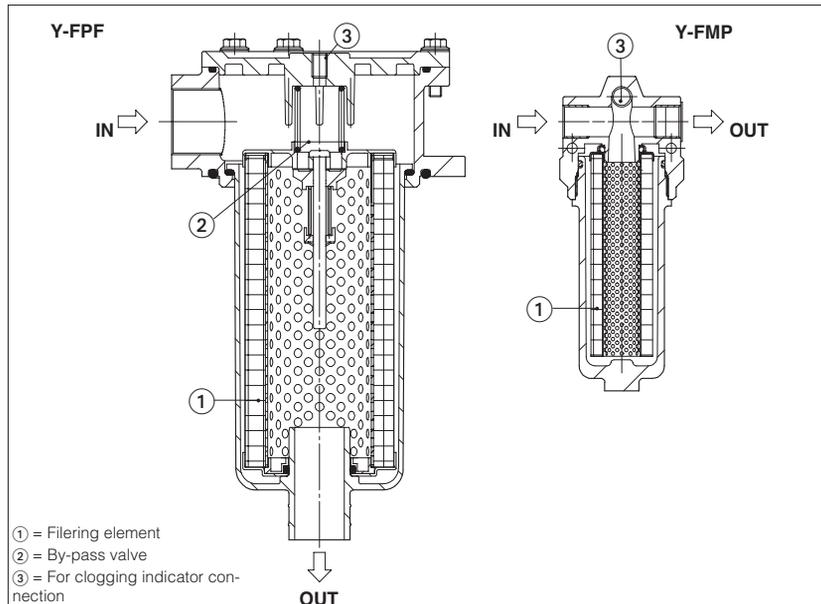


Hydraulic Filter type Y-FPF, Y-FMP

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 synthetic 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	**	/	*	
Type Y-FPF = return line "T" (max 3 bar) Y-FMP = pressure line "P" (max 250 bar)								Design number		Synthetic fluids: WG = glycol water (1) PE = phosphoric ester (2)	
Nominal size: 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" 180 = G 1 1/4" 135/2 = G 1" 400 = G 1 1/4"								Clogging indicator - see sez 4 and 5: Y-FPF Y-FMP V1 = visual V = visual E = electric SPDT E = electric SPDT VE = visual / electric			
- = without by-pass valve /B = by-pass valve (always present on Y-FPF)								Absolute filtration rating: 03 = 3 µm (only for Y-FMP 065/135) 10 = 10 µm 25 = 25 µm			

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

Notes:

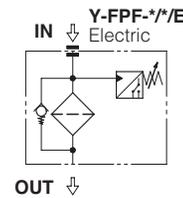
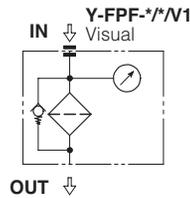
- 1) For glycol water it is better to use filters with a filtration rating not lower than 25 µm.
- 2) For phosphoric ester, consult our technical office and specify the kind of fluid.

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 : $-20^{\circ}\text{C} \div +70^{\circ}\text{C}$.

Hydraulic symbols

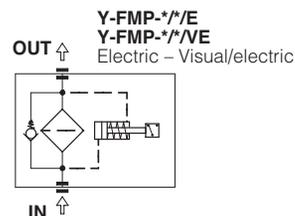
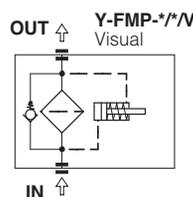


Model	Y-FPF-030/10	Y-FPF-030/25	Y-FPF-100/10	Y-FPF-100/25	Y-FPF-102/10	Y-FPF-102/25	Y-FPF-180/10	Y-FPF-180/25	Y-FPF-400/10	Y-FPF-400/25
Max. recommended flow ($\Delta p \sim 0,4$ bar) [l/min]	21	30	35	65	45	125	185	300	170	300
Max. inlet pressure [bar]	3									
Δp max [bar]	3									

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 : $-20^{\circ}\text{C} \div +70^{\circ}\text{C}$.

