

FILTRATION



- 98 • Retro-fit filter combination units
- 100 • Diatomaceous earth filters
- 102 • Cartridge filters
- 103 • Hydrocyclonic pre-filter
- 104 • Injection moulded sand filters
- 105 • Blow-moulded sand filters
- 107 • Laminated filters
- 113 • AstralPool Signature laminated filters
- 118 • Bobbin wound filters
- 148 • Nefrona monoblocs
- 150 • Multiport valves
- 159 • Valve manifold
- 161 • Control panel
- 162 • Supports for valve manifold
- 163 • Compact filtration housings
- 164 • Air vents
- 165 • Filtration media & accessories
- 166 • Pressure gauge panels and Air blowers

RETRO-FIT FILTER COMBINATION UNITS



Made of heat-moulded ABS, and high quality acrylic finish and advanced design. Specially designed to install in all types of private pools, whether concrete or prefabricated. The compact unit saves the traditional pipework assembly.

The Combo units consist of two separate parts:

- 1) The first part is designed for installation inside the pool and contains the skimmer, return and suction inlets, an underwater light is optional.
- 2) The second part incorporates the pump, filtration equipment, control box and depending on model type, chlorinator, electric heater and transformer for the light. It also includes water discharge connection for backwashing and drainage plug.

The two units can be installed as one compact unit (being adaptable to any type of pool with a wall thickness of 180 to 300 mm) or as a split unit installing the filtration part in a convenient spot not more than 3.5 m away.



Combo I

With 3/4 HP pump with 11 m³/h flow at 10 m.h.w., 3 cartridge filters of 5 m³/h flow rate each. Total filtration surface 6.9 m². Control box included.

Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
18546	1	92	1.241

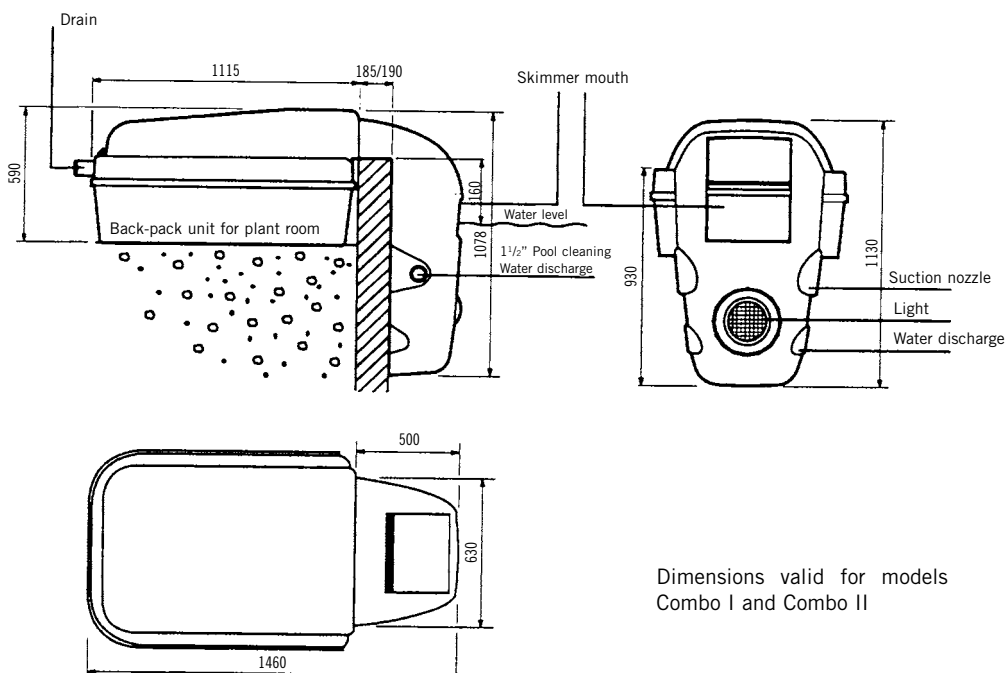


Combo II

With Terra 50 cartridge filter with maximum flow 10 m³/h, Sena pump 3/4 HP, 100 W light and programmable control box. An electric heater and chlorinator can also be incorporated. One single filter replaces the three used in Combo I. Improved return of water to pool. This Combo II can also be installed as one compact unit or can be installed as 2 separated parts.

Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
27413	1	79	1.41

White cartridge filter, 10 m³/h flow



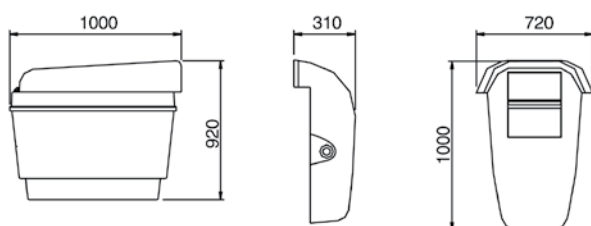
Dimensions valid for models Combo I and Combo II

RETRO-FIT FILTER COMBINATION UNITS

Mini Combo Basic

Made of heat-moulded ABS, and high quality acrylic finish with advanced design. Includes a 3/4 HP pump, a 500 mm sand filter with multiport valve and control box. It also includes water discharge nozzle and drainage plug. This arrangement allows it to be adapted to any pool basin with a wall thickness between 180 and 300 mm. It can also be installed as a split system, using 25900 adapter unit, and placing the filtration section away from the pool in a convenient place but not more than 3.5 m away.

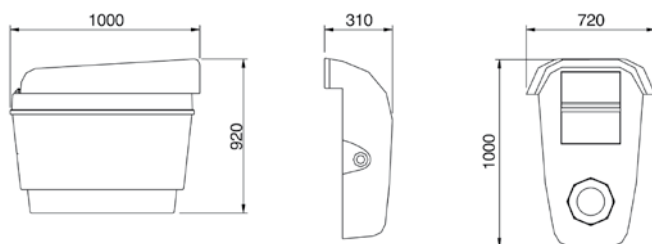
Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
22439	1	95	1.460



Mini Combo with lighting system

The same features as the Basic Mini Combo but also includes a 100 W, 12 V underwater light with transformer.

Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
22440	1	95	1.460



Streamlined covers for Mini-Combo

Includes front covers and cover for filtration unit.

Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
25900	1	1	0.062



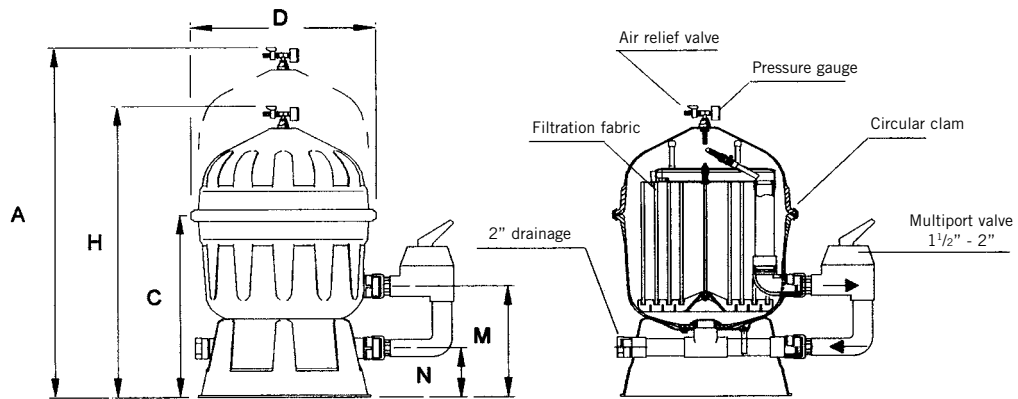
DIATOMACEOUS EARTH FILTERS

Diatomaceous earth Clarity filters



Made in polyester and fibreglass. Supplied with pressure gauge, air vent and side mounted multiport valve. Filtration velocity 4.9 m³/h/m².

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
11000 l/h Ø 600 mm Outlet 1½" Model DE-24	11619	1	34.0	0.410
16400 l/h Ø 600 mm Outlet 1½" Model DE-36	11620	1	39.0	0.460
21800 l/h Ø 600 mm Outlet 2" Model DE-48	11621	1	44.0	0.550
27300 l/h Ø 600 mm Outlet 2" Model DE-60	11622	1	48.0	0.610



Code	H	D	M	C	N	A
11619	930	610	420	675	190	1230
11620	1080	610	420	675	190	1380
11621	1230	610	420	825	190	1530
11622	1400	610	420	825	190	1900

Code	11619	11620	11621	11622
Filtration area m ²	2.2	3.3	4.5	5.6
Diatomaceous earth weight kg	1.4	2.3	3.2	4.1
Maxi. working pressure kg /cm ²	2.5	2.5	2.5	2.5

Dimensions in mm.

Multiport valve for Clarity filter

This valve is valid only for the diatomaceous earth filter "Clarity".



	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
For D.E. filter 1½" with filter connections (config. 2)	15385	6	15.5	0.079
For D.E. filter 2" with filter connections (config. 2)	15389	6	22.7	0.158

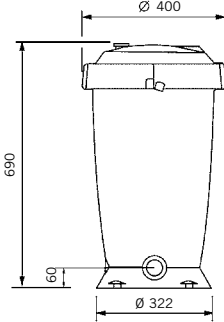
Consult valve variations on page 150

DIATOMACEOUS EARTH FILTERS

Diatomaceous earth collector

To collect waste diatomaceous earth from filter. Made of PP & PVC.

Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
20127	1	9.5	0.112




Diatomaceous earth Celatom FW-60

Approx. 20 Kg bags.

Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
03247	1	20	0.60



Diatomaceous earth Celite 545

Marine fossils with diverse shapes that help retention of suspended particles. This feature increases its performance. Approx. 20 kg bags.

Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
03246	1	23	0.60

Cartridge filters, Terra series

Made of PP and fibreglass. Fitted with pressure gauge and manual air vent. High filtration capacity. Easy maintenance. 1 1/2" outlet. Filtration velocity 1.8 m³/h x m² of filtration cloth. Maximum working pressure: 2.5 Kg/cm².

Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Terra 50. Recommended flow. 8.4 m ³ /h Filtration surface: 4.7 m ²	1	7.5	0.086
Terra 75. Recommended flow. 12.5 m ³ /h Filtration surface: 7 m ²	1	8.8	0.100
Terra 100. Recommended flow. 16.5 m ³ /h Filtration surface: 9.3 m ²	1	9.7	0.120
Terra 150. Recommended flow. 25 m ³ /h Filtration surface: 14 m ²	1	11.2	0.130

Code	A
18218	450
18219	570
18112	690
18220	810



CARTRIDGE FILTERS

Viron cartridge filter



High capacity filter, 4 x 9.3 m² or 4 x 14 m², with long intervals between each cleaning operation, a 50 mm inlet and outlet, and oil gage, all of which is ideal for rural and other environments where the use of water is restricted. A 5-year guarantee on the tank.

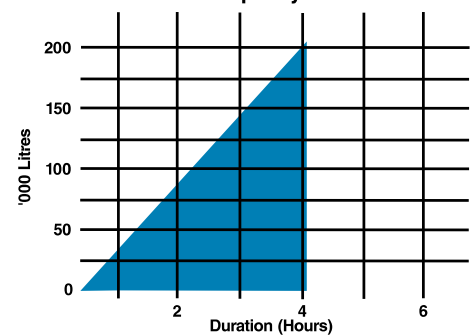
Viron CL 400
Viron CL 600

Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
43429	1	48	0.252
43430	1	50	0.355

Model	Filtration area	Max Flow l/min	Weight	Dimension A	Dimension B
Viron CL 400	38	800	48	734	586
Viron CL 600	57	800	50	1034	586



Turnover Capacity CL 400 & 600



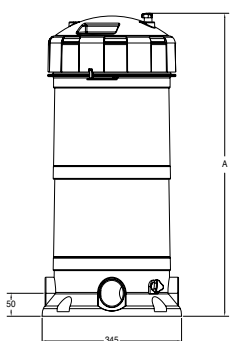
ZX Cartridge Filters



High quality cartridge element for long life filtration, suitable for spa temperatures. Complete with quality pressure gauge and 63 mm water connections.

- ZX 50. Recommended flow 13.5 m³/h. Filtration surface 4.7 m²
- ZX 75 - Recommended flow 17.4 m³/h. Filtration surface 7.0 m²
- ZX 100 - Recommended flow 22.5 m³/h. Filtration surface 9.4 m²
- ZX 150 - Recommended flow 26.7 m³/h. Filtration surface 14.0 m²
- ZX 200 - Recommended flow 29.4 m³/h. Filtration surface 19.0 m²
- ZX 250 - Recommended flow 30.9 m³/h. Filtration surface 24.0 m²

Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
41331	1	7.00	0.075
41332	1	8.00	0.075
41333	1	15.50	0.101
41334	1	16.50	0.101
41335	1	24.00	0.127
41336	1	25.00	0.127



Model	"A" dim (mm)
ZX 50	465
ZX 75	465
ZX 100	700
ZX 150	700
ZX 200	1160
ZX 250	1160

HYDROCYCLONIC PRE-FILTER

Hydrospin

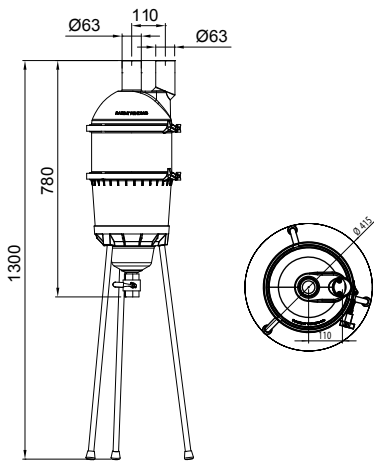
new

Hydrocyclone pre-filter can be fitted to filtration systems in both new and old installations. It is able to treat flows up to 30 m²/h with a maximum working pressure of 2.5 bars. It is fitted between the pump and the filter and separates out solids of up to 40 micron, thus reducing by half the amount of water consumed for cleaning the filtration system. HydroSpin has a device for collecting solids with three separate areas (settling, clarifying and clouding). It can be cleaned using just five litres of water without having to stop the pump.

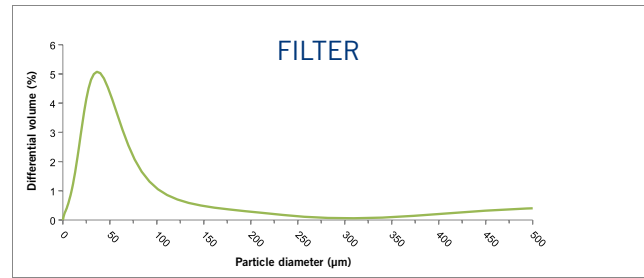
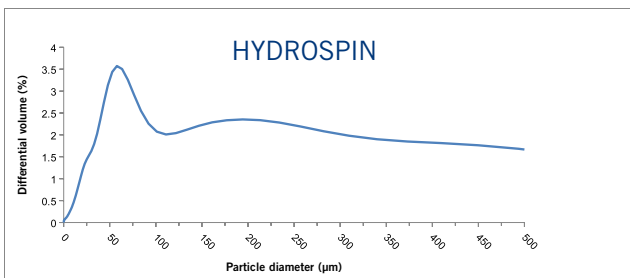
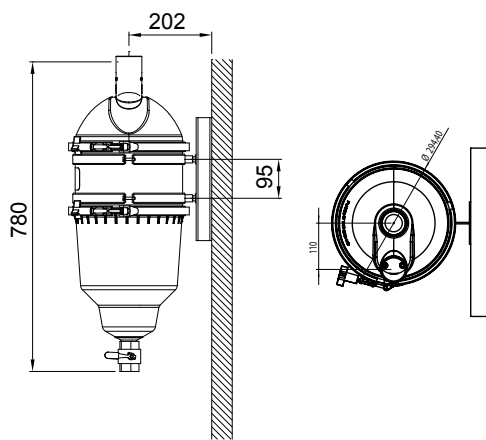
Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
45289	1	7.8	0.088



ON FLOOR INSTALLATION



ON WALL INSTALLATION



INJECTION MOULDED SAND FILTERS

Ivory colour. Injected thermo-plastic shell with built in base. Top and bottom parts are thermally welded. Supplied with pressure gauge, manual air vent, water purge, and multiport valve. Maximum filtration velocity: 50 m³/h/m². Maximum working pressure: 2.5 Kg/cm².

Top mounted Cantabric filter

Top mounted multiport valve. Threaded filter locking ring in ABS.



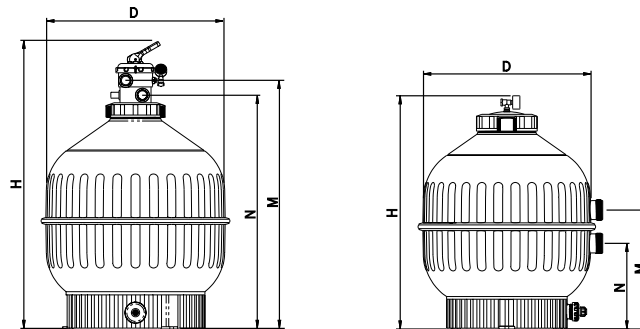
	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
6000 l/h Ø 400 mm outlet 1½"	22399	1	10.7	0.23
9000 l/h Ø 500 mm outlet 1½"	15780	1	17.5	0.37
14000 l/h Ø 600 mm outlet 1½"	15781	1	19.9	0.49
21000 l/h Ø 750 mm outlet 1½"	20128	1	30.4	0.83
21000 l/h Ø 750 mm outlet 2"	23866	1	32.1	0.83

Side mounted Cantabric filter

Clear lid & threaded locking ring in ABS, supplied with side mounted multiport valve.



	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
With multiport side valve				
6.000 l/h Ø 400 mm outlet 1½"	22398	1	9.0	0.15
9.000 l/h Ø 500 mm outlet 1½"	15782	1	15.8	0.29
14.000 l/h Ø 600 mm outlet 1½"	15783	1	17.8	0.40
21.000 l/h Ø 750 mm outlet 2"	15784	1	29.0	0.67
30.000 l/h Ø 900 mm outlet 2½"	22402	1	49.0	1.30
POSSIBILITY WITHOUT MULTIPORT VALVE				



	Top mounted					Side mounted				
	22399	15780	15781	20128	23866	22398	15782	15783	15784	22402
Ø D (mm)	400	500	600	750	750	400	500	600	750	900
H (mm)	894	1009	1069	1239	1250	715	800	875	1045	1215
M (mm)	744	829	894	1064	1098	380	415	445	575	675
N (mm)	680	765	830	1000	1023	255	290	320	345	405
Connections	1½"	1½"	1½"	1½"	2"	1½"	1½"	1½"	2"	2½"
Flow rate m ³ /h	6	9	14	21	21	6	9	14	21	30
Approx. pool volume (m ³) (8 hours)*	48	72	112	168	168	48	72	112	168	240
Sand, kg	60	100	150	300	300	60	100	150	300	550
Net weight, kg	8	14	15	23	25	7	12	14	24	34
Package volume m ³	0.2	0.37	0.49	0.83	0.83	0.15	0.29	0.4	0.67	1.3

Fitted with sand dump port of Ø 2" in Ø 750 mm & Ø 900 mm models, and of 1½" in Ø 400, Ø 500 & Ø 600 mm models

* 8 hours turnover rate

BLOW-MOULDED SAND FILTERS

One piece blow-moulded filters made of plastic With threaded lid, multiport valve, pressure gauge, manual air vent and water purge. Ivory colour. Maximum working pressure: 2.5 Kg/cm² for filters Ø 380 mm, Ø 430 mm & Ø 480 mm, & 2 Kg/cm² for filter Ø 560 mm & Ø 660 mm.

Millennium filters with Top mounted valve

Maximum filtration velocity: 50 m³/h/m².

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Ø 380 mm - 5500 l/h outlet 1 1/2"	27811	1	13.0	0.17
Ø 430 mm - 7000 l/h outlet 1 1/2"	22407	1	14.0	0.17
Ø 480 mm - 9000 l/h outlet 1 1/2"	22408	1	16.0	0.24
Ø 560 mm - 12000 l/h outlet 1 1/2"	22409	1	17.0	0.35
Ø 660 mm - 17000 l/h outlet 1 1/2"	28253	1	24.5	0.52


Millennium filters with side mounted valve

Maximum filtration velocity: 50 m³/h/m².

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Ø 380 mm - 5500 l/h outlet 1 1/2"	27809	1	10.5	0.13
Ø 430 mm - 7000 l/h outlet 1 1/2"	25296	1	13.0	0.13
Ø 480 mm - 9000 l/h outlet 1 1/2"	25297	1	16.0	0.18
Ø 560 mm - 12000 l/h outlet 1 1/2"	25298	1	18.0	0.26
Ø 660 mm - 17000 l/h outlet 1 1/2"	28252	1	29.0	0.42


Millennium model monobloc with top mount MPV

Threaded locking ring, top mount.

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Ø 380 mm - Sena 1/3 HP 230 V II	27805	1	27.0	0.33
Ø 430 mm - Sena 1/3 HP 230 V II	23342	1	27.0	0.33
Ø 480 mm - Sena 1/2 HP 230 V II	23343	1	31.0	0.43
Ø 560 mm - Sena 3/4 HP 230 V II	23344	1	35.0	0.50
Ø 660 mm - Sena 1.25 HP	28299	1	41.0	0.59


Millennium model monobloc with side mount MPV

Threaded cover, side mount.

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Ø 380 mm - Sena 1/3 HP 230 V II	27804	1	28.0	0.33
Ø 430 mm - Sena 1/3 HP 230 V II	23348	1	28.0	0.33
Ø 480 mm - Sena 1/2 HP 230 V II	23349	1	31.0	0.43
Ø 560 mm - Sena 3/4 HP 230 V II	23350	1	35.0	0.50
Ø 660 mm - Sena 1.25 HP	28301	1	41.0	0.59



BLOW-MOULDED SAND FILTERS

Millennium filters

Top mounted



Side mounted



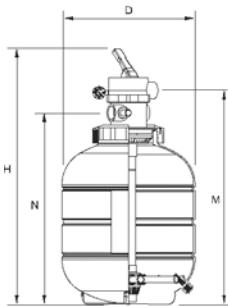
Top mounted monobloc



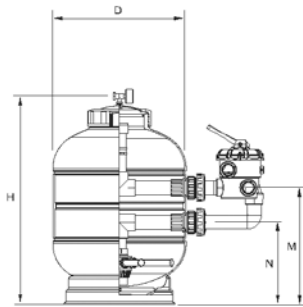
Side mounted monobloc



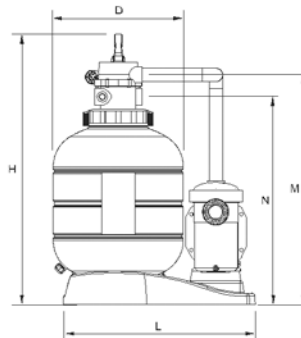
A



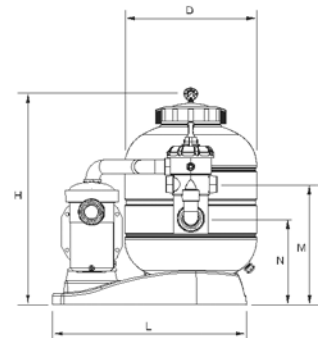
B



C



D



	A - Top mounted					B - Side mounted					C - Top mounted monobloc					D - Side mounted monobloc				
	27811	22407	22408	22409	28253	27809	25296	25297	25298	28252	27805	23342	23343	23344	28299	27804	23348	23349	23350	28301
Ø D (mm)	380	430	480	560	660	380	430	480	560	660	380	430	480	560	660	380	430	480	560	660
H (mm)	895	875	920	995	1160	675	715	742	830	960	905	955	975	1055	1125	685	735	745	830	962
M (mm)	725	735	780	855	920	385	395	420	460	570	735	815	835	915	990	390	415	410	460	570
N (mm)	660	655	700	775	850	260	270	295	335	510	670	735	755	815	925	265	290	285	335	510
Length L (mm)	-	-	-	-	-	-	-	-	-	-	710	715	835	835	835	710	715	835	835	835
Connections	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
Flow rate m³/h	5.5	7	9	12	17	5.5	7	9	12	17	5.5	7	9	12	17	5.5	7	9	12	17
Approx. pool volume m³	up to 40	40-50	50-75	75-100	140	up to 40	40-50	50-75	75-100	140	up to 40	40-50	50-75	75-100	140	up to 40	40-50	50-75	75-100	140
Sand, kg	40	60	85	135	250	40	60	85	135	250	40	60	85	135	250	40	60	85	135	250
Maxi working pressure kg/cm²	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Net weight kg	13	14	16	17	24.5	10.5	13	16	18	29	27	27	31	35	41	28	28	31	35	41
Package volume m³	0.17	0.17	0.24	0.35	0.52	0.13	0.13	0.18	0.26	0.42	0.33	0.33	0.43	0.50	0.59	0.33	0.33	0.43	0.50	0.59

	Millennium / Sena				
Side monobloc	27804	23348	23349	23350	28301
Top monobloc	27805	23342	23343	23344	28299
Ø (mm)	380	430	480	560	660
Pump	Sena	Sena	Sena	Sena	Sena
Power (HP)	1/3	1/3	1/2	3/4	1.25
Voltage (V)	230 II	230 II	230 II	230 II	230 II
Frequency (Hz)	50	50	50	50	50

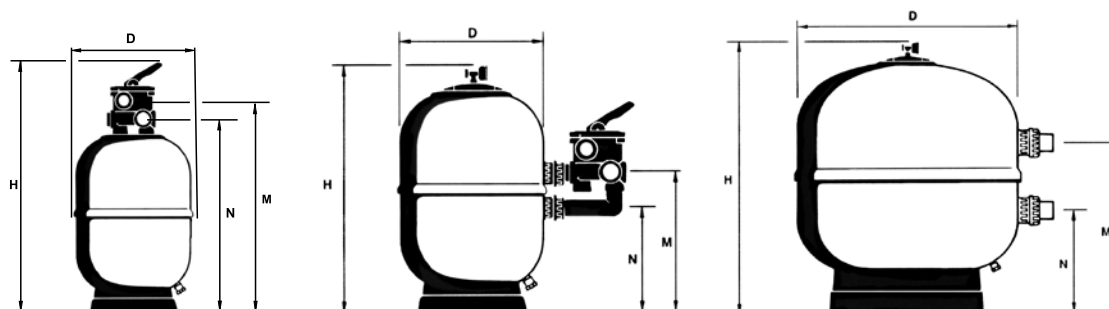
LAMINATED FILTERS

Aster filters

Laminated fibreglass filter with fibreglass. Grey colour, with new boltless lid and polypropylene base. Fitted with pressure gauge, water drainage plug, and multiport valve. Maximum working pressure: 2.5 kg/cm². Maximum filtration velocity 50 m³/h/m².

