



SINGLE FILTER OV & SINGLE FILTER MULTIBASKET OVM

AIRPEL®

SINGLE FILTER OV
20 MM (3/4")–150 MM (6")

MULTI BASKET FILTERS OV
200 MM (8")–250 MM (10")



SINGLE FILTER OV

Single filter OV provides a cost-effective method of protecting pipeline equipment, cleaning liquids or salvaging valuable solids. Incorporated are a number of special features and optional extras. The filter is of cast construction and is supplied with one high quality stainless steel cylindrical basket. It is used in liquid handling installations where the flow can be shut off for short periods to allow the removal of the basket for cleaning.

SINGLE FILTER OV MULTIBASKET

The single filter multi basket extends the range of single filters, specially designed to be compact and easily maintained with easier basket removal compared with other units of a similar pipe size. The filter is of cast construction and is supplied with four or five high quality stainless steel filter baskets depending on the pipe size. For use in liquid handling installations where flow can be interrupted to enable the removal of the filter baskets for cleaning.

MAIN FEATURES

- High quality 316 grade stainless steel basket with large filtration areas resulting in low pressure drops.
- Compact design for space saving.
- Working pressures up to 50 bar (A300 Series).
- Quick release filter covers and knobs for easy maintenance.

OPTIONS

- Range of extras allowing filter to be customised.
- Available in cast iron, cast steel, gunmetal (bronze) or stainless steel.
- Visual/Electrical differential pressure indicators are available.
- Magnetic columns (pre-magnetic filtration).

SPECIFICATIONS FOR SINGLE FILTER OV

	OV	OV/S	OV/GM	OV/SS	OV/S & SS A300 Series
Body & cover material	Cast Iron EN1561/ EN-JL 1030	Cast steel EN 10213-2/1.0625	Gunmetal (Bronze) BS 1400 Grade LG4C	Stainless Steel BS 1504 316 C16	Cast steel EN10213-2/1.0625 (S) Stainless steel BS1504 316 C16 (SS)
Maximum working pressure	17 bar at 50°C 250psi at 120°F	22 bar at 50°C 320psi at 120°F	13.8 bar at 50°C 200psi at 120°F	22 bar at 50°C 320psi at 120°F	50 bar at 50°C (S) 725psi at 120°F (S) 48 bar at 50°C (SS) 700psi at 120°F (SS)
Baskets	Stainless Steel — Basket & Mesh Lining BS1449 Grade 316 S31				
Drain plug	Brass	Stainless Steel	Gunmetal (Bronze)	Stainless Steel	Stainless Steel
Vent	Stainless Steel	Stainless Steel	Phosphor Bronze	Stainless Steel	Stainless Steel
Standard seals	Viton® (-20°C to +200°C) (-5°F to +400°F)				
Body colour	Blue	Silver	Natural	Natural	Silver (S) /Natural (SS)

Special alloys on request

SPECIFICATIONS FOR MULTI BASKET FILTERS

	OVM	OVM/S	OVM/GM	OVM/SS
Body & cover material	Cast Iron EN1561/EN-JL 1030	Cast steel EN 10213-2/1.0625	Gunmetal (Bronze) BS1400 Grade LG4C	Stainless Steel BS 1504 316 C16
Maximum working pressure	13.8 bar at 50°C			
Baskets	Stainless Steel — Basket & Mesh Lining BS1449 Grade 316 S31			
Drain plug	Brass	Stainless Steel	Gunmetal (Bronze)	Stainless Steel
Vent	Stainless Steel	Stainless Steel	Phosphor Bronze	Stainless Steel
Standard seals	Viton® (-20°C to +200°C)			
Body colour	Blue	Silver	Natural	Natural

Special alloys on request

EQUIVALENT MATERIAL SPECIFICATIONS

	Cast Iron	Cast Steel	Gunmetal	Stainless Steel
European Standard	BS EN1561/EN-JL 1030	BS EN10213-2/1.0625	BS 1400 GRD LG4C	BS 1504 316 C16
American Standard	ASTM A48/76 Class 35	ASTM A216 Grade WCB	—	ASTM A351 CR8M

Special alloys on request

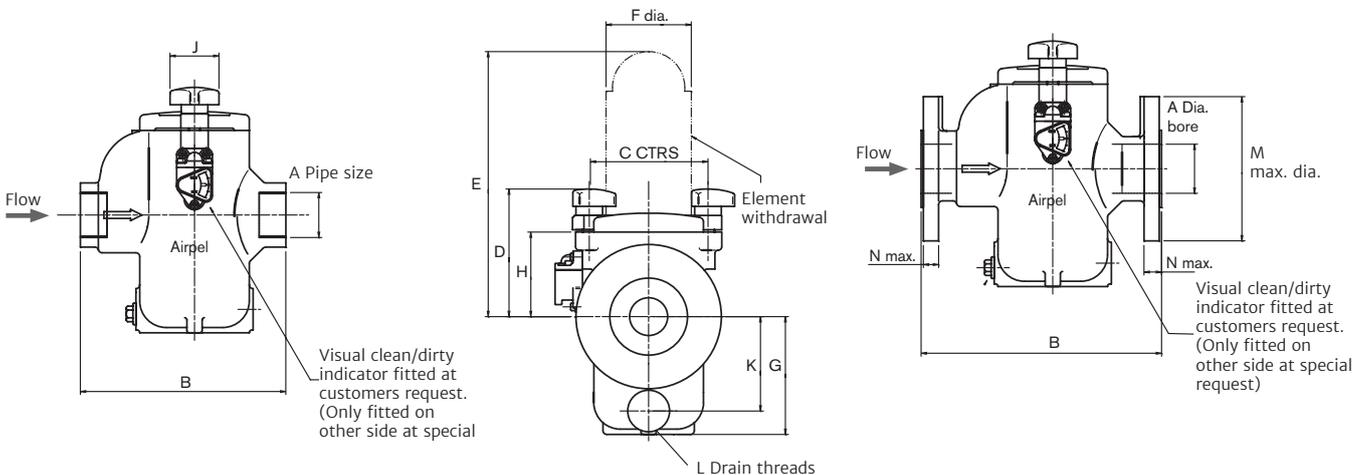
THREADED BSP OR NPT SIZES IN MM

A Pipe Size	B	C	D	E	F	G	H	J	K	L	Element Area	Weight (Cast Iron)
20	159	108	103	220	73	105	64	50	86	1/2" BSP	184cm ²	5kg
25	159	108	103	220	73	105	64	50	86	1/2" BSP	184cm ²	5kg
32	174	108	129	306	73	145	90	50	122	1/2" BSP	268cm ²	7kg
40	174	108	129	306	73	145	90	50	122	1/2" BSP	268cm ²	7kg
50	270	156	165	351	112	156	112	76	131	1/2" BSP	484cm ²	19kg
65	270	156	165	351	112	156	112	76	131	1/2" BSP	484cm ²	19kg

