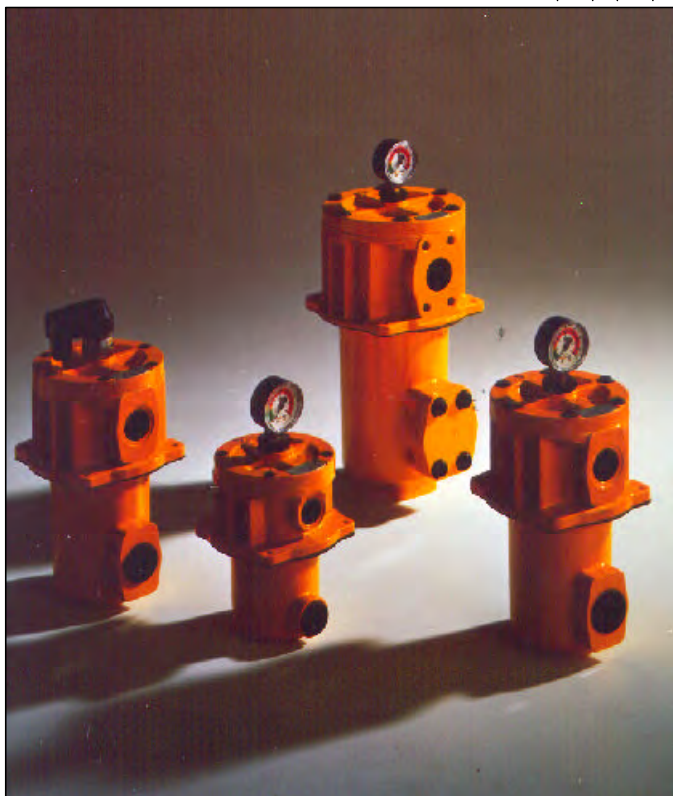


SERIES FAS SUCTION FILTERS



FAS SERIES - SUCTION FILTERS

FAS series filters are designed for a variety of filtration requirements for suction applications.

The particular design of these filters allows them to be mounted semi-immersed in the reservoir or inline.

FAS series filters are manufactured from aluminium alloy and are available in several sizes with flow rates up to 850 l/min (225 gpm). These filters are particularly suitable for stationary industrial applications, such as hydraulic presses, injection moulding machines and heavy industry.

FAS series filters can be supplied with contamination indicator, either visual or electrical.

A bypass valve, opening at 30 kPa (4.5 psi), can be supplied on request.



TECHNICAL SPECIFICATIONS

MATERIALS :

Bowl:	Anodized Aluminium - Steel (only FAS 850)
Cover:	Anodized Aluminium
Seals:	"A" Series: Nitrile (Buna-N) / "V" Series: Viton
Filter element:	Square wire mesh
End caps and tube:	steel

OPERATING TEMPERATURE RANGE : From -25 to +110 °C

BYPASS VALVE

SETTING : 30 KPa (4.5 psi) ±10%

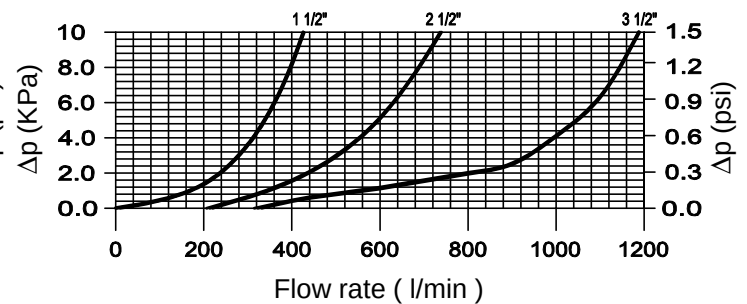
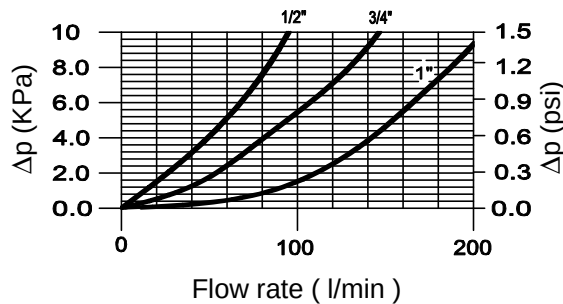
10 KPa = 0.1 bar

EFFECTIVE FILTER AREA OF FILTER ELEMENTS :

FILTER ELEMENT TYPE	Area cm ² (in ²)
	M25 - M60 - M90 - M250
CU 025	280 (43 in ²)
CU 040	480 (74 in ²)
CU 100	770 (119 in ²)
CU 250	1820 (282 in ²)
CU 630	3450 (535 in ²)
CU 850	11600 (1798 in ²)

FILTER HOUSING PRESSURE DROP :

NOTE: The following diagrams were obtained using mineral oil with a density = 0,86 Kg/dm³



FILTER ELEMENT PRESSURE DROP:

NOTE:

For calculating the pressure drop (KPa) of filter elements, the "K" coefficient shown in the table must be multiplied by the flow rate (l/min). (The values refer to tests made using a mineral oil having a kinematic viscosity = 30 mm²/s = 150 SUS)

FILTER ELEMENT TYPE	"K" Coefficient			
	M25	M60	M90	M250
CU 025	0.072	0.051	0.040	0.032
CU 040	0.056	0.048	0.043	0.046
CU 100	0.040	0.033	0.026	0.021
CU 250	0.016	0.014	0.012	0.010
CU 630	0.013	0.010	0.0093	0.008
CU 850	0.0066	0.0057	0.005	0.0041

EXAMPLE:

Filter element type CA 100 M60 N

K coefficient = 0.033

Flow rate Q = 75 l/min

$$\Delta p = K \times Q = 0.033 \times 75 = 2.4 \text{ KPa}$$

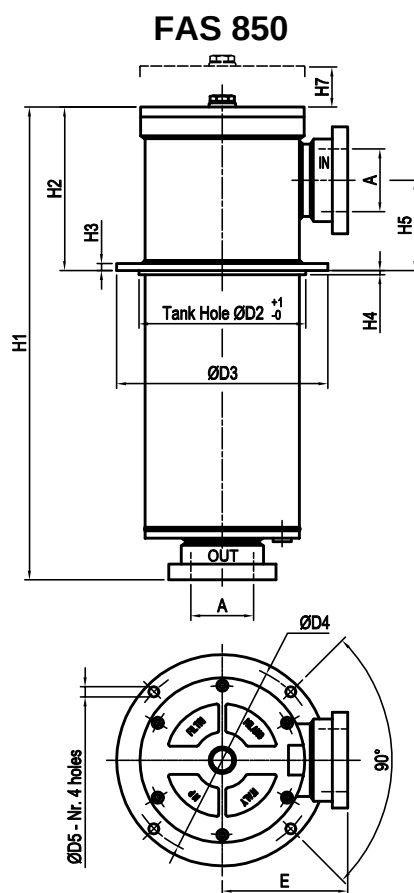
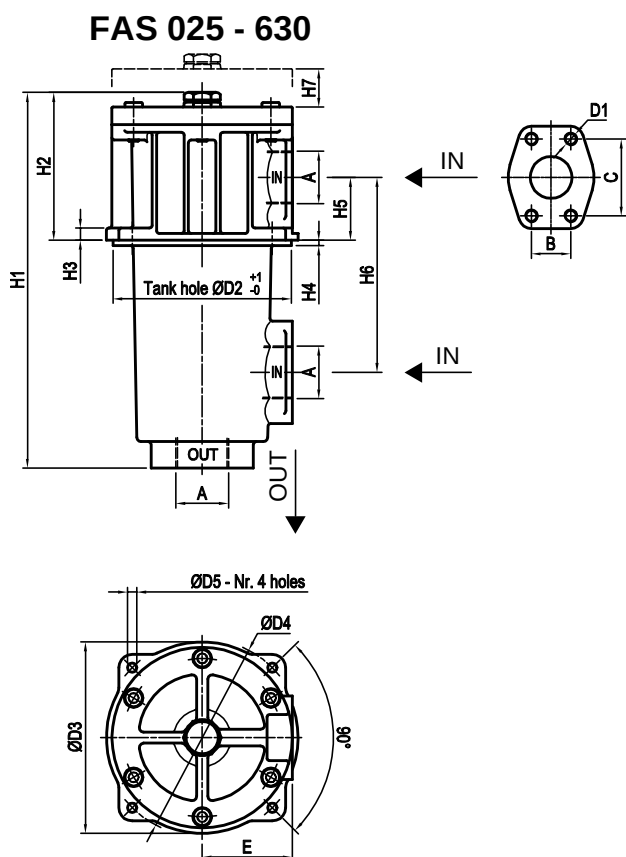
$$(2.4 \text{ KPa} \times 0.145 = 0.35 \text{ psi})$$

FILTER ASSEMBLY SIZING:

For calculating the pressure drop of the filter assembly, the Δp of the filter housing must be added to the Δp of the filter element (Δp filter assembly = Δp filter housing + Δp filter element).

