SF2 500 series

Flow rate up to 700 l/min

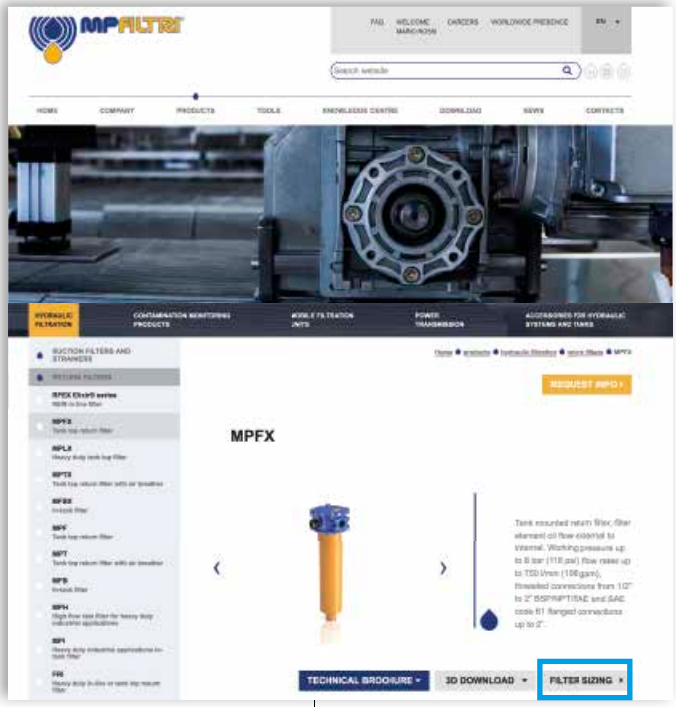
TYPICAL FILTER SIZING Selection Software

Step 1

Select “FILTER SIZING SOFTWARE” after login

OR

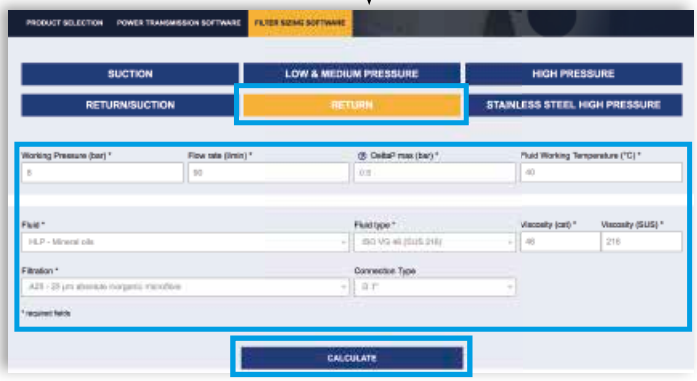
Select “FILTER SIZING” after login from a product page

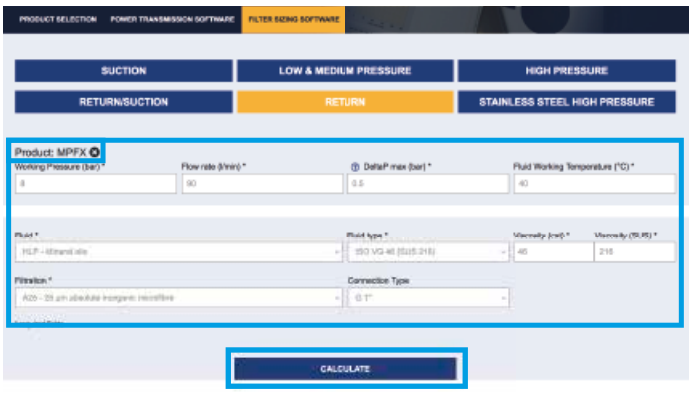


Choose the type of filter family.
Enter the main data for sizing the filter
then push CALCULATE.

Step 2

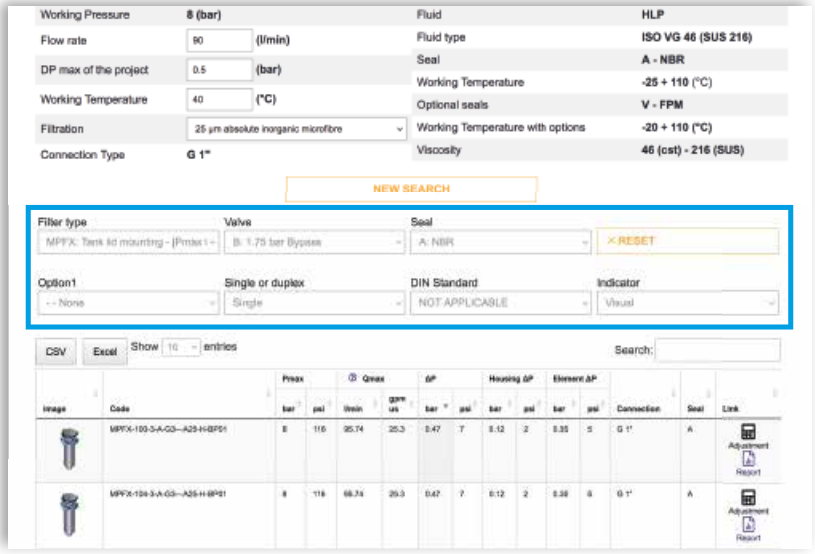
Enter the main data for sizing the filter
then push CALCULATE.





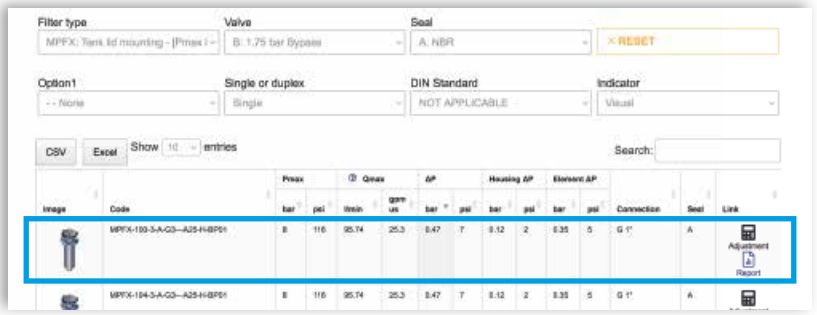
Step 3

Select the desidered options to choose the appropriate filter type for the application.



