	Clear Spherical Beads
Sphericity	95% min.
Screen Size Range US Standard Screen	16 ÷ 50 mesh, wet
Particle Size Range	+1,2 mm < 5%, - 0,3 mm < 1%
Uniformity Coefficient	1,6 max.
Water Retention	45 ÷ 55%
Swelling Na ⁺ → H ⁺	10% max.
Shipping Weight	760 ÷ 830 g/l (50 lbs/cu.ft, approx.)
Total Exchange Capacity	1,8 eq/l min.
pH Range	0 ÷ 14

REF.	PRICE EURO / LITER
RA318	5,38

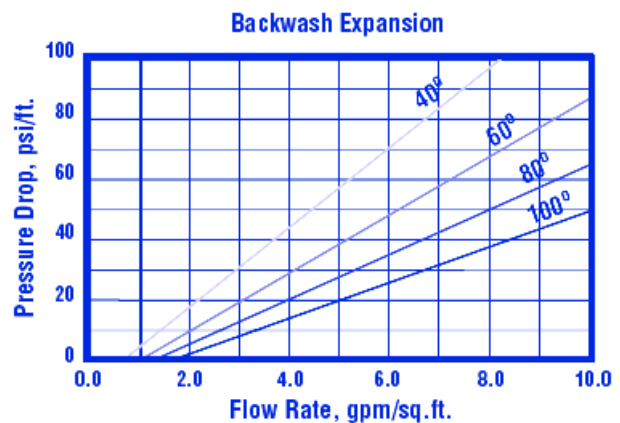


Suggested Operating Conditions	
Maximum Temperature	150°C (300°F) max.
Minimum Bed Depth	0,6 m (24 inches)
Backwash Rate	25 ÷ 50% Bed Expansion
Regeneration Flow Rate Contact Time	8 ÷ 20% NaCl 2 ÷ 7 BV/h (0,25 ÷ 0,90 gpm/cu.ft) At least 20 Minutes
Displacement Rinse Rate	Same as Regenerant Flow Rate
Displacement Rinse Volume	1,4 ÷ 2,0 BV (10 ÷ 15 gallons/cu.ft)
Fast Rinse Rate	Same as Service Flow Rate
Fast Rinse Volume	4 ÷ 8 BV (30 ÷ 60 gallons/cu.ft)
Service Flow Rate	10 ÷ 50 BV/h (1,25 ÷ 6,25 gpm/cu.ft)

Hydraulic Properties



Pressure Drop: The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.



Backwash: After each cycle the resin bed should be backwashed at a rate that expands the bed 25 to 50 percent. That will remove any foreign matter and reclassify the bed. The graph above shows the expansion characteristics of Pure PC100.

Pure Resin PC100H



- Macroporous Strong Acid Cation Exchange Resin;
- Macroporous poly (styrene sulphonate) cation exchange resin with excellent resistance to both osmotic and thermal shock;
- Supplied as spherical beads;
- Used for water softening with high level of DVB;
- Also widely used in mixed bed demineralizers where high hydraulic demands exist and high resistance to mechanical thermal and oxidative stresses are required, such as condensate polishing, chemical processing, hydrometallurgy, sugar treatment;
- Shipped in 25 liter bags.



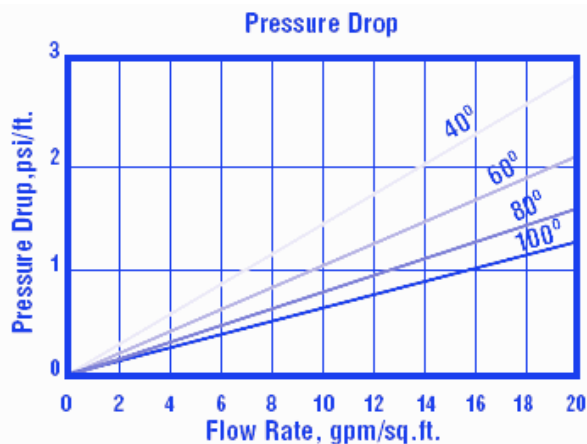
Typical Physical & Chemical Characteristics	
Polymer Matrix Structure	Polystyrene crosslinked with 8% DVB
Functional Group	R-(SO ₃) ⁻ M ⁺
Ionic Form, as shipped	H ⁺
Physical Form and Appearance	Clear Spherical Beads
Sphericity	95% min.
Screen Size Range US Standard Screen	16 ÷ 50 mesh, wet
Particle Size Range	+1,2 mm < 5%, - 0,3 mm < 1%
Uniformity Coefficient	1,6 max.
Water Retention	50 ÷ 60%
Swelling Na ⁺ → H ⁺	10% max.
Shipping Weight, Na ⁺ form	760 ÷ 830 g/l (50 lbs/cu.ft, approx.)
Total Exchange Capacity	1,7 eq/l min.
pH Range	0 ÷ 14

REF.	PRICE EURO / LITER
RA320	5,21

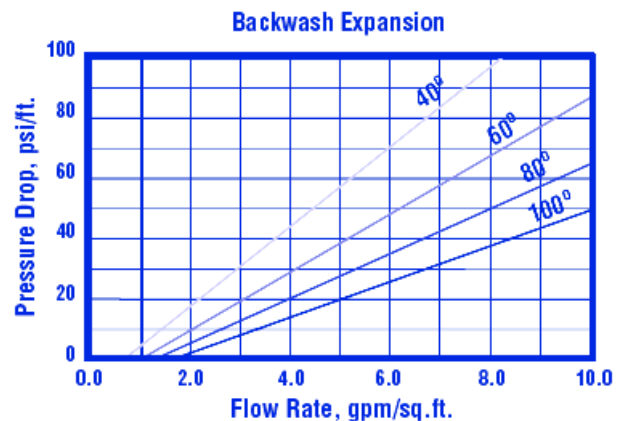


Suggested Operating Conditions	
Maximum Temperature	120°C (248°F) max.
Minimum Bed Depth	0,6 m (24 inches)
Backwash Rate	25 ÷ 50% Bed Expansion
Regeneration Flow Rate Contact Time	5 ÷ 10% HCl, 2 ÷ 8% H ₂ SO ₄ 2 ÷ 7 BV/h (0,25 ÷ 0,90 gpm/cu.ft) At least 20 Minutes
Displacement Rinse Rate	Same as Regenerant Flow Rate
Displacement Rinse Volume	1,4 ÷ 2,0 BV (10 ÷ 15 gallons/cu.ft)
Fast Rinse Rate	Same as Service Flow Rate
Fast Rinse Volume	4 ÷ 8 BV (30 ÷ 60 gallons/cu.ft)
Service Flow Rate	10 ÷ 50 BV/h (1,25 ÷ 6,25 gpm/cu.ft)

Hydraulic Properties



Pressure Drop: The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.



Backwash: After each cycle the resin bed should be backwashed at a rate that expands the bed 25 to 50 percent. That will remove any foreign matter and reclassify the bed. The graph above shows the expansion characteristics of Pure PC100.

Pure Resin PC200FD



- Macroporous Weak Acid Cation Exchange Resin;
- Macroporous poly-acrylic weak acid cation resin;
- It can be supplied in the hydrogen (H⁺) form or sodium (Na⁺) as spherical beads;
- In H cycle is used for dealcalisation, deionization and chemical processing applications;
- Supplied in sodium cycle for use in applications such as softening and heavy metal cations removal. This requires a two stage regeneration process using a strong acid first and then a neutralization rinse to put the resin into the sodium form and is especially effective in high solids softening applications;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- Shipped in 25 liter bags.



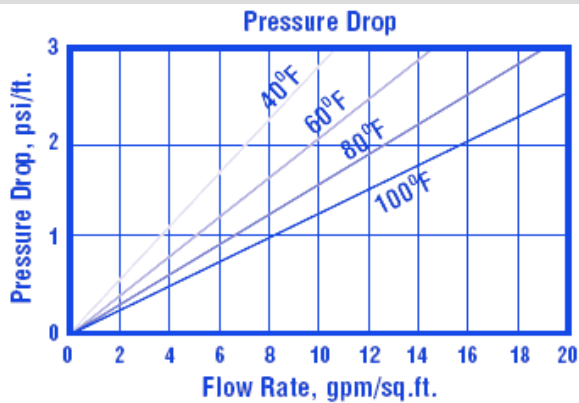
Typical Physical & Chemical Characteristics	
Polymer Matrix Structure	Acrylic-Divinylbenzene
Functional Group	R-(COOH) ⁻
Ionic Form, as shipped	H ⁺
Physical Form and Appearance	Clear Spherical Beads
Sphericity	95% min.
Screen Size Range US Standard Screen	16 ÷ 50 mesh, wet
Particle Size Range	+1,2 mm < 5%, - 0,3 mm < 1%
Uniformity Coefficient	1,6 max.
Water Retention, H ⁺ form	45 ÷ 50%
Swelling Na ⁺ → H ⁺	65% max.
Shipping Weight, H ⁺ form	720 ÷ 800 g/l (46 lbs/cu.ft, approx.)
Total Exchange Capacity, H ⁺ form	4 eq/l min.
pH Range	4 ÷ 14

REF.	PRICE EURO / LITER
RA330	9,25

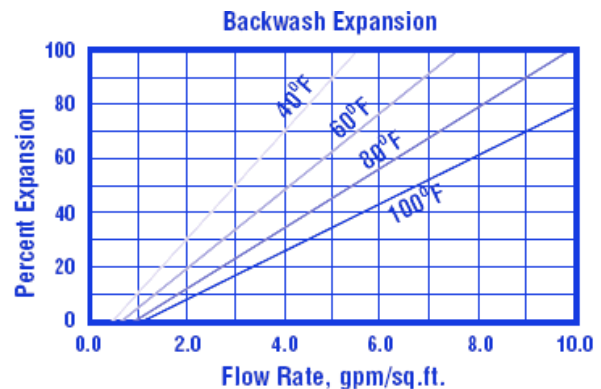


Suggested Operating Conditions	
Maximum Temperature, H ⁺ form	120°C (248°F) max.
Minimum Bed Depth	0,8 m (30 inches)
Backwash Rate	50 ÷ 75% Bed Expansion
Regeneration, Hydrogen Cycle Flow Rate Contact Time	5 ÷ 10% HCl, 0,5 ÷ 1% H ₂ SO ₄ 2 ÷ 7 BV/h 8 ÷ 20 BV/h At least 30 Minutes
Displacement Rinse Rate	Same as Regenerant Flow Rate
Displacement Rinse Volume	1,4 ÷ 2 BV (10 ÷ 15 gallons/cu.ft)
Fast Rinse Rate	Same as Service Flow Rate
Fast Rinse Volume	4,5 ÷ 8 BV (35 ÷ 60 gallons/cu.ft)
Service Flow Rate	16 ÷ 40 BV/h (2 ÷ 5 gpm/cu.ft)

Hydraulic Properties



Pressure Drop: The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.



Backwash: After each cycle the resin bed should be backwashed at a rate that expands the bed 25 to 50 percent. That will remove any foreign matter and reclassify the bed. The graph above shows the expansion characteristics of Pure PC200FD.

Pure Resin PA103OH



- REF. RA340;
- Gel Strong Base Anion Exchange Resin;
- It is a Type II, gel strong-base anion exchange resin, with high capacity and excellent regeneration efficiency;
- Supplied as spherical beads in the hydroxyl form;
- It removes all ions including silica and CO₂, anyway, it operates best on waters having a high percentage of strong acids (FMA);
- Intended for use in all type of dealcalisation, demineralization, deionization and chemical processing applications;
- Shipped in 25 liter bags.



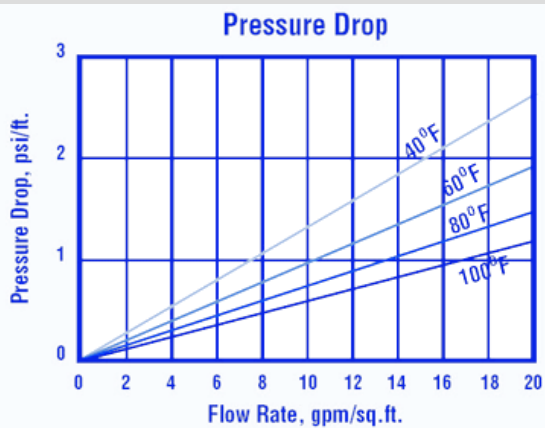
Typical Physical & Chemical Characteristics	
Polymer Matrix Structure	Polystyrene crosslinked with divinylbenzene
Functional Group	R-N(CH ₃) ₂ (C ₂ O ₄ H) ⁺
Ionic Form, as shipped	Hydroxyl (OH ⁻)
Physical Form and Appearance	Clear Spherical Beads
Sphericity	95% min.
Screen Size Range US Standard Screen	16 ÷ 50 mesh, wet
Particle Size Range	+1,2 mm < 5%, - 0,3 mm < 1%
Uniformity Coefficient	1,6 max.
Water Retention, Cl ⁻ form	45 ÷ 51%
Swelling Cl ⁻ → OH ⁻	15% max.
Weight, Cl ⁻ form	680 ÷ 760 g/l (44 lbs/cu.ft, approx.)
Total Exchange Capacity, Cl ⁻ form	1,3 eq/l min.
pH Range	0 ÷ 14

REF.	PRICE EURO / LITER
RA340	9,12

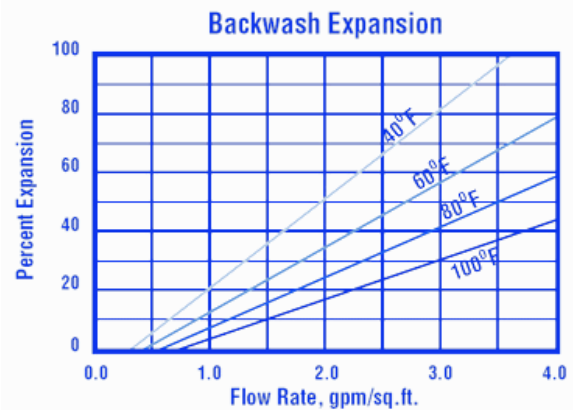


Suggested Operating Conditions	
Maximum Temperature, Cl- form OH- form	60°C (140°F) max. 40°C (105°F) max.
Minimum Bed Depth	0,6 m (24 inches)
Backwash Rate	50 ÷ 75% Bed Expansion
Regeneration, Regenerant Concentration Flow Rate Contact Time	2 ÷ 6% NaOH 2 ÷ 4 BV/h (0,25 ÷ 0,50 gpm/cu.ft) At least 60 Minutes
Displacement Rinse Rate	Same as Regenerant Flow Rate
Displacement Rinse Volume	1,4 ÷ 2 BV (10 ÷ 15 gallons/cu.ft)
Fast Rinse Rate	Same as Service Flow Rate
Fast Rinse Volume	4 ÷ 8 BV (30 ÷ 60 gallons/cu.ft)
Service Flow Rate	10 ÷ 50 BV/h (1,25 ÷ 6,25 gpm/cu.ft)

Hydraulic Properties



Pressure Drop: The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.



Backwash: After each cycle the resin bed should be backwashed at a rate that expands the bed 50 to 75 percent. That will remove any foreign matter and reclassify the bed. The graph above shows the expansion characteristics of Pure PA103.

Pure Resin PA101 IND-1



- Gel Strong Base Anion Exchange Resin, with indicator;
- It is a Type I, gel strong-base anion exchange resin with both high operating capacity and the ability to achieve low residual silica levels;
- Supplied as spherical beads in the hydroxyl form;
- It can be well used in multiple and mixed bed demineralizers to inform customer when the resin is exhausted or not;
- Shipped in 25 liter bags.



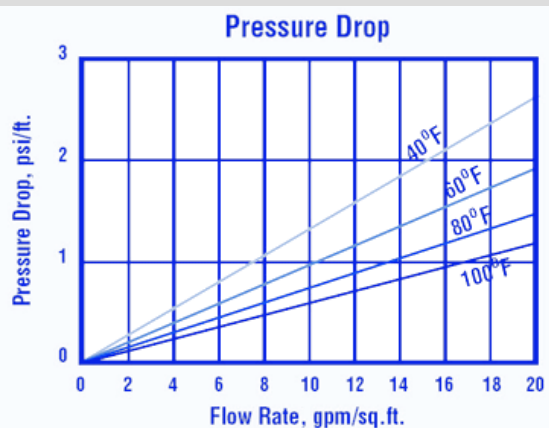
Typical Physical & Chemical Characteristics	
Polymer Matrix Structure	Polystyrene crosslinked with divinylbenzene
Functional Group	R-N(CH ₃) ₃ ⁺ (color : Blue → Yellow)
Ionic Form, as shipped	Hydroxyl (OH ⁻)
Physical Form and Appearance	Clear Spherical Beads
Sphericity	95% min.
Screen Size Range US Standard Screen	16 ÷ 50 mesh, wet
Particle Size Range	+1,2 mm < 5%, - 0,3 mm < 1%
Uniformity Coefficient	1,6 max.
Water Retention, Cl ⁻ form	55 ÷ 65%
Swelling Cl ⁻ → OH ⁻	20 ÷ 30%
Weight, Cl ⁻ form	660 ÷ 710 g/l (43 lbs/cu.ft, approx.)
Total Exchange Capacity, Cl ⁻ form	1,0 eq/l min.
pH Range	0 ÷ 14

REF.	PRICE EURO / LITER
RA338	14,05

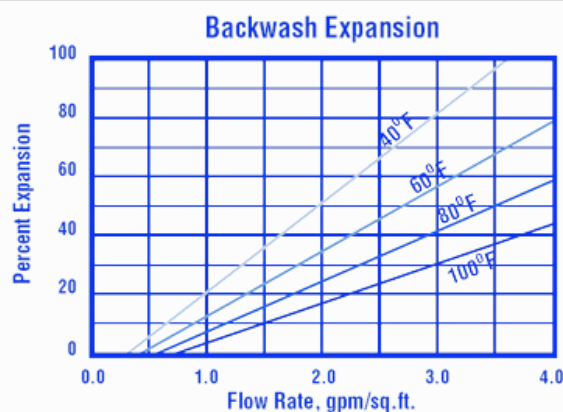


Suggested Operating Conditions	
Maximum Temperature, Cl- form OH- form	100°C (212°F) max. 60°C (140°F) max.
Minimum Bed Depth	0,6 m (24 inches)
Backwash Rate	50 ÷ 75% Bed Expansion
Regeneration, Regenerant Concentration Flow Rate Contact Time	2 ÷ 6% NaOH 2 ÷ 8 BV/h (0,25 ÷ 1,00 gpm/cu.ft) At least 60 Minutes
Displacement Rinse Rate	Same as Regenerant Flow Rate
Displacement Rinse Volume	1,4 ÷ 2 BV (10 ÷ 15 gallons/cu.ft)
Fast Rinse Rate	Same as Service Flow Rate
Fast Rinse Volume	4,9 ÷ 8 BV (35 ÷ 60 gallons/cu.ft)
Service Flow Rate	4 ÷ 8 BV/h (0,5 ÷ 1,0 gpm/cu.ft)

Hydraulic Properties



Pressure Drop: The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.



Backwash: After each cycle the resin bed should be backwashed at a rate that expands the bed 50 to 75 percent. That will remove any foreign matter and reclassify the bed. The graph above shows the expansion characteristics of Pure PA101 IND-1.

Pure Resin PA201(CL)



- Macroporous Strong Base Anion Exchange Resin;
- It is a Type II, gel strong-base anion exchange resin;
- Supplied wet as spherical beads in the chloride form;
- It has a high operating capacity, especially on high-FMA feedwaters, as well as a high reversible sorptive capacity for complex organic materials, such as the fulvic and humic acids which occur in many surface water supplies;
- It is recommended for use in waters with low silica loads. For high silica waters, a type I anion resin such as Pure PA200 is recommended;
- Shipped in 25 liter bags.



Typical Physical & Chemical Characteristics	
Polymer Matrix Structure	Macroporous polystyrene crosslinked with divinylbenzene
Functional Group	R-N(CH ₃) ₂ (C ₂ H ₄ OH) ⁺
Ionic Form, as shipped	Chloride (Cl ⁻)
Physical Form and Appearance	Opaque light yellowish spherical beads
Sphericity	95% min.
Screen Size Range US Standard Screen	16 ÷ 50 mesh, wet
Particle Size Range	+1,2 mm < 5%, - 0,3 mm < 1%
Uniformity Coefficient	1,6 max.
Water Retention, Cl ⁻ form	47 ÷ 57%
Swelling Cl ⁻ → OH ⁻	10% max.
Weight, Cl ⁻ form	660 ÷ 730 g/l (43 lbs/cu.ft, approx.)
Total Exchange Capacity, Cl ⁻ form	1,2 eq/l min.
pH Range	0 ÷ 14

REF.	PRICE EURO / LITER
RA342	8,92



Suggested Operating Conditions

Maximum Temperature, Cl ⁻ form OH ⁻ form	60°C (140°F) max. 40°C (105°F) max.
Minimum Bed Depth	0,8 m (2,6 ft)
Backwash Rate	50 ÷ 75% Bed Expansion
Regeneration, Regenerant Concentration	2 ÷ 5% NaOH
Service/fast rinse	5 ÷ 50 m/h (2 ÷ 20 gpm/ft ²)
Co-current regeneration/displacement rinse	1 ÷ 10 m/h (0,4 ÷ 4 gpm/ft ²)
Total rinse requirement	3 ÷ 5 Bed volumes
Temperature	Ambient up to 35°C (95°F) for silica removal

Pure Resin PA200



- It is a Type I, Macroporous Strong Base Anion Exchange Resin supplied in chloride or hydroxide and has high capacity, shock resistant with high physical stability;
- It is widely used in multiple and mixed bed demineralizers, wherever complete ion and organic removal are required;
- It is also intended for use in all types of deionization systems, condensate polishing and chemical processing applications;
- Shipped in 25 liter bags.



Typical Physical & Chemical Characteristics	
Polymer Matrix Structure	Macroporous polystyrene crosslinked with divinylbenzene
Functional Group	R-N(CH ₃) ₃ + X
Ionic Form, as shipped	Chloride (Cl ⁻)
Physical Form and Appearance	Opaque light yellowish spherical beads
Sphericity	95% min.
Screen Size Range US Standard Screen	16 ÷ 50 mesh, wet
Particle Size Range	+1,2 mm < 5%, - 0,3 mm < 1%
Uniformity Coefficient	1,6 max.
Water Retention, Cl ⁻ form	50 ÷ 60%
Swelling Cl ⁻ → OH ⁻	20 ÷ 30%
Weight, Cl ⁻ form	660 ÷ 730 g/l (43 lbs/cu.ft, approx.)
Total Exchange Capacity, Cl ⁻ form	1,15 eq/l min.
Total Exchange Capacity, OH ⁻ form	0,92 eq/l min.
pH Range	0 ÷ 14

REF.	PRICE EURO / LITER
RA341	8,16



Suggested Operating Conditions	
Maximum Temperature, Cl ⁻ form OH ⁻ form	80°C (170°F) max. 60°C (140°F) max.
Minimum Bed Depth	0,6 m (24")
Backwash Rate	50 ÷ 75% Bed Expansion
Regeneration, Regenerant Concentration	4 ÷ 6% NaOH
Service/Fast Rinse	2 ÷ 8 BV/h (0,25 ÷ 1,0 gpm/ft ²)
Contact Time	Minimum 60 minutes
Displacement Rinse Rate	Same as Regenerant Flow Rate
Displacement Rinse Volume	1,4 ÷ 2,0 BV (10 ÷ 15 gallons/cu.ft)
Fast Rinse Rate	Same as Service Flow Rate
Fast Rinse Volume	4,6 ÷ 8 BV (35 ÷ 60 gallons/cu.ft)
Service Flow Rate	16 ÷ 32 BV/h (2,0 ÷ 4,0 gpm/cu.ft)
Hydraulic Properties	
<p>Pressure Drop: The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various Temperatures.</p>	<p>Backwash: After each cycle the resin bed should be backwashed at a rate that expands the bed 50 to 75 percent. That will remove any foreign matter and reclassify the bed. The graph above shows the expansion characteristics of Pure PA200.</p>

Pure Resin PA300



- Macroporous Weak Base Anion Exchange Resin;
- It is a macroporous polystyrene weak-base anion exchange resin having tertiary amine functionality;
- It has superior kinetics and greater resistance to oxidation and osmotic shock, high chemical and physical stability;
- Intended primarily for use in multiple bed demineralizers;
- It can be used in a two-bed system following a strong acid cation exchanger such as Pure PC003 where weak acid ions (silica and carbon dioxide) do not have to be removed;
- It can also be used in a separate bed, ahead of the strong base exchanger to remove organics and strong acid ions;
- Shipped in 25 liter bags.



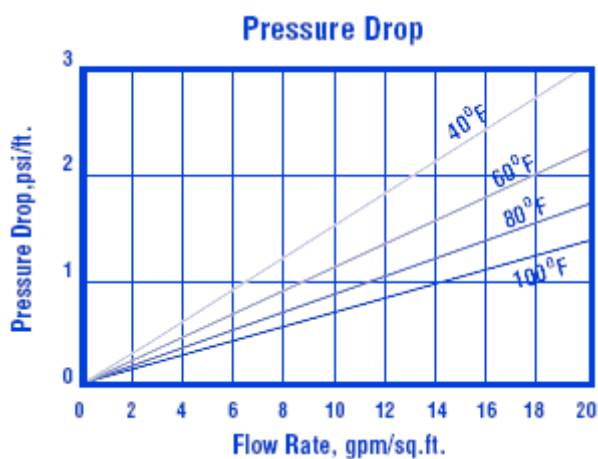
Typical Physical & Chemical Characteristics	
Polymer Matrix Structure	Macroporous Polystyrene with DVB
Functional Group	R-N-(CH ₃) ₂ ⁺
Ionic Form, as shipped	Free Base
Physical Form and Appearance	Spherical Beads
Sphericity	95% min.
Screen Size Range US Standard Screen	16 ÷ 50 mesh, wet
Particle Size Range	+1,2 mm < 5%, - 0,3 mm < 1%
Uniformity Coefficient	1,6 max.
Water Retention, Free Base	50 ÷ 60%
Swelling Na ⁺ → Cl ⁻	25% max.
Shipping Weight	650 ÷ 720 g/l (42 lbs/cu.ft, approx.)
Total Exchange Capacity, Free Base	1,4 eq/l min.
pH Range	0 ÷ 14

REF.	PRICE EURO / LITER
RA350	8,28

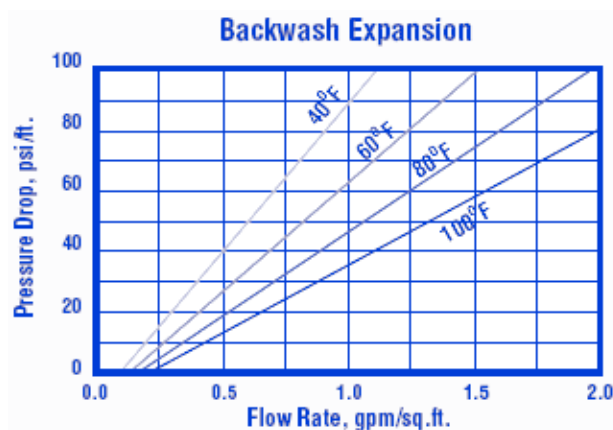


Suggested Operating Conditions	
Maximum Temperature Free Base	100°C (212°F) max.
Minimum Bed Depth	0,6 m (24 inches)
Backwash Expansion	50 ÷ 75%
Regeneration Regenerant Concentration Flow Rate Contact Time	2 ÷ 6% NaOH 2 ÷ 8 BV/h (0,25 ÷ 1,0 gpm/cu.ft) At least 60 Minutes
Displacement Rinse Rate	Same as Regenerant Flow Rate
Displacement Rinse Volume	1,4 ÷ 2 BV (10 ÷ 15 gallons/cu.ft)
Fast Rinse Rate	Same as Service Flow Rate
Fast Rinse Volume	4,9 ÷ 8 BV (35 ÷ 60 gallons/cu.ft)
Service Flow Rate	16 ÷ 32 BV/h (2,0 ÷ 4,0 gpm/cu.ft)

Hydraulic Properties



Pressure Drop: The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.



Backwash: After each cycle the resin bed should be backwashed at a rate that expands the bed 50 to 75 percent. That will remove any foreign matter and reclassify the bed. The graph above shows the expansion characteristics of Pure PA300.



- Nitrate Selective Resin;
- Macroporous strong base anion exchange resin supplied in the chloride form as moist, tough, spherical beads, specially designed for the removal of nitrates from water;
- The macroporous matrix and special ion exchange group functionality imparts ideal nitrate selectivity to Pure PA202 making this resin particularly suitable for nitrate removal even when moderate to high sulphate concentrations are present;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- Shipped in 25 liter bags.



Typical Physical & Chemical Characteristics	
Polymer Matrix Structure	Macroporous, Styrene with DVB
Functional Group	R-N-R ₃ ⁺ Cl ⁻
Ionic Form, as shipped	Cl ⁻
Physical Form and Appearance	Clear Spherical Beads
Sphericity	95% min.
Screen Size Range US Standard Screen	16 ÷ 50 mesh, wet
Particle Size Range	+1,2 mm < 5%, - 0,3 mm < 1%
Uniformity Coefficient	1,6 max.
Water Retention, Cl ⁻ form	52 ÷ 56%
Shipping Weight	680 ÷ 730 g/l (42 ÷ 45,5 lbs/cu.ft, approx.)
Total Exchange Capacity	1,0 eq/l min.
Max Operating Temperature	100°C (212°F) max.
pH Range	0 ÷ 14

REF.	PRICE EURO / LITER
RA360	8,54



Suggested Operating Conditions	
Maximum Operating Temperature	100°C (212°F) max.
Working Exchange Capacity @ 25°C	≥ 0,3 meq/l (wet)
Concentration of Regenerate Solution	NaCl: 8 ÷ 10%
Consumption of Regenerate	NaCl (8 ÷ 10%) Vol. : Resin Vol. = 2÷3 : 1
Flow Rate of Regenerate Solution	4 ÷ 6 (m/hr)
Regenerate Contact time	30 ÷ 60 (minute)
Rinse Flow Rate	15 ÷ 25 (m/hr)
Rinse Time (minute)	25 (approx.)
Operating Flow Rate	15 ÷ 25(m/hr)

Pure Resin PMB101-2



- Mixed Bed Resin;
- It is a high capacity mixed bed ion exchange resin consisting of a mixture of a gel, Type I strong base anion resin and a gel strong acid cation resin for direct water purification;
- The conductivity is around 0,1 us/cm;
- Suitable for use in regenerable or non-regenerable cartridges, for deionization with high silica removal efficiency and refine water for electrical home applications;
- Shipped in 25 liter bags.



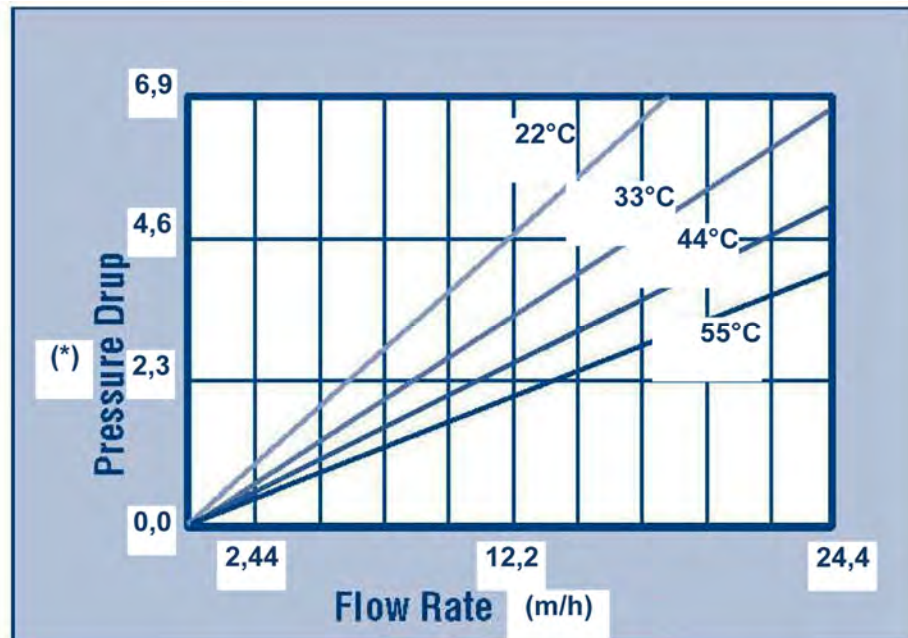
Typical Physical & Chemical Characteristics	
Polymer Matrix Structure	Gel polystyrene crosslinked with DVB
Functional Group: Cation Anion	R-SO ₃ ⁻ H ⁺ R ₄ -N-OH ⁻
Ionic Form, as shipped	H ⁺ / OH ⁻
Physical Form and Appearance	Spherical Beads
Sphericity	95% min.
Screen Size Range US Standard Screen	16 ÷ 50 mesh, wet
Particle Size Range	+1,2 mm < 5%, - 0,3 mm < 1%
Volume Ratio (as shipped) Cation Anion	40% PC003H 60% PA101OH
Total Exchange Capacity, Cation (in Na ⁺ form) Cation (in H ⁺ form) Anion (in Cl ⁻ form) Anion (in OH ⁻ form)	2,0 eq/l min. 1,9 eq/l min. 1,3 eq/l min. 1,0 eq/l min.
Water Retention, H ⁺ form OH ⁻ form	45 ÷ 50% 53 ÷ 60%
Shipping Weight (Approx.)	700 ÷ 740 g/l (44 ÷ 46 lbs/cu.ft, approx.)
Max temperature	60°C (140°F)
pH Range	0 ÷ 14

REF.	PRICE EURO / LITER
RA370	6,40



Suggested Operating Conditions	
Minimum Bed Depth	0,6 m (24 inches)
Service Flow Rate	20 ÷ 60 BV/h (2,5 ÷ 7,5 gpm/cu.ft)
Limitations	Extended exposure to strong oxidizers, such as chlorine, hydrogen peroxide and concentrated nitric acid, degrade the structural backbone of the resin and should be avoided

Hydraulic Properties



(*) = m of water / m of bed

Pure Resin PMB102-2



- Mixed Bed Resin;
- It is a high capacity mixed bed ion exchange resin consisting of a mixture of a gel, Type I strong base anion resin and a gel strong acid cation resin for direct water purification;
- The conductivity is around 0,1 us/cm;
- Suitable for use in regenerable or non-regenerable cartridges, for deionization with high silica removal efficiency and applications for treatment of the R.O. permeate;
- Shipped in 25 liter bags.



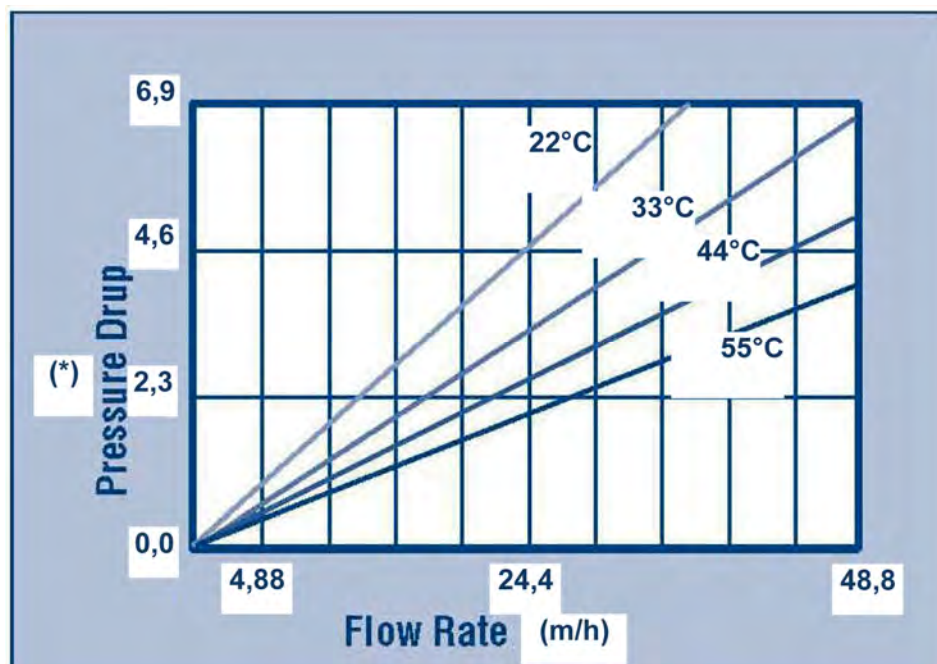
Typical Physical & Chemical Characteristics	
Polymer Matrix Structure	Gel polystyrene crosslinked with DVB
Functional Group: Cation Anion	R-SO ₃ ⁻ H ⁺ R ₄ -N-OH ⁻
Ionic Form, as shipped	H ⁺ / OH ⁻
Physical Form and Appearance	Spherical Beads
Sphericity	95% min.
Screen Size Range US Standard Screen	16 ÷ 50 mesh, wet
Particle Size Range	+1,2 mm < 5%, - 0,3 mm < 1%
Volume Ratio (as shipped) Cation Anion	40% PC003H 60% PA102OH
Total Exchange Capacity, Cation (in Na ⁺ form) Cation (in H ⁺ form) Anion (in Cl ⁻ form) Anion (in OH ⁻ form)	2,0 eq/l min. 1,9 eq/l min. 1,3 eq/l min. 1,0 eq/l min.
Water Retention, H ⁺ form OH ⁻ form	45 ÷ 50% 48 ÷ 58%
Shipping Weight (Approx.)	700 ÷ 740 g/l (44 ÷ 46 lbs/cu.ft, approx.)
Max temperature: Non-regenerative bed Regenerative bed	100°C (212°F) 60°C (140°F)
pH Range	0 ÷ 14

REF.	PRICE EURO / LITER
RA372	6,89



Suggested Operating Conditions	
Minimum Bed Depth	0,6 m (24 inches)
Service Flow Rate	20 ÷ 60 BV/h (2,5 ÷ 7,5 gpm/cu.ft)
Limitations	Extended exposure to strong oxidizers, such as chlorine, hydrogen peroxide and concentrated nitric acid, degrade the structural backbone of the resin and should be avoided

Hydraulic Properties



(*) = m of water / m of bed

Pure Resin PMB101-3



- Mixed Bed Resin;
- It is a high capacity mixed bed ion exchange resin consisting of a mixture of a gel, Type I strong base anion resin and a gel strong acid cation resin for direct water purification;
- The conductivity is around 0,06 us/cm;
- Suitable for use in regenerable or non-regenerable cartridges, for deionization with high silica removal efficiency and ultrapure water production applications;
- Shipped in 25 liter bags.



