



EFPM Series

EVOTEK High Pressure Filters

Product Description

- Operating pressure up to 420 bar
- 680 l/min max. flow rate
- installation in pressure line
- application in Injection moulding, Servo controls, Machine tools, Mobile equipment and In-plant Systems
- compliant with industry relevant ISO standards(see ISO test below)

Technical Specifications

Application

Inline High Pressure Filter

Port Sizes:

Threaded Connections according to BSP and NPT standard in $\frac{3}{4}$ ", 1-1 $\frac{1}{4}$ ", 1- $\frac{1}{2}$ " and SAE12/SAE20/SAE24 threads

Flange Connections in SAE DN20/ SAE DN32/ SAE DN50 for 6000psi

Flow Rate:

max. 680 l/min

Operating Pressure:

max. 420 bar(EFPM2 to EFPM12)

max. 315bar(EFPM15 to EFPM17)

Burst Pressure:

min. 1260 bar

Element Collapse Pressure:

21 bar (M series), 30 bar (Y series), 210 bar (H series)

By-pass Opening Pressure:

$\Delta p = 6 \text{ bar} + 0.6 \text{ bar}$

Material

Seals:

NBR or FPM (-25°C to 100°C)

Filter Head:

S.G. cast iron

Filter Bowl:

forged 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

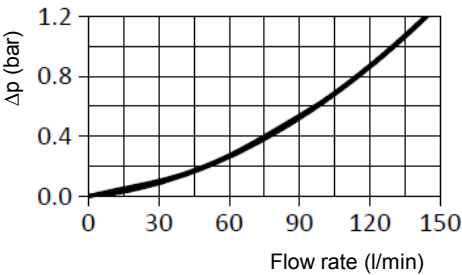
ISO3968 Pressure Drop vs. Flow Rate

ISO16889 Multi-Pass Test

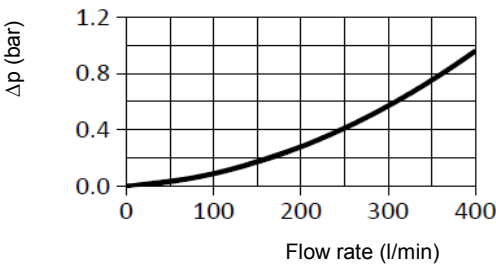
EFPM High Pressure Filter Series

Pressure Drop Graphs (Δp)

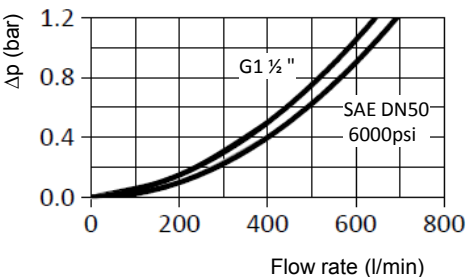
Pressure Drop of Filter Housing only
EFPM2,3&4



EFPM5,6 & 8

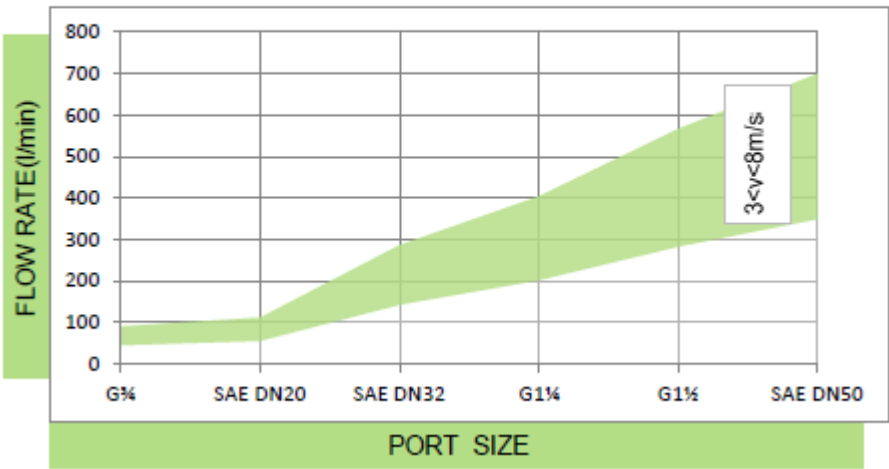


EFPM9,11,12,15 & 17



Graph of oil flow velocity
(we recommend to select size of the filter considering range of oil velocity between 3 to 8 m/s for pressure series)

