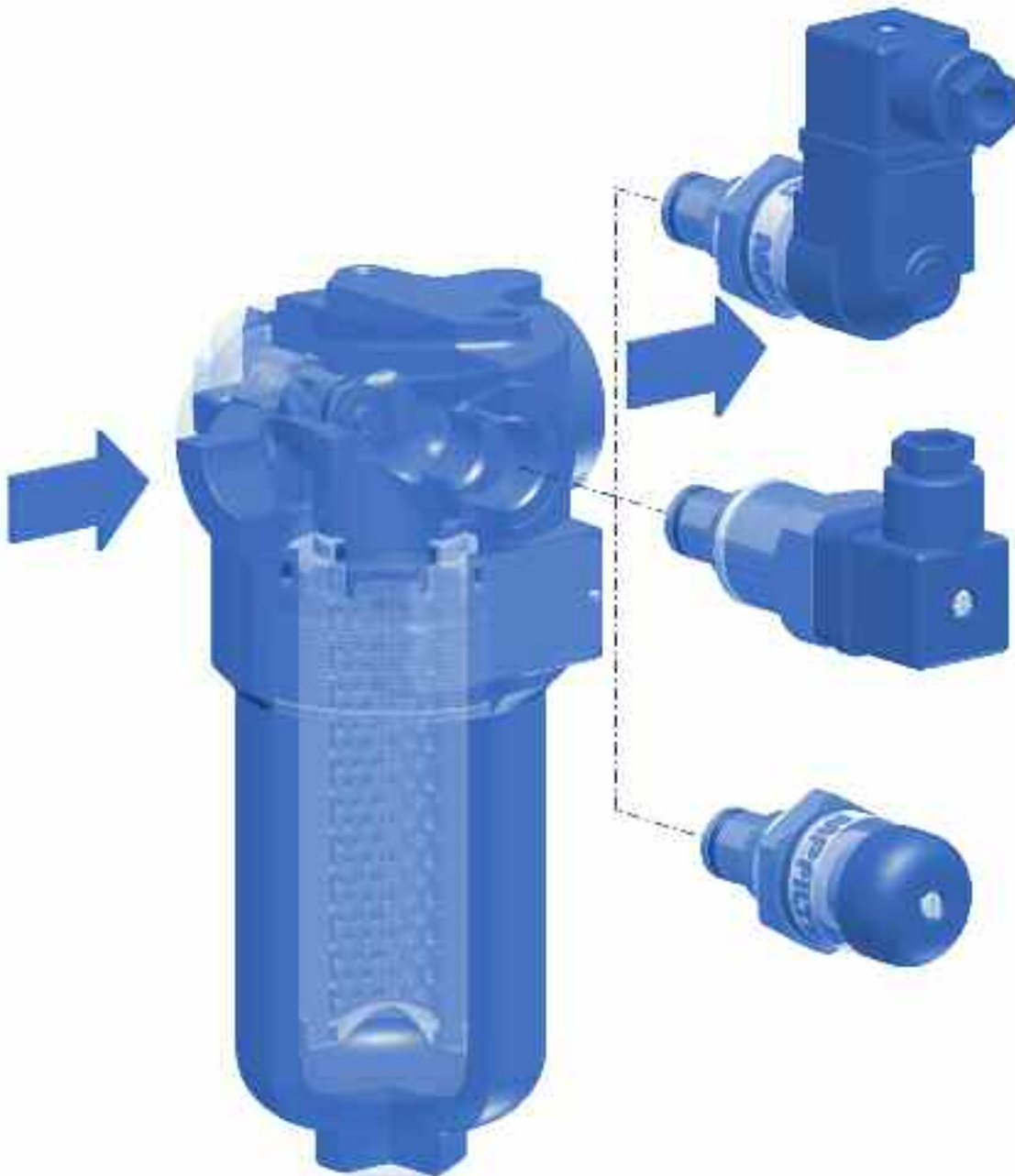


FMIP

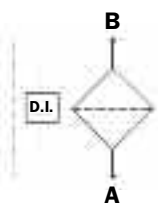


SERIES FMIP

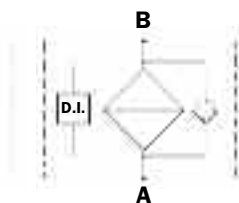
Working pressure
320 bar



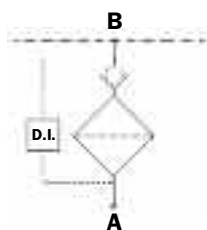
Style S



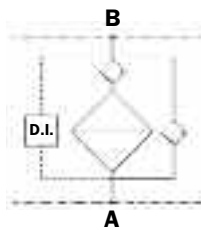
Style B



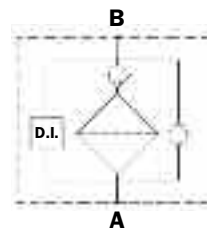
Style T



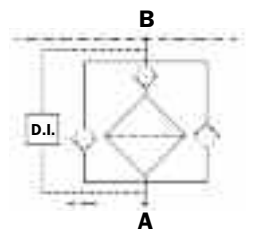
Style D



Style V



Style Z



Technical data

Filter body (Materials)

- Head: Cast iron (chemical heat treatment)
- Housing: Cast iron (chemical heat treatment)
- Bypass valve: Brass
- Reverse Flow: Steel (series 135 - 320 only)
- Check valve: Steel

Pressure

- Maximum operating pressure: 320bar (32 MPa)
- Test pressure: 420 bar (42 MPa)
- Burst pressure: 840 bar (84 MPa)
- Pulsed pressure fatigue test 1,000,000 cycles with pressure from 0 to 320 bar (32 MPa)