The values of "K" shown in the table refer to tests made using a mineral oil having a kinematic viscosity = 30 mm²/s (cSt). The Δp is proportional to the fluid kinematic viscosity. The maximum pressure loss for the complete assembly should be 8 KPa (1.2 psi).

DIMENSIONS



THREAD CONNECTIONS

FILTER TYPE	A		
	G1	G2	G3
FAS 025	G 1/2"	1/2" NPT	SAE 8 - 3/4" 16 UNF
FAS 040	G 3/4"	3/4" NPT	SAE 12 - 1 1/16" 12 UN
FAS 100	G 1"	1" NPT	SAE 16 - 1 5/16" 12 UN
FAS 250	G 1-1/2"	1 1/2" NPT	SAE 20 - 1 5/8" 12 UN
FAS 630	G 2-1/2"	2 1/2" NPT	SAE 32 - 2 1/2" 12 UN

FLANGE CONNECTIONS

FILTER TYPE		A	B	C	D1
FAS 100	F1	1" SAE 3000 PSI / M	26.19	52.37	M10
	F2	1" SAE 3000 PSI / UNC	26.19	52.37	3/8" UNC
FAS 250	F1	1 1/2" SAE 3000 PSI / M	35.71	69.85	M12
	F2	1 1/2" SAE 3000 PSI / UNC	35.71	69.85	1/2" UNC
FAS 630	F1	2 1/2" SAE 3000 PSI / M	50.80	88.90	M12
	F2	2 1/2" SAE 3000 PSI / UNC	50.80	88.90	1/2" UNC
FAS 850	F1	3 1/2" SAE 3000 PSI / M	69.90	120.70	M16
	F2	3 1/2" SAE 3000 PSI / UNC	69.90	120.70	5/8" UNC

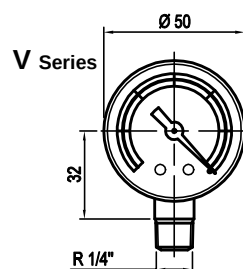
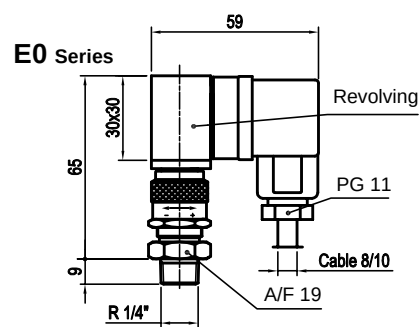
FILTER

TYPE	H1	H2	H3	H4	H5	H6	H7	D2	D3	D4	D5	E
FAS 025	150	85	5	3	19	62.5	105	83.5	89	95	5.5	44
FAS 040	190	98	8	3.5	36	105	110	121	132	138	6.5	57
FAS 100	260	120	10	5	49	140	155	135	146	154	6.5	67
FAS 250	345	145	10	5	58	177	240	162	174	180	8.5	82
FAS 630	400	190	13	10	79	218	275	237	253	275	10.5	117.5
FAS 850	687	248	10	6	128	/	525	238	300	275	14.5	178

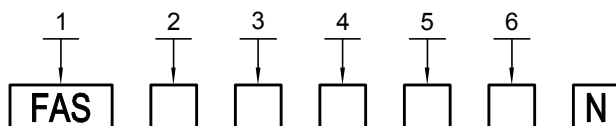
Note: All dimensions are in mm .

FAS SERIES - SUCTION FILTERS

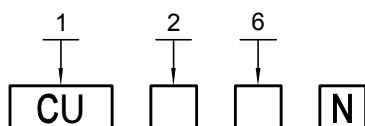
Indicators



HOW TO ORDER THE FILTER ASSEMBLY



HOW TO ORDER THE REPLACEMENT FILTER ELEMENT



1 - FILTER SERIES

FAS - Suction Filter Assembly
CU - Filter element

2 - SIZE

025
040
100
250
630
850

3 - BYPASS VALVES

S - Without bypass valve
B - With bypass valve (setting = 30 KPa = 4,35 psi)

4 - SEALS

A - Nitrile (Buna N)
V - Viton

5 - PORT OPTIONS

CONNECTIONS						
TYPE	025	040	100	250	630	850
G1	G 1/2"	G 3/4"	G 1"	G 1 1/2"	G 2 1/2"	-
G2	1/2" NPT	3/4" NPT	1" NPT	1 1/2" NPT	2 1/2" NPT	-
G3	SAE 8	SAE 12	SAE 16	SAE 20	SAE 32	-
F1	-	-	1" SAE 3000 PSI/M	1 1/2" SAE 3000 PSI/M	2 1/2" SAE 3000 PSI/M	3 1/2" SAE 3000 PSI/M
F2	-	-	1" SAE 3000 PSI/UNC	1 1/2" SAE 3000 PSI/UNC	2 1/2" SAE 3000 PSI/UNC	3 1/2" SAE 3000 PSI/UNC

6 - FILTER MEDIA

M25 Square wire mesh 25 µm
M60 Square wire mesh 60 µm
M90 Square wire mesh 90 µm
M250 Square wire mesh 250 µm

FILTER INDICATOR:

T1 - Plug (no indicator)
V - Gauge at 20 kPa = 2.9 psi
E1 - Electrical indicator at 20 kPa = 2.9 psi

NOTE: All the filter assemblies are supplied with machined indicator hole.
The indicators must be ordered separately.



SERIES
SF2-250
SUCTION FILTER



Flow rate to 160 l/min

Description

SF2 250

The SF2 series suction filter are designed for reservoir side-wall applications.

This completely new design of filter allows the filter element to be replaced without having to drain the oil from the reservoir.

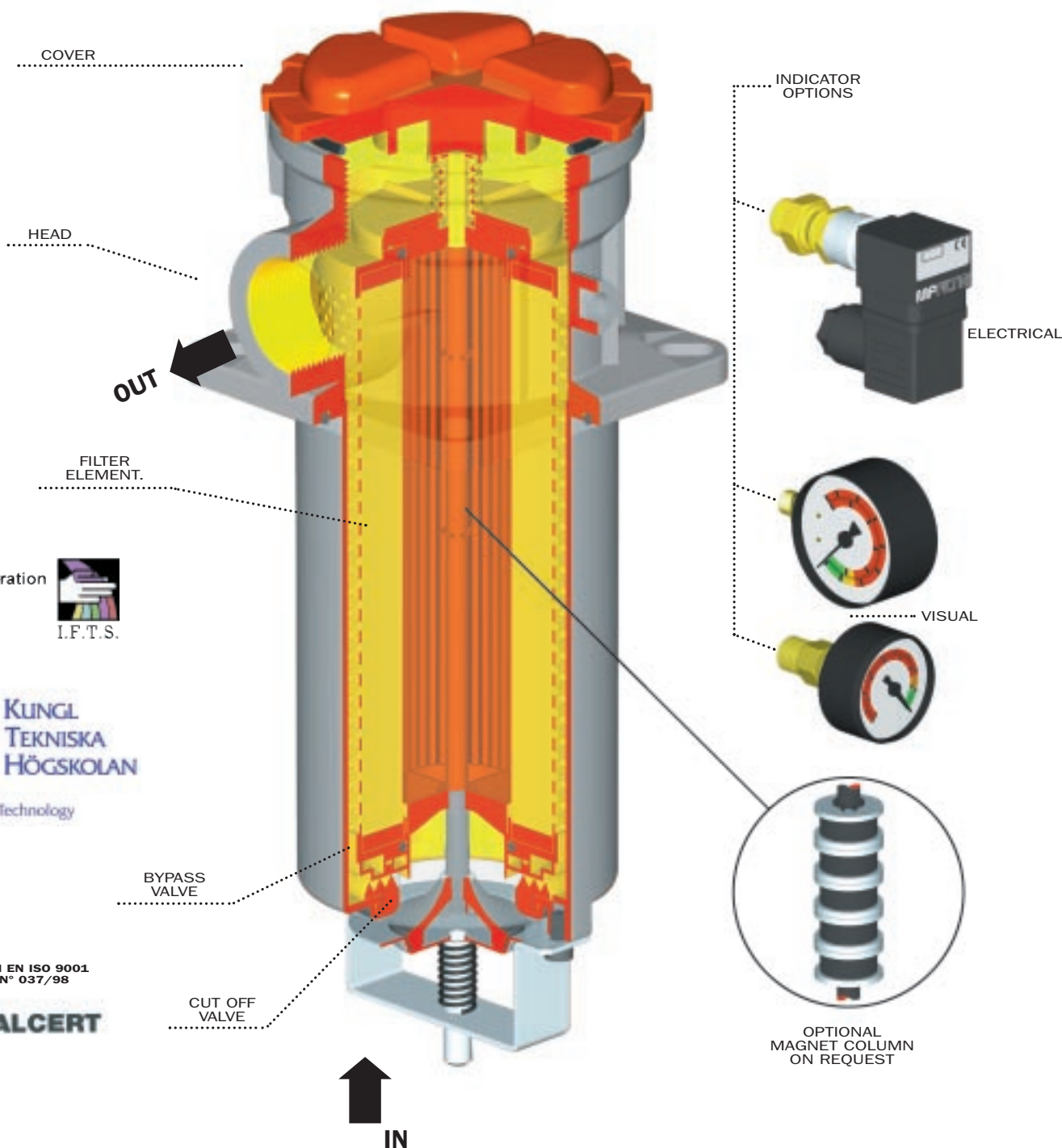
Unscrewing the filter cover operates a closing valve

within the filter preventing oil loss from the reservoir.

