

MFB series

BOWL ASSEMBLY

Maximum working pressure up to 800 kPa (8 bar) - Flow rate up to 700 l/min



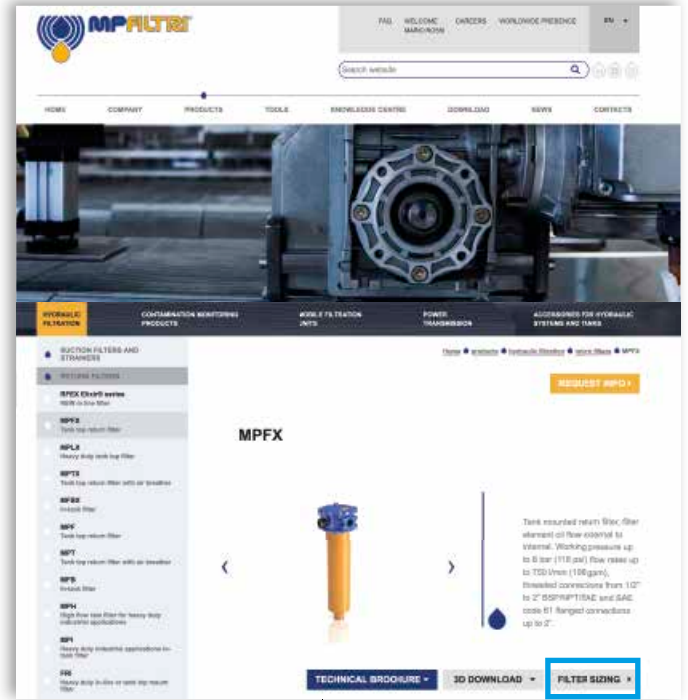
TYPICAL FILTER SIZING Selection Software

Step ①

Select "FILTER SIZING SOFTWARE" after login

OR

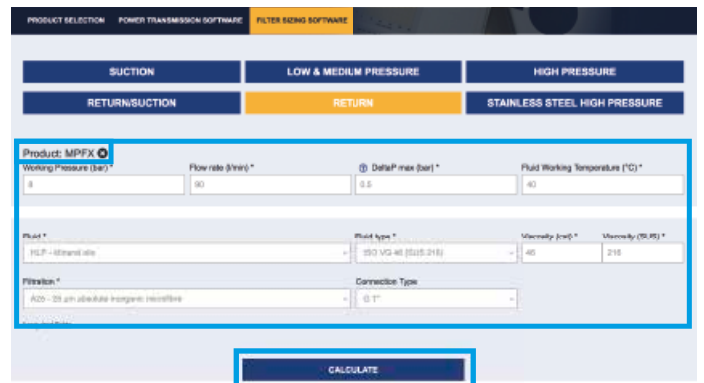
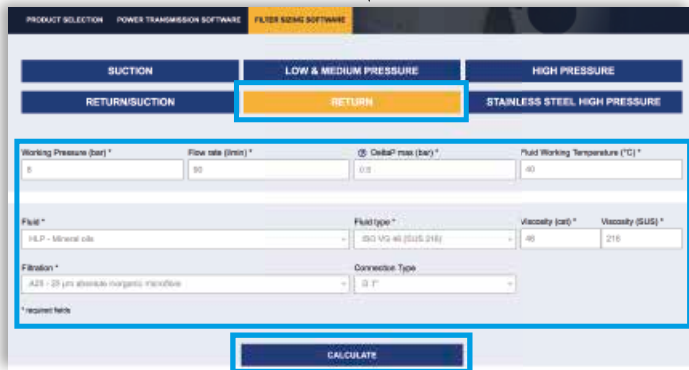
Select "FILTER SIZING" after login from a product page



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

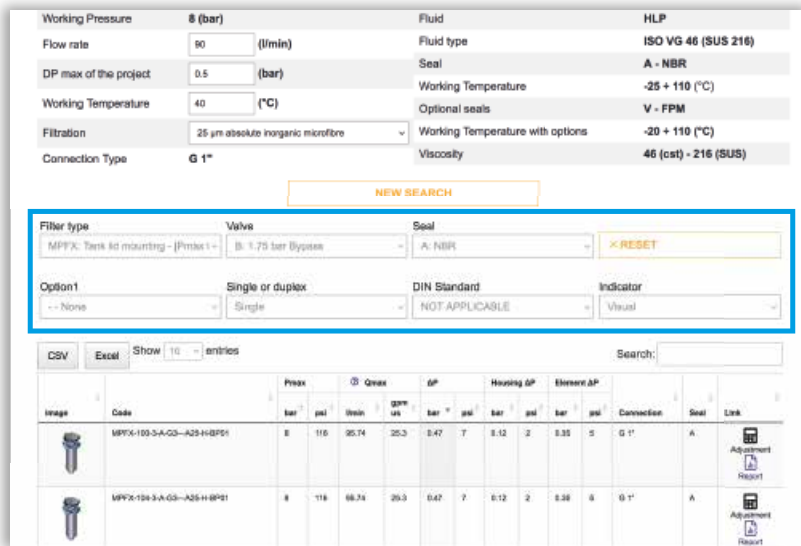
Step ②

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



Step ③

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



Step 4

Choose the most suitable filter from the proposed list.