Temperature

- From -25 °C to +110 °C

Bypass valve

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

Elements type Δp

- Microfibre elements series N-R: 20 bar
- Elements in stainless steel mesh series N: 20 bar
- Elements in microfibre series H-S: 210 bar
- Oil flow from exterior to interior.

Seals

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

Weights without filter elements (kg)

Length	1	2	3	4
• FMP 065	3.0	3.4	5.2	—
• FMP 135	6.0	8.2	12.0	—
• FMP 320	12.7	14.7	20.7	23.7

Filter internal volumes (dm³)

Length	1	2	3	4
• FMP 065	0.38	0.45	0.67	—
• FMP 135	0.40	1.02	1.24	—
• FMP 320	1.61	2.61	3.27	4.20

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
Length

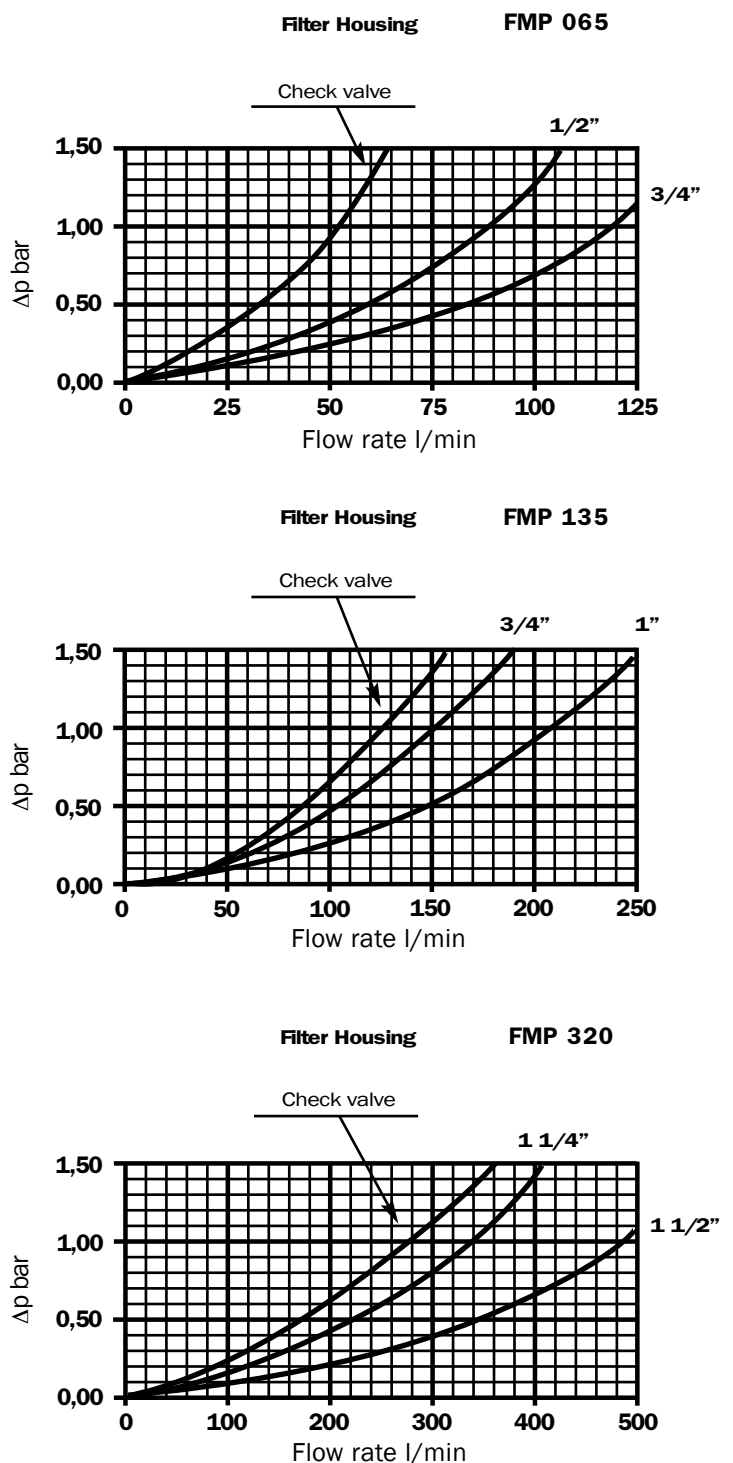
Type	1	2	3	4
HP065	374	530	1064	-
HP135	950	2020	2700	-
HP320	1650	3645	5970	8280

