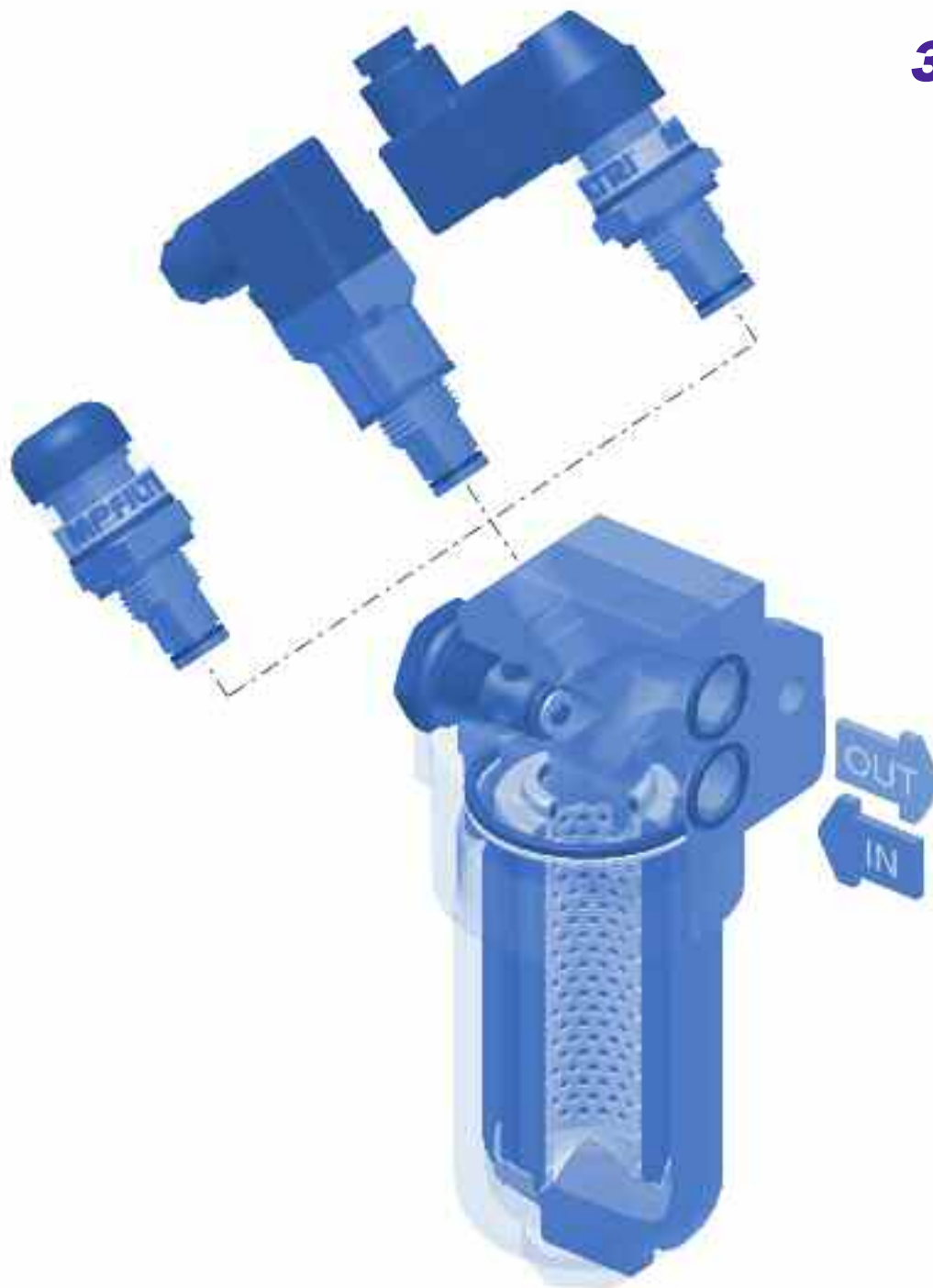


FHB

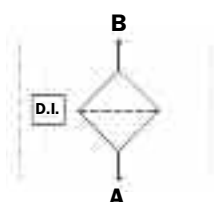


SERIES FHB

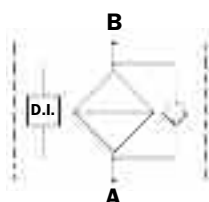
Working pressure
320 bar



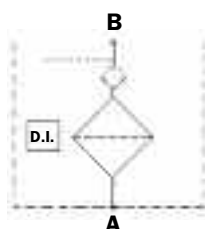
Style S



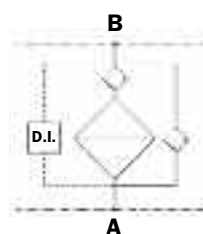
Style B



Style T



Style D



Technical data

Filter body (Materials)

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

Pressure

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

Temperature

- From -25 °C to +110 °C

Bypass valve

- Opening pressure 6 bar $\pm$ 10%
- Other opening pressures on request.

Elements type Δp

- Elements in microfibre series N: 20 bar
- Elements in microfibre series H: 210 bar
