

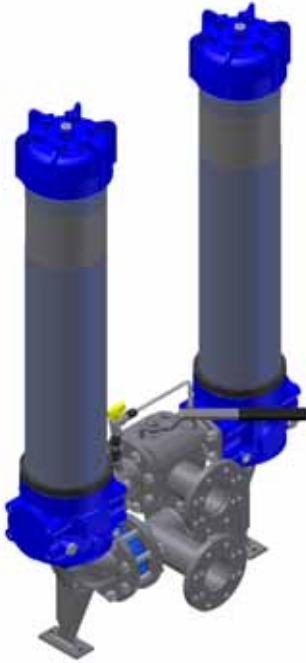
LMD 951



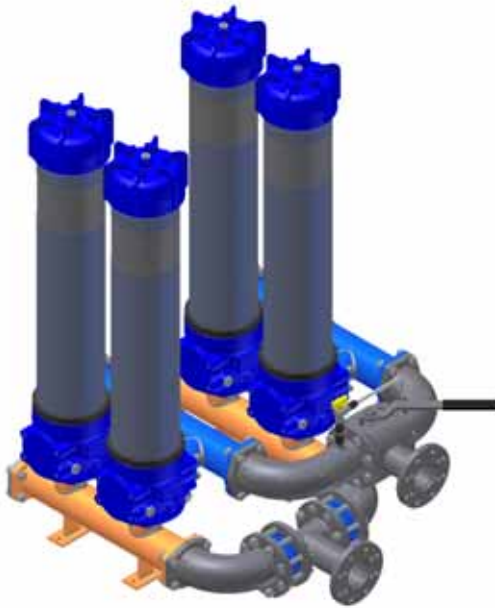
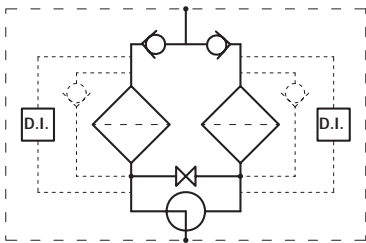
LMD

SERIES 951

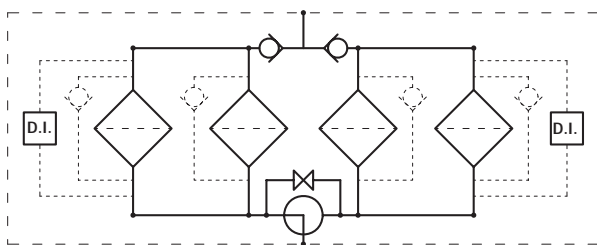
Working pressure
16 bar



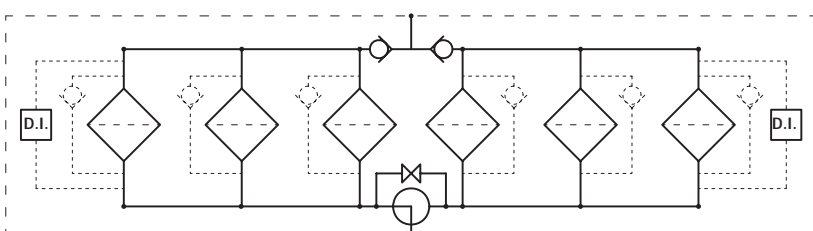
LMD 951
Double filter



LMD 952
Double filter with manifolds for two filters



LMD 953
Double filter with manifolds for three filters



Technical data

Filter housing (Materials)

- Head: Anodised Aluminium
- Housing: Anodised Aluminium
- Manifolds: Steel / Painted black
- Bypass valve: Nylon - Steel
- 3-way ball valve:
 - Steel body
 - Stainless steel ball
- Check valve:
 - Cast iron body
 - AISI 304 leaf

Pressure

- DIN Flange
- Working pressure: 16 bar (1.6 MPa)
- Test pressure: 25 bar (2.5 MPa)

Temperature

- From -25°C to +110°C

Bypass valve

- Opening pressure 3.5 bar \pm 10%
- Other opening pressures on request.

Number of filter elements

- LMD 951: 2 filter elements CU950-3
- LMD 952: 4 filter elements CU950-3
- LMD 953: 6 filter elements CU950-3

Filter elements Δp

- Series N and W elements: 20 bar
- Oil flow from exterior to interior.

Seals

- Standard NBR series V

Weights (kg) Length

- LMD951 102 (DN 80) - 130 (DN 100)
- LMD952 207 (DN 80) - 235 (DN 100)
- LMD953 312 (DN 80) - 340 (DN 100)

Volumes (dm³) Length

- LMD951 62
- LMD952 138
- LMD953 232

Connections

Inlet/Outlet

- Over and under
- In-line

Compatibility

- Housings compatible with:
 - Mineral oils to ISO 2943 - aqueous emulsions
 - synthetic fluids, water and glycol.
- The filter elements are compatible with:
 - Mineral oils to ISO 2943, synthetic fluids
 - Aqueous emulsions, water and glycol (series W required).
- NBR seals series A, compatible with:
 - Mineral oils to ISO 2943 - aqueous emulsions
 - synthetic fluids, water and glycol.
- V series FPM seals, compatible with:
 - Synthetic fluids type HS-HFDR-HFDS-HFDU
 - To ISO 2943