The SF2 250 filter uses a vacuum gauge or electrical vacuum switch for filter element indication.

These filters are supplied complete with bypass valve.

These filters are particularly suitable for power pack, mobile, construction, and industrial machinery applications.



Filter element:

Materials

End caps:
Nylon

Support tube:
Steel

Support frames:
Expanded metal

Element material
Nominal filtration

M

Series

Square wire mesh (filtration degree is defined in microns by the maximum diameter of a sphere corresponding to the mesh size).

Filtering area
Filter elements

Type SF2	250
M25	1980
M60	1980
M90	1980
M250	1980

Values in cm²

Filter body:

Materials

Head
Pressure die cast aluminium

Cover
Nylon

Seals
A Series: Nitrile (Buna-N)
V Series: Viton

Indicator
Brass

Working temperature

From -25 to +110°C
For temperature outside this range, please consult our Sales Network Organization

Bypass valve
Setting pressure

Bypass valve, differential opening pressure:

30 kPa ± 10%

Compatibility with fluids

Filter head and bowls

compatible for use with:

- mineral oils (types HH-HL-HM-HR-HV-HG as per ISO 6743/4)
- water-based emulsions (types HFAE-HFAS as per ISO 6743/4)
- synthetic fluids (types HS-HFDR-HFDS-HFDU as per ISO 6743/4)
- water-glycol (types HFC as per ISO 6743/4)

Ask for anodised version

Filter elements

As per ISO 2943; suitable for mineral oils (types HH-HL-HM-HR-HV-HG as per ISO 6743/4) synthetic fluids (A and M series only) (types HS-HFDR-HFDS-HFDU as per ISO 6743/4)

For water-based emulsions (type HFAE-HFAS as per ISO 6743/4) and fluids other than those mentioned, please consult our Sales Network Organization.

Seals

A Series

Nitrile (Buna-N) compatible with mineral oils (types HH-HL-HM-HR-HV-HG as per ISO 6743/4) water - based emulsions (types HFAE-HFAS as per ISO 6743/4)

V Series

Viton compatible with synthetic fluids (types HS-HFDR-HFDS-HFDU as per ISO 6743/4)

Types of indicator

Description:
SF2 250 series filters are fitted with visual and electrical indicators.

Visual indicator

V Series (radial)
V0 Series (axial)

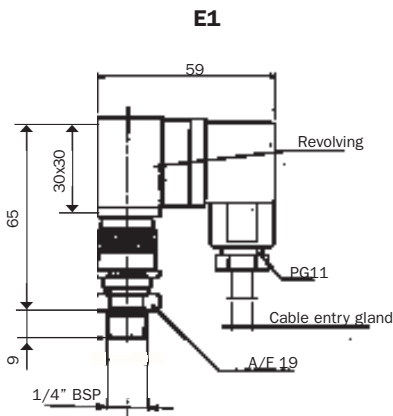
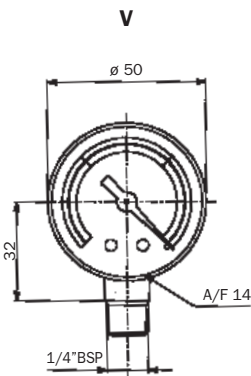
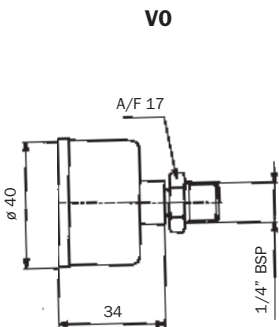
vacuummeter: scale 0÷76 cmHg
vacuummeter: scale 0÷76 cmHg

Electrical indicator

E1 Series:
vacuum switch with change-over contacts (setting std. 20kPa ± 10%) (adjustable setting: 15 to 90 kPa)

Operational information:

Max voltage: 250 V 50÷60 Hz
Max current: 5 A resistive,
2 A inductive.
Protection degree IP65



Pressure drop information

General

Pressure drop versus flow rate curve information for both housing and filter elements is in accordance with ISO 3968

Filter assembly pressure drop - $\Delta p_{\text{Total}} = \Delta p_{\text{Housing}} + \Delta p_{\text{Filter element}}$

Housing pressure drop - The housing pressure drop is proportional to the fluid density

Filter element pressure drop - Filter element pressure drop is proportional to kinematic viscosity therefore always check the fluid operating temperature and fluid type to obtain the working viscosity according to the following formula:

$$\Delta p_1 \text{ Filter element} = (\text{working viscosity} / \text{brochure viscosity}) \times \Delta p \text{ filter element}$$

Brochure viscosity = 30 mm²/s cSt

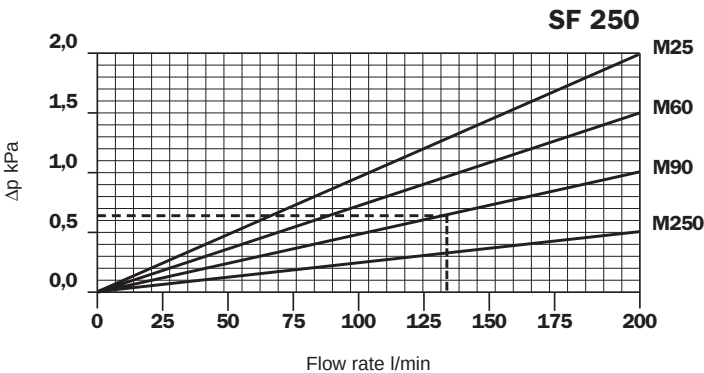
1 bar = 100 kPa

Filter assembly sizing example

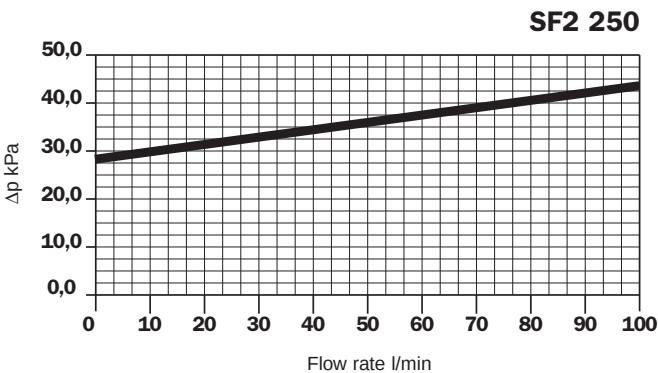
Selection

- Customer requires a 140 l/min filter assembly • 1" 1/2 port size
- Mineral oil fluid: ISO VG 46 (46 mm²/s (cSt) at 40°C)
- M90 - 90 micron filtration
- **Housing pressure drop** - SF2 250 (1" 1/2 port size) with 140 l/min Δp = SkPa (see curve on page 5)
- **Filter element pressure drop** (brochure viscosity) - SF2 250 M90 N with 140 l/min Δp = 1.4 kPa (see curve on page 6)
- **Filter element pressure drop** (working viscosity) - With 46 mm²/s (cSt) $\Delta p_1 = 0.6 \times (46/30) = 1.1 \text{ kPa}$
- **Filter assembly pressure drop** $\Delta p_{\text{Total}} = \Delta p_{\text{Housing}} + \Delta p_1 \text{ Filter element} = S + 1.10 = \mathbf{6.1 \text{ kPa}^*}$ { * Acceptable pressure drop as per our recommendations

Filter element pressure drop



Bypass valve pressure drop



Ordering code example

SF2

250

A

G1

H

M25

V

This example shows how order a filter assembly with features based on the customer request.