Values expressed in cm²

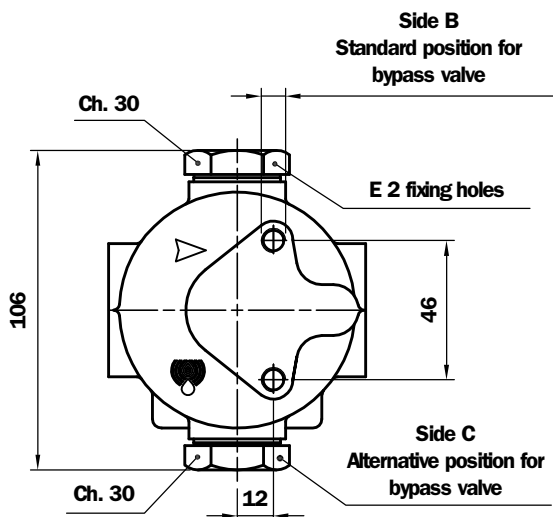
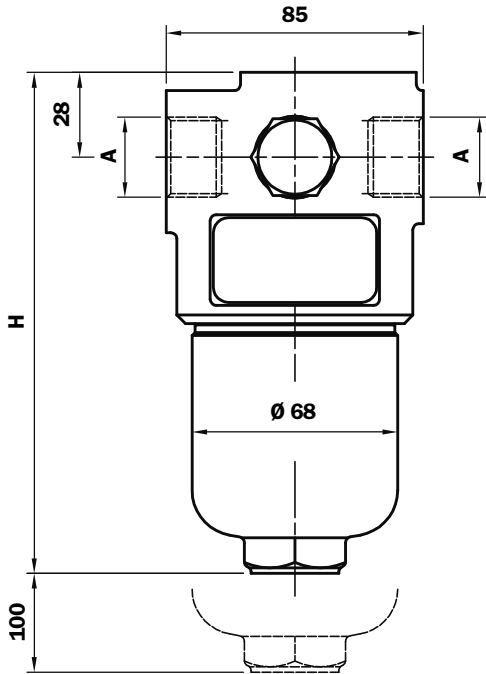
Pressure drops Δp Housing

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

Δp varies proportional with density.



FMP 065



Indicator and bypass valve positions can be inverted.

