



# FPD

## PRESSURE FILTERS

### DESCRIPTION

Modular inline filter

### MATERIALS

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

### PRESSURE

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

### FLOW RATE

Qmax 400 l/min

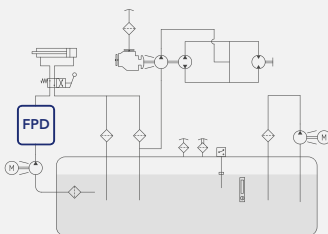
### WORKING TEMPERATURE

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

# FPD




## PRESSURE FILTERS

### ORDERING AND OPTION CHART

F	P	D	COMPLETE FILTER FAMILY											FILTER ELEMENT FAMILY			E	P	B
			SIZE & LENGTH	01	02	12	21	22	31	32	33	34	35						
				01	12	12	21	22	31	32	33	34	35	SIZE & LENGTH					
			PORT TYPE																
			C = CETOP interface	C	C	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	30						
X			BYPASS VALVE																
			X = not available	X	X	X	X	X	X	X	X	X	X	X	X				
			SEALS																
			N = NBR Nitrile	N	N	N	N	N	N	N	N	N	N	N	N				
			F = FKM Fluoroelastomer	F	F	F	F	F	F	F	F	F	F	F					
			FormulaUFI MEDIA																
			HA = FormulaUFI.MICRON 5 $\mu\text{m}_{(c)}$ $\beta > 1.000 \Delta p$ 21 MPa (210 bar)	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA					
			HB = FormulaUFI.MICRON 7 $\mu\text{m}_{(c)}$ $\beta > 1.000 \Delta p$ 21 MPa (210 bar)	HB	HB	HB	HB	HB	HB	HB	HB	HB	HB	HB					
			HC = FormulaUFI.MICRON 12 $\mu\text{m}_{(c)}$ $\beta > 1.000 \Delta p$ 21 MPa (210 bar)	HC	HC	HC	HC	HC	HC	HC	HC	HC	HC	HC					
			HD = FormulaUFI.MICRON 21 $\mu\text{m}_{(c)}$ $\beta > 1.000 \Delta p$ 21 MPa (210 bar)	HD	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	03					
			5F = visual differential 800 kPa (8 bar)	5F	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	6F					
			7F = indicator 6F with LED	7F	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	T3					
X	X		ACCESSORI / ACCESSORIES																
			XX = no accessories available	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX				

\*\* 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)

### SPARE PARTS

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



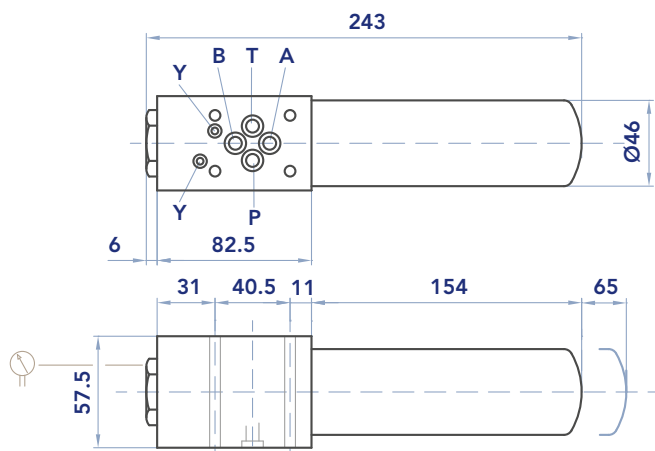
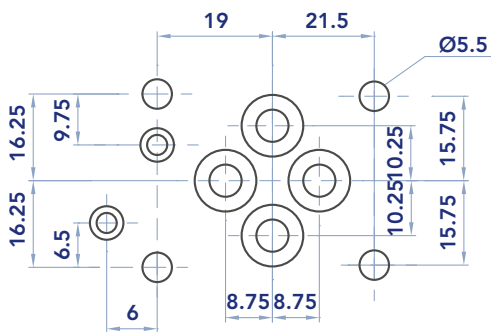
## SPARE SEAL KIT