FLANGED BS10, BS4504, ANSI OR DIN SIZES IN MM (IN)

A	B	C	D	E	F	G	H	J	K	L	M*	N*	Element Area	Weight (Cast Iron)
25	194	108	103	220	73	105	64	50	86	1/2" BSP	124	16	184cm ²	8kg
40	210	108	129	306	73	145	90	50	122	1/2" BSP	156	18	268cm ²	12kg
50	310	156	165	351	112	156	112	76	131	1/2" BSP	165	20	484cm ²	24kg
65	310	156	165	351	112	156	112	76	131	1/2" BSP	191	22	484cm ²	25kg
80	343	175	198	451	132	210	140	76	186	1/2" BSP	210	22/24	718cm ²	42kg
100	356	175	234	575	132	265	175	76	241	1/2" BSP	229/254	24	964cm ²	45kg
150	480	—	296	728	160	361	218	—	330	1/2" BSP	318	26	1835cm ²	107kg

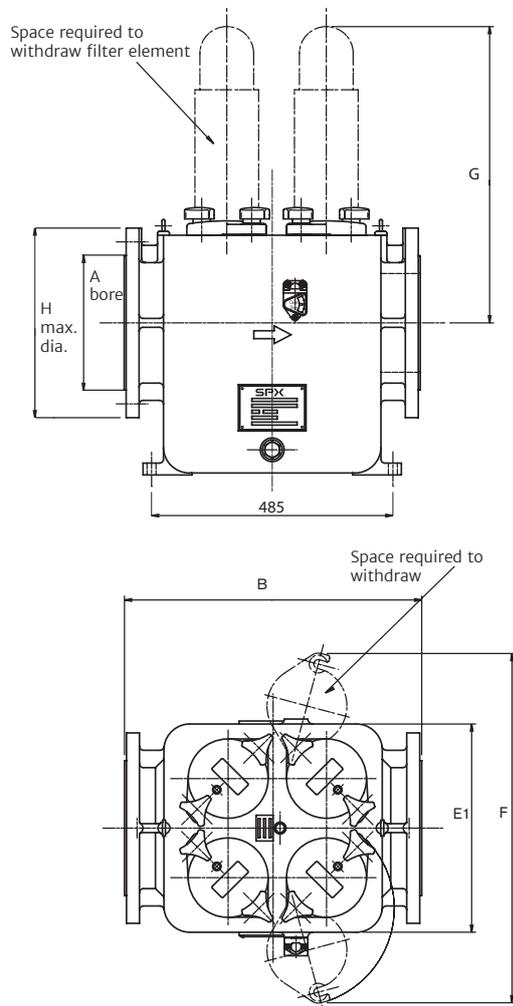
* Dimensions left of the oblique are for cast iron filters. Dimensions right of the oblique are for Steel, Stainless Steel and Bronze



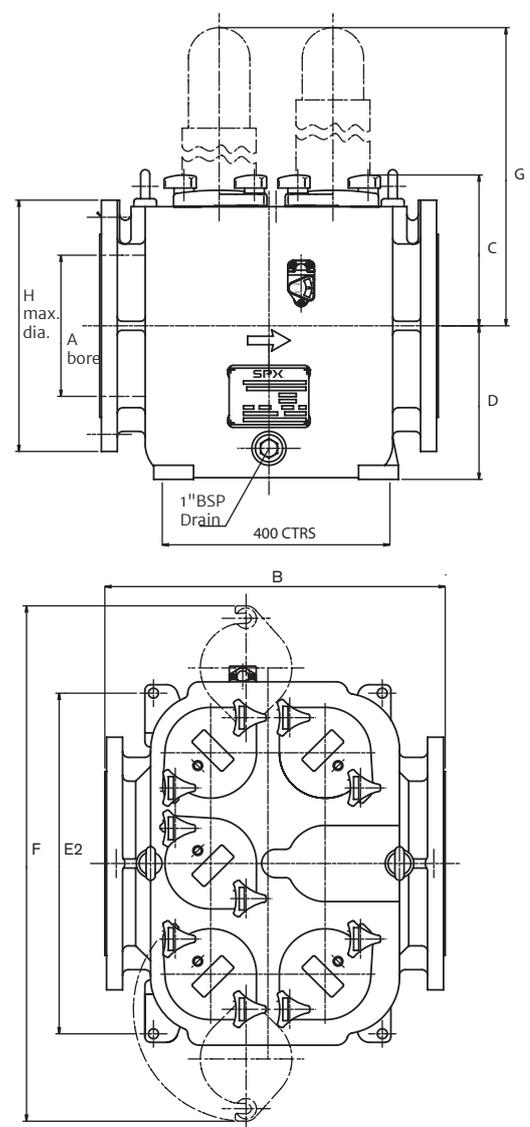
SIZES (IN MM)

	A	B	C	D	E1 E2	F	G	H	WEIGHT (CAST IRON)
200 (8")	200	595	230	308	420 (E1)	658	610	381	260 KG
250 (10")	250	595	276	272	600 (E2)	908	610	445	391 KG

200 MM (8") — 4 BASKETS



250 MM (10") — 5 BASKETS



ACCESSORIES AND SPARE PARTS FOR OV

A range of optional extras enables filters to be tailored to customers' precise requirements

DIFFERENTIAL PRESSURE INDICATOR (D.P.I.)

The Differential Pressure Indicator is designed to monitor basket conditions and provide visual warning that cleaning is required.



OPTIONAL EXTRAS WITH FILTERS

HEATING JACKET

For constant temperature processes to aid flow of viscous liquids.

AUTOMATIC AIR ELIMINATORS

To vent air from filter e.g. after element cleaning.

MAGNETIC INSERTS

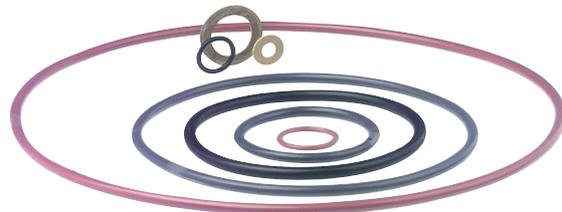
Suspended from the cover to capture metallic particles. Magnets can be nylon coated if required.

