

COMPO CARE
 Pressure Filters

PB



CLOGGING INDICATOR
 A visual or visual-electrical differential indicator is available as an option and allows monitoring of the element conditions, giving an exact indication of the right time to replace the element.

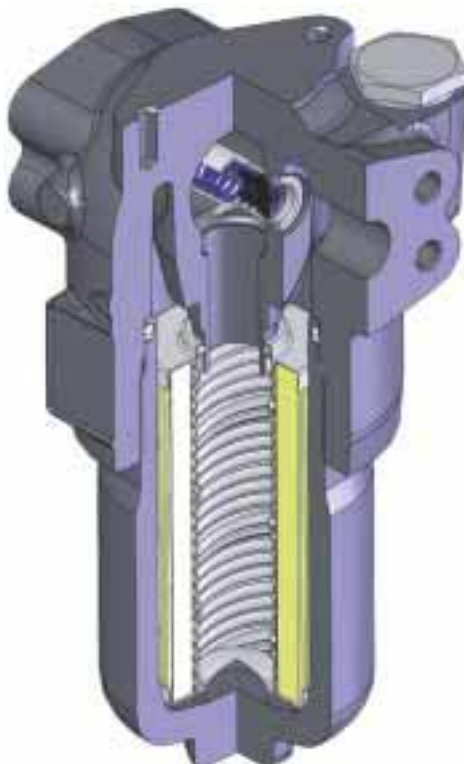


FILTER HOUSING
 The head by high performance cast iron and the bowl by extruded steel ensure the best fatigue resistance to the working pressures.

FILTER ELEMENT
 The filter element is manufactured with filter medias selected in the UFI laboratory and mechanically supported to maintain the highest performance even at high differential pressures.

SEAL GUARANTEED
 A perfect O-ring seal is always ensured as it is not dependent on the tightening torque applied to the bowl.

EASY MAINTENANCE
 The hexagon end of the bowl allows for easy maintenance by using a simple hexagon wrench.



MATERIALS

Head:
 Cast iron

Bowl:
 Steel

Bypass valve:
 Steel

Seals:
 NBR Nitrile
 (FKM - on request fluoroelastomer)

Indicator housing:
 Brass

PRESSURE (ISO 10771-1:2002)

Max. working: 42 MPa (420 bar)

Test: 62 MPa (620 bar)

Bursting: 126 MPa (1.260 bar)

Collapse, differential for the filter element (ISO 2941):
 series standard 2 MPa (20 bar)
 serie H+ 21 MPa (210 bar)