	NBR	FKM
FPD01	521.0005.2	521.0073.2
FPD02	521.0107.2	521.0108.2
FPD12	521.0071.2	521.0074.2

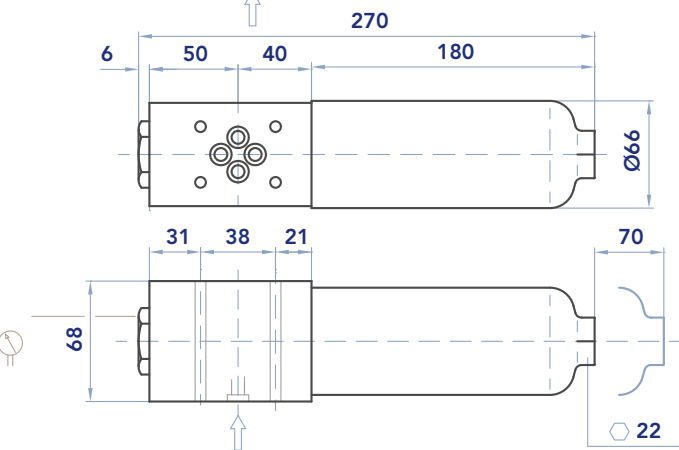
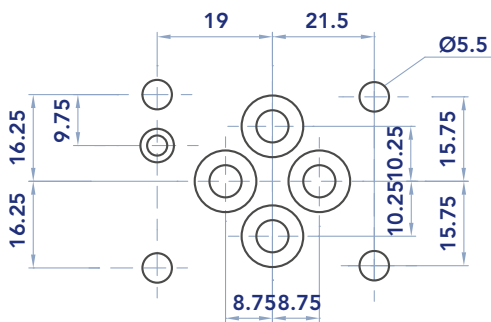
	NBR	FKM
FPD21-22	521.0072.2	521.0028.2
FPD31-32-33-34-35	521.0109.2	521.0110.2

## INSTALLATION DRAWING

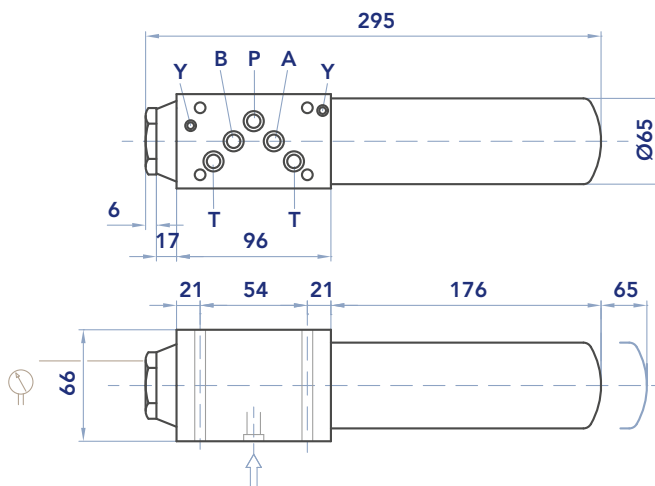
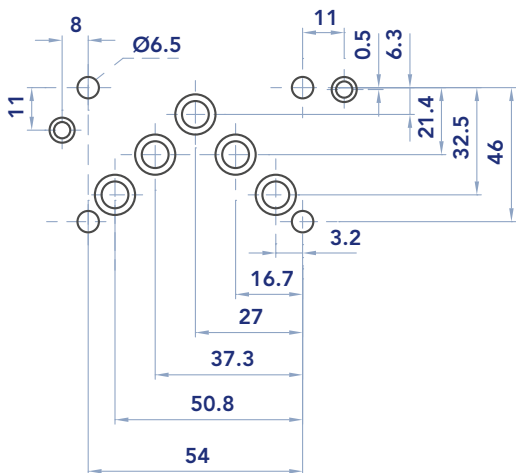
FPD 01 weight Kg. 2.5



