

FHP 500



SERIES FHP 500

Working pressure
420 bar



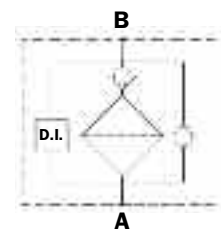
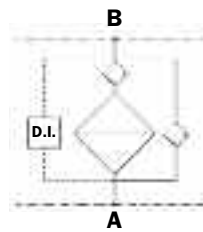
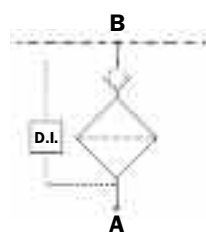
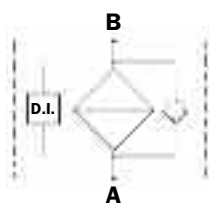
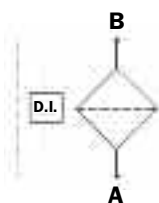
Style S

Style B

Style T

Style D

Style V



Technical data

Filter body (Materials)

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

Pressure

- Maximum operating pressure: 420 bar (42 MPa)
- Test pressure: 630 bar (63 MPa)
- Burst pressure: 1250 bar (125 MPa)
- Pulsed pressure fatigue test 1,000,000 of cycles with pressure from 0 to 420 bar (42 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 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	1	2	3	4	5
• FHP 500	27	31	35	46	53

Filter internal volumes (dm³)

Length	1	2	3	4	5
• FHP 500	2.66	3.39	4.02	5.26	6.59

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

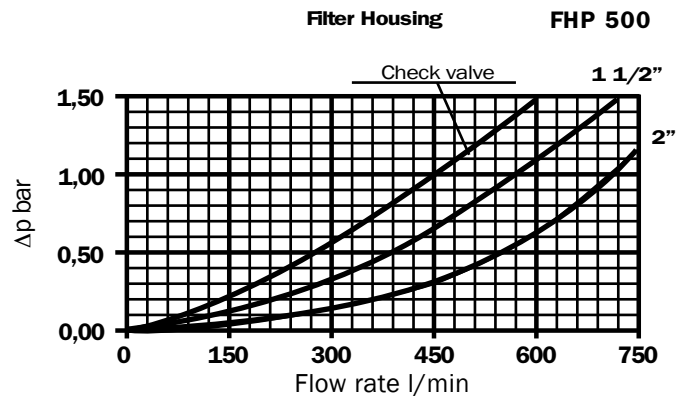
Type	Length				
	1	2	3	4	5
HP500	3030	4900	6500	9800	13000

Values expressed in cm²

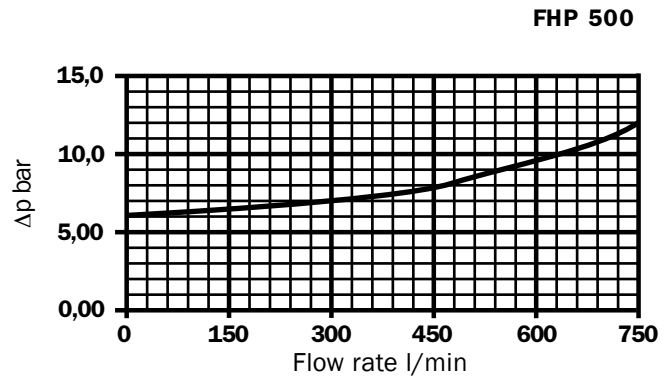
Pressure drops Δp Housing

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

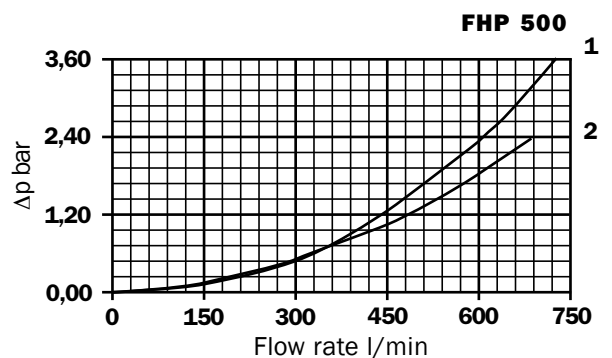
Δp varies proportional with density.