Recommended maximum flow rate

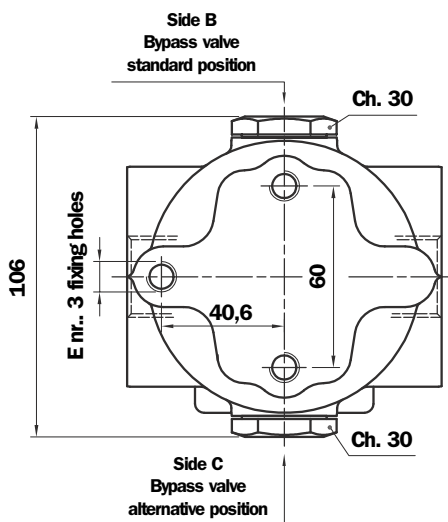
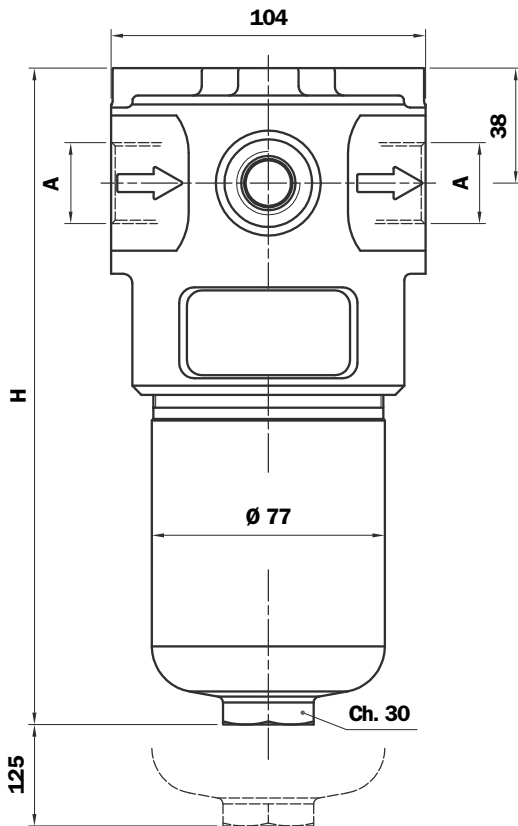
- Pressure drop of complete filter equal to Δp 1.5 bar.
- Oil kinematic viscosity 30 mm²/s (cSt).
- Density 0.86 kg/dm³.
- Connections of filter under test G 3/4".

Filter element type	Flow rate l/min Series N	Flow rate l/min Series H	Filter Length
A03	23	22	1
A06	30	23	
A10	48	43	
A16	53	50	
A25	72	68	
M25	105	-	
A03	31	30	2
A06	45	35	
A10	60	57	
A16	64	63	
A25	82	77	
M25	106	-	
A03	53	52	3
A06	61	58	
A10	79	78	
A16	84	83	
A25	94	93	
M25	108	-	

A Threaded Connections	E Depth 15 mm
G 1/2"	M8
1/2" NPT	5/16" UNC
G 3/4"	M8
3/4" NPT	5/16" UNC
SAE 8 (3/4"- 16 UNF)	5/16" UNC
SAE 12 (1 1/16"- 12 UN)	5/16" UNC

Filter Length	H mm
1	169
2	200
3	302

FMP 135



Indicator and bypass valve positions can be inverted.

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 1".

Filter element type	Flow rate l/min Series N	Flow rate l/min Series H	Filter Length
A03	69	50	1
A06	74	57	
A10	120	98	
A16	129	101	
A25	171	156	
M25	200	-	2
A03	110	91	
A06	117	110	
A10	148	136	
A16	151	139	
A25	208	175	3
M25	230	-	
A03	150	126	
A06	153	140	
A10	192	170	
A16	195	179	3
A25	213	196	
M25	232	-	

A Threaded Connections E Depth 15 mm

G 3/4"	M10
3/4" NPT	3/8" UNC
G 1"	M10
1" NPT	3/8" UNC
SAE 12 (1 1/16" - 12 UN)	3/8" UNC
SAE 16 (1 5/16" - 12 UN)	3/8" UNC

