

# LMP 400-401 & 430-431 series

Maximum working pressure up to 6 MPa (60 bar) - Flow rate up to 740 l/min



# FILTER SIZING

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**THE CORRECT FILTER SIZING HAVE TO BE BASED ON THE TOTAL PRESSURE DROP DEPENDING BY THE APPLICATION.**

FOR EXAMPLE, THE MAXIMUM TOTAL PRESSURE DROP ALLOWED BY A NEW AND CLEAN RETURN FILTER HAVE TO BE IN THE RANGE 0.4 ÷ 0.6 bar.

The pressure drop calculation is performed by adding together the value of the housing with the value of the filter element. The pressure drop Δpc of the housing is proportional to the fluid density (kg/dm³); all the graphs in the catalogue are referred to mineral oil with density of 0.86 kg/dm³.

The filter element pressure drop Δpe is proportional to its viscosity (mm²/s), the corrective factor Y have to be used in case of an oil viscosity different than 30 mm²/s (cSt).

**Sizing data for single filter element, head at top**

Δpc = Filter housing pressure drop [bar]

Δpe = Filter element pressure drop [bar]

Y = Corrective factor Y (see correspondent table), depending on the filter type, on the filter element size, on the filter element length and on the filter media

Q = flow rate (l/min)

V1 reference oil viscosity = 30 mm²/s (cSt)

V2 = operating oil viscosity in mm²/s (cSt)

**Filter element pressure drop calculation with an oil viscosity different than 30 mm²/s (cSt)**

$\Delta p_e = Y : 1000 \times Q \times (V2:V1)$

$\Delta p_{Tot.} = \Delta p_c + \Delta p_e$

**Verification formula**

$\Delta p_{Tot.} \leq \Delta p_{max \text{ allowed}}$

**Maximum total pressure drop (Δp max) allowed by a new and clean filter**

Application	Range (bar)
Suction filters	0.08 ÷ 0.10
Return filters	0.4 ÷ 0.6
	0.4 ÷ 0.6 return lines
	0.3 ÷ 0.5 lubrication lines
Low & Medium Pressure filters	0.3 ÷ 0.4 off-line in power systems
	0.1 ÷ 0.3 off-line in test benches
	0.4 ÷ 0.6 over-boost
High Pressure filters	0.8 ÷ 1.5
Stainless Steel filters	0.8 ÷ 1.5

**Generic filter calculation example**

Application data:

Tank top return filter

Pressure Pmax = 10 bar

Flow rate Q = 120 l/min

Viscosity V2 = 46 mm²/s (cSt)

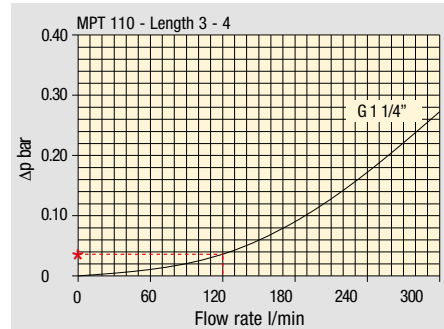
Oil density = 0.86 kg/dm³

Required filtration efficiency = 25 µm with absolute filtration

With bypass valve and G 1 1/4" inlet connection

Calculation:

Δpc = 0.03 bar (see graphic below)



Filter housings Δp 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.

$\Delta p_e = (2.00 : 1000) \times 120 \times (46 : 30) = 0.37 \text{ bar}$

Filter element	Absolute filtration H Series					Nominal filtration N Series		
	A03	A06	A10	A16	A25	P10	P25	M25 M60 M90
Type								
Return filters								
MF 020	74.00	50.08	20.00	16.00	9.00	6.43	5.51	4.40
	2	29.20	24.12	8.00	7.22	5.00	3.33	2.85
	3	22.00	19.00	6.56	5.33	4.33	1.68	1.44
MF 030	74.00	50.08	20.00	16.00	9.00	6.43	5.51	3.40
MFX 030	1	28.20	24.40	8.67	8.17	6.88	4.62	3.96
	2	17.33	12.50	6.86	5.70	4.00	3.05	2.47
	3	10.25	9.00	3.65	3.33	2.50	1.63	1.32
	4	6.10	5.40	2.30	2.20	2.00	1.19	0.96
MF 100								
MFX 100								

$\Delta p_{Tot.} = 0.03 + 0.37 = 0.4 \text{ bar}$

The selection is correct because the total pressure drop value is inside the admissible range for top tank return filters.

In case the allowed max total pressure drop is not verified, it is necessary to repeat the calculation changing the filter length/size.

# FILTER SIZING Corrective factor

Corrective factor Y to be used for the filter element pressure drop calculation. The values depend to the filter size and length and to the filter media.  
Reference oil viscosity 30 mm<sup>2</sup>/s

