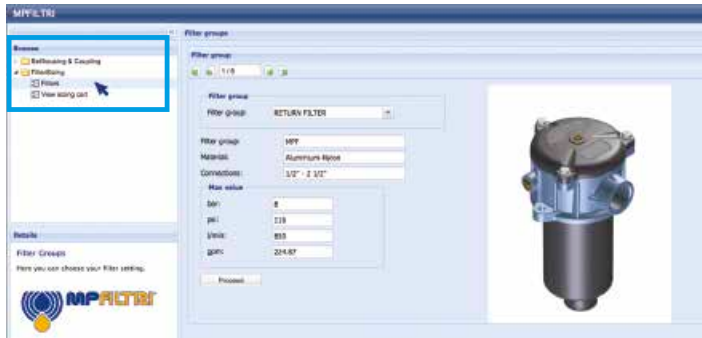


LMP 210-211

Maximum working pressure up to 6 MPa (60 bar) - Flow rate up to 330 l/min



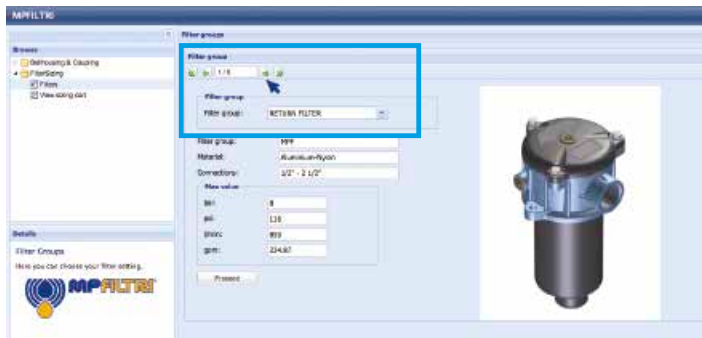
Step 1 Select "FILTERS"



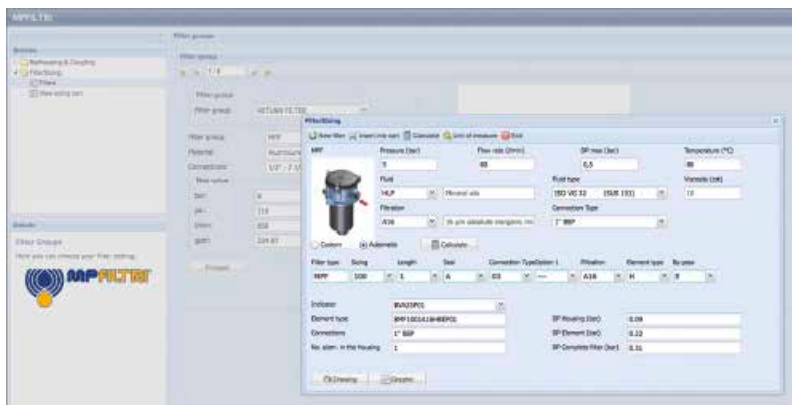
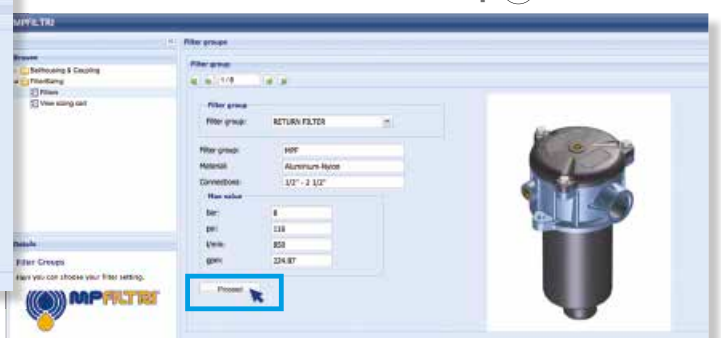
Step 2 Choose filter group (Return Filter, Pressure Filter, etc.)