Step 4

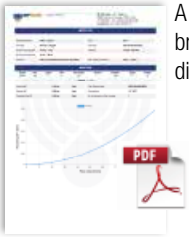
Choose the most suitable filter from the proposed list.



Step 5

A SAVE YOUR FILTER'S REPORT

SAVE IN YOUR ARCHIVE
typing your reference data and then SAVE AS PDF

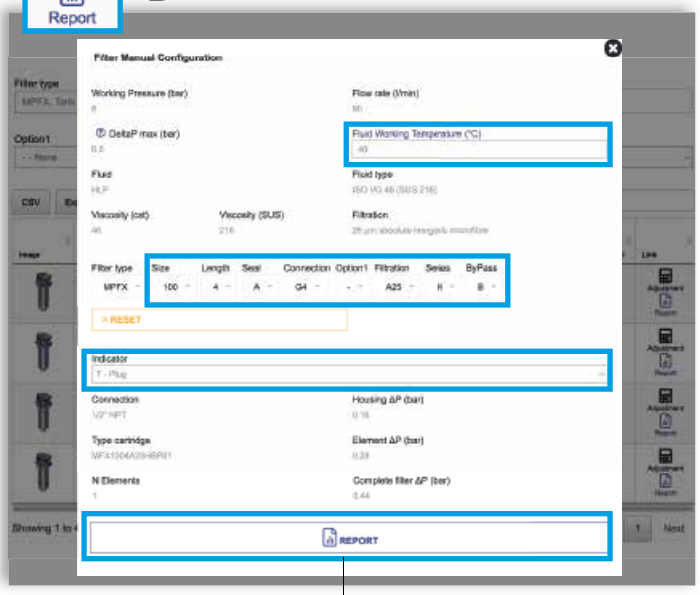


A new
browser window
displays the pdf

Close the report window

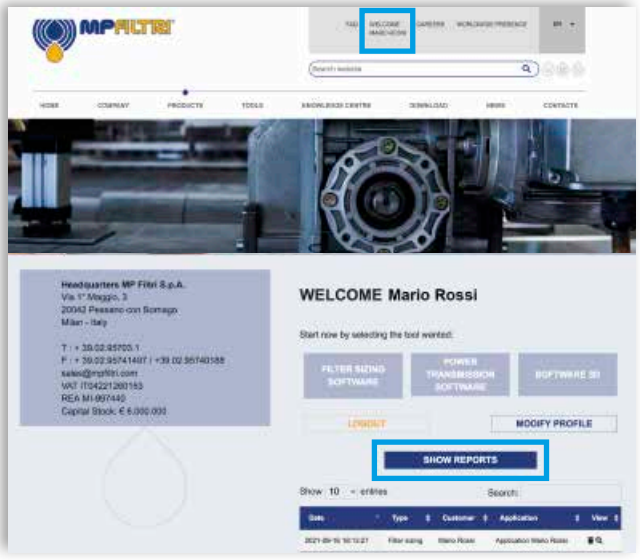
B MANUAL EDIT

It is possible to change the filter
modifying every parameter.



see **A**

By clicking your WELCOME button,
the SHOW REPORTS is displayed: select it to see your filters list.



SF2 500 GENERAL INFORMATION

Description

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 800 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

Technical data

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

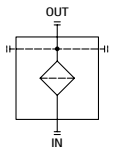
FILTER ASSEMBLY SIZING
Flow rates [l/min]

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

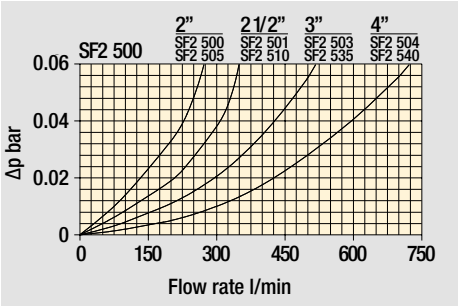
Maximum flow rate for a complete suction filter with a pressure drop Δp = 0.08 bar.
The reference fluid has a kinematic viscosity of 30 mm²/s (cSt) and a density of 0.86 kg/dm³.
For different pressure drop or fluid viscosity we recommend to use our selection software available on www.mpfiltri.com.
You 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.

Filter series	
SF2 500	•

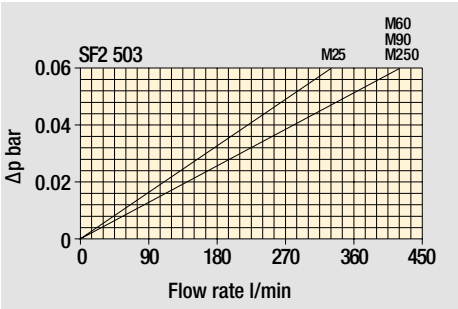
Hydraulic symbols

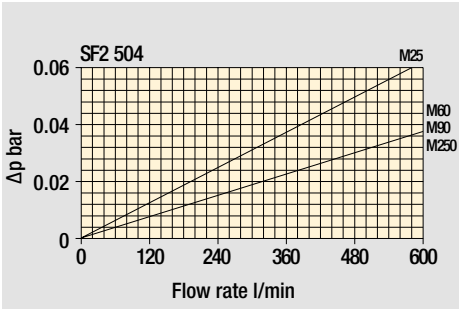


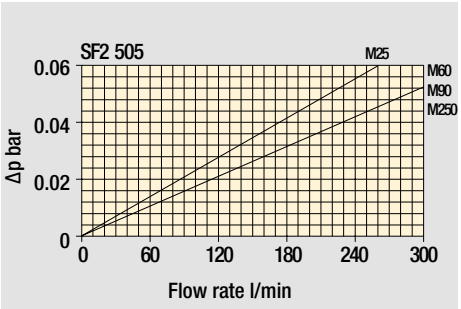
Pressure drop
Filter housings Δp pressure drop

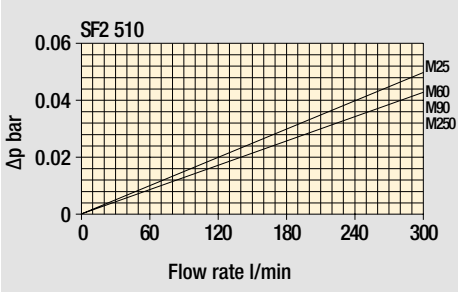


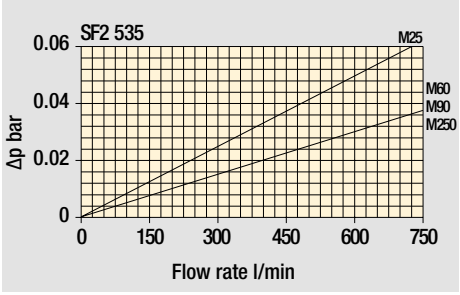
Filter element Δp pressure drop

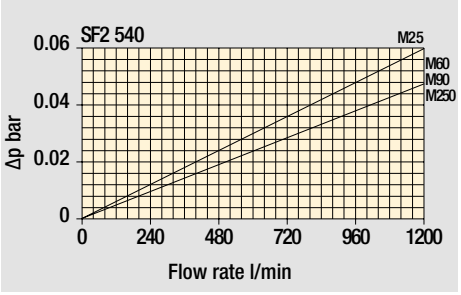












The curves are plotted using mineral oil with density of 0.86 kg/dm³ in compliance with ISO 3968. Δp varies proportionally with density.

