

# 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)  $\pm$ 10%

### $\Delta p$ element type

- $\Delta p$ : 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>]

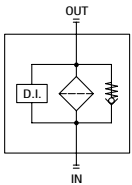
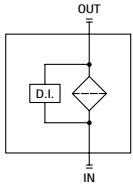
Filter series	Weights [kg]	Volumes [dm <sup>3</sup> ]
<b>MSH 050</b>	1.50	0.65
<b>MSH 070</b>	1.90	0.95
<b>MSH 100</b>	3.30	1.80
<b>MSH 150</b>	3.80	2.20

## Cartridge

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

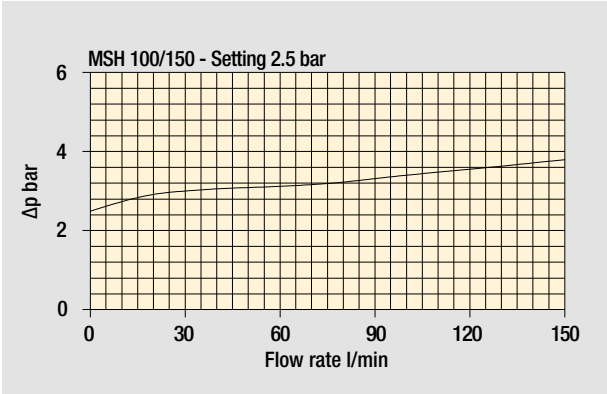
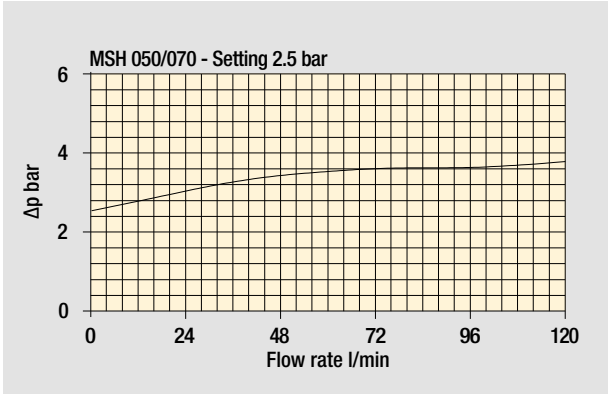
**CH**

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

Series and size **MSH050** | **MSH070** | **MSH100** | **MSH150** Configuration example: **MSH050** **B** **A** **G1** **A10** **P01**

**Bypass valve**  
**S** Without bypass  
**B** 2.5 bar

**Seal**  
**A** NBR

Connections	MSH 050 - 070	MSH 100 - 150
<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

**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

**Execution**  
**P01** MP Filtri standard

## CARTRIDGE

Cartridge series and size **CH050** | **CH070** | **CH100** | **CH150** Configuration example: **CH050** **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

