

SF2 500 series

Flow rate up to 700 l/min



SF2 500 GENERAL INFORMATION

Description

Technical data

Suction filters

Flow rate up to 700 l/min

SF2 500 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:

- Flanged connections up to 4", for a maximum flow rate of 700 l/min
- Optional hose fitting installed, to connect the suction line without the use of flanges
- Magnetic filter, to hold the ferrous particles
- Plastic and metal handle, to close the shut-off valve before the cover removal
- Electrical switch, to signal the closed shut-off valve
- Visual, electrical and electronic clogging indicators

Common application:

Industrial equipment

Filter housing materials

- Housing:
 - Anodized Aluminium
 - Steel (chemical heat treatment): only for SF2 535 - 540
- Cover:
 - Anodized Aluminium
 - Steel (chemical heat treatment): only for SF2 535 - 540
- Optional flange:
 - Anodized Aluminium

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 500 filters mounting, see the drawings on page 51 and following

Weights [kg]

Filter series	
SF2 500-501	4.0
SF2 503	4.8
SF2 504	5.8
SF2 505	6.0
SF2 510	7.2
SF2 535	17
SF2 540	19

GENERAL INFORMATION SF2 500

FILTER ASSEMBLY SIZING Flow rates [l/min]

Filter series	Filter element design - N Series	
	M25	M60 M90 M250
SF2 500	219	234
SF2 501	259	282
SF2 503	325	390
SF2 504	484	543
SF2 505	199	221
SF2 510	259	282
SF2 535	439	479
SF2 540	644	688

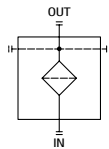
Maximum flow rate for a complete suction filter with a pressure drop $\Delta p = 0.08$ bar.

The reference fluid has a kinematic viscosity of 30 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 in 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.

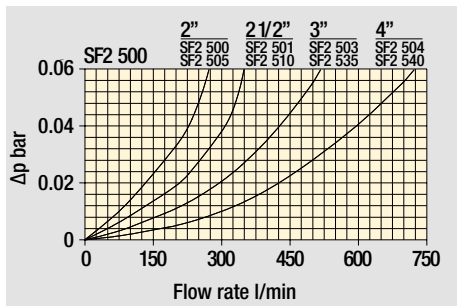
Filter series	
SF2 500	•



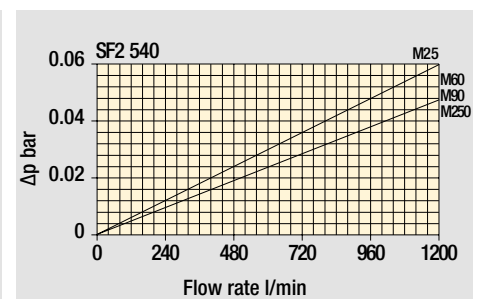
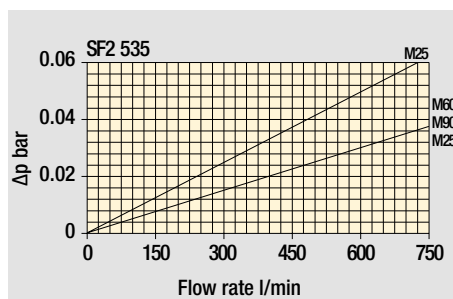
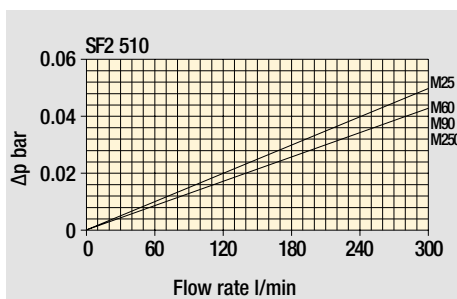
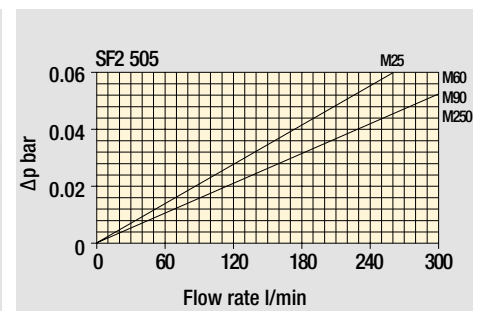
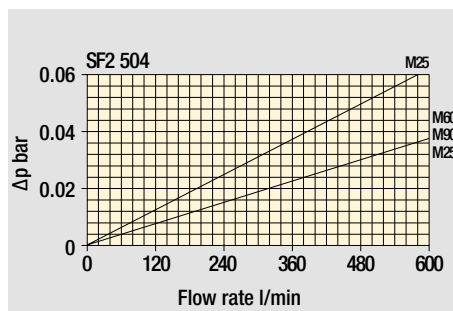
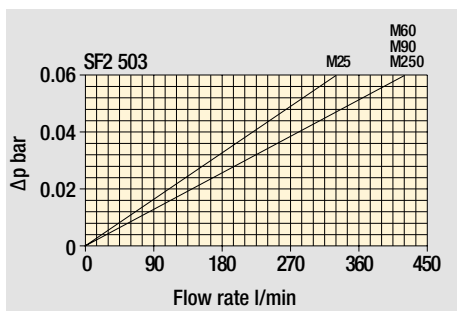
Hydraulic symbols

Pressure drop

Filter housings Δp pressure drop



Filter element Δp 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.

