MPLX series

Maximum working pressure up to 1 MPa (10 bar) - Flow rate up to 1800 l/min



MPLX GENERAL INFORMATION

Description

Return filter

Maximum working pressure up to 1 MPa (10 bar)
Flow rate up to 1800 l/min

MPLX is a range of return filters for protection of the reservoir against the system contamination.
Completely interchangeable with Pall 8420 & 8520, they are directly fixed to the reservoir, in immersed or semi-immersed position.
The use of the diffuser is recommended, to place the filter output always immersed into the fluid to avoid aeration or foam generation into the reservoir.
The filter output must be always immersed into the fluid to avoid aeration or foam generation into the reservoir.

Available features:
- Flanged connections up to 3", for a maximum flow rate of 1800 l/min
- Fine filtration rating, to get a good cleanliness level into the reservoir
- Bypass valve, to relieve excessive pressure drop across the filter media
- 6 fixing holes for installation, to meet any reservoir surface flatness and roughness
- Diffuser, to reduce the risk of aeration, foaming and noise
- Filler plug, to fill cleaned fluid into the tank without an additional connection
- Visual, electrical and electronic differential clogging indicators

Common applications:
- Heavy duty industrial equipment
- Heavy duty mobile equipment

Technical data

Filter housing materials
- Head: Anodized aluminium
- Cover: Anodized aluminium
- Bowl: Phosphatized steel
- Bypass valve: Steel

Bypass valve
- Opening pressure 450 kPa (4.5 bar) ±10%

Δp element type
- Microfiber filter elements: 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
MPLX filters are provided for vertical mounting

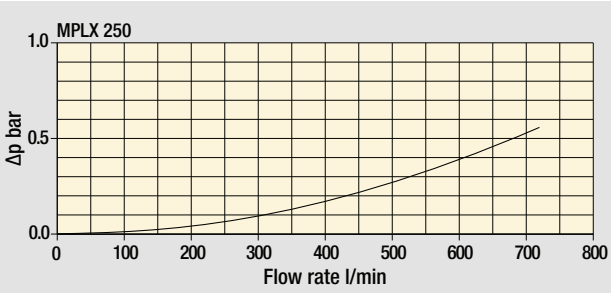


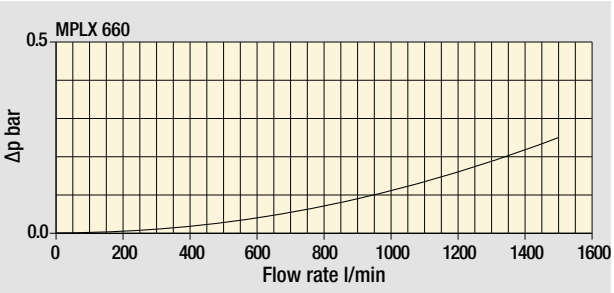
Weights [kg] and volumes [dm³]

Filter series	Weights [kg]		Volumes [dm³]	
	Length	2	Length	2
MPLX 250		8.95		2.90
MPLX 660		20.20		11.00

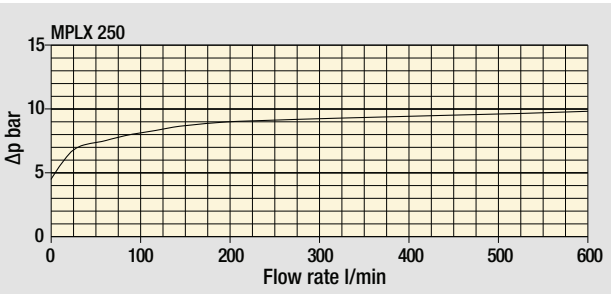
Pressure drop

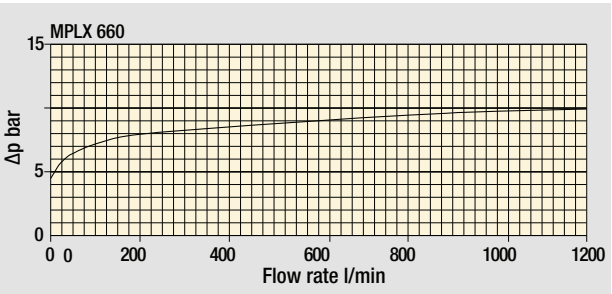
Filter housings
Δp pressure drop





Bypass valve
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.

