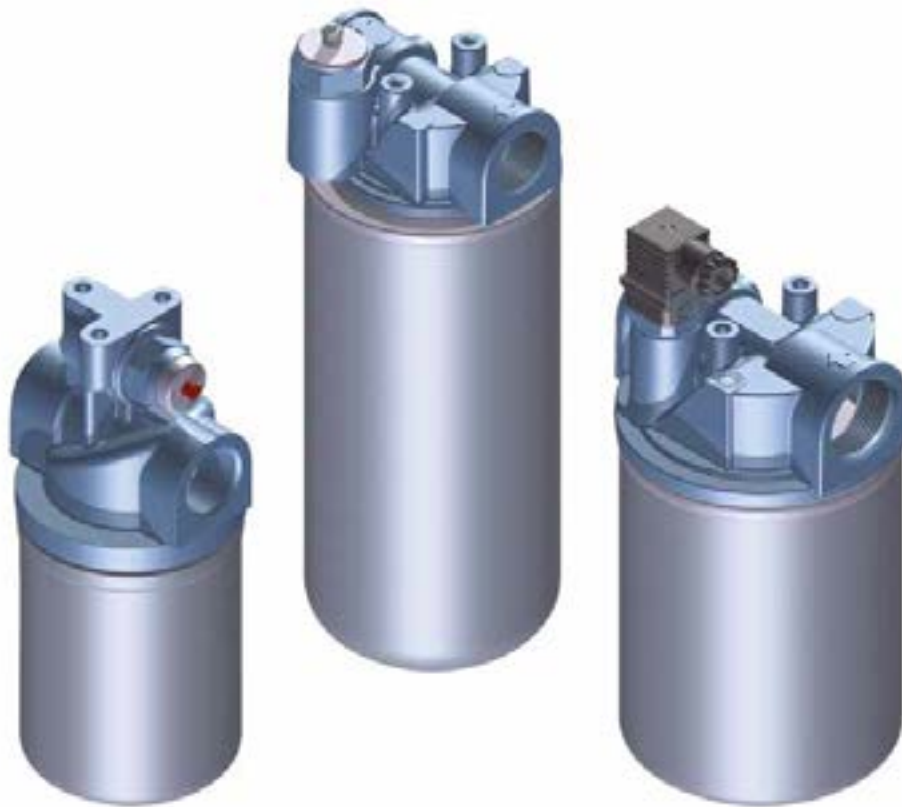


# MPS series

Maximum pressure up to 12 bar - Flow rate up to 365 l/min



The correct filter sizing have to be based on the variable pressure drop depending by the application. For example, for the return filter the pressure drop have to be in the range 0.4 - 0.6 bar.

The pressure drop calculation is performed by adding together the value of the housing with the value of the filter element. The pressure drop in the housing is proportional to the fluid density (kg/dm<sup>3</sup>); all the graphs in the catalogue are referred to mineral oil with density of 0.86 kg/dm<sup>3</sup>.

The filter element pressure drop is proportional to its viscosity (mm<sup>2</sup>/s), the corrective factor Y is related to an oil viscosity different than 30 mm<sup>2</sup>/s.

### Sizing data for single cartridge, head at top

$\Delta p_c$  = Filter housing pressure drop [bar]

$\Delta p_e$  = Filter element pressure drop [bar]

**Y** = Multiplication factor Y (see correspondent table), depending on the filter element size, on the filter element lenght and on the filter media

**Q** = flow rate (l/min)

**V1 reference viscosity** = 30 mm<sup>2</sup>/s (cSt)

**V2** = operating viscosity in mm<sup>2</sup>/s (cSt)

$\Delta p_e = Y : 1000 \times Q \times (V2/V1)$

$\Delta p_{Tot.} = \Delta p_c + \Delta p_e$

### Calculation examples with HLP Mineral oil Variation in viscosity

Application data:

Top tank return filter

Filter with in-line connections

Pressure Pmax = 10 bar

Flow rate Q = 120 l/min

Viscosity V2 = 46 mm<sup>2</sup>/s (cSt)

Oil viscosity = 0.86 kg/dm<sup>3</sup>

Required filtration efficiency = 25 µm with absolute filtration

With bypass valve and 1 1/4" inlet connection

From the working pressure and the flow rate we understand it should be possible using the following top tank return filter series: MPT, MPH and FRI. Let's proceed with MPT series.

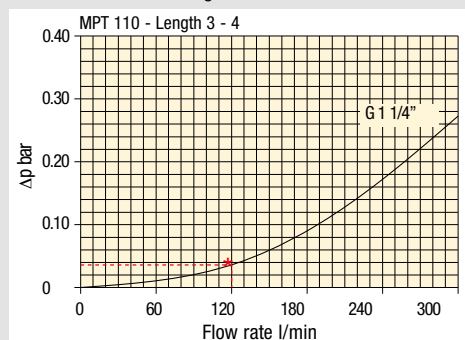
The size 20 doesn't achieve the required flow rate, therefore we have to consider the size 100. The final version of size 100 (101, 104, 110, 120 and 114) will be then defined in function of the mounting characteristics.

$\Delta p_c = 0.03 \text{ bar}$  (★ see graphic below, considering size 100 with the max available lenght to get the lowest pressure drop)

$\Delta p_e = (2.0 : 1000) \times 120 \times (46/30) = 0.37 \text{ bar}$

$\Delta p_{Tot.} = 0.03 + 0.37 = 0.4 \text{ bar}$

The selection is correct because the total pressure drop value is inside the admissible range for top tank return filters. It is of course possible trying to find a different solution, according to the mounting position or to other commercial need, repeating the previous steps while using a different series or lenght.



### Filter housings $\Delta p$ pressure drop.

The curves are plotted using mineral oil with density of 0.86 kg/dm<sup>3</sup> in compliance with ISO 3968.  $\Delta p$  varies proportionally with density.

**Corrective factor Y, to be used for the filter element pressure drop calculation. The values depend to the filter size and lenght and to the filter media.**

Reference viscosity 30 mm<sup>2</sup>/s

### Return filters

Filter element	Absolute filtration H Series					Nominal filtration N Series			
	Type	A03	A06	A10	A16	A25	P10	P25	M25 M60 M90
MF 020	1	74.00	50.08	20.00	16.00	9.00	6.43	5.51	4.40
	2	29.20	24.12	8.00	7.22	5.00	3.33	2.85	2.00
	3	22.00	19.00	6.56	5.33	4.33	1.68	1.44	1.30
MF 030 MFX 030	1	74.00	50.08	20.00	16.00	9.00	6.43	5.51	3.40
MF 100 MFX 100	1	28.20	24.40	8.67	8.17	6.88	4.62	3.96	1.25
	2	17.33	12.50	6.86	5.70	4.00	3.05	2.47	1.10
	3	10.25	9.00	3.65	3.33	2.50	1.63	1.32	0.96
	4	6.10	5.40	2.30	2.20	2.00	1.19	0.96	0.82
MF 180 MFX 180	1	3.67	3.05	1.64	1.56	1.24	1.18	1.06	0.26
	2	1.69	1.37	0.68	0.54	0.51	0.43	0.39	0.12
MF 190 MFX 190	2	1.69	1.37	0.60	0.49	0.44	0.35	0.31	0.11
MF 400 MFX 400	1	3.20	2.75	1.39	1.33	1.06	0.96	0.87	0.22
	2	2.00	1.87	0.88	0.85	0.55	0.49	0.45	0.13
	3	1.90	1.60	0.63	0.51	0.49	0.39	0.35	0.11
MF 750 MFX 750	1	1.08	0.84	0.49	0.36	0.26	0.21	0.19	0.06
CU 025		78.00	48.00	28.00	24.00	9.33	9.33	8.51	1.25
CU 040		25.88	20.88	10.44	10.00	3.78	3.78	3.30	1.25
CU 100		15.20	14.53	5.14	4.95	2.00	2.00	0.17	1.10
CU 250		3.25	2.55	1.55	1.35	0.71	0.71	0.59	0.25
CU 630		1.96	1.68	0.85	0.72	0.42	0.42	0.36	0.09
CU 850		1.06	0.84	0.42	0.33	0.17	0.17	0.13	0.04
MR 100	1	19.00	17.00	6.90	6.30	4.60	2.94	2.52	1.60
	2	11.70	10.80	4.40	4.30	3.00	2.94	2.52	1.37
	3	7.80	6.87	3.70	3.10	2.70	2.14	1.84	1.34
	4	5.50	4.97	2.60	2.40	2.18	1.72	1.47	1.34
	5	4.20	3.84	2.36	2.15	1.90	1.60	1.37	1.34
MR 250	1	5.35	4.85	2.32	1.92	1.50	1.38	1.20	0.15
	2	4.00	3.28	1.44	1.10	1.07	0.96	0.83	0.13
	3	2.60	2.20	1.08	1.00	0.86	0.77	0.64	0.12
	4	1.84	1.56	0.68	0.56	0.44	0.37	0.23	0.11
MR 630	1	3.10	2.48	1.32	1.14	0.92	0.83	0.73	0.09
	2	2.06	1.92	0.82	0.76	0.38	0.33	0.27	0.08
	3	1.48	1.30	0.60	0.56	0.26	0.22	0.17	0.08
	4	1.30	1.20	0.48	0.40	0.25	0.21	0.16	0.08
	5	0.74	0.65	0.30	0.28	0.13	0.10	0.08	0.04
MR 850	1	0.60	0.43	0.34	0.25	0.13	0.12	0.09	0.03
	2	0.37	0.26	0.23	0.21	0.11	0.08	0.07	0.03
	3	0.27	0.18	0.17	0.17	0.05	0.04	0.04	0.02
	4	0.23	0.16	0.13	0.12	0.04	0.03	0.03	0.02

