



EFDR Series

EVOTEK Pressure Filters

Product Description

- Operating pressure up to 25 bar
- 1300 l/min max. flow rate
- installation in Tank-top or in line
- application in heavy duty, industry , construction and agricultural machines
- compliant with industry relevant ISO standards(see ISO test below)

Technical Specifications

Application

Duplex tank-top / in-line return filter

Port Sizes:

Threaded Connections according to BSP standard in ¾" ,1 " ,2 "

Flange Connections in SAE DN50 ,SAE DN80, SAD DN100 for 3000psi

Flow Rate:

max. 1300 l/min

Operating Pressure:

max. 25bar

Burst Pressure:

min. 83bar

Element Collapse Pressure:

10bar Cellulose

21 bar Fibreglass

30 bar Wire Mesh

Clogging indicator setting:

$\Delta p = 3 \text{ bar} \pm 0.5 \text{ bar}$

Material

Seals:

NBR or FPM (-10°C to 100°C)

Filter Housing and cover plate:

Cast iron

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

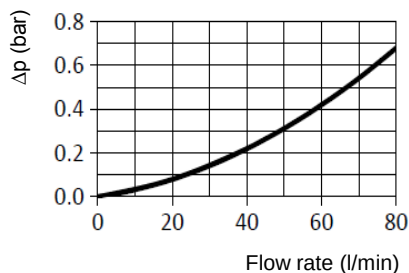
ISO16889 Multi-Pass Test

EFDR Pressure Filter Series

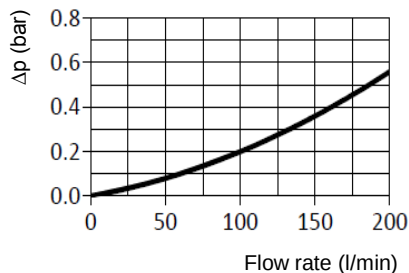
Pressure Drop Graphs (Δp)

Pressure Drop of Filter Housing only

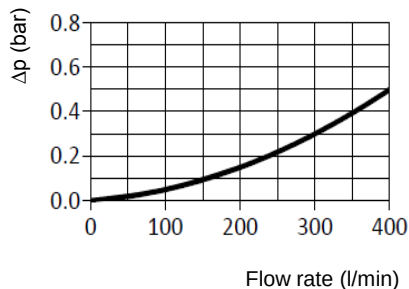
EFDR2&3



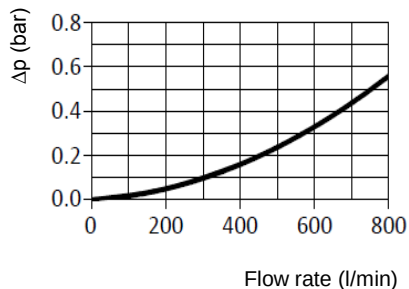
EFDR5&6



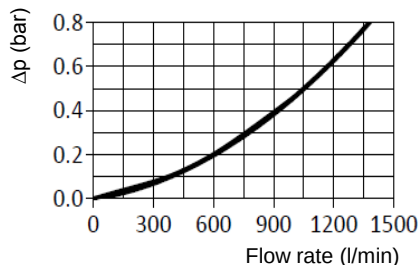
EFDR9



EFDR12&14



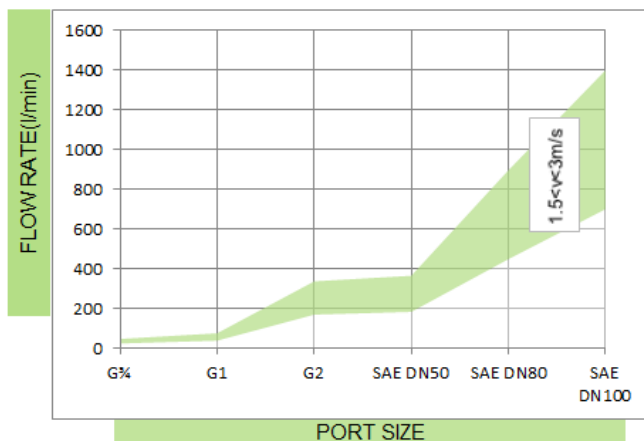
EFDR16



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)