SF2 500 SF2500 - SF2501 - SF2503 - SF2504 - SF2505 - SF2510 - SF2535 - SF2540

Designation & Ordering code

COMPLETE FILTER

Configuration example 1: SF2500 | W | F1 | D | M25 | P01

Configuration example 2: SF2535 | A | F2 | C | M60 | P01

Series and size

SF2500
SF2501
SF2503
SF2504
SF2505
SF2510
SF2535
SF2540

Seals and treatments

		Filtration rating Mxx
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 handwheel	•	•	•	•
C	With microswitch, without handwheel			•	•
D	With microswitch, with Nylon handwheel	•	•		
K	With microswitch, with steel handwheel	•	•		
M	Without microswitch, with Nylon handwheel	•	•		

Filtration rating (filter media)

M25	Wire mesh 25 µm	**M90**	Wire mesh 90 µm
M60	Wire mesh 60 µm	**M250**	Wire mesh 250 µm

Execution

P01	MP Filtri standard
Pxx	Customized

FILTER ELEMENT

Configuration example 1: SF510 | M25 | W | P01

Configuration example 2: SF535 | M60 | | P01

Element series and size

	SF2500	SF2501	SF2503	SF2504	SF2505	SF2510	SF2535	SF2540
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

		Filtration rating Mxx	Pxx
	Standard version	•	•
W	Compatible with fluids HFA-HFB-HFC	•	