Image	Code	Peak bar	Qmax psi	Qmax m³/min	Qmax gpm us	AP bar	AP psi	Housing AP bar	Housing AP psi	Element AP bar	Element AP psi	Connection	Seal	Link
	MPFX-103-3-A-Q3-A25-H-BPST	8	116	25.74	25.3	0.47	7	0.12	2	0.33	5	G 1"	A	Adjustment Report
	MPFX-104-3-A-Q3-A25-H-BPST	8	116	25.74	25.3	0.47	7	0.12	2	0.33	5	G 1"	A	Adjustment Report

Step 5

It is possible to change the filter modifying every parameter.



A SAVE YOUR FILTER'S REPORT



B MANUAL EDIT



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



A new browser window displays the pdf

see **A**

Close the report window



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

Return filter Bowl assembly

Maximum working pressure up to 800 kPa (8 bar)

Flow rate up to 700 l/min

MFB is a range of return filter kits for protection of the reservoir against the system contamination.

They are directly integrated in the moulded reservoir in immersed or semi-immersed position to save space into the tank.

Treaded or flanged covers can be provided.

The filter output must be always immersed into the fluid to avoid aeration or foam generation into the reservoir.

Available features:

- Fine filtration rating, to get a good cleanliness level into the reservoir
- Bypass valve integrated into the filter element, to relieve excessive pressure drop across the filter media
- Extension tube, to be used in deep reservoirs (sold as separate item)
- Diffuser, to reduce the risk of aeration, foaming and noise (sold as separate item)

Common applications:

Mobile machines

Bowl assembly materials

- Cover
Nylon: MFB 020-030-100
Aluminium: MFB 180-190

- Bowl: Nylon

Filter element materials

- Caps: Nylon
- Spring: Spring steel

Bypass valve

- Opening pressure 175 kPa (1.75 bar) $\pm 10\%$
- Opening pressure 300 kPa (3 bar) $\pm 10\%$

Δp element type

- Microfibre filter elements - series H: 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

MFB filters are provided for vertical mounting



Weights [kg] and volumes [dm³]

Filter series	Weights [kg]				Volumes [dm ³]					
	Length	1	2	3	4	Length	1	2	3	4
MFB 020		0.25	0.35	0.40	-		0.10	0.15	0.20	-
MFB 030		0.25	-	-	-		0.15	-	-	-
MFB 100		0.50	0.60	0.75	0.95		0.35	0.50	0.80	1.10
MFB 180		1.60	2.40	-	-		1.50	2.90	-	-
MFB 190		-	2.40	-	-		-	3.00	-	-

Filter series	Length	Filter element design - H series					Filter element design - N series		
		A03	A06	A10	A16	A25	M25 M60 M90	P10	P25
MFB 020	1	7	10	23	28	42	59	51	54
	2	17	20	45	48	56	72	64	67
	3	21	24	50	55	59	76	74	75
MFB 030	1	7	10	24	29	47	84	60	66
MFB 100	1	18	20	53	56	65	153	87	96
	2	28	38	65	75	95	158	111	123
	3	48	55	125	135	169	289	224	251
	4	79	89	180	185	198	306	264	289
MFB 180	1	127	148	235	243	278	441	285	299
	2	231	262	358	382	388	472	404	412
MFB 190	2	261	305	489	528	546	696	583	598

Maximum flow rate for a complete return filter with a pressure drop $\Delta p = 0.5$ bar.

The reference fluid has a kinematic viscosity of 30 mm²/s (cSt) and a density of 0.86 kg/dm³.

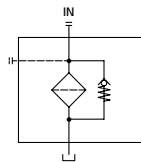
For different pressure drop or fluid viscosity we recommend to use our selection software available on www.mpfiltri.com.

