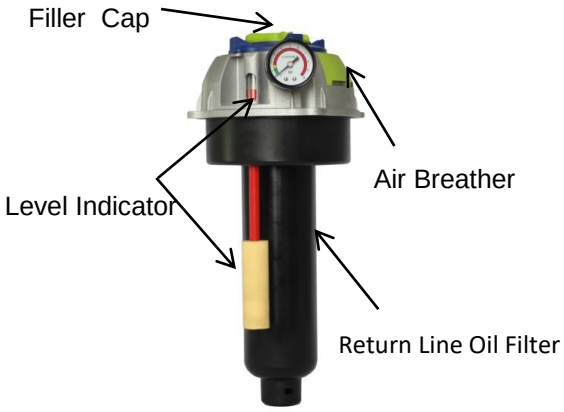


EFRE Series

EVOTEK Return Filters

Product Description

- Operating pressure up to 10 bar
- 130 l/min max.Oil flow rate
- 1350 l/min max.Air flow rate
- Installed on the return line of the hydraulic system
- application in heavy duty, industry
- compliant with industry relevant ISO standards(see ISO test below)

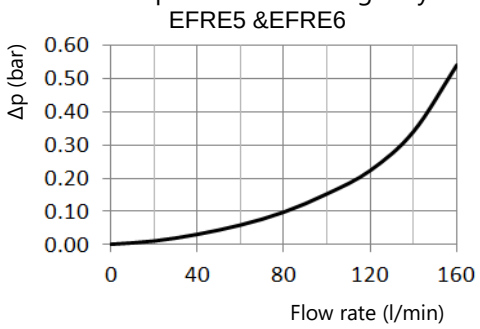
Technical Specifications

Application	Tank-top return filter with integrated level indicator, air breather & refill filtration
Port Sizes:	Threaded Connections according to BSP and NPT standard in 1-¼"and SAE16 threads
Oil Flow Rate:	max. 130 l/min
Air Flow Rate:	max. 1350 l/min
Operating Pressure:	max. 10 bar
Element Collapse Pressure:	10 bar
By-pass Opening Pressure:	Δp=1.7 bar +0.3bar
Material	
Seals:	NBR or FPM (-10°C to 100°C)
Filter Head:	Aluminium
Filter Bowl:	Polyamide
Compatibility:	Suitable for mineral oils, lubrication oils, non-flam fluids, synthetic and rapidly biodegradable oils (for use with water or other fields please contact our technical department)
Tested according to ISO standards:	ISO2941 Collapse/burst resistance ISO2942 Fabrication integrity ISO2943 Material compatibility integrity ISO3723 Method for end load test ISO3724 Flow fatigue characteristics ISO3968 Pressure Drop vs. Flow Rate ISO16889 Multi-Pass Test

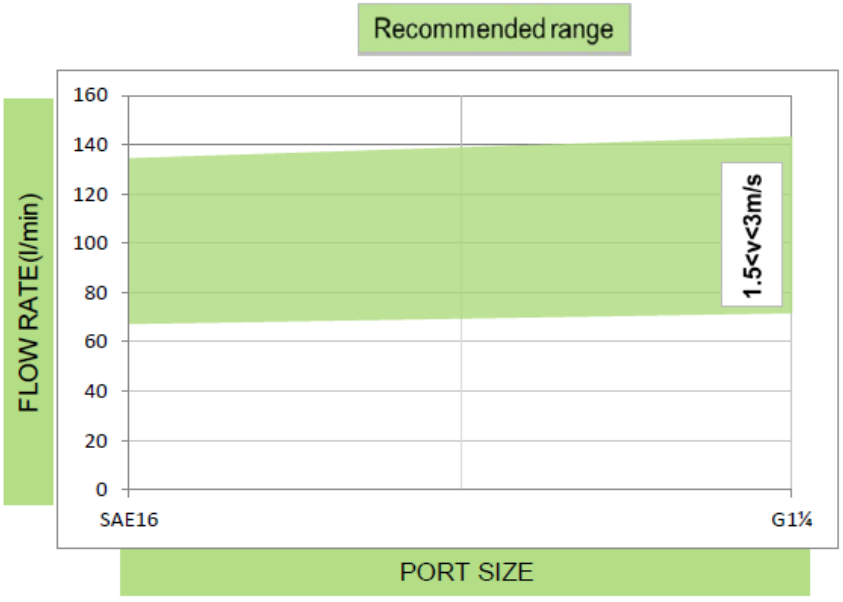
EFRE Return Filter Series

Pressure Drop Graphs (Δp)

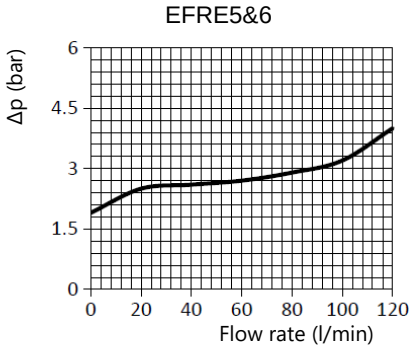
Pressure Drop of Filter Housing only



Graph of oil flow velocity
(we recommend to select size of the filter considering range of oil velocity between 1.5 to 3 m/s for return series



