

FHF 325 series

Maximum working pressure up to 35 MPa (350 bar) - Flow rate up to 550 l/min

Filter housing according to SAE J2066 for HF4 filter elements



INSTALLATION, SERVICE AND MAINTENANCE MANUAL AND SAFETY INSTRUCTIONS



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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 550 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 550 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

- Test pressure: 52.5 MPa (525 bar)
- Min. 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 0.6 MPa (6 bar) $\pm 10\%$
- Other opening pressures on request.

Filter element features

Filter FHF		Filter element HF	
Δp Element type			
Element media	Construction	Δp Series	Δp
A - Microfiber	Standard	N	20 bar
M - Wire mesh	Standard	N	20 bar
Please see ordering code tables to check element Δp series availability based on filter features.			
Flow direction 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 [dm³]				
	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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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

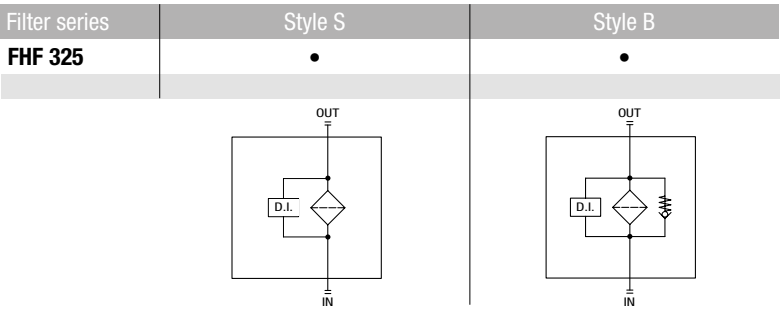
Maximum flow rate for a complete pressure filter with a pressure drop $\Delta p = 1.5$ bar.

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

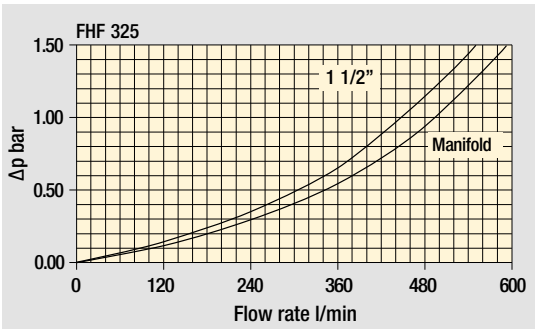
For different pressure drop or fluid viscosity we recommend to use our selection software available on www.mpfiltri.com.

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 diagram



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									
FHF325	2	S	A	H	7	A10	N	P01		
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 pressure indicator										
7 With two connections plugged on both sides										
Filtration rating (filter media)										
A03 Inorganic microfiber 3 µm										
A06 Inorganic microfiber 6 µm										
A10 Inorganic microfiber 10 µm										
A16 Inorganic microfiber 16 µm										
A25 Inorganic microfiber 25 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					
HF325	2	A10	A	N	P01	
Element length						
1 2 3						
Filtration rating (filter media)						
A03 Inorganic microfiber 3 µm						
A06 Inorganic microfiber 6 µm						
A10 Inorganic microfiber 10 µm						
A16 Inorganic microfiber 16 µm						
A25 Inorganic microfiber 25 µm						
M25 Wire mesh 25 µm						
		Seals		Element Δp		Execution
		A NBR		N 20 bar		P01 MP Filtri standard
		V FPM				Pxx Customized