Typical Physical & Chemical Characteristics	
Polymer Matrix Structure	Gel polystyrene crosslinked with DVB
Functional Group: Cation Anion	R-SO ₃ ⁻ H ⁺ R ₄ -N-OH ⁻
Ionic Form, as shipped	H ⁺ / OH ⁻
Physical Form and Appearance	Spherical Beads
Sphericity	95% min.
Screen Size Range US Standard Screen	16 ÷ 50 mesh, wet
Particle Size Range	+1,2 mm < 5%, - 0,3 mm < 1%
Volume Ratio (as shipped) Cation Anion	40% PC003H 60% PA101OH
Total Exchange Capacity, Cation (in Na ⁺ form) Cation (in H ⁺ form) Anion (in Cl ⁻ form) Anion (in OH ⁻ form)	2,0 eq/l min. 1,9 eq/l min. 1,3 eq/l min. 1,0 eq/l min.
Water Retention, H ⁺ form OH ⁻ form	45 ÷ 50% 53 ÷ 60%
Shipping Weight (Approx.)	700 ÷ 740 g/l (44 ÷ 46 lbs/cu.ft, approx.)
Max temperature: Non-regenerative bed Regenerative bed	100°C (212°F) 60°C (140°F)
pH Range	0 ÷ 14

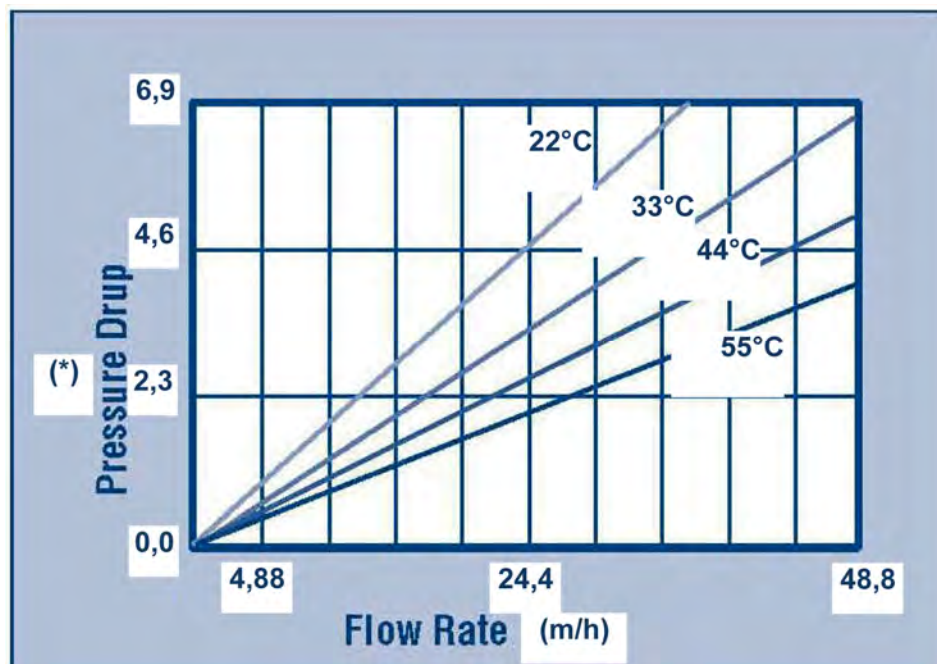
REF.	PRICE EURO / LITER
RA374	6,89



Suggested Operating Conditions

Minimum Bed Depth	0,6 m (24 inches)
Service Flow Rate	20 ÷ 60 BV/h (2,5 ÷ 7,5 gpm/cu.ft)
Limitations	Extended exposure to strong oxidizers, such as chlorine, hydrogen peroxide and concentrated nitric acid degrade the structural backbone of the resin and should be avoided.

Hydraulic Properties



(*) = m of water / m of bed

Pure Resin PMB101 IND-2



- Mixed Bed Resin;
- It is a high capacity indicated mixed bed ion exchange resin consisting of a mixture of a gel, Type I strong base anion resin and a gel strong acid cation resin for direct purification of water;
- The conductivity is 0,1 us/cm max.;
- Suitable for use in regenerable or non-regenerable cartridges, for deionization with high silica removal efficiency and refine water for electrical home applications;
- It changes color from violet to yellow on exhaustion which contains an indicator showing when the resin is exhausted and can no longer treat the water;
- Shipped in 25 liter bags.



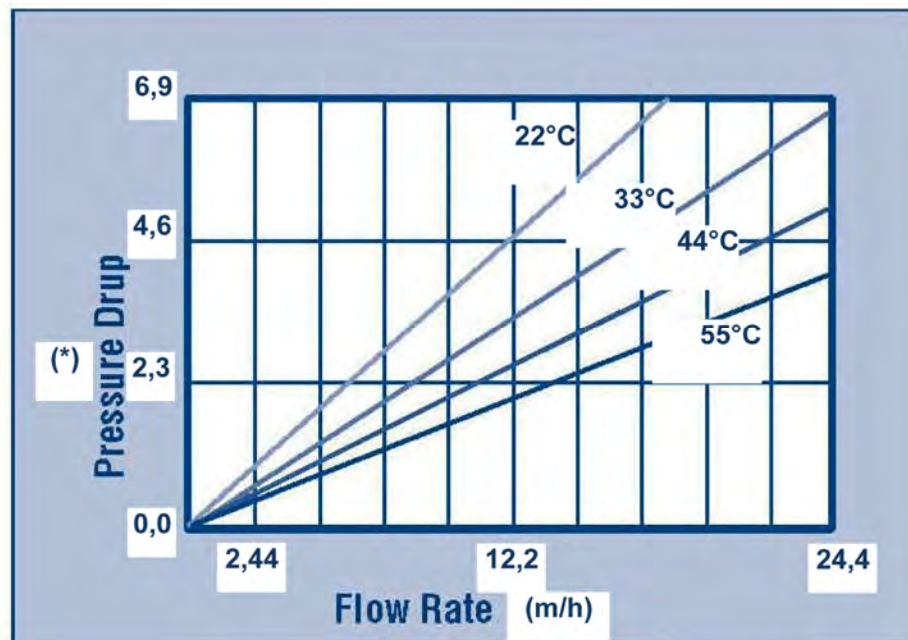
Typical Physical & Chemical Characteristics	
Polymer Matrix Structure	Gel polystyrene crosslinked with DVB
Functional Group: Cation Anion	R-SO ₃ ⁻ H ⁺ (color: Violet → Yellow) R ₄ N ⁺ OH ⁻
Ionic Form, as shipped	H ⁺ / OH ⁻
Physical Form and Appearance	Spherical Beads
Sphericity	95% min.
Screen Size Range US Standard Screen	16 ÷ 50 mesh, wet
Particle Size Range	+1,2 mm < 5%, - 0,3 mm < 1%
Volume Ratio (as shipped) Cation Anion	40% PC003H 60% PA101OH
Total Exchange Capacity, Cation (in Na ⁺ form) Anion (in Cl ⁻ form)	2,0 eq/l min. 1,3 eq/l min.
Water Retention, H ⁺ form OH ⁻ form	45 ÷ 50% 53 ÷ 60%
Shipping Weight (Approx.)	700 ÷ 740 g/l (44 ÷ 46 lbs/cu.ft, approx.)
Max temperature: Non-regenerative bed Regenerative bed	100°C (212°F) 60°C (140°F)
pH Range	0 ÷ 14
REF.	PRICE EURO / LITER
RA378	16,05



Suggested Operating Conditions

Minimum Bed Depth	0,6 m (24 inches)
Service Flow Rate	20 ÷ 60 BV/h (2,5 ÷ 7,5 gpm/cu.ft)
Limitations	Extended exposure to strong oxidizers, such as chlorine, hydrogen peroxide and concentrated nitric acid, degrade the structural backbone of the resin and should be avoided

Hydraulic Properties



(*) = m of water / m of bed

Pure Resin PMB101 IND-3



- Mixed Bed Resin;
- It is a high capacity indicated mixed bed ion exchange resin consisting of a mixture of a gel, Type I strong base anion resin and a gel strong acid cation resin for direct purification of water;
- The conductivity is 0,1 us/cm max.;
- Suitable for use in regenerable or non-regenerable cartridges, for deionization with high silica removal efficiency and refine water for electrical home applications;
- It changes color from blue to yellow on exhaustion which contains an indicator showing when the resin is exhausted and can no longer treat the water;
- Shipped in 25 liter bags.

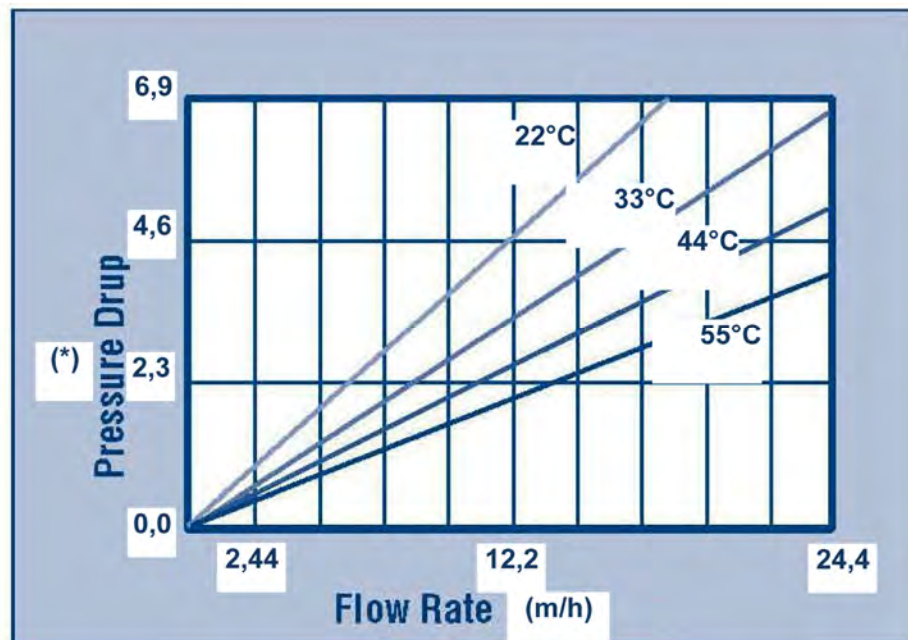


Typical Physical & Chemical Characteristics	
Polymer Matrix Structure	Gel polystyrene crosslinked with DVB
Functional Group: Cation Anion	R-SO ₃ ⁻ H ⁺ R ₄ N ⁺ OH ⁻ (color: Blue → Yellow)
Ionic Form, as shipped	H ⁺ / OH ⁻
Physical Form and Appearance	Spherical Beads
Sphericity	95% min.
Screen Size Range US Standard Screen	16 ÷ 50 mesh, wet
Particle Size Range	+1,2 mm < 5%, - 0,3 mm < 1%
Volume Ratio (as shipped) Cation Anion	40% PC003H 60% PA101OH
Total Exchange Capacity, Cation (in Na ⁺ form) Anion (in Cl ⁻ form)	2,0 eq/l min. 1,3 eq/l min.
Water Retention, H ⁺ form OH ⁻ form	45 ÷ 50% 53 ÷ 60%
Shipping Weight (Approx.)	700 ÷ 740 g/l (44 ÷ 46 lbs/cu.ft, approx.)
Max temperature: Non-regenerative bed Regenerative bed	100°C (212°F) 60°C (140°F)
pH Range	0 ÷ 14
REF.	PRICE EURO / LITER
RA380	15,04



Suggested Operating Conditions	
Minimum Bed Depth	0,6 m (24 inches)
Service Flow Rate	20 ÷ 60 BV/h (2,5 ÷ 7,5 gpm/cu.ft)
Limitations	Extended exposure to strong oxidizers, such as chlorine, hydrogen peroxide and concentrated nitric acid, degrade the structural backbone of the resin and should be avoided

Hydraulic Properties



(*) = m of water / m of bed



- Selective removal of polyvalent ions;
- Macroporous Weak Acid Cation Exchange Resin;
- it is based on the iminodiacetic acid functional group, which has chelating properties for heavy metal ions even against high concentrations of calcium;
- It finds use in processes for extraction and recovery of metals from ores, galvanic plating solutions, picking baths and effluents;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- Shipped in 25 liter bags.



Typical Physical & Chemical Characteristics	
Polymer Matrix Structure	Macroporous, Styrene / DVB
Functional Group	Iminodiacetic
Ionic Form, as shipped	Na ⁺
Physical Form and Appearance	Milky White Spherical Beads
Sphericity	95% min.
Screen Size Range US Standard Screen	16 ÷ 40 mesh, wet
Particle Size Range	0,40 ÷ 1,25 mm ≥ 95
Uniformity Coefficient	1,6 max.
Water Retention, Na ⁺ form	52 ÷ 58%
Reversible Swelling H ⁺ → Na ⁺	40% max.
Shipping Weight	720 ÷ 780 g/l (45 lbs/cu.ft, approx.)
Total Exchange Capacity, Na ⁺ form	≥ 1.95 meq/g (Chelated Cu ²⁺)
pH Range	3 ÷ 12

REF.	PRICE EURO / LITER
RA376	18,75



Suggested Operating Conditions	
Maximum Temperature, H ⁺ form	100°C (212°F) max.
Operating Flow Rate	15 ÷ 45 (m/hr)
Method of Regeneration	pass 1 eq/l HCl 2~4 BV in 1~1,5 hours, rinse with DI water or soft water until pH = 3~4; pass 1 eq/l NaOH 2~4 BV in 1,5~2 hours, rinse with DI water or soft water until pH = 9

Greensand Plus



- filter media used for removing soluble iron, manganese, hydrogen sulphide, arsenic and radium from well water supplies;
- the Manganese Greensand Plus has a manganese dioxide coated surface that acts as a catalyst in the oxidation-reduction of iron and manganese;
- the silica sand core allows to better withstand operating conditions in waters that are low in silica, TDS and hardness;
- a pre-filtration with sand and anthracite is recommended;
- the Manganese Greensand Plus can be used in CR (continuous regeneration) or IR (intermittent regeneration) and requires no changes in backwash rate or times or chemical feeds;
- the removal of iron and manganese can be made by using oxidant as chlorine, even in the presence of manganese;
- not shipped in regenerated form; prior to use it is necessary to regenerate with a solution of potassium permanganate contacting the bed for a minimum of 4 hours. A regeneration level of 4 g of potassium permanganate per liter is recommended. Before placing in service the filter must be rinsed of all remaining traces of potassium permanganate;
- dosage Cl_2 (mg/l) = 1 mg/l Fe + 3 mg/l Mn + 6 mg/l H_2S + 8 mg/l NH_3 for service flow rate continuous;
- available in 14,2 liters bags.



Physical properties		Operating conditions	
Colour	black	pH range	6,2 ÷ 8,8
Specific gravity (g/l)	2400	Service flow rate continuous / intermittent ($\text{m}^3/\text{h m}^2$)	12 ÷ 29
Bulk density (g/l)	1410	Backwash flow rate @13°C ($\text{m}^3/\text{h m}^2$)	30
Effective size (mm)	0,30 ÷ 0,35	Backwash bed expansion (%)	35 ÷ 40
Uniform coefficient	1,6	Pressure drop (psi)	10 ÷ 18

Recommended Operating Guidelines	
Intermittently Regeneration (IR)	
Minimum bed depth (mm)	750 single media; 380 each for dual media beds
Backwash Duration	10 minutes (until water is clear)
Regenerant Dosage 6,5% Bleach	65 liters / m^3 diluted in approx. 25 liters of water injected over 30 ÷ 40 minutes
Regenerant Dosage 12% Bleach	25 liters / m^3 diluted in approx. 25 liters of water injected over 30 ÷ 40 minutes

Recommended Operating Guidelines	
Continuous Regeneration (CR)	
Minimum bed depth (mm)	500 Greensand Plus and 380 Anthracite
Backwash Duration	10 minutes (until water is clear)

REF.	PRICE EURO
RA074	63,10



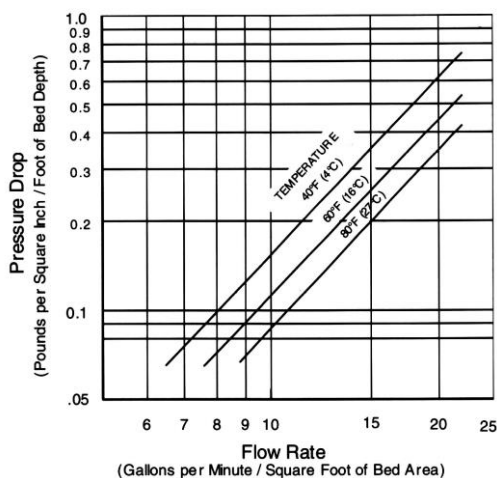
- MTM consist of a light weight granular core with a coating of manganese dioxide, and is used for reducing iron, manganese and hydrogen sulphide from water. Its active surface coating oxidizes and precipitate soluble iron and manganese, and hydrogen sulphide is oxidized to a sulphur. The precipitates are filtered out in the granular bed and removed by backwashing;
- compared to other iron removal medias, MTM has many advantages: pH level as low as 6,2 can be treated, dissolved oxygen is not essential, the media light weight reduces backwash water requirements;
- chlorine can be beneficial in extending filter run times;
- MTM requires intermittent or continuous regeneration to maintain its oxidizing capacity, with a weak solution of potassium permanganate;
- regeneration $KMnO_4$ solution from 1,5 to 2 g per liter MTM;
- a new bed should be regenerated at the start up;
- CAUTION: operating the filter after its oxidizing capacity is exhausted will reduce its service life and may cause staining;
- influent limitations: none oil and polyphosphates;
- available in 28,3 liters bags.



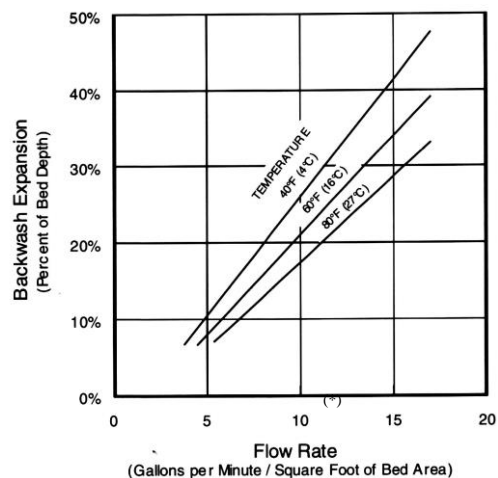
PHYSICAL PROPERTIES		OPERATING CONDITIONS	
Colour	dark brown	Bed depth (mm)	600 ÷ 900
Specific gravity (g/l)	2000	Service flow rate (m ³ /h m ²)	8 ÷ 13
Bulk density (g/l)	715	Backwash flow rate (m ³ /h m ²)	20 ÷ 24
Effective size (mm)	0,45	Backwash bed expansion (%)	20 ÷ 40
		Capacity per liter (g)	1,4 Fe or 0,7 Mn
		pH range	6,2 ÷ 8,5

REF.	PRICE EURO
RA071	130,04

SERVICE FLOW – PRESSURE DROP



BACKWASH BED EXPANSION



(*) Note: a “Gallon per Minute / Square Foot of Bed Area” is equal to 2,44448 m/h.



- Granular filter media used for the reduction of iron and manganese dissolved in the water. In ground water the dissolved iron is usually in the ferrous bicarbonate state and is not filterable; BIRM acts as an insoluble catalyst to enhance the reaction between dissolved oxygen and iron compounds, producing ferric hydroxide which precipitates and may be easily filtered;
- the physical characteristics of BIRM provide an excellent filter media which is easily cleaned by backwashing to remove the precipitant;
- BIRM is not consumed in the iron removal operation;
- available in 28,3 liters bags;
- following are the conditions necessary for a good efficiency of the BIRM:
 - no Oil, Hydrogen Sulphide and Polyphosphates in the water;
 - pH 6,8 ÷ 9,0 (if water contains also manganese pH has to be 8,0 ÷ 8,5);
 - dissolved oxygen content must be equal to at least 15% of the iron content and 29% of the manganese content;
 - alkalinity should be greater than two times the combined sulphate and chloride concentration;
 - less than 5 ppm TOC.

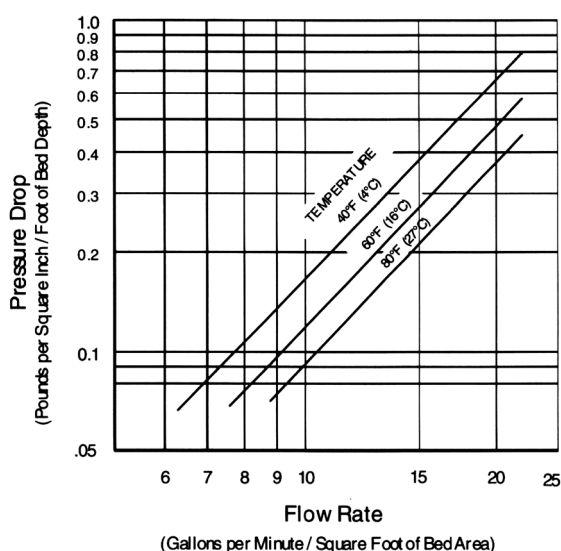


CAUTION: chlorination greatly reduces BIRM activity.

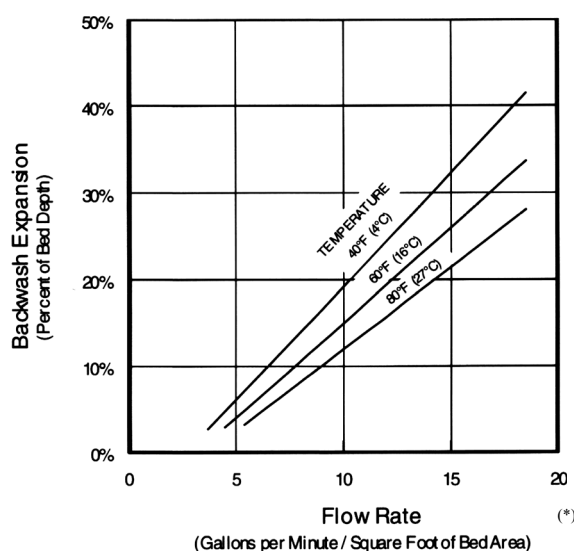
PHYSICAL PROPERTIES		OPERATING CONDITIONS	
Colour	black	Bed depth (mm)	750 ÷ 900
Specific gravity (g/l)	2000	Service flow rate (m ³ /h m ²)	9 ÷ 13
Bulk density (g/l)	560 ÷ 640	Backwash flow rate (m ³ /h m ²)	24 ÷ 30
Mesh Size	12 x 50	Backwash bed expansion (%)	20 ÷ 40
Effective Size (mm)	0,48		
Uniformity Coefficient	2,7		

REF.	PRICE EURO
RA072	95,82

SERVICE FLOW – PRESSURE DROP



BACKWASH BED EXPANSION



(*) Note: a "Gallon per Minute / Square Foot of Bed Area" is equal to 2,44448 m/h.

PYROLUSITE



- PYROLUSITE is manganese dioxide (MnO_2) of very good quality and pureness obtained by washing, drying and screening of mineral selected for the specific catalytic activity;
- used as catalyser for the reduction of iron and manganese dissolved in the water, by sand filters, mixed 20÷50 % with sand 0,4÷0,8 / 0,7÷1,2 mm;
- does not require a compulsory regeneration with $KMnO_4$, but you can do a continuous chlorination or a chlorination during the backwash;
- PYROLUSITE complies the standard UNI ISO EN 13752 “Products for potable water treatment”;
- hardness 3° ÷ 5° Mosh;
- available in 25 kg bags.



Physical Properties	
Colour	brown
Bulk density (g/l)	2000
Effective size (mm)	0,3 ÷ 0,8
Mn (%)	80

Operating Conditions	
Composition	Mixed 20÷50 % with sand 0,4÷0,8 / 0,7÷1,2 mm
Suggested filtration speed (m/h)	≤ 10
Max backwash speed (m ³ /h m ²)	25
Min contact time (min)	6
Range pH	6,5 ÷ 8,5

REF.	PRICE EURO
RA069	101,52

Activated Carbon



- RA201, RA202, RA206, RA208, RA212, RA212A, RA214 e RA214A activated carbon are suitable for treatment of water intended for human consumption), except RA204;
- In granular form;
- Suitable for Chlorine, chemical oxidants, chlorinated compounds and organic contaminants dissolved in water;
- activated carbon require periodic backwashing to eliminate accumulated suspended matters and to regrade the filter bed;
- a good backwashing of the AC filter bed of the start-up is required.
- Mainly bituminous origin coal activated carbons are carefully selected, with a thermal activation process at strictly controlled temperature to obtain a large surface area and a mesoporous structure allowing the adsorption of high molecular weight organic compounds in particular hydrocarbons, atrazine, surfactants;
- Mainly vegetal (coconut base) activated carbons are suitable for applications that need good resistance to the attrition and mechanical shocks; they have a microporous structure allowing the adsorption of low molecular weight organic compounds in particular trichloroethylene, tetrachloroethylene.



REF.	TYPE	ORIGIN	SIZE (mm)	BULK DENSITY (g/l)	BET (m ² /g)	IODINE NUMBER (mg/g)	ASH CONTENT (%)	WEIGHT (kg)	VOLUME (liters)	PACKAGING	PRICE EURO
RA204	SC45 cylindrical	Mineral	4	530	700	750	12	25	47	bag	105,87
RA201	GAC 8x30	Mineral	0,6 ÷ 2,4	480	1100	1000	12	25	52	bag	111,94
RA202	GAC 12x40	Mineral	0,4 ÷ 1,7	480	1100	1000	12	25	52	bag	124,46
RA212 (*)	Norit GAC 8x30	Mineral	0,6 ÷ 2,4	500	1100	950	12	25	50	bag	159,04
RA212A (*)	Norit GAC 8x30	Mineral	0,6 ÷ 2,4	500	1100	950	12	500	1000	Big bag	3.181,12
RA214 (*)	Norit GAC 12x40	Mineral	0,4 ÷ 1,7	500	1100	950	12	25	50	bag	159,04
RA214A (*)	Norit GAC 12x40	Mineral	0,4 ÷ 1,7	500	1100	950	12	500	1000	Big bag	3.181,12
RA206	GAC 8x30	Vegetal	0,6 ÷ 2,4	500	1250	1100	3	25	50	bag	189,12
RA208	GAC 12x40	Vegetal	0,4 ÷ 1,7	500	1250	1100	3	25	50	bag	189,12

Operating conditions	
Bed depth (mm) (dechlorination)	650 ÷ 750
Service flow rate (m ³ /h m ²) (dechlorination)	12 ÷ 15
Backwash flow rate (m ³ /h m ²)	24 ÷ 30
Backwash bed expansion (%)	30 ÷ 40

(*) not available in stock.

Acid Washed Activated Carbon



- High quality granular activated carbon produced by physical activation of selected raw material of mineral origin;
- It is further washed with acid in order to reduce the ash content;
- Particularly effective for the removal of organic pollutants, dyes, pesticides, chlorinated and aromatic solvents, phenols, tannins, chlorine derivatives and compounds that cause bad smells and tastes in drinking water;
- Suitable for different applications such as the purification of water intended for human consumption, the purification of wastewater, of process and condensates. It is also used in the purification and decoloration processes of intermediates chemical and food products;
- It is in conformity with the rule UNI ISO EN 12915 "Chemicals used for treatment of water intended for human consumption";
- It can be thermally reactivated once its adsorbing capacity is exhausted;
- Available in 25 kg bags.



GENERAL PROPERTIES			
Iodine number	Astm D 4607	mg / g	1.000
Moisture as packed	Astm D 2867	%	2
Size	Astm D 2862	Mesh	12 x 30
Size distribution	12 Mesh 30 Mesh	%	5 5
Methylene blue index	Cefic Dab VI	ml	18
CCl ₄ adsorption	Astm D 3467	%	60
Surface area (B.E.T.)	Astm D 3663	m ² /g	1.100
Bulk density	Astm D 2854	kg/m ³	460
Density after back-washing and draining		kg/m ³	420
Iron (acid extraction)		ppm	300
Hardness	Astm D 3802	%	95
Ash content	Astm D 2866	%	8
pH	Astm D 3838	-	neutral

REF.	PRICE EURO
RA222 (*)	220,90

(*) not available in stock.

Filter Sand and Gravel



- REF. RA049, RA050, RA051, RA052 and RA053;
- filter sand and gravel shape of alluvium origin, uncrushed;
- high contents of silica, selected for specific use in water filtration for potable and industrial application;
- hardness 7° Mosh.



REF.	SIZE (mm)	BAG WEIGHT (kg)	PRICE EURO / kg
RA049	0,4 ÷ 0,8	25	0,49
RA050	0,8 ÷ 1,2	25	0,49
RA051	1,0 ÷ 2,0	25	0,49
RA053	2,0 ÷ 3,0	25	0,49
RA052	3,0 ÷ 5,0	25	0,49

Physical properties

Colour	white
Specific gravity (g/l)	2650
Bulk density (g/l)	1500
SiO ₂ content	> 96 %
Humidity	0,3 % max
Melting point	1700 g/c
pH	8

Operating conditions

Bed depth (mm) (sand filter)	450 ÷ 750
Service flow rate (m ³ /h m ²)	8 ÷ 12
Backwash flow rate (m ³ /h m ²)	30 ÷ 42
Backwash bed expansion (%)	5 ÷ 10



- granular anthracite selected per gradation, hardness and purity for specific use in potable and industrial water filtration;
- the high filtering efficiency of anthracite is due to its angular shape, that allows high filtering speed, longer filter runs and less head loss;
- excellent media with density lower than sand, the anthracite is usually used in multimedia filters;
- the ANTHRACITE complies the standard UNI ISO EN 12909 "Products used for treatment of water intended for human consumption";
- minimum carbon contents 90%, low silica, hardness 3° Mosh average.



REF.	SIZE (mm)	WEIGHT (kg)	PACKAGE	PRICE EURO / kg
RA060	0,6 ÷ 1,0	25	Bag	1,88
RA061	2,0 ÷ 3,0	25	Bag	1,88
RA061A (*)	2,0 ÷ 3,0	1000	Big bag	1,84

(*) not available in stock.

Physical properties	
Bulk density (g/l)	950
Absolute density (g/l)	1400
Humidity packaging	2 % max
Ashes	4 % (±2)
Substances volatiles	3 % (±1)
Sulphur	0,5 % max
pH	8 ÷ 10

Operating conditions:

- monolayer bed depth 600 ÷ 900 mm;
- top bed depth in multilayer beds 250 ÷ 450 mm;
- service flow rate following specific conditions;
- backwash flow rate 28 ÷ 35 m³/h m²;
- bed expansion 20 ÷ 30%.

Calcite

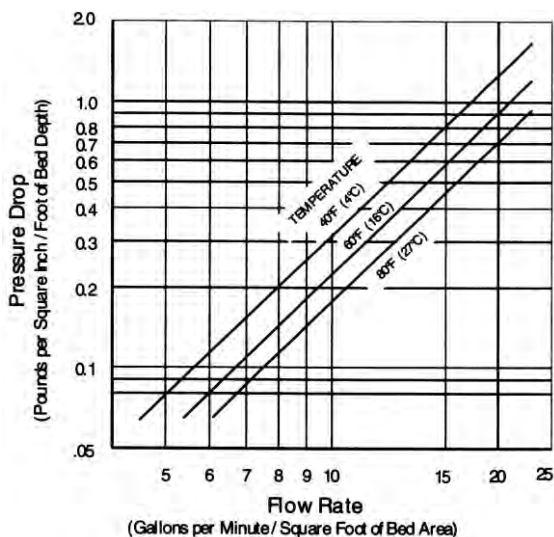


- CALCITE is a natural crushed and screened calcium carbonate media which is used to neutralize low pH waters;
- acidic water slowly dissolves the calcium carbonate to raise the pH which reduces the potential leaching of copper, lead and other metals found in typical plumbing systems;
- one of the advantages of CALCITE is its self-limiting property, that corrects pH only enough to reach a non corrosive equilibrium;
- of course CALCITE will increase the hardness of the water;
- periodic backwashing of the bed is necessary to keep in working order the system;
- the CALCITE bed will have to be periodically replenished as the CALCITE is depleted;
- gravel support bed is recommended;
- available in 15,6 liters bags.

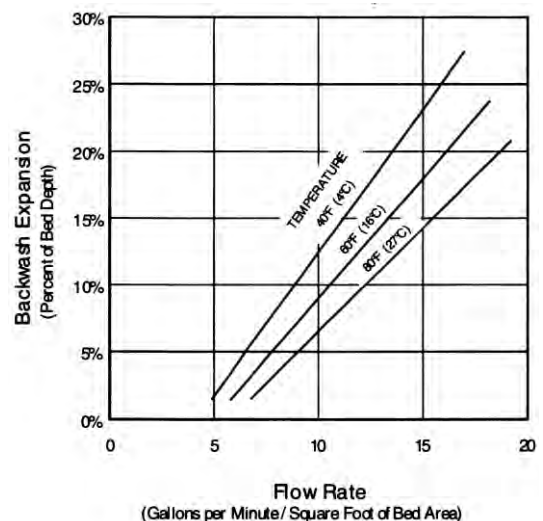


Physical properties		Operating conditions	
Colour	white	Bed depth (mm)	600 ÷ 750
Specific gravity (g/l)	2700	Service flow rate (m ³ /h m ²)	7 ÷ 15
Bulk density (g/l)	1450	Backwash flow rate (m ³ /h m ²)	20 ÷ 30
Effective size (mm)	0,4 ÷ 1,1	Backwash bed expansion (%)	≥ 50
Composition	CaCO ₃ 95% min. MgCO ₃ 3% max.	pH range	5,0 ÷ 7,0

REF.	PRICE EURO
RA073	45,78



Service flow – pressure drop



Backwash bed expansion

(*) Note: a “Gallon per Minute / Square Foot of Bed Area” is equal to 2,44448 m/h .



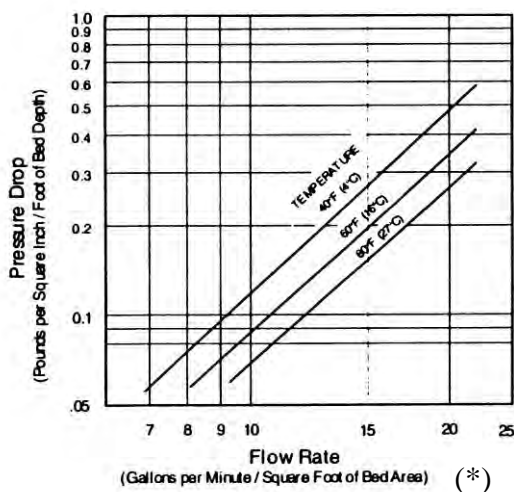
- Filter-Ag is a non-hydrous silicon dioxide media which can be used as highly efficient filter media for the reduction of suspended matter. Its fractured edges and irregular surface provides an high surface area and complex flow path for efficient filtration;
- less pressure loss through a bed of Filter-Ag than through most other filter medias;
- light weight requires lower backwash rates than other filter medias;
- upon installation allow bed to soak overnight before backwashing;
- available in 28,3 liters bags.



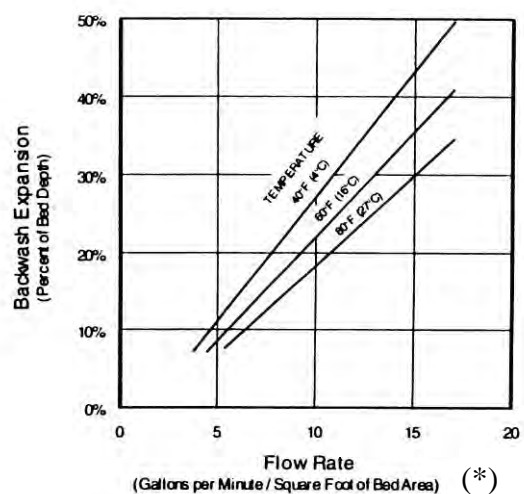
Physical properties		Operating conditions	
Colour	light grey	Bed depth (mm)	600 ÷ 900
Specific gravity (g/l)	2250	Service flow rate (m ³ /h m ²)	12 ÷ 13
Bulk density (g/l)	380 ÷ 420	Backwash flow rate (m ³ /h m ²)	20 ÷ 24
Effective size (mm)	0,5 ÷ 2,0	Backwash bed expansion (%) of bed depth	20 ÷ 40
		Freeboard of bed depth (%)	≥ 50

REF.	PRICE EURO
RA059	36,35

Service flow – pressure drop



Backwash bed expansion



(*) Note: a “Gallon per Minute / Square Foot of Bed Area” is equal to 2,44448 m/h .

