

# FHF 325 series

Maximum working pressure up to 35 MPa (350 bar) - Flow rate up to 500 l/min

Filter housing according to SAE J2066 for HF4 filter elements



# FHF 325 GENERAL INFORMATION

## Filter housing according to SAE J2066 for HF4 filter elements

### Description

#### High Pressure filters

#### Manifold

**Maximum working pressure up to 35 MPa (350 bar)**

**Flow rate up to 500 l/min**

FHF is a range of high pressure filter for protection of sensitive components in high pressure hydraulic systems in the mobile machines. They are directly connected to the lines of the system through the hydraulic fittings or the proper flanged interface.

#### Available features:

- 1 1/2" female threaded connections, 1 1/2" flanged connections and manifold connections up to 1 1/2", for a maximum flow rate of 500 l/min
- Base-mounting design, for ease of the replacement of the filter element
- Filter element designed in accordance with SAE J2066 HF4 regulation
- Fine filtration rating, to get a good cleanliness level into the system
- Bypass valve, to relieve excessive pressure drop across the filter media
- Low collapse filter element "N", for use with filters provided with bypass valve
- Visual, electrical and electronic differential clogging indicators

#### Common applications:

Delivery lines, in any high pressure industrial equipment

### Technical data

#### Filter housing materials

- Head: Phosphatized cast iron
- Housing: Phosphatized steel
- Cover: Cast iron (chemical heat treatment)
- Bypass valve: Brass - Steel

#### Pressure

- Working pressure: 35 MPa (350 bar)
- Test pressure: 52.5 MPa (525 bar)
- Burst pressure: 105 MPa (1050 bar)
- Pulse pressure fatigue test: 1 000 000 cycles with pressure from 0 to 35 MPa (350 bar)

#### Bypass valve

- Opening pressure 600 kPa (6 bar)  $\pm 10\%$
- Other opening pressures on request.

#### $\Delta p$ element type

- Microfibre filter elements - series N: 20 bar
- Wire mesh filter elements - series N: 20 bar
- Fluid flow through the filter element from OUT to IN

#### Seals

- Standard NBR series A
- Optional FPM series V

#### Temperature

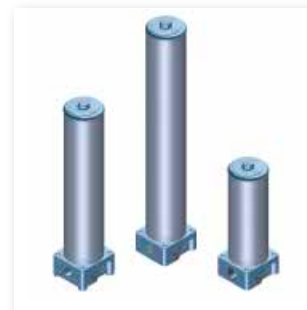
From -25 °C to +110 °C

#### Connections

- FHF 325: In-line threaded connection
- FHF 325: In-line flanged connection
- FHF 325: Manifold mounting

#### Note

FHF filters are provided for vertical mounting



### Weights [kg] and volumes [dm<sup>3</sup>]

Filter series	Weights [kg]				Volumes [dm <sup>3</sup> ]			
	Length	1	2	3	Length	1	2	3
<b>FHF 325</b>		23.90	32.68	41.47		3.50	5.80	8.11

# GENERAL INFORMATION FHF 325

Filter housing according to SAE J2066 for HF4 filter elements

FILTER ASSEMBLY SIZING  
Flow rates [l/min]

Filter series	Length	Filter element design - N Series					
		A03	A06	A10	A16	A25	M25
FHF 325	1	302	339	348	419	500	556
	2	401	424	434	457	505	557
	3	416	451	460	469	510	559

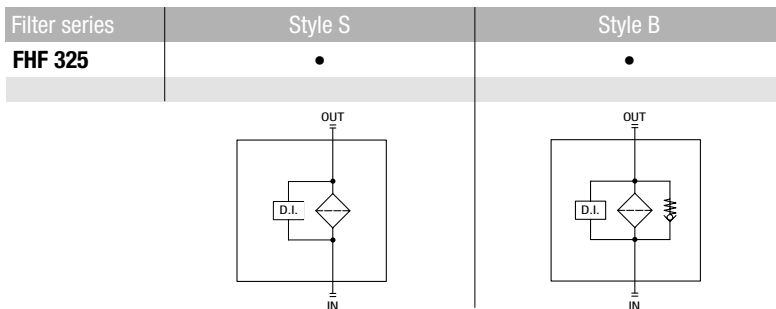
## Maximum flow rate for a complete pressure filter with a pressure drop $\Delta p = 1.5$ bar.

