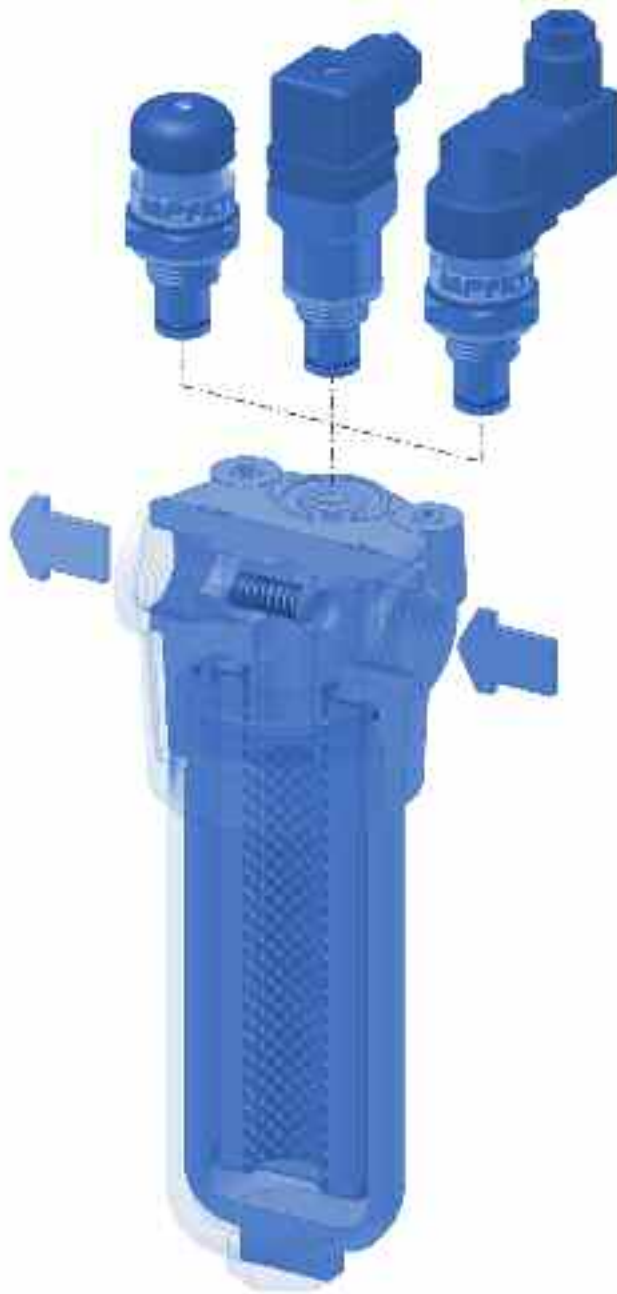


FMIM 050



FMIM **S**ERIES **050**

Working pressure
420 bar

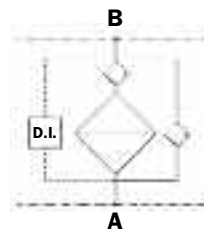
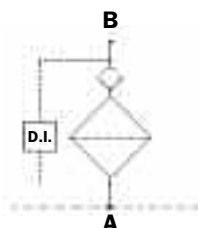
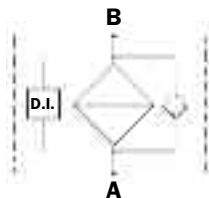
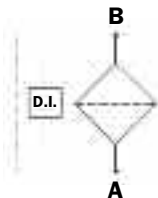


Style S

Style B

Style T

Style D



Technical data

Filter body (Materials)

- Head: Cast iron (chemical heat treatment)
- Housing: Steel (chemical heat treatment)
- Bypass valve: Steel

Pressure

- Working pressure: 420 bar (42 MPa)
- Test pressure: 420 bar (42 MPa)
- Burst pressure: 840 bar (84 MPa)
- Pulsed pressure fatigue test 1,000,000 of cycles with variable pressure from 0 to 420 bar (42 MPa)

Temperature

- From -25°C to +110°C

Bypass valve

- Opening pressure 6 bar ±10%
- Other opening pressures on request.

Elements type Δp

- Microfibre filter elements series N: 20 bar
- Microfibre filter elements series H: 210 bar
- Stainless steel mesh elements series N: 20 bar
- Oil flow from exterior to interior.

