

LMP 400 - 401 430 - 431

Maximum pressure 60 bar
Flow rates to 740 l/min



Technical data

Filter housing (Materials)

- Head: Anodised Aluminium
- Housing: Anodised Aluminium
- Bypass valve: Steel

Pressure

LMP 400 length: 2 - 3 - 4

- Working pressure: 60 bar (6 MPa)
- Test pressure: 90 bar (9 MPa)
- Burst pressure: 180 bar (18 MPa)
- Pulse pressure fatigue test: 1.000.000 cycles with pressure from 0 to 60 bar (6 MPa)

LMP 400 length: 5 - 6

- Working pressure: 50 bar (5 MPa)
- Test pressure: 75 bar (7,5 MPa)
- Burst pressure: 150 bar (15 MPa)
- Pulse pressure fatigue test: 1.000.000 cycles with pressure from 0 to 50 bar (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

- Standard NBR series A
- Optional FPM series V

LMP 400 FILTERS ARE PROVIDED FOR VERTICAL MOUNTING

Weights (kg)

Length	2	3	4	5	6
• LMP400	7,20	8,10	8,80	11,9	14,4

Volumes (dm³)

Length	2	3	4	5	6
• LMP400	3,50	5,00	6,50	9,50	13,5

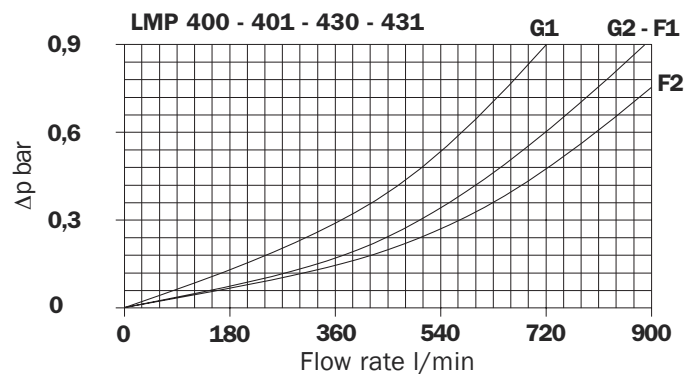
Connections

- LMP 400-430: In-line Inlet/Outlet
- LMP 401-431: 90° Inlet/Outlet

Filter housings Δp pressure drop

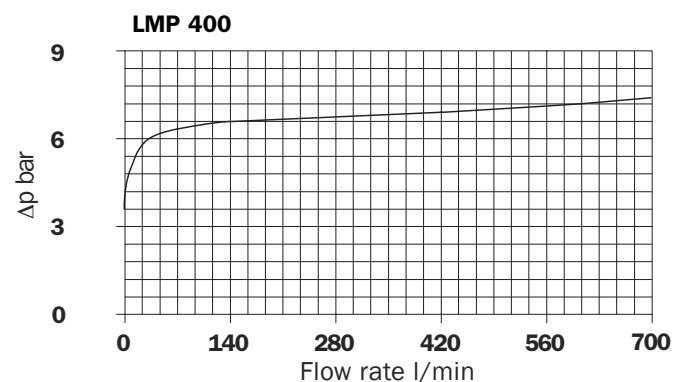
The curves are plotted utilising mineral oil with density of 0,86 kg/dm³ to ISO 3968.

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.
- Connections of filter under test G 2 1/2".

Filtration

Leng.	A03	A06	A10	A16	A25	P10	P25	M25
LMP400-401	2	180	215	325	360	460	270	500
430-431	3	245	295	420	460	540	580	600
	4	305	350	480	510	575	600	630
	5	405	445	550	600	660	640	670
	6	450	520	610	630	670	650	670

Flow rate l/min

LMP 400

(length 2 - 3 - 4)

