RF2 series

Maximum working pressure up to 2 MPa (20 bar) - Flow rate up to 350 l/min

Description

Return filter

Maximum working pressure up to 2 MPa (20 bar)
Flow rate up to 350 l/min

RF2250 and RF2350 are ranges of return filters for side tank mounting with integrated shut-off valve for protection of the reservoir against the system contamination.
They are placed below the minimum oil level, directly connected to the return line of the system.
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 350 l/min
- 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 applications:
- Compact mobile machines
- Compact 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 175 kPa (1.75 bar) ±10%

Δp element type
- Microfibre filter elements - series CU: 10 bar
- Fluid flow through the filter element from OUT to IN

Seals
- Standard NBR series A
- Optional FPM series V

Temperature
From -25 °C to +110 °C

Note
RF2 250-350 filters mounting, see the drawings on page 235 and following

Weights [kg] and volumes [dm³]

Filter series	Weights [kg]	Volumes [dm³]
	Length 1	Length 1
RF2 250	2.6	2.0
RF2 350	2.8	2.0

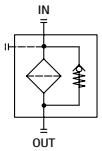
FILTER ASSEMBLY SIZING
Flow rates [l/min]

Filter series	Length	Filter element design - N Series							
		A03	A06	A10	A16	A25	M25 M60 M90	P10	P25
RF2 250	**1**	148	184	278	307	447	615	447	485
RF2 350	**1**	148	184	278	307	447	615	447	485

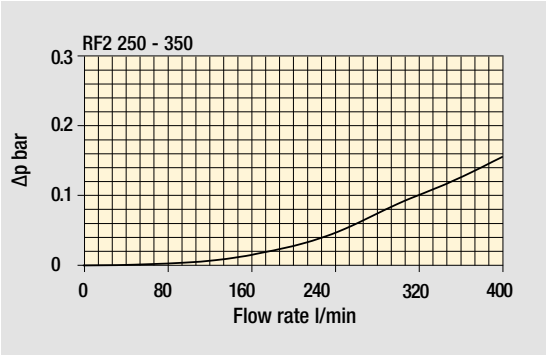
Maximum flow rate for a complete return filter with a pressure drop Δp = 0.5 bar.
The reference fluid has a kinematic viscosity of 30 mm^2/s (cSt) and a density of 0.86 kg/dm^3.
For different pressure drop or fluid viscosity we recommend to use our selection software available on www.mpfiltri.com.
You 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	Style B - E
RF2 250	•
RF2 350	•

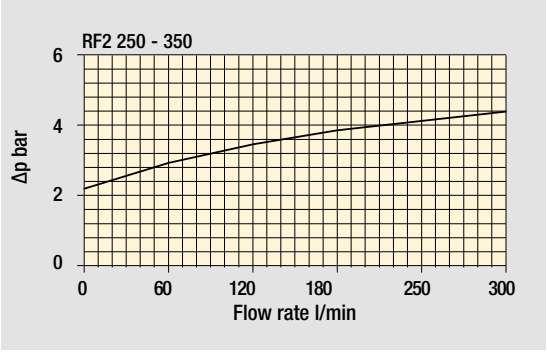
Hydraulic symbols



Pressure drop
Filter housings Δp pressure drop



Bypass valve pressure drop



The curves are plotted using mineral oil with density of 0.86 kg/dm^3 in compliance with ISO 3968. Δp varies proportionally with density.

Designation & Ordering code

COMPLETE FILTER

Configuration example 1: RF2250 | W | F2 | E | M25 | P01

Configuration example 2: RF2350 | A | G1 | B | A25 | P01

Series and size

RF2250

RF2350

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

Connections		Aux (only RF2350)	Mxx	Pxx
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

B 1.75 bar

E 3 bar

Filtration rating (filter media)

A03	Inorganic microfiber 3 µm	**M25**	Wire mesh 25 µm
A06	Inorganic microfiber 6 µm	**M60**	Wire mesh 60 µm
A10	Inorganic microfiber 10 µm	**M90**	Wire mesh 90 µm
A16	Inorganic microfiber 16 µm	**P10**	Resin impregnated paper 10 µm
A25	Inorganic microfiber 25 µm	**P25**	Resin impregnated paper 25 µm

