

EFDM Series

EVOTEK Pressure Filters



Product Description

- Operating pressure up to 210 bar
- 400 l/min max. flow rate
- installation in pressure line
- application in heavy duty, industry , construction and agricultural machines
- compliant with industry relevant ISO standards(see ISO test below)

Technical Specifications

Application

In-line duplex filter

Port Sizes:

Threaded Connections according to BSP and NPT standard in ¾", 1-¼", 1-½" inch

Flange Connections in SAE DN40 for 3000psi

Flow Rate:

max. 400 l/min

Operating Pressure:

max. 210 bar

Burst Pressure:

min. 630 bar

Element Collapse Pressure:

21 bar or 210 bar Fibreglass

30 bar Wire Mesh

By-pass Opening Pressure:

$\Delta p = 7 \text{ bar} \pm 0.5 \text{ bar}$

Clogging indicator setting:

$\Delta p = 5 \text{ bar} \pm 10\%$

Material

Seals:

NBR or FPM (-10°C to 100°C)

Filter Head:

Cast iron

Filter Bowl:

Steel

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

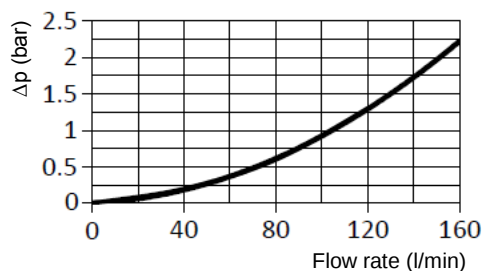
ISO16889 Multi-Pass Test

EFDM Pressure Filter Series

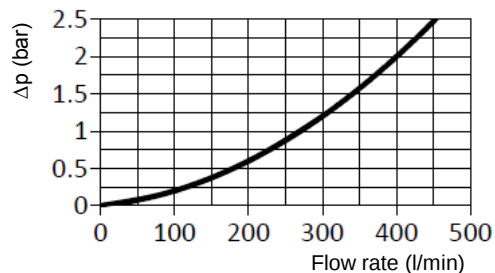
Pressure Drop Graphs (Δp)

Pressure Drop of Filter Housing only

EFDM2, EFDM3 & EFDM4

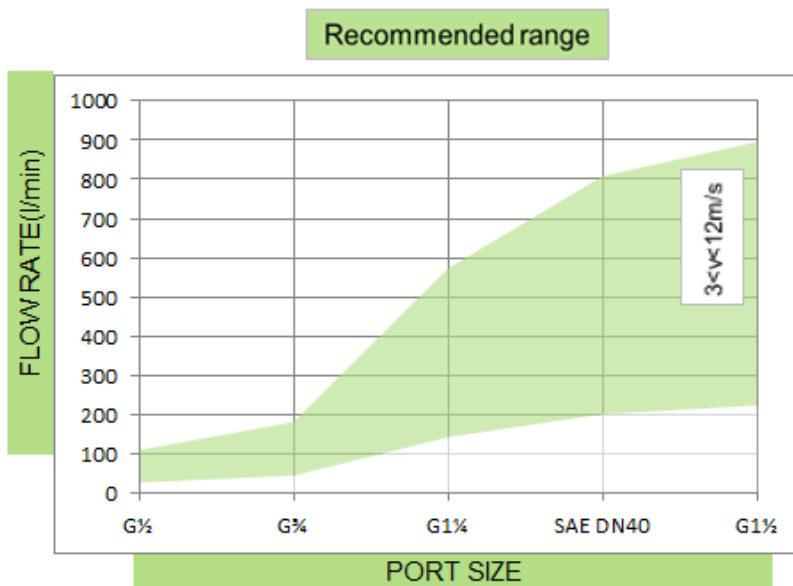


EFDM5.1, EFDM7.1 & EFDM10.1



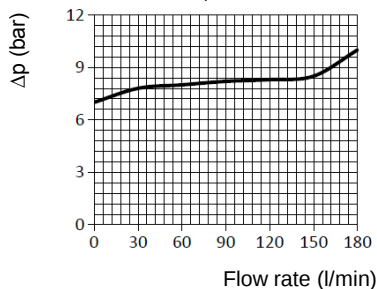
Graph of oil flow velocity

(we recommend to select size of the filter considering range of oil velocity between 3 to 12 m/s for return series)