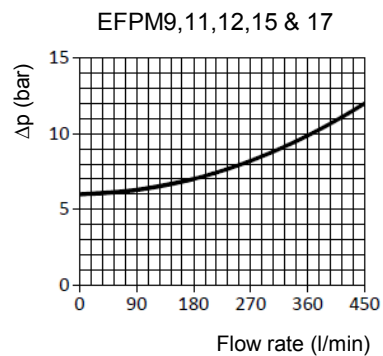
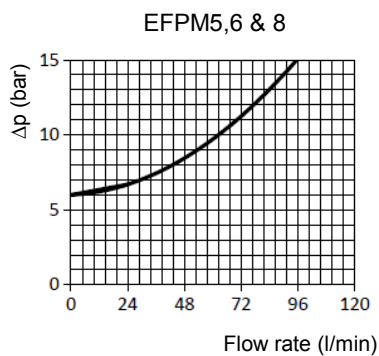
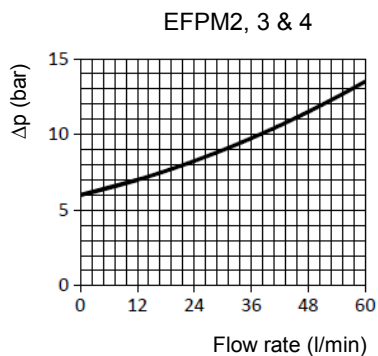
Recommended range



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Pressure Drop Graphs (Δp)

