

# FPD-MDF

## PRESSURE FILTERS



### MATERIALS

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

### PRESSURE

Max working: 31,5 MPa (315 bar)  
Collapse, differential for the filter element (ISO 2941):  
21 MPa (210 bar)

### WORKING TEMPERATURE

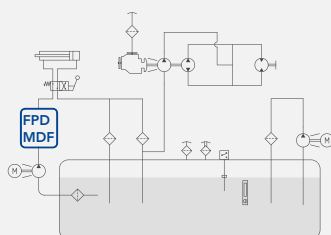
From -25° to +110° C

### COMPATIBILITY (ISO 2943)

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



### HYDRAULIC DIAGRAM



Is this datasheet the latest release? Please check on our website.

### ORDERING AND OPTION CHART

F	P	D	COMPLETE FILTER FAMILY											FILTER ELEMENT FAMILY			E	P	B	
			SIZE & LENGHT	01	02	12	21	22	31	32	33	34								
				01	12	12	21	22	31	32	33	34	SIZE & LENGHT							
			PORT TYPE																	
			C = CETOP interface	C	C	C	C	C	C	C	C	C	C	C						
			Y = bowl side B	Y	Y	-	-	-	-	-	-	-	-							
			PORT SIZE																	
			03 = CETOP 3 (size 6)	03	03	-	-	-	-	-	-	-	-							
			05 = CETOP 5 (size 10)	-	-	05	-	-	-	-	-	-	-							
			07 = CETOP 7 (size 16)	-	-	-	07	07	-	-	-	-								
			30 = size 30	-	-	-	-	-	30	30	30	30								
X			BYPASS VALVE																	
			X = not available	X	X	X	X	X	X	X	X	X	X							
			SEALS											SEALS						
			N = NBR Nitrile	N	N	N	N	N	N	N	N	N	N							
			F = FKM Fluoroelastomer	F	F	F	F	F	F	F	F	F								
			FILTER MEDIA											FILTER MEDIA						
			HA = fibreglass 5 μm(c) β>1.000 Δp 21MPa (210 bar)	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA							
			HB = fibreglass 7 μm(c) β>1.000 Δp 21MPa (210 bar)	HB	HB	HB	HB	HB	HB	HB	HB	HB	HB							
			HC = fibreglass 12 μm(c) β>1.000 Δp 21MPa (210 bar)	HC	HC	HC	HC	HC	HC	HC	HC	HC	HC							
			HD = fibreglass 21 μm(c) β>1.000 Δp 21MPa (210 bar)	HD	HD	HD	HD	HD	HD	HD	HD	HD	HD							
			CLOGGING INDICATOR**																	
			03 = port, plugged	03	03	03	03	03	03	03	03	03	03							
			5F = visual differential 800 kPa (8 bar)	5F	5F	5F	5F	5F	5F	5F	5F	5F	5F							
			6F = electrical differential 800 kPa (8 bar)	6F	6F	6F	6F	6F	6F	6F	6F	6F	6F							
			7F = indicator 6F with LED	7F	7F	7F	7F	7F	7F	7F	7F	7F	7F							
			T3 = elect. diff. 800 kPa (8 bar) with thermostat 30°C	T3	T3	T3	T3	T3	T3	T3	T3	T3	T3							
X	X		ACCESSORIES																	
			XX = no accessory available	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX							

### SPARE PARTS ELEMENTS

FILTER HOUSING				FILTER ELEMENT				CLOGGING INDICATOR			
B	P	D	X	E	P	B					



# MDF

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### ORDERING AND OPTION CHART