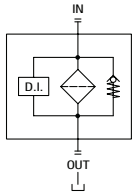
Flow rates [l/min]

		Filter element design - N Series						
Filter series	Length	A03	A06	A10	A16	A25	M25 M60 M90	P10 P25
MPLX 250	**2**	157	155	281	312	325	583	392
MPLX 660	**2**	376	384	820	925	1018	1732	1332

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 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.
Please, contact our Sales Department for further additional information.

Hydraulic symbols

Filter series	Style 1 connection + Diff. indic.
MPLX 250	•
MPLX 660	•



MPLX MPLX250 - MPLX660

Designation & Ordering code

COMPLETE FILTER

Configuration example 1:	MPLX250	2	D	S	W	A	6	M25	P01
Configuration example 2:	MPLX660	2	D	D	A	B	6	A10	P01

Series and size

MPLX250 Filter element with private spigot
MPLX660 Filter element with private spigot

Length

2

By-pass valve

D 4.5 bar

Diffuser

S Without diffuser
D With standard diffuser

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

Connections	MPLX250	MPLX660
A	2” SAE 3000 psi/M	3” SAE 3000 psi/M
B	2” SAE 3000 psi/UNC	3” SAE 3000 psi/UNC

Connection for differential indicator

6 With plugged connection

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:	MLX250	2	M25	W	P01
Configuration example 2:	MLX660	2	A10	A	P01

Element series and size

MLX250 Filter element with private spigot
MLX660 Filter element with private spigot

Element length

2

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
A	NBR	•	•	•
V	FPM	•	•	•
W	NBR filter element compatible with fluids HFA-HFB-HFC	•	•	
Z	FPM	•	•	

Execution

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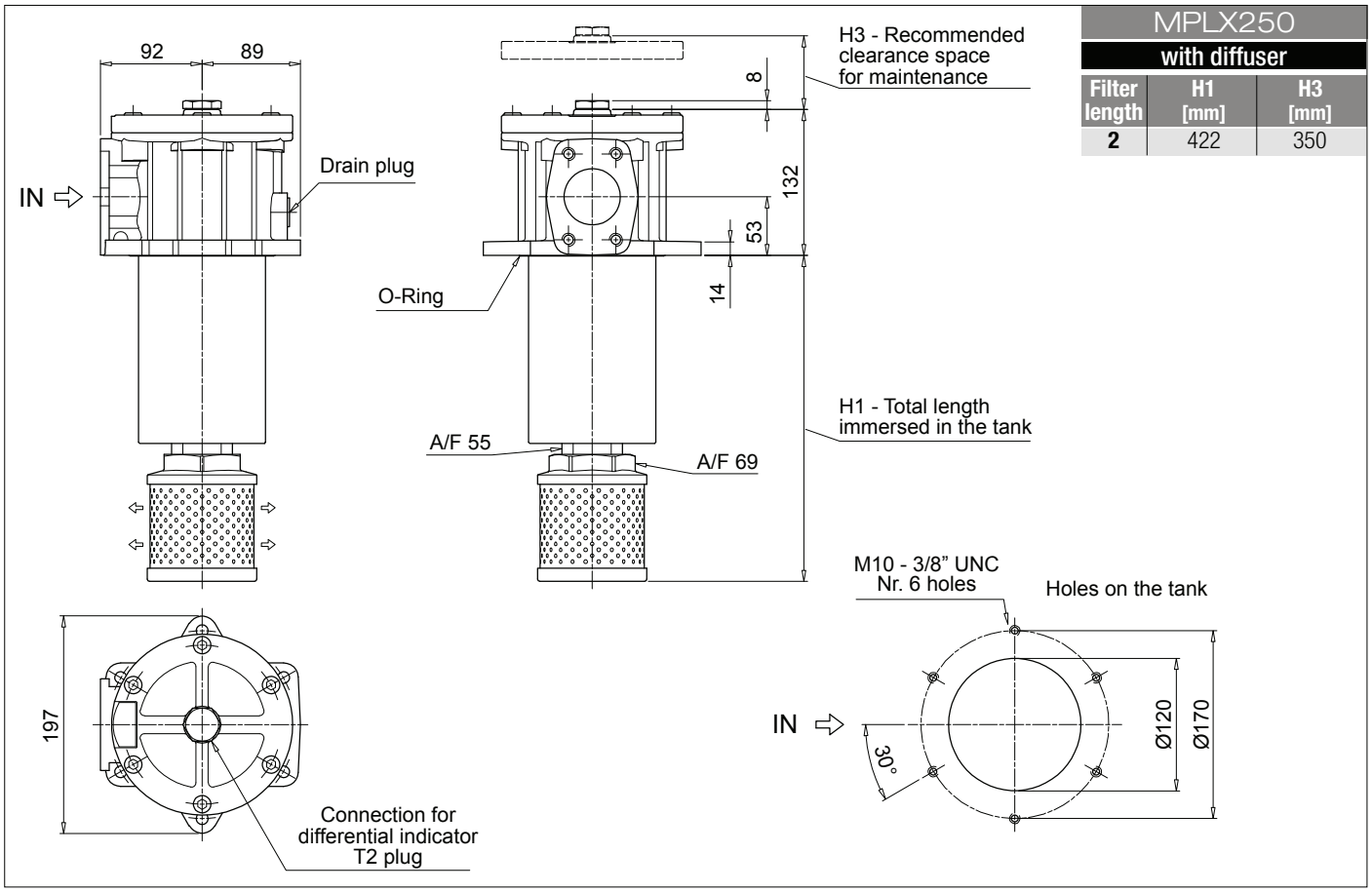
ACCESSORIES

