

# SFMC 250 series

Flow rate up to 160 I/min



# SFMC 250 GENERAL INFORMATION

# Description

#### Cuction filters

#### Flow rate up to 160 l/min

SFMC 250 is a range 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 filter, 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 or W
- Optional FPM series V or Z

#### **Temperature**

From -25 °C to +110 °C

#### Note

SFMC 250 filters mounting, see the drawings on page 54 and following.

# Weights [kg] and volumes [dm³]

Filter series	Weights [kg]	Volumes [dm³]
SFMC 250	2.8	2.3
SFMC 250	2.8	2.4



# GENERAL INFORMATION SFMC 250

# Flow rates [I/min]

	Filter element design - N Series						
Filter series	M0025	M0060	M0090	M0250	P0010	P0025	
SFMC 250	147	151	155	160	85	132	

#### Maximum flow rate for a complete suction filter with a pressure drop $\Delta p = 0.08$ bar.

The reference fluid has a kinematic viscosity of 30 mm<sup>2</sup>/s (cSt) and a density of 0.86 kg/dm<sup>3</sup>.

For different pressure drop or fluid viscosity we recommend to use our selection software available on www.mpfiltri.com.

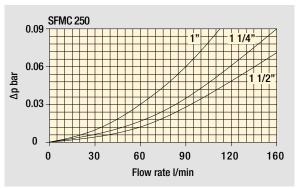
You can also calculate the right size using the formulas present on the FILTER SIZING paragraph at the beginning of the full catalogue or at the beginning of the filter family brochure. Please, contact our Sales Department for further additional information.

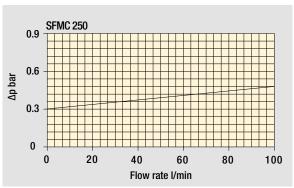
# Hydraulic symbols

Filter series	0 - without additional connections	1 - with smaller additional connections	0 - without additional connections	1 - with smaller additional connections
SFMC 250 without bypass	•	•	-	-
SFMC 250 with bypass	-	-	•	•
	OUT TO THE PROPERTY OF THE PRO	Aux OUT OUT OUT II	OUT T	Aux OUT OUT OUT

# Pressure drop

#### Filter housings ∆p 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.  $\Delta p$  varies proportionally with density.

#### Corrective factors "Y" for filter element $\Delta p$ calculation

Filter element		Nominal filtration Collapse $\Delta P: A = 1$ bar						
Туре	Length	P0010	P0025	M0025	M0060	M0090	M0250	
SMC 250	10	0.65	0.20	0.10	0.08	0.05	0.03	

See page 22 for the complete information regarding filter element  $\Delta p$  calculation.

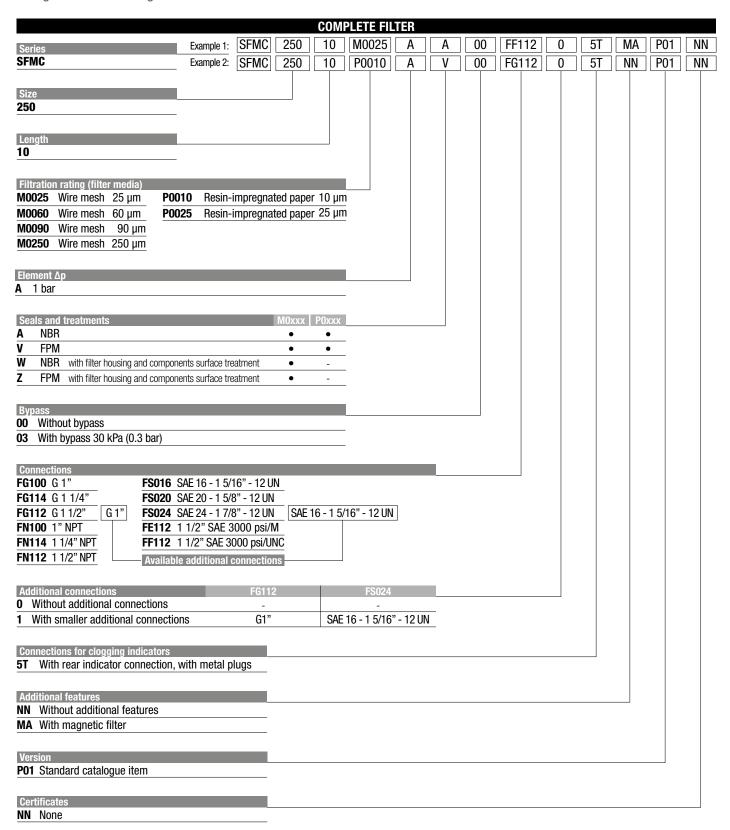
#### Maximum total pressure drop ( $\Delta p$ max) allowed by a new and clean filter