Designation & Ordering code

COMPLETE FILTER

Series and size					Configuration example 1:	SF2500	W	F1	D	M25	P01	
SF2500					Configuration example 2:	SF2535	A	F2	C	M60	P01	
SF2501												
SF2503												
SF2504												
SF2505												
SF2510												
SF2535												
SF2540												
Seals and treatments												
A NBR												
V FPM												
W NBR compatible with fluids HFA-HFB-HFC												
Z FPM compatible with fluids HFA-HFB-HFC												
Connections												
	SF2500 - SF2505		SF2501 - SF2510		SF2503 - SF2535		SF2504 - SF2540					
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	Hose barb 2"/M		Hose barb 2 1/2"/M		Hose barb 3"/M		Hose barb 4"/M					
Microswitch and Handweel												
		SF2500 - SF2501		SF2503 - SF2504		SF2505 - SF2510		SF2535 - SF2540				
S	Without microswitch, without handweel		•		•		•		•			
C	With microswitch, without handweel		-		-		•		•			
D	With microswitch, with polyamide handweel		•		•		-		-			
K	With microswitch, with steel handweel		•		•		-		-			
M	Without microswitch, with polyamide handweel		•		•		-		-			
Filtration rating (filter media)												
M25 Wire mesh 25 µm		M90 Wire mesh 90 µm										
M60 Wire mesh 60 µm		M250 Wire mesh 250 µm										
All filter media except M60, P10 and P25 are compatible with fluids HFA, HFB and HFC												
					Execution							
					P01 MP Filtri standard							
					Pxx Customized							

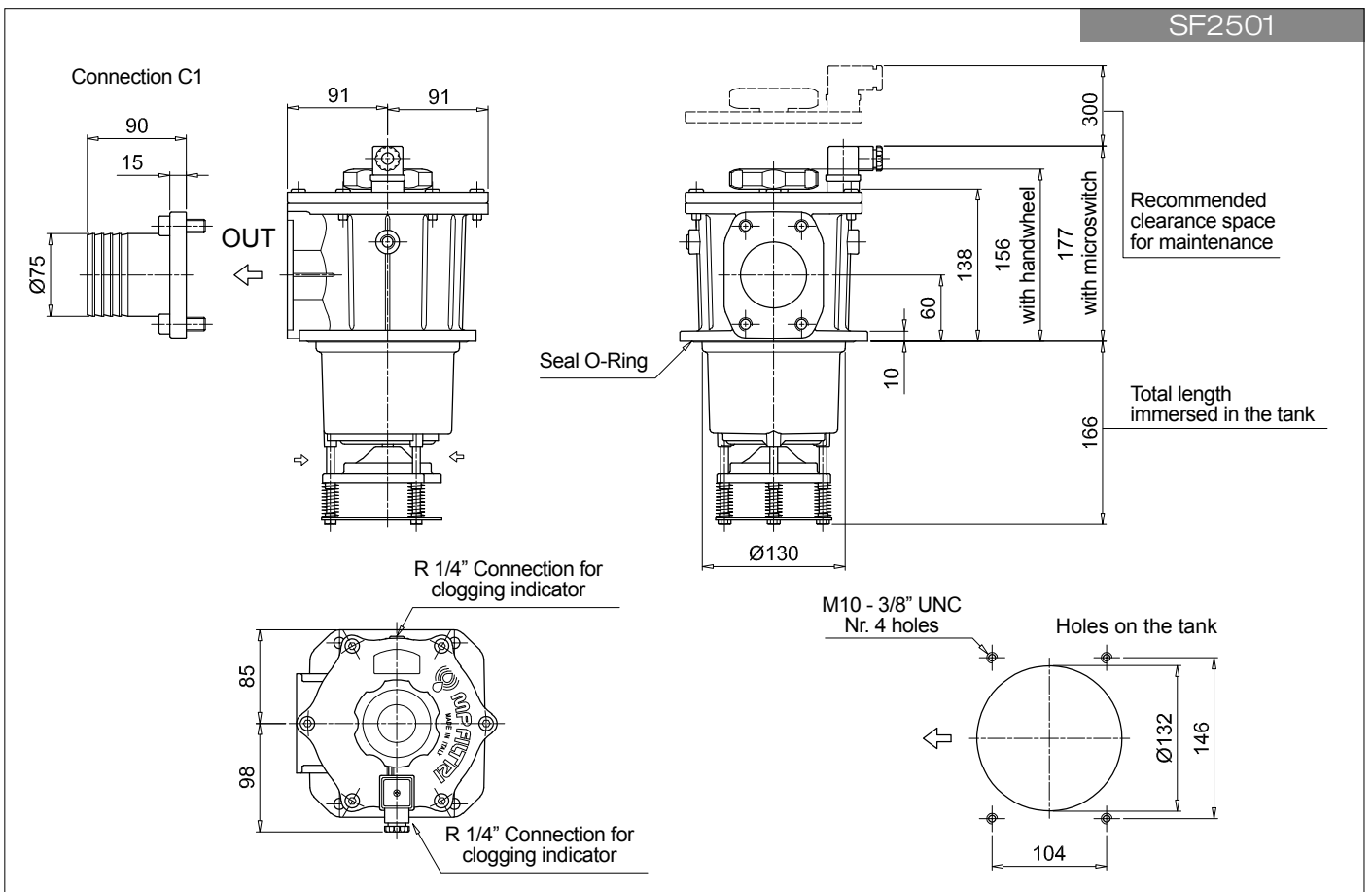
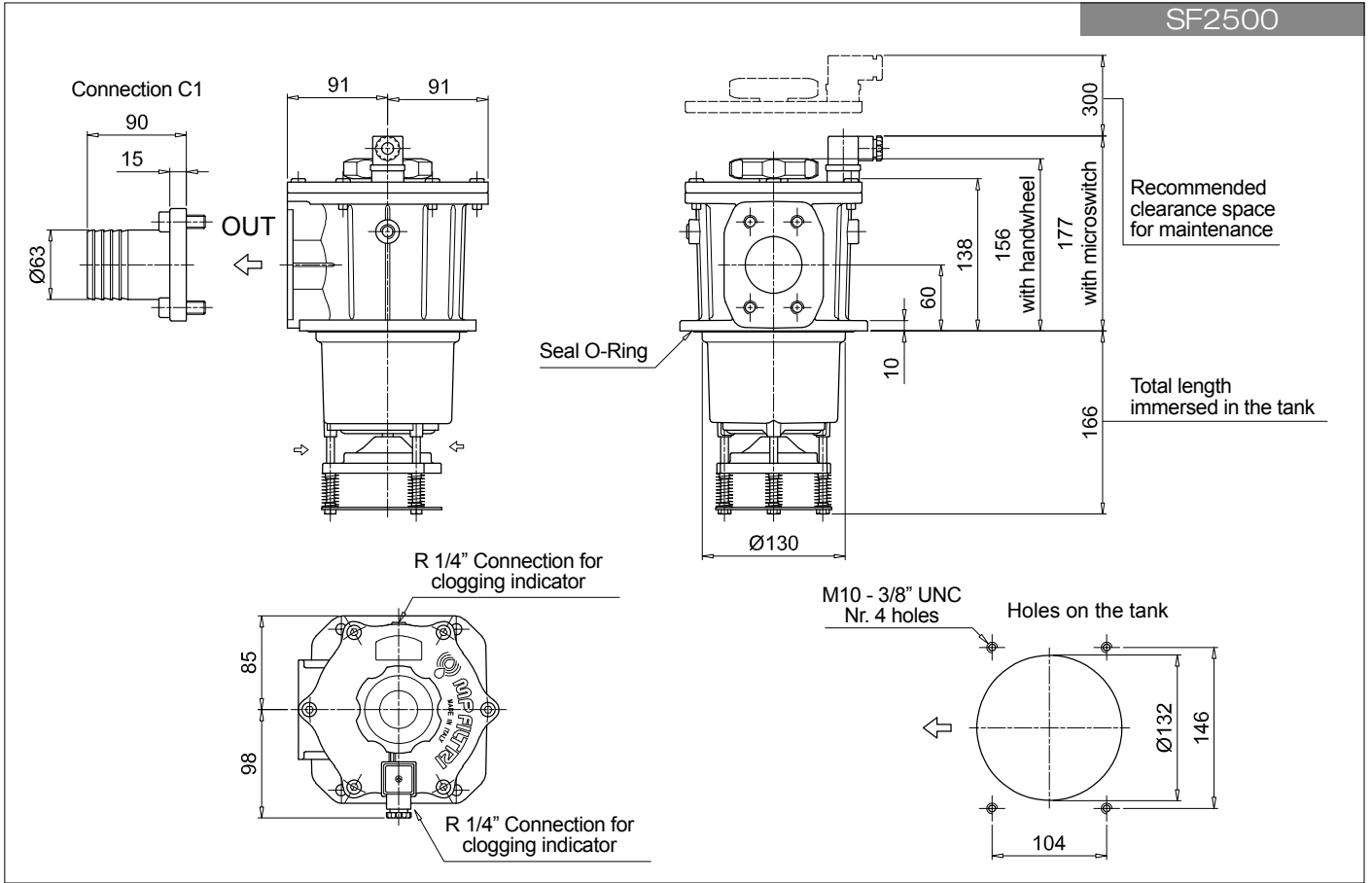
FILTER ELEMENT

