



EFPS Series

EVOTEK Low Pressure Filters

Product Description

- Operating pressure up to 12 bar
- 250 l/min max. flow rate
- installation in pressure line
- application in Mobile Equipment, Hydrostatic Drives, Power Units, and agricultural machines
- compliant with industry relevant ISO standards(see ISO test below)

Technical Specifications

Application

Inline Pressure Filter

Port Sizes:

Threaded Connections according to BSP and NPT standard in ¾" & 1¼" and SAE12/ SAE20 threads

Flow Rate:

max. 250 l/min

Operating Pressure:

max. 12 bar

Burst Pressure:

min. 25 bar

Element Collapse Pressure:

4 bar

By-pass Opening Pressure:

$\Delta p=1.7 \text{ bar} + 0.3\text{bar}$

Material

Seals:

NBR or FPM (-10°C to 100°C)

Filter Head:

Aluminum

Filter Bowl:

Sheet 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)

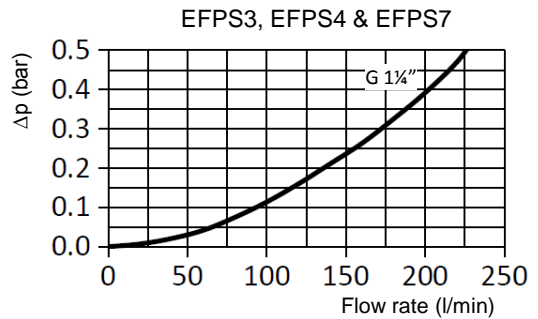
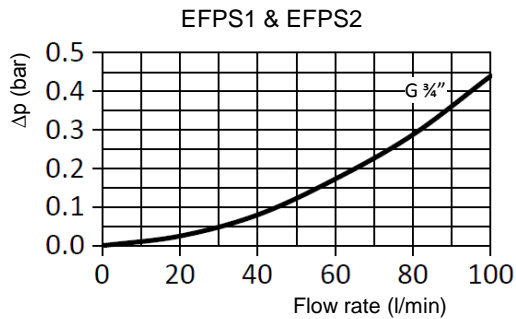
Tested according to ISO standards:

- 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

EFPS Low Pressure Filter Series

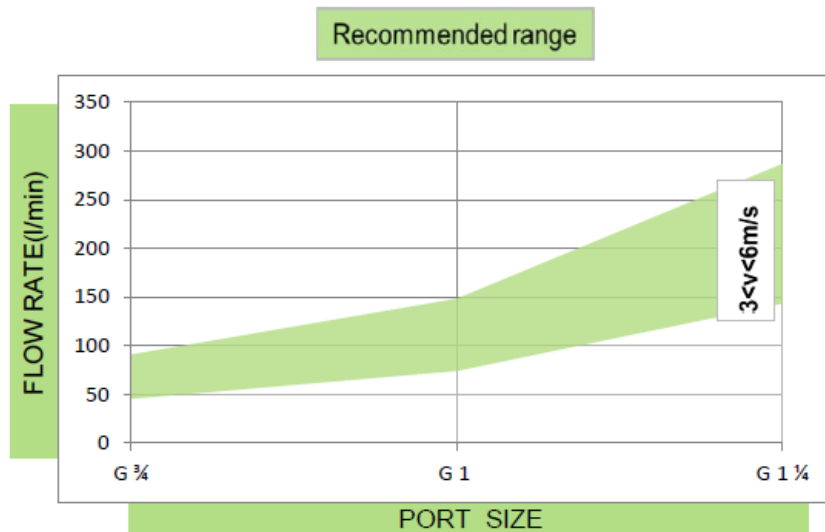
Pressure Drop Graphs (Δp)

Pressure Drop of Filter Housing only

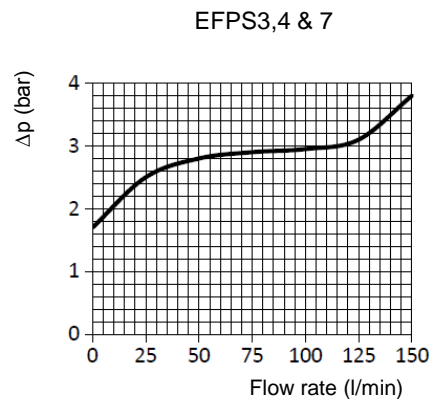
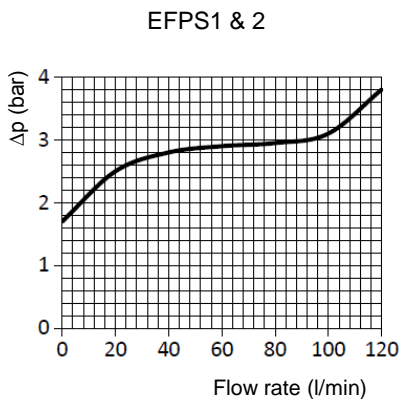


Graph of oil flow velocity

(we recommend to select size of the filter considering range of oil velocity between 3 to 6 m/s for pressure series)



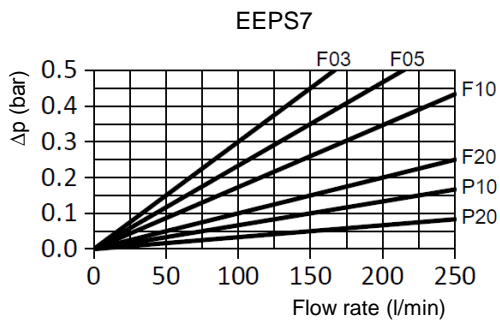
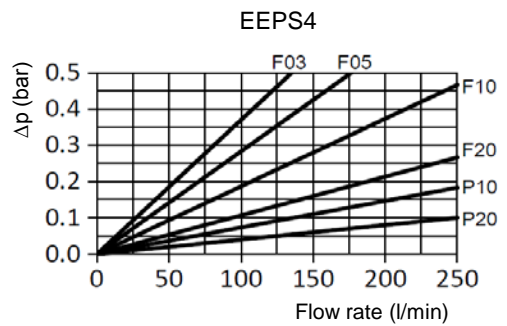
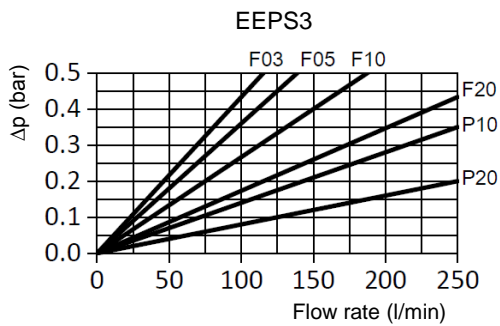
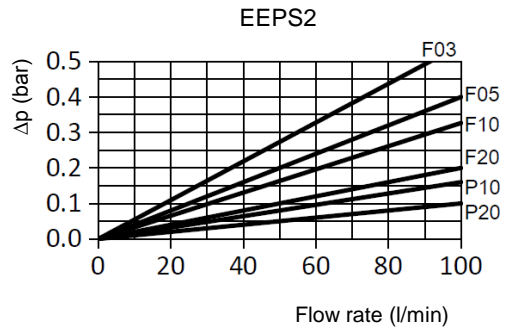
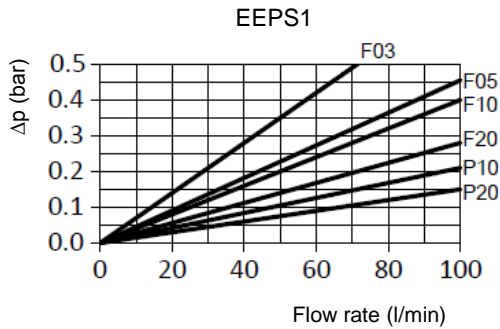
Pressure drop graph on by-pass valve



EFPS Low Pressure Filter Series

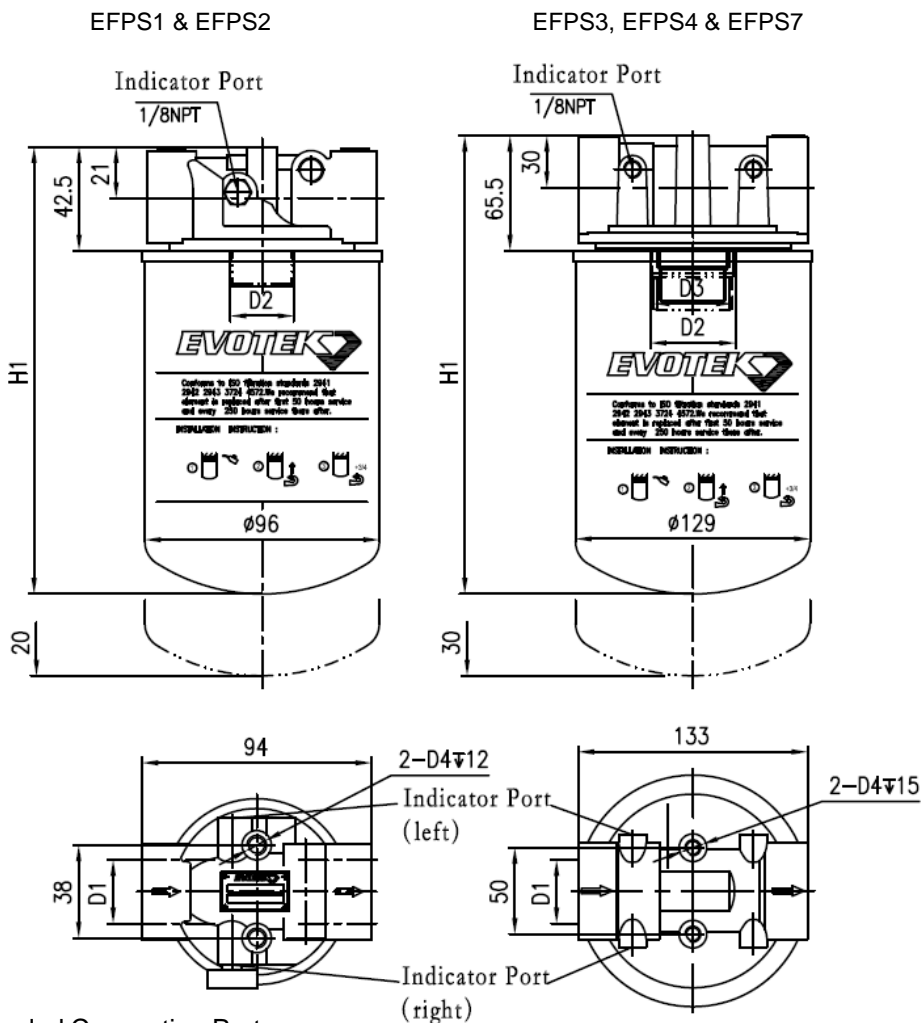
Pressure Drop Graphs (Δp)

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



EFPS Low Pressure Filter Series

Technical Drawings and Dimension



Threaded Connection Ports

Type	Connection Port (BSP/NPT/SAE)				Height
	D1 inch	D2	D3	D4	H1 mm
EFPS1BC	G 3/4"	G 3/4"	-	M8	188
EFPS1NC	3/4" NPT	1" - 12UNF	-	5/16-18UN	188
EFPS1A12	SAE12	1" - 12UNF	-	5/16-18UN	188
EFPS2BC	G 3/4"	G 3/4"	-	M8	234
EFPS2NC	3/4" NPT	1" - 12UNF	-	5/16-18UN	234
EFPS2A12	SAE12	1" - 12UNF	-	5/16-18UN	234
EFPS3BE	G 1 1/4"	G 1 1/4"	-	M8	248
EFPS3NE	1 1/4" NPT	-	1 1/2" - 16UN	5/16-18UN	240
EFPS3A20	SAE20	-	1 1/2" - 16UN	5/16-18UN	240
EFPS4BE	G 1 1/4"	G 1 1/4"	-	M8	293
EFPS4NE	1 1/4" NPT	-	1 1/2" - 16UN	5/16-18UN	335
EFPS4A20	SAE20	-	1 1/2" - 16UN	5/16-18UN	335
EFPS7BE	G 1 1/4"	G 1 1/4"	-	M8	375

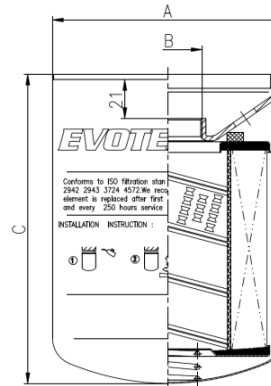
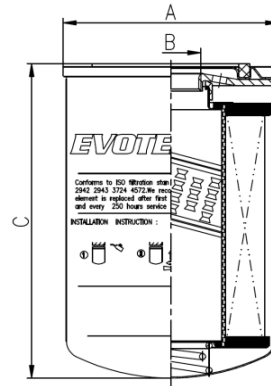
EFPS Low Pressure Filter Series

