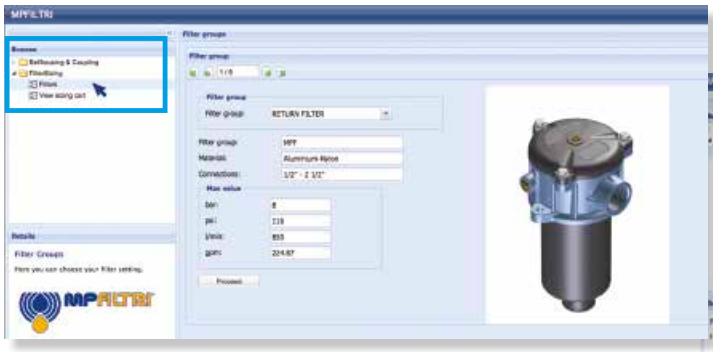
FHF 325 series

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

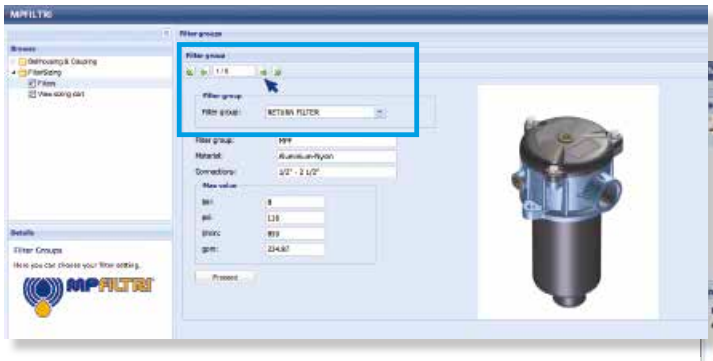
Filter housing according to SAE J2066 for HF4 filter elements

Step 1 Select “FILTERS”

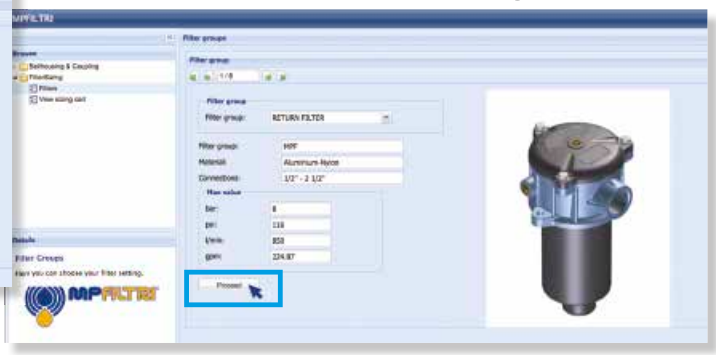


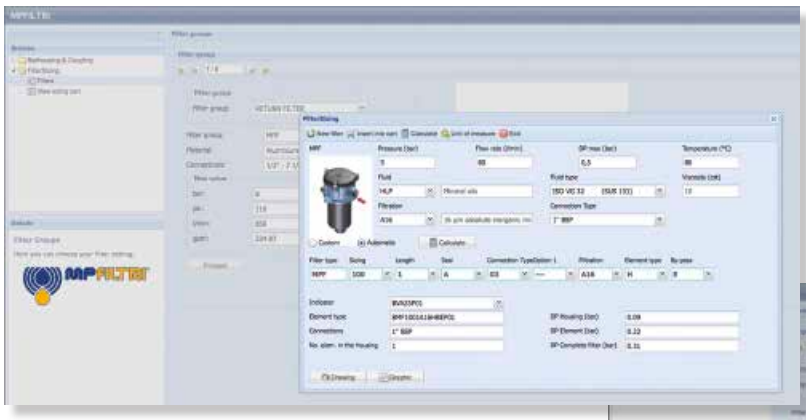
Step 2 Choose filter group (Return Filter, Pressure Filter, etc.)