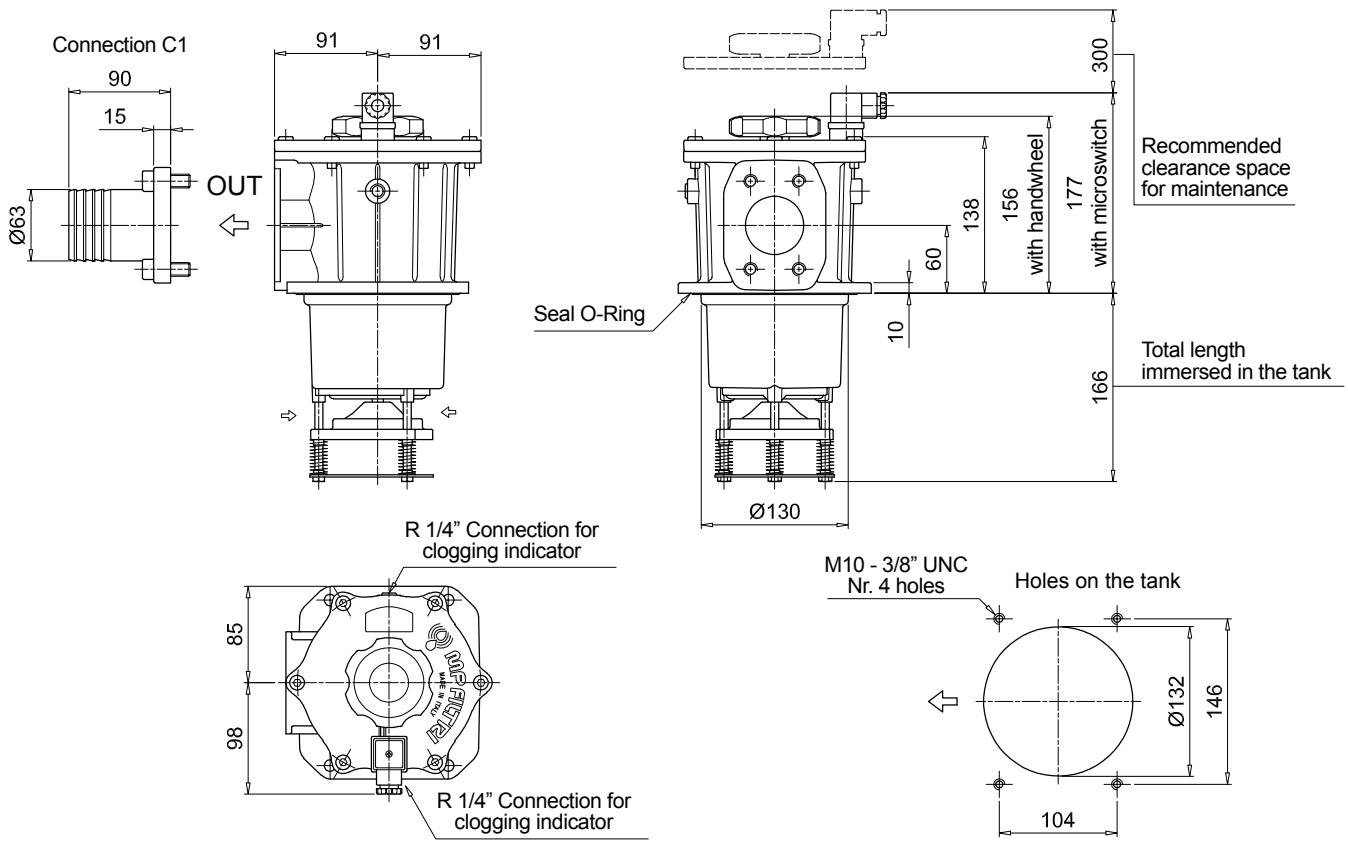
Execution

P01	MP Filtri standard
Pxx	Customized

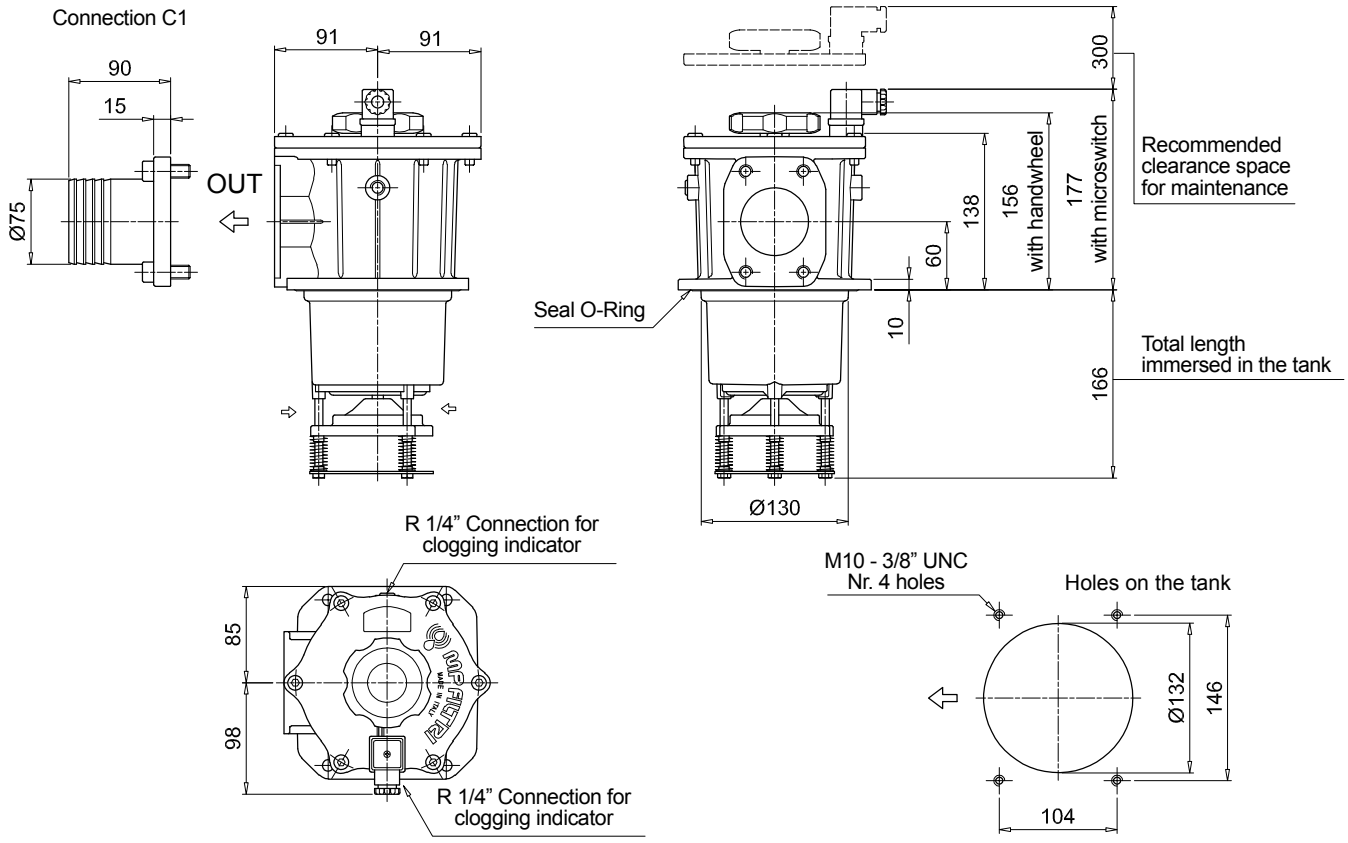
ACCESSORIES

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