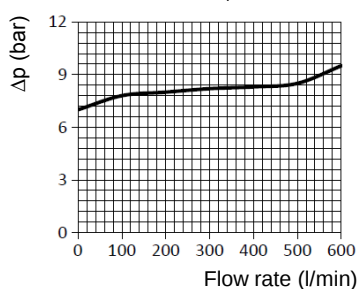


Pressure drop graph on by-pass valve

EFDM2,3 & 4



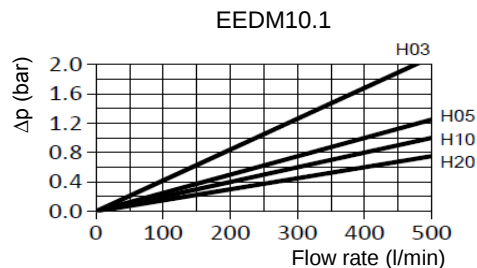
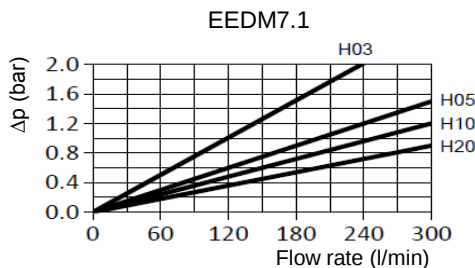
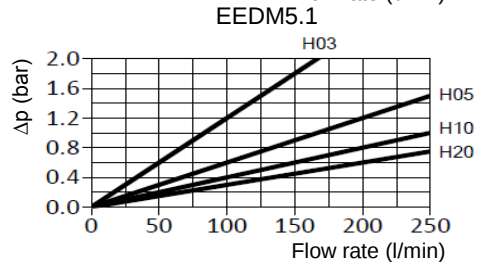
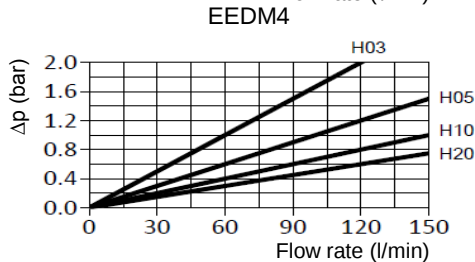
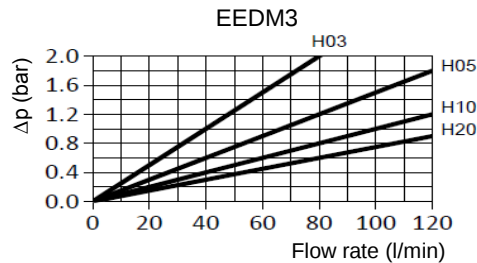
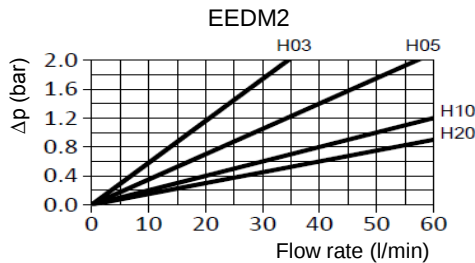
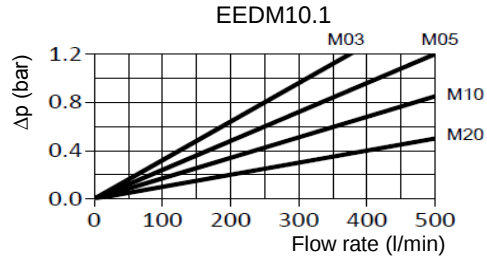
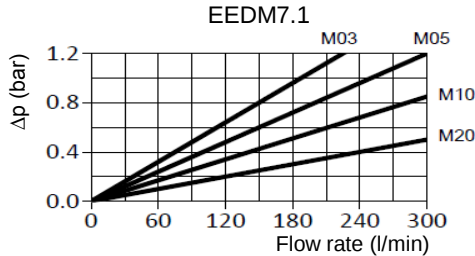
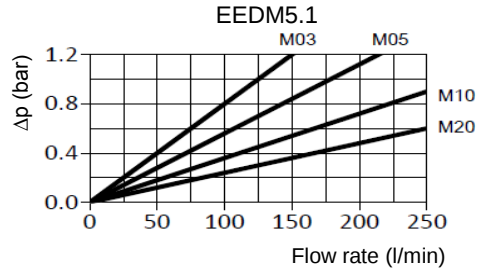
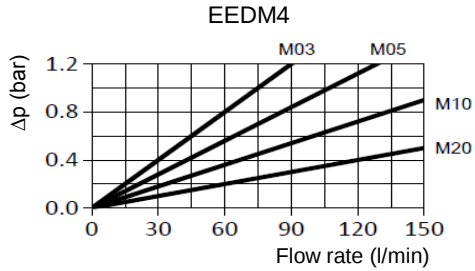
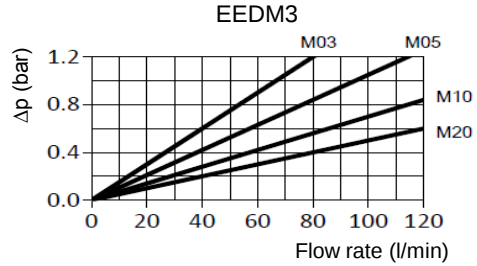
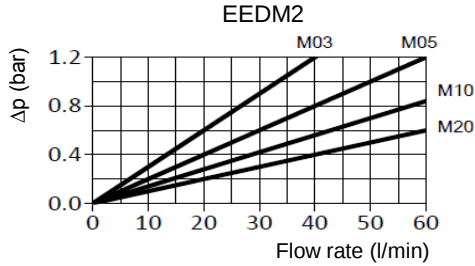
EFDM5.1,7.1 & 10.1