Technical Drawings and Dimension

ELEMENT

Type	Connection Port (BSP/UN)	Diameter	Height
	inch	mm	mm
	B	A	C
EEPS1-B	G ¾"	96	146
EEPS2-B	G ¾"	96	191
EEPS1-U	1"-12 UNF-2B	96	146
EEPS2-U	1"-12 UNF-2B	96	191
EEPS3-B	G 1¼"	129	181
EEPS4-B	G 1¼"	129	226
EEPS7-B	G 1¼"	129	308

Type	Connection Port (UN)	Diameter	Height
	inch	mm	mm
	B	A	C
EEPS3-U	½" 16-UN	128	175
EEPS4-U	½" 16-UN	128	270





EFPF Series

EVOTEK Low Pressure Filters

Product Description

- Operating pressure up to 35 bar
- 190 l/min max. flow rate
- installation in pressure line
- application in construction and agricultural machines, hydrostatic transmissions and power units
- compliant with industry relevant ISO standards(see ISO test below)

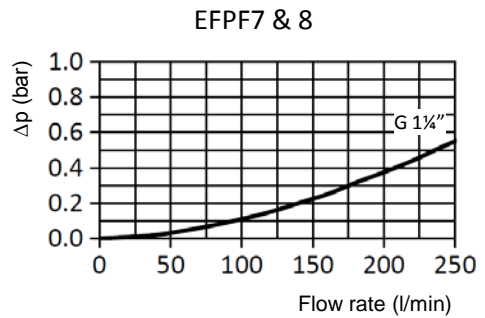
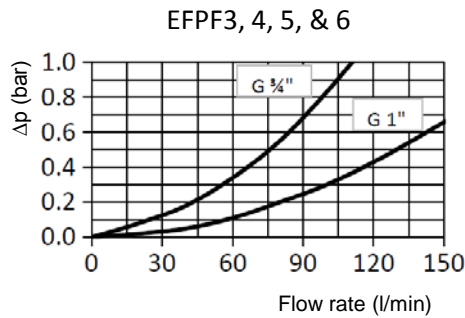
Technical Specifications

Application	Inline Low Pressure Filter
Port Sizes:	Threaded Connections according to BSP and NPT standard in 3/8" to 1 1/4" inch and SAE12/ SAE16/ SAE20 threads
Flow Rate:	max. 190 l/min
Operating Pressure:	EFPF3,4,5,6 max. 35 bar EFPF7,8 max. 24 bar
Burst Pressure:	EFPF3,4,5,6 min. 70 bar EFPF7,8 min. 55 bar
Element Collapse Pressure:	10 bar
By-pass Opening Pressure:	$\Delta p=1.7 \text{ bar} \pm 10\%$ or $\Delta p= 3.5 \text{ bar} \pm 10\%$
Material	
Seals:	NBR or FPM (-10°C to 100°C)
Filter Head:	Aluminum
Filter Bowl:	Sheet 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

EFPF Low Pressure Filter Series

Pressure Drop Graphs (Δp)

Pressure Drop of Filter Housing only



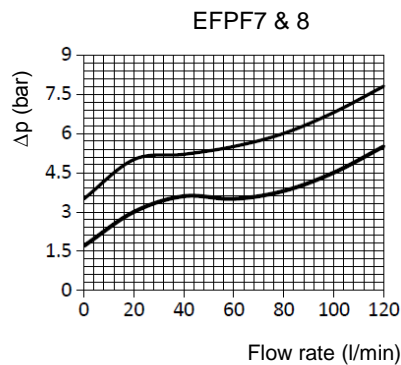
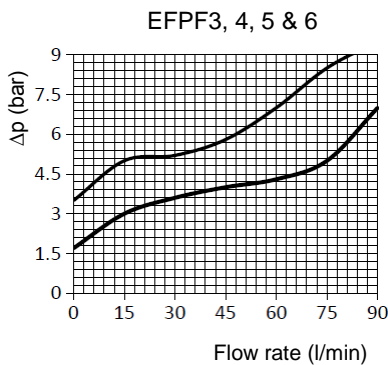
Graph of oil flow velocity

(we recommend to select size of the filter considering range of oil velocity between 3 to 6 m/s for pressure series)

Recommended range



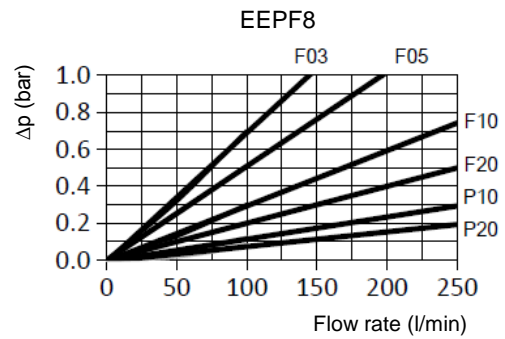
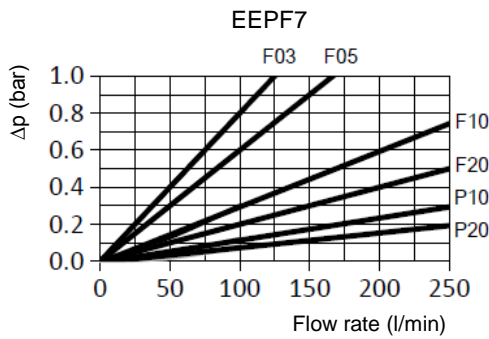
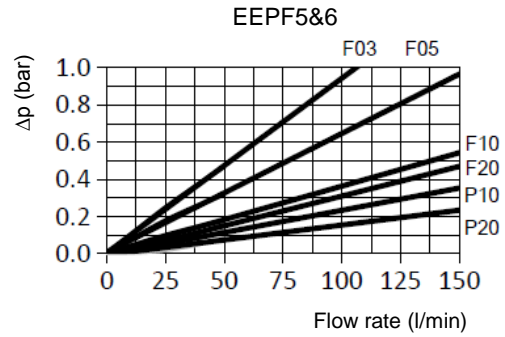
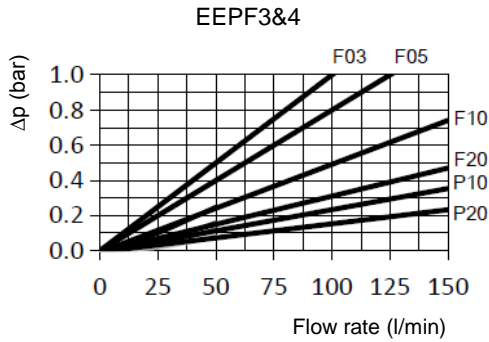
Pressure drop graph on by-pass valve



EFPF Low Pressure Filter Series

Pressure Drop Graphs (Δp)

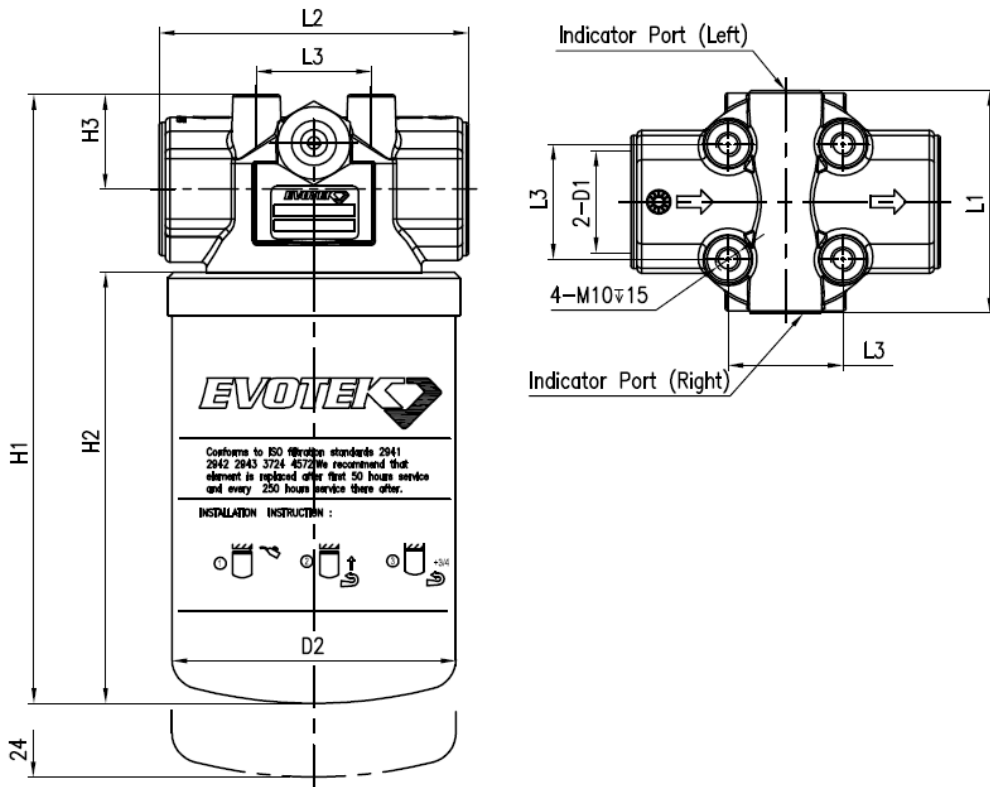
Pressure Drop with Clean Filter Elements (F and P filter media)



EFPP Low Pressure Filter Series

Technical Drawings and Dimension

EFPP

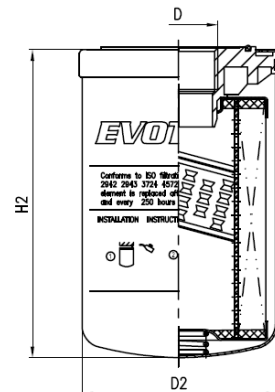


Threaded Connection Ports

Type	Connection Port (BSP/NPT/SAE)		Height						
	D1 inch		H1 mm	H2 mm	H3 mm	D2 mm	L1 mm	L2 mm	L3 mm
EFPP3	3/4"		219	155					
EFPP4	1"		246	182	34	94	84	102	35
EFPP5	SAE12		292	228					
EFPP6	SAE16		304	240					
EFPP7	1 1/4"		369	294	40	117	92	127	47.5
EFPP8	SAE20		436	361					

ELEMENT

Type	Connection Port (UN)		Height	
	D inch	D2 mm	H2 mm	
EEPF3-UB			155	
EEPF4-UB			182	
EEPF5-UB	1 1/8"-12 UNF-2B	94	228	
EEPF6-UB			240	
EEPF7-UD			294	
EEPF8-UD	1 3/4"-12 UNF-2B	117	361	



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EFPF Low Pressure Filter Series

Order Codes

Filter Assembly Series	A	B	C	-	D	E	-	F	G
EFPF	3	BC	00	-	B	F20	-	E25	R

Element Series	A	-	See prev. page	E	D
EFPF	3	-	UB	F20	B

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
3	80 l/min
4	90 l/min
5	120 l/min
6	130 l/min
7	170 l/min
8	190 l/min

B Connection Ports	
A12	SAE12
A16	SAE16
A20	SAE20
BC	BSP ¾"
BD	BSP 1"
BE	BSP 1¼"
NC	NPT ¾"
ND	NPT 1"
NE	NPT 1¼"

C By-pass Valve	
00	No
06	1.7 bar
09	3.5 bar

D Seal	
B	NBR
V	FPM

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

F Indicator	Connection
00 No	
V13 1.3 bar visual	M20*1.5 Thread
V25 2.5 bar visual	M20*1.5 Thread
E13 1.3 bar visual/electrical	M20*1.5 Thread
E25 2.5 bar visual/electrical	M20*1.5 Thread

G Indicator Mounting position	
R	Right
L	Left

EFPG Series

EVOTEK Medium Pressure Filters



Product Description

- Operating pressure up to 70 bar
- 660 l/min max. flow rate
- installation in pressure line
- application in Off-line Filter Loops, Machine Tools , Mobile Equipment, Injection Molding, Oil Patch Drilling Equipment and agricultural machines
- compliant with industry relevant ISO standards(see ISO test below)

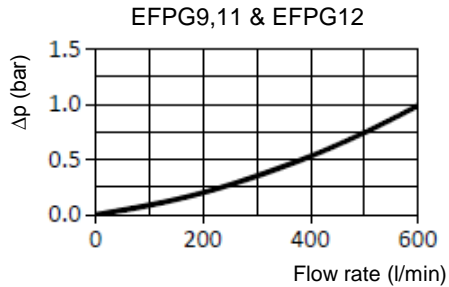
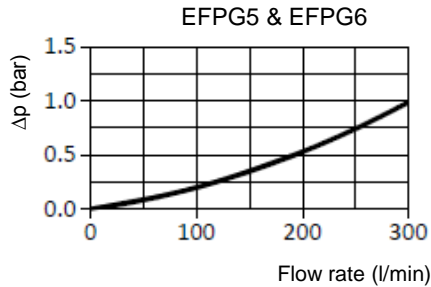
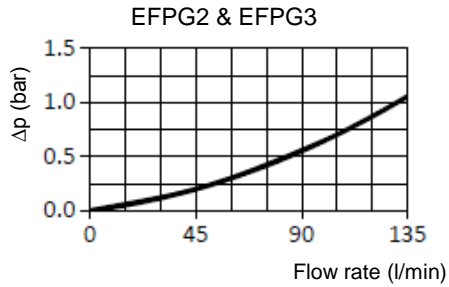
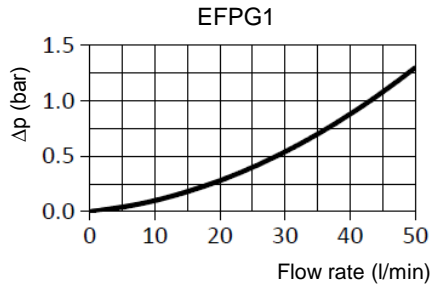
Technical Specifications