Step 3 Choose filter type (MPF, MPT, etc.) in function of the max working pressure and the max flow rate



Step 4 Push "PROCEED"



Step 5

Insert all application data to calculate the filter size following the sequence:


- working pressure
- working flow rate
- working pressure drop
- working temperature
- fluid material and fluid type
- filtration media
- connection type

Step 6

Push "CALCULATE" to have result; in case of any mistake, the system will advice which parameter is out of range to allow to modify/adjust the selection



Step 7

Download PDF  Datasheet "Report.aspx" pushing the button "Drawing"

LMP 210-211 GENERAL INFORMATION

Description

Technical data

Low & Medium Pressure filters

Maximum working pressure up to 6 MPa (60 bar)
Flow rate up to 330 l/min

LMP210 is a range of versatile low pressure filter for transmission, protection of sensitive components in low pressure hydraulic systems and filtration of the coolant into the machine tools.

They are also suitable for the off-line filtration of small reservoirs. They are directly connected to the lines of the system through the hydraulic fittings.

Available features:

- Flanged connections up to 1 1/2", for a maximum flow rate of 330 l/min (LMP210)
- Female threaded connections up to 1 1/2", for a maximum return flow rate of 330 l/min (LMP211)
- Fine filtration rating, to get a good cleanliness level into the system
- Water removal elements, to remove the free water from the hydraulic fluid. For further information, see the Contamination Management document and the dedicate leaflet.
- Bypass valve, to relieve excessive pressure drop across the filter media
- Visual, electrical and electronic differential clogging indicators

Common applications:

Delivery lines, in any low pressure industrial equipment or mobile machines

Filter housing materials

- Head: Aluminium
- Bowl: Cataphoretic Painted Steel
- Bypass valve: AISI 304 - Nylon

Pressure

- Test pressure: 9 MPa (90 bar)
- Burst pressure: 21 MPa (210 bar)
- Pulse pressure fatigue test: 1 000 000 cycles with pressure from 0 to 6 MPa (60 bar)

Bypass valve

- Opening pressure 350 kPa (3.5 bar) $\pm 10\%$
- Other opening pressures on request.

Δp element type

- Microfibre filter elements - series N: 20 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

Connections

Inlet/Outlet In-Line

Note

LMP 210 - 211 filters are provided for vertical mounting



Weights [kg] and volumes [dm³]

Filter series	Weights [kg]			Volumes [dm ³]				
	Length	1	2	3	Length	1	2	3
LMP 210-211		3.10	4.80	6.40		1.60	2.10	2.80

GENERAL INFORMATION LMP 210-211

FILTER ASSEMBLY SIZING Flow rates [l/min]

Filter series	Length	Filter element design - N Series										
		A03	A06	A10	A16	A25	M25	M60	M90	M250	P10	P25
LMP 210	1	106	130	190	200	221	286	287	287	288	261	265
	2	153	175	220	237	249	288	289	290	290	265	269
	3	204	214	248	260	265	289	290	291	291	277	281
LMP 211	1	118	149	227	240	269	358	359	360	361	324	330
	2	178	207	268	292	307	361	362	363	364	329	335
	3	247	260	306	323	329	362	363	364	365	345	351

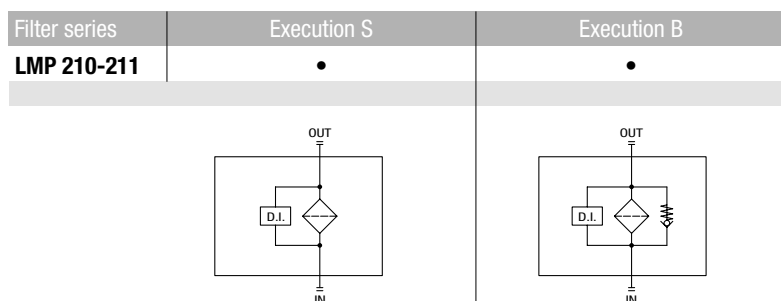
Maximum flow rate for a complete low and medium pressure filter with a pressure drop $\Delta p = 0.7$ bar.

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

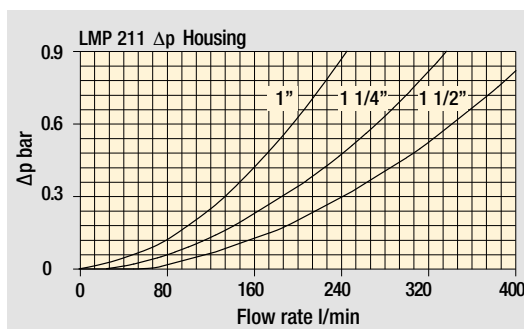
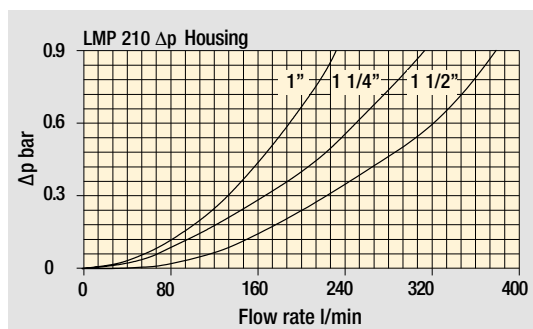
For different pressure drop or fluid viscosity we recommend to use our selection software available on www.mpfiltri.com.

