Фильтры Spin-On

Технические характеристики

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MPS GENERAL INFORMATION

Description

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 (CW), 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

Technical data

Filter housing materials
- Head: Aluminium
- Bypass valve: Polyamide - Steel
- Element: Zinc-Plated Steel - Painted steel

Bypass valve
- Inline / Return filter opening pressure: 175 kPa (1.75 bar) ±10%
- Inline / Suction filter opening pressure: 30 kPa (0.3 bar) ±10%

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

Seals
Standard NBR - series A

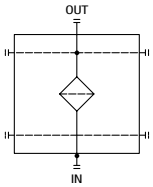
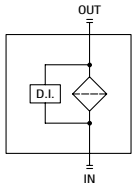
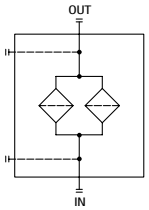
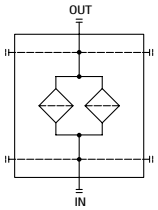
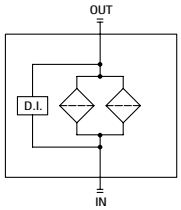
Temperature
From -20 °C to +110 °C

Note
MPS filters are provided for vertical mounting

Weights [kg] and volumes [dm³]

Filter series	Weights [kg]	Volumes [dm³]
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

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
					
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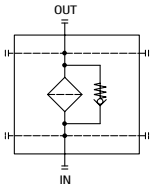
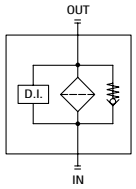
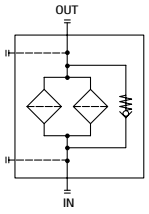
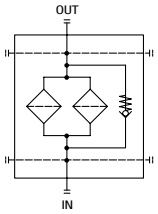
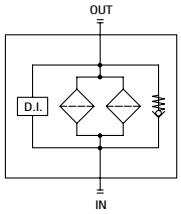
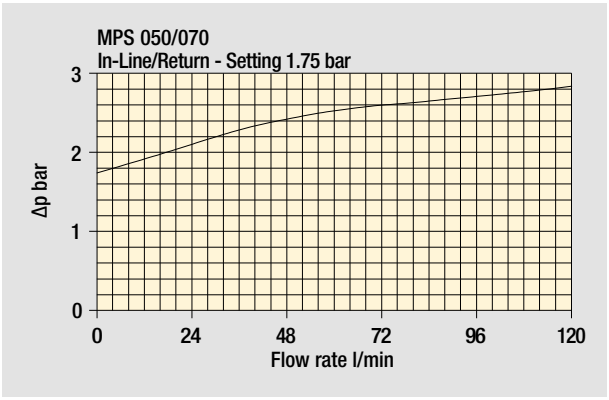
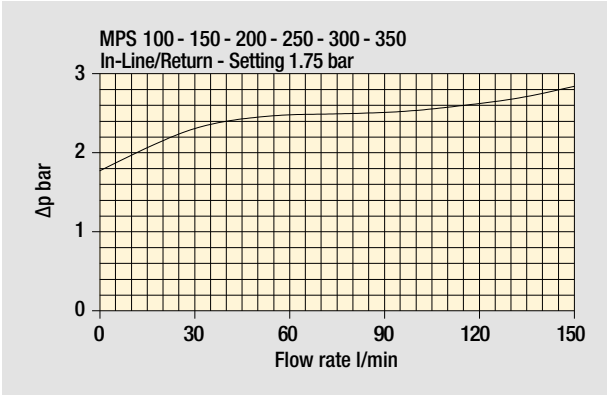
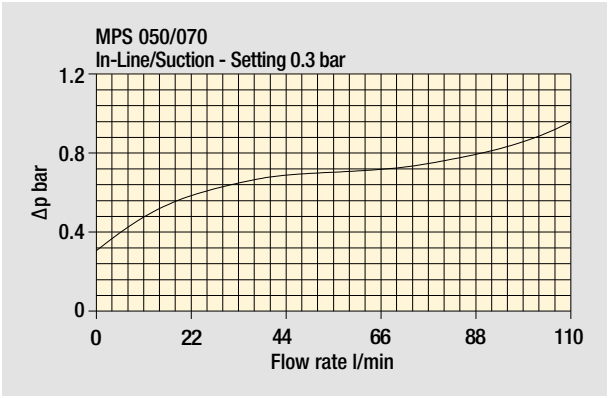
					

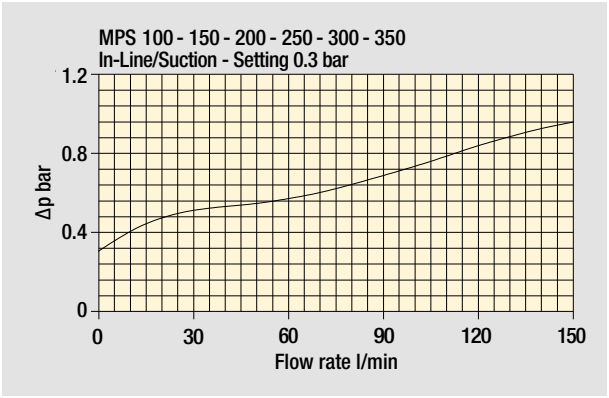
Pressure drop

Bypass valve pressure drop







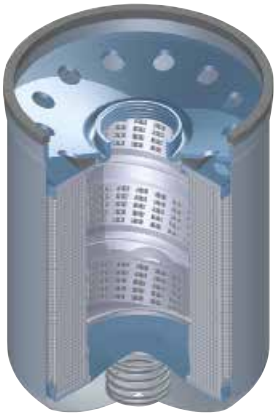


The curves are plotted using mineral oil with density of 0.86 kg/dm^3 in compliance with ISO 3968. Δp varies proportionally with density.

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.

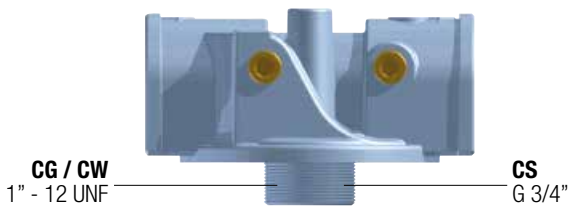
Water holding capacities:
CW 050= 240 ml
Ordering code: **CW050P10AP01**

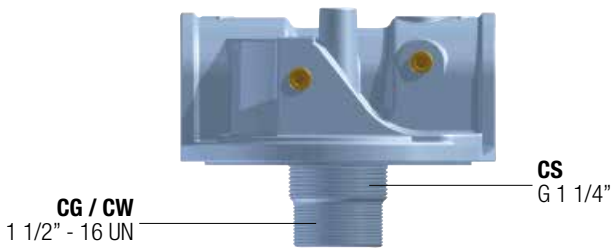
CW 150= 788 ml
Ordering code: **CW150P10AP01**

Thread connections	
Element	Connection
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)
H_2O 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





MPS MPS050 - MPS070 MPS051 - MPS071

Designation & Ordering code

COMPLETE FILTER

Configuration example : MPS050 | R | G1 | A10 | A | P01

Series and size

MPS050	**MPS070**	With connections for clogging indicators
MPS051	**MPS071**	With connections for differential pressure indicators

Bypass valve

		MPS 050 - 070	MPS 051 - 071
R	Inline / Return: with bypass 1.75 bar	•	•
S	Inline / Suction: with bypass 0.3 bar	•	-
U	Without bypass	•	-
P	Without bypass	-	•

Connections

G1	G 3/4”
G2	3/4” NPT
G3	SAE 12 - 1 1/16” - 12 UN

Filtration rating (filter media)

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

Seal

A	NBR

Execution

P01	MP Filtri standard

CARTRIDGE

Configuration example: CS050 | A10 | A | P01

Cartridge series and size

CS050 | **CS070**

Filtration rating (filter media)

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

Seals

A	NBR

Execution

P01	MP Filtri standard
Pxx	Customized

CLOGGING INDICATORS

See page 724-725

Clogging indicators on RETURN line

BVA	Axial pressure gauge	**BEA**	Electrical pressure indicator
BVR	Radial pressure gauge	**BEM**	Electrical pressure indicator
BVP	Visual pressure indicator with automatic reset	**BLA**	Electrical / visual pressure indicator
BVQ	Visual pressure indicator with manual reset		