LMP 401

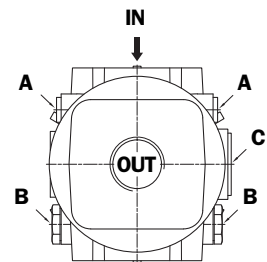
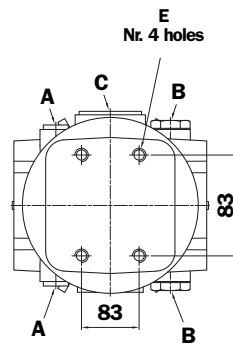
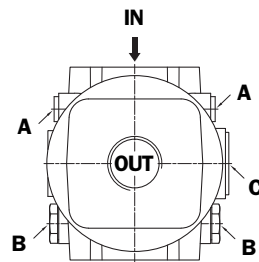
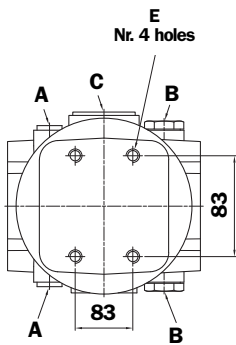
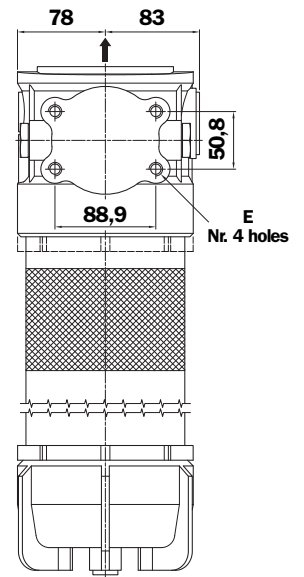
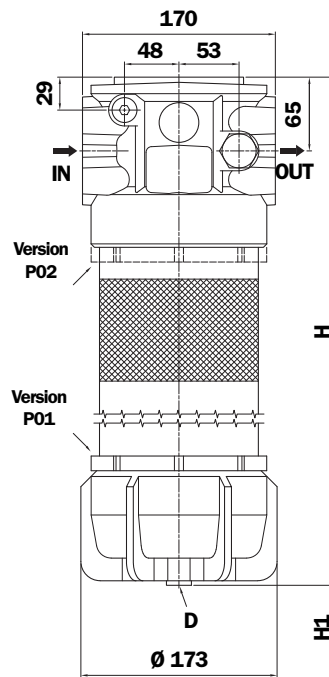
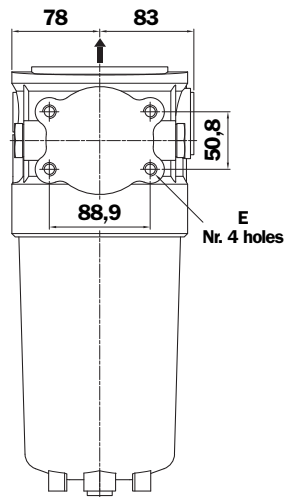
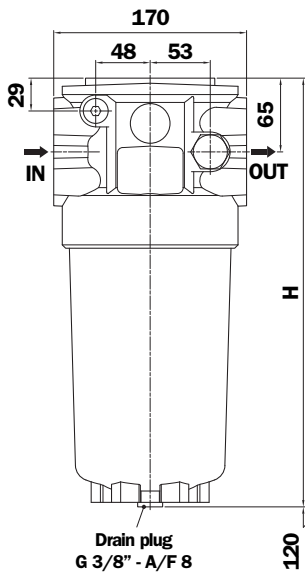
(length 2 - 3 - 4)

LMP 400

(length 5 - 6)

LMP 401

(length 5 - 6)



LMP 400

Length Filter	H mm
2	378
3	478
4	578

LMP 401

Length Filter	H mm	H1 mm	H2 mm
5	828	120	660
6	1158	120	990

LMP 400 - 401 Thread IN - OUT connections

Type	Size	E Depth 20 mm
G1	G 1 1/2"	M12
G2	G 2"	M12
G3	1 1/2" NPT	1/2" UNC
G4	2" NPT	1/2" UNC
G5	SAE 24 - 17/8" - 12 UN	1/2" UNC
G6	SAE 35 - 2 1/2" - 12 UN	1/2" UNC

LMP 400 - 401 Flange IN - OUT connections

Type	Size	E Depth 20 mm
F1	2" SAE 3000 psi/M	M12
F2	2 1/2" SAE 3000 psi/M	M12
F3	2" SAE 3000 psi/UNC	1/2" UNC
F4	2 1/2" SAE 3000 psi/UNC	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

