

"COMPO CARE" - Pressure filters

PB



TECHNICAL DATA

ORDERING AND OPTIONS CHART

CLOGGING INDICATORS

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PRESSURE DROP (Δp) CURVES - MEDIA H+

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DIMENSIONS OF THE FILTER ELEMENT

"COMPO CARE" PRESSURE FILTERS

PB

COMPATIBILITY

Full with fluids: HH-HL-HM-HR-HV-HG
(according to ISO 6743/4). For fluids different than the above mentioned, please contact our sales Department.

PRESSURE

Max. working	6,000 psi (420 bar)
Test	9,000 psi (620 bar)
Bursting	18,250 psi (1.260 bar)
Collapse, differential for the filter element	
Series standard	300 psi (20 bar)
serie H+	3,000 psi (210 bar)

BYPASS VALVE

Setting 90 psi (6 bar) +/-10%

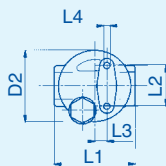
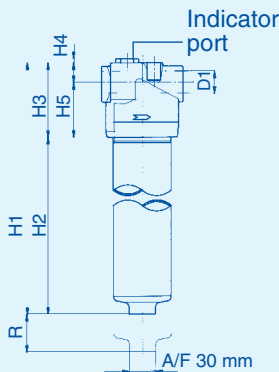
WORKING TEMPERATURE

from -15° to +230° F

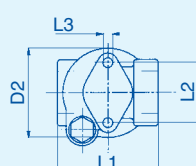
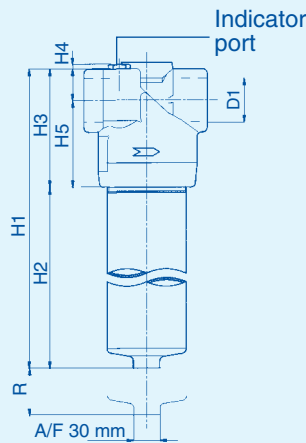
MATERIALS

Head	Cast iron
Bowl	Steel
Bypass valve	Steel
Seals	Nitrile (NBR) (FKM - on request fluoroelastomer)
Indicator housing	Brass

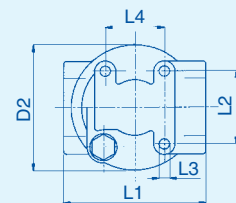
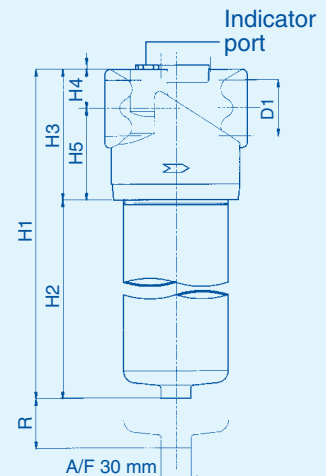
FPB 1



FPB 2



FPB 3



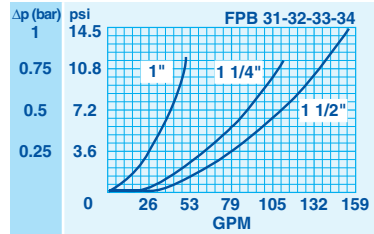
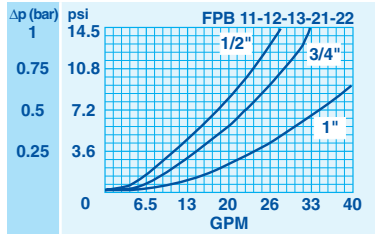
	D1	D2	H1	H2	H3	H4	H5	L1	L2	L3	L4	R	Weight lbs	
F PB11	3/4"	3.23	6.50	3.11	3.39	0.91	2.48	3.35	1.81	5/16"	0.49	3.94	9.3	
F PB12	3/4"	3.23	7.68	4.29	3.39	0.91	2.48	3.35	1.81		0.49	3.94	9.7	
F PB13	3/4"	3.23	11.61	8.23	3.39	0.91	2.48	3.35	1.81		0.49	3.94	11.0	
F PB21	3/4" - 1"	3.70	8.90	4.57	4.33	1.38	3.03	4.21	2.56		=	3.94	13.9	
F PB22	3/4" - 1"	3.70	12.48	8.15	4.33	1.38	3.03	4.21	2.56	=	3.94	17.3		
F PB31	1" - 1 1/4" - 1 1/2"	5.04	9.61	4.21	5.39	1.73	3.66	5.63	3.46	7/16"	1.69	3.94	23.2	
F PB32	1" - 1 1/4" - 1 1/2"	5.04	13.23	7.83	5.39	1.73	3.66	5.63	3.46		1.69	3.94	29.4	
F PB33	1" - 1 1/4" - 1 1/2"	5.04	17.95	12.56	5.39	1.73	3.66	5.63	3.46		14 UNC	1.69	3.94	36.4
F PB34	1" - 1 1/4" - 1 1/2"	5.04	21.93	16.54	5.39	1.73	3.66	5.63	3.46			1.69	3.94	46.5

