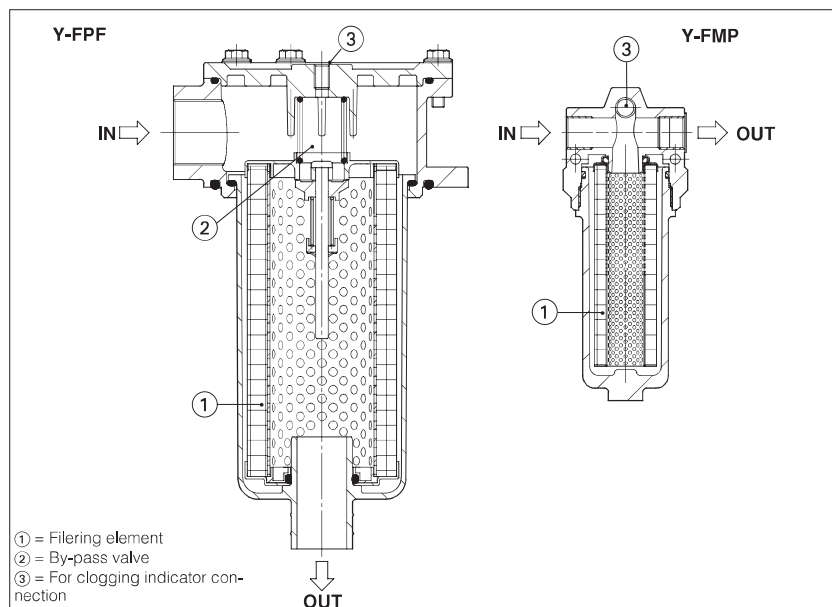


Hydraulic Filter type Y-FPF, Y-FMP

return semi-immersed and pressure filters



Y-FPF and Y-FMP filters have high filtering characteristics and are designed to be installed respectively on return lines and on pressure lines; they are suitable for hydraulic mineral oil or syntehtetic fluids.

The filtering elements are made by inorganic microfibre with acrylic support and can be easily replaced.

They are available in different dimensions:

- type Y-FPF to be installed on the return line to the reservoir:
from 1/2" Gas until 1 1/4" Gas.
- type Y-FMP to be installed on the medium pressure line:
from 1/2" Gas until 1" Gas.

Y-FPF and Y-FMP filters are provided with visual or electrical clogging indicators ③.

1 MODEL CODE

Y-FPF	-	100	/B	/	25	/	V	**	/	*														
<p>Tipo</p> <p>Y-FPF = return line "T" (max 3 bar)</p> <p>Y-FMP = pressure line "P" (max 250 bar)</p>						<p>Synthetic fluids:</p> <p>WG = glycol water (1)</p> <p>PE = phosphoric ester (2)</p>																		
<p>Nominal size:</p> <table><tr><th>Y-FPF</th><th>Y-FMP</th></tr><tr><td>030 = G 1/2"</td><td>037/2 = G 1/2"</td></tr><tr><td>100 = G 1/2"</td><td>065/1 = G 3/4"</td></tr><tr><td>102 = G 3/4"</td><td>065/3 = G 3/4"</td></tr><tr><td>103 = G 1"</td><td>135/2 = G 1"</td></tr><tr><td>180 = G 1 1/4"</td><td></td></tr><tr><td>400 = G 1 1/4"</td><td></td></tr></table> <p>Other dimensions available on request</p>			Y-FPF	Y-FMP	030 = G 1/2"	037/2 = G 1/2"	100 = G 1/2"	065/1 = G 3/4"	102 = G 3/4"	065/3 = G 3/4"	103 = G 1"	135/2 = G 1"	180 = G 1 1/4"		400 = G 1 1/4"					<p>Design number</p>				
Y-FPF	Y-FMP																							
030 = G 1/2"	037/2 = G 1/2"																							
100 = G 1/2"	065/1 = G 3/4"																							
102 = G 3/4"	065/3 = G 3/4"																							
103 = G 1"	135/2 = G 1"																							
180 = G 1 1/4"																								
400 = G 1 1/4"																								
						<p>Clogging indicator - see sez 4 and 6:</p> <table><tr><th>Y-FPF</th><th>Y-FMP</th></tr><tr><td>V1 = visual</td><td>V = visual</td></tr><tr><td>E = electric SPDT</td><td>E = electric SPDT</td></tr><tr><td></td><td>VE = visual / electric</td></tr></table>					Y-FPF	Y-FMP	V1 = visual	V = visual	E = electric SPDT	E = electric SPDT		VE = visual / electric						
Y-FPF	Y-FMP																							
V1 = visual	V = visual																							
E = electric SPDT	E = electric SPDT																							
	VE = visual / electric																							
						<p>Absolute filtration rating:</p> <p>03 = 3 µm (only for Y-FMP 065/135)</p> <p>10 = 10 µm</p> <p>25 = 25 µm</p>																		
<p>- = without by-pass valve</p> <p>/B = by-pass valve (always present on Y-FPF)</p>																								

