

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.

Δp 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 [dm³]

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

GENERAL INFORMATION FHF 325

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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

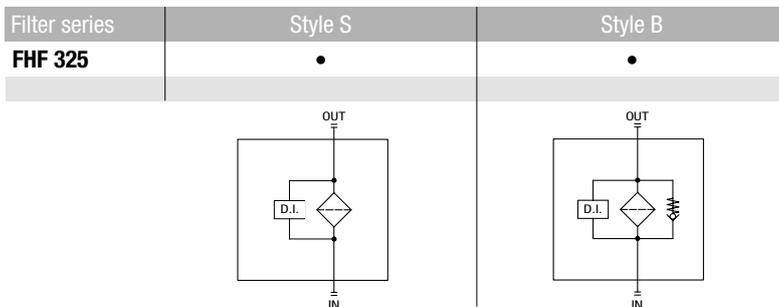
Maximum flow rate for a complete pressure filter with a pressure drop $\Delta p = 1.5$ bar.

The reference fluid has a kinematic viscosity of 30 mm²/s (cSt) and a density of 0.86 kg/dm³.

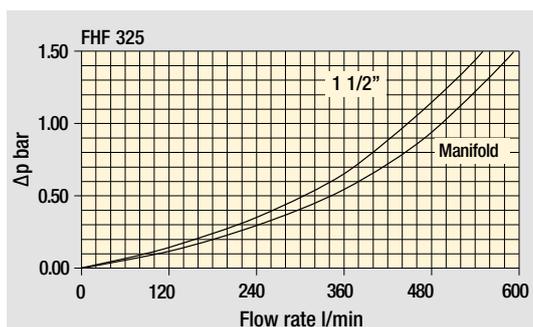
For different pressure drop or fluid viscosity we recommend to use our selection software available on www.mpfiltri.com.

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 Δp pressure drop



The curves are plotted using mineral oil with density of 0.86 kg/dm³ in compliance with ISO 3968. Δp varies proportionally with density.

FHF 325

Designation & Ordering code

COMPLETE FILTER

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

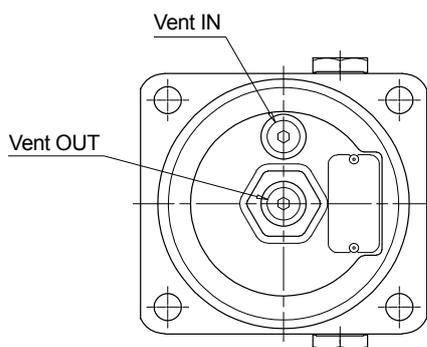
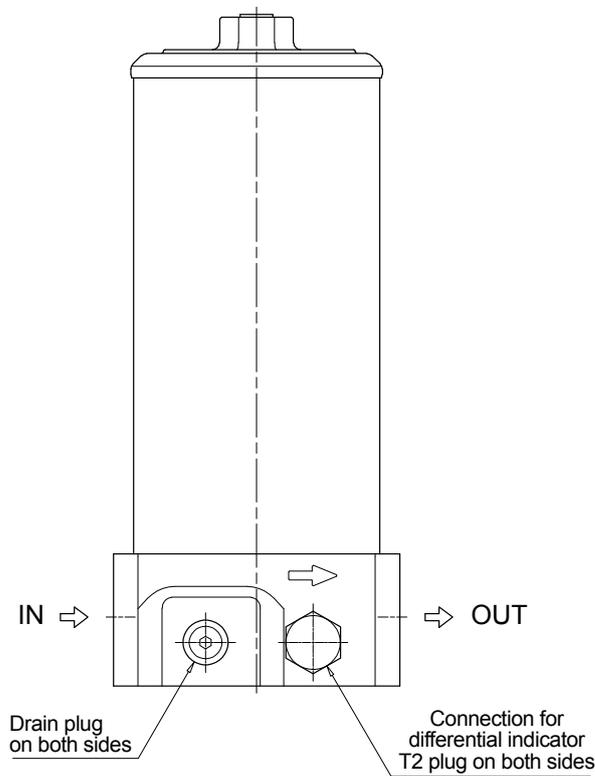
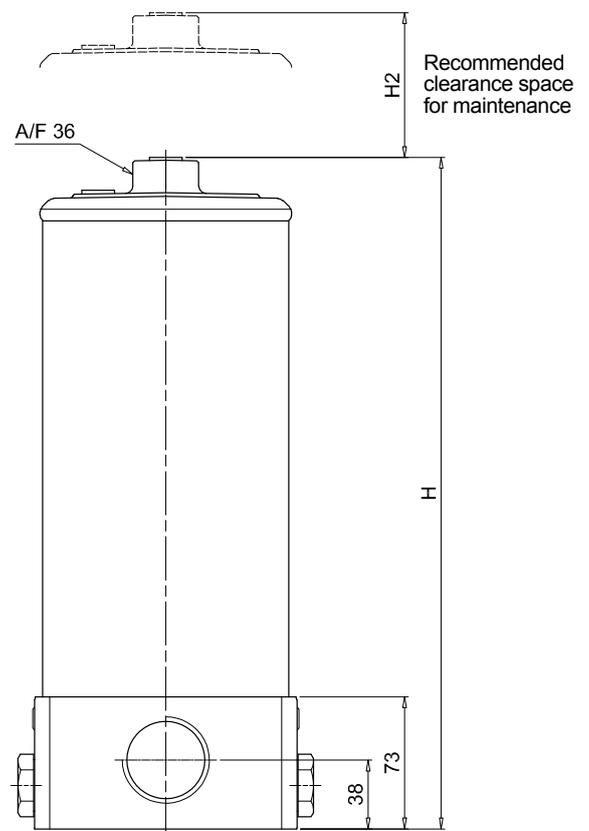
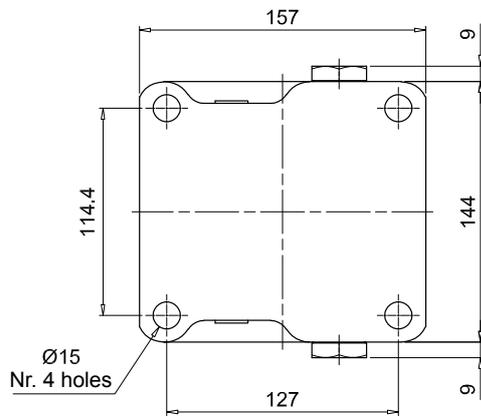
FILTER ELEMENT