M	D	F	COMPLETE FILTER FAMILY				FILTER ELEMENT FAMILY	C	C	H
			SIZE & LENGHT	003	005	007				
				003	152	302	SIZE & LENGHT			
			FILTER MEDIA				FILTER MEDIA			
			2T = fibreglass 5 $\mu\text{m(c)}$ $\beta > 1.000$ $\Delta p$ 21MPa (210 bar)	2T	2T	2T				
			2C = fibreglass 7 $\mu\text{m(c)}$ $\beta > 1.000$ $\Delta p$ 21MPa (210 bar)	2C	2C	2C				
			2D = fibreglass 12 $\mu\text{m(c)}$ $\beta > 1.000$ $\Delta p$ 21MPa (210 bar)	2D	2D	2D				
			2V = fibreglass 21 $\mu\text{m(c)}$ $\beta > 1.000$ $\Delta p$ 21MPa (210 bar)	2V	2V	2V				
			SEALS				SEALS			
			1 = NBR 1itrile	1	1	1				
			2 = FKM Fluoroelastomer	2	2	2				
		0	BYPASS VALVE							
			0 = not available	0	0	0				
			PORT TYPE							
			C = CETOP	C	C	C				
			Y = Bowl on side B	Y	-	-				
			PORT SIZE							
			3 = CETOP 3	3	-	-				
			5 = CETOP 5	-	5	-				
			7 = CETOP 7	-	-	7				
			CLOGGING INDICATOR**							
			03 = port, plugged	03	03	03				
			5F = visual differential 800 kPa (8 bar)	5F	5F	5F				
			6F = electrical differential 800 kPa (8 bar)	6F	6F	6F				
			7F = indicator 6F with LED	7F	7F	7F				
			T3 = elect. diff. 800 kPa (8 bar) with thermostat 30°C	T3	T3	T3				
X	X		ACCESSORIES							
			XX = no accessory available	XX	XX	XX				

### SPARE SEAL KIT

	NBR	FKM
FPD01 MDF003	521.0005.2	521.0073.2
FPD02 MDF005	521.0107.2	521.0108.2
FPD12 MDF007	521.0071.2	521.0074.2
FPD21	521.0072.2	521.0028.2
FPD22	521.0072.2	521.0028.2
FPD31	521.0109.2	521.0110.2
FPD32	521.0109.2	521.0110.2
FPD33	521.0109.2	521.0110.2
FPD34	521.0109.2	521.0110.2

\*\* When the filter is ordered with FKM seals, the first digit of the indicator code is a letter  
(please see Clogging Indicator Chapter for further details)

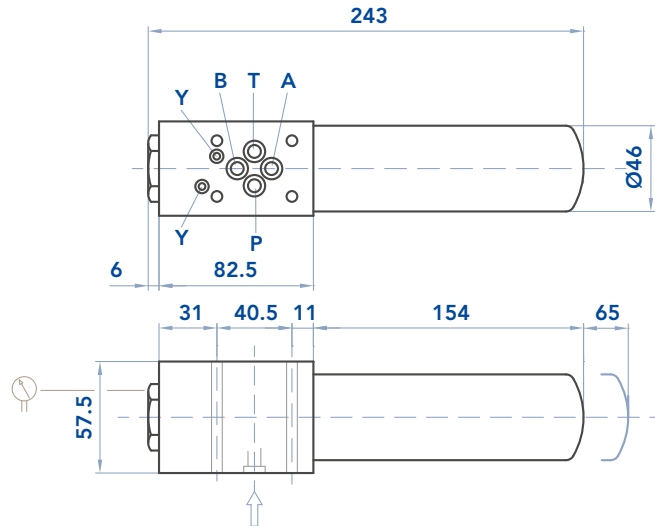
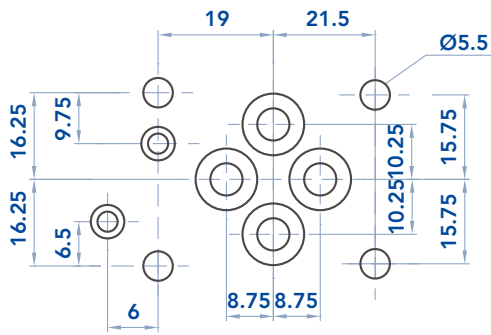
# FPD-MDF