- Elements in stainless steel mesh 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	1	2	3	4	5
• FHB 050	2.6	2.9	4.5	5.1	6.5
• FHB 065	2.8	3.2	4.9	–	–
• FHB 135	6.7	8.1	10.7	–	–
• FHB 320	13.0	15.0	21.0	24.0	–

Filter internal volumes (dm³)

Length	1	2	3	4	5
• FHB 050	0.33	0.43	0.52	0.63	0.93
• FHB 065	0.35	0.47	0.60	–	–
• FHB 135	0.55	0.85	1.20	–	–
• FHB 320	1.25	1.95	2.80	3.50	–

Connections

Side manifold 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

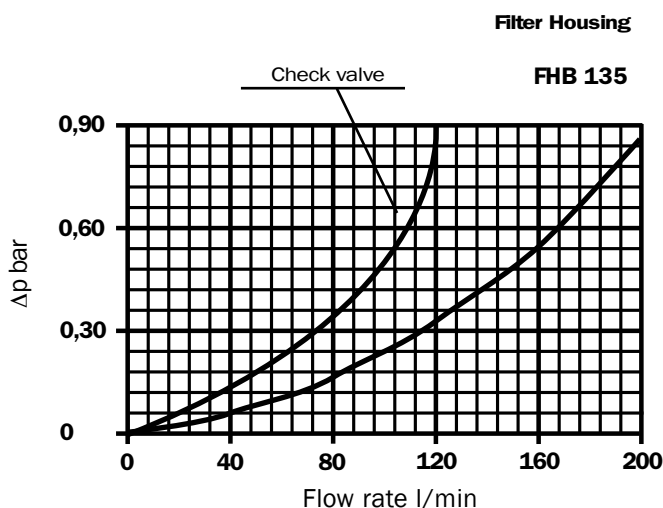
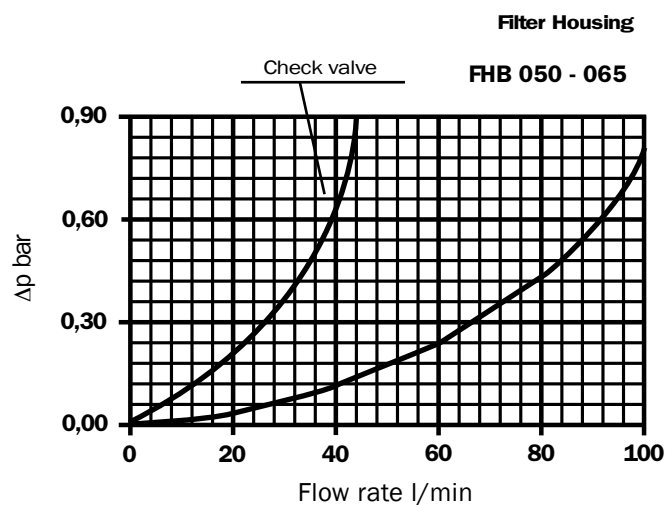
Type	Length				
	1	2	3	4	5
HP050	450	700	1000	1300	2100
HP065	374	530	1064	–	–
HP135	950	2020	2700	–	–
HP320	1650	3645	5970	8280	–

