SF2 250-350 series

Flow rate up to 160 l/min

SF2 250-350 GENERAL INFORMATION

Description

Suction filters

Flow rate up to 160 l/min

SF2 250 and SF2 350 are ranges of suction filters with integrated shut-off valve for protection of the downstream pump against the coarse contamination.
They are placed below the minimum oil level, directly connected to the suction line of the pump.
They can be fitted on the side or below the tank, allowing a more flexible design of the tank.
The shut-off valve closes automatically when the cover is removed, allowing the filter element replacement without the fluid drop.

Available features:

- Female threaded connections up to 1" and flanged connections up to 1 1/2", for a maximum flow rate of 160 l/min
- Multiple connections, to connect several suction lines
- Bypass valve, to relieve excessive pressure drop across the filter media
- Magnetic column, to hold the ferrous particles
- Visual, electrical and electronic clogging indicators

Common application:

- Mobile machines
- Industrial equipment

Technical data

Filter housing materials

- Filter body: Aluminium
- Cover: Polyamide, GF reinforced
- Valve: Polyamide, GF reinforced - Steel
- Anti-Emptying valve: Steel

Bypass valve

Opening pressure 30 kPa (0.3 bar) ±10%

Elements

Fluid flow through the filter element from IN to OUT

Seals

- Standard NBR series A
- Optional FPM series V

Temperature

From -25 °C to +110 °C

Note

SF2 250-350 filters mounting, see the drawings on page 43 and following.

Weights [kg]

Filter series	
SF2 250	2.6
SF2 350	2.6

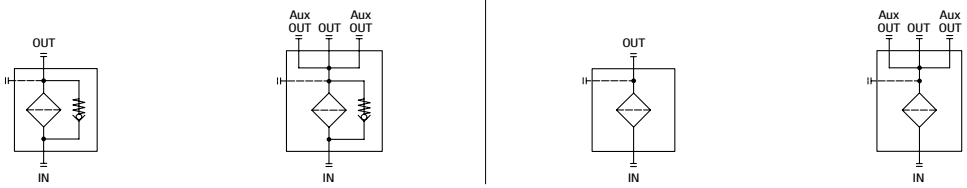
FILTER ASSEMBLY SIZING
Flow rates [l/min]

	Filter element design - N Series					
Filter series	M25	M60	M90	M250	P10	P25
SF2 250	147	151	155	160	85	132
SF2 350	147	151	155	160	85	132

Maximum flow rate for a complete suction filter with a pressure drop Δp = 0.08 bar.
The reference fluid has a kinematic viscosity of 30 mm²/s (cSt) and a density of 0.86 kg/dm³.
For different pressure drop or fluid viscosity we recommend to use our selection software available on www.mpfiltri.com.
You can also calculate the right size using the formulas present on the FILTER SIZING paragraph at the beginning of the full catalogue or at the beginning of the filter family brochure.
Please, contact our Sales Department for further additional information.

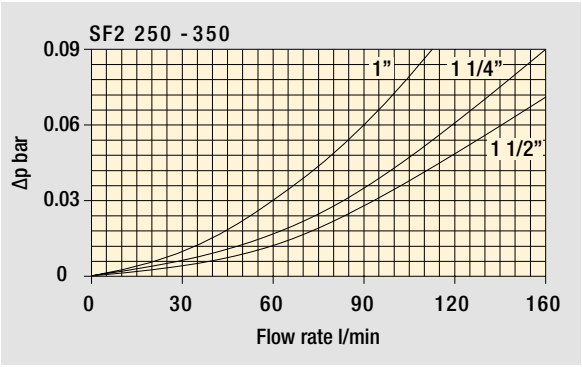
Hydraulic symbols

Filter series	Style R - S		Style Q - H	
SF2 250	•		•	
SF2 350		•		•

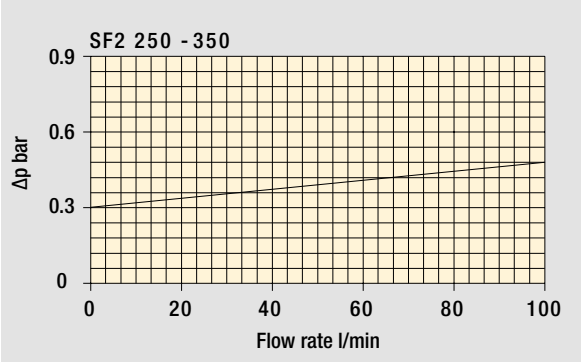


Pressure drop

Filter housings Δp pressure drop



Bypass valve pressure drop



The curves are plotted using mineral oil with density of 0.86 kg/dm³ in compliance with ISO 3968. Δp varies proportionally with density.