Nominal size

250

Seals

A
V

Nitrile (Buna-N)
Viton

Port option

Type	SF2 250
G1	1 1/2" BSP
G2	1 1/2" NPT
G3	SAE 4
G4	1 1/4" BSP
G5	1 1/4" NPT
G6	SAE 20
G7	1" BSP
G8	1" NPT
G9	SAE 16
F1	1 1/2" SAE 3000 PSI/M
F2	1 1/2" SAE 3000 PSI/UNC

Filter condition indicator

S	With threaded hole only
T1	With hole + plug
V0	Visual (axial vacuumeter)
V	Visual (radial vacuumeter)
E1	Electrical (change-over contacts vacuumeter)

Filter elements

M25
M60
M90
M250

Square wire mesh

Options

H	Without By-pass, without magnet
R	With By-pass and magnet
S	With By-pass, without magnet
Q	Without By-pass and magnet

Seals (only for filter elements)

N
V

Buna N
Viton

SF

250

M25

N

This example shows how order a filter element with features based on the customer request

Replacement element

MP Filtri - Filtration products will only be guaranteed if original MP Filtri replacement elements and spares are used

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SERIES
SF2-500
SUCTION FILTER



MP FILTER
filtr per pneumatica



Flow rates to 850 l/min

Description

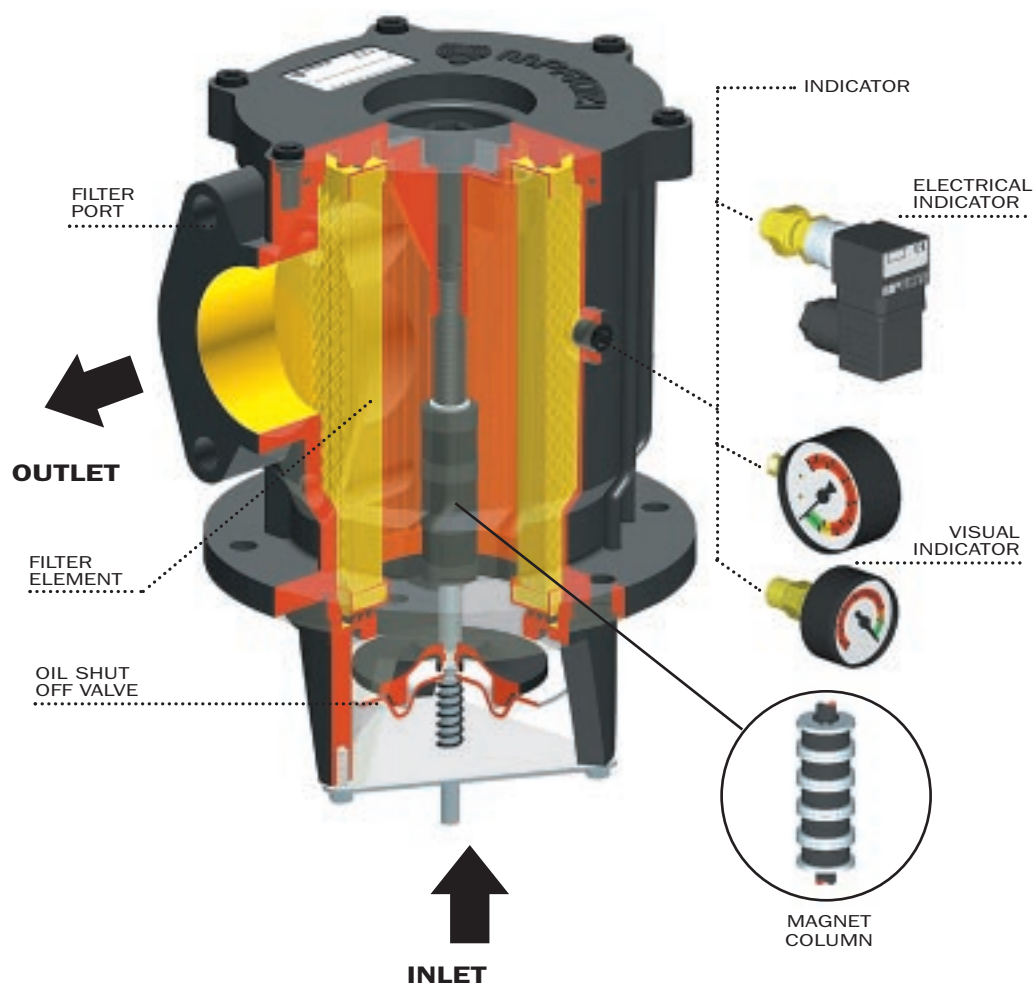
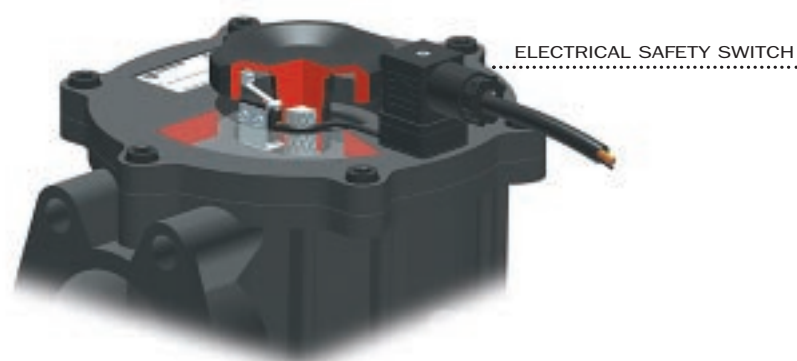
SF2 500

The SF2 series are designed for reservoir side-wall mounting applications, suitable for flow rates to 850 l/min and filtration from 25 to 250 micron.

The design of the SF2 ensures an excellent performance in terms of low pressure drop and high dirt holding capacity. The SF2 filters are without bypass and include a magnetic prefilter. The filtration flow from «inside to outside» of the filter element ensures that the contaminant is collected inside the element itself, avoiding contact with tank oil during element change.

A major feature of these filters is that the filter element (situated under the oil level) can be changed without emptying the reservoir; the valve is actioned by handwheel on the filter cover, to avoid accidental start up when the valve is closed, an antistart safety switch is available as an option.

Clogging indicators are available as vacuum switches or as vacuummeters. These filters are particularly suitable for industrial application, die-casting and plastic injection machines.



Filter element:

Materials

End caps:

Nylon

Support tube:

Steel expanded metal

Support frames:

Expanded metal

Element material Nominal filtration

M Series

Square wire mesh (filtration degree is defined in microns by the maximum diameter of a sphere corresponding to the mesh size).

Filtering area Filter elements

Type SF2	SF2 503	SF2 504	SF2 505	SF2 510	SF2 535	SF2 540
M25	2280	2660	1710	1800	3650	5110
M60	2280	2660	1710	1800	3650	5110
M90	2280	2660	1710	1800	3650	5110
M250	2280	2660	1710	1800	3650	5110

Values in cm²

Filter body:

Materials

Head

Pressure aluminium die casting
Steel (only for SF2 535-540)

Seals

A Series: Nitrile (Buna-N)
V Series: Viton

Cover

Anodized aluminium

Indicator

Brass

Optional Flange

Anodized aluminium

Working temperature

From -25 to +110°C
For temperature outside this range, please consult our Sales and Network Organization

Types of indicator

Description:
SF2 500 series filters are available with visual and electrical indicators.

Visual indicator

V Series (radial connection)
V0 Series (axial connection)

vacuumeter: scale 0÷76 cmHg
vacuumeter: scale 0÷76 cmHg

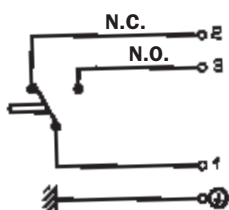
Electrical indicator

E1 Series:
vacuumeter with change-over contacts at the setting pressure of 20 kPa±10%. Calibration range from 15 to 90 kPa.

Operational information:

Max voltage: 220 Vac 50÷60 Hz
Max current: 0.5 A resistive,
0.2 A inductive.
Protection degree IP65

Electrical safety Switch



The scheme refers to the oil shut off valve in a closed position

Protection degree: IP67
Max voltage: 250Vca 50-60Hz
Max current: 3A resistive
3A inductive

Compatibility
with fluids

Filter head and bowls

compatible for use with:

- mineral oils
(types HH-HL-HM-HR-HV-HG as per ISO 6743/4)
- water-based emulsions
(types HFAE-HFAS as per ISO 6743/4)
- synthetic fluids
(types HS-HFDR-HFDS-HFDU as per ISO 6743/4)
- water-glycol
(types HFC as per ISO 6743/4)

Ask for anodised version

Filter elements

As per ISO 2943; suitable for mineral oils (types HH-HL-HM-HR-HV-HG as per ISO 6743/4)
synthetic fluids (A and M series only)
(types HS-HFDR-HFDS-HFDU as per ISO 6743/4)

For water-based emulsions (type HFAE-HFAS as per ISO 6743/4) and fluids other than those mentioned, please consult our Sales Network Organization.