Execution

P01 MP Filtri standard

Pxx Customized

FILTER ELEMENT

Configuration example 1: CU250 | M25 | W | P01

Configuration example 2: CU250 | A25 | N | P01

Element series and size

CU250

Filtration rating (filter media)

A03	Inorganic microfiber 3 µm	**M25**	Wire mesh 25 µm
A06	Inorganic microfiber 6 µm	**M60**	Wire mesh 60 µm
A10	Inorganic microfiber 10 µm	**M90**	Wire mesh 90 µm
A16	Inorganic microfiber 16 µm	**P10**	Resin impregnated paper 10 µm
A25	Inorganic microfiber 25 µm	**P25**	Resin impregnated paper 25 µm

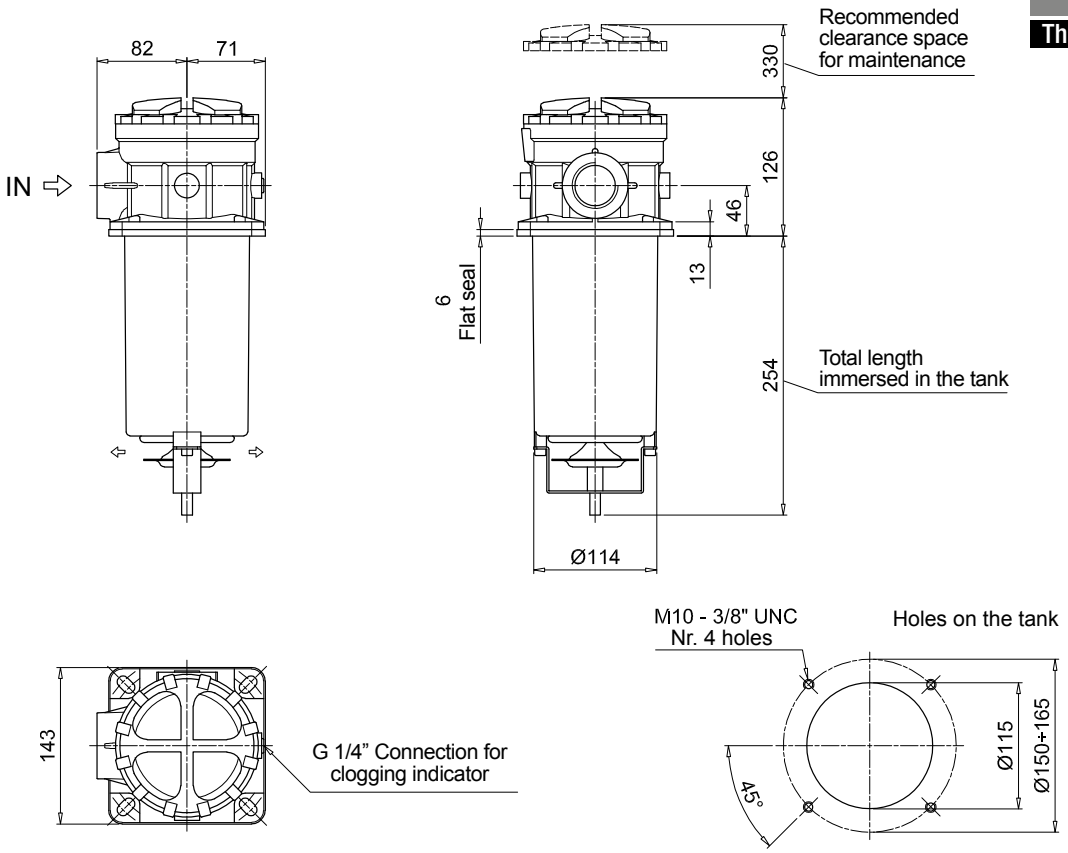
Seals and treatments			Filtration rating Axx	Mxx	Pxx
N	NBR		•	•	•
V	FPM		•	•	•
W	NBR head anodized	filter element compatible with fluids HFA-HFB-HFC	•	•	
Z	FPM head anodized		•	•	