ALTERNATIVE O-RING MATERIALS

To suit chemical or low/high temperature applications

CUSTOM-DESIGNED ELEMENTS & BASKETS

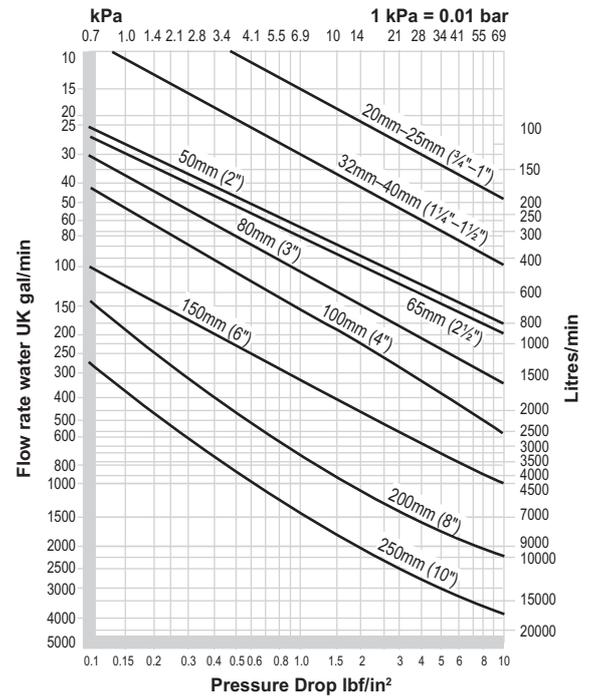
Made according to process needs



SIZING DATA OV SINGLE FILTERS

A single basket OV filter is required to protect pipeline equipment to a level of 200 microns. The media is water at 20°C, at a pressure of 4 bar g and having a flow rate of 600 litres/min. A clean basket pressure drop of no more than 34 kPa is acceptable.

1. Check temperature/pressure rating of filter and suitability for application, i.e. 20°C temperature at 4 bar g: Standard Cast Iron Filter suitable.
2. Selection of Mesh: protection to 200 microns or less would require an 80 mesh basket (at 190 microns).
3. Mark flow rate of 600 litres/min on chart to intersect diagonal "filter selection line" and read vertically to obtain pressure drop in kPa. 600 l itres/min intersects 65 mm (2.1/2") filter and will have a pressure drop of 28 KPa.
4. Apply correction factor for 80 mesh basket:
Pressure drop
= 28 kPa x 1.1 (see table on reverse) = 30.8 kPa.
(This falls within acceptable pressure drop of 34 KPa).
5. Selection for application would be 65 mm (2 1/2") cast iron OV filter with an 80 mesh lined basket.



OV BASKET IDENTIFICATION

Code numbers are used to identify the basket as shown on the end plate. Typical example:

E - GA	2	S	80
SIZE	MARK	MATERIAL	MESH
A = ¾" - 1	MK1-1	S = ST.ST	
B = 1¼" - 1½"	MK2-2		
C = 2" - 2½"			
D = 3"			
E = 4"			
F = 6" (OW)			
FT= 6" MULTI			
FV = 6" (OV)			
G = 8" (OV)			
GA/GB = 8"/10" (OV)			

PRESSURE DROP CHART

The charts are for water flowing through a filter without an element. Use the following correction factors for the chosen filtration rating and for liquids of higher viscosity.

CORRECTION FACTORS FOR OV

Either – multiply the pressure drop for water shown in the chart by the following correction factors to obtain the actual pressure drop. (Water has a viscosity of 1 centistoke at 20°C) Or – divide the acceptable pressure drop by the necessary correction factor in the table below and then use the chart to determine the filter size and flow rate.

FILTRATION

VISCOSITY CENTISTOKES	UNLINED PERFORATED BASKETS	20 MESH (910µM)	80 MESH (190µM)	120 MESH (130µM)	200 MESH (80µM)
1	1	1	1.1	1.25	1.35
50	1.6	1.7	2.1	2.3	2.5
230	2.0	2.3	3.0	3.35	3.75
370	2.2	2.6	3.4	3.8	4.3

STANDARD BASKET DATA

Baskets are constructed from stainless steel perforated plate. Welding the appropriate grade of stainless steel mesh to the basket provides the relevant degree of filtration. Pleated elements giving filtration down to 10 microns are also available.

FILTRATION

PERF. PLATE HOLES PER SQUARE INCH	DIAMETER OF HOLE			MATERIAL REF	PERCENTAGE CLEAR AREA
	INCHES	MM	µM		
11	0.25	6.35	6350	S11	54
33	0.125	3.17	3170	S33	39
124	0.063	1.60	1600	S124	38

SQUARE MESH MESHES PER LINEAR INCH	DIAMETER OF HOLE			MATERIAL REF	PERCENTAGE CLEAR AREA
	INCHES	MM	µM		
20	0.036	0.91	910	S20	53
30	0.022	0.56	560	S30	42
40	0.015	0.38	380	S40	40
60	0.01	0.25	250	S60	35
80	0.0075	0.19	190	S80	34
120	0.005	0.13	130	S120	32
200	0.003	0.08	80	S200	36
300	0.002	0.05	50	S300	32



| SPEED
| EXCELLENCE
| PARTNERSHIP

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For more information, visit www.celerosft.com.

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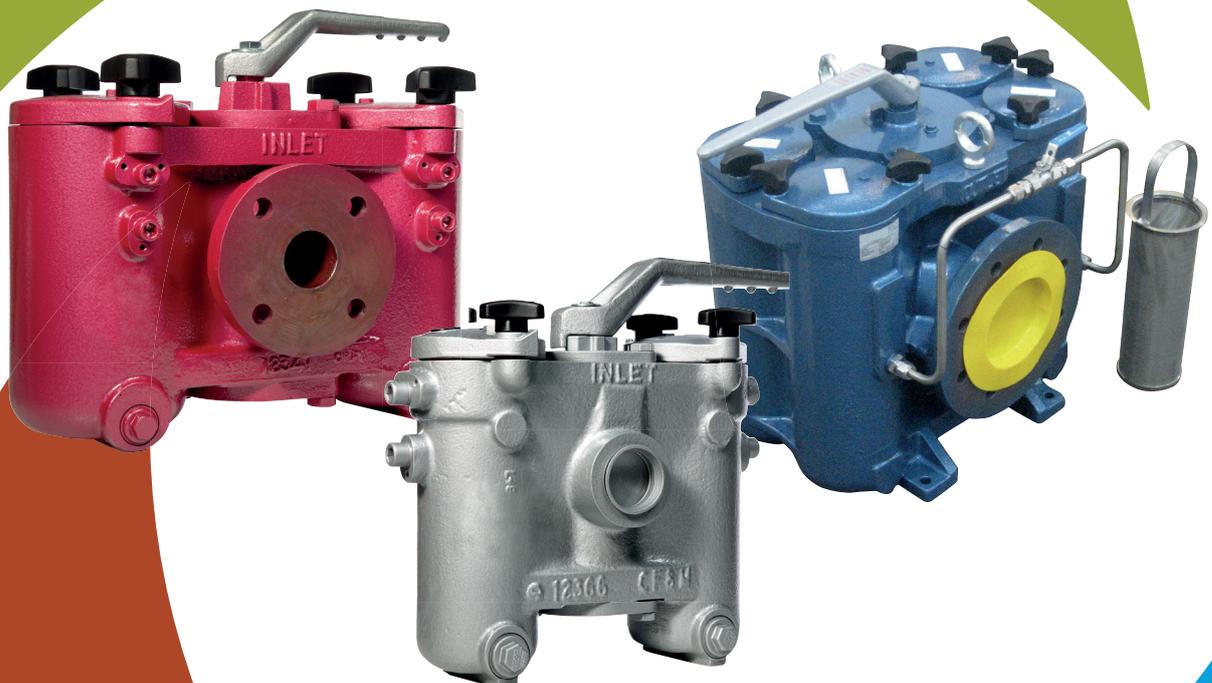
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DUAL FILTER OW & MULTIBASKET OW

AIRPEL®

DUAL FILTER
20 MM (3/4")–200 MM (8")
MULTI BASKET FILTER
150 MM (6")



DUAL FILTER OW 20 mm (3/4")–200 mm (8")

For applications where the requirement is for continuous flow with minimum loss of pressure, the dual filter OW provides quality of design and performance.

