LMD 951 series

Maximum working pressure up to 1.6 MPa (16 bar) - Flow rate up to 1200 l/min



LMD 951 GENERAL INFORMATION

Description

Low & Medium Pressure filters

Duplex
Maximum working pressure up to 1.6 MPa (16 bar)
Flow rate up to 1200 l/min

LMD950 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:
- Flanged connections up to 4", for a maximum flow rate of 1200 l/min
- Base-mounting design, for ease of the replacement of the filter element
- 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, to equalize the housing pressure before the switch
- Bypass valve, to relieve excessive pressure drop across the filter media
- Drain ports, to remove the fluid from the housing prior the maintenance work
- Visual, electrical and electronic differential clogging indicators

Common applications:
- Systems where shut-down causes high costs
- Systems where shut-down causes safety issues

Technical data

Filter housing materials
- Head: Anodized Aluminium
- Housing: Anodized Aluminium
- Manifolds: Welded - Painted black
- Bypass valve: Steel
- 3-way ball valve: Steel body - Stainless Steel ball
- Check valve: Cast Iron body - AISI 304 leaf

Pressure
- SAE + DIN Flange
- Test pressure: 2.5 MPa (25 bar)

Bypass valve
- Opening pressure 350 kPa (3.5 bar) ±10%
- Other opening pressures on request.

Number of filter elements
LMD 951: 2 filter elements CU950-3

Δp element type
- Microfibre filter elements - series N: 20 bar
- Fluid flow through the filter element from OUT to IN

Seals
FPM series V

Temperature
From -25° C to +110° C

Connections
- LMD 951: In-line Inlet/Outlet
- Same side

Note
LMD 951 filters
are provided
for vertical mounting



Weights [kg] and volumes [dm³]

Filter series	Weights [kg]		Volumes [dm³]	
	DN 80	DN 100	DN 80	DN 100
LMD 951	102	130	62	66

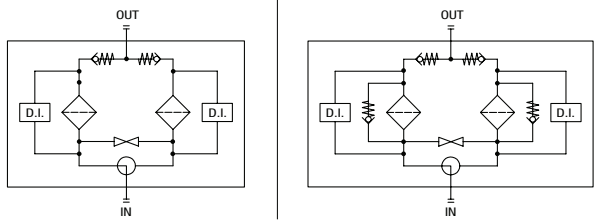
FILTER ASSEMBLY SIZING
Flow rates [l/min]

Filter series	Length	Filter element design - N Series					
		A03	A06	A10	A16	A25	M25 M60 M90 M250
LMD 951	**3**	853	884	995	1066	1096	1233

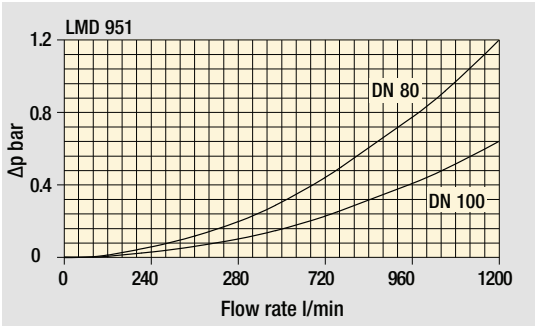
Maximum flow rate for a complete low and medium pressure filter with a pressure drop Δp = 0.7 bar.
The reference fluid has a kinematic viscosity of 30 mm^2/s (cSt) and a density of 0.86 kg/dm^3.
For different pressure drop or fluid viscosity we recommend to use our selection software available on www.mpfiltri.com.
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

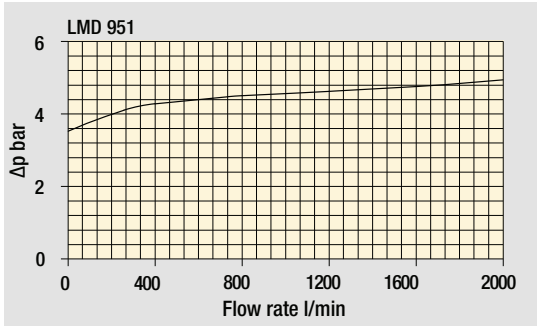
Filter series	Execution S	Execution B
LMD 951	•	•



