

LMD 211 series

Maximum working pressure up to 6 MPa (60 bar) - Flow rate up to 200 l/min



GENERAL INFORMA

Description

Technical data

Low & Medium Pressure filters

Duplex

Maximum working pressure up to 6 MPa (60 bar) Flow rate up to 200 I/min

LMD211 is a range of versatile low pressure duplex filter with integrated changeover function to allow the filter element replacement without the system shut-down.

They are directly connected to the lines of the system through the hydraulic fittings.

Available features:

- Female threaded connections up to 1 1/2" and flanged connections up to 1 1/2", for a maximum flow rate of 200 l/min
- 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.
- Balancing valve integrated in the changeover lever, to equalize the housing pressure before the switch
- Bypass valve, to relieve excessive pressure drop across the filter media
- Vent ports, to avoid air trapped into the filter going into the system
- Drain ports, to remove the fluid from the housing prior the maintenance work
- Optional sampling ports, to get samples of fluid or to connect additional instrument to the system
- Visual, electrical and electronic differential clogging indicators

Common applications:

- Systems where shut-down causes high costs
- Systems where shut-down causes safety issues

Filter housing materials

- Head: Aluminium
- Bowl: Cataphoretic painted steel
- Bypass valve: AISI 304 Polyamide

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

LMD 211 filters are provided for vertical mounting

Weights [kg] and volumes [dm3]

Filter series	Weights [kg]					Volumes [dm³]				
	Length 1 2 3				Length					
LMD 211		9.5	11.2	12.8			4.1	4.6	5.3	



GENERAL INFORMATION LMD 211

Flow rates [I/min]

		Filter element design - N Series									
Filter series	Length	A03	A06	A10	A16	A25	M25	M60	M90	P10	P25
	1	90	95	140	147	156	191	192	192	177	181
LMD 211	2	113	121	158	162	173	192	192	193	181	183
	3	131	146	166	169	177	193	194	194	184	187

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.

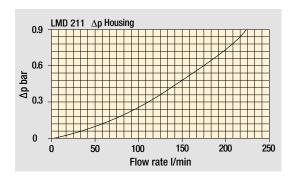
You can also calculate the right size using the formulas present on the FILTER SIZING paragraph at the beginning of the full catalogue or at the beginning of the filter family brochure. Please, contact our Sales Department for further additional information.

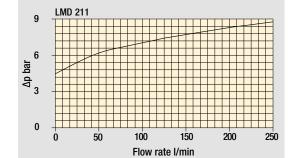
Hydraulic symbols

Filter series	Style S	Style B
LMD 211	•	•
	D.I. IN	D.I. IN

 $\begin{array}{c} Pressure \ drop \\ \text{Filter housings } \Delta p \ pressure \ drop \end{array}$