Seals

- Standard Nitrile (NBR) series A
- Optional FPM series V

Weights without filter elements (kg)

Length

- FMM050-1 2.6
- FMM050-2 3.6
- FMM050-3 3.9
- FMM050-4 4.5
- FMM050-5 6.1

Filter internal volumes (dm³)

Length

- FMM050-1 0.38
- FMM050-2 0.48
- FMM050-3 0.58
- FMM050-4 0.69
- FMM050-5 0.86

Connections

In-line Inlet/Outlet

Compatibility

- Bodies compatible with: Mineral oils to ISO 2943 - aqueous emulsions synthetic fluids, water/glycol.
- Filter elements compatible with: Mineral oils to ISO 2943 - aqueous emulsions synthetic fluids, water/glycol.

- Nitrile (NBR) seals series A, compatible with: Mineral oils to ISO 2943 - aqueous emulsions synthetic fluids, water/glycol.
- V series FPM seals, compatible with: Synthetic fluids type HS-HFDR-HFDS-HFDU To ISO 2943

Filter Element Area

Filter element in stainless steel mesh

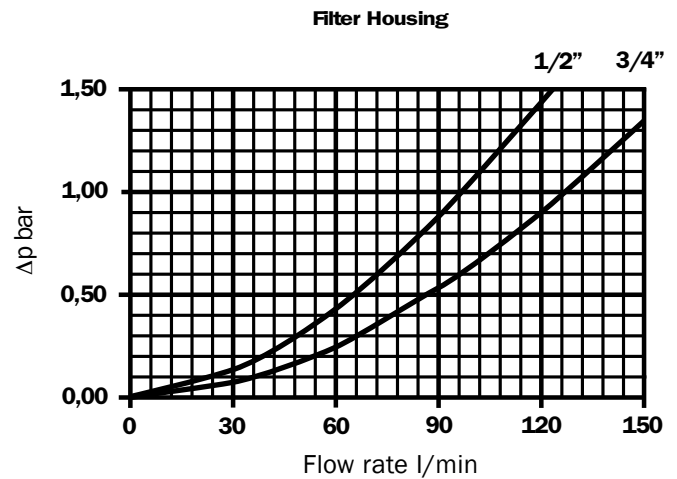
Type	Length				
	1	2	3	4	5
HP050	450	700	1000	1300	2100

Values expressed in cm²

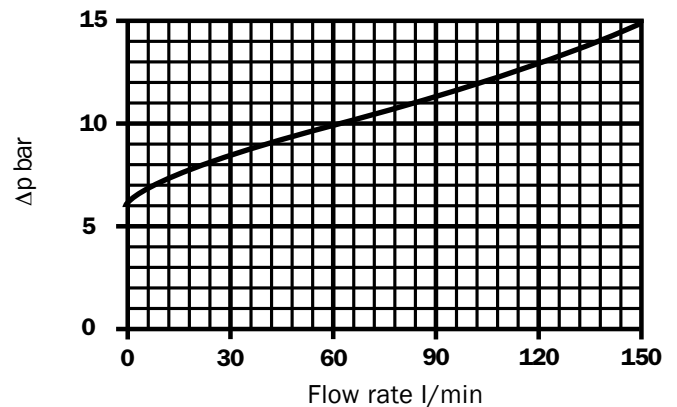
Pressure drops Δp Housing

The curves are plotted using mineral oil with density of 0.86 kg/dm³ to ISO 3968.

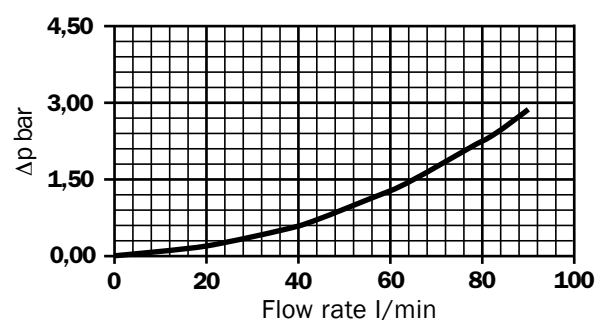
Δp varies proportional with density.