Step 3 Choose filter type (MPF, MPT, etc.) in function of the max working pressure and the max flow rate



Step 4 Push “PROCEED”

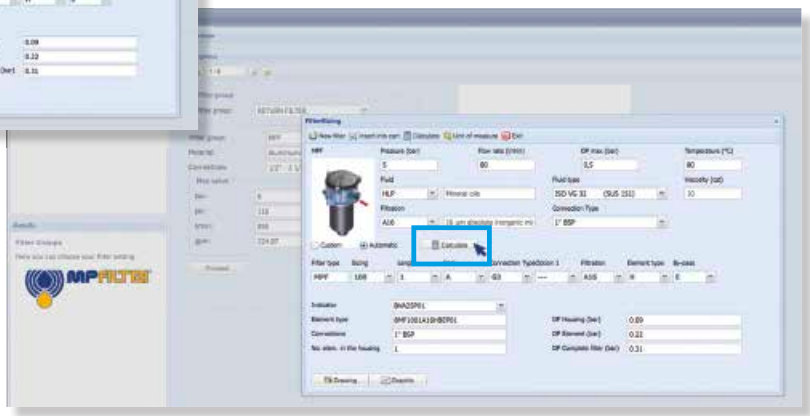




Step 5

Insert all application data to calculate the filter size following the sequence:

- working pressure
- working flow rate
- working pressure drop
- working temperature
- fluid material and fluid type
- filtration media
- connection type



Step 6

Push “CALCULATE” to have result; in case of any mistake, the system will advice which parameter is out of range to allow to modify/adjust the selection

Step 7

Download PDF

Datasheet “Report.aspx” pushing the button “Drawing”

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) ±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 [dm³]			
	Length	1	2	3	Length	1	2	3
FHF 325		23.90	32.68	41.47		3.50	5.80	8.11

Filter housing according to SAE J2066 for HF4 filter elements

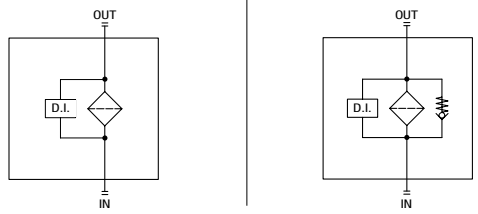
FILTER ASSEMBLY SIZING
Flow rates [l/min]

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

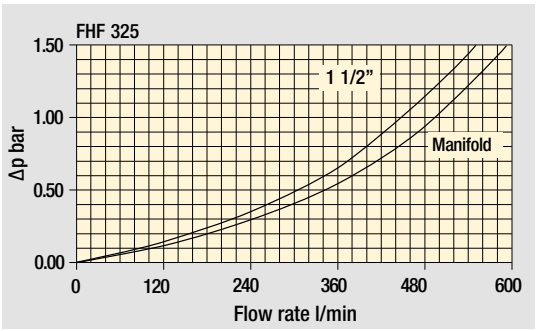
Maximum flow rate for a complete pressure filter with a pressure drop Δp = 1.5 bar.
The reference fluid has a kinematic viscosity of 30 mm^2/s (cSt) and a density of 0.86 kg/dm^3.
For different pressure drop or fluid viscosity we recommend to use our selection software available on www.mpfiltri.com.
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

Filter series	Style S	Style B
FHF 325	•	•



Pressure drop
Filter housings Δp pressure drop



The curves are plotted using mineral oil with density of 0.86 kg/dm^3 in compliance with ISO 3968. Δp varies proportionally with density.

FHF 325

Designation & Ordering code

COMPLETE FILTER

Configuration example: FHF325 | 2 | S | A | H | 7 | A10 | N | P01

Series and size
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)

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

Element Δp
N 20 bar

Execution
P01 MP Filtri standard
Pxx Customized

FILTER ELEMENT

Configuration example: HF325 | 2 | A10 | A | N | P01

Element series and size
HF325

Element length
1 | **2** | **3**

Filtration rating (filter media)