**Seal**  
**A** NBR

**Execution**  
**P01** MP Filtri standard  
**Pxx** Customized

## CLOGGING INDICATORS

See page 714-715

### Differential pressure indicators

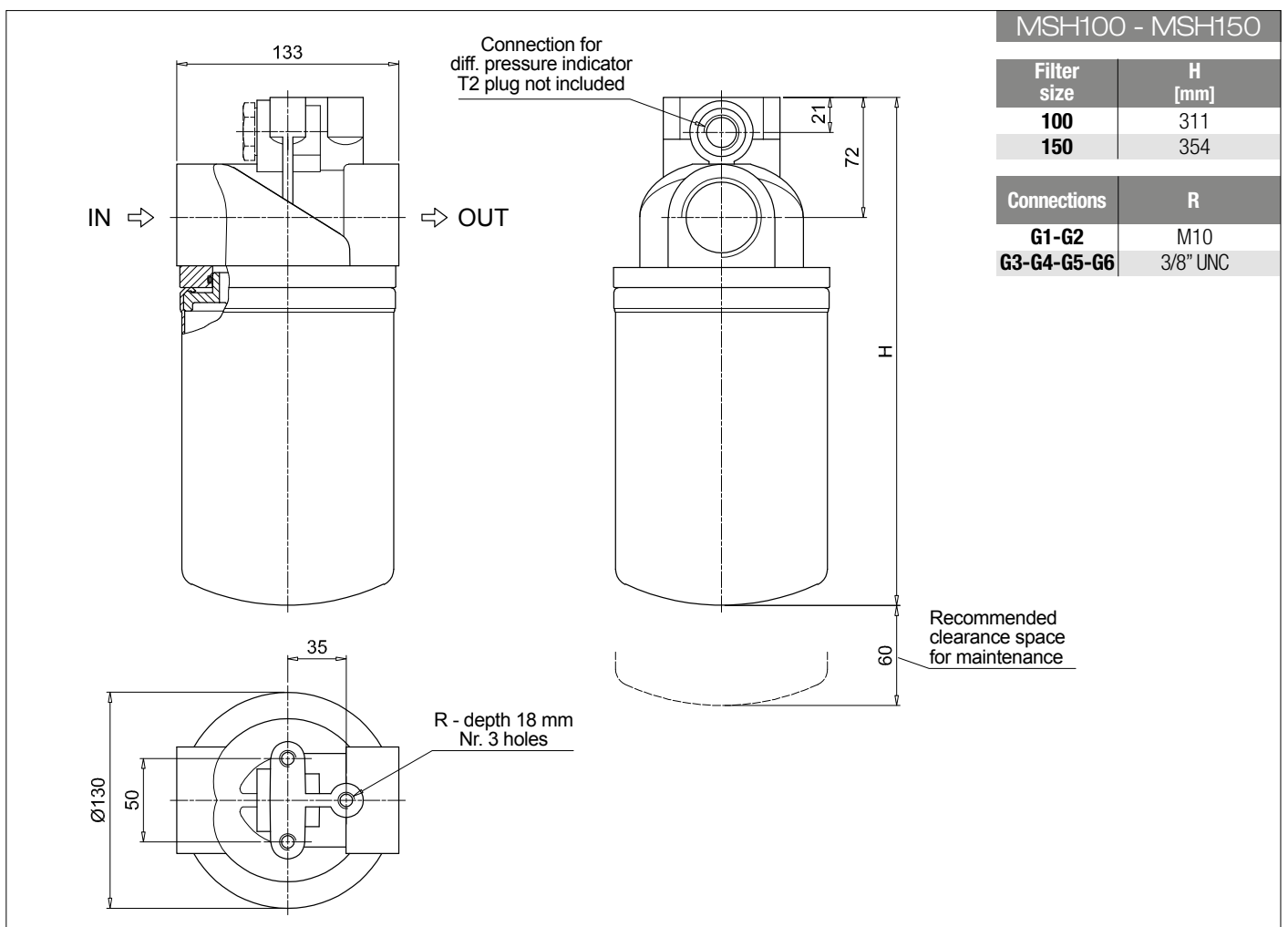
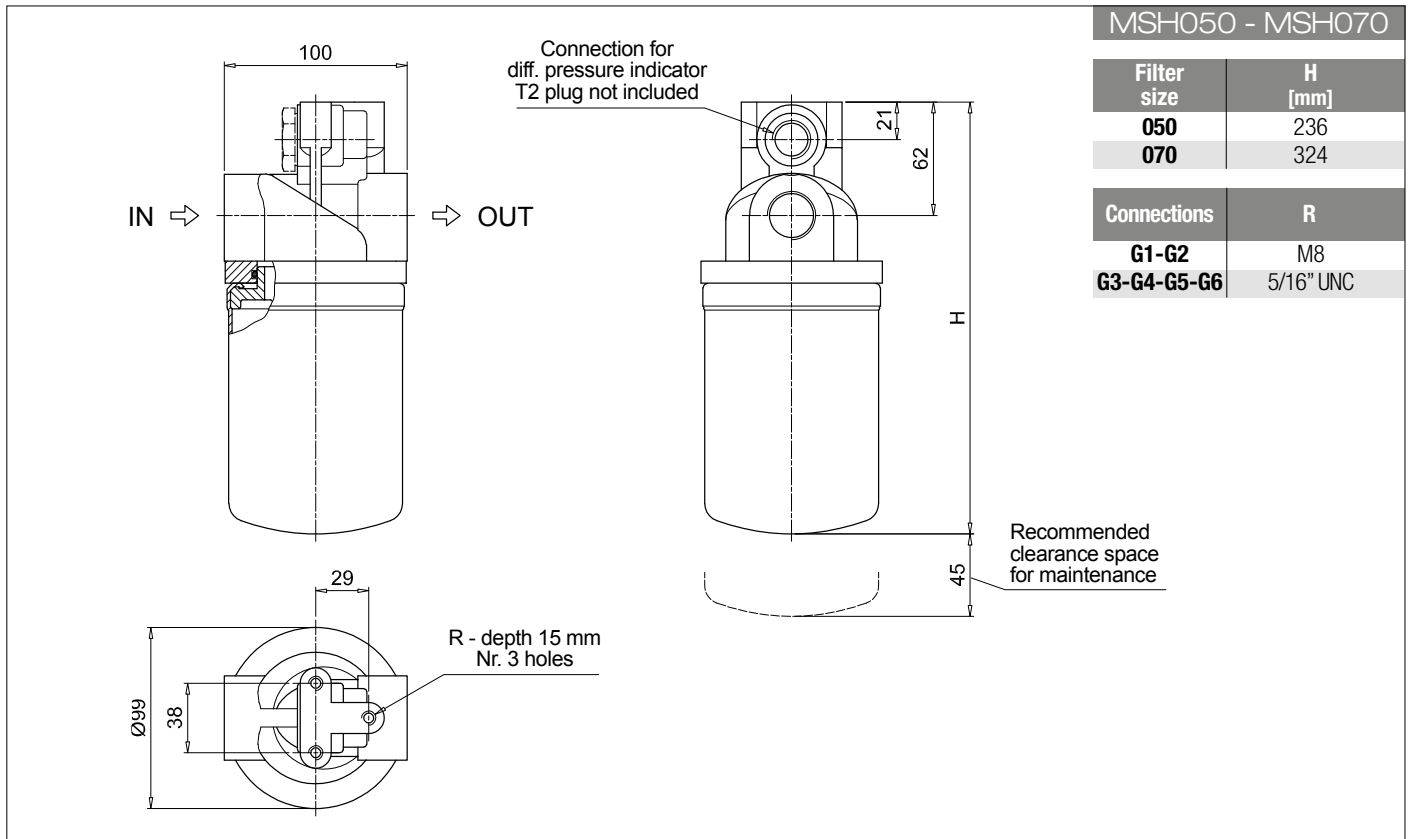
<b>DEA</b> Electrical differential pressure indicator
<b>DEM</b> Electrical differential pressure indicator
<b>DLA</b> Electrical / visual differential pressure indicator
<b>DLE</b> Electrical / visual differential pressure indicator