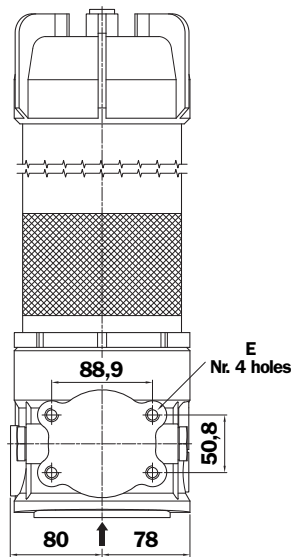
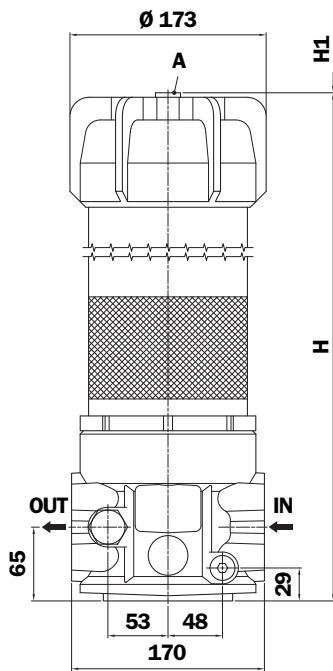
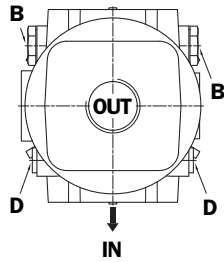
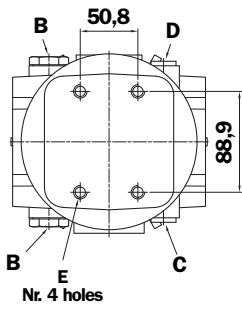
LMP 430

(length 5 - 6)

LMP 431

(length 5 - 6)

Option P02 for LMP 430 - 431



Option 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.

P02 "Internal tube for reduced flow rates"

LMP 430 - 431

Length Filter	H mm	H1 mm
5	828	660
6	1158	990

Thread IN - OUT connections

Type	Size	E Depth 20 mm
G1	G 1 1/2"	M12
G2	G 2"	M12
G3	1 1/2" NPT	1/2" UNC
G4	2" NPT	1/2" UNC
G5	SAE 24 - 1 7/8" - 12 UN	1/2" UNC
G6	SAE 32 - 2 1/2" - 12 UN	1/2" UNC

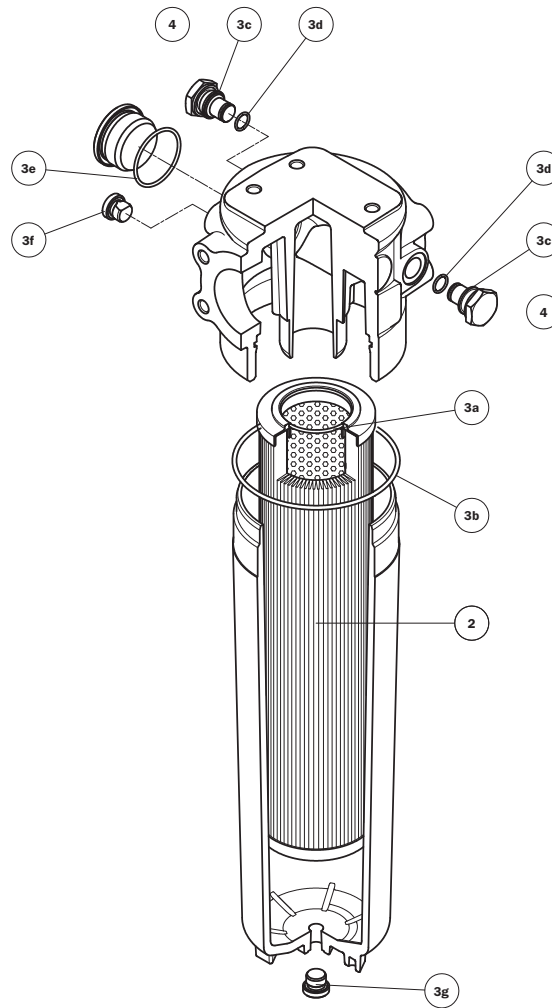
Flange IN - OUT connections

Type	Size	E Depth 20 mm
F1	2" SAE 3000 psi/M	M12
F2	2 1/2" SAE 3000 psi/M	M12
F3	2" SAE 3000 psi/UNC	1/2" UNC
F4	2 1/2" SAE 3000 psi/UNC	1/2" UNC

