

FMP 039 series

Maximum working pressure up to 11 MPa (110 bar) - Flow rate up to 80 l/min



FMP 039 GENERAL INFORMATION

Description

High Pressure filters

In-line
Maximum working pressure up to 11 MPa (110 bar)
Flow rate up to 80 l/min

FMP039 is a range of versatile medium pressure filter for transmission, protection of sensitive components in medium pressure hydraulic systems and filtration of the coolant into the machine tools. They are directly connected to the lines of the system through the hydraulic fittings.

- Available features:**
- 1/2" female threaded connections, for a maximum flow rate of 80 l/min
 - Fine filtration rating, to get a good cleanliness level into the system
 - Bypass valve, to relieve excessive pressure drop across the filter media
 - Low collapse filter element "N", for use with filters provided with bypass valve
 - Visual, electrical and electronic differential clogging indicators

Common applications:
Delivery lines, in any medium pressure industrial equipment or mobile machines

Technical data

Filter housing materials

- Head: Anodized aluminium
- Housing: Anodized aluminium
- Bypass valve: Steel

Pressure

- Test pressure: 17 MPa (170 bar)
- Burst pressure: 33 MPa (330 bar)
- Pulse pressure fatigue test: 1 000 000 cycles with pressure from 0 to 11 MPa (110 bar)

Bypass valve

- Opening pressure 600 kPa (6 bar) ±10%
- Other opening pressures on request.

Δp element type

- Microfibre filter elements - series N: 20 bar
- Wire mesh filter elements - series N: 20 bar
- Fluid flow through the filter element from OUT to IN.

Seals

- Standard NBR series A
- Optional FPM series V

Temperature

From -25 °C to +110 °C

Connections

In-line Inlet/Outlet

Note

FMP 039 filters are provided for vertical mounting



Weights [kg] and volumes [dm³]

Filter series	Weights [kg]			Volumes [dm³]				
	Length	2	3	4	Length	2	3	4
FMP 039		0.60	0.70	0.80		0.19	0.26	0.34

Executions

Execution 1:
without indicator connection

Execution 6:
double indicator connection (A - B)

A:
Closure cap with standard T2 steel. The position of the cap is reversible.

B:
Standard closure cap with plastic thread protection. If necessary, a second T2 plug is available, see ordering information.

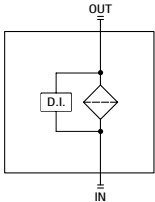
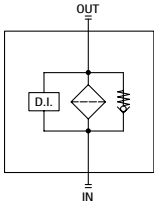
Special connections on request

Filter series	Length	Filter element design - N Series					
		A03	A06	A10	A16	A25	M25
FMP 039	2	20	26	45	52	61	97
	3	35	39	56	64	76	98
	4	44	48	66	71	82	92

Maximum flow rate for a complete pressure filter with a pressure drop Δp = 1.5 bar.

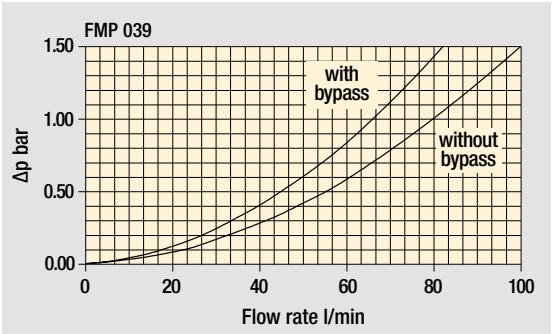
The reference fluid has a kinematic viscosity of 30 mm²/s (cSt) and a density of 0.86 kg/dm³.
For different pressure drop or fluid viscosity we recommend to use our selection software available on www.mpfiltri.com.
You can also calculate the right size using the formulas present on the FILTER SIZING paragraph at the beginning of the full catalogue or at the beginning of the filter family brochure.
Please, contact our Sales Department for further additional information.

Hydraulic symbols

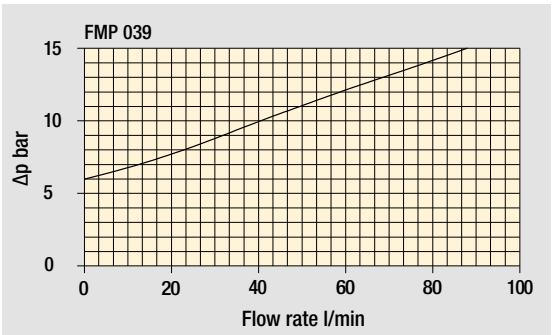
Filter series	Style S	Style B
FMP 039	•	•
		

Pressure drop

Filter housings Δp pressure drop



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.