## Return filters

Filter element	Absolute filtration H Series					Nominal filtration N Series			
	Type	A03	A06	A10	A16	A25	P10	P25	M25 M60 M90
MF 020	1	74.00	50.08	20.00	16.00	9.00	6.43	5.51	4.40
	2	29.20	24.12	8.00	7.22	5.00	3.33	2.85	2.00
	3	22.00	19.00	6.56	5.33	4.33	1.68	1.44	1.30
MF 030 MFX 030	1	74.00	50.08	20.00	16.00	9.00	6.43	5.51	3.40
MF 100 MFX 100	1	28.20	24.40	8.67	8.17	6.88	4.62	3.96	1.25
	2	17.33	12.50	6.86	5.70	4.00	3.05	2.47	1.10
	3	10.25	9.00	3.65	3.33	2.50	1.63	1.32	0.96
	4	6.10	5.40	2.30	2.20	2.00	1.19	0.96	0.82
MF 180 MFX 180	1	3.67	3.05	1.64	1.56	1.24	1.18	1.06	0.26
	2	1.69	1.37	0.68	0.54	0.51	0.43	0.39	0.12
MF 190 MFX 190	2	1.69	1.37	0.60	0.49	0.44	0.35	0.31	0.11
MF 400 MFX 400	1	3.20	2.75	1.39	1.33	1.06	0.96	0.87	0.22
	2	2.00	1.87	0.88	0.85	0.55	0.49	0.45	0.13
	3	1.90	1.60	0.63	0.51	0.49	0.39	0.35	0.11
MF 750 MFX 750	1	1.08	0.84	0.49	0.36	0.26	0.21	0.19	0.06
MLX 250	2	3.00	3.04	1.46	1.25	1.17	-	-	M25 0.20
MLX 660	2	1.29	1.26	0.52	0.44	0.38	-	-	M25 0.10
CU 025		78.00	48.00	28.00	24.00	9.33	9.33	8.51	1.25
CU 040		25.88	20.88	10.44	10.00	3.78	3.78	3.30	1.25
CU 100		15.20	14.53	5.14	4.95	2.00	2.00	0.17	1.10
CU 250		3.25	2.55	1.55	1.35	0.71	0.71	0.59	0.25
CU 630		1.96	1.68	0.85	0.72	0.42	0.42	0.36	0.09
CU 850		1.06	0.84	0.42	0.33	0.17	0.17	0.13	0.04
MR 100	1	19.00	17.00	6.90	6.30	4.60	2.94	2.52	1.60
	2	11.70	10.80	4.40	4.30	3.00	2.94	2.52	1.37
	3	7.80	6.87	3.70	3.10	2.70	2.14	1.84	1.34
	4	5.50	4.97	2.60	2.40	2.18	1.72	1.47	1.34
	5	4.20	3.84	2.36	2.15	1.90	1.60	1.37	1.34
MR 250	1	5.35	4.85	2.32	1.92	1.50	1.38	1.20	0.15
	2	4.00	3.28	1.44	1.10	1.07	0.96	0.83	0.13
	3	2.60	2.20	1.08	1.00	0.86	0.77	0.64	0.12
	4	1.84	1.56	0.68	0.56	0.44	0.37	0.23	0.11
MR 630	1	3.10	2.48	1.32	1.14	0.92	0.83	0.73	0.09
	2	2.06	1.92	0.82	0.76	0.38	0.33	0.27	0.08
	3	1.48	1.30	0.60	0.56	0.26	0.22	0.17	0.08
	4	1.30	1.20	0.48	0.40	0.25	0.21	0.16	0.08
	5	0.74	0.65	0.30	0.28	0.13	0.10	0.08	0.04
MR 850	1	0.60	0.43	0.34	0.25	0.13	0.12	0.09	0.03
	2	0.37	0.26	0.23	0.21	0.11	0.08	0.07	0.03
	3	0.27	0.18	0.17	0.17	0.05	0.04	0.04	0.02
	4	0.23	0.16	0.13	0.12	0.04	0.03	0.03	0.02

## Return / Suction filters

Filter element	Absolute filtration			
	Type	A10	A16	A25
RSX 116	1	5.12	4.33	3.85
	2	2.22	1.87	1.22
RSX 165	1	2.06	1.75	1.46
	2	1.24	1.05	0.96
	3	0.94	0.86	0.61

Filter element	Absolute filtration N Series								
	Type	A03	A06	A10	A16	A25	P10	P25	M25 M60 M90
CU 110	1	16.25	15.16	8.75	8.14	5.87	2.86	2.65	0.14
	2	12.62	10.44	6.11	6.02	4.16	1.60	1.49	0.12
	3	8.57	7.95	5.07	4.07	2.40	1.24	1.15	0.11
	4	5.76	4.05	2.80	2.36	1.14	0.91	0.85	0.05

## Low & Medium pressure filters

Filter element	Absolute filtration N-W Series					Nominal filtration N Series			
	Type	A03	A06	A10	A16	A25	P10	P25	M25
CU 110	1	16.25	15.16	8.75	8.14	5.87	2.86	2.65	0.14
	2	12.62	10.44	6.11	6.02	4.15	1.60	1.49	0.12
	3	8.57	7.95	5.07	4.07	2.40	1.24	1.15	0.11
	4	5.76	4.05	2.80	2.36	1.14	0.91	0.85	0.05
CU 210	1	5.30	4.80	2.00	1.66	1.32	0.56	0.43	0.12
	2	3.44	2.95	1.24	1.09	0.70	0.42	0.35	0.09
	3	2.40	1.70	0.94	0.84	0.54	0.33	0.23	0.05
DN	016	7.95	7.20	3.00	2.49	1.98	0.84	0.65	0.18
	025	5.00	4.53	1.89	1.57	1.25	0.53	0.41	0.11
	040	3.13	2.66	1.12	0.98	0.63	0.38	0.32	0.08
CU 400	2	3.13	2.55	1.46	1.22	0.78	0.75	0.64	0.19
	3	2.15	1.70	0.94	0.78	0.50	0.40	0.34	0.10
	4	1.60	1.28	0.71	0.61	0.40	0.34	0.27	0.08
	5	1.00	0.83	0.47	0.34	0.20	0.24	0.19	0.06
	6	0.82	0.58	0.30	0.27	0.17	0.22	0.18	0.05
	CU 900	1	0.86	0.63	0.32	0.30	0.21	-	-
CU 950	2	1.03	0.80	0.59	0.40	0.26	-	-	0.05
	3	0.44	0.40	0.27	0.18	0.15	-	-	0.02
MR 630	7	0.88	0.78	0.36	0.34	0.16	0.12	0.96	0.47

**Corrective factor Y to be used for the filter element pressure drop calculation. The values depend to the filter size and length and to the filter media.**  
Reference oil viscosity 30 mm<sup>2</sup>/s

## High pressure filters

Filter element		Absolute filtration N - R Series					Nominal filtration N Series
Type		A03	A06	A10	A16	A25	M25
HP 011	1	332.71	250.07	184.32	152.36	128.36	-
	2	220.28	165.56	74.08	59.13	37.05	-
	3	123.24	92.68	41.48	33.08	20.72	-
	4	77.76	58.52	28.37	22.67	16.17	-
HP 039	2	70.66	53.20	25.77	20.57	14.67	4.90
	3	36.57	32.28	18.00	13.38	8.00	2.90
	4	26.57	23.27	12.46	8.80	5.58	2.20
HP 050	1	31.75	30.30	13.16	12.3	7.29	1.60
	2	24.25	21.26	11.70	9.09	4.90	1.40
	3	17.37	16.25	8.90	7.18	3.63	1.25
	4	12.12	10.75	6.10	5.75	3.08	1.07
	5	7.00	6.56	3.60	3.10	2.25	0.80
HP 065	1	58.50	43.46	23.16	19.66	10.71	1.28
	2	42.60	25.64	16.22	13.88	7.32	1.11
	3	20.50	15.88	8.18	6.81	3.91	0.58
HP 135	1	20.33	18.80	9.71	8.66	4.78	2.78
	2	11.14	10.16	6.60	6.38	2.22	1.11
	3	6.48	6.33	3.38	3.16	2.14	1.01
HP 150	1	17.53	15.91	7.48	6.96	5.94	1.07
	2	8.60	8.37	3.54	3.38	3.15	0.58
	3	6.53	5.90	2.93	2.79	2.12	0.49
HP 320	1	10.88	9.73	5.02	3.73	2.54	1.04
	2	4.40	3.83	1.75	1.48	0.88	0.71
	3	2.75	2.11	1.05	0.87	0.77	0.61
	4	2.12	1.77	0.98	0.78	0.55	0.47
HP 500	1	4.44	3.67	2.30	2.10	1.65	0.15
	2	3.37	2.77	1.78	1.68	1.24	0.10
	3	2.22	1.98	1.11	1.09	0.75	0.08
	4	1.81	1.33	0.93	0.86	0.68	0.05
	5	1.33	1.15	0.77	0.68	0.48	0.04