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
With top mounted multiport valve				
5000 l/h Ø 350 mm outlet 1½"	30768	1	17	0.16
8000 l/h Ø 450 mm outlet 1½"	30769	1	20	0.27
9000 l/h Ø 500 mm outlet 1½"	30770	1	22	0.30
14000 l/h Ø 600 mm outlet 1½"	30771	1	27	0.46
15000 l/h Ø 650 mm outlet 1½"	30772	1	33	0.52
21000 l/h Ø 750 mm outlet 2"	33847	1	38	0.74
32000 l/h Ø 900 mm outlet 2"	33848	1	72	1.49
With side mounted multiport valve				
5000 l/h Ø 350 mm outlet 1½"	00497	1	12.5	0.110
8000 l/h Ø 450 mm outlet 1½"	00498	1	15.5	0.160
9000 l/h Ø 500 mm outlet 1½"	19781	1	20.0	0.265
14000 l/h Ø 600 mm outlet 1½"	00499	1	21.0	0.320
15000 l/h Ø 650 mm outlet 1½"	21071	1	32.0	0.472
21000 l/h Ø 750 mm outlet 2"	00500	1	31.0	0.570
32000 l/h Ø 900 mm outlet 2"	08133	1	-	-
Without multiport valve				
31000 l/h Ø 900 mm outlet 2½"	00501	1	65.0	1.250

Optional: working pressure 4 bars



	With Top mounted multiport valve							With side mounted multiport valve							Without valve	
	30768	30769	30770	30771	30772	33847	33848	00497	00498	19781	32706	00499	21071	28479		00500
Ø D mm	350	450	500	600	650	750	900	350	450	500	550	600	650	680	750	900
H mm	910	965	960	1005	1060	1184	1344	780	795	770	825	850	880	915	945	1050
M mm	740	795	790	835	890	973	1133	420	430	415	455	455	480	525	555	660
N mm	680	785	730	775	830	897	1057	295	305	290	330	330	355	400	325	390
Connections	1½"	1½"	1½"	1½"	1½"	2"	2"	1½"	1½"	1½"	1½"	1½"	1½"	1½"	2	2½"
Flow rate m ³ /h at 50m ³ /h/m ²	5	8	9	14	15	21	31	5	8	9	12	14	15	18	21	30
Pool (volume) m ³ (8 hours)	40	64	72	112	120	168	240	40	64	72	96	112	120	144	168	240
Sand kg	50	70	90	110	200	290	500	50	70	90	110	125	200	290	210	500
Maxi working pressure kg/cm ²	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Net weight kg	17	20	22	27	33	38	72	12.5	15.5	18	20	21	24	26	30	51
Packaging volume m ³	0.16	0.27	0.30	0.46	0.52	0.74	1.49	0.13	0.18	0.26	0.36	0.36	0.44	0.69	0.6	1.03

Filtration bed 1 m



LAMINATED FILTERS

Artic filter

New range of high filtration sand filters with diameters Ø500, 650, 800, 950, 1050, 1200 mm. Filter of sand of great quality with a high efficiency of cleaning manufactured in polyester with external finish in gel-coat, by spraying. Body with only two parts. Sand high 1m. Maximum working pressure of 2,5 Kg./cm². Maximum working temperature 50°C. Internal components made of plastic PVC. Excellent external finishing with gel-coat. Internal coating with white gel-coat. Filter color Ivory. Filled union between the top and bottom filter part with silicone for a optim finished. Optional sight-glass. Manual water drain 1" in Ø500, 650, 800, 950 and 2 1/2" in Ø1050 and 1200 and 2 1/2" in Ø1050 and 1200. Manual air drain. Lid in injected plastic of Ø200mm in 500, 650, 800, 950, and of Ø400 in 1050 and 1200. Sand discharge lid Ø200mm in the bottom of the filter. (optional Ø400 in 1050 and 1200). Ø 650,800,950,1050 and 1200 available in collector arms or nozzle plate

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
In collector arms				
Ø 500 mm connection 1 1/2"	34029-0100	1	70.0	-
Ø 650 mm connection 1 1/2"	34030-0100	1	85.0	-
Ø 800 mm connection 2"	34031-0100	1	115.0	-
Ø 950 mm connection 2 1/2"	41187	1	140.0	-
Ø 1050 mm connection 3"	41188	1	180.0	-
Ø 1200 mm connection 4"	41189	1	210.0	-

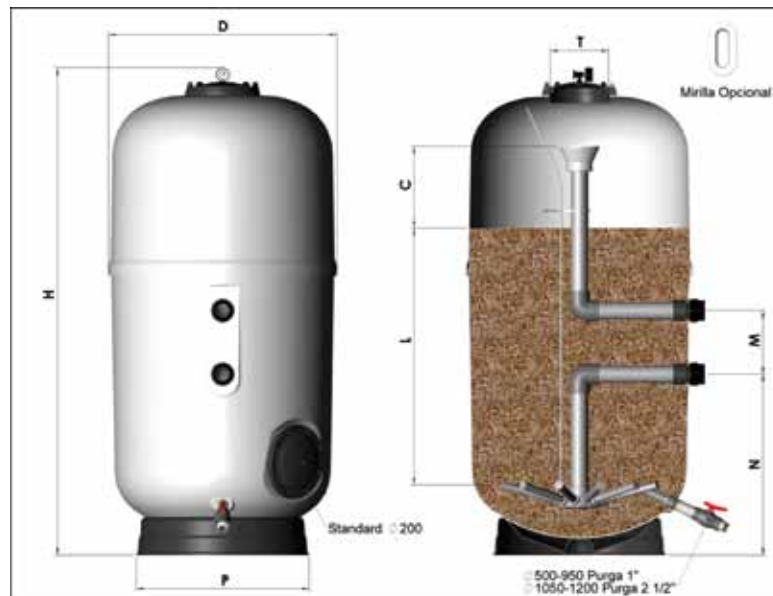


Nozzle plate detail



Collector arms detail

	34029	34030	34031	41187	41188	41189
Ø D mm	500	650	800	950	1050	1200
H mm	1650	1700	1750	1760	1895	1970
M mm	125	125	230	270	270	270
N mm	780	775	685	655	630	665
L mm	1000					
C mm	300					
P mm	400	490	625	705	775	940
T mm	200			400		
Connections	1 1/2"	1 1/2"	2"	2 1/2"	3"	4"
Flow m ³ /h	9.5	16.5	25	35	43	56.5
Filtering surface m ²	0.19	0.33	0.50	0.70	0.86	1.13
Sand kg	225	380	530	830	1015	1360
Gravel kg	50	100	165	260	320	410
Working pressure kg/cm ²	2.5	2.5	2.5	2.5	2.5	2.5
Net weight kg	70	85	115	140	180	210



LAMINATED FILTERS

Artic Plus filter

New range of high filtration sand filters with diameters Ø650, 800, 950, 1050, 1200 mm. This filters are manufactured by spraying on layers of polyester resin and fiber glass strands. Body with only two parts. Sand high 1,2 m. Maximun working pressure of 2,5 Kg./cm². Maximun working temperature 50°C. Internal components made of plastic PVC. Excellent external finishing with gel-coat. Internal coating with white gel-coat.. Filter color Ivory. Filled union between the top and bottom filter part with silicone for a optim finished. Optional sight-glass. Manual water drain 1" in Ø650, 800, 950 and 2 1/2" in Ø1050 and 1200. Manual air drain. Lid in injected plastic of Ø200mm in 650, 800, 950, and of Ø400 in 1050 and 1200. Sand discharge lid Ø200mm in the bottom of the filter (optional Ø400 in 1050 and 1200). Ø 650,800,950,1050 and 1200 available in collector arms or nozzle plate.

Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
------	--------------------	--------------------	--------------------------------

In colector arms:

Ø 650 mm connection 1 1/2"	36053-100	1	105.0	-
Ø 800 mm connection 2"	36054-100	1	135.0	-
Ø 950 mm connection 2 1/2"	41373	1	160.0	-
Ø 1050 mm connection 3"	36055	1	200.0	-
Ø 1200 mm connection 4"	36056	1	230.0	-

	36053	36054	41373	36055	36056
Ø D mm	680	825	970	1090	1255
H mm	1900	1950	1960	2145	2170
M mm	125	230	270	270	270
N mm	730	670	665	665	665
L mm	1200				
C mm	300				
P mm	490	625	705	775	940
T mm	200		400		
Connections	1 1/2"	2"	2 1/2"	3"	4"
Flow m ³ /h	16,5	25	35	43	56,5
Filtering surface m ²	0.33	0.50	0.70	0.86	1.13
Sand kg	470	660	1015	1240	1665
Gravel kg	100	165	260	320	410
Working pressure kg/cm ²	2.5				
Net weight kg	105	135	160	200	230

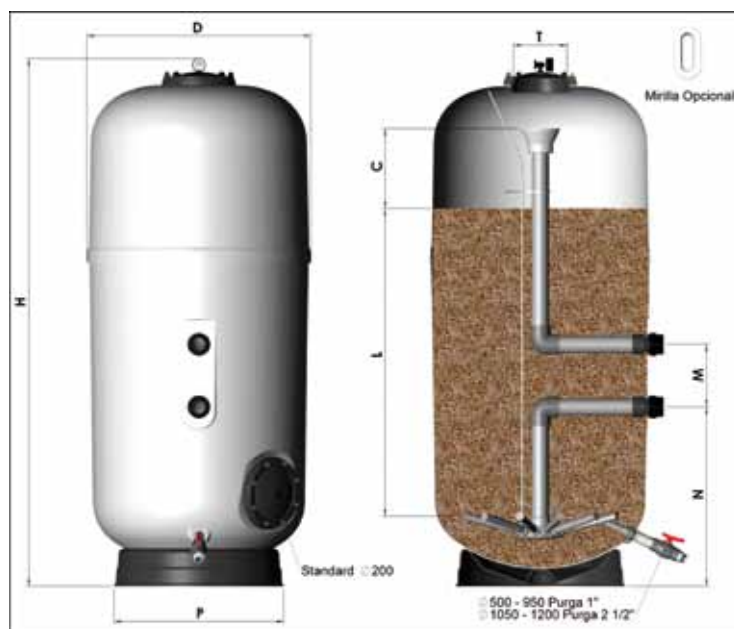
Filtration bed 1.2 m



Nozzle plate detail



Collector arms detail



Filtration bed 0.6 m

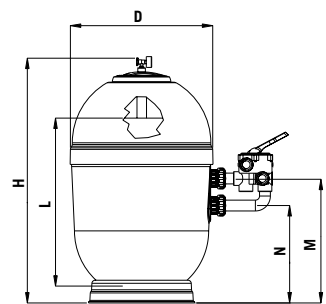
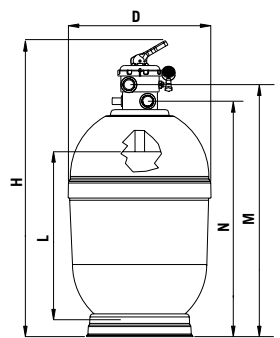
LAMINATED FILTERS



High performance filter Rapidpool

Laminated polyester filter with fibreglass. Red colour, polypropylene base, boltless lid. Port for emptying sand and water, fitted with pressure gauge and air relief valve. Side mount multiport valve. Maximum filtration velocity 50 m³/h/m². Maximum working pressure 2.5 kg/cm². Filtration bed 0.6 m.

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Top mounted valve version				
6000 l/h Ø 400 mm outlet 1½"	32427	1	19.0	0.200
9000 l/h Ø 500 mm outlet 1½"	32428	1	25.0	0.355
15000 l/h Ø 650 mm outlet 1½"	32429	1	34.0	0.600
24000 l/h Ø 800 mm outlet 2"	33849	1	44.0	1.050
Side mounted valve version				
6000 l/h Ø 400 mm outlet 1½"	00488	1	15.0	0.150
9000 l/h Ø 500 mm outlet 1½"	00489	1	22.0	0.280
15000 l/h Ø 650 mm outlet 1½"	00490	1	30.0	0.500
24000 l/h Ø 800 mm outlet 2"	00491	1	45.0	0.880



	Top mounted valve				Side mounted valve			
	32427	32428	32429	33849	00488	00489	00490	00491
Ø Filter mm	400	500	650	800	400	500	650	800
H mm	1020	1165	1285	1566	860	1032	1126	1272
M mm	850	995	1115	1355	442	527	552	592
N mm	790	935	1055	1279	317	402	427	362
Connections	1½"	1½"	1½"	2"	1½"	1½"	1½"	2"
Flow rate m ³ /h at 50m ³ /h/m ²	6	9	15	24	6	9	15	24
Pool (volume) m ³ (8 hours)	48	72	120	120	48	72	120	192
Sand kg	60	130	255	445	60	130	255	445
Sand height mm	545	571	650	785	545	571	650	785
Maxi working pressure kg/cm ²	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Net weight kg	19	25	34	44	15	22	30	45
Packaging Volume m ³	0.20	0.355	0.60	1.05	0.16	0.3	0.53	0.9

LAMINATED FILTERS

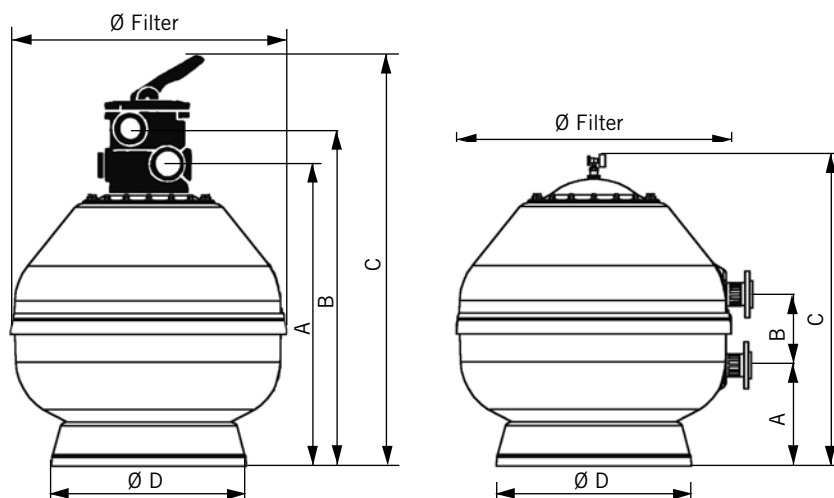
Vesubio filters

The Vesubio range covers both public and residential pools. Filters manufactured with simultaneous projection of resin and fibreglass. Lid fastened with high resistance bolts. Top opening of Ø 210 mm. Ø 1050 mm and Ø 1200 mm models are also available with top opening of Ø 400 mm. Maximum working pressure of 2.5 kg/cm².

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Side mount version				
8000 l/h Ø 450 mm outlet 50 mm	15785	1	16	0.200
9000 l/h Ø 500 mm outlet 50 mm	19353	1	20	0.260
14000 l/h Ø 600 mm outlet 50 mm	15786	1	23	0.357
22000 l/h Ø 750 mm outlet 63 mm	15787	1	32	0.595
32000 l/h Ø 900 mm outlet 75 mm	15788	1	48	1.003
43000 l/h Ø 1050* mm outlet 75 mm	15789	1	97	2.052
43000 l/h Ø 1050** mm outlet 75 mm	32391	1	97	2.052
56000 l/h Ø 1200* mm outlet 90 mm	15790	1	130	2.450
56000 l/h Ø 1200** mm outlet 90 mm	32392	1	140	2.430
Top mount version				
8000 l/h Ø 450 mm outlet 50 mm	32430	1	19	0.280
9000 l/h Ø 500 mm outlet 50 mm	32431	1	23	0.350
14000 l/h Ø 600 mm outlet 50 mm	32432	1	26	0.480
22000 l/h Ø 750 mm outlet 63 mm	33850	1	40	0.787
32000 l/h Ø 900 mm outlet 63 mm	33851	1	56	1.276

* Small upper lid of Ø 210 mm

** Upper lid of Ø 400 mm



Filters up to Ø 1050 mm can be fitted with side mounted multiport valve. Ø 900 and Ø 1050 mm filters with side outlets are supplied without multiport valve.

	Top mounted version					Side mounted version									
	32430	32431	32432	33850	33851	15785	19353	15786	15787	15788	15789	32391	15790	32392	
Ø Filter mm	450	500	600	750	900	450	500	600	750	900	1050	1050	1200	1200	
A mm	650	690	790	837	987	265	305	325	300	325	435	410	490	490	
B mm	710	750	850	913	1063	125	125	125	230	270	270	270	270	270	
C mm	880	920	1020	1124	1274	725	765	865	895	1080	1110	1235	1235	1360	
D mm	347	400	400	490	625	347	400	400	490	625	760	775	855	940	
Filtration area	0.16	0.19	0.30	0.44	0.64	0.16	0.19	0.30	0.44	0.64	0.86	0.86	1.13	1.13	
Connections	1½"	1½"	1½"	2"	2"	1½"	1½"	1½"	2"	2½"	2½"	2½"	90	90	
Flow rate m ³ /h at 50m ³ /h/m ²	8	9	14	22	32	8	9	14	22	32	43	43	6	56	
Pool (volume) m ³ (8 hours)	64	72	112	176	256	64	72	112	176	256	344	344	448	448	
Sand kg	60	95	148	245	415	60	95	148	245	415	660	660	1000	1000	

Filtration bed 1 m



LAMINATED FILTERS

Vesubio filters- Commercial pools

With sand discharge port of 2 1/2".

Maximum working pressure 2.5 Kg/cm²

Filtration bed 1 m

Diameter Ø mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
1050	20	63	17	41304	1	90	870
	30/40	75	25/34	41305	1	90	870
	50	90	43	41306	1	90	870
1200	20/30	75	22/33	41307	1	105	1290
	40/50	90	45/56	41308	1	105	1290
1400	20	75	30	41309	1	125	1810
	30	90	46	41310	1	125	1810
	40/50	110	61/77	41311	1	125	1810
1600	20	90	40	41312	1	175	2285
	30/40	110	60/80	41313	1	175	2285
	50	125	100	41314	1	175	2285
1800	20	90	50	41315	1	210	2950
	30	110	76	41316	1	210	2950
	40	125	101	41317	1	210	2950
	50	140	125	41318	1	210	2950
2000	20	110	62	41319	1	245	3850
	30	125	94	41320	1	245	3850
	40	140	125	41321	1	245	3850
	50	160	157	41322	1	245	3850

Ø D (mm)	Filtration velocity (m ³ /h/m ²)	Code	Connections		Flow (m ³ /h)	Pool volume (8h) (m ³)	Filtration area (m ²)	C (mm)	A (mm)	B (mm)	Ø D (mm)	Gravel 1-2 mm (kg)	Sand 0.4-0.8 mm (kg)
			mm	inches									
1050	20	41304	63	2"	17	136	0.86	1545	465	500	760	175	1125
	30/40	41305	75	2 1/2"	25/34	200/272							
	50	41306	90	3"	43	344							
1200	20/30	41307	75	2 1/2"	22/33	176/264	1.13	1730	675	500	850	275	1350
	40/50	41308	90	3"	45/56	360/448							
1400	20	41309	75	2 1/2"	30	240	1.54	1845	725	500	1085	350	1850
	30	41310	90	3"	46	368							
	40/50	41311	110	4"	61/77	488/616							
1600	20	41312	90	3"	40	320	2.01	1850	710	500	1230	450	2725
	30/40	41313	110	4"	60/80	480/640							
	50	41314	125	4 1/2"	100	800							
1800	20	41315	90	3"	50	400	2.54	1915	755	570	1370	550	3175
	30	41316	110	4"	76	608							
	40	41317	125	4 1/2"	101	808							
	50	41318	140	5"	125	1000							
2000	20	41319	110	4"	62	496	3.14	2030	775	570	1560	675	3650
	30	41320	125	4 1/2"	94	752							
	40	41321	140	5"	125	1000							
	50	41322	160	6"	157	1256							

Note: Codification options according to table on page 120

Atlas filter

Reinforced polyester sand filter.

Technical features:

- Made of polyester resin and fibreglass.
- Excellent finish with gel-coat colour RAL 8029.
- The filter has been designed with higher coefficient of security, to guarantee a perfect operation.
- The union of the two bodies of the filter is carried out through a seal specially reinforced with fibreglass and polyester resin.
- Large diameter plastic lid.
- Cap to make the sand discharge into the filter easier.
- Fitted with 1" collector arms and diffuser made from unplasticised PVC.
- Interior pipe with tubes of PN-16.
- Sand purge of 2 1/2".
- Fitted with pressure gauge, air purge and manual water drain.
- Connections to multiport valve with six positions: filter, backwash, rinse, recirculate, waste and closed.
- **AstralPool innovation:** The filter has a security valve to avoid any over-pressure.
- Maximum working pressure of 2.5 Kg/cm².



Includes multiport

- Ø 500 mm outlet 1 1/2"
- Ø 600 mm outlet 1 1/2"
- Ø 750 mm outlet 2"

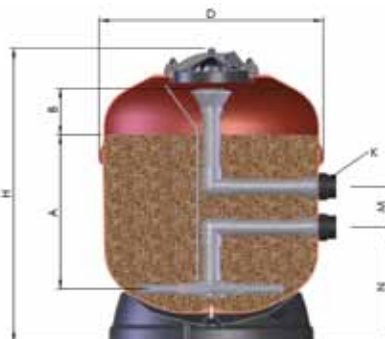
	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Ø 500 mm outlet 1 1/2"	36596	1	20	-
Ø 600 mm outlet 1 1/2"	36597	1	25	-
Ø 750 mm outlet 2"	36598	1	33	-

Does not include multiport

- Ø 900 mm outlet 2 1/2"

Ø 900 mm outlet 2 1/2"	36599	1	51	-
------------------------	--------------	---	----	---

Code	36596	36597	36598	36599
Ø Filter mm	500	600	750	900
Connections	1 1/2"		2"	2 1/2"
Filtering surface (m ²)	0,19	0,30	0,44	0,64
Filtering velocity (m ³ /h/m ²)	50			
Flow (m ³ /h)	9.5	15	22	30
Working pressure (bar)	2.5			
Sand (kg)	120	190	360	580
Net weight (kg)	20	25	33	51



Dimensions:

Code	A (mm)	B (mm)	D (mm)	H (mm)	M (mm)	N (mm)
36596	400	120	545	830	125	300
36597	480	145	640	905	125	325
36598	550	165	790	1050	230	310
36599	630	190	940	1185	270	410



Sand drain of 2 1/2" and water drain of 3/4" with security valve.

Filtration bed 1 m



LAMINATED FILTERS

The new **range of laminated Delta filters** has evolved from the PTK filter series. Using new manufacturing processes, which provides multiple product configuration options.

A new 30% larger joint reinforces the seal of both parts of the filter with double security: fibreglass laminated on the inside and high tensile strength composite at the outer union of the filter. All connections are on a thicker base, thus improving resistance. Connection to any valve is also made easier thanks to the re-location of the fittings. The height of the lower part of the filter has been increased in order to strengthen the internal nozzle plate support. 2 year guarantee. Blue RAL 5024.colour. Other colours available on request, subject to a minimum order of 5 filters.