Bypass valve pressure drop

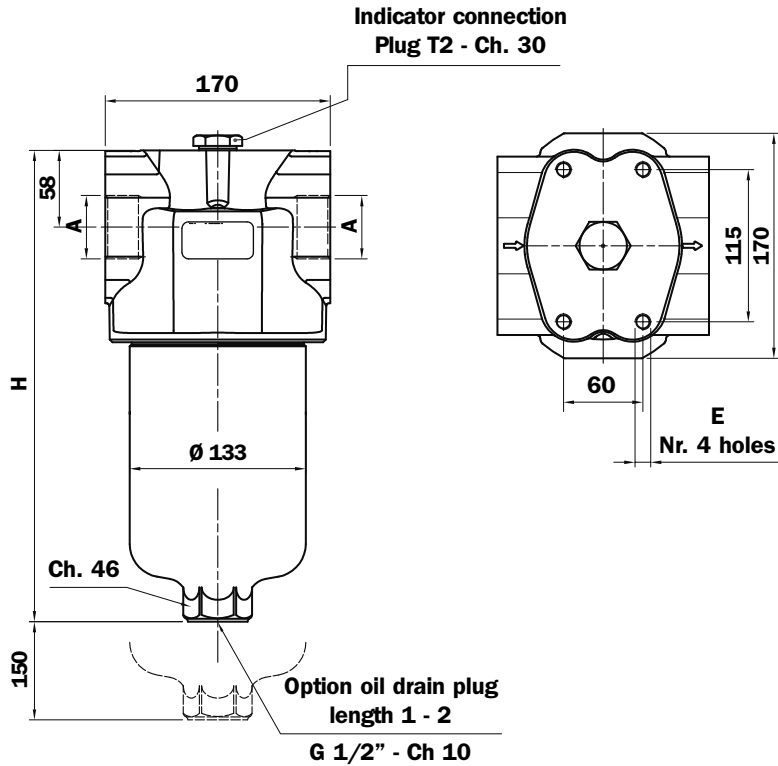


Bypass valve pressure drop



FHP 500

Dimensions

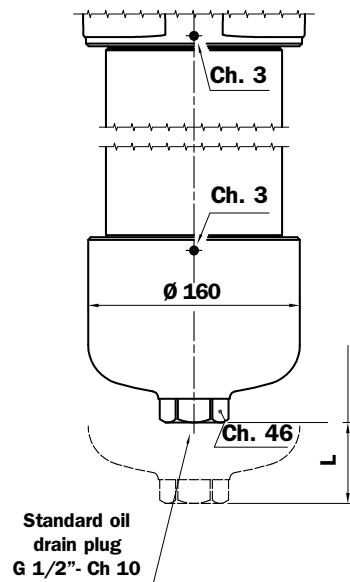


Recommended maximum flow rate

- 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 FLANGE 2" SAE 6000 PSI.

Filter element type	Flow rate l/min Series N	Flow rate l/min Series S	Filter Length
A03	280	140	
A06	300	165	
A10	370	260	1
A16	370	275	
A25	430	370	
M25	650	-	
<hr/>			
A03	315	240	
A06	325	270	
A10	425	350	2
A16	450	360	
A25	480	425	
M25	700	-	
<hr/>			
A03	390	290	
A06	400	300	
A10	465	390	3
A16	470	410	
A25	500	450	
M25	700	-	
<hr/>			
A03	550	390	
A06	600	450	
A10	650	465	4
A16	650	600	
A25	700	650	
M25	750	-	
<hr/>			
A03	600	515	
A06	645	520	
A10	680	645	5
A16	710	650	
A25	750	720	
M25	750	-	

Only for FHP 500 length 4/5



Style P01	
L mm	Filter length
150	4/5

Style P02	
L mm	Filter length
480	4
650	5

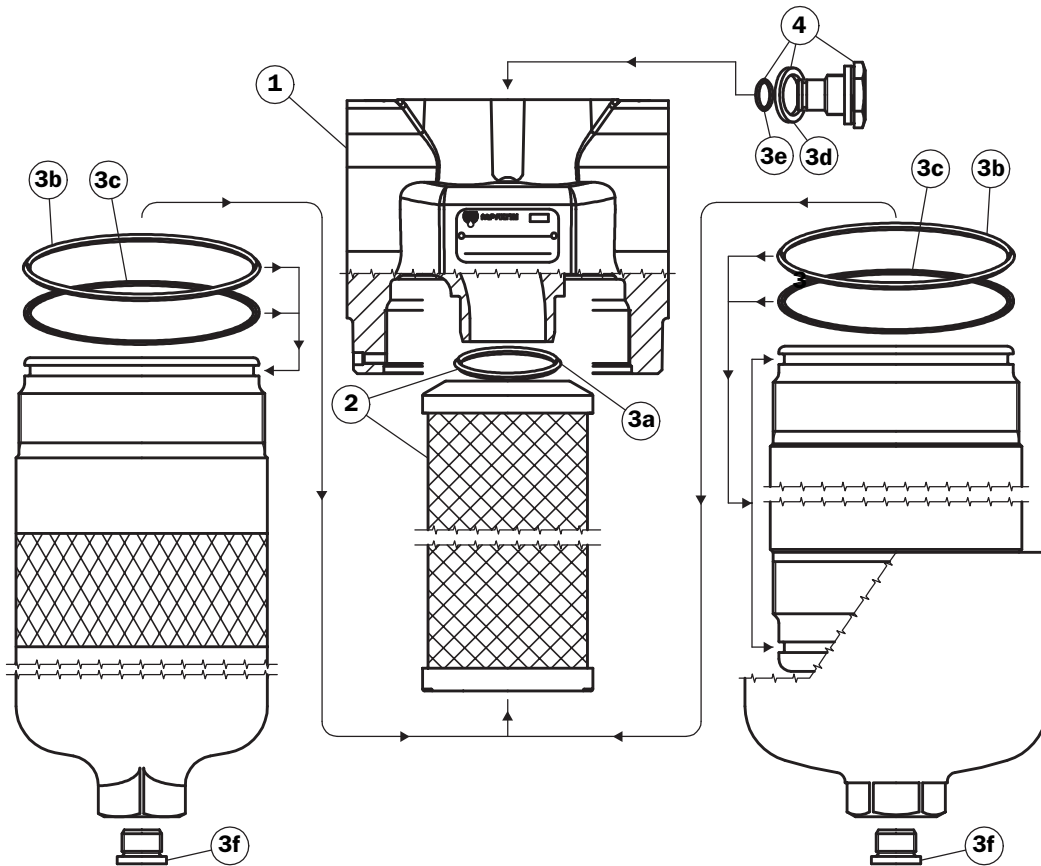
Style P01 standard maintenance from head.
Style P02 maintenance option from housing base.