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.

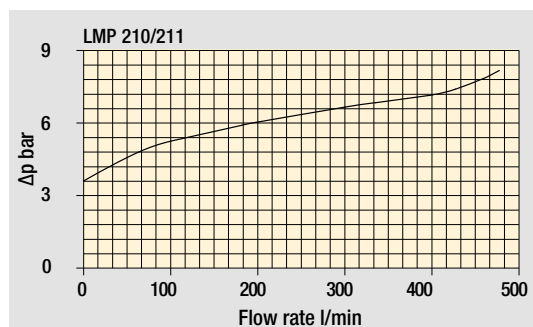
Hydraulic symbols



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.

LMP 210

Designation & Ordering code

COMPLETE FILTER

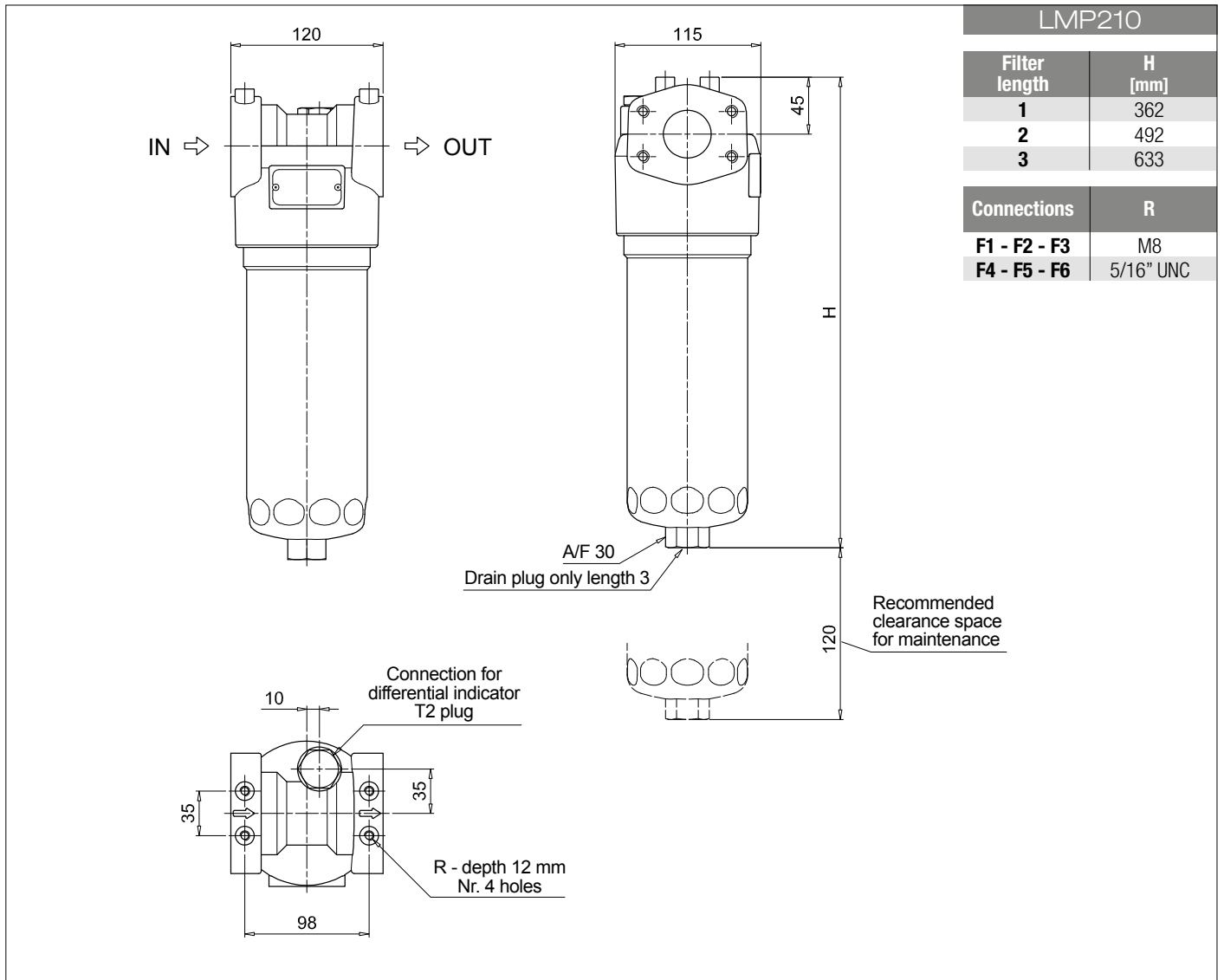
Series and size	Configuration example: LMP210 3 B A F1 A10 N P01																		
LMP210																			
Length	1 2 3																		
Bypass valve	S Without bypass B 3.5 bar																		
Seals and treatments	Filtration rating																		
	Axx	Mxx	Pxx																
A NBR	•	•	•																
V FPM	•	•	•																
W NBR compatible with fluids HFA-HFB-HFC	•	•																	
Connections	F1 1" SAE 3000 psi/M F2 1 1/4" SAE 3000 psi/M F3 1 1/2" SAE 3000 psi/M F4 1" SAE 3000 psi/UNC F5 1 1/4" SAE 3000 psi/UNC F6 1 1/2" SAE 3000 psi/UNC																		
Filtration rating (filter media)	<table border="0"> <tr> <td>A03 Inorganic microfiber 3 µm</td> <td>M25 Wire mesh 25 µm</td> </tr> <tr> <td>A06 Inorganic microfiber 6 µm</td> <td>M60 Wire mesh 60 µm</td> </tr> <tr> <td>A10 Inorganic microfiber 10 µm</td> <td>M90 Wire mesh 90 µm</td> </tr> <tr> <td>A16 Inorganic microfiber 16 µm</td> <td>P10 Resin impregnated paper 10 µm</td> </tr> <tr> <td>A25 Inorganic microfiber 25 µm</td> <td>P25 Resin impregnated paper 25 µm</td> </tr> </table>									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
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A16 Inorganic microfiber 16 µm	P10 Resin impregnated paper 10 µm																		
A25 Inorganic microfiber 25 µm	P25 Resin impregnated paper 25 µm																		
WA025 Water absorber inorganic microfiber 25 µm																			
	Element Δp			Execution															
	N 20 bar			P01 MP Filtri standard Pxx Customized															