Filter element		Absolute filtration N Series					Nominal filtration N Series
Type		A03	A06	A10	A16	A25	M25
HF 320	1	3.65	2.95	2.80	1.80	0.90	0.38
	2	2.03	1.73	1.61	1.35	0.85	0.36
	3	1.84	1.42	1.32	1.22	0.80	0.35

## Suction filters

Filter element		Nominal filtration N Series	
Type		P10	P25
SF 250		65	21

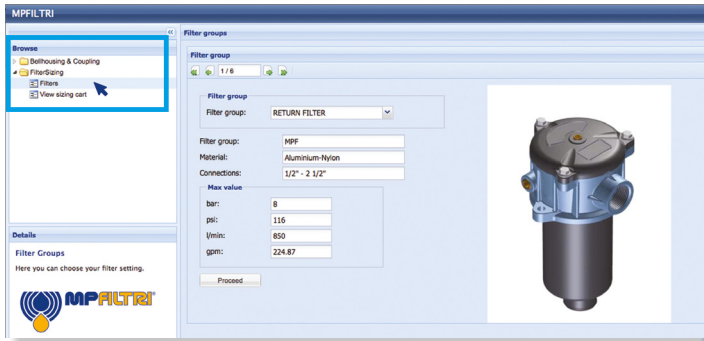
## Stainless steel high pressure filters

Filter element		Absolute filtration N Series				
Type		A03	A06	A10	A16	A25
HP 011	1	332.71	250.07	184.32	152.36	128.36
	2	220.28	165.56	74.08	59.13	37.05
	3	123.24	92.68	41.48	33.08	20.72
	4	77.76	58.52	28.37	22.67	16.17
HP 039	2	70.66	53.20	25.77	20.57	14.67
	3	36.57	32.28	18.00	13.38	8.00
	4	26.57	23.27	12.46	8.80	5.58
HP 050	1	31.75	30.30	13.16	12.3	7.29
	2	24.25	21.26	11.70	9.09	4.90
	3	17.37	16.25	8.90	7.18	3.63
	4	12.12	10.75	6.10	5.75	3.08
	5	7.00	6.56	3.60	3.10	2.25
HP 135	1	20.33	18.80	9.71	8.66	4.78
	2	11.14	10.16	6.60	6.38	2.22
	3	6.48	6.33	3.38	3.16	2.14

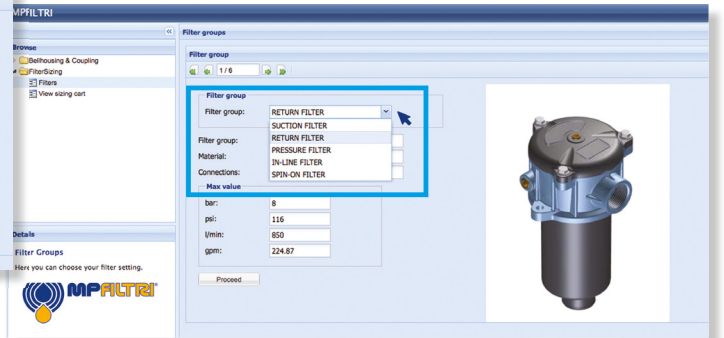
Filter element		Absolute filtration H - U Series				
Type		A03	A06	A10	A16	A25
HP 011	1	424.58	319.74	235.17	194.44	163.78
	2	281.06	211.25	94.53	75.45	47.26
	3	130.14	97.50	43.63	34.82	21.81
	4	109.39	82.25	36.79	29.37	18.40
HP 039	2	73.00	57.00	28.00	24.00	17.20
	3	40.90	36.33	21.88	18.80	11.20
	4	31.50	28.22	17.22	9.30	6.70
HP 050	1	47.33	34.25	21.50	20.50	14.71
	2	29.10	25.95	14.04	10.90	5.88
	3	20.85	19.50	10.68	8.61	4.36
	4	14.55	12.90	7.32	6.90	3.69
	5	9.86	9.34	6.40	4.80	2.50
HP 135	1	29.16	25.33	13.00	12.47	5.92
	2	14.28	11.04	7.86	7.60	4.44
	3	8.96	7.46	4.89	4.16	3.07

# FILTER SIZING Selection Software

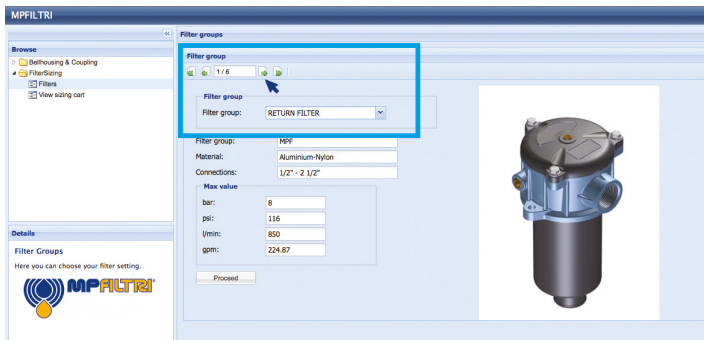
## Step 1 Select "FILTERS"