Delta 10 filters

The **Delta 1000** model is the equivalent of the PTK series 1000 and is available in 650, 800, 1000 and 1200 mm diameters. It features a 1m filtration bed and is available with either lateral or nozzle plate collector systems.

- DN 200 filter lid with quick-locking system for 650 and 800 models and DN 400 bolt down lid for 1000 and 1200 models.
- DN200 lateral manhole with bolt down cover.
- Filter interior left with natural resin finish.
- Optional methacrylate sight glass available on request.
- Inner pipe and fittings in PVC, PP and ABS.
- Pressure gauge included in filter lid.
- Gaskets in EPDM and all screw fittings in stainless steel.
- Vinylester option. In this case, all laminated layers are manufactured from vinylester resin (and not only the top layer in contact with the water), to a maximum chemical resistance of 0.4 ppm of ozone dissolved and to a maximum water temperature of 40°C.



Maximum working pressure 2.5 Kg/cm²

Conventional collector arms. Arm slots 0.3 mm

Diameter Ø mm	Outlet Ø mm	Flow** m ³ /h 40m ³ /h/m ²	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
650	1½"	13.3	36676	1	112	0.56
800	2"	20.1	36677	1	115	0.88
1000	2½"	31.4	36678	1	121	1.45
1200	90	45.2	36679	1	113	2.17

** Maximum flow and filtration velocity recommended



Maximum working pressure 2.5 Kg/cm²

Nozzle collector plate. Nozzle slots 0.5 mm

Diameter Ø mm	Outlet Ø mm	Flow** m ³ /h 40m ³ /h/m ²	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
650	1½"	13.3	36684	1	119	0.60
800	2"	20.1	36685	1	121	0.93
1000	2½"	31.4	36686	1	129	1.54
1200	90	45.2	36687	1	123	2.34

** Maximum Flow and filtration velocity recommended

*except diam. 1200 mm models

LAMINATED FILTERS



Delta 12 filters

The **Delta 1200 filter** is equivalent to the old PTK series 1200 and is available in 650, 800, 1000 and 1200 mm diameters. The high performance filter bed measures 1.2 m and is available with either lateral or nozzle plate collector systems.

- DN 200 filter lid with quick-locking system for 650 and 800 models and DN 400 bolt down lid for 1000 and 1200 models.
- DN200 lateral manhole with bolt down cover.
- Filter interior left with natural resin finish.
- Methacrylate sight glass as standard. Further sight glasses are available on request.
- Internal pipe and fittings in PVC, PP and ABS.
- Pressure gauge included in filter lid.
- Gaskets in EPDM and all bolt fasteners in stainless steel.
- Vinylester option. In this case, all laminate layers are manufactured from vinylester resin (and not only the top layer in contact with the water), to a maximum chemical resistance of 0.4 ppm of ozone dissolved and to a maximum water temperature of 40°C.

Filtration bed 1.2 m



Maximum working pressure 2.5 Kg/cm²

Conventional collector arms. Arm slots 0.3 mm

Diameter Ø mm	Outlet Ø mm	Flow m ³ /h 40m ³ /h/m ²	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
650	1½"	13.3	36680	1	120	0.60
800	2"	20.1	36681	1	121	0.92
1000	2½"	31.4	36682	1	129	1.54
1200	90	45.2	36683	1	130	2.24

Nozzle collector plate. Nozzle slots 0.5 mm

Diameter Ø mm	Outlet Ø mm	Flow m ³ /h 40m ³ /h/m ²	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
650	1½"	13.3	36688	1	127	0.64
800	2"	20.1	36689	1	127	0.97
1000	2½"	31.4	36690	1	137	1.63
1200	90	45.2	36691	1	141	2.42



Nozzle plate detail



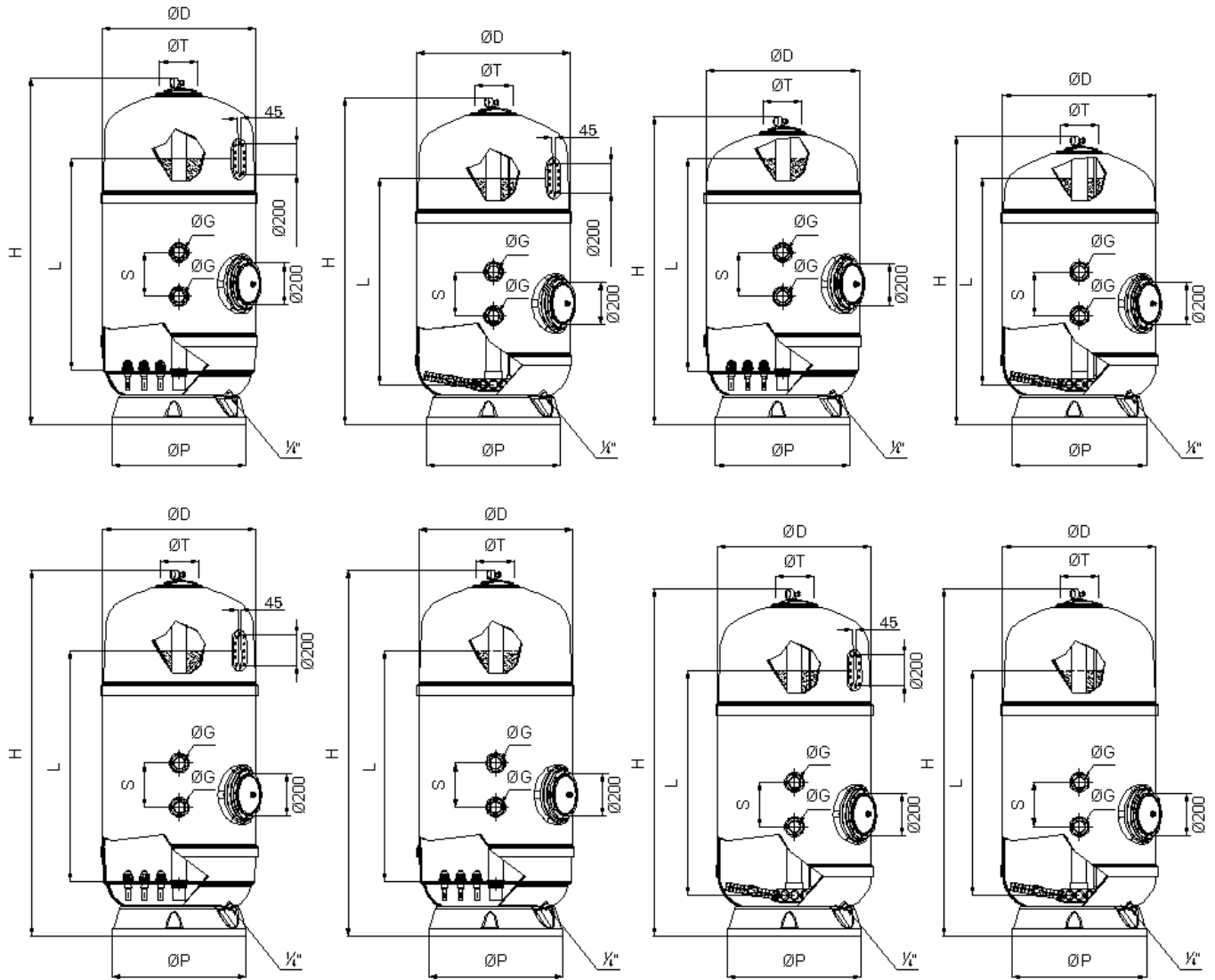
Collector arms detail

Note: Codification options according to table on page 120

LAMINATED FILTERS



Delta filters



TECHNICAL FEATURES

	DELTA 10								DELTA 12							
	Collector arms				Nozzle plate				Collector arms				Nozzle plate			
	36676	36677	36678	36679	36684	36685	36686	36687	36680	36681	36682	36683	36688	36689	36690	36691
D (mm)	650	800	1.000	1.200	650	800	1.000	1.200	650	800	1.000	1.200	650	800	1.000	1.200
Ø P(mm)	490	625	890	1145	490	625	890	1145	585	700	890	1145	585	700	890	1145
H (mm)	1702	1749	1840	1915	1802	1843	1955	2071	1825	1830	1960	2022	1925	1924	2075	2128
L (mm)	1000	1000	1000	1000	1000	1000	1000	1000	1200	1200	1200	1200	1200	1200	1200	1200
S (mm)	125	230	270	300	125	230	270	300	125	230	270	300	125	230	270	300
Ø T	200	200	400	400	200	200	400	400	200	200	400	400	200	200	400	400
Ø G	1½"	2"	2½"	3"	1½"	2"	2½"	3"	1½"	2"	2½"	3"	1½"	2"	2½"	3"
Flow rate m³/h at 30 m³/h/m²	9	15	23	34	9	15	23	34	9	15	23	34	9	15	23	34
Flow rate m³/h at 40 m³/h/m²	12	20	30	45	12	20	30	45	12	20	30	45	12	20	30	45
MULTILAYER	Anthracite 0.8 - 1.6 mm (l)	-	-	-	-	-	-	-	148	250	387	564	148	250	387	564
	Sand 0.4 - 0.8 mm (Kg)	-	-	-	-	-	-	-	160	271	419	611	160	271	419	611
	Gravel 1 - 2 mm (Kg)	-	-	-	-	-	-	-	46	78	120	175	46	78	120	175
	Gravel 3 - 5 mm (Kg)	-	-	-	-	-	-	-	86	156	300	350	46	78	120	175
SINGLE LAYER	Sand 0.4 - 0.8 mm (kg)	400	640	990	1425	400	640	990	451	767	1325	1763	451	767	1325	1763
	Gravel 1 - 2 mm (kg)	86	156	300	350	46	78	120	86	156	300	350	46	78	120	175

LAMINATED FILTERS

Filtration bed 1.2 m



Norma filters

Laminated filter in polyester reinforced with fibreglass (PRFV). Filtration bed can be of single or multilayer. Maximum working pressure 2.5 kg/cm². Complies with DIN standard 19643/19605. Collector system with nozzle plate (0.5 mm slot). Fitted with sight glass, sand dump port, lateral manhole, pressure gauge and manual air vent and water purge. Top sand charge lid Ø 200 mm and manhole Ø 200 mm or Ø 400 mm according to model type. PVC and PP internal components. A4 bolts and EPDM gaskets. **Options:** Interior vinylester coating (resistant to ozone concentrations <0.4 ppm) and maximum temperature of 40°C. Standard colour: Ivory.

Maximum working pressure 2.5 Kg/cm²

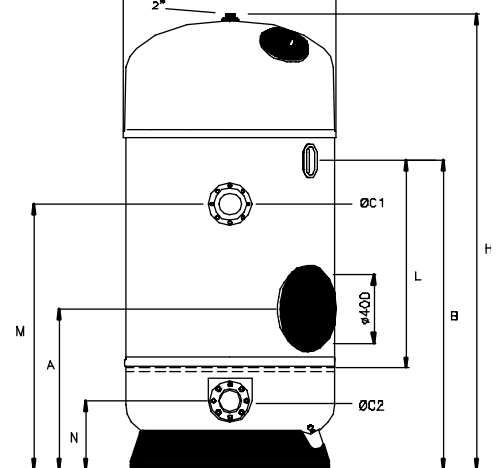
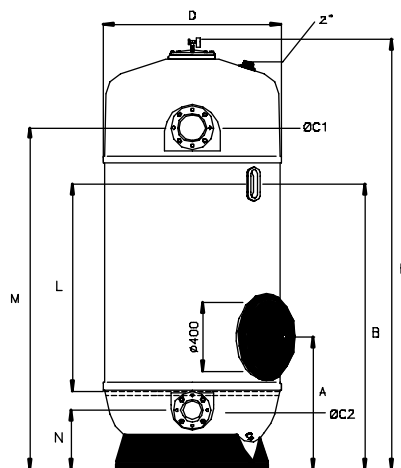
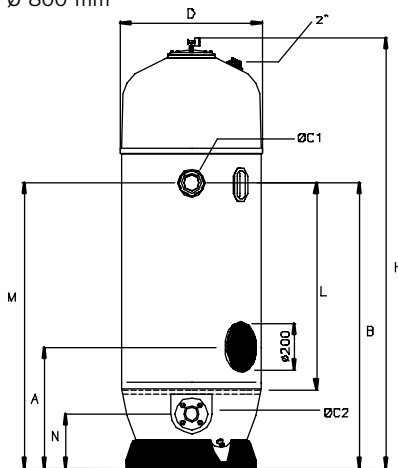
Diameter Ø mm	Filtration velocity	Outlet Ø mm	Flow m ³ /h 30m ³ /h/m ²	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
650	30	90-75	10	08142	1	100	1.33
800	30	90-75	15	08143	1	125	2.00
1.000	30	140-110	23	08144	1	145	3.00
1.200	30	140-140	34	08145	1	177	5.50



Ø 650 mm
Ø 800 mm

Ø 1000 mm

Ø 1200 mm



TECHNICAL FEATURES

	08142	08143	08144	08145	
D (mm)	650	800	1000	1200	
A (mm)	680	700	770	950	
B (mm)	1660	1640	1655	1790	
H (mm)	2480	2480	2490	2640	
L (mm)	1200	1200	1200	1200	
M (mm)	1650	1650	1980	1600	
N (mm)	320	320	340	400	
Ø C1 (mm)	90	90	140	140	
Ø C2 (mm)	75	75	110	140	
Flow rate m ³ /h at 30 m ³ /h/m ²	10	15	23	33	
MULTILAYER	Antracita 0.8 - 1.6 mm (l)	148	250	390	564
	Sand 0.4 - 0.8 mm (Kg)	160	271	420	611
	Gravel 1 - 2 mm (Kg)	46	78	120	175
	Gravel 3 - 5 mm (Kg)	46	78	120	175
SINGLE LAYER	Sand 0.4 - 0.8 mm (kg)	451	767	1215	1763
	Gravel 1 - 2 mm (kg)	46	78	120	175



BOBBIN WOUND FILTERS



Berlin filter

Bright satin finish with a transparent polyurathane varnish dust-repellant coating. Ø 230 mm injected lid fixed with bolts. Fitted with pressure gauge, manual air vent, water purge, and side mounted multiport valve. Maximum filtration velocity 50 m³/h/m².



Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
------	--------------------	--------------------	--------------------------------

With multiport valve:

9000 l/h Ø 500 mm outlet 1½"
 14000 l/h Ø 600 mm outlet 1½"
 21000 l/h Ø 750 mm outlet 2"

00541	1	17.3	0.230
00542	1	21.8	0.360
00543	1	36.0	0.620

Without multiport valve:

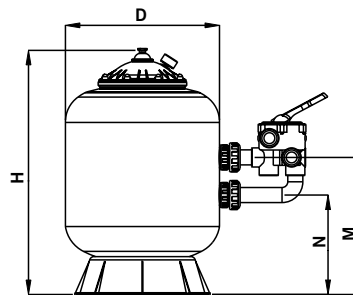
30000 l/h Ø 900 mm outlet 2½"

00544	1	60.0	0.980
-------	---	------	-------

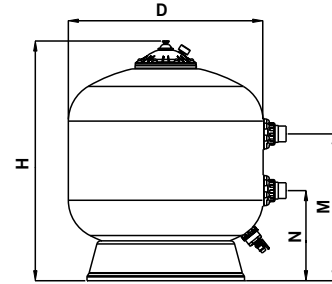
Without multiport valve and with Ø 400 mm polyester and FV lid:

43000 l/h Ø 1050 mm outlet Ø 75 mm
 56000 l/h Ø 1200 mm outlet Ø 90 mm

00545	1	101.0	1.610
00546	1	130.0	2.306



With multiport valve



Without multiport valve

	Side mounted valve			Without valve			Monoblocs	
	00541	00542	00543	00544	00545	00546	00547	00548
Ø D mm	500	600	750	900	1050	1200	500	600
H mm	805	910	1050	1145	1300	1450	-	-
M mm	450	505	610	685	810	870	-	-
N mm	325	380	380	415	500	560	-	-
Connections	1½"	1½"	2"	2½"	*D75	**D90	1½"	1½"
Flow rate m ³ /h at 50 m ³ /h/m ²	9	14	21	30	43	56	9	14
Pool (volume) m ³	50-75	75-115	115-170	170-240	240-350	350-450	50-75	75-115
Sand kg	100	175	300	525	575/300	800/300	100	175
Maxi working pressure kg/cm ²	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Net weight kg	14.6	18.6	27.5	43.4	83	93	-	-
Packaging volume m ³	0.23	0.36	0.26	0.99	1.92	2.75	-	-

BOBBIN WOUND FILTERS
In-ground compact housings with Berlin filter

Made in polyester and fibreglass. Includes filter, multiport valve, pump, control cabinet, with programmer and valve manifold.

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
In-ground compact				
Ø 500 mm Pump 0.37 kW (1/2 HP) 230 V II	00549	1	82.0	0.948
Ø 600 mm Pump 0.55 kW (3/4 HP) 230 V II	00550	1	92.0	0.948
Ø 750 mm Pump 1.10 kW (1.5 HP) 230 V II	00551	1	182.0	2.229


Semi in-ground compact housings with Berlin filter

Made in Polyester and fibreglass. Includes filter, multiport valve, pump, control cabinet with programming unit and valve manifold.

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Semi in-ground compact				
Ø 500 mm Pump 0.37 kW (1/2 HP) 230 V II	00552	1	64.0	1.056
Ø 600 mm Pump 0.55 kW (3/4 HP) 230 V II	00553	1	74.0	1.056
Ø 750 mm Pump 1.10 kW (1.5 HP) 230 V II	00554	1	121.0	1.791



Consult our wide range of housings for your filtration needs

FILTER CODIFICATION FOR COMMERCIAL FILTERS



Filter coding

The filter code is composed of eight digits. The first five digits correspond to the filter code and the last three digits correspond to the model – this information is given in the tables below.

This codification system is used for the Praga, Oslo, Olot, Ampuria, Rodas, Vic, Europe, Vesubio and Delta filters.

Position	1	2	3	4	5	-	6	7	8
----------	---	---	---	---	---	---	---	---	---

Position 1 to 5: Five digit code of the standard product.

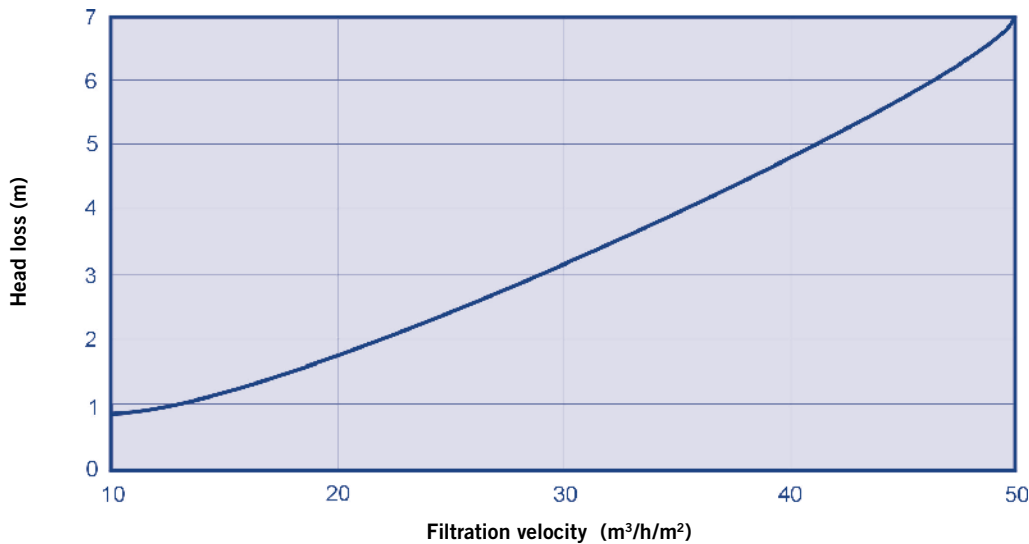
Position 6 Specifies the nozzle plate and vinylester options		Position 7 Specifies manhole options		Position 8 Specifies sightglass options	
0	Filter without nozzle plate	0	No manholes	0	No sightglass
1	Filter with nozzle plate	1	1 Ø 225 mm manhole	1	1 sightglass for laminated filter
2	Vinylester finish	2	1 Ø 400 mm manhole	2	1 Ø 135 mm sightglass
3	With nozzle plate and vinylester	3	2 Ø 225 mm manholes	3	2 sightglass for laminated filter
		4	2 Ø 400 mm manholes	4	2 Ø 135 mm sightglass

Please enquire pricing for various options:

- Vinylester finish
- Ø 225 mm and Ø 400 mm manhole
- Sightglass

Head loss curve

Ø 1050 mm to Ø 3000 mm filters



LAMINATED FILTERS



Europe filters

Polyester and fibreglass filters: complete fitted with pressure gauge panel, manual air relief valve and water purge Ø 200 sand discharge port. Ø 400 mm top lid. Suitable for filtration velocities of 20, 30, 40 and 50 m³/h/m². Please enquire for other velocities. All Europe filters can be fitted with valve manifold.

Maximum working pressure 2.5 Kg/cm²

Filtration bed 1 m

Diameter Ø mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
1050	20*	63	17	20070	1	125	2.823
	30/40**	75	25/34	20071	1	125	2.823
	50	90	43	20072	1	125	2.823
1200	20/30	75	22/33	20068	1	150	3.597
	40/50	90	45/56	20069	1	150	3.597
1400	20	75	30	21497	1	214	5.880
	30	90	46	21498	1	214	5.880
	40/50	110	61/77	21499	1	214	5.880
1600	20	90	40	21500	1	230	7.80
	30/40	110	60/80	21501	1	230	7.80
	50	125	100	21502	1	230	7.80
1800	20	90	50	21503	1	344	10.00
	30	110	76	21504	1	344	10.00
	40	125	101	21505	1	344	10.00
	50	140	125	21506	1	344	10.00
2000	20	110	62	21507	1	400	12.10
	30	125	94	21508	1	400	12.10
	40	140	125	21509	1	400	12.10
	50	160	157	21510	1	400	12.10
2350	20	125	87	33820	1	600	15.70
	30	140	130	33822	1	600	15.70
	40	160	174	33824	1	600	15.70
	50	200	217	33826	1	600	15.70
2500	20	140	100	34302	1	630	-
	30	160	150	34303	1	630	-
	40	200	200	34304	1	630	-
	50	225	225	34305	1	630	-

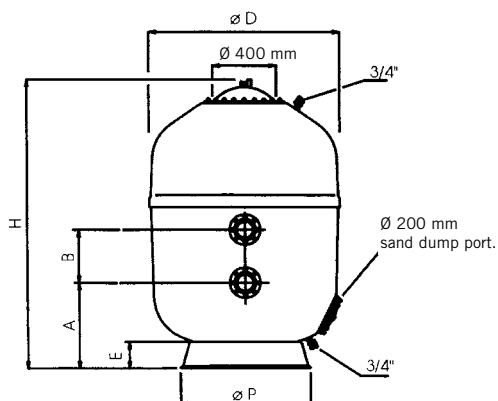
Filtration bed 1 m



* Can use a 2" multiport valve
 **Can use a 2 1/2" multiport valve.

DOES NOT INCLUDE VALVE MANIFOLD

new



Ø (mm)	1050	1200	1400	1600	1800	2000	2350	2500
Filtration bed height (m)	1	1	1	1	1	1	1	1
H (mm)	1860	1860	2000	2100	2200	2200	2430	2525
B (mm)	270*	350	400	400	400	400	400	500
A (mm)	540	570	615	710	725	805	950	1015
Ø P (mm)	760	850	1083	1230	1370	1558	1830	1830
E (mm)	170	180	240	250	270	300	355	-
Filtration area (m ²)	0.86	1.13	1.54	2.01	2.54	3.14	4.34	4.9
Volume (l)	1250	1575	2185	2965	3850	4850	7230	9385
Sand 0.4 – 0.8 mm (Kg)	1050	1360	1820	2375	3010	3750	5000	5600
Gravel 1 – 2 mm (Kg)	265	325	410	515	760	1060	2000	2920
Total weight in operation (Kg)	2060	2600	3500	4700	6150	7800	10786	13800

* For 2" multiport valve the height will be 230 mm.