FILTER ELEMENT

Element series and size	Configuration example: CU210 3 A10 A N P01																
CU210																	
Element length	1 2 3																
Filtration rating (filter media)	<table border="0"> <tr> <td>A03 Inorganic microfiber 3 µm</td> <td>M25 Wire mesh 25 µm</td> </tr> <tr> <td>A06 Inorganic microfiber 6 µm</td> <td>M60 Wire mesh 60 µm</td> </tr> <tr> <td>A10 Inorganic microfiber 10 µm</td> <td>M90 Wire mesh 90 µm</td> </tr> <tr> <td>A16 Inorganic microfiber 16 µm</td> <td>P10 Resin impregnated paper 10 µm</td> </tr> <tr> <td>A25 Inorganic microfiber 25 µm</td> <td>P25 Resin impregnated paper 25 µm</td> </tr> </table>							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
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WA025 Water absorber inorganic microfiber 25 µm																	
	Element Δp			Execution													
	N 20 bar			P01 MP Filtri standard Pxx Customized													
	Filtration rating																
	Axx	Mxx	Pxx														
A NBR	•	•	•														
V FPM	•	•	•														
W NBR compatible with fluids HFA-HFB-HFC	•	•															

ACCESSORIES

Differential indicators	page		page
DEA Electrical differential indicator	445	DTA Electronic differential indicator	448
DEM Electrical differential indicator	445-446	DVA Visual differential indicator	448
DLA Electrical / visual differential indicator	446-447	DVM Visual differential indicator	448
DLE Electrical / visual differential indicator	447		
Additional features	page		
T2 Plug	449		