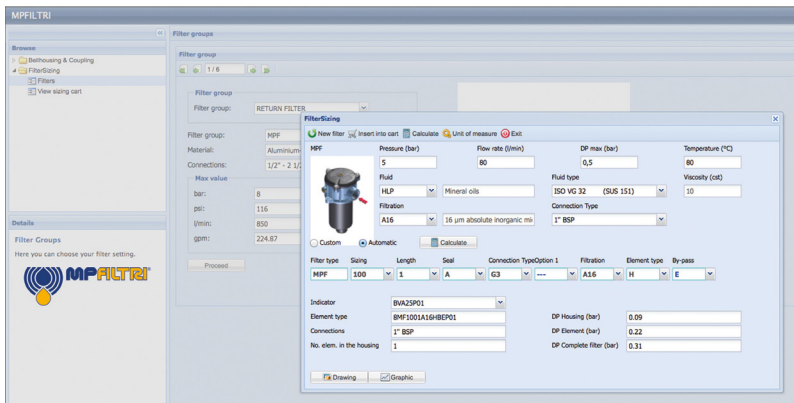
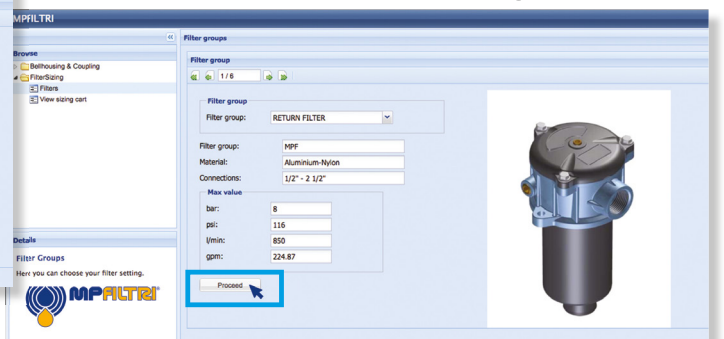
## Step 2 Choose filter group (Return Filter, Pressure Filter, etc.)



## Step 3 Choose filter type (MPF, MPT, etc.) in function of the max working pressure and the max flow rate



## Step 4 Push "PROCEED"



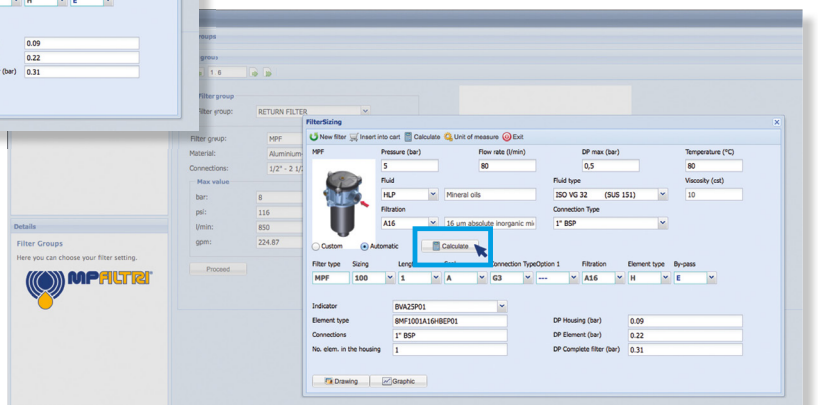
## Step 5

Insert all application data to calculate the filter size following the sequence:

- working pressure
- working flow rate
- working pressure drop
- working temperature
- fluid material and fluid type
- filtration media
- connection type

## Step 6

Push "CALCULATE" to have result; in case of any mistake, the system will advice which parameter is out of range to allow to modify/adjust the selection



## Step 7

Download PDF Datasheet "Report.aspx" pushing the button "Drawing"

# LMP 400-401 & 430-431 series

Maximum working pressure up to 6 MPa (60 bar) - Flow rate up to 740 l/min





### Description

### Technical data

#### Low & Medium Pressure filters

**Maximum working pressure up to 6 MPa (60 bar)**  
**Flow rate up to 740 l/min**

LMP400 is a range of low pressure filter with large filtration surface mainly suitable for lubrication, off-line filtration of the reservoirs and filtration equipment.

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

#### Available features:

- Female threaded connections up to 2" and flanged connections up to 2 1/2", for a maximum flow rate of 740 l/min
- In line or 90° connections, to meet any type of application
- Base-mounting design also available, 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
- 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
- Visual, electrical and electronic differential clogging indicators

#### Common applications:

- Off-line filtration of reservoirs
- Filtration systems

#### Filter housing materials

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

#### Pressure LMP 400 length 2 - 3 - 4

- Working pressure: 6 MPa (60 bar)
- 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)

#### Pressure LMP 400 length 5 - 6

- Working pressure: 5 MPa (50 bar)
- Test pressure: 7.5 MPa (75 bar)
- Burst pressure: 15 MPa (150 bar)
- Pulse pressure fatigue test: 1 000 000 cycles with pressure from 0 to 5 MPa (50 bar)

#### Bypass valve

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

#### Δp element 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

#### Temperature

From -25 °C to +110 °C

#### Connections

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

#### Note

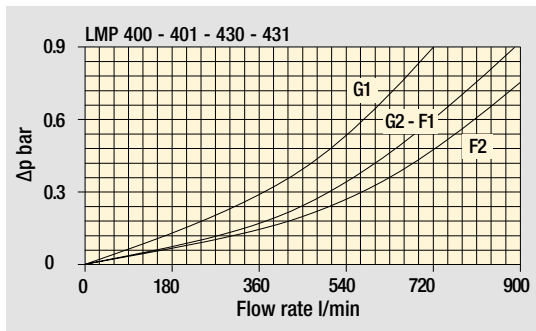
LMP 400 filters are provided for vertical mounting



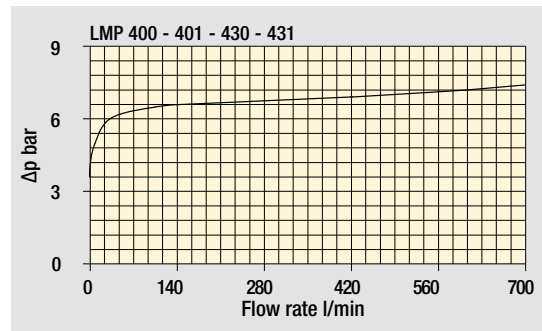
### Weights [kg] and volumes [dm<sup>3</sup>]

Filter series	Weights [kg]					Volumes [dm <sup>3</sup> ]						
	Length	2	3	4	5	6	Length	2	3	4	5	6
<b>LMP 400-401 &amp; 430-431</b>		7.20	8.10	8.80	11.90	14.40		3.50	5.00	6.50	9.50	13.50





Filter housings  
Δp pressure drop



Bypass valve  
pressure drop

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

Flow rates [l/min]

