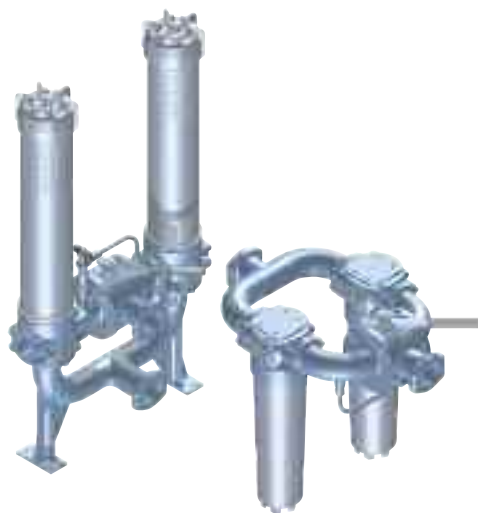


LMD 400 - 401 - 431

Maximum pressure 16 bar
Flow rates to 590 l/min



Technical data

Filter housing (Materials)

- Head: Anodized Aluminium
- Housing: Anodized Aluminium
- Manifolds: Steel - Painted black
- Bypass valve: Steel
- 3-way ball valve: Steel housings - Stainless Steel ball
- Valve: Phosphated Steel - Stainless Steel

Pressure

- 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.

Δp Elements type

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

Seals

- FPM series V

LMD 400-401-431 FILTERS ARE PROVIDED FOR VERTICAL MOUNTING

Weights (kg)

Length	4	5	6
• LMD400-401	60	65	72
• LMD431	-	68	78

Volumes (dm³)

Length	4	5	6
• LMD400-401	20	28	33
• LMD431	-	28	33

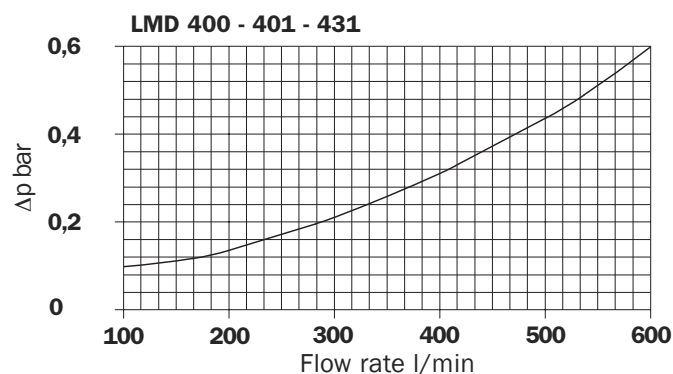
Connections

- LMD 400-401: In-line Inlet/Outlet
- LMD 401: Same side
- LMD 400-401-431: In-Line

Filter housings Δp pressure drop

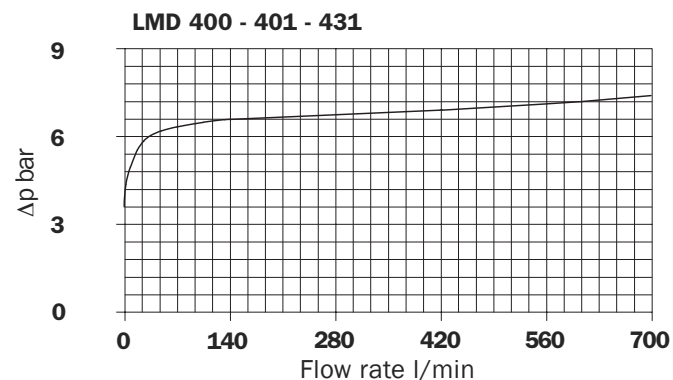
The curves are plotted utilising mineral oil with density of 0,86 kg/dm³ to ISO 3968.

Δp varies proportionally with density.