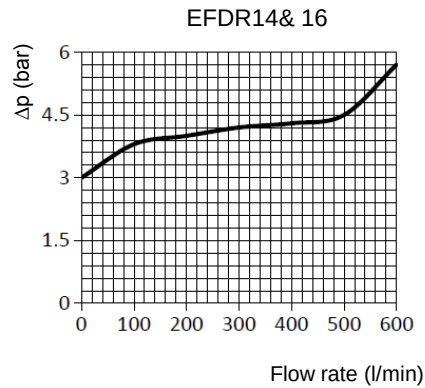
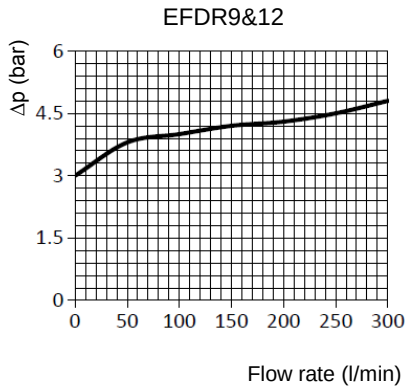
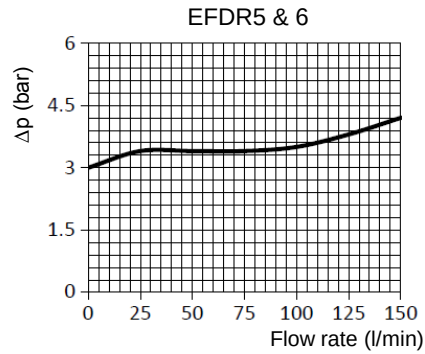
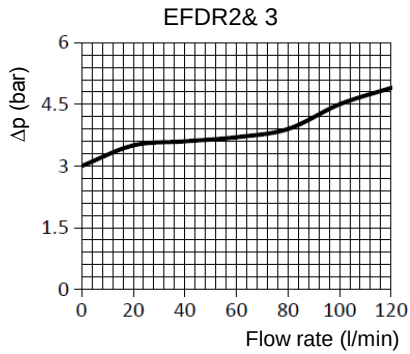
Recommended range



EFDR Pressure Filter Series

Pressure Drop Graphs (Δp)