## PRESSURE FILTERS

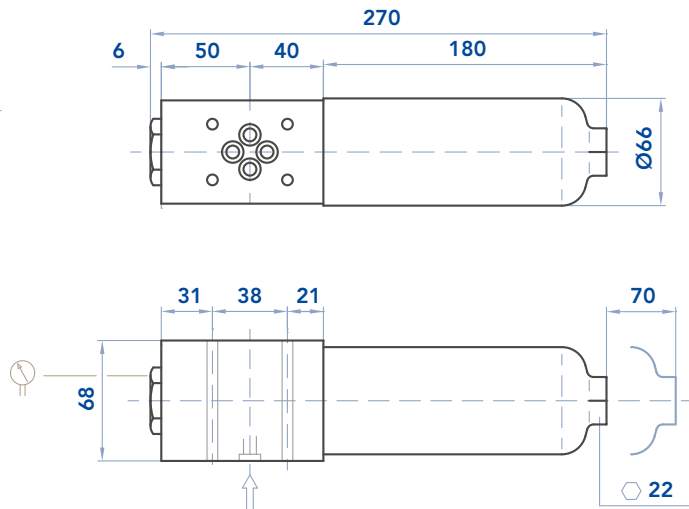
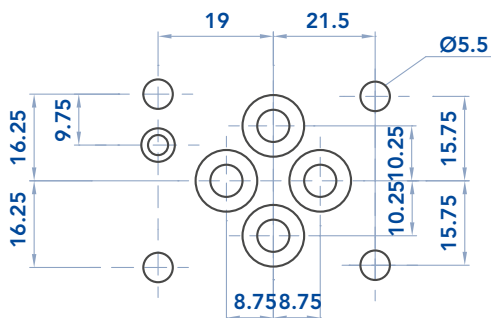


### INSTALLATION DRAWING

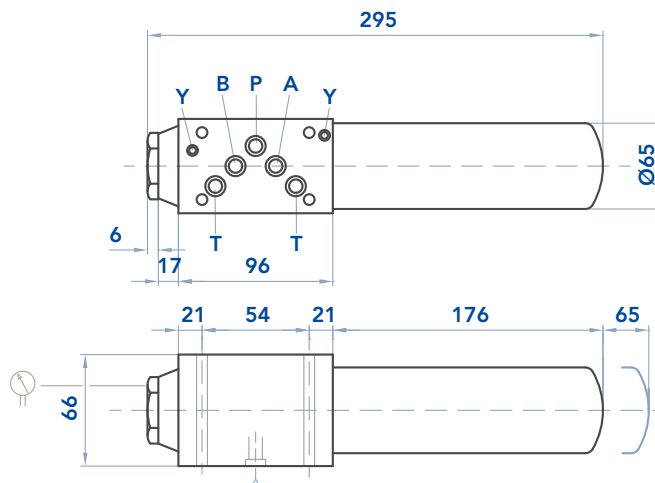
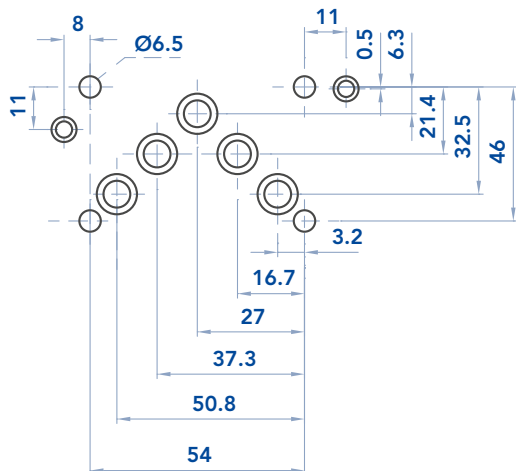
FPD 01 weight KG. 2.5