**Corrective factor Y, to be used for the filter element pressure drop calculation.**  
**The values depend to the filter size and lenght and to the filter media.**

Reference viscosity 30 mm<sup>2</sup>/s

## Suction filters

Filter element	Nominal filtration N Series	
	P10	P25
<b>SF 250</b>	65	21

## Return / Suction filters

Filter element	Absolute filtration			
	A10	A16	A25	
<b>RSX 116</b>	1	5.12	4.33	3.85
	2	2.22	1.87	1.22
<b>RSX 165</b>	1	2.06	1.75	1.46
	2	1.24	1.05	0.96
	3	0.94	0.86	0.61

## Low & Medium pressure filters

Filter element	Type	Absolute filtration N-W Series					Nominal filtration N Series		
		A03	A06	A10	A16	A25	P10	P25	M25
<b>CU 110</b>	1	16.25	15.16	8.75	8.14	5.87	2.86	2.65	0.14
	2	12.62	10.44	6.11	6.02	4.15	1.60	1.49	0.12
	3	8.57	7.95	5.07	4.07	2.40	1.24	1.15	0.11
	4	5.76	4.05	2.80	2.36	1.14	0.91	0.85	0.05
<b>CU 210</b>	1	5.30	4.80	2.00	1.66	1.32	0.56	0.43	0.12
	2	3.44	2.95	1.24	1.09	0.70	0.42	0.35	0.09
	3	2.40	1.70	0.94	0.84	0.54	0.33	0.23	0.05
<b>DN</b>	016	7.95	7.20	3.00	2.49	1.98	0.84	0.65	0.18
	025	5.00	4.53	1.89	1.57	1.25	0.53	0.41	0.11
	040	3.13	2.66	1.12	0.98	0.63	0.38	0.32	0.08
<b>CU 400</b>	2	3.13	2.55	1.46	1.22	0.78	0.75	0.64	0.19
	3	2.15	1.70	0.94	0.78	0.50	0.40	0.34	0.10
	4	1.60	1.28	0.71	0.61	0.40	0.34	0.27	0.08
	5	1.00	0.83	0.47	0.34	0.20	0.24	0.19	0.06
	6	0.82	0.58	0.30	0.27	0.17	0.22	0.18	0.05
	<b>CU 900</b>	1	0.86	0.63	0.32	0.30	0.21	-	-
<b>CU 950</b>	2	1.03	0.80	0.59	0.40	0.26	-	-	0.05
	3	0.44	0.40	0.27	0.18	0.15	-	-	0.02
<b>MR 630</b>	7	0.88	0.78	0.36	0.34	0.16	0.12	0.96	0.47

# FILTER SIZING Corrective factor

Corrective factor **Y**, to be used for the filter element pressure drop calculation.  
The values depend to the filter size and lenght and to the filter media.

Reference viscosity 30 mm<sup>2</sup>/s

## High pressure filters

Filter element	Absolute filtration N - R Series					Nominal filtration N Series	
	Type	A03	A06	A10	A16		A25
HP 011	1	332.71	250.07	184.32	152.36	128.36	-
	2	220.28	165.56	74.08	59.13	37.05	-
	3	123.24	92.68	41.48	33.08	20.72	-
	4	77.76	58.52	28.37	22.67	16.17	-
HP 039	1	70.66	53.20	25.77	20.57	14.67	4.90
	2	36.57	32.28	18.00	13.38	8.00	2.90
	3	26.57	23.27	12.46	8.80	5.58	2.20
HP 050	1	31.75	30.30	13.16	12.3	7.29	1.60
	2	24.25	21.26	11.70	9.09	4.90	1.40
	3	17.37	16.25	8.90	7.18	3.63	1.25
	4	12.12	10.75	6.10	5.75	3.08	1.07
	5	7.00	6.56	3.60	3.10	2.25	0.80
HP 065	1	58.50	43.46	23.16	19.66	10.71	1.28
	2	42.60	25.64	16.22	13.88	7.32	1.11
	3	20.50	15.88	8.18	6.81	3.91	0.58
HP 135	1	20.33	18.80	9.71	8.66	4.78	2.78
	2	11.14	10.16	6.60	6.38	2.22	1.11
	3	6.48	6.33	3.38	3.16	2.14	1.01
HP 320	1	10.88	9.73	5.02	3.73	2.54	1.04
	2	4.40	3.83	1.75	1.48	0.88	0.71
	3	2.75	2.11	1.05	0.87	0.77	0.61
	4	2.12	1.77	0.98	0.78	0.55	0.47
HP 500	1	4.44	3.67	2.30	2.10	1.65	0.15
	2	3.37	2.77	1.78	1.68	1.24	0.10
	3	2.22	1.98	1.11	1.09	0.75	0.08
	4	1.81	1.33	0.93	0.86	0.68	0.05
	5	1.33	1.15	0.77	0.68	0.48	0.04

Filter element	Absolute filtration N Series					Nominal filtration N Series	
	Type	A03	A06	A10	A16		A25
HF 320	1	3.65	2.95	2.80	1.80	0.90	0.38
	2	2.03	1.73	1.61	1.35	0.85	0.36
	3	1.84	1.42	1.32	1.22	0.80	0.35

## Stainless steel high pressure filters

Filter element	Absolute filtration N Series					
	Type	A03	A06	A10	A16	A25
HP 011	1	332.71	250.07	184.32	152.36	128.36
	2	220.28	165.56	74.08	59.13	37.05
	3	123.24	92.68	41.48	33.08	20.72
	4	77.76	58.52	28.37	22.67	16.17
HP 039	2	70.66	53.20	25.77	20.57	14.67
	3	36.57	32.28	18.00	13.38	8.00
	4	26.57	23.27	12.46	0.88	5.58
	1	31.75	30.30	13.16	12.3	7.29
HP 050	2	24.25	21.26	11.70	9.09	4.90
	3	17.37	16.25	8.90	7.18	3.63
	4	12.12	10.75	6.10	5.75	3.08
	5	7.00	6.56	3.60	3.10	2.25
	1	20.33	18.80	9.71	8.66	4.78
HP 135	2	11.14	10.16	6.60	6.38	2.22
	3	6.48	6.33	3.38	3.16	2.14