Element series and size									Configuration example 1:	SF510	M25	W	P01	
	SF2500	SF2501	SF2503	SF2504	SF2505	SF2510	SF2535	SF2540	Configuration example 2:	SF535	M60		P01	
SF503	-	-	•	-	-	-	-	-						
SF504	-	-	-	•	-	-	-	-						
SF505	-	-	-	-	•	-	-	-						
SF510	•	•	-	-	-	•	-	-						
SF535	-	-	-	-	-	-	•	-						
SF540	-	-	-	-	-	-	-	•						
Filtration rating (filter media)														
M25 Wire mesh 25 µm		M90 Wire mesh 90 µm												
M60 Wire mesh 60 µm		M250 Wire mesh 250 µm												
Seals and treatments														
- Standard version														
W Compatible with fluids HFA-HFB-HFC														
									Execution					
									P01 MP Filtri standard					
									Pxx Customized					

CLOGGING INDICATORS

See page 679

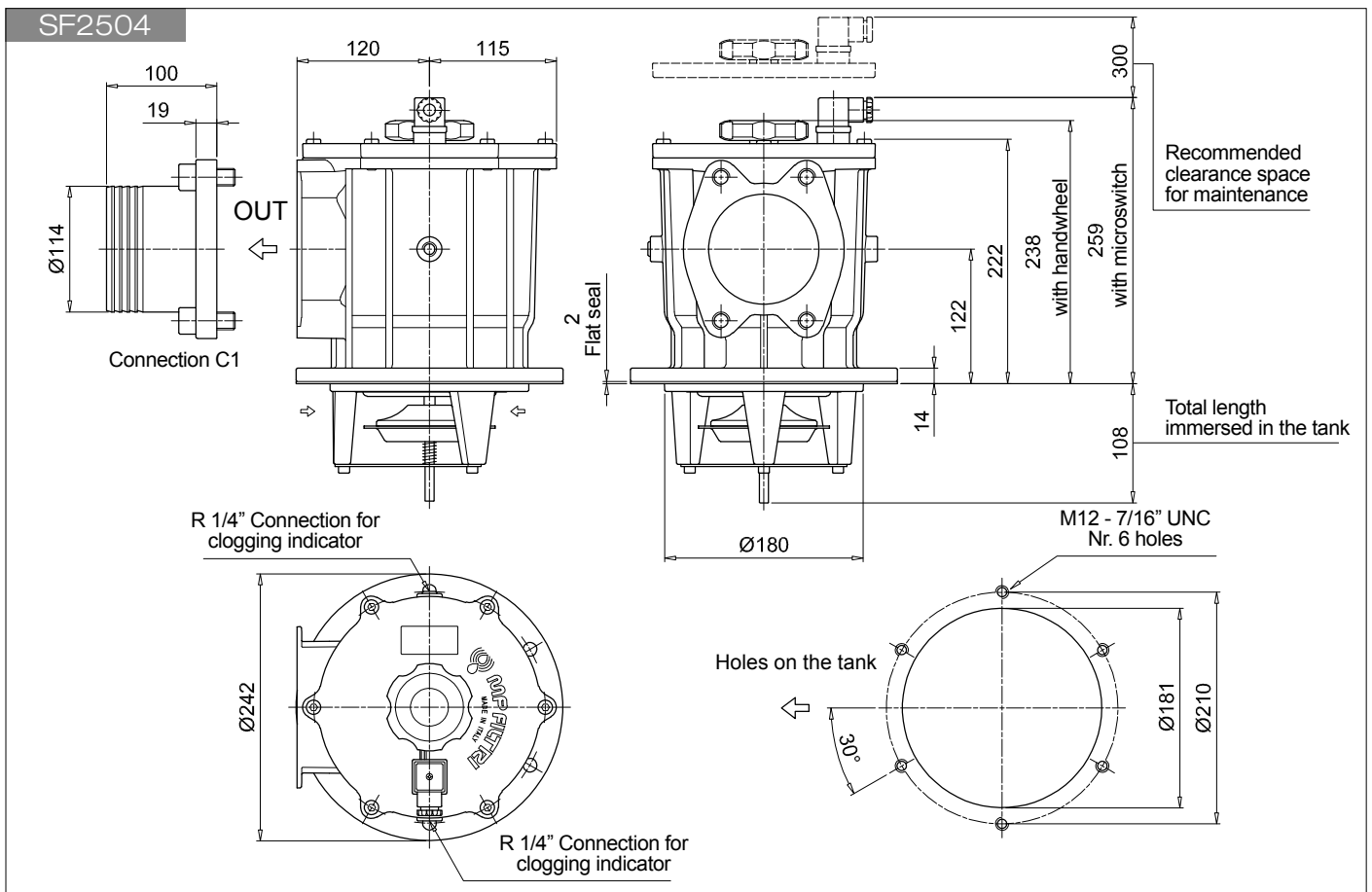
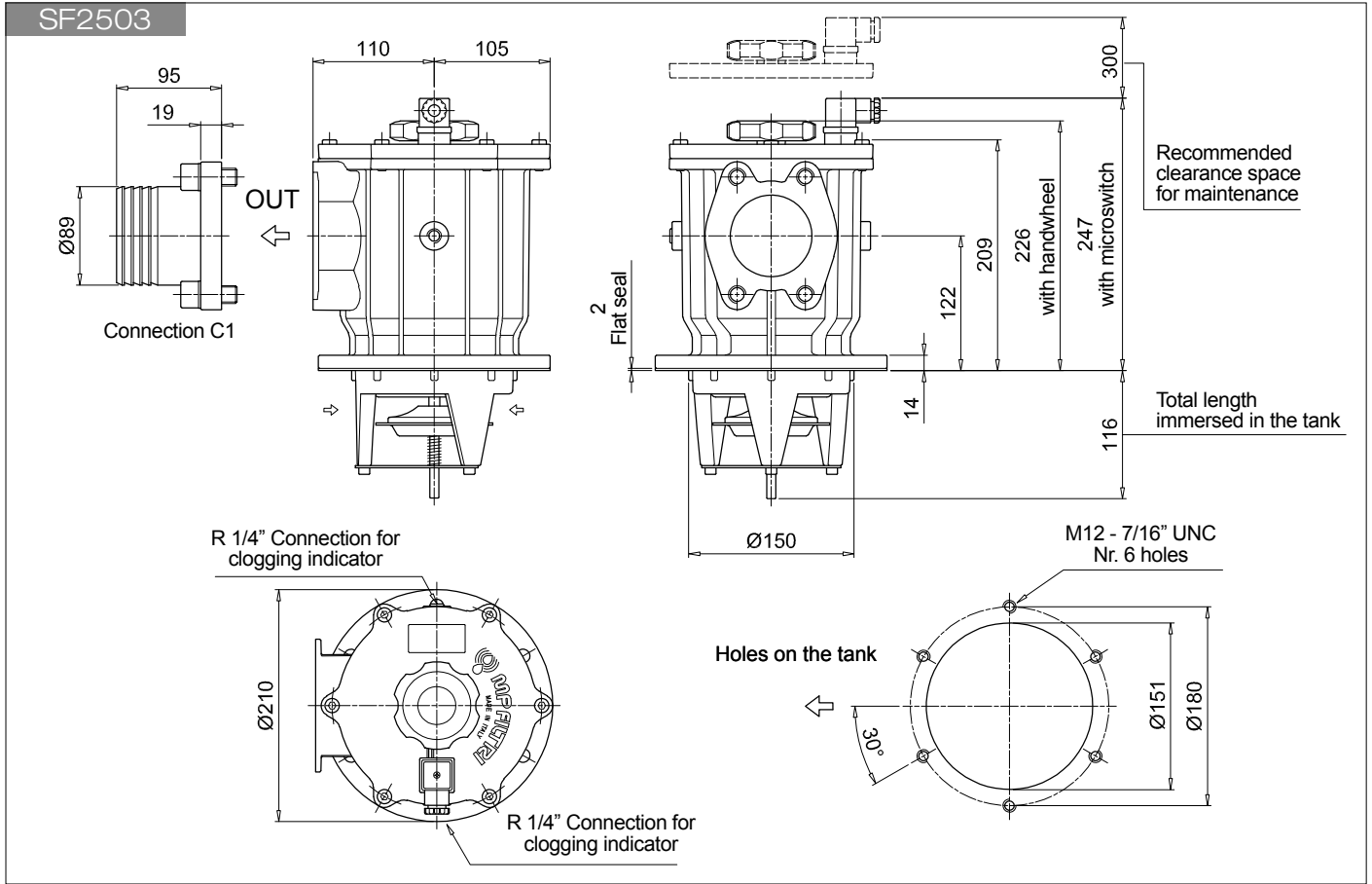
VVA	Axial vacuum gauge
VVR	Radial vacuum gauge
VEA	Electrical vacuum indicator
VLA	Electrical / visual vacuum indicator