PRESSURE DROP (Δp) CURVES

The "Assembly Pressure Drop (Δp)" is obtained by adding the pressure drop values of the filter Housing and of the Clean Filter Element corresponding to the

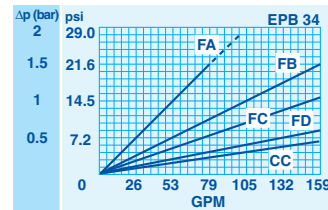
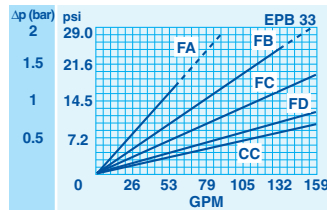
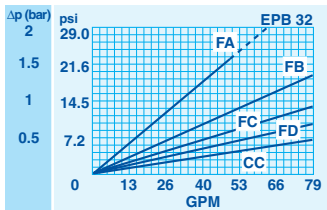
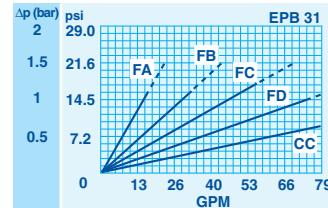
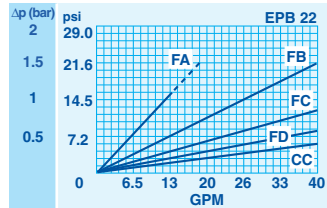
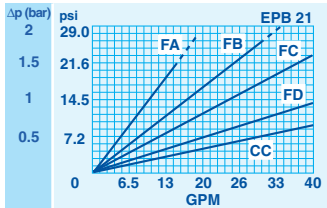
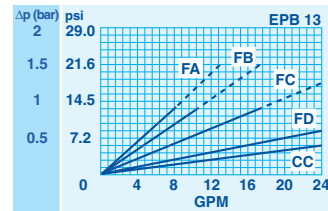
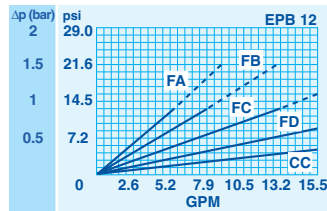
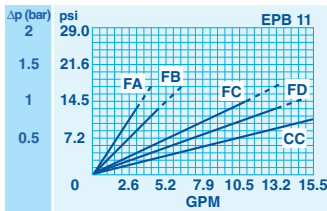
considered Flow Rate and it must be lower than 17 psi (1.2 bar).

