

### General

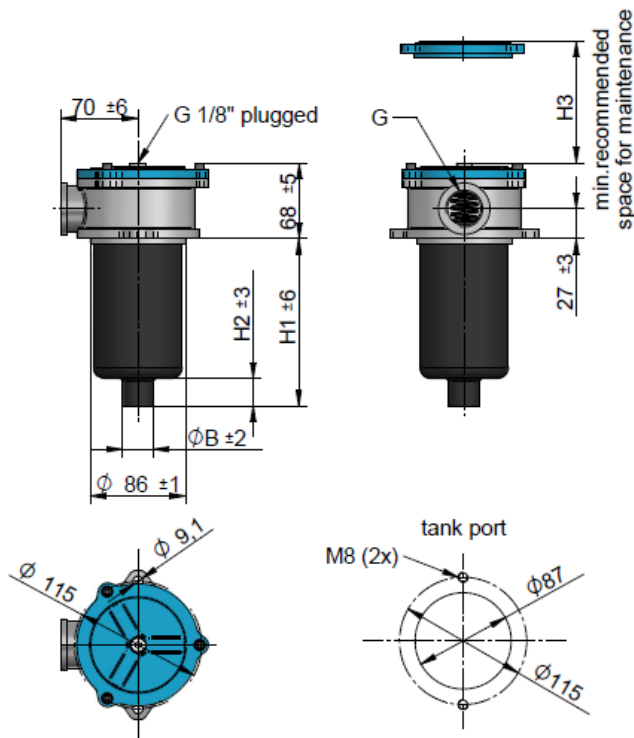
Our return filter ranges offer the usual 2-bolt, 3-bolt and 4-bolt tank flange types as well as a wide range of connection sizes, port standards and other options. This system can be used for any tank top return filter installation in accordance with our given configurations and options.

### Design

Complementary we offer all our possible high performance filter technologies from 5 microns to 60 microns filter rating. A filling plug option gives the possibility of easy and efficient filter operation. The top end cap includes a handle allowing easy removal of the element and a complete cleaning of the filter bowl. The end cap with captive o-ring ensures a perfect seal between filter element and bowl.

Please contact us for further information on the product or complementary filter and tank accessory product from our fluid controls range ([support@asa-innovation.com](mailto:support@asa-innovation.com) or [www.asa-innovation.com](http://www.asa-innovation.com)).

### HFTF / filter sizes 31, 32 & 33



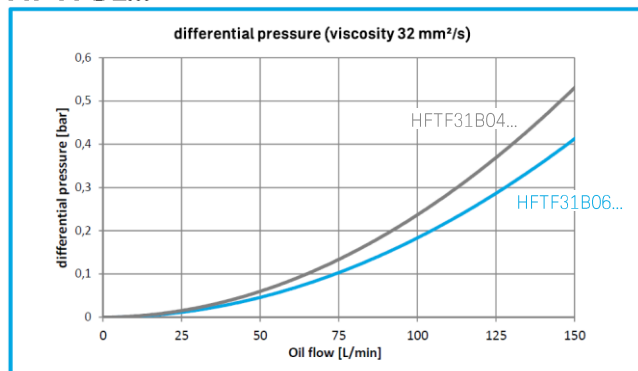
### Technical Data

order number (sample configuration)	description	G	H1	B	H2	H3	weight
		BSP	[mm]	[mm]	[mm]	[mm]	[kg]
HFTF31B04BNCC01WKI	return filter TF31 BSP ½", 10µm, 1/8"plug.	½"	106	28	25	130	0,45
HFTF31B06BNCC01WKI	return filter TF31 BSP ¾", 10µm, 1/8"plug.	¾"	106	28	25	130	0,80
HFTF32B06BNCC01WKI	return filter TF32 BSP ¾", 10µm, 1/8"plug.	¾"	152	28	25	180	0,95
HFTF32B08BNCC01WKI	return filter TF32 BSP 1", 10µm, 1/8"plug.	1"	152	28	25	180	0,95
HFTF33B08BNCC01WKI	return filter TF33 BSP 1", 10µm, 1/8"plug.	1"	235	40	30	260	1,10