CLOGGING INDICATORS

See page 786

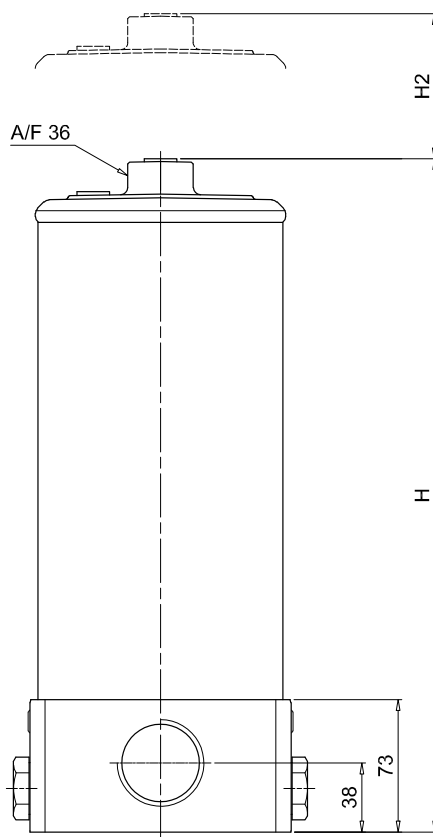
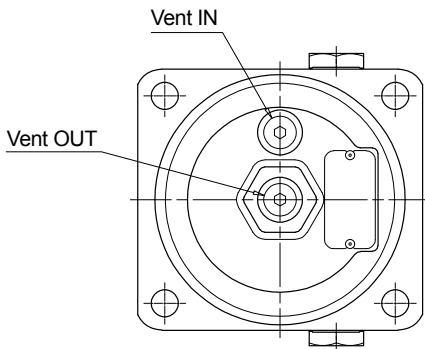
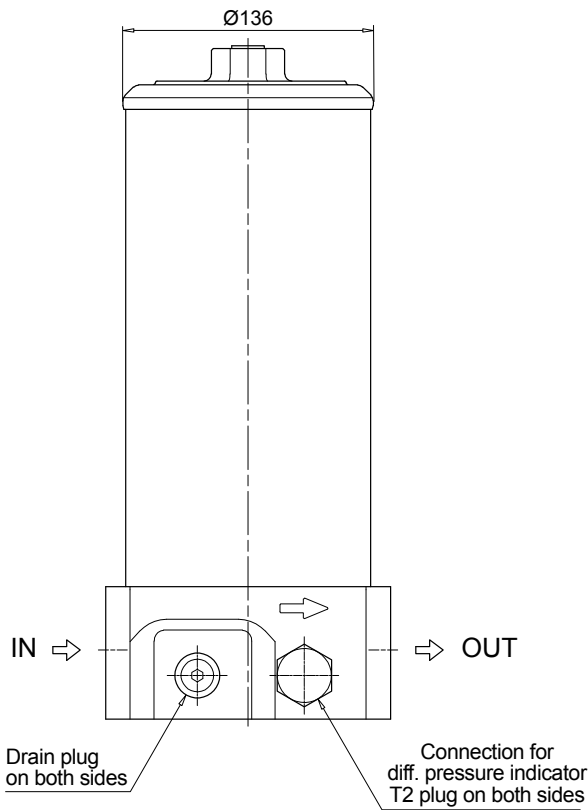
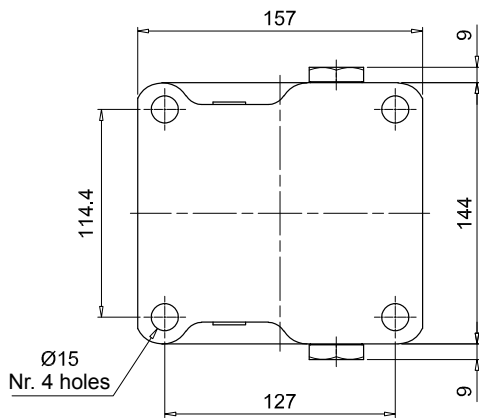
DEA	Electrical differential pressure indicator
DEM	Electrical differential pressure indicator
DEU	Electrical differential pressure indicator
DLA	Electrical / visual differential pressure indicator
DLE	Electrical / visual differential pressure indicator

DTA	Electronic differential pressure indicator
DTI	I-O Link electronic differential pressure indicator
DVA	Visual differential pressure indicator
DVM	Visual differential pressure indicator