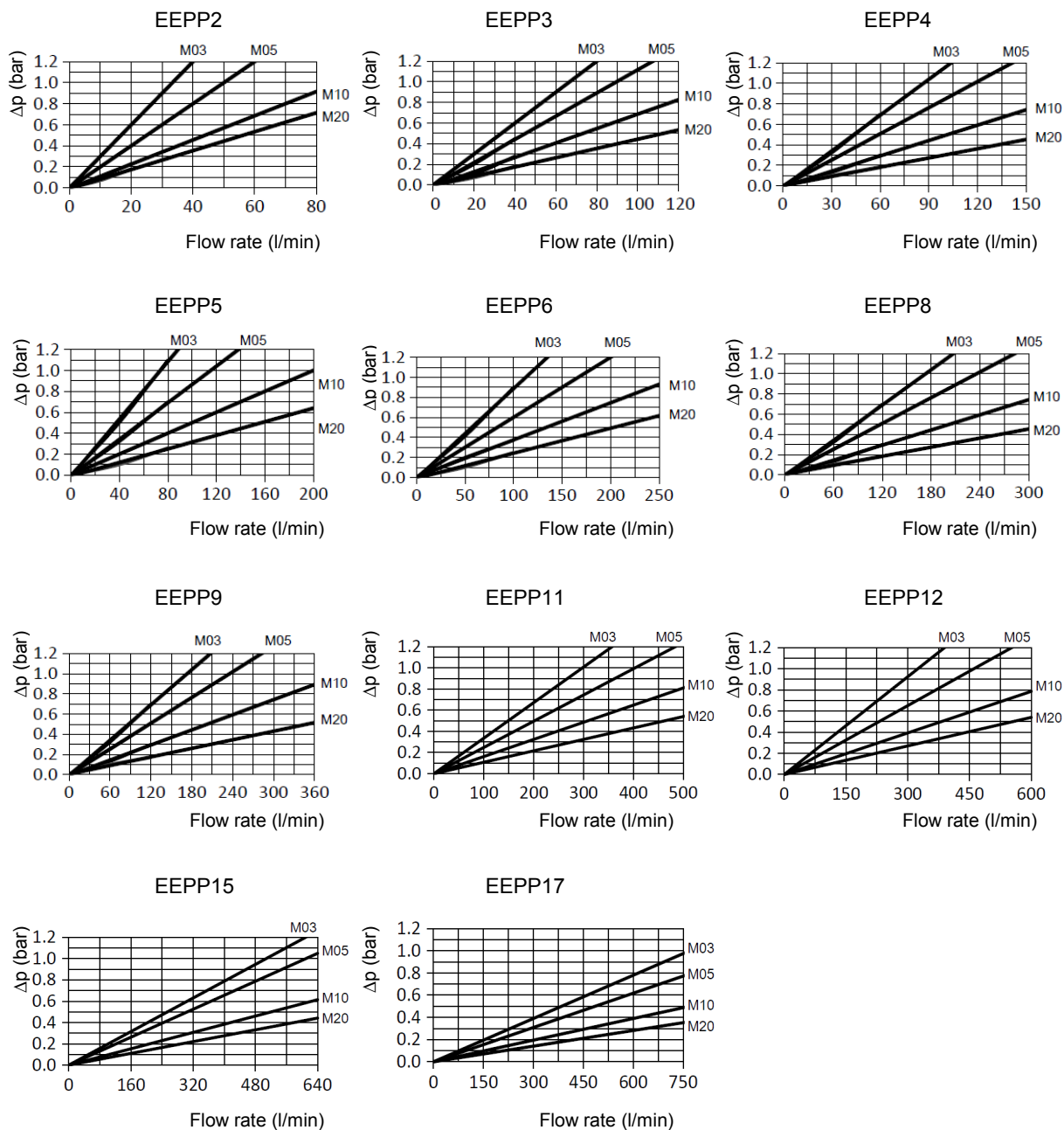
Pressure drop graph on by-pass valve



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Pressure Drop Graphs (Δp)

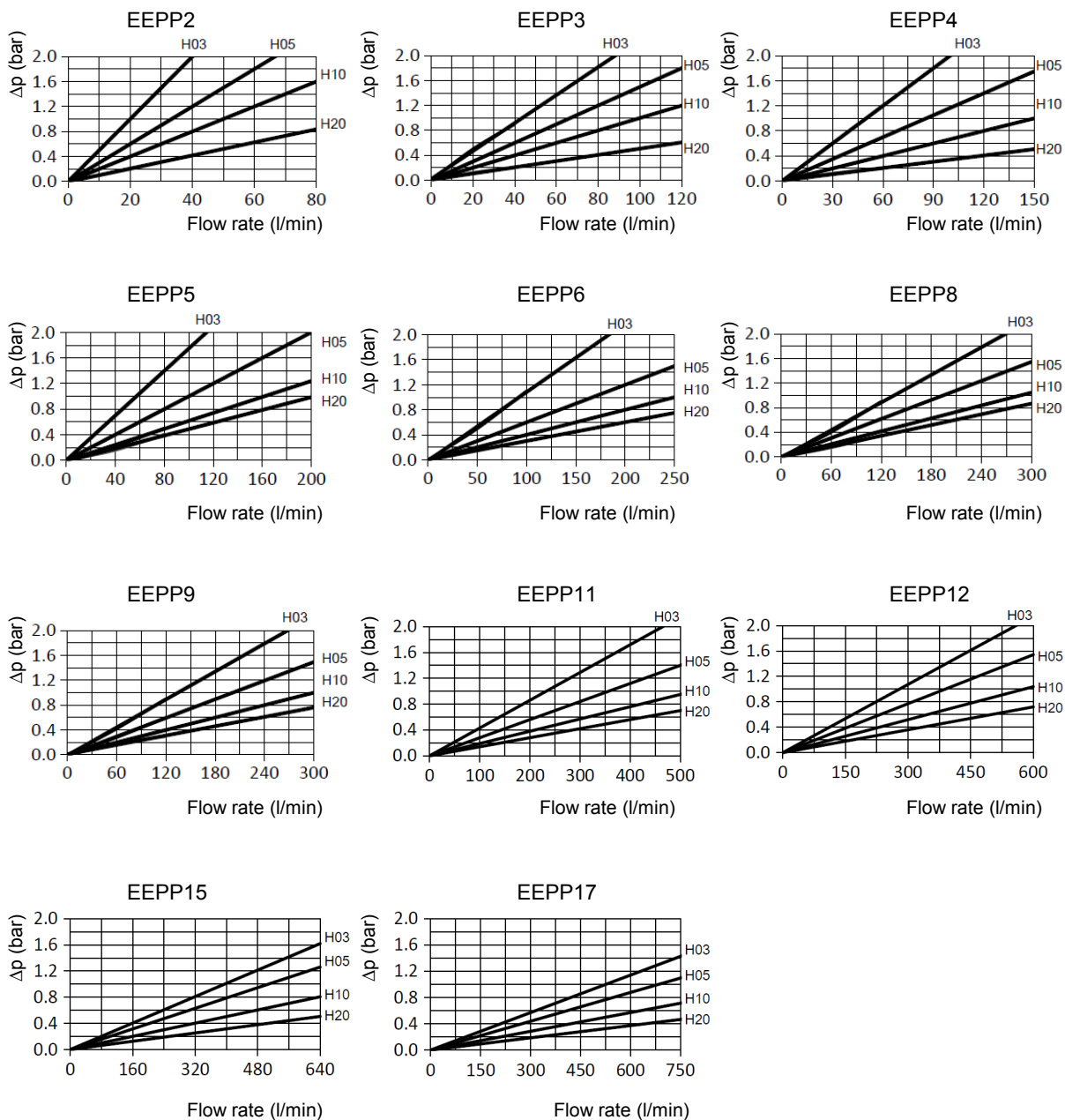
Pressure Drop with Clean Filter Elements (M filter media)