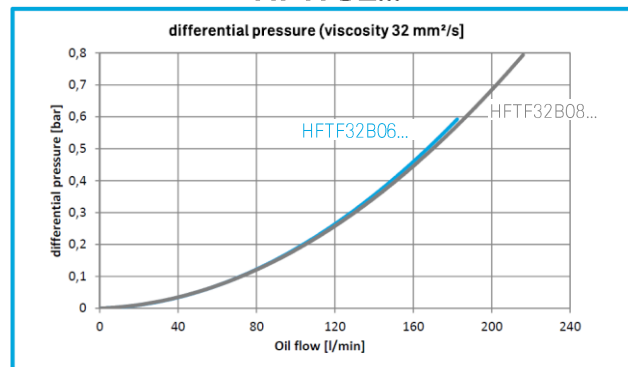
Filter Quick Guide				
type	filter element size Ø diameter, L=length		tank top	page
HFTF	31	Ø 70mm, L=85mm	2-hole	1+2
	32	Ø 70mm, L=130mm		1+2
	33	Ø 70mm, L=210mm		1+2
	41	Ø 99mm, L=211mm	3-hole 4-hole	5
	51	Ø 130mm, L=140mm	4-hole	6
	52	Ø 130mm, L=200mm		6
	53	Ø 130mm, L=251mm		6
HFTU	31	Ø 70mm, L=85mm	2-hole 4-hole	3+4
	32	Ø 70mm, L=130mm		3+4
	33	Ø 70mm, L=210mm		3+4
order codes @ page 7				

### Pressure drop of filter housing

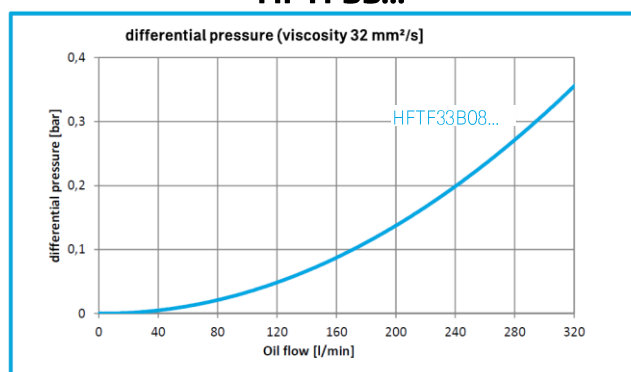
#### HFTF31...



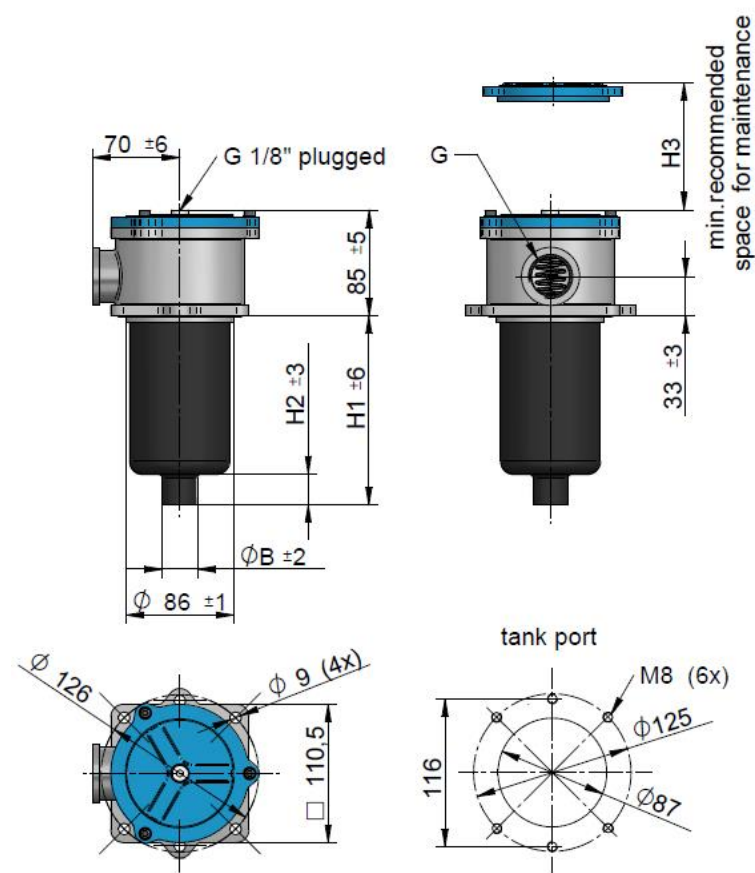
#### HFTF32...