Pressure drop graph on by-pass valve

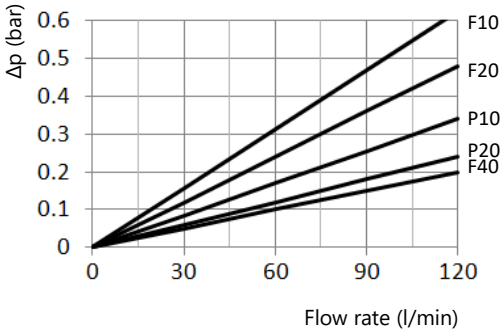


EFRE Return Filter Series

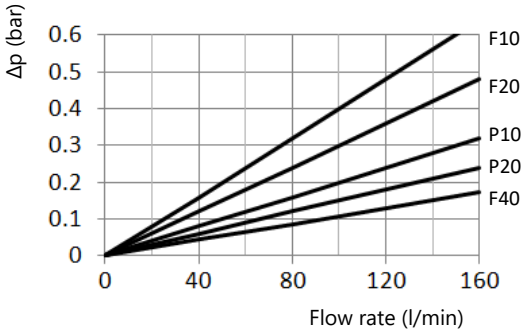
Pressure Drop Graphs (Δp)

Pressure Drop with Clean Filter Elements (F and P filter media)

EERE5

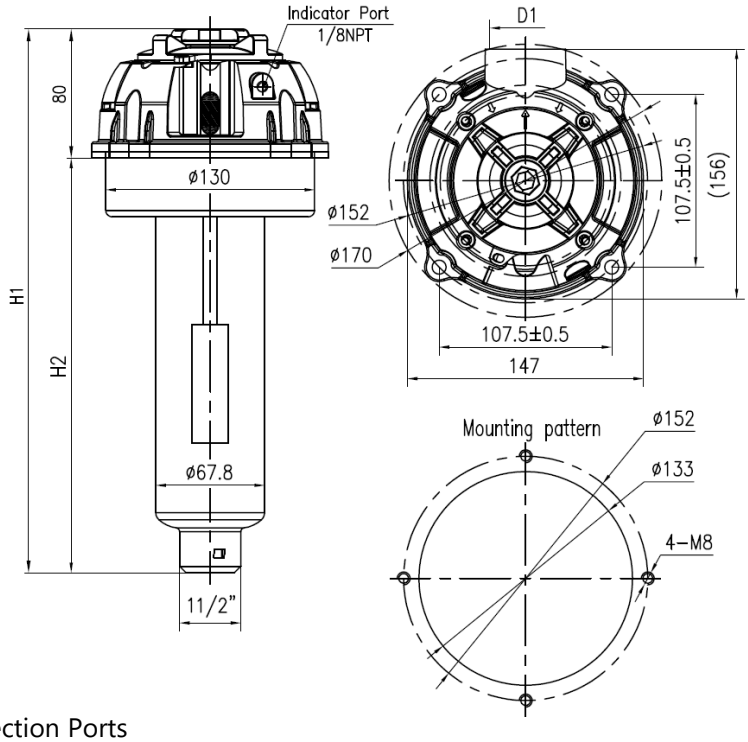


EERE6



EFRE Return Filter Series

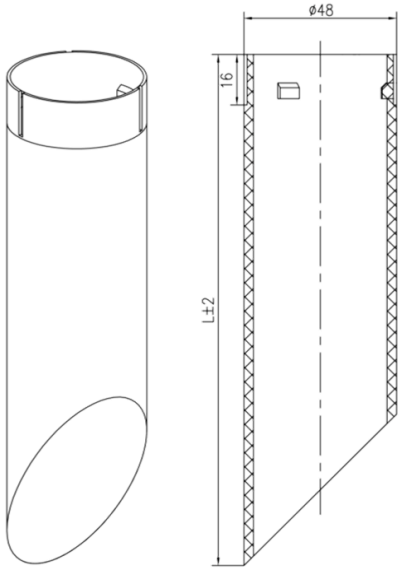
Technical Drawings and Dimension



Threaded Connection Ports

Type	Connection Port (BSP/NPT/SAE) Inch D1	Height mm H1	H2 lowest oil level	H2 highest oil level
EFRE5	1-¼" SAE20	244	132	110
EFRE6		336	132	110

Extension tube



Type	Tube length(L)
L130	130mm
L210	210mm
L260	260mm
L375	375mm
L425	425mm
L456	456mm

EFRE Return Filter Series

Order Codes

Filter Assembly Series	A	B	C	D	-	E	F	G
EFRE	6	BE	06	B	-	F10	PZ	L00

Element Series	A	D	E
EERE	6	B	F10

Select the code for each filter (or element) feature according to your requirements and place it in the sequence (see example above) to create the corresponding product order code.

A Size	Flow Rate
5	100 l/min
6	130 l/min

B Connection Ports	
A20	SAE20
BE	BSP 1-¼"
NE	NPT 1-¼"

C By-pass Valve	
6	1.7bar
X	Special

D Seal	
B	NBR
V	FPM

E Media Material		Filtration	Collapse Pressure
P10	Cellulose	10μm	10 bar
P20	Cellulose	20μm	10 bar
F10	Fibreglass	12μm	10 bar
F20	Fibreglass	21μm	10 bar
F40	Fibreglass	40μm	10 bar

F Indicator		Connection
0	No	
PZ	0~4bar Axial gauge	1/8NPT Thread
PS	0~4bar Radial gauge	1/8NPT Thread
R15	1.5 bar Pressure Switch	1/8NPT Thread

G Extension tube	
Type	Tube length(L)
L130	130mm
L210	210mm
L260	260mm
L375	375mm
L425	425mm
L456	456mm