Hydraulic symbols



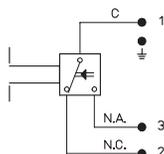
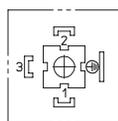
Model	Y-FMP-037/2/10	Y-FMP-037/2/25	Y-FMP-065/1/03	Y-FMP-065/1/10	Y-FMP-065/1/25	Y-FMP-065/3/03	Y-FMP-065/3/10	Y-FMP-065/3/25	Y-FMP-135/2/03	Y-FMP-135/2/10	Y-FMP-135/2/25
Max. recommended flow ($\Delta p \sim 1,25$ bar) [l/min]	60	75	18	35	50	35	75	90	100	140	160
Max. inlet pressure [bar]	110		250		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

4 ELECTRICAL CLOGGING INDICATORS

4.1 Y-FPF filters, option /E

ELECTRIC DIAGRAM
(changeover contacts)

Connector DIN 43650
 Protection rating to DIN 40050: IP-65

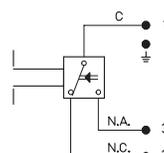
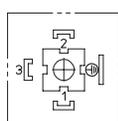


Feeding voltage (V)	Contacts max flow	
	Resistive load (A)	Inductive load (A)
Max AC 250	5	1
Max DC 30	4	3

4.2 Filters Y-FMP - options /E and /VE

ELECTRIC DIAGRAM
(changeover contacts)

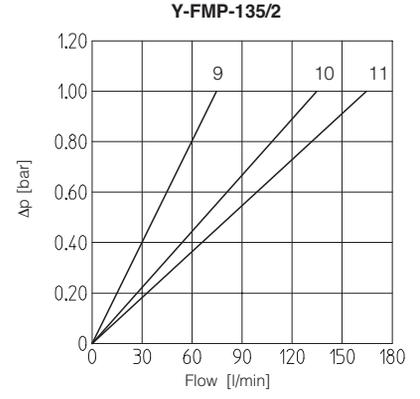
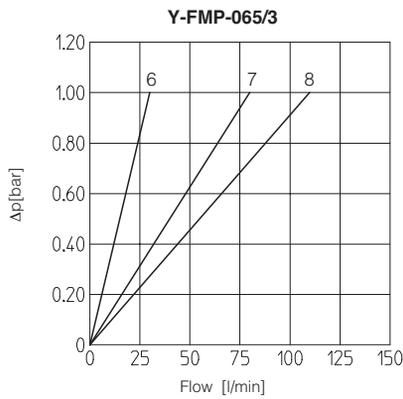
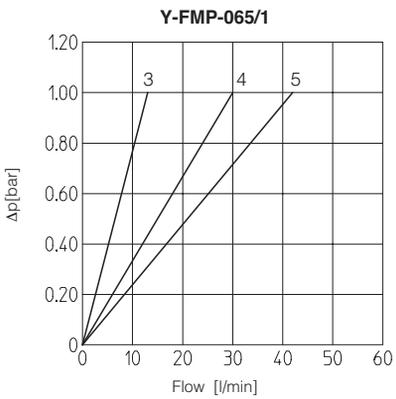
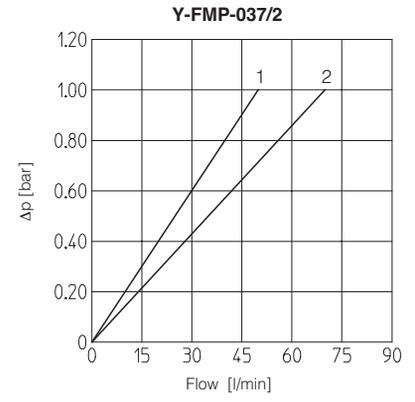
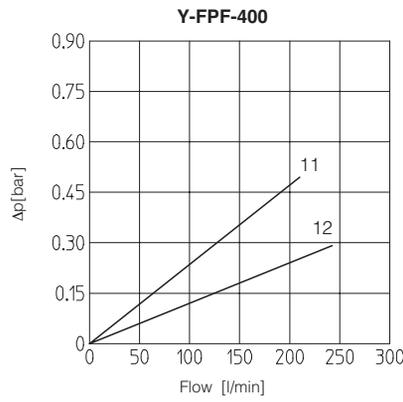
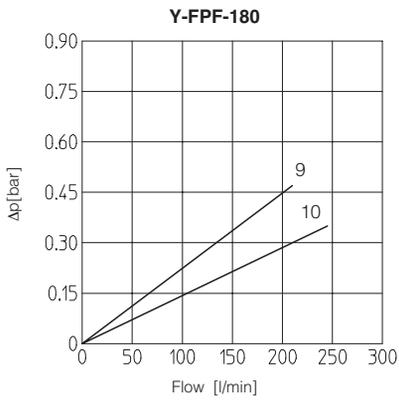
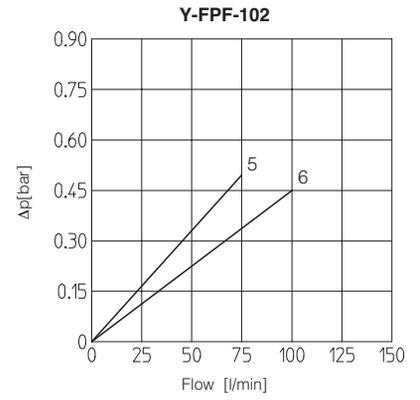
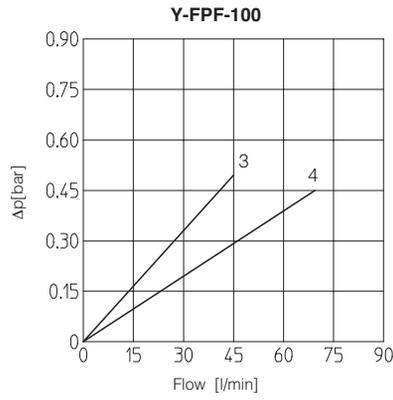
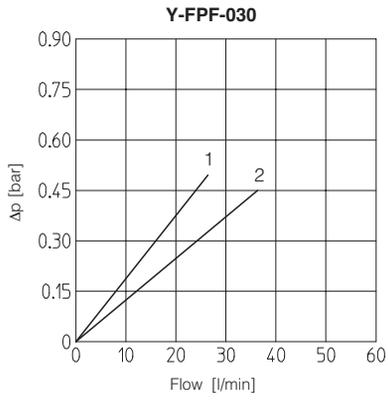
Connector DIN 43650
 Protection rating to DIN 40050: IP-65