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 1 connection
MFB 020	•
MFB 030	•
MFB 100	•
MFB 180	•
MFB 190	•



MFB MFB020 - MFB030 - MFB100 - MFB180 - MFB190

Designation & Ordering code

COMPLETE FILTER

Series and size						Configuration example 1: MFB100 1 A 2 A10 H E P01								
MFB020 MFB030 MFB100 MFB180 MFB190						Configuration example 2: MFB180 2 V 1 M25 N B P01								
Filter element with private spigot														
Length		MFB020	MFB030	MFB100	MFB180	MFB190								
1		•	•	•	•									
2		•		•	•	•								
3		•		•										
4				•										
Seals														
A NBR														
V FPM														
Version		MFB020	MFB030	MFB100	MFB180	MFB190								
1	Without cover	•	•	•	•	•								
2	With flanged cover type MPF		•	•	•	•								
3	With threaded cover type MPT	•		•										
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												
Element Δp					Filter media									
					Axx	Mxx	Pxx							
N	10 bar					•	•							
H	10 bar					•								
W	10 bar, compatible with fluids HFA, HFB and HFC				•	•								
						Bypass valve		Execution						
						E 3 bar		P01 MP Filtri standard						
						B 1.75 bar		Pxx Customized						

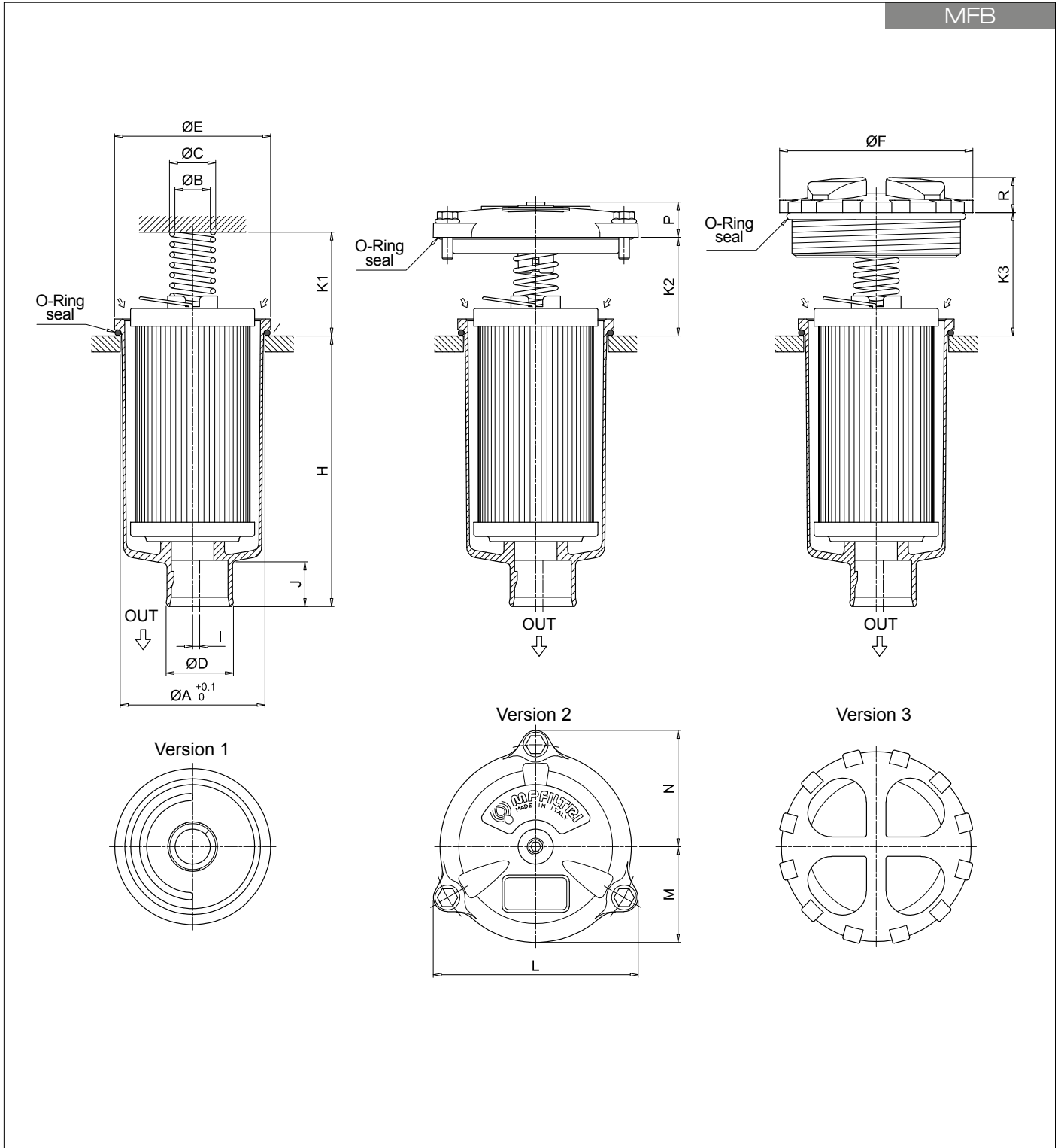
FILTER ELEMENT

Element series and size						Configuration example 1: MF100 1 A10 H B E P01								
MF020 MF030 MF100 MF180 MF190						Configuration example 2: MF180 2 M25 N V P01								
Filter element with private spigot														
Element length		MF020	MF030	MF100	MF180	MF190								
1		•	•	•	•									
2		•		•	•	•								
3		•		•										
4				•										