Clogging indicators on SUCTION line

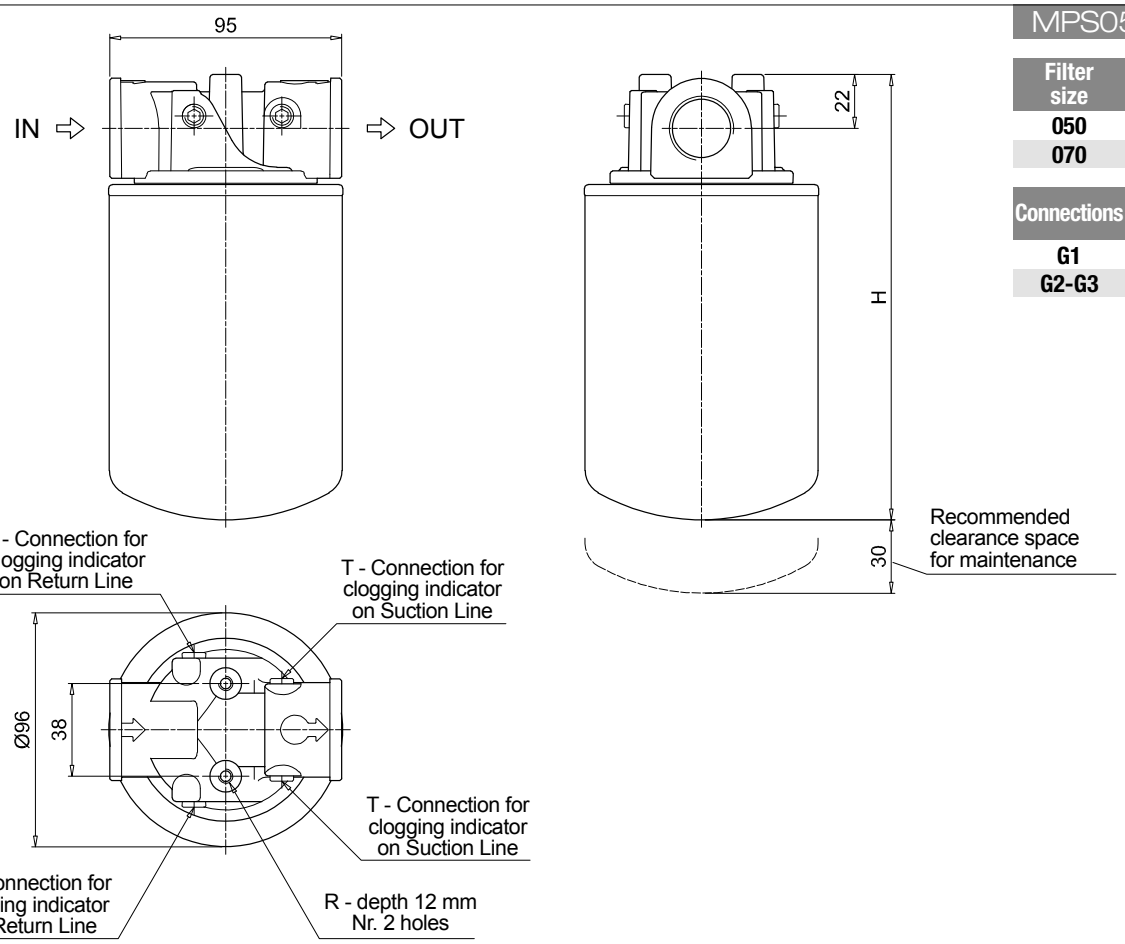
VVB	Axial pressure gauge	**VEB**	Electrical vacuum indicator
VVS	Radial pressure gauge	**VLB**	Electrical / visual vacuum indicator

Differential pressure indicators

DEA	Electrical differential pressure indicator	**DLE**	Electrical / visual differential pressure indicator
DEM	Electrical differential pressure indicator	**DTA**	Electronic differential pressure indicator
DEU	Electrical differential pressure indicator	**DVA**	Visual differential pressure indicator
DLA	Electrical / visual differential pressure indicator	**DVM**	Visual differential pressure indicator

Dimensions

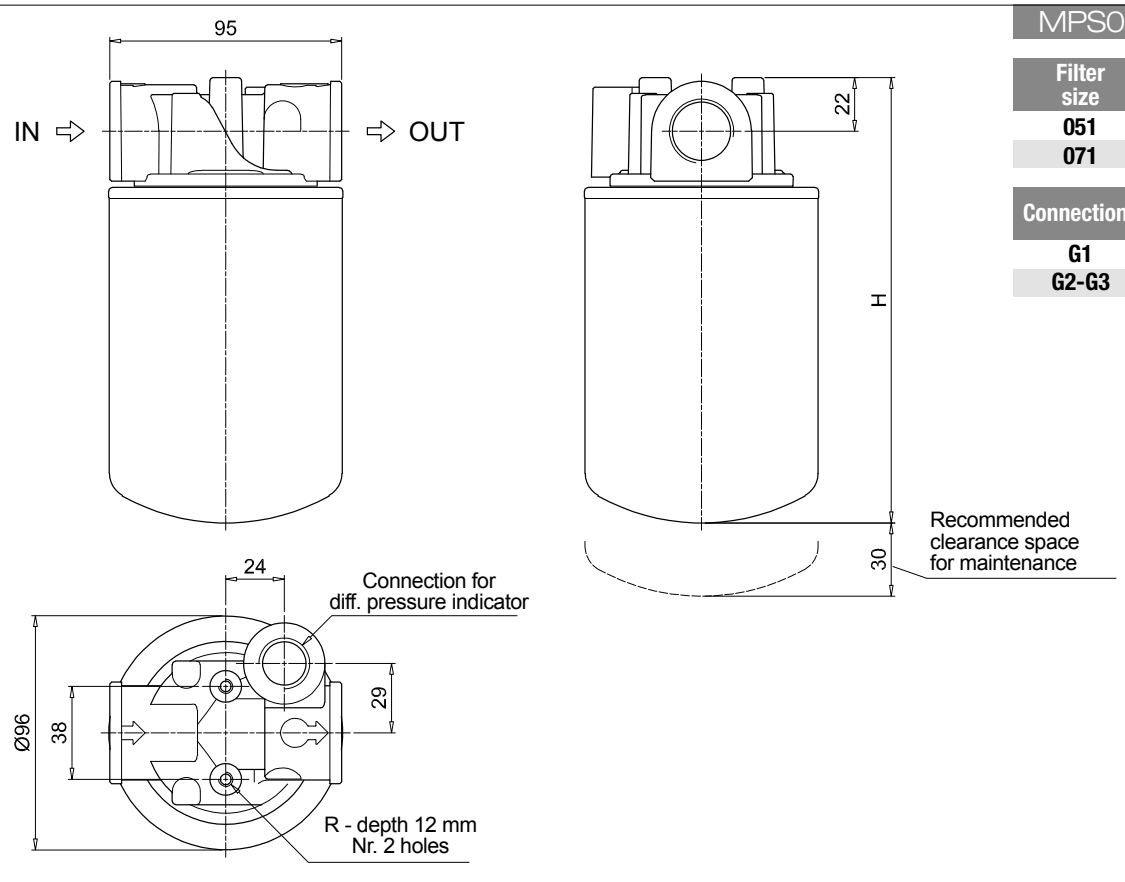
MPS050 - MPS070



Filter size	H [mm]
050	192
070	256

Connections	T	R
G1	G 1/8"	M6
G2-G3	1/8" NPT	1/4" UNC

MPS051 - MPS071



Filter size	H [mm]
051	192
071	256

Connections	R
G1	M6
G2-G3	1/4" UNC

MPS MPS100 - MPS150 MPS101 - MPS151

Designation & Ordering code

COMPLETE FILTER

Configuration example : MPS100 | R | G1 | A10 | A | P01

Series and size

MPS100	**MPS150**	With connections for clogging indicators
MPS101	**MPS151**	With connections for differential pressure indicators

