

# MSH series

Maximum working pressure up to 3.5 MPa (35 bar) - Flow rate up to 195 l/min



## Description

## Technical data

### Spin-on filters

**Maximum working pressure up to 3.5 MPa (35 bar)**  
**Flow rate up to 195 l/min**

MSH is a range of spin-on filters suitable to be used in 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 1/4", for a maximum flow rate of 195 l/min
- Fine filtration rating, to get a good cleanliness level into the reservoir
- Strong sealing between the housing and cans, to be used in heavy applications
- Bypass valve, to relieve excessive pressure drop across the filter media
- Visual, electrical and electronic differential clogging indicators for low pressure applications

#### Common applications:

- Delivery lines, in economic industrial equipment or mobile machines

### Filter housing materials

- Head: Anodized Aluminium
- Bypass valve: Nylon - Steel
- Element: Aluminium - Painted Steel

### Bypass valve

Opening pressure: 250 kPa (2.5 bar) ±10%

### Δp element type

- Δp: 5 bar
- Oil flow from OUT to IN

### Seals

- Standard NBR - series A
- Optional FPM - series V

### Temperature

From -20 °C to +110 °C

### Note

MSH filters are provided for vertical mounting

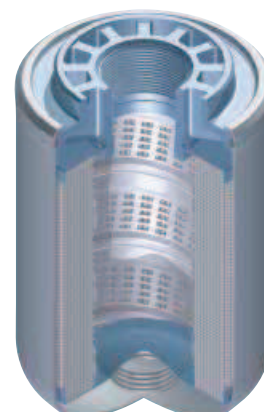


## Weights [kg] and volumes [dm<sup>3</sup>]

Filter series	Weights [kg]	Volumes [dm <sup>3</sup> ]
<b>MSH 050</b>	1.50	0.65
<b>MSH 070</b>	1.90	0.95
<b>MSH 100</b>	3.30	1.80
<b>MSH 150</b>	3.80	2.20

## Cartridge

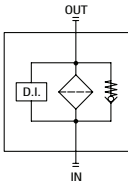
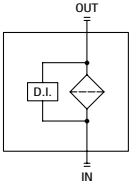
CH



### Thread connections

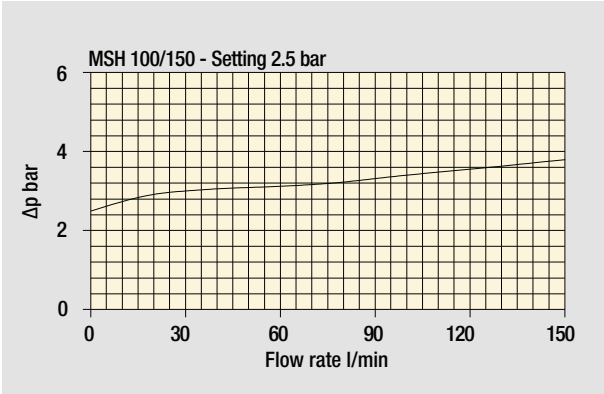
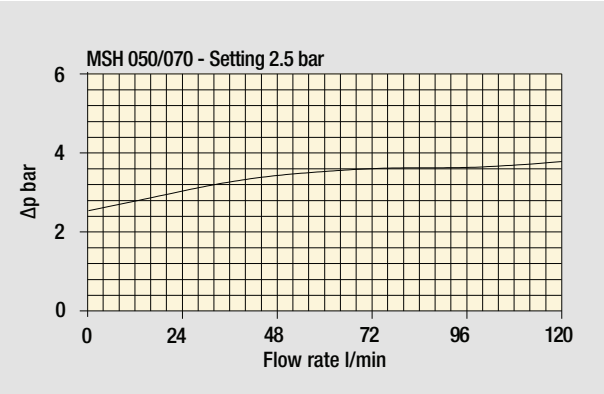
Type	Connection
<b>CH 050 - 070</b>	M32 x 2
<b>CH 100 - 150</b>	M45 x 2