Filter series	Length	Filter element design - N Series							
		A03	A06	A10	A16	A25	M25 M60 M90 M250	P10	P25
LMP 400	2	205	244	370	411	515	720	524	556
	3	280	333	474	515	602	760	637	660
	4	347	400	535	564	637	769	660	688
	5	459	501	610	660	717	781	700	721
	6	504	575	676	689	728	783	708	727
LMP 401	2	200	236	347	382	468	628	475	501
	3	268	315	434	468	537	659	565	582
	4	328	373	484	507	565	665	582	603
	5	423	456	544	582	626	674	613	629
	6	459	516	594	604	634	676	619	633
LMP 430	5	459	501	610	660	717	781	700	721
	6	504	575	676	689	728	783	708	727
LMP 431	5	423	456	544	582	626	674	613	629
	6	459	516	594	604	634	676	619	633

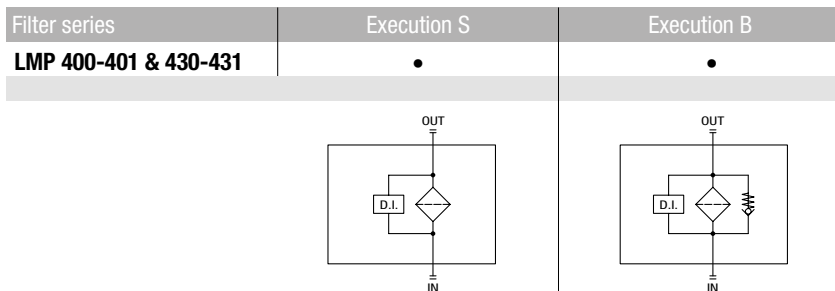
**Maximum flow rate for a complete low and medium pressure filter with a pressure drop Δp = 0.7 bar.**

The reference fluid has a kinematic viscosity of 30 mm<sup>2</sup>/s (cSt) and a density of 0.86 kg/dm<sup>3</sup>.

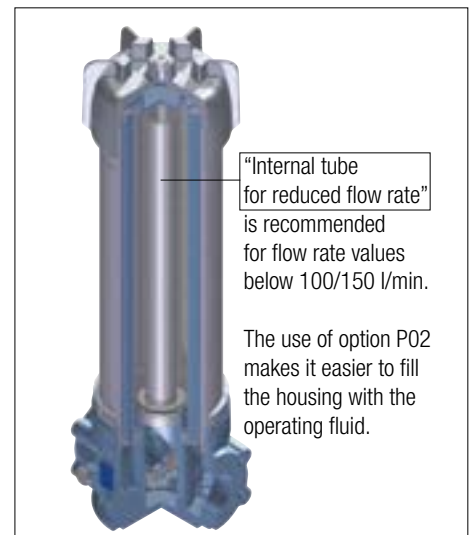
For different pressure drop or fluid viscosity we recommend to use our selection software available on [www.mpfiltri.com](http://www.mpfiltri.com).

Please, contact our Sales Department for further additional information.