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

Seals
A NBR
V FPM

Element Δp
N 20 bar

Execution
P01 MP Filtri standard
Pxx Customized

ACCESSORIES

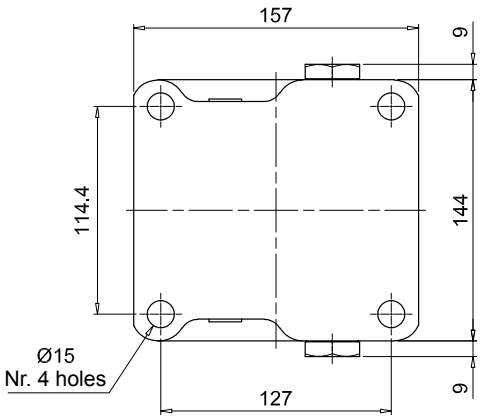
Differential indicators

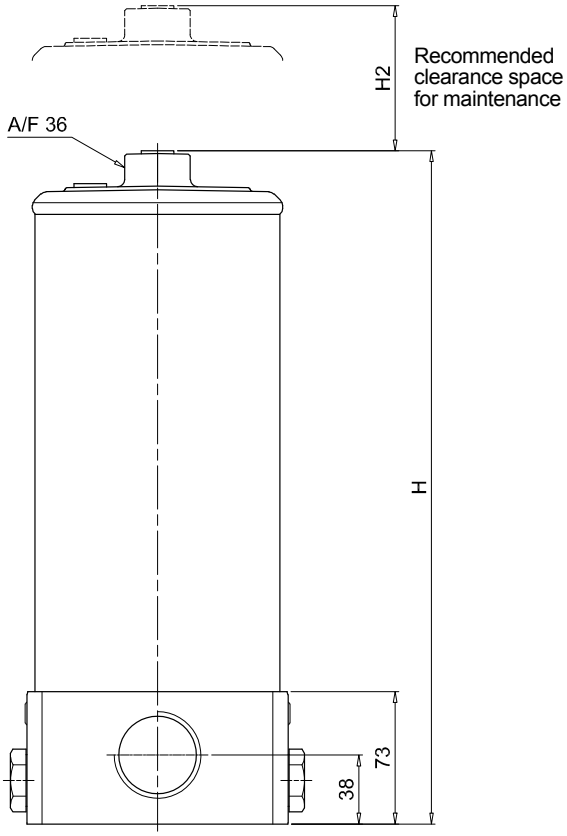
		page
DEA	Electrical differential indicator	567
DEH	Hazardous area electronic differential indicator	567-568
DEM	Electrical differential indicator	568-569
DLA	Electrical / visual differential indicator	569-570
DLE	Electrical / visual differential indicator	570
DTA	Electronic differential indicator	571
DVA	Visual differential indicator	571
DVM	Visual differential indicator	571