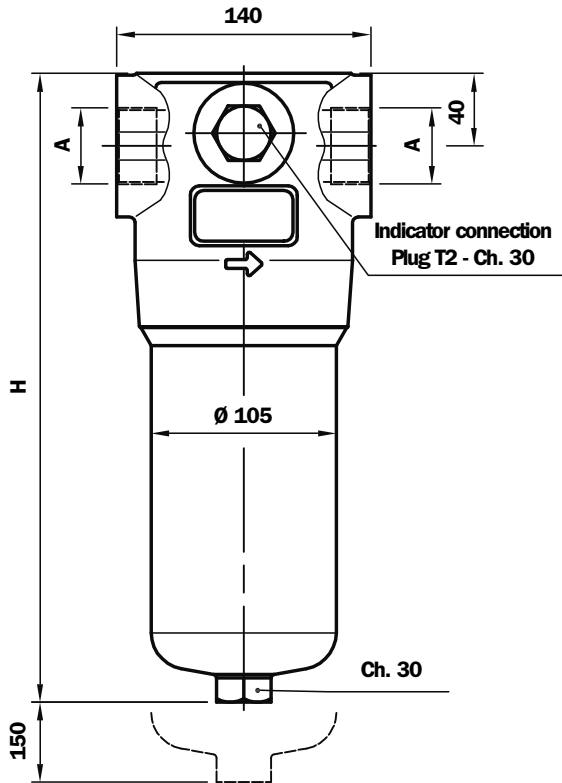
A Flanged Connections B Depth 15 mm

3/4" SAE 3000 psi/M	M10
3/4" SAE 3000 psi/UNC	3/8" UNC
1" SAE 3000 psi/M	M10
1" SAE 3000 psi/UNC	3/8" UNC

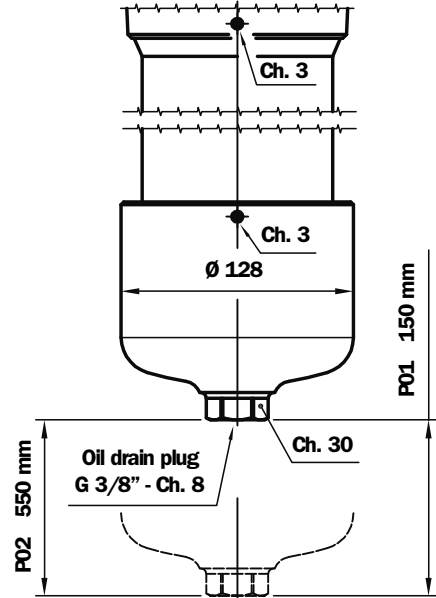
Filter Length H mm

1	220
2	333
3	408

FMP 320

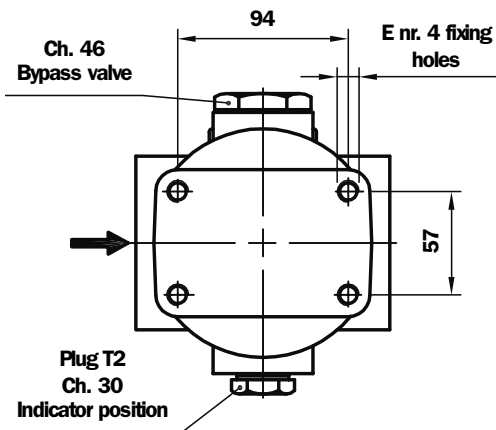


Only for FMP 320 length 4

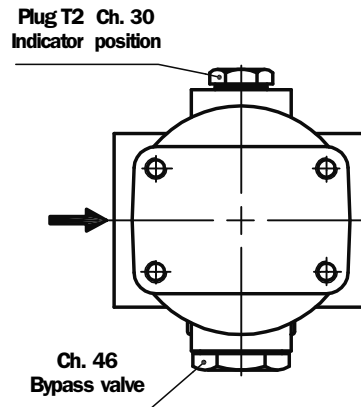


Style P01 standard maintenance from head.
Style P02 maintenance option from housing base.

Side B
Bypass valve standard
position



Side C
Bypass valve alternative
position



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 1 1/2".