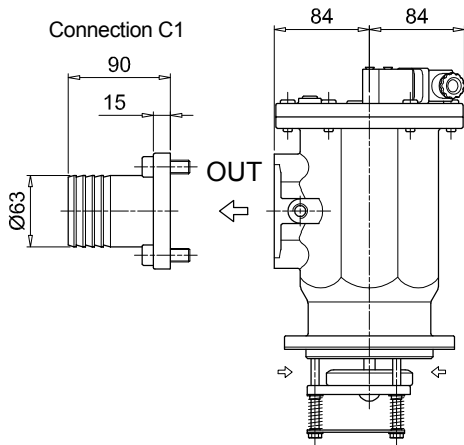
SF2 500

SF2500 - SF2501 - SF2503 - SF2504 - SF2505 - SF2510 - SF2535 - SF2540

Dimensions



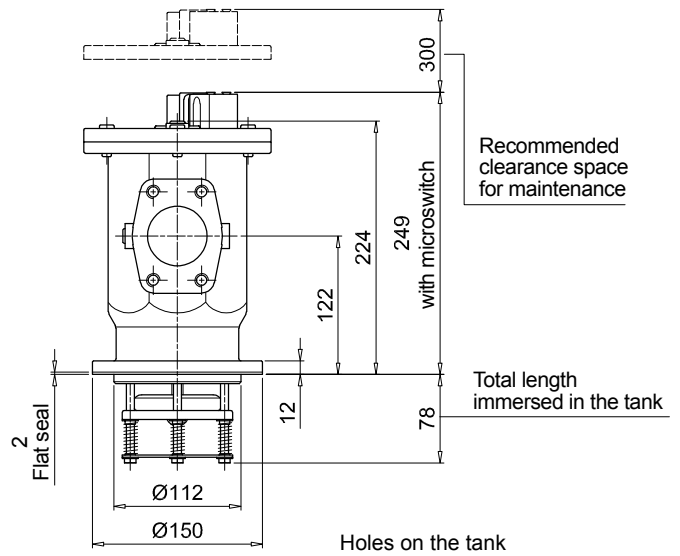
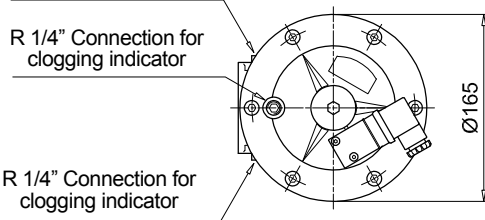
SF2505



R 1/4" Connection for clogging indicator

R 1/4" Connection for clogging indicator

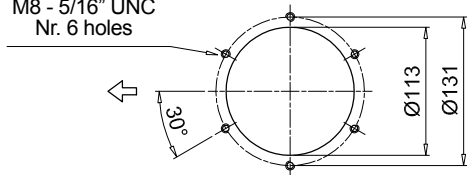
R 1/4" Connection for clogging indicator



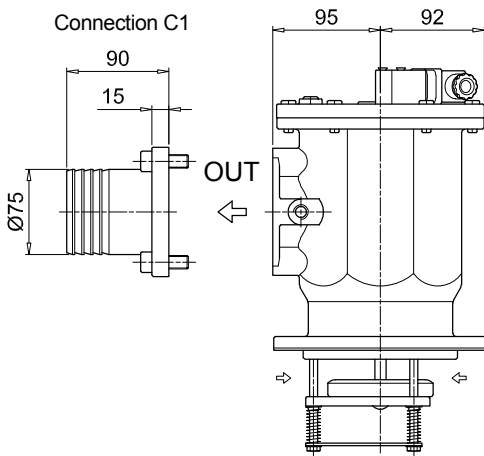
Recommended clearance space for maintenance

