



THE X CONCEPT FOR OUR FILTERS

Protect the performance of your system with MYclean.
Quality and efficiency are fundamental for MP Filtri:
this exclusive new filter element possesses polygon shape geometry and specific seal that ensures only original spare parts can be used - ensuring correct operation and higher system reliability.

MFBX series

with MYCLEAN MFX Filter Element



- Protects the machine from improper use of non-original products.
- Safety of constant quality protection & reliability

With exclusive filter element you are sure that only MP Filtri filter elements can be used, ensuring the best cleaning level of the oil due to the use of originals filter elements.



The products identified as MFBX are protected by:

- Italian Patent n° 102014902261205
- Canadian Patent n° 2,937,258
- European Patent n° 3 124 092 B1
- US Patent n° 20170030384 A1

TOGETHER WITH MYCLEAN, AS OPTION, MFBX SERIES CAN BE PROVIDED WITH

zerospark®
THE ANTI-STATIC FILTERS

THE Z CONCEPT FOR OUR FILTERS



Zerospark® is a specialist solution designed to solve the problem of electrostatic discharge inside hydraulic filters. Caused by the electrical charge build-up due to the passage of oil through the filters, this can result in damage to filter elements, oils and circuit components. It can even cause fire hazards in environments where flammable materials are present.

MFBX series

BOWL ASSEMBLY

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



MFBX GENERAL INFORMATION

Description

Technical data

Return filter Bowl assembly

Maximum working pressure up to 800 kPa (8 bar)

Flow rate up to 700 l/min

MFBX 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)
- MyClean interface connection, to protect the product against non-original spare parts
- External protective wrap, to optimize the flow through the element and to save the element efficiency against non-proper handling

Common applications:

Mobile machines

Bowl assembly materials

- Cover
 - Polyamide: MFBX 020-030-100
 - Aluminium: MFBX 180-190

- Bowl: Polyamide

Filter element materials

- Caps: Polyamide
- 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

MFBX 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
MFBX 020		0.25	0.35	0.40	-		0.10	0.15	0.20	-
MFBX 030		0.25	-	-	-		0.15	-	-	-
MFBX 100		0.50	0.60	0.75	0.95		0.35	0.50	0.80	1.10
MFBX 180		1.60	2.40	-	-		1.50	2.90	-	-
MFBX 190		-	2.40	-	-		-	3.00	-	-

Flow rates [l/min]

Filter series	Length	Filter element design - H series					Filter element design - N series		
		A03	A06	A10	A16	A25	M25 M60 M90	P10	P25
MFBX 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
MFBX 030	1	7	10	24	29	47	84	60	66
MFBX 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
MFBX 180	1	127	148	235	243	278	441	285	299
	2	231	262	358	382	388	472	404	412
MFBX 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.

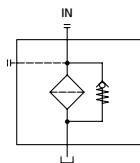
The reference fluid has a kinematic viscosity of 30 mm²/s (cSt) and a density of 0.86 kg/dm³.

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
MFBX 020	•
MFBX 030	•
MFBX 100	•
MFBX 180	•
MFBX 190	•



Designation & Ordering code

COMPLETE FILTER

Series and size: **MFBX020** | **MFBX100** | **MFBX190** Filter featuring **MYCLEAN** Filter Element
MFBX030 | **MFBX180**

Configuration example 1: **MFBX100** | **1** | **A** | **2** | **A10** | **H** | **E** | **P01**
 Configuration example 2: **MFBX180** | **2** | **V** | **1** | **M25** | **N** | **B** | **P01**

Length	MFBX020	MFBX030	MFBX100	MFBX180	MFBX190
1	•	•	•	•	-
2	•	-	•	•	•
3	•	-	•	-	-
4	-	-	•	-	-

Seals
A NBR
V FPM

Version	MFBX020	MFBX030	MFBX100	MFBX180	MFBX190
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		•	-	-

Bypass valve		Executions	
		Base	zerospark*
E 3 bar		P01	Z01 * MP Filtri standard
B 1.75 bar		Pxx	Zxx * Customized

* Not for Mxx filter media

FILTER ELEMENT

Element series and size: **MFXX020** | **MFXX100** | **MFXX030** | **MFXX180** Filter Element with **MYCLEAN** feature