2 MODEL CODE FOR SPARE CARTRIDGES

SP-PF		-	100	/A	25	**	/	*
Type: SP-PF = for filters type Y-FPF SP-MP = for filters type Y-FMP-37 SP-HP = for filters type Y-FMP-65-135								Synthetic fluids: WG = glycol water (1) PE = phosphoric ester (2)
Nominal size (see initials of complete filter):						Design number		
Y-FPF	Y-FMP							
030	037/2							
100	065/1							
102	065/3							
103	135/2							
180								
400								
				Absolute filtration rating (βx = 75): 03 = 3 µm (only for Y-FMP 065/135) 10 = 10 µm 25 = 25 µm				

Notes:

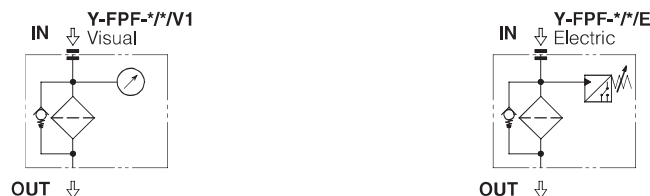
- 1) For glycol water it is better to use filters with a filtration rating not lower than 25 µm.
- 2) For phosphoric ester, consult our technical office and specify the kind of fluid.

3 NOTE

3.1 Y-FPF

They have to be installed on the return line to tank.
The cartridge is made by inorganic microfibre with acrylic support and when it is installed it cannot be cleaned but it must be replaced.
The substitution can be easily made after removing the closing cover.
The collapse pressure of the filtering elements is 3 bar.
They are equipped with a by-pass valve with opening pressure of 1,75 bar \pm 10%. The by-pass valve is incorporated into the cartridge.
They are delivered with visual or electrical indicator.
The visual indicator shows the clogging of the cartridge through the reaching of red sector on the pressure gauge.
The electric indicator (see section 4 and 6) consists of a mini-switch which opens and closes an electrical contact when the pressure reaches the fixed setting level (1,3 bar).
Fluid temperature : -20°C , +70°C.

Hydraulic symbols



Model	Y-FPF-030/10	Y-FPF-030/25	Y-FPF-100/10	Y-FPF-100/25	Y-FPF-102/10	Y-FPF-102/25	Y-FPF-103/10	Y-FPF-103/25	Y-FPF-180/10	Y-FPF-180/25	Y-FPF-400/10	Y-FPF-400/25
Max. recommended flow [l/min] ($\Delta p \sim 0,4$ bar)	21	30	35	65	45	125	70	150	185	300	170	300
Max. inlet pressure [bar]	3											
Δp max [bar]	3											

3.2 Y-FMP

They have to be installed on the pressure line in order to protect the components on the circuit.
The cartridge is made by inorganic microfibre with acrylic support and when it is installed it cannot be cleaned but it must be replaced.
The substitution can be easily made after unscrewing the filter case.
The collapse pressure of filtering elements is 20 bar.
The by-pass valve, if present, has an opening pressure about 6 bar.
They are delivered with visual, electrical or visual/electrical indicator.
The visual indicator shows the clogging of the cartridge through the appearance of a red sector.
The electric and visual/electrical indicator (see section 4 and 6) consists of a mini-switch which opens and closes an electrical contact when the differential pressure in the filter reaches the fixed level (5 bar \pm 10%).
Fluid temperature : -20°C , +70°C.