FPD 02 weight Kg. 2.5



FPD 12 weight Kg. 4.2

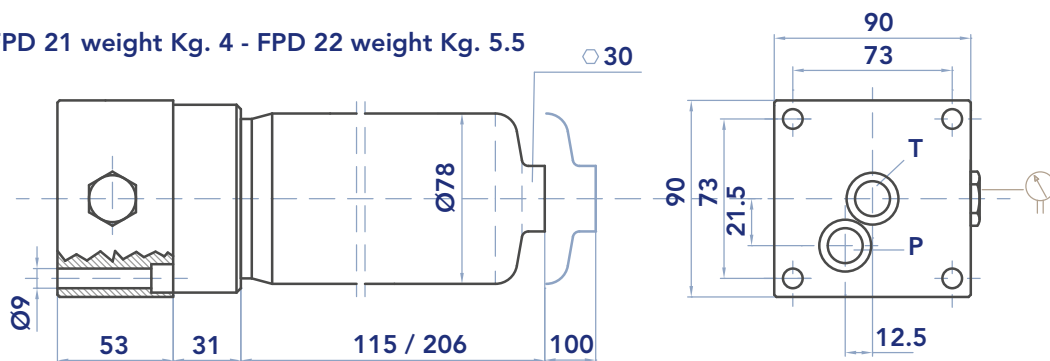


# FPD

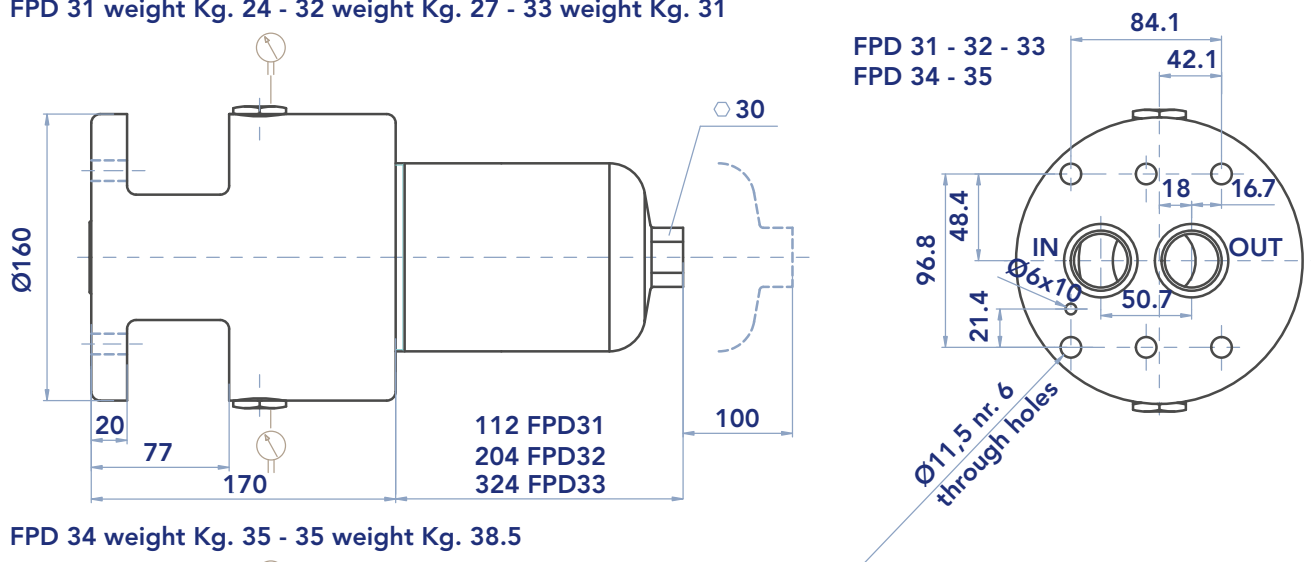
## PRESSURE FILTERS

### INSTALLATION DRAWING

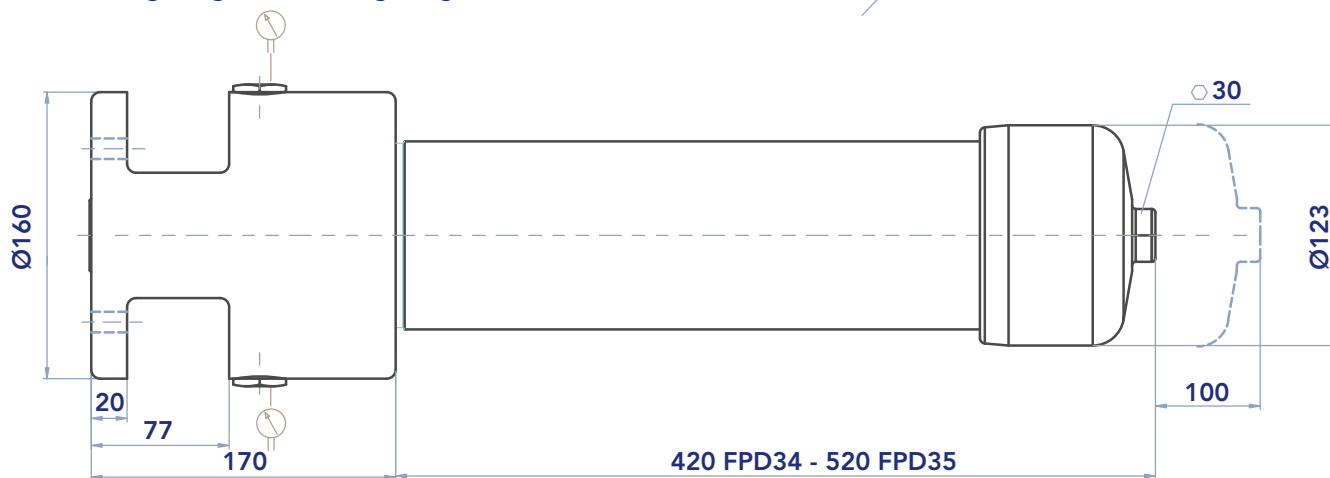
FPD 21 weight Kg. 4 - FPD 22 weight Kg. 5.5



FPD 31 weight Kg. 24 - 32 weight Kg. 27 - 33 weight Kg. 31



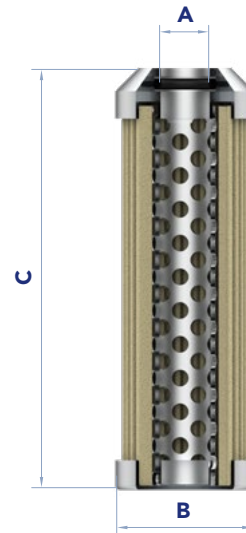