Configuration example 1: **MFXX180** | **2** | **M25** | **H** | **V** | **P01**
 Configuration example 2: **MFXX100** | **1** | **A10** | **N** | **B** | **E** | **P01**

Element length	MFXX020	MFXX030	MFXX100	MFXX180	MFXX190
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		•	-	-

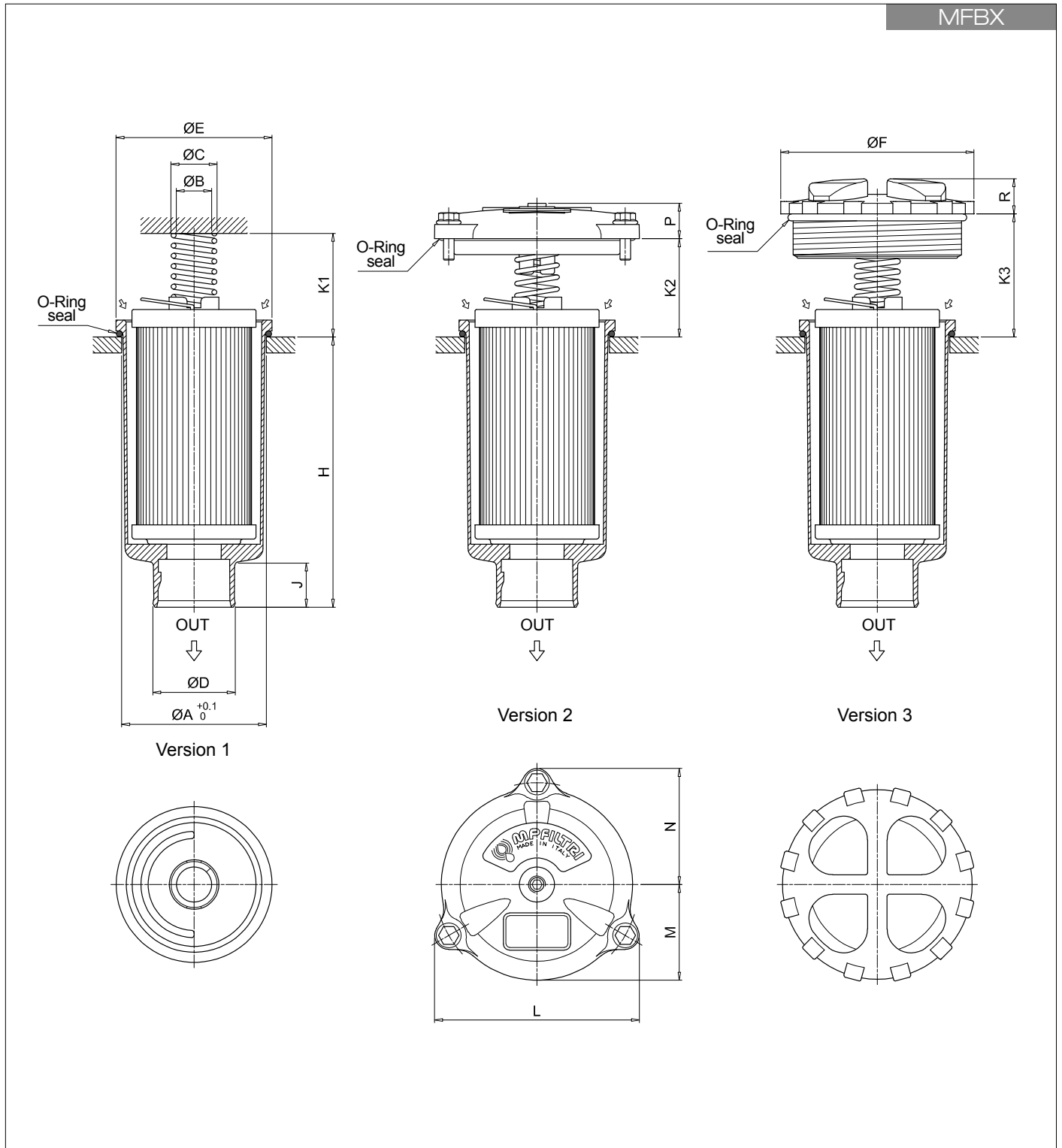
Seals		Bypass valve	Executions	
			Base	zerospark*
B NBR		E 3 bar	P01	Z01 * MP Filtri standard
V FPM		- 1.75 bar	Pxx	Zxx * Customized