SF2500

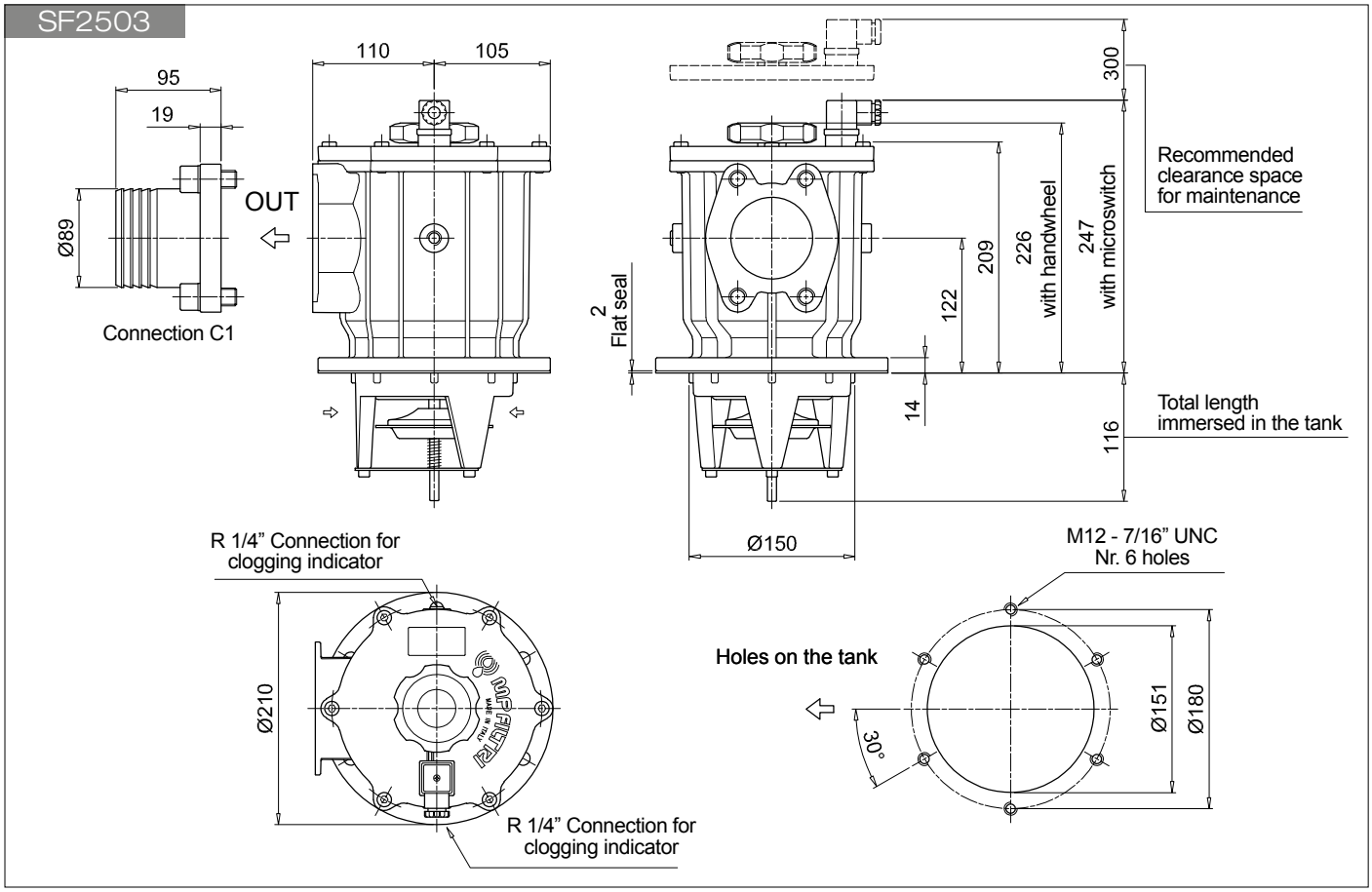


SF2501

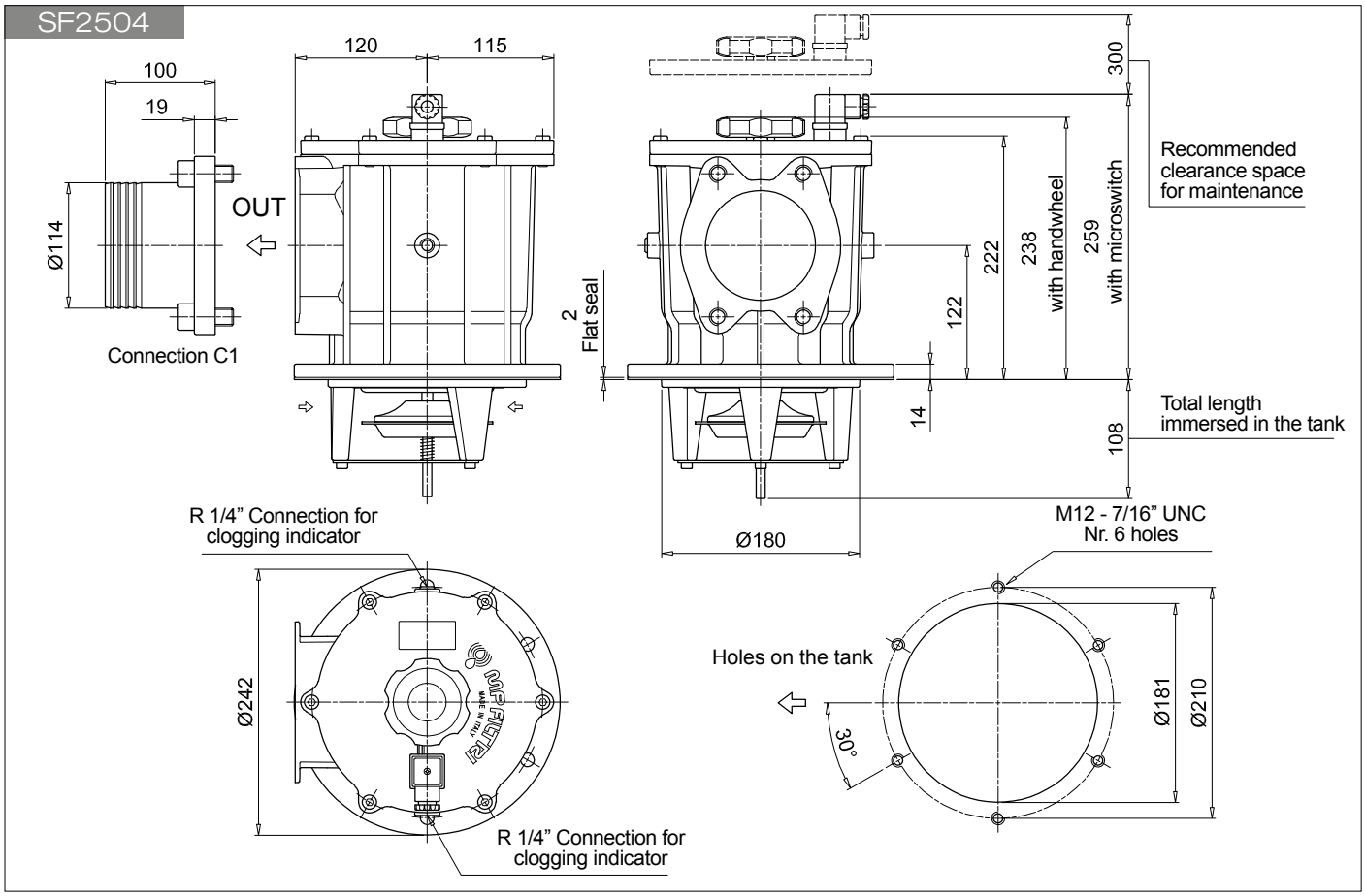


Dimensions

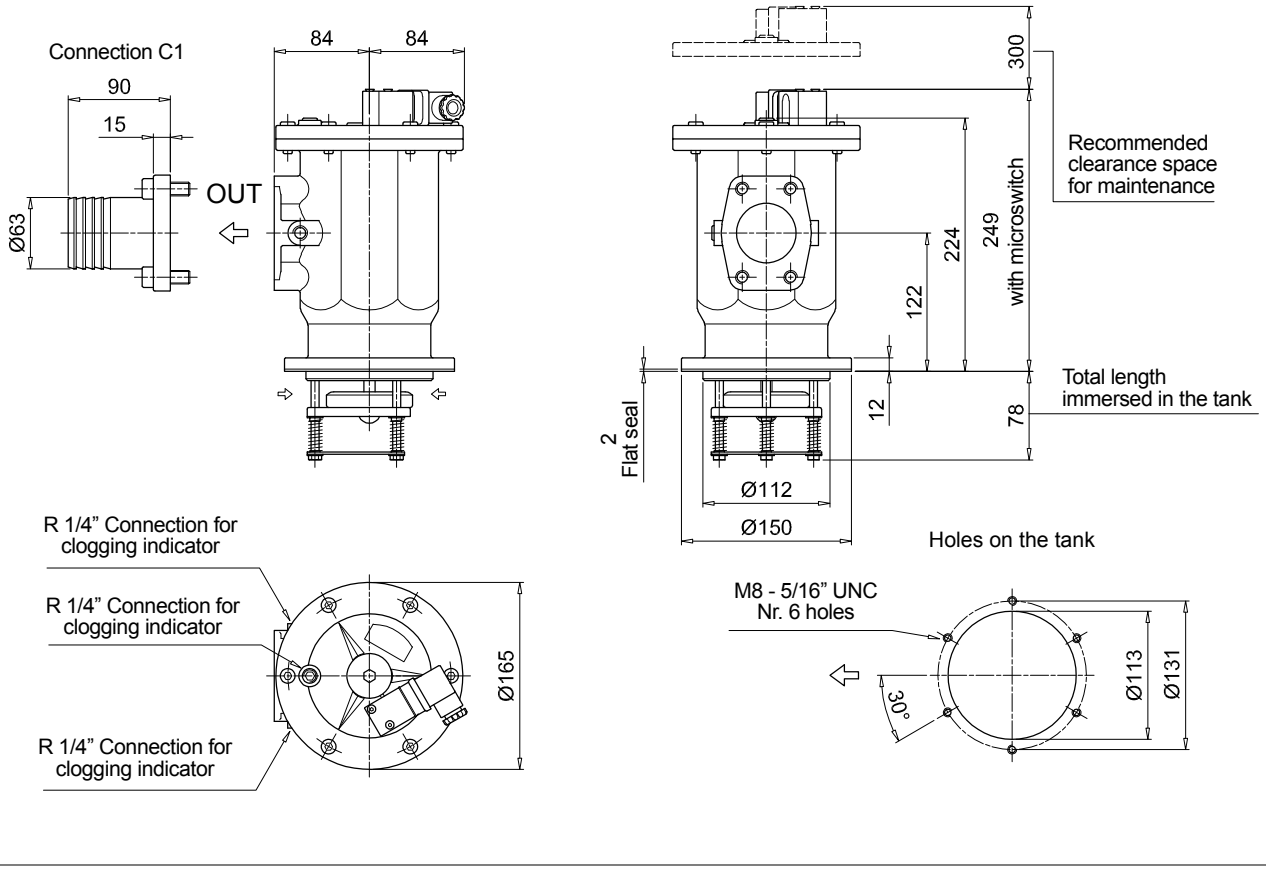