Total length immersed in the tank

M8 - 5/16" UNC
Nr. 6 holes



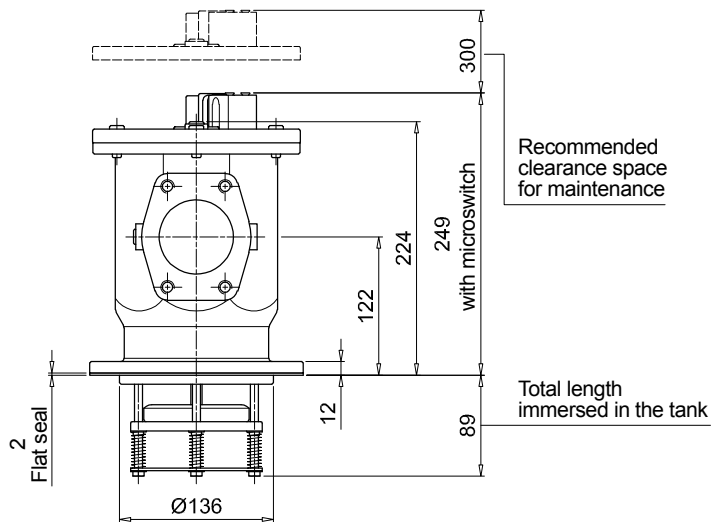
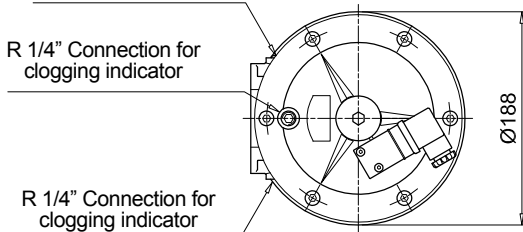
SF2510



R 1/4" Connection for clogging indicator

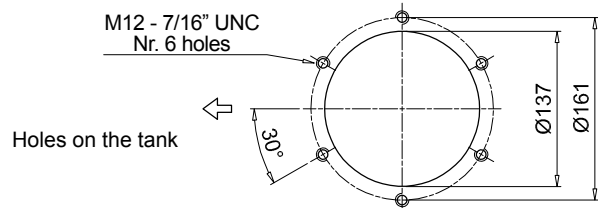
R 1/4" Connection for clogging indicator