SF2 250-350

Designation & Ordering code

COMPLETE FILTER

Configuration example 1: SF2250 | W | F2 | R | M25 | P01

Configuration example 2: SF2350 | A | G1 | S | M90 | P01

Series and size

SF2250

SF2350

Seals and treatments		Filtration rating Mxx	Filtration rating Pxx
A	NBR	•	•
V	FPM	•	•
W	NBR compatible with fluids HFA-HFB-HFC	•	
Z	FPM compatible with fluids HFA-HFB-HFC	•	

Connections		Aux (only SF2350)	SF2250	SF2350
G1	G 1 1/2”	G 1”	•	•
G2	1 1/2” NPT	-	•	
G3	SAE 24 - 1 7/8” - 12 UN	SAE 16 - 1 5/16” - 12 UN	•	•
G4	G 1 1/4”	-	•	
G5	1 1/4” NPT	-	•	
G6	SAE 20 - 1 5/8” - 12 UN	-	•	
G7	G 1”	-	•	
G8	1” NPT	-	•	
G9	SAE 16 - 1 5/16” - 12 UN	-	•	
F1	1 1/2” SAE 3000 psi/M	-	•	
F2	1 1/2” SAE 3000 psi/UNC	-	•	

Bypass valve and magnetic column

R	With bypass, with magnetic column	**Q**	Without bypass, with magnetic column
S	With bypass, without magnetic column	**H**	Without bypass, without magnetic column

Filtration rating (filter media)

M25	Wire mesh 25 µm	**P10**	Resin impregnated paper 10 µm
M60	Wire mesh 60 µm	**P25**	Resin impregnated paper 25 µm
M90	Wire mesh 90 µm		
M250	Wire mesh 250 µm		

Execution

P01	MP Filtri standard
Pxx	Customized

FILTER ELEMENT

Configuration example 1: SF250 | M25 | W | P01

Configuration example 2: SF250 | M90 | N | P01

Element series and size

SF250

Filtration rating (filter media)

M25	Wire mesh 25 µm	**P10**	Resin impregnated paper 10 µm
M60	Wire mesh 60 µm	**P25**	Resin impregnated paper 25 µm
M90	Wire mesh 90 µm		
M250	Wire mesh 250 µm		

Seals and treatments		Filtration rating Mxx	Filtration rating Pxx
N	NBR	•	•
V	FPM	•	•
W	NBR compatible with fluids HFA-HFB-HFC	•	
Z	FPM compatible with fluids HFA-HFB-HFC	•	