BYPASS VALVE

Setting:
 600 kPa (6 bar) +/-10%

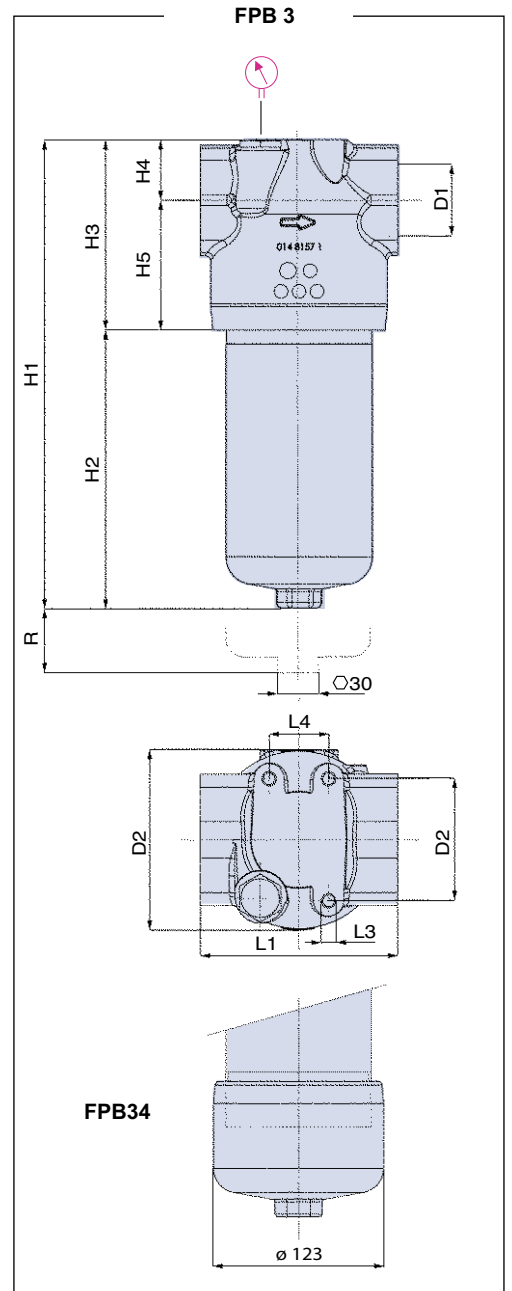
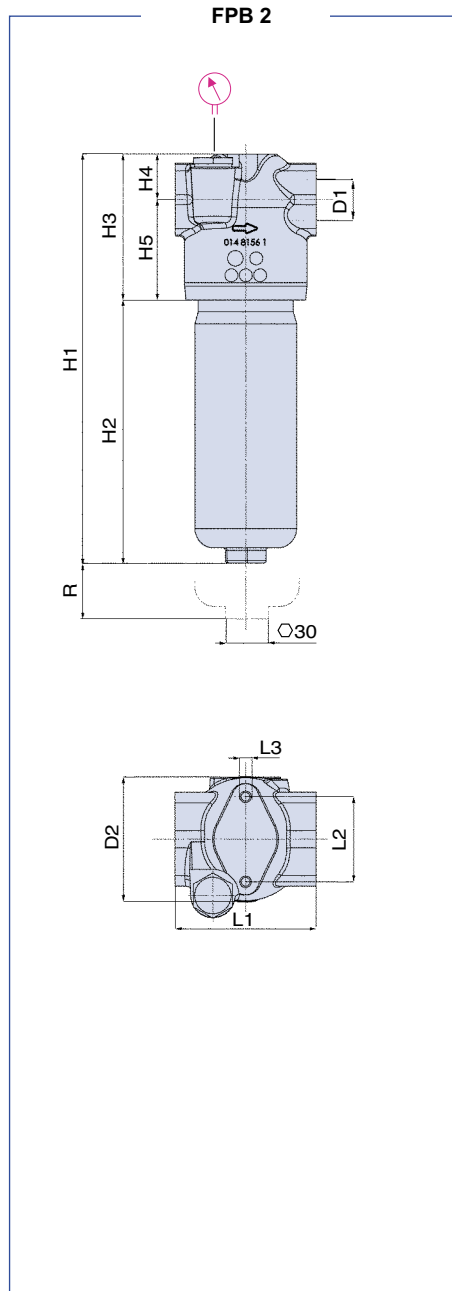
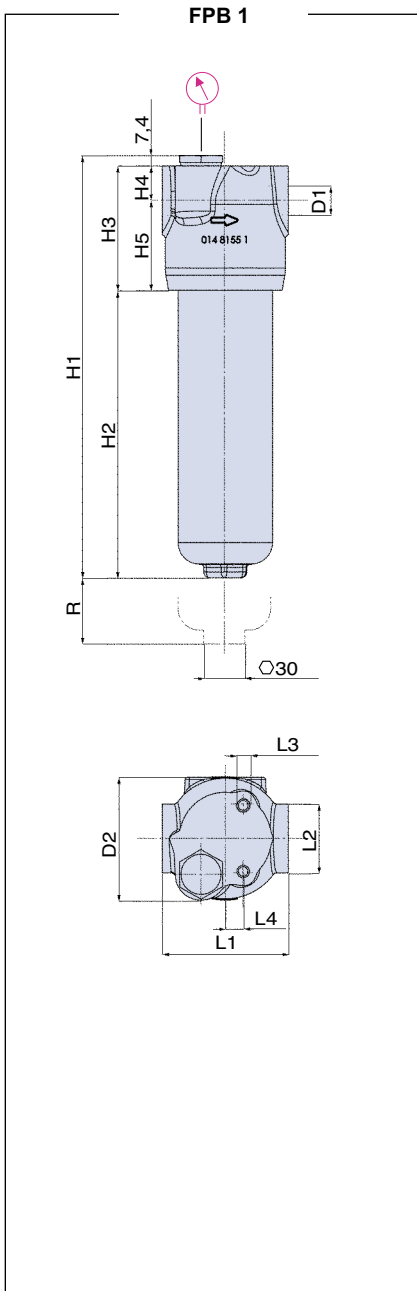
WORKING TEMPERATURE