Filter element	Absolute filtration H - U Series					
	Type	A03	A06	A10	A16	A25
HP 011	1	424.58	319.74	235.17	194.44	163.78
	2	281.06	211.25	94.53	75.45	47.26
	3	130.14	97.50	43.63	34.82	21.81
	4	109.39	82.25	36.79	29.37	18.40
HP 039	2	70.66	53.20	25.77	20.57	14.67
	3	36.57	32.28	18.00	13.38	8.00
	4	26.57	23.27	12.46	8.80	5.58
	1	47.33	34.25	21.50	20.50	14.71
HP 050	2	29.10	25.95	14.04	10.90	5.88
	3	20.85	19.50	10.68	8.61	4.36
	4	14.55	12.90	7.32	6.90	3.69
	5	9.86	9.34	6.40	4.80	2.50
	1	29.16	25.33	13.00	12.47	5.92
HP 135	2	14.28	11.04	7.86	7.60	4.44
	3	8.96	7.46	4.89	4.16	3.07

**Step 1** Select "FILTERS"



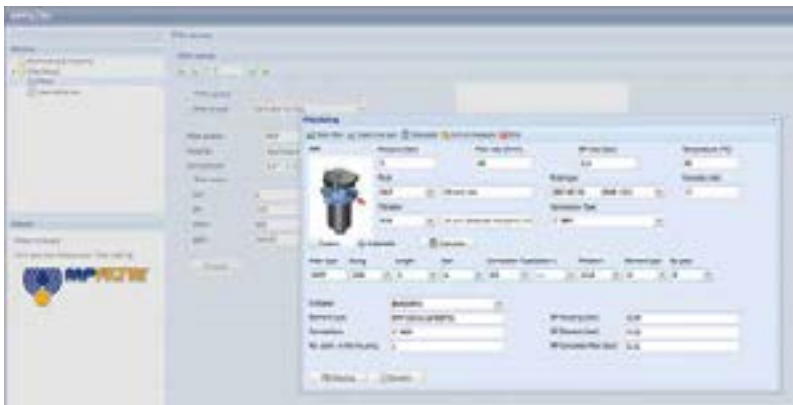
**Step 2** Choose filter group (Return Filter, Pressure Filter, etc.)



**Step 3** Choose filter type (MPF, MPT, etc.) in function of the max working pressure and the max flow rate



**Step 4** Push "PROCEED"



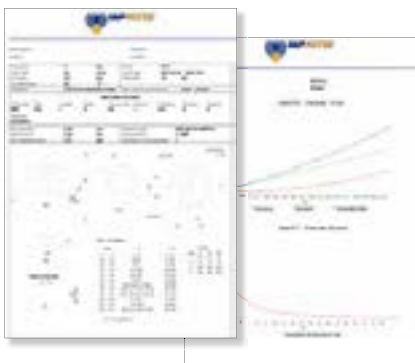
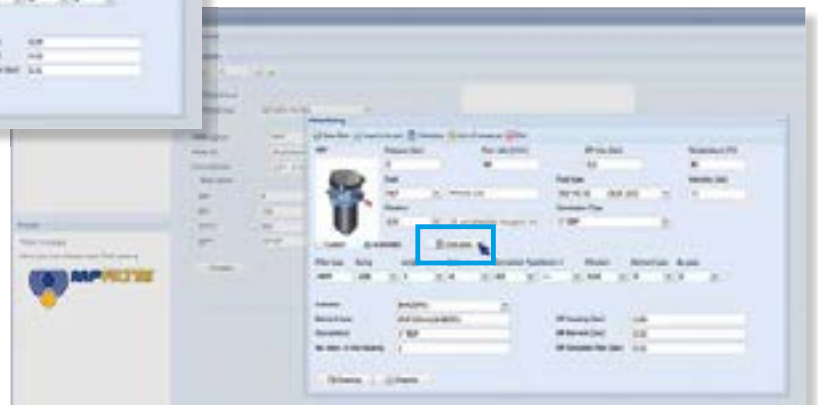
**Step 5**

Insert all application data to calculate the filter size following the sequence:

- working pressure
- working flow rate
- working pressure drop
- working temperature
- fluid material and fluid type
- filtration media
- connection type

**Step 6**

Push "CALCULATE" to have result; in case of any mistake, the system will advice which parameter is out of range to allow to modify/adjust the selection



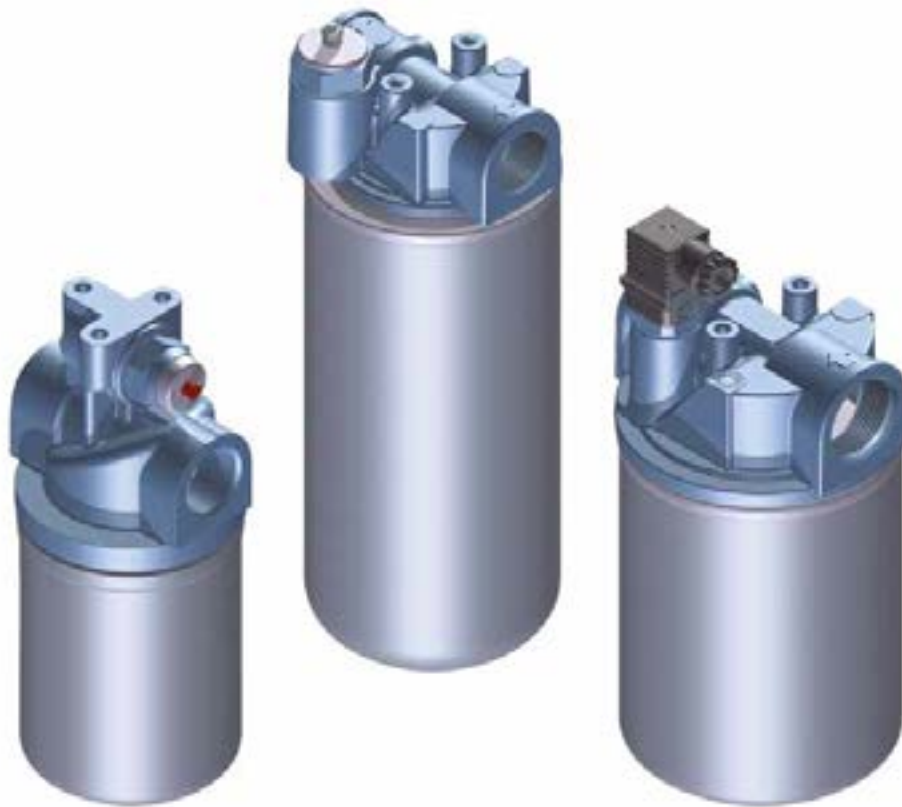
**Step 7**

Download PDF Datasheet "Report.aspx" pushing the button "Drawing"



# MPS series

Maximum pressure up to 12 bar - Flow rate up to 365 l/min



## Technical data

**Spin-on filters** Maximum pressure up to 12 bar - Flow rate up to 365 l/min

### Filter housing materials

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

### Pressure

- Working pressure: 1.2 MPa (12 bar)

### Bypass valve

- Return filter opening pressure: 175 kPa (1.75 bar)
- Suction filter opening pressure: 30 kPa (0.3 bar)

