

MPS series

Maximum working pressure up to 1.2 MPa (12 bar) - Flow rate up to 365 l/min



Description

Technical data

Spin-on filters

Maximum working pressure up to 1.2 MPa (12 bar)
Flow rate up to 365 l/min

MPS is a range of spin-on filters suitable to be used in suction, return and low pressure lines.

They offer a good balance between performances, dimensions and prices. They are directly connected to the lines of the system through the hydraulic fittings.

Available features:

- Female threaded connections up to 1 1/2" and flanged connections up to 1 1/2", for a maximum flow rate of 365 l/min.
- Fine filtration rating, to get a good cleanliness level into the reservoir
- Water removal elements, to remove the free water from the hydraulic fluid
- Double connection for the cans, to fit both European and American standard elements
- Double cans fitting, to increase the life time of the filter
- Bypass valve, to relieve excessive pressure drop across the filter media
- Visual, electrical and electronic clogging indicators for suction and return applications
- Visual, electrical and electronic differential clogging indicators for low pressure applications

Common applications:

- Suction lines, Return lines, Delivery lines, in economic industrial equipment or mobile machines.
- Off-line filtration tank in economic industrial equipment or mobile machines

Filter housing materials

- Head: Aluminium
- Bypass valve: Nylon - Steel
- Element: Zinc-Plated Steel. Painted Steel

Bypass valve

- Return filter opening pressure: 175 kPa (1.75 bar) $\pm 10\%$
- Suction filter opening pressure: 30 kPa (0.3 bar) $\pm 10\%$

Δp element type

- Δp : 5 bar
- Fluid flow through the filter element from OUT to IN.

Seals

Standard NBR - series A

Temperature

From -20 °C to +110 °C

Note

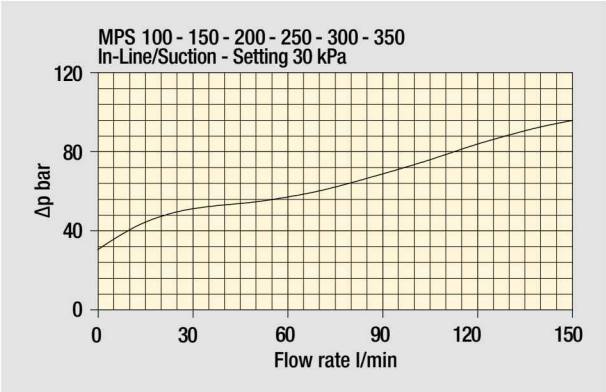
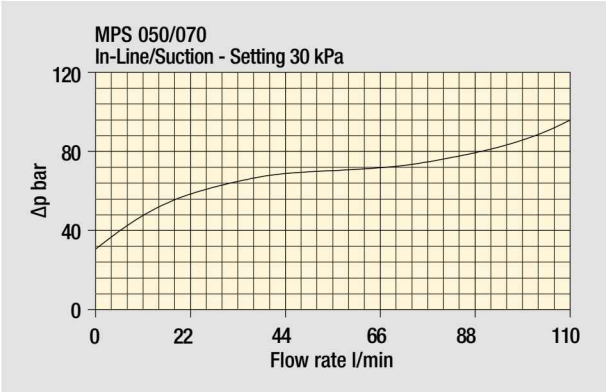
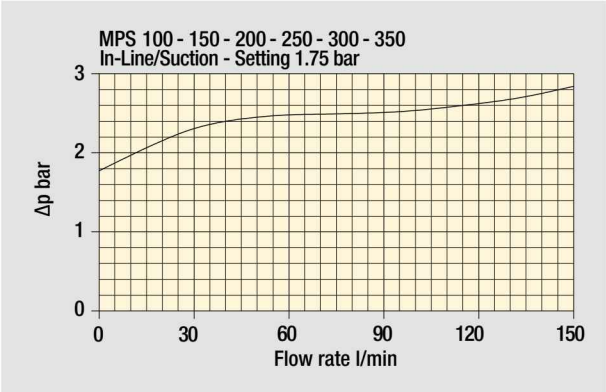
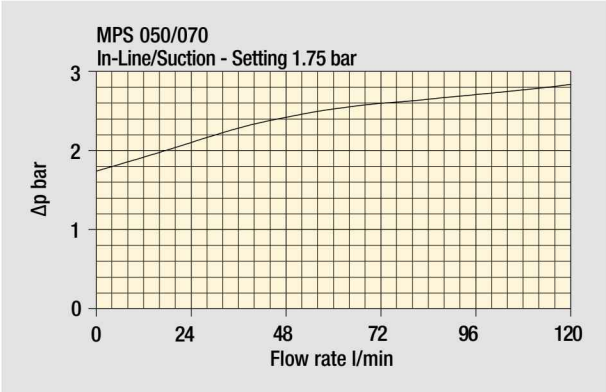
MPS filters are provided for vertical mounting



Weights [kg] and volumes [dm³]

Filter series	Weights [kg]	Volumes [dm ³]
MPS 050	1.00	0.70
MPS 051	1.05	0.70
MPS 070	1.20	0.95
MPS 071	1.25	0.95
MPS 100	2.10	1.65
MPS 101	2.20	1.65
MPS 150	2.40	2.00
MPS 151	2.50	2.00
MPS 200	3.90	3.00
MPS 250	4.60	3.70
MPS 300-301	5.30	3.40
MPS 350-351	6.00	4.10