Filter series	Style S	Style B
<b>MSH 050</b>	•	•
<b>MSH 070</b>	•	•
<b>MSH 100</b>	•	•
<b>MSH 150</b>	•	•



### Pressure drop

Bypass valve pressure drop



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

# MSH MSH050 - MSH070 MSH100 - MSH150

## Designation & Ordering code

### COMPLETE FILTER

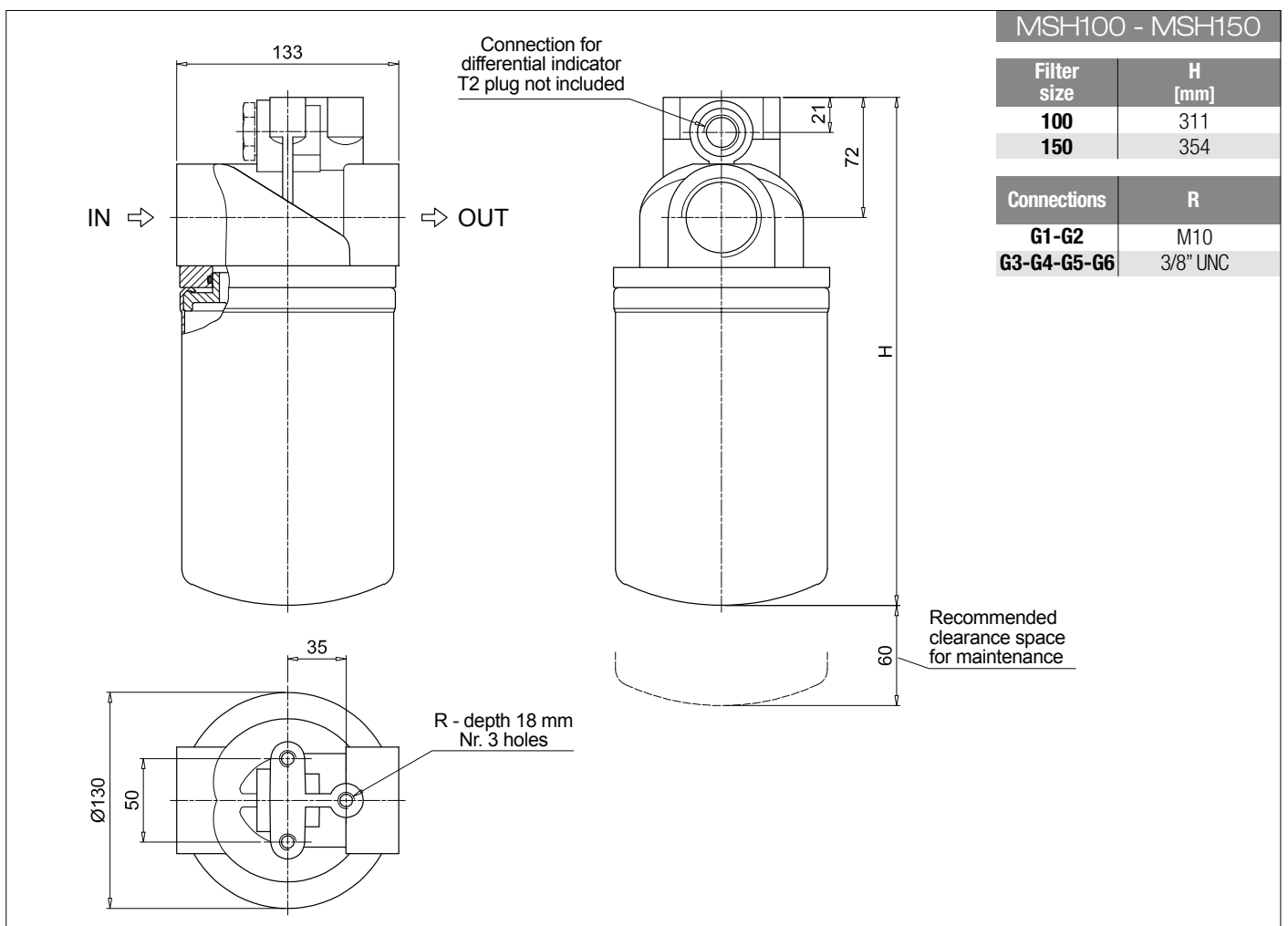
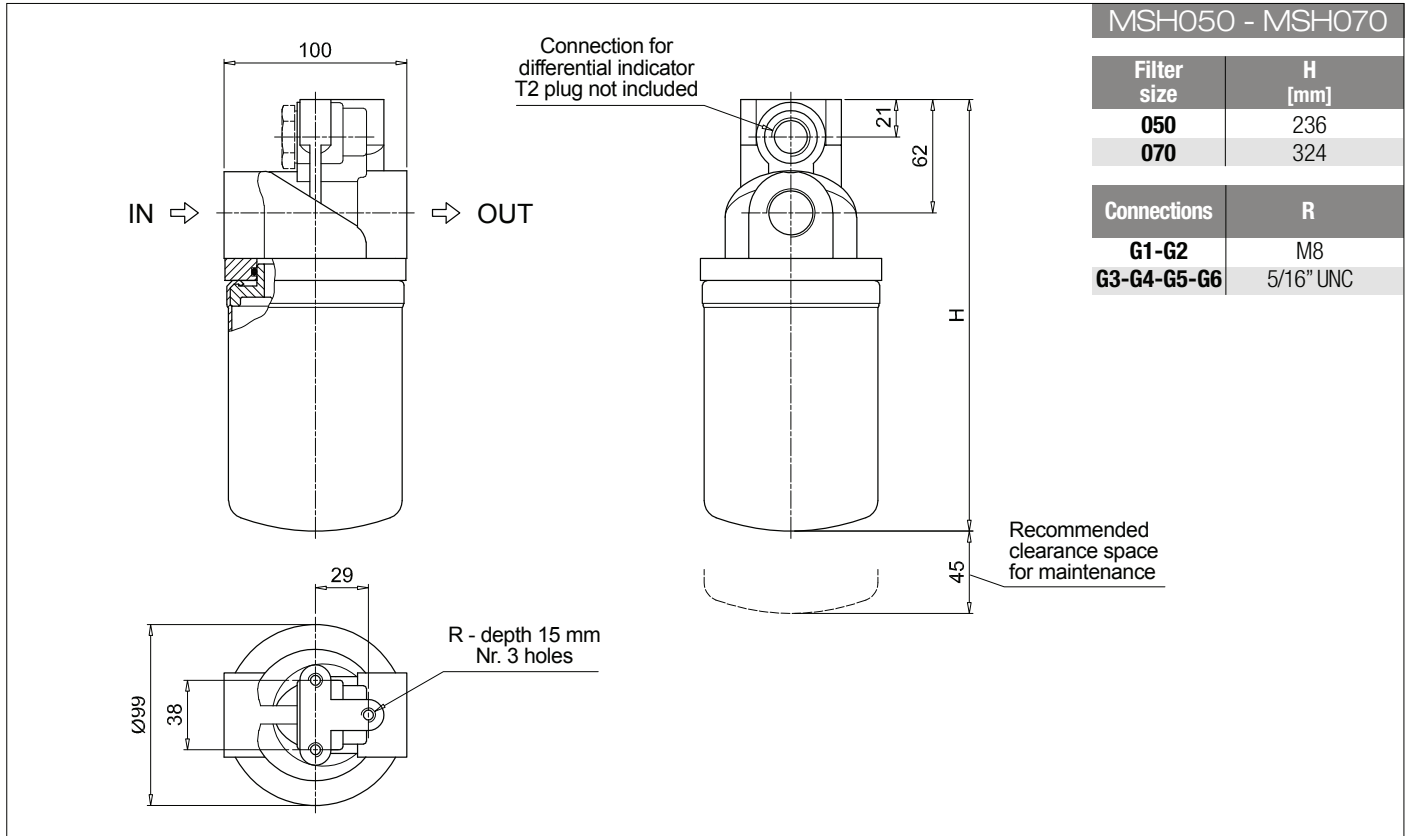
<b>Series and size</b>		Configuration example: <b>MSH050</b> <b>B</b> <b>A</b> <b>G1</b> <b>A10</b> <b>P01</b>				
<b>MSH050</b>   <b>MSH070</b>   <b>MSH100</b>   <b>MSH150</b>						
<b>Bypass valve</b>						
<b>S</b>	Without bypass					
<b>B</b>	2.5 bar					
<b>Seal</b>						
<b>A</b>	NBR					
<b>Connections</b>	<b>MSH 050 - 070</b>	<b>MSH 100 - 150</b>				
<b>G1</b>	G 1"	G 1 1/2"				
<b>G2</b>	G 3/4"	G 1 1/4"				
<b>G3</b>	1" NPT	1 1/2" NPT				
<b>G4</b>	3/4" NPT	1 1/4" NPT				
<b>G5</b>	SAE 16 - 1 5/16" - 12 UN	SAE 24 - 1 7/8" - 12 UN				
<b>G6</b>	SAE 12 - 1 1/16" - 12 UN	SAE 20 - 1 5/8" - 12 UN				
<b>Filtration rating (filter media)</b>						
<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			
			<b>Execution</b>			
			<b>P01</b> MP Filtri standard			

