EFRL Series

EVOTEK Return Filters

Product Description

- Operating pressure up to 16 bar
- 990 l/min max. flow rate
- installation in Tank-top
- application in Waste management trucks, Mobile cranes, Power packs, Wheeled loaders and Drilling equipment
- compliant with industry relevant ISO standards(see ISO test below)

Technical Specifications

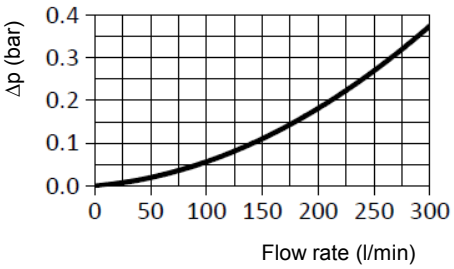
Application	Tank-top return filter
Port Sizes:	Threaded Connections according to BSP and NPT standard in 1-½" and SAE24 Flange Connections in SAE DN40/ SAE DN65/ SAE DN90 for 3000psi
Flow Rate:	max. 990 l/min
Operating Pressure:	max. 16bar
Burst Pressure:	min. 48 bar
Element Collapse Pressure:	10 bar
By-pass Opening Pressure:	Δp= 4 bar ± 10%
Material	
Seals:	NBR or FPM (-25˚C to 100˚C)
Filter Head:	Aluminium
Filter Bowl:	Aluminium
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

EFRL Return Filter Series

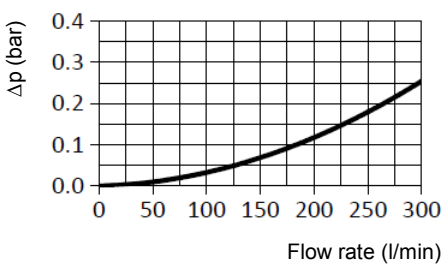
Pressure Drop Graphs (Δp)

Pressure Drop of Filter Housing only

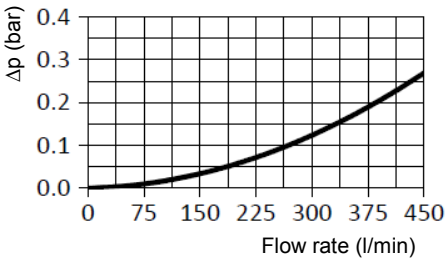
EFRL5



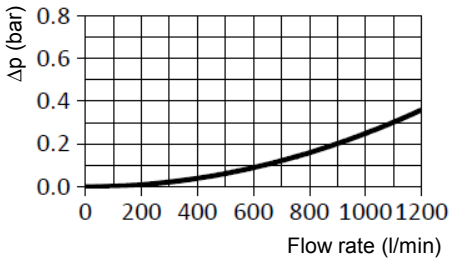
EFRL7.2



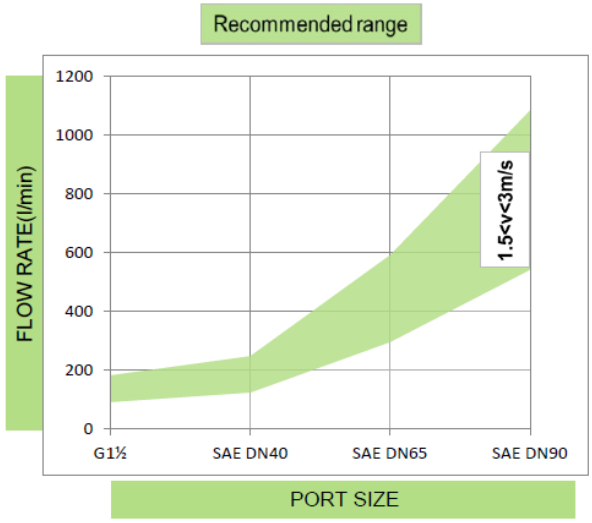
EFRL10.2



EFRL11.2,12.2,13.2&15.2

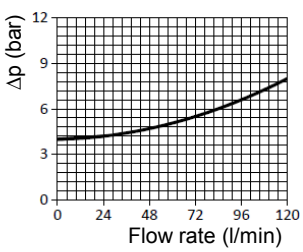


Graph of oil flow velocity
(we recommend to select size of the filter considering range of oil velocity between 1.5 to 3 m/s for return series)