Note: Codification options according to table on page 120

Filtration bed 1.2 m



DOES NOT INCLUDE
VALVE MANIFOLD

LAMINATED FILTERS



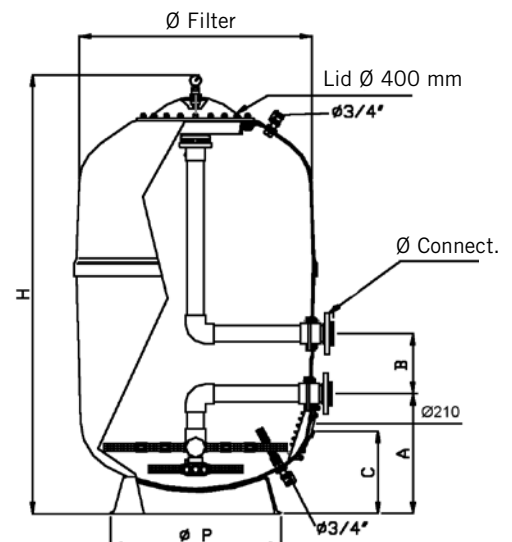
Europe filters

Maximum working pressure 2.5 Kg/cm²

Filtration bed 1.2 m

Diameter Ø mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
1050	20*	63	17	31857	1	140	3.04
	30/40**	75	25/34	31858	1	140	3.04
	50	90	43	31859	1	140	3.04
1200	20/30	75	22/33	31860	1	155	3.89
	40/50	90	45/56	31861	1	155	3.89
1400	20	75	30	21511	1	215	6.27
	30	90	46	21512	1	215	6.27
	40/50	110	61/77	21513	1	215	6.27
1600	20	90	40	21514	1	255	8.31
	30/40	110	60/80	21515	1	255	8.31
	50	125	100	21516	1	255	8.31
1800	20	90	50	21517	1	385	10.65
	30	110	76	21518	1	385	10.65
	40	125	101	21519	1	385	10.65
	50	140	125	21520	1	385	10.65
2000	20	110	62	21521	1	425	12.90
	30	125	94	21522	1	425	12.90
	40	140	125	21523	1	425	12.90
	50	160	157	21524	1	425	12.90
2350	20	125	87	33821	1	630	16.80
	30	140	130	33823	1	630	16.80
	40	160	174	33825	1	630	16.80
	50	200	217	33827	1	630	16.80
2500	20	140	100	34306	1	860	-
	30	160	150	34307	1	860	-
	40	200	200	34308	1	860	-
	50	225	225	34309	1	860	-

Ø (mm)	1050	1200	1400	1600	1800	2000	2350	2500
Filtration bed height (m)	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
H (mm)	2060	2060	2200	2300	2400	2400	2630	2675
B (mm)	270	350	400	400	400	400	400	500
A (mm)	540	570	615	710	725	805	950	1015
Ø P (mm)	760	850	1085	1230	1370	1560	1830	1830
E (mm)	170	180	240	250	270	300	355	-
Filtration area (m ²)	0.86	1.13	1.54	2.01	2.54	3.14	4.34	4.90
Volume (l)	1500	1900	2650	3560	4620	5820	8060	-
Sand 0.4 – 0.8 mm (Kg)	1300	1660	2220	2950	3680	4600	6130	6680
Gravel 1 – 2 mm (Kg)	265	325	410	515	760	1060	2000	2920
Total weight in operation (Kg)	2375	2950	4000	5475	6950	8800	12180	14460



BOBBIN WOUND FILTERS



Vic filters

Industrial bobbin wound filters with diameters from 1050 mm to 3000 mm, with the corresponding flange connections for different filtration velocities. Replaces the Atenas model. New top cover system with quick closing system 400 x 500 mm opening. The air relief valve is fitted into the cover in order to help eliminate air from the filter. 1½" collector arms injected in ABS at the necessary lengths for each of the filters and without joints. Lengths from 90 mm to 525 mm. A reduced head loss is achieved thanks to the greater diameter of the arms.

The 90 mm diam collector tubing is injected in PVC. Water purge and air relief are faster due to a 1" connection. The distance between the top sand layer and the difusor head ("freeboard") has been increased to ensure greatest water distribution during filtration and to prevent sand entering into the laterals during the backwashing.

In filters with diameters of 2350 mm, 2500 mm and 3000 mm, the top cover is Ø 400 mm, sealed with bolts for high resistance.

Maximum working pressure 2.5 Kg/cm²

Diameter Ø mm	Filtration velocity m³/h/m²	Outlet Ø mm	Flow m³/h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m³
1050	20	63	17	11511N	1	120	1.9
	30-40	75	25-34	11517N	1	120	1.9
	50	90	43	11526N	1	120	1.9
1200	20-30	75	22-33	11512N	1	154	2.7
	40-50	90	45-56	11522N	1	154	2.7
1400	20	75	30	11513N	1	173	3.7
	30	90	46	11518N	1	173	3.7
	40-50	110	61-77	11523N	1	173	3.7
1600	20	90	40	11514N	1	235	5.0
	30-40	110	60-80	11519N	1	235	5.0
	50	125	100	11527N	1	235	5.0
1800	20	90	50	11515N	1	270	6.4
	30	110	76	11520N	1	270	6.4
	40	125	101	11524N	1	270	6.4
	50	140	125	11528N	1	270	6.4
2000	20	110	62	11516N	1	295	8.7
	30	125	94	11521N	1	295	8.7
	40	140	125	11525N	1	295	8.7
	50	160	157	11529N	1	295	8.7
2350	20	125	87	33039	1	530	14.8
	30	140	130	33040	1	530	14.8
	40	160	175	33041	1	530	14.8
	50	200	217	33042	1	530	14.8
2500	20	140	100	33043	1	780	19.5
	30	160	150	33044	1	780	19.5
	40	200	200	33045	1	780	19.5
	50	225	250	33046	1	780	19.5
3000	20	160	140	33047	1	1350	29.0
	30	200	212	33048	1	1350	29.0
	40	225	282	33049	1	1350	29.0
	50	250	353	33050	1	1350	29.0

Note: Codification options according to table on page 120

Filtration bed 1 m



DOES NOT INCLUDE VALVE MANIFOLD

- SOME FILTER VESSELS FROM Ø 2000 mm AND ABOVE MAY REQUIRE SPECIAL TRANSPORT VEHICLES. PLEASE ASK FOR A QUOTATION AT THE TIME OF YOUR ENQUIRY.

NOTE: The lateral manholes (Ø 400 mm or Ø 225 m) are recommended for filters with nozzle collector plates for emptying of filter media.



Filter base



Collector arms

Filtration bed 1 m



- SOME FILTER VESSELS FROM Ø 2000 mm AND ABOVE MAY REQUIRE SPECIAL TRANSPORT VEHICLES. PLEASE ASK FOR A QUOTATION AT THE TIME OF YOUR ENQUIRY.

DOES NOT INCLUDE VALVE MANIFOLD

NOTE: The lateral manholes (Ø 400 mm or Ø 225 m) are recommended for filters with nozzle collector plates for emptying of filter media.



Filter base



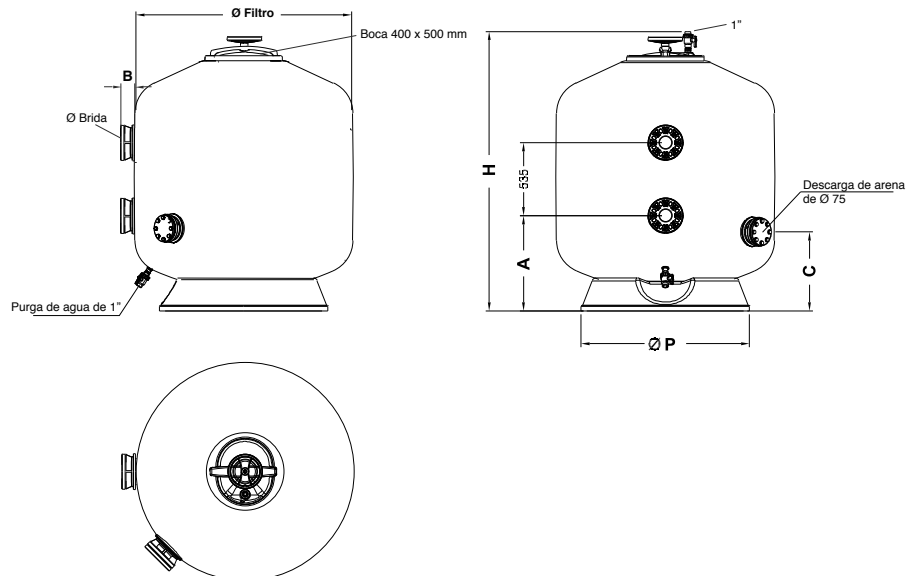
Collector arms

BOBBIN WOUND FILTERS



Vic filters

Code 2.5 Kg	Ø Filter mm	A mm	B mm	C mm	H mm	Ø P mm	Ø Connection mm	Filtration surface m ²
11511N	1050	685	85	535	1950	760	63	0.86
11517N	1050	685	85	535	1950	760	75	0.86
11526N	1050	685	85	535	1950	760	90	0.86
11512N	1200	680	85	530	1970	860	75	1.13
11522N	1200	680	85	530	1970	860	90	1.13
11513N	1400	685	85	575	2000	1020	75	1.54
11518N	1400	685	85	575	2000	1020	90	1.54
11523N	1400	685	85	575	2000	1020	110	1.54
11514N	1600	695	85	625	2050	1150	90	2.01
11519N	1600	695	85	625	2050	1150	110	2.01
11527N	1600	695	85	625	2050	1150	125	2.01
11515N	1800	710	85	670	2080	1320	90	2.54
11520N	1800	710	85	670	2080	1320	110	2.54
11524N	1800	710	85	670	2080	1320	125	2.54
11528N	1800	710	85	670	2080	1320	140	2.54
11516N	2000	730	85	715	2150	1470	110	3.14
11521N	2000	730	85	715	2150	1470	125	3.14
11525N	2000	730	85	715	2150	1470	140	3.14
11529N	2000	730	85	715	2150	1470	160	3.14
33039	2350	965	85	1030	2520	1830	125	4.34
33040	2350	965	85	1030	2520	1830	140	4.34
33041	2350	965	85	1030	2520	1830	160	4.34
33042	2350	965	150	1030	2520	1830	200	4.34
33043	2500	1050	85	1080	2550	1830	140	4.90
33044	2500	1050	85	1080	2550	1830	160	4.90
33045	2500	1050	150	1080	2550	1830	200	4.90
33046	2500	1050	150	1080	2550	1830	225	4.90
33047	3000	1175	85	1140	2750	2365	160	7.07
33048	3000	1175	150	1140	2750	2365	200	7.07
33049	3000	1175	150	1140	2750	2365	225	7.07
33050	3000	1175	170	1140	2750	2365	250	7.07



BOBBIN WOUND FILTERS

Filtration bed 1 m



Praga filters

Single layer filter in polyester and fibreglass. Lid Ø 400 mm. Supplied with manual air relief valve and water purge, sand dump port, and pressure gauge panel. Valid for 20, 30 and 40 m³/h/m² filtration velocities. For other filtration velocities, please enquire.



DOES NOT INCLUDE VALVE MANIFOLD

- ALTERNATIVE HEIGHTS AVAILABLE UNDER SPECIAL ORDER.
- SOME FILTER VESSELS FROM Ø 2000 mm AND ABOVE MAY REQUIRE SPECIAL TRANSPORT. PLEASE ASK FOR A QUOTATION AT THE TIME OF YOUR ENQUIRY.

NOTE: The lateral manholes (Ø 400 mm or Ø 225 m) are recommended for filters with nozzle collector plates for the emptying of filtration media.

Maximum working pressure 2.5 Kg/cm²

Diameter Ø mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
1050	20	63	17	00687	1	120	1.9
	30-40	75	25-34	00694	1	120	1.9
1200	20-30	75	22-33	00688	1	154	2.7
	40	90	45	00702	1	154	2.7
1400	20	75	30	00689	1	173	3.7
	30	90	46	00696	1	173	3.7
	40	110	61	00703	1	173	3.7
1600	20	90	40	00690	1	235	5.0
	30-40	110	60-80	00697	1	235	5.0
1800	20	90	50	00691	1	270	6.4
	30	110	76	00698	1	270	6.4
	40	125	101	00705	1	270	6.4
2000	20	110	62	00692	1	295	8.7
	30	125	94	00699	1	295	8.7
	40	140	125	00706	1	295	8.7
2350	20	125	87	00693	1	530	14.8
	30	140	130	00700	1	530	14.8
	40	160	175	04935	1	530	14.8
2500	20	140	100	08695	1	780	19.5
	30	160	150	08696	1	780	19.5
	40	200	200	08697	1	780	19.5
3000	20	160	140	08699	1	1350	29.0
	30	200	212	08700	1	1350	29.0
	40	225	282	08701	1	1350	29.0

Note: Codification options according to table on page 120

Filtration bed 1 m



DOES NOT INCLUDE VALVE MANIFOLD

- ALTERNATIVE HEIGHTS AVAILABLE UNDER SPECIAL ORDER.
- SOME FILTER VESSELS FROM Ø 2000 mm AND ABOVE MAY REQUIRE SPECIAL TRANSPORT. PLEASE ASK FOR A QUOTATION AT THE TIME OF YOUR ENQUIRY.

BOBBIN WOUND FILTERS

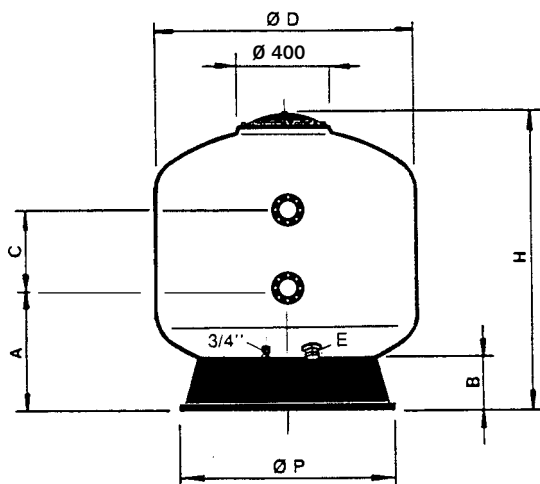


Praga filters

Lid Ø 400 mm.

Maximum working pressure 4 Kg/cm²

Diameter Ø mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
1050	20	63	17	09209	1	142	1.9
	30-40	75	25-34	00712	1	142	1.9
1200	20-30	75	22-33	00713	1	169	2.7
	40	90	45	00719	1	169	2.7
1400	20	75	30	09210	1	192	3.7
	30	90	46	00714	1	192	3.7
	40	110	61	00720	1	192	3.7
1600	20	90	40	09211	1	250	5.0
	30-40	110	60-80	00715	1	250	5.0
1800	20	90	50	09212	1	300	6.4
	30	110	76	00716	1	300	6.4
	40	125	101	00722	1	300	6.4
2000	20	110	62	09213	1	350	8.7
	30	125	94	00717	1	350	8.7
	40	140	125	00723	1	350	8.7
2350	20	125	87	09214	1	530	14.8
	30	140	130	09217	1	530	14.8
	40	160	175	09220	1	530	14.8
2500	20	140	100	09215	1	960	19.5
	30	160	150	09218	1	960	19.5
	40	200	200	09221	1	960	19.5
3000	20	160	140	09216	1	1600	29.0
	30	200	212	09219	1	1600	29.0
	40	225	282	09222	1	1600	29.0



Ø (mm)	1050	1200	1400	1600	1800	2000	2350	2500	3000
Filtration bed height (m)	1	1	1	1	1	1	1	1	1
H (mm)	1640	1780	1755	1835	1875	2040	2520	2550	2750
B (mm)	200	230	240	260	280	300	340	340	350
A (mm)	540	570	585	680	720	790	965	1080	1100
C (mm)	645	640	610	515	465	510	600	450	440
Ø P (mm)	755	940	1085	1230	1370	1550	1859	2000	2365
E (mm)	90	90	90	140	140	140	140	140	140
Filtration area (m ²)	0.86	1.13	1.54	2.01	2.54	3.14	4.34	4.90	7.07
Volume (l)	1050	1500	2000	2600	3400	4400	8045	9050	12800
Sand 0.4 – 0.8 mm (Kg)	950	1375	1650	2150	2800	3800	5275	5950	8600
Gravel 1 – 2 mm (Kg)	300	300	450	675	750	1050	1800	2200	3300
Total weight in operation (Kg)	2000	2700	3700	4900	6100	7900	12550	13760	20200

BOBBIN WOUND FILTERS

THIS CHART APPLIES ONLY TO HIGH PERFORMANCE OSLO, OLOT AND AMPURIA BOBBIN WOUND FILTERS



Vertical high performance bobbin wound filters

General features:

- 100% resistant to corrosion unlike conventional steel filters
- Maximum operating temperature 50° C
- Comply with European standards for pressure vessels 97/23/CE included in section 3 of article 3
- Hydraulic pressure test 1.5 times the maximum admissible pressure

Technical features of internal components:

- Internal components and pipe in PVC
- Laterals and nozzles in PP
- Airwash connection in models with underdrain nozzle plates
- Bolts, nuts and washers in AISI-316
- EPDM seals and gaskets.

Advantages of using an underdrain nozzle plate system over the conventional lateral system:

- There are no areas beneath the nozzles for water to stagnate as could occur in a lateral system
- Optimum filter bed back wash with a uniform water distribution
- Possibility of air wash with consequent saving of clean water
- The lateral manhole is recommended for sand discharge

The characteristics of liquids to be filtered should be indicated clearly when requesting ozone or other chemical resistant coatings for the filter interior.



DOES NOT INCLUDE VALVE MANIFOLD

MEDIA RECOMMENDATIONS:

MULTILAYER - Nozzle plate - Filtration bed 1.2 m												
Diameter mm		1050	1200	1400	1600	1800	2000	2350	2500	2600	2800	3000
Hydroanthracite (0.8-1.6) Kg	600 mm	450	575	775	1000	1275	1575	2175	2450	2548	2956	3550
Sand (0.4-0.8) Kg	400 mm	475	625	825	1100	1400	1700	2350	2675	2973	3448	3850
Gravel (1-2) Kg	100 mm	150	175	250	300	400	500	675	775	796	924	1100
Gravel (3-5) Kg	100 mm	150	175	250	300	400	500	675	775	796	924	1100
MULTILAYER - Nozzle plate - Filtration bed 1.5 m												
Diameter mm		1050	1200	1400	1600	1800	2000	2350	2500	2600	2800	3000
Hydroanthracite (0.8-1.6) Kg	600 mm	450	575	775	1000	1275	1575	2175	2450	2548	2956	3550
Sand (0.4-0.8) Kg	600 mm	725	950	1250	1650	2100	2550	3525	4025	4460	5172	5775
Gravel (1-2) Kg	100 mm	150	175	250	300	400	500	675	775	796	924	1100
Gravel (2-3) Kg	100 mm	150	175	250	300	400	500	675	775	796	924	1100
Gravel (3-5) Kg	100 mm	150	175	250	300	400	500	675	775	796	924	1100
SINGLELAYER - Nozzle plate - Filtration bed 1.2 m												
Diameter mm		1050	1200	1400	1600	1800	2000	2350	2500	2600	2800	3000
Sand (0.4-0.8) Kg	1100 mm	1300	1775	2300	3000	3800	4650	6300	7075	8176	9483	10575
Gravel (1-2) Kg	100 mm	150	175	250	300	400	500	675	775	796	924	1100
SINGLELAYER - Nozzle plate - Filtration bed 1.5 m												
Diameter mm		1050	1200	1400	1600	1800	2000	2350	2500	2600	2800	3000
Sand (0.4-0.8) Kg	1200 mm	1450	1900	2500	3300	4200	5100	7050	8050	8920	10345	11550
Gravel (1-2) Kg	100 mm	150	175	250	300	400	500	675	775	7964	9236	1100
Gravel (2-3) Kg	100 mm	150	175	250	300	400	500	675	775	7964	9236	1100
Gravel (3-5) Kg	100 mm	150	175	250	300	400	500	675	775	7964	9236	1100
MULTILAYER - Collector arms - Filtration bed 1.2 m												
Diameter mm		1050	1200	1400	1600	1800	2000	2350	2500	2600	2800	3000
Hydroanthracite (0.8-1.6) Kg	600 mm	450	575	775	1000	1275	1575	2175	2450	2548	2956	3550
Sand (0.4-0.8) Kg	400 mm	475	625	825	1100	1400	1700	2350	2675	2973	3448	3850
Gravel (2-3) Kg	100 mm	150	175	250	300	400	500	675	775	796	924	1100
Gravel (3-5) Kg	100 mm (1)	300	350	500	775	850	1150	1800	1975	2123	2463	3850
SINGLELAYER - Collector arms - Filtration bed 1.2 m												
Diameter mm		1050	1200	1400	1600	1800	2000	2350	2500	2600	2800	3000
Sand (0.4-0.8) Kg	1100 mm	1300	1775	2300	3000	3800	4650	6300	7075	8176	9483	10575
Gravel (1-2) Kg	100 mm (1)	300	350	500	775	850	1150	1800	1975	2123	2463	3850

Densities: Hydroanthracite = 0.8 Kg/dm³ - Sand = 1.4 Kg/dm³ - Gravel = 1.5 Kg/dm³

(1) 100 mm above laterals

Filtration bed 1.2 m



DOES NOT INCLUDE VALVE MANIFOLD

- ALTERNATIVE HEIGHTS AVAILABLE UNDER SPECIAL ORDER.
- SOME FILTER VESSELS FROM Ø 2000 mm AND ABOVE MAY REQUIRE SPECIAL TRANSPORT. PLEASE ASK FOR A QUOTATION AT THE TIME OF YOUR ENQUIRY.



Lateral manhole Ø 400 mm



Nozzle plate



Sightglass

BOBBIN WOUND FILTERS



Oslo filters

Features:

Vertical high performance bobbin wound filters

Collector system:

A -Conventional collector system using laterals with 0.3 mm slots

For working pressure of 2.5 and 4 bars.

B -Nozzle plate with 0.5 mm slots. For working pressure of 2.5 and 4 bars.

Fitted with:

- Pressure gauge panel
- Manual air vent and water purge

Options:

- Positioning of water connections flanges, sightglasses and manhole covers are provided according to customer specification.
- Diameters of connections and purges depend on customer specifications
- For other variations such as height, chemical resistant internal coating, pressure rating, etc., please enquire.

Maximum working pressure 2.5 Kg/cm²

Diameter Ø mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
1050	30	75	25	04611	1	207	2.5
	40	90	34	04612	1	207	2.5
1200	30	75	33	04613	1	234	3.2
	40	110	45	04650	1	234	3.2
1400	30	90	46	04615	1	294	4.7
	40	125	61	04616	1	294	4.7
1600	30	110	60	04619	1	360	6.2
	40	140	80	04651	1	360	6.2
1800	30	125	76	04623	1	416	8.5
	40	160	101	04624	1	416	8.5
2000	30	125	94	04626	1	483	10.3
	40	160	125	04652	1	483	10.3
2350	30	140	130	08693	1	651	15.8
	40	200	175	08694	1	651	15.8
2500	30	160	150	08704	1	820	20.8
	40	225	200	08706	1	820	20.8
3000	30	200	212	08708	1	1300	31.0
	40	250	282	08710	1	1300	31.0

BOBBIN WOUND FILTERS

Filtration bed 1.2 m


Oslo filters

 Maximum working pressure 4 Kg/cm²

Diameter Ø mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
1050	30	75	25	05168	1	230	2.5
	40	90	34	05173	1	230	2.5
1200	30	75	33	05169	1	265	3.2
	40	110	45	05174	1	265	3.2
1400	30	90	46	07436	1	364	4.7
	40	125	61	07437	1	364	4.7
1600	30	110	60	05170	1	442	6.2
	40	140	80	05175	1	442	6.2
1800	30	125	76	07438	1	518	8.5
	40	160	101	07439	1	518	8.5
2000	30	125	94	05171	1	644	10.3
	40	160	125	05176	1	644	10.3
2350	30	140	130	05172	1	786	15.8
	40	200	175	05177	1	786	15.8
2500	30	160	150	08712	1	964	20.8
	40	225	200	08714	1	964	20.8
3000	30	200	212	08716	1	1613	31.0
	40	250	282	08718	1	1613	31.0



DOES NOT INCLUDE VALVE MANIFOLD

- SOME FILTER VESSELS FROM Ø 2000 mm AND ABOVE MAY REQUIRE SPECIAL TRANSPORT VEHICLE. PLEASE ASK FOR A QUOTATION AT THE TIME OF YOUR ENQUIRY.