FPD 02 weight KG. 2.5



FPD 12 weight KG. 4.2

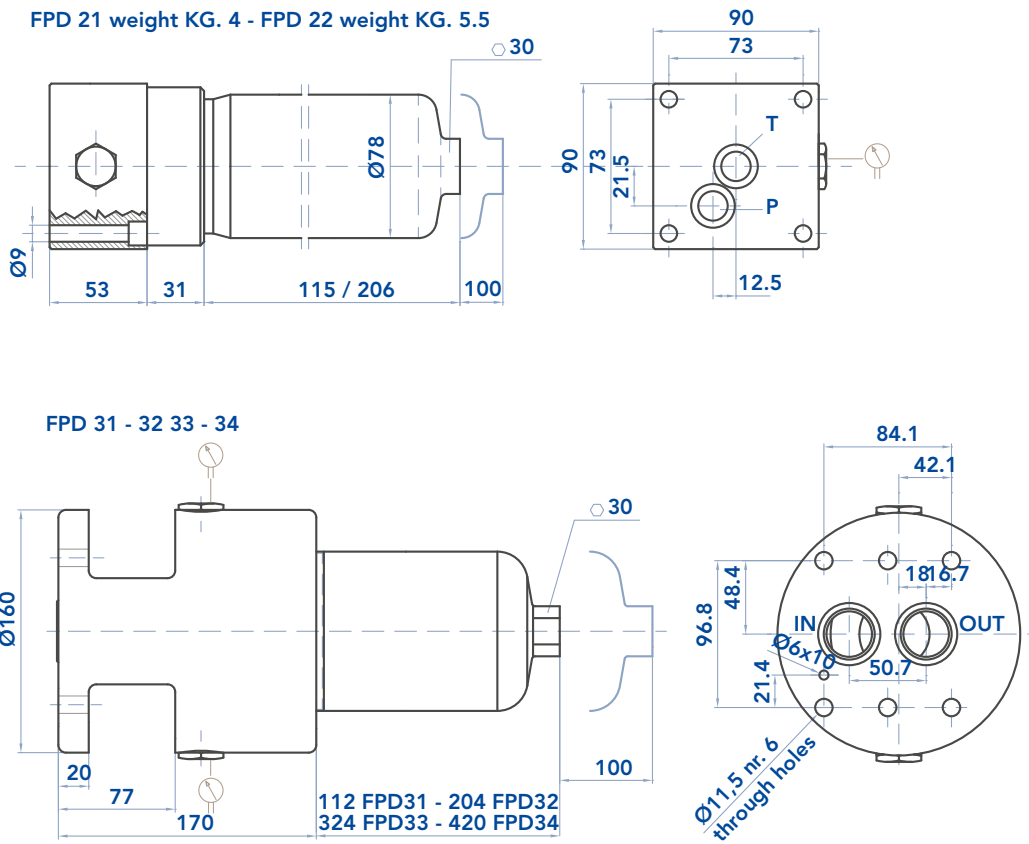


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PRESSURE FILTERS



## INSTALLATION DRAWING



# FPD-MDF

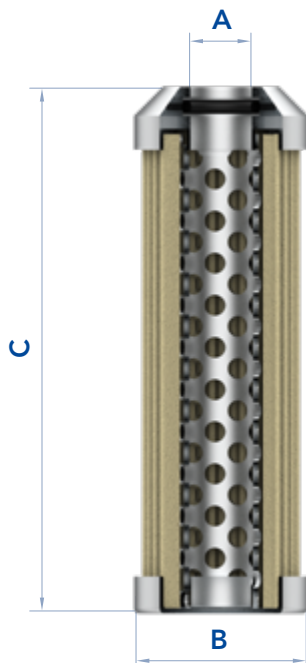
## PRESSURE FILTERS



### MAINTENANCE

The best time to change your filter element is just before it reaches its maximum dirt-holding capacity. For this reason, we recommend to monitor the pressure of the hydraulic oil flowing through the filter with a clogging indicator. When it is time to change the filter element, switch off the system before opening the filter housing and make sure there is no pressure in the filter. Unscrew the bowl and remove the dirty filter element. Replace it with an original UFI element, verifying the

part number on the filter label or on the catalogue. Clean the bowl; check the gaskets conditions and replace if necessary. Insert the clean element into his seat, handling with care and cleanliness. Screw the housing until it stops, with a tightening torque of 70 Nm +5/0. We recommend the stocking of a spare UFI filter element for timely replacement when required.