From -25° to +110° C

COMPATIBILITY (ISO 2943:1999)

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.

INSTALLATION DRAWING



DIMENSIONS AND WEIGHTS

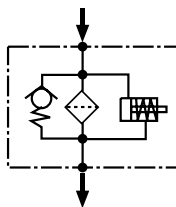
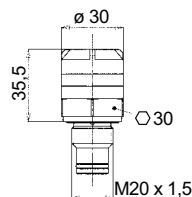
FILTER HOUSING

	D1	D2	H1	H2	H3	H4	H5	L1	L2	L3	L4	R	kg
FPB11	1/2" - 3/4"	86	166	79	87	24	63	88	46	M8	12,5	100	4,4
FPB12	1/2" - 3/4"	86	196	109	87	24	63	88	46	M8	12,5	100	4,6
FPB13	1/2" - 3/4"	86	296	209	87	24	63	88	46	M8	12,5	100	5,2
FPB21	3/4" - 1"	94	226	116	112	35	77	108	65	M8	-	100	6,6
FPB22	3/4" - 1"	94	317	207	112	35	77	108	65	M8	-	100	8,2
FPB31	1" - 1 1/4" - 1 1/2"	128	245	107	138	44	94	143	88	M10	43	100	11,0
FPB32	1" - 1 1/4" - 1 1/2"	128	337	199	138	44	94	143	88	M10	43	100	13,9
FPB33	1" - 1 1/4" - 1 1/2"	128	457	319	138	44	94	143	88	M10	43	100	17,2
FPB34	1" - 1 1/4" - 1 1/2"	128	558	420	138	44	94	143	88	M10	43	100	22,0

CLOGGING INDICATORS Differential

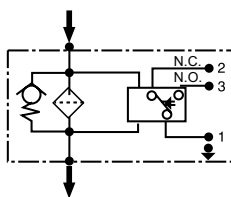
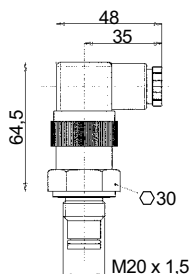
Recommended tightening torque 90 Nm

SERIES 5E - 5F



Series 5E & 5F:
differential visual indicator,
set 500 kPa (5 bar) - 5E
& 800 kPa (8 bar) - 5F +/-10%

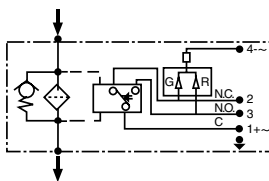
SERIES 6E - 6F & SERIES 7E - 7F



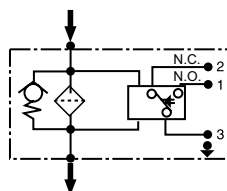
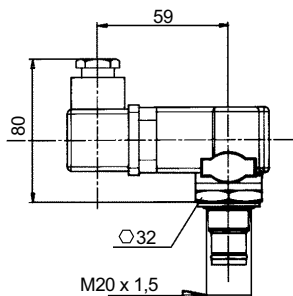
Series 6E & 6F (series 7E & 7F with LED - 24V):
differential electrical indicator,
set 500 kPa (5 bar) - 6E
& 800 kPa (8 bar) - 6F +/-10%.

