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) ±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

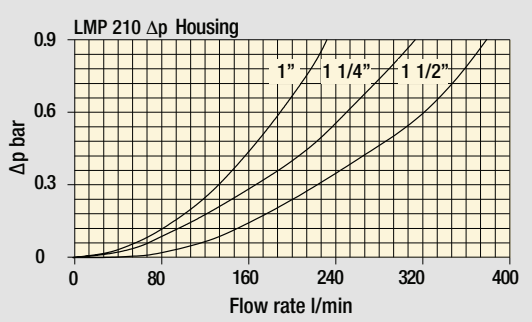


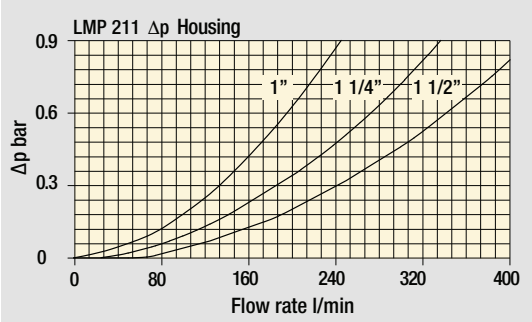
Weights [kg] and volumes [dm³]

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

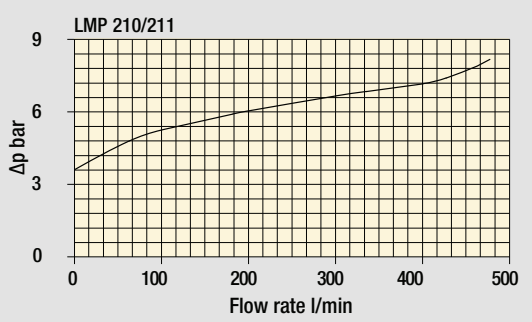
Pressure drop

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.

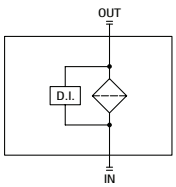
Flow rates [l/min]

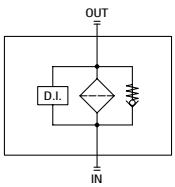
		Filter element design - N Series										
Filter series	Length	A03	A06	A10	A16	A25	M25	M60	M90	M250	P10	P25
	1	106	130	190	200	221	286	287	287	288	261	265
LMP 210	**2**	153	175	220	237	249	288	289	290	290	265	269
	3	204	214	248	260	265	289	290	291	291	277	281
	1	118	149	227	240	269	358	359	360	361	324	330
LMP 211	**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 Δp = 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 210

Designation & Ordering code

COMPLETE FILTER

Configuration example: LMP210 | 3 | B | A | F1 | A10 | N | P01

Series and size

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	**G1**	G 1'
F2	1 1/4" SAE 3000 psi/M	**G2**	G 1 1/4"
F3	1 1/2" SAE 3000 psi/M	**G3**	G 1 1/2"
F4	1" SAE 3000 psi/UNC	**G4**	1" NPT
F5	1 1/4" SAE 3000 psi/UNC	**G5**	1 1/4" NPT
F6	1 1/2" SAE 3000 psi/UNC	**G6**	1 1/2" NPT
		G7	SAE 16 - 1 5/16" - 12 UN
		G8	SAE 20 - 1 5/8" - 12 UN
		G9	SAE 24 - 1 7/8" - 12 UN