Bypass valve		MPS 100 - 150	MPS 101 - 151
R	Inline / Return: with bypass 1.75 bar	•	•
S	Inline / Suction: with bypass 0.3 bar	•	-
U	Without bypass	•	-
P	Without bypass	-	•

Connections

G1	G 1 1/4”
G2	1 1/4” NPT
G3	SAE 20 - 1 5/8” - 12 UN

Filtration rating (filter media)

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

Seal

A	NBR

Execution

P01	MP Filtri standard

CARTRIDGE

Configuration example: CS100 | A10 | A | P01

Cartridge series and size

CS100 | **CS150**

Filtration rating (filter media)

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

Seals

A	NBR

Execution

P01	MP Filtri standard
Pxx	Customized

CLOGGING INDICATORS

See page 724-725

Clogging indicators on RETURN line

BVA	Axial pressure gauge	**BEA**	Electrical pressure indicator
BVR	Radial pressure gauge	**BEM**	Electrical pressure indicator
BVP	Visual pressure indicator with automatic reset	**BLA**	Electrical / visual pressure indicator
BVQ	Visual pressure indicator with manual reset		

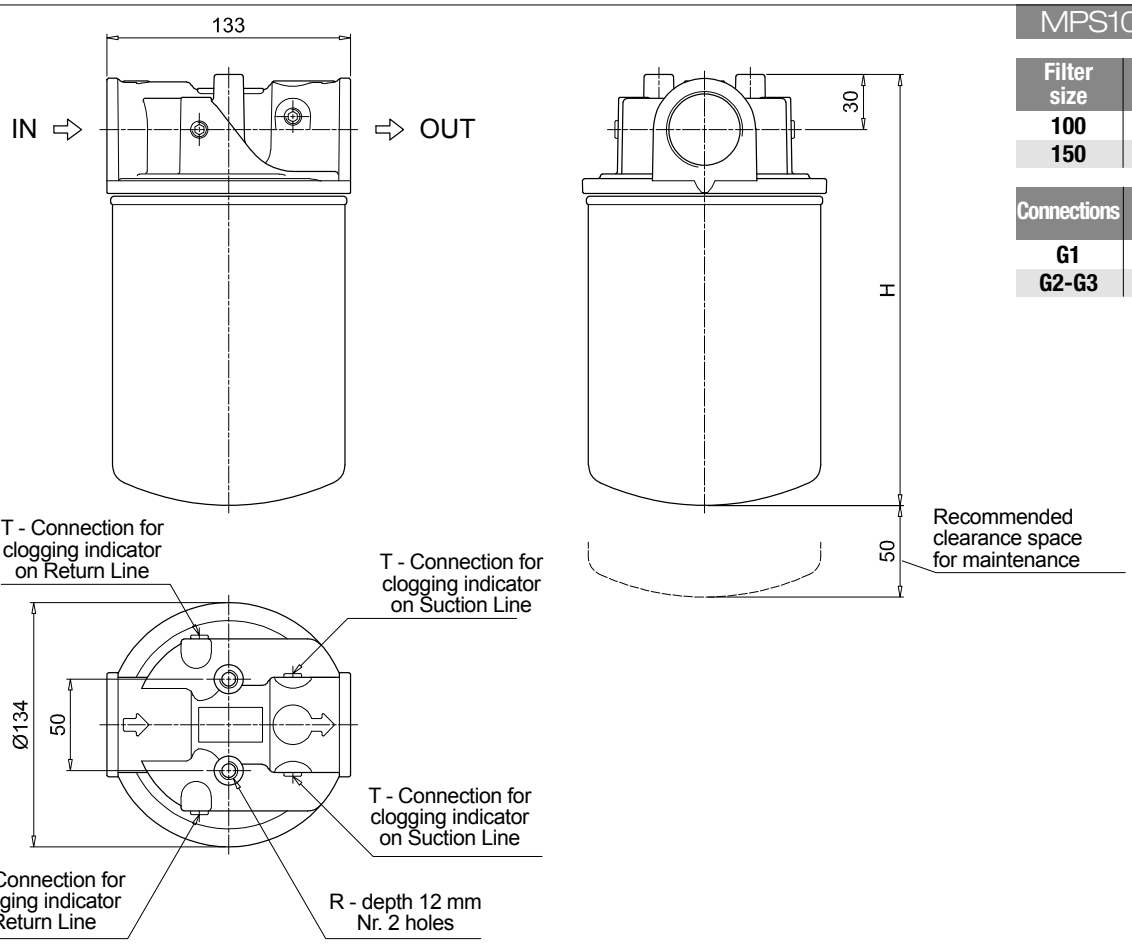
Clogging indicators on SUCTION line

VVB	Axial pressure gauge	**VEB**	Electrical vacuum indicator
VVS	Radial pressure gauge	**VLB**	Electrical / visual vacuum indicator

Differential pressure indicators

DEA	Electrical differential pressure indicator	**DLE**	Electrical / visual differential pressure indicator
DEM	Electrical differential pressure indicator	**DTA**	Electronic differential pressure indicator
DEU	Electrical differential pressure indicator	**DVA**	Visual differential pressure indicator
DLA	Electrical / visual differential pressure indicator	**DVM**	Visual differential pressure indicator

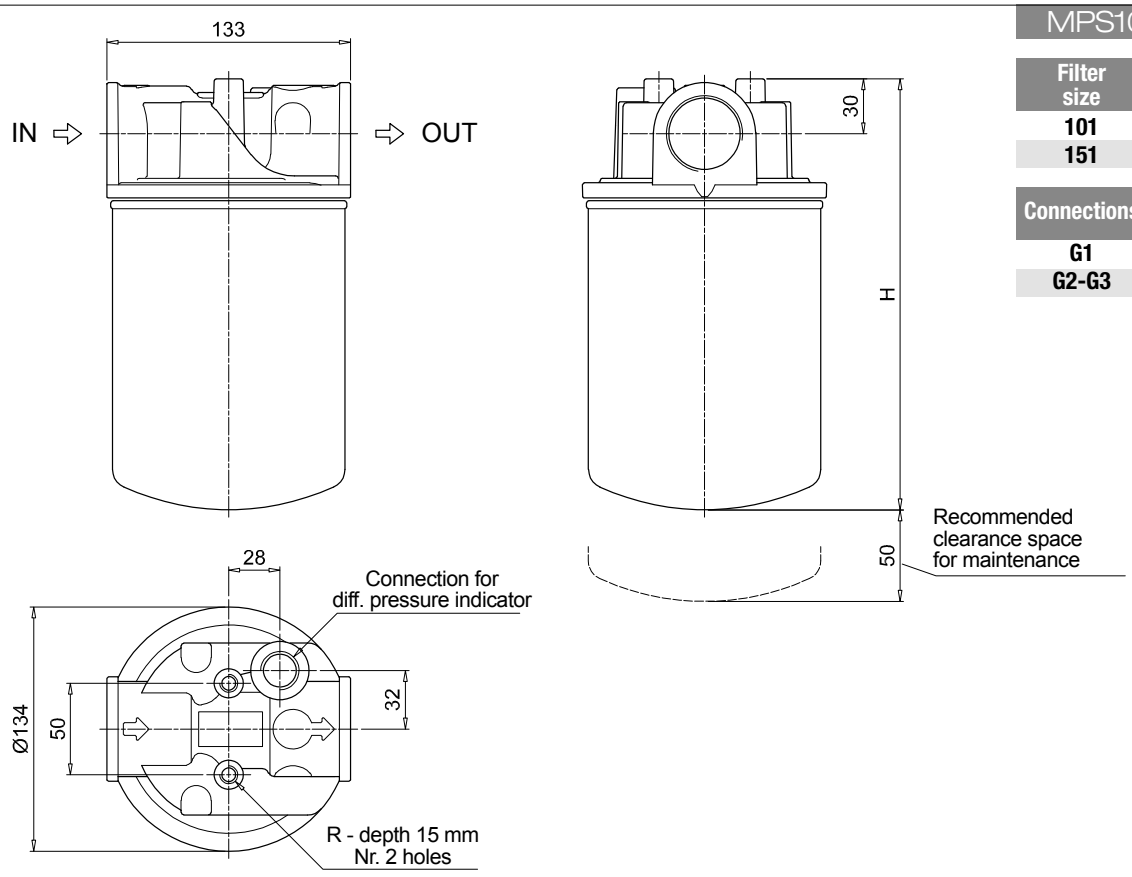
Dimensions



MPS100 - MPS150

Filter size	H [mm]
100	246
150	295

Connections	T	R
G1	G 1/8"	M8
G2-G3	1/8" NPT	5/16" UNC



MPS101 - MPS151

Filter size	H [mm]
101	246
151	295

Connections	R
G1	M8
G2-G3	5/16" UNC

MPS MPS200 - MPS250

Designation & Ordering code

COMPLETE FILTER

Configuration example : MPS200 | R | G1 | A10 | A | P01

Series and size

MPS200 | **MPS250**

Bypass valve

R	Inline / Return: with bypass 1.75 bar
S	Inline / Suction: with bypass 0.3 bar
U	Without bypass

