

LMP 210-211

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



LMP 210-211 GENERAL INFORMATION

Description

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
- 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

Technical data

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

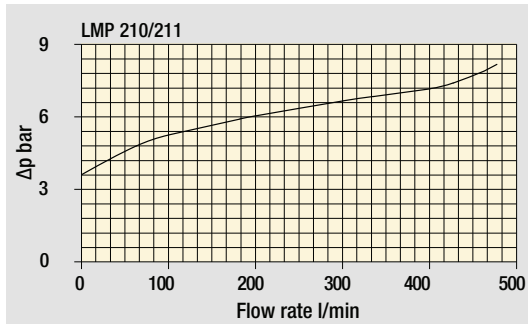
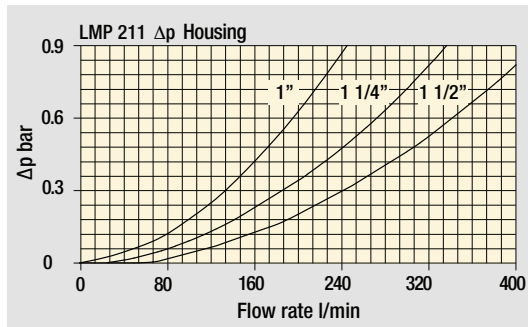
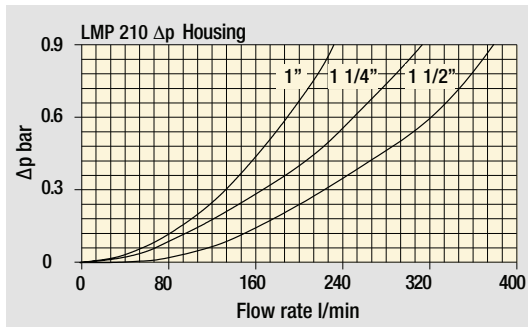
LMP 210 - 211 filters are provided for vertical mounting



Weights [kg] and volumes [dm³]

Filter series	Weights [kg]			Volumes [dm³]				
	Length	1	2	3	Length	1	2	3
LMP 210-211		3.10	4.80	6.40		1.60	2.10	2.80

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	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.

Please, contact our Sales Department for further additional information.

Hydraulic symbols

Filter series	Execution S	Execution B
LMP 210-211	•	•

LMP 211

Designation & Ordering code

COMPLETE FILTER

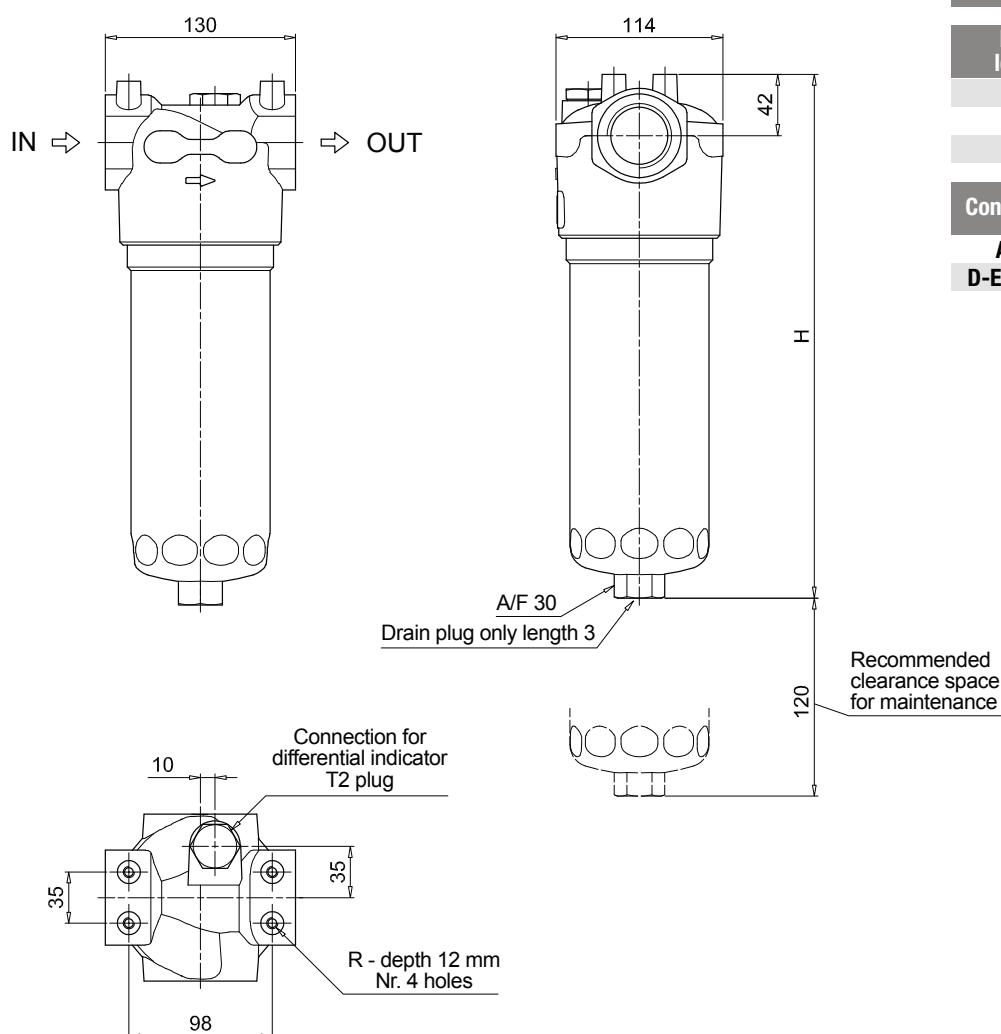
Series and size		Configuration example: LMP211										3	B	A	D	6	A10	N	P01			
LMP211																						
Length																						
1 2 3																						
Bypass valve																						
S		Without bypass										B		3.5 bar								
Seals and treatments															Filtration rating							
															Axx	Mxx	Pxx					
A		NBR										•		•		•						
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										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)													
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													
Seals				Filtration rating									
				Axx	Mxx	Pxx							
A NBR				•	•	•							
V FPM				•	•	•							
W NBR compatible with fluids HFA-HFB-HFC				•	•								
								Element Δp		Execution			
								N 20 bar		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		