FMP 039

Designation & Ordering code

COMPLETE FILTER

Series and size

FMP039

Configuration example:

FMP039

3

B

A

B

6

A03

N

P01

Length

2

3

4

Valves

S Without bypass

B 6 bar

Seals

A NBR

V FPM

Connections

A G 1/2"

B 1/2" NPT

C SAE 8 - 3/4" - 16 UNF

Connection for differential indicator

1 Without

6 With two connections on both sides

Filtration rating (filter media)

A03 Inorganic microfiber 3 µm

A06 Inorganic microfiber 6 µm

A10 Inorganic microfiber 10 µm

A16 Inorganic microfiber 16 µm

A25 Inorganic microfiber 25 µm

M25 Wire mesh 25 µm

Element Δp

N 20 bar

Execution

P01 MP Filtri standard

Pxx Customized

FILTER ELEMENT

Element series and size

HP039

Configuration example:

HP039

3

A03

A

N

P01

Element length

2

3

4

Filtration rating (filter media)

A03 Inorganic microfiber 3 µm

A06 Inorganic microfiber 6 µm

A10 Inorganic microfiber 10 µm

A16 Inorganic microfiber 16 µm

A25 Inorganic microfiber 25 µm

M25 Wire mesh 25 µm

Seals

A NBR

V FPM

Element Δp