Filter AG Plus



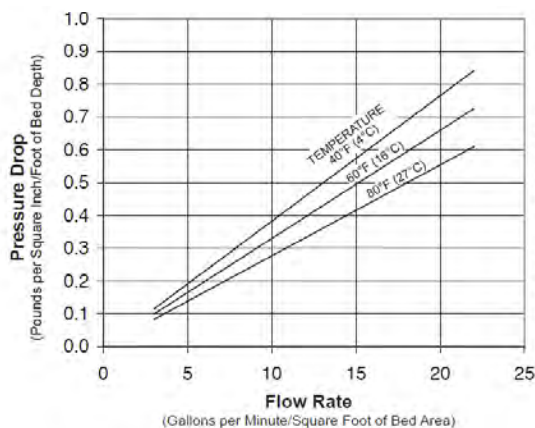
- Filter-Ag Plus is a clinoptilolite natural media with a large surface area and microporous structure which can be used as highly efficient filter media for the reduction of suspended matter. Its irregular surface and 3 micron void spaces provides a surface area over 100 times greater than silica sand;
- its low pressure drop, high service flow rates and high bed loadings combined with lower backwash frequency allow economy in equipment downsizing and reduced pumping requirements;
- utilizing deep bed filtration can typically reduce suspended solids down to 5 micron or less range;
- Filter Ag Plus can be applied to systems designed for either pressure or gravity flow;
- available in 28,3 liters bags.



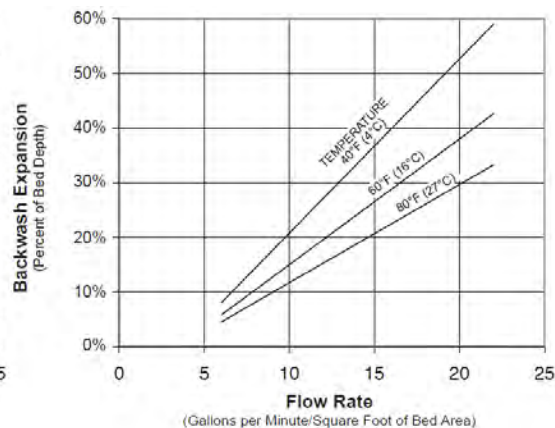
Physical properties		Operating conditions	
Colour	White to off white	Bed depth (mm)	600 ÷ 1200 (900 for optimal filtration)
Specific gravity (g/l)	2200	Service flow rate (m ³ /h m ²)	30 ÷ 50
Bulk density (g/l)	800	Backwash flow rate (m ³ /h m ²)	35 ÷ 45
Effective size (mm)	0,55	Backwash bed expansion (%) of bed depth	30 ÷ 40
		Freeboard of bed depth (%)	≥ 50

REF.	PRICE EURO
RA058	61,56

Service flow – pressure drop



Backwash bed expansion



(*) Note: a “Gallon per Minute / Square Foot of Bed Area” is equal to 2,44448 m/h .

GFH (Granular Ferric Hydroxide)



- Granular ferric hydroxide GFH is an adsorbent for selective removal of arsenic (both arsenite and arsenate), phosphate, vanadium, antimony, lead, uranium, molybdenum and other heavy metals from natural water;
- Preoxidation is not required for arsenic removal applications;
- Once the media has exhausted its adsorption capacity, it is removed from the vessel and replaced with new media;
- The simplicity of this process is very attractive for small installations and wellhead applications;
- Active substance $\text{Fe}(\text{OH})_3 + \beta\text{-FeOOH}$;
- Dry solids content 58% ($\pm 10\%$);
- Conform with the rule EN 15029;
- NSF/ANSI 61 certified.

Requirements for raw water

- Free of turbidity
- Positive redox potential
- No calcium precipitation



REF.	WEIGHT (kg)	PACKAGING	PRICE EURO
RA068	30	Drum	543,40
RA068B (**)	800	Big bag	(*) 13,38

(*) EURO / kg

(**) not available in stock.

Physical properties (with water content 45%):	
Density of grains (g/l)	1590
Bulk density (g/l) backwashed	1150 ($\pm 10\%$)
Particle size range (mm)	0,2 ÷ 2,0
Specific surface (m^2/g) (BET method)	approx 300
Porosity of grains (%)	72 ÷ 77
Bulk porosity (%)	22 ÷ 28
Iron content, relative to dry solids	600g / Kg ($\pm 10\%$)

Operating conditions	
Bed depth (m)	0,6 ÷ 1,6
Specific flow rate ($\text{m}^3/\text{h m}^2$)	5 ÷ 20
Contact time (minutes)	3 ÷ 6
Backwash flow rate ($\text{m}^3/\text{h m}^2$)	26
Expansion free volume (%) of bed depth	50
Pressure loss max (bar)	0,5
Operation temperature max ($^{\circ}\text{C}$)	60
AsO_4^{3-} Arsenic adsorption density in the drinking water processing (g/kg)	1 ÷ 5 (***)

(***) the adsorption density depends on pH and water chemistry.



- ECOMIX is a granular filtering media, suitable for remove natural organic matter, hardness, iron, manganese and ammonia in a wide pH range and without any oxidant products dosage;
- ECOMIX is a homogeneous mixture of five high quality ion-exchange and adsorption materials of natural and synthetic origin;
- you can use ECOMIX as a ion-exchange resin and regenerate it with sodium chloride (NaCl);
- wide range of raw water as indicated in the “Limit Concentration Table” below;
- ECOMIX can treat water with high concentration of Fe and Mn, and with max TDS = 4000 mg/l;
- to calculate filter capacity, one should only consider water hardness and ion-exchange capacity (don't consider Fe and Mn data);
- NSF/ANSI 44, 61 & 372 certified;
- shipping weight 0,75 kg / liter;
- available in 12,0 liters bags.



REF.	TYPE	ION EXCHANGE CAPACITY (eq/l)	ION EXCHANGE CAPACITY (g CaCO ₃ /l)	DOSE OF REGENERANT (g NaCl 100% per liter)	PRICE EURO / LITER
RA080	Ecomix - A	0,75	35	100	12,08
RA081	Ecomix - C	0,65	30	100	13,57

- ECOMIX A is preferred when the contaminants to be removed are mainly hardness and iron;
- ECOMIX C is preferred when the contaminants to be removed are mainly organic matter.

WARNING: if you use only a part of the product contained in a bag, you have make sure that all the contents are mixed, in order to homogenize the product before spilling. ECOMIX is a mixture of five materials with different specific weight and different particle size, which if not well mixed tends to stratify.



Limit Concentration Tables

RA080	Hardness (ppm CaC O₃)	Fe (mg/l) (ppm)	Mn (mg/l) (ppm)	COD (ppm O₂)	Ammonia (mg/l) (ppm)	TDS (ppm)
Raw water concentration limits	< 750	< 15	< 3	< 20	< 4	< 4000
Quality of purified water	≤ 20	< 0,3	< 0,1	< 10	< 0,5	No changes

RA081	Hardness (ppm CaC O₃)	Fe (mg/l) (ppm)	Mn (mg/l) (ppm)	COD (ppm O₂)	Ammonia (mg/l) (ppm)	TDS (ppm)
Raw water concentration limits	< 750	< 10	< 3	< 20	< 4	< 4000
Quality of purified water	≤ 20	< 0,3	< 0,1	< 4	< 0,5	No changes

OPERATING CONDITIONS		UNIT OF MEASUREMENT
Maximum operating temperature	40	°C
pH range	5 ÷ 9	
Minimum bed depth	500	mm
Optimum bed depth	800	mm
Service flow rate	20 ÷ 25	m ³ /h m ²
Backwash flow rate (15÷20 min)	10 ÷ 15	m ³ /h m ²
Regeneration flow rate (45÷65 min)	3 ÷ 5	m ³ /h m ²
Active chlorine	< 1	mg/l (ppm)
Free bed volume	≥ 40	%

COMMONLY USED PRESSURE VESSELS:

(*) for Ecomix A

	8x35	8x44	10x35	10x54	12x52	13x54	14x65	16x65	21x60
Volume of Ecomix (liters)	16	20	24	36	48	60	72	96	144
Flow Capacity (m ³ /h)	0,8	0,8	1,2	1,2	1,6	2,0	2,5	3,0	5,5
IX Capacity (kg CaCO ₃) (*)	0,56	0,7	0,8	1,3	1,7	2,1	2,5	3,3	5,0
Salt Requirement (kg)	1,6	2,0	2,4	3,6	4,8	6,0	7,2	9,6	14,4
Backwash Flow Rate (m ³ /h)	0,4	0,4	0,6	0,6	0,9	1,1	1,2	1,6	2,7



- Corosex is designed for use in filters to neutralize acidity by increasing the pH value;
- By neutralizing the free carbon dioxide in water, Corosex can correct acidic water conditions and render it less corrosive. Corosex, being a highly reactive magnesium oxide, is used most effectively where pH correction is substantial or high flow conditions are in use. pH correction and media consumption are affected by a number of water chemical variables. Being soluble to acidity, Corosex will slowly dissolve and will need to be replenished periodically;
- On a per weight basis, magnesium oxide can neutralize five times more acidity than can calcium carbonate. This results in greatly reduced chemical usage for the same pH correction. Please note; under certain low flow conditions, Corosex may overcorrect and create a highly basic (high pH) condition;
- Under certain hardness conditions, pH correction can cause hardness minerals to precipitate out of solution, resulting in cementing or solidification of the Corosex mineral bed. Upflow service is generally recommended with hardness exceeding 9 °F. Always use an in-line filter ahead of an upflow system to prevent plugging of the lower distribution screen;
- As Corosex's magnesium oxide neutralizes the water, it will increase hardness and a softener may become necessary after the neutralizing filter;
- Corosex can be effectively combined with Calcite to combine the high flow neutralization properties of Corosex, along with the slower reacting low flow properties of Calcite, reducing potentially high basic properties due to overcorrection;
- High degree of activity and speed of correction allowing high flow;
- High capacity...less chemical usage;
- NSF/ANSI 60 certified;
- Available in 18,7 liters bags.

REF.	PRICE EURO
RA075	156,02

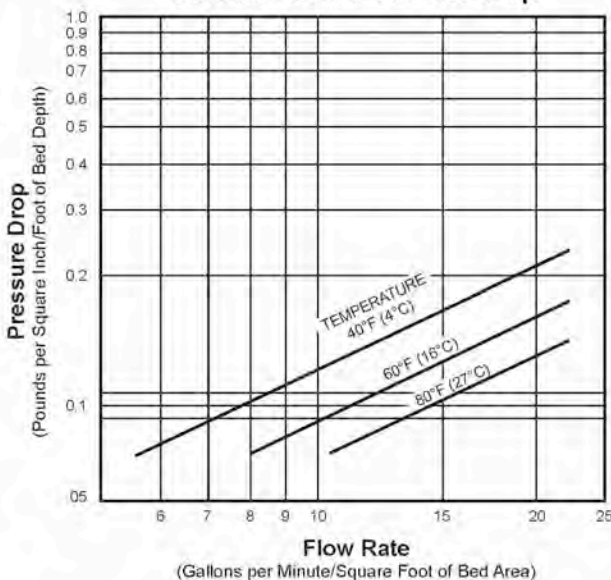


Physical properties	
Colour	Brownish white
Specific gravity (g/l)	3600
Bulk density (g/l)	1200
Effective size (mm)	1,4
Uniformity coefficient	1,7
Composition	MgO 97% min.
Mesh size	6 x 16

Operating conditions	
Bed depth (mm)	600 ÷ 750
Service flow rate (m ³ /h m ²)	12 ÷ 15
Backwash flow rate (m ³ /h m ²)	25 ÷ 30
Backwash bed expansion (%)	≥ 50
pH range	4,5 ÷ 6,0

- Downflow service is generally satisfactory on waters with a hardness of less than 9 °F or where it's combined with Calcite at least 50-50. Upflow service is generally recommended with hardness exceeding 9 °F to prevent cementing of the Corosex bed;
- Use distributors designed for upflow applications;
- A gravel support bed is recommended;
- Backwash frequently to prevent possible cementing;
- Max usage 100 mg/l.

Service Flow Pressure Drop



Backwash Bed Expansion

Due to Corosex's high density and large particle size, a new bed is difficult to expand, but it is still imperative to backwash in order to keep the bed clean. Over time, as the media is consumed, the particle size will decrease and backwash bed expansion will begin to occur.

(* Note: a "Gallon per Minute / Square Foot of Bed Area" is equal to 2,44448 m/h .



Residential R.O. components



1,8" Residential CSM Membranes



RESIDENTIAL

RO elements for residential use (1.8 inch diameter)

CSM[®]

SPECIFICATIONS:

General Features

Model Name	Permeate Flow Rate GPD (L/day)	Salt Rejection %
RE1810-30	30 (114)	98.0%
RE1810-50	50 (189)	98.0%
RE1812-35	35 (132)	98.0%
RE1812-50	50 (189)	98.0%
RE1812-60	60 (227)	98.0%
RE1812-80	80 (303)	98.0%

- The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:
 - 200 mg/L NaCl solution at 60 psig (0.41 MPa) applied pressure
 - 15% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- Dry type elements are vacuum leak tested using the San Diego Protocol.
- Permeate flow rate for each element may vary but will be no more than 15%.
- Dry elements are packaged in a polyethylene bag
 - α Wet elements are packaged in a polyethylene bag containing SB(4g/L) + HCl(0.51g/L) solution.

Membrane type: Thin-Film Composite
Membrane material: Polyamide (PA)
Element configuration: Spiral-Wound, Tape Wrapping

Dimensions

Model Name	A	B	C	D	E
RE1810-30	0.67 (17mm)	0.55 (14mm)	10.08 (256mm)	0.98 (25mm)	1.77 (45mm)
RE1810-50					
RE1812-35	0.67 (17mm)	0.87 (22mm)	11.73 (298mm)	0.98 (25mm)	1.77 (45mm)
RE1812-50					
RE1812-60					
RE1812-80					

*All measurement are in inches



1,8" Residential CSM Membranes



These model names are tested and certified under NSF/ANSI standard 58, material requirement only (excluding RE1810-30)

RESIDENTIAL
RO elements for residential use (1.8 inch diameter)

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Operating Pressure	125 psi (0.86 MPa)
· Max. Feed Flow Rate	2 gpm (0.45 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

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GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

REF.	MODEL NAME	PRICE EURO
	RE1810-30	
	RE1812-35	
MCRE1812-50	RE1812-50	24,33
MCRE1812-60	RE1812-60	25,75
MCRE1812-80	RE1812-80	31,15

1,8" Residential CSM Membranes



RESIDENTIAL

High recovery & High rejection RO element for residential use

CSM[®]

SPECIFICATIONS:

General Features

Model Name	Permeate Flow Rate GPD (L/day)	Salt Rejection (%)	Pressure / Recovery
RE1812-HR+	80 (302.8)	99.0 (min. 97.5)	60psig / 30%
	105 (397.5)	96.0 (min. 95.0)	80psig / 60%

- The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:
 - 200 mg/L NaCl solution , 77 °F (25 °C), pH 6.5–7.0
- All elements are vacuum leak tested using the CSM integrity test.
- Permeate flow rate for each element may vary +15/ -15%.
- Elements can be supplied as dry or wet-type. Wet-tested elements are soaked in a preservative solution (1.0% food grade SBS) and vacuum sealed in a poly bag. All elements are individually boxed.

Membrane type: Thin-Film Composite
Membrane material: Polyamide (PA)
Element configuration: Spiral-Wound, Tape Wrapping

Dimensions

Model Name	A	B	C	D	E
RE1812-HR+	0.67 inch (17mm)	0.87 inch (22 mm)	11.73 inch (298 mm)	0.87 inch (22 mm)	1.77 inch (45 mm)



1,8" Residential CSM Membranes



RESIDENTIAL

High recovery & High rejection RO element for residential use

CSM®

APPLICATION DATA:

Operating Limits

· Max. Operating Pressure	150 psi (1.03 MPa)
· Max. Feed Flow Rate	2 gpm (0.45 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	3.0
· Max. Chlorine Concentration	< 0.1 mg/L

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GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- When running the system for the first time, the permeate should be discarded continuously at least 1 hour.
- Keep elements moistly at all times after initial wetting.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing from biological growth.
- Keep elements moistly at all times after initial wetting.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty. For additional information on use of approved chemicals please contact your nearest CSM representative.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

REF.	MODEL NAME	PRICE EURO
MCRE1812-HR+	RE1812-HR+	38,16

2" - 2,8" Residential CSM Membranes



RESIDENTIAL

RO elements for residential use (2.0 and 2.8 inch diameters)

CSM®

SPECIFICATIONS:

General Features

Model Name	Permeate Flow Rate GPD (L/day)	Salt Rejection (%)
RE2012-100	100 (397)	98.0
RE2812-300	300 (1,136)	96.0

- The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:
 - 200 mg/L NaCl solution at 60 psig (0.41 MPa) applied pressure
 - 15% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- Minimum salt rejection is 96.0%.
- Permeate flow rate for each element may vary but will be no more than 15%.
- Wet elements are packaged in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution.

Membrane type: Thin-Film Composite
Membrane material: Polyamide (PA)
Element configuration: Spiral-Wound, Tape Wrapping

Dimensions

Model Name	A	B	C	D	E
RE2012-100	0.67 (17)	0.5 (12)	11.7 (298)	0.9 (23)	1.9 (48)
RE2812-300	0.67 (17)	0.9 (22)	11.7 (298)	0.9 (22)	2.9 (74)

*All measurements are in inches (millimeters)



2" - 2,8" Residential CSM Membranes



RESIDENTIAL

RO elements for residential use (2.0 and 2.8 inch diameters)

CSM®

APPLICATION DATA:

Operating Limits

· Max. Operating Pressure	125 psi (0.86 MPa)
· Max. Feed Flow Rate	2 gpm (0.45 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

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GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- When running the system for the first time, the permeate should be discarded continuously at least 1 hour.
- Keep elements moistly at all times after initial wetting.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing from biological growth.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

REF.	MODEL NAME	PRICE EURO
MCRE2012-100	RE2012-100	35,16
MCRE2812-300	RE2812-300	100,14

2" Residential CSM Membranes



SPECIFICATIONS:

General Features

Model Name	Active Membrane Area ft ² (m ²)	Permeate Flow Rate GPD (L/day)	Salt Rejection (%)
RE2012-150	6.4 (0.59)	150 (567.8)	98.0

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- **200 mg/L NaCl solution at 60 psig (0.41 MPa) applied pressure**
- **15% recovery**
- **77 °F (25 °C)**
- **pH 6.5–7.0**

2. Minimum salt rejection is 96.0%.

3. Dry type elements are vacuum leak tested using the CSM integrity test.

4. Permeate flow rate for each element may vary but will be no more than 15%.

5. Dry elements are packaged in a polyethylene bag.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, Tape Wrapping

Dimensions

Model Name	A	B	C	D	E
RE2012-150	0.67 (17)	0.5 (12)	11.7 (298)	0.9 (23)	1.9 (48)

*All measurements are in inches (millimeters).



2" Residential CSM Membranes



RESIDENTIAL

High flux RO elements for residential use

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Operating Pressure	150 psi (1.03 MPa)
· Max. Feed Flow Rate	2 gpm (0.45 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

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GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- When running the system for the first time, the permeate should be discarded continuously at least 1 hour.
- Keep elements moistly at all times after initial wetting.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing from biological growth.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty. For additional information on use of approved chemicals please contact your nearest CSM representative.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

REF.	MODEL NAME	PRICE EURO
MCRE2012-150	RE2012-150	42,95

2" Residential CSM Membranes



SPECIFICATIONS:

General Features

Model Name	Permeate Flow Rate GPD (L/day)	Salt Rejection (%)	Pressure / Recovery
RE2012-400	400 (1514)	96.0 (min. 95.0)	80psig / 30%

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 200 mg/L NaCl solution , 77 °F (25 °C), pH 6.5–7.0

2. Wet type elements are vacuum leak tested using the CSM integrity test.

3. Permeate flow rate for each element may vary but will be no more than 15%.

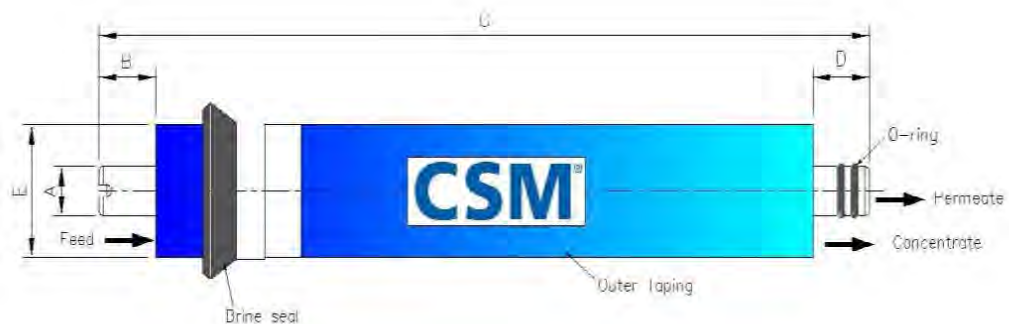
4. Wet elements are packaged in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, Tape Wrapping

Dimensions

Model Name	A	B	C	D	E
RE2012-400	0.67 (17mm)	0.5 (12mm)	11.73 (298mm)	0.91 (23mm)	1.89 (48mm)

*All measurements are in inches (millimeters).



2" Residential CSM Membranes



RESIDENTIAL

High recovery & High rejection RO element for residential use

CSM®

APPLICATION DATA:

Operating Limits

· Max. Operating Pressure	150 psi (1.03 MPa)
· Max. Feed Flow Rate	2 gpm (0.45 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	3.0
· Max. Chlorine Concentration	< 0.1 mg/L

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GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- When running the system for the first time, the permeate should be discarded continuously at least 1 hour.
- Keep elements moistly at all times after initial wetting.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing from biological growth.
- Keep elements moistly at all times after initial wetting.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty. For additional information on use of approved chemicals please contact your nearest CSM representative.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

REF.	MODEL NAME	PRICE EURO
MCRE2012-400	RE2012-400	79,08

2" Residential CSM Membranes



RESIDENTIAL

Low pressure grade RO elements for residential use

CSM[®]

SPECIFICATIONS:

General Features

Model Name	Permeate Flow Rate GPD (L/day)	Salt Rejection %
RE2010-LP	30 (114)	93.0%
RE2012-LP	50 (189)	93.0%
RE2012-LPF	60 (227)	93.0%

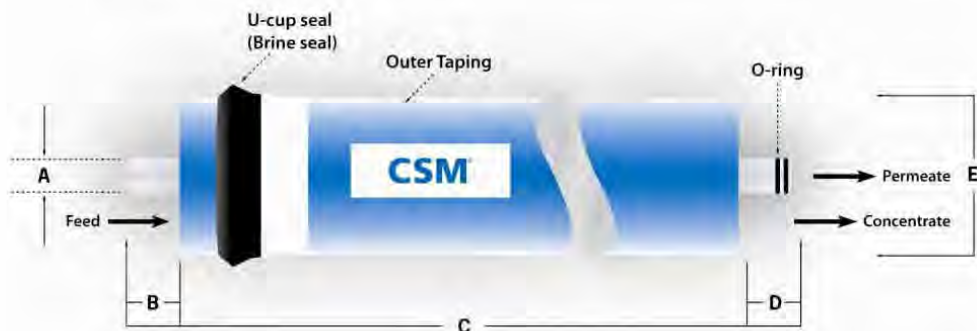
- The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:
 - 100 mg/L NaCl solution at 20 psig (0.14 MPa) applied pressure
 - 15% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- Dry type elements are vacuum leak tested using the San Diego Protocol.
- Permeate flow rate for each element may vary but will be no more than 15%.
- Dry elements are packaged in a polyethylene bag
 - Wet elements are packaged in a polyethylene bag containing SB(4g/L) + HCl(0.5 lg/L) solution.

Membrane type: Thin-Film Composite
Membrane material: Polyamide (PA)
Element configuration: Spiral-Wound, Tape Wrapping

Dimensions

Model Name	A	B	C	D	E
RE2010-LP	0.67	0.55	10.08	0.98	1.91
RE2012-LP	0.67	0.47	11.73	0.91	1.91
RE2012-LPF	0.67	0.47	11.73	0.91	1.91

*All measurement are in inches



2" Residential CSM Membranes



RESIDENTIAL

Low pressure grade RO elements for residential use

CSM®

APPLICATION DATA:

Operating Limits

· Max. Operating Pressure	125 psi (0.86 MPa)
· Max. Feed Flow Rate	2 gpm (0.45 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

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GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

REF.	MODEL NAME	PRICE EURO
	RE2010-LP	
MCRE2012-LP	RE2012-LP	40,57
MCRE2012-LPF	RE2012-LPF	44,67

3" Residential CSM Membranes



RESIDENTIAL

RO elements for residential use

CSM®

SPECIFICATIONS:

General Features

Model Name	Permeate Flow Rate GPD (L/day)	Salt Rejection (%)
RE3012-500	500 (1,893)	97.0

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 200 mg/L NaCl solution at 80 psig (0.55 MPa) applied pressure
- 40% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 95.0%.

3. Dry type elements are vacuum leak tested using the CSM integrity test.

4. Permeate flows for warranty evaluation may vary +25/-15%.

5. Dry elements are packaged in a polyethylene bag

α Wet elements are packaged in a polyethylene bag containing storage solution.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, Tape Wrapping

Dimensions

Model Name	A	B	C	D	E
RE3012-500	0.67 (17)	0.39 (10)	11.7 (298)	0.79 (20)	2.95 (75)

*All measurement are in inches(millimeters)



3" Residential CSM Membranes



RESIDENTIAL

RO elements for residential use

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Operating Pressure	150 psi (1.03 MPa)
· Max. Feed Flow Rate	2 gpm (0.45 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

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GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag of wet element is damaged, a new preservative solution must be added and air-tight sealed to prevent drying and biological growth.
- When running the system for the first time, the permeate should be discarded continuously at least 1 hour.
- Keep elements moistly at all times after initial wetting.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing from biological growth.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

REF.	MODEL	PRICE EURO
MCRE3012-500	RE3012-500	138,83



RESIDENTIAL

Tankless RO elements for residential use

CSM[®]

SPECIFICATIONS:

General Features

Model Name	Permeate Flow Rate GPD (L/day)	Salt Rejection (%)
RE3512-TK	600 (2,271)	95.0

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- 200 mg/L NaCl solution at 60 psig (0.41 MPa) applied pressure
- 30% recovery
- 77 °F (25 °C)
- pH 6.5–7.0

2. Minimum salt rejection is 93.0%.

3. Dry type elements are vacuum leak tested using the CSM integrity test.

4. Permeate flow rate for each element may vary but will be no more than 15%.

5. Dry elements are packaged in a polyethylene bag.

Membrane type:	Thin-Film Composite
Membrane material:	Polyamide (PA)
Element configuration:	Spiral-Wound, Tape Wrapping

Dimensions

Model Name	A	B	C	D	E
RE3512-TK	0.67 (17)	0.31 (8)	11.73 (298)	0.63 (16)	3.35 (85)

*All measurements are in inches (millimeters).





RESIDENTIAL

Tankless RO elements for residential use

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Operating Pressure	150 psi (1.03 MPa)
· Max. Feed Flow Rate	5 gpm (1.14 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

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GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- When running the system for the first time, the permeate should be discarded continuously at least 1 hour.
- Keep elements moistly at all times after initial wetting.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing from biological growth.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty. For additional information on use of approved chemicals please contact your nearest CSM representative.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

REF.	MODEL NAME	PRICE EURO
MCRE3512-TK	RE3512-TK	121,39

1,8" - 2" Residential CSM Membranes



RESIDENTIAL

NF elements for residential use

CSM[®]

SPECIFICATIONS:

General Features

Model Name	Permeate Flow Rate GPD (L/day)	Salt Rejection %
NE1812	80 (379)	40.0–60.0%
NE2010	90 (341)	40.0–60.0%

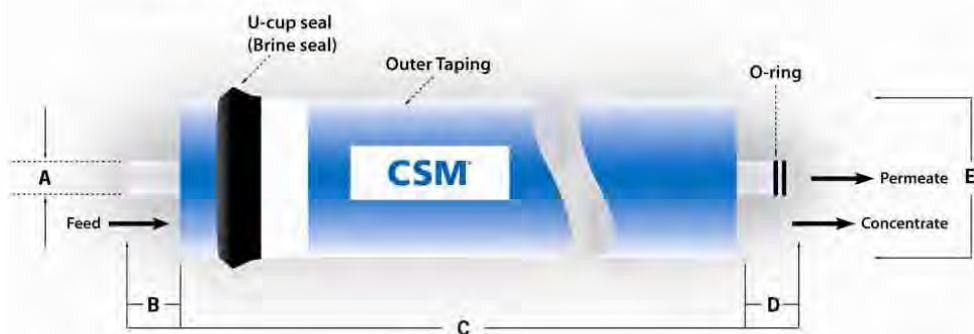
- The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:
 - 250 mg/L NaCl solution at 60 psig (4.14 MPa) applied pressure
 - 15% recovery
 - 77 °F (25 °C)
 - pH 6.5–7.0
- Dry type elements are vacuum leak tested using the San Diego Protocol.
- Permeate flow rate for each element may vary but will be no more than 15%.
- All elements are packaged in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution.

Membrane type: Thin-Film Composite
Membrane material: Polyamide (PA)
Element configuration: Spiral-Wound, Tape Wrapping

Dimensions

Model Name	A	B	C	D	E
NE1812	0.67	0.87	11.73	0.87	1.77
NE2010	0.67	0.63	10.08	0.87	1.91

*All measurement are in inches



1,8" - 2" Residential CSM Membranes



RESIDENTIAL

NF elements for residential use

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Operating Pressure	125 psi (0.86 MPa)
· Max. Feed Flow Rate	2 gpm (0.45 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0
· Max. Chlorine Concentration	< 0.1 mg/L

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GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

REF.	MODEL NAME	PRICE EURO
MCNE1812	NE1812	40,82
	NE2010	

1,8" - 2" Residential CSM Membranes



RESIDENTIAL

UF elements for residential use

CSM[®]

SPECIFICATIONS:

General Features

Model Name	Permeate Flow Rate GPD (L/day)	Molecular Weight Cut Off
UE1810	200 (757)	100K
UE1812	250 (946)	100K
UE2010	450 (1,703)	100K

1. The stated product performance is based on data taken after 30 minutes of operation at the following test conditions:

- Pure water (2 MΩ) at 20 psig applied pressure
- 100% recovery
- 77 °F (25 °C)

2. Dry type elements are vacuum leak tested using the San Diego Protocol.

3. Permeate flow rate for each element may vary but will be no more than 15%.

4. Dry elements are packaged in a polyethylene bag

- α Wet elements are packaged in a polyethylene bag containing SB(4g/L) + HCl(0.51g/L) solution.

Membrane type: Thin-Film Composite

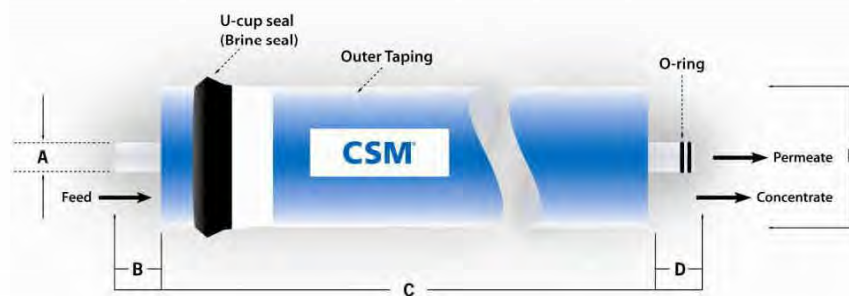
Membrane material: Polysulfone (PSF)

Element configuration: Spiral-Wound, Tape Wrapping

Dimensions

Model Name	A	B	C	D	E
UE1810	0.67	0.55	10.08	0.98	1.77
UE1812	0.67	0.55	11.02	0.79	1.77
UE2010	0.67	0.55	10.08	0.98	1.91

*All measurement are in inches



These model names are tested and certified under NSF/ANSI standard 58, material requirement only (excluding UE1812)

1,8" - 2" Residential CSM Membranes



RESIDENTIAL

UF elements for residential use

CSM[®]

APPLICATION DATA:

Operating Limits

· Max. Operating Pressure	125 psi (0.86 MPa)
· Max. Feed Flow Rate	2 gpm (0.45 m ³ /hr)
· Max. Operating Temperature	113 °F (45 °C)
· Operating pH Range	2.0–11.0
· Max. Turbidity	1.0 NTU
· Max. SDI (15 min)	5.0

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GENERAL HANDLING PROCEDURES

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight sealed to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- Keep elements moist at all times after initial wetting.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.

REF.	MODEL NAME	PRICE EURO
	UE1810	
MCUE1812 (*)	UE1812	N.A.
	UE2010	

(*) available till it will be out-of-stock.

Vessel for Residential Elements



1,8" - 2" membranes

- material PP white;
- connections 1/8" NPT F;
- max pressure 125 psi (8,6 bar);
- double o-ring;
- permeate tube seat diameter = 0,67";
- nominal dimension 1812 - 2012.



REF.	PRICE EURO
DE010	5,60

Membranes coupling:

- CSM 1,8" - 2" residential membranes, see 10-01-01-EN, 10-01-02-EN, 10-01-03-EN, 10-01-04-EN, 10-01-07-EN and 10-01-08-EN data sheets.

Single mounting clips for vessel residential 1,8" - 2" membranes

- material PP;
- white colour.

REF.	PRICE EURO
DE034	0,33



2,8" - 3" membranes

- material PP white;
- connections:
 - feed, permeate and concentrate 3/8" NPT F (please, use our fittings ref. AV153 or elbows ref. AV159);
- max pressure 125 psi (8,6 bar);
- permeate tube seat diameter = 0,67";
- nominal dimension 2812 - 3012.



REF.	PRICE EURO
DE007	22,94

Membranes coupling:

- CSM 2,8" residential membranes, see 10-01-02-EN and 10-01-05-EN data sheets.

Single mounting clips for vessel residential 2,8" - 3" membranes

- material PP;
- white colour.

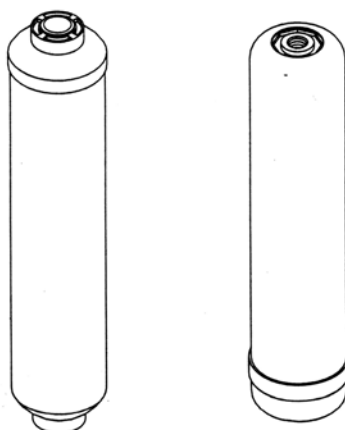
REF.	PRICE EURO
DE006	1,38



In-Line Cartridges



- IN LINE cartridges ¼" NPT F connections;
- Max pressure = 100 psi (7 bar);
- Max temperature = 35°C;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption.



REF.	DIAMETER (inch)	LENGTH (inch)	VERSION	FLOW (gpm)	PRICE EURO
DE028	2"	10"	Coconut Shell Activated Carbon	0,75	4,90
DE029	2"	10"	Sediment	0,75	6,72
DE030	2 ½"	11"	Coconut Shell Activated Carbon	1,00	7,79
DE031	2 ½"	11"	Sediment	1,00	9,64

R.O. compact assembly and accessories

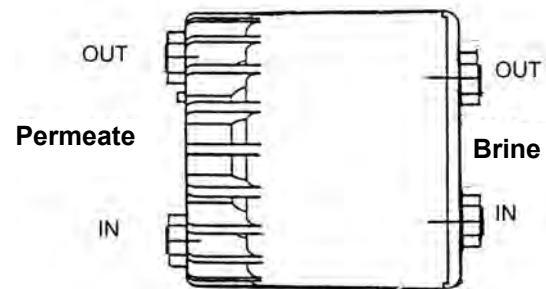
REF.	DESCRIPTION	PRICE EURO
DE100	Compact assembly empty	156,70
DE101	Special membrane 50 GPD	86,96
DE102A	Sediment / Carbon Block Prefilter cartridge	21,50
DE103	GAC Postfilter cartridge	17,82

Permeate Pump for Residential R.O. Systems

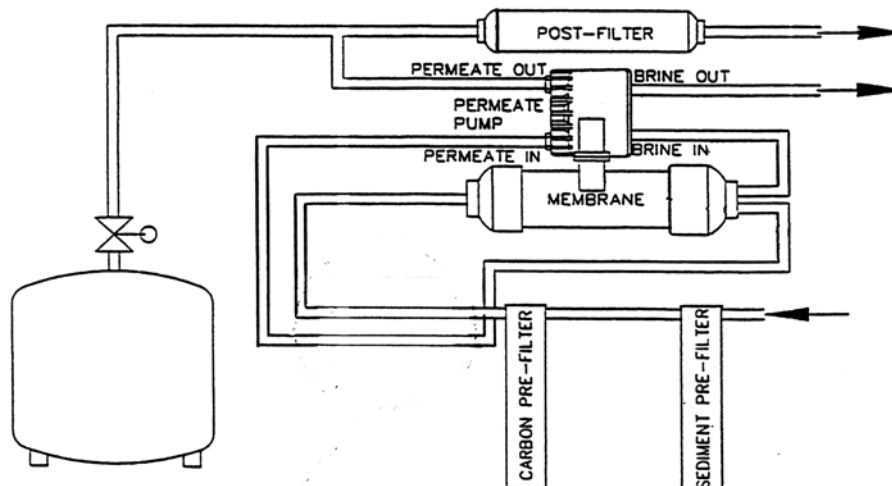


- using the energy of the brine water of the R.O. system to pump the permeate into the pressure tank, increases the net operating pressure on the membrane and eliminate the negative effect of the pressure on the storage tank;
- hydraulic pump, does not require electricity;
- for residential R.O. systems with pressurized storage tank and membrane from 35 to 100 GPD;
- the permeate pump can increase up to 5 time the system recovery, reducing the water consumption and the refill time of the storage tank;
- no shut-off valve is needed;
- materials polypropylene/ EPDM;
- max operating pressure 6,8 bar;
- connections for 1/4" tubing;
- max drain flow rate 0,8 l/min.