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												
Element Δp					Filter media									
					Axx	Mxx	Pxx							
N	10 bar					•	•							
H	10 bar					•								
						Seals		Bypass valve		Execution				
						B NBR		E 3 bar		P01 MP Filtri standard				
						V FPM		 1.75 bar		Pxx Customized				

ACCESSORIES

Additional features											page	
		MFB020	MFB030	MFB100	MFB180	MFB190						
TE	Extension tube	•	•	•	•	•						248
DFS	Diffuser with fast lock connection			•								249

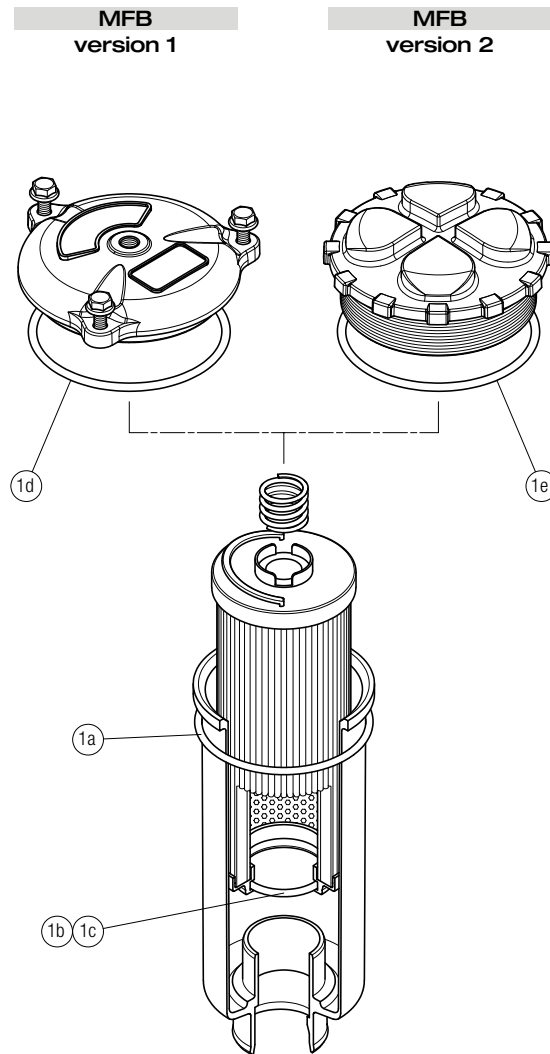
MFB



Filter size	Filter Length	ø A [mm]	ø B [mm]	ø C [mm]	ø D [mm]	ø E [mm]	ø F [mm]	H [mm]	I [mm]	J [mm]	K1 [mm]	K2 [mm]	K3 [mm]	L [mm]	M [mm]	N [mm]	P [mm]	R [mm]
020	1	52	20.5	26	32	56	75	111	0	24	42	-	36	-	-	-	-	18
	2	52	20.5	26	32	56	75	175	0	24	42	-	36	-	-	-	-	18
	3	52	20.5	26	32	56	75	214	0	24	42	-	36	-	-	-	-	18
030	1	60.5	20	25.5	32	68	-	92	3	21	33	35	-	92	42	52	18	-
	1	80.5	20	26	38	88	111	107	4	24	58	55	69	116	54	66	20	20
	2	80.5	20	26	38	88	111	154	4	24	58	55	69	116	54	66	20	20
	3	80.5	20	26	47	88	111	232	0	24	58	55	69	116	54	66	20	20
100	4	80.5	20	26	47	88	111	334	2.5	24	58	55	69	116	54	66	20	20
	1	112.5	26	33.5	47	121	-	234	0	31	58	58	69	159	76	95	21	-
	2	112.5	26	33.5	47	121	-	447	0	31	58	58	69	159	76	95	21	-
	2	112.5	26	33.5	50	121	-	454	0	38	58	58	69	159	76	95	21	-

MFB SPARE PARTS

Order number for spare parts



Q.ty: 1 pc.		
1 (1a ÷ 1e)		
Item:	Seal Kit code number	
	NBR	FPM
MFB 020	02050572	02050573
MFB 030	02050574	02050575
MFB 100	02050555	02050556
MFB 180	02050576	02050577
MFB 190	02050578	02050579