Connections

G1	G 1 1/2”
G2	1 1/2” NPT
G3	SAE 24 - 1 7/8” - 12 UN

Filtration rating (filter media)

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

Seal

A	NBR

Execution

P01	MP Filtri standard

CARTRIDGE

Configuration example: CS100 | A10 | A | P01

Cartridge series and size

CS100 | **CS150**

Filtration rating (filter media)

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

Seals

A	NBR

Execution

P01	MP Filtri standard
Pxx	Customized

CLOGGING INDICATORS

See page 724-725

Clogging indicators on RETURN line

BVA	Axial pressure gauge	**BEA**	Electrical pressure indicator
BVR	Radial pressure gauge	**BEM**	Electrical pressure indicator
BVP	Visual pressure indicator with automatic reset	**BLA**	Electrical / visual pressure indicator
BVQ	Visual pressure indicator with manual reset		

Clogging indicators on SUCTION line

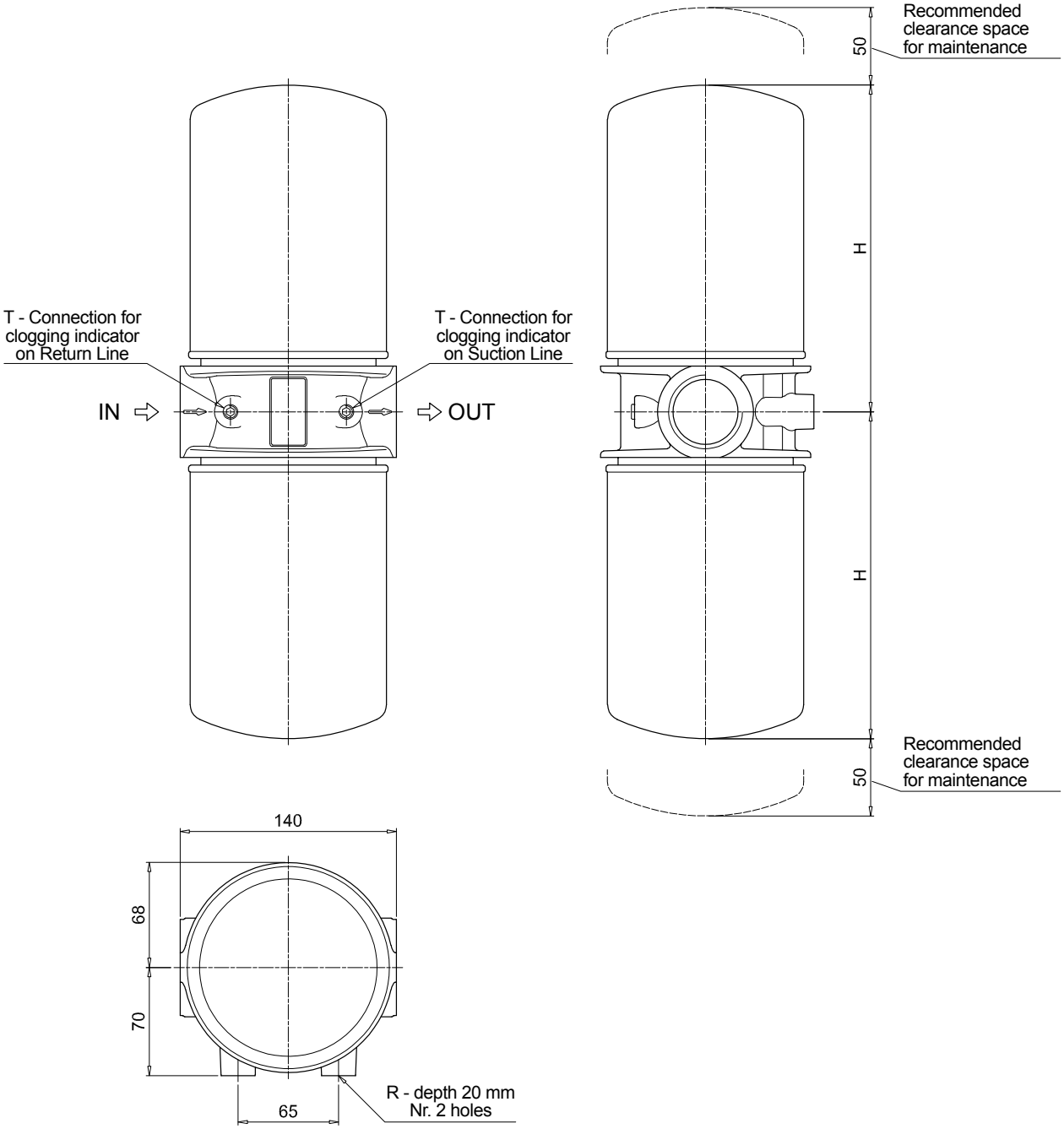
VVB	Axial pressure gauge	**VEB**	Electrical vacuum indicator
VVS	Radial pressure gauge	**VLB**	Electrical / visual vacuum indicator

Dimensions

MPS200 - MPS250

Filter size	H [mm]
200	213
250	262

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



Designation & Ordering code

COMPLETE FILTER

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

Series and size

MPS300 | **MPS350**	With connections for clogging indicators
MPS301 | **MPS351**	With connections for differential pressure indicators

Bypass valve

		MPS 300 - 350	MPS 301 - 351
R	Inline / Return: with bypass 1.75 bar	•	•
S	Inline / Suction: with bypass 0.3 bar	•	-
U	Without bypass	•	-
P	Without bypass	-	•

Connections

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

Filtration rating (filter media)

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

Seal

A	NBR

Execution

P01	MP Filtri standard

CARTRIDGE

Configuration example: CS100 | A10 | A | P01

Cartridge series and size

CS100 | CS150

Filtration rating (filter media)

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

Seals

A	NBR

Execution

P01	MP Filtri standard
Pxx	Customized

CLOGGING INDICATORS

See page 724-725

Clogging indicators on RETURN line

BVA	Axial pressure gauge	**BEA**	Electrical pressure indicator
BVR	Radial pressure gauge	**BEM**	Electrical pressure indicator
BVP	Visual pressure indicator with automatic reset	**BLA**	Electrical / visual pressure indicator
BVQ	Visual pressure indicator with manual reset		

Clogging indicators on SUCTION line

VVB	Axial pressure gauge	**VEB**	Electrical vacuum indicator
VVS	Radial pressure gauge	**VLB**	Electrical / visual vacuum indicator

Differential indicators

DEA	Electrical differential pressure indicator	**DLE**	Electrical / visual differential pressure indicator
DEM	Electrical differential pressure indicator	**DTA**	Electronic differential pressure indicator
DEU	Electrical differential pressure indicator	**DVA**	Visual differential pressure indicator
DLA	Electrical / visual differential pressure indicator	**DVM**	Visual differential pressure indicator