Pressure drop



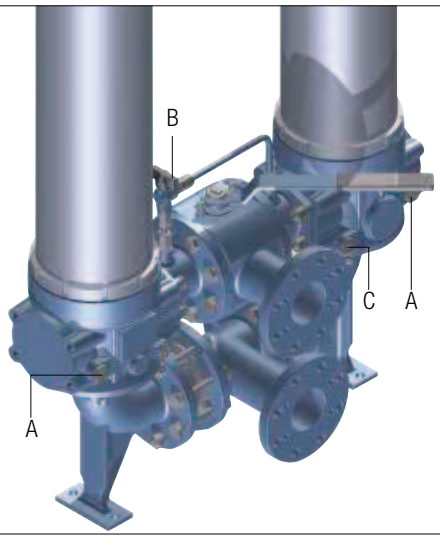
Filter housings
Δp pressure drop



Bypass valve
pressure drop

The curves are plotted using mineral oil with density of 0.86 kg/dm^3 in compliance with ISO 3968. Δp varies proportionally with density.

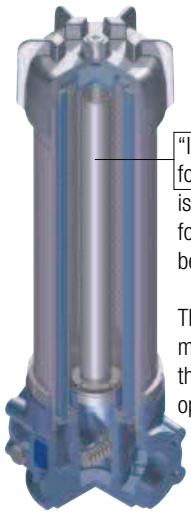
Focus on



LMD 951
Fit one differential indicator
for individual filter assembly.

A	Indicator port Plug T2 - A/F 30
B	Compensation valve
C	Oil drain plug G 1/2" - A/F 10

Execution P02



"Internal tube
for reduced flow rate"
is recommended
for flow rate values
below 100/150 l/min.

The use of option P02
makes it easier to fill
the housing with the
operating fluid.

LMD 951

Designation & Ordering code

COMPLETE FILTER

Configuration example: LMD951 | 3 | B | V | F1 | A10 | N | P01

Series and size
LMD951

Length
3

Bypass valve
S Without bypass
B 3.5 bar

Seals and treatments
V FPM

Connections
F1 3" SAE 3000 psi/M
F2 3" SAE 3000 psi/UNC
F3 4" SAE 3000 psi/M
F4 4" SAE 3000 psi/UNC
F5 3" SAE 3000 psi/M, In-line connections
F6 3" SAE 3000 psi/UNC, In-line connections
F7 4" SAE 3000 psi/M, In-line connections
F8 4" SAE 3000 psi/UNC, In-line connections

Filtration rating (filter media)
A03 Inorganic microfiber 3 µm
A06 Inorganic microfiber 6 µm
A10 Inorganic microfiber 10 µm
A16 Inorganic microfiber 16 µm
A25 Inorganic microfiber 25 µm
M25 Wire mesh 25 µm
M60 Wire mesh 60 µm
M90 Wire mesh 90 µm

WA025 Water absorber inorganic microfiber 25 µm

Element Δp
N 20 bar

Execution
P01 MP Filtri standard
P02 With internal tube for reduced flow rate
Pxx Customized

FILTER ELEMENT

Configuration example: CU950 | 3 | A10 | V | N | P01

Element series and size
CU950

Element length
3

Filtration rating (filter media)
A03 Inorganic microfiber 3 µm
A06 Inorganic microfiber 6 µm
A10 Inorganic microfiber 10 µm
A16 Inorganic microfiber 16 µm
A25 Inorganic microfiber 25 µm
M25 Wire mesh 25 µm
M60 Wire mesh 60 µm
M90 Wire mesh 90 µm