### FILTER ELEMENT

	A	B	C	Kg	AREA (cm <sup>2</sup> ) Media H+
EPB01 CCH003	16	33	100	0,14	270
EPB12 CCH152	25	45	116	0,55	475
EPB21 CCH301	23,5	52	115	0,40	975
EPB22 CCH302	23,5	52	210	0,55	1.785
EPB31 CCH801	42,5	78	118	0,70	1.470
EPB32 CCH802	42,5	78	210	1,30	2.695
EPB33 CCH803	42,5	78	330	1,60	4.325
EPB34 CCH804	42,5	78	430	1,80	5.685

The used filter elements cannot be cleaned and are classified as "Dangerous waste material". They must be disposed according to local laws by authorized Companies.

Verify that the Company you choose has the expertise and authorization to dispose this type of waste material.

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## PRESSURE FILTERS

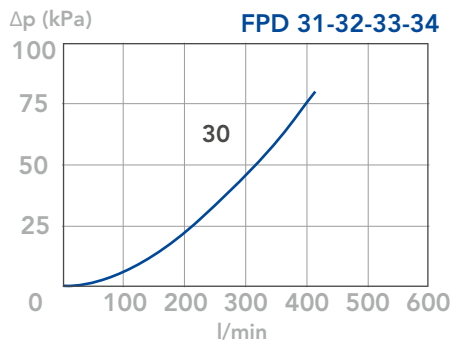
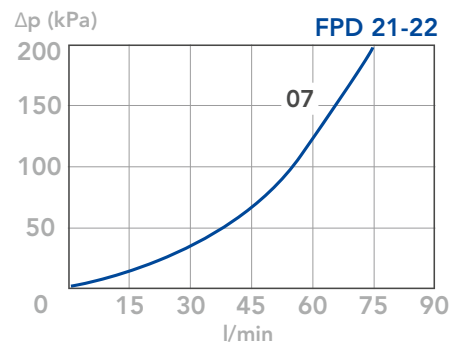
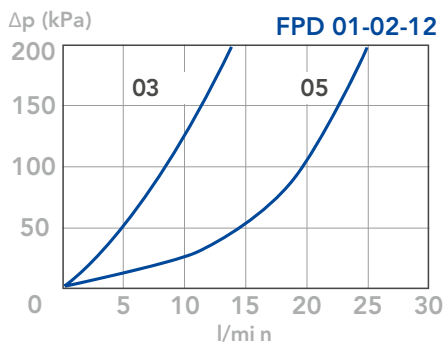


### PRESSURE DROP CURVES ( $\Delta p$ )

The "Assembly Pressure Drop ( $\Delta p$ )" 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) and should never exceed 1/3 of the bypass valve setting

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



### N.B.

All the curves have been obtained with mineral oil having a kinematic viscosity 30 cSt and specific gravity 0,86 Kg/dm<sup>3</sup>; for fluids with different features, please consider the factors described in the first part of this catalogue. All the curves