REF.	PRICE EURO
DE120	105,98



Typical system layout



ATTENTION

Install the pump horizontal with both outlet ports in the highest position so that any air purges out automatically.

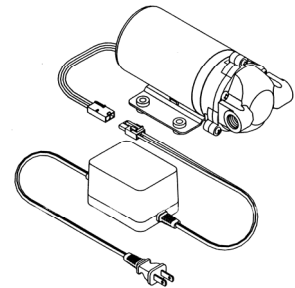
The concentrate flow restrictor has to be installed before the permeate pump inlet.

ACCESSORIE		
REF.	DESCRIPTION	PRICE EURO
DE121	SINGLE MOUNTING CLIP	4,07

Booster Pump for Residential R.O.



- booster pump and relevant accessories for residential R.O. Systems.
- membrane booster pump with transformer;
- transformer power supply 220 V – 50 Hz;
- IN/OUT connections 3/8" F.

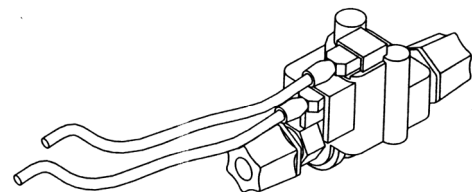


REF.	MODEL	POWER SUPPLY	FLOW (liters/min)		PRICE EURO
			60 psi	100 psi	
DE130	E36	24 VAC	0,8	0,6	N.A.

Accessories:

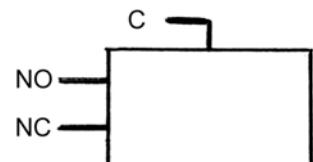
High/low pressure switch

- pressure 30 – 50 psi;
- connections 1/4" tube.

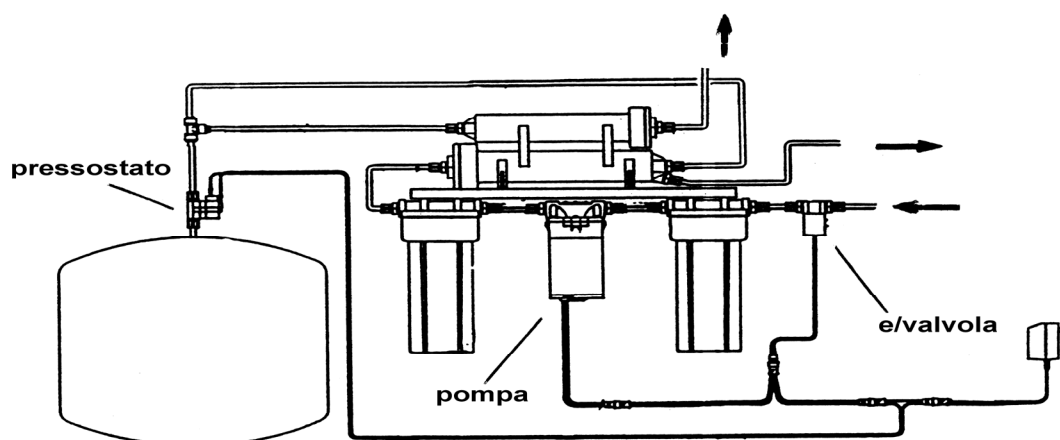


REF.	PRICE EURO
DE140	7,45

- to use as high pressure switch contacts C and NC;
- to use as low pressure switch contacts C and NO.



Typical system layout



MWG High Pressure Switch



- Pressure switch contact NO;
- Connection 1/4" G;
- Body material in Stainless Steel;
- Diaphragm in NBR;
- Max Voltage = 42 V;
- Max Current = 4 A;
- Max operating pressure = 150 bar;
- Operating temperature range = - 40 ÷ + 100°C;
- Class protection IP54;
- Conform with CE safety Directives;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption.



REF.	DESCRIPTION	TOLERANCE	PRICE EURO
DH571	MWG HIGH PRESSURE SWITCH 1-10 BAR	± 0,5 bar	34,40
DH573	MWG HIGH PRESSURE SWITCH 10-20 BAR	± 1 bar	34,40
DH575	MWG HIGH PRESSURE SWITCH 20-50 BAR	± 2 bar	34,40

MWG Booster Pumps for Residential R.O.



- MWG booster pumps for residential R.O. Systems;
- Membrane booster pumps without transformer (to order separately);
- IN/OUT connections 3/8" F;
- Conform with CE safety Directives;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption.

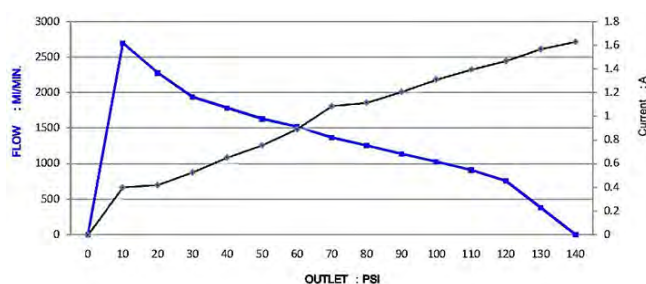


REF.	MODEL	POWER SUPPLY	TRANSFORMER REF.	INLET PRESSURE (psi)	WORKING PRESSURE RANGE (psi)	FLOW @ 70 psi (l/min)	RATED CURRENT (A)	CURRENT @ 70 psi (A)	PRICE EURO
DH501	M100G	24 VDC	DH531	30	60 ÷ 80	≥ 1,1	1,8	≤ 1,2	54,29
DH503	L200G	24 VDC	DH533	30	60 ÷ 80	≥ 1,6	2,2	≤ 1,6	62,77
DH505	L400G	24 VDC	DH535	30	70 ÷ 90	≥ 2,6	3,6	≤ 2,5	74,63

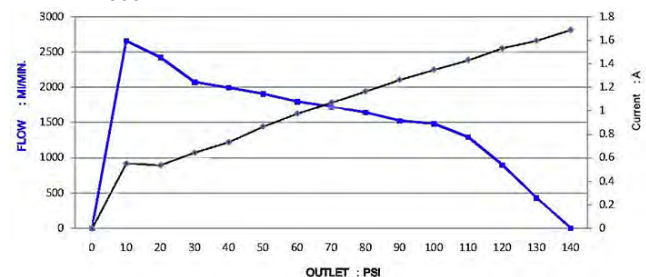
TRANSFORMERS

REF.	MODEL	PRICE EURO
DH531	24VDC 2,0A	19,22
DH533	24VDC 2,5A	22,46
DH535	24VDC 4,0A	37,93

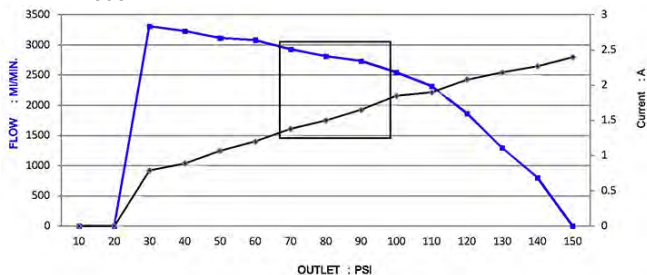
DH501



DH503



DH505



Two-Way Solenoid Valves for R.O. Systems



- two-way solenoid valve NC direct acting;
- body material plastic;
- connections 1/4" NPT;
- power supply 24 VAC;
- orifice diameter 2,5 mm.



REF.	PRICE EURO
DE142	N.A.

- two-way solenoid valve NC direct acting;
- body material brass.



Ref. DE144



Ref. DE147

REF.	CONNECTIONS (inch)	POWER SUPPLY	ORIFICE DIAMETER (mm)	PRICE EURO
DE144 (*)	1/4"	24 VDC	3,0	40,09
DE147	3/8"	220 VAC	4,5	N.A.

(*) available till it will be out-of-stock

MWG Two-Way Solenoid Valves for R.O. Systems



- Two-way solenoid valve NC direct acting;
- Body material plastic;
- Seals in EPDM;
- Spring in SS304;
- Range water temperature = 4°C ÷ 120°C;
- Range ambient temperature = -10°C ÷ +40°C;
- Range pressure = 0 ÷ 8 bar;
- Class protection IP65;
- Connections ¼" NPT;
- Orifice diameter 2,5 mm;
- Conform with CE safety Directives;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption.



REF.	POWER SUPPLY	PRICE EURO
DH601	24 V DC	7,60
DH603	24 V AC	7,60

MWG Two -Way Solenoid Valves for R.O. Systems



- Two-way solenoid valve NC direct acting;
- Body material brass;
- Seals in EPDM;
- Range water temperature = 4°C ÷ 120°C;
- Class protection IP65;
- G thread connections;
- Conform with CE safety Directives;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption.



REF.	CONNECTIONS (inch)	POWER SUPPLY	ORIFICE DIAMETER (mm)	MAX OPERATING PRESSURE (bar)	PRICE EURO
DH611	1/4"	24 V DC	3	6	26,00
DH615	3/8"	220 V AC	5	5	34,00

- Two-way solenoid valve NC indirect acting;
- Body material brass;
- Seals in EPDM;
- Range water temperature = 4°C ÷ 120°C;
- Class protection IP65;
- G thread connections;
- Conform with CE safety Directives;
- D.M. n.174 dated 06/04/2004 compliant about materials suitable for contact with water for human consumption.



REF.	CONNECTIONS (inch)	POWER SUPPLY	ORIFICE DIAMETER (mm)	MAX OPERATING PRESSURE (bar)	PRICE EURO
DH621	3/8"	220 V AC	10	16	52,00
DH623	1/2"	220 V AC	15	16	52,00
DH625	3/4"	220 V AC	20	16	60,00
DH627	1"	220 V AC	25	16	80,00
DH629	1 1/4"	220 V AC	35	16	162,00
DH631	1 1/2"	220 V AC	35	16	162,00
DH633	2"	220 V AC	50	16	228,00

Valves for Residential R.O. and Filtration System



Saddle Valve

- saddle valve self piercing for residential R.O and filtration systems;
- suitable for copper piping;
- connection for 1/4" tubing;
- material brass with aluminium clamp.



REF.	PRICE EURO
DE041	4,78

Needle Valves

- needle valve for residential R.O and filtration systems;
- for tube 1/2" M/F or 3/8" M/F;
- connection for 1/4" or 3/8" or 5/16" flexible tubing;
- material brass.



REF.	TUBE (inch)	FLEXIBLE TUBING (inch)	PRICE EURO
DE039	1/2" M/F	1/4"	7,19
DE050	1/2" M/F	3/8"	8,93
DE050A	1/2" M/F	5/16"	9,29
DE039A	3/8" M/F	1/4"	7,67

Drain and Diverter Valves for R.O. Systems



- suitable for residential R.O and filtration systems.

Drain Clamp

- material ABS black.

REF.	CONNECTION (inch)	PRICE EURO
DE040	¼" tubo	1,65
DE049	¼" F NPT	1,94



Diverter Valve with Swivel Collar

- connection for ¼" tubing;
- material chrome plated brass.

REF.	PRICE EURO
DE042	8,41



ADAPTER 15/16" – 27 X 55/64" – 27

- length 8 mm;
- material chrome plated brass.

REF.	PRICE EURO
DE043	1,40



Jaco Style Fittings

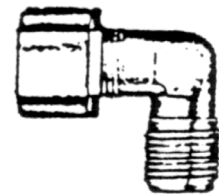


- Range of polypropylene fittings, white colour, for residential R.O. and filtration systems.

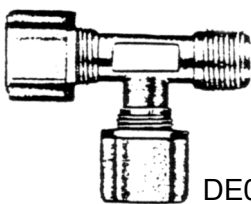
STRAIGHT			
REF.	THREADED CONNECTION (inch)	FOR TUBE (inch)	PRICE EURO
DE063	1/8"	1/4"	0,82
DE064	1/4"	1/4"	0,88
DE068	1/4" F	1/4"	1,68
DE069	3/8"	1/4"	1,46



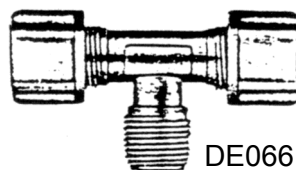
ELBOWS			
REF.	THREADED CONNECTION (inch)	FOR TUBE (inch)	PRICE EURO
DE060	1/8"	1/4"	0,88
DE062	1/8" F	1/4"	1,10
DE061	1/4"	1/4"	0,95
DE070	3/8"	1/4"	1,87



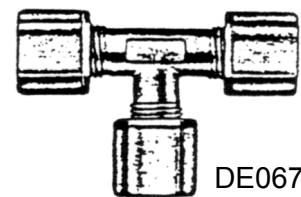
TEES				
REF.	1/4" THREAD POSITION	THREADED CONNECTION (inch)	FOR TUBE (inch)	PRICE EURO
DE065	LATERAL	1/4"	1/4"	1,20
DE066	CENTRAL	1/4"	1/4"	1,20
DE067	-	-	1/4"	1,20



DE065



DE066



DE067

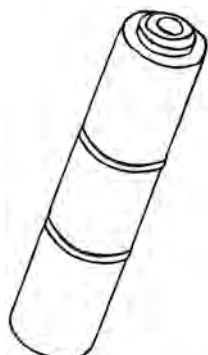
BULKHEAD UNION		
REF.	FOR TUBE (inch)	PRICE EURO
DE085 (*)	1/4"	3,55



(*) available till it will be out-of-stock.



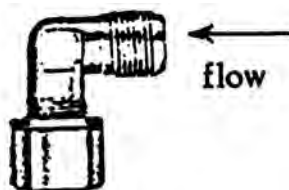
In-Line Flow Restrictors



- Quick connections 1/4" tube.

REF.	Flow @ 60 psi (gpd)	Flow @ 60 psi (ml/min)	PRICE EURO
DE105	60	150	5,70
DE106	115	300	5,70
DE107	150	400	5,70
DE108	208	550	5,70
DE109	227	600	5,70
DE110	300	800	5,70

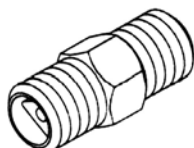
JACO Style Check Valve



- Jaco style elbow 1/8" x 1/4" tube complete with AISI check-valve.

REF.	PRICE EURO
DE079	4,61

S.S. Check Valve



- Stainless steel check valve 1/8" x 1/8".

REF.	PRICE EURO
DE048	3,55



PP Storage Tanks

- pressurized storage tank for treated water;
- white colour;
- connection 1/4" NPT;
- min. operating pressure 1 bar.



REF.	CAPACITY (liters)	MATERIAL	DIAMETER (mm)	HEIGHT (mm)	MAX PRESSURE (bar)	PRICE EURO
DE032	12	PP / acciaio	240	370	7,0	50,85
DE051	15	PP	260	400	3,5	60,19

Steel Storage Tanks

- pressurized storage tank for R.O water;
- material painted steel, white colour;
- connection 1" BSPP female;
- with threaded extension M 1" x 1/4", with elbowed ball valve with connection 3/8" tubing;
- min. operating pressure 1 bar;
- max operating pressure 7 bar.



REF.	CAPACITY (liters)	DIAMETER (mm)	HEIGHT (mm)	PRICE EURO
DE096	41	390	575	147,18
DE097	75	390	770	223,26



Elbowed Ball Valve

- material white plastic;
- connections 1/4" F NPT x 1/4" tubing.

REF.	PRICE EURO
DE052	3,98



Automatic Shut-Off Valve

- material white ABS;
- connections 1/4" tubing;
- max pressure 125 psi (8,5 bar).

REF.	PRICE EURO
DE038	3,98



Mechanical Flow Meter

- adjustable setting;
- automatic shut-off based on volume;
- capacity 7000 litres;
- connections 1/4" NPT;
- operating pressure 1 ÷ 8,5 bar;
- material ABS, black colour.

REF.	PRICE EURO
DE080	42,53





Single Mounting Clips

- PP material;
- white colour.

REF.	DIAMETER (inch)	DIAMETER (mm)	PRICE EURO
DE033	2"	50	0,33
DE034	2 1/2"	60	0,33
DE006	3"	90	1,38



Double Mounting Clips

- PP material;
- white colour.

REF.	DIAMETER (inch)	DIAMETER (mm)	PRICE EURO
DE035	2" x 2 1/2"	50 x 60	0,45
DE036	2 1/2" x 2 1/2"	60 x 60	0,70



Flexible 1/4" Tubing

- hanks of 50 m (100 m only for DE081).

REF.	DIAMETER (inch)	DIAMETER (mm)	PRICE EURO
DE082	PVC	White	21,67
DE083	PE	Blue	16,19
DE084	PE	Black	16,19
DE086	PE	Red	16,19
DE081	PE	Clear	45,91



Needle Valve In-Line Style

- brass material.

(*) available till it will be out-of-stock.

REF.	TUBE CONNECTIONS	PRICE EURO
DE098 (*)	1/4"	3,86
DE098A (*)	3/8"	5,93



Insert for Flexible 1/4" Tubing

- CELCON material.

REF.	PRICE EURO
DE059	0,14

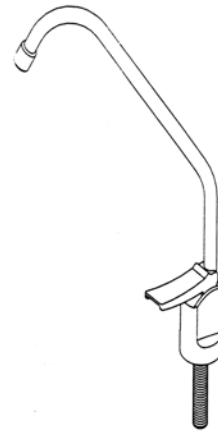




Long Reach Faucet

- material chrome plated;
- connection for ¼" tubing;
- complete with installation kit;
- threaded tube length 50 mm.

REF.	PRICE EURO
DE037	18,59



Quarter-Turn faucet

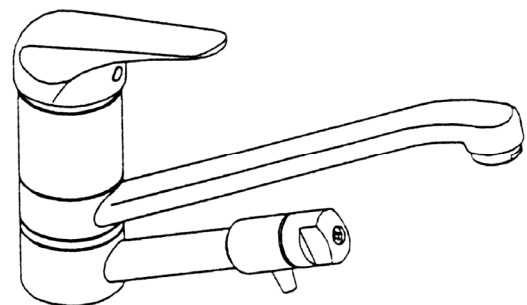
- metal and plastic chrome material;
- connection for ¼" tubing;
- complete with installation kit;
- threaded tube length 71 mm;
- wetted materials suitable for drinking water use;
- conform to the requirements of NSF/ANSI 61.

REF.	PRICE EURO
DE116	27,69



Single Handle Faucet with Drinking Nozzle

- monobloc, material chrome plated;
- adjustable necks;
- hot and cold water connections ½" with needle valves;
- treated water connection ¼" tube;
- complete with installation kit.



REF.	PRICE EURO
DE087	220,48



Pressure Gauge

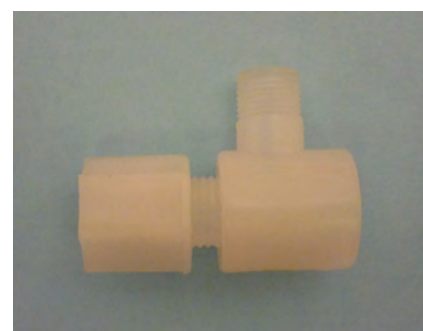
- pressure set 0 ÷ 10 bar;
- connection 1/8" M;
- diameter 25 mm.



REF.	PRICE EURO
DE077	8,53

3 Ways Adapter for Pressure Gauge

- plastic material;
- connections 1/8" F x 1/8" M x 1/4" tube.



REF.	PRICE EURO
DE078	2,79

Check Valve in Line

- plastic material;
- 1/4" tube quick connections.



REF.	PRICE EURO
DE089	10,71

MD, DD and TD two Pieces Filter Housings IN/OUT connections 1/4" for R.O. Systems



REF.
FBMD1002T



REF.
FBMD1002W



REF.
FBDD1002W



REF.
FBTD1002W

- Made in European Union (Italy);
- Suitable for residential R.O. and filtration systems;
- Two pieces filter housings for standard filtering cartridges length 10"
- Total height 325 mm;
- Fixable head (single, double or triplex) in material PP reinforced white colour;
- Sump in PET clear or white, O-ring in EPDM;
- IN/OUT connections 1/4" BSPP F;
- With air valve;
- Max operating pressure 8 bar, temperature 4 ÷ 45°C;
- D.M. n.174/2004 compliant about materials suitable for contact with water for human consumption;
- D.M. n.25/2012 compliant about technical provisions for equipment intended for water treatment for human consumption;
- In compliance with the sanitary certification ACS (France).
- Designed for the following single, double or triple brackets (also ideal for 2 + 1 application), with fixing screws.

REF.	MODEL	CARTRIDGE LENGTH (inch)	SUMP MATERIAL AND COLOUR	HEAD DIMENSION (mm)	TOTAL LENGTH (mm)
FBMD1002T	MD1002T	Single	Clear	122	12,35
FBMD1002W	MD1002W	Single	White	122	12,35
FBDD1002W	DD1002W	Duplex	White	228	26,34
FBTD1002W	TD1002W	Triplex	White	336	36,96

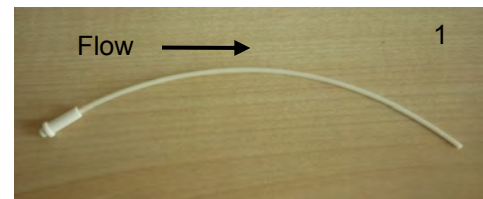
Accessories

REF.	DESCRIPTION	PRICE EURO
FBMDR11	PLASTIC WRENCH FOR MD FILTER HOUSINGS	1,26
FBMDR22	WHITE BRACKET WITH SCREWS FOR MD AND MT FILTER HOUSINGS	1,61
FBMDR24	WHITE BRACKET WITH SCREWS FOR DD AND DT TWO FILTER HOUSINGS	19,23
FBMDR26	WHITE BRACKET WITH SCREWS FOR TD AND TT THREE FILTER HOUSINGS	21,30

Flow Restrictor Linear Type



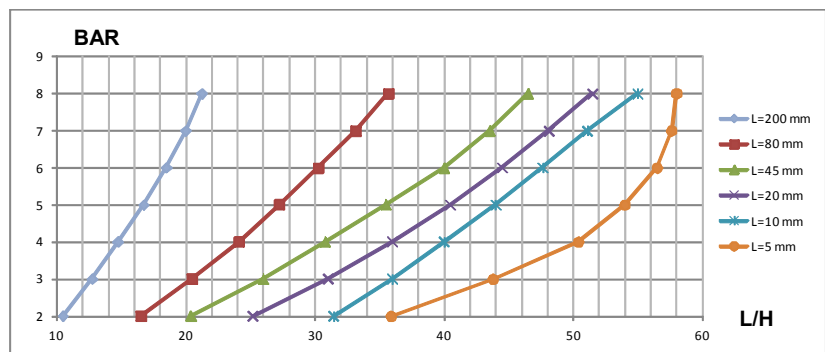
- capillary adjusting flow system with insertion in tube 1/4" diameter ($\varnothing e=6,35$ mm);
- 200 mm standard length; you can change the length as required (please see the diagram below);
- PP material insert: PE material capillary tube;
- range of operating pressure 2 ÷ 8 bar.



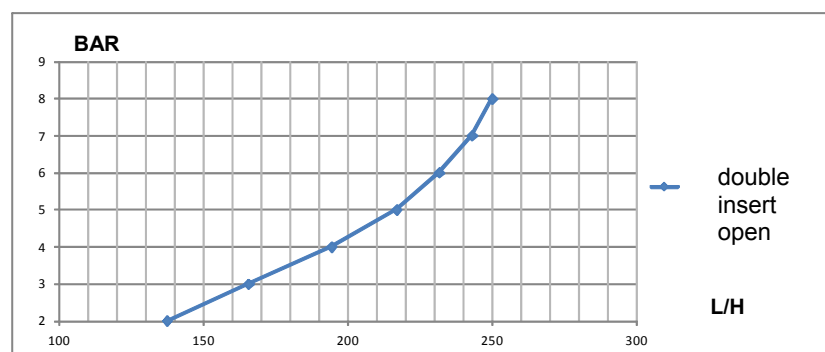
ITEM	DESCRIPTION	REF.	PRICE EURO
1	FLOW RESTRICTOR LINEAR TYPE; L = 200 MM	DE122	1,12
2	FLOW RESTRICTOR FRT-14P INSERT	DE124	0,63
3	CAPILLARY TUBE (25 M ROLL)	DE125	54,12
4	FLOW RESTRICTOR JACO DOUBLE INSERT OPEN	DE123	4,53

WARNING: it is essential that the cutting of the capillary be net and tube perfectly circular (you can use an awl in order to restore the circular form), otherwise the flow rate value can be greatly altered. Observe the flow direction as shown in Picture n.1.

Flow restrictor linear type



Flow restrictor Jaco 1/4" double insert open

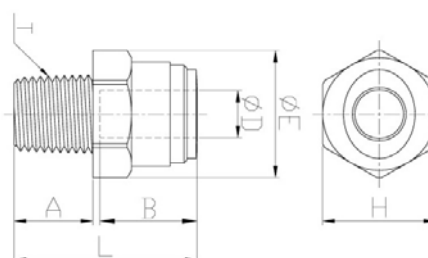




- Suitable for residential R.O. and filtration systems;
- Designed for water, food and air contact but can be used with selected gases, vacuum & other liquids;
- DM 174 (Italy) dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- In compliance with the sanitary certification ACS (France);
- In acetal resin grey color, non-toxic and NSF approved material;
- Pressure max 16 bar @ 25°C.

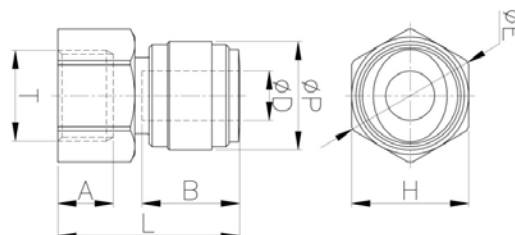
MALE CONNECTOR NPTF

REF.	T NPT THREADED CONNECTION (inch)	Ø D CONNECTION (inch)	A (mm)	B (mm)	Ø E (mm)	H (mm)	L (mm)	PRICE EURO
DH005	1/8"	1/4"	9,1	16,9	17,8	15,8	27,0	1,84
DH006	1/4"	1/4"	13,2	16,9	17,8	15,8	27,0	1,84
DH007	3/8"	1/4"	13,8	16,9	21,4	19,0	26,1	2,76
DH012	1/8"	3/8"	9,1	20,2	23,0	20,6	30,4	2,72
DH013	1/4"	3/8"	13,2	20,2	23,0	20,6	34,3	2,76
DH014	3/8"	3/8"	13,8	20,2	23,0	20,6	29,9	2,88



FEMALE ADAPTER NPTF

REF.	T NPT THREADED CONNECTION (inch)	Ø D CONNECTION (inch)	Ø P (mm)	A (mm)	B (mm)	Ø E (mm)	H (mm)	L (mm)	PRICE EURO
DH021	1/8"	1/4"	15,5	11,5	16,9	19,0	17	30,9	3,52
DH022	1/4"	1/4"	15,5	11,5	16,9	21,5	19	30,9	2,84
DH023	1/4"	3/8"	20,0	11,5	20,2	21,5	19	34,2	3,00

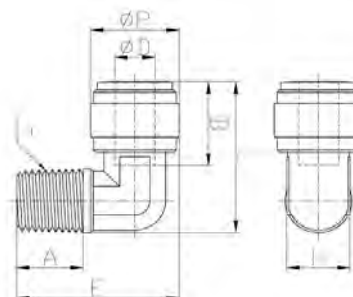




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- In compliance with the sanitary certification ACS (France);
- In acetal resin grey color, non-toxic and NSF approved material;
- Pressure max 16 bar @ 25°C.

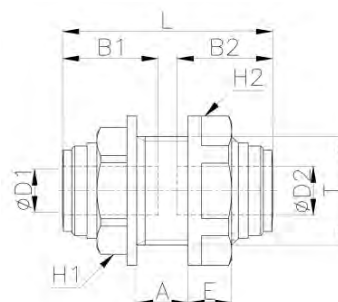
MALE ELBOW NPT

REF.	T NPT THREADED CONNECTION (inch)	Ø D CONNECTION (inch)	Ø P (mm)	A (mm)	B (mm)	E (mm)	H (mm)	L (mm)	PRICE EURO
DH033	1/8"	1/4"	15,5	9,1	16,9	26,4	11,0	25,6	2,08
DH034	1/4"	1/4"	15,5	13,2	16,9	31,9	11,0	27,0	2,24
DH035	3/8"	1/4"	15,5	13,8	16,9	32,7	11,0	28,9	3,60
DH038	1/4"	3/8"	20,0	13,2	20,2	35,2	14,3	31,8	3,76
DH039	3/8"	3/8"	20,0	13,8	20,2	35,8	14,3	33,9	4,10



BULKHEAD CONNECTOR

REF.	T	Ø D ₁ CONNECTION (inch)	Ø D ₂ CONNECTION (inch)	B ₁ (mm)	B ₂ (mm)	H ₁ (fixed)	H ₂ (mm)	L (mm)	PRICE EURO
DH052	M17	1/4"	1/4"	16,9	16,9	19	21	35,7	3,68
DH054	M24	3/8"	3/8"	20,2	20,2	24	25,5	42,4	5,48

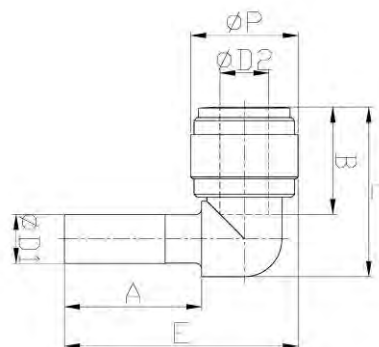




- Suitable for residential R.O. and filtration systems;
- Designed for water, food and air contact but can be used with selected gases, vacuum & other liquids;
- DM 174 (Italy) dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- In compliance with the sanitary certification ACS (France);
- In acetal resin grey color, non-toxic and NSF approved material;
- Pressure max 16 bar @ 25°C.

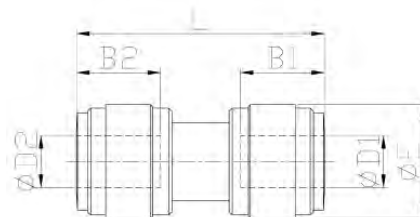
UNION ELBOW TUBE WITH STEM

REF.	Ø D ₁ CONNECTION (inch)	Ø D ₂ CONNECTION (inch)	Ø P (mm)	A (mm)	B (mm)	E (mm)	L (mm)	PRICE EURO
DH063	1/4"	1/4"	15,5	21,0	16,9	34,8	25,1	2,32
DH065	3/8"	3/8"	20,0	24,8	20,2	43,2	31,4	4,12
DH067	3/8"	1/4"	17,6	22,5	17,5	38,3	27,7	4,08



UNION CONNECTOR

REF.	Ø D ₁ CONNECTION (inch)	Ø D ₂ CONNECTION (inch)	B ₁ (mm)	B ₂ (mm)	Ø E (mm)	L (mm)	PRICE EURO
DH073	1/4"	1/4"	16,9	16,9	15,5	36,2	2,32
DH075	3/8"	3/8"	20,2	20,2	20,0	42,9	2,96
DH079	3/8"	1/4"	20,2	16,9	20,0	42,1	3,12

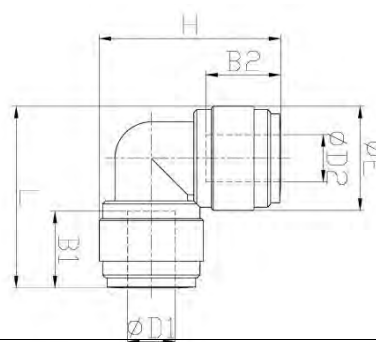




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- In compliance with the sanitary certification ACS (France);
- In acetal resin grey color, non-toxic and NSF approved material;
- Pressure max 16 bar @ 25°C.

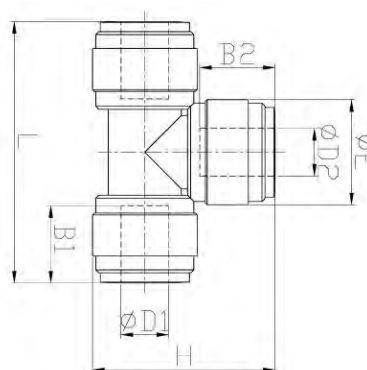
UNION ELBOW

REF.	Ø D ₁ CONNECTION (inch)	Ø D ₂ CONNECTION (inch)	B ₁ (mm)	B ₂ (mm)	Ø E ₁ (mm)	Ø E ₂ (mm)	L (mm)	H (mm)	PRICE EURO
DH083	1/4"	1/4"	16,9	16,9	15,5	15,5	28,8	28,8	2,60
DH085	3/8"	3/8"	20,2	20,2	20,0	20,0	35,9	35,9	3,84



UNION T

REF.	Ø D ₁ CONNECTION (inch)	Ø D ₂ CONNECTION (inch)	Ø D ₃ CONNECTION (inch)	B ₁ (mm)	B ₂ (mm)	B ₃ (mm)	Ø E (mm)	L (mm)	H (mm)	PRICE EURO
DH093	1/4"	1/4"	1/4"	16,9	16,9	16,9	15,5	42,0	28,8	3,24
DH095	3/8"	3/8"	3/8"	20,2	20,2	20,2	20,0	51,8	35,9	3,92

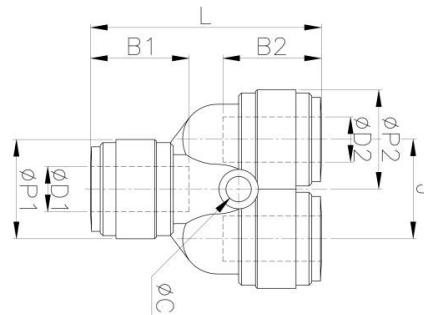




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- In compliance with the sanitary certification ACS (France);
- In acetal resin grey color, non-toxic and NSF approved material;
- Pressure max 16 bar @ 25°C.

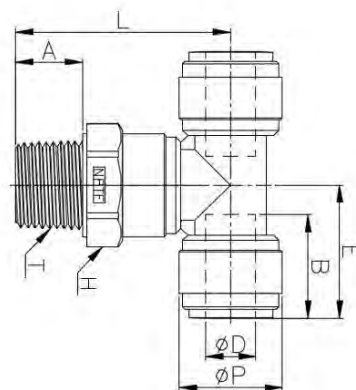
TWO WAY DIVIDER

REF.	Ø D ₁ CONNECTION (inch)	Ø D ₂ CONNECTION (inch)	B ₁ (mm)	B ₂ (mm)	Ø P ₁ (mm)	Ø P ₂ (mm)	L (mm)	J (mm)	C (mm)	PRICE EURO
DH103	1/4"	1/4"	16,9	16,9	15,5	15,5	38,8	15,5	3,3	4,21
DH105	3/8"	3/8"	20,2	20,2	20,0	20,0	46,4	20,0	4,5	4,32



MALE SWIVEL TEE NPTF

REF.	T NPT THREADED CONNECTION (inch)	Ø D CONNECTION (inch)	Ø P (mm)	A (mm)	B (mm)	E (mm)	H (mm)	L (mm)	PRICE EURO
DH112	1/4"	1/4"	15,5	13,2	16,9	21,0	17,46	36,9	3,52
DH114	3/8"	3/8"	20,0	13,0	20,2	25,9	21,4	41,8	3,98

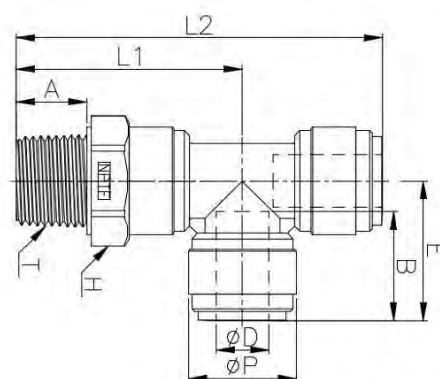




- Suitable for residential R.O. and filtration systems;
- Designed for water, food and air contact but can be used with selected gases, vacuum & other liquids;
- DM 174 (Italy) dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- In compliance with the sanitary certification ACS (France);
- In acetal resin grey color, non-toxic and NSF approved material;
- Pressure max 16 bar @ 25°C.

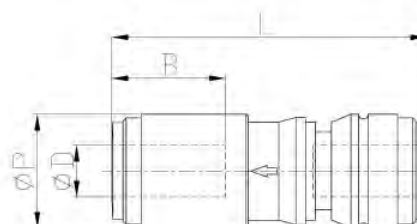
MALE SWIVEL RUN TEE NPTF

REF.	T NPT THREADED CONNECTION (inch)	Ø D CONNECTION (inch)	Ø P (mm)	A (mm)	B (mm)	E (mm)	H (mm)	L ₁ (mm)	L ₂ (mm)	PRICE EURO
DH122	1/4"	1/4"	15,5	13,2	16,9	21,0	17,46	36,9	57,9	3,53
DH124	3/8"	3/8"	20,0	13,0	20,2	25,9	21,4	41,8	67,7	3,98



CHECK VALVES

REF.	Ø D CONNECTION (inch)	Ø P (mm)	B (mm)	L (mm)	PRICE EURO
DH131	1/4"	15,5	16,1	45,5	15,52
DH133	3/8"	20,0	19,5	57,8	17,88

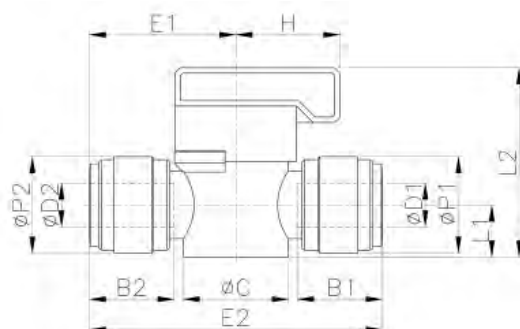




- Suitable for residential R.O. and filtration systems;
- Designed for water, food and air contact but can be used with selected gases, vacuum & other liquids;
- DM 174 (Italy) dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- In compliance with the sanitary certification ACS (France);
- In acetal resin grey color, non-toxic and NSF approved material;
- Pressure max 16 bar @ 25°C.