Connector according to DIN 43650.
Protection IP65 according to DIN 40050.
SPDT: C.A. 125-250 V

> max resistive or inductive load 1A;
C.C. 14-30 V
> max resistive or inductive load 4-3 A resp.



SERIES T2 - T3



Series T2 & T3:
differential electrical indicator
with thermostat 30°C,
set 500 kPa (5 bar) - T2 &
800 kPa (8 bar) - T3 +/-10%.

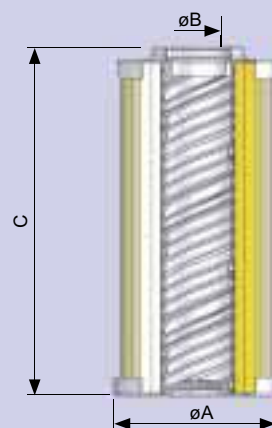
Connector according to DIN 43650.
Protection IP65 according to DIN 40050.
SPDT: C.A. 125-250 V

> max resistive or inductive load 1A;
C.C. 14-30 V
> max resistive or inductive load 4-3 A resp.

SERIES 72 - 73 AVAILABLE ONLY ON REQUEST - SEE SUMMING UP OF THE CLOGGING INDICATORS

FILTER ELEMENT

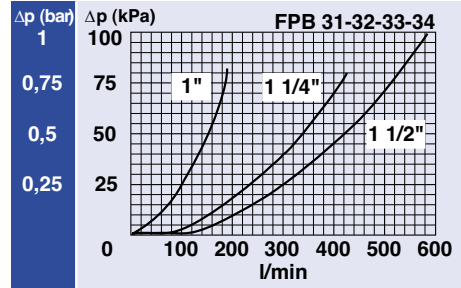
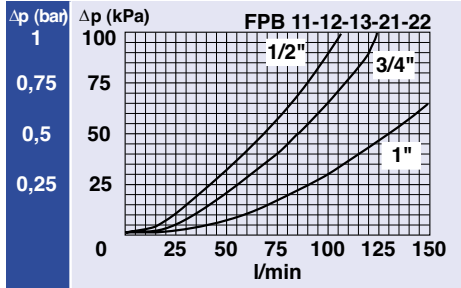
	A	B	C	kg media F+&C+	kg media H+	Area (cm ²)		
						Media F+	Media H+	Media C+
EPB11	45	25	85	0,15	0,25	355	340	310
EPB12	45	25	116	0,20	0,55	500	475	435
EPB13	45	25	211	0,30	0,45	935	915	815
EPB21	52	23,5	115	0,25	0,40	975	975	780
EPB22	52	23,5	210	0,35	0,55	1.830	1.785	1.465
EPB31	78	42,5	118	0,40	0,70	2.000	1.470	1.720
EPB32	78	42,5	210	0,80	1,30	3.695	2.695	3.170
EPB33	78	42,5	330	1,00	1,60	5.025	4.325	4.025
EPB34	78	42,5	430	1,20	1,80	6.585	5.685	6.585



PRESSURE DROP CURVES (Δp)