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

Spare parts

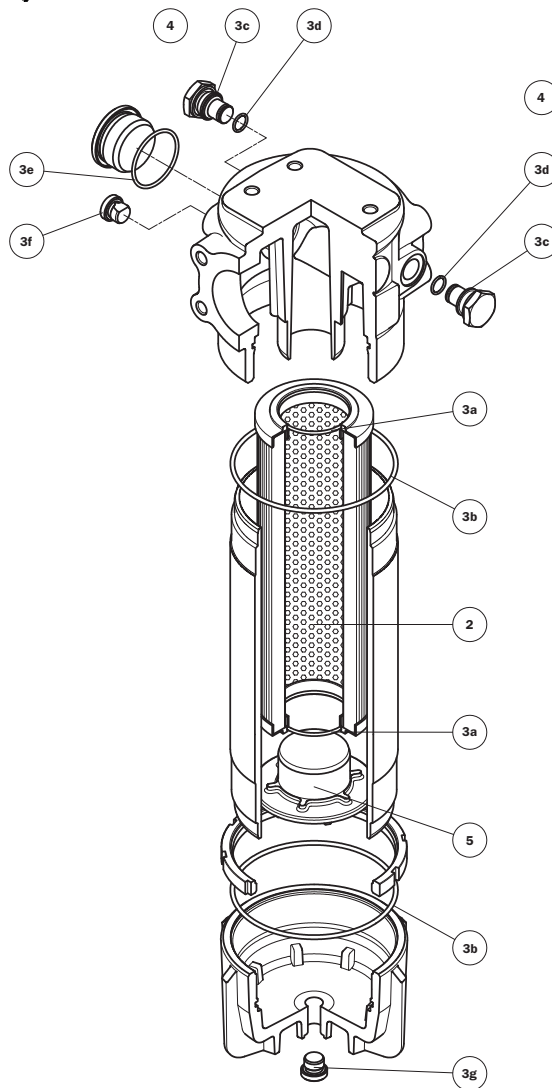
LMP 400 - 401 (length 2 - 3 - 4)



Item	Description	Q.ty	FILTER Series LMP 400 - 401	
1	Filter assembly	1	See order table	
2	Filter element	1	See order table	
3	Seal Kit	1	NBR 02050391	FPM 02050392
3a	Filter element O-Ring	1	O-R 3237 Ø 59,99 x 2,62	
3b	O-Ring for housing	1	O-R 4525 Ø 132,95 x 3,53	
3c	Seal	2	01030058 (HNBR)	01030046 (FPM)
3d	O-Ring for indicator	2	O-R 2050 Ø 12,42 x 1,78	
3e	By-pass plug O-Ring	1	O-R 3193 Ø 48,90 x 2,62	
3f	Breather plug	2	01029436	
3g	Drain plug	1	G 3/8" with seal	
4	Indicator connection plug	1	T2H	T2V

Spare parts

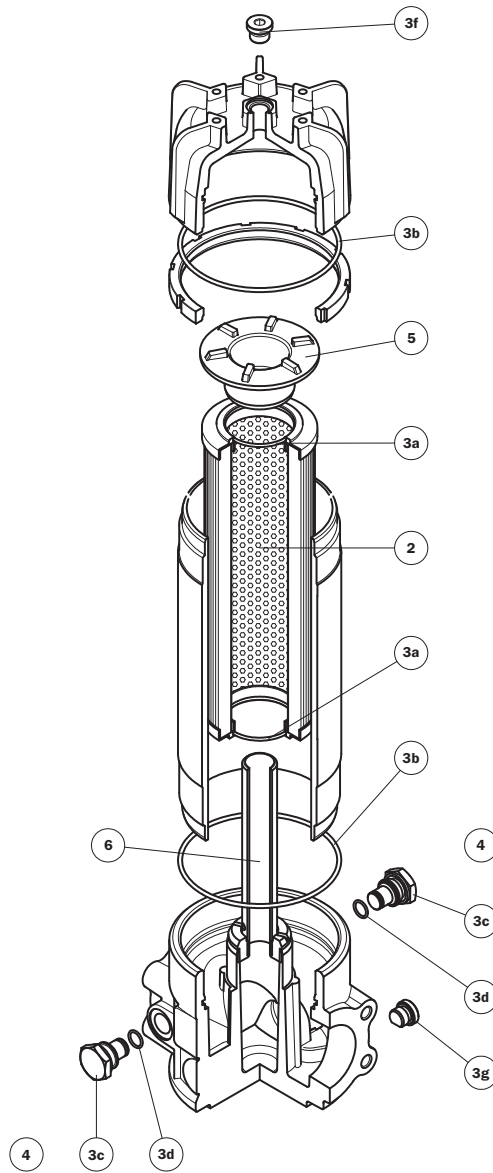
LMP 400 - 401 (length 5 - 6)