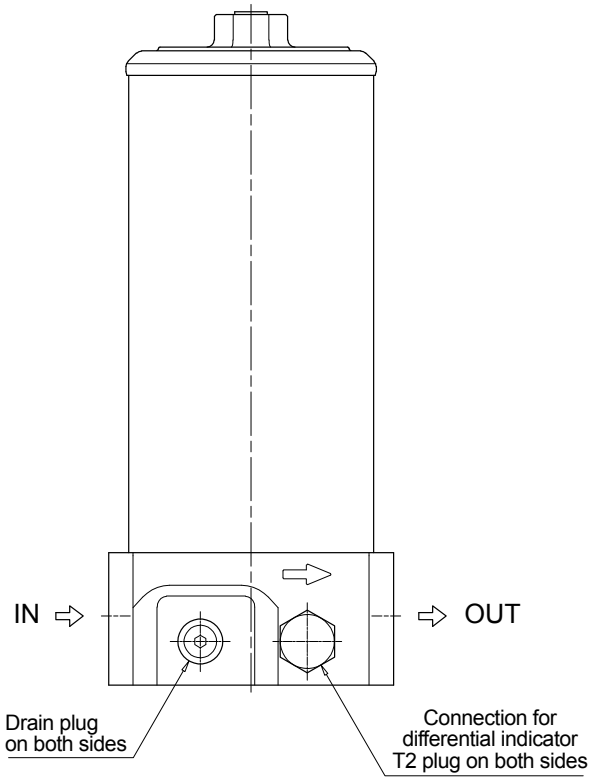
Additional features

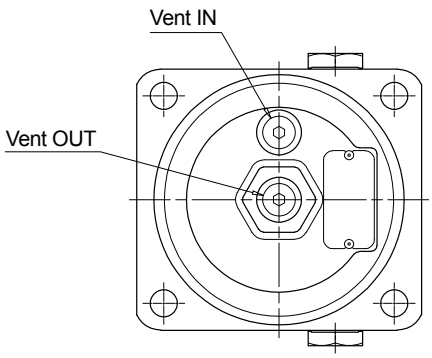
		page
T2	Plug	572

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





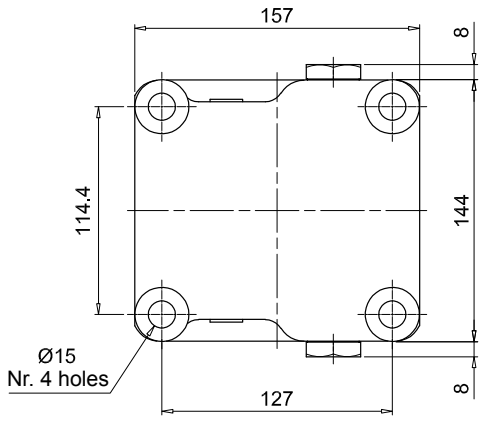


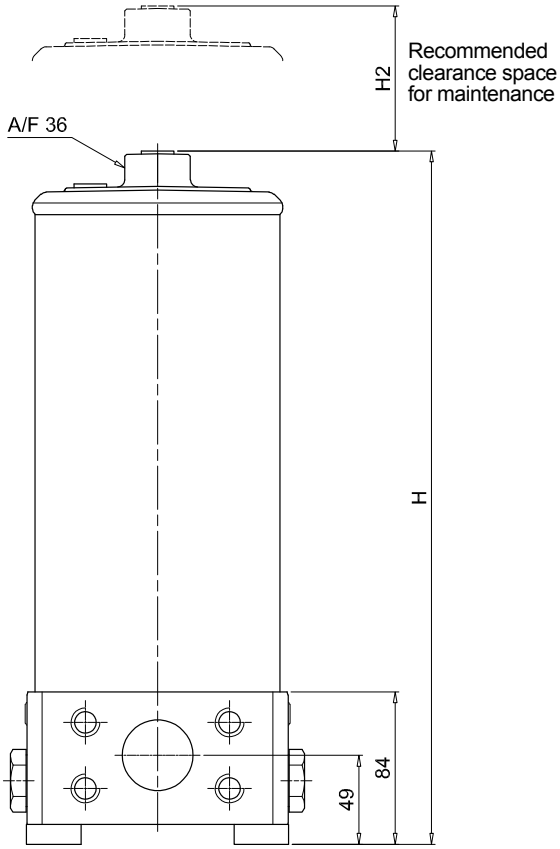


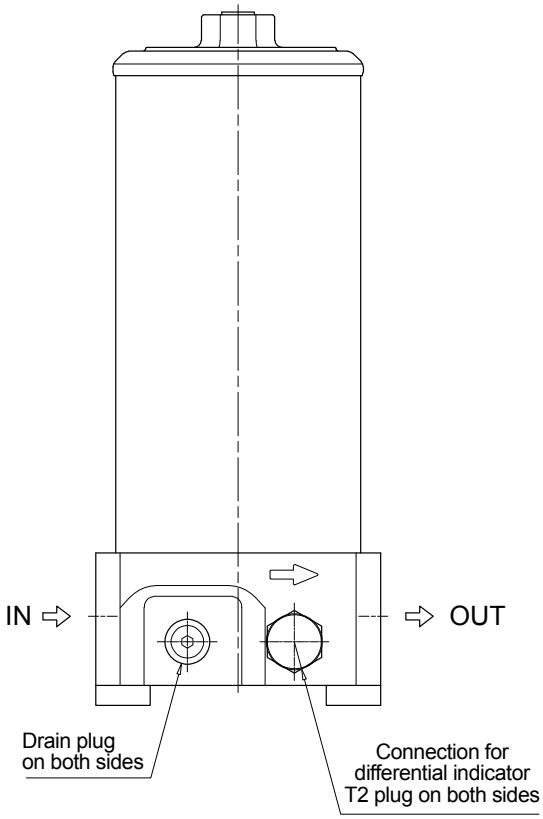
FHF 325

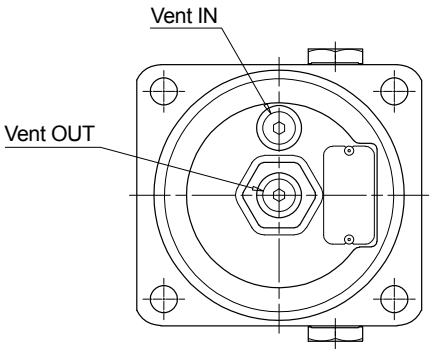
Dimensions

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



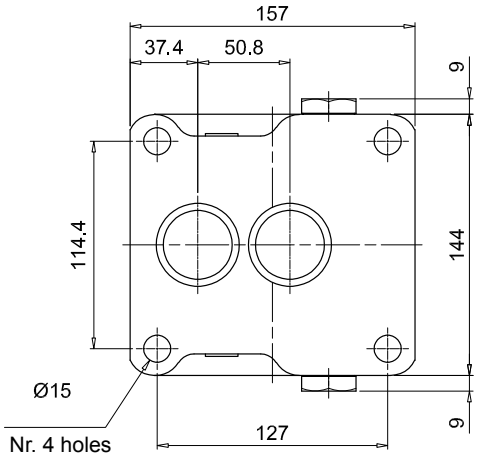


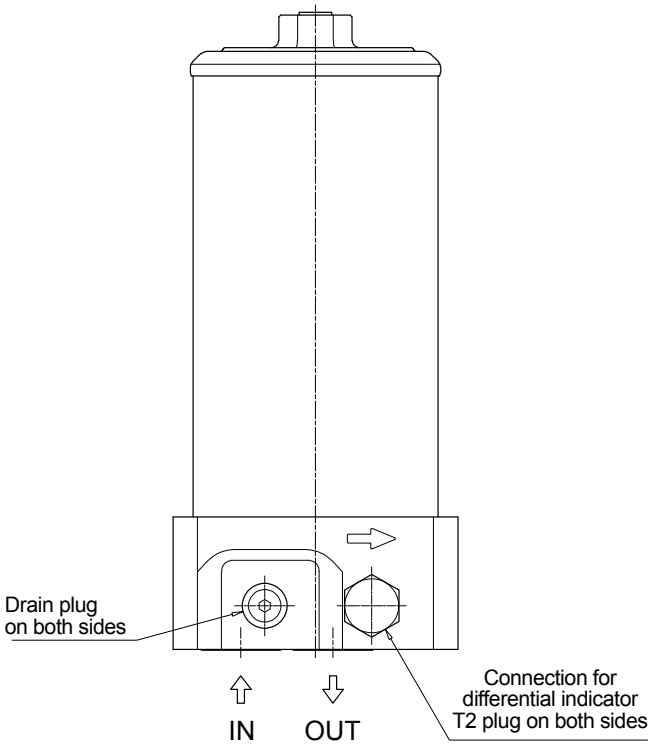