The filter is of cast construction and incorporates two chambers each containing a high quality stainless steel basket. Flow is diverted from one basket to the other without interruption by turning the handle, which rotates dual cylindrical cocks, delivering the flow to the appropriate chamber.

MAIN FEATURES

- Simple changeover operation requires infrequent maintenance.
- Compact design.
- Large filtration areas giving low-pressure drops.
- Working pressures up to 50 bar (A300 Series).
- Quick release filter covers and knobs for easy maintenance.
- No contamination between filtered and unfiltered liquids.
- Wide range of materials, sizes and accessories.
- Filtration down to 10 microns.
- Handle covers chamber in use — preventing accidental opening of pressurised chamber.
- Differential pressure indicators as optional extras.

DUAL FILTER MULTIBASKET OW 150 mm (6")

The Dual Filter Multibasket design compliments the existing OW range by offering a high level of filtration within a small, compact physical size where space, weight and high free filtration area are key to the operator.

The filter is of cast construction and is supplied with four quality stainless steel cylindrical baskets which are fitted into the filter in a 2 (left) + 2 (right) arrangement. Just as the standard dual filter range, the construction lends itself to non-interrupted liquid flow during basket removal for cleaning.

MAIN FEATURES

- High quality stainless steel baskets with large filtration areas resulting in low pressure drops
- Compact design for space saving
- Working pressures up to 22 bar
- Quick release filter covers and knobs for easy basket removal
- Simple changeover for uninterrupted operation

OPTIONS

- Range of extras allowing filter to be customised
- Available in cast iron, cast steel, gunmetal (bronze) or stainless steel as standard
- Differential pressure indicators are available
- Equilisation Pressure Line as standard

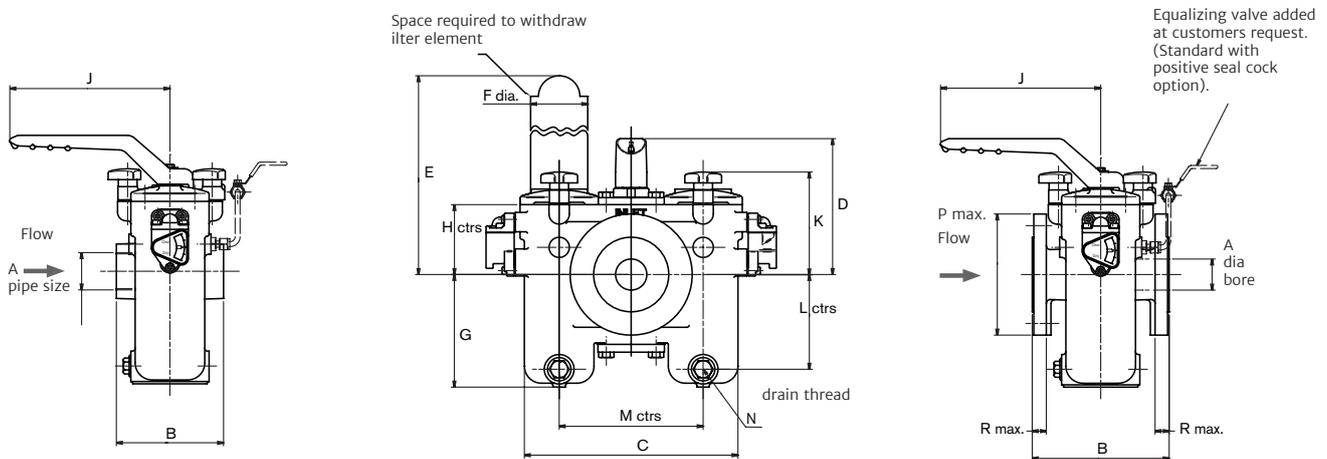
THREADED BSP OR NPT (SIZES IN MM)

A PIPE SIZE	B	C	D	E	F	G	H	J	K	L	M	N	ELEMENT AREA	WEIGHT (CAST IRON)
20 (3/4")	120	282	149	220	73	105	64	205	103	86	170	1/2" BSP	184 CM ²	13 KG
25 (1")	120	282	149	220	73	105	64	205	103	86	170	1/2" BSP	184 CM ²	13 KG
32 (1 1/4")	137	295	175	306	73	145	90	205	132	122	184	1/2" BSP	268 CM ²	19 KG
40 (1 1/2")	137	295	175	306	73	145	90	205	132	122	184	1/2" BSP	268 CM ²	19 KG

FLANGED DRILLED BS10, BS4504, ANSI, DIN OR JIS (SIZES IN MM)