R 1/4" Connection for clogging indicator



Recommended clearance space for maintenance

M12 - 7/16" UNC
Nr. 6 holes

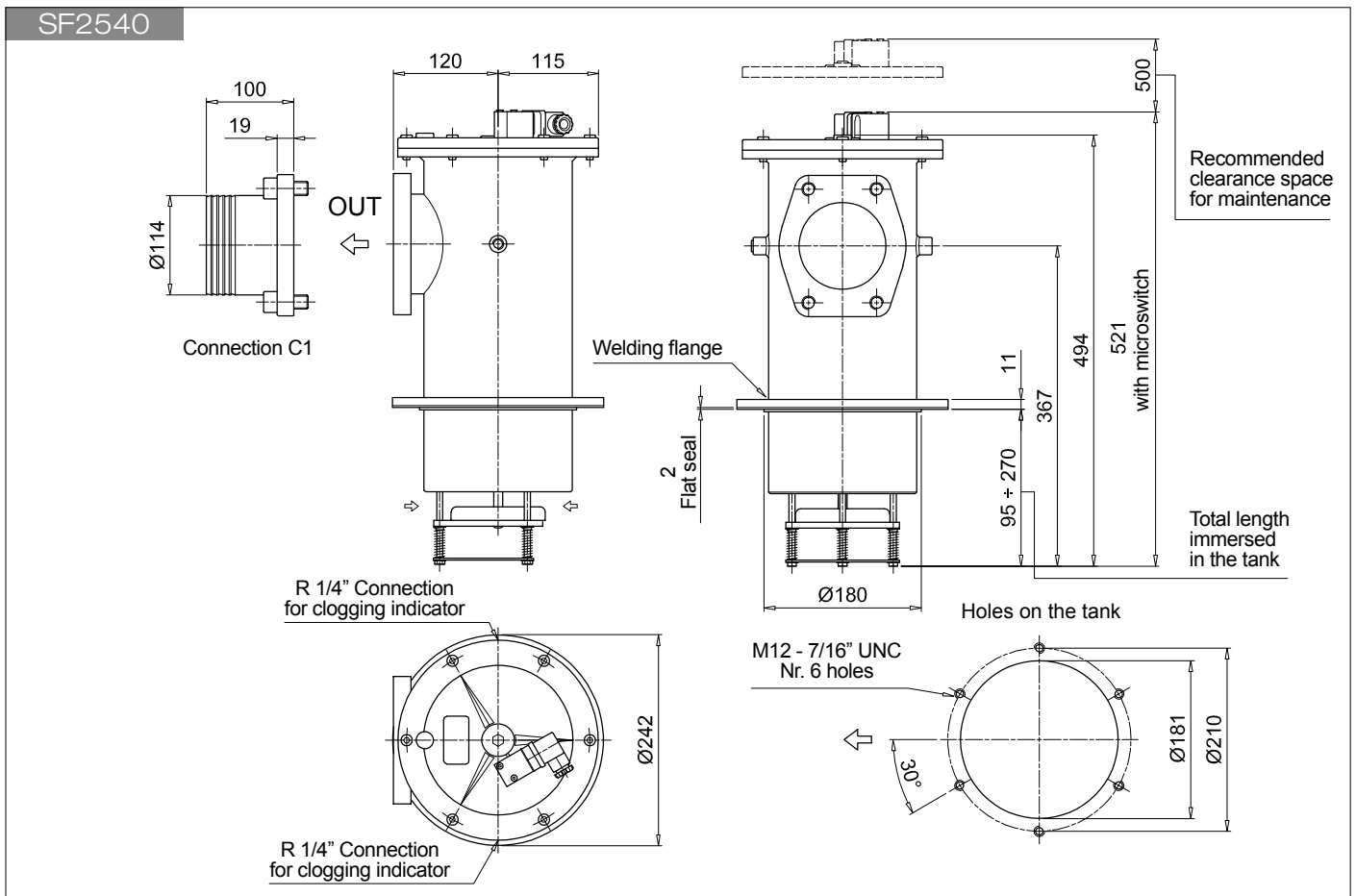
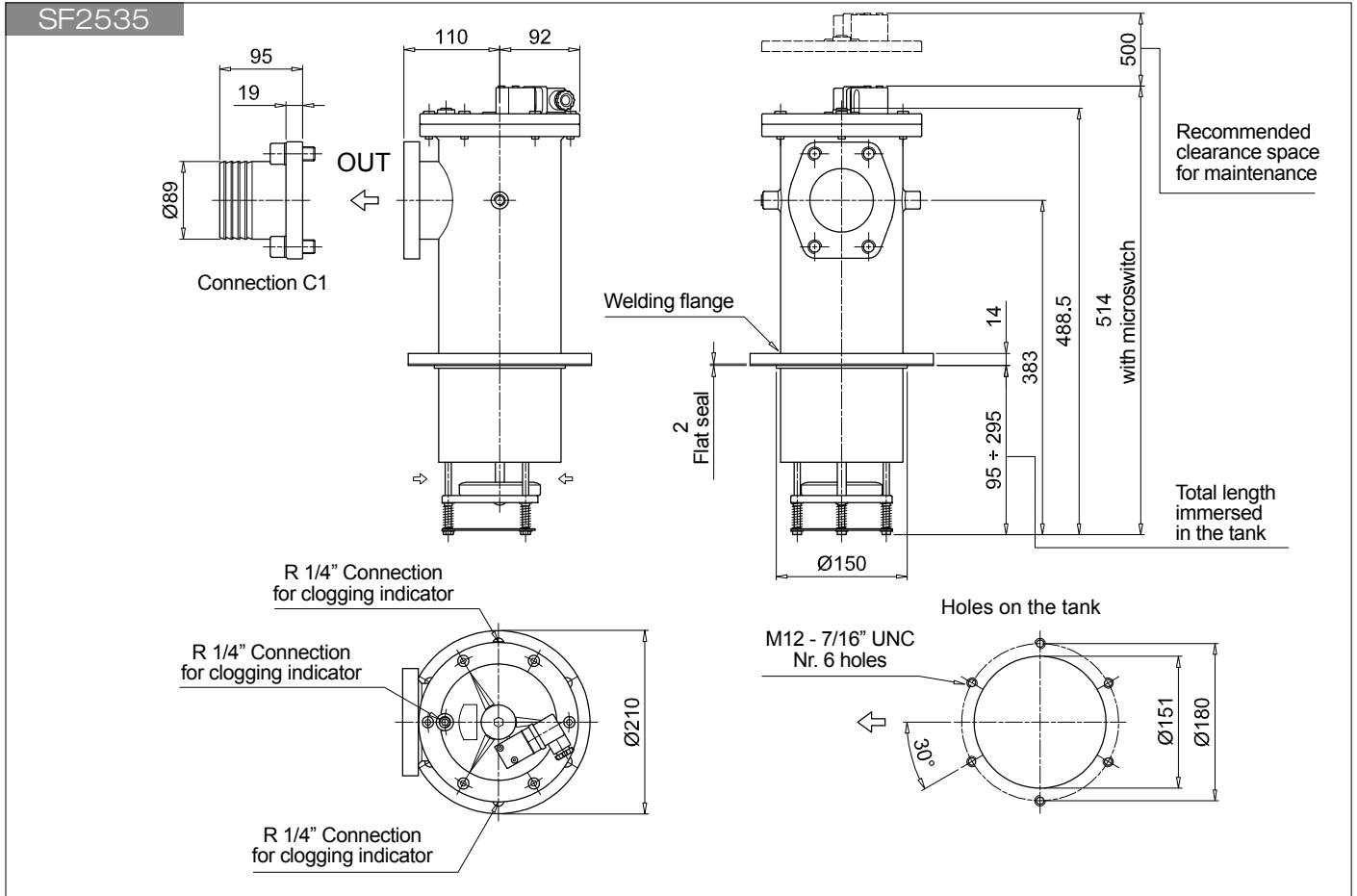