FILTER HOUSING PRESSURE DROP (mainly depending on the port size)



CLEAN FILTER ELEMENT PRESSURE DROP USING MEDIA F+ e C+

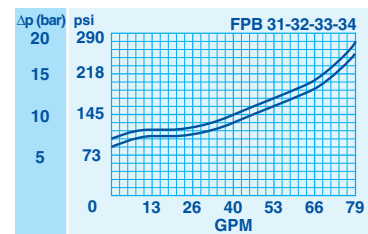
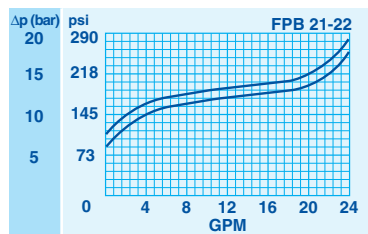
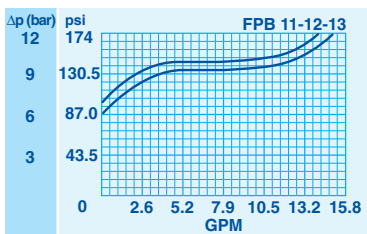
(depending both on the internal diameter of the element and on the filter media)



BYPASS VALVE PRESSURE DROP

When selecting the filter size, these curves must be taken into account if it is foreseen that any flow peak is to be absorbed by the bypass valve, it also must

be of proper configuration to avoid pressure peaks. The valve pressure drop is directly proportional to fluid specific gravity.



N.B. All the curves are obtained from test done at the UFI HYDRAULIC DIVISION Laboratory, according to the specification ISO 3968. In case of discrepancy, please check the contamination level, viscosity and features of the fluid in use.

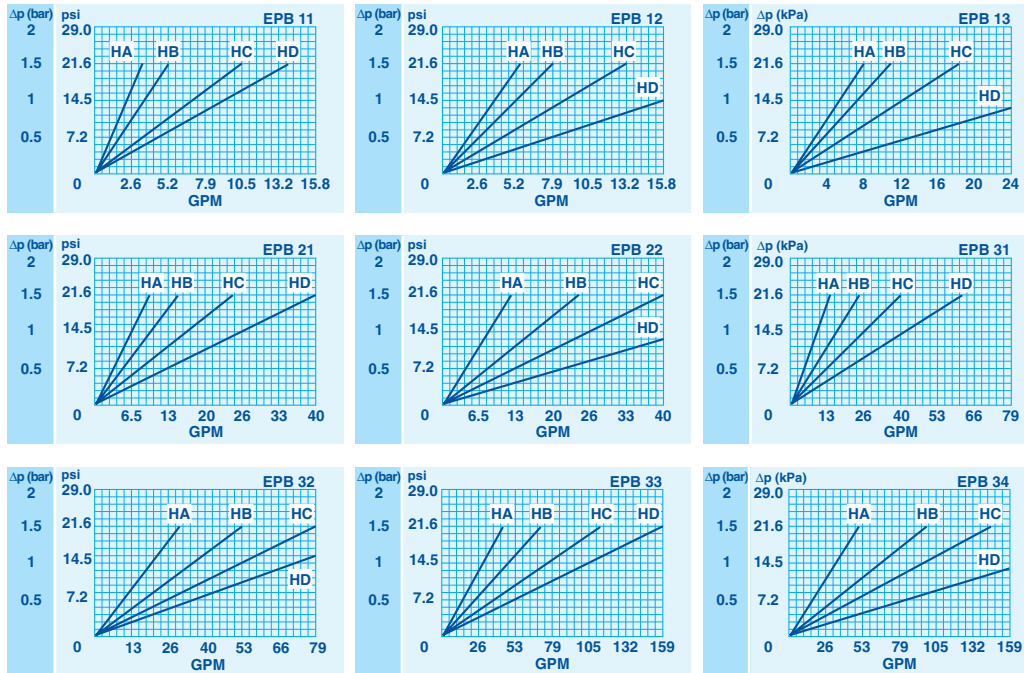
PRESSURE DROP (Δp) CURVES

The "Assembly Pressure Drop (Δp)" is obtained by adding the pressure drop values of the filter Housing and of the Clean Filter Element corresponding to the

considered Flow Rate and it must be lower than 17 psi (1.2 bar).