LMP210	
Filter length	H [mm]
1	362
2	492
3	633
Connections	R
F1 - F2 - F3	M8
F4 - F5 - F6	5/16" UNC

LMP 211

Designation & Ordering code

COMPLETE FILTER

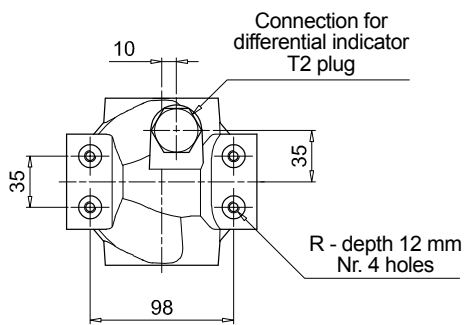
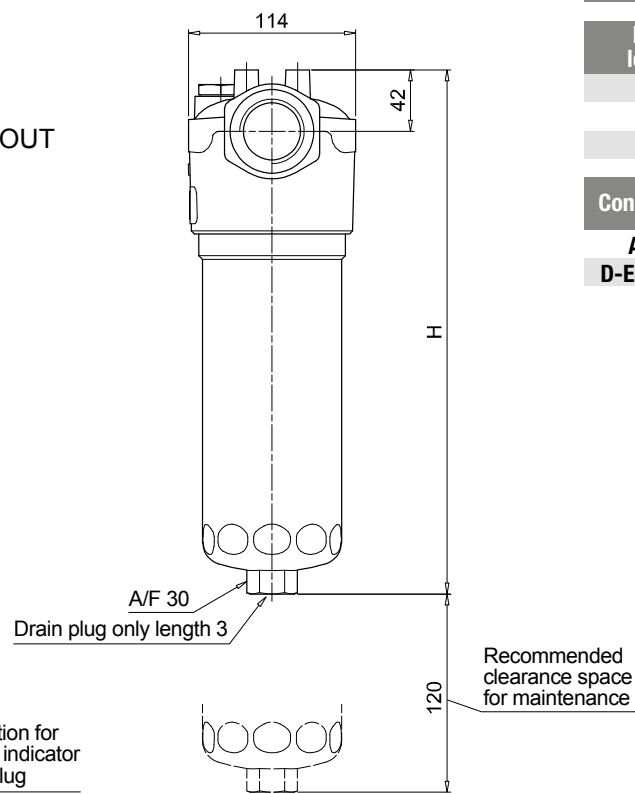
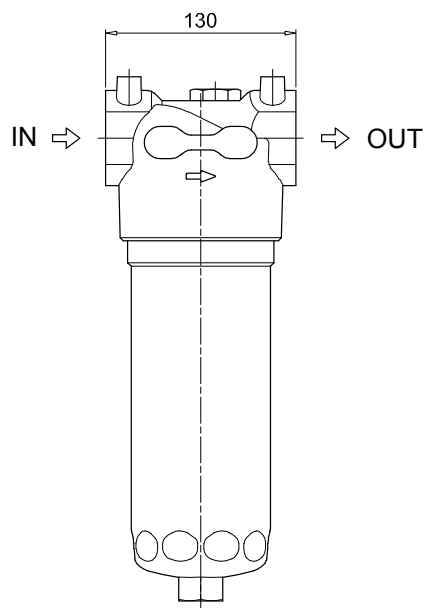
Series and size	Configuration example: LMP211 3 B A D 6 A10 N P01									
LMP211										
Length	1 2 3									
Bypass valve	S Without bypass B 3.5 bar									
Seals and treatments	Filtration rating									
A NBR	Axx	Mxx	Pxx							
V FPM	•	•	•							
W NBR compatible with fluids HFA-HFB-HFC	•	•								
Connections										
A G 1"										
B G 1 1/4"										
C G 1 1/2"										
D 1" NPT										
E 1 1/4" NPT										
F 1 1/2" NPT										
G SAE 16 - 1 5/16" - 12 UN										
H SAE 20 - 1 5/8" - 12 UN										
I SAE 24 - 1 7/8" - 12 UN										
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									
WA025 Water absorber inorganic microfiber 25 µm										
			Element Δp	N 20 bar						
						Execution	P01 MP Filtri standard Pxx Customized			