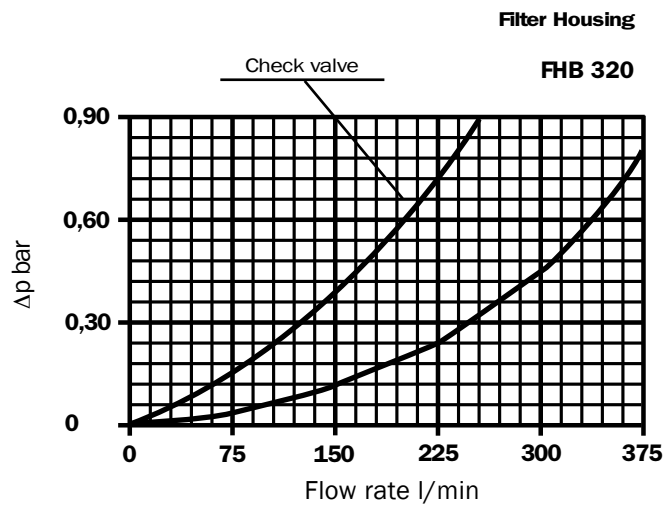
Values expressed in cm²

Pressure drops Δp Housing

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

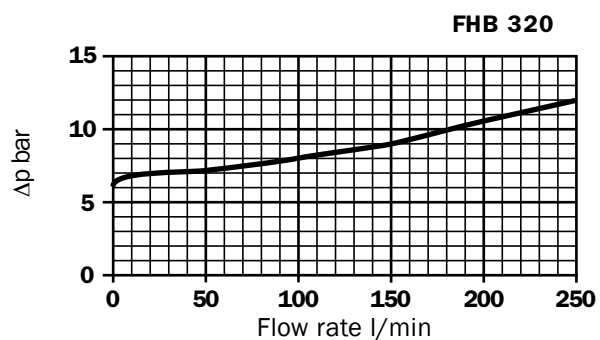
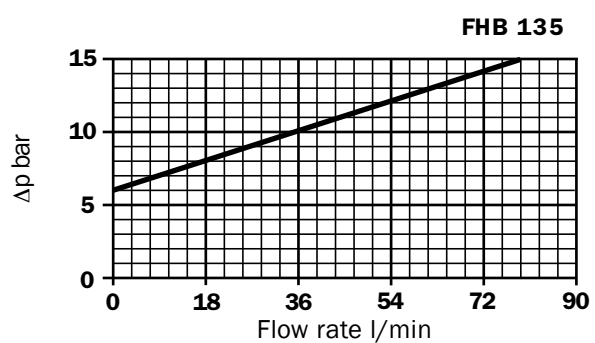
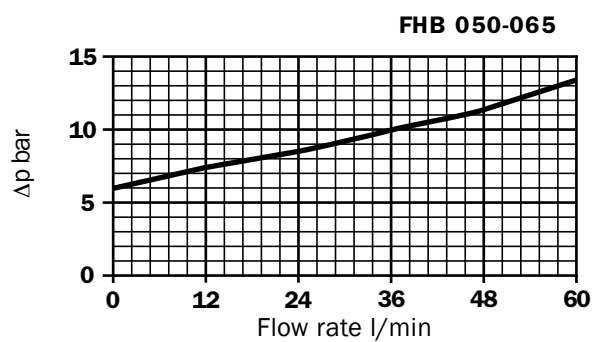
Δp varies proportional with density.