Indicators

DEA	Electrical differential indicator	242
DEM	Electrical differential indicator	242-243
DLA	Electrical / visual differential indicator	243-244
DLE	Electrical / visual differential indicator	244
DTA	Electronic differential indicator	245
DVA	Visual differential indicator	245
DVM	Visual differential indicator	245

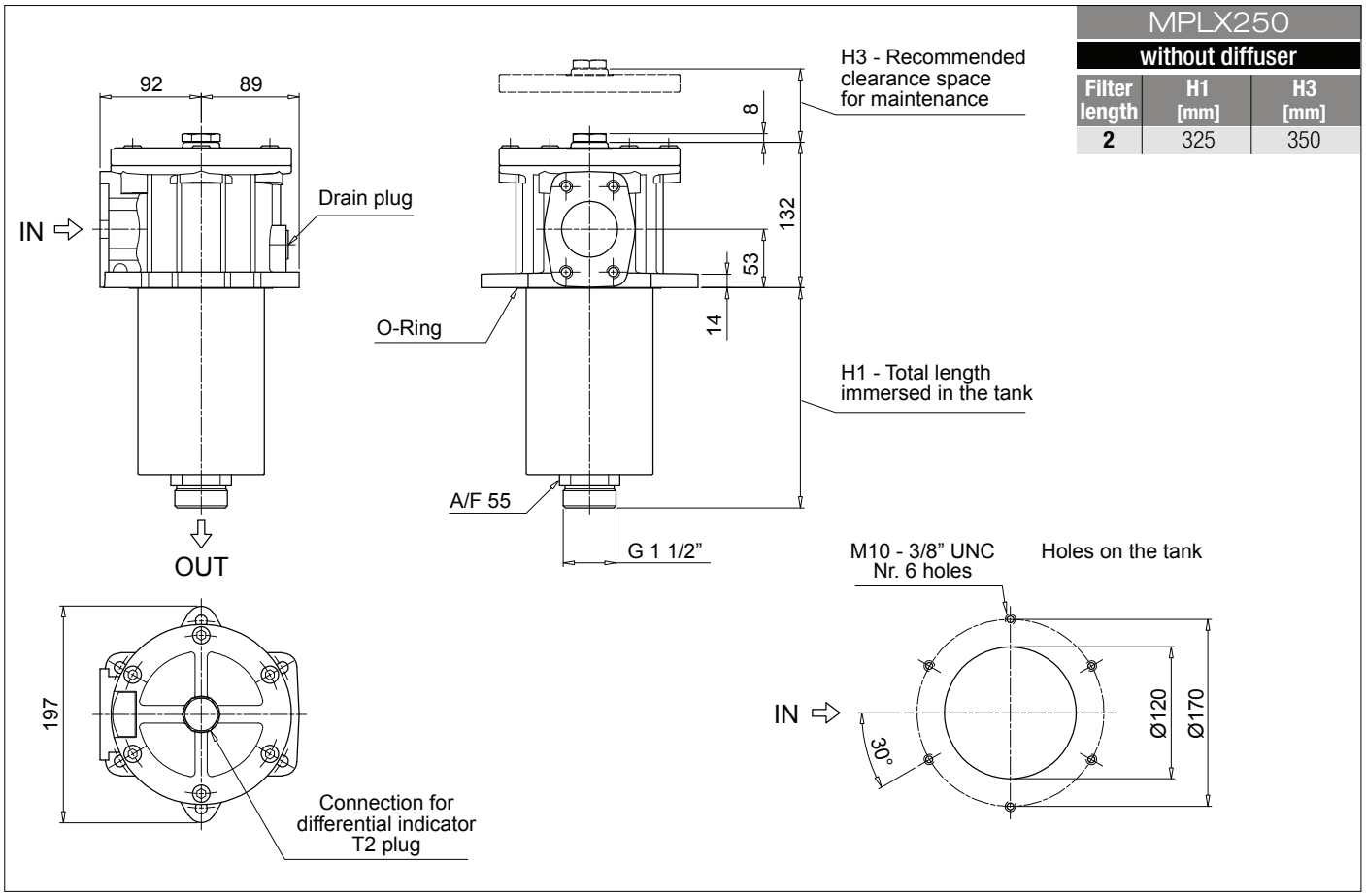
Additional features

T2	Plug	246



MPLX250 with diffuser

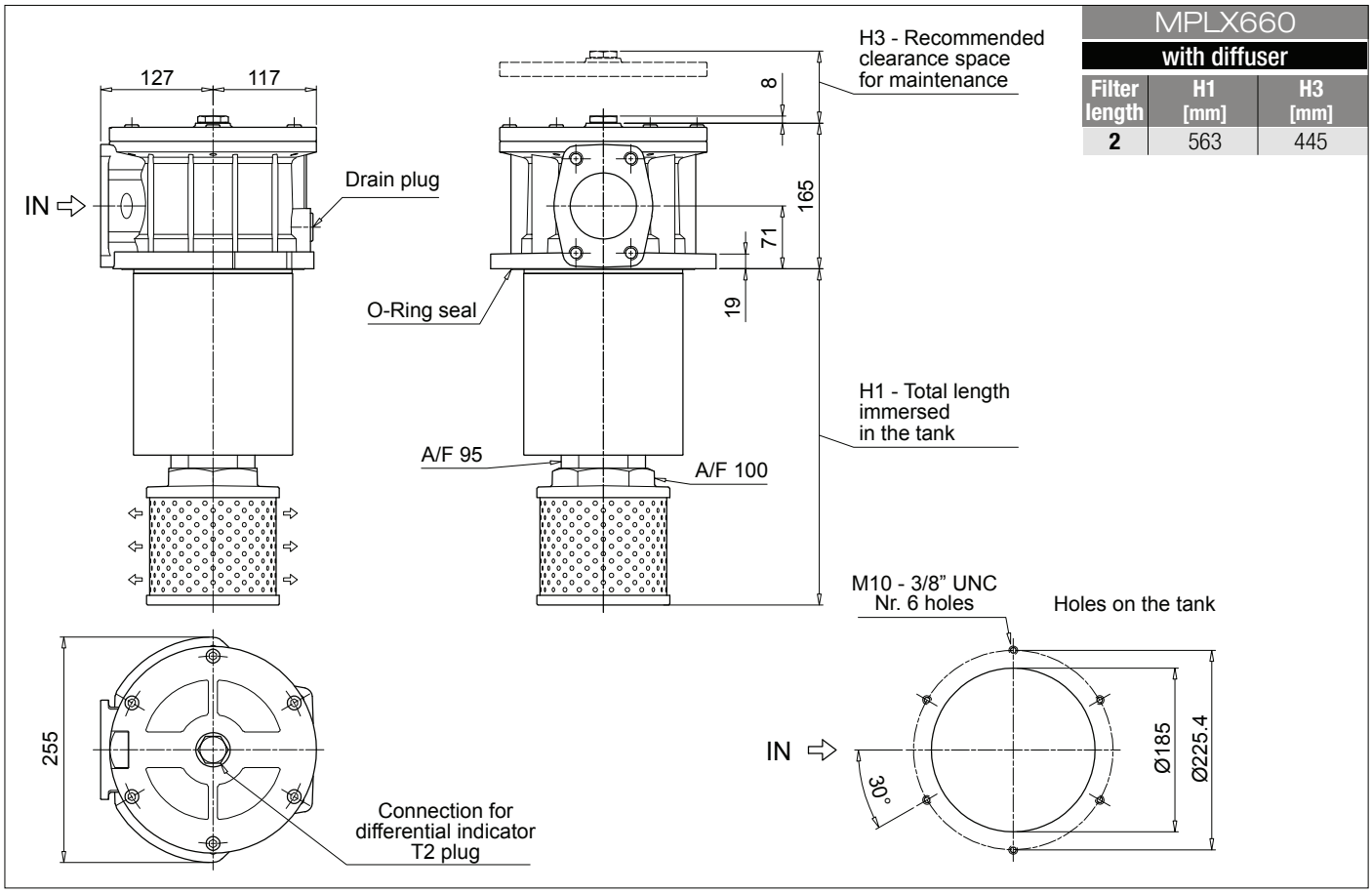
Filter length	H1 [mm]	H3 [mm]
2	422	350



MPLX250 without diffuser

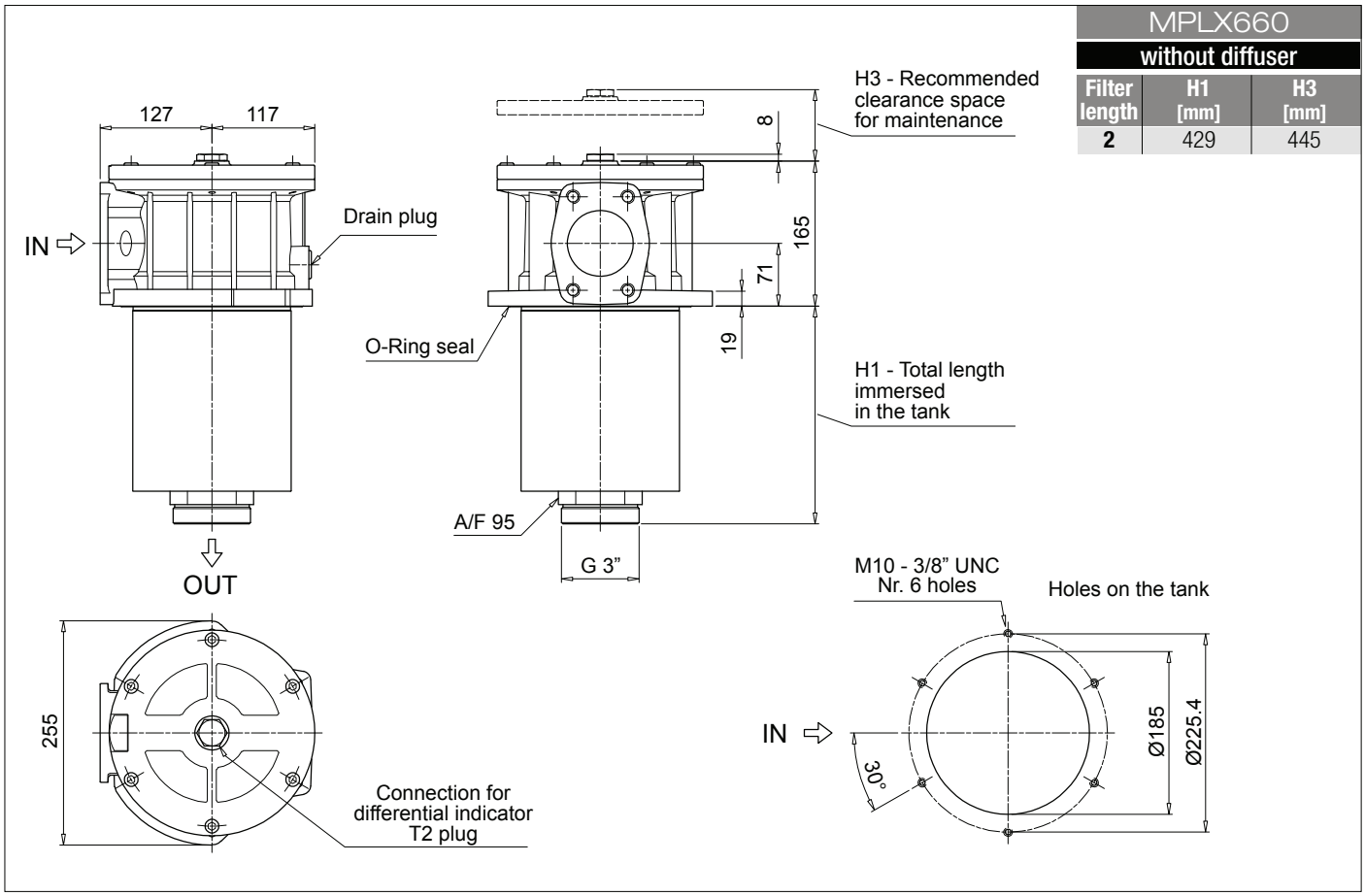