SF2503



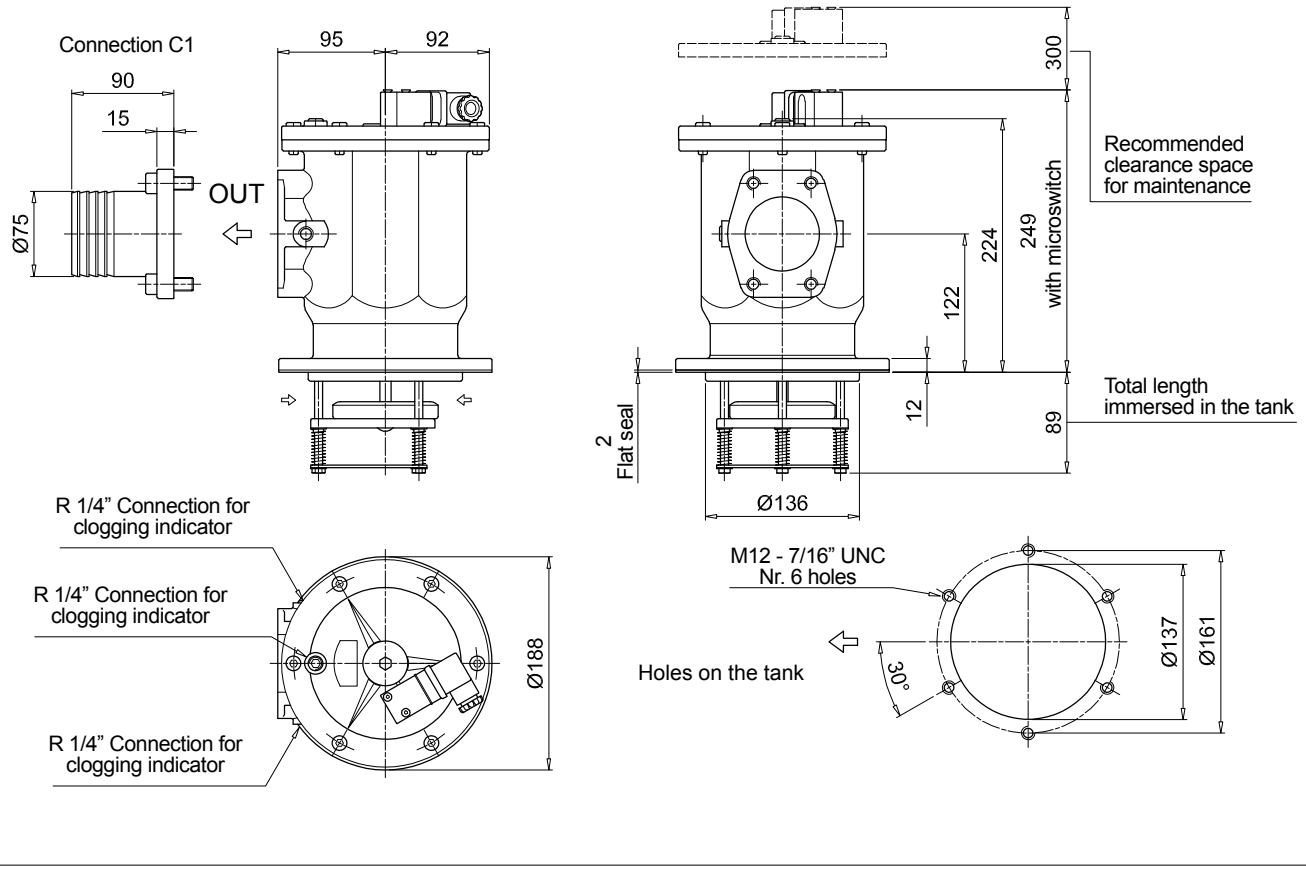
SF2504



SF2505

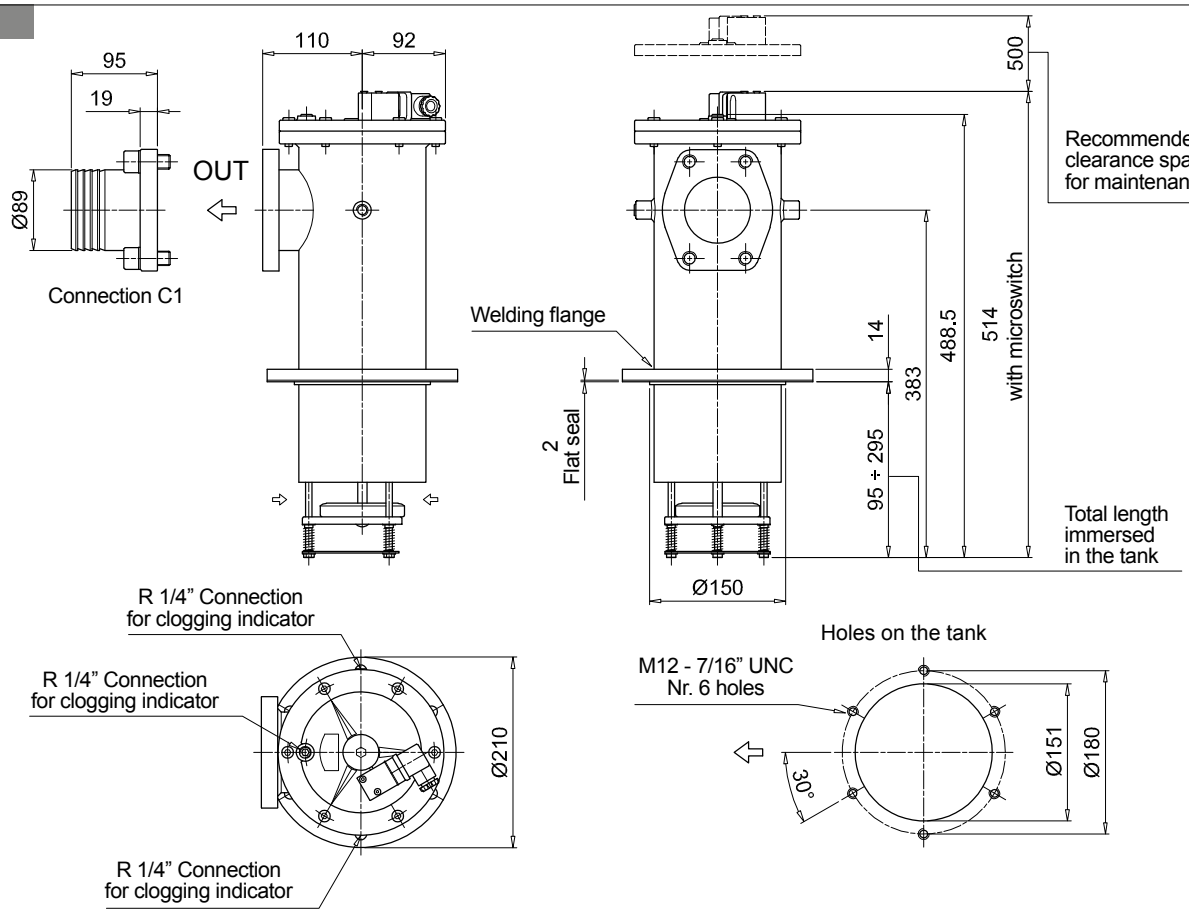


SF2510

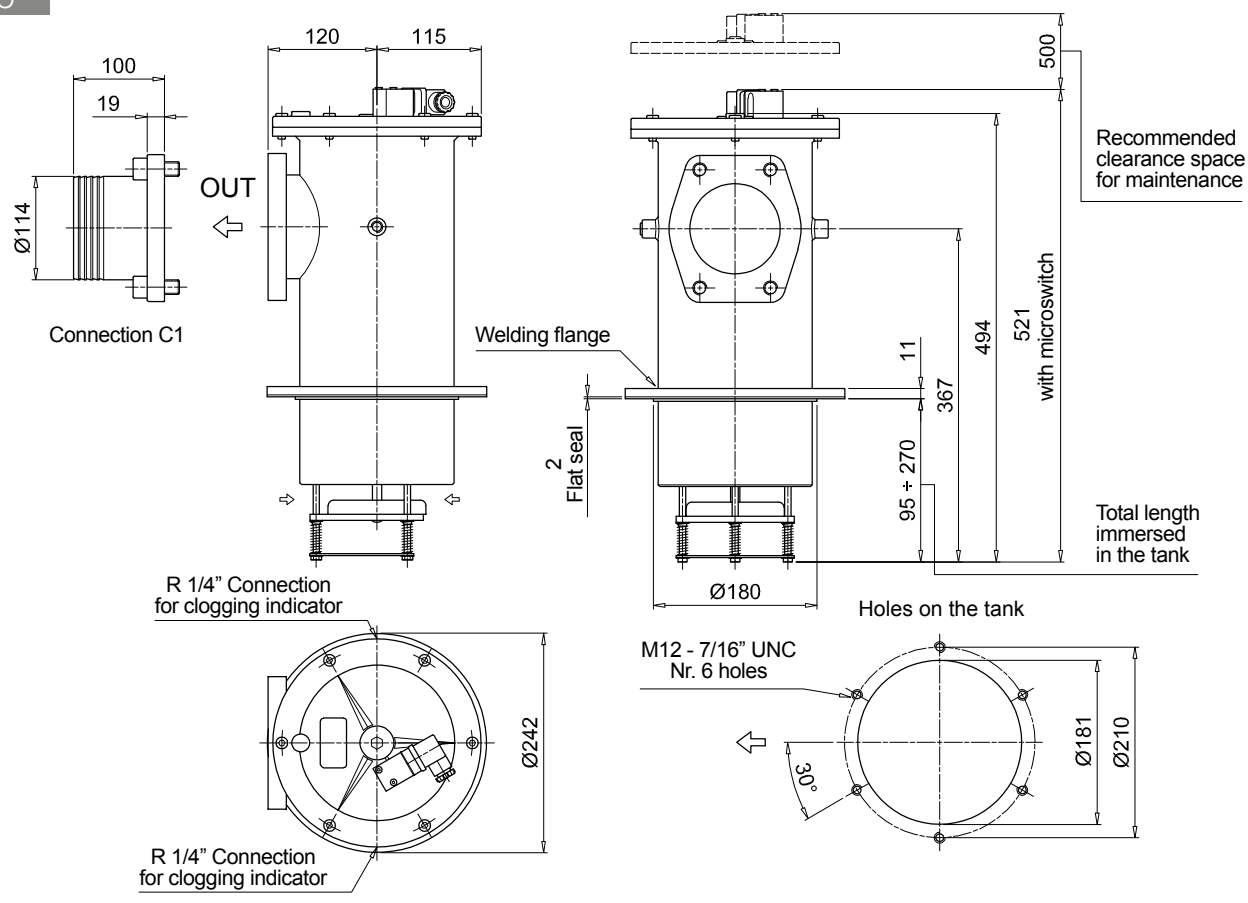