Valves

Bypass valve pressure drop



Dimensions

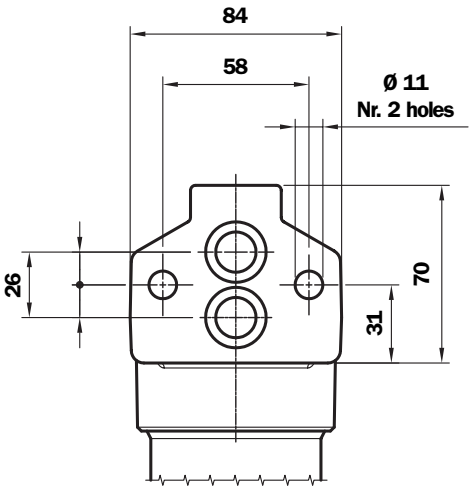
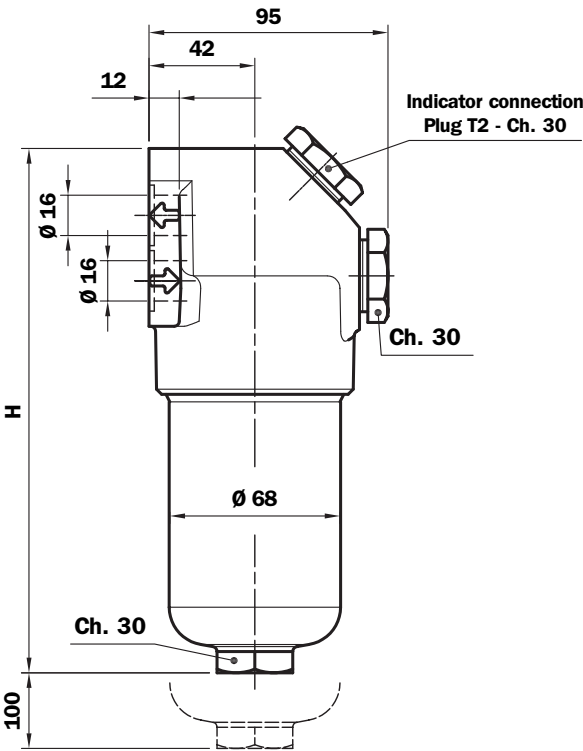
FHB 050

FHB 065

FHB 050

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.



Filter element type	Flow rate l/min Series N	Flow rate l/min Series H	Filter Length
A03	43	30	1
A06	43	40	
A10	78	58	
A16	80	60	
A25	100	74	
M25	130	-	2
A03	52	45	
A06	58	50	
A10	81	75	
A16	93	85	
A25	112	108	3
M25	130	-	
A03	65	58	
A06	70	62	
A10	93	87	
A16	99	96	4
A25	118	115	
M25	135	-	
A03	82	73	
A06	87	80	
A10	105	100	5
A16	108	102	
A25	122	118	
M25	135	-	
A03	102	85	
A06	104	92	
A10	120	105	
A16	122	112	
A25	128	115	
M25	140	-	