#### HFTF33...



### HFTU / filter sizes 31, 32 & 33

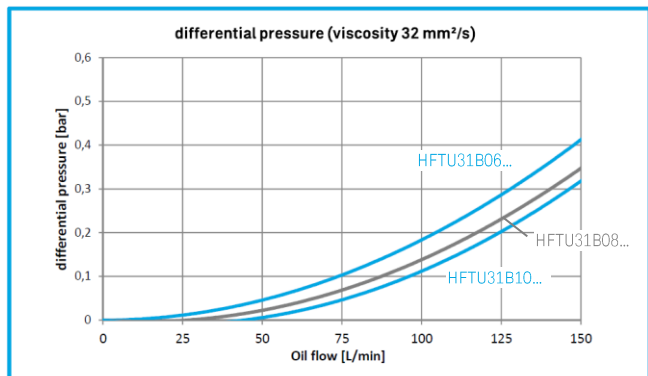


### Technical Data

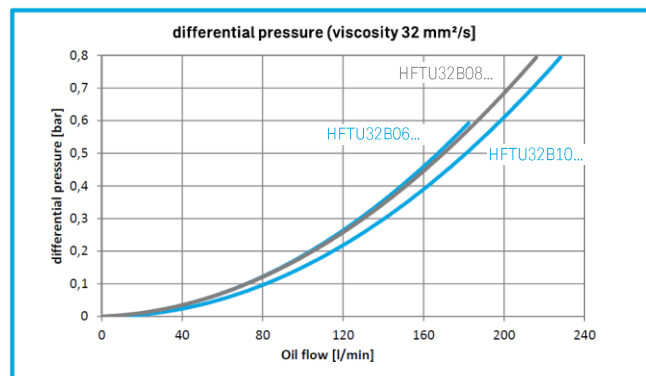
order number (sample configuration)	description	G	H1	B	H2	H3	weight
		SAE	[mm]	[mm]	[mm]	[mm]	[lbs]
HFTU31S06BNCC05WKI	return filter TU31, SAE#12, 10µm, 1/8"plug.	1 1/16-12 UN	106	27	25	130	2.1
HFTU31S08BNCC05WKI	return filter TU31, SAE#16, 10µm, 1/8"plug.	1 5/16-12 UN	106	27	25	130	2.1
HFTU31S10BNCC05WKI	return filter TU31, SAE#20, 10µm, 1/8"plug.	1 5/8-12 UN	106	27	25	130	2.1
HFTU32S06BNCC05WKI	return filter TU32, SAE#12, 10µm, 1/8"plug.	1 1/16-12 UN	152	27	25	180	2.4
HFTU32S08BNCC05WKI	return filter TU32, SAE#16, 10µm, 1/8"plug.	1 5/16-12 UN	152	27	25	180	2.4
HFTU32S10BNCC05WKI	return filter TU32, SAE#20, 10µm, 1/8"plug.	1 5/8-12 UN	152	27	25	180	2.4
HFTU33S06BNCC05WKI	return filter TU33, SAE#12, 10µm, 1/8"plug.	1 1/16-12 UN	235	40	30	260	2.8
HFTU33S08BNCC05WKI	return filter TU33, SAE#16, 10µm, 1/8"plug.	1 5/16-12 UN	235	40	30	260	2.8
HFTU33S10BNCC05WKI	return filter TU33, SAE#20, 10µm, 1/8"plug.	1 5/8-12 UN	235	40	30	260	2.8

### Pressure drop of housing

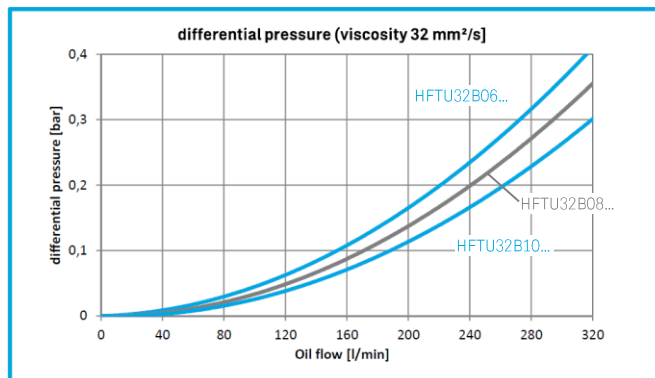
#### HFTU31..