PLUGS

See page 747

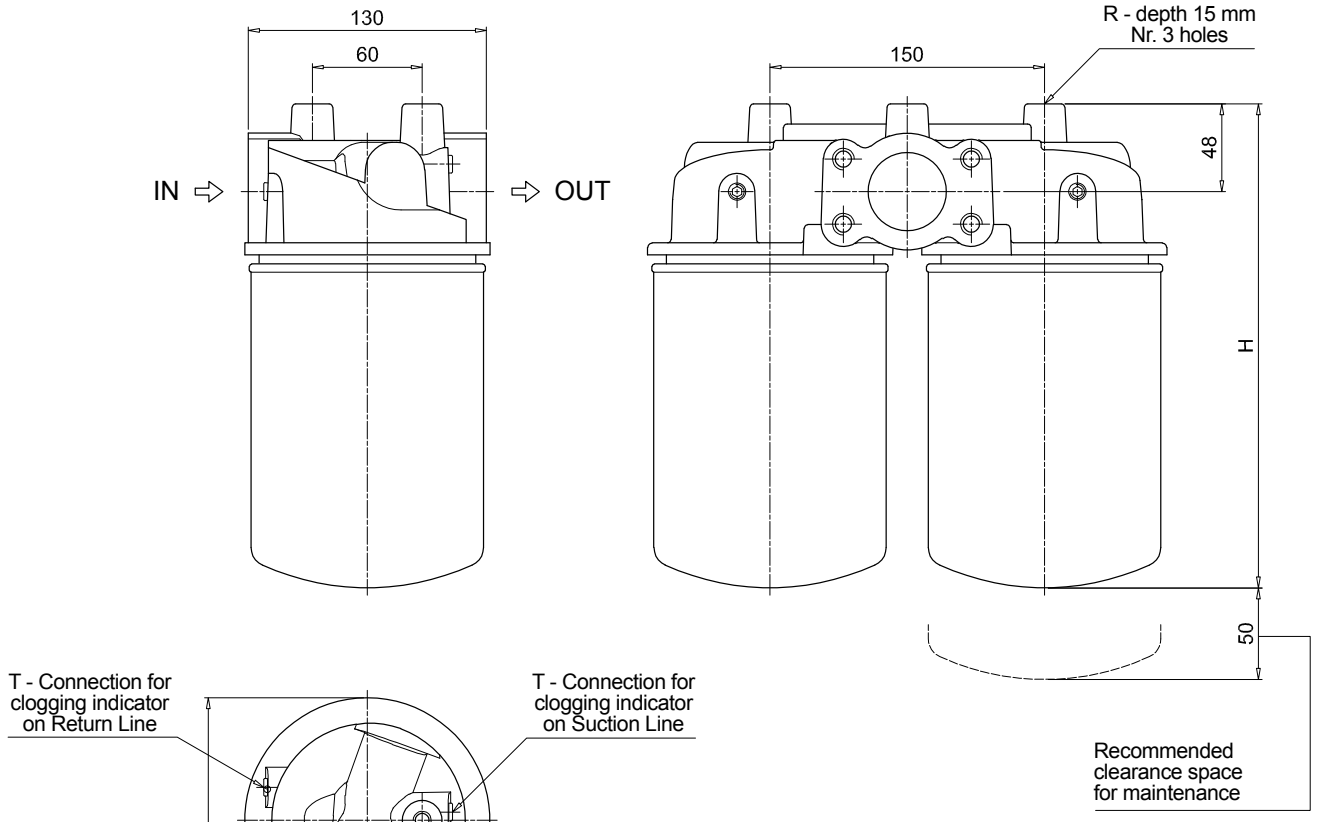
T2	Plug (not included)

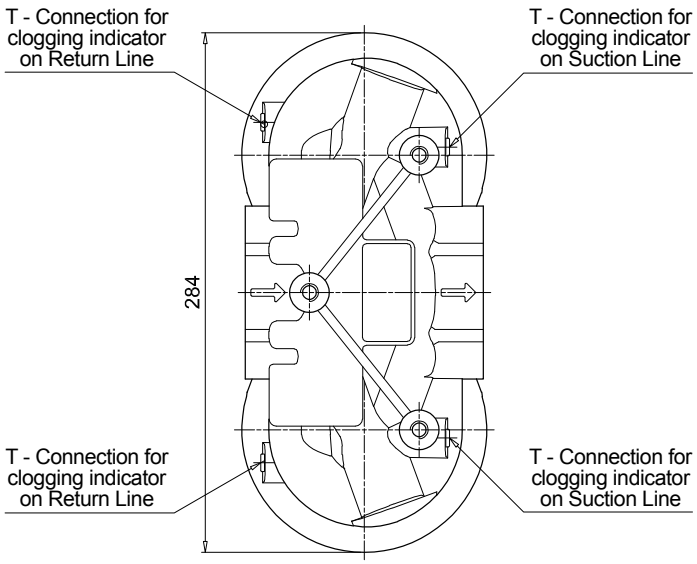
Dimensions

MPS300 - MPS350

Filter size	H [mm]
300	266
350	315

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





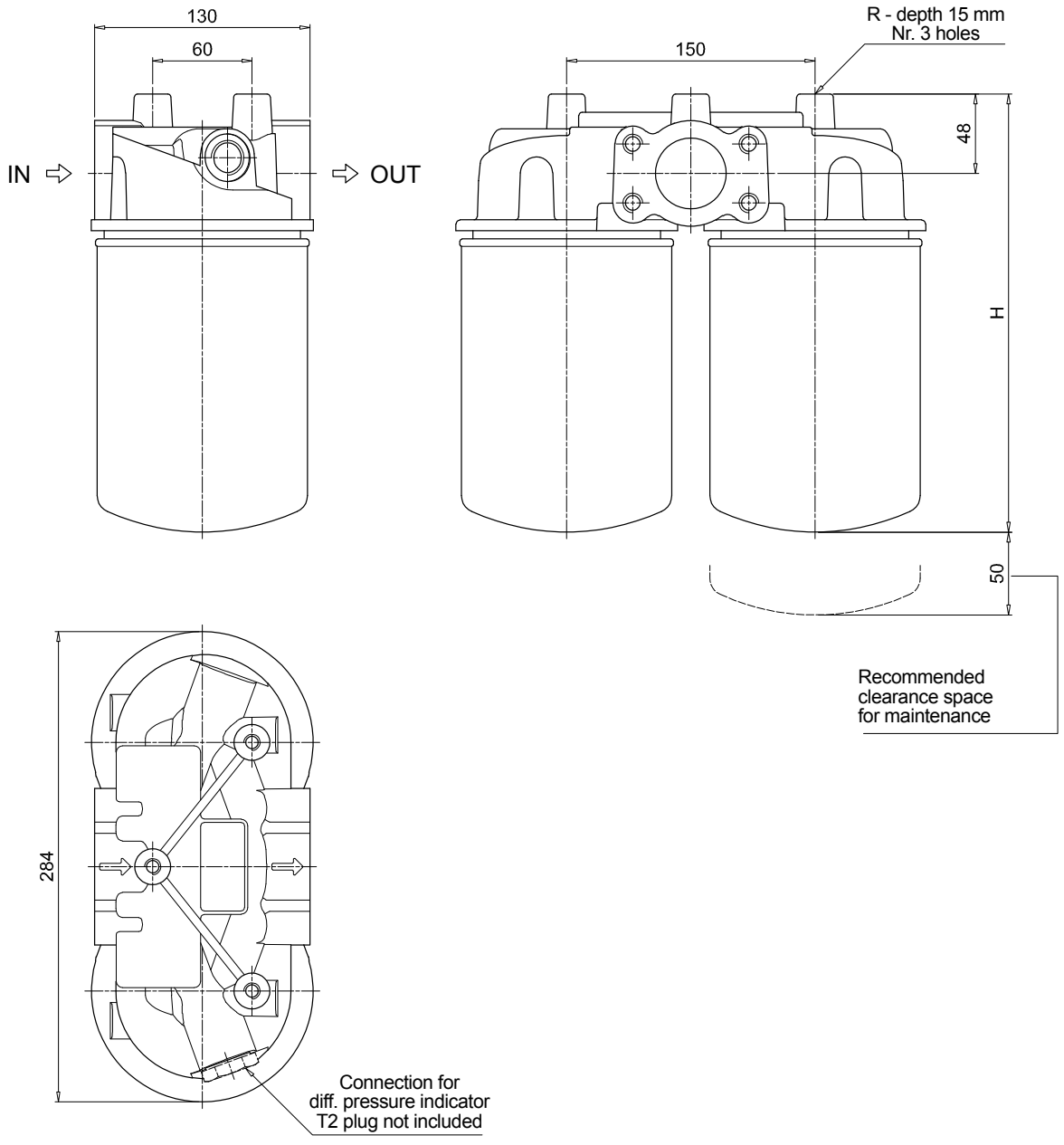
MPS MPS300 - MPS350 MPS301 - MPS351

Dimensions

MPS301 - MPS351

Filter size	H [mm]
301	266
351	315

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



Designation & Ordering code

VACUUM INDICATORS

Configuration example 1:	VE	B	21	A	A	50	P01	EX
Configuration example 2:	VL	B	21	A	A	71	P01	
Configuration example 3:	VV	S	20				P01	