Filter Length	H mm
1	176
2	213
3	255
4	303
5	425

FHB 065

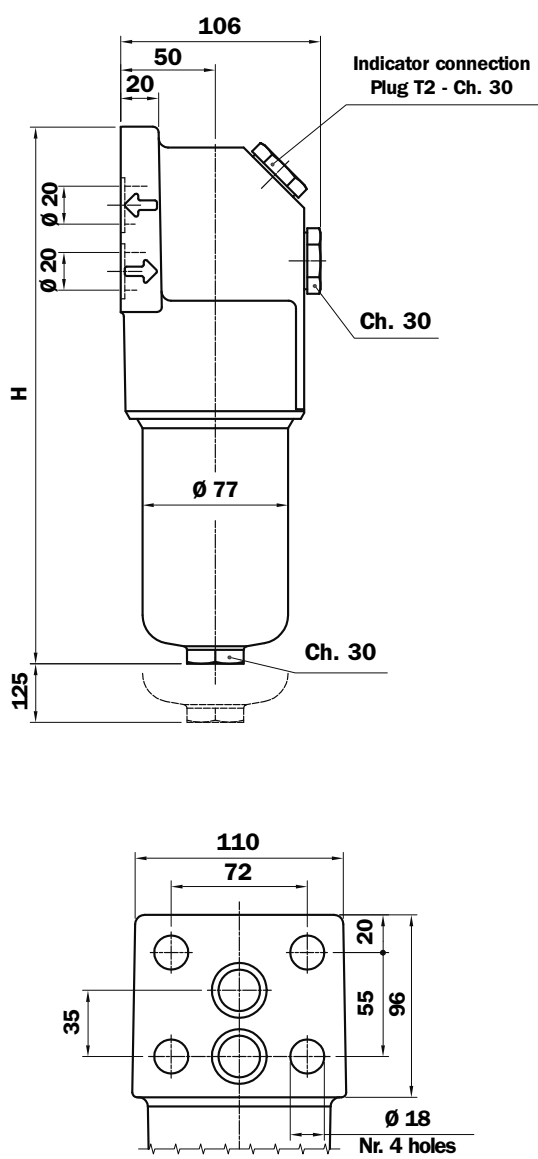
Recommended maximum flow rate

- Pressure drop of complete filter equal to Δp 1.5 bar.
- Oil kinematic viscosity 30 mm²/s (cSt).
- Density 0.86 kg/dm³.

Filter element type	Flow rate l/min Series N	Flow rate l/min Series H	Filter Length
A03	25	23	1
A06	32	26	
A10	55	49	
A16	62	57	
A25	87	80	
M25	-	-	
A03	33	32	2
A06	50	38	
A10	70	66	
A16	76	75	
A25	100	94	
M25	-	-	
A03	60	59	3
A06	70	68	
A10	96	95	
A16	101	100	
A25	117	115	
M25	-	-	

Filter Length	H mm
1	183
2	214
3	316

FHB 135



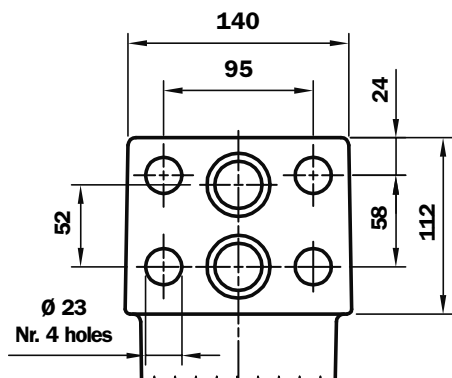
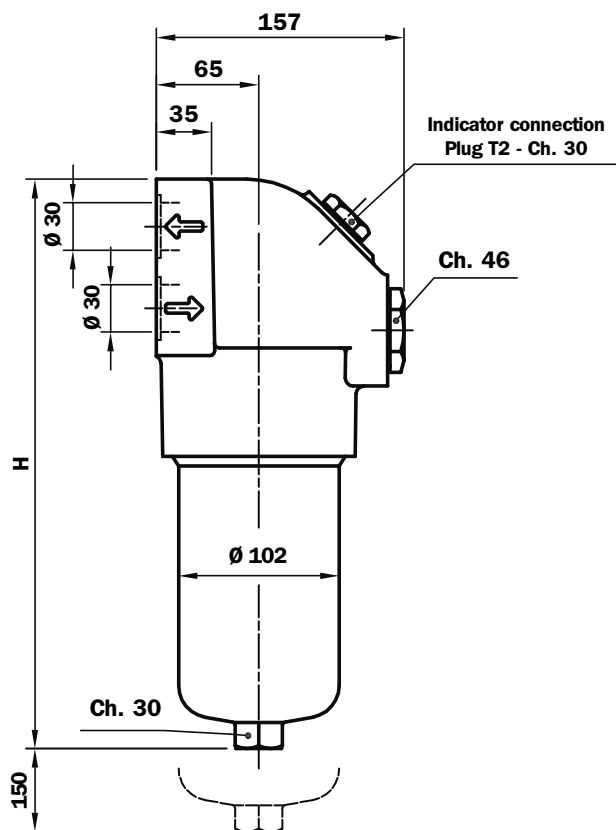
Recommended maximum flow rate

- Pressure drop of complete filter equal to Δp 1.5 bar.
- Oil kinematic viscosity 30 mm²/s (cSt).
- Density 0.86 kg/dm³.