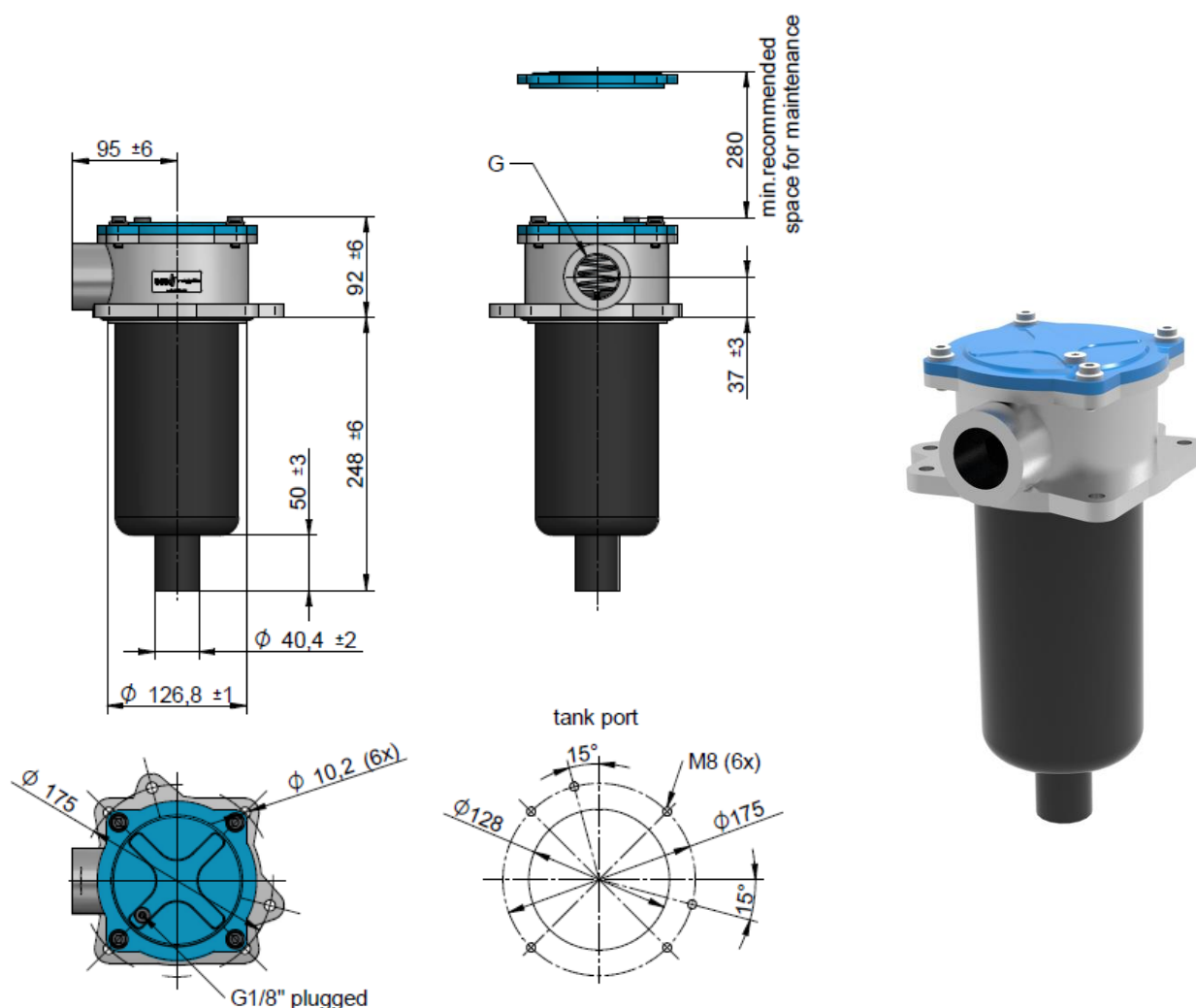
#### HFTU32..