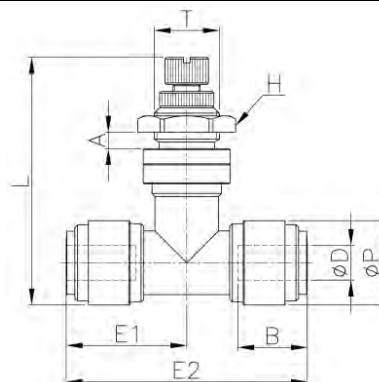
2 WAYS HAND VALVES

REF.	Ø D ₁ CONNECTION (inch)	Ø D ₂ CONNECTION (inch)	B ₁ (mm)	B ₂ (mm)	Ø P ₁ (mm)	Ø P ₂ (mm)	L ₁ (mm)	L ₂ (mm)	E (mm)	Ø C (mm)	PRICE EURO
DH141	1/4"	1/4"	16,1	16,1	15,5	15,5	9,5	34,5	51,7	19,2	9,32
DH143	3/8"	3/8"	20,2	20,2	20,0	20,0	12,5	42,3	63,2	24,2	9,84



BULKHEAD FLOW REGULATORS

REF.	Ø D CONNECTION (inch)	T	Ø P (mm)	A (mm)	B (mm)	E ₁ (mm)	E ₂ (mm)	H (mm)	L min (mm)	L max (mm)	PRICE EURO
DH157	1/4"	M12	15,5	5,0	16,9	22,2	44,4	16	45,5	50,4	16,48
DH158	3/8"	M15	20,0	6,0	19,8	26,1	52,1	19	52,7	58,4	19,72

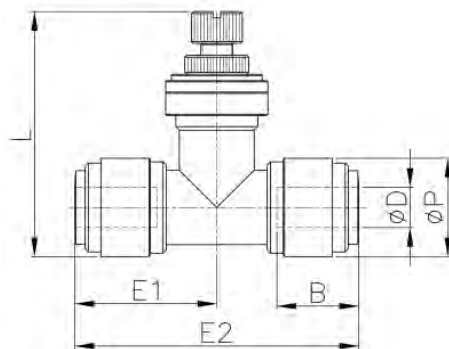




- Suitable for residential R.O. and filtration systems;
- Designed for water, food and air contact but can be used with selected gases, vacuum & other liquids;
- DM 174 (Italy) dated 06/04/2004 compliant about materials suitable for contact with water for human consumption;
- In compliance with the sanitary certification ACS (France);
- In acetal resin grey color, non-toxic and NSF approved material;
- Pressure max 16 bar @ 25°C.

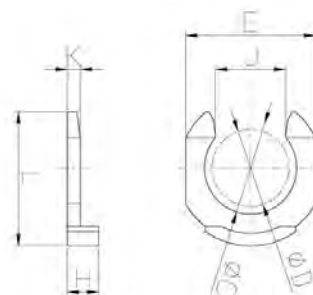
FLOW REGULATORS

REF.	Ø D CONNECTION (inch)	Ø P (mm)	B (mm)	L min (mm)	L max (mm)	E 1 (mm)	E 2 (mm)	PRICE EURO
DH167	1/4"	15,5	16,9	45,5	42,7	22,2	44,4	14,52
DH168	3/8"	20,0	19,8	57,8	49,7	26,1	52,1	15,76



LOCKING CLIPS

REF.	Ø D CONNECTION (inch)	Ø C (mm)	E (mm)	L (mm)	H (mm)	J (mm)	K (mm)	PRICE EURO
DH193	06 - 1/4"	8,0	11,6	11,6	3,1	6,4	1,3	0,17
DH195	10 - 3/8"	11,8	16,0	16,4	3,4	9,2	1,4	0,17



PRF-RO Reverse Osmosis System



- Suitable for residential and commercial application use;
- Compact and reliable system that better suits the flow requirements of small and mid-sized businesses;
- No storage tank needed;
- Works with Line Pressure;
- No Pump or Electricity;
- Very easy installation with quick connections;
- Virtually Maintenance Free (change cartridges fast and easy);
- Consisting of Nr.1 Carbon Pre-Filter, Nr.2 R.O. Membrane Elements and Nr.1 Carbon Post-Filter.



OPERATING CONDITIONS	MINIMUM	MAXIMUM
Inlet Pressure	2,8 bar (40 psi)	5,5 bar (80 psi)
Inlet Temperature (°C)	4	38
Inlet TDS (mg/l)	50	2.000
Inlet Hardness (°F)	0	20
Inlet Chlorine (mg/l)	0	1,0
Inlet Iron (mg/l)	0	0,1
Inlet Manganese (mg/l)	0	0,05

Salt Rejection: Minimum 90%, Medium 93%.

TUBING/FITTING DIMENSIONS	
Inlet Tubing (natural tubing)	1/2"
Concentrate Tubing (black tubing)	3/8"
Permeate Tubing (blue tubing)	3/8"
Drain Tubing (red tubing) for airgap installation	1/2"
Drain connection	3/8" or 1/2"
Carbon Post-Filter	3/8" quick disconnect fittings

Filter/Membrane Performance Specifications:

Filter Type	Length (mm)	Diameter (mm)	Flow Rate (lpm)	Flow Rate (gpm)	Average Life (months)
Carbon Pre-Filter	432	74	14,20	3,75	6 (or 19.000 liters)
RO Element	476	80	(*) 0,95	(*) 0,25	24 ÷ 48
Carbon Post-Filter	254	51	2,80	0,75	6 (or 19.000 liters)

(*) @ 3,44 bar T=25°C 750 mg/l NaCl 25% recovery 1 ppm Chlorine inlet

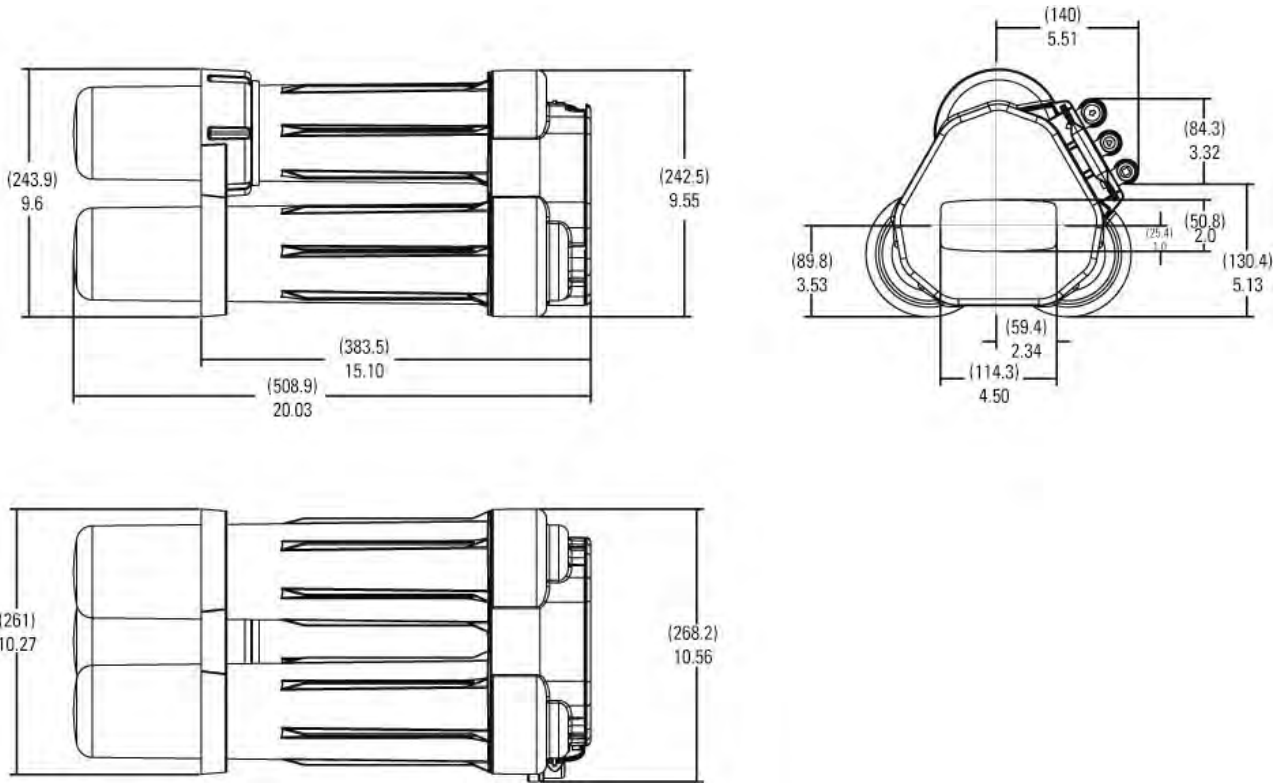
Ref.	P. N.	Description	Price EURO
DE904	4000462	Kit R.O. PRF-RO System with faucet	877,63
DE906 (*)	4000575	Kit R.O. PRF-RO System without faucet	873,45

(*) available till it will be out-of-stock.

PRF-RO Reverse Osmosis System

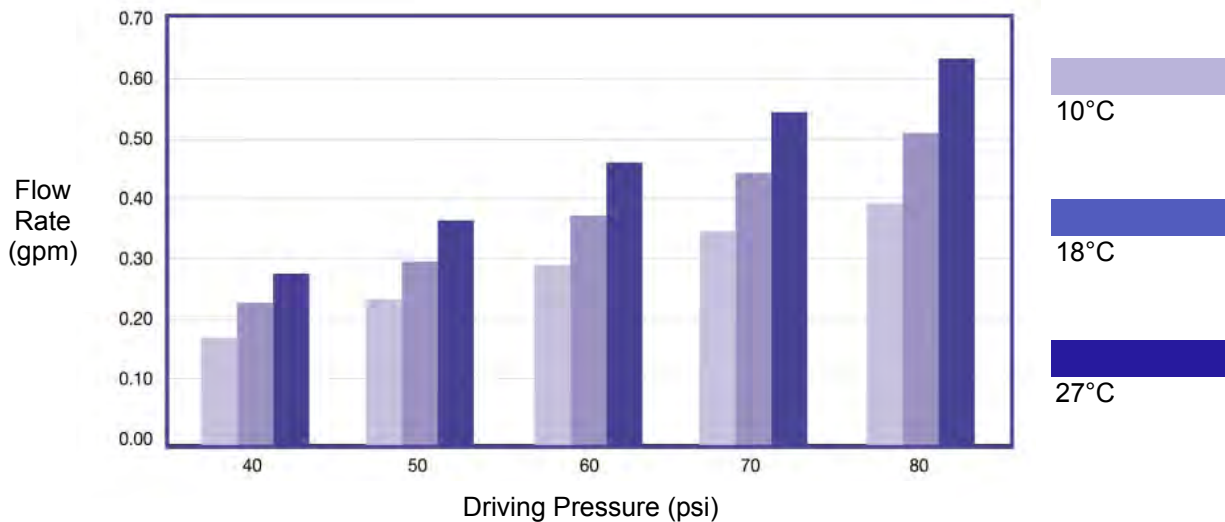


Outline Dimensions in Inches (mm):



Performance – Flow Rate Characteristics (*)

Based on 750 ppm TDS Inlet Water



Flow Adjustment Based on TDS

(*) Estimated flow based on internal test data. Actual performance may vary.

PRF-RO Reverse Osmosis System



Spare parts of PRF-RO Reverse Osmosis System:

Ref.	P. N.	Description	Price EURO
DE920	4000569	PRF-RO Membrane	218,06
DE923	3038333	Carbon pre-filter	44,76
DE924	1266690	Sediment pre-filter 10 micron	26,11
DE926	255526-09	Carbon post-filter	25,23
DE930	1239705	Sump	42,05
DE932	1240326	Sump o-ring	3,48
DE935	4000445	PRF-RO complete manifold	253,63
DE937	3038021	PRF-RO Support Leg	52,57
DE938	1240564	Drain boa kit	27,12
DE941	3038026	Locking bar disconnect	10,50
DE942	3020487	Air-gap faucet kit	72,20
DE945	4000330	PRF-RO kit connection fittings	63,06
DE946	1255736	Tubing install kit	14,22
DE950 (*)	1240620	3/8" black tubing 152 m	N.A.
DE951 (*)	1240621	3/8" blue tubing 152 m	N.A.
DE952 (*)	1240622	1/2" natural tubing 76 m	N.A.
DE953 (*)	1240623	1/2" red tubing 76 m	N.A.
DE954	1264462	Fitting elbow concentrate 3/8" black	12,82
DE955	12400117	Fitting elbow feed 1/2" white	10,50
DE956	12400118	Fitting elbow permeate 3/8" blue	10,50
DE960	3002791	Tds and temperature meter	N.A.
DE961	4000454	PRF-RO retro fit kit	316,76

(*) N.A. = Not Available.



Autotrol valves spare parts price list

EUROTRON[®]
WATER TREATMENT COMPONENTS

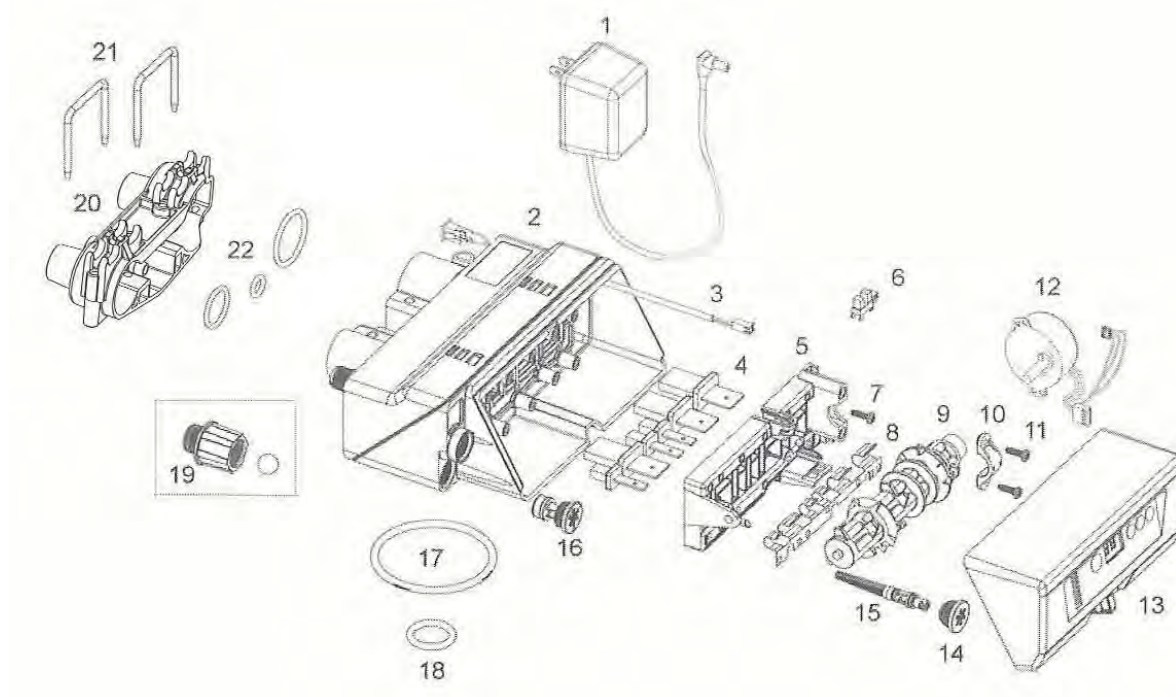
Autotrol[®]
Distribuzione esclusiva per l'Italia



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368/604 VALVE EXPLODED VIEW



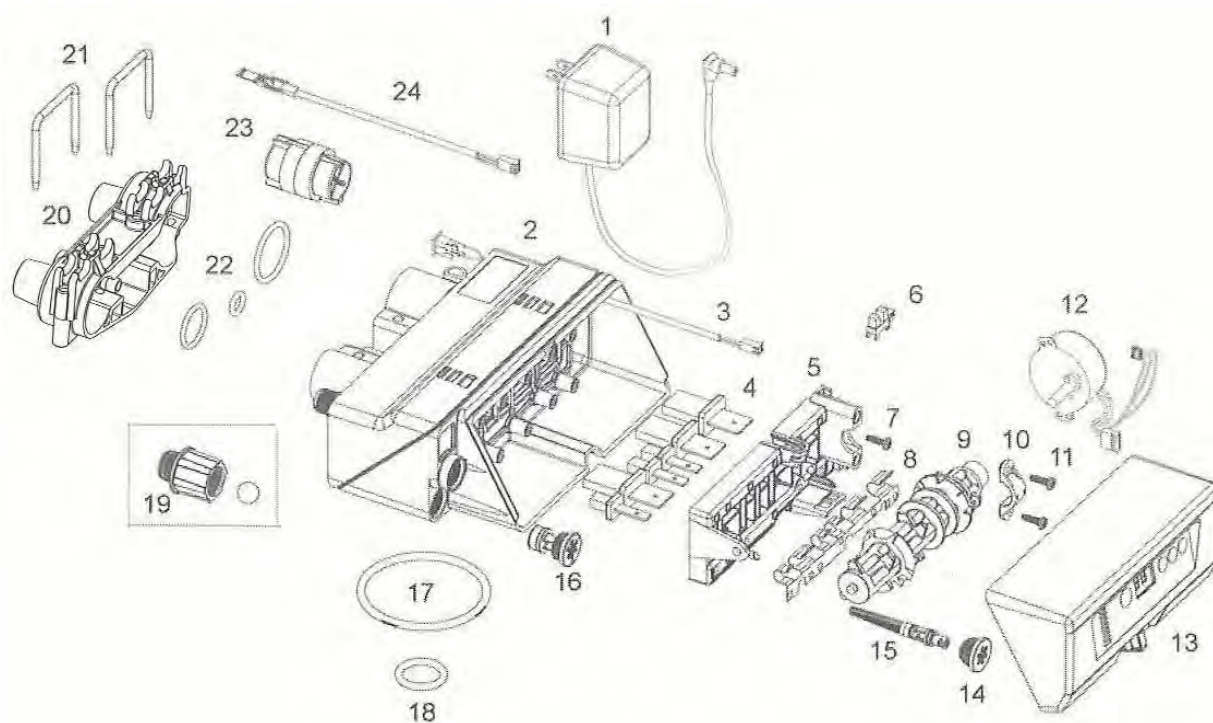
368/604 VALVE PARTS LIST



Number	Ref.	P.N.	Description	Price EURO
1	AW500	1000814	European Transformer 230/12V	35,12
1	AW501	1000813	British Transformer	35,12
1	AW502	1000811	American transformer 120/12V	N.A.
2+4+5+7+8			368 Valve Body Assembly	
3	AW260	3022576	Optic Sensor Power Cable	13,23
4	AW250	3007947	Valve Disc Kit	24,33
5	AW251	3022012	Top Plate	26,53
6	AW129	1235373	Optic Sensor	16,43
7	AW174	3030450	Top Plate Screw No 8 x 9/16"	0,73
8	AW252	3022017	Spring	9,92
9	AW253	3022014	Camshaft, 7 Cycle	19,83
10	CD100	1000589	Pillow Block Cap	3,22
11	AW174	3030450	Top Plate Screw No 8 x 9/16"	0,73
12	AW254	3026537	12 Volt Motor/Cable Assembly	67,82
13	AW280	4001737	604 Control	86,14
14	AW107	1000269	Injector / Backwash 00-open Cap with o-ring	3,55
15	AW266	3025326	"E" Injector, Yellow, 6-inch tank / Screen Assembly	10,88
15	AW267	3025327	"F" Injector, Peach, 7-inch tank / Screen Assembly	10,88
15	AW268	3025328	"G" Injector, Tan, 8-inch tank / Screen Assembly	10,88
15	AW269	3025329	"H" Injector, Lt Purple 9-inch tank / Screen Assembly	10,88
16	AW115	1000221	Brine Refill Control Assembly 0.14 Gpm	16,15
17	AW172	3029969	O-ring tank	5,87
18	AW169	3030918	O-ring 1,05"	1,14
19	AV146	3031526	Kit Drain Line Flow Control 0,9 gpm	9,26
19	AV147	3031527	Kit Drain Line Flow Control 1,2 gpm	9,26
19	AV148	3031528	Kit Drain Line Flow Control 1,6 gpm	9,26
19	AV149	3031529	Kit Drain Line Flow Control 2,0 gpm	9,26
20	AW255	3027832	Manifold ¾" BSPT, Inlet / Outlet	41,80
21	AW256	3027831	Retainer Manifold	19,69
22	AW257	3031825	Kit o-ring Manifold	2,96
*	AV185	3022042	Blending Kit	3,41

* Not shown

368/606 VALVE EXPLODED VIEW



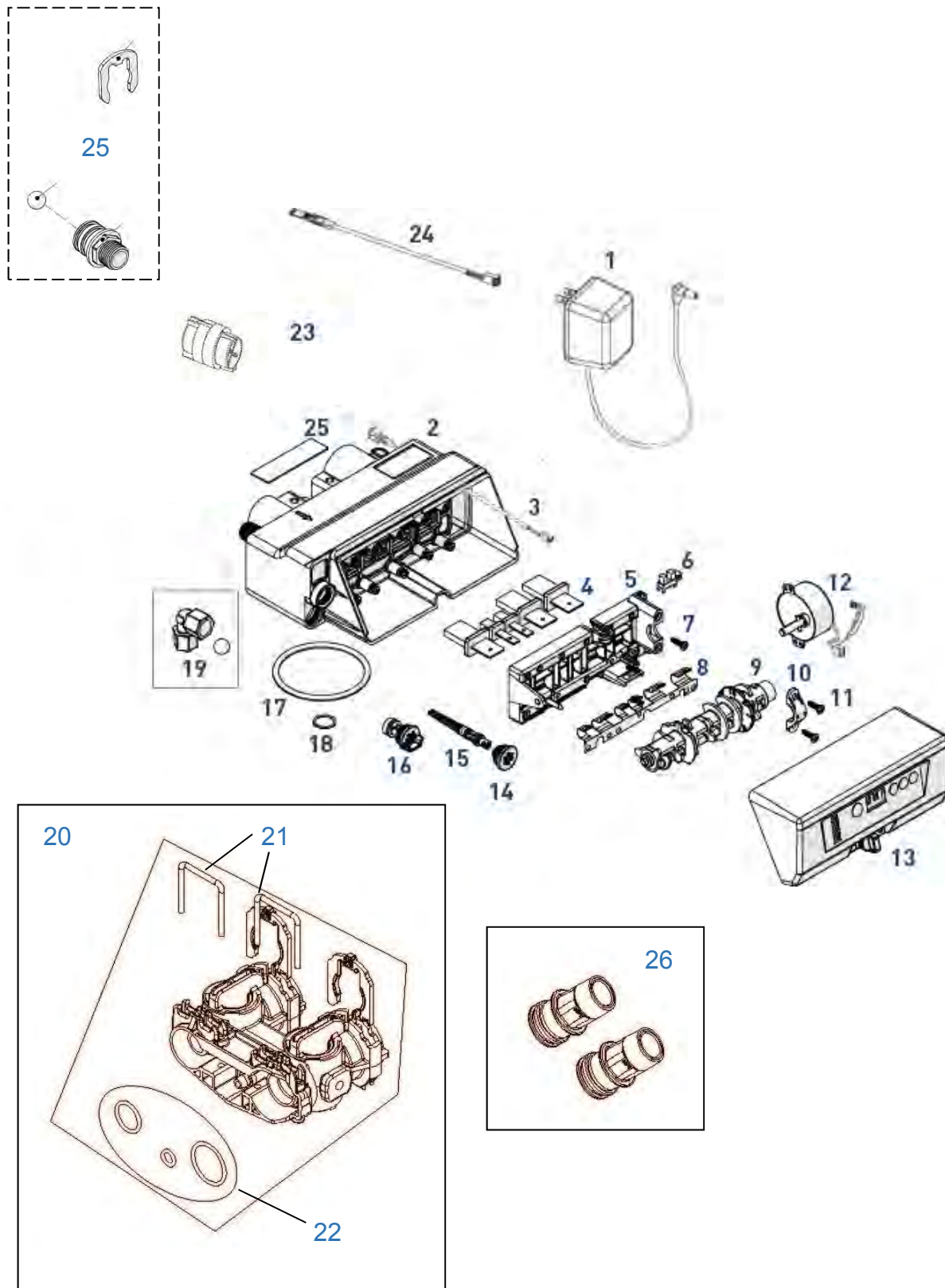
368/606 VALVE PARTS LIST



Number	Ref.	P.N.	Description	Price EURO
1	AW500	1000814	European Transformer 230/12V	35,12
1	AW501	1000813	British Transformer	35,12
1	AW502	1000811	American transformer 120/12V	N.A.
2+4+5+7+8			368 Valve Body Assembly	
3	AW260	3022576	Optic Sensor Power Cable	13,23
4	AW250	3007947	Valve Disc Kit	24,33
5	AW251	3022012	Top Plate	26,53
6	AW129	1235373	Optic Sensor	16,43
7	AW174	3030450	Top Plate Screw No 8 x 9/16"	0,73
8	AW252	3022017	Spring	9,92
9	AW253	3022014	Camshaft, 7 Cycle	19,83
10	CD100	1000589	Pillow Block Cap	3,22
11	AW174	3030450	Top Plate Screw No 8 x 9/16"	0,73
12	AW254	3026537	12 Volt Motor/Cable Assembly	67,82
13	AW281	3031824	606 Control	75,41
14	AW107	1000269	Injector / Backwash 00-open Cap with o-ring	3,55
15	AW266	3025326	"E" Injector, Yellow, 6-inch tank / Screen Assembly	10,88
15	AW267	3025327	"F" Injector, Peach, 7-inch tank / Screen Assembly	10,88
15	AW268	3025328	"G" Injector, Tan, 8-inch tank / Screen Assembly	10,88
15	AW269	3025329	"H" Injector, Lt Purple 9-inch tank / Screen Assembly	10,88
16	AW115	1000221	Brine Refill Control Assembly 0.14 Gpm	16,15
17	AW172	3029969	O-ring tank	5,87
18	AW169	3030918	O-ring 1,05"	1,14
19	AV146	3031526	Kit Drain Line Flow Control 0,9 gpm	9,26
19	AV147	3031527	Kit Drain Line Flow Control 1,2 gpm	9,26
19	AV148	3031528	Kit Drain Line Flow Control 1,6 gpm	9,26
19	AV149	3031529	Kit Drain Line Flow Control 2,0 gpm	9,26
20	AW255	3027832	Manifold 3/4" BSPT, Inlet / Outlet	41,80
21	AW256	3027831	Retainer Manifold	19,69
22	AW257	3031825	Kit o-ring Manifold	2,96
23	AW258	3027839	Meter Assembly	23,06
24	AW259	3027837	Meter Cable	9,33
*	AV185	3022042	Blending Kit	3,41

* Not shown

368/606B VALVE EXPLODED VIEW



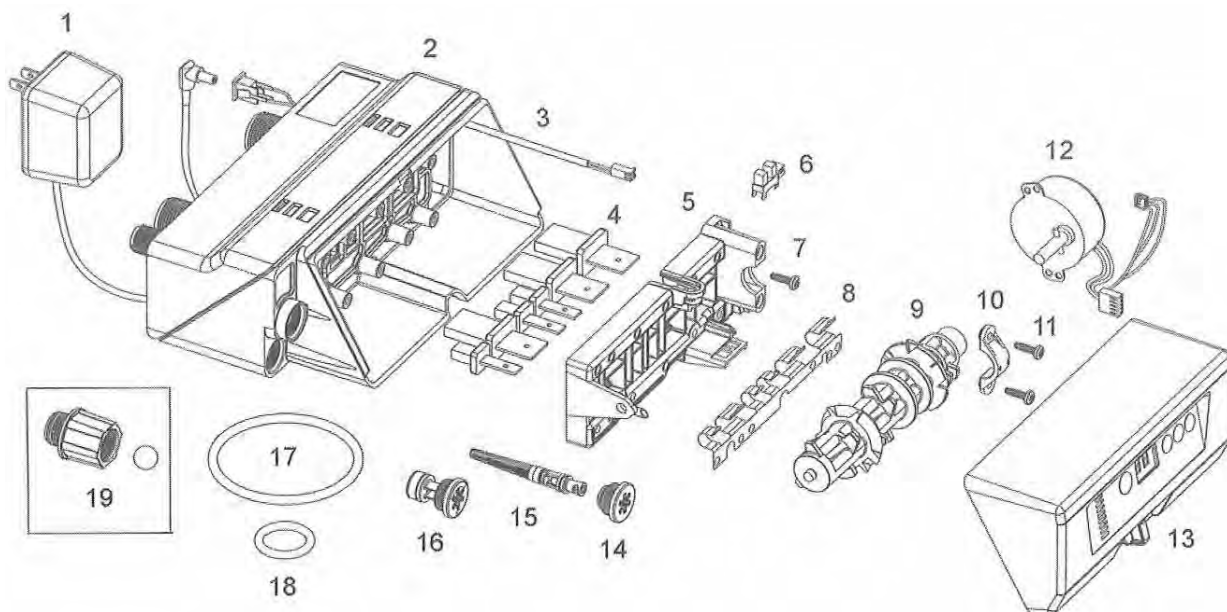
368/606B VALVE EXPLODED VIEW



Number	Ref.	P.N.	Description	Price EURO
1	AW500	1000814	European Transformer 230/12V	35,12
1	AW501	1000813	British Transformer	35,12
1	AW502	1000811	American transformer 120/12V	N.A.
2+4+5+7+8			368 Valve Body Assembly	
3	AW260	3022576	Optic Sensor Power Cable	13,23
4	AW250	3007947	Valve Disc Kit	24,33
5	AW251	3022012	Top Plate	26,53
6	AW129	1235373	Optic Sensor	16,43
7	AW174	3030450	Top Plate Screw No 8 x 9/16"	0,73
8	AW252	3022017	Spring	9,92
9	AW253	3022014	Camshaft, 7 Cycle	19,83
10	CD100	1000589	Pillow Block Cap	3,22
11	AW174	3030450	Top Plate Screw No 8 x 9/16"	0,73
12	AW254	3026537	12 Volt Motor/Cable Assembly	67,82
13	AW281	3031824	606 Control	75,41
14	AW107	1000269	Injector / Backwash 00-open Cap with o-ring	3,55
15	AW266	3025326	"E" Injector, Yellow, 6-inch tank / Screen Assembly	10,88
15	AW267	3025327	"F" Injector, Peach, 7-inch tank / Screen Assembly	10,88
15	AW268	3025328	"G" Injector, Tan, 8-inch tank / Screen Assembly	10,88
15	AW269	3025329	"H" Injector, Lt Purple 9-inch tank / Screen Assembly	10,88
16	AW115	1000221	Brine Refill Control Assembly 0.14 Gpm	16,15
17	AW172	3029969	O-ring tank	5,87
18	AW169	3030918	O-ring 1,05"	1,14
19	AV174		Elbow draiv fitting1/2F	3,25
20	AW290	4000886	Bypass 368	121,35
21	AW256	3027831	Retainer Manifold	19,69
22	AW257	3031825	Kit o-ring Manifold	2,96
23	AW258	3027839	Meter Assembly	23,06
24	AW259	3027837	Meter Cable	9,33
25	AV146B	4001297	External Backwash Control 368 Bypass 0.9 gpm # 06	17,09
25	AV147B	4001298	External Backwash Control 368 Bypass 1.2 gpm # 07	17,09
25	AV148B	4001299	External Backwash Control 368 Bypass 1.6 gpm # 08	17,09
25	AV149B	4001300	External Backwash Control 368 Bypass 2.0 gpm # 09	17,09
26	AW275	4001606	Kit 3/4" BSPT Connectors	33,17
*	AV185	3022042	Blending Kit	3,41

* Not shown

366/604 VALVE EXPLODED VIEW



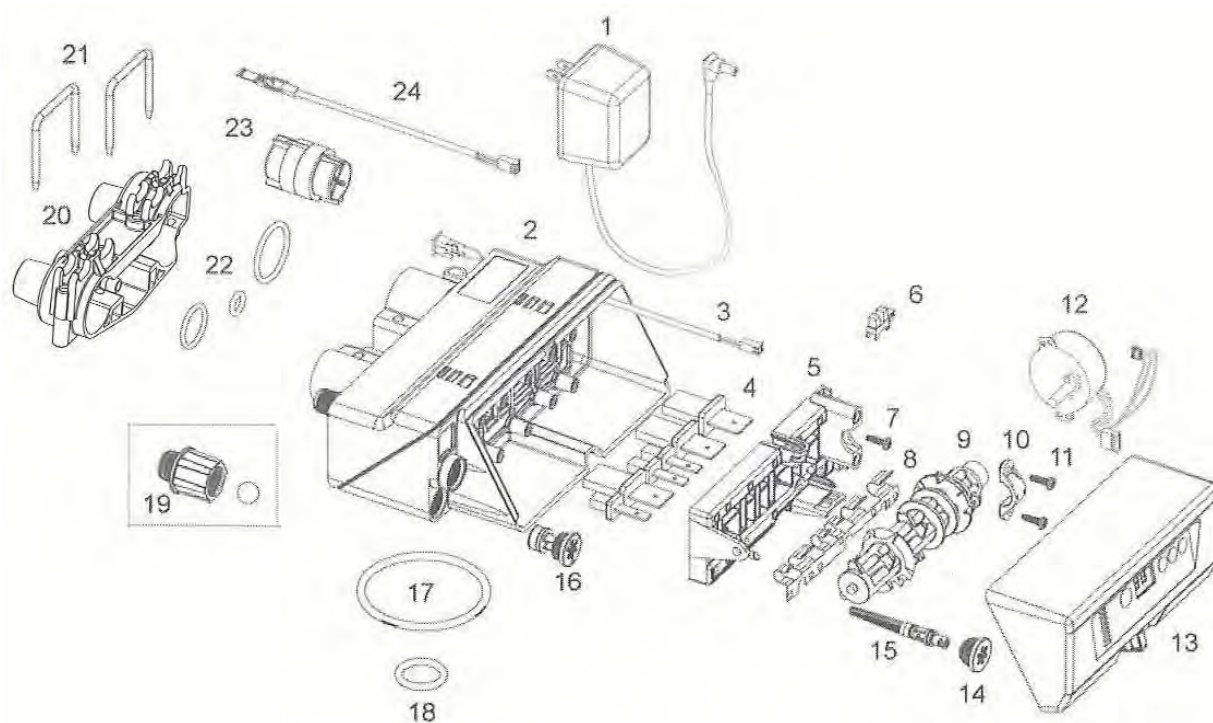
366/604 VALVE PARTS LIST



Number	Ref.	P.N.	Description	Price EURO
1	AW500	1000814	European Transformer 230/12V	35,12
1	AW501	1000813	British Transformer	35,12
1	AW502	1000811	American transformer 120/12V	N.A.
2+4+5+7+8	AW261	3025678	366 Valve Body Assembly	171,96
3	AW260	3022576	Optic Sensor Power Cable	13,23
4	AW250	3007947	Valve Disc Kit	24,33
5	AW251	3022012	Top Plate	26,53
6	AW129	1235373	Optic Sensor	16,43
7	AW174	3030450	Top Plate Screw No 8 x 9/16"	0,73
8	AW252	3022017	Spring	9,92
9	AW253	3022014	Camshaft, 7 Cycle	19,83
10	CD100	1000589	Pillow Block Cap	3,22
11	AW174	3030450	Top Plate Screw No 8 x 9/16"	0,73
12	AW254	3026537	12 Volt Motor/Cable Assembly	67,82
13	AW280	4001737	604 Control	86,14
14	AW107	1000269	Injector / Backwash 00-open Cap with o-ring	3,55
15	AW266	3025326	"E" Injector, Yellow, 6-inch tank / Screen Assembly	10,88
15	AW267	3025327	"F" Injector, Peach, 7-inch tank / Screen Assembly	10,88
15	AW268	3025328	"G" Injector, Tan, 8-inch tank / Screen Assembly	10,88
15	AW269	3025329	"H" Injector, Lt Purple 9-inch tank / Screen Assembly	10,88
16	AW115	1000221	Brine Refill Control Assembly 0.14 Gpm	16,15
17	AW172	3029969	O-ring tank	5,87
18	AW169	3030918	O-ring 1,05"	1,14
19	AV146	3031526	Kit Drain Line Flow Control 0,9 gpm	9,26
19	AV147	3031527	Kit Drain Line Flow Control 1,2 gpm	9,26
19	AV148	3031528	Kit Drain Line Flow Control 1,6 gpm	9,26
19	AV149	3031529	Kit Drain Line Flow Control 2,0 gpm	9,26
*	AV185	3022042	Blending Kit	3,41