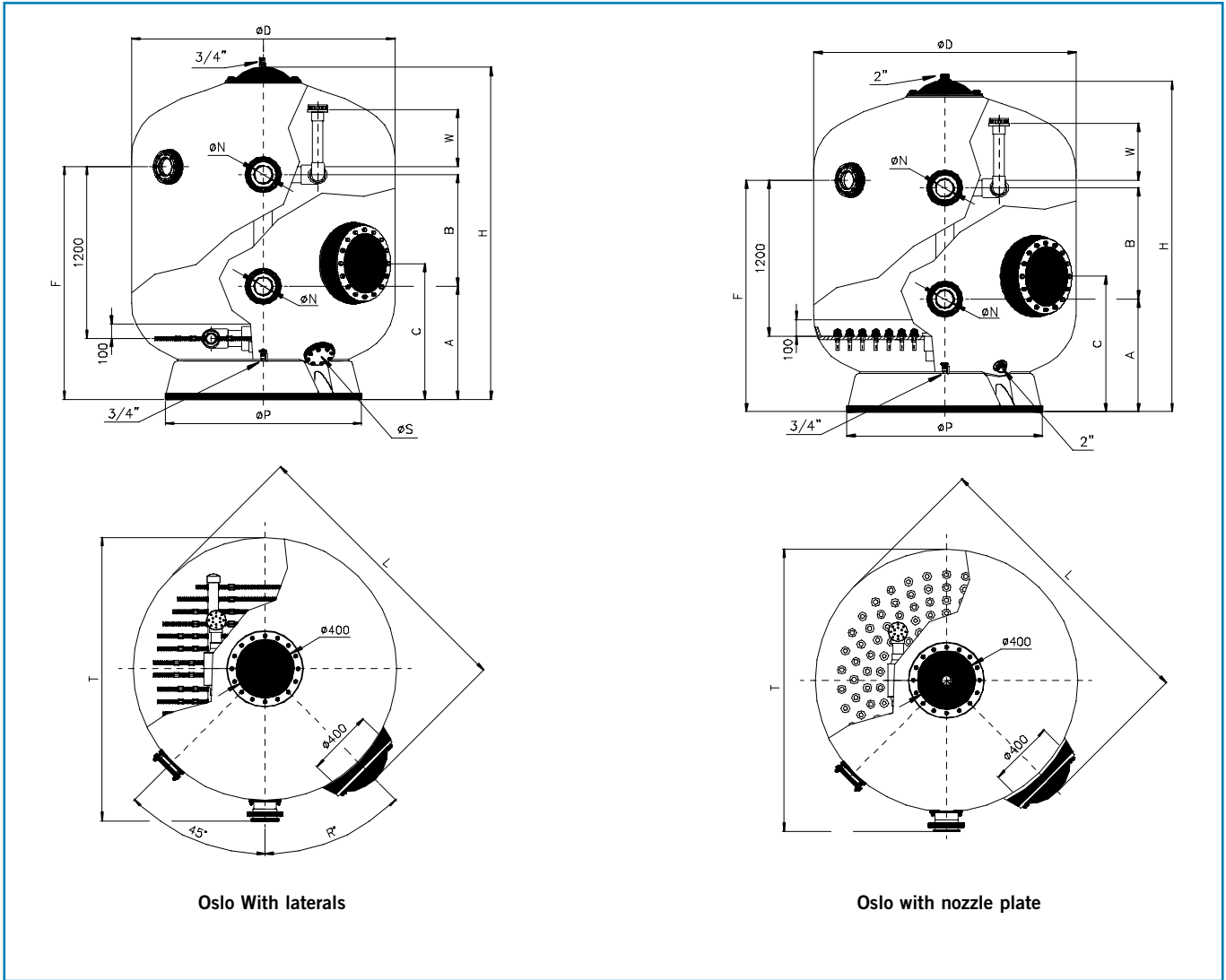
NOTE: The lateral manholes (Ø 400 mm or Ø 225 m) are recommended for filters with nozzle collector plates for the emptying of filter media.

Note: Codification options according to table on page 120

BOBBIN WOUND FILTERS



Oslo filters



Oslo With laterals

Oslo with nozzle plate

Ø D (mm)	Filtration velocity (m ³ /hr/m ²)	Ø N (mm)	2.5 bar		4 bar		Flow m ³ /h	Filtration area m ²	Volume (l)	A (mm)	B (mm)	C (mm)	F (mm)	H (mm)	L (mm)	Ø P (mm)	R (mm)	Ø S (mm)	T (mm)	W (mm)	Total weight in oper. Kg
			Code	Code	Code	Code															
1050	30	75	DN65	04611	05168	25	0.86	1500	650	940	770	1550	2070	1240	750	55	90	1220	325	2450	
	40	90	DN80	04612	05173	34															
1200	30	75	DN65	04613	05169	33	1.13	1860	670	830	770	1550	2080	1390	940	45	90	1380	350	3000	
	40	110	DN100	04650	05174	45															
1400	30	90	DN80	04615	07436	46	1.54	2700	680	820	840	1570	2175	1590	1085	45	90	1570	350	4300	
	40	125	DN110	04616	07437	61															
1600	30	110	DN100	04619	05170	60	2.01	3620	780	800	870	1625	2310	1790	1230	45	140	1780	400	5825	
	40	140	DN125	04651	05175	80															
1800	30	125	DN110	04623	07438	76	2.54	4725	790	780	950	1625	2320	1990	1370	45	140	2000	400	7300	
	40	160	DN150	04624	07439	101															
2000	30	125	DN110	04626	05171	94	3.14	5800	790	840	950	1695	2460	2190	1550	45	140	2200	400	9000	
	40	160	DN150	04652	05176	125															
2350	30	140	DN125	08693	05172	130	4.34	8800	1065	700	1030	1850	2720	2550	1830	45	140	2550	500	13750	
	40	200	DN175	08694	05177	175															
2500	30	160	DN150	08704	08712	150	4.90	9850	1125	450	1080	1760	2750	2700	2000	45	140	2750	500	14885	
	40	225	DN200	08706	08714	200															
3000	30	200	DN175	08708	08716	212	7.07	15350	1150	600	1140	1870	2950	3200	2365	45	140	3200	500	21615	
	40	250	DN225	08710	08718	282															

BOBBIN WOUND FILTERS

Filtration bed 1.2 and 1.5 m



Olot filters

Features:

According to DIN 19605/19643 Standard

Collector system:

Nozzle plate with 0.5 mm slots, working pressure 2.5 bar.

Fitted with:

- Pressure gauge panel
- Manual air vent and water purge
- Air wash connection flange
- Ø 400 mm manhole

Options:

- Positioning of water connection flanges, sightglasses and manhole covers are provided according to customer specifications.
- Diameters of connections and purges depend on customer specifications.
- Please enquire for the variations such as height, chemical resistant internal coating, pressure rating, etc...



DOES NOT INCLUDE VALVE MANIFOLD

Maximum working pressure 2.5 Kg/cm²

Filtration bed 1.2 m

Diameter Ø mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
1050	30	110	25	07355	1	265	2.95
1200	30	125	33	07356	1	345	3.86
1400	30	140	46	07447	1	380	5.22
1600	30	160	60	07357	1	420	7.09
1800	30	200	76	07448	1	470	9.09
2000	30	225	94	07358	1	540	11.25
2350	30	250	130	07359	1	825	16.20
2500	30	250	150	19335	1	940	24.40
2600	30	250	160	23969	1	1021	25.21
2800	30	250	185	23970	1	1135	29.50
3000	30	250	212	19336	1	1425	30.00

• SOME FILTER VESSELS FROM Ø 2000 mm AND ABOVE MAY REQUIRE SPECIAL TRANSPORT VEHICLE. PLEASE ASK FOR A QUOTATION AT THE TIME OF YOUR ENQUIRY.

Filtration bed 1.5 m

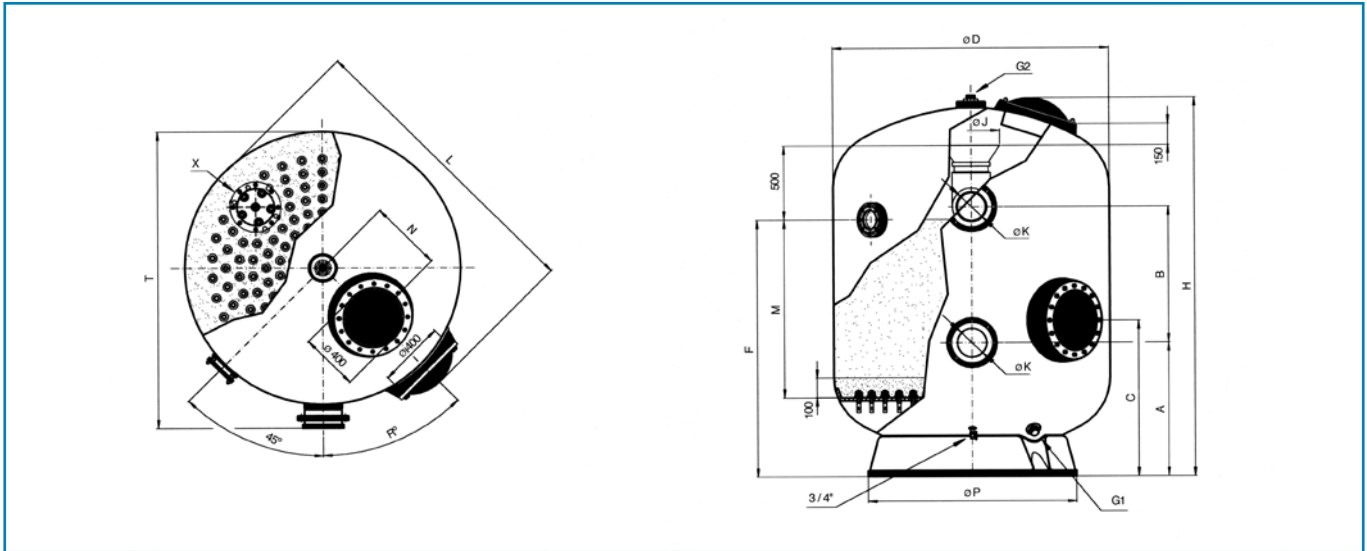
Diameter Ø mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
1050	30	110	25	18227	1	285	3.21
1200	30	125	33	18228	1	385	4.20
1400	30	140	46	18229	1	420	5.68
1600	30	160	60	18230	1	460	7.69
1800	30	200	76	18231	1	515	9.58
2000	30	225	94	18232	1	625	12.90
2350	30	250	130	18233	1	920	17.50
2500	30	250	150	19337	1	1010	25.87
2600	30	250	160	23971	1	1144	26.51
2800	30	250	185	23972	1	1264	30.63
3000	30	250	212	19338	1	1590	32.12

Note: Codification options according to table on page 120

BOBBIN WOUND FILTERS



Olot filters



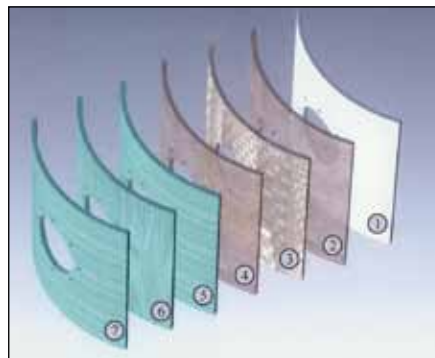
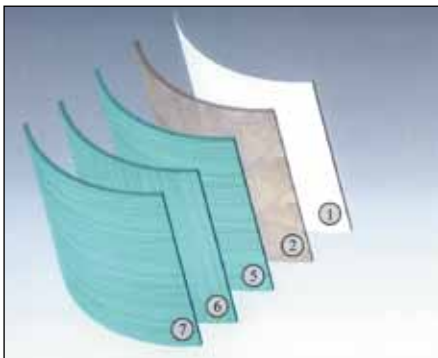
Ø D (mm)	1050	1200	1400	1600	1800	2000	2350	2500	2.600	2.800	3000	
Filtration velocity (m ³ /h/m ²)	30	30	30	30	30	30	30	30	30	30	30	
Ø K (mm)	110	125	140	160	200	225	250	250	250	250	250	
	DN100	DN110	DN125	DN150	DN175	DN200	DN225	DN225	DN225	DN225	DN225	
FILTRATION BED 1.2 m	Code	07355	07356	07447	07357	07448	07358	07359	19335	23969	23970	19336
	H (mm)	2380	2400	2520	2520	2570	2660	2800	2850	2920	3030	2900
	F (mm)	1615	1635	1645	1690	1740	1750	1870	1870	1880	1920	1880
	Vol. (l)	1735	2175	3000	4350	5450	6650	9575	11700	12800	15500	18000
	Total weight in operation (kg)	2600	3325	4475	6250	7500	9625	13600	15500	16650	19500	22500
FILTRATION BED 1.5 m	Code	18227	18228	18229	18230	18231	18232	18233	19337	23971	23972	19338
	H (mm)	2680	2700	2820	2820	2870	2960	3100	3150	3220	3330	3200
	F (mm)	1915	1935	1945	1990	2040	2050	2170	2170	2180	2220	2180
	Vol (l)	1995	2745	3590	5150	6350	7650	11255	12950	14100	16900	19700
	Total weight in operation (kg)	3000	3900	5300	7150	8750	11250	15800	17950	19400	22600	26250
Flow rate (m ³ /h)	25	33	46	60	76	94	130	150	160	185	212	
Filtration area (m ²)	0.86	1.13	1.54	2.01	2.54	3.14	4.34	4.90	5.31	6.16	7.07	
Nozzle number	59	78	102	134	168	200	286	333	333	381	433	
A (mm)	700	700	830	830	900	950	1050	1100	1160	1230	1140	
B (mm)	1000	1000	900	950	920	760	680	600	600	650	600	
C (mm)	830	840	840	870	950	950	1030	1100	1200	1230	1220	
L (mm)	1240	1390	1600	1810	1990	2194	2550	2720	2800	3000	3220	
Ø P (mm)	730	940	1080	1230	1390	1550	1850	2050	2050	2200	2360	
T (mm)	1220	1380	1570	1780	2000	2240	2630	2750	2800	3000	3270	
N (mm)	0	130	130	400	450	480	550	700	600	600	720	
Ø X Inspection lid (mm)	125	250	250	250	250	250	250	250	250	250	250	
° R	55°	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°	
Ø J (mm)	380	380	380	380	380	380	600	600	600	600	600	
Ø G1	2"	2"	2"	2"	2"	2"	2"	2"	90	110	140	
Ø G2*	2"	2"	2"	2"	2"	2"	75	75	75	75	75	

* In models Ø 1050 mm, 1200 mm and 1400 mm, this fitting is fitted on to the cover.

BOBBIN WOUND FILTERS

Construction features of the filter according to DIN 18820:

- (1) Chemical protective gel-coat barrier isoneopenligical type CSS-UP3. Superior hardness and resistance to the abrasion of sand and salt water. Complies with German standard KTW recommendations and certified by LVHT. The optional vinylester layer for protection against ozone is of the CCS-PHAS class.
- (2) Polyester reinforced laminated resin with randomly orientated fibreglass filament GF-UP1type.
- Reinforced in MW areas under greater stress with an additional woven matting, alternating non-aligned (4) with aligned fibres (3).
- Bobbin wound layers using computer controlled machinery that lay down a set of radial bobbin layers (5) (7) on the cylindrical part and a set of polar layers (6) along the entire filter body with type GF-UP1. The most essential features of these filters is their great mechanical resistance that enables them to withstand greater internal pressures.
- All filters are submitted to a seasoning process at a temperature of 60°C.



Ø 1050 mm and Ø 1200 mm Rodas filters

General features:

- Resistant to corrosion unlike conventional steel filters
- Excellent relation between filter weight and its mechanical characteristics
- Maximum operating temperature 50°C
- Comply with European standards for pressure vessels 97/23/CE included in section 3 of article 3.
- Hydraulic pressure test 1.5 times the maximum admissible pressure
- Resistance and thickness calculations are based on norms BS-4994 and AD Merkblatt N1

Fitted with:

- Pressure gauge panel
- Manual air relief valve and water drain
- Ø 400 mm lateral manhole and Ø 140 mm top port

Characteristics of internal components:

- Internal components and pipe in PVC
- PP laterals with 0.3 slots
- Bolts, nuts and washers in AISI-316
- EPDM seals and gaskets



Ø 1050 mm
Ø 1200 mm

Filtration bed 0.6 m

BOBBIN WOUND FILTERS



DOES NOT INCLUDE
VALVE MANIFOLD

Ø 1050 mm
Ø 1200 mm



Ø 1050 mm and Ø 1200 mm Rodas filters

Maximum working pressure 2.5 Kg/cm²

Filters Ø 1050 mm

Filter length mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
1900	20	75	34	05102	1	230	2.95
	30	90	52	05105	1	230	2.95
	40	110	69	05108	1	230	2.95
2300	20	110	42	11331	1	280	3.57
	30	125	64	11332	1	280	3.57
	40	140	85	11333	1	280	3.57
2500	20	110	46	24842	1	305	3.88
	30	125	70	24843	1	305	3.88
	40	140	93	24844	1	305	3.88
2700	20	110	50	11334	1	330	4.20
	30	125	75	11335	1	330	4.20
	40	140	100	11336	1	330	4.20
3000	20	110	56	22647	1	370	4.67
	30	140	84	22648	1	370	4.67
	40	160	112	22649	1	370	4.67

Filters Ø 1200 mm

Filter length mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
1900	20	110	39	22650	1	270	3.08
	30	125	59	22651	1	270	3.08
	40	140	79	22652	1	270	3.08
2300	20	110	48	22653	1	330	3.73
	30	140	73	22654	1	330	3.73
	40	160	97	22655	1	330	3.73
2500	20	125	53	24845	1	360	4.05
	30	140	79	24846	1	360	4.05
	40	160	106	24847	1	360	4.05
2700	20	125	57	22656	1	390	4.38
	30	140	86	22657	1	390	4.38
	40	160	115	22658	1	390	4.38
3000	20	125	64	22659	1	435	4.86
	30	140	96	22660	1	435	4.86
	40	160	129	22661	1	435	4.86

BOBBIN WOUND FILTERS

Filtration bed 0.6 m


Ø 1050 mm and Ø 1200 mm Rodas filters

 Maximum working pressure 4 Kg/cm²
Filters Ø 1050 mm

Filter length mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
1900	20	75	34	07124	1	270	2.95
	30	90	52	07125	1	270	2.95
	40	110	69	07126	1	270	2.95
2300	20	110	42	11321	1	330	3.57
	30	125	64	11322	1	330	3.57
	40	140	85	11323	1	330	3.57
2500	20	110	46	25016	1	355	3.88
	30	125	70	25017	1	355	3.88
	40	140	93	25018	1	355	3.88
2700	20	110	50	11326	1	380	4.20
	30	125	75	11327	1	380	4.20
	40	140	100	11328	1	380	4.20
3000	20	110	56	22683	1	420	4.67
	30	140	84	22684	1	420	4.67
	40	160	112	20895	1	420	4.67


 DOES NOT INCLUDE
VALVE MANIFOLD

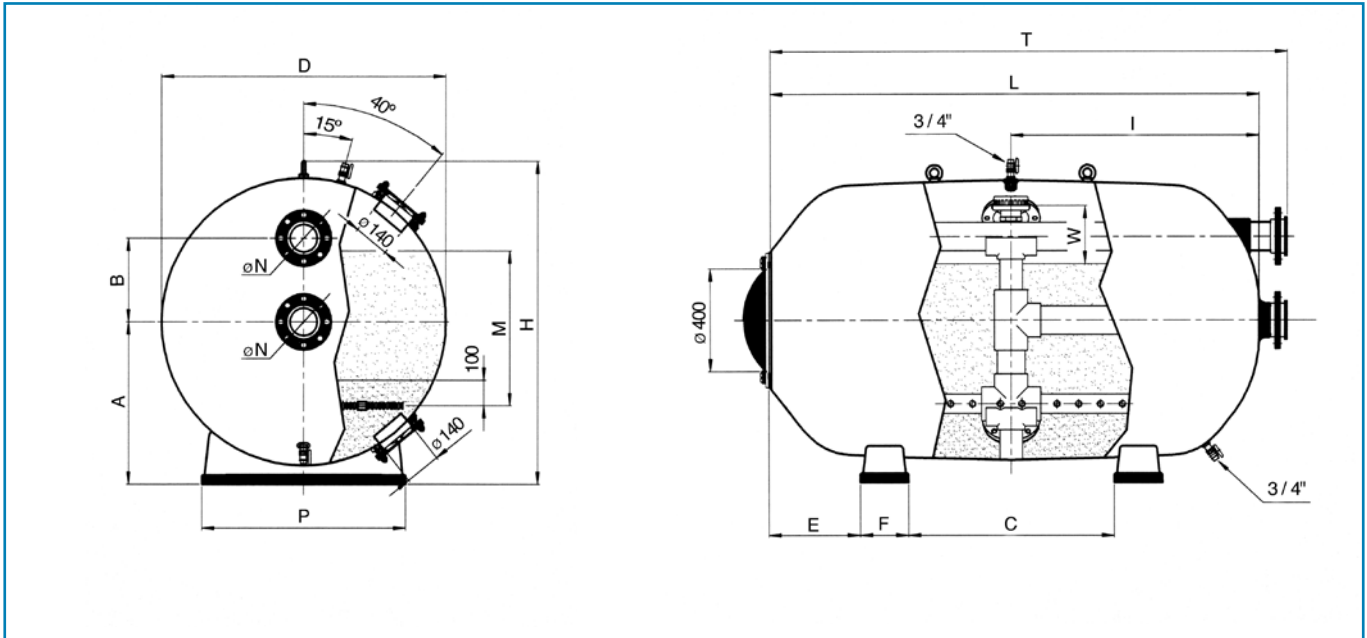
**Ø 1050 mm
Ø 1200 mm**
Filters Ø 1200 mm

Filter length mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
1900	20	110	39	22685	1	310	3.08
	30	125	59	22686	1	310	3.08
	40	140	79	22687	1	310	3.08
2300	20	110	48	22688	1	375	3.73
	30	140	73	22689	1	375	3.73
	40	160	97	20897	1	375	3.73
2500	20	125	53	25019	1	410	4.05
	30	140	79	25020	1	410	4.05
	40	160	106	25021	1	410	4.05
2700	20	125	57	22690	1	440	4.38
	30	140	86	22691	1	440	4.38
	40	160	115	20898	1	440	4.38
3000	20	125	64	22692	1	480	4.86
	30	140	96	22693	1	480	4.86
	40	160	129	20899	1	480	4.86

BOBBIN WOUND FILTERS



Ø 1050 mm and Ø 1200 mm Rodas filters



Length (mm)	Filtration velocity (m³/h/m²)	Ø N (mm)	2.5 bar		4 bar		Flow m³/h	Filtration area m²	Volume (l)	A (mm)	B (mm)	C (mm)	E (mm)	F (mm)	H (mm)	I (mm)	P (mm)	T (mm)	W (mm)	Total weight in oper. Kg	Sand charge	
			Code	Code	1 - 1.2 mm	0.4 - 0.8 mm																
Diameter 1050 mm - Height of filtration bed 0.6 m.																						
1900	20	75	DN65	05102	07124	34	1.72	1480	630	325	760	380	190	1260	950	800	2160	170	2530	350	950	
	30	90	DN80	05105	07125	52																
	40	110	DN100	05108	07126	69																
2300	20	110	DN100	11331	11321	42	2.12	1820	630	325	1000	460	190	1260	1150	800	2560	170	3100	475	1250	
	30	125	DN110	11332	11322	64																
	40	140	DN125	11333	11323	85																
2500	20	110	DN100	24842	25016	46	2.32	2000	630	325	1120	500	190	1260	1250	800	2760	170	3380	575	1525	
	30	125	DN110	24843	25017	70																
	40	140	DN125	24844	25018	93																
2700	20	110	DN100	11334	11326	50	2.51	2170	630	325	1240	540	190	1260	1350	800	2960	170	3670	700	1800	
	30	125	DN110	11335	11327	75																
	40	140	DN125	11336	11328	100																
3000	20	110	DN100	22647	22683	56	2.81	2430	630	325	1420	600	190	1260	1500	800	3260	170	4100	775	20250	
	30	140	DN125	22648	22684	84																
	40	160	DN150	22649	20895	112																
Diameter 1200 mm - Height of filtration bed 0.6 m.																						
1900	20	75	DN100	22650	22685	39	1.96	1900	725	325	760	380	200	1390	950	900	2130	225	3220	425	1100	
	30	90	DN110	22651	22686	59																
	40	110	DN125	22652	22687	79																
2300	20	110	DN100	22653	22688	48	2.42	2350	725	325	1000	460	200	1390	1150	900	2530	225	3960	550	1425	
	30	125	DN125	22654	22689	73																
	40	140	DN150	22655	20897	97																
2500	20	110	DN110	24845	25019	53	2.65	2580	725	325	1120	500	200	1390	1250	900	2750	225	4320	700	1750	
	30	125	DN125	24846	25020	79																
	40	140	DN150	24847	25021	106																
2700	20	110	DN110	22656	22690	57	2.87	2800	725	325	1240	540	200	1390	1350	900	2950	225	4690	825	2075	
	30	125	DN125	22657	22691	86																
	40	140	DN150	22658	20898	115																
3000	20	110	DN110	22659	22692	64	3.21	3140	725	325	1420	600	200	1390	1500	900	3250	225	5240	925	2325	
	30	140	DN125	22660	22693	96																
	40	160	DN150	22661	20899	129																