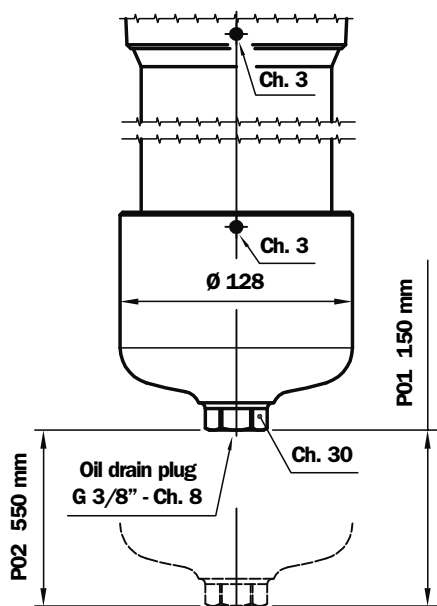
Filter element type	Flow rate l/min Series N	Flow rate l/min Series H	Filter Length
A03	67	48	1
A06	72	55	
A10	120	97	
A16	129	100	
A25	177	159	
M25	-	-	
A03	110	90	2
A06	116	110	
A10	152	137	
A16	154	140	
A25	224	182	
M25	-	-	
A03	152	126	3
A06	155	141	
A10	200	175	
A16	205	187	
A25	226	207	
M25	-	-	

Filter Length	H mm
1	266
2	379
3	454

FHB 320



Only for FHB 320 length 4



Recommended maximum flow rate

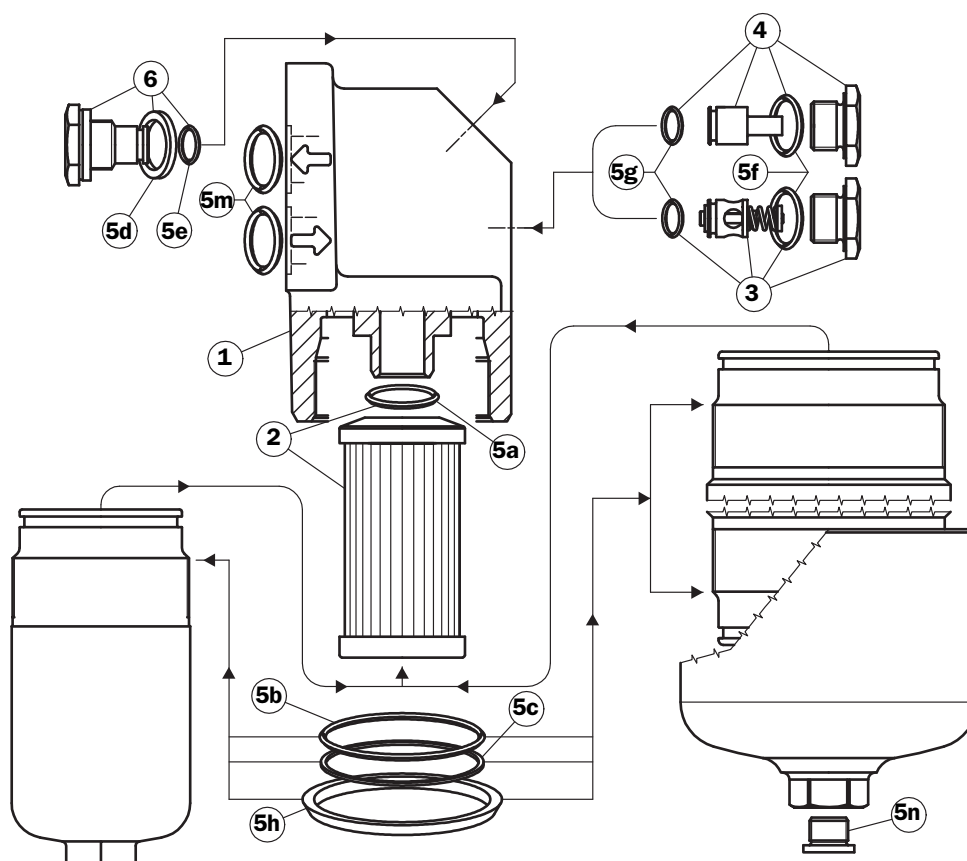
- Pressure drop of complete filter equal to Δp 1.5 bar.
- Oil kinematic viscosity 30 mm²/s (cSt).
- Density 0.86 kg/dm³.