Hydraulic symbols



LMP 430-431: execution P02



# LMP 400-401

## Designation & Ordering code

### COMPLETE FILTER

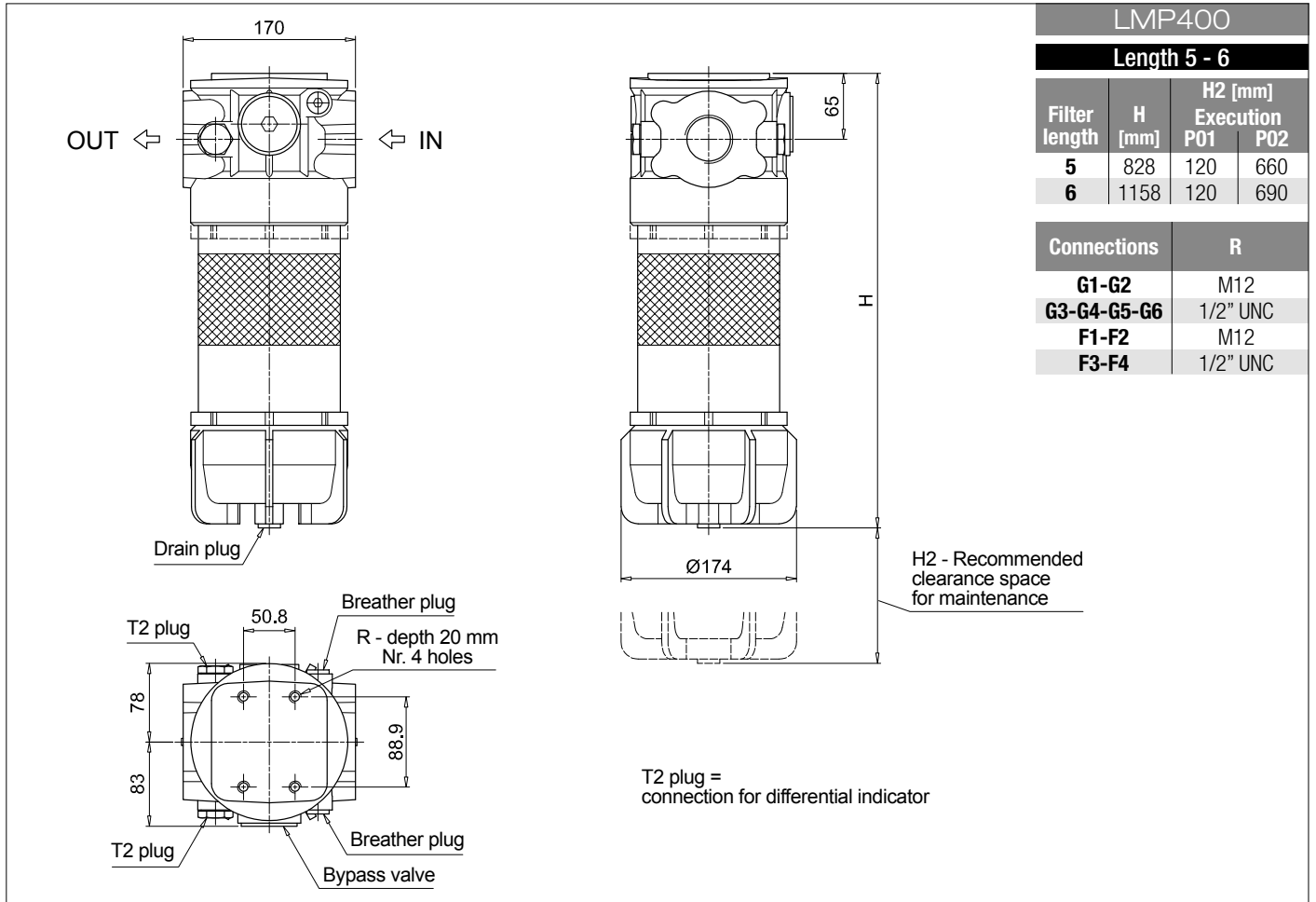
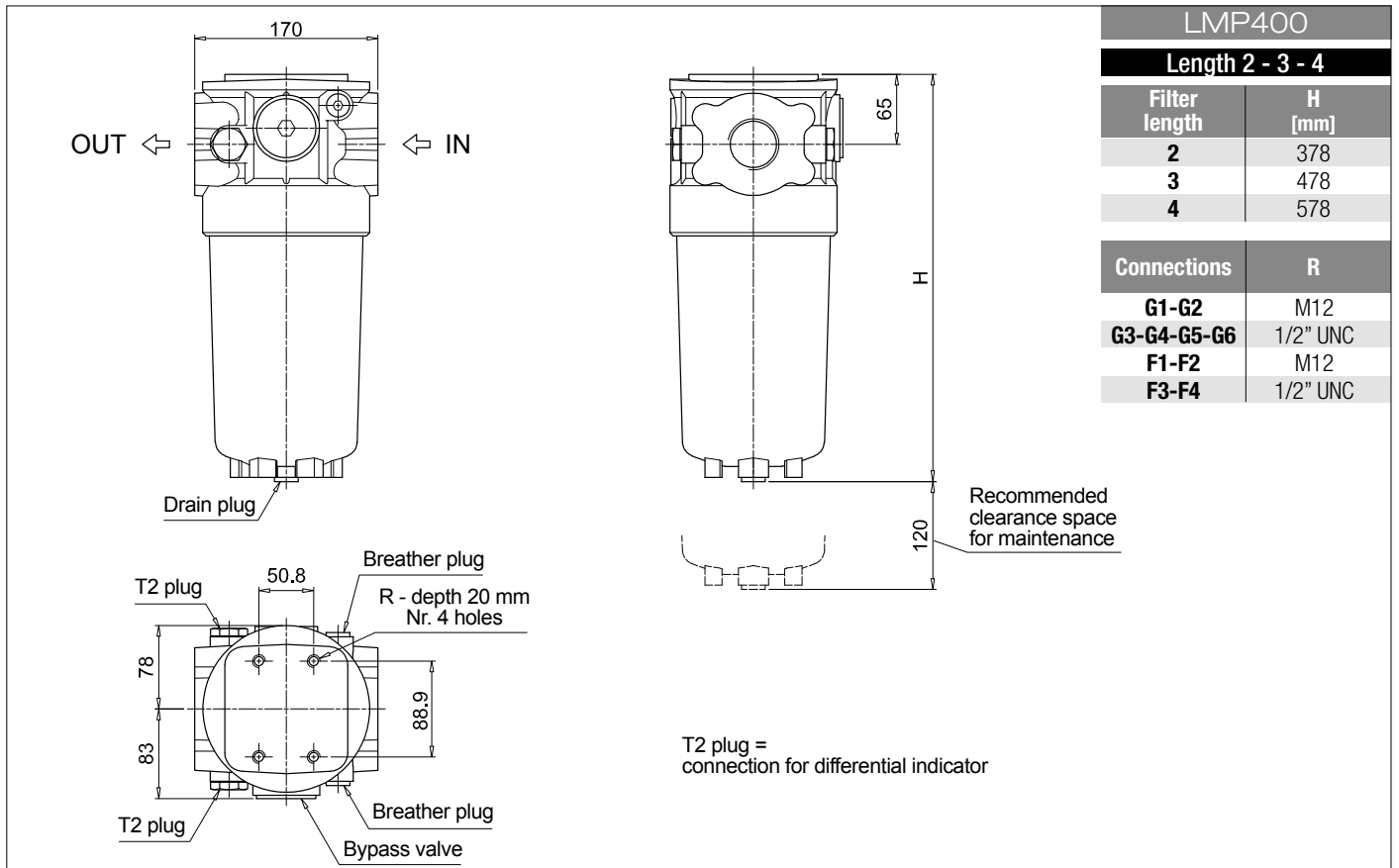
Series and size		Configuration example: <b>LMP401</b>   <b>3</b>   <b>B</b>   <b>A</b>   <b>G1</b>   <b>A10</b>   <b>N</b>   <b>P01</b>									
<b>LMP400</b>   <b>LMP401</b>											
Length											
2   3   4   5   6											
Bypass valve											
<b>S</b> Without bypass		<b>B</b> 3.5 bar									
Seals and treatments		Filtration rating									
		Axx	Mxx	Pxx							
<b>A</b> NBR		•	•	•							
<b>V</b> FPM		•	•	•							
<b>W</b> NBR compatible with fluids HFA-HFB-HFC		•	•								
Connections											
<b>G1</b> G 1 1/2"		<b>F1</b> 2" SAE 3000 psi/M									
<b>G2</b> G 2"		<b>F2</b> 2 1/2" SAE 3000 psi/M									
<b>G3</b> 1 1/2" NPT		<b>F3</b> 2" SAE 3000 psi/UNC									
<b>G4</b> 2" NPT		<b>F4</b> 2 1/2" SAE 3000 psi/UNC									
<b>G5</b> SAE 24 - 1 7/8" - 12 UN											
<b>G6</b> SAE 32 - 2 1/2" - 12 UN											
Filtration rating (filter media)											
<b>A03</b> Inorganic microfiber 3 µm		<b>M25</b> Wire mesh 25 µm									
<b>A06</b> Inorganic microfiber 6 µm		<b>M60</b> Wire mesh 60 µm									
<b>A10</b> Inorganic microfiber 10 µm		<b>M90</b> Wire mesh 90 µm									
<b>A16</b> Inorganic microfiber 16 µm		<b>P10</b> Resin impregnated paper 10 µm									
<b>A25</b> Inorganic microfiber 25 µm		<b>P25</b> Resin impregnated paper 25 µm									
<b>WA025</b> Water absorber inorganic microfiber 25 µm											
Element Δp		Filter length									
<b>N</b> 20 bar		2   3   4   5   6									
Execution		P01 MP Filtri standard • • • • •									
		P02 Maintenance from the bottom of the housing • •									
		Pxx Customized									