MEDIA RECOMMENDATIONS - Sand = 1.4 Kg/dm³ - Gravel = 1.5 Kg/dm³

BOBBIN WOUND FILTERS

Ø 1400 mm, Ø 1600 mm and Ø 1800 mm Rodas filters
General features:

- Resistant to corrosion unlike conventional steel filters
- Maximum operating temperature 50°C
- Comply with European standards for pressure vessels 97/23/CE included in section 3 of article 3
- Hydraulic pressure test 1.5 times the maximum admissible pressure

Fitted with:

- Pressure gauge panel
- Manual air relief valve and water purge
- Ø 400 mm lateral manhole

Characteristics of internal components:

- Internal components and pipe in PVC
- PP laterals with 0.3 mm slots
- Bolts, nuts and washers in AISI-316
- EPDM seals and gaskets

Filtration bed 0.8 and 1 m

 DOES NOT INCLUDE VALVE
MANIFOLD

**Ø 1400 mm
Ø 1600 mm
Ø 1800 mm**
Maximum working pressure 2.5 Kg/cm²
Filters Ø 1400 mm - Filtration bed 0.8 m

Filter length mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
1900	20	110	45	24848	1	340	4.84
	30	125	67	24849	1	340	4.84
	40	140	89	24850	1	340	4.84
2500	20	110	60	24854	1	435	6.23
	30	140	91	24855	1	435	6.23
	40	160	121	24856	1	435	6.23
3000	20	125	73	24860	1	530	7.44
	30	160	110	24861	1	530	7.44
	40	200	147	24862	1	530	7.44

Filters Ø 1600 mm - Filtration bed 1 m

Filter length mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
1900	20	110	49	22662	1	400	5.49
	30	140	74	22663	1	400	5.49
	40	160	99	22664	1	400	5.49
2500	20	140	67	24866	1	520	7.18
	30	160	101	24867	1	520	7.18
	40	200	134	24868	1	520	7.18
3000	20	140	82	22671	1	620	8.60
	30	160	123	22672	1	620	8.60
	40	200	164	22673	1	620	8.60

Filtration bed 0.8
and 1 m



DOES NOT INCLUDE VALVE
MANIFOLD

Ø 1400 mm
Ø 1600 mm
Ø 1800 mm

BOBBIN WOUND FILTERS



Ø 1400 mm, Ø 1600 mm and Ø 1800 mm Rodas filters

Maximum working pressure 2.5 Kg/cm²

Filters Ø 1800 mm - Filtration bed 1 m

Filter length mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
2500	20	125	75	24875	1	585	10.40
	30	160	112	24876	1	585	10.40
	40	200	150	24877	1	585	10.40
3000	20	140	92	24881	1	700	12.25
	30	160	137	24882	1	700	12.25
	40	200	183	24883	1	700	12.25
3500	20	140	108	24887	1	875	14.20
	30	200	162	24888	1	875	14.20
	40	225	216	24889	1	875	14.20
4000	20	160	125	24893	1	930	16.00
	30	200	187	24894	1	930	16.00
	40	225	250	24895	1	930	16.00

Maximum working pressure 4 Kg/cm²

Filters Ø 1400 mm - Filtration bed 0.8 m

Filter length mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
1900	20	110	45	25022	1	385	4.84
	30	125	67	25023	1	385	4.84
	40	140	89	25024	1	385	4.84
2500	20	110	60	25028	1	485	6.23
	30	140	91	25029	1	485	6.23
	40	160	121	25030	1	485	6.23
3000	20	125	73	25034	1	585	7.44
	30	160	110	25035	1	585	7.44
	40	200	147	25036	1	585	7.44

BOBBIN WOUND FILTERS

Ø 1400 mm, Ø 1600 mm and Ø 1800 mm Rodas filters
Maximum working pressure 4 Kg/cm²
Filters Ø 1600 mm - Filtration bed 1 m

Filter length mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
1900	20	110	49	22694	1	450	5.49
	30	140	74	22695	1	450	5.49
	40	160	99	20900	1	450	5.49
2500	20	140	67	25040	1	570	7.18
	30	160	101	25041	1	570	7.18
	40	200	134	25042	1	570	7.18
3000	20	140	82	22700	1	685	8.60
	30	160	123	22701	1	685	8.60
	40	200	164	20903	1	685	8.60

Filtration bed 0.8 and 1 m

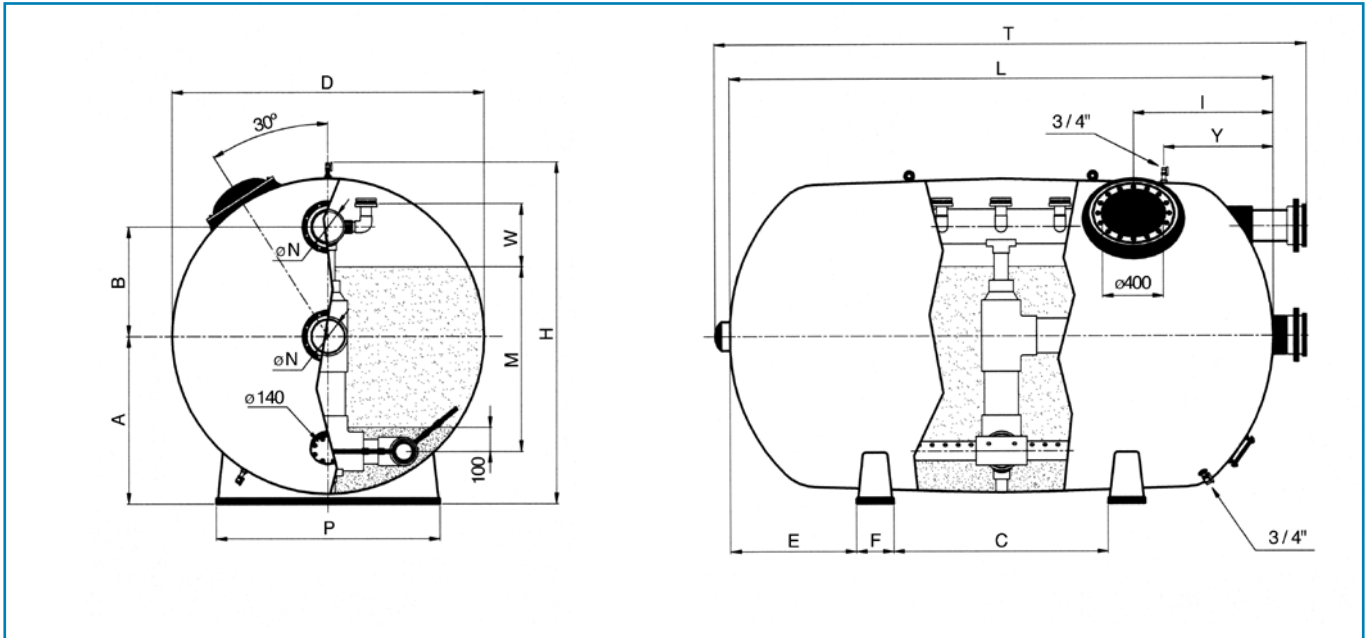
DOES NOT INCLUDE VALVE MANIFOLD
**Ø 1400 mm
Ø 1600 mm
Ø 1800 mm**
Filters Ø 1800 mm - Filtration bed 1 m

Filter length mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
2500	20	125	75	25049	1	680	10.40
	30	160	112	25050	1	680	10.40
	40	200	150	25051	1	680	10.40
3000	20	140	92	25055	1	805	12.25
	30	160	137	25056	1	805	12.25
	40	200	183	25057	1	805	12.25
3500	20	140	108	25061	1	930	14.20
	30	200	162	25062	1	930	14.20
	40	225	216	25063	1	930	14.20
4000	20	160	125	25067	1	1055	16.00
	30	200	187	25068	1	1055	16.00
	40	225	250	25069	1	1055	16.00

BOBBIN WOUND FILTERS



Ø 1400 mm, Ø 1600 mm and Ø 1800 mm Rodas filters



Length (mm)	Filtration velocity (m ³ /h/m ²)	Ø N (mm)	2.5 bar		4 bar		Flow m ³ /h	Filtration area m ²	Volume (l)	A	B	C	E	F	H	I	P	T	W	Y	Total weight in oper. Kg	Sand charge	
			Code	Code	(mm)	(mm)				(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	1 - 1.2 mm		0.4 - 0.8 mm	
Diameter 1400 mm - Filtration bed 0.8 m.																							
1900	20	110	DN100	24848	25022	45	2.23	2530	810	390	720	380	210	1600	820	1080	2160	220	1380	4250	575	2100	
	30	125	DN110	24849	25023	67																	
	40	140	DN125	24850	25024	89																	
2500	20	110	DN100	24854	25028	60	3.02	3460	810	390	1080	500	210	1600	820	1080	2780	220	1380	5740	800	2825	
	30	140	DN125	24855	25029	91																	
	40	160	DN150	24856	25030	121																	
3000	20	125	DN110	24860	25034	73	3.67	4230	810	390	1380	600	210	1600	820	1080	3320	220	1380	6990	1000	3450	
	30	160	DN150	24861	25035	110																	
	40	200	DN175	24862	25036	147																	
Diameter 1600 mm - Filtration bed 1 m.																							
1900	20	110	DN100	22662	22694	49	2.47	3220	925	475	470	475	240	1830	800	1230	2220	250	1380	5420	600	2850	
	30	140	DN125	22663	22695	74																	
	40	160	DN150	22664	20900	99																	
2500	20	140	DN125	24866	25040	67	3.36	4430	925	475	1020	500	240	1830	800	1230	2820	250	1380	7400	850	3875	
	30	160	DN150	24867	25041	101																	
	40	200	DN175	24868	25042	134																	
3000	20	140	DN125	22671	22700	82	4.1	5430	925	475	1320	600	240	1830	800	1230	3360	250	1380	9020	1050	4750	
	30	160	DN150	22672	22701	123																	
	40	200	DN175	22673	20903	164																	
Diameter 1800 mm - Filtration bed 1 m.																							
2500	20	125	DN110	24875	25049	75	3.74	5530	1040	550	1020	380	270	2050	870	1380	2820	350	1250	9170	975	4850	
	30	160	DN150	24876	25050	112																	
	40	200	DN175	24877	25051	150																	
3000	20	140	DN125	24881	25055	92	4.58	6800	1040	550	1320	460	270	2050	870	1380	3320	350	1500	11230	1225	5925	
	30	160	DN150	24882	25056	137																	
	40	200	DN175	24883	25057	183																	
3500	20	140	DN125	24887	25061	108	5.41	8070	1040	550	1620	500	270	2050	870	1380	3850	350	1750	13290	1475	7000	
	30	200	DN175	24888	25062	162																	
	40	225	DN200	24889	25063	216																	
4000	20	160	DN150	24893	25067	125	6.25	9340	1040	550	1920	540	270	2050	870	1380	4350	350	2000	15350	1700	8075	
	30	200	DN175	24894	25068	187																	
	40	225	DN200	24895	25069	250																	

MEDIA RECOMMENDATIONS - Sand = 1.4 Kg/dm³ - Gravel = 1.5 Kg/dm³

BOBBIN WOUND FILTERS



Ø 2000 mm and Ø 2350 mm Rodas filters

General features:

- Resistant to corrosion unlike conventional steel filters
- Maximum operating temperature 50°C
- Comply with European standards for pressure vessels 97/23/CE included in section 3 of article 3
- Hydraulic pressure test 1.5 times the maximum admissible pressure

Fitted with:

- Pressure gauge panel
- Manual air relief valve and water purge
- Ø 400 mm lateral manhole

Characteristics of internal components:

- Internal components and pipe in PVC
- PP laterals with 0.3 mm slots
- Bolts, nuts and washers in AISI-316
- EPDM seals and gaskets

Maximum working pressure 2.5 Kg/cm²

Filters Ø 2000 mm

Filter length mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow rate m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
2500	20	140	87	05103	1	650	13.20
	30	160	130	05106	1	650	13.20
	40	200	174	05109	1	650	13.20
3000	20	140	106	24899	1	775	15.65
	30	160	159	24900	1	775	15.65
	40	200	212	24901	1	775	15.65
3500	20	160	125	05104	1	900	18.10
	30	200	187	05107	1	900	18.10
	40	225	250	05110	1	900	18.10
4000	20	160	144	24908	1	1025	20.55
	30	200	216	24909	1	1025	20.55
	40	225	288	24910	1	1025	20.55
4500	20	200	163	24914	1	1150	23.00
	30	225	245	24915	1	1150	23.00
	40	250	326	24916	1	1150	23.00

Filtration bed 1 and 1.2 m



DOES NOT INCLUDE VALVE MANIFOLD

**Ø 2000 mm
Ø 2350 mm**

Filtration bed 1
and 1.2 m



DOES NOT INCLUDE VALVE
MANIFOLD

Ø 2000 mm
Ø 2350 mm

BOBBIN WOUND FILTERS



Ø 2000 mm and Ø 2350 mm Rodas filters

Maximum working pressure 2.5 Kg/cm²

Filters Ø 2350 mm

Filter length mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow rate m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
3000	20	160	119	24917	1	1350	20.25
	30	200	178	24918	1	1350	20.25
	40	225	238	24919	1	1350	20.25
3500	20	160	141	17120	1	1500	23.00
	30	200	212	16696	1	1500	23.00
	40	225	282	17121	1	1500	23.00
4000	20	200	163	24926	1	1650	25.75
	30	225	245	24927	1	1650	25.75
	40	250	327	24928	1	1650	25.75
4500	20	200	186	22674	1	1800	28.50
	30	225	279	22675	1	1800	28.50
	40	250	371	22676	1	1800	28.50
5000	20	200	208	24935	1	1950	31.25
	30	250	312	24936	1	1950	31.25
	40	350	416	24937	1	1950	31.25

Maximum working pressure 4 Kg/cm²

Filters Ø 2000 mm

Filter length mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow rate m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
2500	20	140	87	07127	1	795	13.20
	30	160	130	07128	1	795	13.20
	40	200	174	07129	1	795	13.20
3000	20	140	106	25073	1	945	15.65
	30	160	159	25074	1	945	15.65
	40	200	212	25075	1	945	15.65
3500	20	160	125	07130	1	1100	18.10
	30	200	187	07131	1	1100	18.10
	40	225	250	07132	1	1100	18.10
4000	20	160	144	25082	1	1260	20.55
	30	200	216	25083	1	1260	20.55
	40	225	288	25084	1	1260	20.55
4500	20	200	163	25088	1	1420	23.00
	30	225	245	25089	1	1420	23.00
	40	250	326	25090	1	1420	23.00

BOBBIN WOUND FILTERS

Ø 2000 mm and Ø 2350 mm Rodas filters
Maximum working pressure 4 Kg/cm²
Filters Ø 2350 mm

Filter length mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow rate m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
3000	20	160	119	25091	1	1150	20.25
	30	200	178	25092	1	1150	20.25
	40	225	238	25093	1	1150	20.25
3500	20	160	141	22702	1	1300	23.00
	30	200	212	22703	1	1300	23.00
	40	225	282	22704	1	1300	23.00
4000	20	200	163	25100	1	1450	25.75
	30	225	245	25101	1	1450	25.75
	40	250	327	25102	1	1450	25.75
4500	20	200	186	22705	1	1600	28.50
	30	225	279	22706	1	1600	28.50
	40	250	371	22707	1	1600	28.50
5000	20	200	208	25109	1	1750	31.25
	30	250	312	25110	1	1750	31.25
	40	350	416	25111	1	1750	31.25

**Filtration bed 1
and 1.2 m**

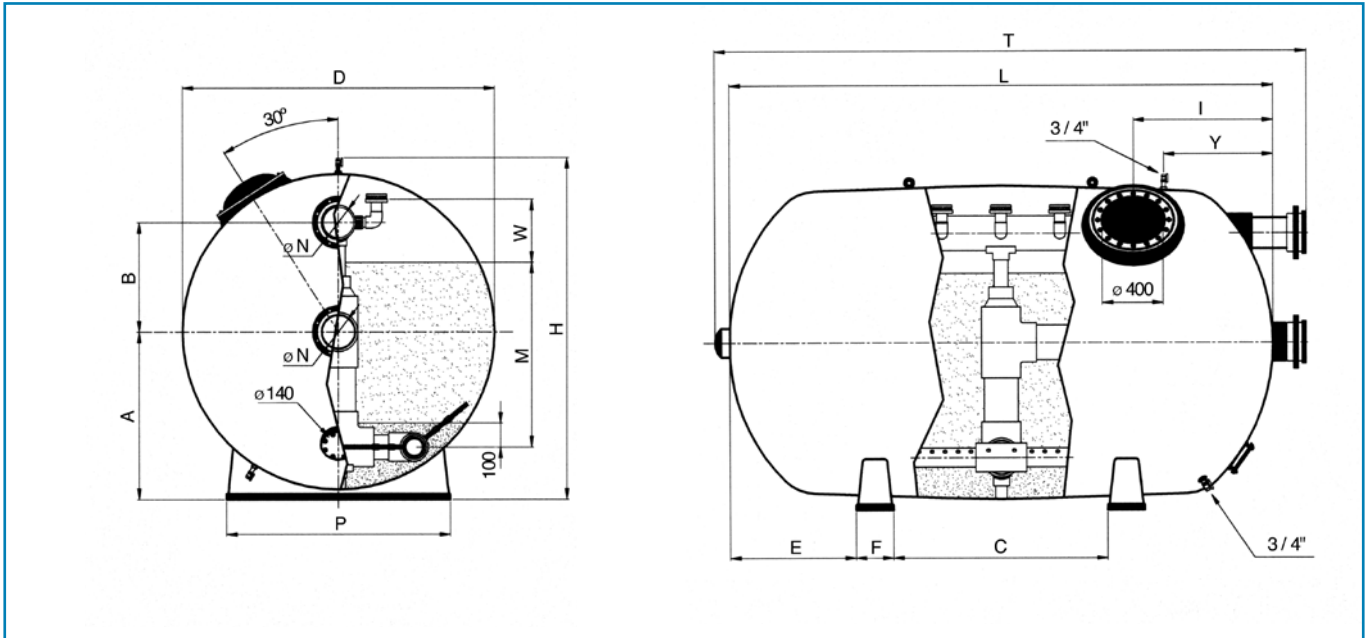
 DOES NOT INCLUDE VALVE
MANIFOLD

**Ø 2000 mm
Ø 2350 mm**

BOBBIN WOUND FILTERS



Ø 2000 mm and Ø 2350 mm Rodas filters



Length (mm)	Filtration velocity (m ³ /h/m ²)	Ø N (mm)	2.5 bar	4 bar	Flow m ³ /h	Filtration area m ²	Volume (l)	A (mm)	B (mm)	* C (mm)	E (mm)	F (mm)	H (mm)	I (mm)	P (mm)	T (mm)	W (mm)	Y (mm)	Total weight in oper. Kg	Sand charge		
			Code	Code																1 - 1.2 mm	0.4 - 0.8 mm	
Diameter 2000 mm - Filtration bed 1 - 1.2 m.																						
2500	20	140	DN125	05103	07127	87	4.34	6900	1090	710	500	500	2220	925	1470	2820	410	1250	11300	1050	6575	
	30	160	DN150	05106	07128	130														M=1.2 m	M=1.2 m	
	40	200	DN175	05109	07129	174																
3000	20	140	DN125	24899	25073	106	5.3	8470	1090	710	810	600	500	2220	925	1470	3320	410	1500	13790	1300	8025
	30	160	DN150	24900	25074	159															M=1.2 m	M=1.2 m
	40	200	DN175	24901	25075	212																
3500	20	160	DN150	05104	07130	125	6.25	10040	1090	710	1070	725	500	2220	925	1470	3850	410	1750	16280	1550	9475
	30	200	DN175	05107	07131	187															M=1.2 m	M=1.2 m
	40	225	DN200	05110	07132	250																
4000	20	160	DN150	24908	25082	144	7.21	11600	1090	710	650	600	500	2220	925	1470	4350	410	2000	18780	1800	10925
	30	200	DN175	24909	25083	216															M=1.2 m	M=1.2 m
	40	225	DN200	24910	25084	288																
4500	20	200	DN175	24914	25088	163	8.16	13180	1090	710	795	600	500	2220	925	1470	4880	410	2250	21380	2075	12375
	30	225	DN200	24915	25089	245															M=1.2 m	M=1.2 m
	40	250	DN225	24916	25090	326																
Diameter 2350 mm - Filtration bed 1 - 1.2 m.																						
3000	20	160	DN150	24917	25091	119	5.94	11130	1270	710	800	600	500	2560	925	1740	3350	500	1500	18300	2575	9300
	30	200	DN175	24918	25092	178															M=1.2 m	M=1.2 m
	40	225	DN200	24919	25093	238																
3500	20	160	DN150	17120	22702	141	7.06	13300	1270	710	1100	700	500	2560	925	1740	3850	500	1750	21790	3125	11050
	30	200	DN175	16696	22703	212															M=1.2 m	M=1.2 m
	40	225	DN200	17121	22704	282																
4000	20	200	DN175	24926	25100	163	8.17	15470	1270	710	650	600	500	2560	925	1740	4380	500	2000	25280	3650	12800
	30	225	DN200	24927	25101	245															M=1.2 m	M=1.2 m
	40	250	DN225	24928	25102	327																
4500	20	200	DN175	22674	22705	186	9.28	17640	1270	710	820	700	500	2560	925	1740	4880	500	2250	28880	4200	14525
	30	225	DN200	22675	22706	279															M=1.2 m	M=1.2 m
	40	250	DN225	22676	22707	371																
5000	20	200	DN175	24935	25109	208	10.4	19800	1270	710	600	600	500	2560	925	1740	5440	500	2500	32380	4750	16250
	30	250	DN225	24936	25110	312															M=1.2 m	M=1.2 m
	40	315	DN250	24937	25111	416																

MEDIA RECOMMENDATIONS: Hydroanthracite = 0.8 Kg/dm³ - Sand = 1.4 Kg/dm³ - Gravel = 1.5 Kg/dm³

*With lengths (dimension L) of 4000 mm or more, an additional central support is provided.

BOBBIN WOUND FILTERS

Ø 2500 mm Rodas filters
General features:

- Resistant to corrosion unlike conventional steel filters
- Maximum operating temperature 50°C
- Comply with European standards for pressure vessels 97/23/CE included in section 3 of article 3
- Hydraulic pressure test 1.5 times the maximum admissible pressure

Fitted with:

- Pressure gauge panel
- Manual air relief valve and water purge
- Ø 400 mm lateral manhole

Characteristics of internal components:

- Internal components and pipe in PVC
- PP laterals with 0.3 mm slots
- Bolts, nuts and washers in AISI-316
- EPDM seals and gaskets

**Filtration bed 1
and 1.2 m**


DOES NOT INCLUDE VALVE
MANIFOLD

Ø 2500 mm
Maximum working pressure 2.5 Kg/cm²
Filters Ø 2500 mm

Filter length mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow rate m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
3500	20	160	149	24938	1	1285	28.00
	30	200	223	24939	1	1285	28.00
	40	225	297	24940	1	1285	28.00
4000	20	200	172	22677	1	1450	31.80
	30	225	258	22678	1	1450	31.80
	40	250	345	22679	1	1450	31.80
4500	20	200	196	24947	1	1615	35.55
	30	250	294	24948	1	1615	35.55
	40	315	392	24949	1	1615	35.55
5000	20	200	220	22680	1	1780	39.30
	30	250	329	22681	1	1780	39.30
	40	315	439	22682	1	1780	39.30

- ALL FILTER VESSELS FROM Ø 2.5 m AND ABOVE WILL REQUIRE SPECIAL TRANSPORT VEHICLE. PLEASE ASK FOR A QUOTATION AT THE TIME OF YOUR ENQUIRY.