Filter element type	Flow rate l/min Series N	Flow rate l/min Series H	Filter Length
A03	130	110	1
A06	143	117	
A10	238	192	
A16	285	200	
A25	340	300	
M25	440	-	2
A03	259	200	
A06	282	230	
A10	390	318	
A16	395	325	
A25	450	385	3
M25	460	-	
A03	330	270	
A06	368	312	
A10	440	380	
A16	450	382	4
A25	460	395	
M25	480	-	
A03	367	310	
A06	390	332	
A10	450	390	
A16	463	390	
A25	480	430	
M25	490	-	

Filter Length	H mm
1	299
2	422
3	554
4	709

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

Spare parts FHB



Pos.	Description	Qty.	FHB Series FILTER								
			050 1 - 2 - 3 - 4 - 5		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)						02001381 (NBR) 02001382 (FPM)		
4	Non bypass assembly	1	02001314 (NBR) 02001386 (FPM)						02001383 (NBR) 02001384 (FPM)		
5	Seal kits	1	NBR 02050412	FPM 02050413	NBR 02050266	FPM 02050277	NBR 02050270	FPM 02050281	NBR 02050273	FPM 02050284	
5a	Filter element O-Ring O-Ring for housing Anti-extrusion ring Gasket O-Ring Bp or Non Bp O-Ring Bp or Non Bp O-Ring Protective seal Head seal Oil drain plug	1	OR 3093 Ø 23,67 x 2,62		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			OR 3225 Ø 56,82 x 2,62		OR 159 Ø 55,56 x 3,53		OR 3256 Ø 64,77 x 2,62		2 pz.	OR 3350 Ø 88,57 x 2,62	
5c			Parbak 139 Ø 56,03 x 2,18		Parbak 227 Ø 54,53 x 3		Parbak 144 Ø 63,96 x 2,18		2 pz.	Parbak 153 Ø 89,36 x 2,18	
5d			01030058 (HNBR)	01030046 (FPM)	01030058 (HNBR)	01030046 (FPM)	01030058 (HNBR)	01030046 (FPM)	01030058 (HNBR)	01030046 (FPM)	
5e			OR 2050 Ø 12,42 x 1,78								
5f			Bonded seal - G 1/2" - FPM						OR 3143 (NBR 90 Sh A) Ø 36,14 x 2,62		
5g			OR 2050 - Ø 12,42 x 1,78 - FPM						OR 3106 Ø 26,65 x 2,62		
5h			01026521				01026509		01026510		
5m			OR 3075 Ø 18,72 x 2,62				OR 3093 Ø 23,67 x 2,62		OR 4131 Ø 32,92 x 3,53		
5n							G 3/8" with bonded seal				
6	Indicator plug	1	T2H	T2V	T2H	T2V	T2H	T2V	T2H	T2V	
-	Indicators	1	See order table								

Filter assembly

FHB

Example: FHB

Filter element

HP

Example: HP

1	2	3	4		5	6	7 _a
				F1			
065	2	B	A	F1	A10	N	P01

1	2	5	4	6	7 _b
065	2	A10	A	N	P01

1 - Size

050
065
135
320

2 - Filter length

1
2
3
4
5

(FHB 050-320 only)

(FHB 050 only)

3 - Valves

S	Without bypass side B - Standard
B	With bypass side B - Standard
D	With bypass + check valve*
T	Without bypass + check valve*
E	Without bypass side C - Optional

*Reduced cross-section oilways

4 - Seals

A	NBR
V	FPM

5 - Filter elements

A03	Inorganic microfibre 3 µ	β _x (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 (series N)	

6 - Filter elements collapse pressure

N	20 bar
H	210 bar (for HP 065, 135, 320)
S	210 bar (for HP 050)

7 - Options

a) Filter

P01	MP Filtri standard
P02	Maintenance from base of housing (FHB 320 4 only)
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

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.