Filter Element Area of Working Body/Bodies

Filter element in stainless steel mesh

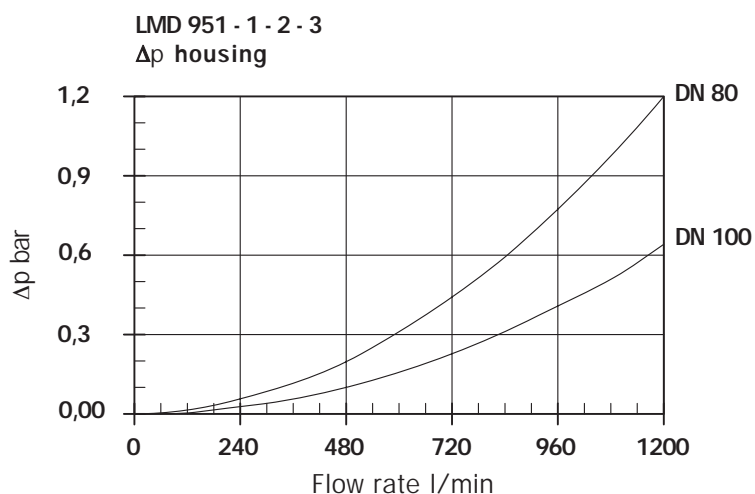
Tipo	LMD		
	951	952	953
CU950-3	25100	50200	75300

Values expressed in cm²

Filter housing Δp pressure drop

The curves are plotted using mineral oil with density of 0.86 kg/dm³ to ISO 3968.

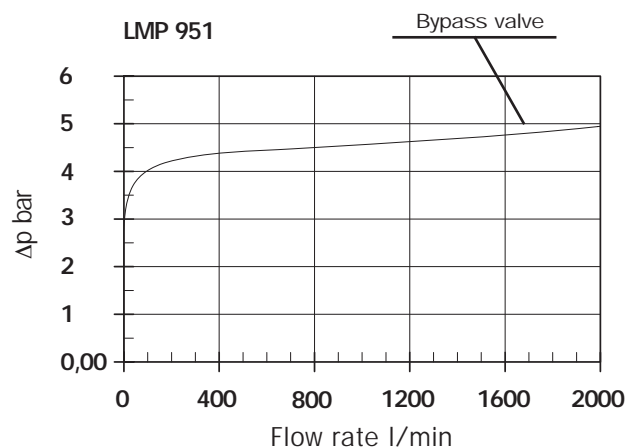
Δp varies proportionally with density.



Valves

Bypass valve pressure drop

Per individual filter

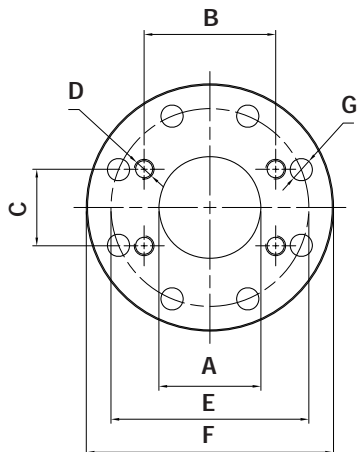


Recommended maximum flow rate

- Pressure drop of filter assembly equal to Δp 0.6 bar.
- Oil kinematic viscosity 30 mm²/s (cSt).
- Density 0.86 kg/dm³.

Filter element type	Flow rate l/min Series N	Filter Type	Flange SAE 3000
A03	625	LMD 951	3"
A06	650		
A10	700		
A16	760		
A25	780		
M25	830		
<hr/>			
A03	720	LMD 952	3"
A06	750		
A10	800		
A16	800		
A25	820		
M25	850		
<hr/>			
A03	780	LMD 953	3"
A06	800		
A10	800		
A16	850		
A25	850		
M25	880		
<hr/>			
A03	780	LMD 951	4"
A06	820		
A10	900		
A16	1000		
A25	1050		
M25	1150		
<hr/>			
A03	950	LMD 952	4"
A06	980		
A10	1050		
A16	1100		
A25	1100		
M25	1180		
<hr/>			
A03	1000	LMD 953	4"
A06	1050		
A10	1100		
A16	1150		
A25	1150		
M25	1200		

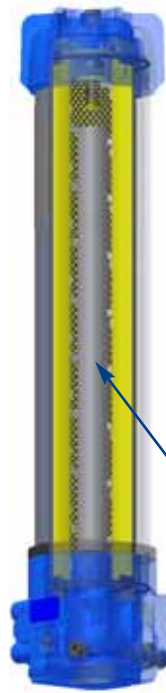
Flange connection



Connection Flange IN-OUT	Connection			
	3" SAE 3000 psi/M	3" SAE 3000 psi/UNC	4" SAE 3000 psi/M	4" SAE 3000 psi/UNC
A	73	99	73	99
B	106,38	106,38	130,18	130,18
C	61,93	61,93	77,77	77,77
D	M16	5/8" UNC	M16	5/8" UNC

Connection Flange IN-OUT	DIN PN16	
	DN80	DN100
A	73	99
E	160	180
F	200	220
G	18	18

Option P02 for LMD 951/952/953



Option P02 "Internal tube for reduced flow rates" is recommended for flow rates lower than:

LMD 951 - 150 l/min

LMD 952 - 300 l/min

LMD 953 - 450 l/min

The use of option P02 allows the operating fluid to fill the filter housing completely.

P02 "Internal tube for reduced flow rates"

Recommended maximum flow rate

The maximum recommended flow rate for the filters installed on lubrication lines, whether return or in-line, is defined by the maximum oil velocity in the connections. For filters installed on Off-Line lines, the maximum recommended flow rate is defined by the pressure drop of the filter element.

Filter for pressurised lubrication, max. oil velocity 2.5 m/sec.