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

ACCESSORIES

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

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



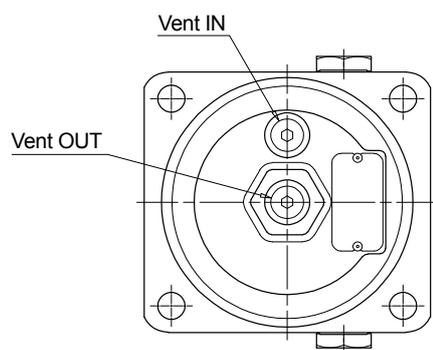
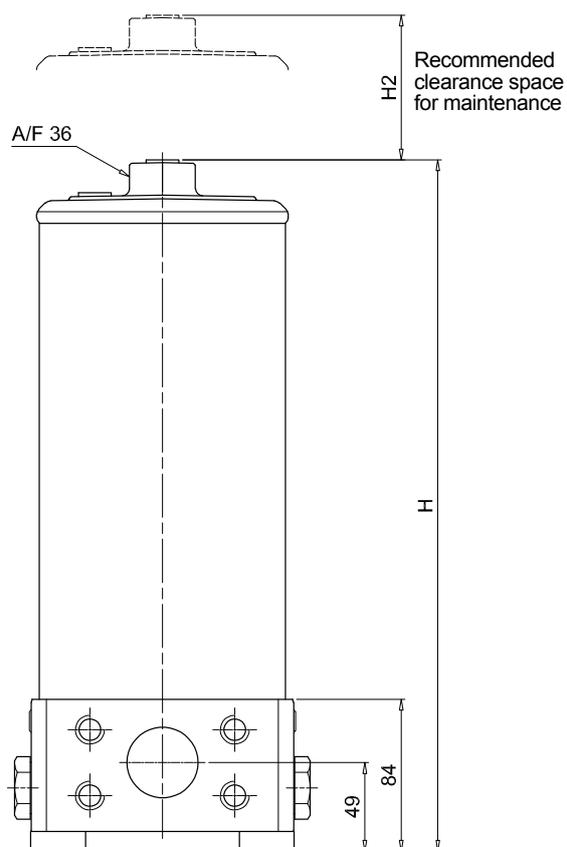
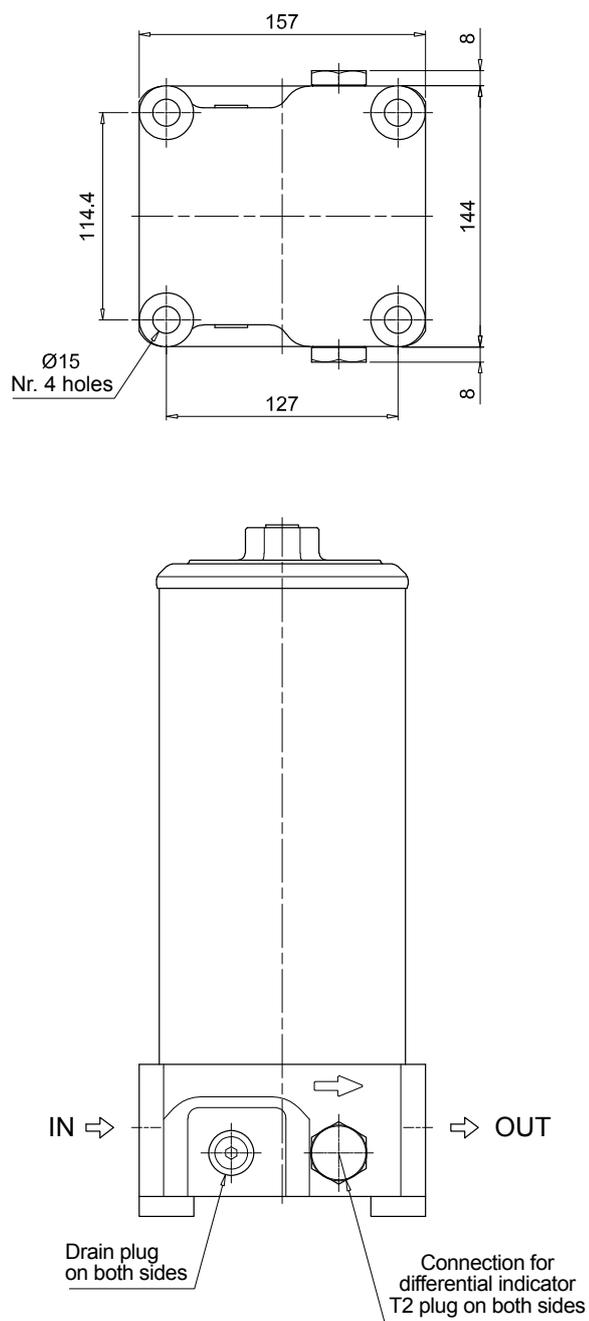
FHF 325