Valves

Bypass valve pressure drop



Recommended maximum flow rate

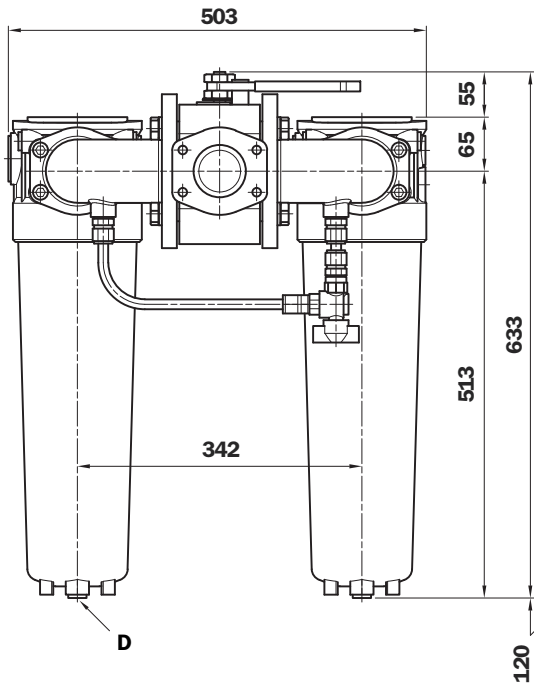
- Pressure drop of filter assembly equal to Δp 0,6 bar.
- Oil kinematic viscosity 30 mm²/s (cSt).
- Density 0,86 kg/dm³.

Leng.	Filtration								
	A03	A06	A10	A16	A25	P10	P25	M25	
LMD400-401	4	265	310	410	430	485	500	520	570
431	5	355	385	465	500	540	530	540	580
	6	390	440	510	520	560	540	555	590

Flow rate l/min

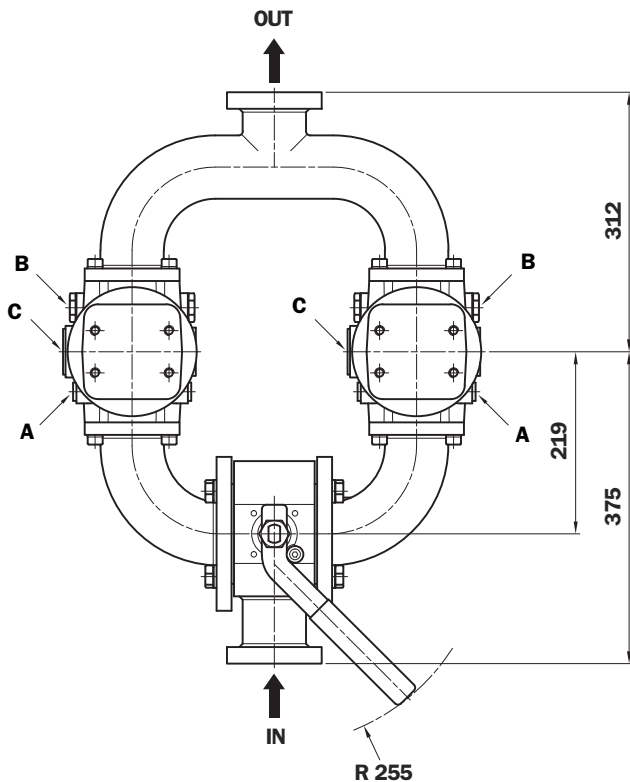
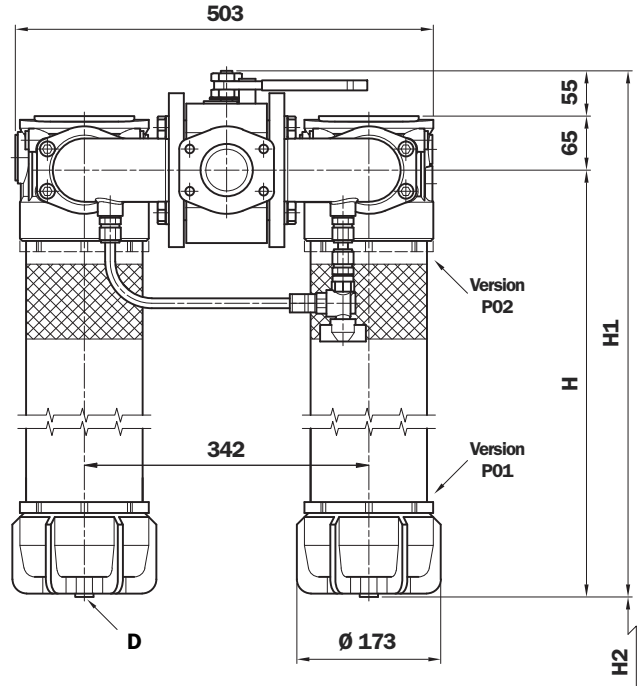
LMD 400

(length 4)