Seals

A Series
Nitrile (Buna-N) compatible with mineral oils
(types HH-HL-HM-HR-HV-HG as per ISO 6743/4) water - based emulsions
(types HFAE-HFAS as per ISO 6743/4)

water - glycol
(types HFC as per ISO 6743/4)

V Series
Viton compatible with synthetic fluids
(types HS-HFDR-HFDS-HFDU as per ISO 6743/4)

Selection & installation information

Filter element types

M Series

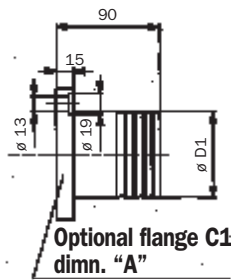
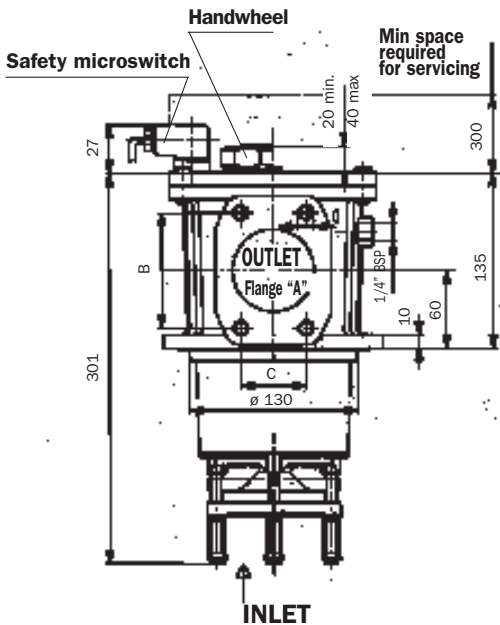
Metal mesh media, available in 25, 60, 90, 250 µm
Example - **M25, M60, M90 or M250**

Please refer to individual pressure drop curves to obtain filter assembly pressure drop information

The following filter sizing recommendations are based using a mineral oil fluid at 30 mm²/s (cSt) with a maximum total filter assembly (housing and filter element) pressure drop of **8kPa** (0,08 bar)

SF2 SERIES 500 - 501

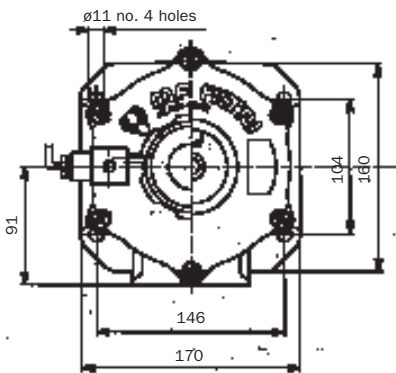
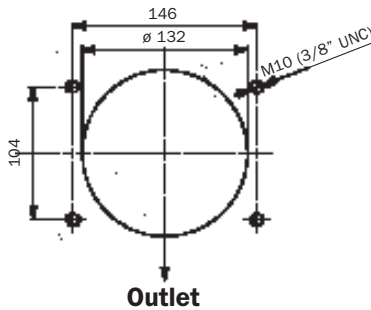
SF2 500 -501



Filter Assembly	Flow rate l/min *	Port Size BSP/NPT/SAE	Weight kg **
M25	250	2" SAE	4,0
M60	280		
M90	280		
M250	280		
M25	300	2" 1/2 SAE	4,0
M60	340		
M90	340		
M250	340		

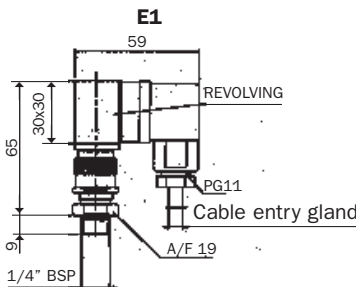
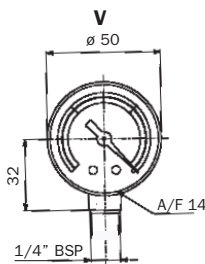
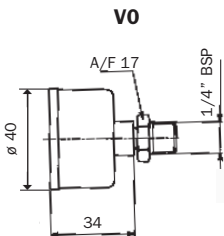
* Flow rates with 30 mm²/s fluid viscosity
** Weight including filter element

Filter mounting dimns



Flange Connections

Type	A	B	C	D	D1
500- F1	2"SAE 3000PSI/M	77,77	42,88	M12	63
500- F2	2"SAE 3000PSI/UNC	77,77	42,88	1/2" UNC	63
501- F1	2 1/2" SAE 3000PSI/M	88,90	50,80	M12	75
501- F2	2 1/2" SAE 3000PSI/UNC	88,90	50,80	1/2" UNC	75



Selection & installation information

Filter element **M Series**

types

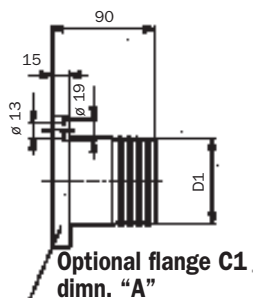
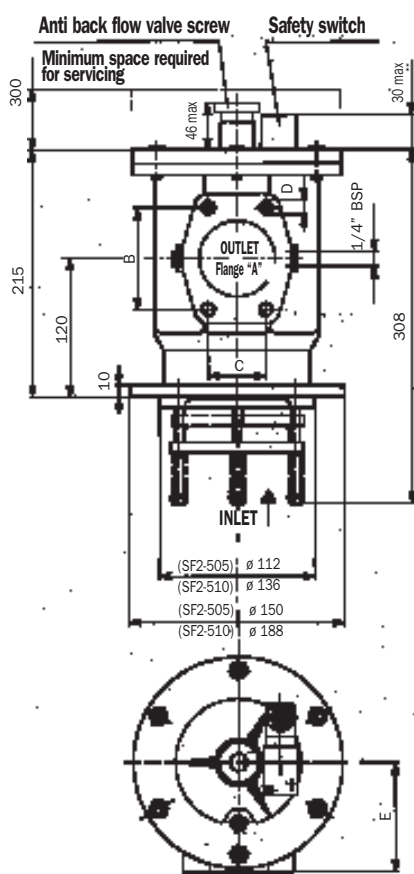
Metal mesh media, available in 25, 60, 90, 250 μm
Example - **M25, M60, M90 or M250**

Please refer to individual pressure drop curves to obtain filter assembly pressure drop information

The following filter sizing recommendations are based using a mineral oil fluid at 30 mm^2/s (cSt) with a maximum total filter assembly (housing and filter element) pressure drop of **8kPa** (0,08 bar)

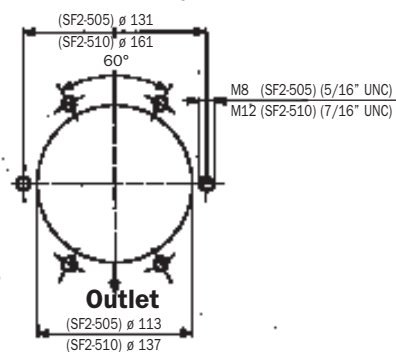
SF2 SERIES 505 - 510

SF2 505-510



Optional flange C1
dimn. "A"

Filter mounting dimns.

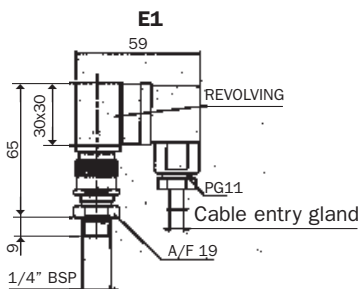
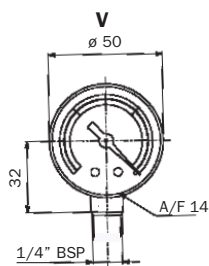
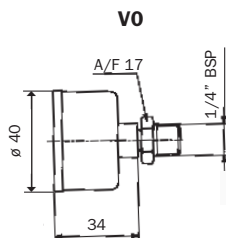


Filter Assembly	Flow rate l/min *	Port Size BSP/NPT/SAE	Weight kg **
M25	200	2" SAE	6,0
M60	250		
M90	250		
M250	250		
M25	250	2" 1/2 SAE	7,2
M60	280		
M90	280		
M250	280		

* Flow rates with 30 mm^2/s fluid viscosity
** Weight including filter element

Flange Connections

Type	A	B	C	D	D1	E
505- F1	2"SAE 3000PSI/M	77,77	42,88	M12	63	84
505- F2	2"SAE 3000PSI/UNC	77,77	42,88	1/2" UNC	63	84
510- F1	2 1/2" SAE 3000PSI/M	88,90	50,80	M12	75	95
510- F2	2 1/2" SAE 3000PSI/UNC	88,90	50,80	1/2" UNC	75	95



Selection & installation information

Filter element types

M Series

Metal mesh media, available in 25, 60, 90, 250 µm
Example - **M25, M60, M90 or M250**

Please refer to individual pressure drop curves to obtain filter assembly pressure drop information

