

FHA 051

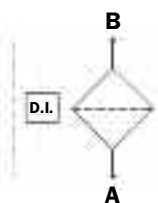


FHA SERIES 051

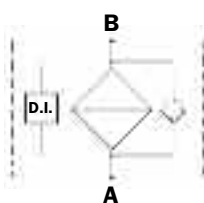
Working pressure
560 bar



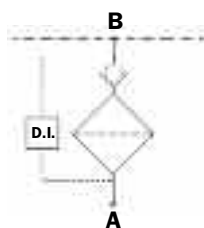
Style S



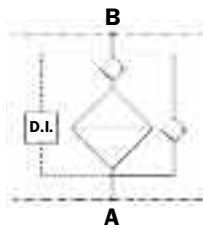
Style B



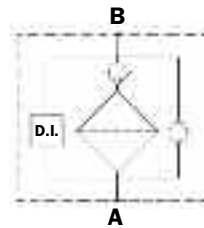
Style T



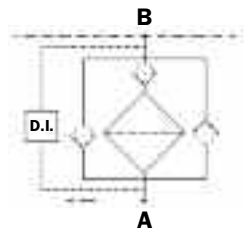
Style D



Style V



Style Z



Technical data

Filter body (Materials)

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

Pressure

- Maximum operating pressure: 560 bar (56 MPa)
- Test pressure: 630 bar (63 MPa)
- Burst pressure: 1250 bar (125 MPa)
- Pulsed pressure fatigue test 1,000,000 of cycles from 0 to 560 bar (56 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-R: 20 bar
- Elements in microfibre series H-S: 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

- FHA051 -1 3.0
- FHA051 -2 3.6
- FHA051 -3 3.9
- FHA051 -4 4.5
- FHA051 -5 6.1

Filter internal volumes (dm³)

Length

- FHA051 -1 0.38
- FHA051 -2 0.47
- FHA051 -3 0.57
- FHA051 -4 0.68
- FHA051 -5 0.88

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-HFDDU
To ISO 2943

Filter Element Area

Filter element in stainless steel mesh

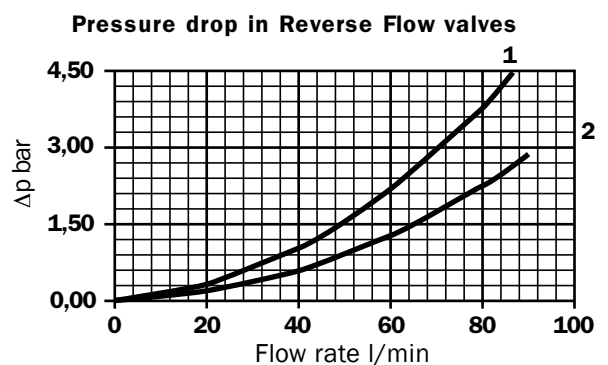
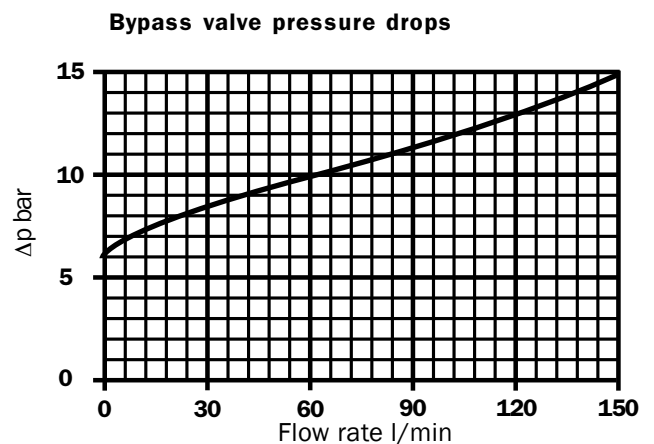
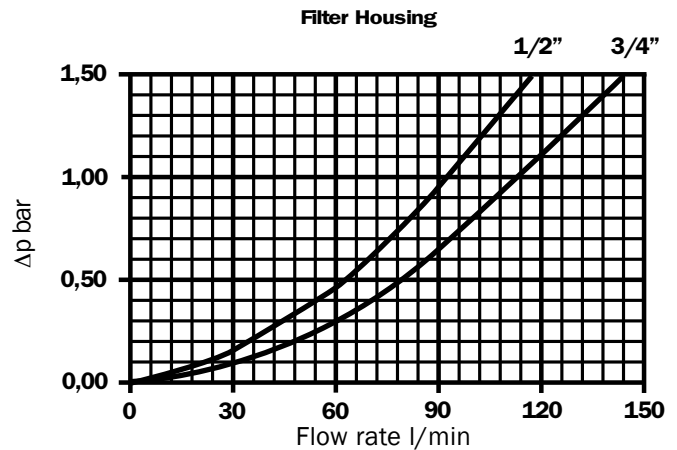
Type	Length				
	1	2	3	4	5
HP050	450	700	1000	1300	2100