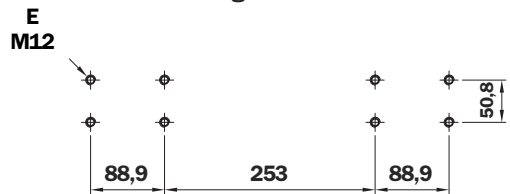


LMD 400

(length 5 - 6)



Filter fixing holes LMD 400



LMD 400

Filter Length	H mm	H1 mm	H2 mm	P01	P02
5	763	883	120	660	
6	1093	1213	120	990	

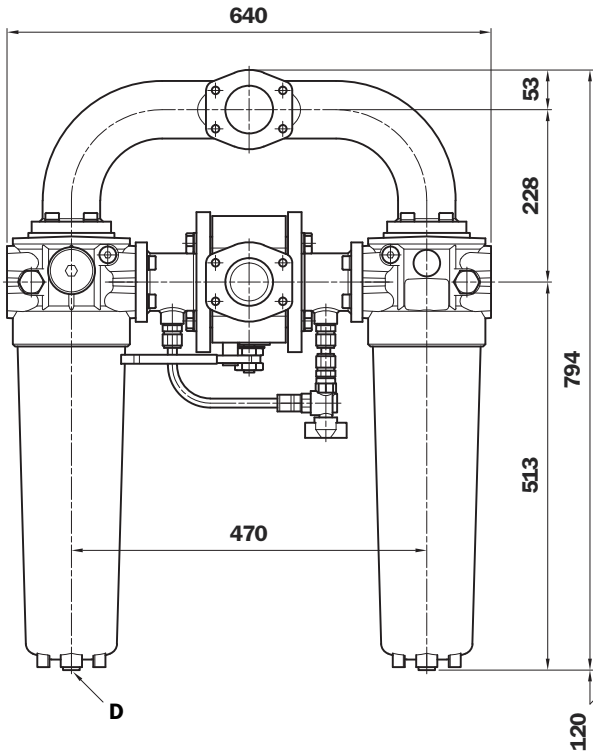
Flange connections

Type	Size	E Depth 20 mm
F1	2 1/2" SAE 3000 psi/M	M12
F2	2 1/2" SAE 3000 psi/UNC	M12
F3	= F1 In-line connection (only for LMD 401 - 431)	1/2" UNC
F4	= F2 In-line connection (only for LMD 401 - 431)	1/2" UNC

A	Breather plug G 3/8" - A/F 8
B	Indicator port Plug T2 - A/F 30
C	Bypass valve A/F 14
D	Oil drain plug G 3/8" - A/F 8

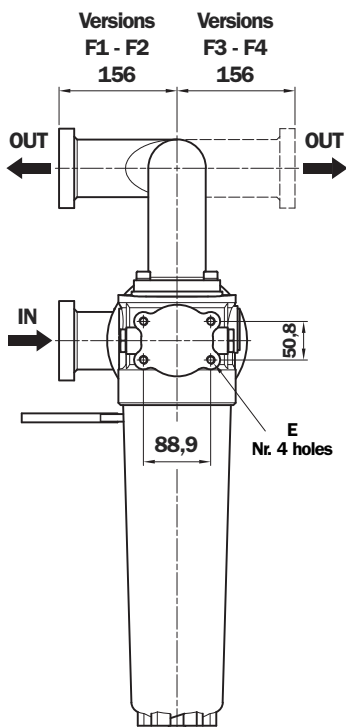
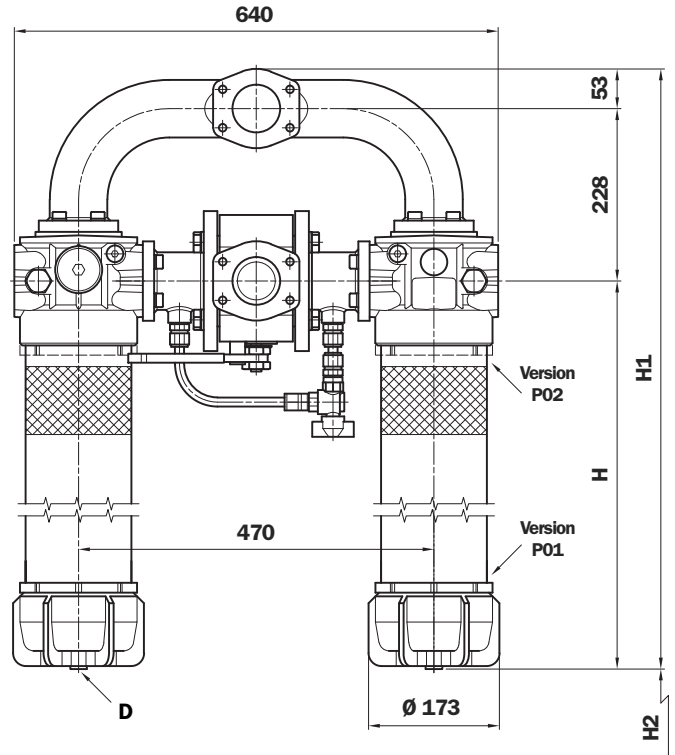
LMD 401