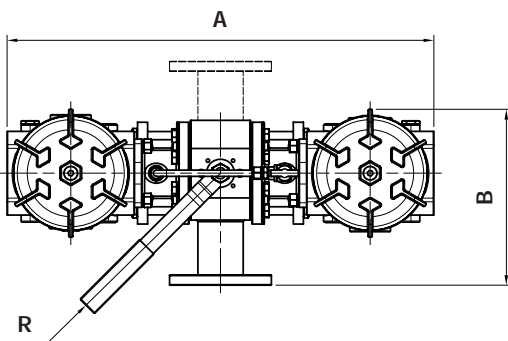
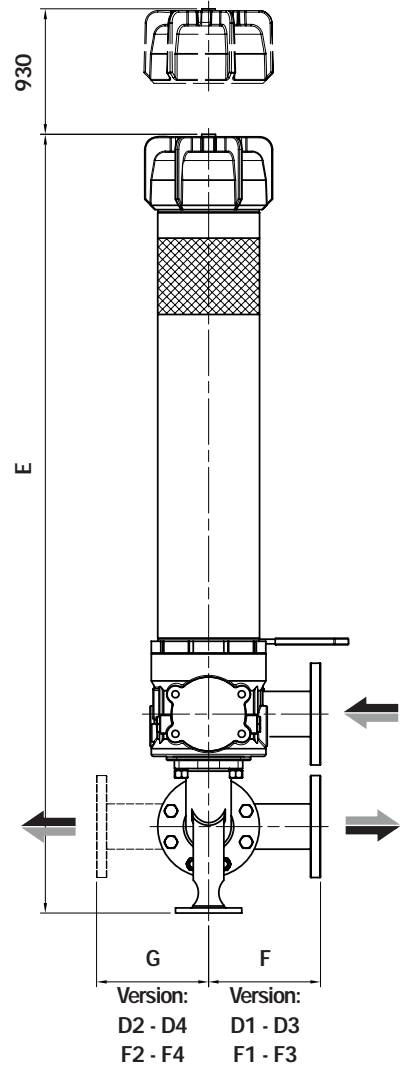
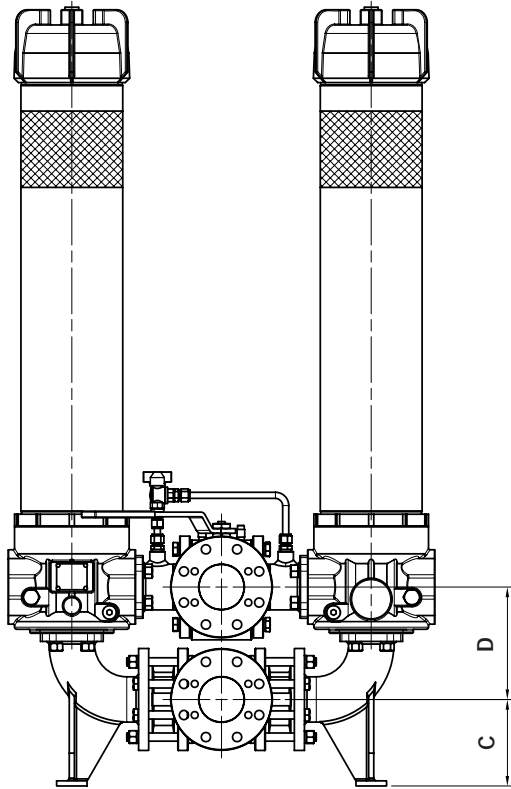
Return or in-line filter, max. oil velocity 5 m/sec.