The reference fluid has a kinematic viscosity of 30 mm<sup>2</sup>/s (cSt) and a density of 0.86 kg/dm<sup>3</sup>.

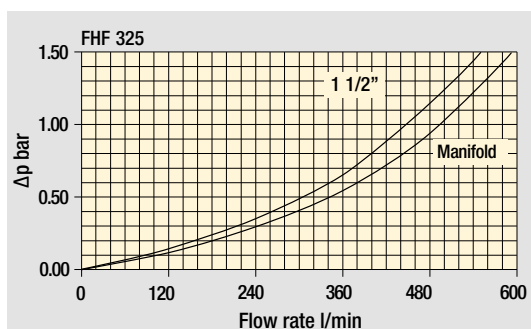
For different pressure drop or fluid viscosity we recommend to use our selection software available on [www.mpfiltri.com](http://www.mpfiltri.com).

You can also calculate the right size using the formulas present on the FILTER SIZING paragraph at the beginning of the full catalogue or at the beginning of the filter family brochure. Please, contact our Sales Department for further additional information.

## Hydraulic symbols



## Pressure drop Filter housings $\Delta p$ pressure drop



The curves are plotted using mineral oil with density of 0.86 kg/dm<sup>3</sup> in compliance with ISO 3968.  $\Delta p$  varies proportionally with density.

# FHF 325

## Designation & Ordering code

### COMPLETE FILTER

<b>Series and size</b>	Configuration example: <b>FHF325</b>   <b>2</b>   <b>S</b>   <b>A</b>   <b>H</b>   <b>7</b>   <b>A10</b>   <b>N</b>   <b>P01</b>															
<b>FHF325</b>																
<b>Length</b>	1   2   3															
<b>Valves</b>	S Without bypass B With bypass 6 bar															
<b>Seals</b>	A NBR V FPM															
<b>Connections</b>	A G 1 1/2" B 1 1/2" NPT C SAE 24 - 1 7/8" - 12 UN G 1 1/2" SAE 6000 psi/M H 1 1/2" SAE 6000 psi/UNC M Manifold ø1.38" N Manifold ø1.50"															
<b>Connection for differential indicator</b>	7 With two connections plugged on both sides															
<b>Filtration rating (filter media)</b>	<table border="0"> <tr> <td><b>A03</b> Inorganic microfiber 3 µm</td> <td><b>A16</b> Inorganic microfiber 16 µm</td> </tr> <tr> <td><b>A06</b> Inorganic microfiber 6 µm</td> <td><b>A25</b> Inorganic microfiber 25 µm</td> </tr> <tr> <td><b>A10</b> Inorganic microfiber 10 µm</td> <td><b>M25</b> Wire mesh 25 µm</td> </tr> </table>										<b>A03</b> Inorganic microfiber 3 µm	<b>A16</b> Inorganic microfiber 16 µm	<b>A06</b> Inorganic microfiber 6 µm	<b>A25</b> Inorganic microfiber 25 µm	<b>A10</b> Inorganic microfiber 10 µm	<b>M25</b> Wire mesh 25 µm
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	<b>Element Δp</b>					<b>Execution</b>										
	N 20 bar					P01 MP Filtri standard Pxx Customized										