(length 4)

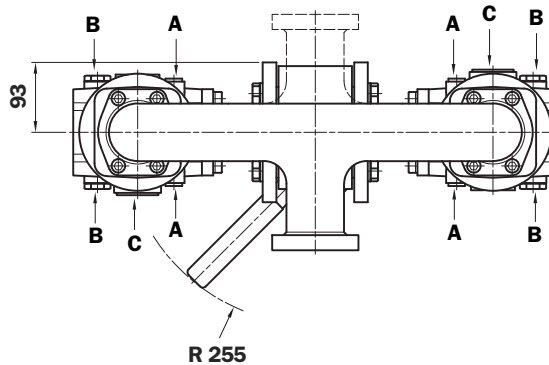


LMD 401

(length 5 - 6)



Filter fixing holes LMD 400



LMD 401

Filter Length	F1-F3	F2-F4	H mm	H1 mm	H2 mm P01	P02
5	M12	1/2" UNC	763	1044	120	660
6	M12	1/2" UNC	1193	1374	120	990

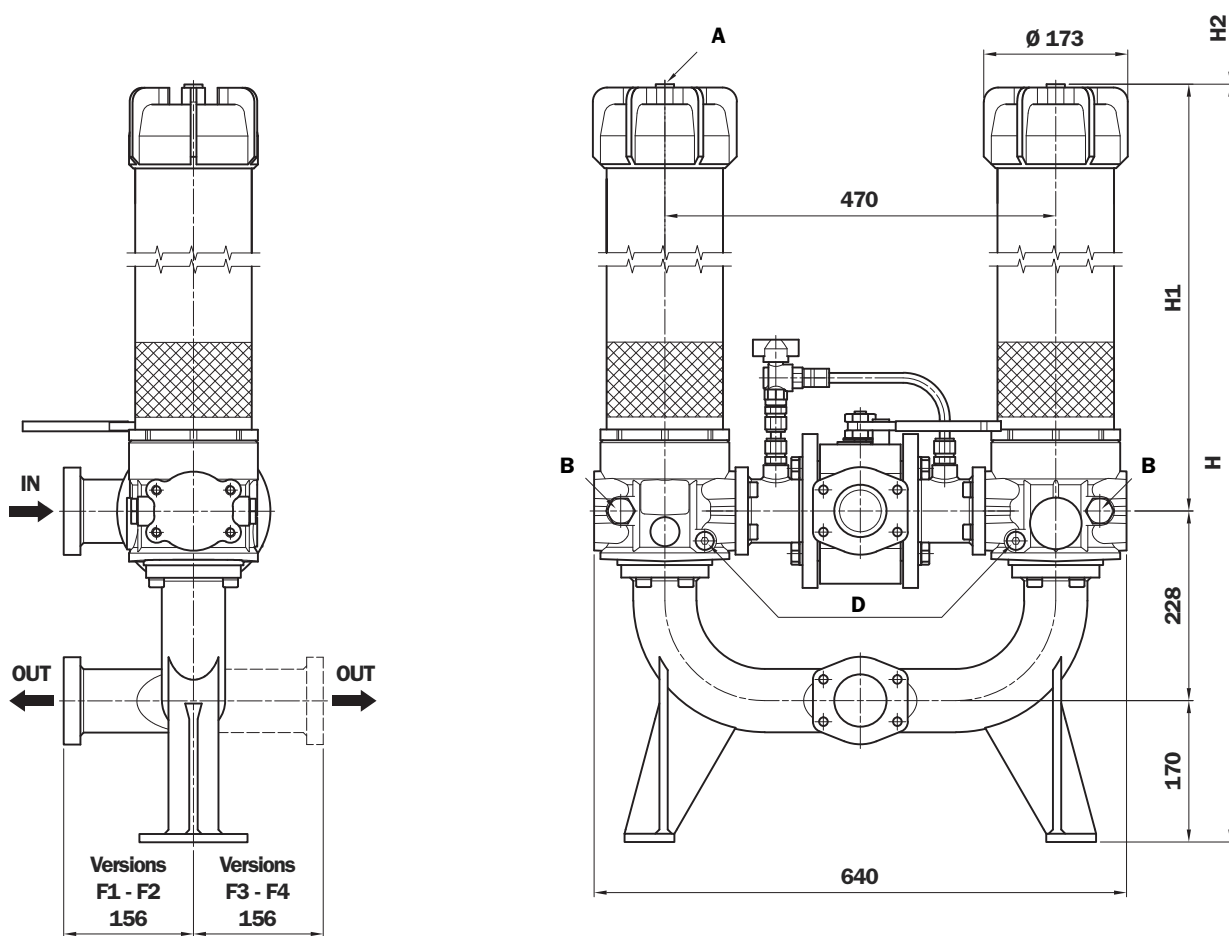
Flange connections

Type	Size	E Depth 20 mm
F1	2 1/2" SAE 3000 psi/M	M12
F2	2 1/2" SAE 3000 psi/UNC	M12
F3	= F1 In-line connection (only for LMD 401 - 431)	1/2" UNC
F4	= F2 In-line connection (only for LMD 401 - 431)	1/2" UNC