### 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

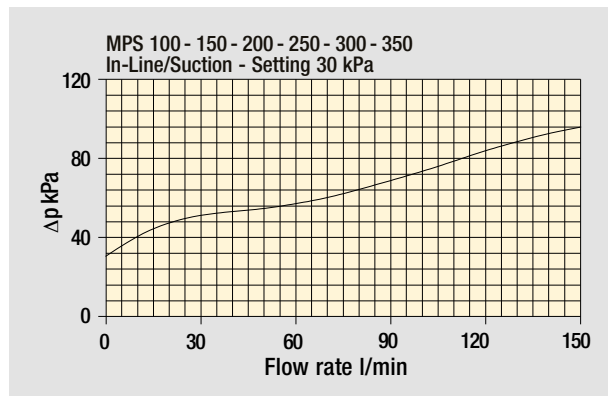
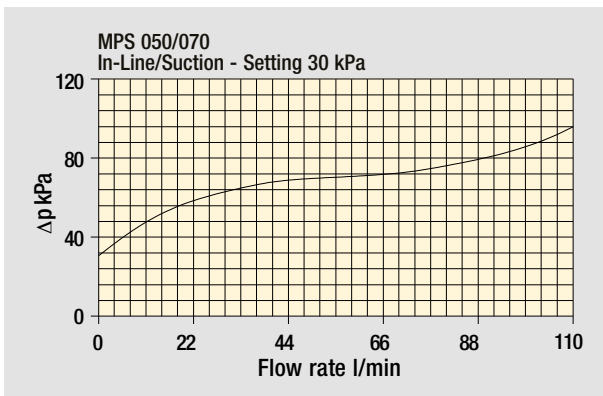
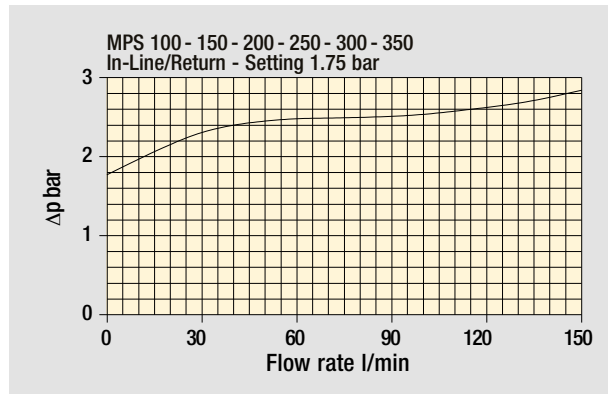
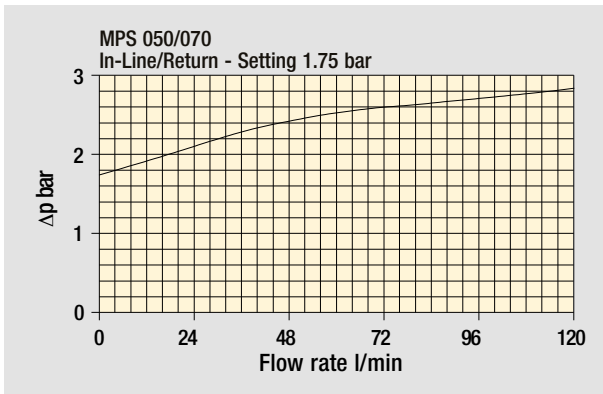
## Weights [kg] and volumes [dm<sup>3</sup>]

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



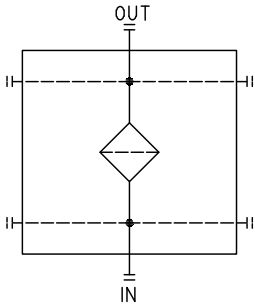
The curves are plotted using mineral oil with density of 0.86 kg/dm<sup>3</sup> in compliance with ISO 3968.  
 $\Delta p$  varies proportionally with density.

Bypass valve pressure drop

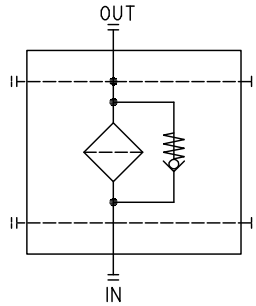


## Hydraulic symbols

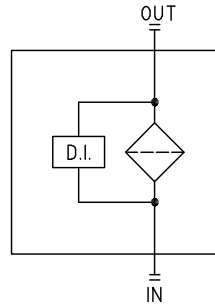
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MPS 050 - 070 - 100 - 150