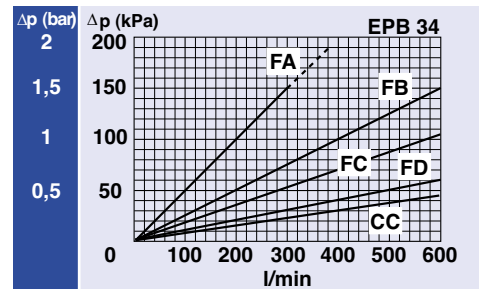
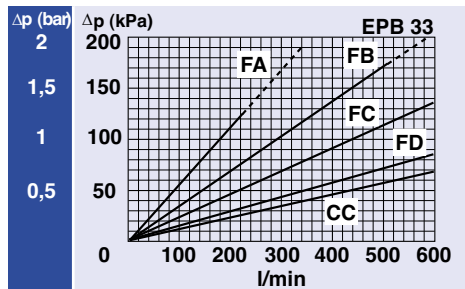
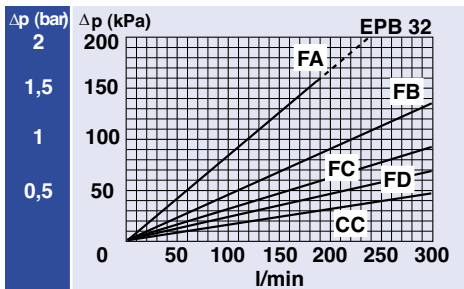
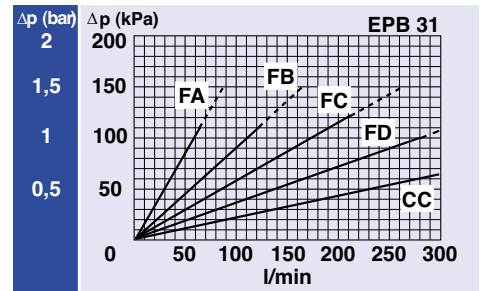
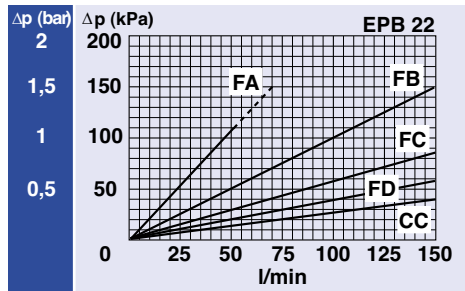
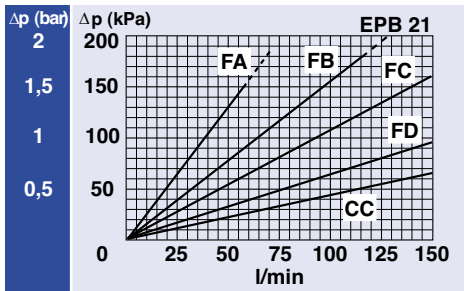
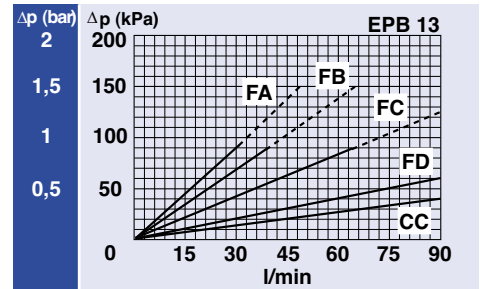
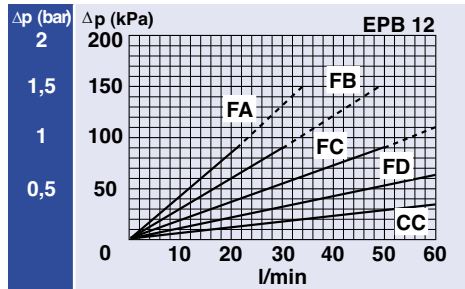
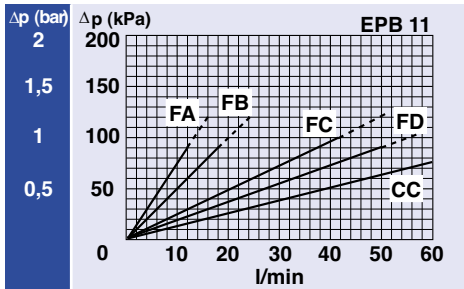
The "Assembly Pressure Drop (Δp)" is obtained by adding the pressure drop values of the Filter Housing and and of the Clean Filter Element corresponding to the considered Flow Rate and it must be lower than 120 kPa (1,2 bar).