FPD 34 weight Kg. 35 - 35 weight Kg. 38.5





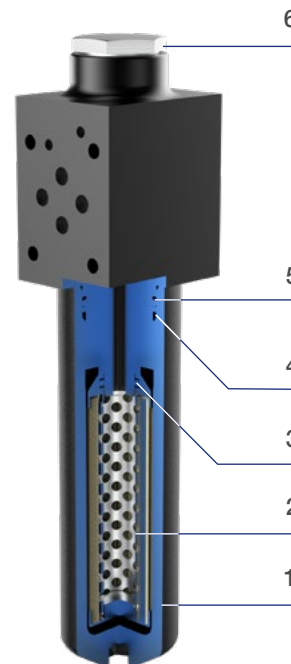
## FILTER ELEMENT

	A	B	C	Kg	AREA (cm <sup>2</sup> ) Media H+
EPB01	33	16	100	0,14	270
EPB12	45	25	116	0,55	475
EPB21	52	23,5	115	0,40	975
EPB22	52	23,5	210	0,55	1.785
EPB31	78	42,5	118	0,70	1.470
EPB32	78	42,5	210	1,30	2.695
EPB33	78	42,5	330	1,60	4.325
EPB34	78	42,5	430	1,80	5.685
EPB35	78	42,5	530	2,00	7.045