Pressure drop graph on by-pass valve

EFRL5



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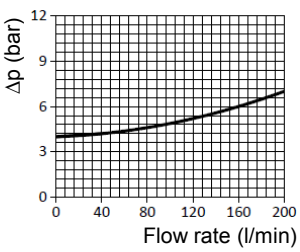
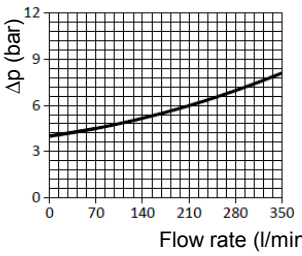
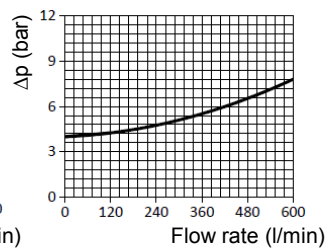


EFRL10.2



EFRL11.2,12.2,13.2&15.2

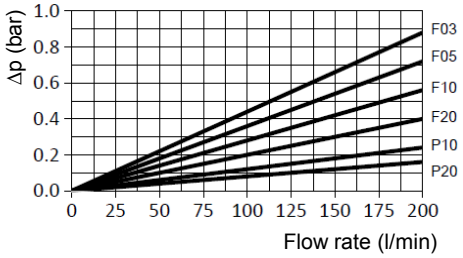


EFRL Return Filter Series

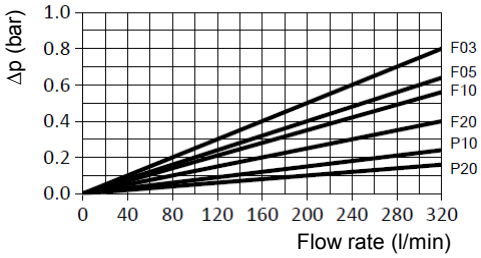
Pressure Drop Graphs (Δp)

