

# PM

# MATERIALS

Housing: Anodized aluminium alloy

Bypass valve: Steel

Seals: NBR Nitrile (FKM - on request fluoroelastomer)

Indicator housing: Brass

# PRESSURE (ISO 10771-1:2002)

Max. working: 21 MPa (210 bar)

Test: 33 MPa (330 bar)
Bursting: 66 MPa (660 bar)

Collapse, differential for the filter element (ISO 2941): 2,1 MPa (21 bar)

# BYPASS VALVE

Setting: 600 kPa (6 bar) ± 10%

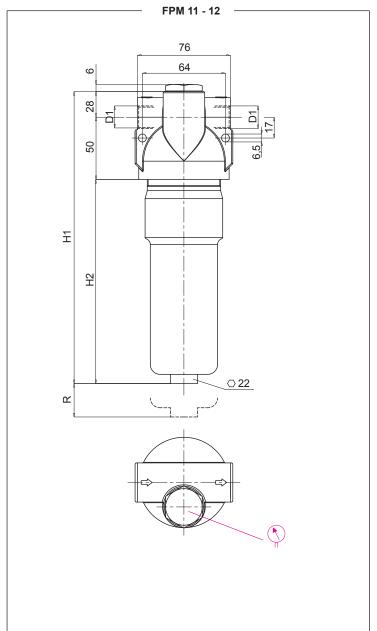
# WORKING TEMPERATURE

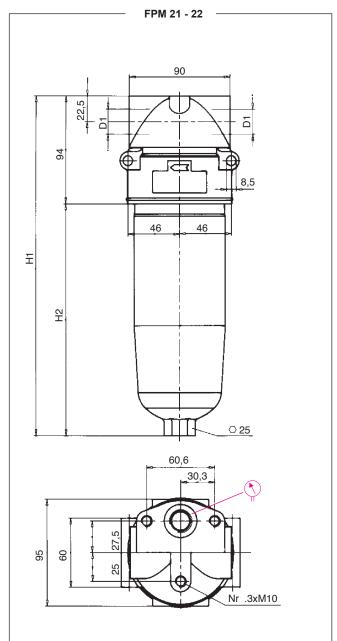
From -25° to +110° C

# COMPATIBILITY (ISO 2943:1999)

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







FILTER HOUSING									
	D1	H1	H2	R	kg				
FPM11	1/2"	157	79	60	0,65				
FPM12	1/2"	244	166	60	0,85				
FPM21	1/2"-3/4"-1"	205	205 111		1,5				
FPM22	1/2"-3/4"-1"	298	197	100	2,0				

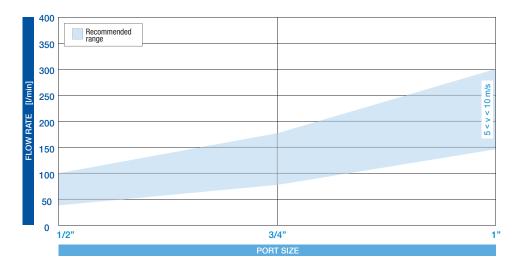
		TYPE						
,		F = FILTER COMPLETE	F	F	F	F		
		B = FILTER HOUSING	В	В	В	В	ELEMENT E	
Л		FAMILY, SIZE & LENGTH						
			11	12			FAMILY P A	
					21	22	SIZE & LENGTH P B	3
	PORT TYPE  B = BSP thread  N = NPT thread  S = SAE thread						_	
			В	В	В	В		
			N	N	N	N		
			s	s	S	S		
		PORT SIZE					_	
		04 = 1/2"	04	04	04	04		
		06 = 3/4"	-	-	06	06		
		08 = 1"	-	-	08	08	_	
		BYPASS VALVE					_	
		W = without	W	W	W	W		
		C = 600 kPa (6 bar)	С	С	С	С		
		SEALS					SEALS	
		N = NBR Nitrile	N	N	N	N	N = NBR	
		F = FKM Fluoroelastomer	F	F	F	F	F = FKM	
								-
		FILTER MEDIA					FILTER MEDIA	J
		FA = fiber $5\mu m_{(c)} \beta > 1.000$	FA	FA	FA	FA	$FA = fiber  5 \mu m_{(c)}$	
		FB = fiber $7\mu m_{(c)} \beta > 1.000$	FB	FB	FB	FB	FB = fiber $7 \mu m_{(c)}$	
		FC = fiber $12 \mu m_{(c)} \beta > 1.000$	FC	FC	FC	FC	FC = fiber $12 \mu m_{(c)}$	
		FD = fiber 21 $\mu$ m <sub>(c)</sub> $\beta$ >1.000	FD	FD	FD	FD	FD = fiber 21 $\mu$ m <sub>(c)</sub>	
		CC = cellulose $10\mu m \beta > 2$	CC	CC	CC	CC	$CC = cellulose 10 \mu m$	
		CLOGGING INDICATOR						
	_	03 = port, plugged	03	03	03	03	When the filter is ordered	
		5E = visual differential 500 kPa (5 bar)	5E	5E	5E	5E	with FKM seals, the first digit	
		6E = electrical differential 500 kPa (5 bar)	6E	6E	6E	6E	of the indicator code is a letter (please see page 182 - 183).	
		7E = indicator 6E with LED	7E	7E	7E	7E	N.B.	
		T2 = elect. diff. 500 kPa (5 bar) with thermostat 30°C	7E	T2	7E T2	T2	Indicator series 72	
		12 - GEGE CHII. 300 KFa (3 Dai) WILL LIETHOSEAL 30°C	12	12	12	12	only on request	
Х	Х	ACCESSORIES						
	<u> </u>						-	