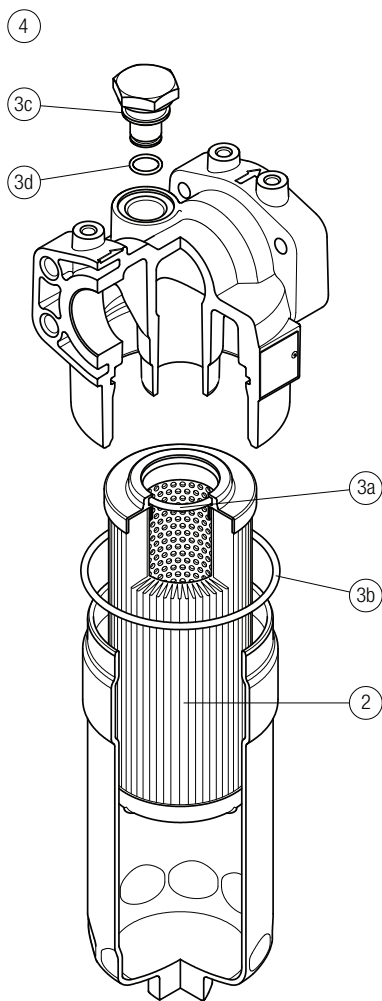


LMP211	
Filter length	H [mm]
1	358
2	488
3	629
Connections	R
A-B-C	M8
D-E-F-G-H-I	5/16" UNC

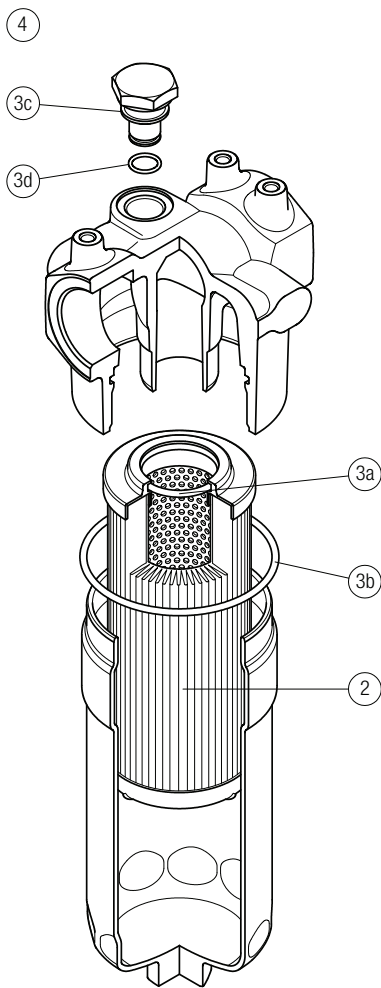
LMP 210-211 SPARE PARTS

Order number for spare parts

LMP 210



LMP 211



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