* Not shown

367/606 VALVE EXPLODED VIEW



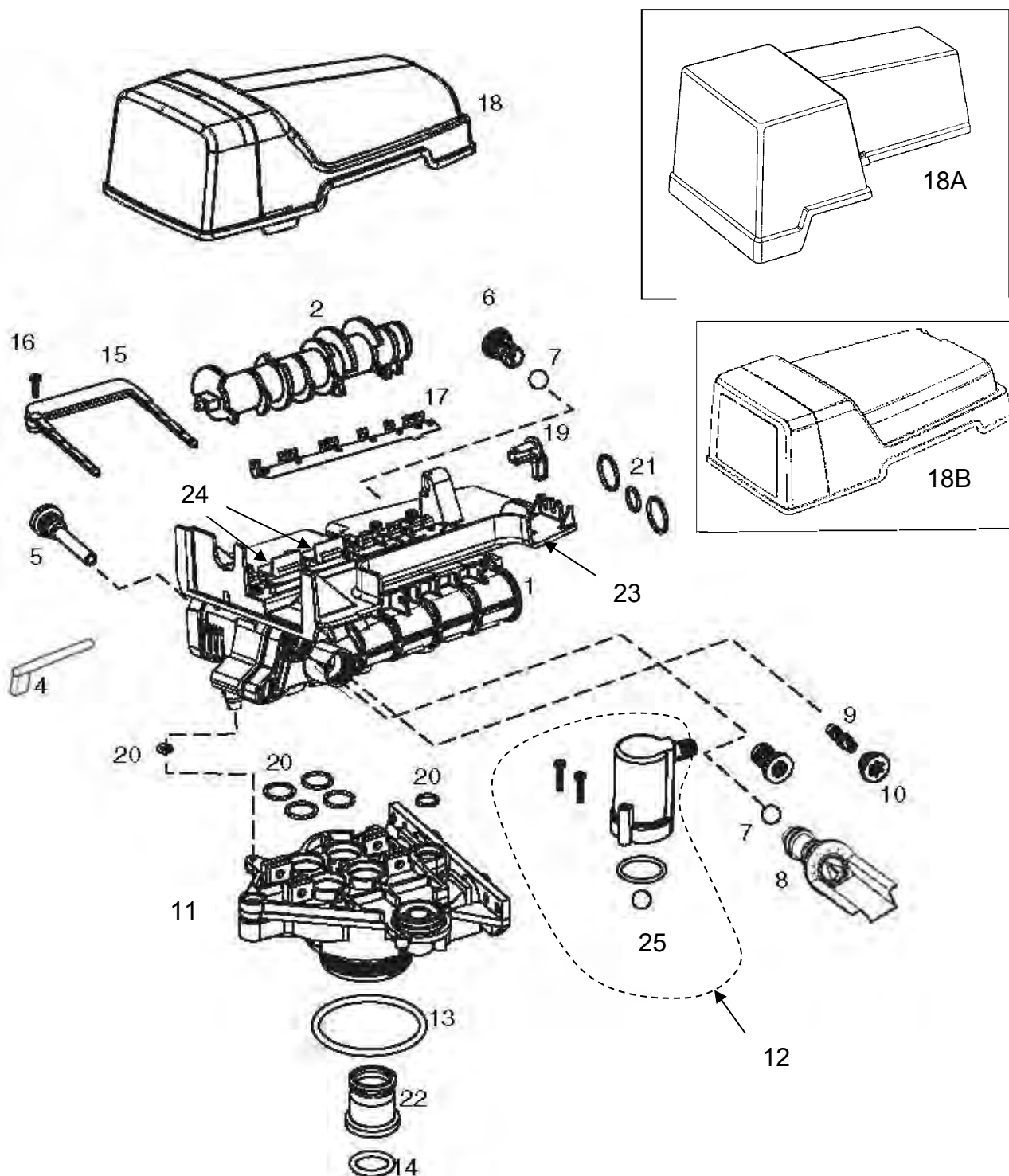
367/606 VALVE PARTS LIST



Number	Ref.	P.N.	Description	Price EURO
1	AW500	1000814	European Transformer 230/12V	35,12
1	AW501	1000813	British Transformer	35,12
1	AW502	1000811	American transformer 120/12V	N.A.
2+4+5+7+8	AW262	3031018	367 Valve Body Assembly	264,77
3	AW260	3022576	Optic Sensor Power Cable	13,23
4	AW250	3007947	Valve Disc Kit	24,33
5	AW251	3022012	Top Plate	26,53
6	AW129	1235373	Optic Sensor	16,43
7	AW174	3030450	Top Plate Screw No 8 x 9/16"	0,73
8	AW252	3022017	Spring	9,92
9	AW253	3022014	Camshaft, 7 Cycle	19,83
10	CD100	1000589	Pillow Block Cap	3,22
11	AW174	3030450	Top Plate Screw No 8 x 9/16"	0,73
12	AW254	3026537	12 Volt Motor/Cable Assembly	67,82
13	AW281	3031824	606 Control	75,41
14	AW107	1000269	Injector / Backwash 00-open Cap with o-ring	3,55
15	AW266	3025326	"E" Injector, Yellow, 6-inch tank / Screen Assembly	10,88
15	AW267	3025327	"F" Injector, Peach, 7-inch tank / Screen Assembly	10,88
15	AW268	3025328	"G" Injector, Tan, 8-inch tank / Screen Assembly	10,88
15	AW269	3025329	"H" Injector, Lt Purple 9-inch tank / Screen Assembly	10,88
16	AW115	1000221	Brine Refill Control Assembly 0.14 Gpm	16,15
17	AW172	3029969	O-ring tank	5,87
18	AW169	3030918	O-ring 1,05"	1,14
19	AV146	3031526	Kit Drain Line Flow Control 0,9 gpm	9,26
19	AV147	3031527	Kit Drain Line Flow Control 1,2 gpm	9,26
19	AV148	3031528	Kit Drain Line Flow Control 1,6 gpm	9,26
19	AV149	3031529	Kit Drain Line Flow Control 2,0 gpm	9,26
20	AW255	3027832	Manifold 3/4" BSPT, Inlet / Outlet	41,80
21	AW256	3027831	Retainer Manifold	19,69
22	AW257	3031825	Kit o-ring Manifold	2,96
23	AW258	3027839	Meter Assembly	23,06
24	AW259	3027837	Meter Cable	9,33
*	AV185	3022042	Blending Kit	3,41

* Not shown

255-440i/450i/460i/460TC VALVE EXPLODED VIEW & PARTS LIST



NOTE: 18A and 18B are old models not compatible with the current plate.

Number	Ref.	P.N.	Description	Price EURO
*	AW164		Valve Body with L top plate	N.A.
1+17+19+ +23+24	AW164A	1000232	Valve Body with L top plate 255 series 400 NEW STYLE	178,20
2	AW150	1031950	Camshaft Standard one piece	13,71
2	AW151	1033024	Camshaft Standard segmented	N.A.

255-440i/450i/460i/460TC VALVE EXPLODED VIEW & PARTS LIST

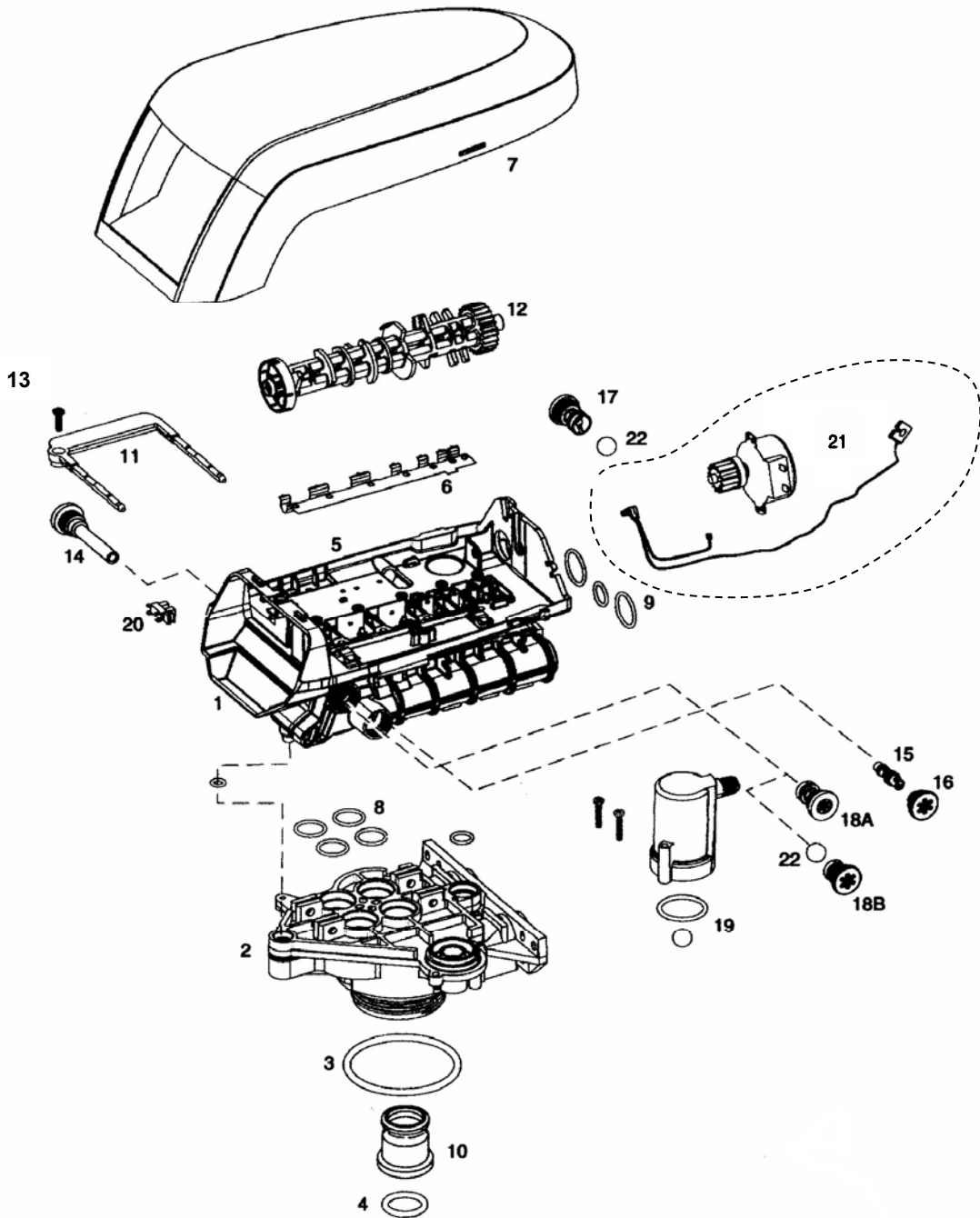


Number	Ref.	P.N.	Description	Price EURO
2	AW152	1033025	Camshaft Extra Salt	20,98
2	AW153	1033026	Camshaft Long Rinse	21,55
2	AW154	1032969	Camshaft Water Saver	22,45
3	AW146	1030501	Camshaft Bearing for cover L-Lid	1,60
4	AW185	1031391	Timer Locking Pin	4,15
5	AW125	1000226	Screen/Cap Assembly with O-ring	3,85
6	AW100	1000209	Drain Control Assembly No 7 for 7" tank	10,83
6	AW101	1000210	Drain Control Assembly No 8 for 8" tank	10,83
6	AW102	1000211	Drain Control Assembly No 9 for 9" tank	10,83
6	AW103	1000212	Drain Control Assembly No 10 for 10" tank	10,83
6	AW104	1000213	Drain Control Assembly No 12 for 12" tank	10,83
6	AW105	1000214	Drain Control Assembly No 13 for 13" tank	10,83
6	AW106	1000215	Drain Control Assembly No 14 for 14" tank	10,83
7	AW139	1030502	Flow Control Ball	0,91
8	AW110	1034261	Brine Refill Control 10 lbs Salt – type A	24,56
8	AW111	1034263	Brine Refill Control 19 lbs Salt – type B	24,56
9	AW130	1032970	A Injector - White w/O-ring	7,08
9	AW131	1032971	B Injector - Blue w/O-ring	7,08
9	AW132	1032972	C Injector - Red w/O-ring	7,08
10	AW107	1000269	Injector / Backwash 00-open Cap with o-ring	3,55
11	AW170	1033784	Tank Adapter Assembly	107,49
12	AW190	1032417	Air-check Kit ¼" male	11,58
13	AW172	3029969	O-ring 3-1/8 x 3-1/2 x 3/16 BN	5,87
14	AW169	3030918	O-ring 1,05"	1,14
15	AW173	1031405	Locking Bar	8,24
16	AW174	3030450	Top Plate Screw No 8 x 9/16"	0,73
17	AW163	1235341	Spring One Piece, 255 Valve	11,87
*	AW181	1001580	Valve Disc Spring (OLD STYLE)	0,91
18	AW141A	3019870	I-Lid Cover NEW STYLE	9,51
18A	AW141	1032565	Standard Cover 440i-450i (L-Lid) OLD STYLE	N.D.
18B	AW142	1000062	I-Lid Cover OLD STYLE	*** 11,40
19	AW146A	3019873	Lever Locking Cam (I-Lid) NEW STYLE	2,65
*	AW147	1000297	Extended Connector (for use with I-lid cover) OLD STYLE	N.A.
*	AW191	1033066	New to Old Air Check Adapter	5,10
20	AW195	1001404	O-ring Set	7,31
21	AW196	1040459	O-ring Set	0,53
*	AW197		O-ring Set w/screws and nuts	4,12
22	AW171	1001986	13/16 Rubber Insert (Optional)	2,59
*	AW160	1033067	Top Plate 255 series 400 OLD STYLE	N.A.
23	AW160A	3019871	Top Plate 255 series 400 NEW STYLE	25,26
24	AW180	1000250	Disc Valves kit	25,26
25	AW140	1030528	Air-check ball	1,01
*	AV037	1239760	Blending Kit for 255 and 268 valves	3,41
*	AV059	1239753	Top Plate Mount Switch Kit 0.1 A	50,78
*	AV069	1239754	Top Plate Mount Switch Kit 5 A	50,78
17+18+19+23	AW211	3034598	Upgrade kit 255 400 series NEW STYLE	36,22

* Not shown

*** Out-of-production, available till it will be out-of-stock

VALVE EXPLODED VIEW & PARTS LIST



Number	Ref.	P.N.	Description	Price EURO
1+5+6	AW168	1244650	255/700 Valve Assembly w/o Flow Controls	178,89
2	AW170	1033784	255 Tank Adapter New Style	107,49
3	AW172	3029969	O-ring BN	5,87
4	AW169	3030918	O-ring 1,05"	1,14
5	AW162	1235340	Top plate, 255 Valve, 700/860 Series Controller	46,84
6	AW163	1235341	Spring One Piece, 255 Valve	11,87
7	AW148	1236246	Standard Cover 255-268 Valve, 700/860 Series	21,05
*	AW145	1242234	255 Slim Cover	18,91
8	AW195	1001404	O-ring set	7,31
9	AW196	1040459	O-ring set	0,53

VALVE EXPLODED VIEW & PARTS LIST



Number	Ref.	P.N.	Description	Price EURO
10	AW171	1001986	13/16 Rubber Insert (Optional)	2,59
*	AW180	1000250	Valve Disk Kit	25,26
*	AV037	1239760	Blending Kit for 255 and 268 valves	3,41
11	AW173	1031405	Locking Bar	8,24
12	AW149	1235353	Cam 255/700-860 Series Valve, STD, Black	20,81
13	AW174	3030450	Top Plate Screw No 8 x 9/16"	0,73
14	AW125	1000226	Screen/Cap Assembly with O-ring	3,85
15	AW133	1035730	E injector – Yellow	7,48
15	AW134	1035731	F injector – Peach	7,48
15	AW135	1035732	G injector – Tan	7,48
15	AW136	1035733	H injector – Light Purple	7,48
15	AW137	1035734	J injector – Light Blue	7,48
15	AW138	1035735	K injector – Pink	7,48
15	AW348	1035736	L injector – Orange	7,48
15	AW349	1035737	M injector – Brown	7,48
15	AW350	1035738	N injector – Green	7,48
15	AW351	1035739	Q injector – Purple	7,48
15	AW352	1035884	R injector – Dark grey	7,48
16	AW107	1000269	Injector / Backwash 00-open Cap with o-ring	3,55
17	AW100	1000209	Drain Control Assembly No 7 for 7" tank	10,83
17	AW101	1000210	Drain Control Assembly No 8 for 8" tank	10,83
17	AW102	1000211	Drain Control Assembly No 9 for 9" tank	10,83
17	AW103	1000212	Drain Control Assembly No 10 for 10" tank	10,83
17	AW104	1000213	Drain Control Assembly No 12 for 12" tank	10,83
17	AW105	1000214	Drain Control Assembly No 13 for 13" tank	10,83
17	AW106	1000215	Drain Control Assembly No 14 for 14" tank	10,83
18A	AW116	1000222	Brine Refill Control 0.33 gpm old style	N.A.
18B	AW118	1243511	Brine Refill Control 0.33 gpm (requires ball)	10,83
19	AW190	1032417	Air-check Kit ¼" male	11,58
20	AW129	1235373	Optic Sensor	16,43
21	AW126	1238861	Motor w/Spacer & Pinion & Cable 700 Series Controller	70,27
22	AW139	1030502	Flow Control Ball	0,91
*	AW191	1033066	New to Old Style Air-check Adapter	5,10
*	AW140	1030528	Air-check Ball	1,01
*	AW128	1035446	Turbine cable 255-268-278/700	23,41
*	AX040	1244336	Kit Chlorine Generator 255/268 Logix	78,08
*	AW124	3029962	Motor Locking Pin	1,43
*	AV057	1239711	Front Mount Switch Kit 0.1 A	50,78
*	AV058	1239752	Front Mount Switch Kit 5 A	50,78
*	AV059	1239753	Top Plate Mount Switch Kit 0.1 A	50,78
*	AV069	1239754	Top Plate Mount Switch Kit 5 A	50,78
*	AV036	1263718	Kit remote Logix control with 3 m cable	49,34
*	AV036A	1256257	Kit remote Logix control with terminal blocks	45,25
*	AV023	1242411	Extension cord for cabinets	19,71
*	AV023A	1239979	Logix impulse Kit	18,40
*	AW500	1000814	European Transformer 230/12V	35,12
*	AW501	1000813	British Transformer	35,12
*	AW502	1000811	American transformer 120/12V	N.A.

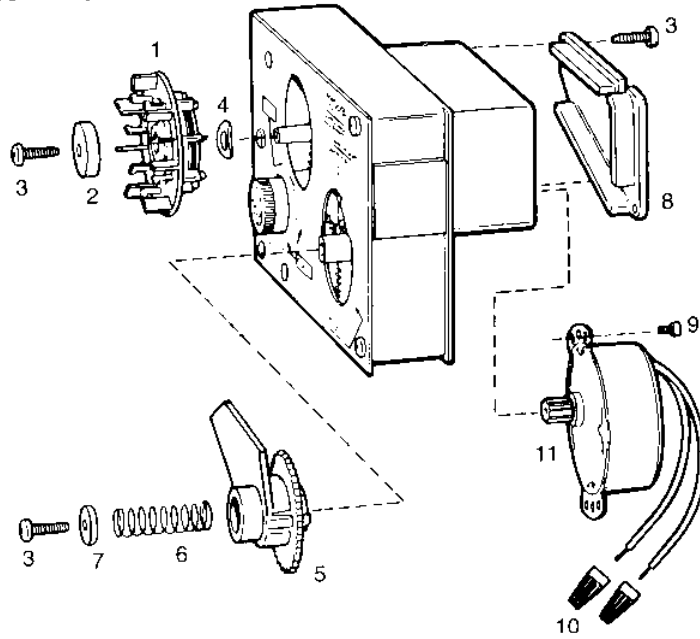
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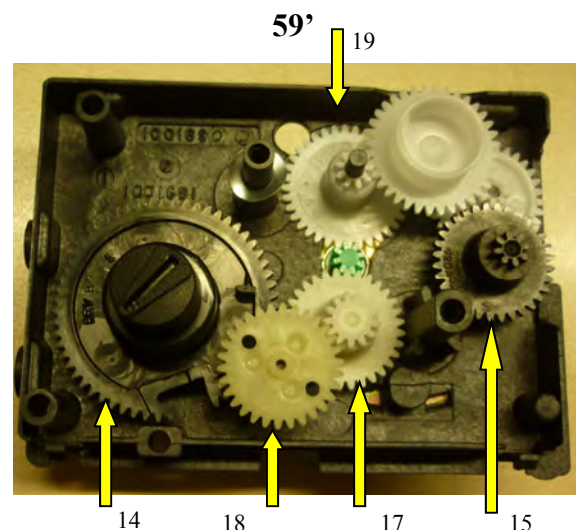
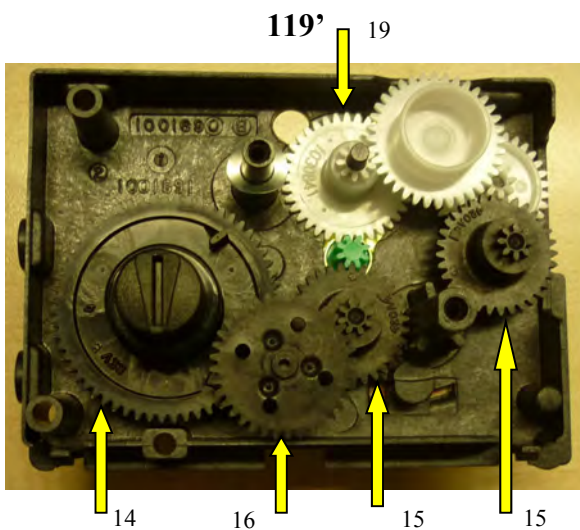
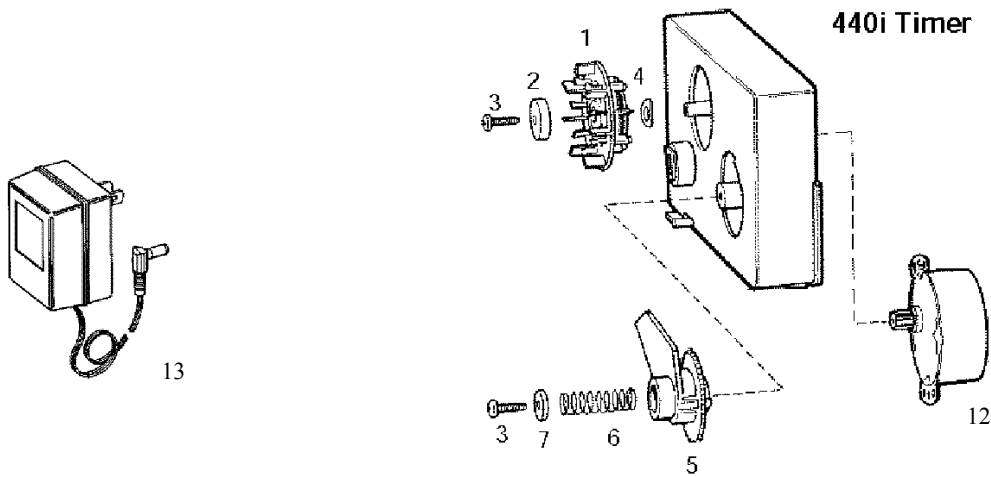
SERIES 400 TIMER (440-450i-440i -460i-460TC) EXPLODED VIEW



440 Timer



440i Timer



SERIES 400 TIMER (440-450i-440i-460i-460TC) SPARE PARTS LIST



Number	Ref.	P.N.	Description	Price EURO
1	AW400	1031740	Skipper Wheel Assembly – 6 Day	13,78
1	AW401	1031742	Skipper Wheel Assembly – 7 Day	13,78
2	AW411	1030659	Washer	0,91
3	AW451	3030002	Motor Cap Screw	1,72
4	AW412	3030003	Bowed Washer	0,73
5	AW402	1031756	Tripper Arm Assembly	5,61
6	AW413	1030830	Spring	0,86
7	AW414	1030821	Retainer	1,24
8	AW450	1031751	Motor Cap (440-450)	N.A.
9	AW452	1005615	Motor fastening Screw	N.A.
10	AW410	1007416	Wire Nut	18,30
11	AW430	1030846	Motor 115V.60 Hz (440-450)	N.A.
11	AW420	1000377	Motor 230V.50 Hz (440-450)	*** 62,89
11	AW421	3003134	Motor 24V.50 Hz (440-450)	N.A.
11	AW431	1030850	Motor 24V.60 Hz (440-450)	N.A.
11		1031557	Motor 200V.60 Hz (440-450)	N.A.
11	AW422	1008205	Motor 12V.50 Hz (440)	N.A.
11	AW432	1008206	Motor 12V.60 Hz (440)	N.A.
12	AW423	1001568	Motor 12V.50 Hz (440i)	49,10
12	AW433	1001569	Motor 12V.60 Hz (440i)	49,10
12	AW424	1000098	Motor 9V.50 Hz (460i – 460tc)	47,67
12	AW434		Motor 9V.60 Hz (460i – 460tc)	49,10
13	AW500	1000814	European Transformer 230/12V	35,12
13	AW501	1000813	British Transformer	35,12
13	AW502	1000811	American transformer 120/12V	N.A.
*	AW403	1001582	Red Start Button (440)	N.A.
*	AW404	1031558	Red Start Button (450-460)	N.A.
14	AW405	1001833	Output Connector w/Black Start Button 440i	5,71
*	AW406	1001000	Black Start Button (460i – 460tc)	4,95
*	AW408	1031496	Output Connector 440	N.A.
*	AW409	1000094	Timer Window 460i – 460tc	6,66
*	AW453	1005120	Cable press w/cable (440)	1,14
15	AW454	1031554	Black gear 119' A (INF. #8) [420A4]	1,24
16	AW455	1030844	Black gear 119' B [420A44]	1,24
17	AW456	1030842	White gear 59' A (INF. #13) [420A4]	1,24
18	AW457	1030843	White gear 59' B [420A42]	1,73
*	AW458	1031555	Black gear 90' A (INF. #10)	6,63
*	AW459	1030845	Black gear 90' B	6,63
*	AW031	1004501	Retaining ring 440 (20E)	N.A.
19	AW449	1030841	White gear for timer 440i	3,38

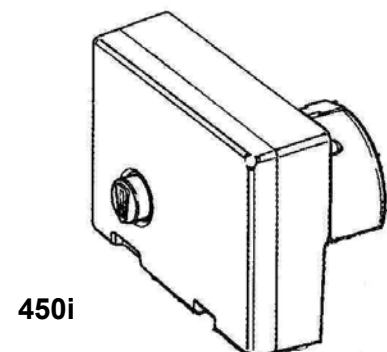
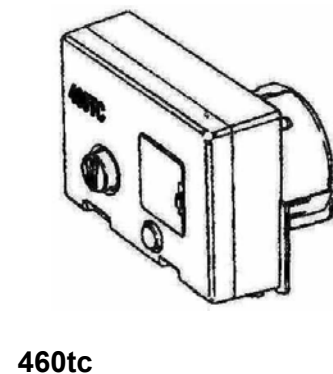
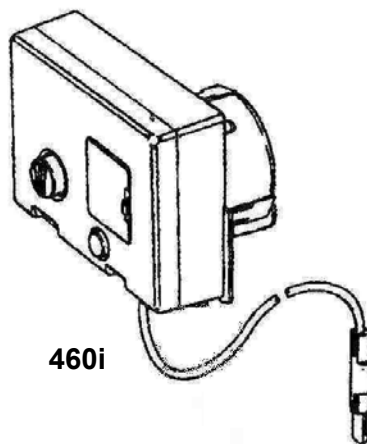
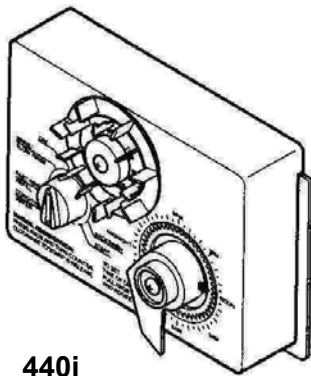
* Not shown *** Out-of-production, available till it will be out-of-stock N.A. = Not available.

SERIES 400 TIMER LIST



Number	Ref.	P.N.	Description	Price EURO
*	AW460	1051826	Timer 440i 7GG 119' 12V.50 Hz ITA	134,41
*	AW461	44IL12L56R	Timer 440i 6GG 119' 12V.50 Hz ITA	N.A.
*	AW462	1051827	Timer 440i 7GG 59' 12V.50 Hz ITA	134,41
*	AW463		Timer 440i 6GG 59' 12V.50 Hz ITA	N.A.
*	AW464	1040779	Timer 440i 7GG 119' 12V.60 Hz US.	N.A.
*	AW465		Timer 440i 6GG 119' 12V.60 Hz US.	N.A.
*	AW466	44ILE2L67R59	Timer 440i 7GG 59' 12V.60 Hz US.	N.A.
*	AW467		Timer 440i 6GG 59' 12V.60 Hz US.	N.A.
*	AW468	3031461	Timer 440i 7GG 119' 12V.50 Hz for filtration	134,41
*	AW474	1051828	Timer 440i 7GG 119' 12V.50 Hz E.	134,41
*	AW475		Timer 440i 6GG 119' 12V.50 Hz E.	134,41
*	AW476	44ILE2L57R59	Timer 440i 7GG 59' 12V.50 Hz E.	134,41
*	AW477		Timer 440i 6GG 59' 12V.50 Hz E.	134,41
*	AW482	4000610	Timer 460tc 118' 12V.50 Hz symbols	133,50
*	AW483	4000611	Timer 460tc 59' 12V.50 Hz symbols	133,50
*	AW484		Timer 460tc 118' 12V.60 Hz US.	133,50
*	AW485		Timer 460tc 59' 12V.60 Hz US.	133,50
*	AW490	1262929	Timer 450i 119' 24V.50 Hz	N.A.
*	AW491		Timer 450i 119' 24V.60 Hz US.	N.A.
*	AW480	1030007	Timer 460i 119' 12V.50 Hz symbols	269,48
*	AW481	1051811	Timer 460i 59' 12V.50 Hz symbols	269,48
*	AW486	1030000	Timer 460i 119' 12V.60 Hz US.	261,64
*	AW487		Timer 460i 59' 12V.60 Hz US.	269,48

* Not shown

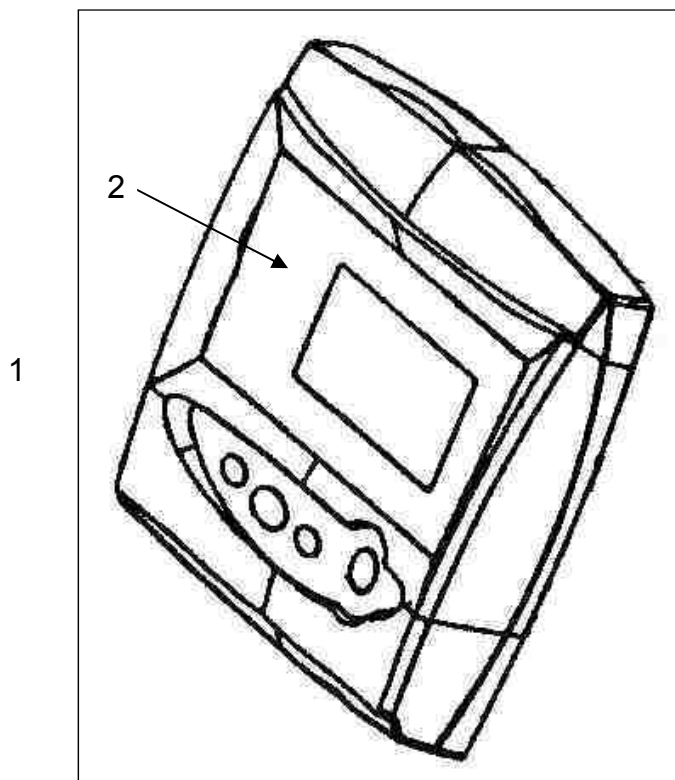


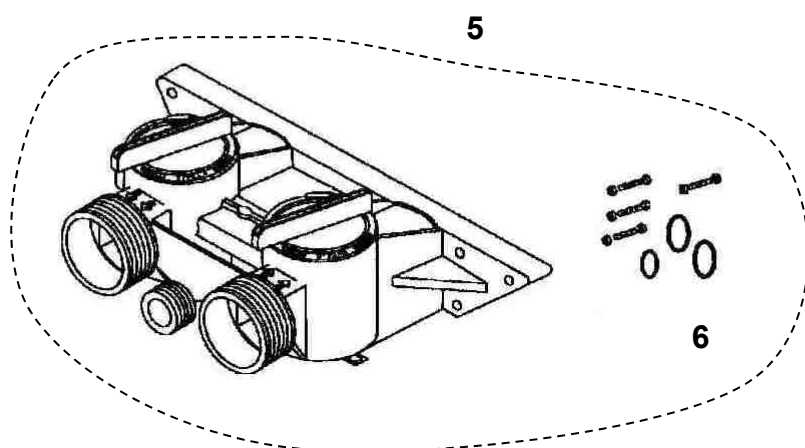
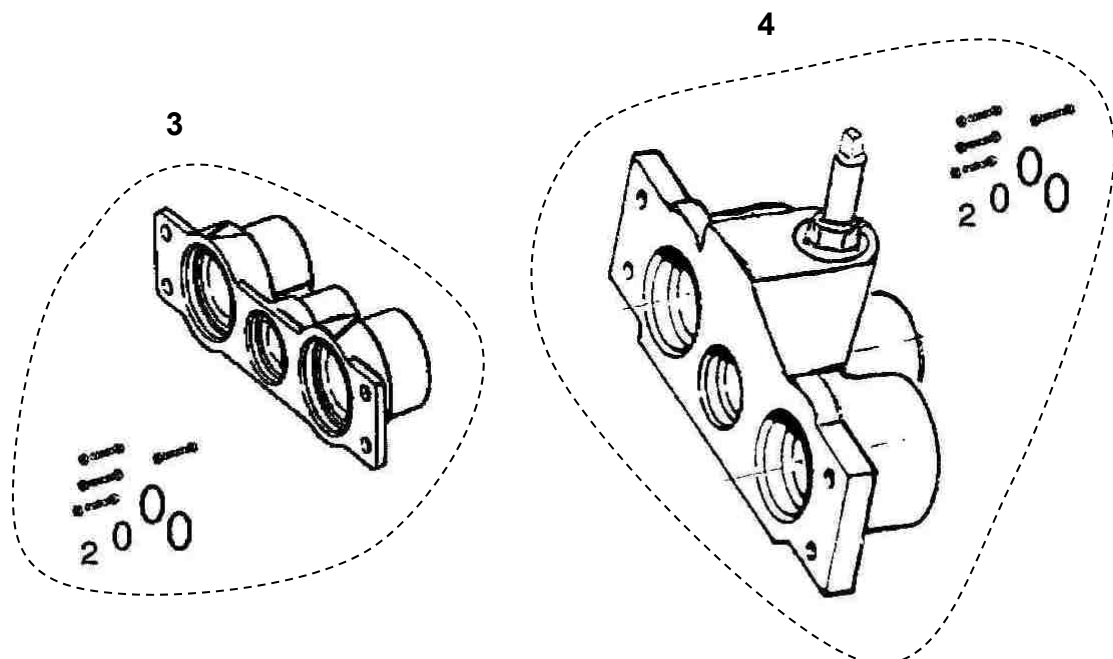
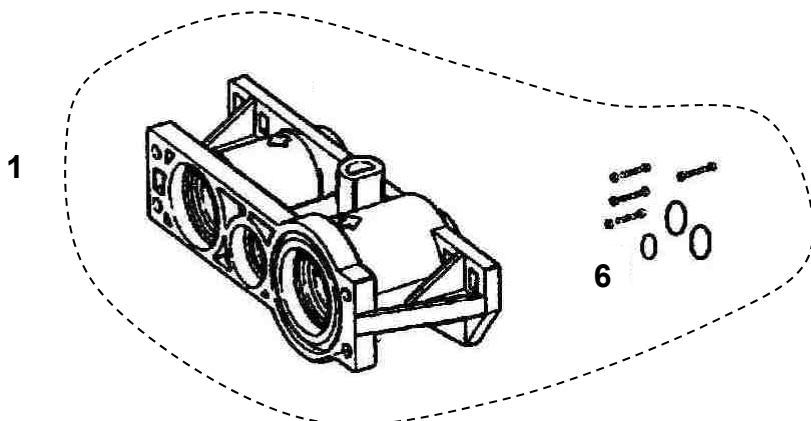
SERIES 700 TIMER LIST



Number	Ref.	P.N.	Description	Price EURO
1	AW511E		740C Timer w/check salt 12V 50Hz w/Symbol Label	187,55
1	AW514E		760C Timer w/check salt 12V 50Hz w/Symbol Label	234,28
1	AW517E		740F Timer w/check salt 12V 50Hz w/Symbol Label	187,55
1	AW524E		760F Timer w/check salt 12V 50Hz w/Symbol Label	234,28
1	AW512E		742C Timer w/check salt 12V 50Hz w/Symbol Label	222,75
1	AW515E		762C Timer w/check salt 12V 50Hz w/Symbol Label	281,04
1	AW518E		742F Timer w/check salt 12V 50Hz w/Symbol Label	222,75
1	AW525E		762F Timer w/check salt 12V 50Hz w/Symbol Label	281,04
1	AW505E		764C Timer w/check salt 12V 50Hz w/Symbol Label	303,99
*	AW504	1254886	Blank secondary controller	34,26

* Not shown





METER, MANIFOLD, 256 BYPASS SPARE PARTS



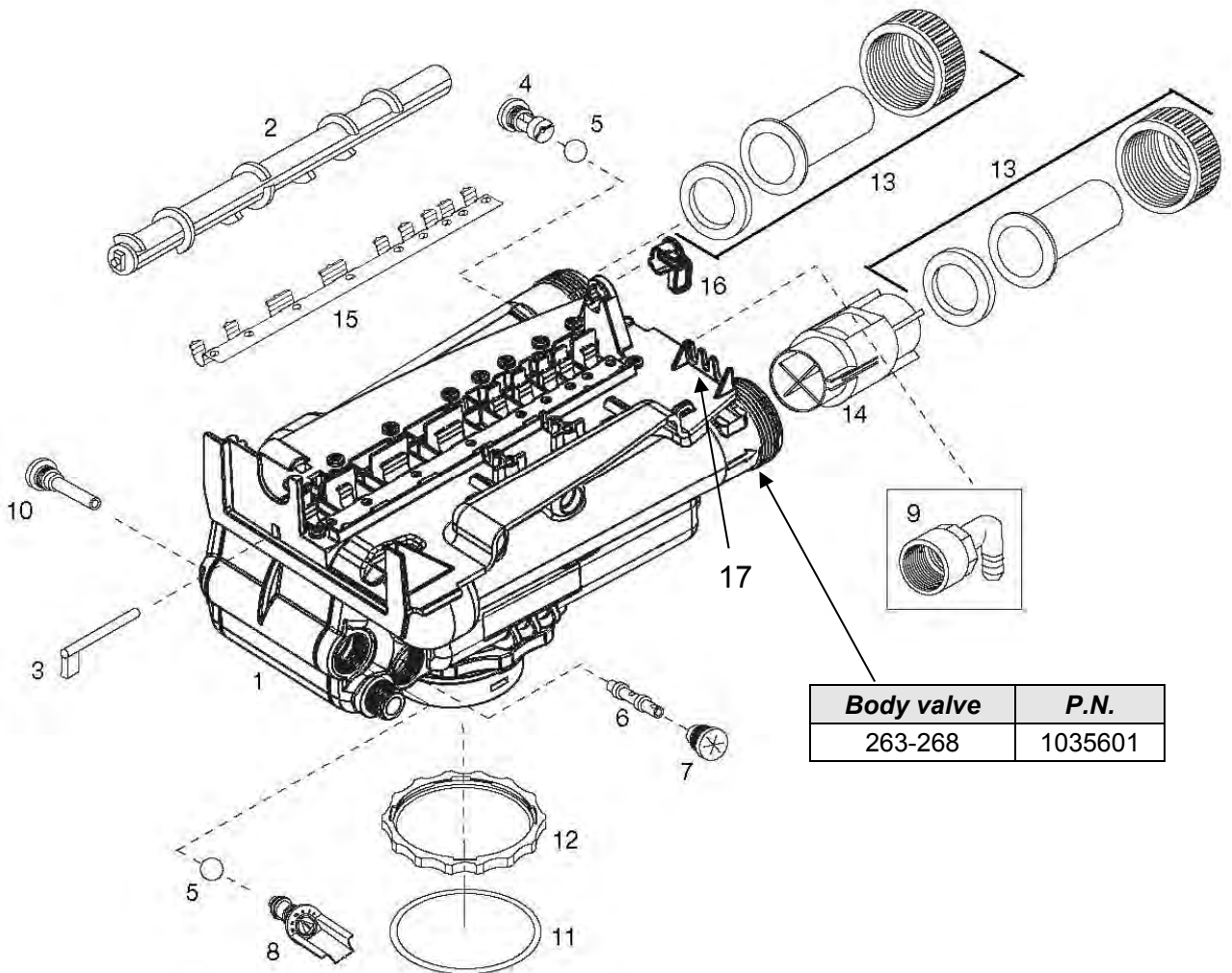
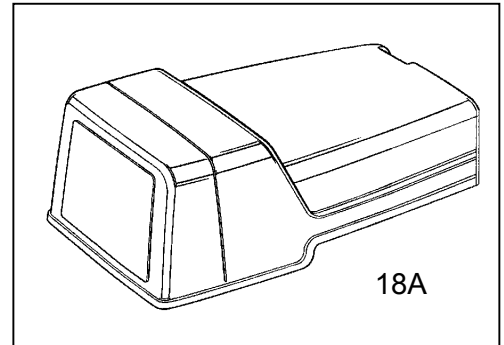
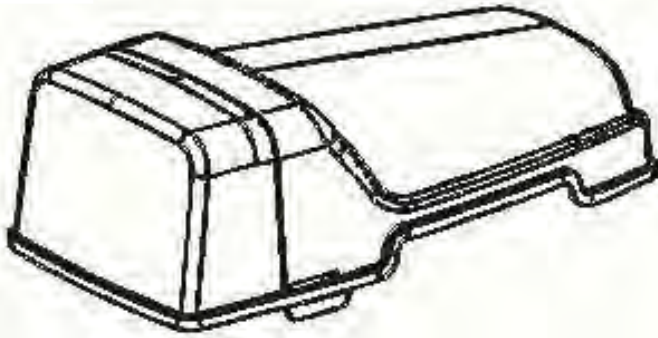
Number	Ref.	P.N.	Description	Price EURO
1	AW201	1032350	Meter Adapter Kit	38,53
2	AW197		O-ring Kit brass w/screws and nuts	4,12
3	AV015		Piping Boss brass 3/4"	24,15
3	AV016		Piping Boss brass 1"	24,64
3	AV010		Piping Boss Kit brass 3/4"	22,93
3	AV011		Piping Boss Kit brass 1"	23,38
*	AV013	1040283	Piping Boss Kit noryl 3/4"	13,85
4	AV006		Piping Boss brass 3/4" mixer	32,40
4	AV017		Piping Boss brass 1" mixer	35,47
*	AV007		Piping Boss Kit brass 3/4" mixer	30,33
*	AV012		Piping Boss Kit brass 1" mixer	32,56
*	AV001		Piping Boss Kit noryl 3/4" with turbine	52,76
*	AV001A		Piping Boss Kit noryl 3/4" without turbine	19,05
*	AV022		Piping Boss Kit noryl 1" with turbine	54,34
*	AV022A		Piping Boss Kit noryl 1" without turbine	19,62
5	AV026	1040769	Bypass 256 w/O-ring, screws and nuts	43,84
*	AW202	1033057	Flow meter (255-168)	19,03
6	AW197N	1040524	O-ring Kit noryl w/screws and nuts	10,08

* Not shown

263-268-268F A/400 VALVE EXPLODED VIEW



18



Body valve	P.N.
263-268	1035601

NOTE: 18A is an old model not compatible with the current plate.