Oil velocity	Connection	
	3"	4"
2,5 m/sec.	750	1200
5 m/sec.	1500	2400

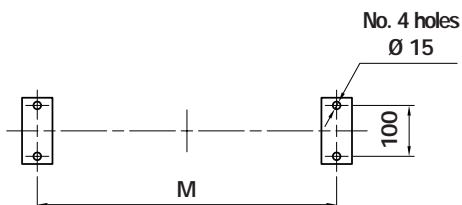
Flow rate l/min

Dimensions

LMD 951

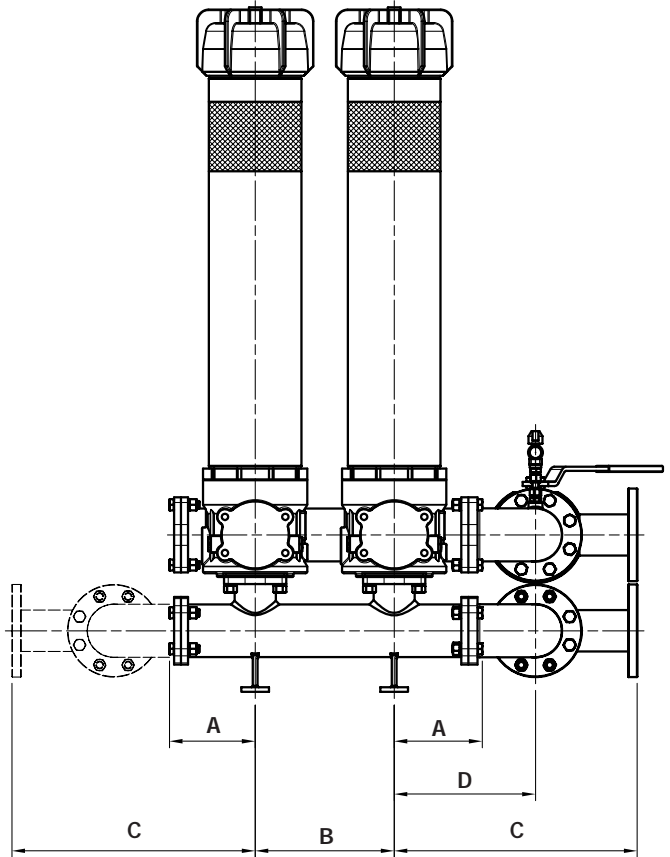
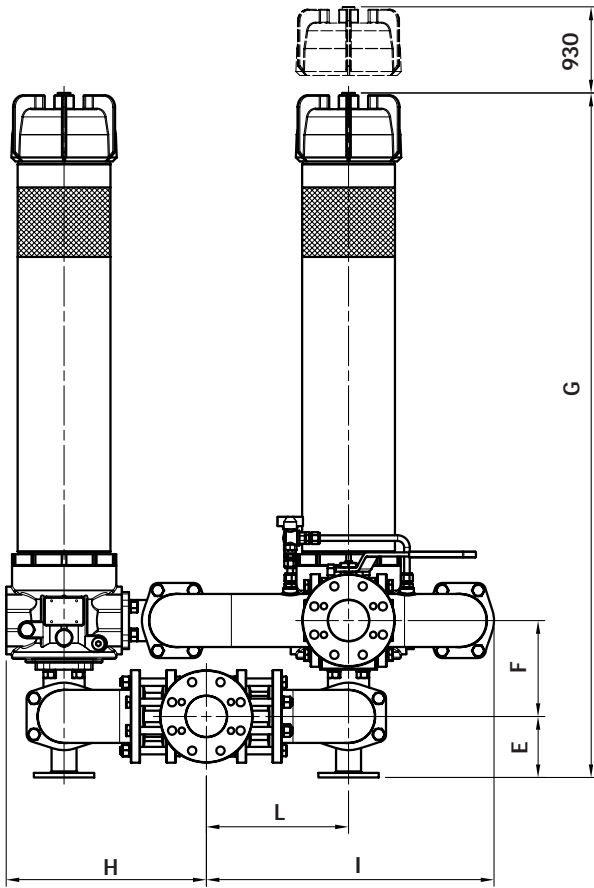