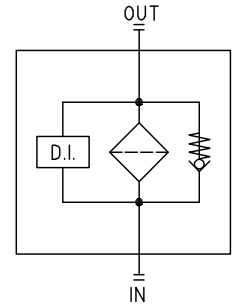
**Style B**  
MPS 050 - 070 - 100 - 150



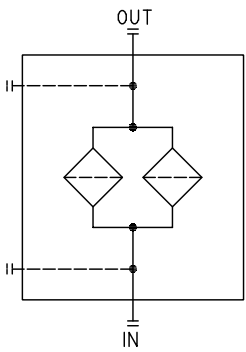
**Style S**  
MPS 051 - 071 - 101 - 151



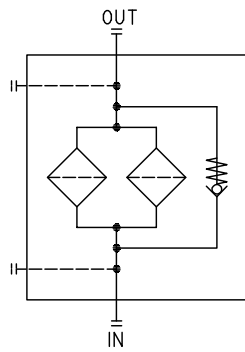
**Style B**  
MPS 050 - 070 - 100 - 150



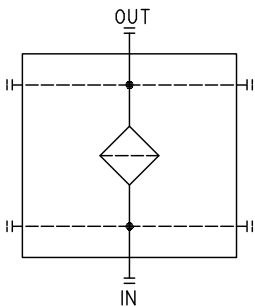
**Style S**  
MPS 200 - 250



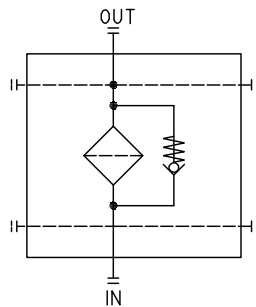
**Style B**  
MPS 200 - 250



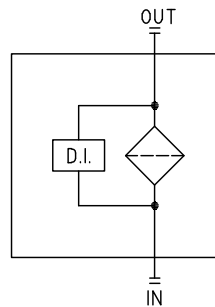
**Style S**  
MPS 300 - 350



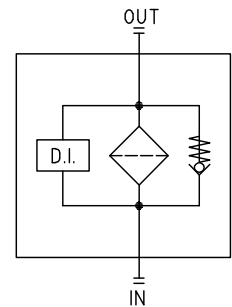
**Style B**  
MPS 300 - 350



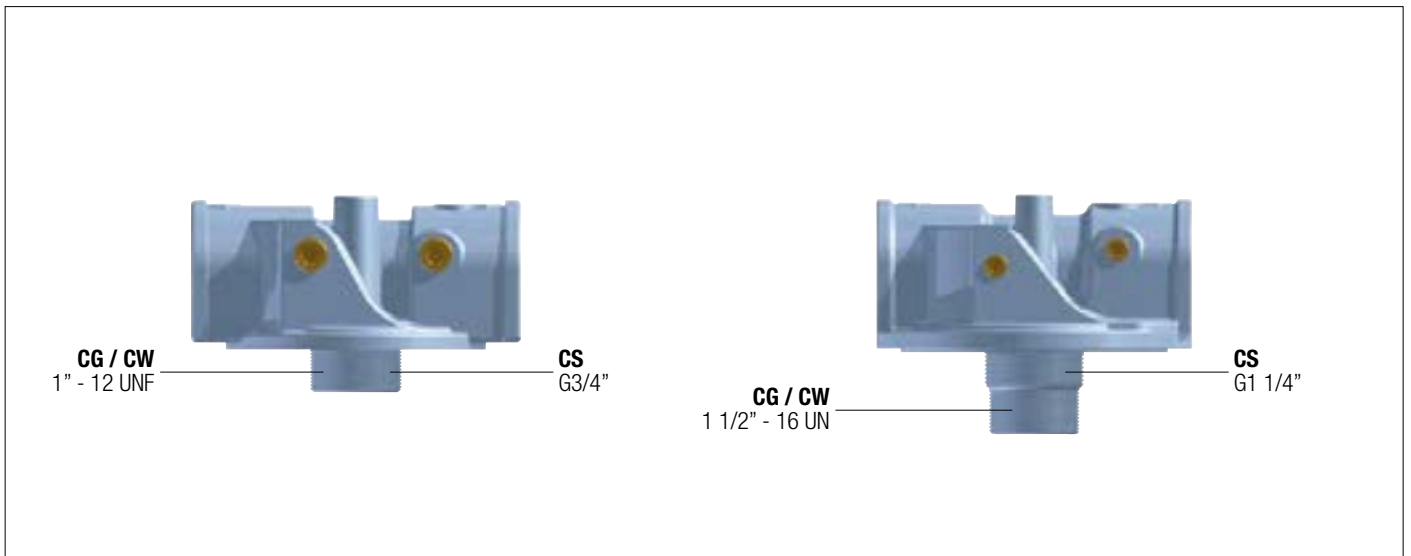
**Style S**  
MPS 301 - 351



**Style B**  
MPS 301 - 351



## Heads



## Cartridge

**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**

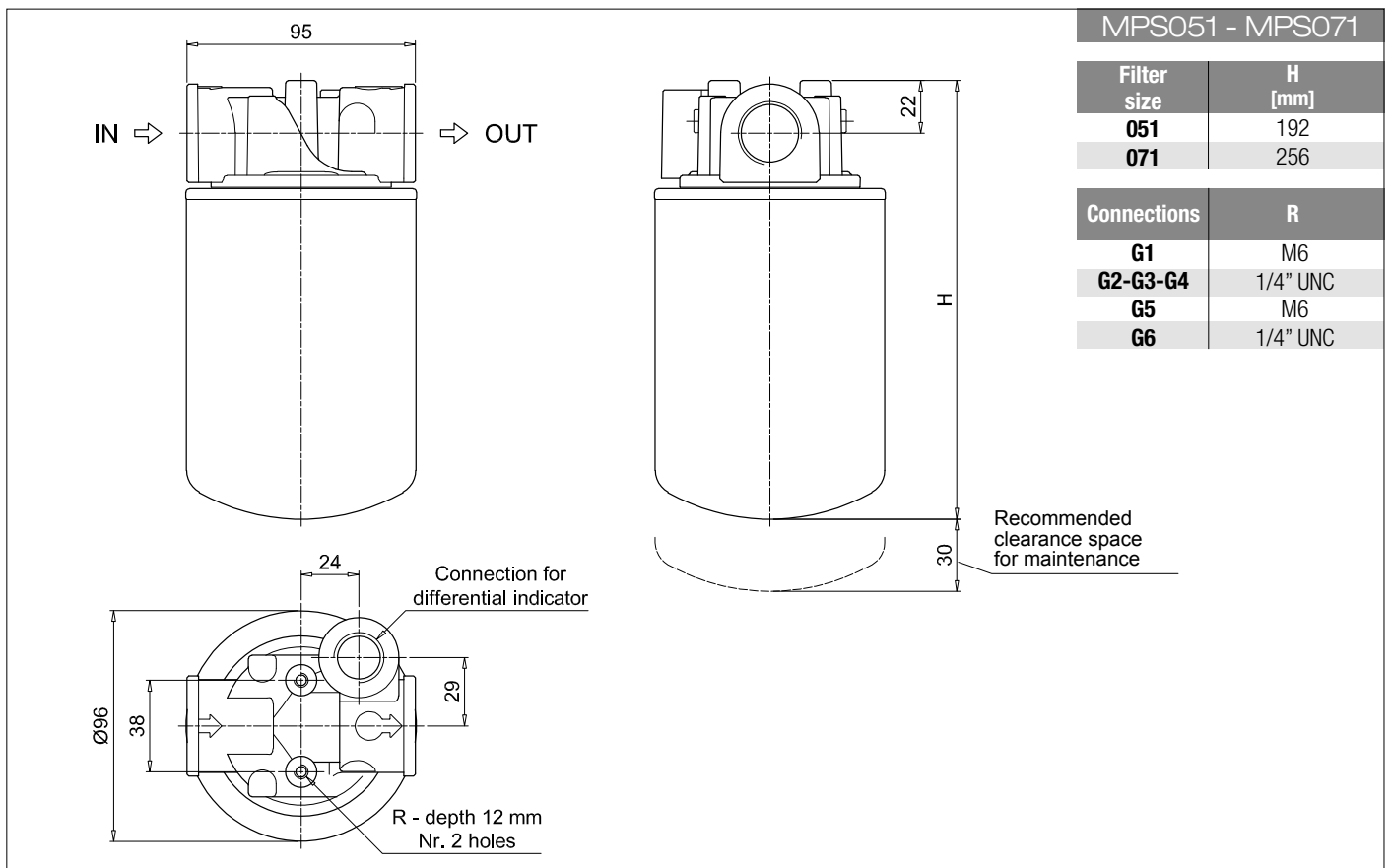
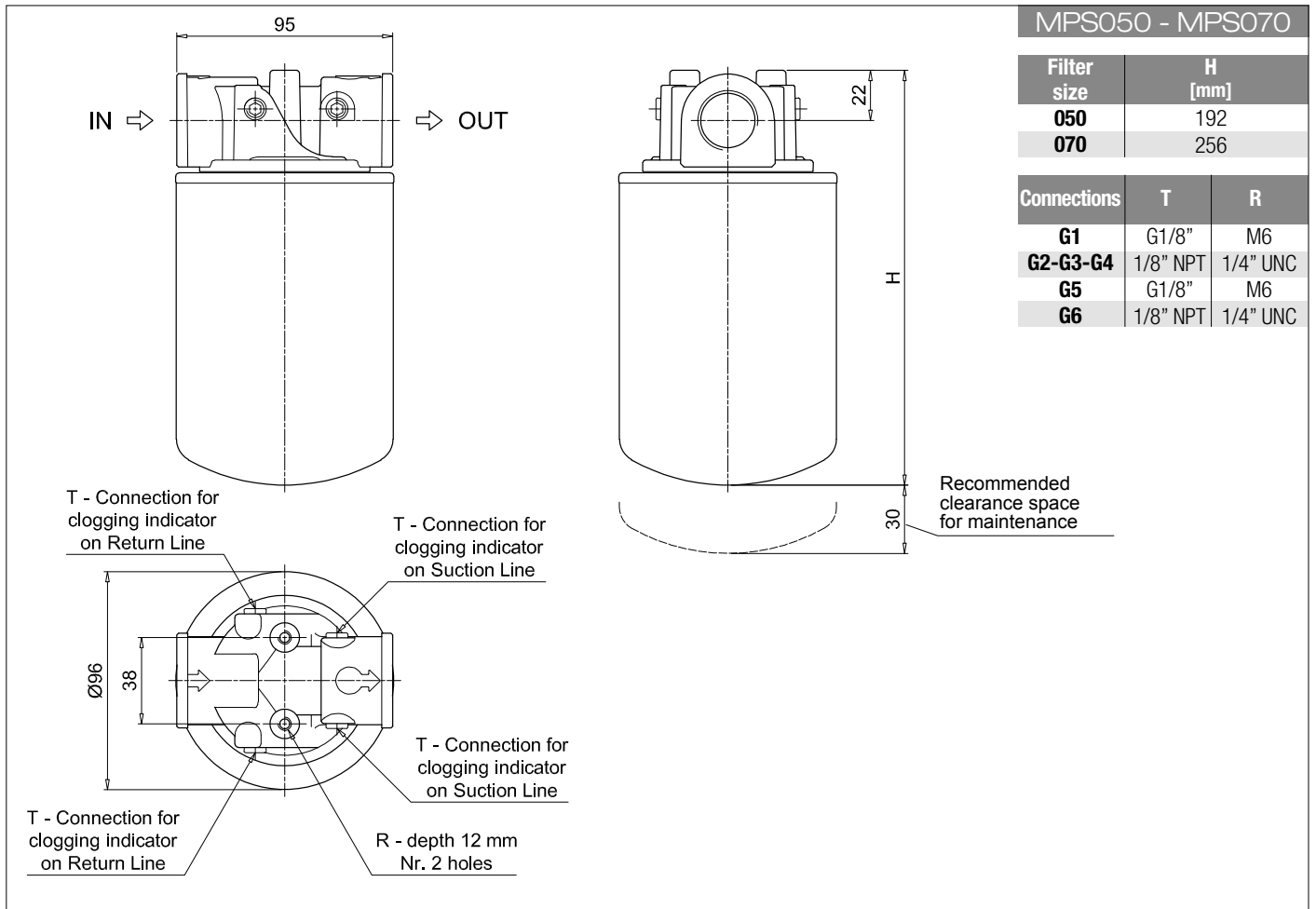
### Thread connections

Element	Connection
<b>CS 050 - 070</b>	G3/4"
<b>CS 100 - 150</b>	G1 1/4"
<b>CG / CW 050 - 070</b>	1" - 12 UNF
<b>CG / CW 100 - 150</b>	1 1/2" - 16 UN