FILTER ELEMENT

Element series and size	Configuration example: CU210 3 A10 A N P01							
CU210								
Element length	1 2 3							
Filtration rating (filter media)								
A03 Inorganic microfiber 3 µm	M25 Wire mesh 25 µm							
A06 Inorganic microfiber 6 µm	M60 Wire mesh 60 µm							
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A16 Inorganic microfiber 16 µm	P10 Resin impregnated paper 10 µm							
A25 Inorganic microfiber 25 µm	P25 Resin impregnated paper 25 µm							
WA025 Water absorber inorganic microfiber 25 µm								
Seals	Filtration rating							
A NBR	Axx	Mxx	Pxx					
V FPM	•	•	•					
W NBR compatible with fluids HFA-HFB-HFC	•	•						
			Element Δp	N 20 bar				
						Execution	P01 MP Filtri standard Pxx Customized	

ACCESSORIES

Differential indicators	page		page
DEA Electrical differential indicator	445	DTA Electronic differential indicator	448
DEM Electrical differential indicator	445-446	DVA Visual differential indicator	448
DLA Electrical / visual differential indicator	446-447	DVM Visual differential indicator	448
DLE Electrical / visual differential indicator	447		
Additional features	page		
T2 Plug	449		



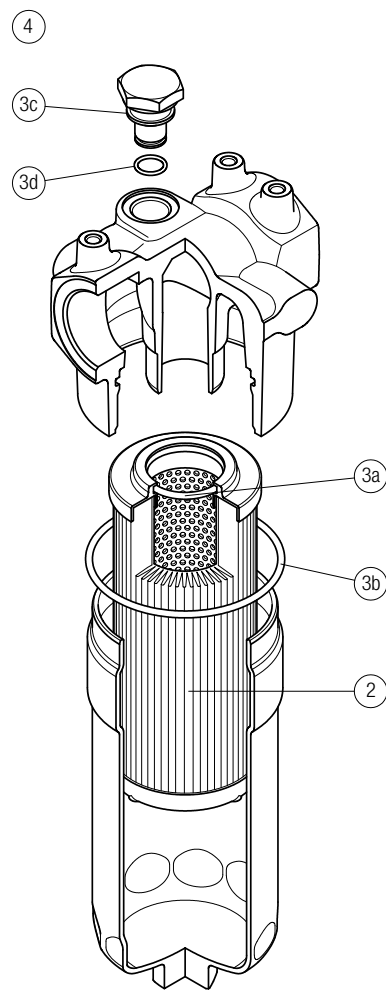
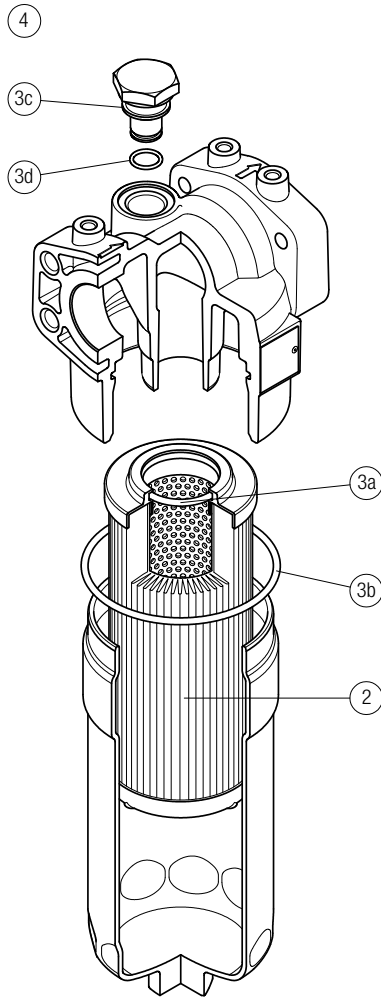
LMP211	
Filter length	H [mm]
1	358
2	488
3	629
Connections	R
A-B-C	M8
D-E-F-G-H-I	5/16" UNC

LMP 210-211 SPARE PARTS

Order number for spare parts

LMP 210

LMP 211



Item:	Q.ty: 1 pc.	Q.ty: 1 pc.		Q.ty: 1 pc.	
Filter series	Filter element	Seal Kit code number		Indicator connection plug	
LMP 210-211	See order table	NBR	FPM	NBR	FPM
	2	3 (3a ÷ 3d)		4	
		02050435	02050436	T2H	T2V