PLUGS

See page 807

T2	Plug (not included)
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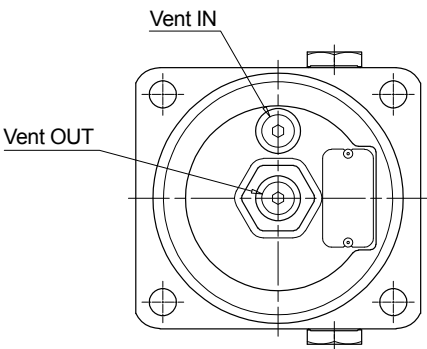
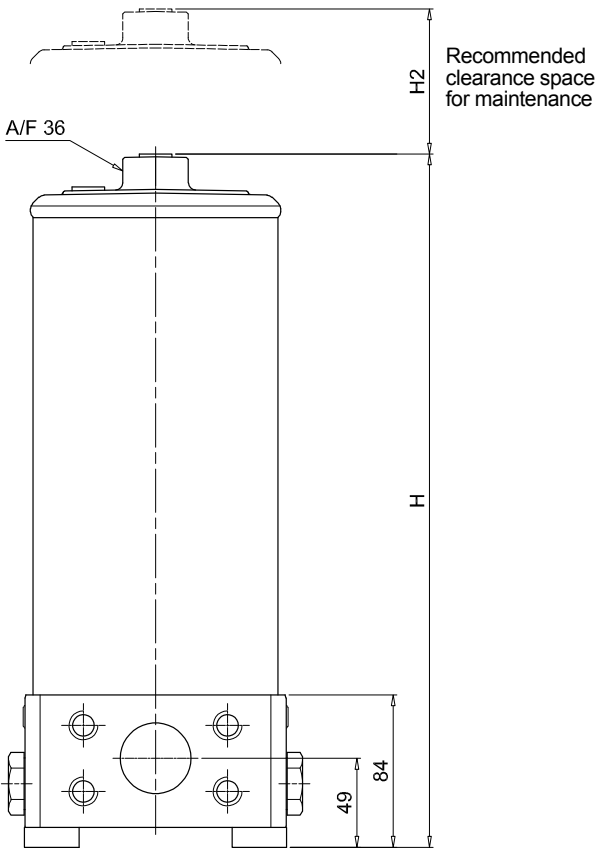
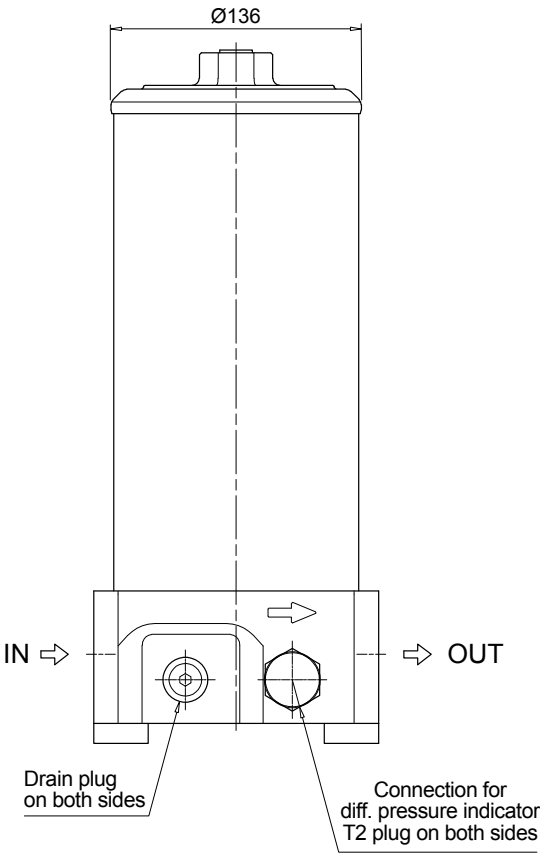
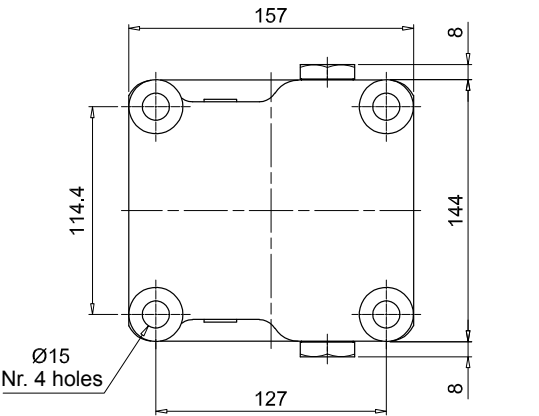
Recommended clearance space for maintenance