Application	Inline Medium Pressure Filter
Port Sizes:	Threaded Connections according to BSP and NPT standard in ½ ” to 1½” and SAE08/SAE12/ SAE20/SAE24 threads
Flow Rate:	max. 660 l/min
Operating Pressure:	max. 70 bar
Burst Pressure:	min. 210 bar
Element Collapse Pressure:	21 bar (M series), 30bar (Y series)
By-pass Opening Pressure:	$\Delta p=6 \text{ bar} + 0.6\text{bar}$
Material	
Seals:	NBR or FPM (-10°C to 100°C)
Filter Head:	Aluminum
Filter Bowl:	Aluminum
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

EFPG High Medium Filter Series

Pressure Drop Graphs (Δp)

Pressure Drop of Filter Housing only

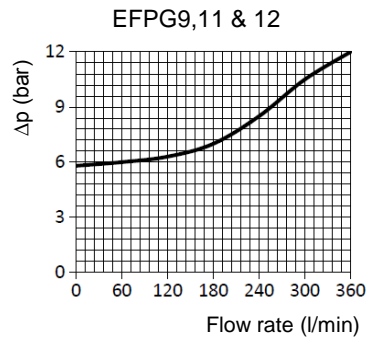
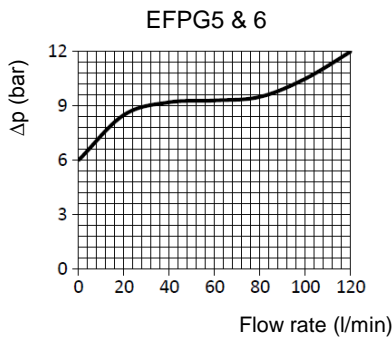
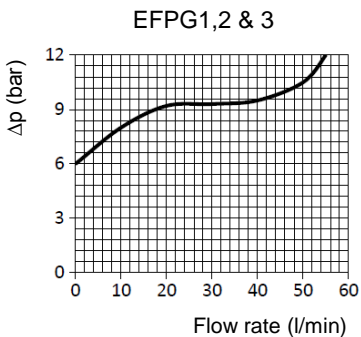


Graph of oil flow velocity

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



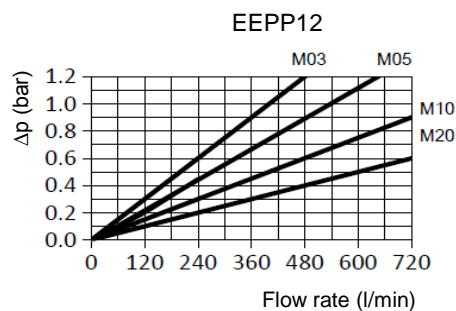
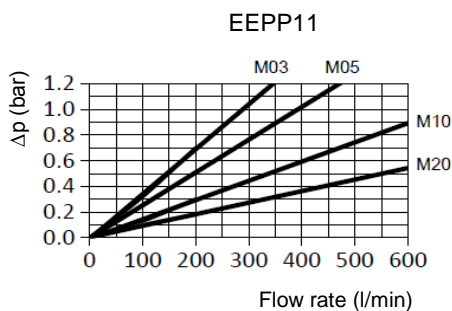
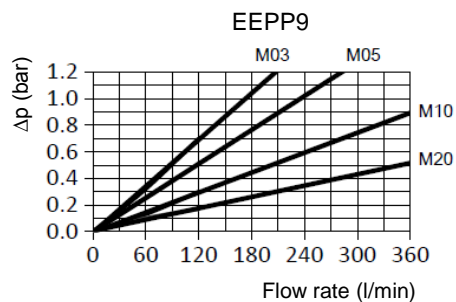
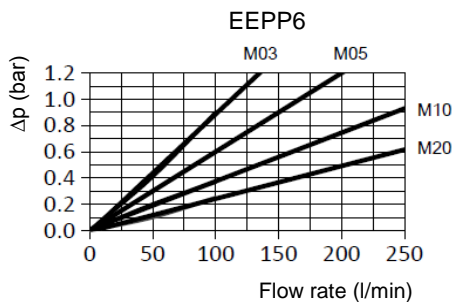
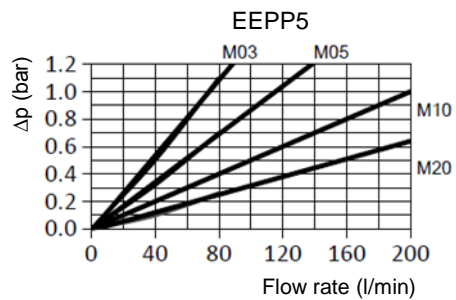
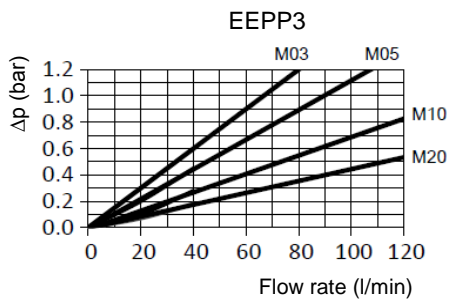
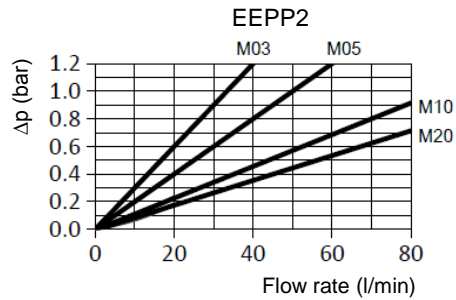
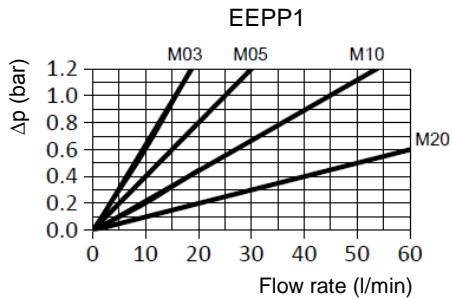
Pressure drop graph on by-pass valve



EFPG Medium Pressure Filter Series

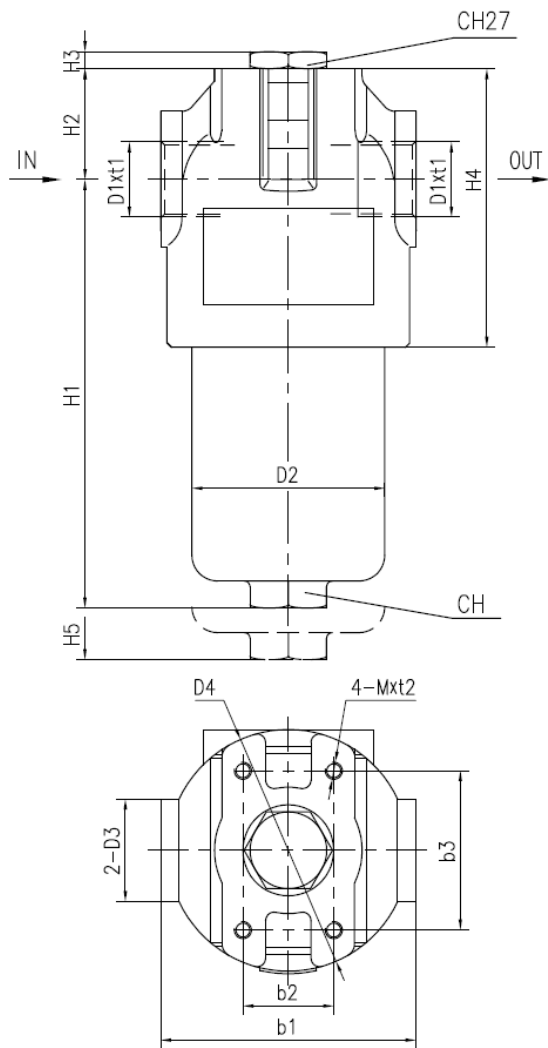
Pressure Drop Graphs (Δp)

Pressure Drop with Clean Filter Elements (M filter media)



EFPG Medium Pressure Filter Series

Technical Drawings and Dimension



Threaded Connection Ports

Type	Connection Port (BSP/NPT/SAE)		Height											CH	M	t1	t2
	D1 inch	Height mm	H1	H2	H3	H4	H5	D2	D3	D4	b1	b2	b3				
EFPG1	1/2", SAE08	136	31	6	88	75	52	36	67	69	30	45	24	M5	15	9	
EFPG2	3/4", SAE12	138	39	6	98	75	68	42	85	90	32	56	27	M6	21	10	
EFPG3		206	39	6	98	75	68	42	85	90	32	56	27	M6	21	10	
EFPG5	1 1/4", SAE20	190	46	6	123	95	95	65	116	125	35	85	32	M10	25	17	
EFPG6		250	46	6	123	95	95	65	116	125	35	85	32	M10	25	17	
EFPG9	1 1/2", SAE24	250	52	6	138	105	130	85	160	160	60	115	36	M12	27	25	
EFPG11		341	52	6	138	105	130	85	160	160	60	115	36	M12	27	25	
EFPG12		416	52	6	138	105	130	85	160	160	60	115	36	M12	27	25	

EFPG Medium Pressure Filter Series

Order Codes

Filter Assembly	A	B	C	D	-	E	-	F	Element Series	A	D	E
EFPG	1	BB	11	B	-	M20	-	5PB	EEPP	1	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

1	30 l/min
2	60 l/min
3	110 l/min
5	160 l/min
6	240 l/min
9	330 l/min
11	500 l/min
12	660 l/min

B Connection Ports

A08	SAE08
A12	SAE12
A20	SAE20
A24	SAE24
BB	BSP ½"
BC	BSP ¾"
BE	BSP 1-¼"
BF	BSP 1-½"
NB	NPT ½"
NC	NPT ¾"
NE	NPT 1-¼"
NF	NPT 1-½"

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	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

F Indicator

00	No	Connection
5PV	5 bar visual	BSP ½" Thread
5PE	5 bar visual/electrical	BSP ½" Thread
5PB	5 bar electrical	BSP ½" Thread

EFPL Series

EVOTEK Medium Pressure Filters



Product Description

- Operating pressure up to 110 bar
- 160 l/min max. flow rate
- installation in pressure line
- application in Machine Tools, Power Units , construction and agricultural machines
- compliant with industry relevant ISO standards(see ISO test below)

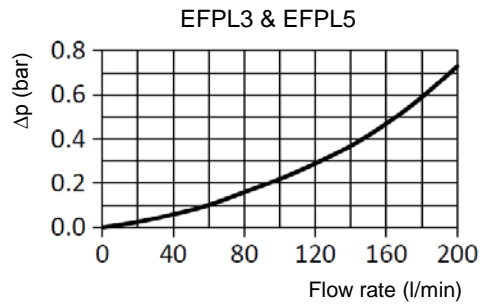
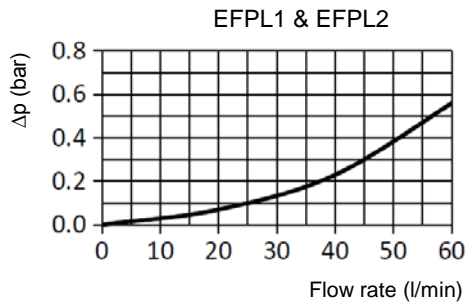
Technical Specifications

Application	Inline High Pressure Filter
Port Sizes:	Threaded Connections according to BSP and NPT standard in ½ " or 1" and SAE08/SAE12 threads
Flow Rate:	max. 160 l/min
Operating Pressure:	max. 110 bar
Burst Pressure:	min. 330 bar
Element Collapse Pressure:	10 bar (P series), 21 bar (M series), 30bar (Y series)
By-pass Opening Pressure:	$\Delta p=6 \text{ bar} + 0.6\text{bar}$
Material	
Seals:	NBR or FPM (-10°C to 100°C)
Filter Head:	Aluminum die-casting alloys
Filter Bowl:	Anodized aluminum alloy
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:	<p>ISO2941 Collapse/burst resistance</p> <p>ISO2942 Fabrication integrity</p> <p>ISO2943 Material compatibility integrity</p> <p>ISO3723 Method for end load test</p> <p>ISO3724 Flow fatigue characteristics</p> <p>ISO3968 Pressure Drop vs. Flow Rate</p> <p>ISO16889 Multi-Pass Test</p>