A	Breather plug G 3/8" - A/F 8
B	Indicator port Plug T2 - A/F 30
C	Bypass valve A/F 14
D	Oil drain plug G 3/8" - A/F 8

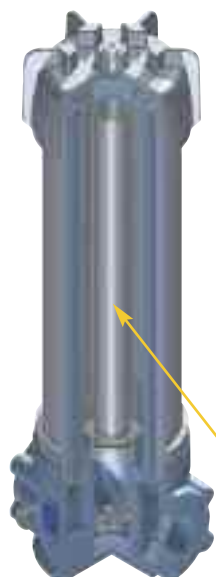
LMD 431

(length 5 - 6)



Versions F1 - F2 156
Versions F3 - F4 156

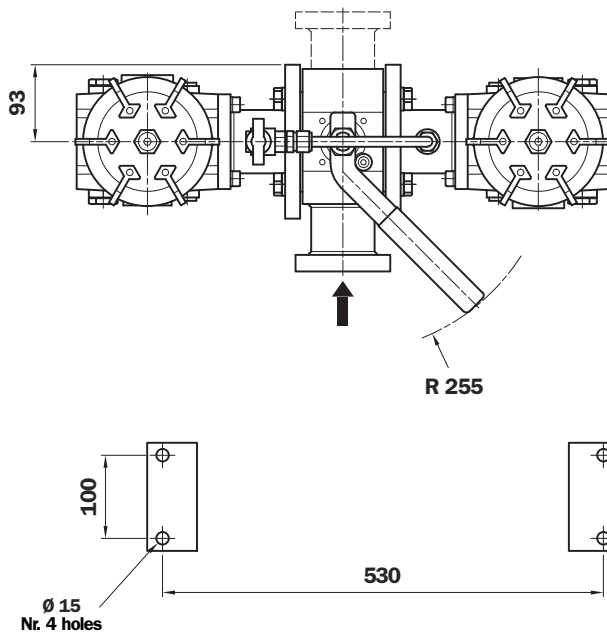
Option P02 for LMD 431



Option P02 "Internal tube for reduced flow rate" is recommended for flow rate values below 150 l/min. The use of option P02 makes it easier to fill the housing with the operating fluid.