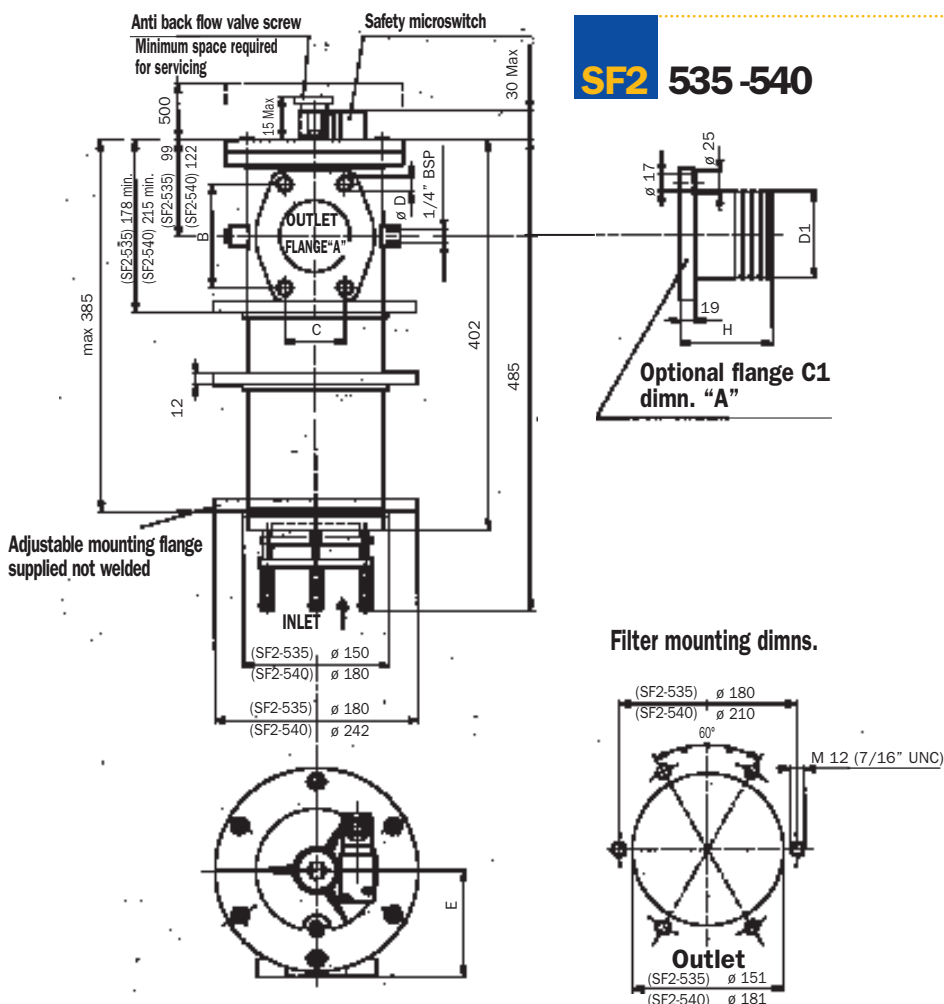
The following filter sizing recommendations are based using a mineral oil fluid at 30 mm²/s (cSt) with a maximum total filter assembly (housing and filter element) pressure drop of **8k Pa** (0,08 bar).

SF2 SERIES 535 - 540

SF2 535-540

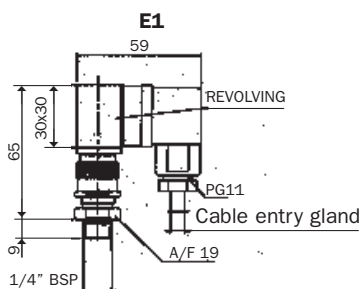
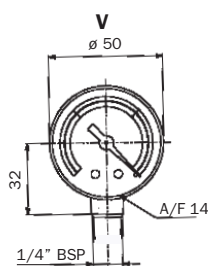
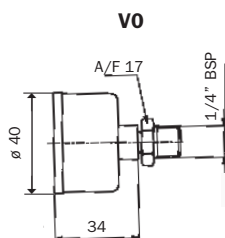
Filter Assembly	Flow rate l/min *	Port Size BSP/NPT/SAE	Weight kg **
M25	450	3" SAE	17,0
M60	550		
M90	550		
M250	550		
M25	700	4" SAE	19,0
M60	800		
M90	800		
M250	800		

* Flow rates with 30 mm²/s fluid viscosity
** Weight including filter element



Flange Connections

Type	A	B	C	D	D1	E	H
535- F1	3"SAE 3000PSI/M	106,38	61,93	M16	89	110	95
535- F2	3"SAE 3000PSI/UNC	106,38	61,93	5/8"UNC	89	110	95
540- F1	4"SAE 3000PSI/M	130,18	77,77	M16	114	120	100
540- F2	4"SAE 3000PSI/UNC	130,18	77,77	5/8"UNC	114	120	100



Pressure drop information

General

Pressure drop versus flow rate curve information for both housing and filter elements is in accordance with ISO 3968

Filter assembly pressure drop - $\Delta p_{\text{Total}} = \Delta p_{\text{Housing}} + \Delta p_{\text{Filter element}}$

Housing pressure drop - The housing pressure drop is proportional to the fluid density

Filter element pressure drop - Filter element pressure drop is proportional to kinematic viscosity therefore always check the fluid operating temperature and fluid type to obtain the working viscosity according to the following formula:

$\Delta p_1 \text{ Filter element} = (\text{working viscosity} / \text{brochure viscosity}) \times \Delta p_{\text{filter element}}$

1 bar = 100 kPa

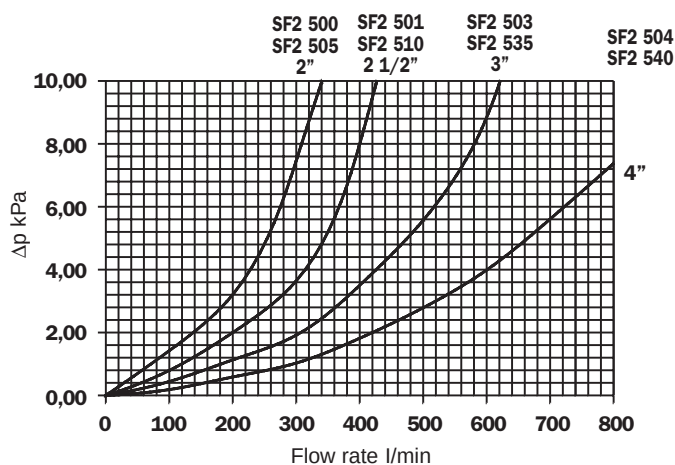
Filter assembly sizing example

Selection

- Customer requires a 250 l/min filter assembly
- Mineral oil fluid: ISO VG 46 (46 mm²/s (cSt) at 40°C)
- M90 - 90 micron filtration
- **Housing pressure drop** - SF2 503 with 250 l/min $\Delta p = 1,4 \text{ kPa}$ (see curve on page 9)
- **Filter element pressure drop** (brochure viscosity) - SF2 503 M90 A with 250 l/min $\Delta p = 3,5 \text{ kPa}$ (see curve on page 10)
- **Filter element pressure drop** (working viscosity) - With 46 mm²/s (cSt) $\Delta p_1 = 3,5 \times (46/30) = 5,4 \text{ kPa}$
- **Filter assembly pressure drop** $\Delta p_{\text{Total}} = \Delta p_{\text{Housing}} + \Delta p_1 \text{ Filter element} = 1,4 + 5,4 = 6,8 \text{ kPa}^*$ { *acceptable pressure drop as per our recommendations

Filter housing pressure drop

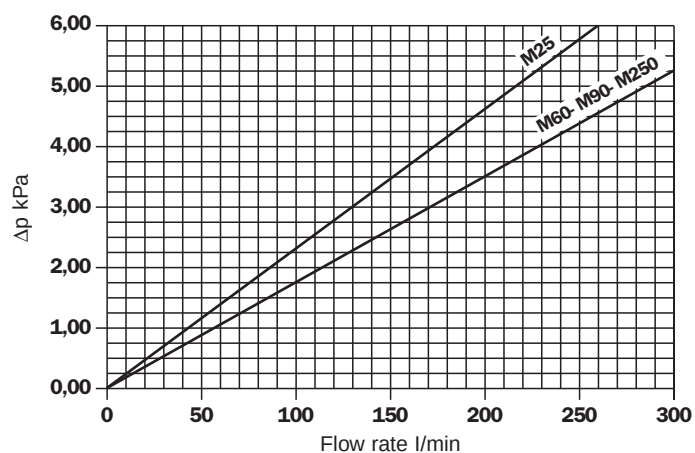
The curves were obtained using a mineral oil with a density of 0,86 kg/dm³.
The Δp varies proportionally to the density



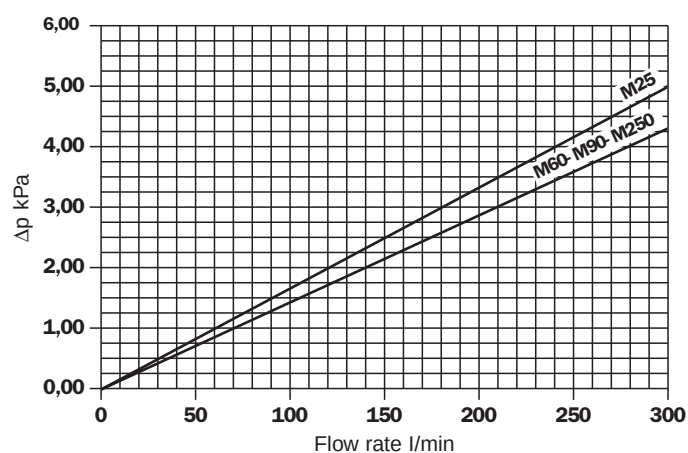
Filter element pressure drop

The curves were obtained using a mineral oil with a kinematic viscosity of 30 mm²/s (cSt). The Δp varies proportionally to the fluid kinematic viscosity.