Bypass valve pressure drops

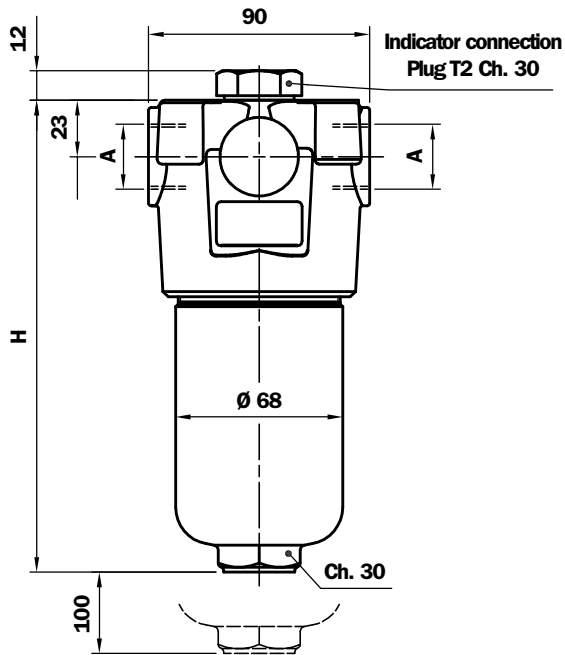


Filter housing with check valve

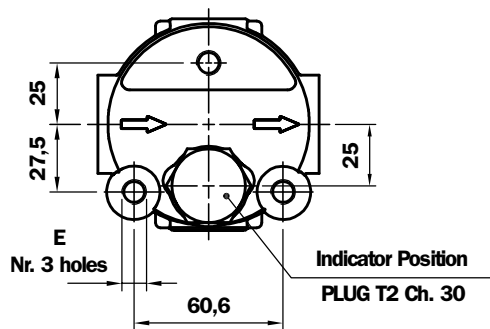


FMM 050

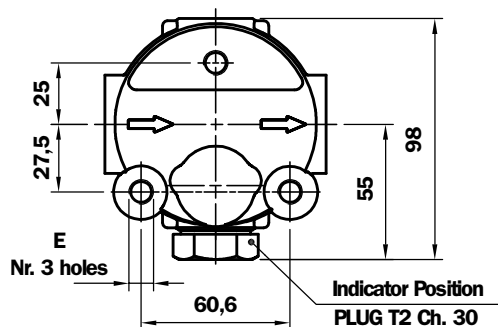
Dimensions



With standard indicator



Option P03 with indicator at 90°



Note. Differential indicator versions are supplied with plug T2.

Recommended maximum flow rate

- Pressure drop of complete filter equal to Δp 1.5 bar.
- Oil kinematic viscosity 30 mm²/s (cSt).
- Density 0.86 kg/dm³.
- Connections of filter under test G 3/4".

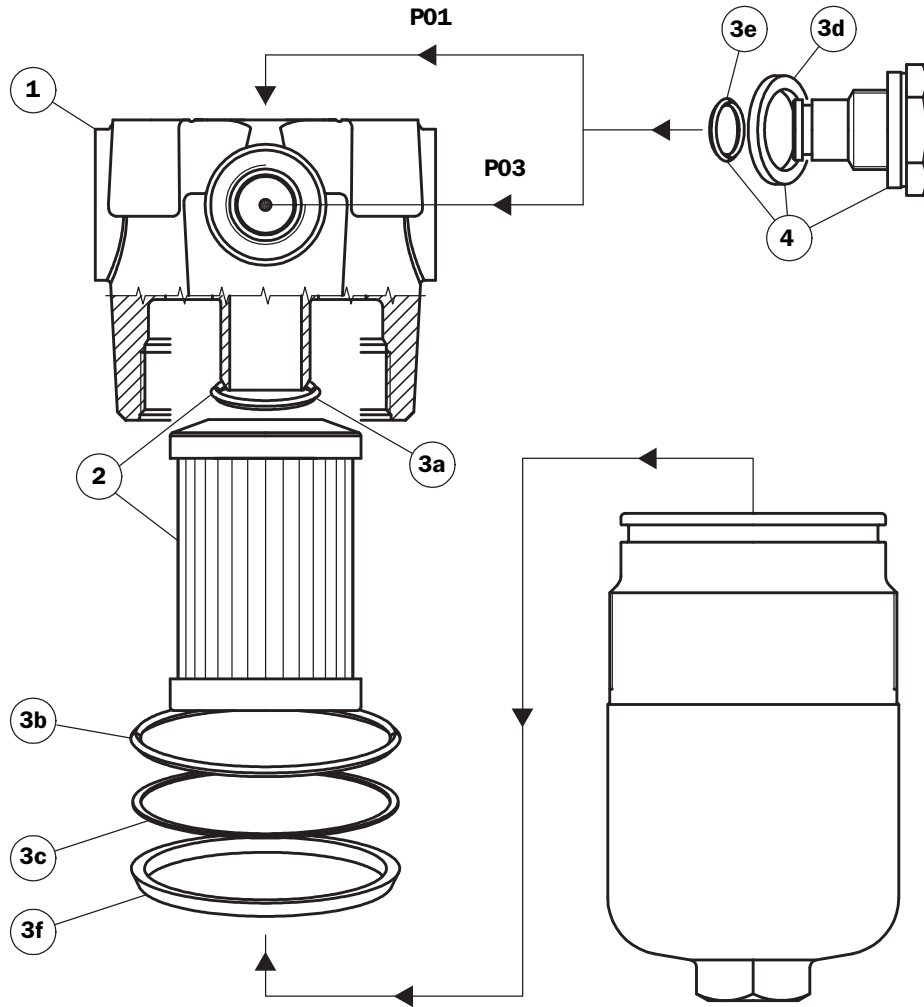
Filter element type	Flow rate l/min Series N	Flow rate l/min Series H	Filter Length
A03	44	30	1
A06	44	40	
A10	80	58	
A16	82	60	
A25	110	75	
M25	140	-	2
A03	53	45	
A06	58	50	
A10	87	78	
A16	100	90	
A25	125	119	
M25	140	-	3
A03	68	59	
A06	71	62	
A10	100	92	
A16	110	100	
A25	135	130	
M25	140	-	4
A03	85	75	
A06	92	82	
A10	118	106	
A16	120	112	
A25	135	135	
M25	145	-	5
A03	110	94	
A06	112	98	
A10	130	112	
A16	135	120	
A25	140	140	
M25	152	-	