* Not for Mxx filter media

ACCESSORIES

See page 268-269

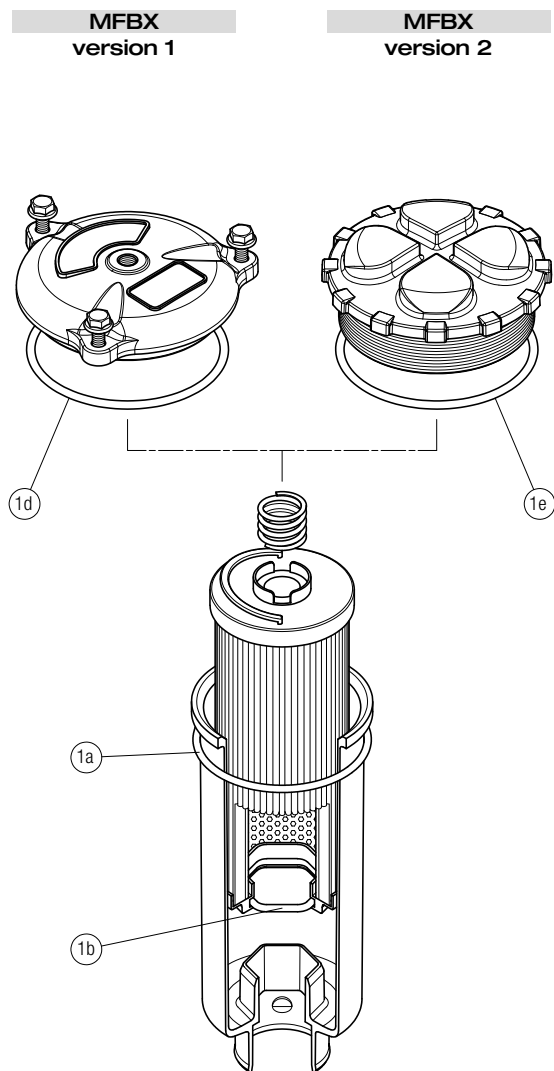
	MFBX020	MFBX030	MFBX100	MFBX180	MFBX190
TE Extension tube	•	•	•	•	•
DFS Diffuser with fast lock connection	-	-	•	-	-



Filter size	Filter Length	ø A [mm]	ø B [mm]	ø C [mm]	ø D [mm]	ø E [mm]	ø F [mm]	H [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	24	42	-	36	-	-	-	-	18
	2	52	20.5	26	32	56	75	175	24	42	-	36	-	-	-	-	18
	3	52	20.5	26	32	56	75	214	24	42	-	36	-	-	-	-	18
030	1	60.5	20	25.5	32	68	-	93	21	33	35	-	92	42	52	18	-
	2	80.5	20	26	47	88	111	109	24	58	55	69	116	54	66	20	20
100	1	80.5	20	26	47	88	111	154	24	58	55	69	116	54	66	20	20
	2	80.5	20	26	47	88	111	232	24	58	55	69	116	54	66	20	20
	3	80.5	20	26	47	88	111	334	24	58	55	69	116	54	66	20	20
180	1	112.5	26	33.5	47	121	-	234	31	58	69	-	159	76	95	21	-
	2	112.5	26	33.5	47	121	-	447	31	58	69	-	159	76	95	21	-
190	2	112.5	26	33.5	50	121	-	454	38	58	69	-	159	76	95	21	-

MFBX SPARE PARTS

Order number for spare parts



Item: Q.ty: 1 pc.		
1 (1a ÷ 1d)		
Filter series	Seal Kit code number	
	NBR	FPM
MFBX 020	02050713	02050714
MFBX 030	02050715	02050716
MFBX 100	02050717	02050718
MFBX 180-190	02050719	02050720