Item	Description	Q.ty	FILTER Series LMP 400 - 401	
1	Filter assembly	1	See order table	
2	Filter element	1	See order table	
3	Seal Kit	1	NBR 02050393	FPM 02050394
3a	Filter element O-Ring	2	O-R 3237 Ø 59,99 x 2,62	
3b	O-Ring for housing	2	O-R 4525 Ø 132,95 x 3,53	
3c	Seal	2	01030058 (HNBR)	01030046 (FPM)
3d	O-Ring for indicator	2	O-R 2050 Ø 12,42 x 1,78	
3e	By-pass plug O-Ring	1	O-R 3193 Ø 48,90 x 2,62	
3f	Breather plug	2	01029436	
3g	Drain plug	1	G 3/8" with seal	
4	Indicator connection plug	2	T2H	T2V
5	Housing spigot	1	01044108	

Spare parts

LMP 430 - 431 (length 5 - 6)



Item	Description	Q.ty	FILTER Series LMP 430 - 431	
1	Filter assembly	1	See order table	
2	Filter element	1	See order table	
3	Seal Kit	1	NBR 02050393	FPM 02050394
3a	Filter element O-Ring	2	O-R 3237 Ø 59,99 x 2,62	
3b	O-Ring for housing	2	O-R 4525 Ø 132,95 x 3,53	
3c	Seal	2	01030058 (HNBR)	01030046 (FPM)
3d	O-Ring for indicator	2	O-R 2050 Ø 12,42 x 1,78	
3f	Breather plug	1	01029436	
3g	Drain plug	2	G 3/8" with seal	
4	Indicator connection plug	2	T2H	T2V
5	Housing spigot	2	Spigot no bypass: 01044108 Spigot with bypass: 02001414	
6	Tube assembly	1	Length 5 - 02025041 Length 6 - 02025042	

Ordering information LMP 400 - 431

Filter assembly LMP

	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"/>
Example: LMP	400	4	B	A	G3	A10	N	P01

Filter element 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"/>
Example: CU	400	4	A10	A	N	P01

1 - Style

Filter	Filter element
<input type="checkbox"/> 400	<input type="checkbox"/> 400
<input type="checkbox"/> 401	<input type="checkbox"/> 400
<input type="checkbox"/> 430	<input type="checkbox"/> 400
<input type="checkbox"/> 431	<input type="checkbox"/> 400

2 - Filter length

Length 2 - 3 - 4	2	3	4
<input type="checkbox"/> 400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 401	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Length 5 - 6	5	6
<input type="checkbox"/> 400	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 401	<input type="checkbox"/>	<input type="checkbox"/>

Length 5 - 6	5	6
<input type="checkbox"/> 430	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 431	<input type="checkbox"/>	<input type="checkbox"/>

3 - Valves

<input type="checkbox"/> S	Without bypass
<input type="checkbox"/> B	With bypass (opening pressure: on request)

4 - Filter seals

<input type="checkbox"/> A	NBR
<input type="checkbox"/> V	FPM
<input type="checkbox"/> W	NBR (compatible with fluid HFA, HFB, HFC)

5 - Connections

Threaded

LMP 400 - 431

Type	Size
G1	G 1 1/2"
G2	G 2"
G3	1 1/2" NPT
G4	2" NPT
G5	SAE 24 - 1 7/8" - 12 UN
G6	SAE 32 - 2 1/2" - 12 UN

Flanged

LMP 400 - 431

Type	Size
F1	2" SAE 3000 psi/M
F2	2 1/2" SAE 3000 psi/M
F3	2" SAE 3000 psi/UNC
F4	2 1/2" SAE 3000 psi/UNC

6 - Filter element

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

7 - Max filter element differential pressure

<input type="checkbox"/> N	Δp 20 bar
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8 - Option

a - Filter

<input type="checkbox"/> P01	MP Filtri standard
<input type="checkbox"/> P02	Maintenance from base of housing (only for LMP 400 - 401 length 5 - 6)
<input type="checkbox"/> P02	With internal tube reduced flow rate (only for LMP 430 - 431)
<input type="checkbox"/> Pxx	Customer request

b - Filter element

<input type="checkbox"/> P01	MP Filtri standard
<input type="checkbox"/> Pxx	Customer request

For Clogging Indicator:
See page 318

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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