P02 "Internal tube for reduced flow rates"

Filter fixing holes LMD 431



LMD 431

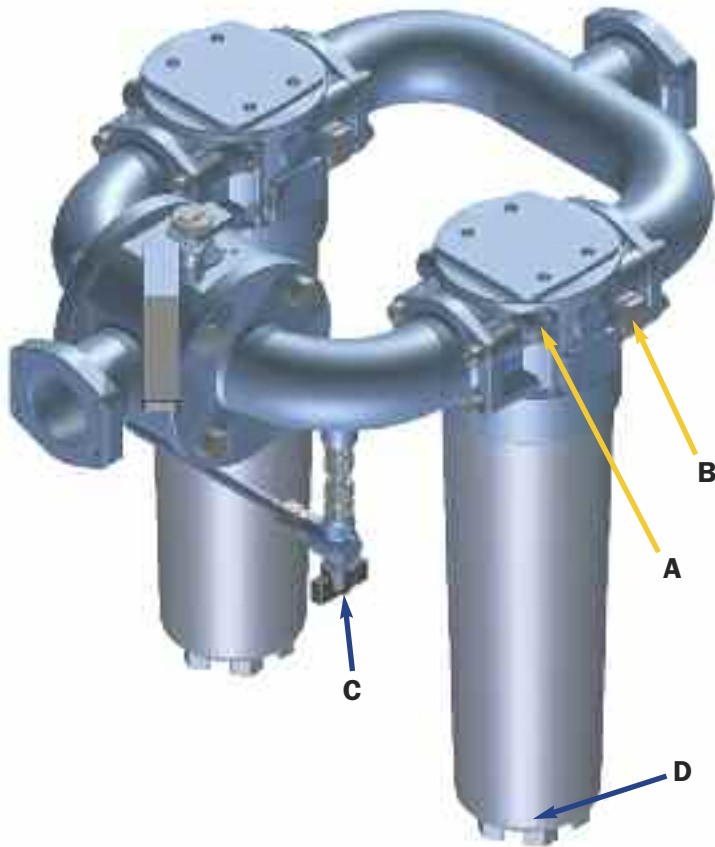
Filter Length	H mm	H1 mm	H2 mm
5	763	1161	660
6	1093	1491	990

Flange connections

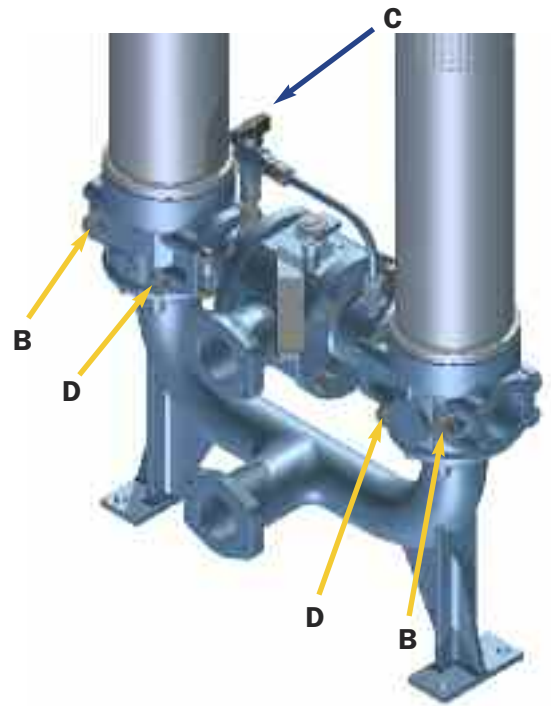
Type	Size
F1	2 1/2" SAE 3000 psi/M
F2	2 1/2" SAE 3000 psi/UNC
F3	= F1 In-line connection (only for LMD 401 - 431)
F4	= F2 In-line connection (only for LMD 401 - 431)

A	Breather plug G 3/8" - A/F 8
B	Indicator port Plug T2 - A/F 30
D	Oil drain plug G 3/8" - A/F 8