Values expressed in cm²

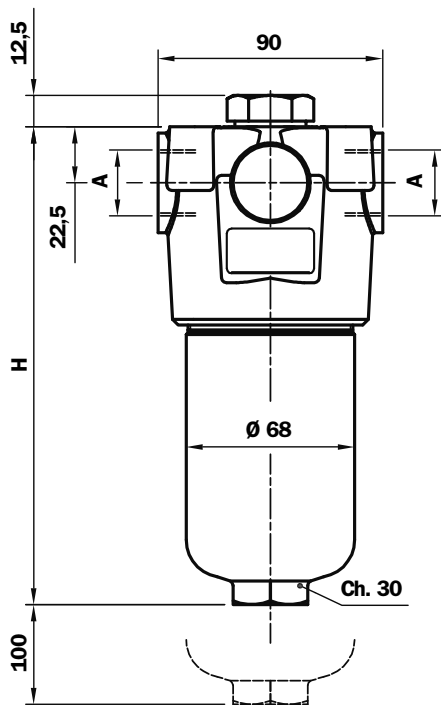
Pressure drops Δp Housing

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

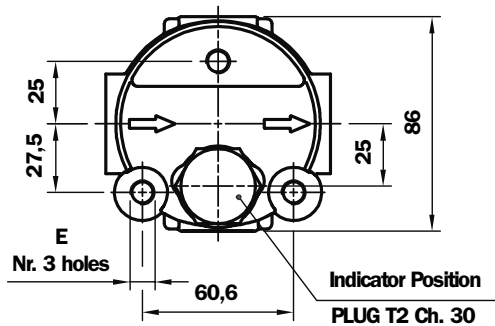
Δp Varies proportional with density.



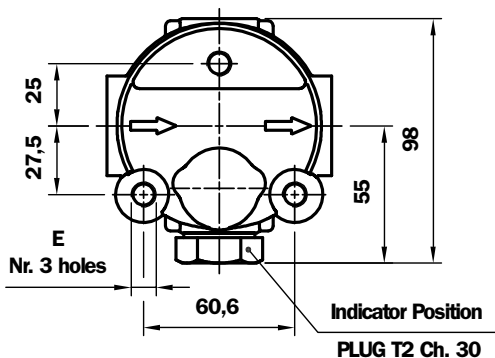
1 - Reverse Flow
2 - In filter direction



With standard indicator



Option P03 with 90° indicator



NB. Versions with differential indicator 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".