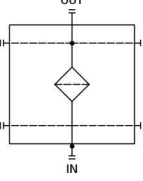
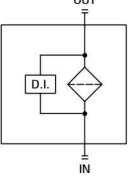
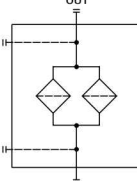
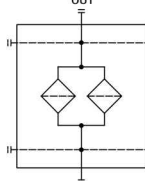
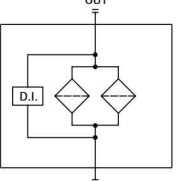
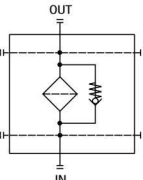
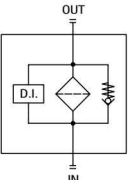
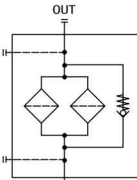
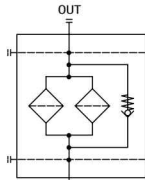
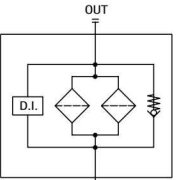
Bypass valve pressure drop



The curves are plotted using mineral oil with density of 0.86 kg/dm³ in compliance with ISO 3968. Δp varies proportionally with density.

MPS GENERAL INFORMATION

Hydraulic symbols

Filter series					
MPS 050	•				
MPS 051		•			
MPS 070	•				
MPS 071		•			
MPS 100	•				
MPS 101		•			
MPS 150	•				
MPS 151		•			
MPS 200			•		
MPS 250			•		
MPS 300				•	
MPS 301				•	•
MPS 350					•
MPS 351					•
	Style U/P	Style U/P	Style U	Style U/P	Style U/P
					
	Style R/S	Style R/S	Style R/S	Style R/S	Style R/S
					

CS 050 - 070 - 100 - 150

CG - CW 050 - 070



CG - CW 100 - 150



CW

This series of cartridge removes water from oil while filtering the oil at the same time.

Water absorbent polymers up to 800 times their own weight provide this major feature.

Water holding capacities:

CW 050= 240 ml

Ordering code: **CW050P10AP01**

CW 150= 788 ml

Ordering code: **CW150P10AP01**

Thread connections

Element	Connection
CS 050 - 070	G 3/4"
CS 100 - 150	G 1 1/4"
CG / CW 050 - 070	1" - 12 UNF
CG / CW 100 - 150	1 1/2" - 16 UN

Water holding capacities CW

	good	poor
Viscosity	30/46 mm ² /s (cSt)	> 46 mm ² /s (cSt)
H₂O p.p.m.	600/800 p.p.m.	> 800 p.p.m.
Flow rate	CW050 7/15 l/min CW150 20/40 l/min	CW050 > 20 l/min CW150 > 50 l/min
Temperature	40/60 °C	< 30 °C

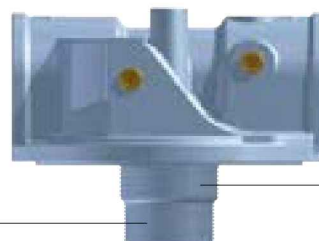
Heads

CG / CW
1" - 12 UNF



CS
G 3/4"

CG / CW
1 1/2" - 16 UN



CS
G 1 1/4"

MPS MPS050 - MPS070 MPS051 - MPS071

Designation & Ordering code

COMPLETE FILTER

Series and size		Configuration example: MPS050 R G1 A10 A P01				
MPS050 MPS070	With connections for clogging indicators					
MPS051 MPS071	With connections for differential indicators					
Bypass valve		MPS 050 - 070	MPS 051 - 071			
R	Return: 1.75 bar	•	•			
S	Suction: 30 kPa	•				
U	Without bypass	•				
P	Without bypass		•			
Connections						
G1	G 3/4"					
G2	3/4" NPT					
G3	SAE 12 - 1 1/16" - 12 UN					
G4	SAE 8 - 3/4" - 16 UNF					
G5	G 1"					
G6	1" NPT					
Filtration rating (filter media)						
A03	Inorganic microfiber 3 µm					
A06	Inorganic microfiber 6 µm					
A10	Inorganic microfiber 10 µm					
A25	Inorganic microfiber 25 µm					
M25	Wire mesh 25 µm					
M60	Wire mesh 60 µm					
M90	Wire mesh 90 µm					
P10	Resin impregnated paper 10 µm					
P25	Resin impregnated paper 25 µm					
				Seal	Execution	
				A NBR	P01 MP Filtri standard	

CARTRIDGE

Cartridge series and size		Configuration example: CS050 A10 A P01			
CS050 CS070					
Filtration rating (filter media)					
A03	Inorganic microfiber 3 µm				
A06	Inorganic microfiber 6 µm				
A10	Inorganic microfiber 10 µm				
A25	Inorganic microfiber 25 µm				
M25	Wire mesh 25 µm				
M60	Wire mesh 60 µm				
M90	Wire mesh 90 µm				
P10	Resin impregnated paper 10 µm				
P25	Resin impregnated paper 25 µm				
				Seals	Execution
				A NBR	P01 MP Filtri standard Pxx Customized

ACCESSORIES

Clogging indicators on RETURN line		page		page
BVA	Axial pressure gauge	315	BEA	Electrical pressure indicator 314
BVR	Radial pressure gauge	315	BEM	Electrical pressure indicator 314
BVP	Visual pressure indicator with automatic reset	316	BLA	Electrical / visual pressure indicator 314-315
BVQ	Visual pressure indicator with manual reset	316		
Clogging indicators on SUCTION line		page		page
VVB	Axial pressure gauge	313	VEB	Electrical vacuum indicator 312
VVS	Radial pressure gauge	313	VLB	Electrical/visual vacuum indicator 312
Differential indicators		page		page
DEA	Electrical differential indicator	317	DTA	Electronic differential indicator 320
DEM	Electrical differential indicator	317-318	DVA	Visual differential indicator 320
DLA	Electrical / visual differential indicator	318-319	DVM	Visual differential indicator 320
DLE	Electrical / visual differential indicator	319		