Filter Length	H mm
1	335
2	424
3	500
4	657
5	823

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

A Flanged Connections	E Depth 15 mm
1 1/2" SAE 3000 psi/M	M12
1 1/2" SAE 3000 psi/UNC	1/2" UNC
2" SAE 3000 psi/M	M12
2" SAE 3000 psi/UNC	1/2" UNC
1 1/2" SAE 6000 psi/M	M12
1 1/2" SAE 6000 psi/UNC	1/2" UNC
2" SAE 6000 psi/M	M12
2" SAE 6000 psi/UNC	1/2" UNC

Spare parts FHP 500



FHP 500 Series FILTER					
Pos.	Description	Qty.	500 1 - 2 - 3 - 4 - 5		
1	Complete filter	1	See order table		
2	Filter element	1	See order table		
3	Seal kits	1	<table border="1"> <tr> <td>NBR 02050330</td> <td>FPM 02050331</td> </tr> </table>	NBR 02050330	FPM 02050331
NBR 02050330	FPM 02050331				
3a	Filter element O-Ring	1	OR 153 Ø 49,21 x 3,53		
3b	O-Ring for housing	2	OR 4462 Ø 117,10 x 3,53		
3c	Anti-extrusion ring	2	Parbak 247 Ø 117,63 x 3		
3d	Gasket	1	<table border="1"> <tr> <td>01030058 (HNBR)</td> <td>01030046 (FPM)</td> </tr> </table>	01030058 (HNBR)	01030046 (FPM)
01030058 (HNBR)	01030046 (FPM)				
3e	O-Ring	1	OR 2050 Ø 12,42 x 1,78		
3f	Oil drain plug	1	G 1/2" with seal		
4	Indicator plug	1	<table border="1"> <tr> <td>T2H</td> <td>T2V</td> </tr> </table>	T2H	T2V
T2H	T2V				
-	Indicators	1	See order table		

Ordering information FHP 500

Filter assembly

FHP 500

Example: FHP500

Filter element

HP 500

Example: HP500

	1	2	3	4	5	6	7 _a
FHP 500	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Example: FHP500	4	B	A	G1	A10	N	P01
Filter element	1	5	3	6	7_b		
HP 500	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Example: HP500	4	A10	A	N	P01		

1 - Filter length

- 1
- 2
- 3
- 4
- 5

2 - Bypass valve

- S Without bypass
- B With bypass
- V With Reverse Flow*
- D With bypass + check valve*
- T Without bypass + check valve*

*Reduced cross-section oilways

3 - Seals

- A NBR
- V FPM

4 - Connections

- G1 G 1 1/2"
- G2 1 1/2" NPT
- G3 SAE 24 (1 7/8" 12 UN)
- F1 1 1/2"SAE - 3000 PSI/M
- F2 1 1/2"SAE - 3000 PSI/UNC
- F3 2"SAE - 3000 PSI/M
- F4 2"SAE - 3000 PSI/UNC
- F5 1 1/2"SAE - 6000 PSI/M
- F6 1 1/2"SAE - 6000 PSI/UNC
- F7 2"SAE - 6000 PSI/M
- F8 2"SAE - 6000 PSI/UNC

5 - Filter elements

- A03 Inorganic microfibre 3 µ
 - 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)
- β_x (c) ≥ 1000
See page 10

6 - Filter elements collapse pressure

- N 20 bar
- S 210 bar

7 - Options

a) Filter

- P01 MP Filtri standard
- P02 MP with replacement of the filter element from the cap (only for length 4 and 5)
- P03 Oil drain plug (only for length 1 and 2) (standard only for length 3 - 4 - 5)
- 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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