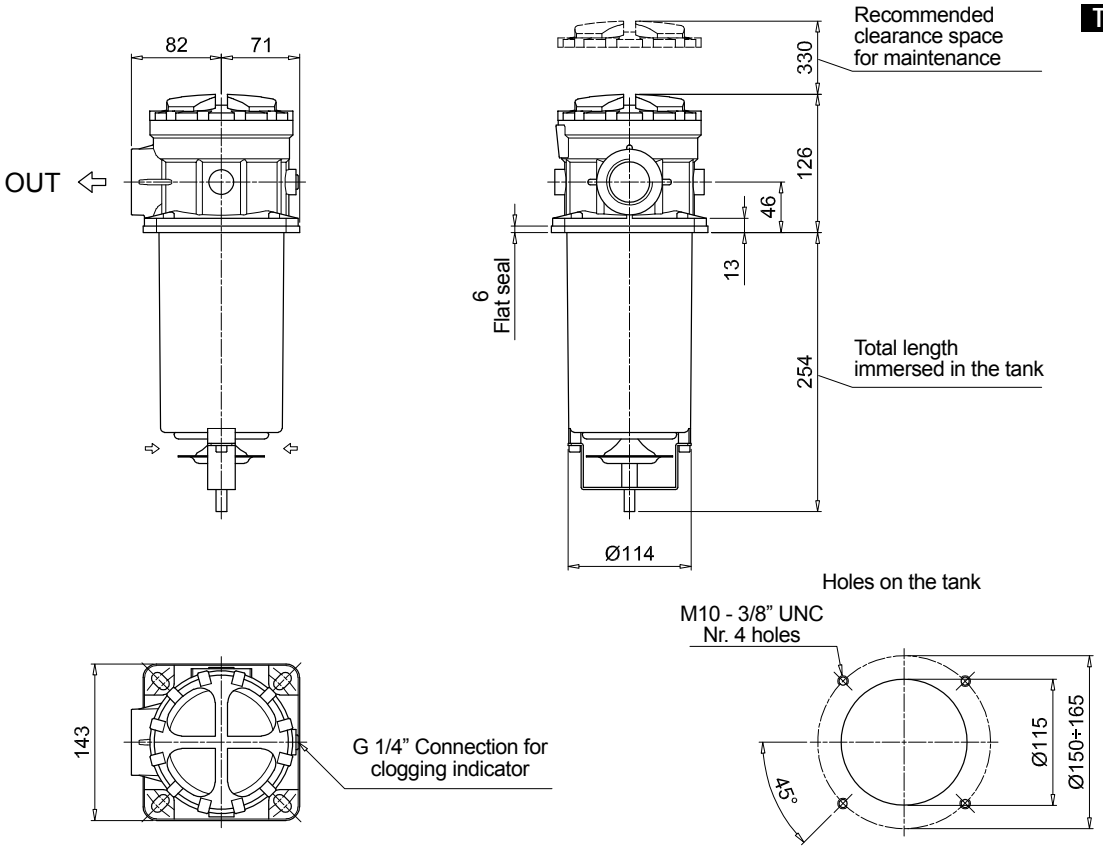
Execution

P01	MP Filtri standard
Pxx	Customized

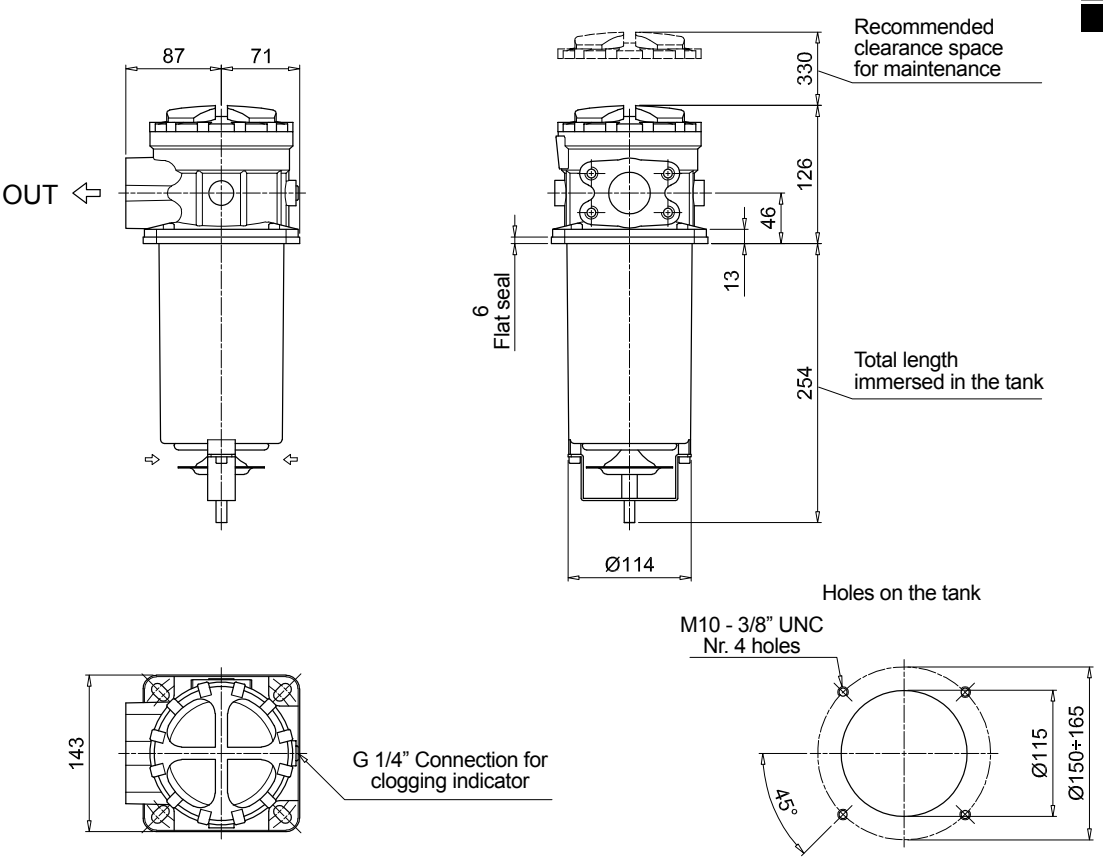
ACCESSORIES

Clogging indicators		page
VVA	Axial vacuum gauge	59
VVR	Radial vacuum gauge	59
VEA	Electrical vacuum indicator	58
VLA	Electrical / visual vacuum indicator	58

SF2 250
Threaded connections “G”