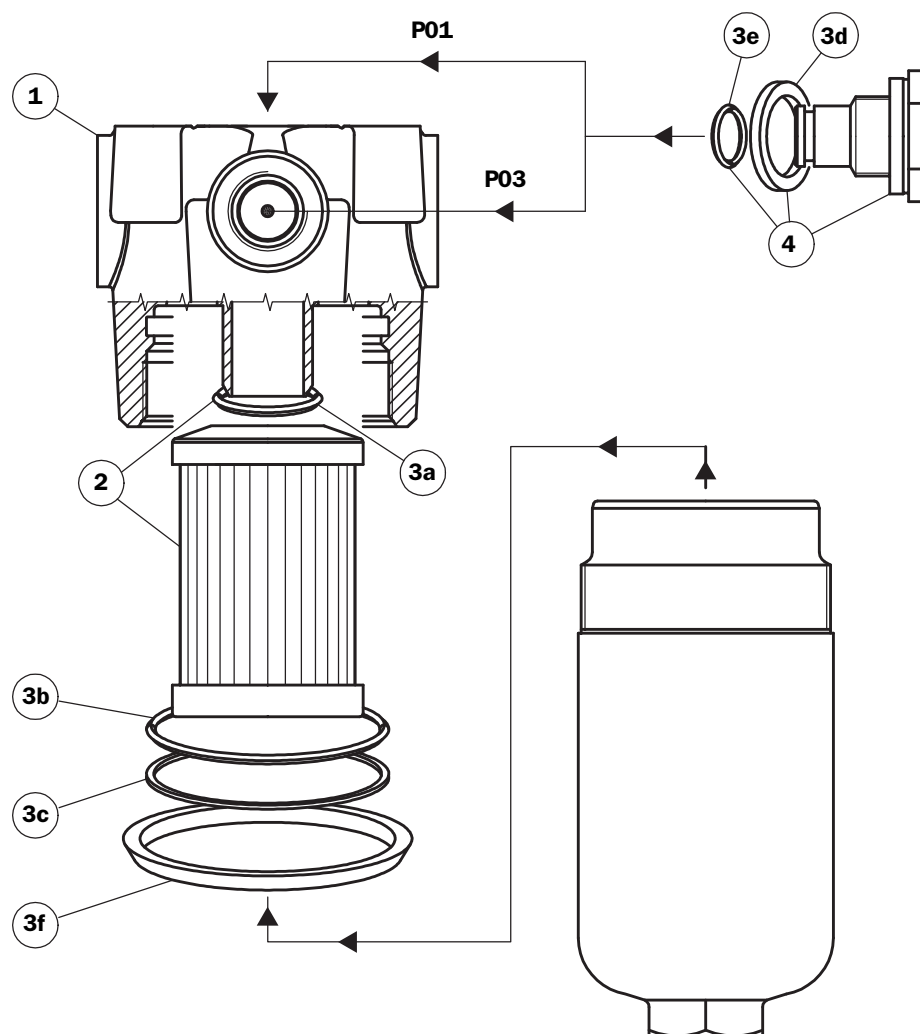
Filter element type	Flow rate l/min Series N	Flow rate l/min Series H	Filter Length
A03	42	30	1
A06	44	39	
A10	77	57	
A16	78	58	
A25	98	72	
M25	132	-	2
A03	52	45	
A06	55	49	
A10	82	74	
A16	91	84	
A25	112	105	3
M25	135	-	
A03	66	58	
A06	68	61	
A10	92	85	
A16	100	93	4
A25	118	112	
M25	135	-	
A03	80	75	
A06	85	78	
A10	105	98	5
A16	108	105	
A25	120	115	
M25	135	-	
A03	102	87	
A06	105	90	5
A10	120	105	
A16	124	112	
A25	130	115	
M25	140	-	

A Threaded Connections E Depth 15 mm

M18x1,5	ISO 6149	M10
M22x1,5	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	157
2	192
3	234
4	282
5	409

Spare parts FHA051



Pos.	Description	Qty.	Series FHA 051 FILTER 051 1 - 2 - 3 - 4 - 5	
1	Complete filter	1	See order table	
2	Filter element	1	See order table	
3	Seal kits	1	NBR 02050288	FPM 02050305
3a	O-Ring for filter element	1	OR 3093 Ø 23.67 x 2.62	
3b	O-Ring for housing	1	O-R 3237 Ø 60 x 2.62	
3c	Anti-extrusion ring	1	Parbak 141 Ø 59.21 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 FHA 051

Filter assembly

FHA 051

Example: FHA051

Filter element

HP 050

Example: HP050

1	2	3	4	5	6	7 _a
2	B	A	C	A10	N	P01
1	5	3	6	7 _b		
2	A10	A	N	P01		

1 - Filter lengths

1
2
3
4
5

2 - Bypass valve

	S	Without bypass
	B	With bypass
	D	With bypass + check valve*
	V	With Reverse Flow*
	Z	With Reverse Flow + bypass*
	T	Without 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	} $\beta_x(c) \geq 1000$ 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)	

6 - Filter elements collapse pressure

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

7 - Options

a) Filter

	P01	Standard threaded connection for indicator
	P02	Without threaded connection for indicator
	P03	Threaded connection for 90° indicator
	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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