### Water holding capacities CW

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





# MPS MPS100 - MPS150 MPS101 - MPS151

## Designation & Ordering code

### COMPLETE FILTER

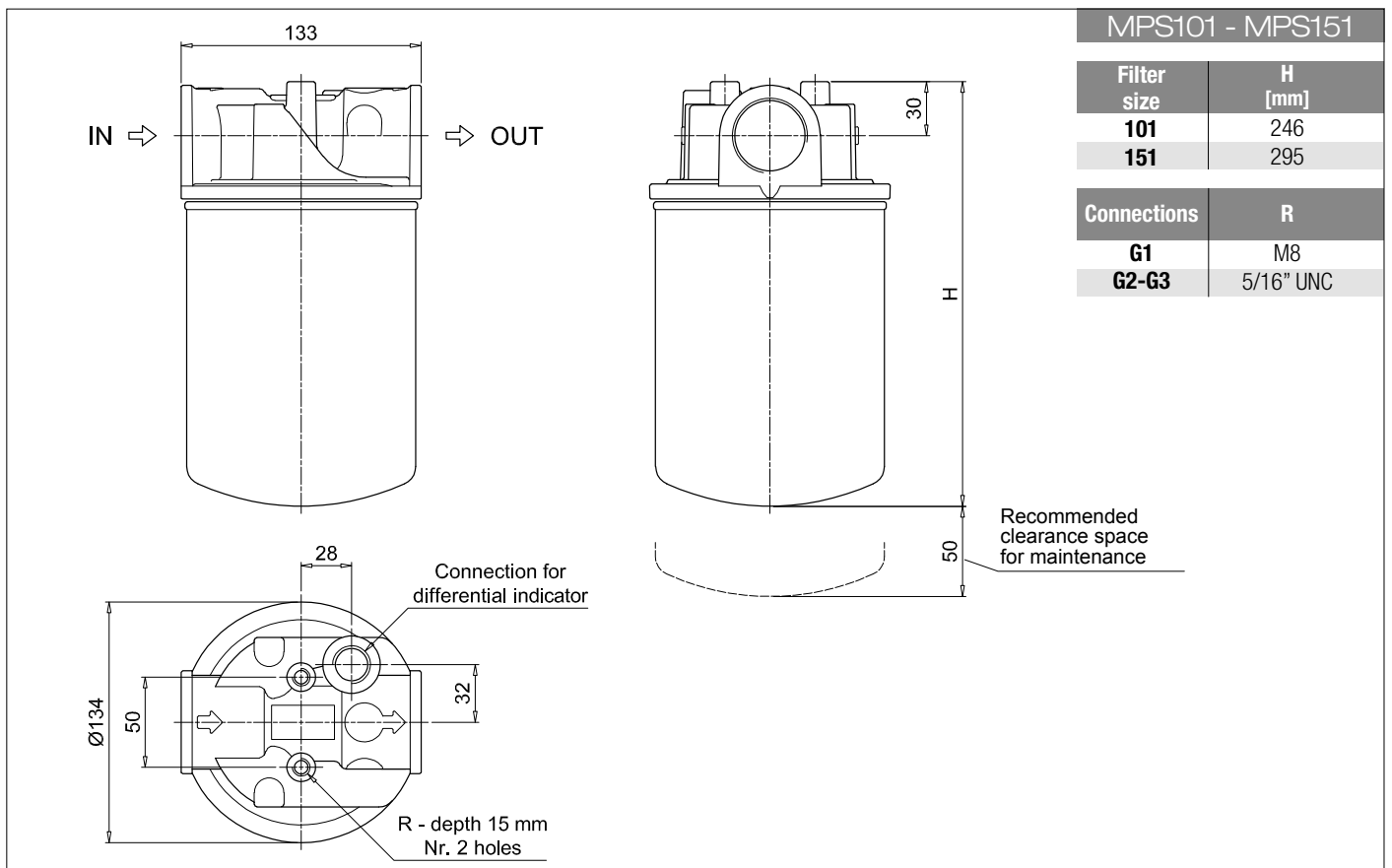
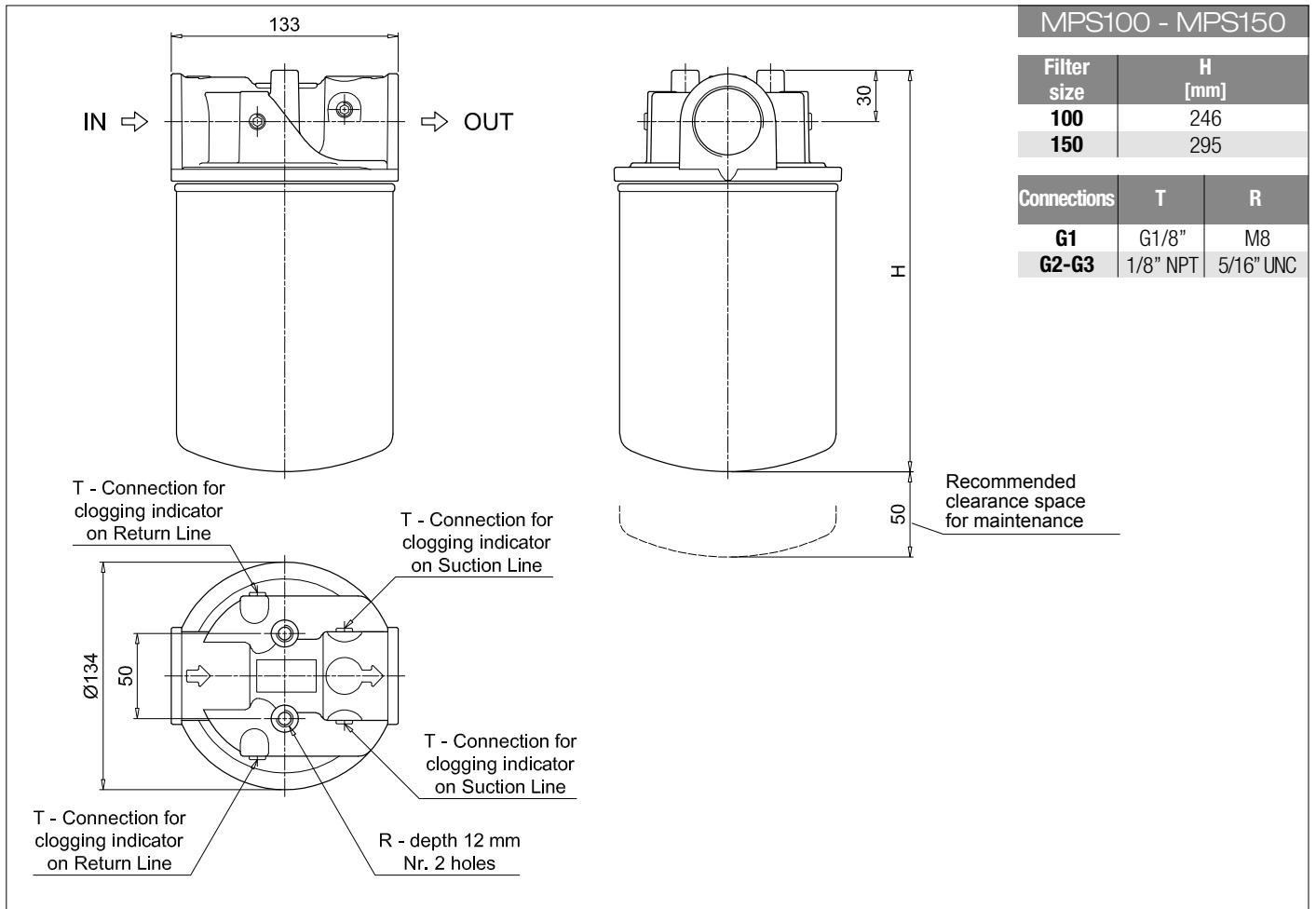
<b>Series and size</b>		Configuration example: <b>MPS100</b> <b>R</b> <b>G1</b> <b>A10</b> <b>A</b> <b>P01</b>				
<b>MPS100</b>   <b>MPS150</b>	With connections for clogging indicators					
<b>MPS101</b>   <b>MPS151</b>	With connections for differential indicators					
<b>Bypass valve</b>		<b>MPS 100 - 150</b>	<b>MPS 101 - 151</b>			
<b>R</b>	Return: 1.75 bar	•	•			
<b>S</b>	Suction: 30 kPa	•				
<b>U</b>	Without bypass	•				
<b>P</b>	Without bypass		•			
<b>Connections</b>						
<b>G1</b>	G1 1/4"					
<b>G2</b>	1 1/4" NPT					
<b>G3</b>	SAE 20 - 1 5/8" - 12 UN					
<b>Filtration rating (filter media)</b>						
<b>A03</b>	Inorganic microfiber 3 µm					
<b>A06</b>	Inorganic microfiber 6 µm					
<b>A10</b>	Inorganic microfiber 10 µm					
<b>A25</b>	Inorganic microfiber 25 µm					
		<b>M25</b>	Wire mesh 25 µm			
		<b>M60</b>	Wire mesh 60 µm			
		<b>M90</b>	Wire mesh 90 µm			
		<b>P10</b>	Resin impregnated paper 10 µm			
		<b>P25</b>	Resin impregnated paper 25 µm			
				<b>Seal</b>	<b>Execution</b>	
				<b>A</b> NBR	<b>P01</b> MP Filtri standard	