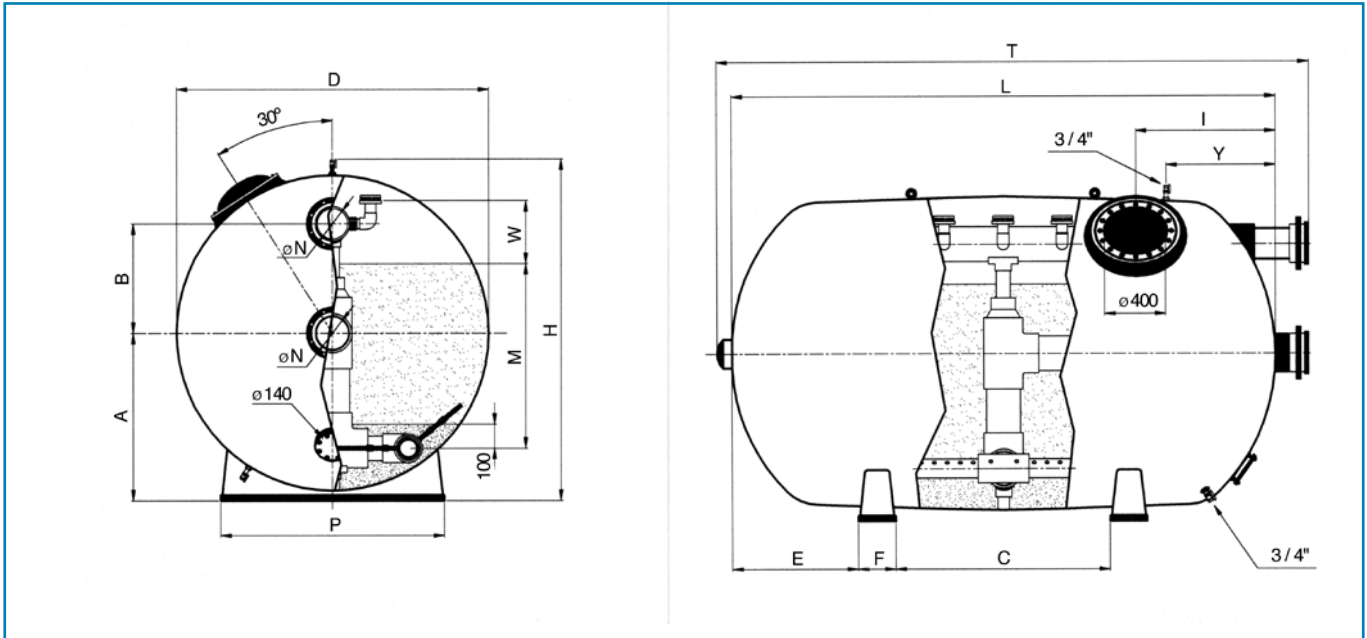
Maximum working pressure 4 Kg/cm²
Filters Ø 2500 mm

Filter length mm	Filtration velocity m ³ /h/m ²	Outlet Ø mm	Flow rate m ³ /h	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
3500	20	160	149	25112	1	1505	28.00
	30	200	223	25113	1	1505	28.00
	40	225	297	25114	1	1505	28.00
4000	20	200	172	22708	1	1670	31.80
	30	225	258	22709	1	1670	31.80
	40	250	345	22710	1	1670	31.80
4500	20	200	196	25121	1	1835	35.55
	30	250	294	25122	1	1835	35.55
	40	315	392	25123	1	1835	35.55
5000	20	200	220	22711	1	2000	39.30
	30	250	329	22712	1	2000	39.30
	40	315	439	22713	1	2000	39.30

BOBBIN WOUND FILTERS



Ø 2500 mm Rodas filters



Length (mm)	Filtration velocity (m ³ /h/m ²)	Ø N (mm)	2.5 bar	4 bar	Flow m ³ /h	Filtration area m ²	Volume (l)	A (mm)	B (mm)	* C (mm)	E (mm)	F (mm)	H (mm)	I (mm)	P (mm)	T (mm)	W (mm)	Y (mm)	Total weight in oper. Kg	Sand charge		
			Code	Code																Granulometry	Granulometry	
Diameter 2500 mm - Filtration bed 1 - 1.2 m.																						
3500	20	160	DN150	24938	25112	149	7.34	14920	1360	710	960	770	500	2710	1300	1850	3850	500	1750	24320	3175	11675
	30	200	DN175	24939	25113	223															M=1.2 m	M=1.2 m
	40	225	DN200	24940	25114	297																
4000	20	200	DN175	22677	22708	172	8.62	17380	1360	710	500	750	500	2710	1300	1850	4380	500	2000	28250	3725	13500
	30	225	DN200	22678	22709	258															M=1.2 m	M=1.2 m
	40	250	DN225	22679	22710	345																
4500	20	200	DN175	24947	25121	196	9.80	19830	1360	710	750	750	500	2710	1300	1850	4940	500	2250	32300	4300	15350
	30	250	DN225	24948	25122	294															M=1.2 m	M=1.2 m
	40	315	DN250	24949	25123	392																
5000	20	200	DN175	22680	22711	220	10.98	22300	1360	710	500	750	500	2710	1300	1850	5440	500	2500	36230	4850	17200
	30	250	DN225	22681	22712	329															M=1.2 m	M=1.2 m
	40	315	DN250	22682	22713	439																

MEDIA RECOMMENDATIONS: Sand = 1.4 Kg/dm³ - Gravel = 1.5 Kg/dm³

*With lenghts (dimension L) of 4000 mm or more, an additional central support is provided.

BOBBIN WOUND FILTERS



Top or side manholes DN500 and DN600 for bobbin wound filters

Optional manhole access for bobbin wound filters in lateral or top position with nominal diameters of 500 and 600 mm. Designed to comply with DIN standard 19605 and to facilitate access in and out of the filter during maintenance work. Manholes are in fibreglass reinforced polyester in the form of a flange with concave lid and can only be integrated into the filter at the factory or by a specialist. The nut and bolt fastenings are removable, as apposed to the standard DN400 manholes.

The manhole options are available with the following bobbin wound filter diameters:

Manhole DN500 mm*

Filters from Ø 1200 mm to Ø 3000 mm

Manhole DN600 mm*

Filters from Ø 1800 mm to Ø 3000 mm

Optional manhole Ø 500 mm*

Optional manhole Ø 600 mm*

***Either lateral or top position**

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Optional manhole Ø 500 mm*	27950	-	-	-
Optional manhole Ø 600 mm*	27951	-	-	-



NEFRONA MONOBLOCS



Nefrona compact units

A new concept in filtration and chemical water treatment.

The Nefrona compact unit is a new concept in water treatment, designed and developed by AstralPool for the X FINA World Swimming Championships 2003 held in Barcelona, featuring the most innovative solution available in the market. The Nefrona is a compact, transportable and modular water treatment unit.

Compact with all equipment parts completely assembled and ready to use, mounted on a hot-dipped galvanised steel bedplate to prevent corrosion. To start the system, simply connect the pool water inlets and outlets and the electrical mains. This compact unit ensures an excellent level of disinfection and filtration that provides the highest water quality.

Transportable as it's sized for easy shipment anywhere worldwide in standard shipping containers. You can have a filtration unit assembled anywhere in the world in record time and with factory warranty.

Modular because its design allows it to be disassembled into several sections. Due to its modular construction, the Nefrona can be installed in areas with restricted access (minimum 1.70 m x 2.20 m height). Once the different modules are located in place, they are interconnected and assembled together.

* According to model type, the Nefrona takes care of filtration, water disinfection and pH control.

With the exception of the Basic model which has a manual valve manifold, all the other Nefrona models can automatically manage all filtration processes without any human intervention.

The Nefrona Ozone and Nefrona Plus models also include the MCS control Software which allows complete automatic operation of the installation from filtration to chemical water treatment.

All Nefrona models can be optionally equipped with a balance tank, a control panel and probes for water level regulation, automatic dosing devices for chemical products which may include automatic measuring and regulating (Controller) as well as control of chemical levels. All these and more options make the Nefrona compact unit the best choice for filtration and chemical water treatment.



NEFRONA MONOBLOCS

Nefrona Basic

The Nefrona Basic is a manual model offering filtration equipment and water treatment which incorporates basic filtration elements.

Main equipment

	Code	Sand Filtration	Automatic Control	MCS Software	Ozone Disinfection	Pool Heating	D.E. Microfiltration
Nefrona Basic	28763	√					
Nefrona Basic C	28764	√				√	
Nefrona Basic D	28765	√					√
Nefrona Basic CD	28766	√				√	√

Nefrona Automatic

With higher performance than the Nefrona Basic, this model works automatically thanks to the inclusion of a set of 5 units of Ø 140 mm motorised pneumatic valves.

Main equipment

	Code	Sand Filtration	Automatic Control	MCS Software	Ozone Disinfection	Pool Heating	D.E. Microfiltration
Nefrona Automatic	28767	√	√				
Nefrona Automatic C	28768	√	√			√	
Nefrona Automatic D	28769	√	√				√
Nefrona Automatic CD	28770	√	√			√	√

Nefrona Ozone

Combines all the performance of the Nefrona Automatic unit with a complete system of ozone disinfection and MCS monobloc control software which manages the physical parameters, and the chemical parameters of the pool allowing a remote automatic management.

Main equipment

	Code	Sand Filtration	Automatic Control	MCS Software	Ozone Disinfection	Pool Heating	D.E. Microfiltration
Nefrona Ozone	28771	√	√	√	√		
Nefrona Ozone C	28772	√	√	√	√	√	
Nefrona Ozone D	28773	√	√	√	√		√

Nefrona Plus

Offering the highest performance, Nefrona Plus incorporates all the features of the Ozone model and includes a standard system of diatomaceous earth microfiltration and temperature control.

Main equipment

	Code	Sand Filtration	Automatic Control	MCS Software	Ozone Disinfection	Pool Heating	D.E. Microfiltration
Nefrona Plus	28774	√	√	√	√	√	√

MULTIPOINT VALVES

A wide range of valves which offers the New Generation series, the Classic series and Flat series with 1½" and 2" valve configurations. The Magnum series with 2½", 3" and 4" valves completes the range.



Multiport valve configurations

Multiport valves (MPV) are available in 5 different configurations. The inlet to the filter is called "TOP" and the outlet from the filter is called "BOTTOM".

Conf. 1: Both filter inlet "Top" and filter outlet "Bottom" from and to the MPV base.

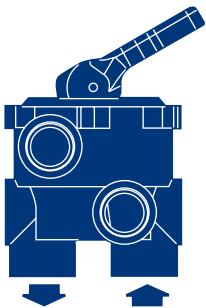
Conf. 2: Filter inlet "Top" from the MPV base and filter outlet "Bottom" to the MPV side.

Conf. 3: Filter inlet "Top" from the MPV side and filter outlet "Bottom" to the MPV base. This configuration can be supplied with pipework and connections for side mounting.

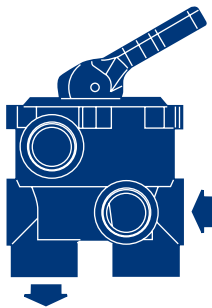
Conf. 4: Both the filter inlet "Top" and the filter outlet "Bottom" from and to the MPV sides.

Conf. 5: All inlets and outlets open.

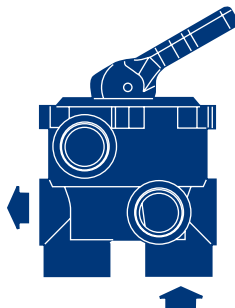
Configuration 1



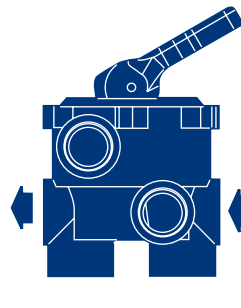
Configuration 2



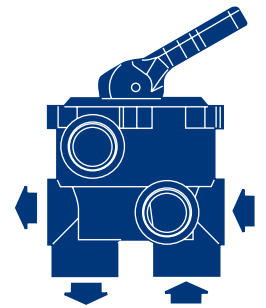
Configuration 3



Configuration 4



Configuration 5



Configuration 1: Commonly used for filters with top mounted multiport valve
 Configuration 3: Commonly used for filters with side mounted multiport valve

Six-way Multiport valve

A six-way valve to perform different functions in an hydraulic circuit: filtration, emptying, shut off, backwashing, circulation and rinsing of the filter. Its functional design, offers a wide range of possibilities of connection in any installation assuring a perfect sealing and easy operation.

When designing and choosing appropriate materials for manufacturing the different Multiport valve components, extreme care has been taken for assuring minimum friction and resistance, maximum security and an attractive finish. Housing, cover and handle are made of ABS, distributor in PPO, gaskets in EPDM and metallic components in S.S.

Models at a glance	New Generation			Classic		Flat	Magnum	
	1 ½" Eco	1 ½"	2"	1 ½"	2"	1 ½"	2 ½"	3"

MULTIPOINT VALVES

New generation of manual multiport valves which incorporate a bayonet closing system (replacing bolts). This eases dismantling for maintenance and prevents rust. The range includes the 1½" and 2" versions, including a "Top Eco" version available in 1½".

1½" and 2" Multiport valve with filter connections - New Generation

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Configuration 3 - 1 1/2"	20569	6	14.0	0.079
Config. 3 - 2"	28512	6	26.4	0.165

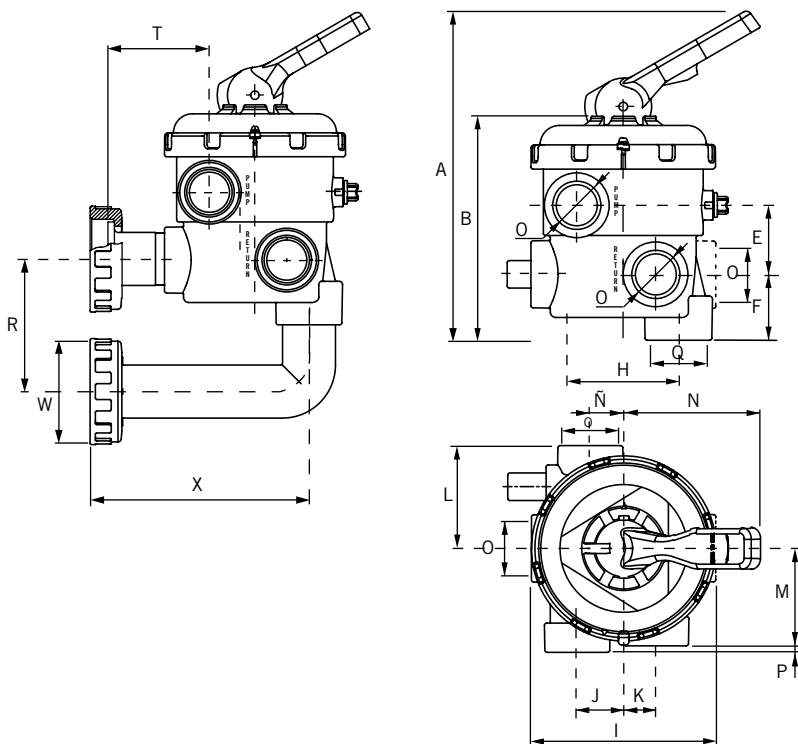


1½" and 2" Multiport valve - New Generation

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Multiport valve 1½" - Configuration 3	20043	-	11.5	0.079
Multiport valve 2":				
Config. 1	28509	6	22.3	0.165
Config. 2	28510	6	22.3	0.165
Config. 3	28511	6	22.3	0.165
Config. 4	28513	6	22.3	0.165
Config. 5	28514	6	22.3	0.165



Dimensions (mm)	A	B	E	F	H	I	J	K	L	M	N	N̄	O	P	Q	R	T	W	X
1 ½"	294	205	64	61	-	-	43	30	95	90	121	31	1½"	6	50	125	97.5		211
2"	350	242	76	62.5	127	240	42	31.5	115.5	105.5	145	31.5	2"	5	63	230	120	96	247



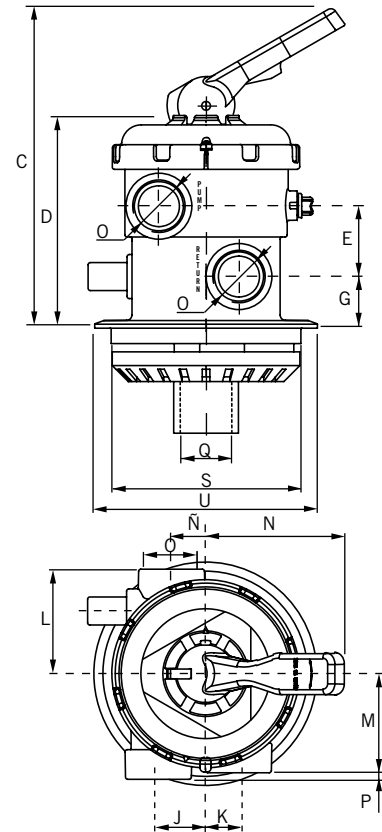
MULTIPOINT VALVES

1 1/2" and 2" multiport valve. Top Config. - New Generation



Top 1 1/2" Multiport valve
Top 2" Multiport valve

Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
20565	6	12.1	0.079
33968	1	3.95	0.028



Dimensions (mm)	C	D	E	G	J	K	L	M	N	N ₁	O	P	Q	S	U
1 1/2"	280	193	64	47	43	30	95	90	121	31	1 1/2"	6	50	173	203
2"	350	242	76	62.5	42	31.5	115.5	105.5	145	31.5	2"	5	63		208

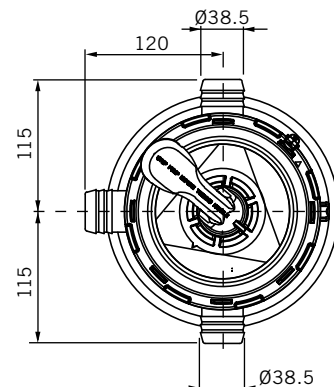
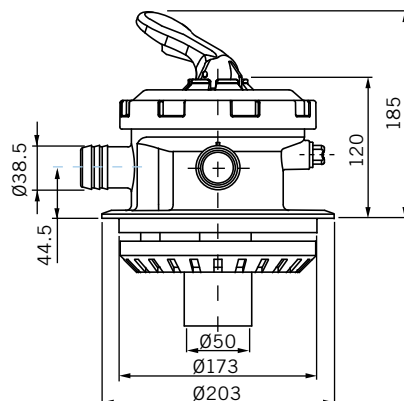
1 1/2" Multiport valve. Top ECO version - New Generation



6-way multiport valve for above ground pool filters where the pressure does not exceed 1.5 bar, of maximum diameter 380 mm. Bayonet closing system.

Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
32583	6	8.83	0.082

Top ECO 1 1/2" multiport valve



MULTIPOINT VALVES

Manual multipoint valves with six channels to carry out different functions in an hydraulic circuit. Its design, basically functional, offers a wide range of possibilities of connection to any installation, assuring perfect water-tightness and comfortable handling.

1½" and 2" multipoint valve with filter connections - Classic

1½" multipor valve- Configuration 3
2" multipor valve- Configuration 3

Code	Standard Packaging	Standard Weight Kg	Standard Volume m³
00599	6	15.5	0.079
07444	6	22.7	0.150



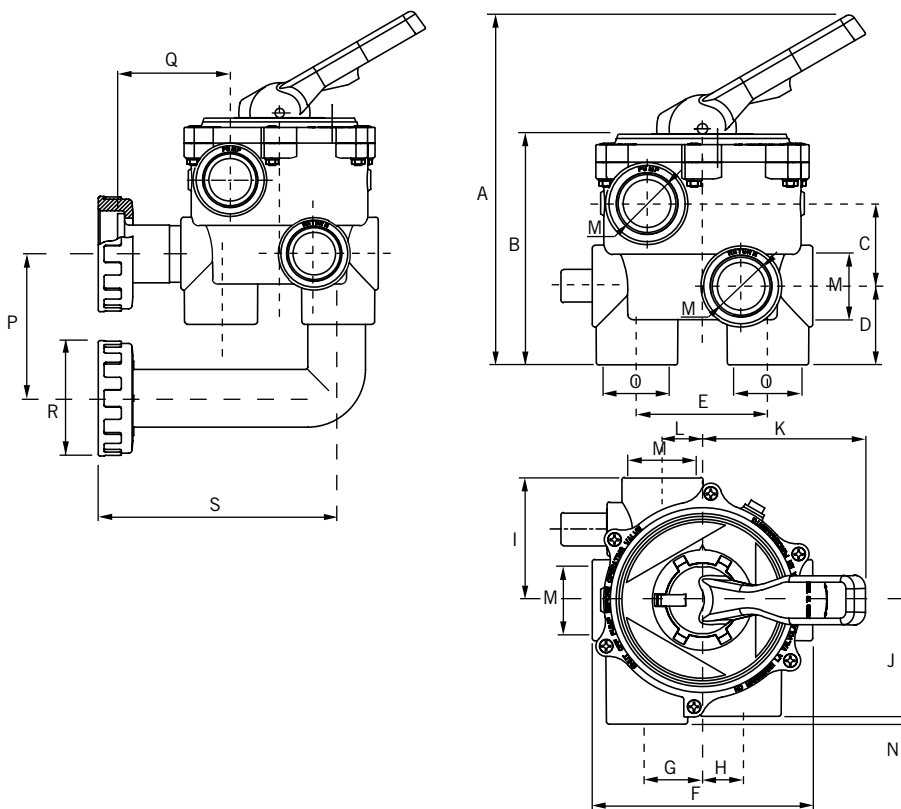
1½" and 2" multipoint valve - Classic

1½" Multiport valve
Configuration 1
Configuration 3
2" Multiport valve:
Configuration 3

Code	Standard Packaging	Standard Weight Kg	Standard Volume m³
00597	6	12.2	0.079
00598	6	12.1	0.079
07441	6	19.9	0.150



Dimensions (mm)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1½"	271	180	64	61	101.5	172	43	30	95	90	121	31	1½"	6	50	125	97.5	96	211
2"	317	211	76	62.5	127	237	42	31.5	115.5	105.5	145	31.5	2"	5	63	230	120		247



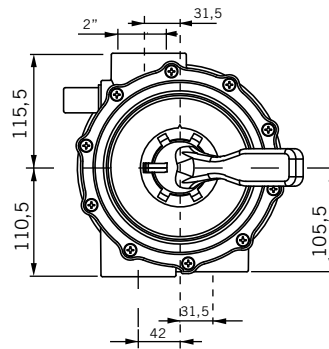
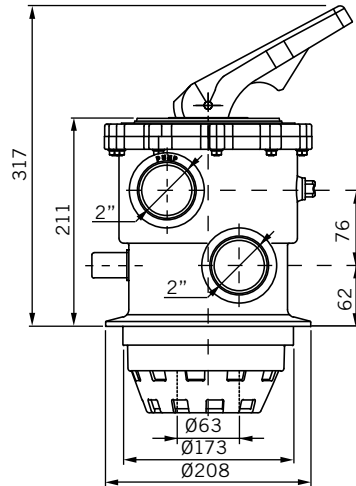
MULTIPOINT VALVES

2" TOP multiport valve- Classic

6-way TOP multiport valve for residential pools. Body, cover and handle injected in ABS. 2" thread.



Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
22490	1	3.45	0.028



MULTIPOINT VALVES

Introducing a new multipoint valve which for the first time features a special compact look thanks to its single-level design (compared to the normal twin-level set-up in other multipoint valves). This reduced size makes the equipment especially suitable in installations where space is at a premium, such as in filter housing or monoblocks.

1½" lateral multipoint valve with filter connections - Flat

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m³
Configuration 3	34543	1	-	-



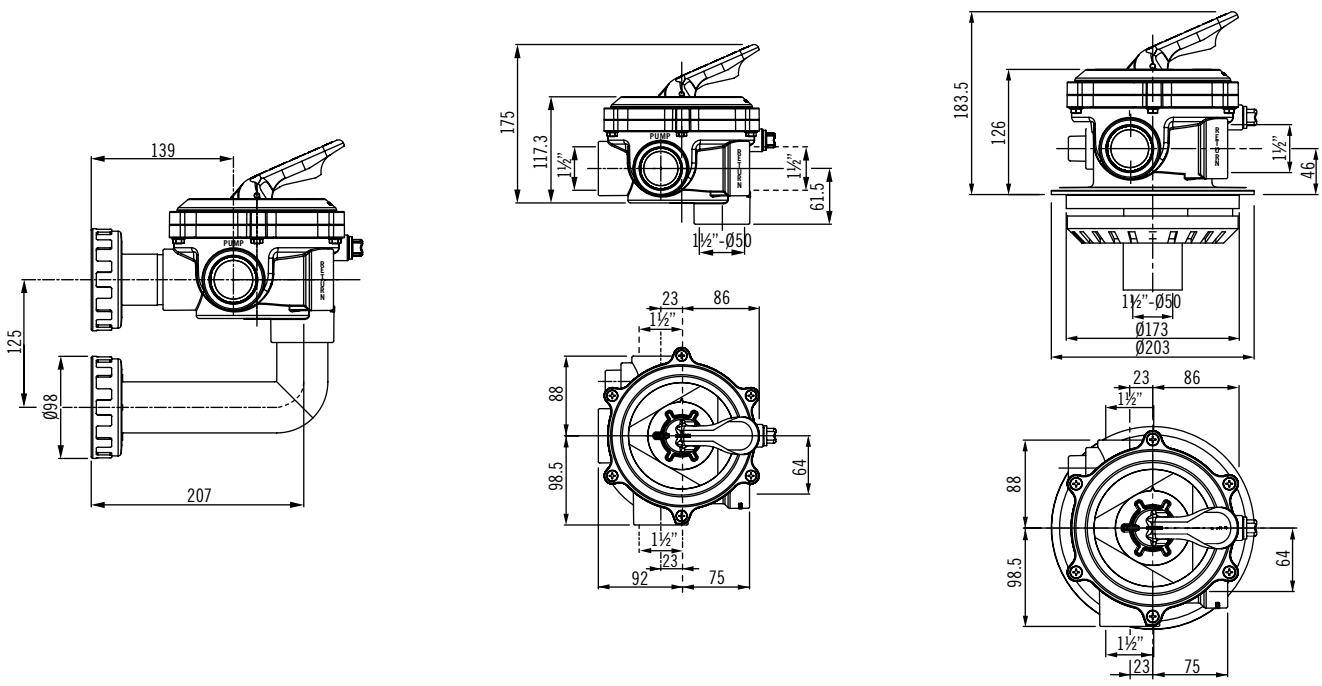
1½" lateral multipoint valve - Flat

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m³
Configuration 3 (bottom port threaded)	34544	1	-	-
Configuration 3 (bottom port solve weld)	34545	1	-	-



1½" TOP multipoint valve - Flat

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m³
	34546	1	-	-



MULTIPOINT VALVES

Specially designed to support high working pressures and connection to large filters which require special connections. Choose from the models offered: 2 1/2", 3" and 4" multiport valves.