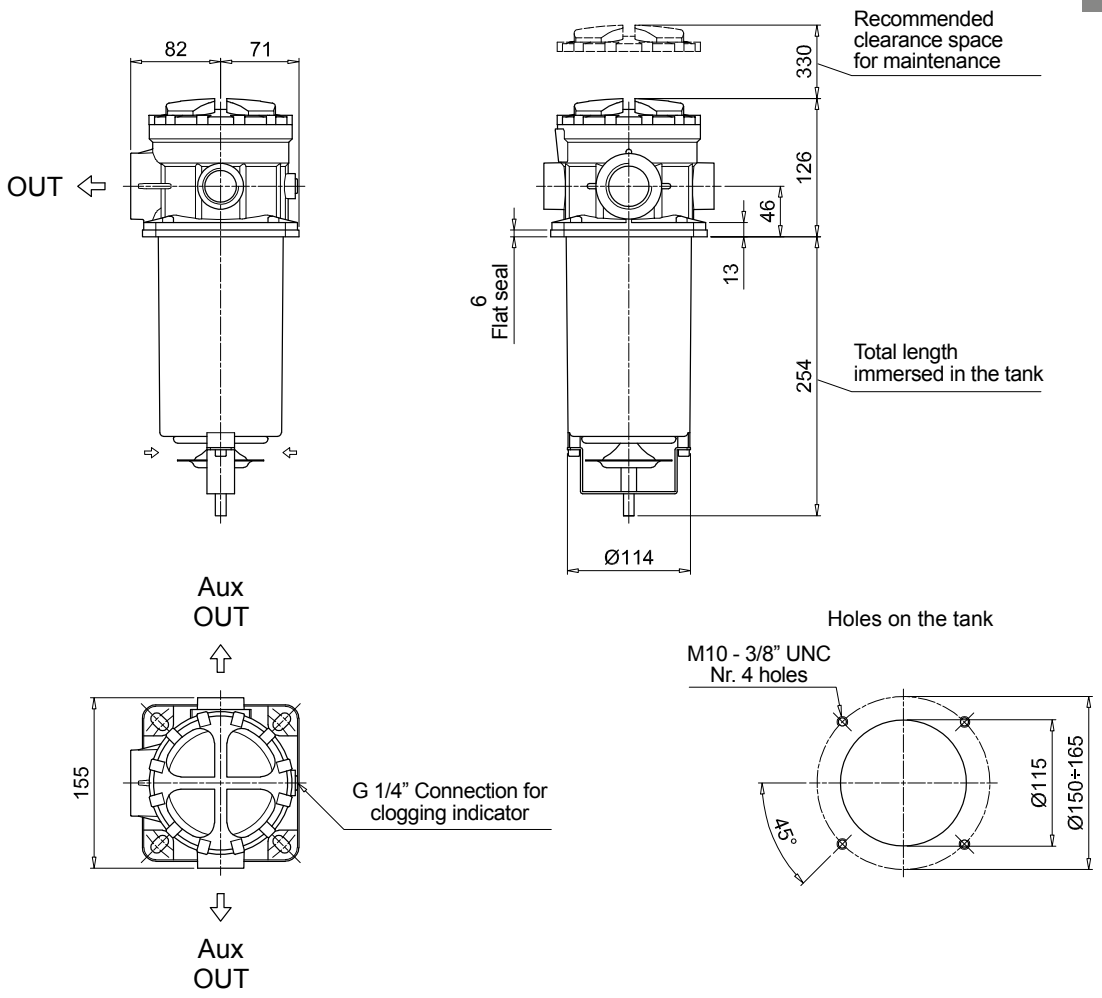
SF2 250
Flange connections “F”



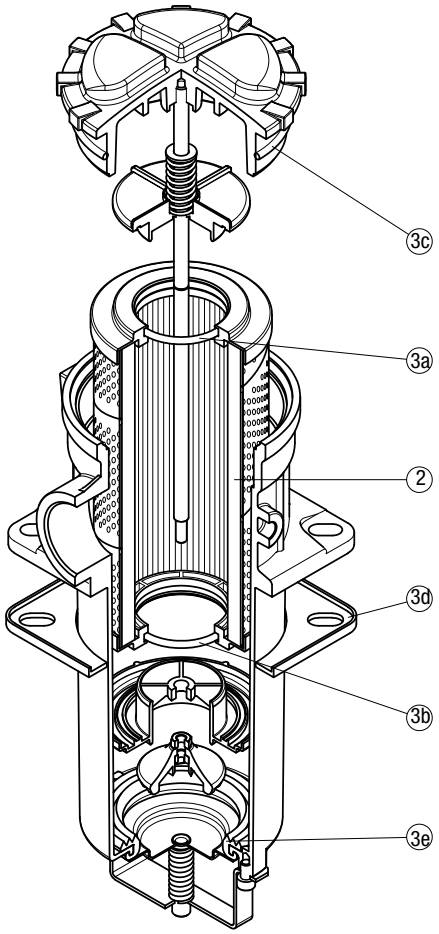
SF2 250-350

Dimensions

SF2 350



Order number for spare parts



Item:	Q.ty: 1 pc. 2	Q.ty: 1 pc. 3 (3a ÷ 3e)	
Filter series	Filter element	Seal Kit code number NBR	FPM
SF2 250 - 350	See order table	02050586	02050587