### CARTRIDGE

<b>Cartridge series and size</b>		Configuration example: <b>CH050</b> <b>A10</b> <b>A</b> <b>P01</b>			
<b>CH050</b>   <b>CH070</b>   <b>CH100</b>   <b>CH150</b>					
<b>Filtration rating (filter media)</b>					
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<b>A25</b>	Inorganic microfiber 25 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	
				<b>Pxx</b> Customized	

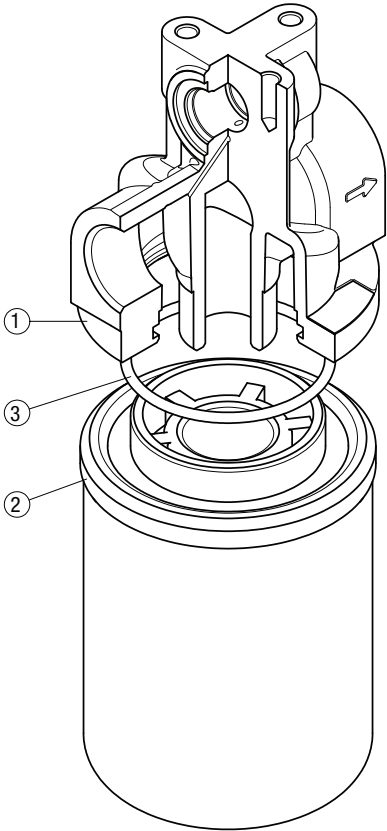
### ACCESSORIES

<b>Differential indicators</b>		page			page
<b>DEA</b>	Electrical differential indicator	317	<b>DTA</b>	Electronic differential indicator	320
<b>DEM</b>	Electrical differential indicator	317-318	<b>DVA</b>	Visual differential indicator	320
<b>DLA</b>	Electrical / visual differential indicator	318-319	<b>DVM</b>	Visual differential indicator	320
<b>DLE</b>	Electrical / visual differential indicator	319			
<b>Additional features</b>		page			
<b>T2</b>	Plug	321			



# MSH SPARE PARTS

Order number for spare parts



Item:	Q.ty: 1 pc. 1	Q.ty: 1 pc. 2	Q.ty: 1 pc. 3
Filter series	Filter assembly	Cartridge	Seal code number
<b>MSH 050-070</b>	See order table	See order table	0-R 167 (ø 63.50 x 3.53)
<b>MSH 100-150</b>	See order table	See order table	0-R 4362 (ø 91.67 x 3.53)