EFPL Medium Pressure Filter Series

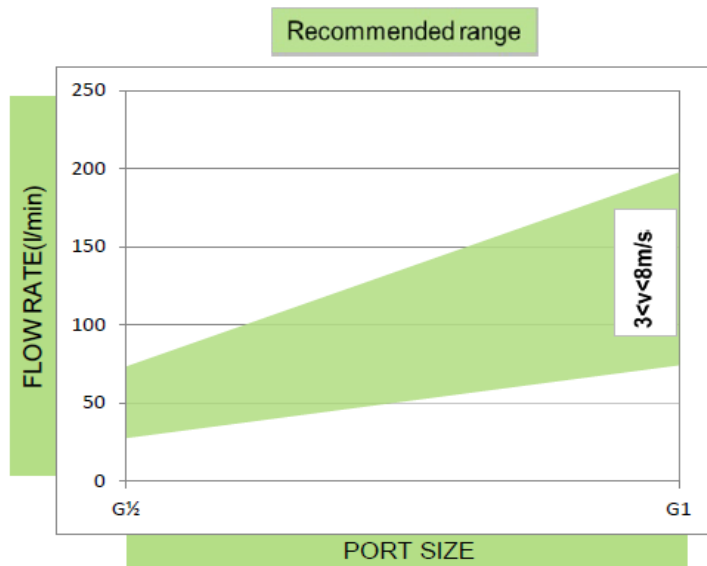
Pressure Drop Graphs (Δp)

Pressure Drop of Filter Housing only

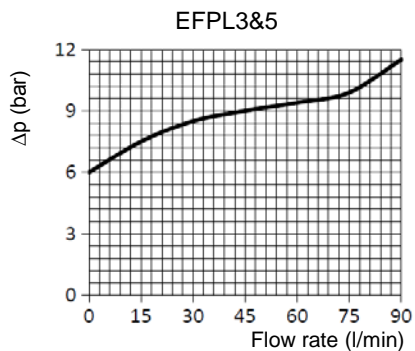
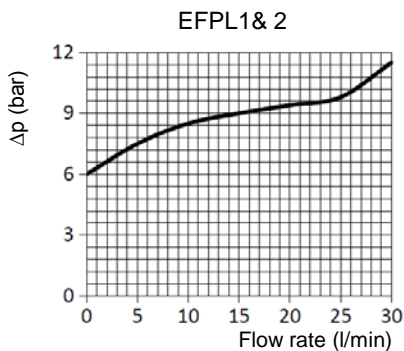


Graph of oil flow velocity

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



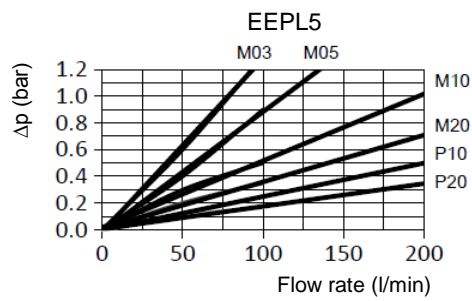
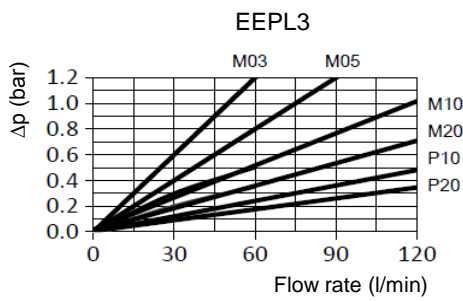
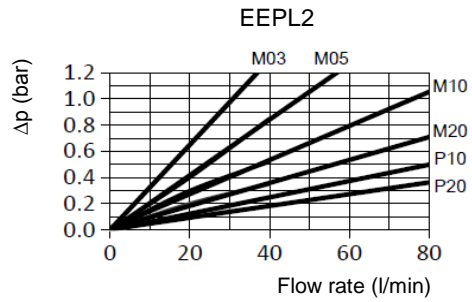
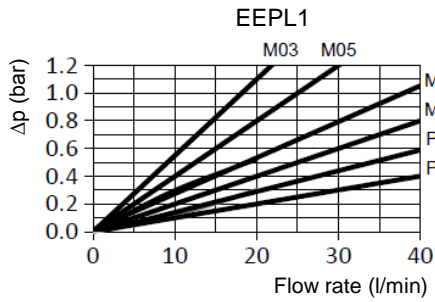
Pressure drop graph on by-pass valve



EFPL Medium Pressure Filter Series

Pressure Drop Graphs (Δp)

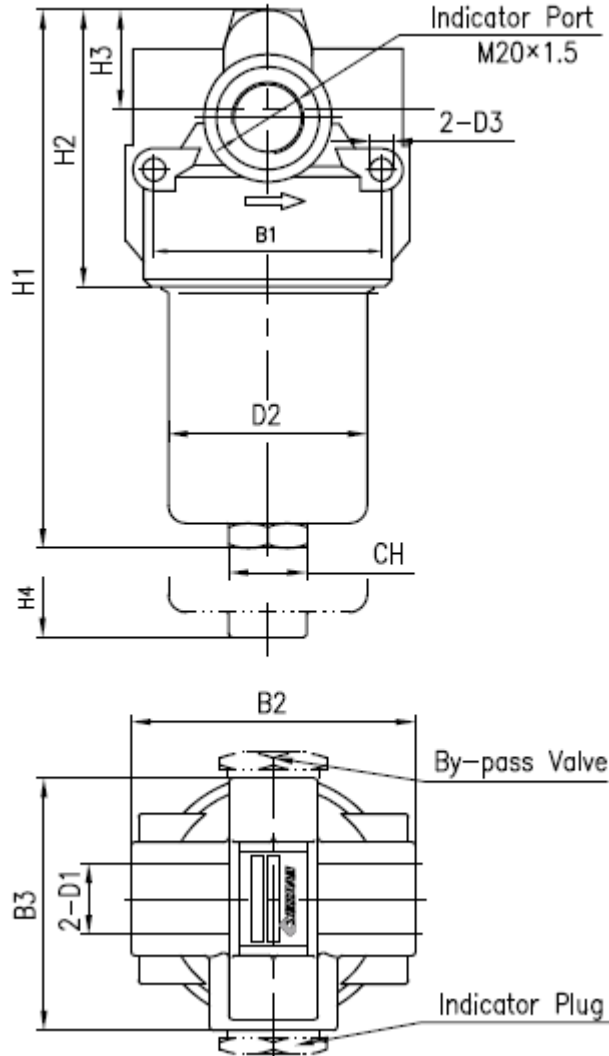
Pressure Drop with Clean Filter Elements (M and P filter media)



EFPL Medium Pressure Filter Series

Technical Drawings and Dimension

EFPL1, EFPL2, EFPL3 & EFPL5



Threaded Connection Ports

Type	Connection Port (BSP/NPT/SAE) Height		H2	H3	H4	B1	B2	B3	D2	D3	CH
	inch	mm									
EFPL1	1/2"	157	78	28	60	64	76	75	55	6.5	22
EFPL2	SAE08	244	78	28	60	64	76	75	55	6.5	22
EFPL3	1"	221	100	37	60	94	114	92	86	8.5	25
EFPL5	SAE16	277	100	37	60	94	114	92	86	8.5	25

EFPL Medium Pressure Filter Series

Order Codes

Filter Assembly	A	B	C	D	-	E	-	F	Element Series	A	D	E
EFPL	1	BB	11	B	-	M20	-	E50	EEPL	1	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
1	30 l/min
2	60 l/min
3	110 l/min
5	160 l/min

B Connection Ports

A08	SAE08
A16	SAE16

BB	BSP ½"
BD	BSP 1"
NB	NPT ½"
ND	NPT 1"

C By-pass Valve

00	No
11	6.0 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
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

F Indicator

00	No	Connection
V50	5 bar visual	M20*1.5 Thread
E50	5 bar visual/electrical	M20*1.5 Thread
E50S	5 bar electrical	M20*1.5 Thread
E50T	5 bar electrical with thermostat (30°C)	M20*1.5 Thread



EFPR Series

EVOTEK High Pressure Filters

Product Description

- Operating pressure up to 210 bar
- 240 l/min max. flow rate
- installation in pressure line
- application in Saw mills, Aircraft ground support equipment, Asphalt pavers, Hydraulic fan drives, Power steering circuits, Cement trucks, Servo control protection, Logging equipment
- 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 ½", ¾" to 1" and SAE08/SAE12/SAE16 threads

Flow Rate:

max. 240 l/min

Operating Pressure:

max. 210 bar

Burst Pressure:

min. 630 bar

Element Collapse Pressure:

10 bar (P series), 21 bar (M series), 30bar (Y series)

By-pass Opening Pressure:

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

Material

Seals:

NBR or FPM (-10°C to 100°C)

Filter Head:

Aluminum

Filter Bowl:

Aluminum

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)

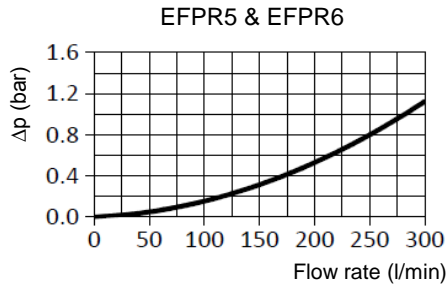
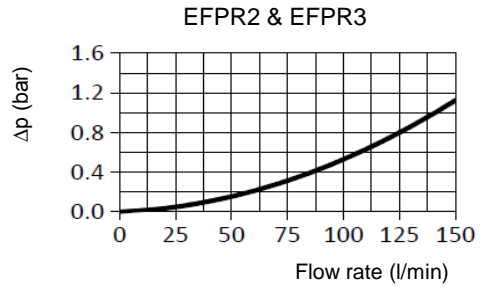
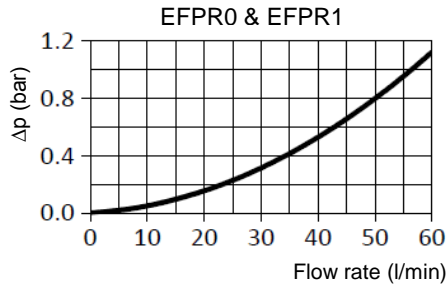
Tested according to ISO standards:

- 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

EFPL High Pressure Filter Series

Pressure Drop Graphs (Δp)

Pressure Drop of Filter Housing only

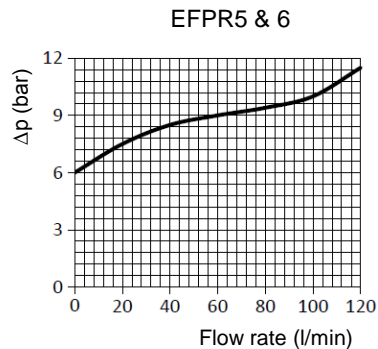
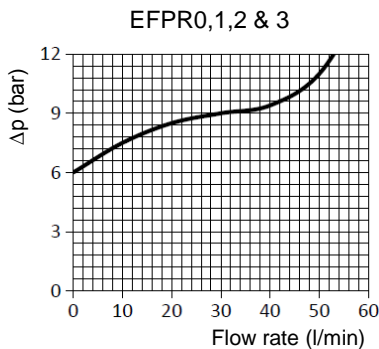


Graph of oil flow velocity

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



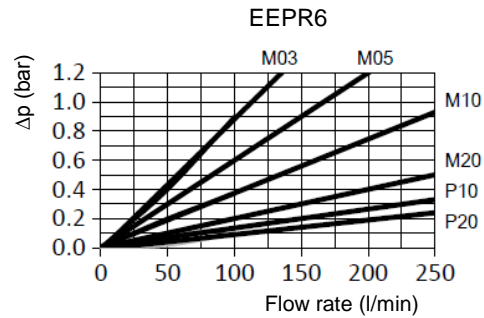
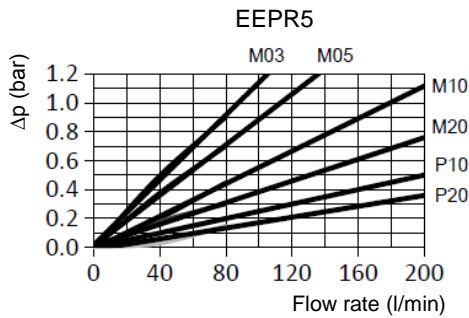
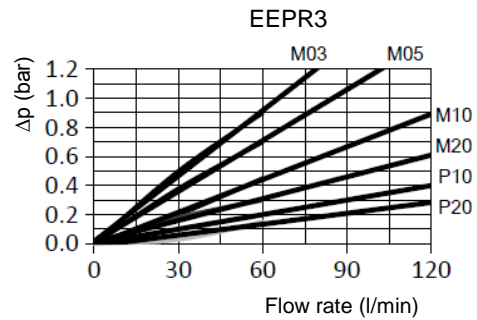
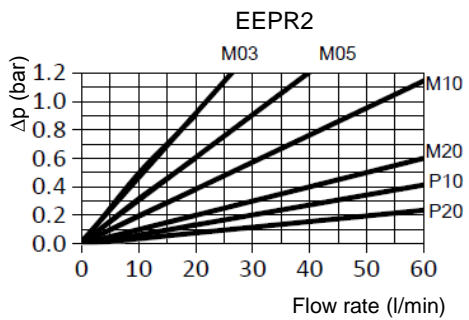
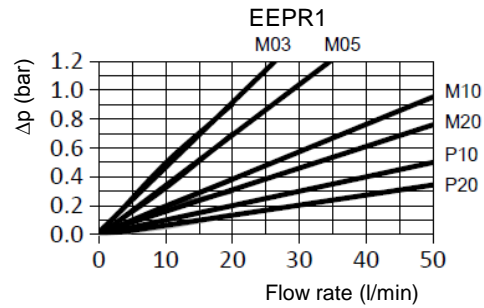
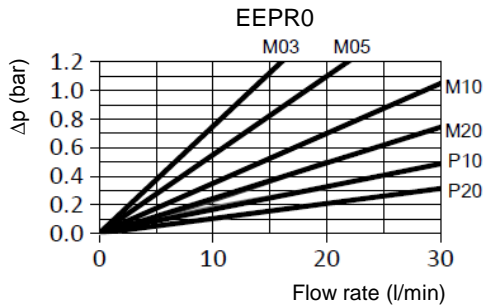
Pressure drop graph on by-pass valve