Series
- **VE** Electrical vacuum indicator
- **VL** Electrical/Visual vacuum indicator
- **VV** Vacuum gauge

Type VE - VL
- **B** Connection EN 10226 - R1/8”

Type VV
- **B** Axial connection EN 10226 - R1/8”
- **S** Radial connection EN 10226 - R1/8”

Vacuum setting	VE	VL	VV
20 -0.16 bar	-	-	•
21 -0.21 bar	•	•	-

Seals	VE	VL
A NBR	•	•

Thermostat	VE	VL
A Without thermostat	•	•

Electrical connections	VE	VL
50 Connection EN 175301-803	•	-
51 Connection EN 175301-803, transparent base with lamps 24 Vdc	-	•
52 Connection EN 175301-803, transparent base with lamps 110 Vdc	-	•
53 Connection EN 175301-803, transparent base with lamps 230 Vac	-	•
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	•

Option
- **P01** MP Filtri standard
- **Pxx** Customized

Certifications	VEB	VL	VV
Without	•	•	•
EX ATEX certification	•	-	-
UL UL certification	-	-	-

BAROMETRIC (PRESSURE) INDICATORS

Configuration example 1:	BE	M	15	H	A	41	P01
Configuration example 2:	BL	A	20	H	A	71	P01
Configuration example 3:	BV	R	14				P01
Configuration example 4:	BV	P	20	H			P01

Series
- **BE** Electrical pressure indicator
- **BL** Electrical/Visual pressure indicator
- **BV** Visual pressure indicator

Type	BE	BL
A Standard type	•	•
M With wired electrical connection	•	-

BV
- **A** Axial connection pressure gauge
- **R** Radial connection pressure gauge
- **P** Visual indicator with automatic reset
- **Q** Visual indicator with manual reset

Pressure setting	BEA-BEM	BLA	BVA-BVR	BVP-BVQ
14 1.4 bar	-	-	•	-
15 1.5 bar	•	•	-	-
20 2 bar	•	•	-	•
25 2.5 bar	-	-	•	-

Seals	BE	BLA	BVA-BVR	BVP-BVQ
H HNBR	•	•	-	•

Thermostat	BEA-BEM	BLA	BV
A Without thermostat	•	•	-

Electrical connections	BEA	BEM	BL
10 Connection AMP Superseal series 1.5	-	-	-
30 Connection Deutsch DT-04-2-P	-	-	-
41 Connection via four-core cable	-	•	-
50 Connection EN 175301-803	•	-	-
51 Connection EN 175301-803, transparent base with lamps 24 Vdc	-	-	•
52 Connection EN 175301-803, transparent base with lamps 110 Vdc	-	-	•
53 Connection EN 175301-803, transparent base with lamps 230 Vac	-	-	•
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	-	•

Option
- **P01** MP Filtri standard
- **Pxx** Customized

Certifications	BEA	BEM-BET	BL	BV
Without	•	•	•	•
EX ATEX certification	•	-	-	-
UL UL certification	•	-	-	-

DIFFERENTIAL PRESSURE INDICATORS

Configuration example 1:	DE	M	12	H	F	50	P01	
Configuration example 2:	DE	U	50	V	A	50	P01	UL
Configuration example 3:	DL	E	20	V	A	71	P01	
Configuration example 4:	DT	A	50	H	F	70	P01	
Configuration example 5:	DV	M	70	V			P01	

Series

DE Electrical differential pressure indicator
DL Electrical/Visual differential pressure indicator
DT Electronic differential pressure indicator
DV Visual differential pressure indicator

Type	DE	DL	DT	DV
A Standard type	•	•	•	**A** With automatic reset
M With wired electrical connection	•	-	-	**M** With manual reset
U Standard type 210 bar, UL certified	•	-	-	
E For high power supply	-	•	-	

Pressure setting	DEA	DEM	DEU	DLA	DLE	DTA	DVA	DVM
12 1.2 bar	•	•	-	•	•	•	•	•
20 2.0 bar	•	•	•	•	•	•	•	•

Seals	DEA	DEM	DEU	DLA	DLE	DTA	DVA	DVM
H HNBR	•	•	-	•	•	•	•	•
V FPM	•	•	•	•	•	•	•	•

Thermostat	DEA	DEM	DEU	DLA	DLE	DT
A Without thermostat	•	•	•	•	•	-
F With thermostat	-	•	-	-	•	•

Electrical connections	DEA	DEM	DEU	DLA	DLE	DT
10 Connection AMP Superseal series 1.5	-	•	-	-	-	-
20 Connection AMP Timer Junior	-	•	-	-	-	-
30 Connection Deutsch DT-04-2-P	-	•	-	-	-	-
35 Connection Deutsch DT-04-3-P	-	•	-	-	-	-
50 Connection EN 175301-803	•	-	•	-	•	-
51 Connection EN 175301-803, transparent base with lamps 24 Vdc	-	-	-	•	-	-
52 Connection EN 175301-803, transparent base with lamps 110 Vdc	-	-	-	•	-	-
70 Connection IEC 61076-2-101 D (M12)	-	-	-	-	-	•
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	-	-	•	-	-

Option

P01 MP Filtri standard
Pxx Customized

Certifications	DEU	OTHERS
Without	-	•
UL UL certification	•	-

PLUGS

Configuration example	T2	H

Series

T2 Plug

Seals

H HNBR
V FPM

MSH series

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

MSH GENERAL INFORMATION

Description

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

Technical data

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

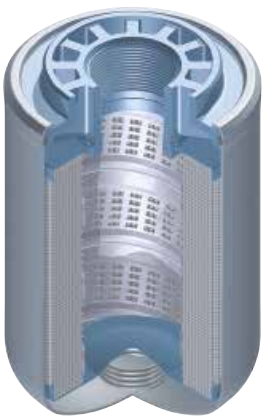
Note
MSH filters are provided for vertical mounting

Weights [kg] and volumes [dm³]

Filter series	Weights [kg]	Volumes [dm³]
MSH 050	1.50	0.65
MSH 070	1.90	0.95
MSH 100	3.30	1.80
MSH 150	3.80	2.20

Cartridge

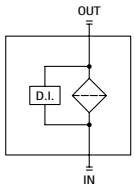
CH

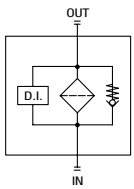


Thread connections	
Type	Connection
CH 050 - 070	M32 x 2
CH 100 - 150	M45 x 2

Hydraulic symbols

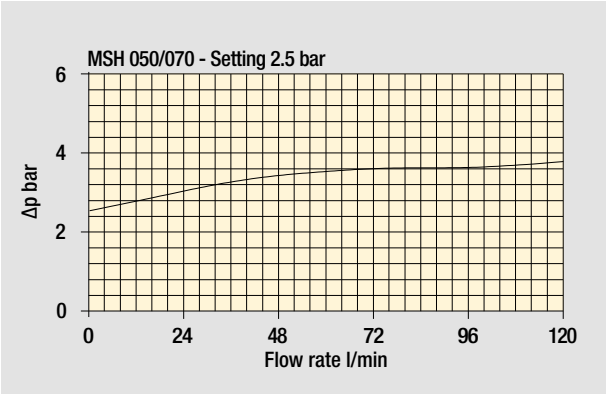
Filter series	Style S	Style B
MSH 050	•	•
MSH 070	•	•
MSH 100	•	•
MSH 150	•	•