Hydraulic symbols



Model	Y-FMP-037/2/10	Y-FMP-037/2/25	Y-FMP-065/1/03	Y-FMP-065/1/10	Y-FMP-065/1/25	Y-FMP-065/3/03	Y-FMP-065/3/10	Y-FMP-065/3/25	Y-FMP-135/2/03	Y-FMP-135/2/10	Y-FMP-135/2/25
Max. recommended flow [l/min] (Δp~1,25 bar)	60	75	18	35	50	35	75	90	100	140	160
Max. inlet pressure [bar]	110		250								
Δp max [bar]	20										

4 ELECTRICAL CLOGGING INDICATORS

4.1 Y-FPF filters, option /E

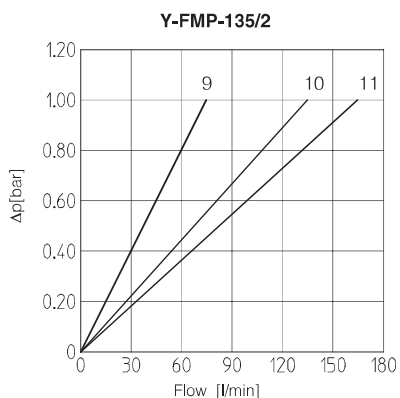
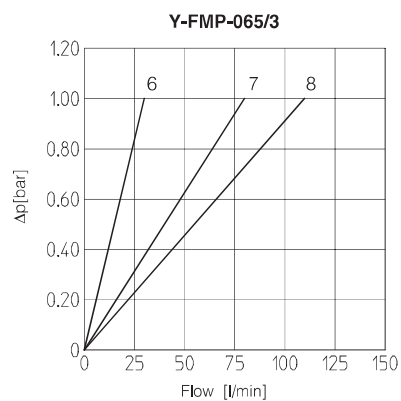
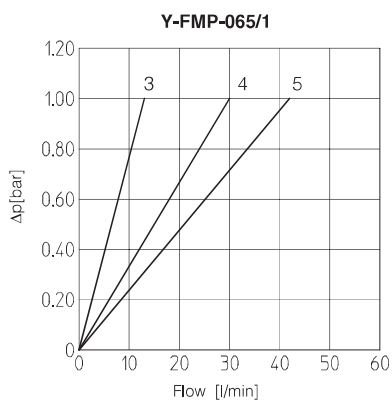
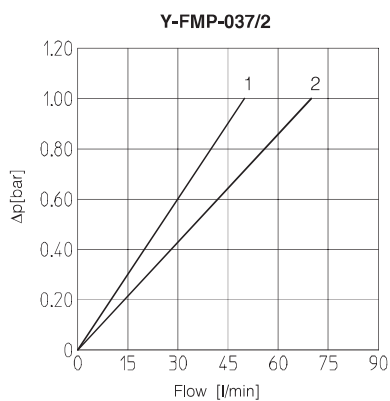
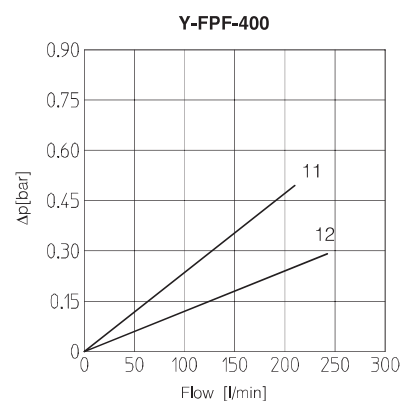
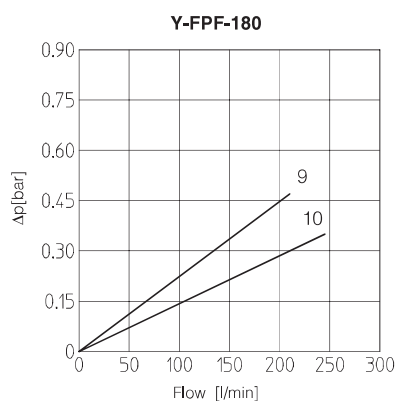
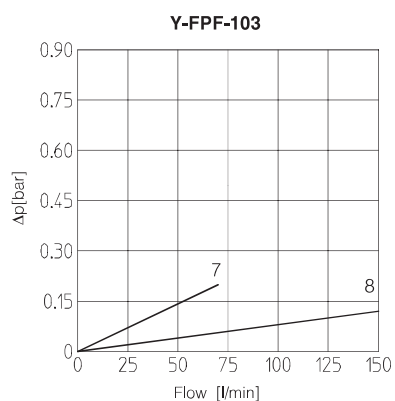
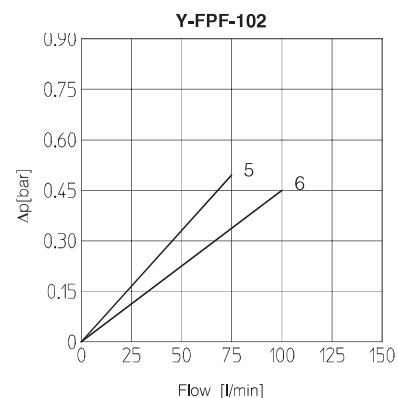
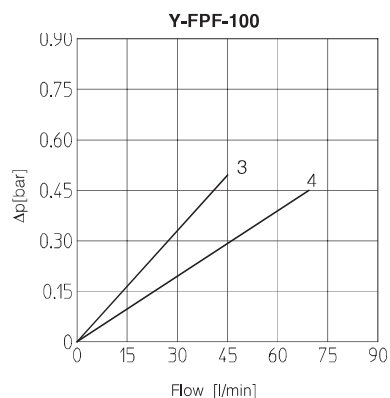
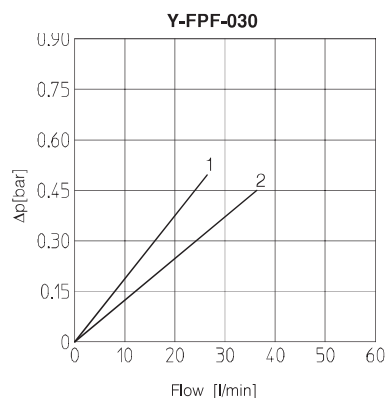
Connector DIN 43650 Protection rating to DIN 40050: IP-65	ELECTRIC DIAGRAM (changeover contacts)		Feeding voltage (V)	Contacts max flow	
				Resistive load (A)	Inductive load (A)
				Max AC 250	0,5
			Max DC 250	0,01	0,001