Filter length	H1 [mm]	H3 [mm]
2	325	350

Dimensions



MPLX660 with diffuser

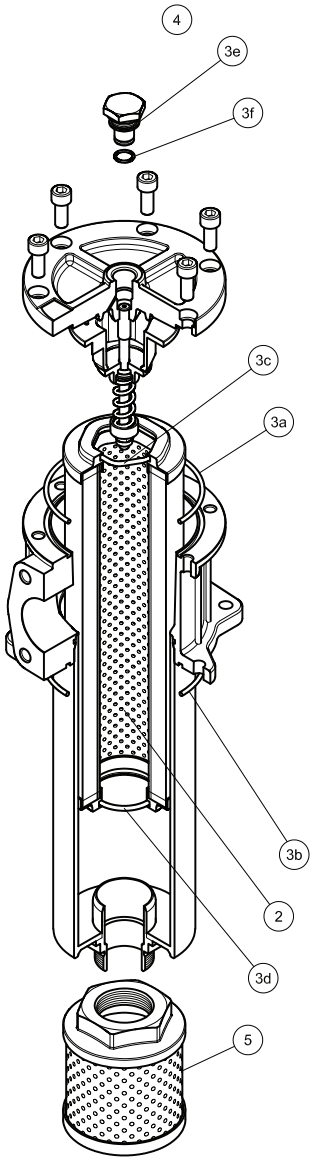
Filter length	H1 [mm]	H3 [mm]
2	563	445



MPLX660 without diffuser

Filter length	H1 [mm]	H3 [mm]
2	429	445

Order number for spare parts



Item:	Q.ty: 1 pc. 2	Q.ty: 1 pc. 3 (3a ÷ 3f)		Q.ty: 1 pc. 4		Q.ty: 1 pc. 5
Filter series	Filter element	Seal Kit code number NBR	Seal Kit code number FPM	Indicator connection plug NBR	Indicator connection plug FPM	Diffuser
MPLX 250	See order table	02050745	02050746	T2H	T2V	STD 100 C 115 P01
MPLX 660		02050747	02050748			STD 150 E 155 P01