LMD 400



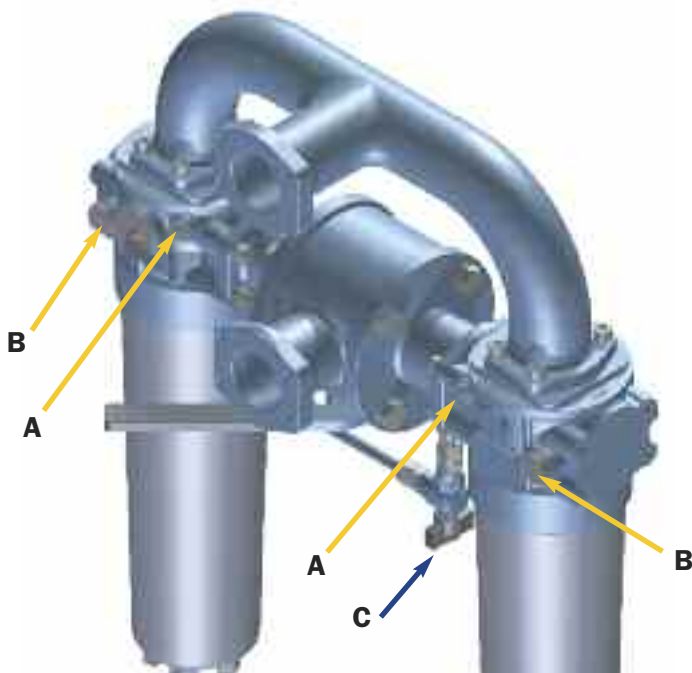
LMD 431



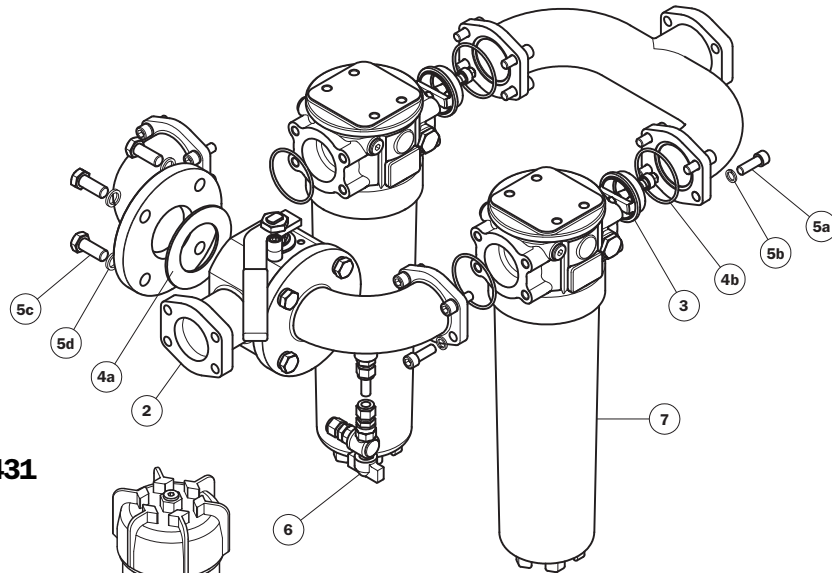
- | | |
|---|------------------------------------|
| A | Breather plug
G 3/8" - A/F 8 |
| B | Indicator port
Plug T2 - A/F 30 |
| C | Compensation
valve |
| D | Oil drain plug
G 3/8" - A/F 8 |

LMD 400 - 401 - 431
Fit one differential indicator for individual filter assembly.