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



CLEAN FILTER ELEMENT PRESSURE DROP WITH F+ AND C+ MEDIA

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



PRESSURE DROP CURVES (Δp)

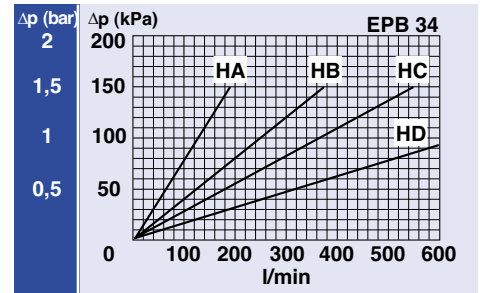
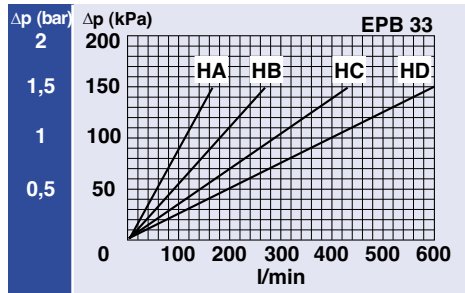
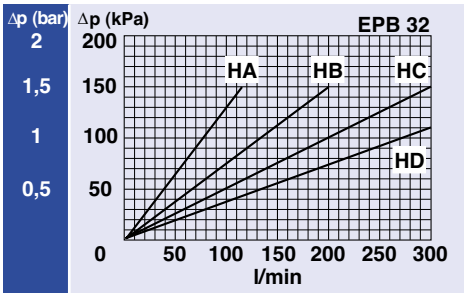
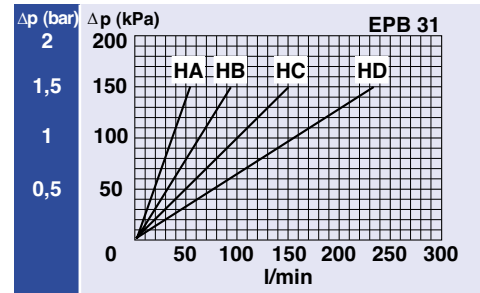
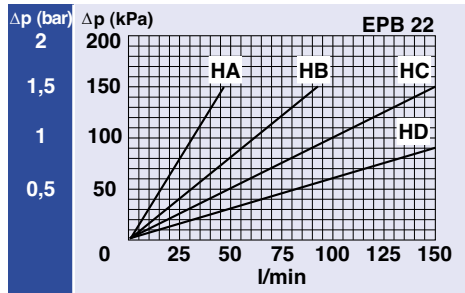
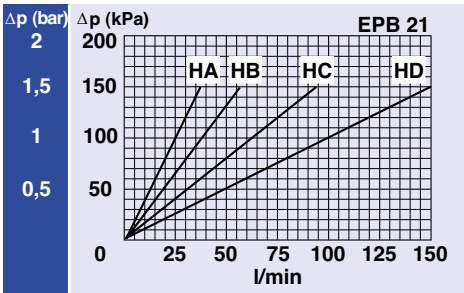
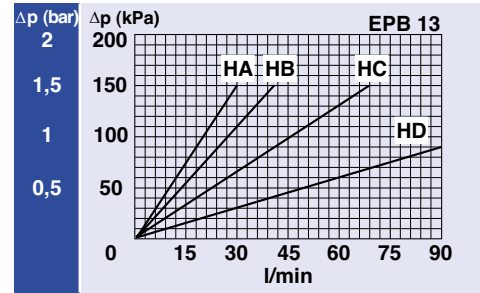
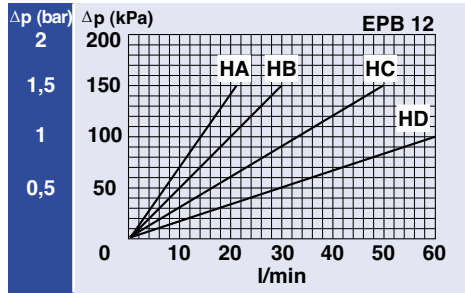
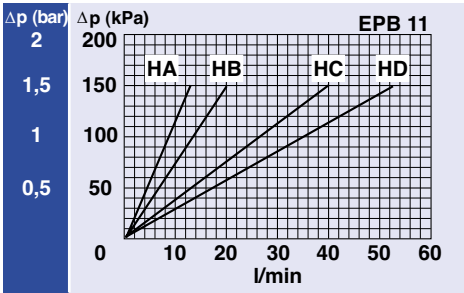
The "Assembly Pressure Drop (Δp)" is obtained by adding the pressure drop values of the Filter Housing and of the Clean Filter Element corresponding to the considered Flow Rate and it must be lower than 120 kPa (1,2 bar).