EFPR High Pressure Filter Series

Pressure Drop Graphs (Δp)

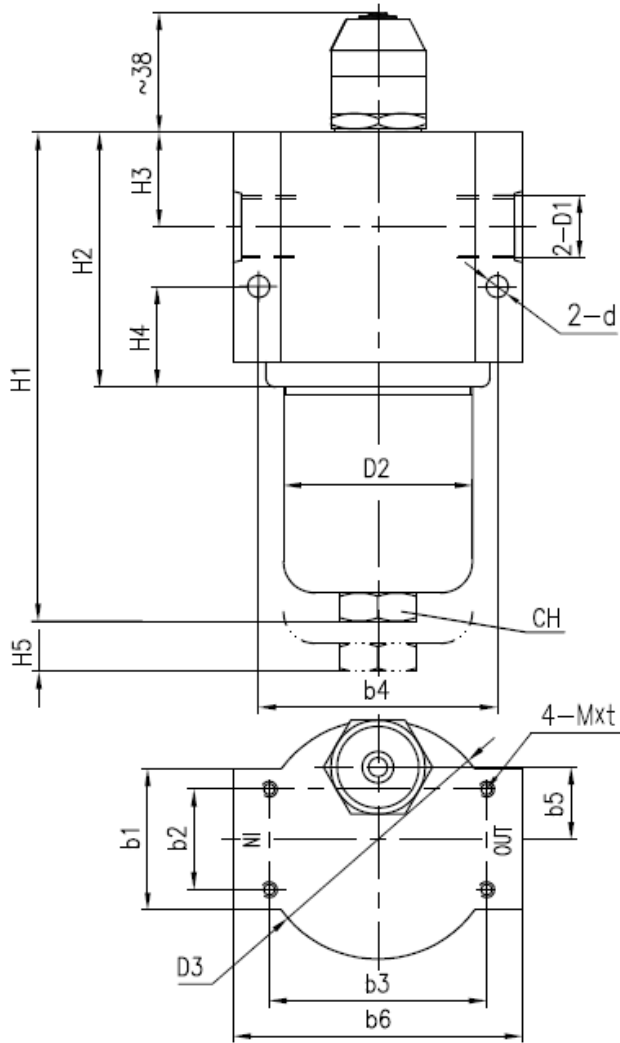
Pressure Drop with Clean Filter Elements (M and P filter media)



EFPR High Pressure Filter Series

Technical Drawings and Dimension

EFPR0, EFPR1, EFPR2 & EFPR3



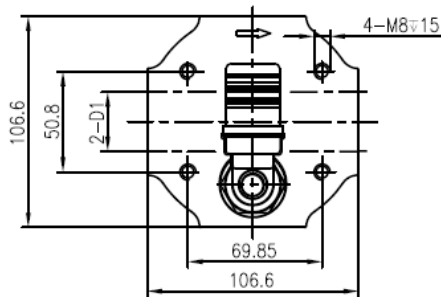
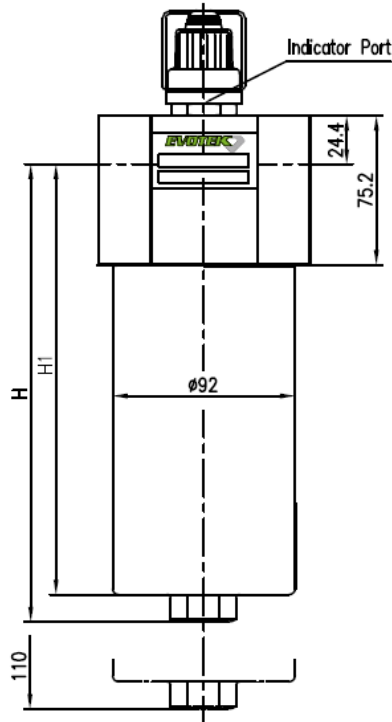
Threaded Connection Ports

Type	Connection Port																		
	(BSP/NPT/SAE)	Height																	
	inch	mm	H1	H2	H3	H4	H5	D2	D3	2-d	b1	b2	b3	b4	b5	b6	CH	M	t
EFPR0	1/2"	12.7	157	82	30	32	50	60	76	7	45	32	69.2	76	23	92	24	M6	18
EFPR1	SAE08	20.3	200	82	30	32	50	60	76	7	45	32	69.2	76	23	92	24	M6	18
EFPR2	3/4", 1"	25.4, 25.4	203	90	26	30	60	69	85	8.5	60	47	69.2	90	25	105	27	M8	21
EFPR3	SAE12 SAE16	31.8, 41.3	298	90	26	30	60	69	85	8.5	60	47	69.2	90	25	105	27	M8	21

EFPR High Pressure Filter Series

Technical Drawings and Dimension

EFPR5& EFPR6



Threaded Connection Ports

Type	Connection Port (BSP/NPT/SAE)		Height	
	inch	mm	H1	H
EFPR5	1"	210	230	
EFPR6	SAE16	320	339	

EFPR High Pressure Filter Series

Order Codes

Filter Assembly Series	A	B	C	D	-	E	-	F	Element Series	A	D	E
EFPR	2	BC	11	B	-	M20	-	X50	EEPR	2	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

0	20 l/min
1	40 l/min
2	60 l/min
3	110 l/min
5	160 l/min
6	240 l/min

B Connection Ports

A08	SAE08
A12	SAE12
A16	SAE16
BB	BSP ½"
BC	BSP ¾"
BD	BSP 1"
NB	NPT ½"
NC	NPT ¾"
ND	NPT 1"

C By-pass Valve

00	No
11	6.0 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
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

F Indicator

	No	Connection
X50	5 bar visual	M20*1.5 Thread
Y50	5 bar visual/electrical	M20*1.5 Thread
Y50S	5 bar electrical	M20*1.5 Thread
Y50T	5 bar electrical with thermostat (30°C)	M20*1.5 Thread

EFPB Series

EVOTEK High Pressure Filters



Product Description

- Operating pressure up to 315 bar
- 120 l/min max. flow rate
- installation in pressure line
- application in Power units, Machine tools, Die Casting and agricultural machines
- 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 1/2" to 3/4" and SAE08/SAE12 threads

Flow Rate:

max. 120 l/min

Operating Pressure:

max. 315 bar

Burst Pressure:

min. 950 bar

Element Collapse Pressure:

10 bar (P series), 21 bar (M series), 30bar (Y series)

By-pass Opening Pressure:

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

Material

Seals:

NBR or FPM (-10°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

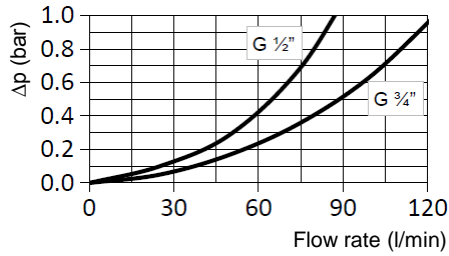
ISO16889 Multi-Pass Test

EFPB High Pressure Filter Series

Pressure Drop Graphs (Δp)

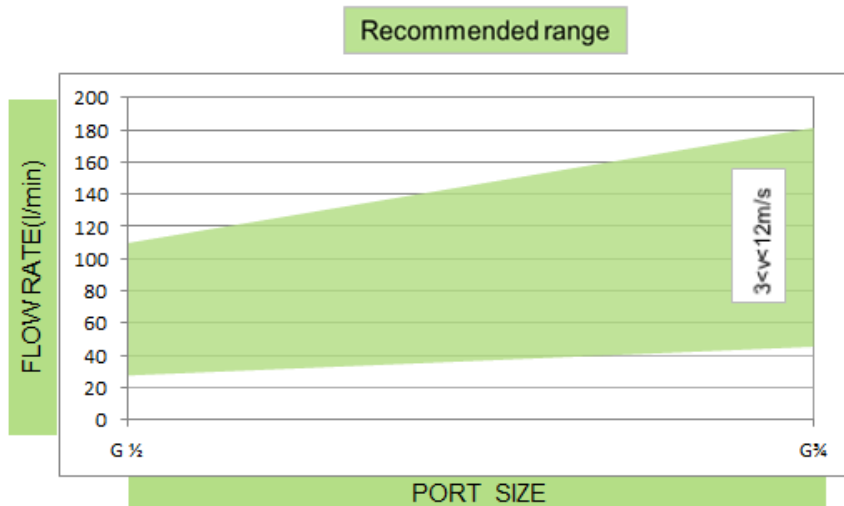
Pressure Drop of Filter Housing only

EFPB1, 2 & 3



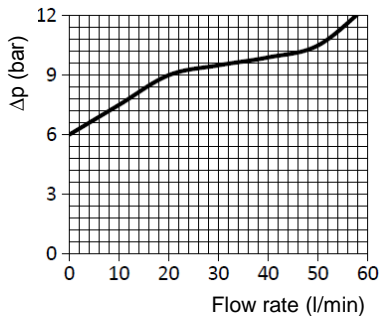
Graph of oil flow velocity

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



Pressure drop graph on by-pass valve

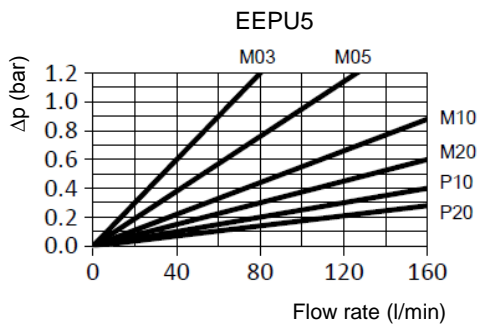
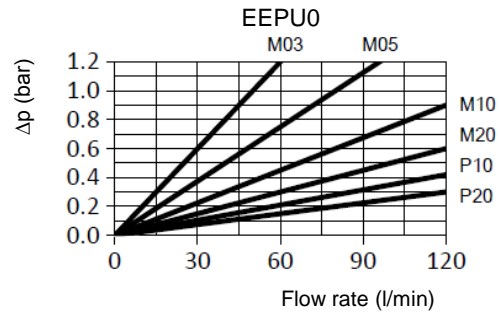
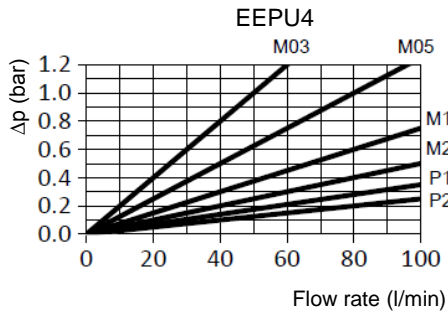
EFPB1, 2 & 3



EFPB High Pressure Filter Series

Pressure Drop Graphs (Δp)

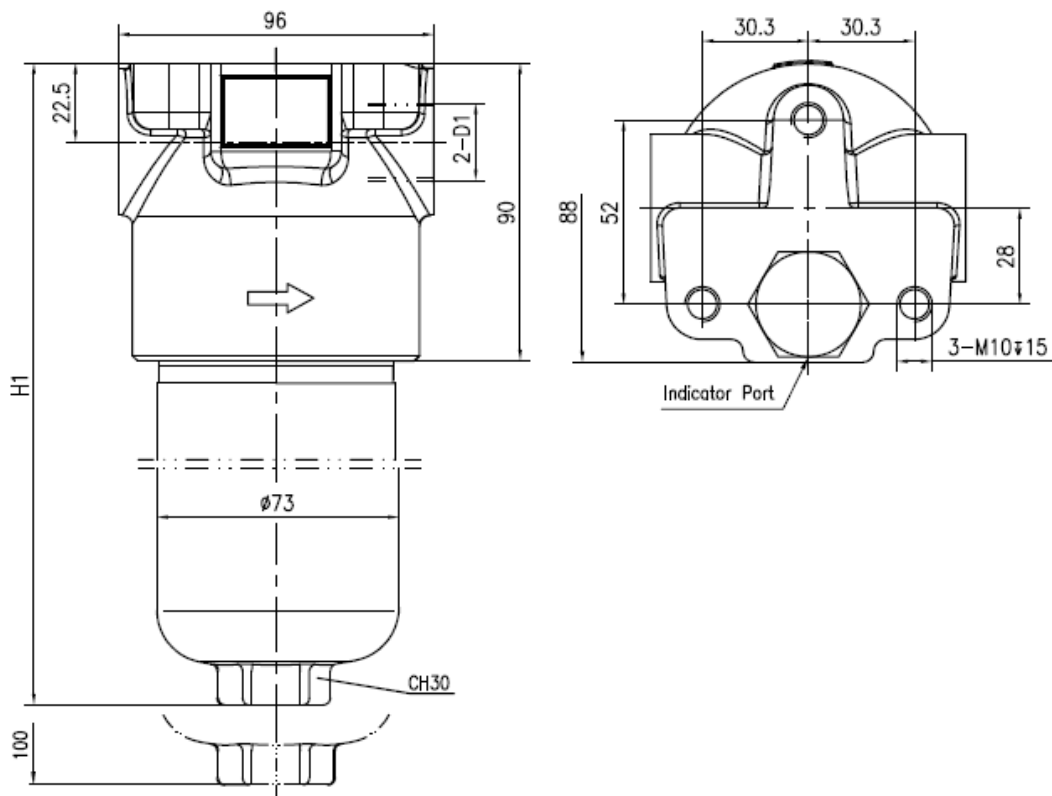
Pressure Drop with Clean Filter Elements (M and P filter media)