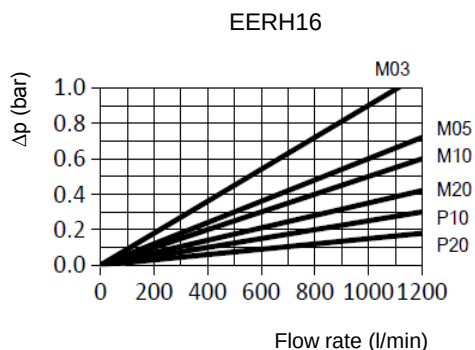
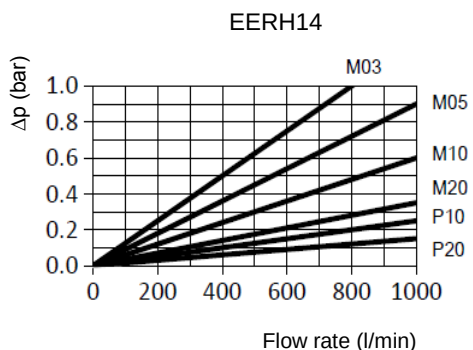
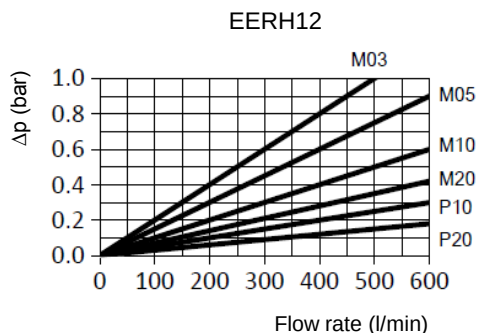
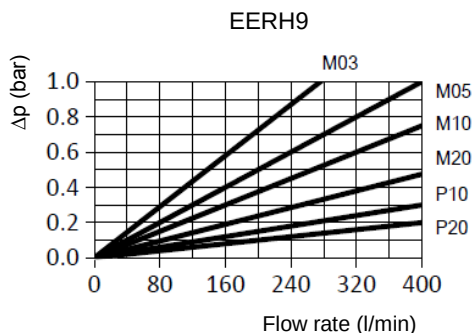
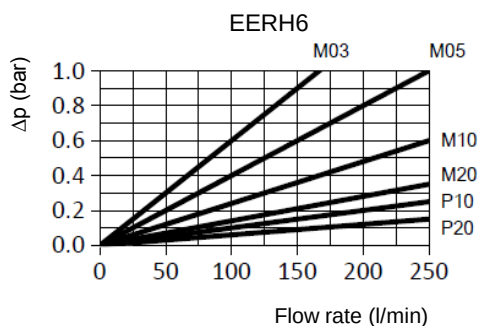
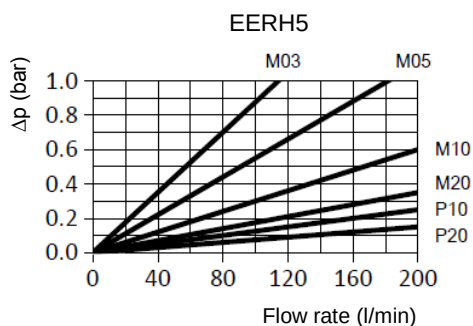