Dimensions

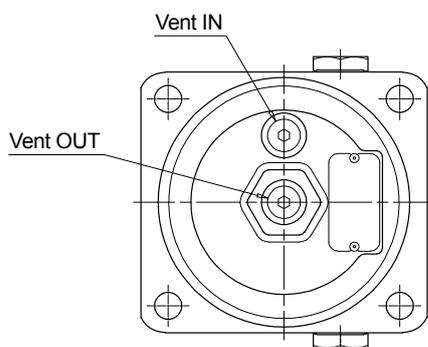
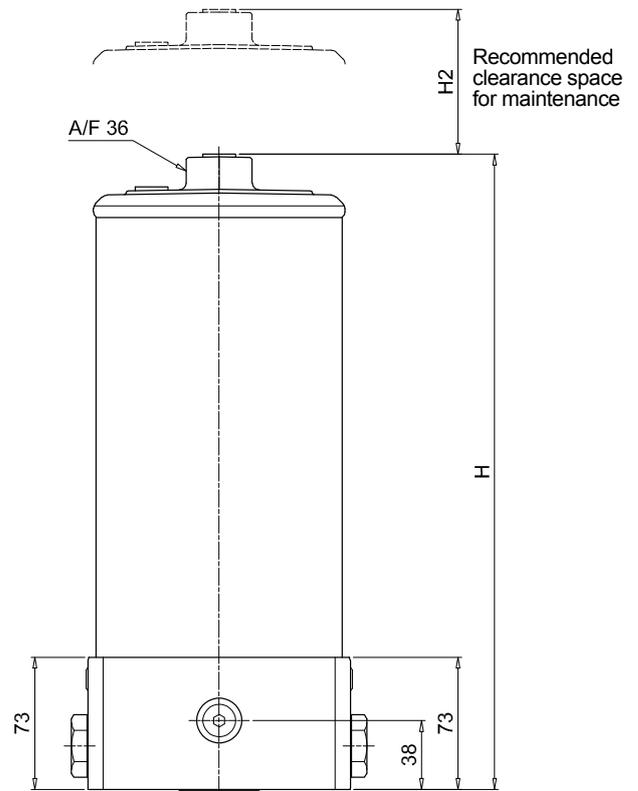
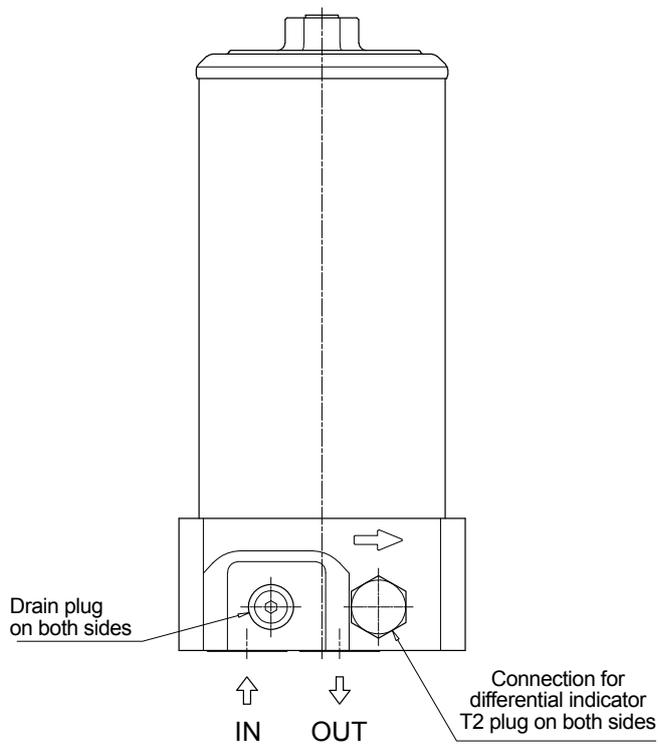
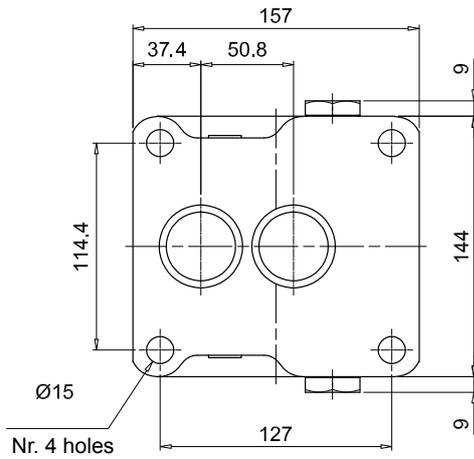
FHF325