4.2 Filtri Y-FMP - opzione /E e /VE

Connector DIN 43650 Protection rating to DIN 40050: IP-65	ELECTRIC DIAGRAM (changeover contacts)		Feeding voltage (V)	Contacts max flow	
				Resistive load (A)	Inductive load (A)
				Max AC 250	5
			Max DC 250	0,25	0,03

See section 6 for dimensions

5 DIAGRAMS based on fluid viscosity of 30 mm²/sec at 40°C



Y-FPF

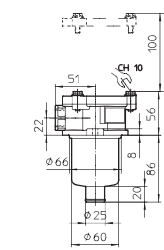
- 1 = Y-FPF-030/10
- 2 = Y-FPF-030/25
- 3 = Y-FPF-100/10
- 4 = Y-FPF-100/25
- 5 = Y-FPF-102/10
- 6 = Y-FPF-102/25
- 7 = Y-FPF-103/10
- 8 = Y-FPF-103/25
- 9 = Y-FPF-180/10
- 10 = Y-FPF-180/25
- 11 = Y-FPF-400/10
- 12 = Y-FPF-400/25

Y-FMP

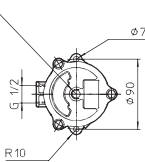
- 1 = Y-FMP-037/2/10
- 2 = Y-FMP-037/2/25
- 3 = Y-FMP-065/1/03
- 4 = Y-FMP-065/1/10
- 5 = Y-FMP-065/1/25
- 6 = Y-FMP-065/3/03
- 7 = Y-FMP-065/3/10
- 8 = Y-FMP-065/3/25
- 9 = Y-FMP-135/2/03
- 10 = Y-FMP-135/2/10
- 11 = Y-FMP-135/2/25

Y-FPF

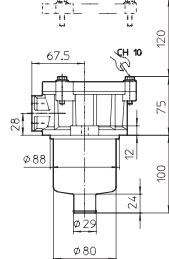
Y-FPF-030



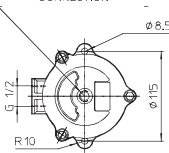
CLOGGING INDICATOR CONNECTION



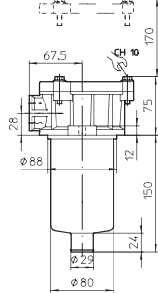
Y-FPF-100



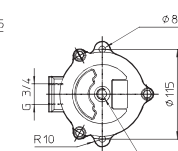
CLOGGING INDICATOR CONNECTION



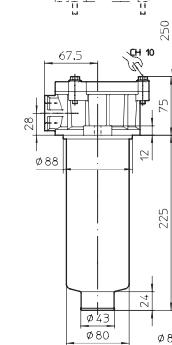
Y-FPF-102



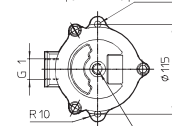
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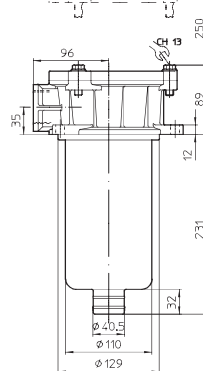
Y-FPF-103