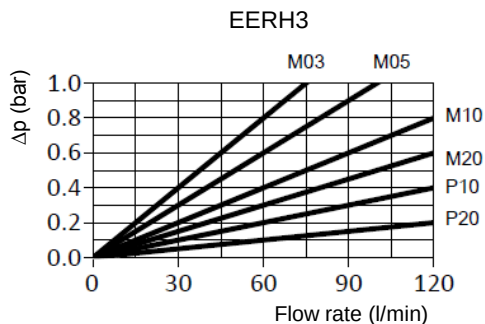
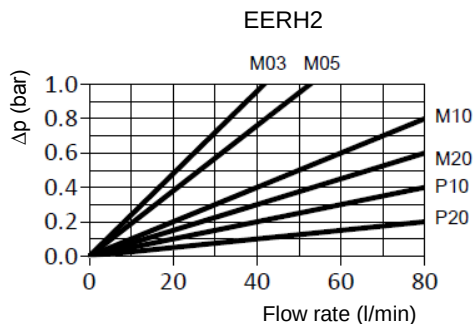
Pressure drop graph on by-pass valve



EFDR Pressure Filter Series

Pressure Drop Graphs (Δp)

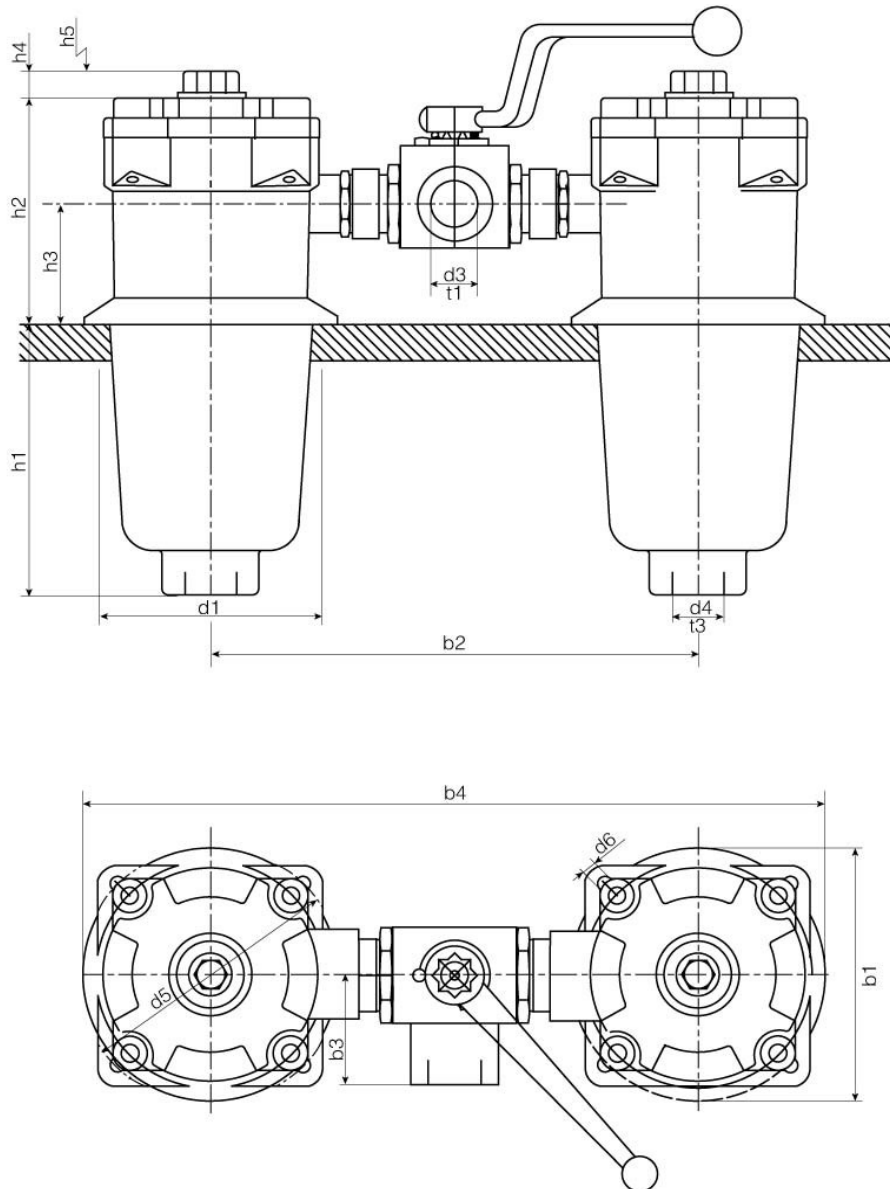
Pressure Drop with Clean Filter Elements (M and P filter media)