Connection G - H

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



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

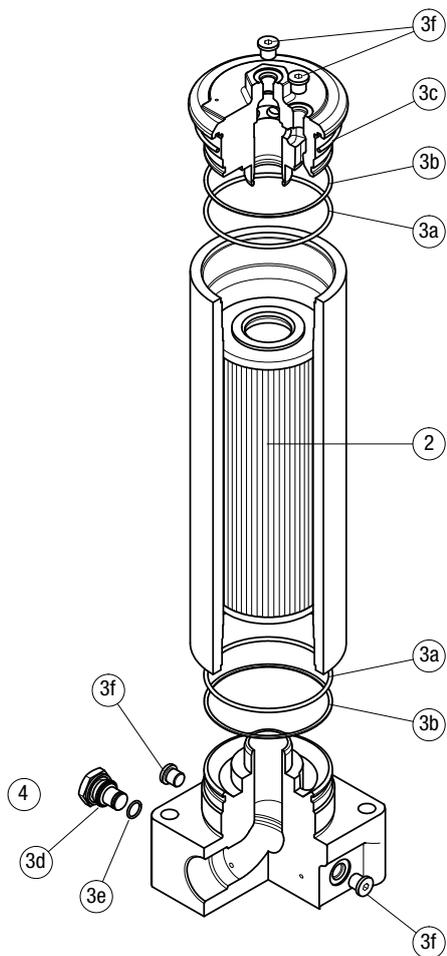


FHF 325 SPARE PARTS

Filter housing according to SAE J2066 for HF4 filter elements

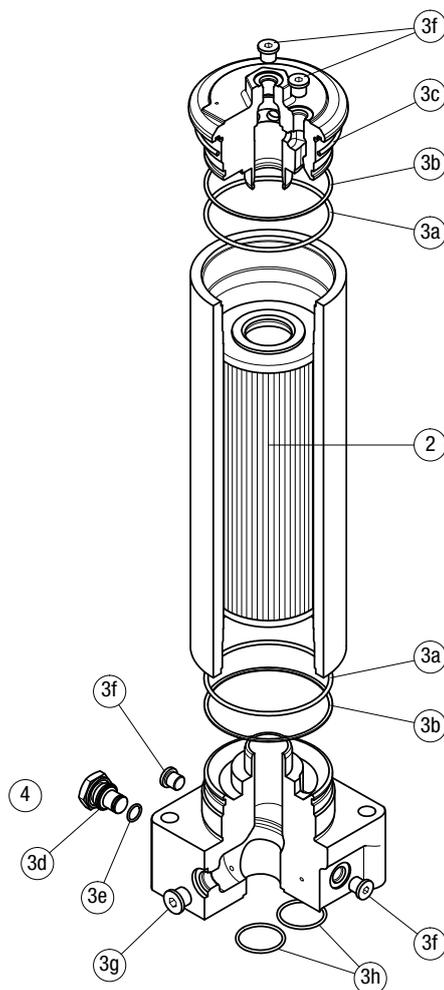
Order number for spare parts

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 NBR	FPM	Indicator connection plug NBR	FPM
FHF 325 A-B-C-G-H	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 NBR	FPM	Indicator connection plug NBR	FPM
FHF 325 M-N	See order table	02050590	02050591	T2H	T2V