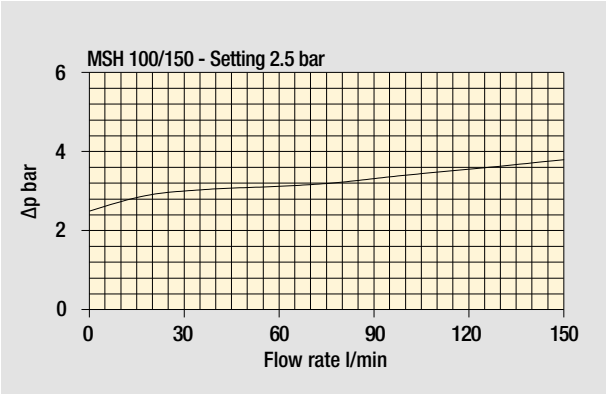




Pressure drop

Bypass valve pressure drop





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

Designation & Ordering code

COMPLETE FILTER

Configuration example : MSH050 | B | A | G1 | A10 | P01

Series and size

MSH050 | MSH070 | MSH100 | MSH150

Bypass valve

S	Without bypass
B	2.5 bar

Seal

A	NBR

Connections	MSH 050 - 070	MSH 100 - 150
G1	G 1”	G 1 1/2”
G2	G 3/4”	G 1 1/4”
G3	1” NPT	1 1/2” NPT
G4	3/4” NPT	1 1/4” NPT
G5	SAE 16 - 1 5/16” - 12 UN	SAE 24 - 1 7/8” - 12 UN
G6	SAE 12 - 1 1/16” - 12 UN	SAE 20 - 1 5/8” - 12 UN

Filtration rating (filter media)

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

Execution

P01	MP Filtri standard

CARTRIDGE

Configuration example: CH050 | A10 | A | P01

Cartridge series and size

CH050 | CH070 | CH100 | CH150

Filtration rating (filter media)

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

Seal

A	NBR

Execution

P01	MP Filtri standard
Pxx	Customized

CLOGGING INDICATORS

See page 724-725

Differential pressure indicators

DEA	Electrical differential pressure indicator	**DTA**	Electronic differential pressure indicator
DEM	Electrical differential pressure indicator	**DVA**	Visual differential pressure indicator
DLA	Electrical / visual differential pressure indicator	**DVM**	Visual differential pressure indicator
DLE	Electrical / visual differential pressure indicator		

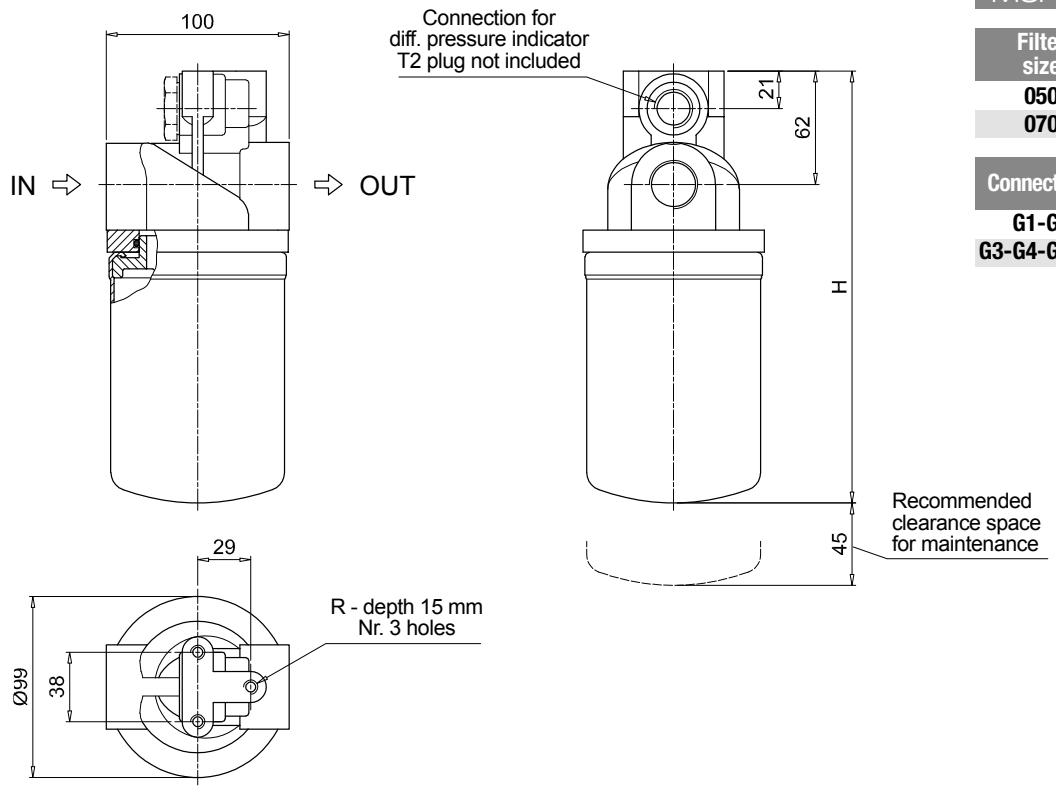
PLUGS

See page 747

T2	Plug (not included)