Filter fixing holes



	3" SAE DN 80	4" SAE DN 100
A	838	932
B	346	346
C	170	170
D	221	268
E	1530	1577
F	220	220
G	220	220
M	588	682
R	370	650

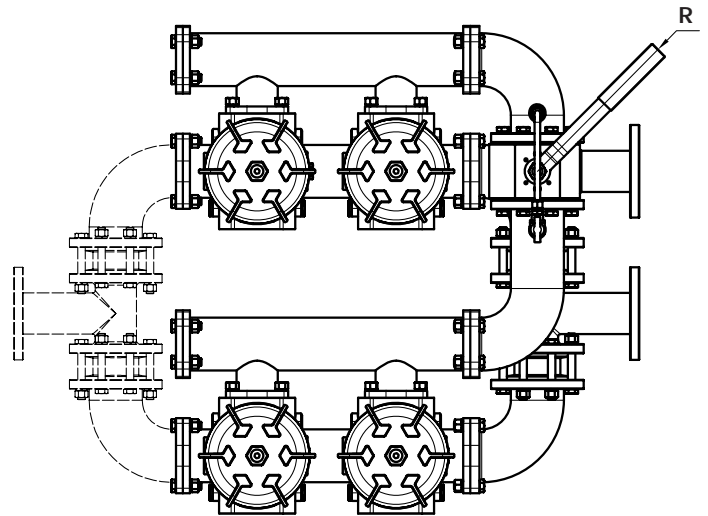
LMD 952



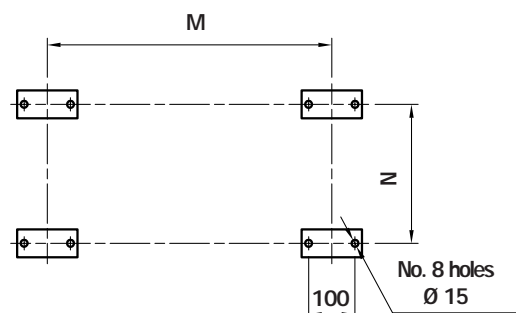
Version:
D3 - D4
F5 - F5 - F7 - F8

Version:
D1 - D2
F1 - F2 - F3 - F4

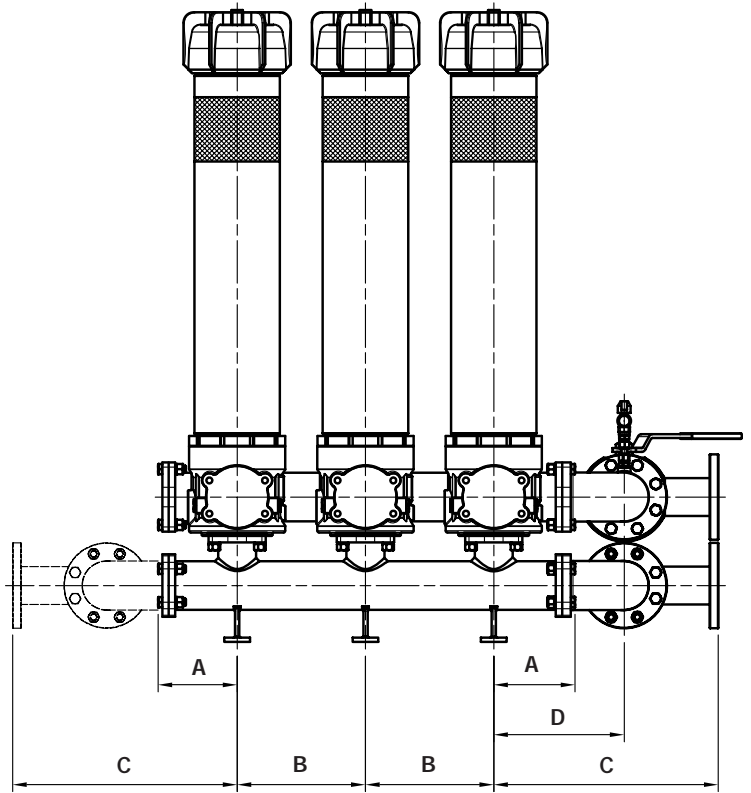
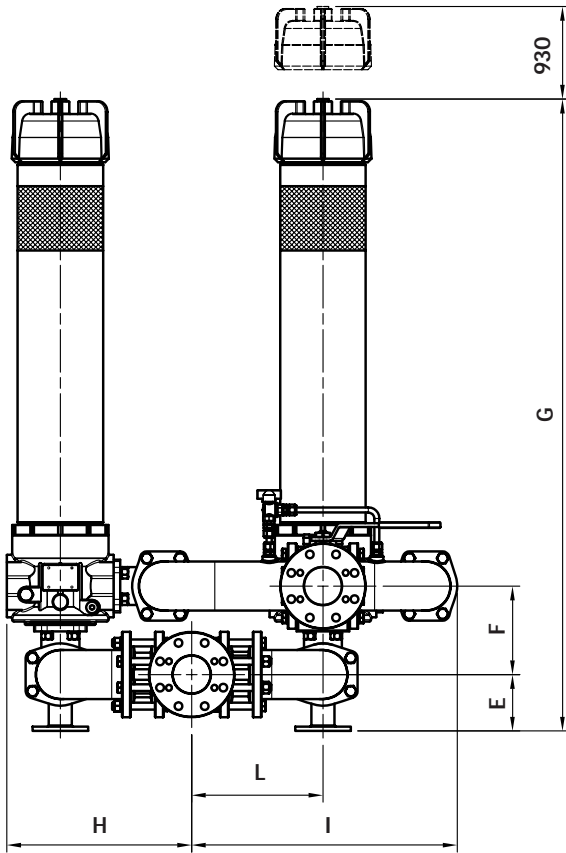
	3" SAE DN 80	4" SAE DN 100
A	190	190
B	300	300
C	552	552
D	332	332
E	132	132
F	207	207
G	1478	1478
H	432	456
I	621	647
L	269	278
M	614	662
N	300	300
R	370	650