EFPM High Pressure Filter Series

Pressure Drop Graphs (Δp)

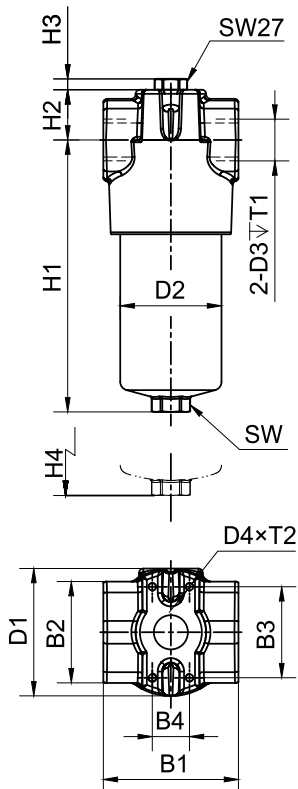
Pressure Drop with Clean Filter Elements (H filter media)



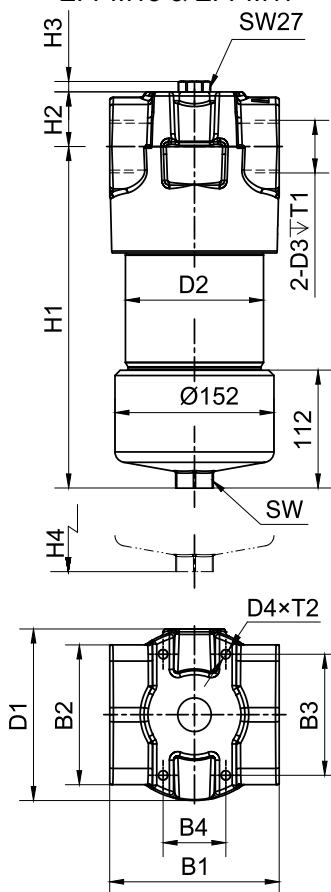
EFPM High Pressure Filter Series

Technical Drawings and Dimension

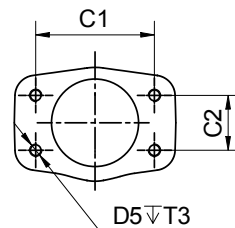
EFPM2 to EFPM12



EFPM15 & EFPM17



EFPM2 to EFPM17
Flange



Connection Port
(BSP/NPT/SAE/FLANGE)