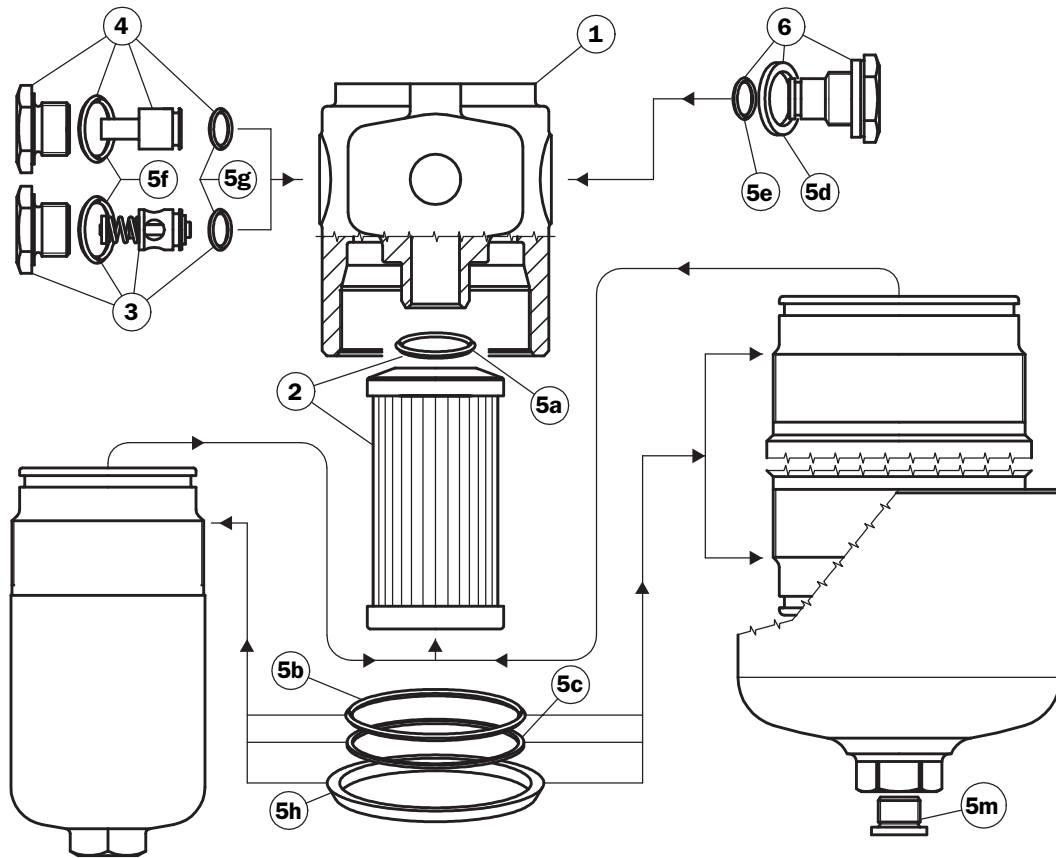
Filter element type	Flow rate l/min Series N	Flow rate l/min Series H	Filter Length
A03	126	107	1
A06	137	112	
A10	230	185	
A16	274	193	
A25	330	292	
M25	425	-	
A03	248	192	2
A06	270	220	
A10	376	300	
A16	395	312	
A25	440	378	
M25	445	-	
A03	319	255	3
A06	353	300	
A10	427	367	
A16	440	375	
A25	450	417	
M25	465	-	
A03	354	298	4
A06	375	320	
A10	430	375	
A16	447	382	
A25	467	422	
M25	475	-	

A Threaded Connections	E Depth 15 mm
G 1 1/4"	M12
1 1/4" NPT	1/2" UNC
G 1 1/2"	M12
1 1/2" NPT	1/2" UNC
SAE 20 (1 5/8" 12 UN)	1/2" UNC
SAE 24 (1 7/8" 12 UN)	1/2" UNC

A Flanged Connections	E Depth 15 mm
1 1/4" SAE 3000 psi/M	M12
1 1/4" SAE 3000 psi/UNC	1/2" UNC
1 1/2" SAE 3000 psi/M	M12
1 1/2" SAE 3000 psi/UNC	1/2" UNC