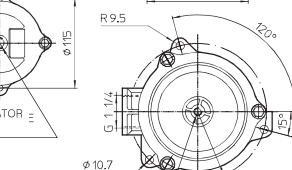
CLOGGING INDICATOR CONNECTION



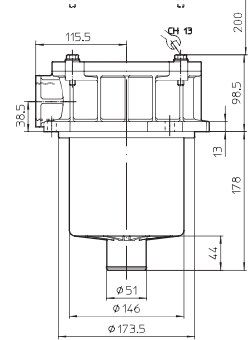
Y-FPF-180



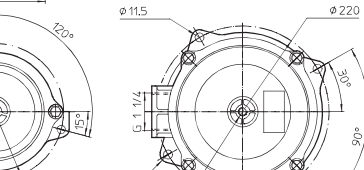
CLOGGING INDICATOR CONNECTION



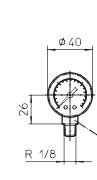
Y-FPF-400



CLOGGING INDICATOR CONNECTION



Visual (option /V1)



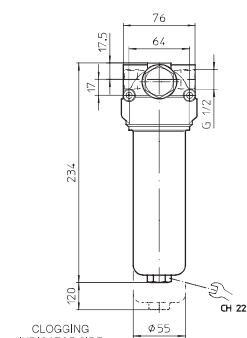
Electric (option /E)



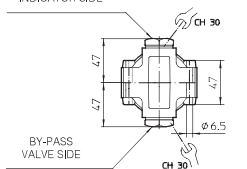
Model	Y-FPF-030	Y-FPF-100	Y-FPF-102	Y-FPF-103	Y-FPF-180	Y-FPF-400
Mass [Kg]	0,5	1	1,2	1,5	2,2	3

Y-FMP

Y-FMP-037/2

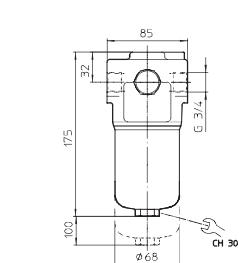


CLOGGING INDICATOR SIDE

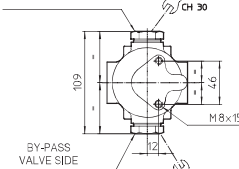


BY-PASS VALVE SIDE

Y-FMP-065/1

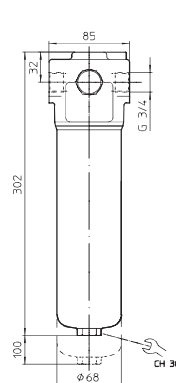


CLOGGING INDICATOR SIDE

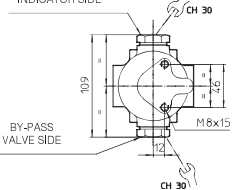


BY-PASS VALVE SIDE

Y-FMP-065/3

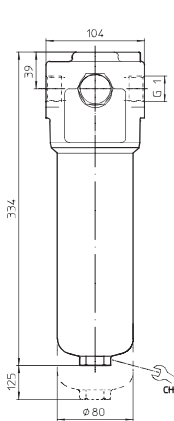


CLOGGING INDICATOR SIDE

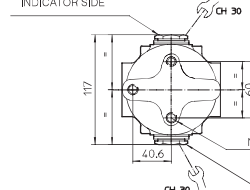


BY-PASS VALVE SIDE

Y-FMP-135/2

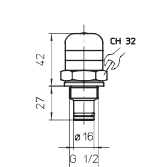


CLOGGING INDICATOR SIDE

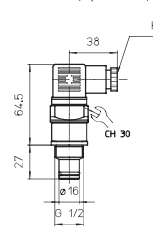


BY-PASS VALVE SIDE

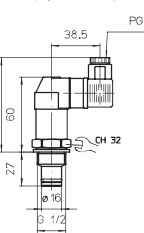
Visual clogging indicator (option /V)



Electrical clogging indicator (option /E)



Visual/electrical clogging indicator (option /VE)



The position of clogging indicator and by-pass valve can be reversed.

Model	Y-FMP-037/2	Y-FMP-065/1	Y-FMP-065/3	Y-FMP-135/2
Mass [Kg]	1,9	3,6	5,4	7,8