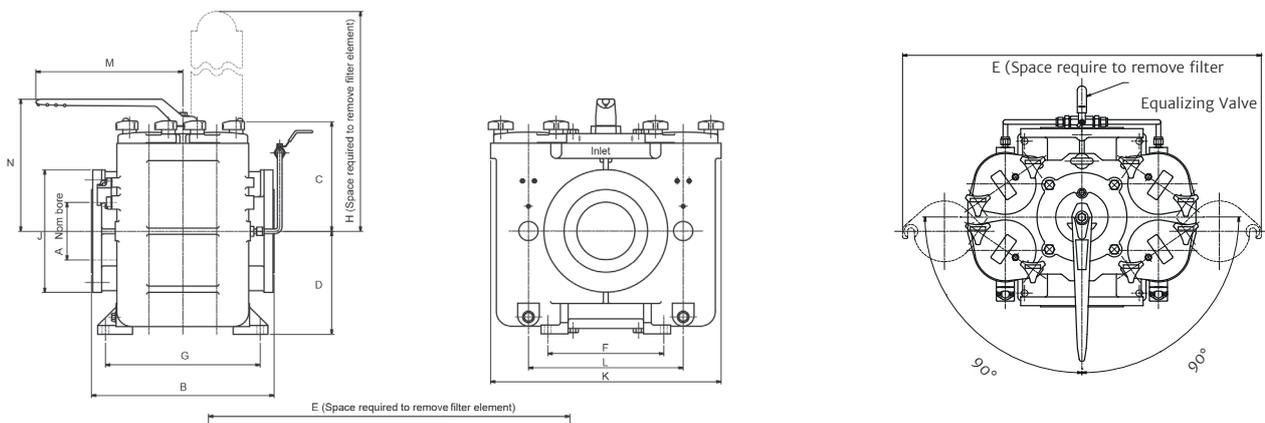
A DIA. BORE	B	C	D	E	F	G	H	J	K	L	M	N	P	R	ELEMENT AREA	WEIGHT (CAST IRON)
25 (1")	152	282	149	220	73	105	64	205	103	86	170	½" BSP	124	16	184 CM2	16 KG
40 (1½")	175	295	175	306	73	145	90	205	132	122	184	½" BSP	156	18	268 CM2	23 KG
50 (2")	210	425	212	351	112	156	112	219	165	131	280	½" BSP	165	20	484 CM2	52 KG
65 (2½")	230	425	212	351	112	156	112	219	165	131	280	½" BSP	191	20	484 CM2	53 KG
80 (3")	267	490	256	451	132	210	140	250	198	186	330	½" BSP	210	22	718 CM2	85 KG
100 (4")	318	540	294	575	132	265	175	250	233	241	380	½" BSP	230/254	24	964 CM2	125 KG
150 (6") *	380	760	398	868	160	410	275	380	—	359	530	½" BSP	318	25	2065 CM2	250 KG
200 (8")	570	1020	550	1210	248	520	390	500	—	472	700	½" BSP	381	30	3980 CM2	730 KG

* Also available as a Multibasket Filter.



FLANGED DRILLED BS10, BS4504, ANSI, DIN OR JIS (SIZES IN

A DIA. BORE	B	C	D	E	F	G	H	J	K	L	M	N	WEIGHT (CAST IRON)	BASKET AREA PER CHAMBER
150 (6")	472	286	268.5	937.5	300	400	575	320	596	400	380	344.5	250 kg	2065 cm ²



SPECIFICATIONS

	OW/O (OIL DUTY ONLY)	OW/WB	OW/S (OIL DUTY ONLY)	OW/S/WB
Body & cover material	Cast Iron EN1561/EN-JL 1030	Cast Iron EN1561/EN-JL 1030	Cast Steel EN10213-2/1.0625	Cast Steel EN10213-2/1.0625
Sleeve	–	Gunmetal (Bronze) BS1400 Grade LG4C	–	Gunmetal (Bronze) BS1400 Grade LG4C
Change over cocks	SG Iron EN1563 EN-JS1020	Gunmetal (Bronze) BS1400 Grade LG4C	SG Iron EN1563 EN-JS1020	Gunmetal (Bronze) BS1400 Grade LG4C
Internal machine part	Mild Steel BS970 220 Mo7	Stainless Steel BS970 303 S31	Mild Steel BS970 220 Mo7	Stainless Steel BS970 303 S31
Baskets	Stainless Steel BS1449 316			
Drain plugs	Brass	Brass	Stainless steel	Brass
Vent	Steel	Brass	Steel	Brass
Seals	Viton® (-20°C to +200°C)			
Maximum working pressure	17 bar at 50°C		22 bar at 50°C	
Maximum working temperature	260°C	150°C	260°C	150°C
	All maximum working temperatures remain dependant on seal selection			
Body colour	Red	Blue	Silver	Silver

	OW/C	OW/GM	OW/SS	OW/S & SS A300 SERIES
Body & cover material	Cast Iron EN1561/EN-JL 1030	Gunmetal (Bronze) BS1400 Grade LG4C	Stainless Steel BS1504 Grade 316 C16	Cast Steel EN10213-2/0.625 (S)
				Stainless Steel BS1504 Grade 316 C16 (SS)
Sleeve	–			
Change over cocks	Stainless Steel BS1504 Grade 316 C16	Gunmetal (Bronze) BS1400 Grade LG4C	Stainless Steel BS1504 Grade 316 C16	SG Iron EN1563 EN-JS1020 (S)
				Stainless Steel BS1504 Grade 316 C16 (SS)
Internal machine part	Stainless Steel BS970 303 S31	Phosphor Bronze BS1400 Grade PBI	Stainless Steel BS970 303 S31	Mild Steel BS970 220 Mo7 (S)
				Stainless Steel BS970 303 S31 (SS)
Baskets	Stainless Steel BS1449 316			
Drain plugs	Stainless Steel	Phosphor Bronze	Stainless Steel	Stainless Steel
Vent	Steel	Brass	Stainless steel	Stainless Steel
Seals	Viton® (-20°C to +200°C)			
Maximum working pressure	17 bar at 50°C	17 bar at 50°C *)	22 bar at 50°C	50 bar at 50°C (S) 48 bar at 50°C (SS)
Maximum working temperature	50°C	260°C	260°C	260°C
	All maximum working temperatures remain dependant on seal selection			
Body colour	Red	Natural	Natural	Silver (S) / Natural (SS)