Filter Length	H mm
1	263
2	386
3	518
4	673

Spare parts FMP



Pos.	Description	Qty.	FMP Series FILTER						
			065 1 - 2 - 3		135 1 - 2 - 3		320 1 - 2 - 3 - 4		
1	Complete filter	1	See order table						
2	Filter element	1	See order table						
3	Bypass assembly	1	02001312 (NBR) 02001385 (FPM)				02001396 (NBR) 02001397 (FPM)		
4	Non bypass assembly	1	02001314 (NBR) 02001386 (FPM)				02001398 (NBR) 02001399 (FPM)		
5	Seal kits	1	NBR 02050267	FPM 02050278	NBR 02050293	FPM 02050294	NBR 02050274	FPM 02050285	
5a	Filter element O-Ring	1	OR 4100 Ø 24.99 x 3.53		OR 3106 Ø 26.65 x 2.62		OR 144 Ø 39.69 x 3.53		
5b	O-Ring for housing	1	OR 159 Ø 55.56 x 3.53		OR 3256 Ø 64.77 x 2.62		2 pcs.	OR 3350 Ø 88.57 x 2.62	
5c	Anti-extrusion ring	1	Parbak 227 Ø 54.53 x 3		Parbak 144 Ø 63.96 x 2.18		2 pcs.	Parbak 153 Ø 89.36 x 2.18	
5d	Gasket	1	01030058 (HNBR)	01030046 (FPM)	01030058 (HNBR)	01030046 (FPM)	01030058 (HNBR)	01030046 (FPM)	
5e	O-Ring	1	O-R 2050 Ø 12.42 x 1.78						
5f	Bp or Non Bp O-Ring	1	Bonded seal G 1/2" - FPM					O-R 3143 (NBR 90 Sh A) Ø 36,14 x 2,62	
5g	Bp or Non Bp O-Ring	1	OR 2050 Ø 12.42 x 1.78					OR 3106 Ø 26,65 x 2,62	
5h	Protective seal	1	01026521		01026509		01026510		
5m	Oil drain plug (not all model)	1	-		-		G 3/8" with bonded seal		
6	Indicator plug	1	T2H	T2V	T2H	T2V	T2H	T2V	
-	Indicators	1	See order table						

Ordering information FMP

Filter assembly FMP

Example: FMP

1	2	3	4	5	6	7	8_a
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
065	2	B	A	G1	A03	N	P01

Filter element HP

Example: HP

1	2	6	4	7	8_b
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
065	2	A03	A	N	P01

1 - Size

065
135
320

2 - Filter length

1
2
3
4

(only for FMP 320)

3 - Valves

S	Without bypass side B - Optional
B	With bypass side B - Standard
C	With bypass side C - Optional
D	With bypass side B + check valve*
V	With Reverse Flow* (Only for size 320)
Z	With Reverse Flow + bypass* (Only for size 320)
T	Without bypass + check valve*
E	Without bypass side C - Optional

*Reduced cross-section oilways

4 - Seals

A	NBR
V	FPM

5 - Connections

Type	065	135	320
G1	G 1/2"	G 3/4"	G 1 1/4"
G2	G 3/4"	G 1"	G 1 1/2"
G3	1/2" NPT	3/4" NPT	1 1/4" NPT
G4	3/4" NPT	1" NPT	1 1/2" NPT
G5	SAE 8 (3/4" 16 UNF)	SAE 12 (1 - 1/16" 12 UN)	SAE 20 (1 5/8" 12 UN)
G6	SAE 12 (1 - 1/16" 12 UN)	SAE 16 (1 - 5/16" 12 UN)	SAE 24 (1 7/8" 12 UN)
F1	-	3/4" SAE 3000 PSI/M	1 - 1/4" SAE 3000 PSI/M
F2	-	1" SAE 3000 PSI/M	1 - 1/2" SAE 3000 PSI/M
F3	-	3/4" SAE 3000 PSI/UNC	1 - 1/4" SAE 3000 PSI/UNC
F4	-	1" SAE 3000 PSI/UNC	1 - 1/2" SAE 3000 PSI/UNC

DIFFERENTIAL INDICATORS
(see page 15)

6 - 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 (style N only)	

7 - Filter elements collapse pressure

N	20 bar
H	210 bar
R	20 bar (Filter with reverse flow + bypass)
S	210 bar (Filter with reverse flow)

8 - Options

a) Filter

P01	MP Standard filters
P02	Maintenance from housing base (only for FMP 320 - 4)
Pxx	Customer request

b) Filter element

P01	MP Filtri standard
Pxx	Customer request

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

The data in this publication is marketing information. MP Filtri reserves the right to make changes to the product described herein at any time it deems fit in relation to technical or commercial requirements. The colors of the products shown on the cover are for illustration purposes only.
Copyright. All rights reserved.