### CARTRIDGE

<b>Cartridge series and size</b>		Configuration example: <b>CS100</b> <b>A10</b> <b>A</b> <b>P01</b>			
<b>CS100</b>   <b>CS150</b>					
<b>Filtration rating (filter media)</b>					
<b>A03</b>	Inorganic microfiber 3 µm				
<b>A06</b>	Inorganic microfiber 6 µm				
<b>A10</b>	Inorganic microfiber 10 µm				
<b>A25</b>	Inorganic microfiber 25 µm				
		<b>M25</b>	Wire mesh 25 µm		
		<b>M60</b>	Wire mesh 60 µm		
		<b>M90</b>	Wire mesh 90 µm		
		<b>P10</b>	Resin impregnated paper 10 µm		
		<b>P25</b>	Resin impregnated paper 25 µm		
				<b>Seals</b>	<b>Execution</b>
				<b>A</b> NBR	<b>P01</b> MP Filtri standard <b>Pxx</b> Customized

### ACCESSORIES

<b>Clogging indicators on RETURN line</b>		page	<b>Clogging indicators on SUCTION line</b>		page
<b>BVA</b>	Axial pressure gauge	295	<b>BEA</b>	Electrical pressure indicator	294
<b>BVR</b>	Radial pressure gauge	295	<b>BEM</b>	Electrical pressure indicator	294
<b>BVP</b>	Visual pressure indicator with automatic reset	296	<b>BLA</b>	Electrical / visual pressure indicator	294-295
<b>BVQ</b>	Visual pressure indicator with manual reset	296			
<b>Clogging indicators on SUCTION line</b>		page	<b>Clogging indicators on SUCTION line</b>		page
<b>VVB</b>	Axial pressure gauge	293	<b>VEB</b>	Electrical vacuum indicator	292
<b>VVS</b>	Radial pressure gauge	293	<b>VLB</b>	Electrical/visual vacuum indicator	292
<b>Differential indicators</b>		page	<b>Differential indicators</b>		page
<b>DEA</b>	Electrical differential indicator	297	<b>DTA</b>	Electronic differential indicator	300
<b>DEM</b>	Electrical differential indicator	297-298	<b>DVA</b>	Visual differential indicator	300
<b>DLA</b>	Electrical / visual differential indicator	298-299	<b>DVM</b>	Visual differential indicator	300
<b>DLE</b>	Electrical / visual differential indicator	299			



# MPS MPS200 - MPS250

## Designation & Ordering code

### COMPLETE FILTER

<b>Series and size</b> MPS200   MPS250	Configuration example: MPS200					R	G1	A10	A	P01
<b>Bypass valve</b>										
R	Return: 1.75 bar									
S	Suction: 30 kPa									
U	Without bypass									
<b>Connections</b>										
G1	G1 1/2"									
G2	1 1/2" NPT									
G3	SAE 24 - 1 7/8" - 12 UN									
<b>Filtration rating (filter media)</b>										
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									
						<b>Seal</b> A NBR		<b>Execution</b> P01 MP Filtri standard		

### CARTRIDGE

<b>Cartridge series and size</b> CS100   CS150	Configuration example: CS100				A10	A	P01
<b>Filtration rating (filter media)</b>							
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						
					<b>Seals</b> A NBR		<b>Execution</b> P01 MP Filtri standard Pxx Customized

### ACCESSORIES

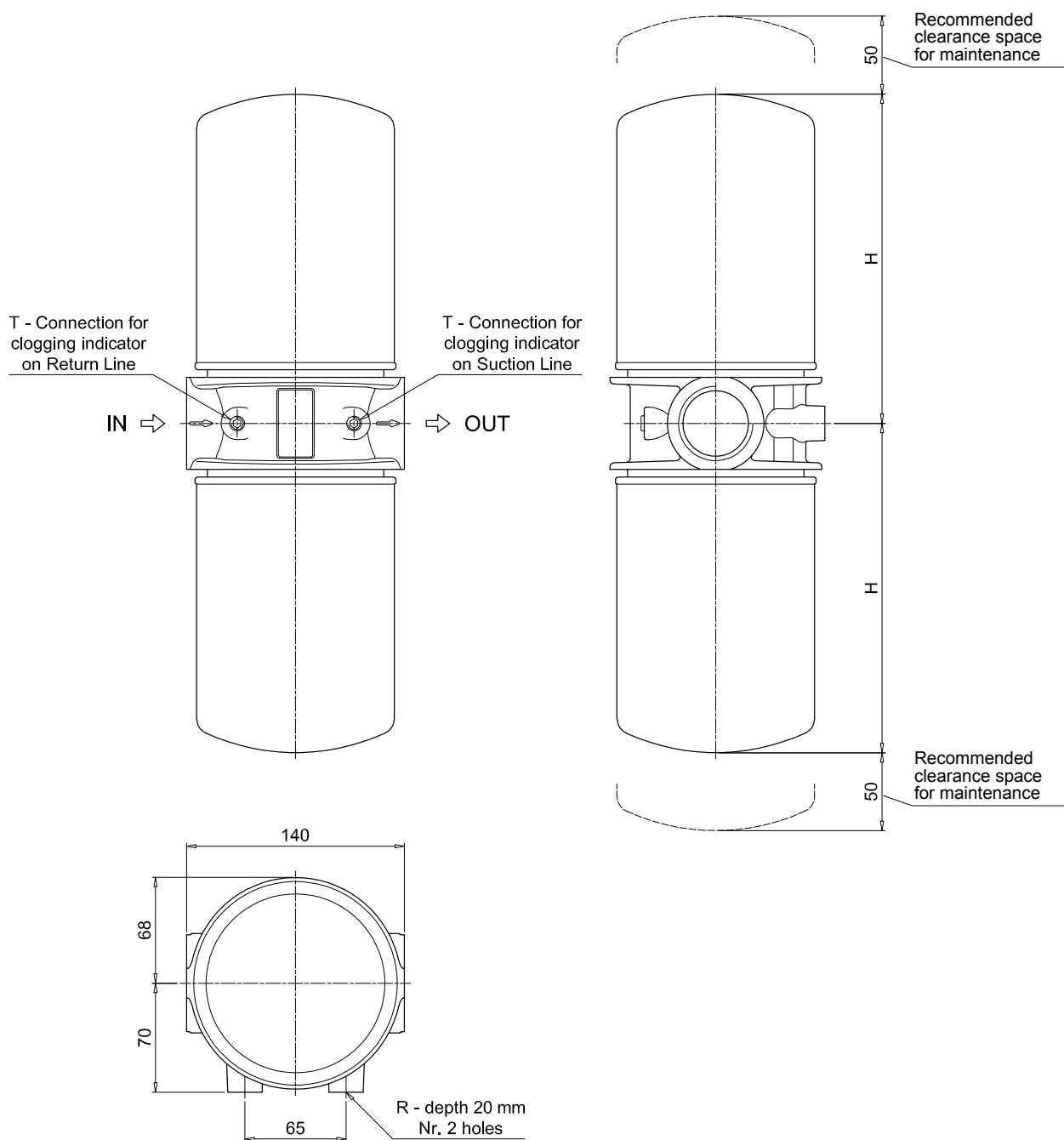
Clogging indicators on RETURN line		page	Clogging indicators on SUCTION line		page
BVA	Axial pressure gauge	295	BEA	Electrical pressure indicator	294
BVR	Radial pressure gauge	295	BEM	Electrical pressure indicator	294
BVP	Visual pressure indicator with automatic reset	296	BLA	Electrical / visual pressure indicator	294-295
BVQ	Visual pressure indicator with manual reset	296			
VVB	Axial pressure gauge	293	VEB	Electrical vacuum indicator	292
VVS	Radial pressure gauge	293	VLB	Electrical/visual vacuum indicator	292