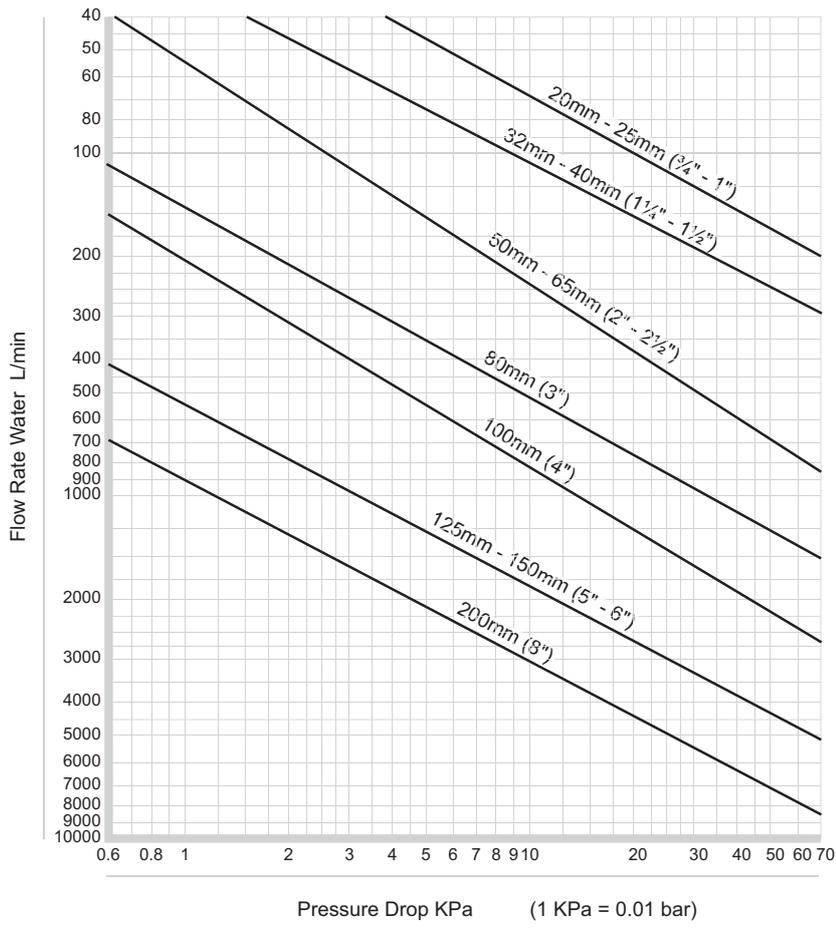
Please Note

- 1 These specifications refer to standard products. Other materials for body (e.g. monel, hastelloy) and seals (e.g. Nitrile, EP, PTFE) are available, please ask.
- 2 Working pressure is stated at 50°C. To verify suitability of this equipment above this temperature or below 0°C, please contact us for more information.
- 3 Whilst alternative seal materials e.g. Nitrile, EP, PTFE are available and can be used to offer a wide range of chemical compatibility and working temperatures up to 260°C, it is recommended that such applications are again discussed with us. Viton is a registered trademark of DuPont Performance Elastomers.
4. Special alloys on request

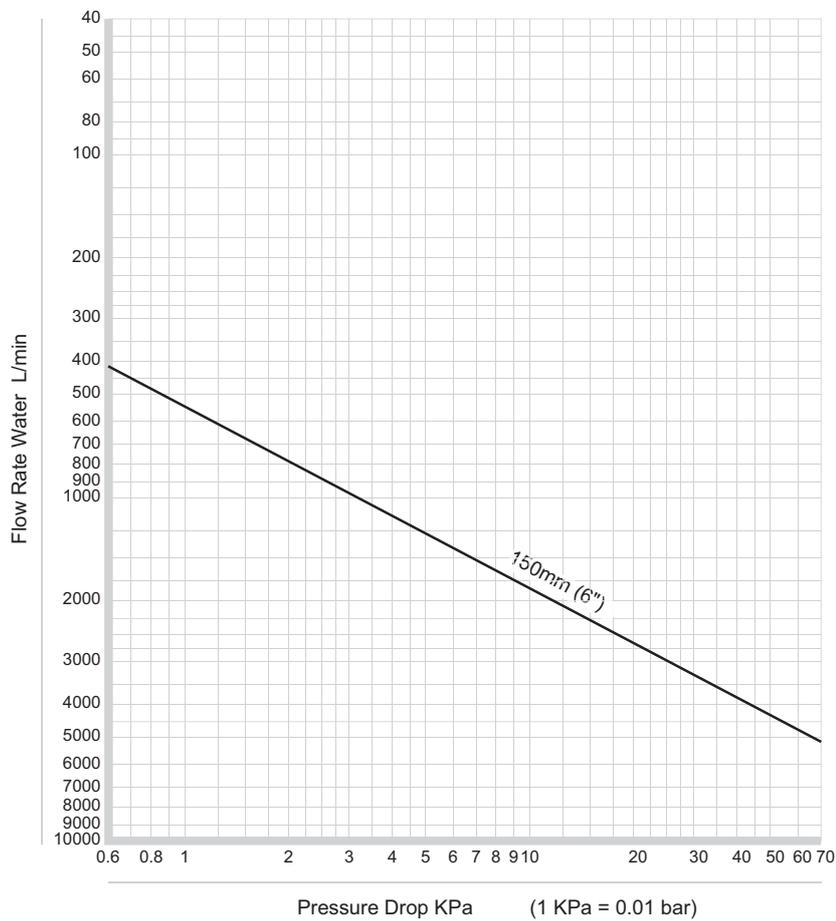
EQUIVALENT MATERIAL SPECIFICATIONS

	CAST IRON	CAST STEEL	GUNMETAL (BRONZE)	STAINLESS STEEL
European Standard	BS EN1561/EN-JL 1030	BS EN10213-2/1.0625	BS 1400 GRD LG4C	BS 1504 316 C16
American Standard	ASTM A48/76 Class 35	ASTM A216 Grade WCB	–	ASTM A351 CF8M

OW DUAL FILTER SIZING CHART



OW DUAL MULTIBASKET SIZING CHART



OPTIONAL EXTRAS WITH FILTERS

DIFFERENTIAL PRESSURE INDICATOR (D.P.I)

The Differential Pressure Indicator is designed to monitor basket conditions and provide visual warning that cleaning is required.

HEATING JACKET

For constant temperature processes to aid flow of viscous liquids.

100% SHUT OFF ON DUAL FILTER CHANGE OVER

This can be achieved by use of a special seal within the change over cock mechanism and eliminates leakage between chambers during cleaning.

AUTOMATIC AIR ELIMINATORS

To vent air from filter e.g. after element cleaning.

MAGNETIC INSERTS

Suspended from the cover to capture metallic particles. Magnets can be nylon coated if required.

PRESSURE EQUALISING VALVES (DUAL FILTER ONLY)

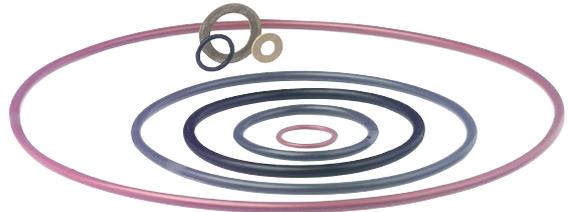
Are fitted to sizes 100, 125, 150 and 200mm as standard but can be fitted to other sizes on request.

ALTERNATIVE O-RING MATERIALS

To suit chemical or low/high temperature applications

CUSTOM-DESIGNED ELEMENTS & BASKETS

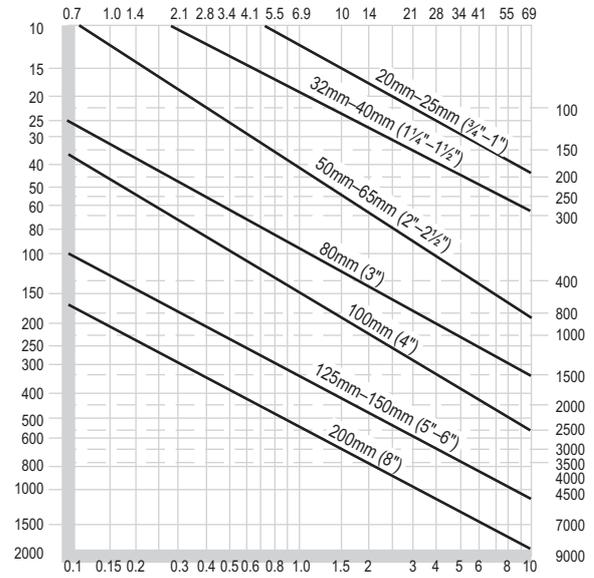
Made according to process needs



SIZING DATA DUAL FILTERS

A dual basket OW filter is required to filter particles the size of 80 microns from lubricating oil which has a viscosity of 230 centistokes at 40°C. The flowrate of oil is 150 litres/min at a pressure of 10 bar g. A clean basket pressure drop of no more than 41 kPa is acceptable.