WA025 Water absorber inorganic microfiber 25 µm

Seals
V FPM

Element Δp
N 20 bar

Execution
P01 MP Filtri standard
Pxx Customized

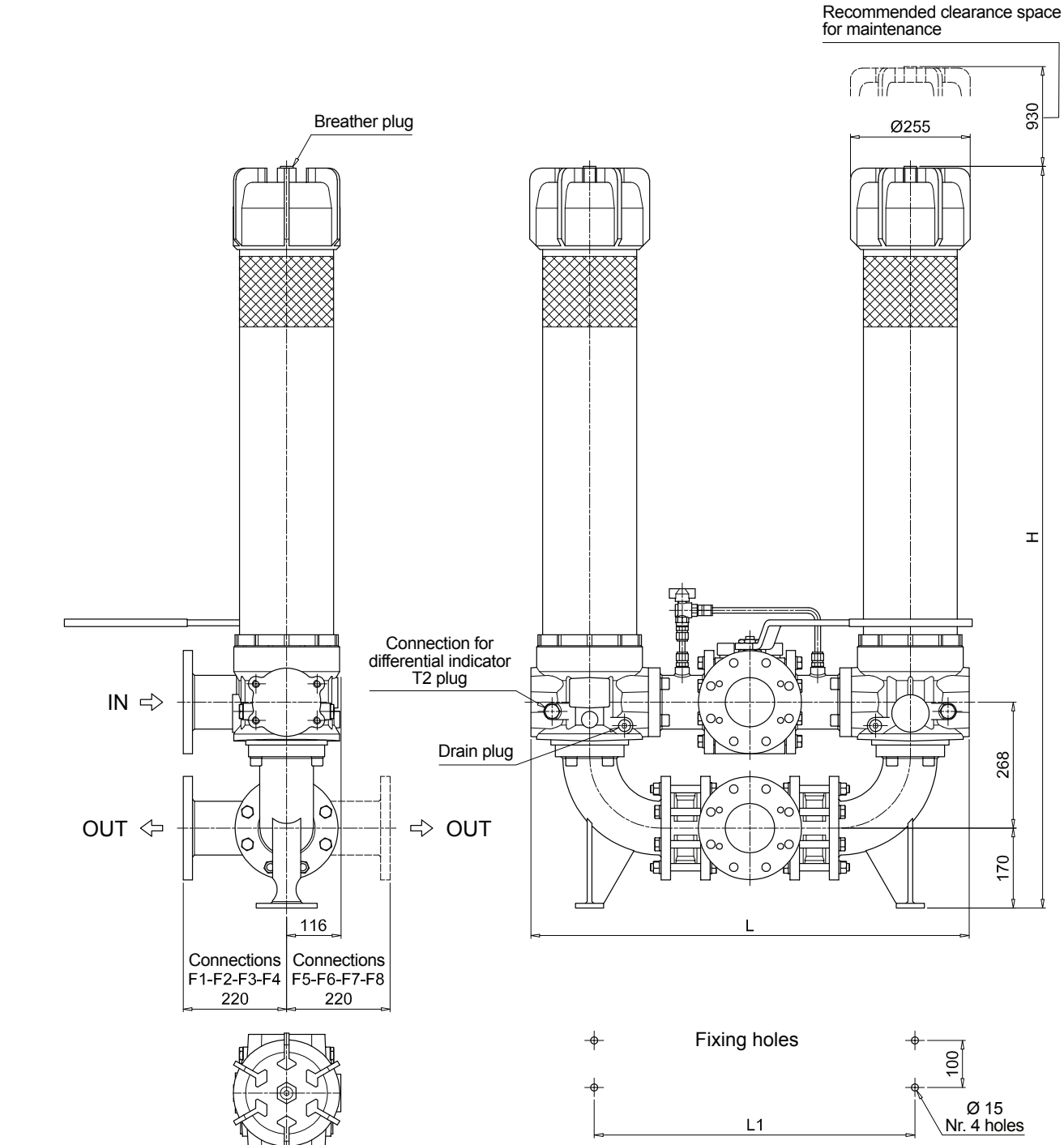
ACCESSORIES

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

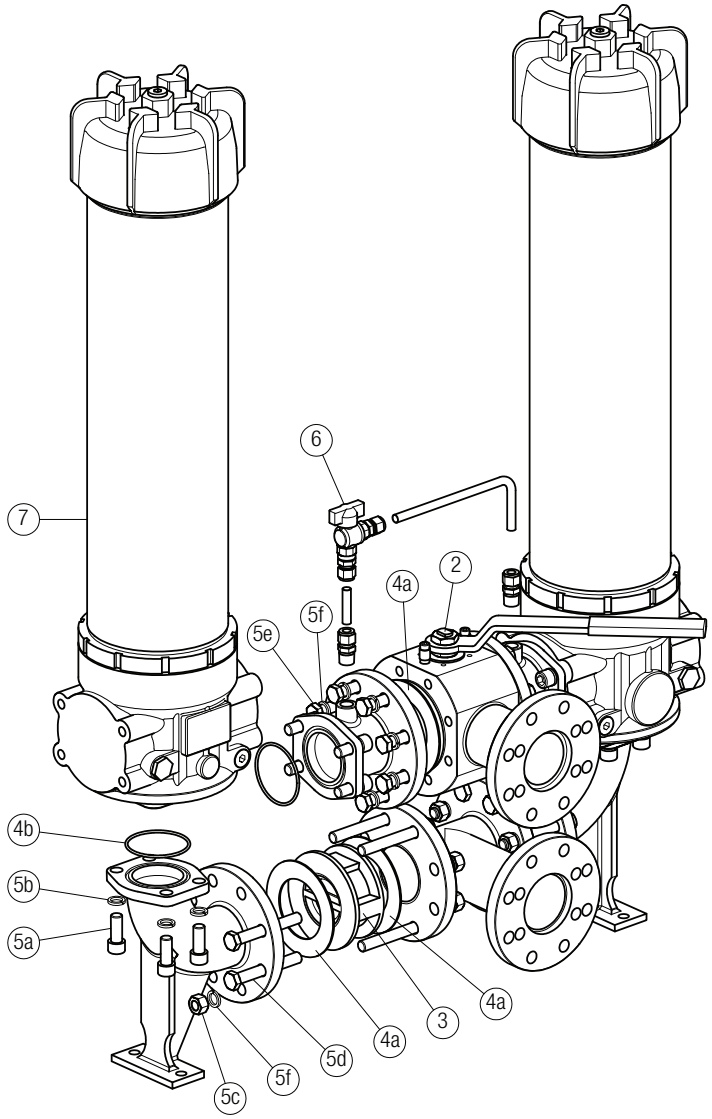


LMD951				
Connections	**H [mm]**	**L [mm]**	**L1 [mm]**	**M [mm]**
F1	1530	838	588	370
F2	1530	838	588	370
F3	1577	932	682	650
F4	1577	932	682	650
F5	1530	838	588	370
F6	1530	838	588	370
F7	1577	932	682	650
F8	1577	932	682	650

LMD 951 SPARE PARTS

Order number for spare parts

LMD 951



Item 7:
for complete filter code and spare parts, see LMP 950 - 951 series chapter

Quantity:
- filter spare parts: 2 pcs.
- filter seal kit: 2 pcs.

Item:	Q.ty: 1 pc. 2		Q.ty: 2 pcs. 3	Q.ty: 1 pc. 4	Q.ty: 1 pc. 5 (5a ÷ 5f)	Q.ty: 1 pc. 6	Q.ty: 2 pcs. 7
Filter series LMD 951	**3-way ball valve PN 16**		**One-way valve**	**Seal Kit**	**Threaded fasteners kit**	**G 1/2" Ball Valve Kit with straight fittings**	**Filter**
F1 - F2 - F5 - F6 / D1 - D3 (3" SAE / DIN PN16 DN 80)	3" SAE 3000 psi/M 02001135	3" SAE 3000 psi/UNC 02001438	02001418	02050388	02049056	02025043	LMP9513xVF1xxxNP01
F3 - F4 - F7 - F8 / D2 - D4 (4" SAE / DIN PN16 DN 100)	4" SAE 3000 psi/M 02001162	4" SAE 3000 psi/UNC 02001439	02001419	02050389	02049057		LMP9513xVF3xxxNP01