Dimensions

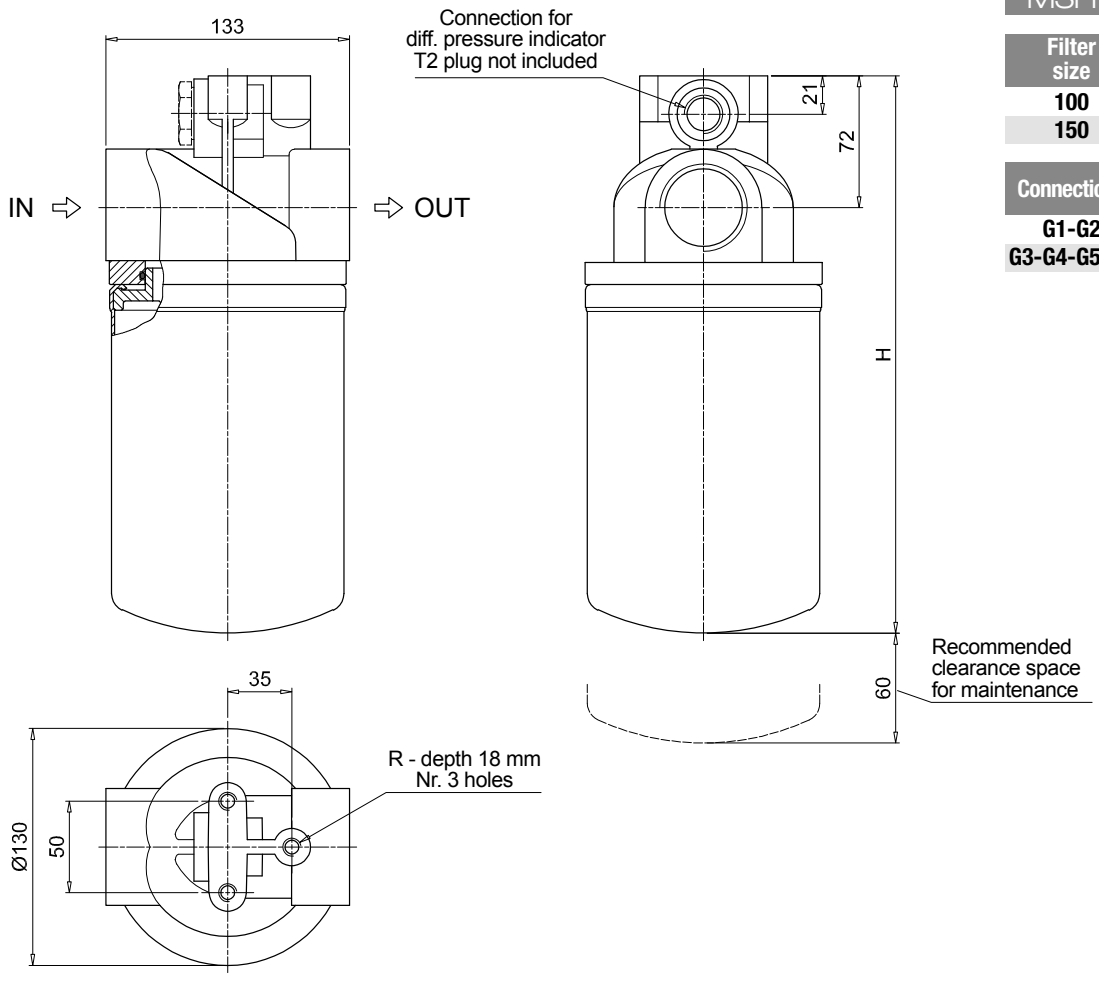
MSH050 - MSH070



Filter size	H [mm]
050	236
070	324

Connections	R
G1-G2	M8
G3-G4-G5-G6	5/16" UNC

MSH100 - MSH150

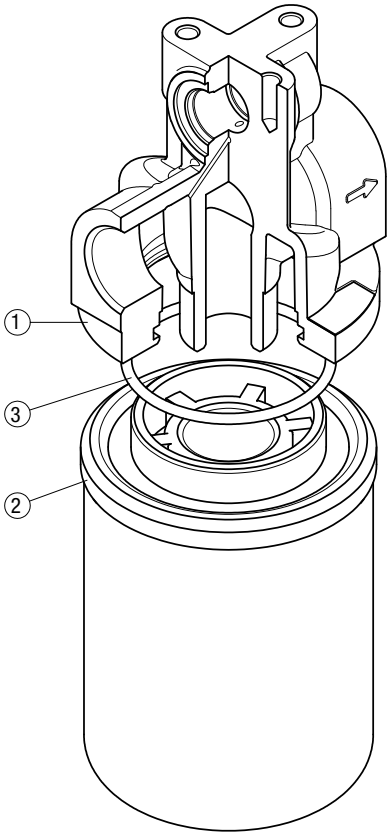


Filter size	H [mm]
100	311
150	354

Connections	R
G1-G2	M10
G3-G4-G5-G6	3/8" UNC

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**
MSH 050-070	See order table	See order table	O-R 167 (ø 63.50 x 3.53)
MSH 100-150			O-R 4362 (ø 91.67 x 3.53)

Designation & Ordering code

VACUUM INDICATORS

Configuration example 1:	VE	B	21	A	A	50	P01	EX
Configuration example 2:	VL	B	21	A	A	71	P01	
Configuration example 3:	VV	S	20				P01	

Series
- **VE** Electrical vacuum indicator
- **VL** Electrical/Visual vacuum indicator
- **VV** Vacuum gauge

Type VE - VL
- **B** Connection EN 10226 - R1/8”

Type VV
- **B** Axial connection EN 10226 - R1/8”
- **S** Radial connection EN 10226 - R1/8”

Vacuum setting	VE	VL	VV
20 -0.16 bar	-	-	•
21 -0.21 bar	•	•	-

Seals	VE	VL
A NBR	•	•

Thermostat	VE	VL
A Without thermostat	•	•

Electrical connections	VE	VL
50 Connection EN 175301-803	•	-
51 Connection EN 175301-803, transparent base with lamps 24 Vdc	-	•
52 Connection EN 175301-803, transparent base with lamps 110 Vdc	-	•
53 Connection EN 175301-803, transparent base with lamps 230 Vac	-	•
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	•

Option
- **P01** MP Filtri standard
- **Pxx** Customized

Certifications	VEB	VL	VV
Without	•	•	•
EX ATEX certification	•	-	-
UL UL certification	-	-	-

BAROMETRIC (PRESSURE) INDICATORS

Configuration example 1:	BE	M	15	H	A	41	P01
Configuration example 2:	BL	A	20	H	A	71	P01
Configuration example 3:	BV	R	14				P01
Configuration example 4:	BV	P	20	H			P01

Series
- **BE** Electrical pressure indicator
- **BL** Electrical/Visual pressure indicator
- **BV** Visual pressure indicator

Type	BE	BL
A Standard type	•	•
M With wired electrical connection	•	-

BV
- **A** Axial connection pressure gauge
- **R** Radial connection pressure gauge
- **P** Visual indicator with automatic reset
- **Q** Visual indicator with manual reset

Pressure setting	BEA-BEM	BLA	BVA-BVR	BVP-BVQ
14 1.4 bar	-	-	•	-
15 1.5 bar	•	•	-	-
20 2 bar	•	•	-	•
25 2.5 bar	-	-	•	-

Seals	BE	BLA	BVA-BVR	BVP-BVQ
H HNBR	•	•	-	•

Thermostat	BEA-BEM	BLA	BV
A Without thermostat	•	•	-

Electrical connections	BEA	BEM	BL
10 Connection AMP Superseal series 1.5	-	-	-
30 Connection Deutsch DT-04-2-P	-	-	-
41 Connection via four-core cable	-	•	-
50 Connection EN 175301-803	•	-	-
51 Connection EN 175301-803, transparent base with lamps 24 Vdc	-	-	•
52 Connection EN 175301-803, transparent base with lamps 110 Vdc	-	-	•
53 Connection EN 175301-803, transparent base with lamps 230 Vac	-	-	•
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	-	•

Option
- **P01** MP Filtri standard
- **Pxx** Customized

Certifications	BEA	BEM-BET	BL	BV
Without	•	•	•	•
EX ATEX certification	•	-	-	-
UL UL certification	•	-	-	-

DIFFERENTIAL PRESSURE INDICATORS

Configuration example 1:	DE	M	12	H	F	50	P01	
Configuration example 2:	DE	U	50	V	A	50	P01	UL
Configuration example 3:	DL	E	20	V	A	71	P01	
Configuration example 4:	DT	A	50	H	F	70	P01	
Configuration example 5:	DV	M	70	V			P01	

Series

DE Electrical differential pressure indicator
DL Electrical/Visual differential pressure indicator
DT Electronic differential pressure indicator
DV Visual differential pressure indicator

Type	DE	DL	DT	DV
A Standard type	•	•	•	**A** With automatic reset
M With wired electrical connection	•	-	-	**M** With manual reset
U Standard type 210 bar, UL certified	•	-	-	
E For high power supply	-	•	-	

Pressure setting	DEA	DEM	DEU	DLA	DLE	DTA	DVA	DVM
12 1.2 bar	•	•	-	•	•	•	•	•
20 2.0 bar	•	•	•	•	•	•	•	•

Seals	DEA	DEM	DEU	DLA	DLE	DTA	DVA	DVM
H HNBR	•	•	-	•	•	•	•	•
V FPM	•	•	•	•	•	•	•	•

Thermostat	DEA	DEM	DEU	DLA	DLE	DT
A Without thermostat	•	•	•	•	•	-
F With thermostat	-	•	-	-	•	•

Electrical connections	DEA	DEM	DEU	DLA	DLE	DT
10 Connection AMP Superseal series 1.5	-	•	-	-	-	-
20 Connection AMP Timer Junior	-	•	-	-	-	-
30 Connection Deutsch DT-04-2-P	-	•	-	-	-	-
35 Connection Deutsch DT-04-3-P	-	•	-	-	-	-
50 Connection EN 175301-803	•	-	•	-	•	-
51 Connection EN 175301-803, transparent base with lamps 24 Vdc	-	-	-	•	-	-
52 Connection EN 175301-803, transparent base with lamps 110 Vdc	-	-	-	•	-	-
70 Connection IEC 61076-2-101 D (M12)	-	-	-	-	-	•
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	-	-	•	-	-

Option

P01 MP Filtri standard
Pxx Customized

Certifications	DEU	OTHERS
Without	-	•
UL UL certification	•	-

PLUGS

Configuration example	T2	H

Series

T2 Plug

Seals

H HNBR
V FPM

По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
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Набережные Челны (8552)20-53-41
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Новокузнецк (3843)20-46-81
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