Number	Ref.	P.N.	Description	Price EURO
1+12+15+ +16+17	AW166	1263715	Valve Assembly 263-268/400 w/o Flow Controls	206,82
2	AW315	1035625	Camshaft 440i 460i standard	11,58
2	AW316	1035627	Camshaft 440i 460i Extra Salt	11,58
2	AW317	1030376	Camshaft FA 440i	11,58
2	AW318	1035624	Camshaft 263	11,58

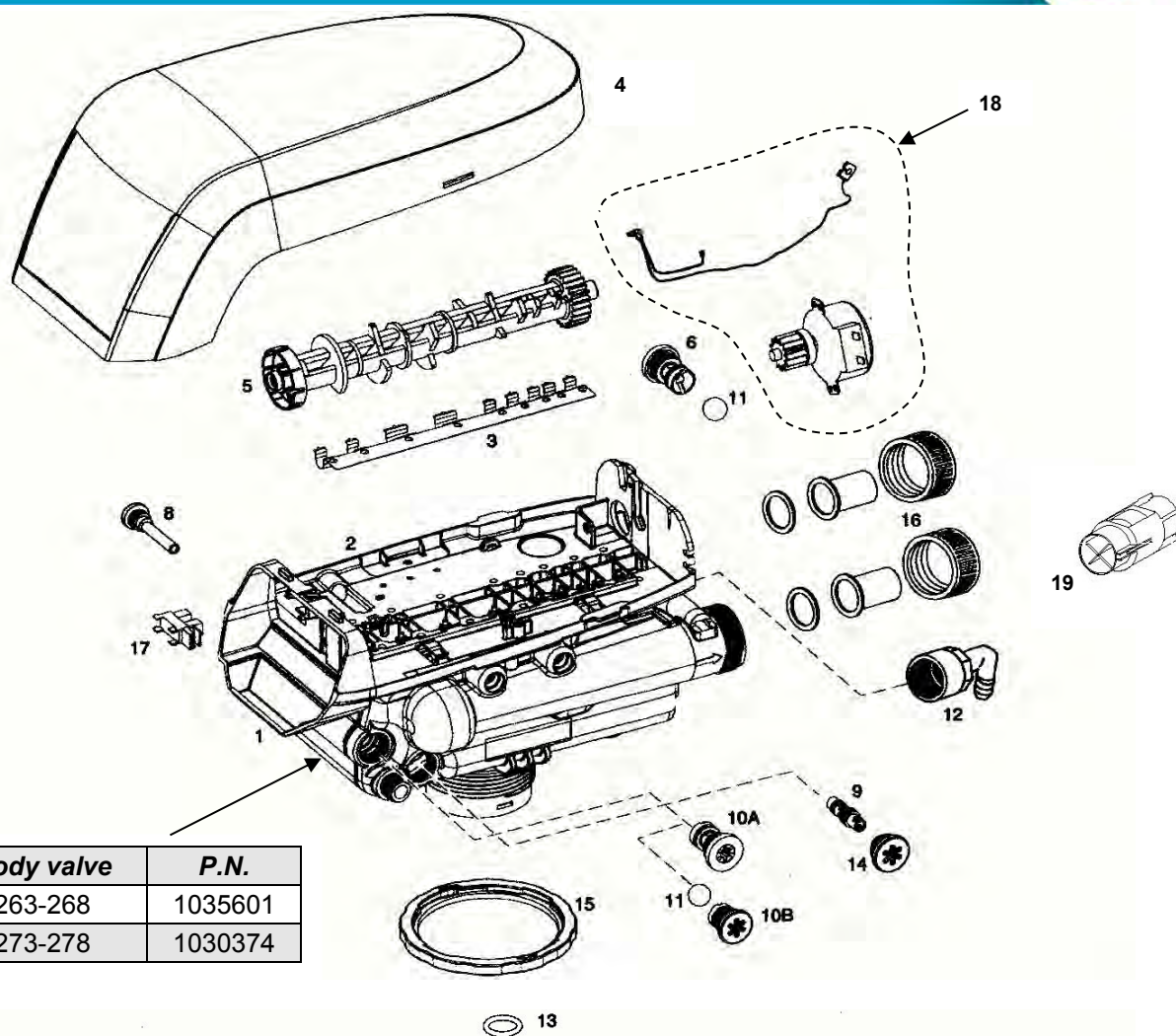
263-268-268F A/400 VALVE EXPLODED VIEW



Number	Ref.	P.N.	Description	Price EURO
3	AW185	1031391	Timer Locking Pin	4,15
4	AW100	1000209	Drain Control Assembly No 7 for 7" tank	10,83
4	AW101	1000210	Drain Control Assembly No 8 for 8" tank	10,83
4	AW102	1000211	Drain Control Assembly No 9 for 9" tank	10,83
4	AW103	1000212	Drain Control Assembly No 10 for 10" tank	10,83
4	AW104	1000213	Drain Control Assembly No 12 for 12" tank	10,83
4	AW105	1000214	Drain Control Assembly No 13 for 13" tank	10,83
4	AW106	1000215	Drain Control Assembly No 14 for 14" tank	10,83
5	AW139	1030502	Flow Control Ball	0,91
6	AW130	1032970	A Injector – White	7,08
6	AW131	1032971	B Injector – Blue	7,08
6	AW132	1032972	C Injector – Red	7,08
6	AW304	1030272	D Injector – Green	N.A.
7	AW107	1000269	Injector / Backwash 00-open Cap with o-ring	3,55
*	AW306	1032978	Blank injector with for per 263	7,08
8	AW110	1034261	Brine Refill Control 10 lbs Salt – type A	24,56
8	AW111	1034263	Brine Refill Control 19 lbs Salt – type B	24,56
8	AW308	1030334	Plugged Refill Control for 263	7,02
9	AV175	1002449	Drain Fitting Elbow (3/4" Hose Barbed)	4,52
10	AW125	1000226	Screen & Cap Assembly with O-ring	3,85
11	AW172	3029969	O-ring 3-1/8 x 3-1/2 x 3/16 BN	5,87
12	AW319	1035622	Tank Ring	7,71
13	AV030		3/4" BSPT Brass Pipe Adapter Kit	15,20
13	AV031		1" BSPT Brass Pipe Adapter Kit	15,85
13	AV032	1001615	32 mm PVC Tube Adapter Kit	22,50
13	AV038		1 1/4" BSPT Brass Pipe Adapter Kit	43,28
14	AW328	1033444	Turbine Assembly	19,89
15	AW360	1235339	Valve Disc Spring, One Piece	11,76
*	AW181	1001580	Valve Disc Spring (OLD STYLE)	0,91
16	AW146A	3019873	Lever Locking Cam (I-Lid) NEW STYLE	2,65
17	AW325A	3019872	Top Plate Performa 400 NEW STYLE	37,96
*	AW325	1035629	Top Plate Performa 400 OLD STYLE	N.A.
18	AW141A	3019870	I-Lid Cover NEW STYLE	9,51
18A	AW142	1000062	I-Lid Cover OLD STYLE	*** 11,40
*	AW329	1041174	Standard Valve Disc Kit	37,21
*	AW309	1035778	Performa Camshaft 400 Clip	*** 1,65
15+16+17+18	AW212	3034599	Upgrade kit 263-268 400 series NEW STYLE	36,22
*	AV037	1239760	Blending Kit for 255 and 268 valves	3,41
*	AV065	1041116	Kit Switch Performa 400 0.1 Amp	47,00
*	AV066	1041117	Kit Switch Performa 400 5 Amp	35,69
*	AV039		Bypass 1265 1"	79,00
*	AV040		Bypass 1265 1 1/4"	105,84
*	AW174	3030450	Top Plate Screw No 8 x 9/16"	0,73

* Not shown *** Out-of-production, available till it will be out-of-stock N.A. = Not available.

LOGIX 263-268-278 VALVE EXPLODED VIEW



Number	Ref.	P.N.	Description	Price EURO
1+2+3+13	AW362	1255104	263-268/700 Valve Assembly w/o Controls	210,86
1+2+3+13	AW363	1255105	278/700 Valve Assembly w/o Controls	248,25
2	AW359	1235338	Top Plate 268/700	46,84
3	AW360	1235339	Valve Disc Spring, One Piece	11,76
4	AW148	1236246	Cover 255-268 700/860 Valve	21,05
5	AW358	1235352	Standard Cam 263-268/700-860 Valve black	23,41
5	AW361	1237405	Standard Cam 278/700-800 Valve brown	23,41
6	AW100	1000209	Drain Control Assembly No 7 for 7" tank	10,83
6	AW101	1000210	Drain Control Assembly No 8 for 8" tank	10,83
6	AW102	1000211	Drain Control Assembly No 9 for 9" tank	10,83
6	AW103	1000212	Drain Control Assembly No 10 for 10" tank	10,83
6	AW104	1000213	Drain Control Assembly No 12 for 12" tank	10,83
6	AW105	1000214	Drain Control Assembly No 13 for 13" tank	10,83
6	AW106	1000215	Drain Control Assembly No 14 for 14" tank	10,83
6	AV044	1030355	Drain Line Flow Control Assembly 05 gpm	20,83
6	AV045	1030356	Drain Line Flow Control Assembly 06 gpm	20,83
6	AV046	1030357	Drain Line Flow Control Assembly 07 gpm	20,83
6	AV047	1030358	Drain Line Flow Control Assembly 08 gpm	20,83
6	AV048	1030359	Drain Line Flow Control Assembly 09 gpm	20,83

LOGIX 263-268-278 VALVE EXPLODED VIEW

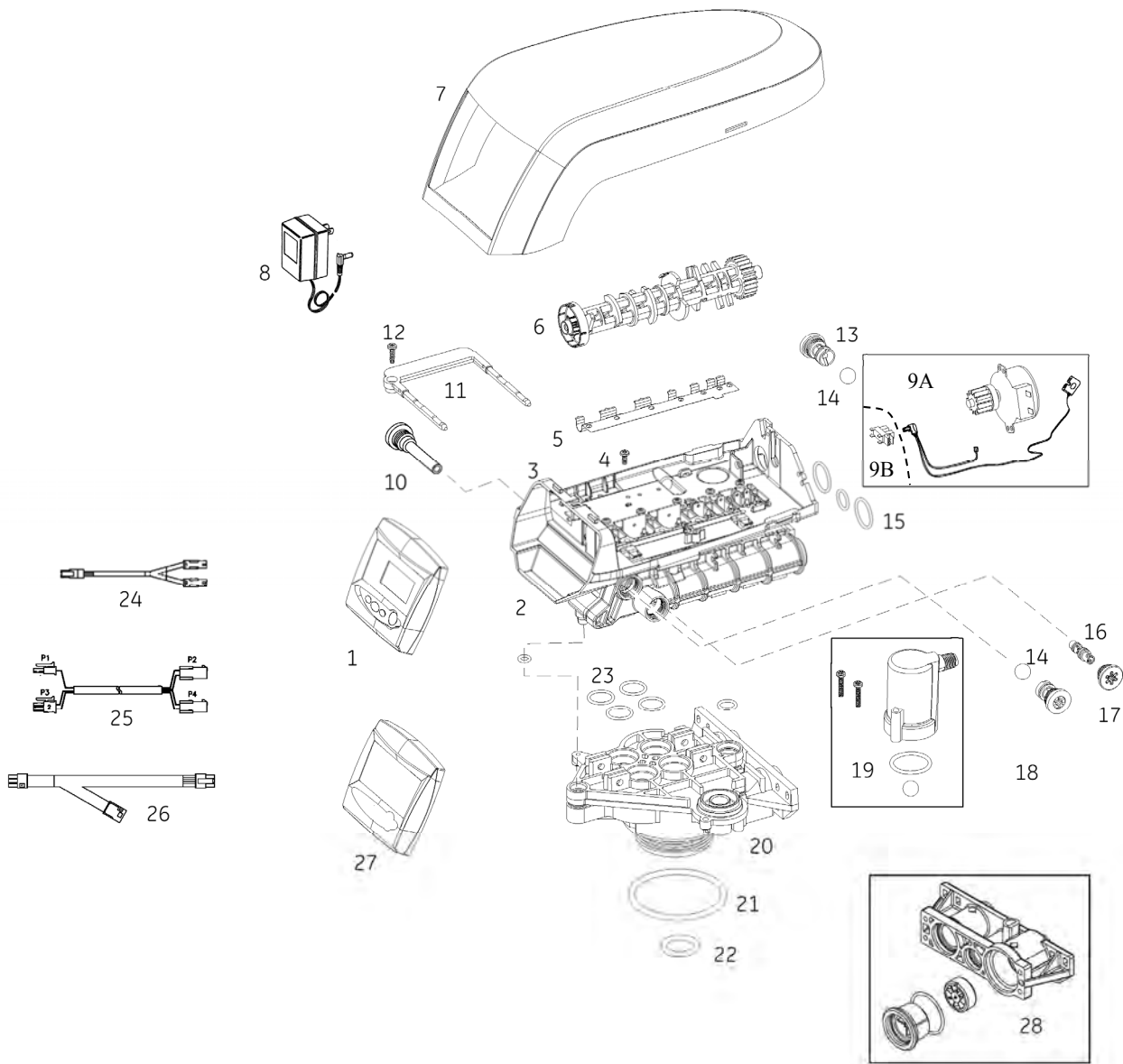


Number	Ref.	P.N.	Description	Price EURO
6	AV049	1030360	Drain Line Flow Control Assembly 10 gpm	20,83
6	AV141	1000406	Drain Line Flow Control Assembly 12 gpm	32,38
6	AV142	1000407	Drain Line Flow Control Assembly 15 gpm	32,38
6	AV144	1000409	Drain Line Flow Control Assembly 20 gpm	32,38
8	AW125	1000226	Screen/Cap Assembly with O-ring	3,85
9	AW133	1035730	E injector – Yellow	7,48
9	AW134	1035731	F injector – Peach	7,48
9	AW135	1035732	G injector – Tan	7,48
9	AW136	1035733	H injector – Light Purple	7,48
9	AW137	1035734	J injector – Light Blue	7,48
9	AW138	1035735	K injector – Pink	7,27
9	AW348	1035736	L injector – Orange	7,48
9	AW349	1035737	M injector – Brown	7,48
9	AW350	1035738	N injector – Green	7,48
9	AW351	1035739	Q injector – Purple	7,48
9	AW352	1035884	R injector – Dark grey	7,48
10A	AW116	1000222	Brine Refill Control 0.33 gpm old style	N.A.
10B	AW118	1243511	Brine Refill Control 0.33 gpm (requires ball)	10,83
10B	AW327	1000519	Brine Refill Control 1.30 gpm (requires ball)	16,15
11	AW139	1030502	Flow Control Ball	0,91
11	AW308	1030334	Plugged Refill Control for 263	7,02
12	AV175	1002449	Drain Fitting Elbow ¾"	4,52
13	AW169	3030918	O-ring 1,05"	1,14
14	AW107	1000269	Injector / Backwash 00-open Cap with o-ring	3,55
15	AW319	1035622	Tank Ring	7,71
16	AV030		¾" BSPT Brass Pipe Adapter kit	15,20
16	AV031		1" BSPT Brass Pipe Adapter Kit	15,85
16	AV032	1001615	32 mm PVC Tube Adapter Kit	22,50
16	AV038		1 ¼" BSPT Brass Pipe Adapter Kit	43,28
17	AW129	1235373	Optic Sensor	16,43
18	AW126	1238861	Motor w/Spacer & Pinion & Cable 700 Series Controller	70,27
*	AW172	3029969	O-ring tank	5,87
*	AW329	1041174	Valves Disk Kit	37,21
*	AV037	1239760	Blending Kit for 255 and 268 valves	3,41
*	AW128	1235446	Turbine cable 255-268-278/700	23,41
19	AW328	1033444	Turbine Assembly	19,89
*	AX040	1244336	Kit Chlorine Generator 255/268 Logix	78,08
*	AW124	3029962	Motor Locking Pin	1,43
*	AV057	1239711	Front Mount Switch Kit 0.1 A	50,78
*	AV058	1239752	Front Mount Switch Kit 5 A	50,78
*	AV059	1239753	Top Plate Mount Switch Kit 0.1 A	50,78
*	AV069	1239754	Top Plate Mount Switch Kit 5 A	50,78
*	AV036	1263718	Kit remote Logix control with 3 m cable	49,34
*	AV036A	1256257	Kit remote Logix control with terminal blocks	45,25
*	AV023	1242411	Extension cord for cabinets	19,71
*	AV023A	1239979	Logix impulse Kit	18,40

* Not shown

*** Out-of-production, available till it will be out-of-stock

255/764 VALVE EXPLODED VIEW & PARTS LIST



Number	Ref.	P.N.	Description	Price EURO
1	AW505E		764C Timer w/check salt 12V 50Hz w/Symbol Label	303,99
2+3+4+5	AW168	1244650	255/700 Valve Assembly w/o Flow Controls	178,89
3	AW162	1235340	Top plate, 255 Valve, 700/860 Series Controller	46,84
4 -12	AW174	3030450	Top Plate Screw No 8 x 9/16"	0,73
5	AW163	1235341	Spring One Piece, 255 Valve	11,87
6	AW149	1235353	Cam 255/700-860 Series Valve, STD, Black, L mode	20,81

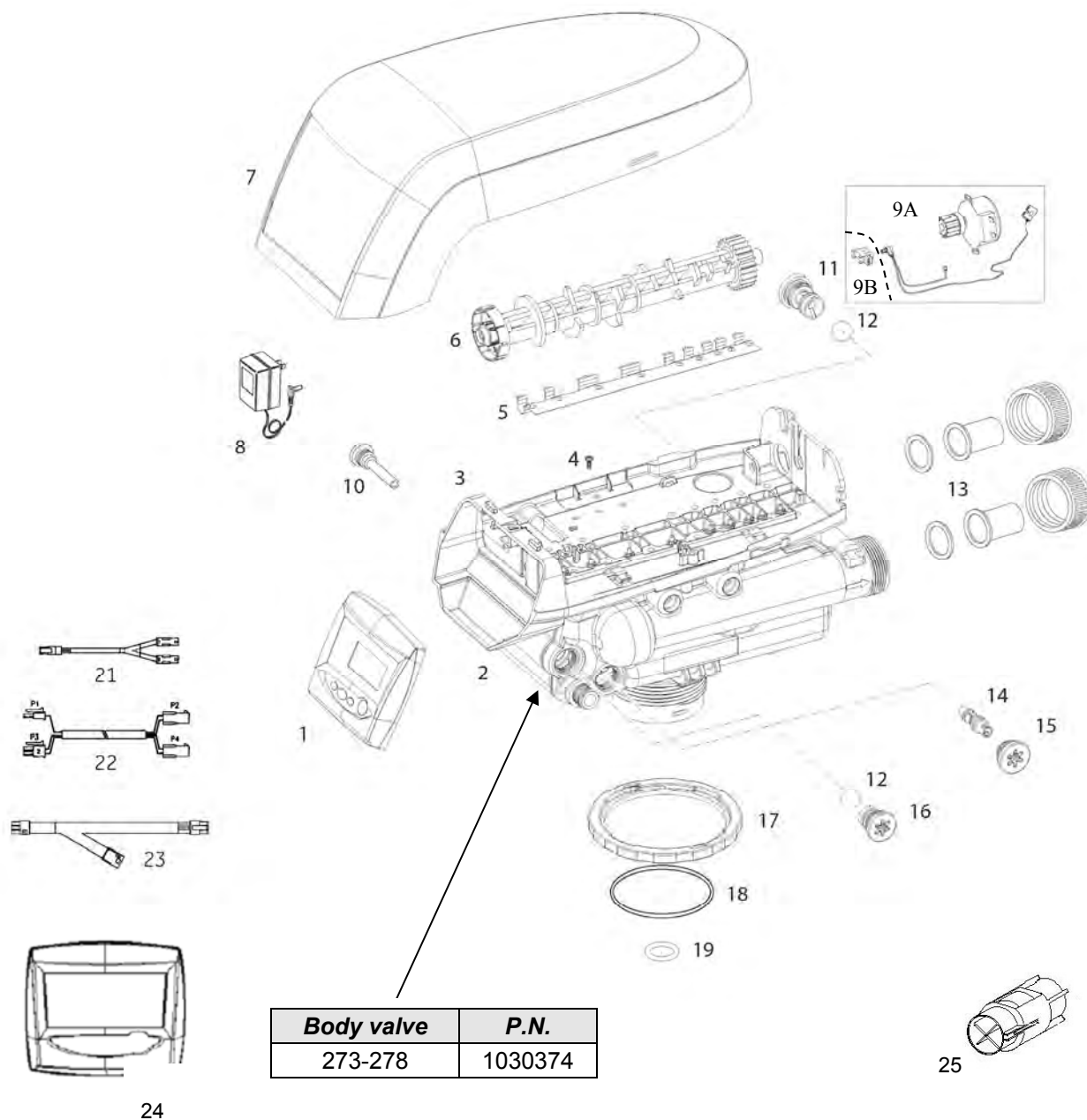
255/764 VALVE EXPLODED VIEW & PARTS LIST



Number	Ref.	P.N.	Description	Price EURO
6	AW177	1236251	Cam 255/700-860 Series valve, TWIN, Tan, A-P mode	24,69
7	AW148	1236246	Standard Cover 255-268 Valve, 700/860 Series	21,05
8	AW500	1000814	European Transformer 230/12V	35,12
8	AW501	1000813	British Transformer	35,12
8	AW502	1000811	American transformer 120/12V	N.A.
9A	AW126	1238861	Motor w/Spacer& Pinion & Cable 700 Series Controller	70,27
9B	AW129	1235373	Optic Sensor	16,43
10	AW125	1000226	Screen/Cap Assembly with O-ring	3,85
11	AW173	1031405	Locking Bar	8,24
13	AW100	1000209	Drain Control Assembly No 7 for 7" tank	10,83
13	AW101	1000210	Drain Control Assembly No 8 for 8" tank	10,83
13	AW102	1000211	Drain Control Assembly No 9 for 9" tank	10,83
13	AW103	1000212	Drain Control Assembly No 10 for 10" tank	10,83
13	AW104	1000213	Drain Control Assembly No 12 for 12" tank	10,83
13	AW105	1000214	Drain Control Assembly No 13 for 13" tank	10,83
13	AW106	1000215	Drain Control Assembly No 14 for 14" tank	10,83
14	AW139	1030502	Flow Control Ball (if used)	0,91
15	AW196	1040459	O-ring Set	0,53
16	AW133	1035730	E injector – Yellow	7,48
16	AW134	1035731	F injector – Peach	7,48
16	AW135	1035732	G injector – Tan	7,48
16	AW136	1035733	H injector – Light Purple	7,48
16	AW137	1035734	J injector – Light Blue	7,48
16	AW138	1035735	K injector – Pink	7,48
16	AW348	1035736	L injector – Orange	7,48
16	AW349	1035737	M injector – Brown	7,48
16	AW350	1035738	N injector – Green	7,48
16	AW351	1035739	Q injector – Purple	7,48
16	AW352	1035884	R injector – Dark grey	7,48
17	AW107	1000269	Injector / Backwash 00-open Cap with o-ring	3,55
18	AW118	1243511	Brine Refill Control 0.33 gpm (requires ball)	10,83
19	AW190	1032417	Air-check Kit ¼" male	11,58
20	AW170	1033784	255 Tank Adapter New Style	107,49
21	AW172	3029969	O-ring tank	5,87
22	AW169	3030918	O-ring 1,05"	1,14
23	AW195	1001404	O-ring set	7,31
24	AW365	3016715	Y sensor cable connector TWIN	35,37
25	AW366	3016775	Interconnecting cable twin	126,42
26	AW367	3020228	Remote Start / Lockout (only L mode)	50,24
27	AW504	1254886	Blank secondary controller	34,26
28	AW201	1032350	Meter Adapter Kit	38,53
*	AW124	3029962	Motor Locking Pin	1,43
*	AW128	1035446	Turbine cable 255-268-278/700	23,41

* Not shown

278/764 VALVE EXPLODED VIEW AND PARTS LIST



Number	Ref.	P.N.	Description	Price EURO
1	AW505E		764C Timer w/check salt 12V 50Hz w/Symbol Label	303,99
2+3+4+ +5+19	AW363	1255105	278/700 Valve Assembly w/o Controls	248,25
3	AW359	1235338	Top Plate 268/700	46,84
4	AW174	3030450	Top Plate Screw No 8 x 9/16"	0,73
5	AW360	1235339	Valve Disc Spring, One Piece	11,76
6	AW361	1237405	Standard Cam 278/700-800 Series Valve, Brown	23,41

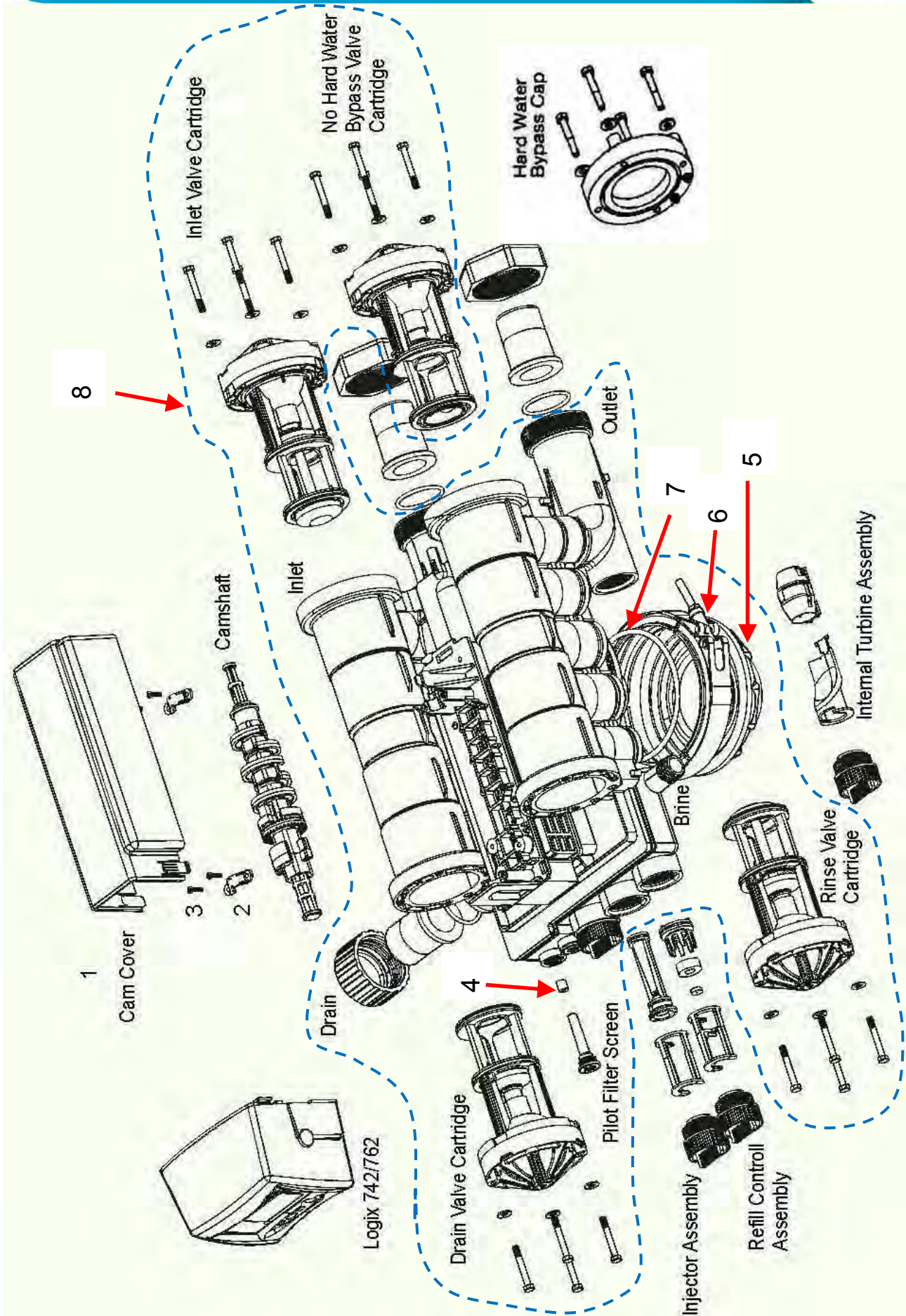
278/764 VALVE EXPLODED VIEW AND PARTS LIST



Number	Ref.	P.N.	Description	Price EURO
6	AW364	1237406	Twin cam 278/700, Tan	33,18
7	AW148	1236246	Cover 255-268 700/860 Valve	21,05
8	AW500	1000814	European Transformer 230/12V	35,12
8	AW501	1000813	British Transformer	35,12
8	AW502	1000811	American transformer 120/12V	N.A.
9A	AW126	1238861	Motor w/Spacer & Pinion & Cable 700 Series Controller	70,27
9B	AW129	1235373	Optic Sensor	16,43
10	AW125	1000226	Screen/Cap Assembly with O-ring	3,85
11	AW100	1000209	Drain Control Assembly No 7 for 7" tank	10,83
11	AW101	1000210	Drain Control Assembly No 8 for 8" tank	10,83
11	AW102	1000211	Drain Control Assembly No 9 for 9" tank	10,83
11	AW103	1000212	Drain Control Assembly No 10 for 10" tank	10,83
11	AW104	1000213	Drain Control Assembly No 12 for 12" tank	10,83
11	AW105	1000214	Drain Control Assembly No 13 for 13" tank	10,83
11	AW106	1000215	Drain Control Assembly No 14 for 14" tank	10,83
12	AW139	1030502	Flow Control Ball	0,91
13	AV031		1" BSPT Brass Pipe Adapter Kit	15,85
13	AV032	1001615	32 mm PVC Tube Adapter Kit	22,50
13	AV038		1 1/4" BSPT Brass Pipe Adapter Kit	43,28
13	AW183		32 mm PVC Tube Adapter Kit	11,88
14	AW133	1035730	E injector – Yellow	7,48
14	AW134	1035731	F injector – Peach	7,48
14	AW135	1035732	G injector – Tan	7,48
14	AW136	1035733	H injector – Light Purple	7,48
14	AW137	1035734	J injector – Light Blue	7,48
14	AW138	1035735	K injector – Pink	7,48
14	AW348	1035736	L injector – Orange	7,48
14	AW349	1035737	M injector – Brown	7,48
14	AW350	1035738	N injector – Green	7,48
14	AW351	1035739	Q injector – Purple	7,48
14	AW352	1035884	R injector – Dark grey	7,48
15	AW107	1000269	Injector / Backwash 00-open Cap with o-ring	3,55
16	AW118	1243511	Brine Refill Control 0.33 gpm (requires ball)	10,83
16	AW327	1000519	Brine Refill Control 1.30 gpm (requires ball)	16,15
17	AW319	1035622	Tank Ring	7,71
18	AW172	3029969	O-ring tank	5,87
19	AW169	3030918	O-ring 1,05"	1,14
21	AW365	3016715	Y sensor cable connector TWIN	35,37
22	AW366	3016775	Interconnecting cable twin	126,42
23	AW367	3020228	Remote Start / Lockout (only L mode)	50,24
24	AW504	1254886	Blank secondary controller	34,26
*	AW124	3029962	Motor Locking Pin	1,43
*	AW128	1235446	Turbine cable 255-268-278/700	23,41
25	AW328	1033444	Turbine Assembly	19,89

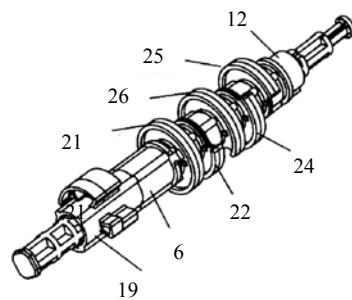
* Not shown

MAGNUM VALVE 700 SERIES EXPLODED VIEW

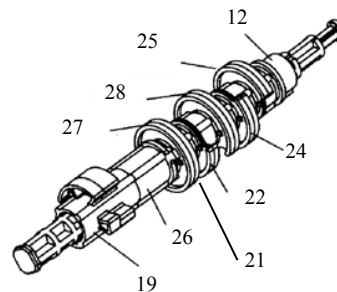




Number	Ref.	P.N.	Description	Price EURO
1	CD140	1000343	Cam Cover	12,62
2	CD100	1000589	Pillow Block Cap	3,22
3	CD109	3030505	Screw (long)	0,61
4	CD144	3025780	Internal Pilot System Check Valve	10,37
5	CD171	3024790	AISI 304 Magnum Adapter	305,50
6	CD173	3024785	AISI 304 Clamp	108,69
7	CD174	3026486	Clamp o-ring	14,51
*	CD166	3007801	1 ½" HWB Magnum Valve body w/o camshaft & reg.	734,49
*	CD167	3007803	1 ½" NHB Magnum Valve body w/o camshaft & reg.	824,80
*	CD168	3007805	2" IT HWB Magnum Valve body w/o camshaft & reg.	N.A.
8	CD169	3007806	2" IT NHB Magnum Valve body w/o camshaft & reg.	914,96



A) CAMSHAFT ASSEMBLY
SOFTENER/FILTER LOGIX

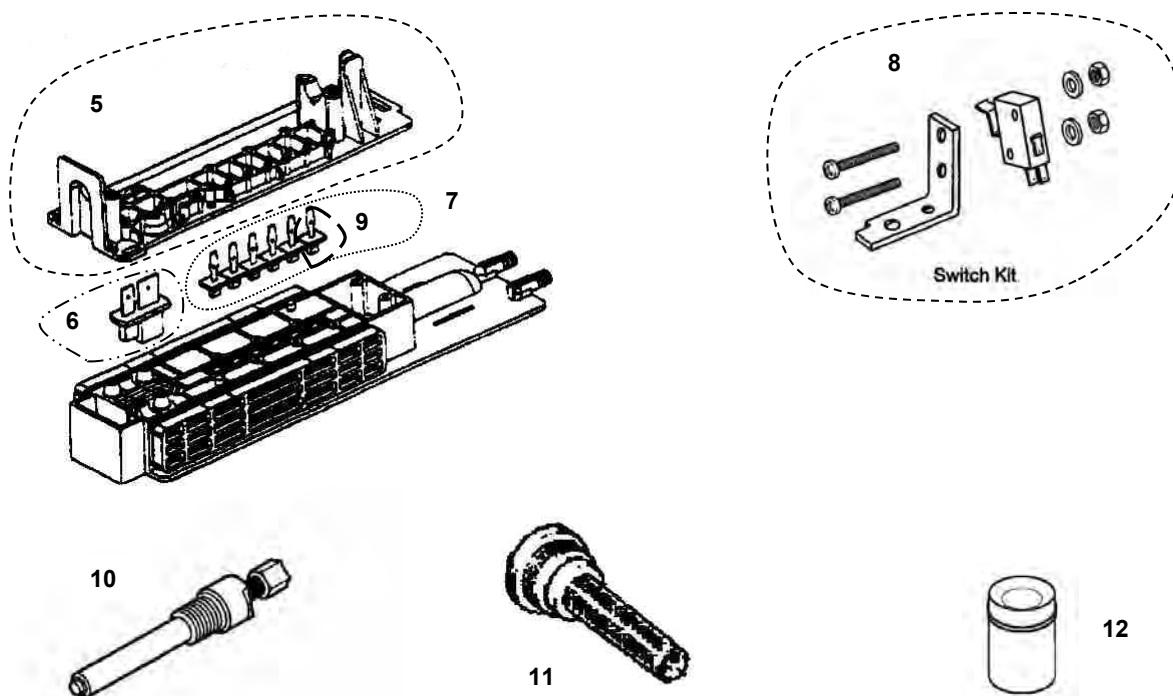


B) CAMSHAFT ASSEMBLY
TWIN LOGIX

Number	Ref.	P.N.	Description	Price EURO
A)	CD125	1267726	Logix Camshaft Assembly	116,86
consisting of				
19		1000499	Brine Cam - TAN	
6		1000462	Standard Cam - BLACK	
21		1001620	Pilot Cam # 1 - TAN	
22		1001621	Pilot Cam # 2 - BLU	
26		1267724	Pilot Cam # 3 - GREY	
24		1001623	Pilot Cam # 4 - YELLOW	
25		1001624	Pilot Cam # 5 - ORANGE	
12		1000469	Pilot Cam # 6 - RED	
B)	CD126	1001751	Logix TWIN Camshaft Assembly	116,86
consisting of				
19		1000499	Brine Cam - TAN	
26		1034356	Spacer Cam - BLACK	
27		1233554	Standard Cam - TAN	
21		1001620	Pilot Cam # 1 - TAN	
22		1001621	Pilot Cam # 2 - BLU	
28		1001622	Pilot Cam # 3 - GREEN	
24		1001623	Pilot Cam # 4 - YELLOW	
25		1001624	Pilot Cam # 5 - ORANGE	
12		1000469	Pilot Cam # 6 - RED	

N.A. = Not available.