Dimensions

SF2535

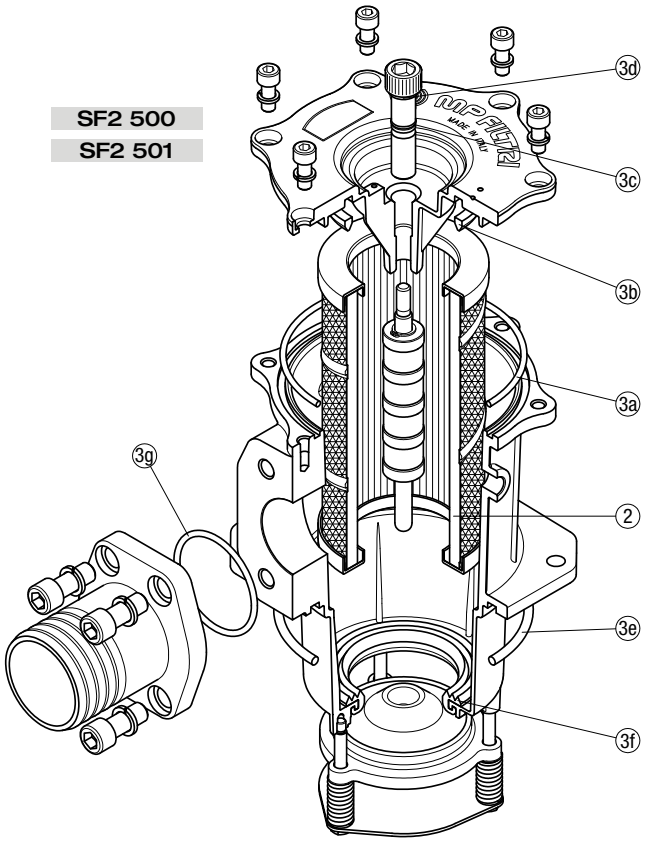


SF2540

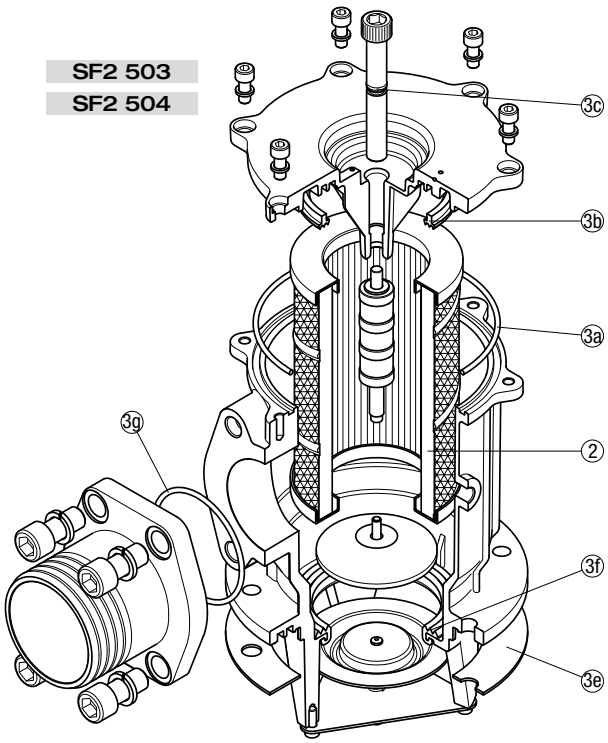


Order number for spare parts

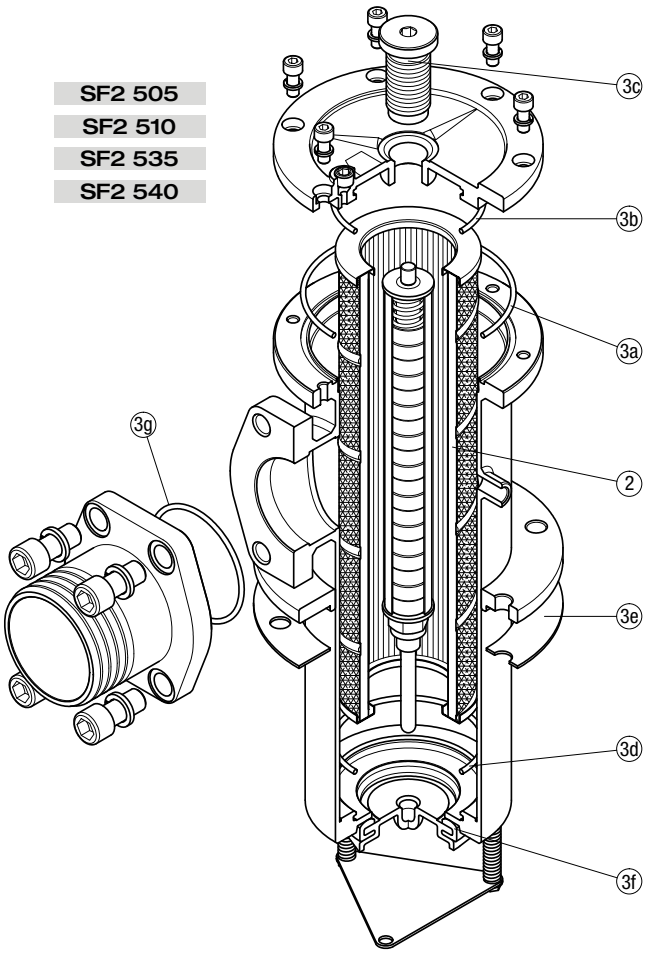
SF2 500
SF2 501



SF2 503
SF2 504



SF2 505
SF2 510
SF2 535
SF2 540



Item:	Q.ty: 1 pc. 2	Q.ty: 1 pc. 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