CLEAN FILTER ELEMENT PRESSURE DROP (depending both on the internal diameter of the element and on the filter media)

MEDIA H+ (recommended with no bypass option)



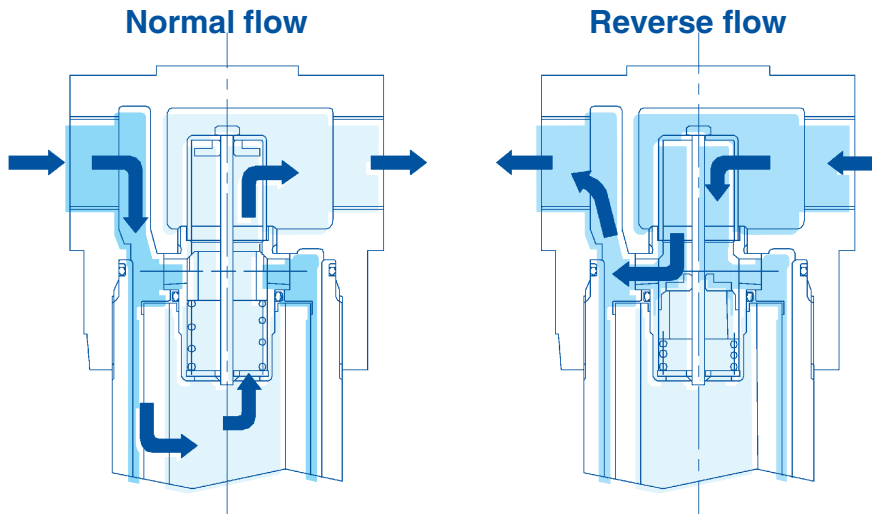
N.B.
All the curves have been obtained with mineral oil having a kinematic viscosity 30 cSt and specific gravity 0.9 ; for fluids with different features, please consider the factors described in the first part of this catalogue.

N.B. All the curves are obtained from test done at the UFI HYDRAULIC DIVISION Laboratory, according to the specification ISO 3968. In case of discrepancy, please check the contamination level, viscosity and features of the fluid in use.

REVERSE FLOW VALVE

For hydraulic systems where reverse flow can occur, the pressure filters series FPB2+ and FPB3+ are available with a free reverse flow valve allowing the fluid to pass through the filter element in the normal direction and to bypass the filter element in the reverse

direction (option "R"). The reverse flow valve is available also with incorporated bypass valve for the normal flow direction, set at 6 bar (option "P").