Bypass valve pressure drop

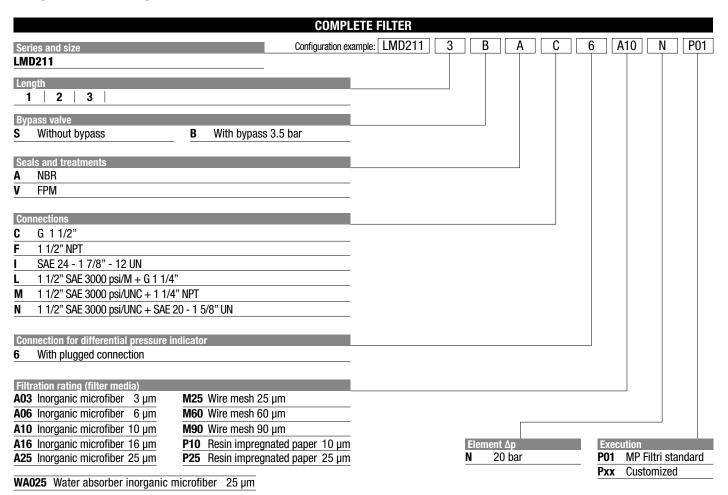


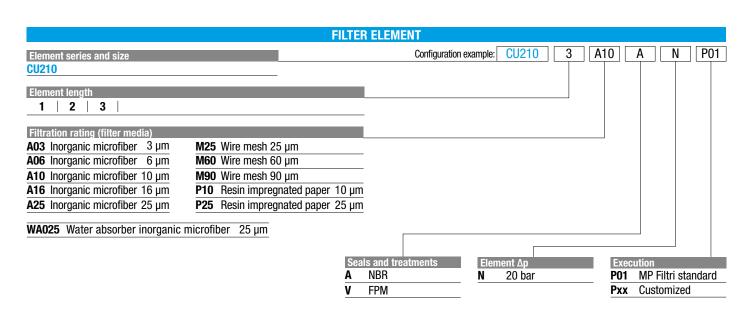


The curves are plotted using mineral oil with density of 0.86 kg/dm³ in compliance with ISO 3968. Δp varies proportionally with density.

LMD 211

Designation & Ordering code





CLOGGING INDICATORS					
DEA	Electrical differential pressure indicator	DLE	Electrical / visual differential pressure indicator		
DEM	Electrical differential pressure indicator	DTA	Electronic differential pressure indicator		
DEU	Electrical differential pressure indicator	DVA	Visual differential pressure indicator		
DLA	Electrical / visual differential pressure indicator	Visual differential pressure indicator			
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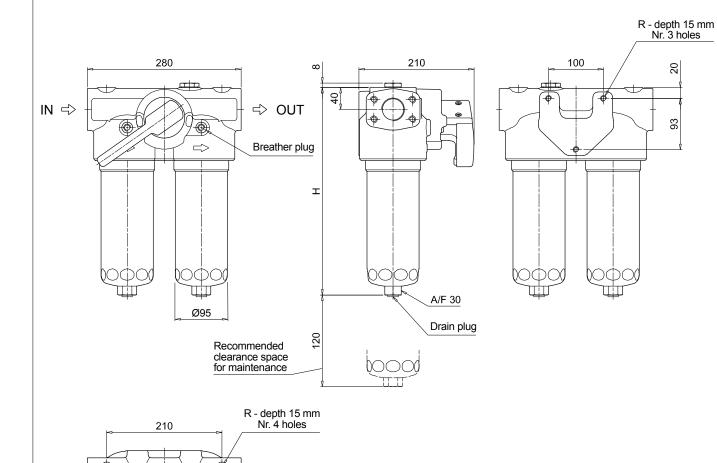
PLUGS See page 747
T2 Plug

Dimensions

LMD211

Filter length	H [mm]
1	383
2	513
3	651

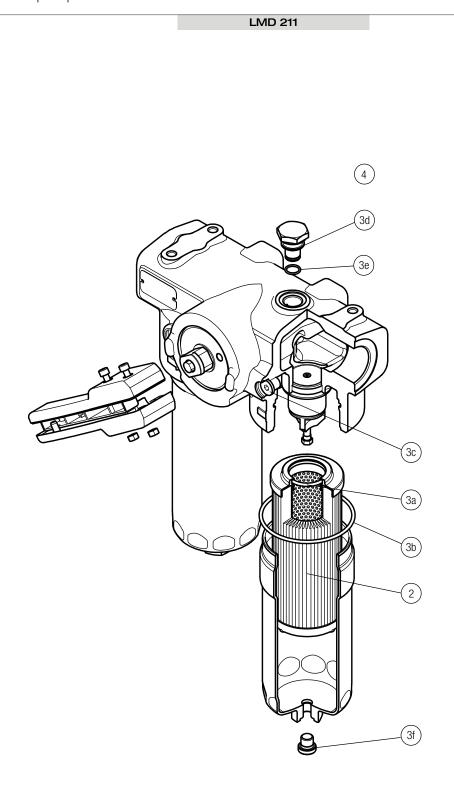
Connections	R
С	M10
F-I	3/8" UNC
L	M10
M - N	3/8" LINC



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Connection for diff. pressure indicator T2 plug

Order number for spare parts



	Q.ty: 1 pc.	Q.ty	: 1 pc.	Q.ty: 2 pcs.		
Item:	2	3 (3a ÷ 3f)		4		
Filter series	Filter element	Seal Kit code number NBR FPM		Indicator connection plug NBR FPM		
LDD	See order table	02050671	02050672	T2H	T2V	

CLOGGING INDICATORS LOW & MEDIUM PRESS, FILTERS

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