Holes on the tank

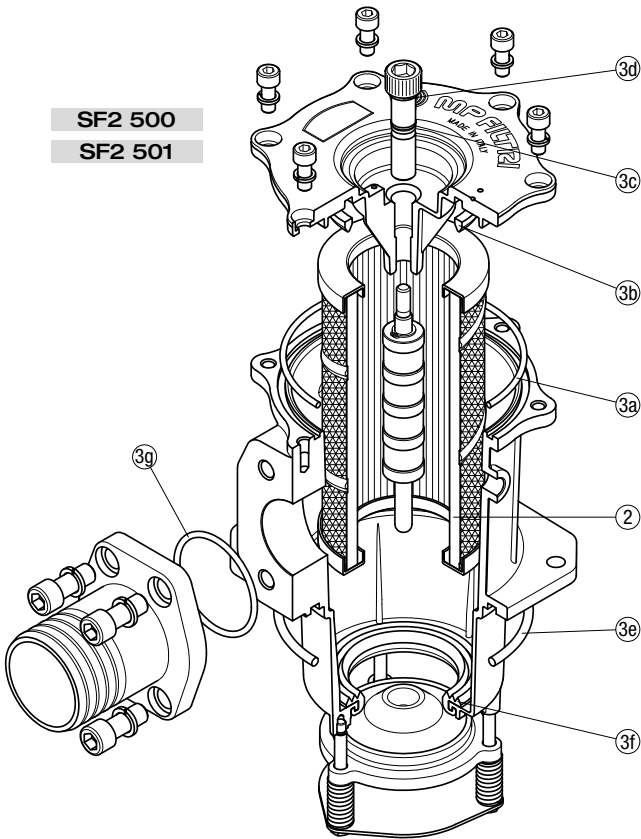
SF2 500

SF2500 - SF2501 - SF2503 - SF2504 - SF2505 - SF2510 - SF2535 - SF2540

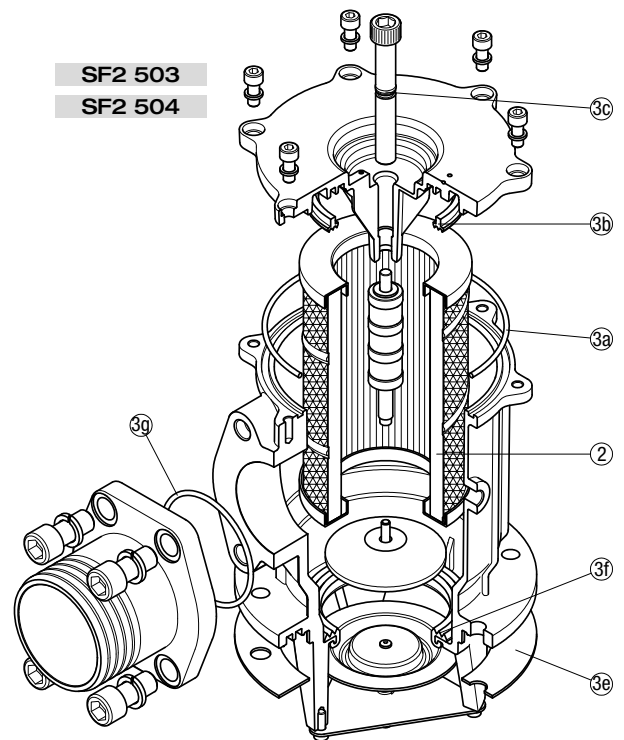
Dimensions



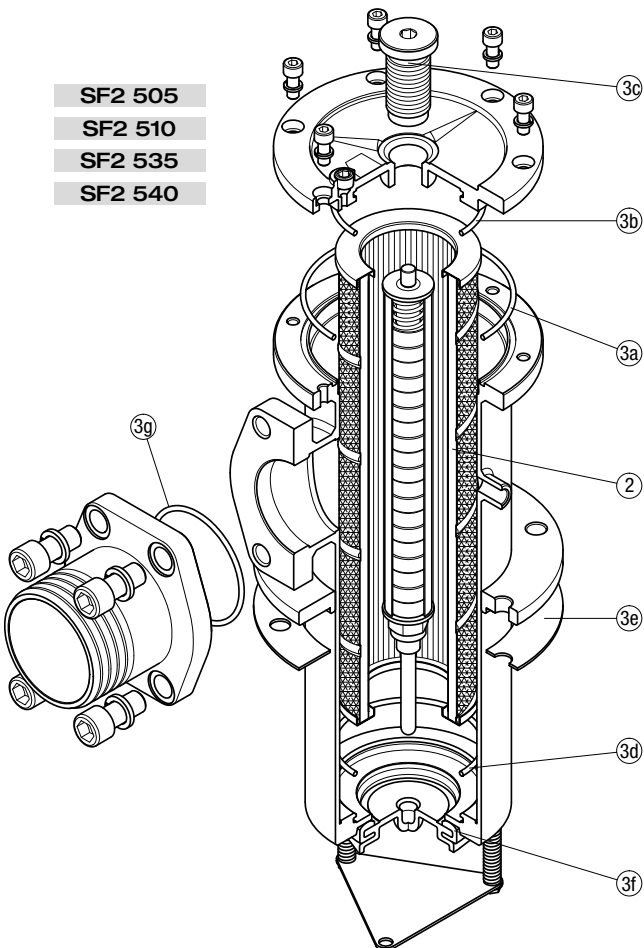
SF2 500
SF2 501



SF2 503
SF2 504



SF2 505
SF2 510
SF2 535
SF2 540



Item:	Q.ty: 1 pc.		
	2	3 (3a = 3g)	
Filter series	Filter element	Seal Kit code number	
		NBR	FPM
SF2 500	See order table	02050141	02050142
SF2 501		02050143	02050144
SF2 503		02050070	02050071
SF2 504		02050072	02050073
SF2 505		02050043	02050044
SF2 510		02050045	02050046
SF2 535		02050051	02050052
SF2 540		02050053	02050054