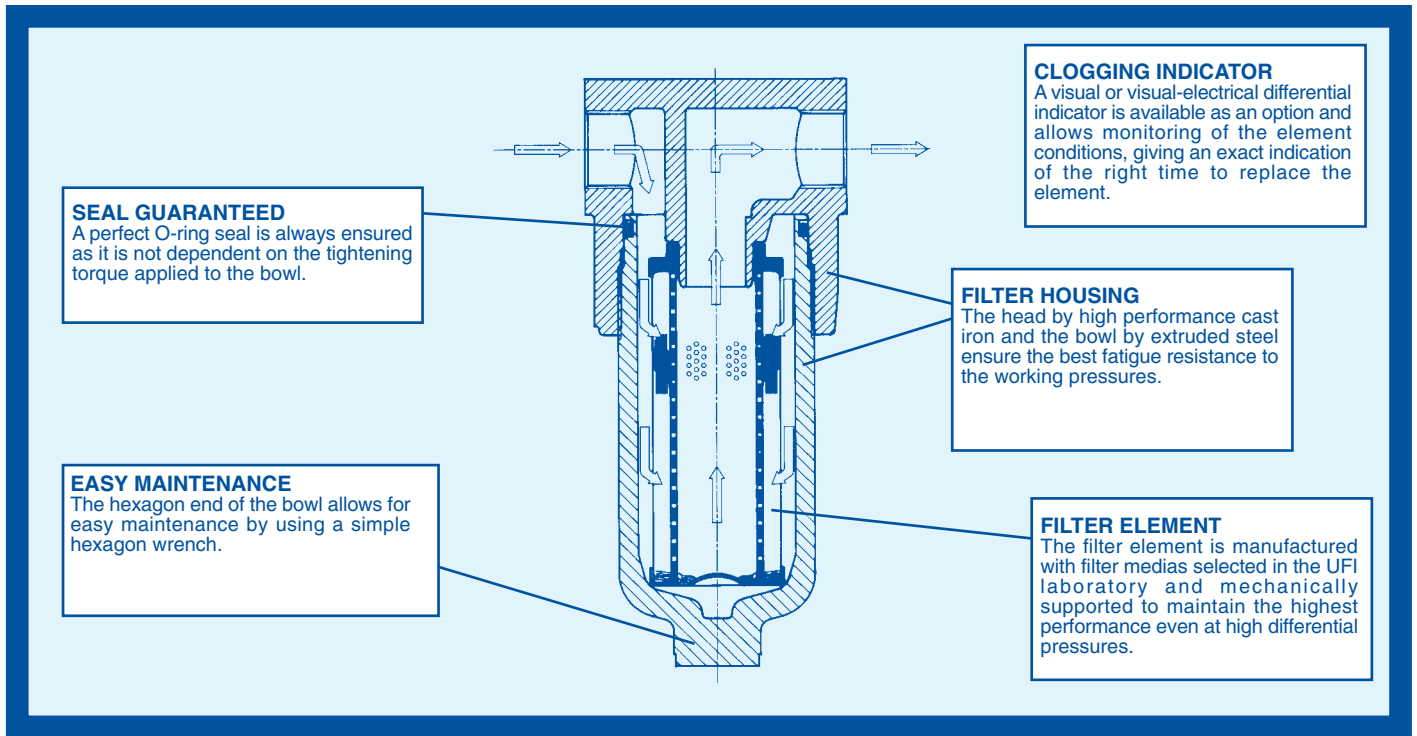


In normal flow conditions the whole flow pass through the filter element. In the option "P", if the differential pressure across the element exceeds 6 bar the bypass is activated. For the pressure drop through the bypass valve, please see our catalogue COMPO CARE - series PB.

In reverse flow conditions the flow bypasses the filter element.

Pressure drop through the valve in the reverse direction:
6 psi at 26 GPM
9 psi at 53 GPM
12 psi at 79 GPM

CROSS FUNCTIONAL VIEW

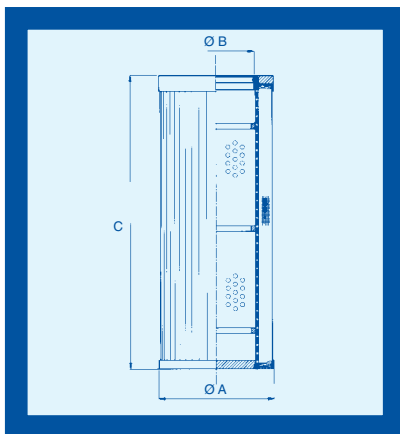


SPARE PARTS ORDERING INFORMATION

(from the code of the complete filter, fill the digits corresponding to the boxes)

Filter housing	B	P	B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	X	<input type="checkbox"/>	<input type="checkbox"/>	X
Head	S	P	B	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	X	X	X	X	X
Bowl	S	P	B	<input type="checkbox"/>	<input type="checkbox"/>	X	X	X	X	<input type="checkbox"/>	X	X	X	X	X
Seal kit	S	P	B	<input type="checkbox"/>	X	X	X	X	X	<input type="checkbox"/>	X	X	X	X	X

DIMENSIONS OF THE FILTER ELEMENT



Type	A	B	C	Area (in ²)	
				Media F+	Media C+
EPB 11	1.77	0.98	3.35	55.0	48.1
EPB 12	1.77	0.98	4.57	77.5	67.4
EPB 13	1.77	0.98	8.31	144.9	126.3
EPB 21	2.05	0.93	4.53	151.1	120.9
EPB 22	2.05	0.93	8.27	283.7	227.1
EPB 31	3.07	1.67	4.65	310.0	266.6
EPB 32	3.07	1.67	8.27	572.7	491.4
EPB 33	3.07	1.67	12.99	778.9	623.9
EPB 34	3.07	1.67	16.93	1,020.7	1,020.7

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