Execution

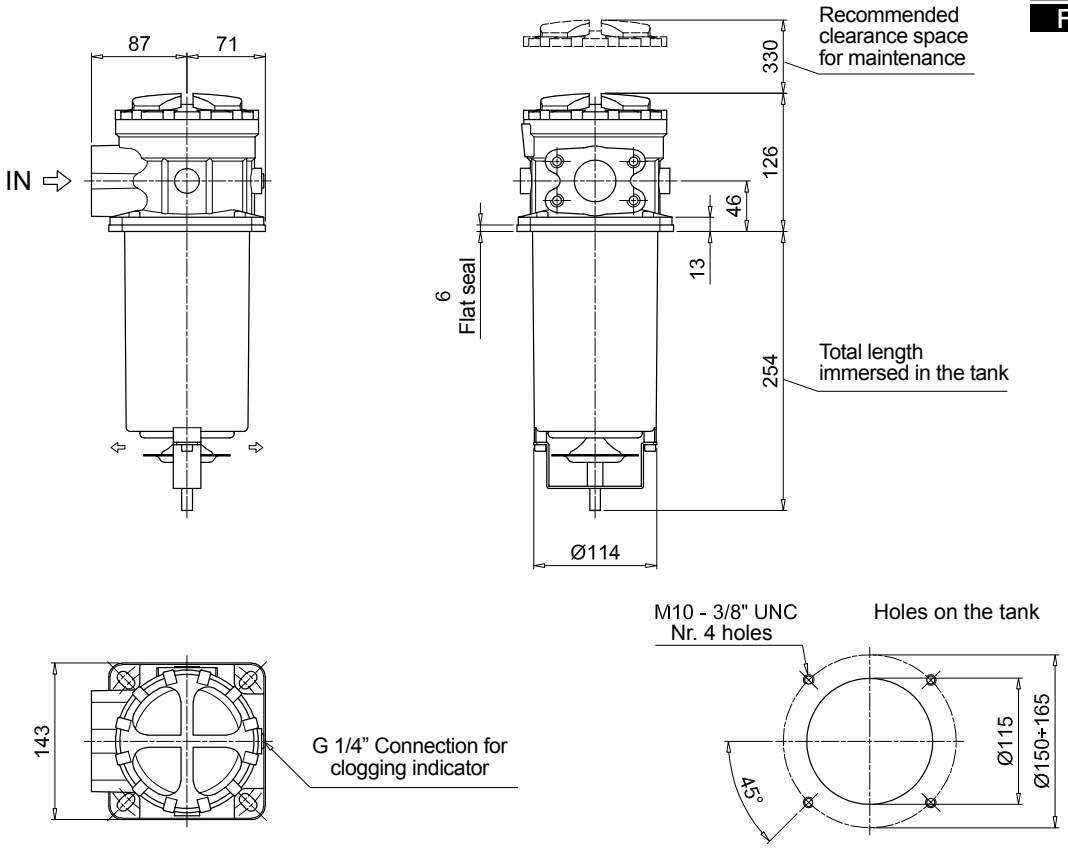
P01 MP Filtri standard

Pxx Customized

RF2250
Threaded connections "G"