CLEAN FILTER ELEMENT PRESSURE DROP

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

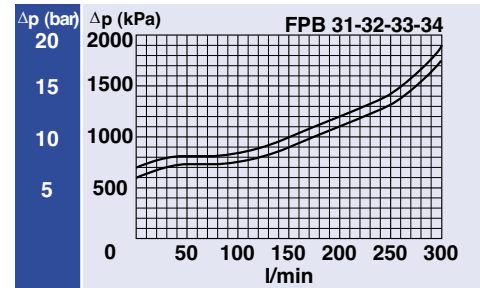
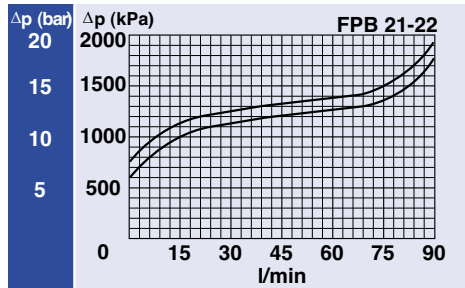
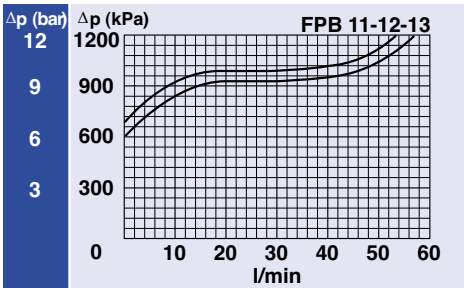
WITH H+ MEDIA

(recommended with no bypass option)



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 have been obtained with mineral oil having a kinematic viscosity 30 cSt and specific gravity 0,9 kg/dm³; for fluids with different features, please consider the factors described in the first part of this catalogue. All the curves are obtained from test done at the UFI HYDRAULIC DIVISION Laboratory, according to the specification ISO 3968:2005. In case of discrepancy, please check the contamination level, viscosity and features of the fluid in use.