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

Configuration example: CU210 | 3 | A10 | A | N | P01

Element series and size

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

N	20 bar

Execution

P01	MP Filtri standard
Pxx	Customized

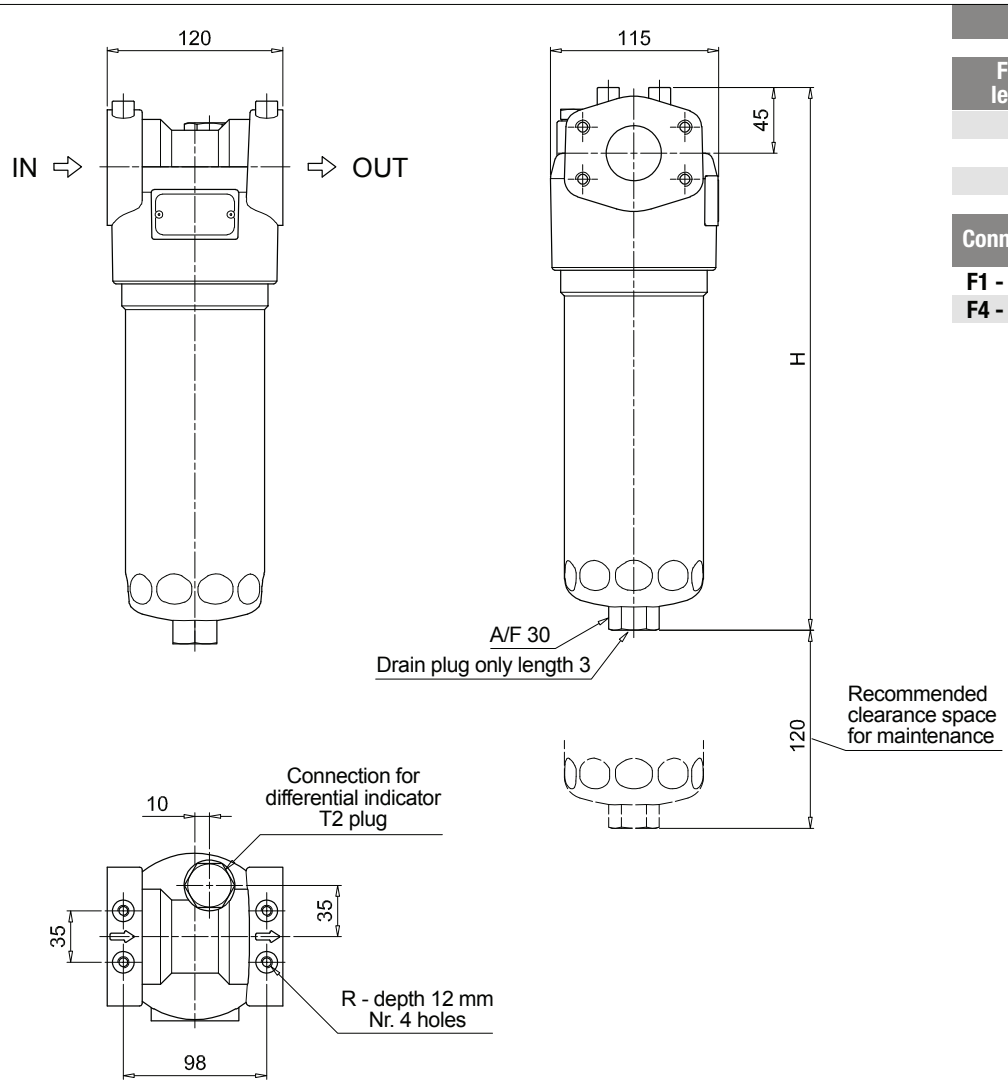
ACCESSORIES

Differential indicators

		page
DEA	Electrical differential indicator	445
DEM	Electrical differential indicator	445-446
DLA	Electrical / visual differential indicator	446-447
DLE	Electrical / visual differential indicator	447
DTA	Electronic differential indicator	448
DVA	Visual differential indicator	448
DVM	Visual differential indicator	448

Additional features

		page
T2	Plug	449



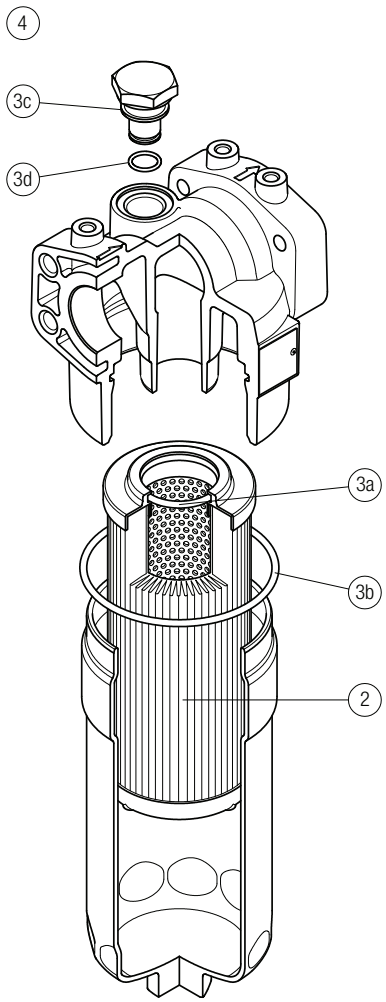
LMP210	
Filter length	**H [mm]**
1	362
2	492
3	633

Connections	**R**
F1 - F2 - F3	M8
F4 - F5 - F6	5/16" UNC

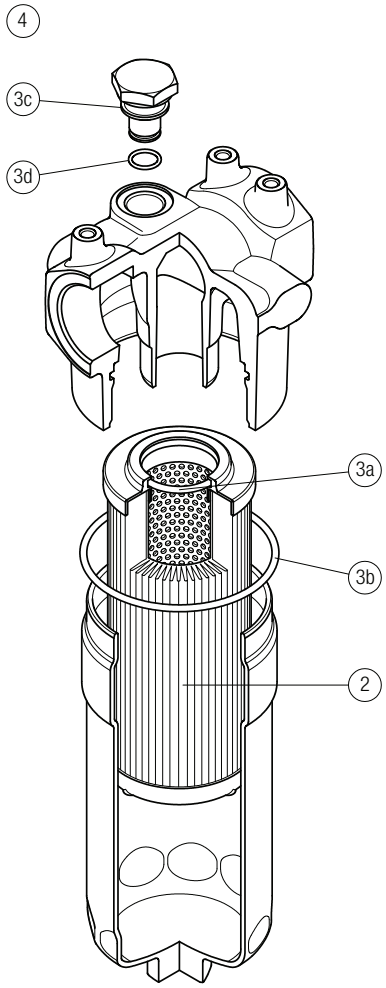
LMP 210-211 SPARE PARTS

Order number for spare parts

LMP 210



LMP 211



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