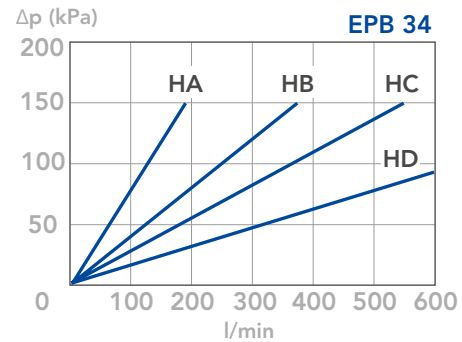
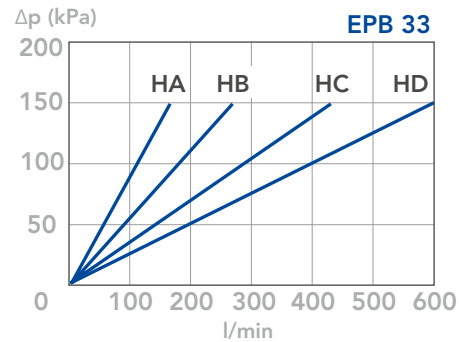
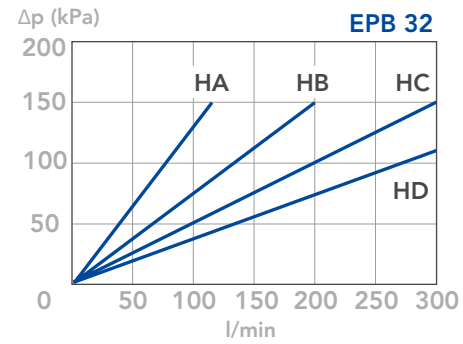
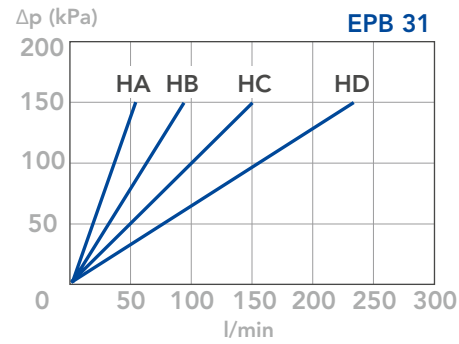
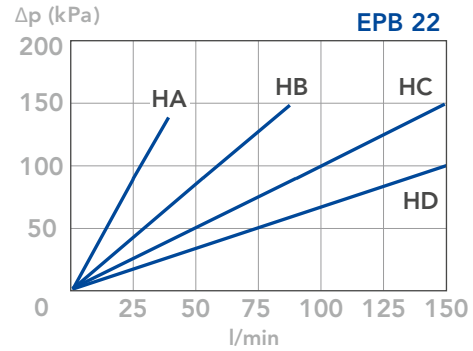
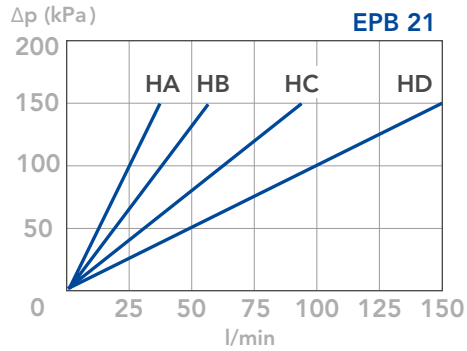
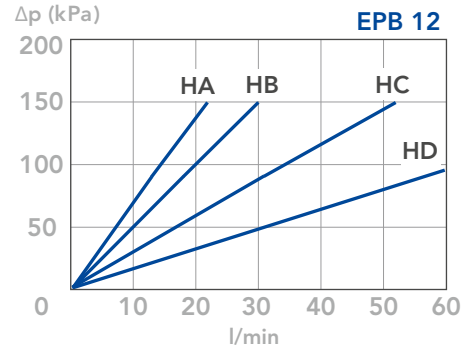
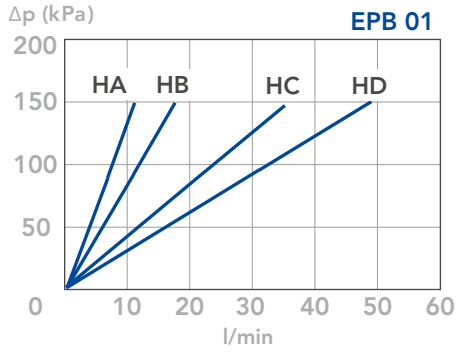
are obtained from test done at the UFI HYDRAULIC DIVISION Laboratory, according to the specification ISO 3968. In case of discrepancy, please check the contamination level, viscosity and features of the fluid in use.

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## PRESSURE FILTERS



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



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