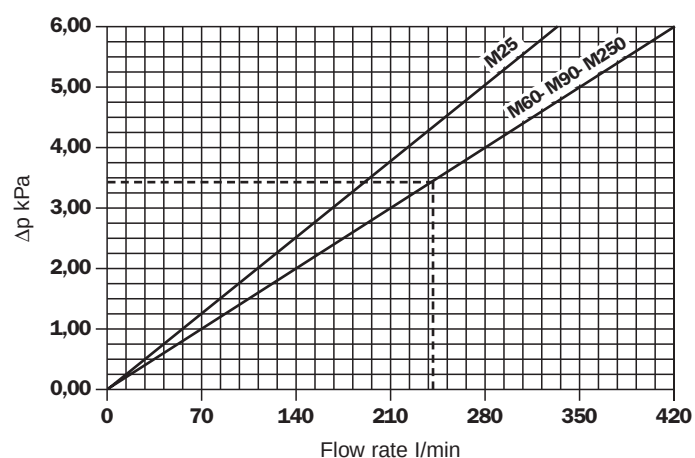
SF 505



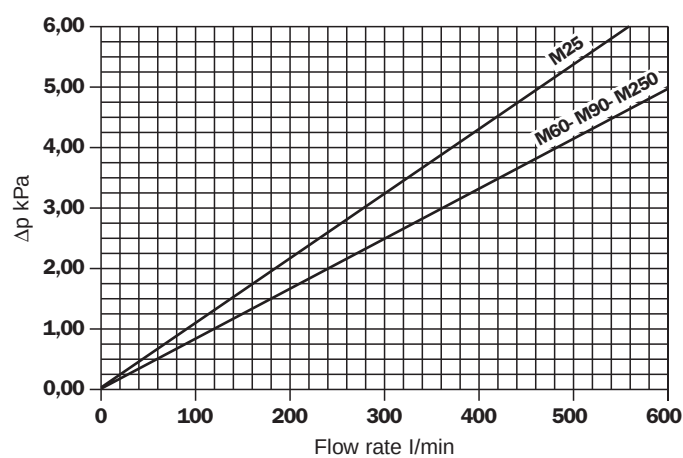
SF 510



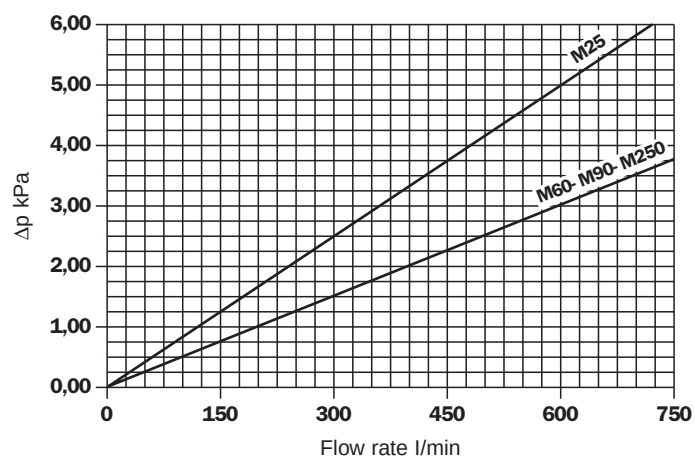
SF 503



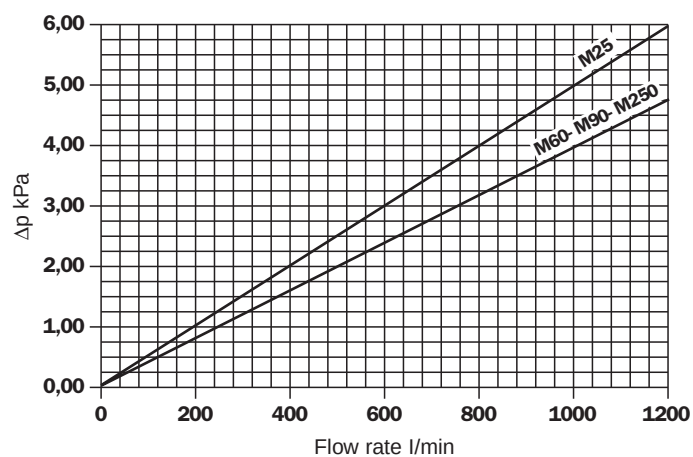
SF 504



SF 535



SF 540



Ordering code example

SF2

500

A

F1

S

M25

V

This example shows how order a complete filter with features based on the customer request.

Nominal sizes	
500	(Use SF 510 filter element code)
501	
503	
504	
505	
510	
535	
540	

Seals	
A	Nitrile (Buna-N)
V	Viton

Port option				
Type	500 505	501 510	503 535	504 540
F1	2"SAE 3000 PSI/M	2 1/2"SAE 3000 PSI/M	3"SAE 3000 PSI/M	4"SAE 3000 PSI/M
F2	2"SAE 3000 PSI/UNC	2 1/2" SAE 3000 PSI/UNC	3"SAE 3000 PSI/UNC	4"SAE 3000 PSI/UNC
C1 (flange)	2" SAE 3000 PSI	2 1/2" SAE 3000 PSI	3" SAE 3000 PSI	4" SAE 3000 PSI

Filter assy.	Element type
500	510
501	510
503	503
504	504
505	505
510	510
535	535
540	540

Filter condition indicator	
S	With threaded hole only
T1	With hole + plug
V0	Visual (axial vacuumeter)
V	Visual (radial vacuumeter)
E1	Electrical (change-over contacts vacuumeter)

Filter elements	
M25	Square wire mesh
M60	
M90	
M250	

Options	
S	Without microswitch, without handwheel
C	With microswitch, without handwheel (505, 510, 535, 540)
D	With microswitch, with nylon handwheel (500, 501, 503, 504)
K	With microswitch, with steel handwheel (500, 501, 503, 504)
M	Without microswitch, with nylon handwheel (500, 501, 503,504)

SF

510

M25

This example shows how order a filter element with features based on the customer request

Replacement element

MP Filtri - Filtration products will only be guaranteed if original MP Filtri replacement elements and spares are used

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STR

Tank immersed suction strainers



Flow rates to 900 l/min

STR (Materials)

- 1 - Connection: Nylon
- 2 - Support tubes: Galvanised Steel
- 3 - Cap: Nylon
- 4 - Valve: Nylon - Steel

Filtration

- M60 - 60 micron
- M90 - 90 micron
- M250 - 250 micron

Bypass valves

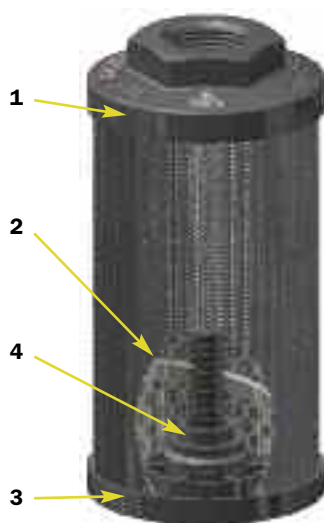
- Opening pressure:
30 kPa $\pm$ 10%

Temperature

- From -25°C to +110°C

Oil flow from exterior to interior.

STR with bypass



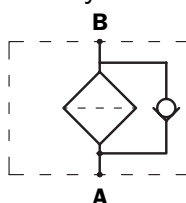
STR without bypass



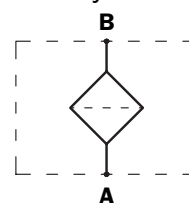
Compatibility

- To ISO 2943; valid for mineral oils (type HH-HM-HR-HV-HG to ISO 6743/4) and synthetic fluids (type HS-HFDR-HFDS-HFDU to ISO 6743/4).
- For aqueous emulsions (type HFAE-HFAS to ISO 6743/4) and other fluids different from those indicated, contact Engineering - Sales Department.