EFPB High Pressure Filter Series

Technical Drawings and Dimension

EFPB 1/2/3



Threaded Connection Ports

Type	Connection Port (BSP/NPT/SAE)	Height
	inch	mm
EFPB1	D1 1/2"	H1 202
EFPB2	3/4" SAE08	248
EFPB3	SAE12	298

EFPB High Pressure Filter Series

Order Codes

Filter Assembly	A	B	C	D	-	E	-	F	Element Series	A	D	E
EFPB	3	BC	00	B	-	M20	-	E50	EEPU	5	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	Element
1	80 l/min	EEPU4
2	100 l/min	EEPU0
3	120 l/min	EEPU5

B Connection Ports

A08	SAE08
A12	SAE12
BB	BSP 1/2"
BC	BSP 3/4"
NB	NPT 1/2"
NC	NPT 3/4"

C By-pass Valve

00	No
11	6.0 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
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

F Indicator

00	No	Connection
V50	5 bar visual	M20*1.5 Thread
E50	5 bar visual/electrical	M20*1.5 Thread
E50S	5 bar electrical	M20*1.5 Thread
E50T	5 bar electrical with thermostat (30°C)	M20*1.5 Thread

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 heavy duty, industry , construction and agricultural machines
- compliant with industry relevant ISO standards(see ISO test below)

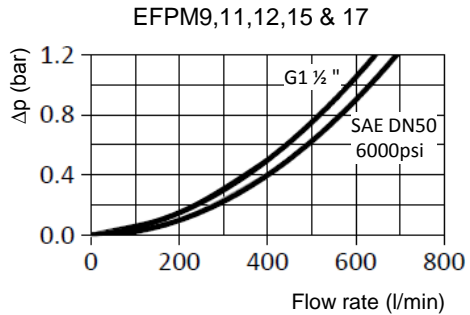
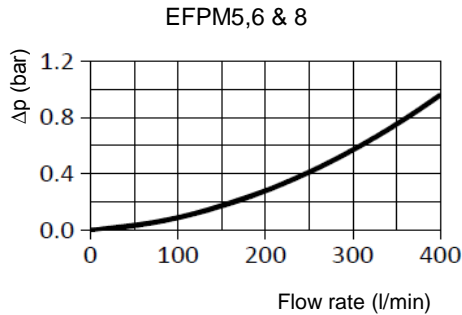
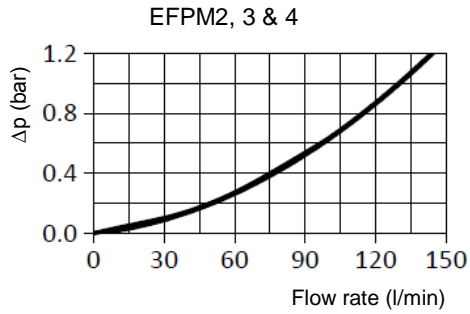
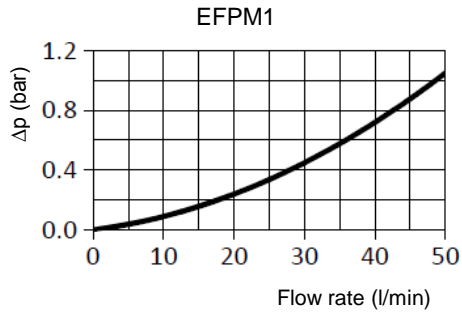
Technical Specifications

Application	Inline High Pressure Filter
Port Sizes:	Threaded Connections according to BSP and NPT standard in ½", ¾", 1-1¼", 1-½" and SAE08/SAE12/SAE20/SAE24 threads
Flow Rate:	Flange Connections in SAE DN50 for 6000psi max. 680 l/min
Operating Pressure:	max. 420 bar(EFPM1 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:	Δp=6 bar + 0.6 bar
Material	
Seals:	NBR or FPM (-10°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



Graph of oil flow velocity

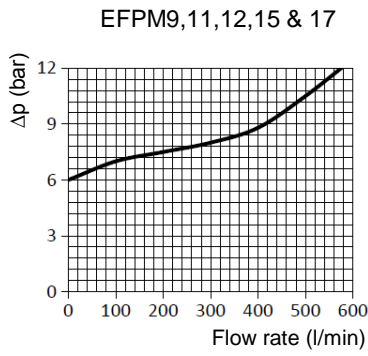
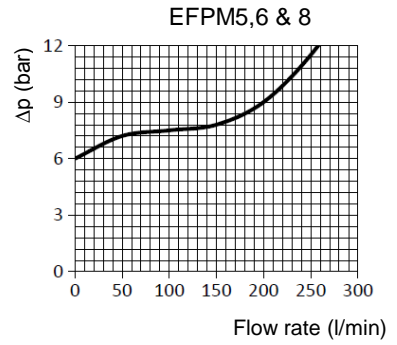
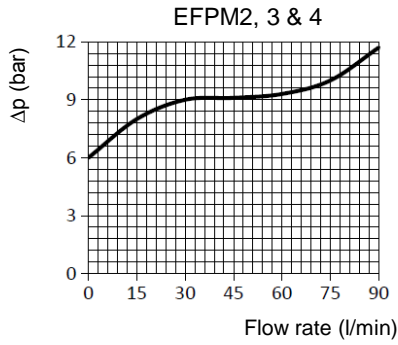
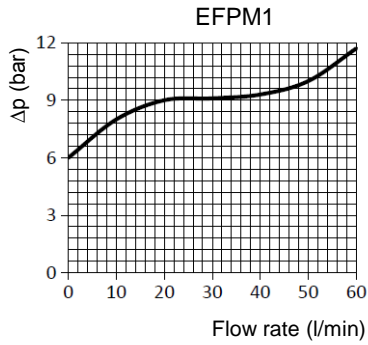
(we recommend to select size of the filter considering range of oil velocity between 3 to 12 m/s for pressure series)



EFPM High Pressure Filter Series

Pressure Drop Graphs (Δp)

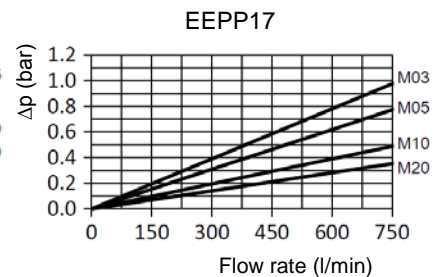
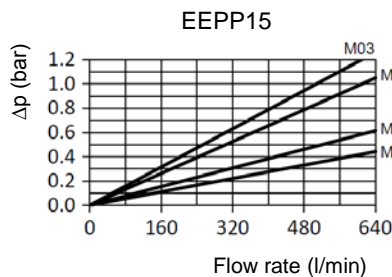
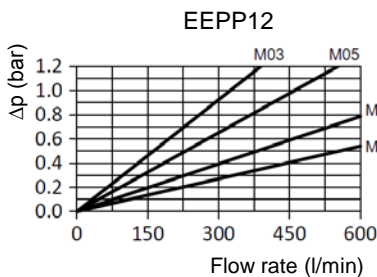
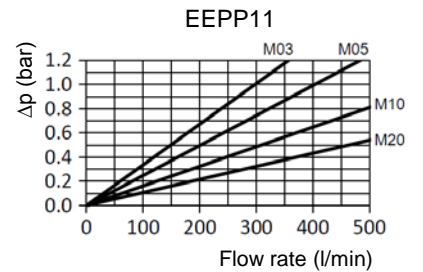
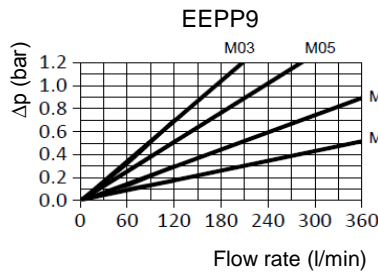
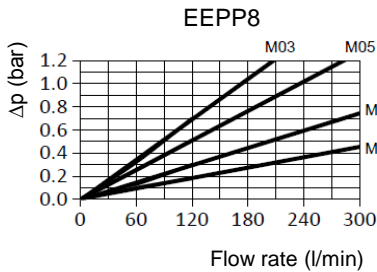
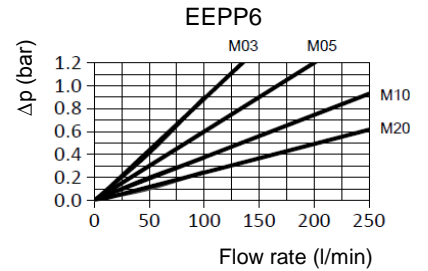
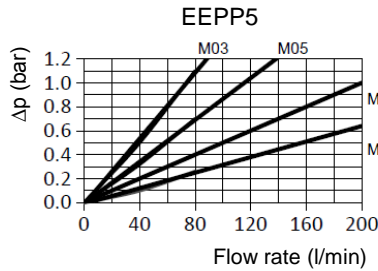
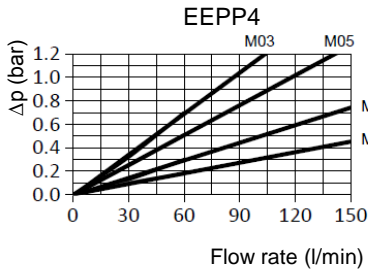
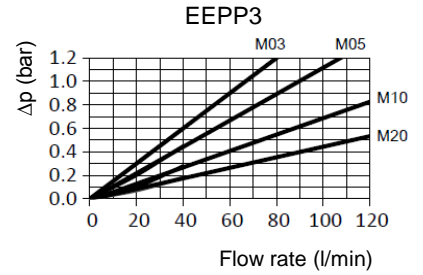
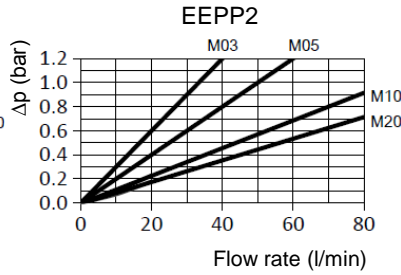
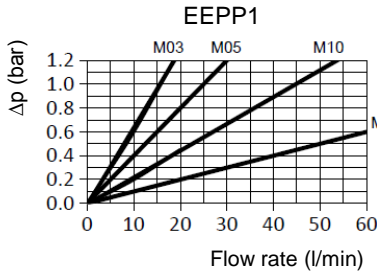
Pressure drop graph on by-pass valve



EFPM High Pressure Filter Series

Pressure Drop Graphs (Δp)