2 1/2" multiport valve with filter connections - Magnum

Multiport valve with connections.

Configuration 3

Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
24837	1	9.5	0.060

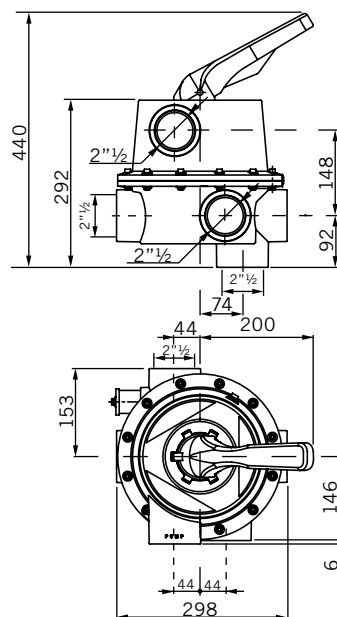
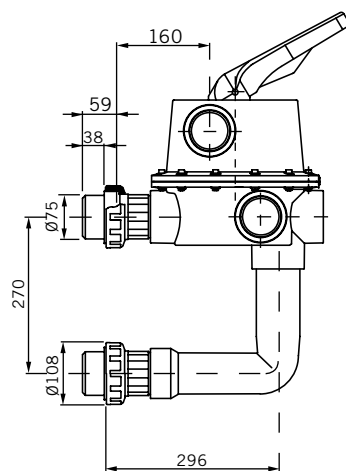


2 1/2" multiport valve - Magnum

Filter inlet from the side and outlet from the bottom. With connections to pool pipes.

Configuration 3

Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
24838	1	8.2	0.061



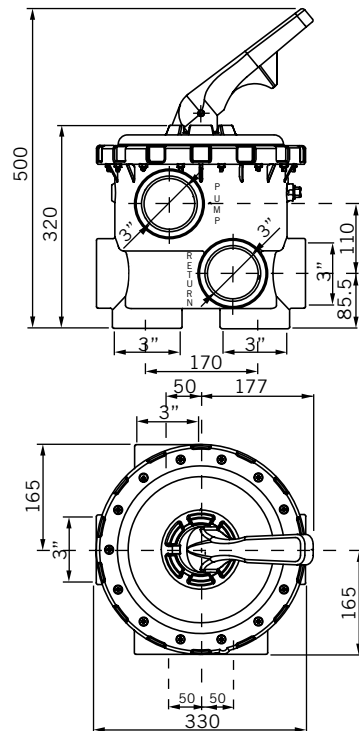
MULTIPOINT VALVES



3" multiport valve - Magnum

Side mounted 6-way multiport valve for connecting to filters. Body and cover injected in ABS and fibre glass. Handle injected in ABS. Sealing system by stainless steel screws. Supplied with two plugs so that the customer can adapt the valve to the most suitable configuration.

Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
28515	1	9.8	0.064

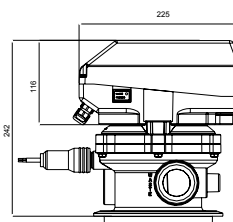
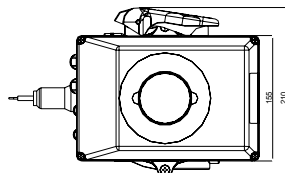
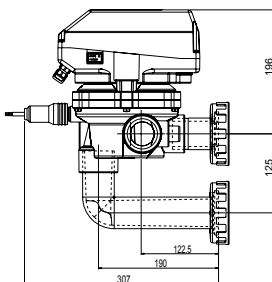


Automatic multiport valve System VRAC Flat 1 1/2"

Low-priced automatic multiport valve model that stands out for its easy operation. Voltage 230/115 volts. Controls filtration, backwashing, rinsing and emptying.

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Top	43512	1	-	-
Lateral	43513	1	-	-

Top
Lateral



MULTIPOINT VALVES

1 1/2" - 2" automatic multiport valve - Config. 3 System VRAC Basic



Automatic multiport valve model provided with push button keyboard for operation. Voltage 230/115 volts. Controls filtration, backwashing, rinsing and emptying.

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Basic 1 1/2" side mounted, Config. 3	32581	1	4.27	0.023
Basic 2" side mounted, Config. 3	32582	1	5.75	0.033

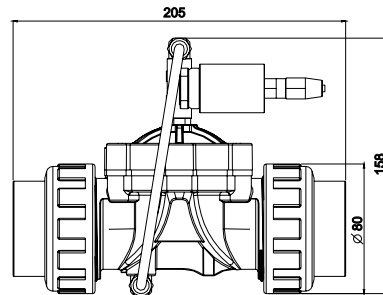
Note: An electrovalve for drainage, code 23139, is needed when valve installed below the pool water level.



Hydraulic safety valve

The 1 1/2" hydraulic safety valve in the drain is specially designed for installation in the drain outlet of an automatic selector valve on a pool sand filter. Using it prevents water loss when the valve changes its working position or when the electricity flow fails and the valve remains in a position in which it could empty the pool. It is recommended in installations with SYSTEM VRAC multiport valves.

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
With 50 mm straight double connection	41898	1	-	-
With 1 1/2" BSP double hose connection	41899	1	-	-
With 50 mm straight body connection	41897	1	-	-



VALVE MANIFOLD



Valve manifold - Coding



All manifolds are supplied **disassembled** and **without support brackets**. (For supports see page 160)

All valve manifolds (manual or automatically driven) are made of PVC (PN 10) with flanges for connection to filters as per DIN-2501 standard.

Butterfly valves or Ball valves in PVC.

Automatic valve manifold, driven either by electric power or pneumatically, for carrying out filtration, back washing, rinsing and shut down of the filters. Fitted with two valves without safety blocks (electric) or double acting (Pneumatic), and the remaining valves with safety blocks (electric) or spring return (pneumatic), to prevent an unexpected emptying of the installation.



Electric control panel:
5 valves code: **16223E**
4 valves code: **16222E**



A: Electric driven without safety block
B: Pneumatic driven spring return

In order to simplify the ordering process for Catalogues and Price Lists we have introduced a new code structure of valve manifolds for filters. This new coding system consists in assigning a code for each manifold model as indicated in the tables below.

In order to determine the code you must identify the **Type of filter, diameter** and the desired type of manifold according to the tables below.

For manifolds with more than one filter please consult.

Table to identify filter type.

BB	Bobbin wound Berlin filter, - 0.6 m height filter bed
BS	Bobbin wound Praga filter
BA	Bobbin wound Oslo filter
OL	Bobbin wound Olot filters 1.2 & 1.5 m bed depth
AM	Bobbin wound Ampuria filters 1.2 &* 1.5 m bed depth
HZ	Bobbin wound Rodas horizontal filters
EU	Laminated Europe filter
VP	Laminated Volcano filters, 0.6 m bed depth
VI	Bobbin wound Vic filter
VO	Laminated Vesubio filter, 1 m bed depth

Table to identify filter diameter:

10	1050
12	1200
14	1400
16	1600
18	1800
20	2000
23	2350
25	2500
26	2600
28	2800
30	3000

Examples:

- 1.- Manual manifold 4 Val. for Praga filter D.2000-140
- 2.- Electric manifold 5 Val. for Praga filter D.1800-125
- 3.- Manual manifold 5 Val. for Olot filter D.1200-125
- 4.- Pneumatic manifold 5 Val. for Vic filter D.2350-160

Code	Filter type	Ø code
1.- 00767	BS	20
2.- 00785E	BS	18
3.- 00785	OL	12
4.- 09177N	VI	23

VALVE MANIFOLD



Valve manifold for one filter

Ø	Code	Description	Ø	Code	Description
Manual Manifolds - 4 Valves			Manual Manifolds - 5 Valves		
75	00749	MANUAL MANIFOLD 4 VAL. D. 75	75	00771	MANUAL MANIFOLD 5 VAL. D. 75
90	00754	MANUAL MANIFOLD 4 VAL. D. 90	90	00776	MANUAL MANIFOLD 5 VAL. D. 90
110	00758	MANUAL MANIFOLD 4 VAL. D.110	110	00780	MANUAL MANIFOLD 5 VAL. D.110
125	00763	MANUAL MANIFOLD 4 VAL. D.125	125	00785	MANUAL MANIFOLD 5 VAL. D.125
140	00767	MANUAL MANIFOLD 4 VAL. D.140	140	00789	MANUAL MANIFOLD 5 VAL. D.140
160	09205	MANUAL MANIFOLD 4 VAL. D.160	160	09177	MANUAL MANIFOLD 5 VAL. D.160
200	09160	MANUAL MANIFOLD 4 VAL. D.200	200	09180	MANUAL MANIFOLD 5 VAL. D.200
225	09164	MANUAL MANIFOLD 4 VAL. D.225	225	09185	MANUAL MANIFOLD 5 VAL. D.225
250	26244	MANUAL MANIFOLD 4 VAL. D.250	250	19133	MANUAL MANIFOLD 5 VAL. D.250

Electric Manifolds - 4 valves			Electric Manifolds - 5 valves		
75	00749E	ELECTRIC MANIFOLD 4 VAL. D. 75	75	00771E	ELECTRIC MANIFOLD 5 VAL. D. 75
90	00754E	ELECTRIC MANIFOLD 4 VAL. D. 90	90	00776E	ELECTRIC MANIFOLD 5 VAL. D. 90
110	00758E	ELECTRIC MANIFOLD 4 VAL. D.110	110	00780E	ELECTRIC MANIFOLD 5 VAL. D.110
125	00763E	ELECTRIC MANIFOLD 4 VAL. D.125	125	00785E	ELECTRIC MANIFOLD 5 VAL. D.125
140	00767E	ELECTRIC MANIFOLD 4 VAL. D.140	140	00789E	ELECTRIC MANIFOLD 5 VAL. D.140
160	09205E	ELECTRIC MANIFOLD 4 VAL. D.160	160	09177E	ELECTRIC MANIFOLD 5 VAL. D.160
200	09160E	ELECTRIC MANIFOLD 4 VAL. D.200	200	09180E	ELECTRIC MANIFOLD 5 VAL. D.200
225	09164E	ELECTRIC MANIFOLD 4 VAL. D.225	225	09185E	ELECTRIC MANIFOLD 5 VAL. D.225
250	26244E	ELECTRIC MANIFOLD 4 VAL. D.250	250	19133E	ELECTRIC MANIFOLD 5 VAL. D.250

Pneumatic Manifolds - 4 Valves			Pneumatic Manifolds - 5 Valves		
75	00749N	PNEUMATIC MANIFOLD 4 VAL. D. 75	75	00771N	PNEUMATIC MANIFOLD 5 VAL. D. 75
90	00754N	PNEUMATIC MANIFOLD 4 VAL. D. 90	90	00776N	PNEUMATIC MANIFOLD 5 VAL. D. 90
110	00758N	PNEUMATIC MANIFOLD 4 VAL. D.110	110	00780N	PNEUMATIC MANIFOLD 5 VAL. D.110
125	00763N	PNEUMATIC MANIFOLD 4 VAL. D.125	125	00785N	PNEUMATIC MANIFOLD 5 VAL. D.125
140	00767N	PNEUMATIC MANIFOLD 4 VAL. D.140	140	00789N	PNEUMATIC MANIFOLD 5 VAL. D.140
160	09205N	PNEUMATIC MANIFOLD 4 VAL. D.160	160	09177N	PNEUMATIC MANIFOLD 5 VAL. D.160
200	09160N	PNEUMATIC MANIFOLD 4 VAL. D.200	200	09180N	PNEUMATIC MANIFOLD 5 VAL. D.200
225	09164N	PNEUMATIC MANIFOLD 4 VAL. D.225	225	09185N	PNEUMATIC MANIFOLD 5 VAL. D.225
250	26244N	PNEUMATIC MANIFOLD 4 VAL. D.250	250	19133N	PNEUMATIC MANIFOLD 5 VAL. D.250

CONTROL PANEL



Control panel for valve manifolds

Control panel for electrically or pneumatically actuated manifolds of 4 or 5 valves. For automatic filtration, backwashing, rinsing and shut-down operations. Fitted with automatic programming installation that enables the execution of all the required operations and can be personalised to suit your requirements. Quick and easy installation with numbered terminal connection strip.

Voltage 230 V single phase. Does not include valve manifold.



	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Electric - For 4 valves	16222E	1	-	-
Electric - For 5 valves	16223E	1	-	-
Pneumatic - For 4 valves	16222N	1	-	-
Pneumatic - For 5 valves	16223N	1	-	-

Factory programmed automation as follows:

	Type of actuator	
	Electric	Pneumatic
For 4 valves	2 valve without block 2 valve with block	2 valve double acting 2 valve spring return
For 5 valves	2 valve without block 3 valve with block	2 valve double acting 3 valve spring return

Distance between PVC valve manifold supports

Overhead PVC pressure pipe installations should be mounted on supports. Distances between them should be as indicated in the chart. Distances are shown in metres (according to UNE 53.399).

Ø mm	NOMINAL PRESSURE			
	0.4 MPa	0.6 MPa	1.0 MPa	1.6 MPa
10	-	-	-	0.3
12	-	-	-	0.3
16	-	-	-	0.3
20	-	-	-	0.4
25	-	-	0.5	0.5
32	-	-	0.6	0.6
40	-	0.8	0.8	0.8
50	-	0.9	0.9	0.9
63	1.0	1.0	1.0	1.0
75	1.0	1.0	1.2	1.2
90	1.0	1.2	1.3	1.4
110	1.2	1.3	1.5	1.7
125	1.3	1.5	1.7	1.9
140	1.3	1.6	1.8	2.0
160	1.5	1.7	2.0	2.2
180	1.6	1.8	2.1	2.4
200	1.7	1.9	2.3	2.6
225	1.8	2.1	2.5	2.9
250	1.8	2.2	2.6	3.0
280	2.0	2.3	2.8	3.2
315	2.1	2.5	3.0	3.5
355	2.2	2.7	3.2	3.8
400	2.4	2.8	3.4	4.0
450	2.5	3.0	3.7	4.3
500	2.7	3.2	3.9	4.6

The distances shown correspond to maximum temperatures of 20°C. For higher temperatures multiply the values indicated by the following reducing coefficients:

- Between 20° and 35°C coefficient 0.9

- Between 35° and 45°C coefficient 0.85

In vertical installations, the distance between supports can be as per chart multiplied by 1.3.

SUPPORTS FOR VALVE MANIFOLD



Valve manifold brackets

Easy assembly valve manifold brackets from Ø 63 mm to Ø 225 mm for all filter types. Totally adjustable in height, consisting of vertical support pipes in zinc-plated steel, together with box of accessories.

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Zinc-plated steel				
Height 1.85 m	28690	1	3.8	-
Height 2.30 m	28691	1	4.5	-
Height 3.0 m	28692	1	5.9	-
Box of accessories consisting of:				
2 support brackets with anti-vibration clamps and fixing bolts				
For Ø 63 mm pipe	42598	1	1.5	0.011
For Ø 75 mm pipe	28693	1	1.5	0.011
For Ø 90 mm pipe	28694	1	1.5	0.011
For Ø 110 mm pipe	28695	1	1.5	0.011
For Ø 125 mm pipe	28696	1	1.5	0.011
For Ø 140 mm pipe	28697	1	1.5	0.011
For Ø 160 mm pipe	28698	1	2.5	0.011
For Ø 200 mm pipe	28699	1	2.5	0.011
For Ø 225 mm pipe	28700	1	2.5	0.011
Accessory box for additional supports:				
Fixing plug and protection cap	28701	1	-	-



Wall brackets for valve manifold

For all filter type from Ø 63 mm pipe onwards. Consisting in zinc-plated steel support bracket with anti-vibration clamp and fixing screws. Supply: 1 vertical support with manifold bracket.



	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
For Ø 63 mm pipe	35585	1	1.0	0.007
For Ø 75 mm pipe	00855	1	1.2	0.007
For Ø 90 mm pipe	00856	1	1.3	0.007
For Ø 110 mm pipe	00857	1	1.4	0.007
For Ø 125 mm pipe	00858	1	1.4	0.007
For Ø 140 mm pipe	00859	1	1.5	0.007
For Ø 160 mm pipe	00860	1	1.6	0.007
For Ø 200 mm pipe	00861	1	1.7	0.007
For Ø 225 mm pipe	00862	1	1.7	0.007
For Ø 250 mm pipe	36120	1	2.0	0.011
For Ø 315 mm pipe	36602	1	2.4	0.011

COMPACT FILTRATION HOUSINGS

In-ground models

Can be stored inside one another for easy transport and storage. Rationalization of the inner space, obtaining maximum utilization performance within the minimum available space. Lightweight lid with reinforced hinges. Prefabricated in polyester, fibreglass and gel-coat finish. Lid in green, with ivory interior.

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Supplied undrilled:				
For Ø 500 mm filters	15260	6	200.0	4.0
For Ø 650 mm filters	15261	6	244.0	4.5
Supplied with drilled connection outlets:				
For Ø 350 mm filters	00615	5	175.0	3.0
For Ø 400-450-500-600 mm filters	00616	3	130.0	4.0
For Ø 650 mm filters	00617	2	175.0	3.4
For Ø 650-750-800 mm filters	00618	1	126.0	3.6



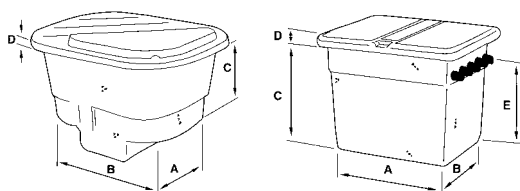
Semi-in-ground models

Prefabricated in polyester and fibreglass. Ivory colour. Totally openable cover.

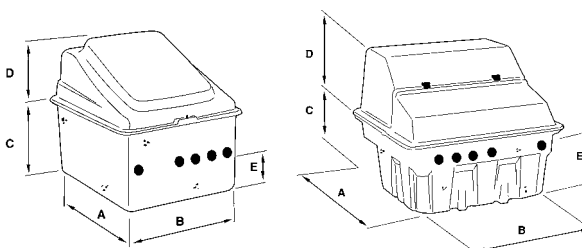
	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
With fully opening lid:				
For Ø 450-500-600 mm filters	00619	2	80.0	2.7
For Ø 600-450-650-750 mm filters	00620	2	145.0	4.7
With partially opening lid:				
For Ø 600 mm filters	00621	2	50.0	2.11



IN-GROUND



SEMI IN-GROUND



	15260	15261
A	1100	1200
B	1310	1420
C	740	840
D	90	90

Dimensions in mm

	00615	00616	00617	00618
A	900	1000	1200	1500
B	650	1000	1000	1200
C	730	900	925	1220
D	70	70	70	70
E	620	725	740	1035

Dimensions in mm

	00619	00620
A	1040	1350
B	870	1200
C	525	675
D	500	470
E	270	500

Dimensions in mm

	00621
A	1230
B	1230
C	540
D	535
E	430

Dimensions in mm

COMPACT FILTRATION HOUSINGS

Above ground housing



For outdoor installation. Lid with reinforced edging. Length 148 cm; Width 86 cm; Height 122 cm.

Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
25881	1	25	0.400

AIR VENTS



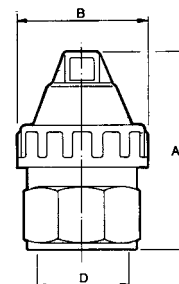
Air vents



In cast Aluminium painted yellow. Inner ball in PVC.

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Ø 1"	04143	12	2.3	0.009
Ø 1½"	04144	12	4.0	0.009
Ø 2"	04145	12	4.5	0.018

Code	D	A (mm)	B (mm)
04143	1"	74	44
04144	1½"	105	69
04145	2"	105	69



Double effect air vent



Body in PP and fibreglass. Maximum pressure 16 Kg/cm². Seal in nitrile rubber.

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Ø 1"	49381	1	0.3	0.001



Double effect air vent



Body in PP and fibreglass. U-bend outlet with PVC elbow. Maximum pressure 16 Kg/cm². Seal in nitrile rubber.

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Ø 2"	49382	1	0.7	0.001

FILTRATION MEDIA & ACCESSORIES



Glass filter media

Filter media environmentally friendly made from glass recycled. 25 Kg bag.

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Granulometry: 0.5 mm - 1.0 mm	45307	1	25.0	0,667
1.0 mm - 3.0 mm	45308	1	25.0	0,667
3.0 mm - 7.0 mm	45309	1	25.0	0,667



Granulometry 0.5 - 1.0 mm



Granulometry 1.0 - 3.0 mm



Granulometry 3.0 - 7.0 mm



Filtration sand

Please ask for a quotation for other grades. 25 Kg bag.

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Granulometry 0.4 - 0.8 mm	00596	1	25	0.667



Gravel

Please ask for a quotation for other grades. 25 Kg bag.

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Granulometry 1 - 2 mm	10697	1	25	0.667
Granulometry 3 - 5 mm	11346	1	25	0.667



Anthracite

Please ask for a quotation for other grades. Bags 25 Kg.

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Granulometry 0.8 - 1.6 mm	03696	1	50	0.8



Zeolite

Natural porous material that has higher filtration qualities than the normal substrate. It can be compared to that of diatomaceous earth but at a lower price and lasting much longer. Bags 25 Kg.

	Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
Zeolite standard 0.5 - 1 mm	25845	1	-	-
Zeolite standard 1-2 mm	25846	1	30	0.023
Zeolite standard 2-5 mm	25847	1	30	0.023



PRESSURE GAUGE PANELS AND AIR BLOWERS



Pressure gauge panels

Including air vents.

With pressure gauges 3 kg/cm²
With pressure gauges 6 kg/cm²

Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
00729	1	1	0.007
00730	1	1	0.007



Air blowers

Air blowers designed to shake the filtration bed during the backwashing process or to supply air wherever required. The blower housing and the impeller are made of a light Aluminium alloy, whereas the shaft is made of S.S. on which the impeller is mounted and dynamically balanced. The 100-120/200-240 V single phase and the 200-240/280-440 V three phase motors at 50/60 Hz for non-stop operation, are manufactured according to the IEC Standards and come with an IP 54 outer protection and an F Class insulation. The pumps can be installed both horizontally and vertically, and as there is no contact between the fixed and movable blower parts, it does not require any lubrication nor maintenance, neither is there any wear and tear.

Power

Air blower 0,4 KW Trif.
Air blower 0,75 KW Mono.
Air blower 0,75 KW Trif.
Air blower 1,1 KW Mono.
Air blower 1,1 KW Trif.
Air blower 1,5 KW Mono.
Air blower 1,75 KW Trif.
Air blower 1,75 KW Trif. 2V
Air blower 2,2 KW Trif.
Air blower 3 KW Trif. 2V
Air blower 3 KW Trif.
Air blower 4 KW Trif. 2V
Air blower 5,5 KW Trif.
Air blower 5,5 KW Trif. 2V
Air blower 7,5 KW Trif. 2V
Air blower 11 KW Trif. 2V
Air blower 13 KW Trif.

Code	Standard Packaging	Standard Weight Kg	Standard Volume m ³
------	--------------------	--------------------	--------------------------------

33970	1	12	0,032
35388	1	-	-
35387	1	-	-
31090	1	29	0,061
31091	1	26	0,064
33971	1	30	0,071
31092	1	27	0,071
35389	1	-	-
31093	1	37	0,078
31094	1	47	0,096
31095	1	39	0,106
31096	1	59	0,217
31097	1	82	0,269
33972	1	78	0,217
31098	1	86	0,269
33973	1	150	0,388
33974	1	150	0,512

Code	Max pressure (mbar)	Max flow m ³ /h
33970	130	84
35387	190	144
35388	190	144
31090	180	216
31091	180	216
33971	200	216
31092	250	216
35389	156	320
31093	220	312
31094	410	410
31095	280	312
31096	380	312
31097	280	552
33972	530	312
31098	360	552
33973	600	552
33974	295	1134