Filter family	Δp max		
Suction	0.08 bar	1.15 psi	



# SFMC 250

# Designation & Ordering code

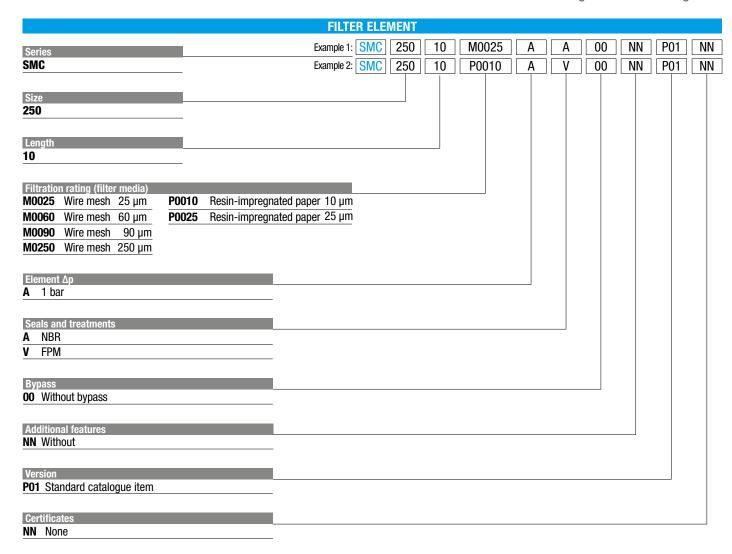


	CLOGGING INDICATORS				
VEA	Electrical vacuum indicator	VVA	Axial vacuum gauge		
VLA	Electrical / visual vacuum indicator	VVR	Radial vacuum gauge		



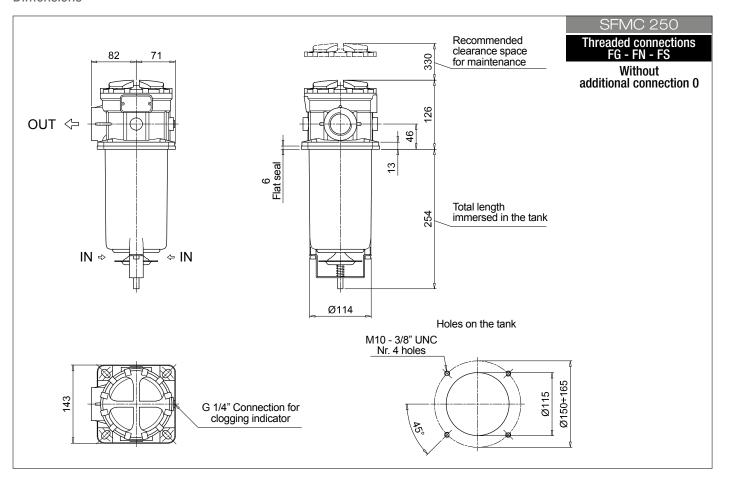


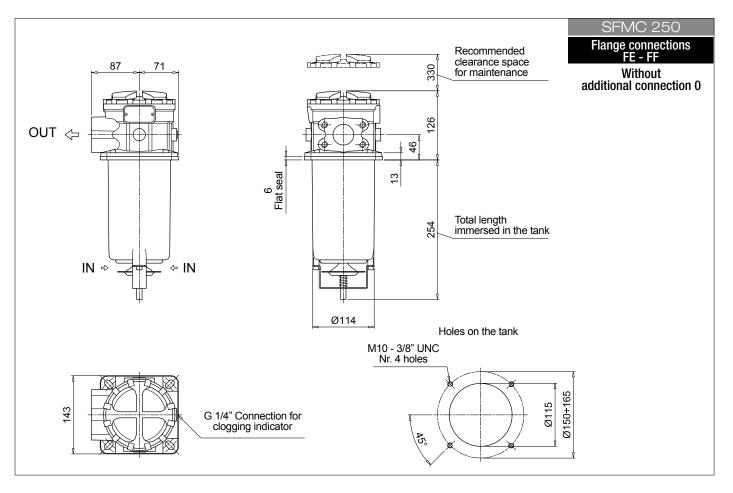
# Designation & Ordering code



# SFMC 250

### **Dimensions**



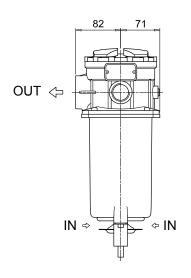


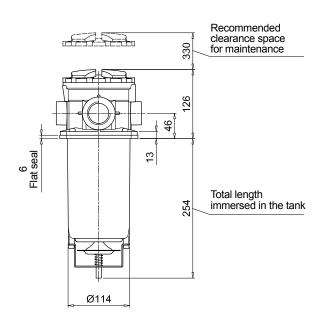
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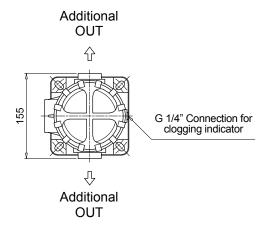
# **Dimensions**

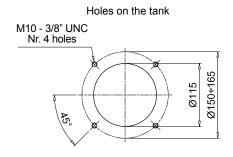
# SFMC 250

With smaller additional connection 1





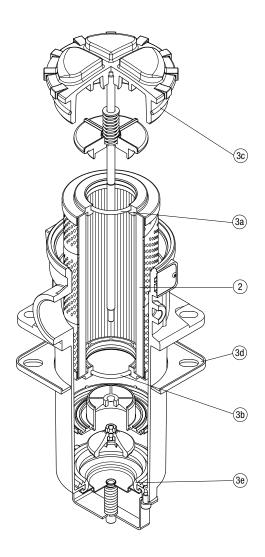




# SFMC 250 SPARE PARTS

Order number for spare parts





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

# Designation & Ordering code