A Threaded Connections E Depth 15 mm

18x1,5	ISO 6149	M10
22x1,5	ISO 6149	M10
G 1/2"		M10
G 3/4"		M10
1/2" NPT		3/8" UNC
3/4" NPT		3/8" UNC
SAE 8 (3/4" - 16 UNF)		3/8" UNC
SAE 12 (1 1/16" - 12 UN)		3/8" UNC

Filter Length	H mm
1	158
2	195
3	237
4	285
5	407

Spare parts FMM050



Pos.	Description	Qty.	FMM 050 series FILTER 050 1 - 2 - 3 - 4 - 5	
1	Complete filter	1	See order table	
2	Filter Element	1	See order table	
3	Seal kits	1	NBR 02050314	FPM 02050315
3a	O-Ring for filter element	1	OR 3093 Ø 23.67 x 2.62	
3b	O-Ring for housing	1	OR 3225 Ø 56.82 x 2.62	
3c	Anti-extrusion ring	1	Parbak 139 Ø 56.03 x 2.18	
3d	Gasket	1	01030058 (HNBR)	01030046 (FPM)
3e	O-Ring	1	OR 2050 Ø 12.42 x 1.78	
3f	Protection seal	1	01026521	
4	Indicator plug	1	T2H	T2V
-	Indicator	1	See order table	

Ordering information FMM050

Filter assembly **FMM 050**

Example: HP050

1	2	3	4	5	6	7_a
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	B	A	C	A10	N	P01

Filter element **HP 050**

Example: HP050

1	5	3	6	7_b
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	A10	A	N	P01

1 - Filter lengths

1
2
3
4
5

2 - Bypass valve

S	Without bypass
B	With bypass
T	Without bypass + check valve*
D	With bypass + check valve*

*Reduced cross-section oilways

3 - Seals

A	NBR
V	FPM

4 - Threaded connections

A	M18x1.5 ISO 6149
B	M22x1.5 ISO 6149
C	G 1/2"
D	G 3/4"
E	1/2" NPT
F	3/4" NPT
G	SAE 8 (3/4" - 16 UNF)
H	SAE 12 (1 1/16" - 12 UN)

5 - Filter elements

A03	Inorganic microfibre 3 µ	} βx (c) ≥ 1000 see page 10
A06	Inorganic microfibre 6 µ	
A10	Inorganic microfibre 10 µ	
A16	Inorganic microfibre 16 µ	
A25	Inorganic microfibre 25 µ	
M25	Stainless steel mesh 25 µ (N style only)	

6 - Filter elements differential pressure

N	20 bar
S	210 bar

7 - Options

a) Filter

P01	Standard threaded connection for indicator
P02	Without threaded connection for indicator
P03	Threaded connection for indicator at 90°
Pxx	Customer request

b) Filter element

P01	MP Filtri standard
Pxx	Customer request

DIFFERENTIAL INDICATORS (see page 15)

MP Filtri - The filter functions as described in this bulletin are valid exclusively for original MP Filtri filter elements and replacement parts. All rights reserved

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