LMD 952 filter fixing holes



LMD 953



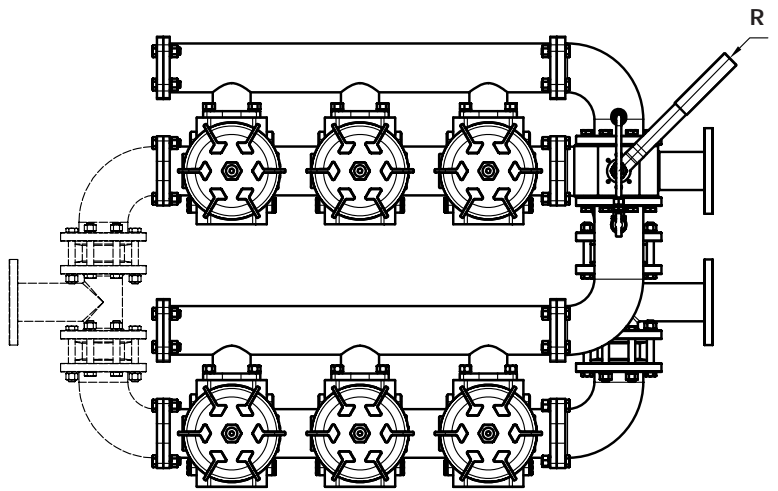
Version:
D3 - D4
F5 - F5 - F7 - F8

Version:
D1 - D2
F1 - F2 - F3 - F4

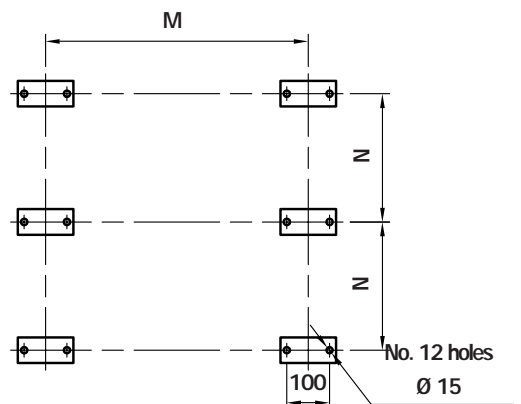
3" SAE
DN 80

4" SAE
DN 100

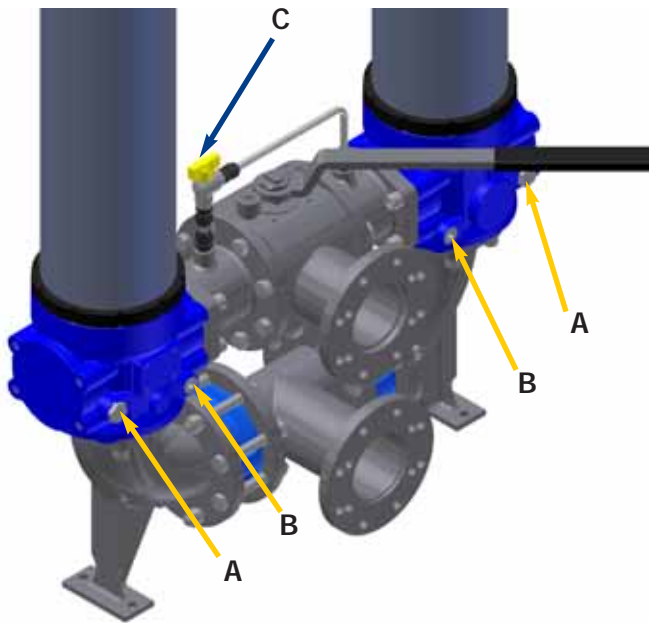
	3" SAE DN 80	4" SAE DN 100
A	190	190
B	300	300
C	552	552
D	332	332
E	132	132
F	207	207
G	1478	1478
H	432	456
I	621	647
L	269	278
M	614	662
N	300	300
R	370	650



LMD 953 filter fixing holes



LMD 951



A Indicator connection plug T2 Ch. 30

B Oil drain plug G 1/2" Ch. 10

C Compensation valve

D Breather plug G 1/2" Ch. 10

Differential indicator:

LMD 951 Fit one indicator per filter housing

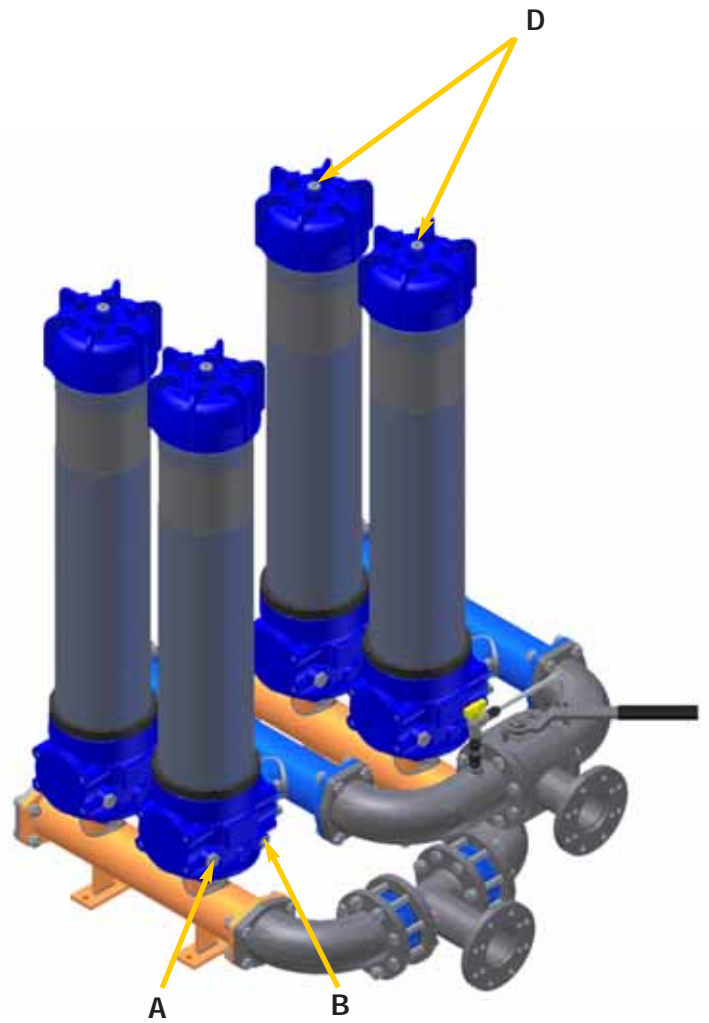
LMD 952 - 953 Fit one indicator per individual filter assembly