1. Check temperature/pressure rating of filter and suitability for application, i.e. 40°C temperature at 10 bar g: Standard Cast Iron Filter suitable.
2. Selection of Mesh: Protection to 80 microns or less would require a 200 mesh basket. (See Standard Basket Data).
3. Mark flowrate of 150 litres/min on chart to intersect diagonal “filter selection line” and read vertically to obtain pressure drop in kPa. 150 litres/min intersects 50mm (2”) – 65mm (2.1/2”) filter and will have a pressure drop of 5.5 kPa.
4. Apply correction factor for oil at 230 centistokes with 200 mesh lined basket:
 Pressure drop = 5.5 kPa x 3.75 = 20.6 kPa. (This falls within acceptable pressure at 41 KPa).
5. Selection for application would be 50 mm (2”) or 65mm (2 1/2”) cast iron OW filter with a 200 mesh lined basket.



OW BASKET IDENTIFICATION

Code numbers are used to identify the basket as shown on the end plate. Typical example:

E-GA	2	S	80
SIZE	MARK	MATERIAL	MESH
A = 3/4" - 1"	MK1-1	S = ST.ST	
B = 1 1/4" - 1 1/2"	MK2-2		
C = 2" - 2 1/2"			
D = 3"			
E = 4"			
F = 6" (OW)			
FT = 6" MULTI			
FV = 6" (OV)			
G = 8" (OV)			
GA/GB = 8"/10" (OV)			

PRESSURE DROP CHART

The charts are for water flowing through a filter without an element. Use the following correction factors for the chosen filtration rating and for liquids of higher viscosity.

CORRECTION FACTORS FOR OW

Either – multiply the pressure drop for water shown in the chart by the following correction factors to obtain the actual pressure drop. (Water has a viscosity of 1 centistoke at 20°C) Or – divide the acceptable pressure drop by the necessary correction factor in the table below and then use the chart to determine the filter size and flow rate.

FILTRATION

VISCOSITY CENTISTOKES	UNLINED PERFORATED BASKETS	20 MESH (910µM)	80 MESH (190µM)	120 MESH (130µM)	200 MESH (80µM)
1	1	1	1.1	1.25	1.35
50	1.6	1.7	2.1	2.3	2.5
230	2.0	2.3	3.0	3.35	3.75
370	2.2	2.6	3.4	3.8	4.3

STANDARD BASKET DATA OW

Baskets are constructed from stainless steel perforated plate. Welding the appropriate grade of stainless steel mesh to the basket provides the relevant degree of filtration. Pleated elements giving filtration down to 10 microns are also available.

FILTRATION

PERF. PLATE HOLES PER SQUARE INCH	DIAMETER OF HOLE			MATERIAL REF	PERCENTAGE CLEAR AREA
	INCHES	MM	µM		
11	0.25	6.35	6350	S11	54
33	0.125	3.17	3170	S33	39
124	0.063	1.60	1600	S124	38

SQUARE MESH MESHERS PER LINEAR INCH	DIAMETER OF HOLE			MATERIAL REF	PERCENTAGE CLEAR AREA
	INCHES	MM	µM		
20	0.036	0.91	910	S20	53
30	0.022	0.56	560	S30	42
40	0.015	0.38	380	S40	40
60	0.01	0.25	250	S60	35
80	0.0075	0.19	190	S80	34
120	0.005	0.13	130	S120	32
200	0.003	0.08	80	S200	36
300	0.002	0.05	50	S300	32





| SPEED
| EXCELLENCE
| PARTNERSHIP

AIRPEL®

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For more information, visit www.celerosft.com.

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SELF CLEANING FILTERS

MANUAL & AUTOMATIC

SIZES 20 MM (3/4") – 300 MM (12")

PLENTY®



Self-cleaning filters are designed specifically to provide efficient filtration for liquids, including those of high viscosity, requiring continuous filtration without interruption to the flow during the cleaning process. There is no operator contact with the process fluid. High quality stainless steel elements are highly effective in removing contaminant particles as small as 25 micron (μm).

The filter is available for either manual or fully automatic electric or pneumatic operation. The range of optional control devices makes it particularly suitable for continuous processes and for service with high contamination levels.



SELF CLEANING FILTERS –

Manual & Automatic

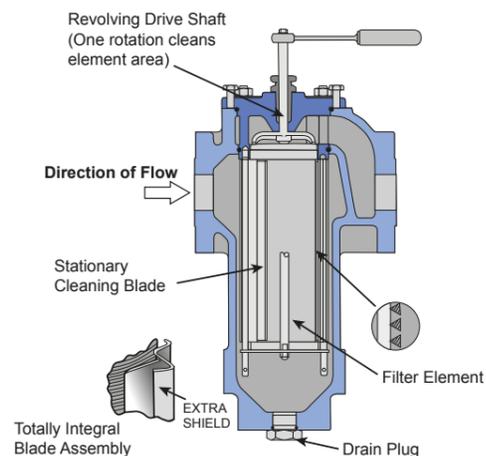
SIZES 20 MM (3/4") – 300 MM (12")

BENEFITS

- No operator contact with liquid during cleaning operation.
- Minimised product loss – during both process production and system cleaning.
- Increased quality output – minimum disruption to product flow.
- Reduced contamination – less possibility of accidents or operator exposure to the fluid.
- Reduced maintenance costs – automated units eliminate manual cleaning.
- Environment friendly – enclosed design with minimal flushing losses.

OPERATION

The liquid enters the body and flows through the element from outside to inside. Debris is collected on the outside of the wedge wire or perforated element, which is cleaned without flow interruption by the rotation of the element against the blades. The debris accumulated during rotation is deposited into the bottom of the filter body from where it is periodically discharged, manually or automatically.

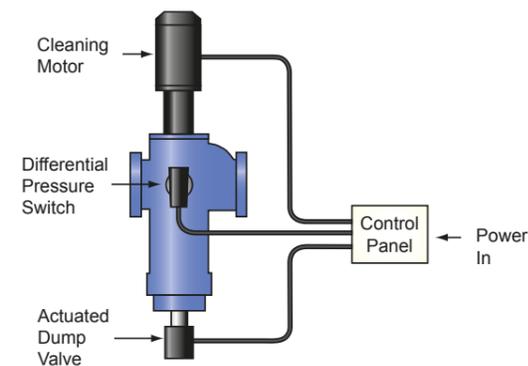


TYPICAL APPLICATION

- Adhesives
- Chemicals
- Chocolate
- Cooling Lines
- HVAC Water
- Inks
- Lacquers
- Paints, Stains, Varnishes
- Petrochemicals
- Printing
- Recycling Water
- River & Sea Water
- Wash Water

AUTOMATED SELF CLEANING FILTERS

The Plenty Filtration automated self cleaning filter allows for stand alone, low maintenance processing of liquids. The range can be automated, either electronically or pneumatically, from 32 mm (1 1/4") and above. The filters can be supplied wired and fully tested, requiring only on site connection to the power source and dump valve connection.