Style B

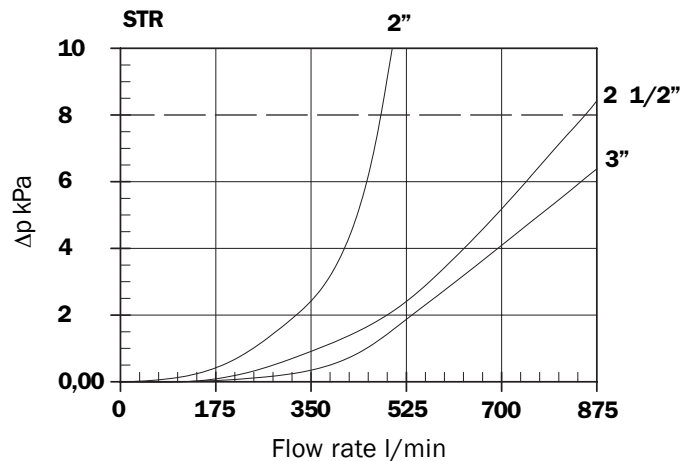
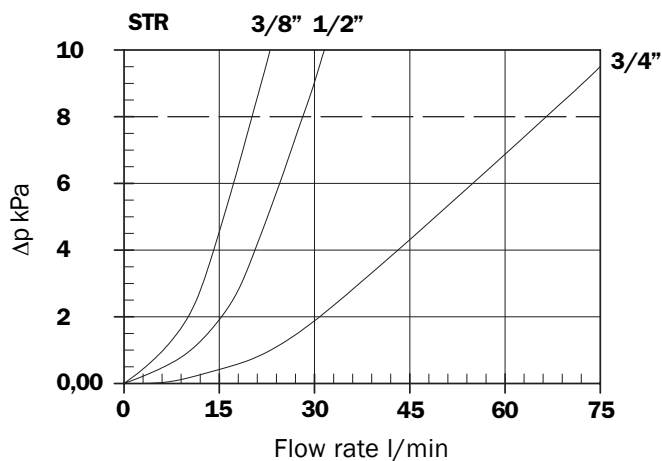
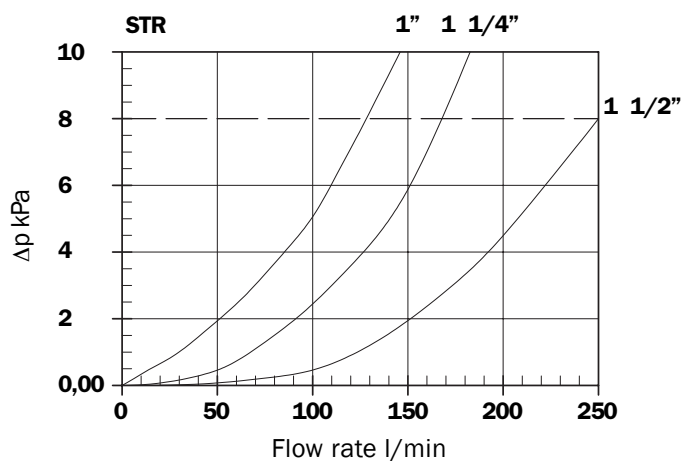


Style S

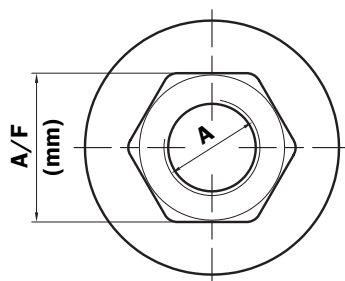
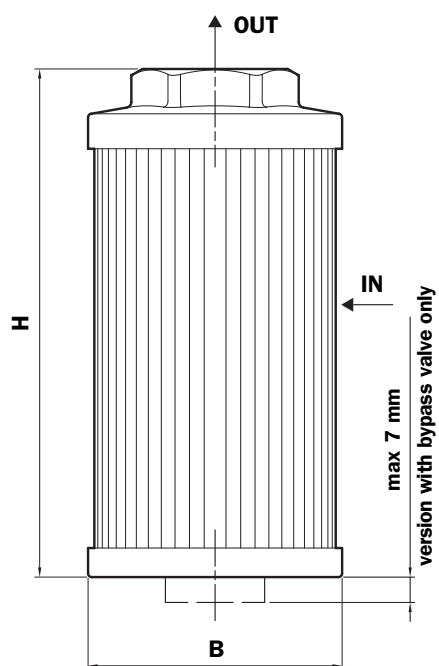


Filter body Δp pressure drop

The curves are plotted using mineral oil reference viscosity 30 mm²/s (cSt) to ISO 3968.



Dimensions



Size	A	B (mm)	H (mm)	A/F (mm)	Weight (kg)
045-1 G1	G 3/8"				0,15
045-1 G2	3/8" NPT	46	105		0,15
045-2 G1	G 1/2"				0,19
045-2 G2	1/2" NPT			30	0,19
050-1 G1	G 3/8"				0,11
050-1 G2	3/8" NPT	52	79		0,11
050-2 G1	G 1/2"				0,11
050-2 G2	1/2" NPT				0,11
065-1 G1	G 1/2"				0,19
065-1 G2	1/2" NPT		110		0,19
065-2 G1	G 3/4"				0,22
065-2 G2	3/4" NPT	65			0,22
065-3 G1	G 3/4"				0,24
065-3 G2	3/4" NPT		144		0,24
065-4 G1	G 1"				0,22
065-4 G2	1" NPT				0,22
070-1 G1	G 1/2"			41	0,18
070-1 G2	1/2" NPT		95		0,18
070-2 G1	G 3/4"				0,17
070-2 G2	3/4" NPT				0,17
070-3 G1	G 3/4"				0,23
070-3 G2	3/4" NPT	70			0,23
070-4 G1	G 1"				0,22
070-4 G2	1" NPT		141		0,22
070-6 G1	G 1/2"				0,24
070-6 G2	1/2" NPT				0,24
086-1 G1	G 1 1/2"				0,33
086-1 G2	1 1/2" NPT		143		0,33
086-2 G1	G 2"				0,30
086-2 G2	2" NPT				0,30
086-3 G1	G 1 1/2"				0,43
086-3 G2	1 1/2" NPT	86	201		0,43
086-4 G1	G 2"				0,40
086-4 G2	2" NPT				0,40
086-5 G1	G 1 1/2"				0,53
086-5 G2	1 1/2" NPT		261		0,53
086-6 G1	G 2"				0,50
086-6 G2	2" NPT				0,50
100-1 G1	G 1 1/4"		137	69	0,47
100-1 G2	1 1/4" NPT				0,47
100-2 G1	G 1 1/4"				0,58
100-2 G2	1 1/4" NPT				0,58
100-3 G1	G 1 1/2"				0,55
100-3 G2	1 1/2" NPT	99	227		0,55
100-4 G1	G 2"				0,51
100-4 G2	2" NPT				0,51
100-5 G1	G 1 1/2"				0,43
100-5 G2	1 1/2" NPT		137		0,43
140-1 G1	G 1 1/2"				0,70
140-1 G2	1 1/2" NPT		160		0,70
140-2 G1	G 2"				0,68
140-2 G2	2" NPT				0,68
140-3 G1	G 2"				0,94
140-3 G2	2" NPT	130	262		0,94
140-4 G1	G 2 1/2"				1,10
140-4 G2	2 1/2" NPT		272		1,10
140-5 G1	G 3"			101	1,0
140-5 G2	3" NPT				1,0
140-6 G1	G 3"				1,17
140-6 G2	3" NPT		330		1,17

Ordering information

Suction filter

STR

Example: STR 070-4 S G1 M90 P01

Box Qty	1 Part NO	Size	2 - Valve	3 - Connection	4 - Filter element	5 - Options
12	045-1	3/8"	S			
12	045-2	1/2"	B			
12	050-1	3/8"				
12	050-2	1/2"				
6	065-1	1/2"		G1		
6	065-2	3/4"		G2		
6	065-3	3/4"				
6	065-4	1"				
6	070-1	1/2"			M60	
6	070-2	3/4"			M90	
6	070-3	3/4"			M250	
6	070-4	1"				
6	070-6	1 1/2"				
6	086-1	1 1/2"				
6	086-2	2"				
6	086-3	1 1/2"				
6	086-4	2"				
6	086-5	1 1/2"				
6	086-6	2"				
6	100-1	1 1/4"				
6	100-2	1 1/4"				
6	100-3	1 1/2"				
6	100-4	2"				
6	100-5	1 1/2"				
-	140-1	1 1/2"				
-	140-2	2"				
-	140-3	2"				
-	140-4	2 1/2"				
-	140-5	3"				
-	140-6	3"				