## MAINTENANCE

- 1) Stop the system and verify there is no pressure in the filter.
- 2) Collect the oil inside the filter with a suitable container.
- 3) Unscrew the bowl (1) and clean it.
- 4) Remove the dirty filter element (2).  
N.B. The exhausted filter elements and the oil dirty filter parts are classified "Dangerous waste material" and must be disposed of according to the local laws, by authorized Companies.
- 5) Check the filter element part number on the filter label or in the ordering and option chart.  
Use only original spare parts.
- 6) Lubricate the element o-ring gasket (3) with oil.
- 7) Insert the clean element into its seat with care.
- 8) Check the condition of the o-ring on the bowl (4) and lubricate with oil .  
If damaged, check the seal kit part number in the spare seal kit table.  
N.B. The anti-extrusion ring (5) must be positioned as follows:  
FPD01-FPD02 upwards with the concave part downwards (seal side);  
FPD2-FPD3 downwards (in this series the anti-extrusion ring has no concave part).
- 9) Screw the bowl (1) until it stops, with a tightening torque of 70 Nm + 5/0.



Accessories:

Clogging indicator (6).

If damaged, unscrew and replace it (check the part number in the ordering and option chart).

Lubricate the o-ring gasket with oil and tighten until it stops, with a tightening torque of 40 Nm +5/0.

# FPD

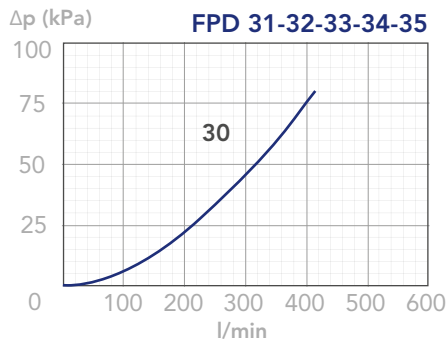
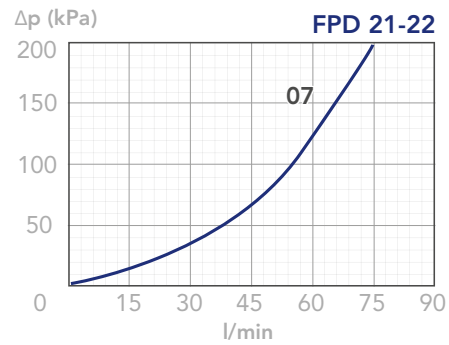
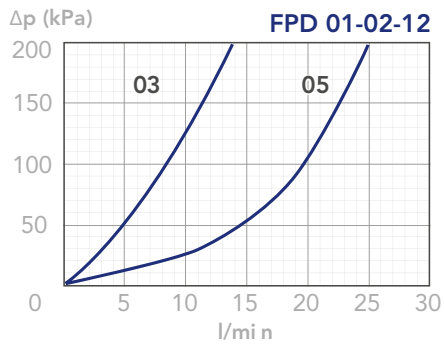
## PRESSURE FILTERS