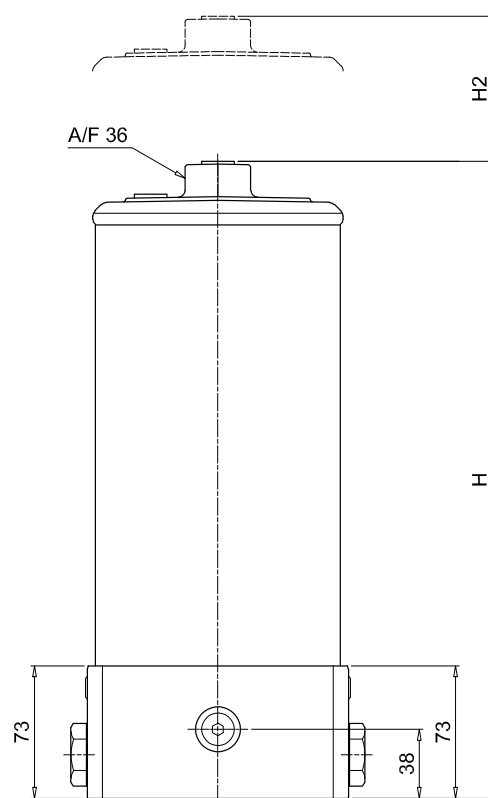
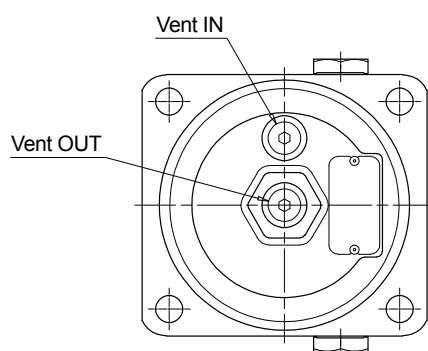
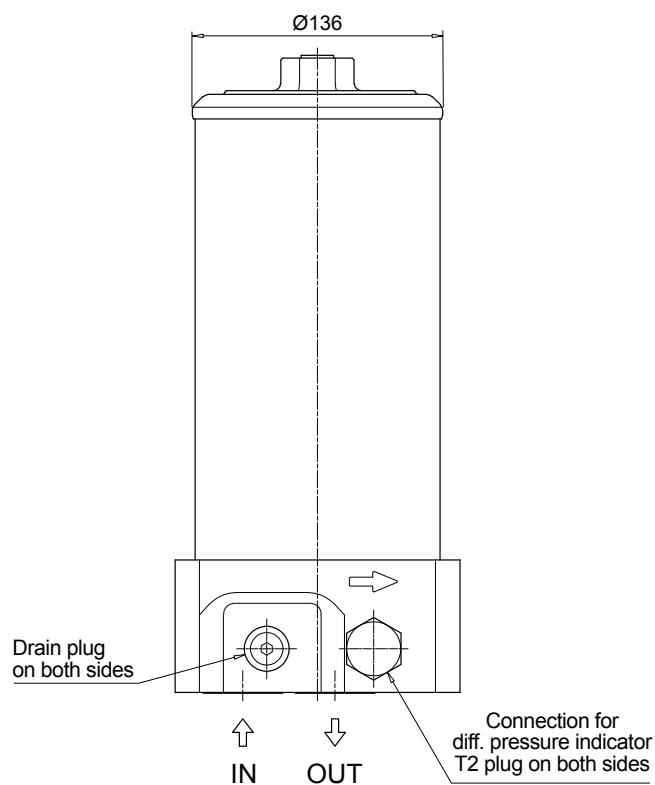
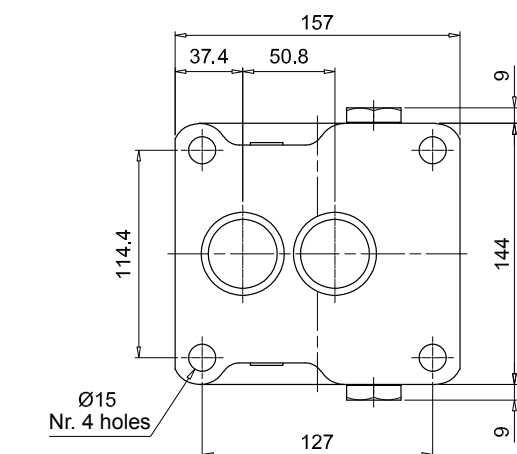
FHF325		
Connection A - B - C		
Filter length	H [mm]	H2 [mm]
1	452	250
2	690	485
3	928	725

FHF 325

Dimensions

FHF325		
Connection G - H		
Filter length	H [mm]	H2 [mm]
1	463	250
2	701	485
3	939	725





Recommended clearance space for maintenance

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.
	2	3 (3a ÷ 3f)	4
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.
	2	3 (3a ÷ 3h)	4
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