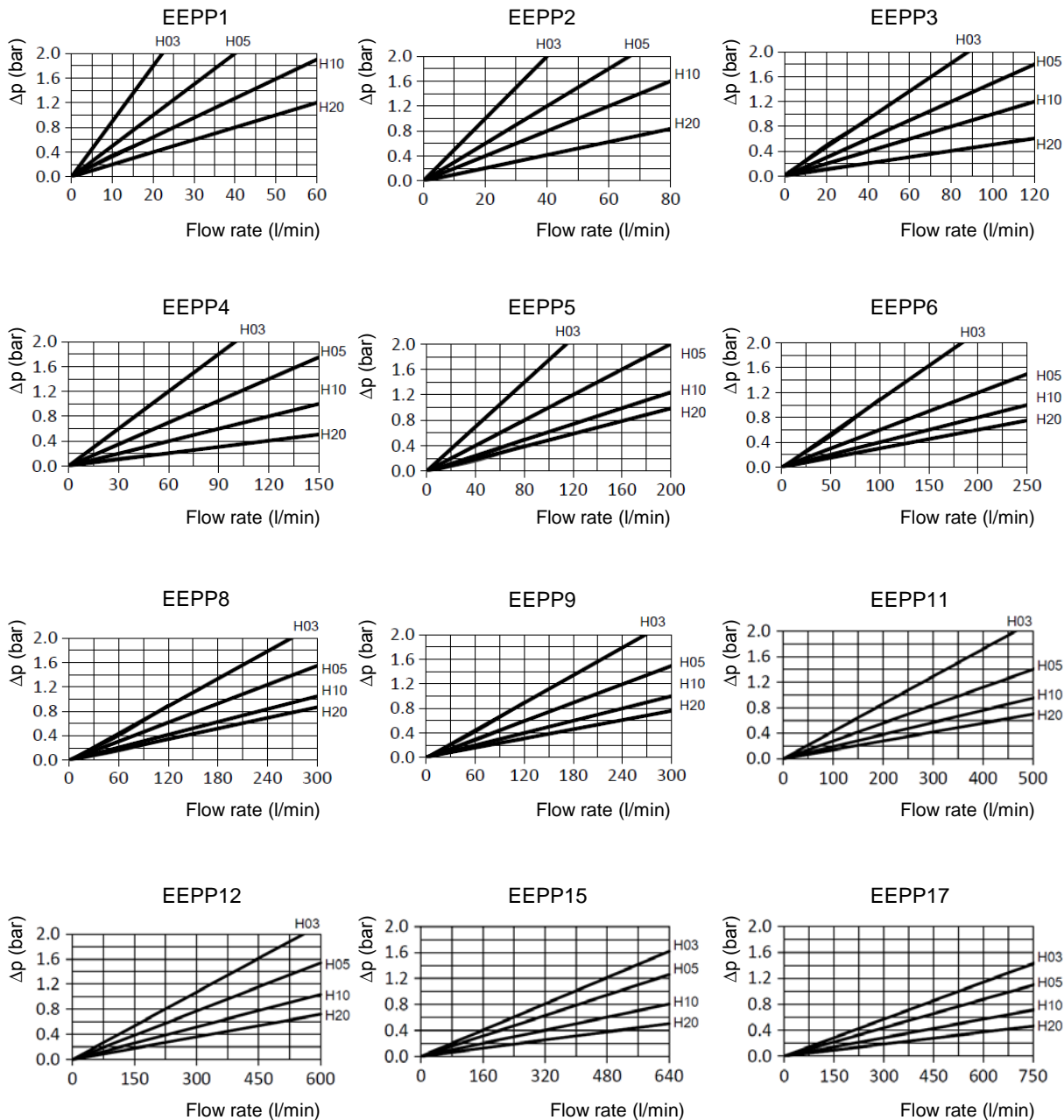
Pressure Drop with Clean Filter Elements (M filter media)



EFPM High Pressure Filter Series

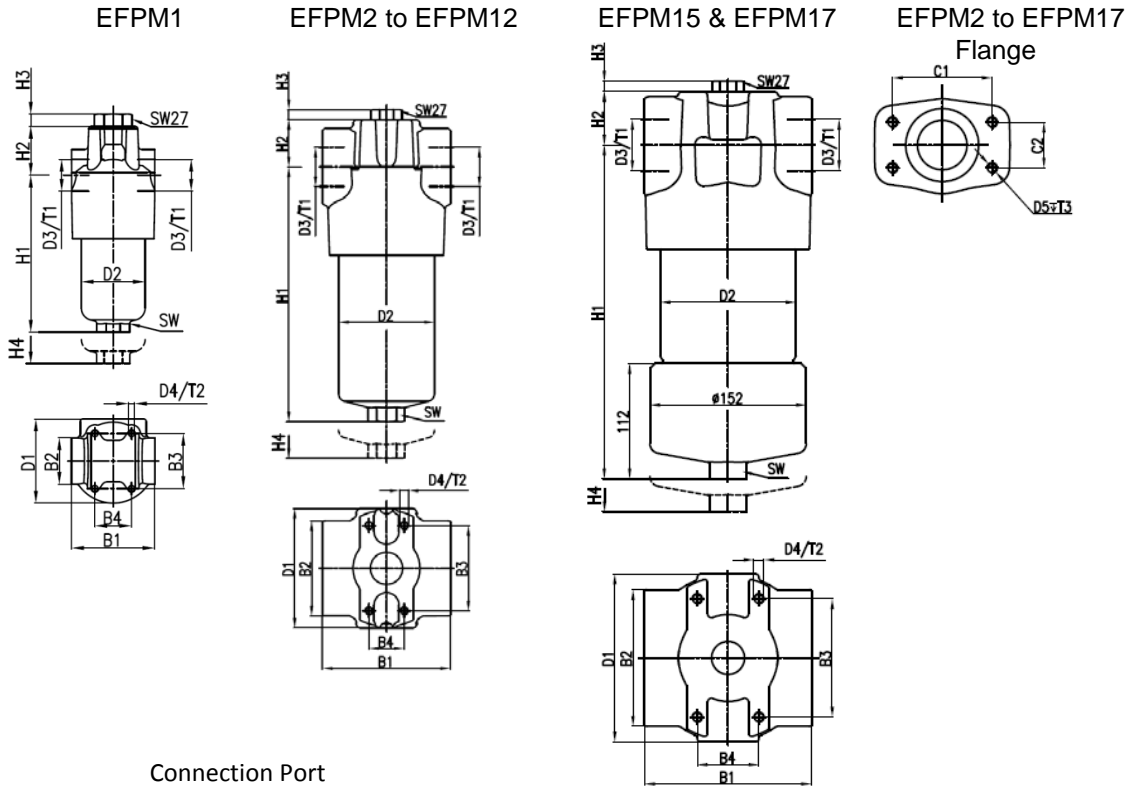
Pressure Drop Graphs (Δp)

Pressure Drop with Clean Filter Elements (H filter media)



EFPM High Pressure Filter Series

Technical Drawings and Dimension



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
EFPM1	1/2", SAE08	68	38	45	30	-	-	69	52	M5	-	131.5	38	6	75	24	14	6	-
EFPM2	3/4", 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	3/4", 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	3/4", 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	1 1/4", 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	1 1/4", 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	1 1/4", 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	1 1/2", 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	1 1/2", 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	1 1/2", 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*	1 1/2", 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*	1 1/2", 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	A	B	C	D	-	E	-	F	Element Series	A	D	E
EFPM	3	BC	00	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

1	30 l/min
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

A08	SAE08
A12	SAE12
A20	SAE20
A24	SAE24
BB	BSP ½"
BC	BSP ¾"
BE	BSP 1-¼"
BF	BSP 1-½"
NB	NPT 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	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	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



EFPU Series

EVOTEK High Pressure Filters

Product Description

- Operating pressure up to 420 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

Inline High Pressure Filter

Port Sizes:

Threaded Connections according to BSP and NPT standard in 1/2" to 1-1/2" and SAE08/SAE12/SAE16/SAE20/SAE24 threads

Flow Rate:

Flange Connections in SAE DN25 / SAE DN32 / SAE DN40 for 3000psi and SAE DN20 / SAE DN32 for 6000psi

Operating Pressure:

max. 400 l/min

Burst Pressure:

max. 420 bar

Element Collapse Pressure:

min. 1260 bar

By-pass Opening Pressure:

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

Material

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

Seals:

NBR or FPM (-10°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

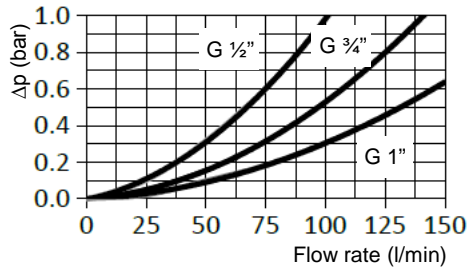
ISO16889 Multi-Pass Test

EFPU High Pressure Filter Series

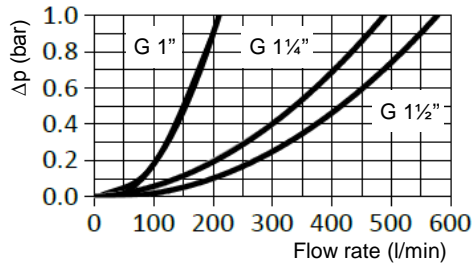
Pressure Drop Graphs (Δp)

Pressure Drop of Filter Housing only

EFPU1, 2, 3, 4 & 5



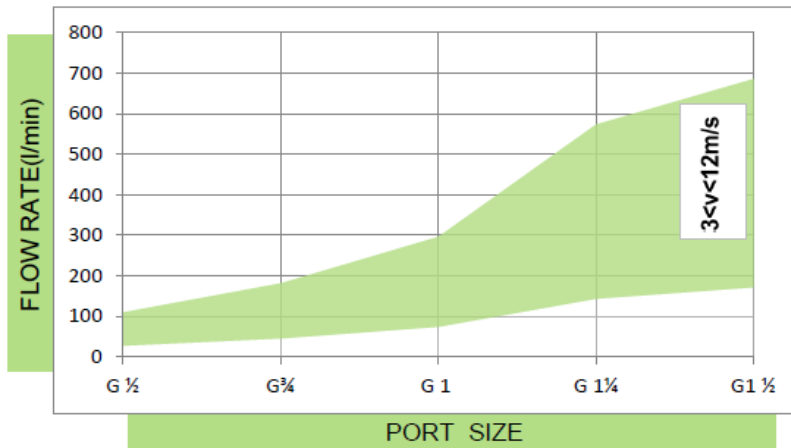
EFPU6, 8, 9 & 10



Graph of oil flow velocity

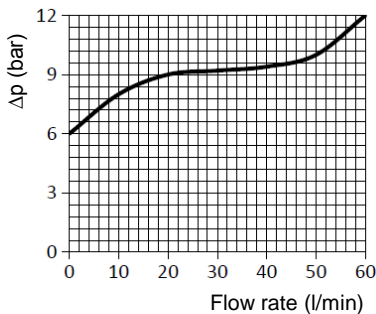
(we recommend to select size of the filter considering range of oil velocity between 3 to 12 m/s for pressure series)

Recommended range

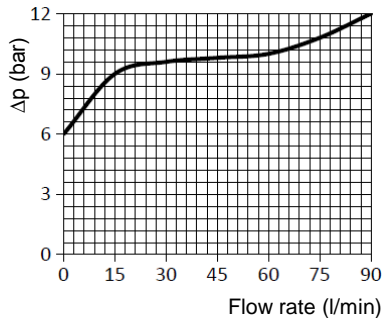


Pressure drop graph on by-pass valve

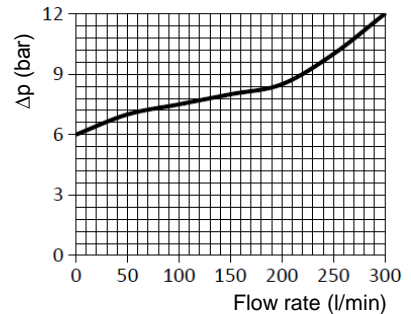
EFPU1, 2 & 3



EFPU4 & 5



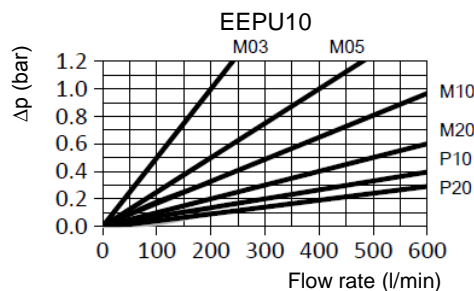
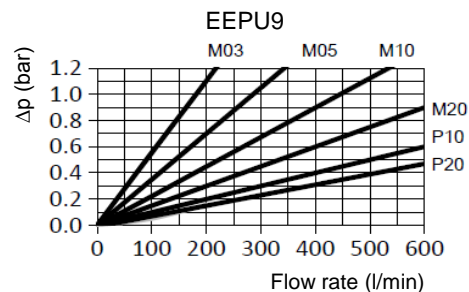
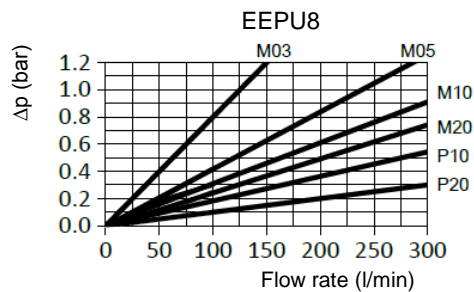
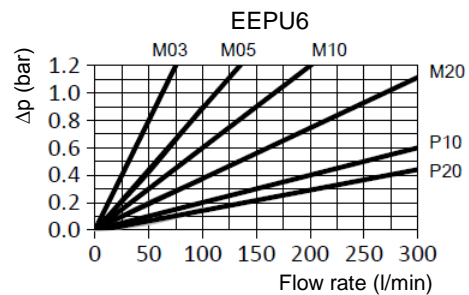
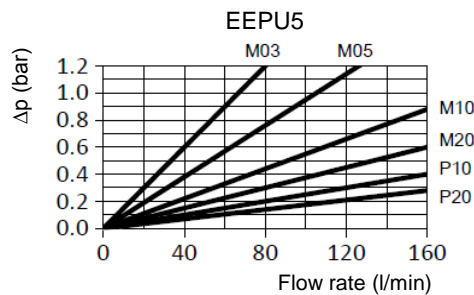
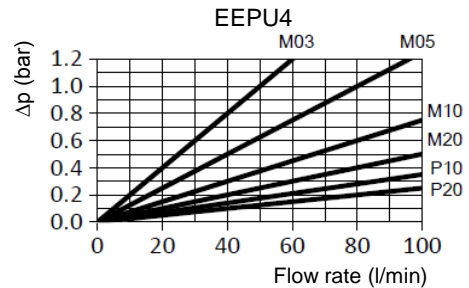
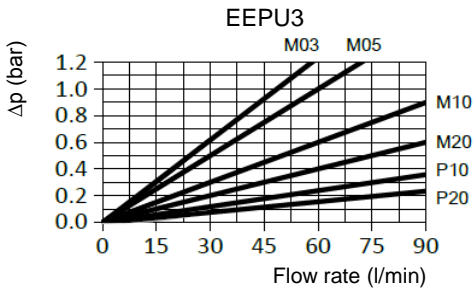
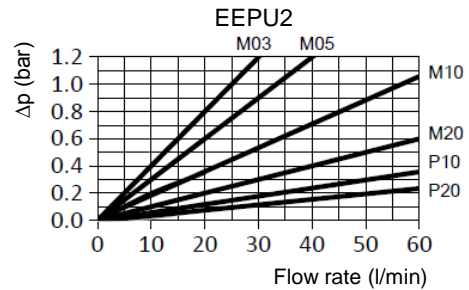
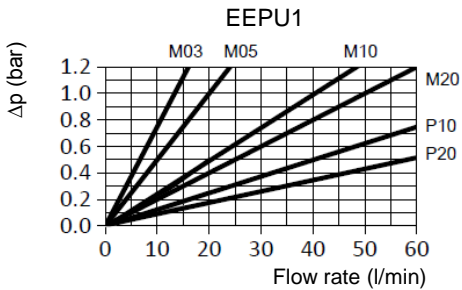
EFPU6, 8, 9 & 10