### 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

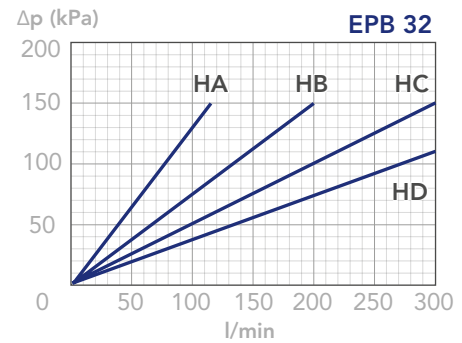
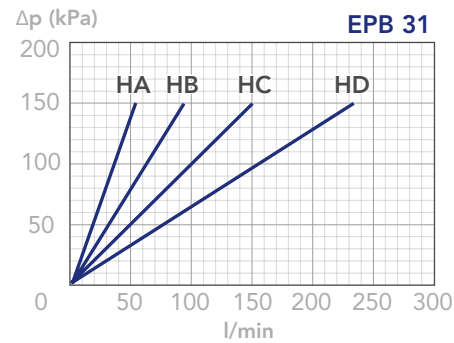
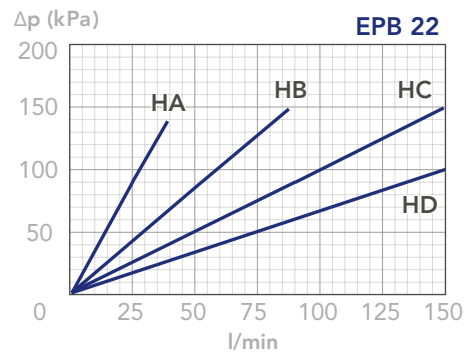
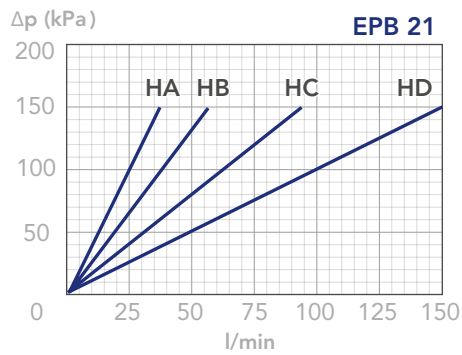
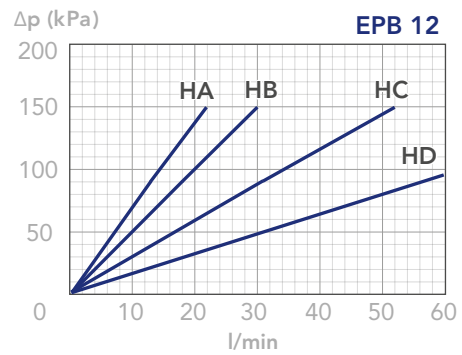
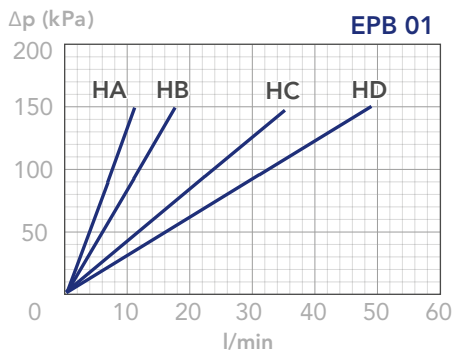
Element corresponding to the considered Flow Rate and it must be lower than 120 kPa (1,2 bar).

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



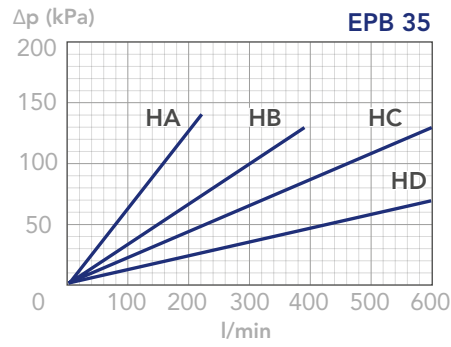
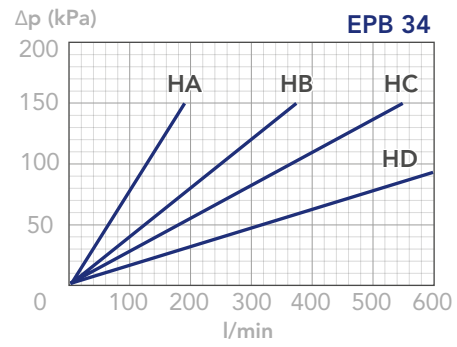
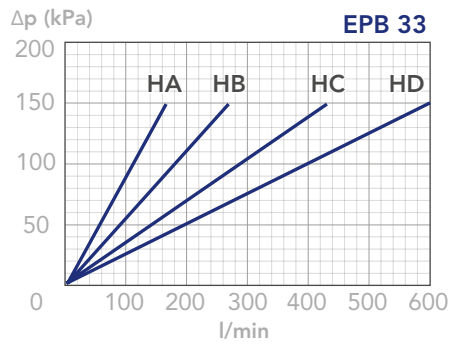


CLEAN FILTER ELEMENT PRESSURE DROP WITH H+ MEDIA  
 (depending both on the internal diameter of the element and on the filter media)



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### 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 FILTERS HYDRAULICS Laboratory, according to the specification ISO 3968. In case of discrepancy, please check the contamination level, viscosity and features of the fluid in use.