### FILTER ELEMENT

Element series and size		Configuration example: <b>CU400</b>   <b>3</b>   <b>A10</b>   <b>A</b>   <b>N</b>   <b>P01</b>									
<b>CU400</b>											
Element length											
2   3   4   5   6											
Filtration rating (filter media)											
<b>A03</b> Inorganic microfiber 3 µm		<b>M25</b> Wire mesh 25 µm									
<b>A06</b> Inorganic microfiber 6 µm		<b>M60</b> Wire mesh 60 µm									
<b>A10</b> Inorganic microfiber 10 µm		<b>M90</b> Wire mesh 90 µm									
<b>A16</b> Inorganic microfiber 16 µm		<b>P10</b> Resin impregnated paper 10 µm									
<b>A25</b> Inorganic microfiber 25 µm		<b>P25</b> Resin impregnated paper 25 µm									
<b>WA025</b> Water absorber inorganic microfiber 25 µm											
Seals		Filtration rating									
		Axx	Mxx	Pxx							
<b>A</b> NBR		•	•	•							
<b>V</b> FPM		•	•	•							
<b>W</b> NBR compatible with fluids HFA-HFB-HFC		•	•								
Element Δp		Execution									
<b>N</b> 20 bar		P01 MP Filtri standard									
		Pxx Customized									

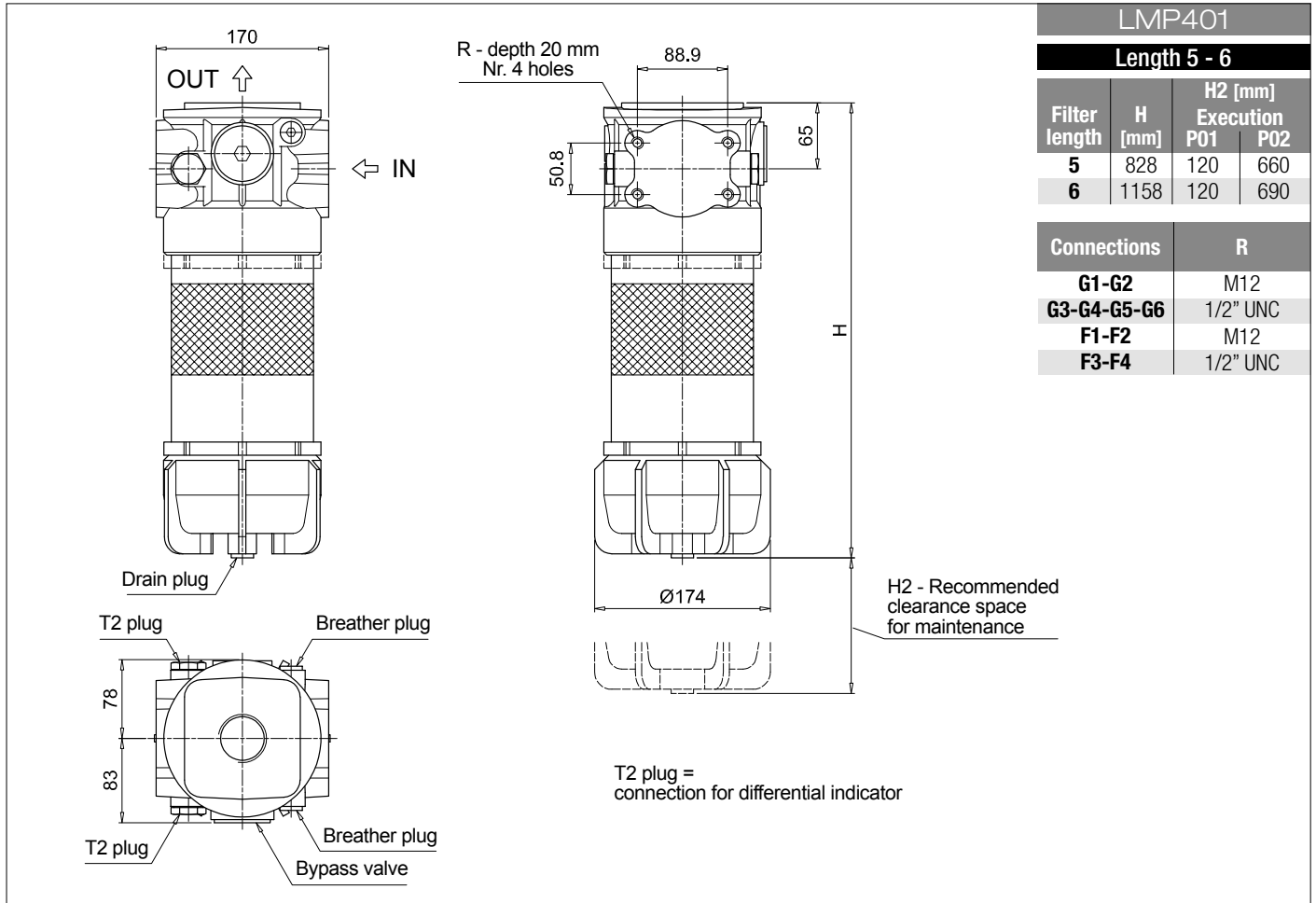
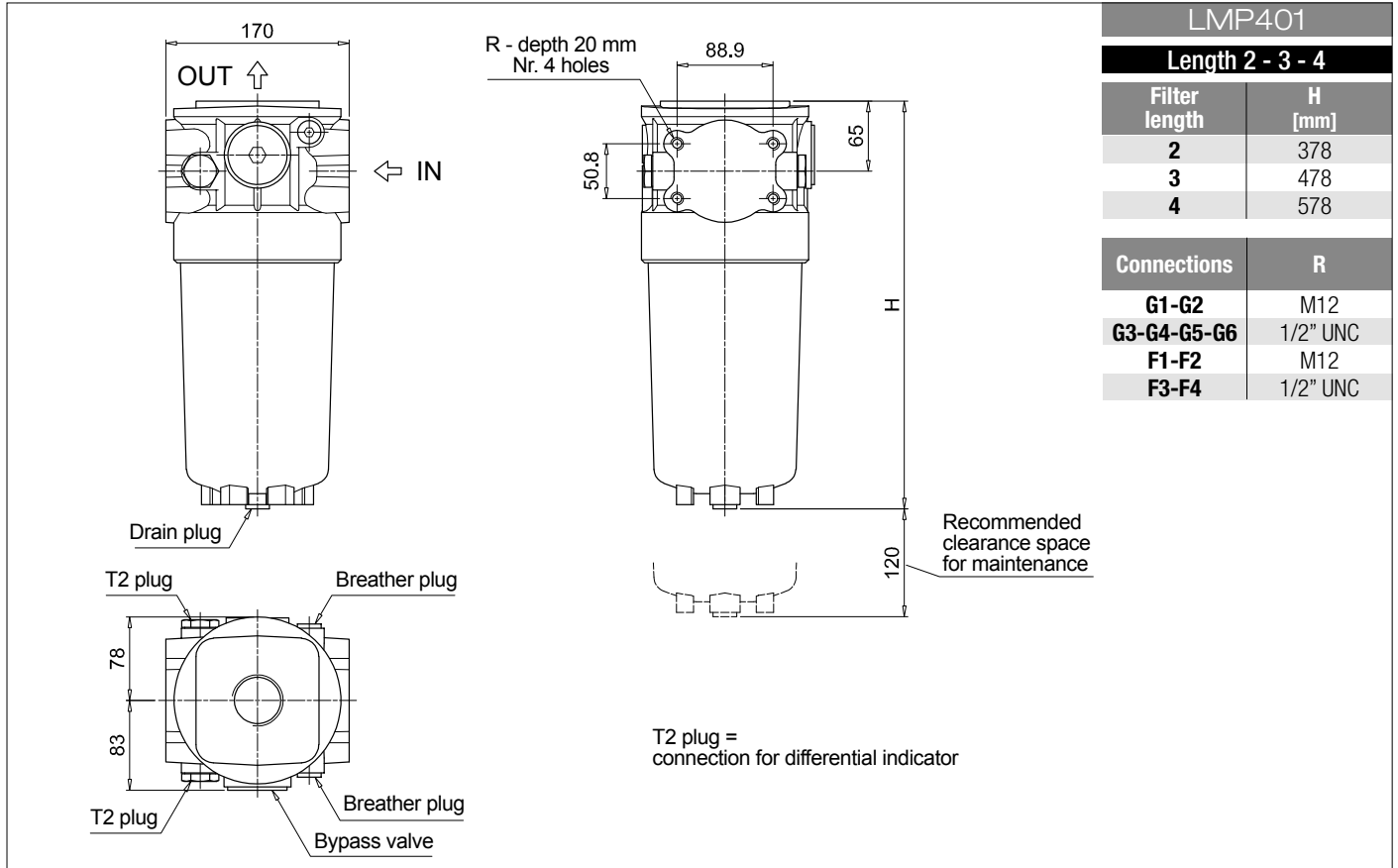
### ACCESSORIES