#### HFTU33..



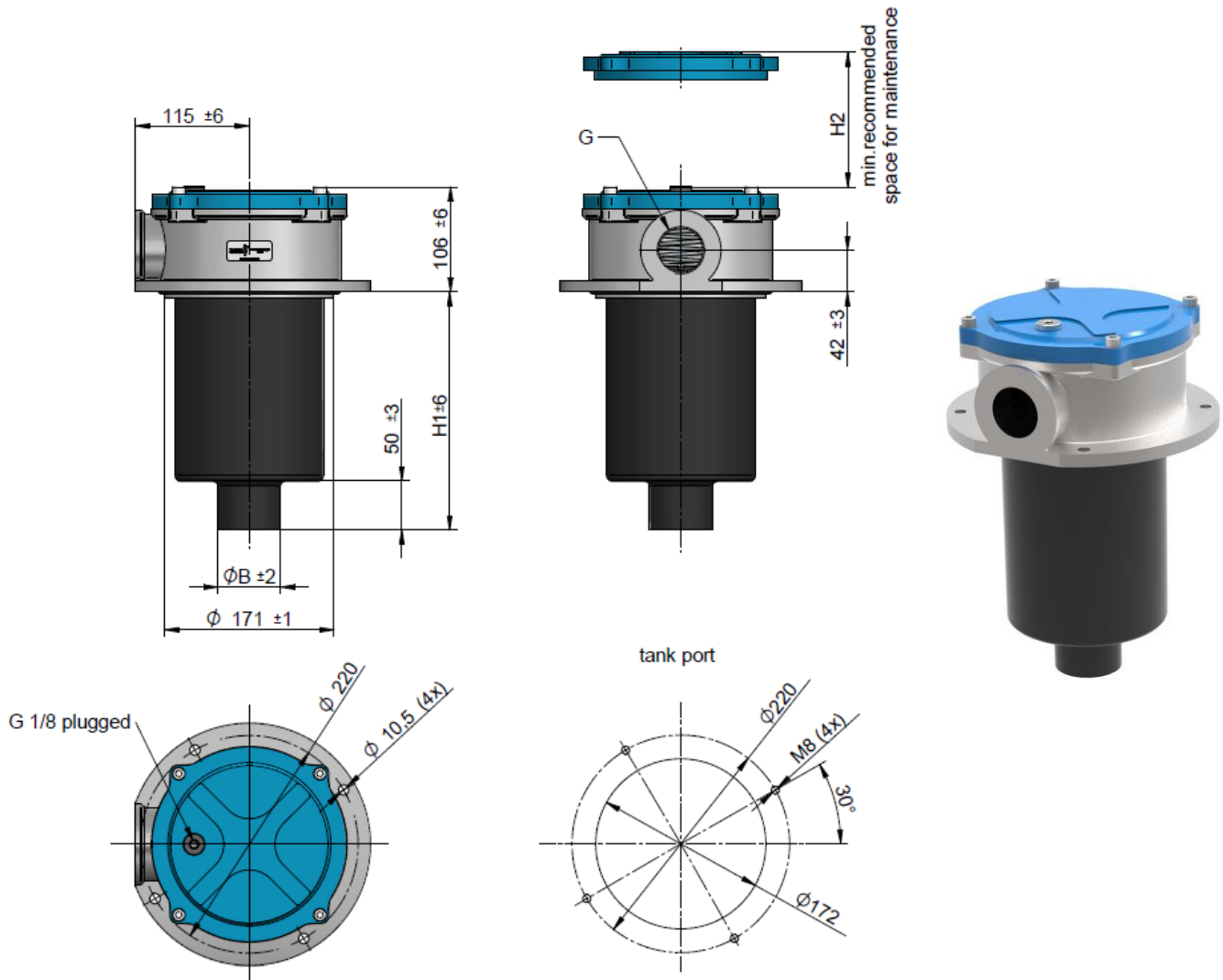
### HFTF / filter sizes 41



### Technical Data

order number (sample configuration)	description	G	weight
		BSP	[kg]
HFTF41B04BNCC01WKI	return filter TF41 BSP 1", 10µm , 1/8"plug.	1"	2,1
HFTF41B10BNCC01WKI	return filter TF41 BSP 1 1/4", 10µm , 1/8"plug.	1 1/4"	2,1