Feeding voltage (V)	Contacts max flow	
	Resistive load (A)	Inductive load (A)
Max AC 250	5	2
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

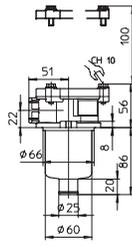
- 1 = Y-FPF-030/10
- 2 = Y-FPF-030/25
- 3 = Y-FPF-100/10
- 4 = Y-FPF-100/25
- 5 = Y-FPF-102/10
- 6 = Y-FPF-102/25
- 9 = Y-FPF-180/10
- 10 = Y-FPF-180/25
- 11 = Y-FPF-400/10
- 12 = Y-FPF-400/25

Y-FMP

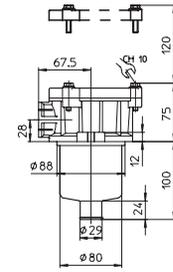
- 1 = Y-FMP-037/2/10
- 2 = Y-FMP-037/2/25
- 3 = Y-FMP-065/1/03
- 4 = Y-FMP-065/1/10
- 5 = Y-FMP-065/1/25
- 6 = Y-FMP-065/3/03
- 7 = Y-FMP-065/3/10
- 8 = Y-FMP-065/3/25
- 9 = Y-FMP-135/2/03
- 10 = Y-FMP-135/2/10
- 11 = Y-FMP-135/2/25

Y-FPF

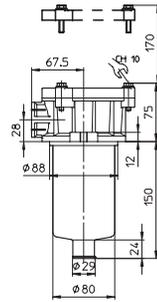
Y-FPF-030



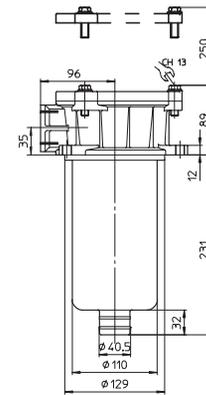
Y-FPF-100



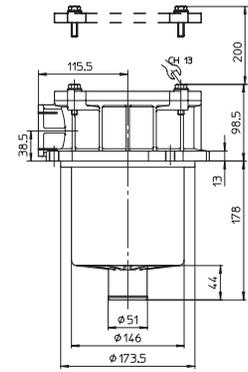
Y-FPF-102



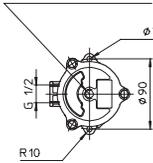
Y-FPF-180



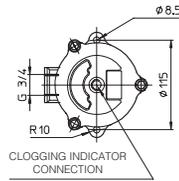
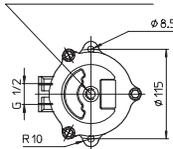
Y-FPF-400