FILTER	FILTER ELEMENT							
	Α	В	С	kg	Area Media F+	(cm²) Media C+	øB ▶	
EPA11	22	42	91	0,15	295	295		
EPA12	22	42	179	0,25	600	600		
EPB21	23,5	52	115	0,25	975	780		
EPB22	23,5	52	210	0,35	1.830	1.465	ØA	



### **FLUID SPEED**

when selecting the filter size, we suggest to consider also the max recommended fluid speed (in pressure lines normally 5< v < 10 m/s)

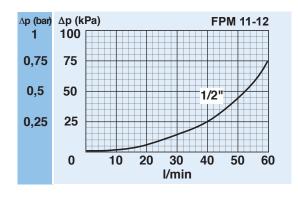


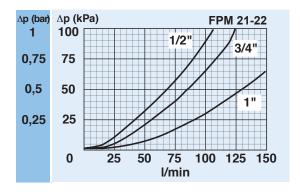
### PRESSURE DROP CURVES (Δp)

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

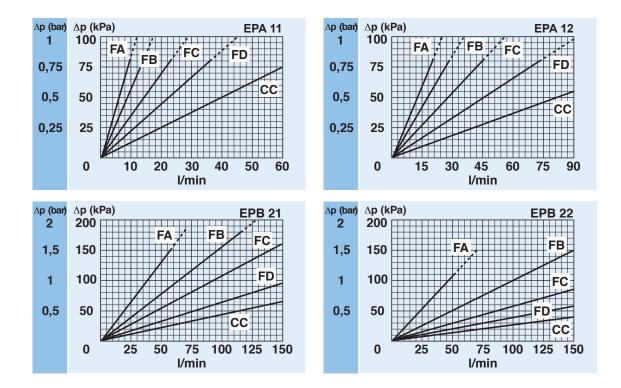
(mainly depending on the port size)





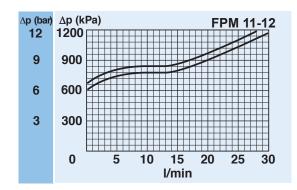
### CLEAN FILTER ELEMENT PRESSURE DROP WITH F+ AND C+ MEDIA

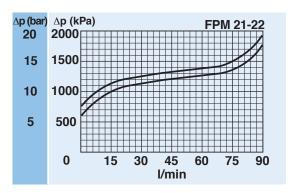
(depending both on the internal diameter of the element and on the filter media)



### **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.





### **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

Head and bowl are made by high performance aluminium alloy ensuring the best fatigue resistance.

### 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 0-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.

### **CLOGGING INDICATOR**

For further technical informations and other options see page 182-183.





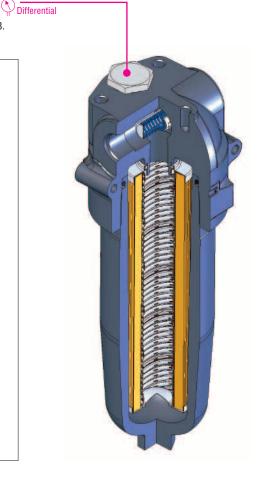
**SERIES 5E** 



SERIES 6E / 7E



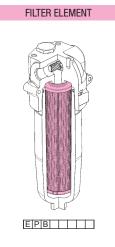
**SERIES T2** 

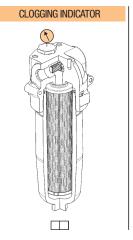


### SPARE SEAL KIT

	NBR	FKM		
FPM11	521.0001.2	521.0062.2		
FPM12	521.0001.2	521.0062.2		
FPM21	521.0011.2	521.0010.2		
FPM22	521.0011.2	521.0010.2		

# FILTER HOUSING BIPIM XX





SPARE PARTS ELEMENTS (For filling up see table "Ordering and option chart")