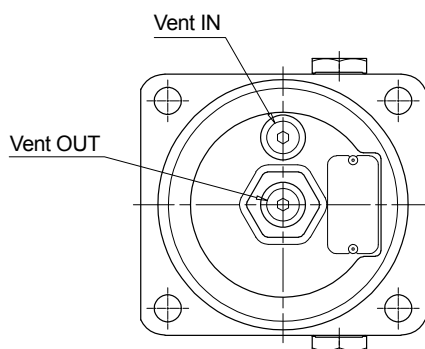
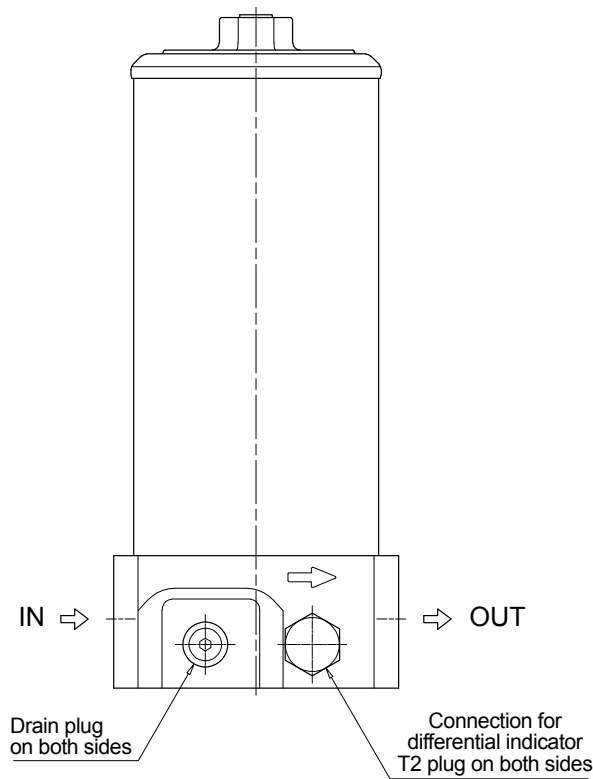
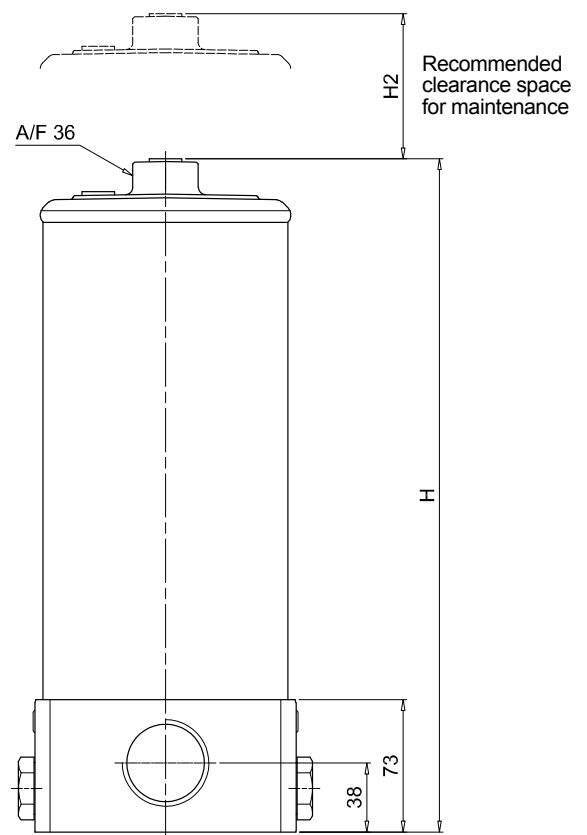
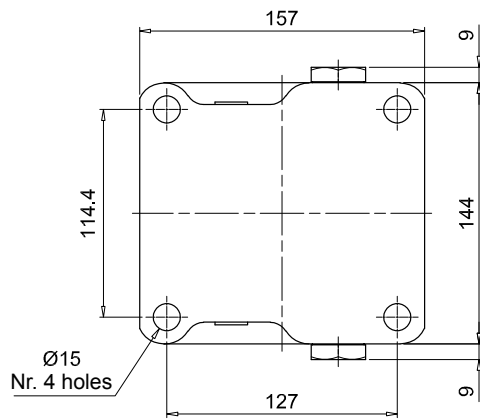
### FILTER ELEMENT