EFDR Pressure Filter Series

Technical Drawings and Dimension

EFDR2 to EFDR6



Threaded Connection Ports

Connection Port (BSP)

Type	b1	b2 ¹	b3	b4	d1	d3	d4	d5	d6 ²	h1	h2	h3	h4	h5	t1	t3
EFDR2	96	260.5	47	357	80	G 3/4"	G 3/4"	100	M5	66	88	44	11	80	16	17
EFDR3	96	260.5	47	357	80	G 3/4"	G 3/4"	100	M5	133	88	44	11	145	16	17
EFDR5	126	335.5	56	461	106	G 1"	G 1 1/4"	135	M6	89	108	54	11	120	24	20
EFDR6	126	335.5	56	461	106	G 1"	G 1 1/4"	135	M6	150	108	54	11	180	24	20

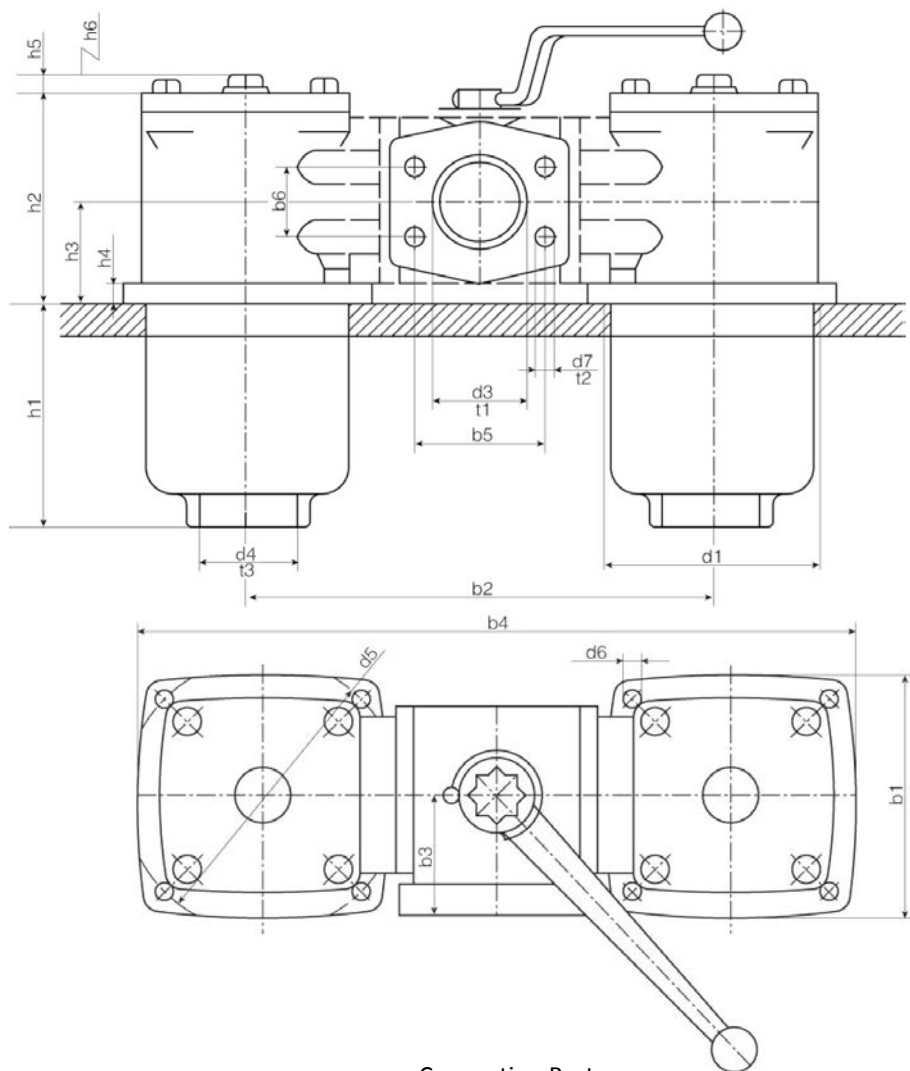
¹ ± 1.5

² Screw mounting hole

EFDR Pressure Filter Series

Technical Drawings and Dimension

EFDR9 to EFDR16



Connection Port
(BSP/FLANGE)

Type	b1	b2 ¹	b3	b4	b5	b6	d1	d3	d4	d5	d6 ²	d7
EFDR9	150	254	69	404	77.8	42.9	135	G 2"	G 2"	170	M8	-
EFDR12	195	330	100	525	106.5	61.9	180	SAE DN80 (3")	G 3"	220	M12	M16
EFDR14	250	390	140	640	130.2	77.8	208	SAE DN100 (4")	SAE DN90 (3½")	290	M16	M16
EFDR16	250	410	140	660	130.2	77.8	208	SAE DN100 (4")	SAE DN100 (4")	290	M16	M16

Type	h1	h2	h3	h4	h5	h6	t1	t2	t3	
EFDR9	138	131	63	13	11	180	24	-	27	¹ ± 1.5
EFDR12	243	167	83	13	11	320	-	20	32	² Screw mounting hole
EFDR14	251	198	93	13	11	350	-	25	-	Filter connection for SAE flange to SAE J518C 3000 psi
EFDR16	332	241	121	13	11	460	-	25	-	

EFDR Pressure Filter Series

Order Codes

Filter Assembly Series	A	B	C	-	D	E	-	F	Element Series	A	C	D	E
EFDR	2	BC	B	-	08	P10	-	2RE	EERH	2	B	08	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	D By-pass Valve			
2	60 l/min	00		NO	
3	110 l/min	08		3bar	
5	160 l/min	X		Special	
6	240 l/min				
9	330 l/min	E Media Material		Filtration	Collapse Pressure
12	660 l/min	P10	Cellulose	10µm	10 bar
14	950 l/min	P20	Cellulose	20µm	10 bar
16	1300 l/min	M03	Fibreglass	5µm	21 bar
		M05	Fibreglass	7µm	21 bar
		M10	Fibreglass	12µm	21 bar
		M20	Fibreglass	21µm	21 bar
		Y25	Wire Mesh	25µm	30 bar
		Y60	Wire Mesh	60µm	30 bar
		Y90	Wire Mesh	90µm	30bar
		Y125	Wire Mesh	125µm	30 bar
		F Indicator			Connection
		00			None
		2RE	2bar Electrical		BSP½" Thread
B Connection Ports					
BC	BSP ¾"				
BD	BSP 1"				
BH	BSP 2"				
FF	SAE DN50 (3000psi)				
FH	SAE DN80 (3000psi)				
FJ	SAE DN100 (3000psi)				
C Seal					
B	NBR				
V	FPM				

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