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

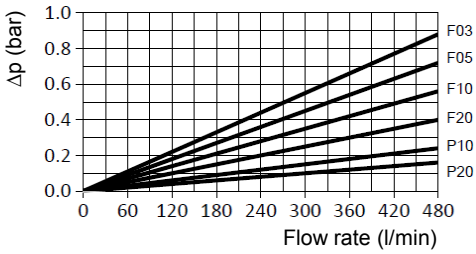
EFRL5



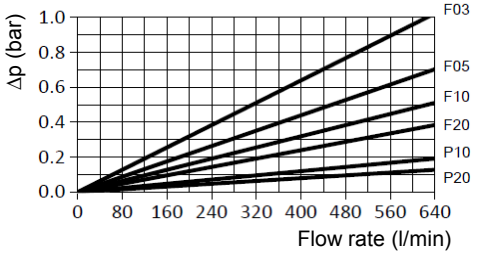
EFRL7.2



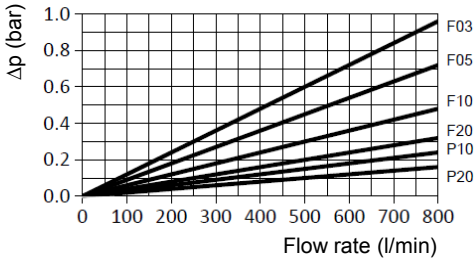
EFRL10.2



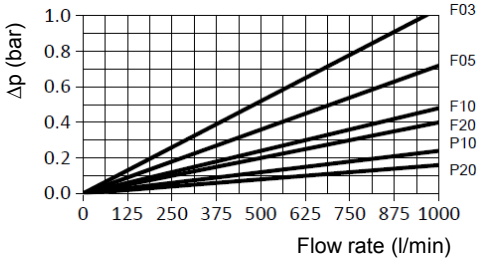
EFRL11.2



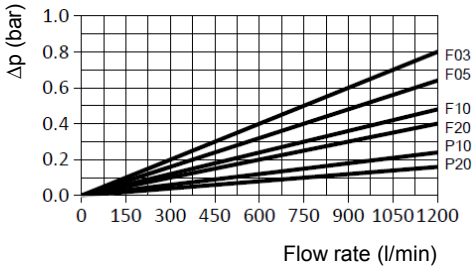
EFRL12.2



EFRL13.2



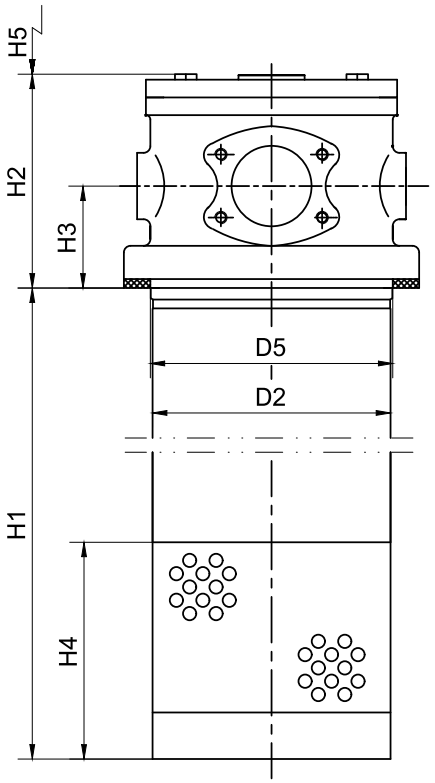
EFRL15.2

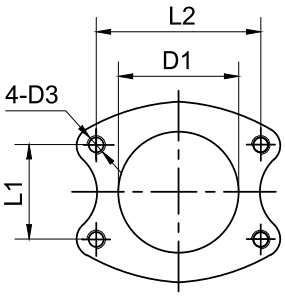


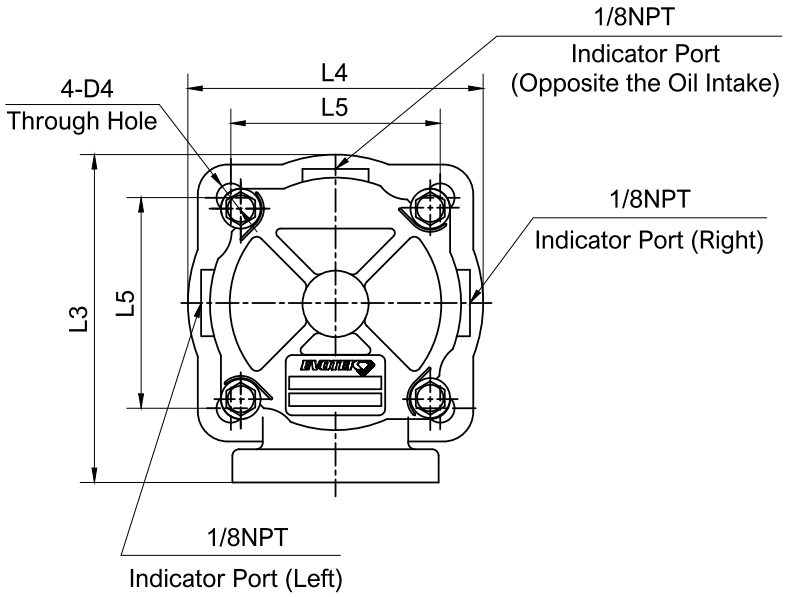
EFRL Return Filter Series

Technical Drawings and Dimension

EFRL5,7.2&10.2







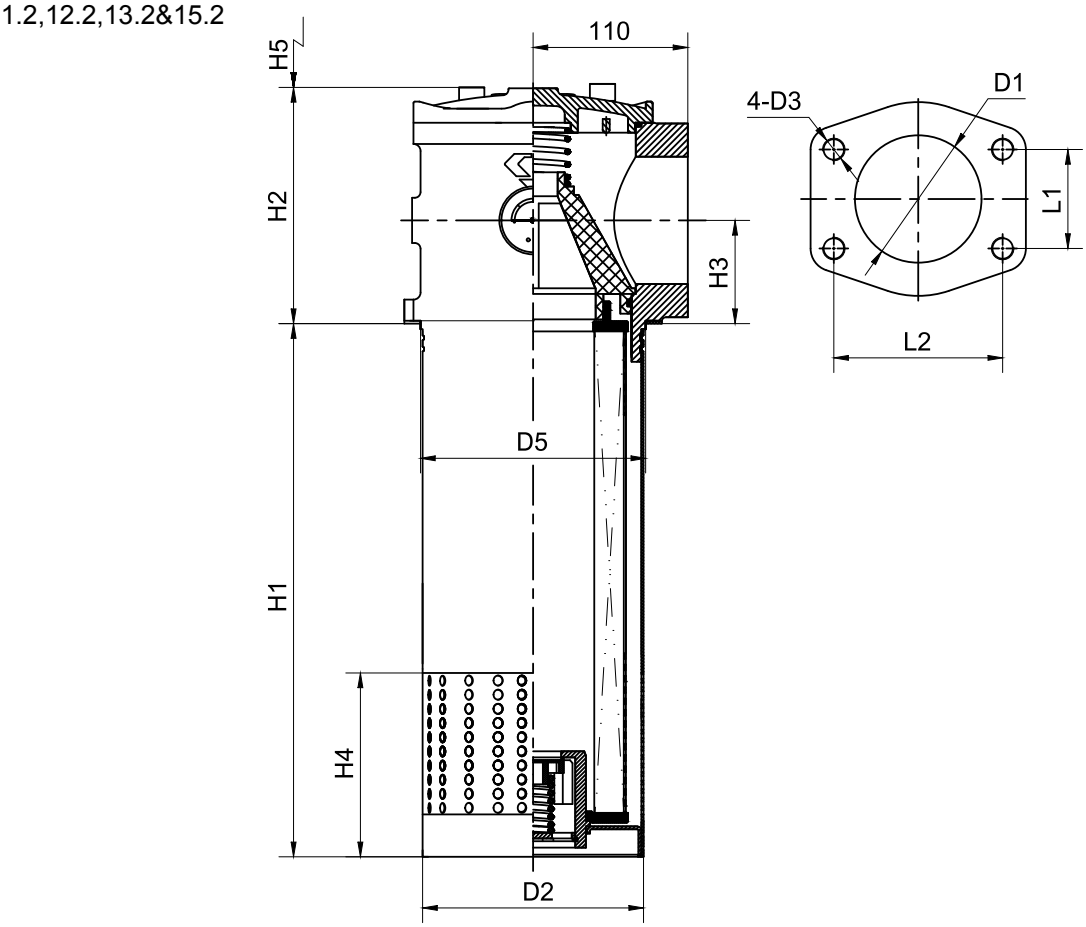
Threaded Connection Ports

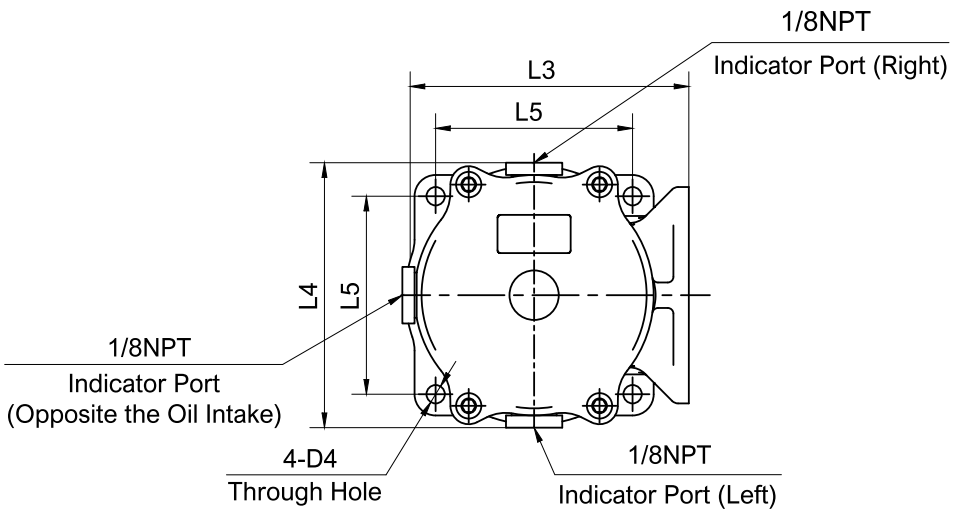
	Connection Port (BSP/NPT/SAE)					Height									
	inch					mm									
Type	D1	D2	D3	D4	D5	H1	H2	H3	H4	H5	L1	L2	L3	L4	L5