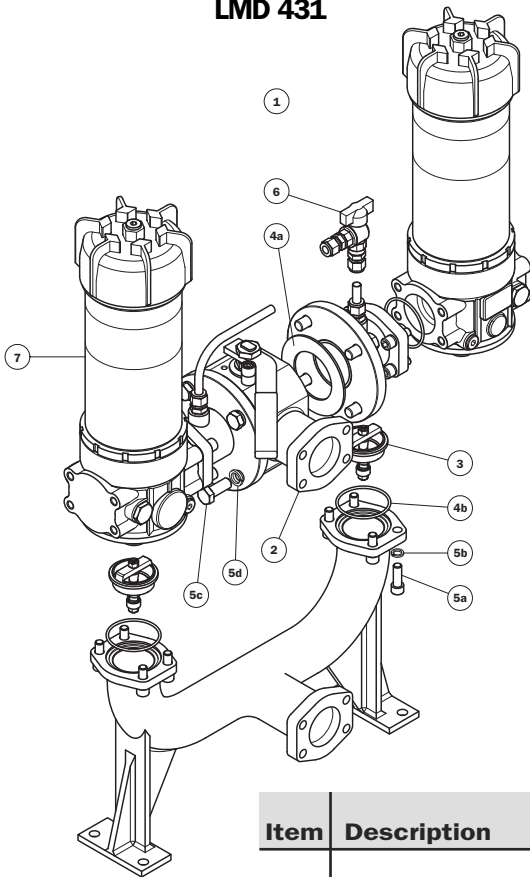
LMD 401



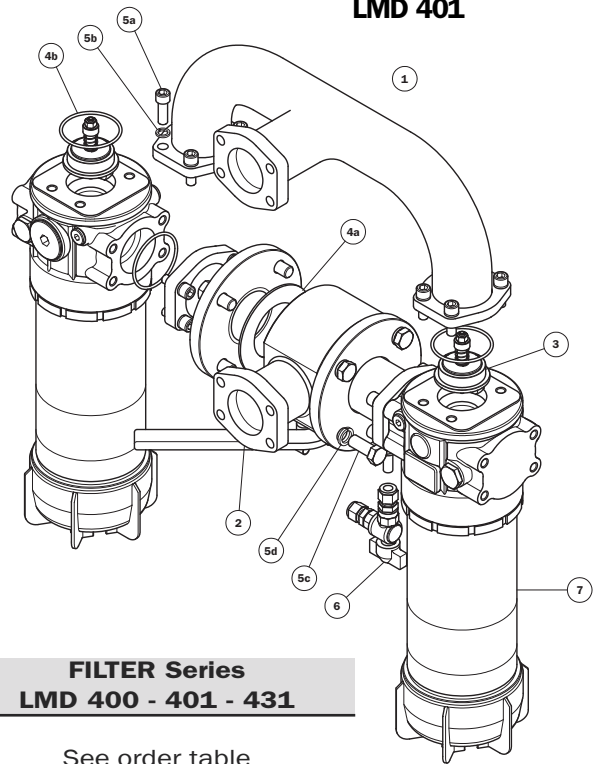
1



LMD 431



LMD 401



Item	Description	Q.ty	FILTER Series LMD 400 - 401 - 431
1	Filter assembly	1	See order table
2	3-way ball valve PN 16	1	2 1/2" SAE 3000 psi/M 02001440 2 1/2" SAE 3000 psi/UNC 02001441
3	One-way valve	2	02001429
4	Seal kit	1	02050399
4a	Flat seal	2	In according to DN65
4b	IN-OUT O-Ring	4	O-R 4287 Ø 72,62 x 3,53
5	Threaded fasteners kit	1	02049062
5a	Hexagon socket screws	16	EN ISO 4762-M12x35-10.9
5b	Spring washers	16	DIN 7980-12
5c	Exagon bolt screws	8	EN ISO 4017-M16x40-10.9
5d	Spring washers	8	UNI 1751-B - DIN 127-B 16
6	Kit ball valve with hose fitting	1	02025043
7	Filter	2	See order table LMP400/401/431xxxF2xxxNP0x page 221
-	Filter spare parts and seals kit Item 7	2	See spare parts table LMP400/401/431 pages 217-218-219

Ordering information LMD 400 - 401 - 431

Filter assembly

LMD

Example: LMD

1	2	3	4	5	6	7	8a
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

400 5 B V F1 A10 N P01

Filter element

CU

Example: CU

1	2	6	4	7	8b
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

400 5 A10 V N P01

1 - Style

Filter

400
401
431

Filter element

400
400
400

2 - Filter length

400
401
431

4	5	6
4	5	6
	5	6

6 - Filter element

A03	Inorganic microfibre 3 µm	Absolute filtration Inorganic Microfibre βx (c) ≥ 1000
A06	Inorganic microfibre 6 µm	
A10	Inorganic microfibre 10 µm	
A16	Inorganic microfibre 16 µm	
A25	Inorganic microfibre 25 µm	
M25	Wire mesh 25 µm	Nominal Filtration
M60	Wire mesh 60 µm	
M90	Wire mesh 90 µm	
P10	Resin - Impregnated paper	Nominal Filtration
P25	Resin - Impregnated paper	

3 - Valves

S	Without bypass
B	With bypass

7 - Max filter element differential pressure

N	Δp 20 bar
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4 - Filter seals

V	FPM
Z	FPM (Compatible with fluid HFA, HFB, HFC)

8 - Option

a - Filter

P01	MP Filtri standard
P02	Maintenance from base of housing (only for LMD 400 - 401 length 5 - 6)
P02	With internal tube reduced flow rate (only for LMD 431)
Pxx	Customer request

b - Filter element

P01	MP Filtri standard
Pxx	Customer request

5 - Connections

Flange

LMD 400 - 401 - 431

Type	Size
F1	2 1/2" SAE 3000 psi/M
F2	2 1/2" SAE 3000 psi/UNC
F3	= F1 In-line connection (only for LMD 401 - 431)
F4	= F2 In-line connection (only for LMD 401 - 431)

For Clogging Indicator:
See page 324

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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