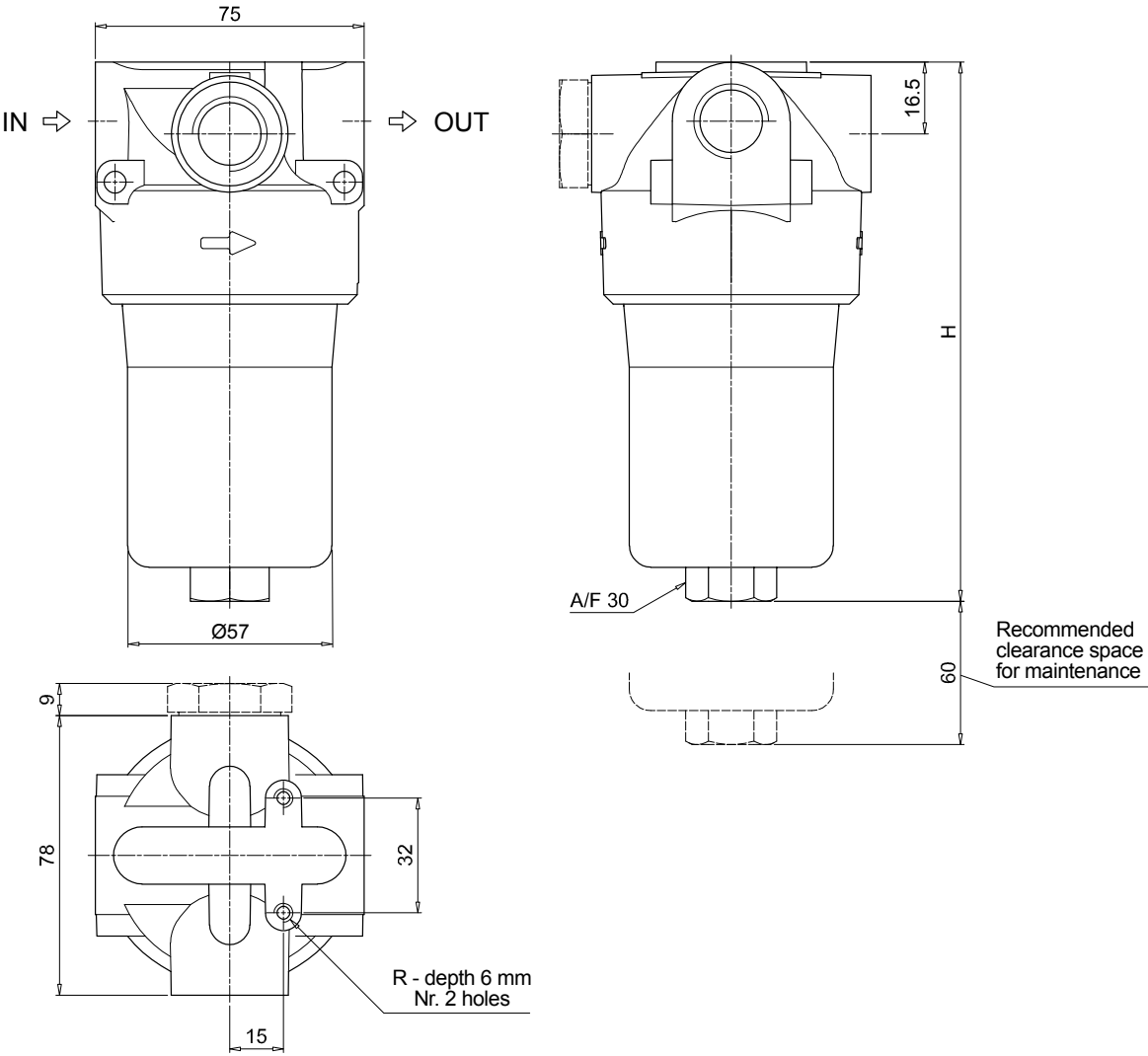
N 20 bar

Execution

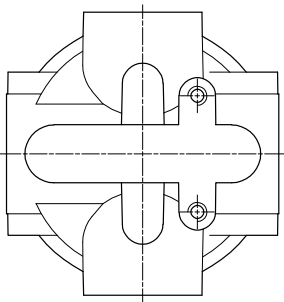
P01 MP Filtri standard

Pxx Customized

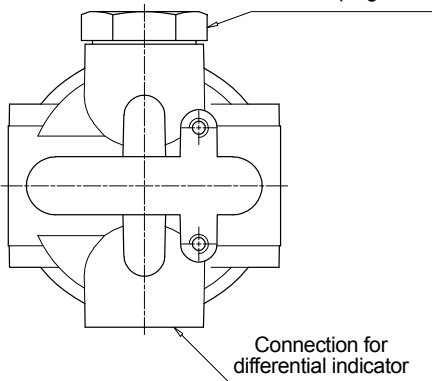
ACCESSORIES			
Differential indicators		page	page
DEA	Electrical differential indicator	577	DLE Electrical / visual differential indicator 580
DEH	Hazardous area electronic differential indicator	577-578	DTA Electronic differential indicator 581
DEM	Electrical differential indicator	578-579	DVA Visual differential indicator 581
DLA	Electrical / visual differential indicator	579-580	DVM Visual differential indicator 581
Additional features		page	
T2	Plug	582	



Version 1



Version 6



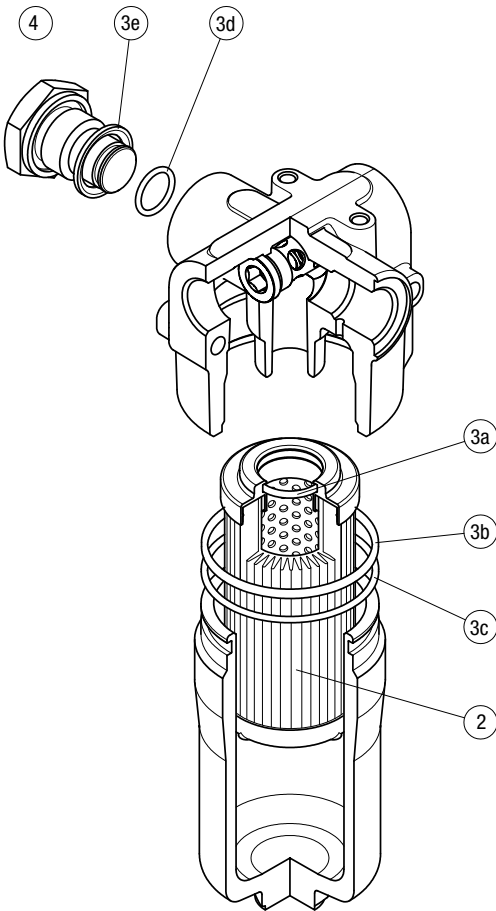
The position of the T2 plug is reversible

FMP039	
Filter length	H [mm]
2	151
3	194
4	238
Connections	R
A	M6
B - C	1/4" UNC

FMP 039 SPARE PARTS

Order number for spare parts

FMP 039



Q.ty: 1 pc.		Q.ty: 1 pc.	
Item:	2	3	(3a ÷ 3e)
Filter series	Filter element	Seal Kit code number	
		NBR	FPM
FMP 039	See order table	02050509	02050510