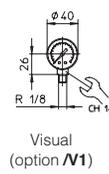
CLOGGING INDICATOR CONNECTION



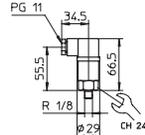
CLOGGING INDICATOR CONNECTION



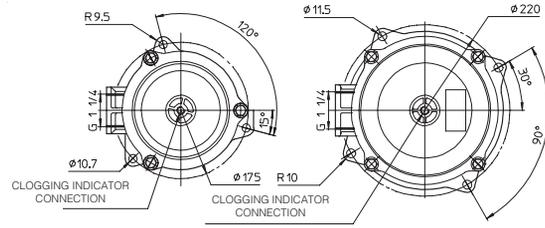
CLOGGING INDICATOR CONNECTION



Visual (option **V1**)



Electric (option **E**)



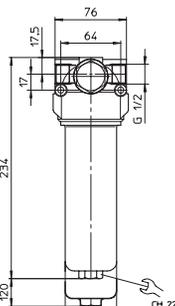
CLOGGING INDICATOR CONNECTION

CLOGGING INDICATOR CONNECTION

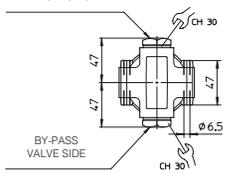
Model	Y-FPF-030	Y-FPF-100	Y-FPF-102	Y-FPF-180	Y-FPF-400
Mass [Kg]	0,5	1	1,2	2,2	3

Y-FMP

Y-FMP-037/2

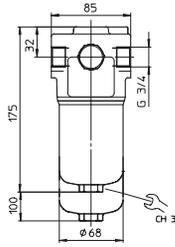


CLOGGING INDICATOR SIDE

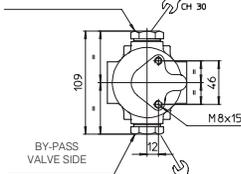


BY-PASS VALVE SIDE

Y-FMP-065/1

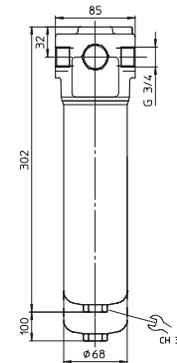


CLOGGING INDICATOR SIDE

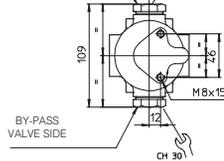


BY-PASS VALVE SIDE

Y-FMP-065/3

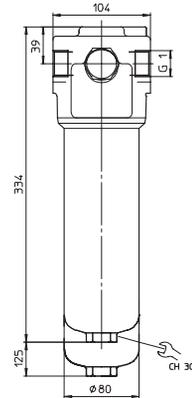


CLOGGING INDICATOR SIDE

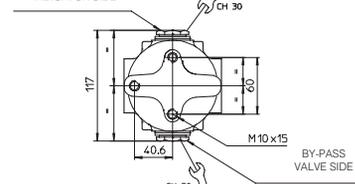


BY-PASS VALVE SIDE

Y-FMP-135/2

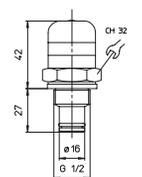


CLOGGING INDICATOR SIDE

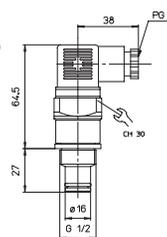


BY-PASS VALVE SIDE

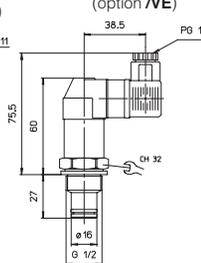
Visual clogging indicator (option **V**)



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