EFRL5	1½" ,SAE24	104	-	13	110	319	102	42	80	380	-	-	152	134	95
EFRL7.2	SAE DN 40 3000psi	104	M12	13	110	419	102	42	80	480	35.7	69.9	152	134	95
EFRL10.2	SAE DN 65 3000psi	124	M12	13	130	463	127	55	90	524	50.8	88.9	169	158	110

EFRL Return Filter Series

Technical Drawings and Dimension

EFRL11.2,12.2,13.2&15.2





Threaded Connection Ports

	Connection Port (BSP/NPT/SAE)					Height									
	inch					mm									
Type	D1	D2	D3	D4	D5	H1	H2	H3	H4	H5	L1	L2	L3	L4	L5
EFRL11.2	SAE DN 90 3000psi	154	M16	13	160	462	164	70	100	569	69.9	120.6	206	192	140
EFRL12.2						488				595					
EFRL13.2						598				705					
EFRL15.2						779				886					

EFRL Return Filter Series

Order Codes

Filter Assembly Series	A	B	C	D	-	E	-	F
EFRL	12.2	FK	10	B	-	P10	-	R35

Element Series	A	D	E
EERL	12	B	P10

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	160 l/min
7.2	250 l/min
10.2	400 l/min
11.2	500 l/min
12.2	660 l/min
13.2	850 l/min
15.2	990 l/min

B	Connection Ports
A24	SAE24
BF	BSP 1-½"
FE	SAE DN40 (3000psi)
FG	SAE DN65 (3000psi)
FK	SAE DN90 (3000psi)

C	By-pass Valve
10	4 bar
X	Special

D	Seal
B	NBR
V	FPM

E	Media Material	Filtration	Collapse Pressure
P10	Cellulose	10μm	10 bar
P20	Cellulose	20μm	10 bar
F03	Fiberglass	5μm	10 bar
F05	Fiberglass	7μm	10 bar
F10	Fiberglass	12μm	10 bar
F20	Fiberglass	21μm	10 bar
W25	Wire Mesh	25μm	10 bar
W60	Wire Mesh	60μm	10 bar
W90	Wire Mesh	90μm	10 bar
W125	Wire Mesh	125μm	10 bar

F	Indicator	Connection
0	No	
PA	0~10bar Pressure gauge	1/8NPT Thread
R35	3.5 bar Pressure Switch	1/8NPT Thread