ORDERING AND OPTIONS CHART

TYPE												ELEMENT		E		
F = FILTER COMPLETE		F	F	F	F	F	F	F	F	F	F					
B = FILTER HOUSING		B	B	B	B	B	B	B	B	B	B					
P	B	FAMILY, SIZE & LENGTH										FAMILY SIZE & LENGTH		P	B	
		11	12	13	21	22	31	32	33	34						
PORT TYPE																
B = BSP - thread		B	B	B	B	B	B	B	B	B	B					
N = NPT - thread		N	N	N	N	N	N	N	N	N	N					
S = SAE - thread		S	S	S	S	S	S	S	S	S	S					
F = SAE Flange 3000 psi		-	-	-	F	F	F	F	F	F	F					
G = SAE Flange 6000 psi		-	-	-	G	G	G	G	G	G	G					
PORT SIZE																
04 = 1/2" (N04 not available)		04	04	04	-	-	-	-	-	-	-					
06 = 3/4"		06	06	06	06	06	-	-	-	-	-					
08 = 1" (G08 not available; F08 for PB2+ only)		-	-	-	08	08	08	08	08	08	08					
10 = 1 1/4"		-	-	-	-	-	10	10	10	10	10					
12 = 1 1/2" (G12 option not available)		-	-	-	-	-	12	12	12	12	12					
BYPASS VALVE																
W = without		W	W	W	W	W	W	W	W	W	W					
C = 600 kPa (6 bar)		C	C	C	C	C	C	C	C	C	C					
R = reverse flow valve		-	-	-	R	R	R	R	R	R	R					
P = reverse flow + bypass valve		-	-	-	P	P	P	P	P	P	P			on request only		
SEALS												SEALS				
N = NBR Nitrile		N	N	N	N	N	N	N	N	N	N	N = NBR				
F = FKM Fluoroelastomer		F	F	F	F	F	F	F	F	F	F	F = FKM				
FILTER MEDIA												FILTER MEDIA				
FA = fiber 5 μm _e β>1.000 Δp 2MPa (20 bar)		FA	FA	FA	FA	FA	FA	FA	FA	FA	FA	FA = fib. 5μm _e 20 bar				
FB = fiber 7 μm _e β>1.000 Δp 2MPa (20 bar)		FB	FB	FB	FB	FB	FB	FB	FB	FB	FB	FB = fib. 7μm _e 20 bar				
FC = fiber 12 μm _e β>1.000 Δp 2MPa (20 bar)		FC	FC	FC	FC	FC	FC	FC	FC	FC	FC	FC = fib. 12μm _e 20 bar				
FD = fiber 21 μm _e β>1.000 Δp 2MPa (20 bar)		FD	FD	FD	FD	FD	FD	FD	FD	FD	FD	FD = fib. 21μm _e 20 bar				
HA = fiber 5 μm _e β>1.000 Δp 21MPa (210 bar)		HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA = fib. 5μm _e 210 bar				
HB = fiber 7 μm _e β>1.000 Δp 21MPa (210 bar)		HB	HB	HB	HB	HB	HB	HB	HB	HB	HB	HB = fib. 7μm _e 210 bar				
HC = fiber 12 μm _e β>1.000 Δp 21MPa (210 bar)		HC	HC	HC	HC	HC	HC	HC	HC	HC	HC	HC = fib. 12μm _e 210 bar				
HD = fiber 21 μm _e β>1.000 Δp 21MPa (210 bar)		HD	HD	HD	HD	HD	HD	HD	HD	HD	HD	HD = fib. 21μm _e 210 bar				
CC = cellulose 10 μm β>2 Δp 2MPa (20 bar)		CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC = cel. 10 μm 20 bar				
CLOGGING INDICATORS																
03 = port, plugged		03	03	03	03	03	03	03	03	03	03					
5E = visual differential 500 kPa (5 bar)		5E	5E	5E	5E	5E	5E	5E	5E	5E	5E					
5F = visual differential 800 kPa (8 bar)		5F	5F	5F	5F	5F	5F	5F	5F	5F	5F					
6E = electrical differential 500 kPa (5 bar)		6E	6E	6E	6E	6E	6E	6E	6E	6E	6E					
6F = electrical differential 800 kPa (8 bar)		6F	6F	6F	6F	6F	6F	6F	6F	6F	6F					
7E = indicator 6E with LED		7E	7E	7E	7E	7E	7E	7E	7E	7E	7E					
7F = indicator 6F with LED		7F	7F	7F	7F	7F	7F	7F	7F	7F	7F					
T2 = elect. diff. 500 kPa (5 bar) with thermostat 30°C		T2	T2	T2	T2	T2	T2	T2	T2	T2	T2					
T3 = elect. diff. 800 kPa (8 bar) with thermostat 30°C		T3	T3	T3	T3	T3	T3	T3	T3	T3	T3					
X ACCESSORIES																
X = no accessory available		X	X	X	X	X	X	X	X	X	X					

When the filter is ordered with FKM seals, the first digit of the indicator code is a letter (please ask for relevant information).

N.B. Indicator series 72 & 73 only on request