<b>Element series and size</b>	Configuration example: <b>HF325</b>   <b>2</b>   <b>A10</b>   <b>A</b>   <b>N</b>   <b>P01</b>												
<b>HF325</b>													
<b>Element length</b>	1   2   3												
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	<b>Seals</b>		<b>Element Δp</b>		<b>Execution</b>								
	A NBR V FPM		N 20 bar		P01 MP Filtri standard Pxx Customized								

### ACCESSORIES

<b>Differential indicators</b>		page			page
<b>DEA</b>	Electrical differential indicator	567	<b>DLE</b>	Electrical / visual differential indicator	570
<b>DEH</b>	Hazardous area electronic differential indicator	567-568	<b>DTA</b>	Electronic differential indicator	571
<b>DEM</b>	Electrical differential indicator	568-569	<b>DVA</b>	Visual differential indicator	571
<b>DLA</b>	Electrical / visual differential indicator	569-570	<b>DVM</b>	Visual differential indicator	571
<b>Additional features</b>		page			
<b>T2</b>	Plug	572			

FHF325		
Connection A - B - C		
Filter length	H [mm]	H2 [mm]
1	452	250
2	690	485
3	928	725



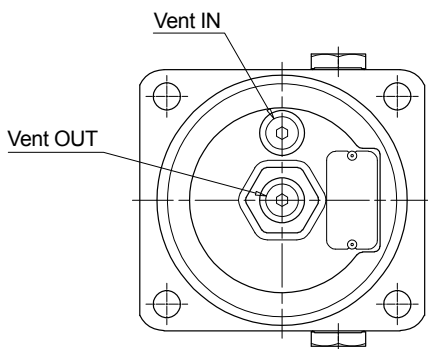
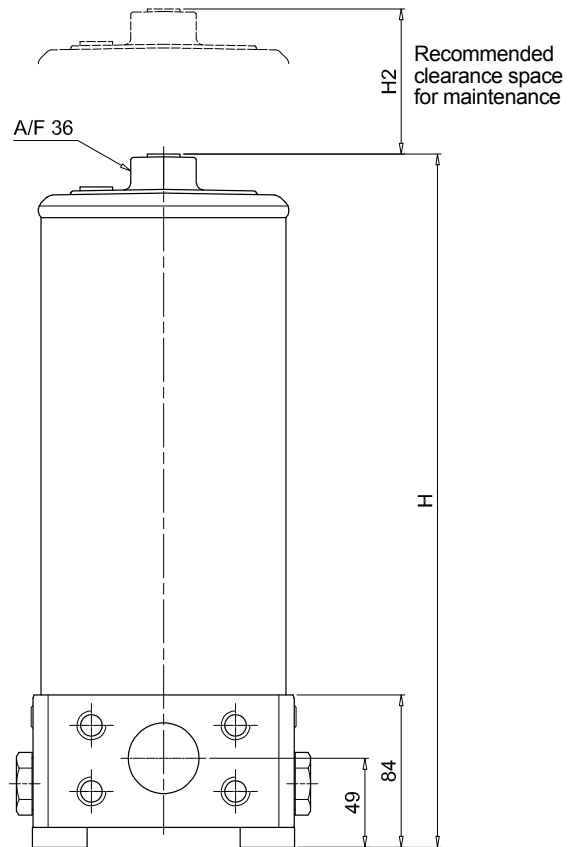
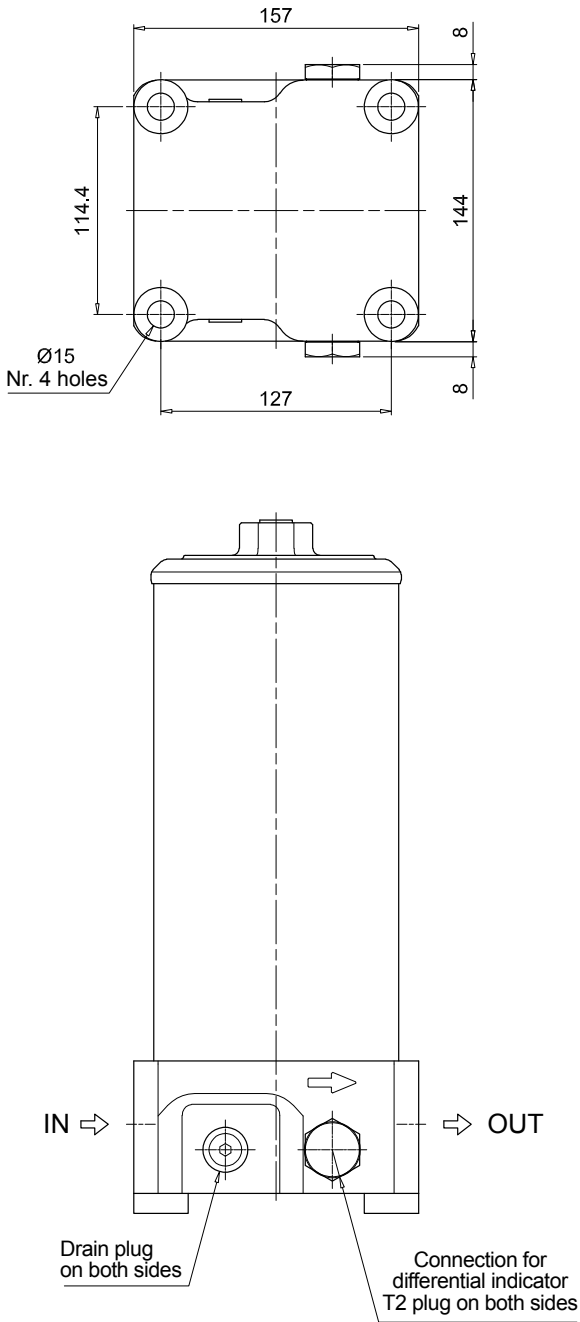
# FHF 325