<b>DTA</b> Electronic differential pressure indicator
<b>DVA</b> Visual differential pressure indicator
<b>DVM</b> Visual differential pressure indicator

## PLUGS

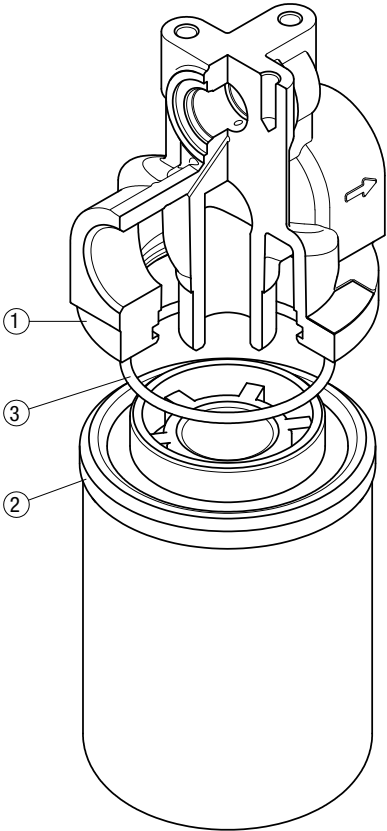
See page 737

<b>T2</b> Plug (not included)
-------------------------------



# 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)