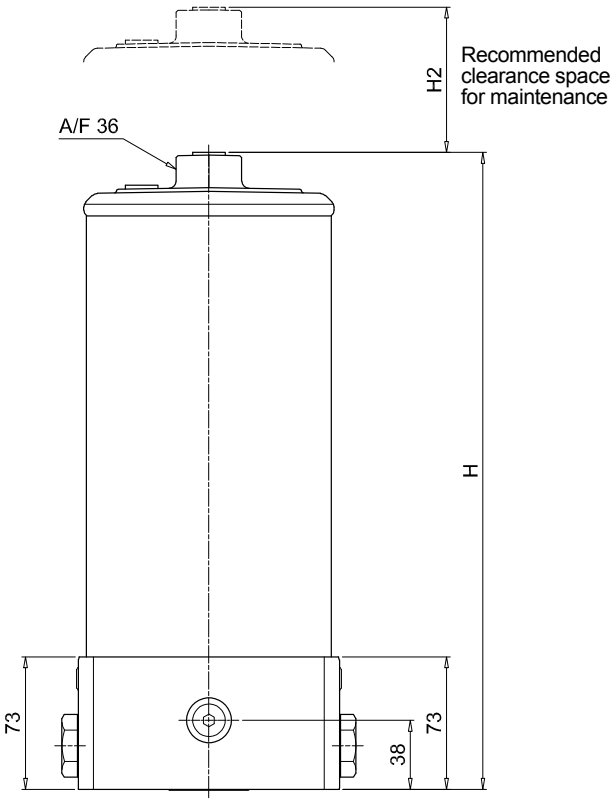


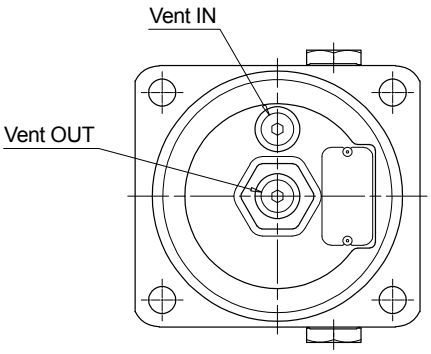
Dimensions

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









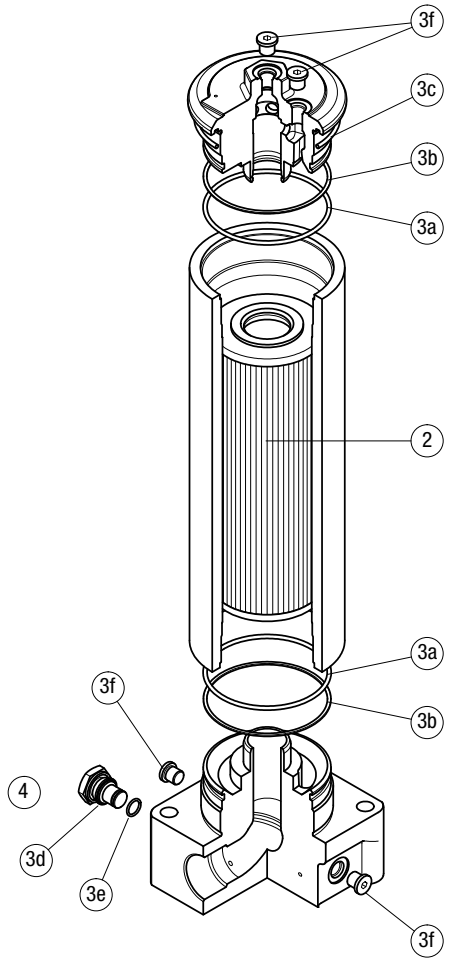
FHF 325 SPARE PARTS

Filter housing according to SAE J2066 for HF4 filter elements

Order number for spare parts

FHF 325

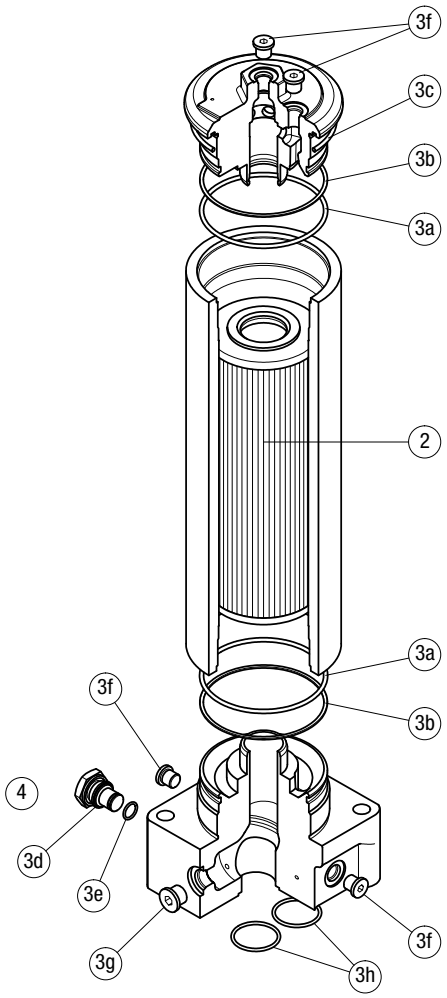
Connections
A - B - C - G - H



	Q.ty: 1 pc.	Q.ty: 1 pc.		Q.ty: 2 pc.	
Item:	**2**	**3** (3a ÷ 3f)		**4**	
Filter series	**Filter element**	**Seal Kit code number NBR**	**Seal Kit code number FPM**	**Indicator connection plug NBR**	**Indicator connection plug FPM**
FHF 325 A-B-C-G-H	See order table	02050588	02050589	T2H	T2V

FHF 325

Connections
M - N



	Q.ty: 1 pc.	Q.ty: 1 pc.		Q.ty: 2 pc.	
Item:	**2**	**3** (3a ÷ 3h)		**4**	
Filter series	**Filter element**	**Seal Kit code number NBR**	**Seal Kit code number FPM**	**Indicator connection plug NBR**	**Indicator connection plug FPM**
FHF 325 M-N	See order table	02050590	02050591	T2H	T2V