### HFTF / filter sizes 51, 52, 53



### Technical Data

order number (sample configuration)	description	G	H1	B	H2	weight
		BSP	[mm]	[mm]	[mm]	[kg]
HFTF51B10BNCC01WKI	return filter TF51 BSP 1 ¼", 10µm, 1/8"plug.	1 ¼"	178	40	210	3,1
HFTF51B12BNCC01WKI	return filter TF51 BSP 1 ½", 10µm, 1/8"plug.	1 ½"	178	40	210	3,1
HFTF51B16BNCC01WKI	return filter TF51 BSP 2", 10µm, 1/8"plug.	2"	178	40	210	3,1
HFTF51B20BNCC01WKI	return filter TF51 BSP 2 ½", 10µm, 1/8"plug.	2 ½"	178	40	210	3,1
HFTF52B10BNCC01WKI	return filter TF52 BSP 1 ¼", 10µm, 1/8"plug.	1 ¼"	240	63,5	270	3,6
HFTF52B12BNCC01WKI	return filter TF52 BSP 1 ½", 10µm, 1/8"plug.	1 ½"	240	63,5	270	3,6
HFTF52B16BNCC01WKI	return filter TF52 BSP 2", 10µm, 1/8"plug.	2"	240	63,5	270	3,6
HFTF52B20BNCC01WKI	return filter TF52 BSP 2 ½", 10µm, 1/8"plug.	2 ½"	240	63,5	270	3,6
HFTF53B16BNCC01WKI	return filter TF53 BSP 2", 10µm, 1/8"plug.	2"	258	63,5	310	4,1
HFTF53B20BNCC01WKI	return filter TF53 BSP 2 ½", 10µm, 1/8"plug.	2 ½"	258	63,5	310	4,1

# Fluid Controls/Filter

## Return Line Filters



### Materials

housing	aluminium
cover	aluminium
filter bell housing	polyamide
sealing	NBR
filter media	see table

### Temperature

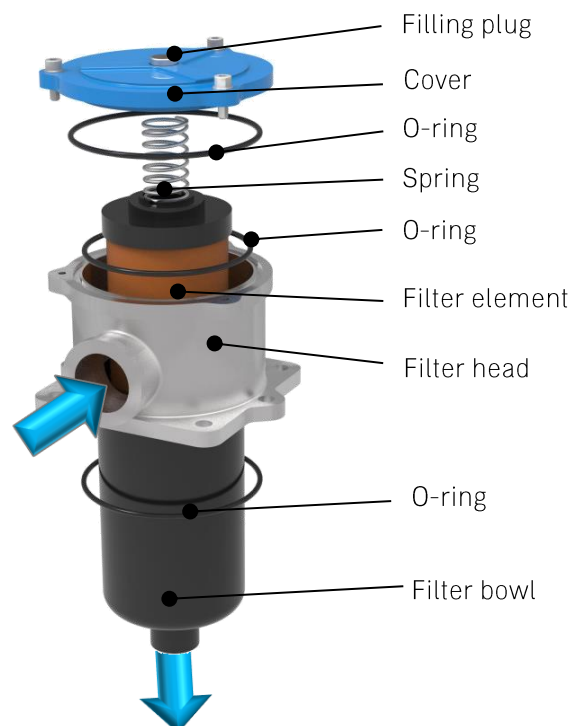
working temperature	-25°C to +100°C
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### Pressure

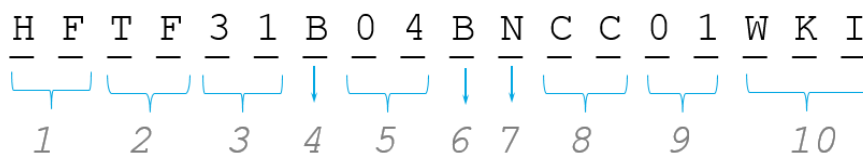
max. working pressure	3 bar
BP relief pressure	1,7 bar

### Compatibility

mineral oils	
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## Order Number Code/Options



### 1 Product Series

HF	hydraulic filters
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### 2 Design Type

TF	return filter tank flange TF
TU	return filter tank flange TU

### 3 Filter Size

21	Ø 52mm, L=70mm
31	Ø 70mm, L=85mm
32	Ø 70mm, L=130mm
33	Ø 70mm, L=210mm
41	Ø 99mm, L=211mm
51	Ø 130mm, L=140mm
52	Ø 130mm, L=200mm
53	Ø 130mm, L=251mm