MAGNUM VALVE 700 SERIES SPARE PARTS

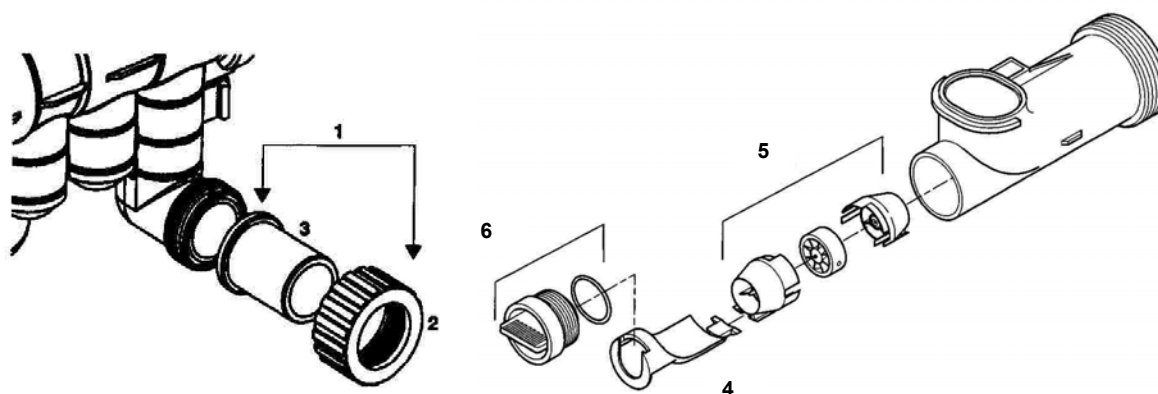


Number	Ref.	P.N.	Description	Price EURO
5	CD141	1000339	Top Plate	21,16
*	AW174	3030450	Top Plate Screw No 8 x 9/16"	0,73
*	CD109	3030505	Screw (long)	0,61
6	CD143	1000391	Brine Flapper Valve	16,49
9	CD142	1000328	Single Pilot Flapper Valve	4,77
*	AW181	1001580	Valve Disc Spring	0,91
6 + 7	CD020	1040692	Kit Flapper	44,71
*	CD161	1010162	O-Ring Tank Adaptor	6,44
*	CC115	1000553	Cam Pilot Auxiliary Twin	16,17
*	CC116	1000554	Cam Pilot Auxiliary Single	16,17
*	CC117	1041064	Breakaway Cam Kit for Auxiliary Output	16,17
8	CC119	3019468	Kit 1 Switch .1 Amp	25,45
8	CC120	3019469	Kit 1 Switch 5 Amp	25,45
*	CC123	3019466	Kit 3 Switch .1 Amp	N.A.
*	CC124	3019467	Kit 3 Switch 5 Amp	64,71
*	CC125	1041065	10-foot Switch Cable Assembly (3 meters length)	N.A.
*	CC126	1041066	20-foot Switch Cable Assembly (6 meters length)	N.A.
10	CC130	1040668	External Pilot Feed Adapter (separate source)	75,01
11	AW125	1000226	Pilot Screen w/Cap and O-ring	3,85
*	CC131	1034312	Twin parallel Interface Cable (10 feet-3 m)	N.A.
*	CC132	1035587	Triple parallel Interface Cable (10 feet-3 m)	N.A.
*	CC133	1035593	Extension cable interconnection	N.A.
12	CD144	3025780	Internal Pilot System Check Valve	10,37

* Not shown

N.A. = Not available.

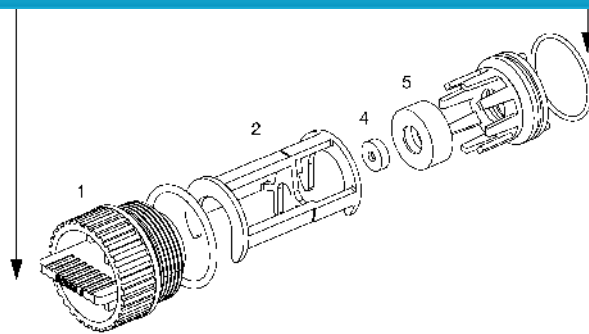
MAGNUM VALVE INSTALLATION ADAPTER PARTS



Number	Ref.	P.N.	Description	Price EURO
1	CC080	3023673	Magnum Cv 1.5" BSPT Stainless Steel Adapter Kit	77,38
1	CC081	1001656	Magnum Cv D.50 mm PVC Adapter Kit	46,15
1	CC082	3023674	Magnum Cv 2" BSPT Stainless Steel Adapter Kit	102,73
1	CC083	1040785	Magnum Cv Plus 2" PVC D. 63 mm Adapter Kit	77,38
2	CD151	1000356	1 1/2" Noryl Adapter Nut	4,69
2	CD152	1030664	2" SS Adapter Nut	39,92
3	CD149		1" CPVC Adapter	N.A.
3	CD153	3014556	1 1/2" Stainless Steel BSP Adapter	28,25
3	CD163		1 1/2" BSPT Female Adapter mat .AVP galvanized	28,92
3	CD154	3014559	2" Stainless Steel BSPT Adapter	45,17
3	CD155	1030577	32 mm metric CPVC Adapter	14,98
3	CD156	1000359	50 mm metric CPVC Adapter	16,49
3	CD157	1030667	63 mm Metric CPVC Adapter	23,06
4	CD067	1000074	Insert, Corner 2"	4,43
5	CD068	1232965	Assembly, Turbine 2" Elbow	83,83
6	CD099	1040688	Assembly, Plug	9,57
*	CD158	3029966	1 1/2" Adapter O-ring	3,33
*	CD159	3029964	2" Adapter O-ring	4,69
*	CD160		1" Plane gasket	N.A.
*	CD161	1010162	4" Tank Adapter O-ring	6,63
*	CD162	1030891	Gasket for 2" Turbine	6,27
*	CC084	1040921	Side Mount Adapter	213,50
*	CD069	1033358	2" Flow meter Body	276,30
*	CD070	1033237	1" Flow meter w/ Stainless Steel BSPT Adapter	N.A.
*	CD071	1033238	1" Flow meter w/ 32 mm metric CPVC Adapter	N.A.
*	CD072	3023537	2" Flow meter w/ Stainless Steel BSPT Adapter	N.A.
*	CD073	1034081	2" Flow meter w/ 63 mm metric CPVC Adapter	474,30
*	CD074	1001466	Turbine cable 3 meters length	N.A.
*	CD075	1233616	IT Turbine cable 0.3 meters length	N.A.
*	CD076	1233615	IT Twin Turbine cable 3 meters length	N.A.

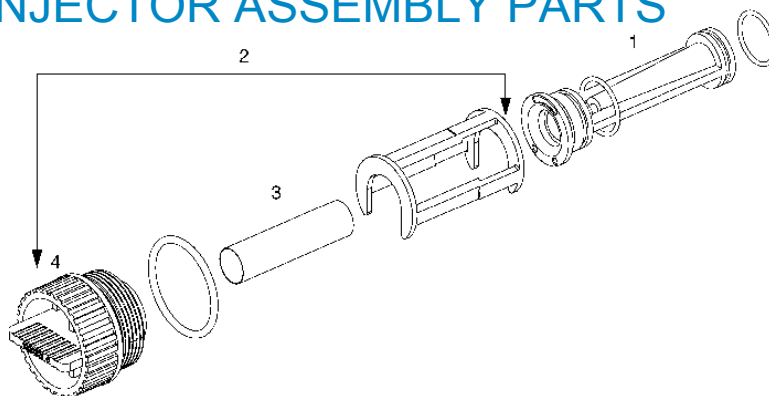
* Not shown *** Out-of-production, available till it will be out-of-stock N.A. = Not available.

MAGNUM REFILL CONTROL ASSEMBLY PARTS



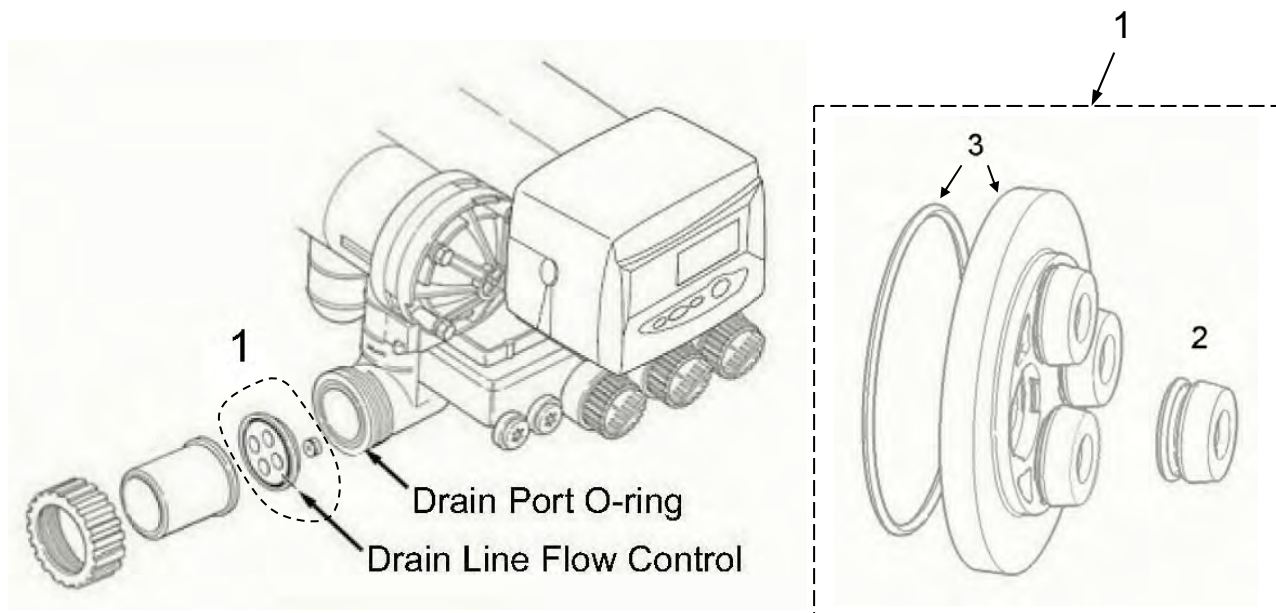
Number	Ref.	P.N.	Description	Price EURO
1	CD099	1040688	Flow Control Plug	9,57
3	CD089	1040687	Refill Control Assembly w/o Refill Control	28,67
4	CD081	1000421	Refill Flow Control for 14" tank – 0,7 GPM	14,29
4	CD082	1000422	Refill Flow Control for 16" tank – 0,8 GPM	14,29
4	CD083	1000423	Refill Flow Control for 18" tank – 1,0 GPM	14,29
4	CD084	1000424	Refill Flow Control for 21" tank – 1,4 GPM	14,29
4	CD085	1000425	Refill Flow Control for 24" tank – 2,0 GPM	14,29
4	CD086	1000426	Refill Flow Control for 30" tank – 3,0 GPM	14,29
4	CD087	1000427	Refill Flow Control for 36" tank – 5,0 GPM	14,29
5	CD080	1000479	Refill Flow Control Cage	11,17

MAGNUM INJECTOR ASSEMBLY PARTS



Number	Ref.	P.N.	Description	Price EURO
1	CD091	1040670	Injector for 14" Tank - 0.5 GPM	26,99
1	CD092	1040671	Injector for 16" (40,6 cm) Tank – 0,5 GPM	26,99
1	CD093	1040672	Injector for 18" (45,7 cm) Tank – 0,6 GPM	26,99
1	CD094	1040673	Injector for 21" (53,3 cm) Tank – 0,9 GPM	26,99
1	CD095	1040674	Injector for 24" (61,0 cm) Tank – 1,4 GPM	26,99
1	CD096	1040675	Injector for 30" (76,2 cm) Tank – 2,0 GPM	26,99
1	CD097	1040676	Injector for 36" (91,4 cm) Tank – 3,3 GPM	26,99
1	CD097A	1000491	Injector for 42" (106,7 cm) Tank – 4,2 GPM	26,99
1	CD098	1040669	Blank Injector	26,99
2	CD088	1040677	Injector Assembly (Less injector)	20,40
3	CD090	1000322	Injector Screen	9,57
4	CD099	1040688	Plug for injector, Refill & Pressure regulator ports	9,57

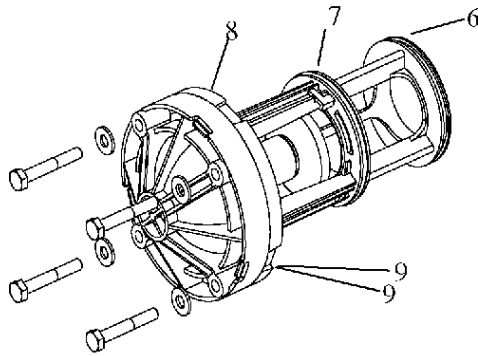
MAGNUM DRAIN LINE FLOW CONTROL PART LIST



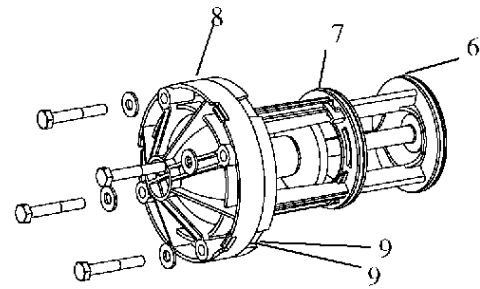
Number	Ref.	P.N.	Description	Price EURO
1	CC101	1040720	Flow Control Disk 05 gpm	42,76
1	CC102	1040721	Flow Control Disk 06 gpm	42,76
1	CC103	1040723	Flow Control Disk 08 gpm	42,76
1	CC104	1040725	Flow Control Disk 10 gpm	42,76
1	CC105	1040728	Flow Control Disk 13 gpm	42,76
1	CC114	1040729	Flow Control Disk 14 gpm	42,76
1	CC106	1040740	Flow Control Disk 15 gpm	42,76
1	CC107	1040745	Flow Control Disk 20 gpm	42,76
1	CC108	1040747	Flow Control Disk 22 gpm	42,76
1	CC109	1040730	Flow Control Disk 25 gpm	42,76
1	CC110	1040735	Flow Control Disk 30 gpm	42,76
1	CC111	1040750	Flow Control Disk 35 gpm	42,76
1	CC112	1040755	Flow Control Disk 40 gpm	42,76
1	CC113	1040742	Flow Control Disk 17 gpm	N.A.
2	CD101	1040756	Flow Control Insert 05 gpm blue	2,50
2	CD102	1040757	Flow Control Insert 06 gpm red	2,50
2	CD103	1040758	Flow Control Insert 07 gpm light brown	2,50
2	CD104	1040759	Flow Control Insert 08 gpm green	2,50
2	CD105	1040760	Flow Control Insert 09 gpm white	2,50
2	CD106	1040761	Flow Control Insert 10 gpm brick red	2,50
2	CD107	1040763	Blank Flow Control Insert black	2,50
2	CD180		Drain line flow control inserts kit (it includes n.1 CD102, n.1 CD103, n.1 CD104, n.1 CD105 and n.4 CD106)	20,04
3	CD108	1040762	Flow Control Disk w/O-ring	35,54

* Not shown

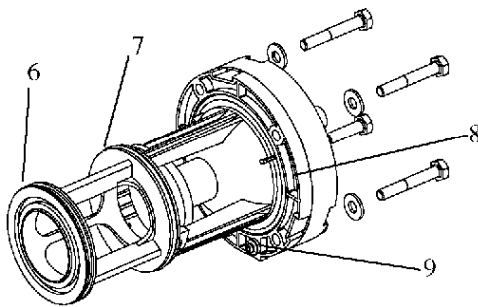
MAGNUM CARTRIDGES PARTS LIST



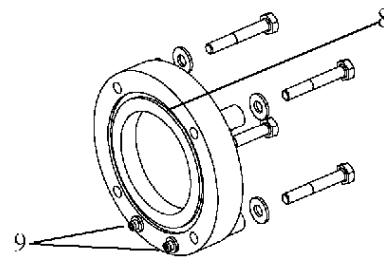
1 - Drain Valve Cartridge



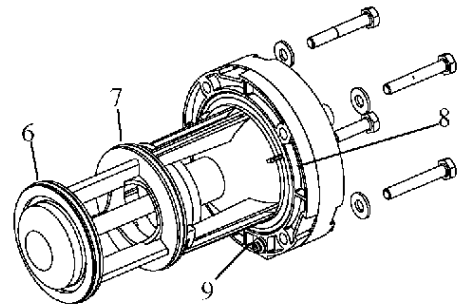
2 - Rinse Valve Cartridge



3 - No Hard Water Bypass Valve Cartridge



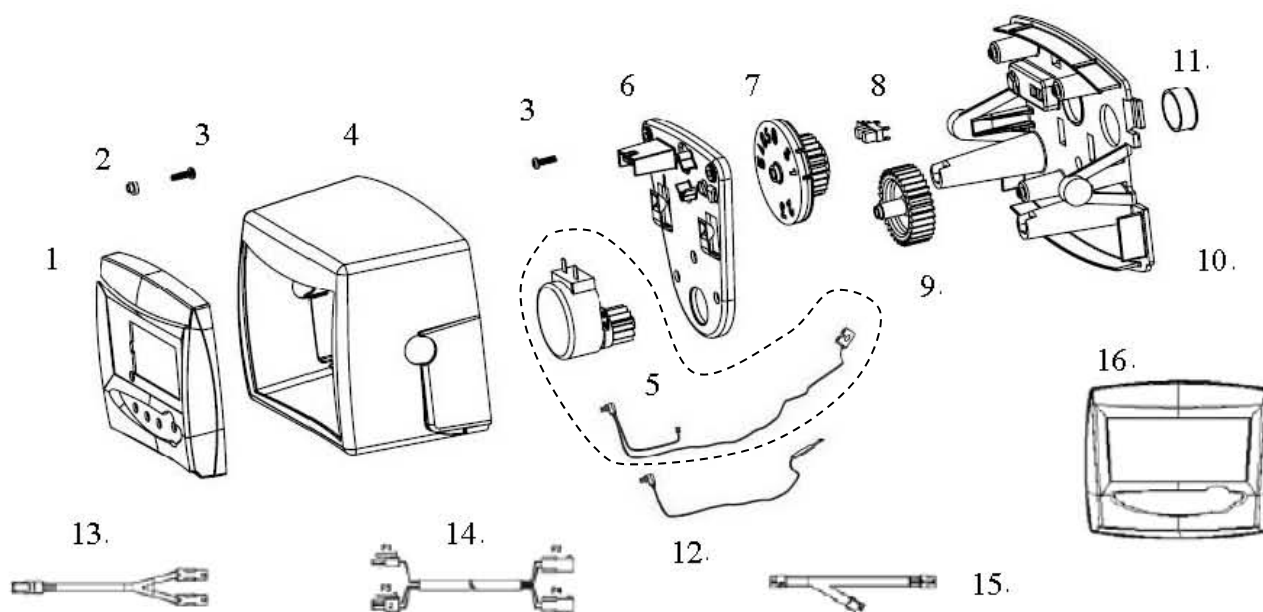
4 - Hard Water Bypass Cap



5 - Inlet Valve Cartridge

Number	Ref.	P.N.	Description	Price EURO
1-3	CD111	1000366	Drain Valve/No Hard Water Bypass Valve Cartridge	120,01
2	CD112	1000365	Rinse Valve Cartridge	167,34
4	CD114	1000336	Hard Water Bypass Cap	32,98
5	CD113	1000317	Inlet Valve Cartridge	167,34
6	CD118	1010157	O-ring # 6	1,35
7	CD119	1010158	O-ring # 7	1,35
8	CD120	3030497	O-ring # 8	2,97
9	CD124	1010116	O-ring – 2 pcs	0,91
*	CD116	1040690	O-ring kit (includes 1x #8, 2x #9)	8,00
*	CD115	1040689	O-ring kit (includes 1x#6, 1x#7, 1x#8, 2x#9)	7,48
*	CD117	3030517	Washer, Plain,.250",TYPE "A"-N – 4 pcs	N.A.

* Not shown



Number	Ref.	P.N.	Description	Price EURO
1	AW512E		742C Timer w/check salt 12V 50Hz w/Symbol Label	222,75
1	AW515E		762C Timer w/check salt 12V 50Hz w/Symbol Label	281,04
1	AW518E		742F Timer w/check salt 12V 50Hz w/Symbol Label	222,75
1	AW525E		762F Timer w/check salt 12V 50Hz w/Symbol Label	281,04
1	AW505E		764C Timer w/check salt 12V 50Hz w/Symbol Label	303,99
2	CD135	3030921	Bushing Logix Mount (2 pcs required)	1,19
3	CD136	3030001	Screw (2 pcs required)	1,19
4	CD137	1262674	Cover Logix Magnum	21,69
5	AW126	1238861	Motor w/Spacer& Pinion & Cable 700 Series Controller	70,27
6		1262673	Gear Plate Logix Magnum Control	N.D.
7	CD139	1262581	Drive Gear Logix Magnum Control	66,92
8	AW129	1235373	Optic Sensor	16,43
9	CD128	1262672	Idle Gear Logix Magnum Control	66,92
10		1262580	Timer Back Plate	N.A.
11		1239647	Bushing Cable	N.A.
12	CD131	1266722	Turbine Cable Logix Lg = 0.8 m	54,21
12	CD132	1266723	Turbine Cable Logix Lg = 3 m	60,00
12	CD133	1266724	Turbine Cable Logix Lg = 7.5 m	69,22
13	AW365	3016715	Y sensor cable connector TWIN	35,37
14	AW366	3016775	Interconnecting cable twin	126,42
15	AW367	3020228	Remote Start / Lockout (only L mode)	50,24
16	AW504	1254886	Blank secondary controller	34,26
*	CD138	1233809	Logix Magnum Control Mech. Assembly (5-6-7-8-9-10-11)	326,62
*	AW500	1000814	European Transformer 230/12V	35,12
*	AW501	1000813	British Transformer	35,12
*	AW502	1000811	American transformer 120/12V	N.A.
*	AV036	1263718	Logix controller Cable Remote Kit lg = 3 m	49,34
*	AV036A	1256257	Logix controller Terminal Board Remote Kit	45,25
*	AV023A	1239979	Impulse Start Cable quadripin connector 700 series	18,40

UPGRADE KIT 700 SERIES



Number	Ref.	P.N.	Description	Price EURO
*	AA199E		Upgrade kit U255-740C SYMBOL	N.A.
*	AA099E		Upgrade kit U255-742C SYMBOL	N.A.
*	AC199E		Upgrade kit U255-760C SYMBOL	N.A.
*	AC099E		Upgrade kit U255-762C SYMBOL	N.A.
*	AF049E	3022343E	Upgrade kit U255-764C TW SYMBOL	*** 475,58
*	AM199E		Upgrade kit U268-740C SYMBOL	N.A.
*	AM066E		Upgrade kit U268-742C SYMBOL	*** 295,52
*	AP199E		Upgrade kit U268-760C SYMBOL	N.A.
*	AP039E		Upgrade kit U268-762C SYMBOL	N.A.
*	AR109E		Upgrade kit U278-762C SYMBOL	*** 342,45
*	AN079E	3022345E	Upgrade kit U278-764C TW SYMBOL	N.A.
*	CD024E		Upgrade kit Magnum U298-742 SYMBOL	*** 416,12
*	CD025E		Upgrade kit Magnum U293-742F SYMBOL	*** 416,20
*	CD026E		Upgrade kit Magnum U298-762 SYMBOL	*** 475,58
*	CD027E		Upgrade kit Magnum U293-762F SYMBOL	N.A.
*	CD028E		Upgrade kit Magnum U298-764 TW SYMBOL	N.A.
*	CD029E		Upgrade kit Magnum U298-764 MULTITANK SYMBOL	N.A.

* Not shown

*** Out-of-production, available till it will be out-of-stock

N.A. = Not available.

255 D.I. VALVE SPARE PART LIST



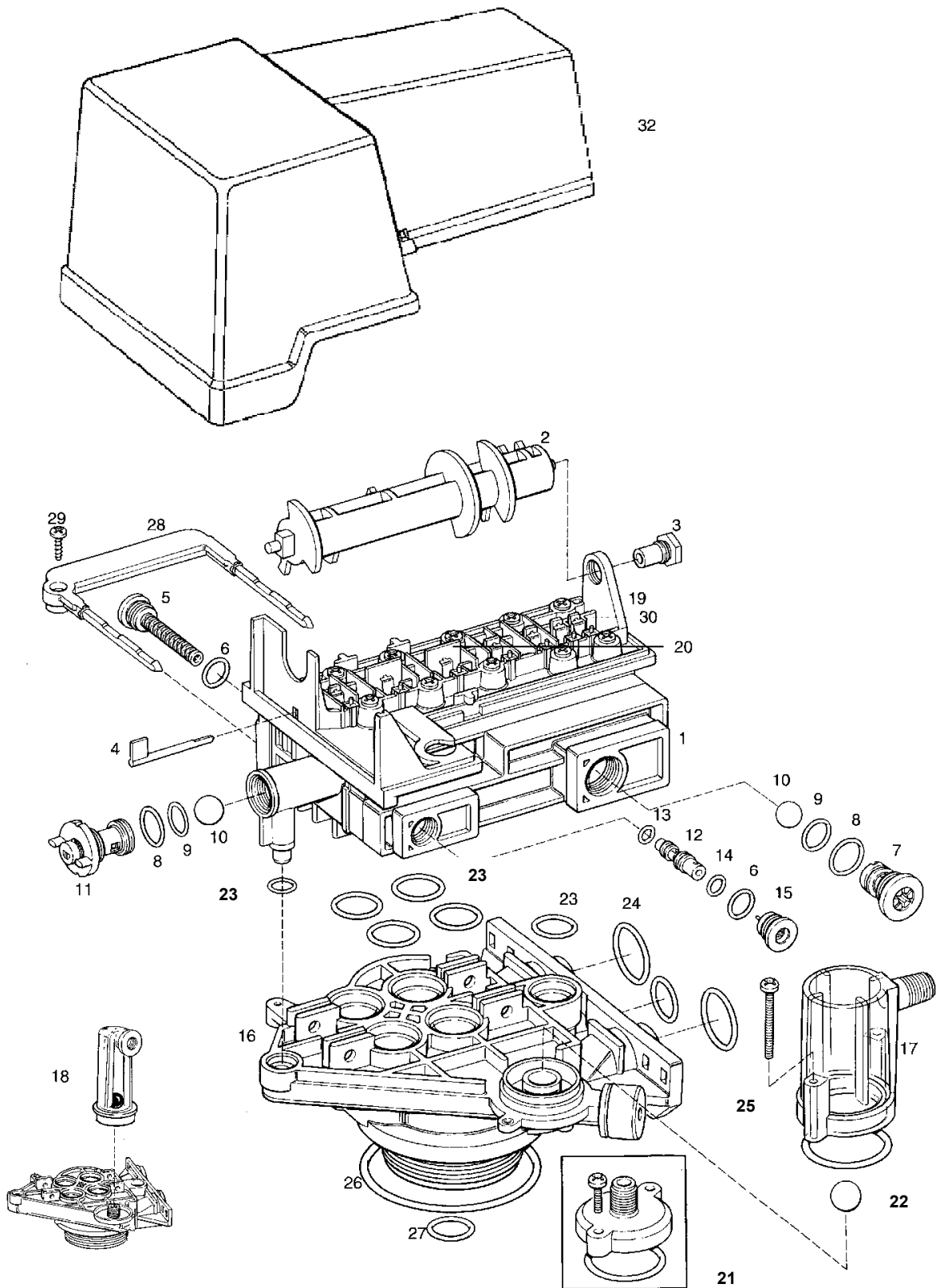
Number	Ref.	P.N.	Description	Price EURO
*	AW030	1030933	Flow Control Ball	2,06
*	AW040	1033441	Cap	24,22
*	AW041	1034117	Injector A	24,97
*	AW042	1034118	Injector B	24,25
*	AW043	1034119	Injector C	24,97
*	AW044	1033437	Backwash 08	23,81
*	AW045	1033438	Backwash 09	23,81
*	AW046	1033439	Backwash 10	23,81
*	AW047	1033440	Backwash 12	23,81
*	AW048	1034110	Check Valve	9,15
*	AW049	1034185	O-ring Set	N.A.
*	AW049EP		O-ring Set EPDM	8,32
*	AW050	1033268	O-ring Set	N.A.
*	AW050EP		O-ring Set EPDM	4,94

* Not shown

*** Out-of-production, available till it will be out-of-stock

N.A. = Not available.

155 VALVE EXPLODED VIEW



155 VALVE SPARE PARTS LIST



Number	Ref.	P.N.	Description	Price EURO
1		155 A77	Valve Assembly w/o Flow Controls	N.D.
2	AW150	1031950	Camshaft Standard one piece	13,71
2	AW151	1033024	Camshaft Standard segmented	N.A.
2	AW152	1033025	Camshaft Extra Salt	20,98
2	AW153	1033026	Camshaft Long Rinse	21,55
3	AW146	1030501	Camshaft Bearing for cover L-Lid	1,60
4	AW185	1031391	Timer Locking Pin	4,15
5	AW013	1032991	Screen/Cap Assembly with O-ring	N.A.
6	AW034	3030527	O-ring	0,91
7	AW014	1000208	Drain Control Assembly No 6 for 6" tank	10,83
7	AW100	1000209	Drain Control Assembly No 7 for 7" tank	10,83
7	AW101	1000210	Drain Control Assembly No 8 for 8" tank	10,83
7	AW102	1000211	Drain Control Assembly No 9 for 9" tank	10,83
7	AW103	1000212	Drain Control Assembly No 10 for 10" tank	10,83
7	AW104	1000213	Drain Control Assembly No 12 for 12" tank	10,83
7	AW105	1000214	Drain Control Assembly No 13 for 13" tank	10,83
8	AW033	1010110	3F O-ring backwash 1/16 x 11/16 x 11/16	N.A.
9	AW032	3030218	2F O-ring backwash 1/16 x 11/16 x 13/16	N.A.
10	AW139	1030502	Flow Control Ball	0,91
11	AW110	1034261	Brine Refill Control 10 lbs Salt – type A	24,56
11	AW111	1034263	Brine Refill Control 19 lbs Salt – type B	24,56
12	AW130	1032970	A Injector - White w/O-ring	7,08
12	AW131	1032971	B Injector - Blue w/O-ring	7,08
12	AW132	1032972	C Injector - Red w/O-ring	7,08
13	AW035	3030525	26F O-ring 1/16 x 1/4 x 3/8	N.A.
14	AW036	1010104	27F O-ring 1/16 x 5/16 x 7/16	N.A.
15	AW009	1032985	Injector Cap with O-ring	N.A.
16	AW170	1033784	Tank Adapter Assembly	107,49
17	AW190	1032417	Air Check kit	11,58
18	AW020	1231264	Old Model Air check	N.A.
19	AW160	1033067	Top Plate 155-255	N.A.
20	AW025	1033013	Disc Valves kit	25,26
21	AW191	1033066	New to Old Air Check Adapter	5,10
22	AW140	1030528	Air-check ball	1,01
23	AW195	1001404	O-ring Set	7,31
24	AW196	1040459	O-ring Set	0,53
25	AW175		Inox Screw length 75 mm (for electrode adapter)	2,76
25	AW176		Vite inox 8-32 UNC lg. 55 mm	N.A.
*	AW197		O-ring Set w/screws and nuts	4,12
26	AW172	3029969	O-ring tank	5,87
27	AW169	3030918	O-ring 1,05"	1,14
28	AW173	1031405	Locking Bar	8,24
29	AW174	3030450	Top Plate Screw No 8 x 9/16"	0,73
30	AW181	1001580	Valve Disc Spring	0,91
32	AW141	1032565	Standard Cover 440i-450i (L-Lid) OLD STYLE	N.A.

N.A. = Not available.



- Any other conditions different from the following will be valid, if accepted in writing.
- Sending the order, the Buyer knows and accepts the general sale's conditions.
- The prices are ex-warehouse, packing included.
- Catalogs and technical sheets can be modified in any moment.
- Eventual delays in delivery do not justify the order's cancellation neither any indenisation.
- Any risk during the delivery is taken by the Buyer. The Buyer has to check quantities and conditions at the reception of the goods; eventual complaints have to be made in writing within 8 days from reception.
- The products are guaranteed for a period of 12 months from the date of delivery, except the normal wear.
The goods considered defective, after our written authorization, have to be returned at Buyer's freight together with the information about the defect.
- We can accept return of material for any different reason than warranty claim only by previous authorization and within 90 days from invoice date. The value of goods will be decreased by 20% from purchase price for all the products except for cabinets that will be decreased by 30%.
- We can't accept return of material indicated in this catalogue as "not available in stock".
- The eventual cancellation of an order of material "not available in stock" must be done within 3 working days from the order date.
- In case of delay in payments interest are due. The delay will cause the suspension of the guarantee and further supplies. The property of the delivered goods will remain to us until the complete payment of the invoices.
- We will not accept orders for net amount lower than 250 EURO.
- In case of controversy the Law – court of Milan (Italy) will be competent.



EUROTROL®

WATER TREATMENT COMPONENTS

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