### MPS200 - MPS250

Filter size	H [mm]
<b>200</b>	213
<b>250</b>	262

Connections	T	R
<b>G1</b>	G1/8"	M10
<b>G2-G3</b>	1/8" NPT	7/16" UNC



# MPS MPS300 - MPS350 MPS301 - MPS351

## Designation & Ordering code

### COMPLETE FILTER

#### Series and size

**MPS300** | **MPS350** With connections for clogging indicators

**MPS301** | **MPS351** With connections for differential indicators

Configuration example: **MPS300** **R** **F1** **A10** **A** **P01**

#### Bypass valve

	MPS 300 - 350	MPS 301 - 351
<b>R</b> Return: 1.75 bar	•	•
<b>S</b> Suction: 30 kPa	•	
<b>U</b> Without bypass	•	
<b>P</b> Without bypass		•

#### Connections

<b>G1</b> G1 1/2"
<b>G2</b> 1 1/2" NPT
<b>G3</b> SAE 24 - 1 7/8" - 12 UN
<b>F1</b> 1 1/2" SAE 3000 psi/M
<b>F2</b> 1 1/2" SAE 3000 psi/UNC

#### Filtration rating (filter media)

<b>A03</b> Inorganic microfiber 3 µm	<b>M25</b> Wire mesh 25 µm
<b>A06</b> Inorganic microfiber 6 µm	<b>M60</b> Wire mesh 60 µm
<b>A10</b> Inorganic microfiber 10 µm	<b>M90</b> Wire mesh 90 µm
<b>A25</b> Inorganic microfiber 25 µm	<b>P10</b> Resin impregnated paper 10 µm
	<b>P25</b> Resin impregnated paper 25 µm

#### Seal

**A** NBR

#### Execution

**P01** MP Filtri standard

### CARTRIDGE

#### Cartridge series and size

**CS100** | **CS150**

Configuration example: **CS100** **A10** **A** **P01**

#### Filtration rating (filter media)

<b>A03</b> Inorganic microfiber 3 µm	<b>M25</b> Wire mesh 25 µm
<b>A06</b> Inorganic microfiber 6 µm	<b>M60</b> Wire mesh 60 µm
<b>A10</b> Inorganic microfiber 10 µm	<b>M90</b> Wire mesh 90 µm
<b>A25</b> Inorganic microfiber 25 µm	<b>P10</b> Resin impregnated paper 10 µm
	<b>P25</b> Resin impregnated paper 25 µm

#### Seals

**A** NBR

#### Execution

**P01** MP Filtri standard

**Pxx** Customized

### ACCESSORIES

#### Clogging indicators on RETURN line

	page
<b>BVA</b> Axial pressure gauge	295
<b>BVR</b> Radial pressure gauge	295
<b>BVP</b> Visual pressure indicator with automatic reset	296
<b>BVQ</b> Visual pressure indicator with manual reset	296

	page
<b>BEA</b> Electrical pressure indicator	294
<b>BEM</b> Electrical pressure indicator	294
<b>BLA</b> Electrical / visual pressure indicator	294-295

#### Clogging indicators on SUCTION line

	page
<b>VVB</b> Axial pressure gauge	293
<b>VVS</b> Radial pressure gauge	293

	page
<b>VEB</b> Electrical vacuum indicator	292
<b>VLB</b> Electrical/visual vacuum indicator	292

#### Differential indicators

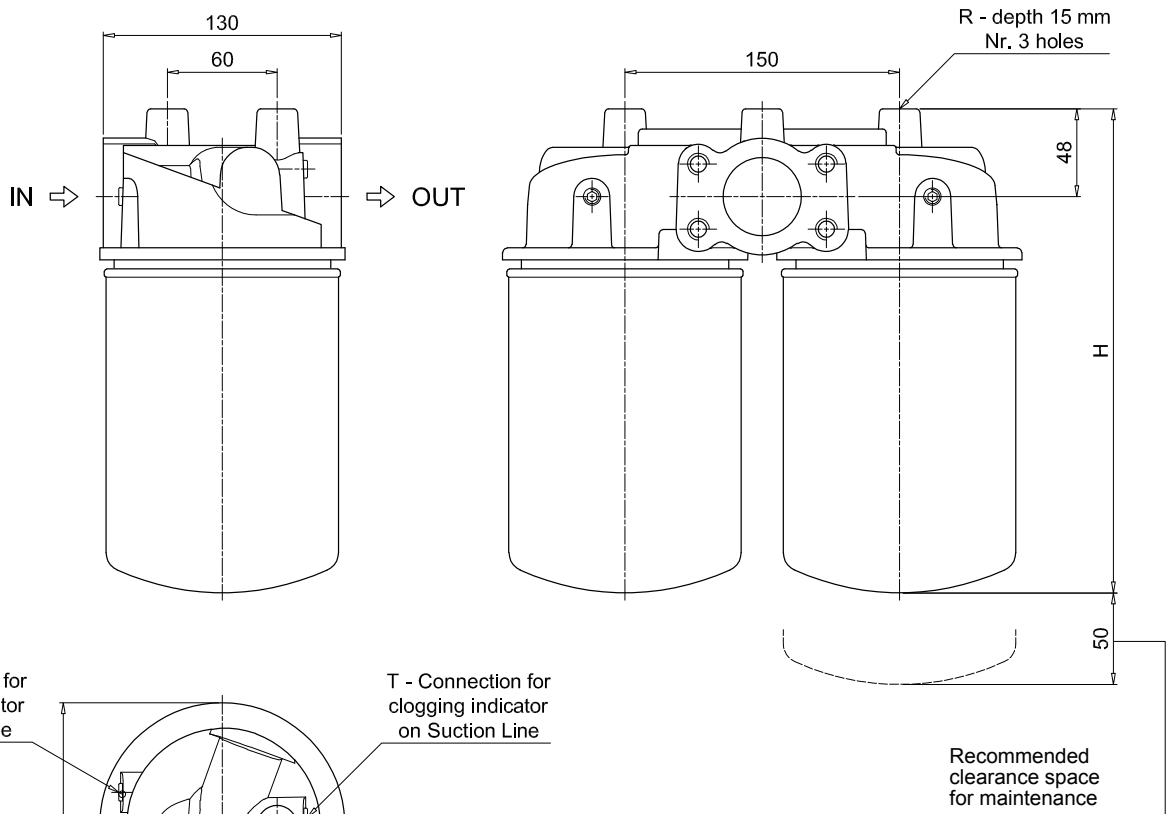
	page
<b>DEA</b> Electrical differential indicator	297
<b>DEM</b> Electrical differential indicator	297-298
<b>DLA</b> Electrical / visual differential indicator	298-299
<b>DLE</b> Electrical / visual differential indicator	299

	page
<b>DTA</b> Electronic differential indicator	300
<b>DVA</b> Visual differential indicator	300
<b>DVM</b> Visual differential indicator	300

### MPS300 - MPS350

Filter size	H [mm]
<b>300</b>	266
<b>350</b>	315

Connections	T	R
<b>G1</b>	G1/8"	M10
<b>G2-G3</b>	1/8" NPT	7/16" UNC
<b>F1</b>	G1/8"	M10
<b>F2</b>	1/8" NPT	7/16" UNC



T - Connection for clogging indicator on Return Line

T - Connection for clogging indicator on Suction Line

T - Connection for clogging indicator on Return Line

T - Connection for clogging indicator on Suction Line

Recommended clearance space for maintenance

# MPS MPS300 - MPS350 MPS301 - MPS351

## Dimensions

### MPS301 - MPS351

Filter size	H [mm]
<b>301</b>	266
<b>351</b>	315

Connections	R
<b>G1</b>	M10
<b>G2-G3</b>	7/16" UNC
<b>F1</b>	M10
<b>F2</b>	7/16" UNC