Option

Flange with oil drain plug for rapid discharge LMD 952 - 953



LMD 952 - 953

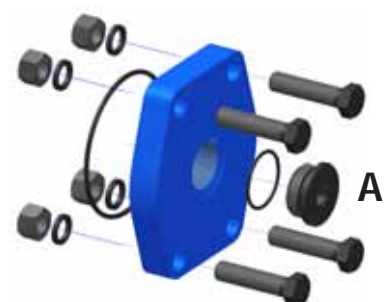


Order code

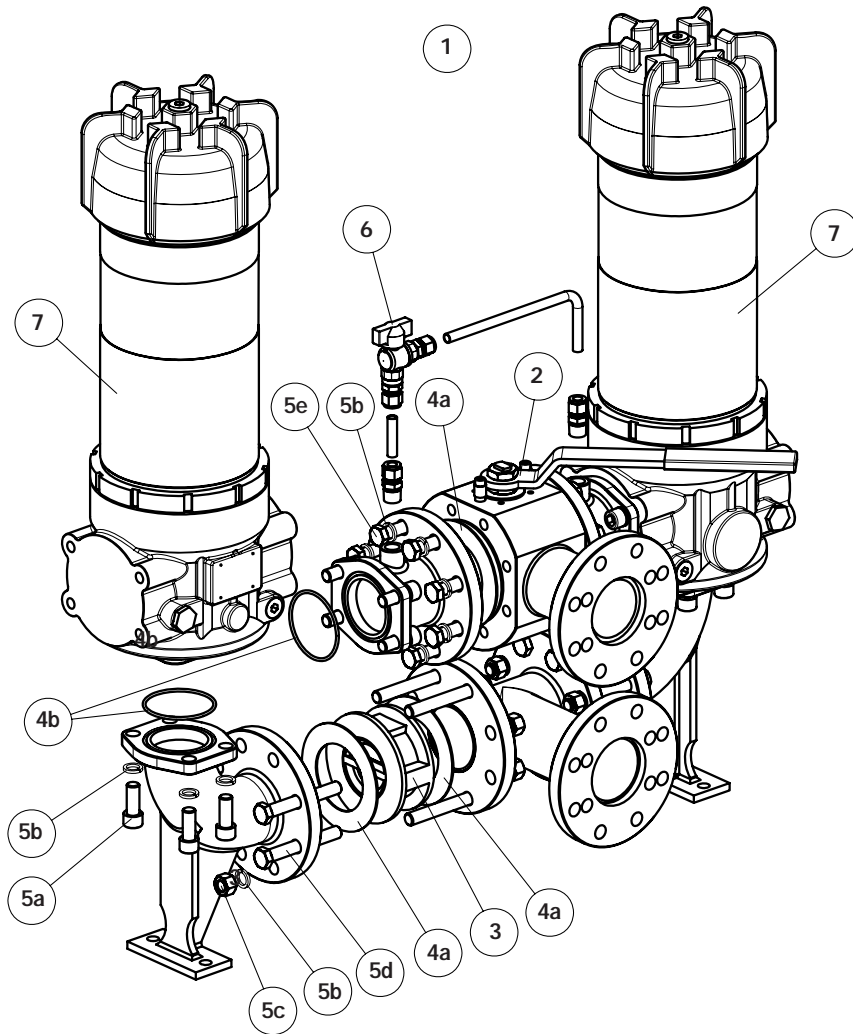
	A
CMV4	G 1 1/4"
CUV4	SAE 20

The order code includes:

- FLANGE
- SCREWS
- NUTS
- SEALS
- OIL DRAIN PLUG

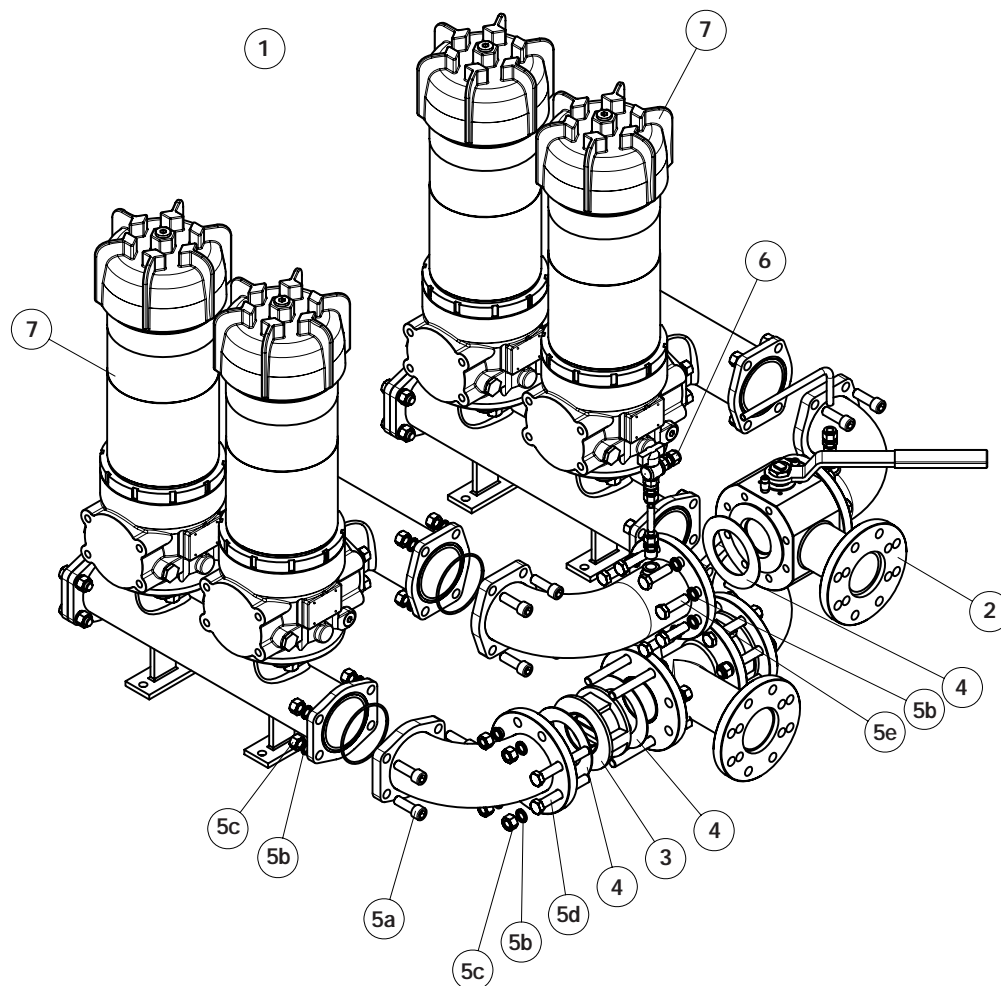


LMD 951 spare parts



Pos.	Description	Qty	LMD 951 Series Filter	
			F1 - F2 - F5 - F6 / D1 - D3 (3" SAE / DIN PN16 DN 80)	F3 - F4- F7 - F8 / D2 - D4 (4" SAE / DIN PN16 DN 100)
1	Filter assembly	1	See order table	
2	3-way ball valve PN 16	1	3" SAE 3000 psi/M 02001135 3" SAE 3000 psi/UNC 02001438	4" SAE 3000 psi/M 02001162 4" SAE 3000 psi/UNC 02001439
3	One-way valve	2	02001418	02001419
4	Seals kit	1	02050388	02050389
4a	Flat seal	6	To DN 80	To DN 100
4b	IN-OUT O-Ring	4	O-R 4337 Ø 85,32 x 3,53 FPM	O-R 4437 Ø 110,7 x 3,53 FPM
5	Threaded fasteners kit	1	02049056	02049057
5a	Stud bolts	16	UNI 5931 - M16 x 40 10.9	
5b	Circlips	48	UNI 1751-B 16	
5c	Nuts	16	UNI - EN 24032 - M16 10.9	
5d	Hex screws for flanges- valves pos. 3	16	UNI-EN 24014 - M16 x 120 - 10.9	UNI-EN 24014 - M16 x 130 10.9
5e	Hex screws for flanges- valves pos. 2	16	UNI-EN 24017 - M16 x 55 - 10.9	
6	G 1/2" Ball Valve Kit with straight fittings	1	02025043	
7	Filter	2	See order table LMP9513F.....PO* a pag. 75	
-	Indicators	2	See order table	

LMD 952-953 spare parts



Pos.	Description	Qty	LMD 952 - 953 Series Filter	
			F1 - F2 - F5 - F6 / D1 - D3 (3" SAE / DIN PN16 DN80)	F3 - F4- F7 - F8 / D2 - D4 (4" SAE / DIN PN16 DN 100)
1	Filter assembly	1	See order table	
2	3-way ball valve PN 16	1	3" SAE 3000 psi/M 02001135 3" SAE 3000 psi/UNC 02001438	4" SAE 3000 psi/M 02001162 4" SAE 3000 psi/UNC 02001439
3	One-way valve	2	02001418	02001419
4	Flat seal	6	To DN 80	To DN 100
5	Threaded fasteners kit	1	02049058	02049059
5a	Hex screws for fittings - manifolds	16	UNI-EN 5931 - M16 x 55 10.9	
5b	Circlips	48	UNI 1751-B 16	
5c	Nuts	32	UNI-EN 24032 - M16 10.9	
5d	Hex screws for flanges- valves pos. 3	16	UNI-EN 24014 - M16 x 110 10.9	UNI-EN 24014 - M16 x 120 10.9
5e	Hex screws for flanges- valves pos. 2	16	UNI-EN 24017 - M16 x 55 - 10.9	
6	G 1/2" Ball Valve Kit with straight fittings	1	02025043	
7	Filter	2	See order table LMP9523F.....PO* a pag. 87 See order table LMP9533F.....PO* a pag. 87	
-	Indicators	2	See order table	

LMD951/2/3 ordering information

Filter assembly

LMD

Example: LMD

1	2	3	4	5	6	7	8 a
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
951	3	B	V	F1	A10	N	P01

Filter element

CU 950

Example: CU950

2	6	4	7	8 b
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	A10	A	N	P01

1 - Sizes

<input type="checkbox"/> 951	1+1 filter elements CU950-3
<input type="checkbox"/> 952	2+2 filter elements CU950-3
<input type="checkbox"/> 953	3+3 filter elements CU950-3

2 - Filter length

<input type="checkbox"/> 3

3 - Valves

<input type="checkbox"/> S	Without by-pass
<input type="checkbox"/> B	With by-pass

4 - Seals

<input type="checkbox"/> V	FPM
----------------------------	-----

5 - Connections

Type		Type	
<input type="checkbox"/> D1	DIN PN 16 DN 80	<input type="checkbox"/> F1	3" SAE 3000 psi/M
<input type="checkbox"/> D2	DIN PN 16 DN 100	<input type="checkbox"/> F2	3" SAE 3000 psi/UNC
<input type="checkbox"/> D3	= D1 In-line connections	<input type="checkbox"/> F3	4" SAE 3000 psi/M
<input type="checkbox"/> D4	= D2 In-line connections	<input type="checkbox"/> F4	4" SAE 3000 psi/UNC
		<input type="checkbox"/> F5	= F1 In-line connections
		<input type="checkbox"/> F6	= F2 In-line connections
		<input type="checkbox"/> F7	= F3 In-line connections
		<input type="checkbox"/> F8	= F4 In-line connections

6 - Filter element

<input type="checkbox"/> A03	3 µm	<input type="checkbox"/> A16	16 µm	Absolute filtration Inorganic microfibre βx (c) ≥ 1000 see page 9
<input type="checkbox"/> A06	6 µm	<input type="checkbox"/> A25	25 µm	
<input type="checkbox"/> A10	10 µm			
<input type="checkbox"/> M25	25 µm	<input type="checkbox"/> M90	90 µm	Nominal Filtration Metal mesh see page 9
<input type="checkbox"/> M60	60 µm			

7 - Filter element series

<input type="checkbox"/> N	Δp 20 bar
<input type="checkbox"/> W	Δp 20 bar (aqueous emulsions - water and glycol)

8 - Options

a - Filters

<input type="checkbox"/> P01	MP Standard filters
<input type="checkbox"/> P02	With internal tube for reduced flow rates
<input type="checkbox"/> Pxx	Customer request

b - Filter elements

<input type="checkbox"/> P01	MP Standard filters
<input type="checkbox"/> Pxx	Customer request

DIFFERENTIAL INDICATORS (see page 12)

Option exclusively for LMD 952 - 953:

Flange with rapid oil drain plug

See page 95

CMV4 G 1 1/4" plug

CUV4 SAE 20 plug

Order 2 kits per filter

MP Filtri - The filter functions as described in this bulletin are valid exclusively for original MP Filtri filter elements and replacement parts. All rights reserved

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