RANGE

Plenty Filtration offer three forms of blade type self cleaning filters: standard range, high pressure range and rotor blade, all working on the same generic principle. Plenty also offer both standard element and high pressure element for very demanding duties. Fabricated units can also be provided, these contain multiple elements and are suitable for larger capacities.

S1

HIGH PRESSURE
Models: 200, 300, 400 and 600 (2" – 6")
Construction: cast
Materials: iron, steel and stainless steel
Working pressures: up to 35 bar
Flow rates: up to 3000 litres/min

S2

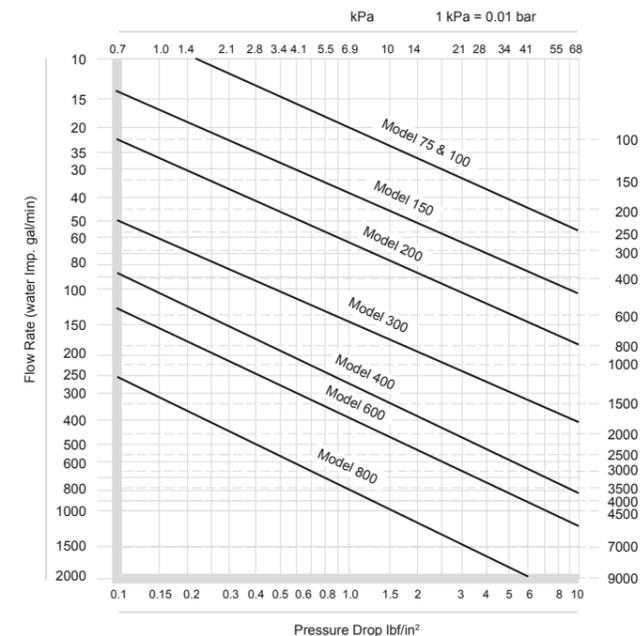
STANDARD PRESSURE
Models: 075, 100, 125, 150, 200, 300 and 400 (3/4" – 4")
Construction: detachable head and bowl form
Materials: cast iron and stainless steel
Working pressures: up to 14 bar
Flow rates: up to 1500 litres/min

S2

SPECIAL FABRICATED
Models: 800, 1000, 1200 (8" – 12")
Construction: welded
Materials: customer specification
Working pressures: customer specification
Flow rates: up to 18 000 litres/min

SIZING CHART / PRESSURE DROP CHART

The chart is for water flowing through a filter without an element. Use the following correction factors for the chosen filtration rating and for liquids of higher viscosity.



CORRECTION FACTORS

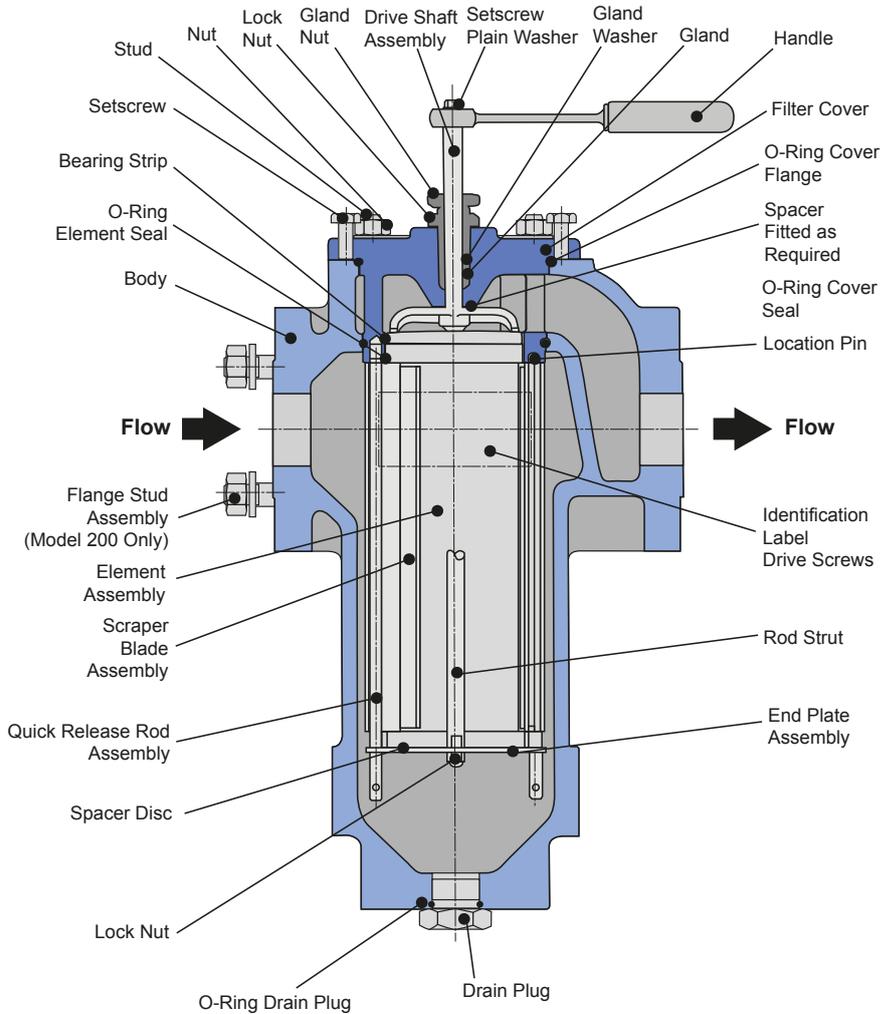
Either – multiply the pressure drop for water shown in the chart by the following correction factors to obtain the actual pressure drop. (Water has a viscosity of 1 centistoke at 20°C)

Or – divide the acceptable pressure drop by the necessary correction factor in the table below and then use the chart to determine the filter size and flow rate.

Correction factors for pressure drop

VISCOSITY CENTISTOKES	FILTRATION RATING				
	1000 MM	500 MM	200 MM	100 MM	50 MM
1	1	1	1.1	1.2	1.45
50	1.4	1.8	2.1	2.3	2.5
230	1.70	2.5	3.0	3.35	3.75
370	1.8	3.0	3.4	3.8	4.3
860	2.6	3.7	4.2	5.0	6.0

SPARE PARTS IDENTIFIER



O-Rings, Gland Packing and Washers available only in Seal Kit

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EXCELLENCE
PARTNERSHIP**

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