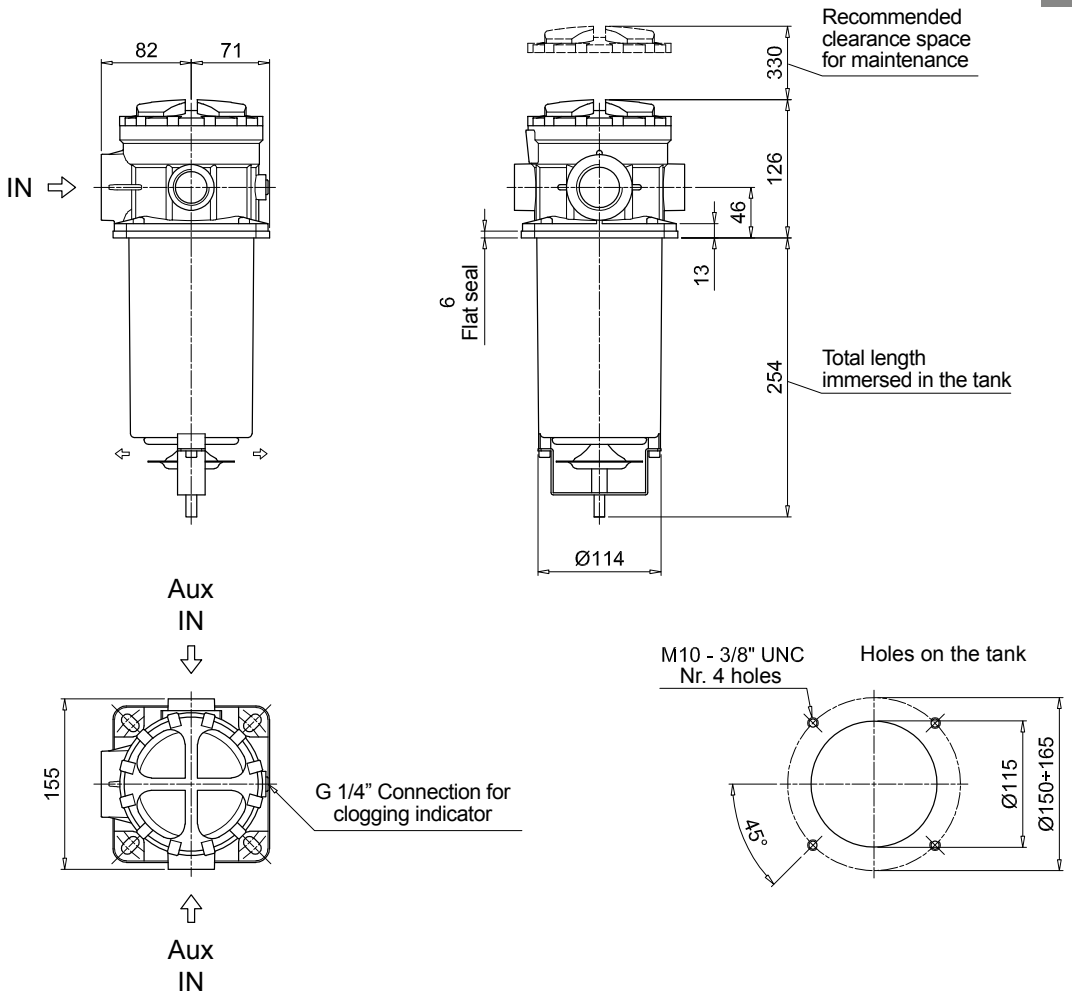


RF2250
Flange connections "F"



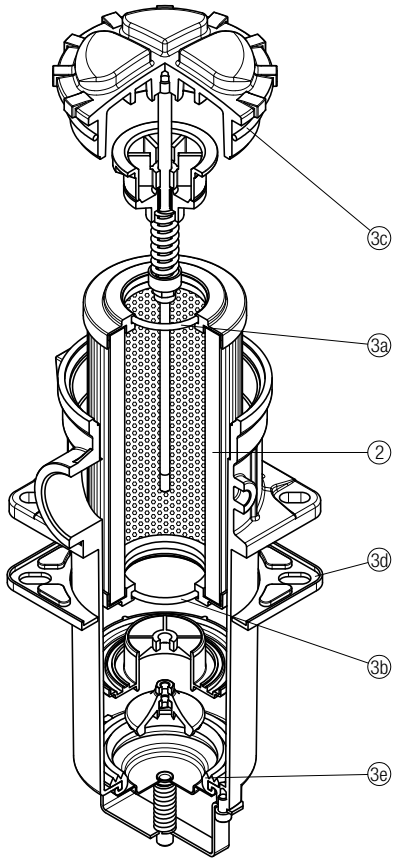
Dimensions

RF2350



Order number for spare parts

RF2 250 - 350



Item:	Q.ty: 1 pc. 2	Q.ty: 1 pc. 3 (3a ÷ 3e)	
Filter series	**Filter element**	**Seal Kit code number NBR**	**FPM**
RF2 250 **RF2 350**	See order table	02050586	02050587