## Dimensions

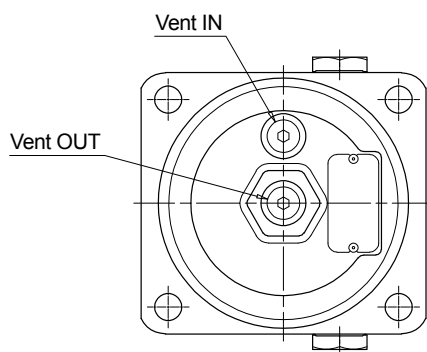
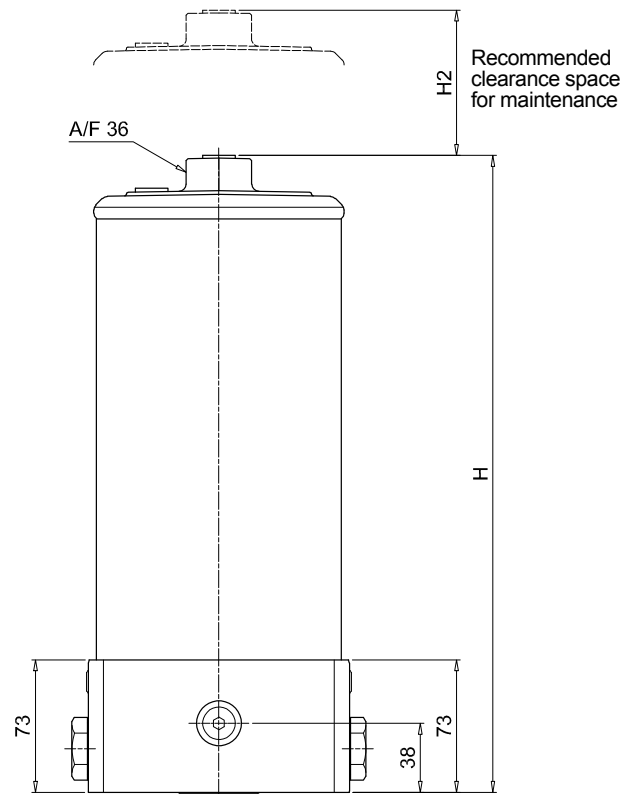
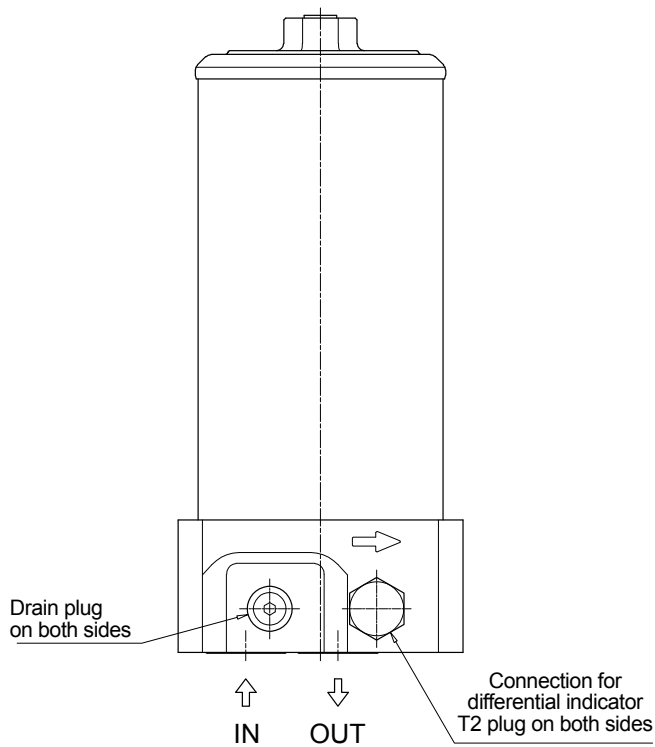
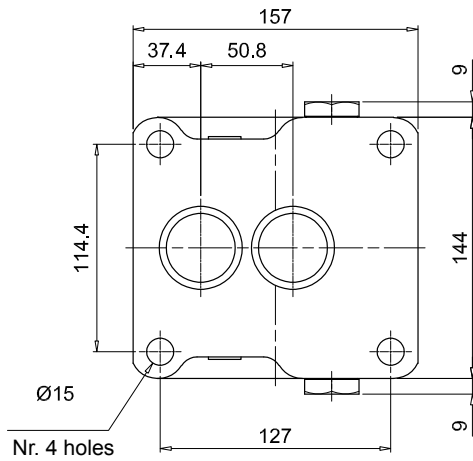
FHF325

Connection G - H

Filter length	H [mm]	H2 [mm]
<b>1</b>	463	250
<b>2</b>	701	485
<b>3</b>	939	725



FHF325		
Connection M - N		
Filter length	H [mm]	H2 [mm]
<b>1</b>	452	250
<b>2</b>	690	485
<b>3</b>	928	725



# FHF 325 SPARE PARTS

Filter housing according to SAE J2066 for HF4 filter elements

Order number for spare parts

**FHF 325**  
**Connections**  
**A - B - C - G - H**

Item:	Q.ty: 1 pc.	Q.ty: 1 pc.	Q.ty: 2 pc.		
Filter series	Filter element	Seal Kit code number	Indicator connection plug		
		NBR	FPM	NBR	FPM
<b>FHF 325</b> <b>A-B-C-G-H</b>	See order table	02050588	02050589	T2H	T2V

**FHF 325**  
**Connections**  
**M - N**

Item:	Q.ty: 1 pc.	Q.ty: 1 pc.	Q.ty: 2 pc.		
Filter series	Filter element	Seal Kit code number	Indicator connection plug		
		NBR	FPM	NBR	FPM
<b>FHF 325</b> <b>M-N</b>	See order table	02050590	02050591	T2H	T2V