EFDM Pressure Filter Series

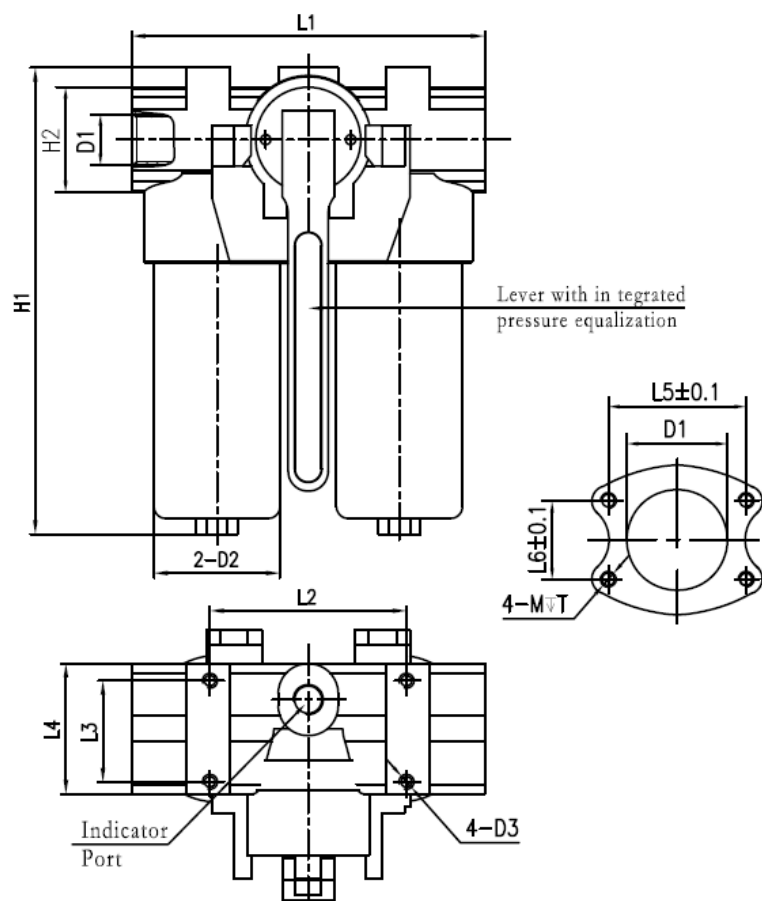
Pressure Drop Graphs (Δp)

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



EFDM Pressure Filter Series

Technical Drawings and Dimension



Connection Port (BSP/NPT/SAE)

Type	inch D1	D2	D3	H/mm									
EFDM2		68	M8x16	180	55	190	106	54.5	70	-	-	-	-
EFDM3	¾",SAE12	68	M8x16	245	55	190	106	54.5	70	-	-	-	-
EFDM4		68	M8x16	290	55	190	106	54.5	70	-	-	-	-
EFDM5.1	1¼",SAE20	115.5	M12x18	308	90	282	210	62	150	-	-	-	-
EFDM7.1	1½",SAE24	115.5	M12x18	398	90	282	210	62	150	-	-	-	-
EFDM10.1	SAE DN40 3000 psi	115.5	M12x18	548	90	282	210	62	150	69.9	35.7	12	23

EFDM Pressure Filter Series

Order Codes

Filter. Assembly Series	A	B	C	D	-	E	-	F	G	Element Series	A	D	E
EFDM	2	BC	12	B	-	M03	-	5PV	X	EEDM	2	B	M03

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

2	60 l/min
3	110 l/min
4	140 l/min
5.1	160 l/min
7.1	250 l/min
10.1	400 l/min

B Connection Ports

BC	BSP ¾"
BE	BSP 1-¼"
BF	BSP 1-½"
NC	NPT ¾"
NE	NPT 1-¼"
NF	NPT 1-½"
A12	SAE12
A20	SAE20
A24	SAE24
FE	SAE DN40 3000psi

C By-pass Valve

00	NO
12	7bar
X	Special

D Seal

B	NBR
V	FPM

E Media Material Filtration Collapse Pressure

M03	Fibreglass	5µm	21 bar
M05	Fibreglass	7µm	21 bar
M10	Fibreglass	12µm	21 bar
M20	Fibreglass	21µm	21 bar
H03	Fibreglass	5µm	210 bar
H05	Fibreglass	7µm	210 bar
H10	Fibreglass	12µm	210 bar
H20	Fibreglass	21µm	210 bar
Y25	Wire Mesh	25µm	30 bar
Y60	Wire Mesh	60µm	30 bar
Y90	Wire Mesh	90µm	30 bar
Y125	Wire Mesh	125µm	30 bar

F Indicator

00	N0	Connection
5PV	5bar Visual	BSP½" Thread
5PE	5bar Electrical	BSP½" Thread
5PB	5 bar Visual/Electrical	BSP½" Thread

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