### 4 Port Standard

B	BSP
S	SAE (O-Ring)
N	NPT

### 5 Port Size

	BSP/NPT	SAE	
04	½"	¾ - 16	for filter sizes: TF 21 & 31
06	¾"	1 ¼ - 12	for filter sizes: TF 31 & 32
			for filter sizes: TU 31 to 33
08	1"	1 ⅝ - 12	for filter sizes: TF 32 to 41
			for filter sizes: TU 31 to 33
10	1 ¼"	1 ⅝ - 12	for filter sizes: TF 41 to 52
			for filter sizes: TU 31 to 33
12	1 ½"	1 ⅞ - 12	for filter sizes: TF 51 & 52
16	2"	2 ½ - 12	for filter sizes: TF 52 & 53
20	2 ½"	on request	for filter sizes: TF 52 & 53

### 6 Bypass valve

B	Bypass 1,7 bar
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### 7 Seals

N	NBR
F	FKM on request

### 8 Filter media

FA	micro fiber 5 µm
FB	micro fiber 7 µm
FC	micro fiber 12 µm
FD	micro fiber 21 µm
CC	cellulose 10 µm
CD	cellulose 25 µm
ME	wire mesh 60 µm

### 9 Clogging indicator

01	G1/8" port, plugged
05	2xG1/8" port, plugged
30	pressure gauge, rear connection
32	pressure gauge, bottom
80	Press. Switch, N.O. contacts
81	Press. Switch, N.C. contacts
P1	SPDT, press switch

### 10 Options

WKI	without filling plug / standard India kit
PKI	with filling plug / standard India kit
Ixx	Special / customized specifications, to be advised



### Spare parts filter / Order Number Code

H F E T F 3 1 C C I 0 0

1 2 3 4 5

#### 1 Product Series

HF hydraulic filters

#### 2 Design Type

ETF return filter element

#### 3 Filter Size

21	Ø 52mm, L=70mm
31	Ø 70mm, L=85mm
32	Ø 70mm, L=130mm
33	Ø 70mm, L=210mm
41	Ø 99mm, L=211mm
51	Ø 130mm, L=140mm
52	Ø 130mm, L=200mm
53	Ø 130mm, L=251mm

#### 4 Filter media

FA	micro fiber 5 µm
FB	micro fiber 7 µm
FC	micro fiber 12 µm
FD	micro fiber 21 µm
CC	cellulose 10 µm
CD	cellulose 25 µm
ME	wire mesh 60 µm

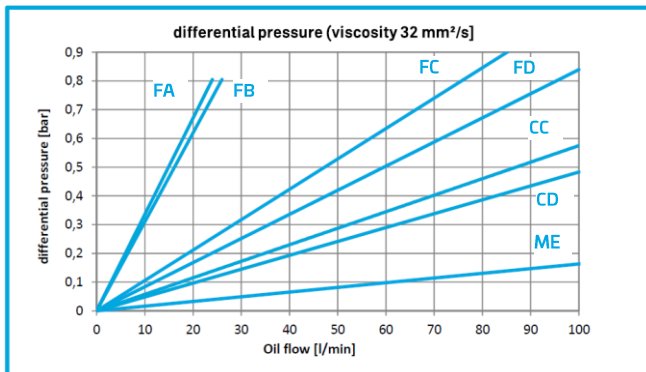
#### 5 Options

I00	standard India delivery kit
Ixx	Special / customized specifications, to be advised

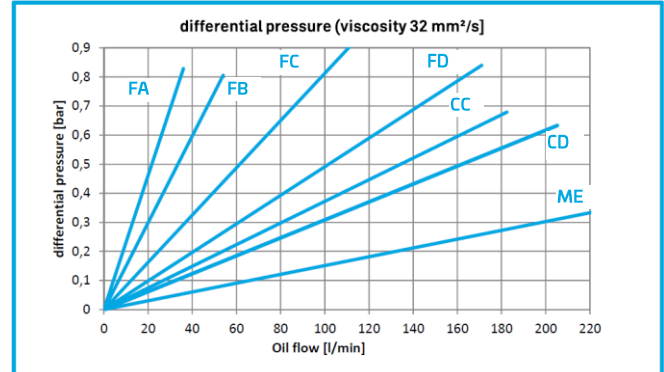


### Pressure drop of filter element

#### HFETF31...



#### HFETF32...



#### HFETF33...