EFPU High Pressure Filter Series

Pressure Drop Graphs (Δp)

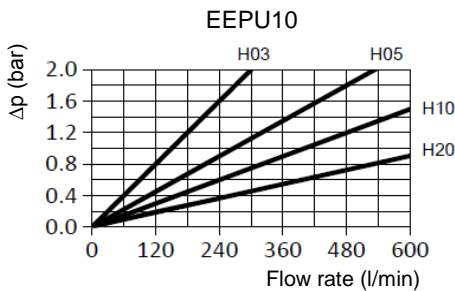
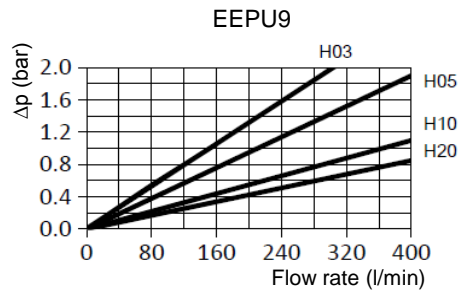
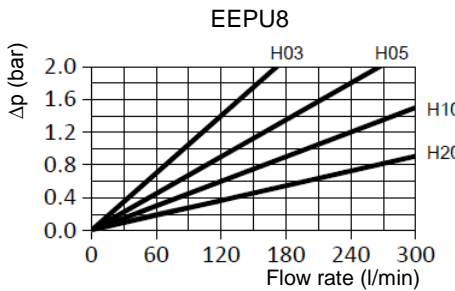
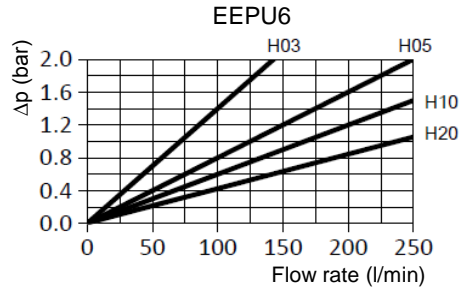
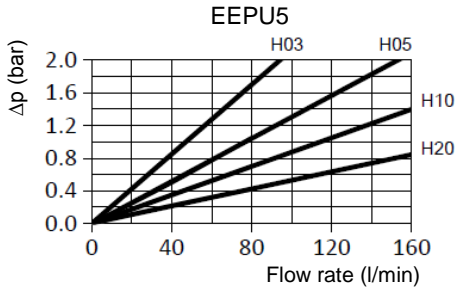
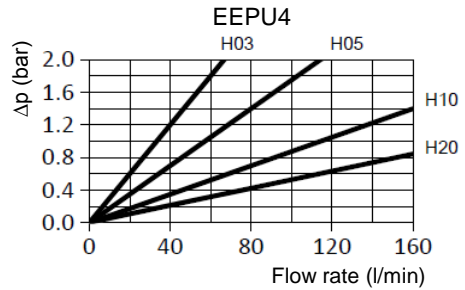
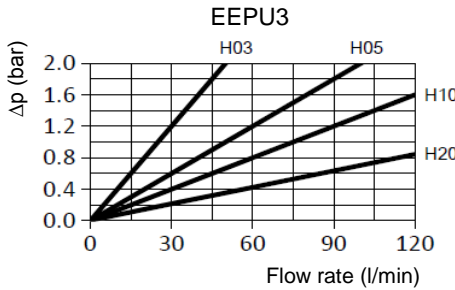
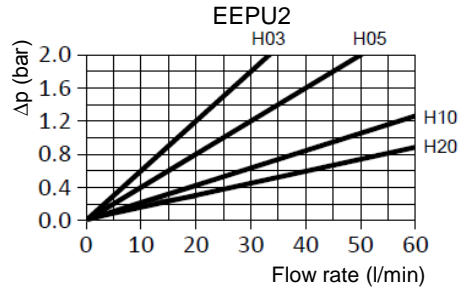
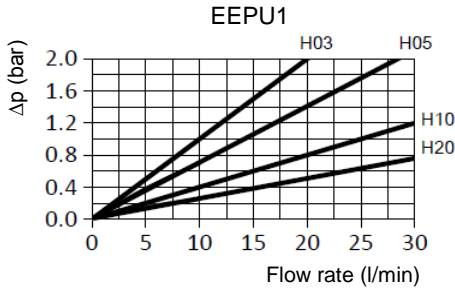
Pressure Drop with Clean Filter Elements (M and P filter media)



EPPU High Pressure Filter Series

Pressure Drop Graphs (Δp)

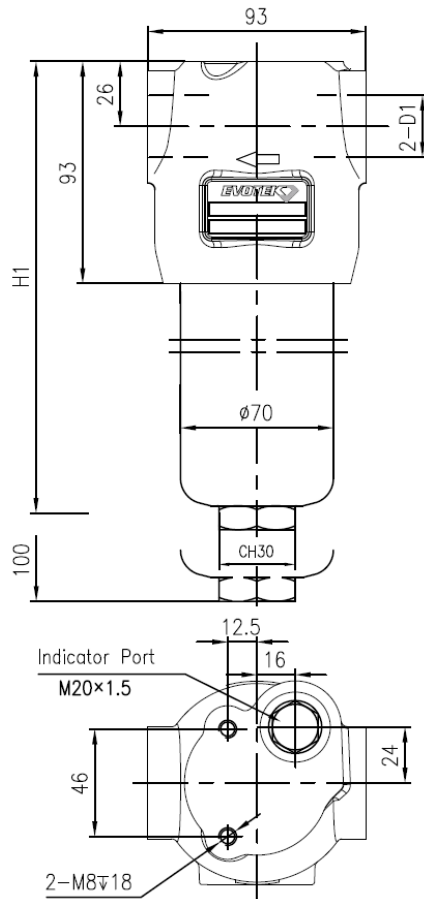
Pressure Drop with Clean Filter Elements (H filter media)



EFPU High Pressure Filter Series

Technical Drawings and Dimension

EFPU 1/2/3

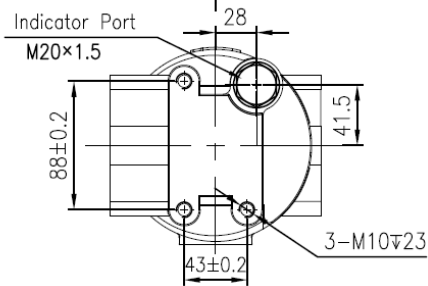
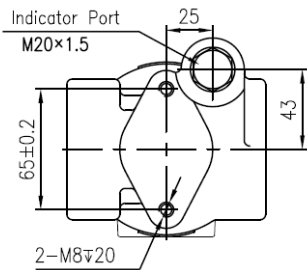
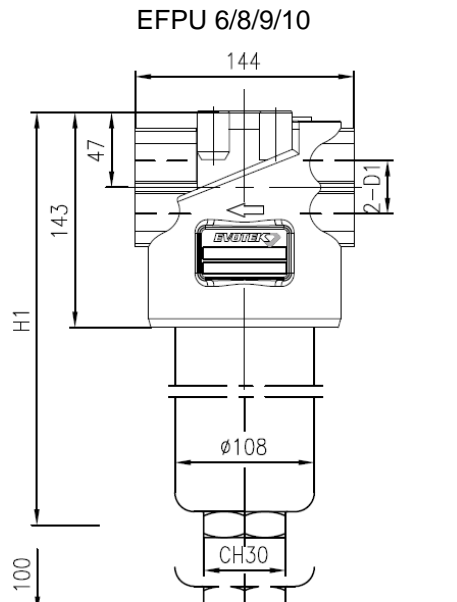
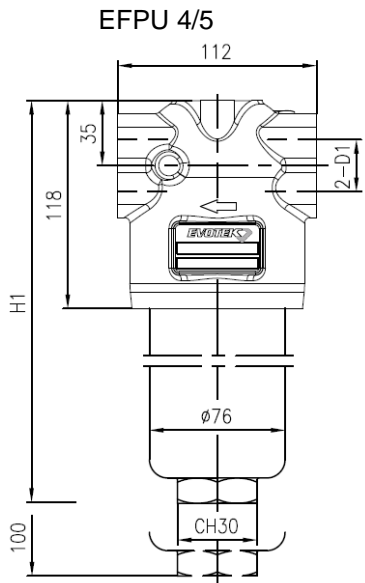


Threaded Connection Ports

Type	Connection Port (BSP/NPT/SAE)	Height	Weight
	inch	mm	kg
EFPU1	D1	H1	
EFPU1	1/2" - 3/4"	170	4.3
EFPU2	SAE08	205	4.5
EFPU3	SAE12	303	5.2

EFPU High Pressure Filter Series

Technical Drawings and Dimension



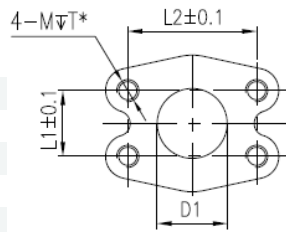
Threaded Connection Ports

Type	Connection Port	Height	Weight
	(BSP/NPT/SAE)	mm	kg
	inch	H1	
EFPU4	¾" - 1"	228	6.5
EFPU5	SAE12 SAE16	320	8.1

Type	Connection Port	Height	Weight
	(BSP/NPT/SAE)	mm	kg
	inch	H1	
EFPU6	1" / ¼" / 1½"	245	11.0
EFPU8	SAE16	337	13.9
EFPU9	SAE20	457	17.2
EFPU10	SAE24	558	22.0

Flange Mounting - bolt dimensions

Type	Flange	Connection Max.		Installation Details			Min. Thread
		Port	Pressure	mm	mm	metric	Depth
	SAE	inch	bar	L1	L2	M	T*
		D1					
EFPU4/5	SAE DN25(3000psi)	1"	210	26.2	52.4	M10	16
	SAE DN20(6000psi)	¾"	420	23.8	50.8	M10	19
	SAE DN32(3000psi)	1-¼"	210	30.2	58.7	M10	22
EFPU6/8/9/10	SAE DN40(3000psi)	1-½"	210	35.7	69.9	M12	21
	SAE DN32(6000psi)	1-¼"	420	31.8	66.7	M14	23



EFPU High Pressure Filter Series

Order Codes

Filter Assembly	A	B	C	D	-	E	-	F	Element Series	A	D	E
EFPU	3	BC	00	B	-	M20	-	E50	EEPU	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

1	30 l/min
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
10	400 l/min

B Connection Ports

A08	SAE08
A12	SAE12
A16	SAE16
A20	SAE20
A24	SAE24
BB	BSP ½"
BC	BSP ¾"
BD	BSP 1"
BE	BSP 1-¼"
BF	BSP 1-½"
NB	NPT ½"
NC	NPT ¾"
ND	NPT 1"
NE	NPT 1-¼"
NF	NPT 1-½"
FC	SAE DN25 (3000psi)
FD	SAE DN32 (3000psi)
FE	SAE DN40 (3000psi)
SB	SAE DN20 (6000psi)
SD	SAE DN32 (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
------------------	------------	-------------------

P10	Cellulose	10µm	10 bar
P20	Cellulose	20µm	10 bar
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

F Indicator

00	No	Connection
V50	5 bar visual	M20*1.5 Thread
E50	5 bar visual/electrical	M20*1.5 Thread
E50S	5 bar electrical	M20*1.5 Thread
E50T	5 bar electrical with thermostat (30°C)	M20*1.5 Thread