inch

Height

mm

Type	D3	B1	B2	B3	B4	C1	C2	D1	D2	D4	D5	H1	H2	H3	H4	SW	T1	T2	T3
EFPM2	¾",SAE12	90	71	56	32	-	-	86	68	M6	-	140	40	6	85	27	17	9	-
	SAE DN 20	90	71	56	32	50.8	23.8	86	68	M6	M10		40	6	85	27	17	9	15
EFPM3	¾",SAE12	90	71	56	32	-	-	86	68	M6	-	209.5	40	6	85	27	17	9	-
	SAE DN 20	90	71	56	32	50.8	23.8	86	68	M6	M10		40	6	85	27	17	9	15
EFPM4	¾",SAE12	89	71	56	32	-	-	86	68	M6	-	250.5	40	6	85	27	17	9	-
	SAE DN 20	89	71	56	32	50.8	23.8	86	68	M6	M10		40	6	85	27	17	9	15
EFPM5	1¼",SAE20	125	95	85	35	-	-	119	95	M10	-	196.5	47	6	105	32	21	14	-
	SAE DN 32	125	95	85	35	66.7	31.8	119	95	M10	M14		47	6	105	32	21	14	19
EFPM6	1¼",SAE20	125	95	85	35	-	-	119	95	M10	-	256	47	6	105	32	21	14	-
	SAE DN 32	125	95	85	35	66.7	31.8	119	95	M10	M14		47	6	105	32	21	14	19
EFPM8	1¼",SAE20	125	95	85	35	-	-	119	95	M10	-	438	47	6	105	32	21	14	-
	SAE DN 32	125	95	85	35	66.7	31.8	119	95	M10	M14		47	6	105	32	21	14	19
EFPM9	1½",SAE24	162	133	115	60	-	-	163	130	M12	-	257.5	52	6	115	36	23	17	-
	SAE DN 50	162	133	115	60	96.8	44.5	163	130	M12	M20		52	6	115	36	23	17	25
EFPM11	1½",SAE24	162	133	115	60	-	-	163	130	M12	-	350.5	52	6	115	36	23	17	-
	SAE DN 50	162	133	115	60	96.8	44.5	163	130	M12	M20		52	6	115	36	23	17	25
EFPM12	1½",SAE24	162	133	115	60	-	-	163	130	M12	-	428	52	6	115	36	23	17	-
	SAE DN 50	162	133	115	60	96.8	44.5	163	130	M12	M20		52	6	115	36	23	17	25
EFPM15	1½",SAE24	162	133	115	60	-	-	163	132	M12	-	576	52	6	500	36	23	17	-
	SAE DN 50	162	133	115	60	96.8	44.5	163	132	M12	M20		52	6		36	23	17	25
EFPM17	1½",SAE24	162	133	115	60	-	-	163	132	M12	-	742	52	6	670	36	23	17	-
	SAE DN 50	162	133	115	60	96.8	44.5	163	132	M12	M20		52	6		36	23	17	25

EFPM High Pressure Filter Series

Order Codes

Filter Assembly Series	A	B	C	D	-	E	-	F	Element Series	A	D	E
EFPM	3	BC	11	B	-	M20	-	E50	EEPP	3	B	M20

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	160 l/min
6	240 l/min
8	280 l/min
9	330 l/min
11	450 l/min
12	500 l/min
15	600 l/min
17	680 l/min

B Connection Ports

A12	SAE12
A20	SAE20
A24	SAE24
BC	BSP ¾"
BE	BSP 1-¼"
BF	BSP 1-½"
NC	NPT ¾"
NE	NPT 1-¼"
NF	NPT 1-½"
SB	SAE DN20 (6000psi)
SD	SAE DN32 (6000psi)
SF	SAE DN50 (6000psi)

C By-pass Valve

00	No
11	6.0 bar
X	special

D Seal

B	NBR
V	FPM

E Media Material Filtration Collapse Pressure

M03	Fiberglass	5µm	21 bar
M05	Fiberglass	7µm	21 bar
M10	Fiberglass	12µm	21 bar
M20	Fiberglass	21µm	21 bar
H03	Fiberglass	5µm	210 bar
H05	Fiberglass	7µm	210 bar
H10	Fiberglass	12µm	210 bar
H20	Fiberglass	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	No	Connection
V50	5 bar visual	M20*1.5 Thread
E50	5 bar visual/electrical	M20*1.5 Thread
L50	5 bar visual/electrical	M20*1.5 Thread

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