Differential indicators		page			page
<b>DEA</b> Electrical differential indicator		445	<b>DTA</b> Electronic differential indicator		448
<b>DEM</b> Electrical differential indicator		445-446	<b>DVA</b> Visual differential indicator		448
<b>DLA</b> Electrical / visual differential indicator		446-447	<b>DVM</b> Visual differential indicator		448
<b>DLE</b> Electrical / visual differential indicator		447			
Additional features		page			
<b>T2</b> Plug		449			



# LMP 400-401

## Dimensions





# LMP 430-431

## Designation & Ordering code

### COMPLETE FILTER

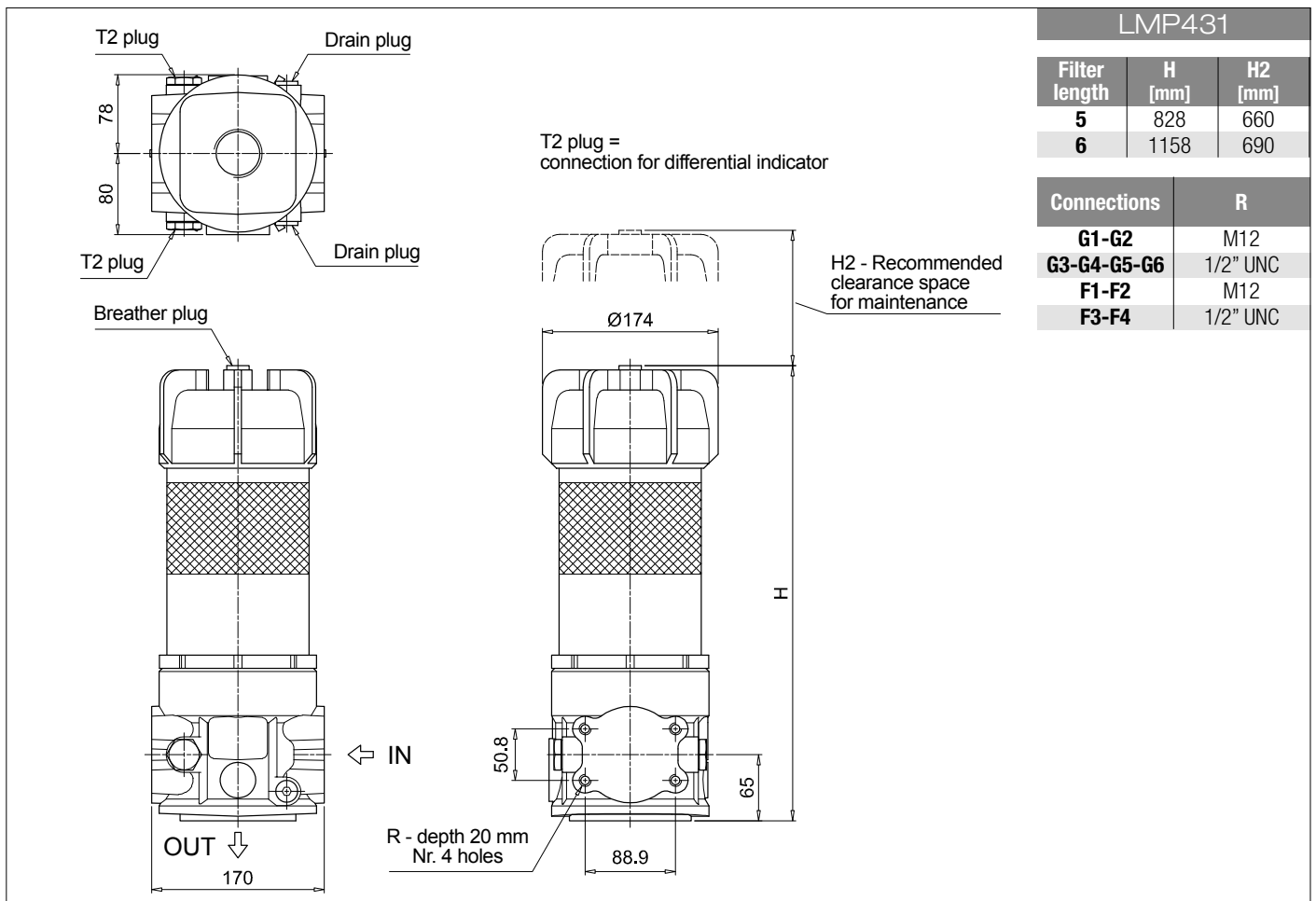
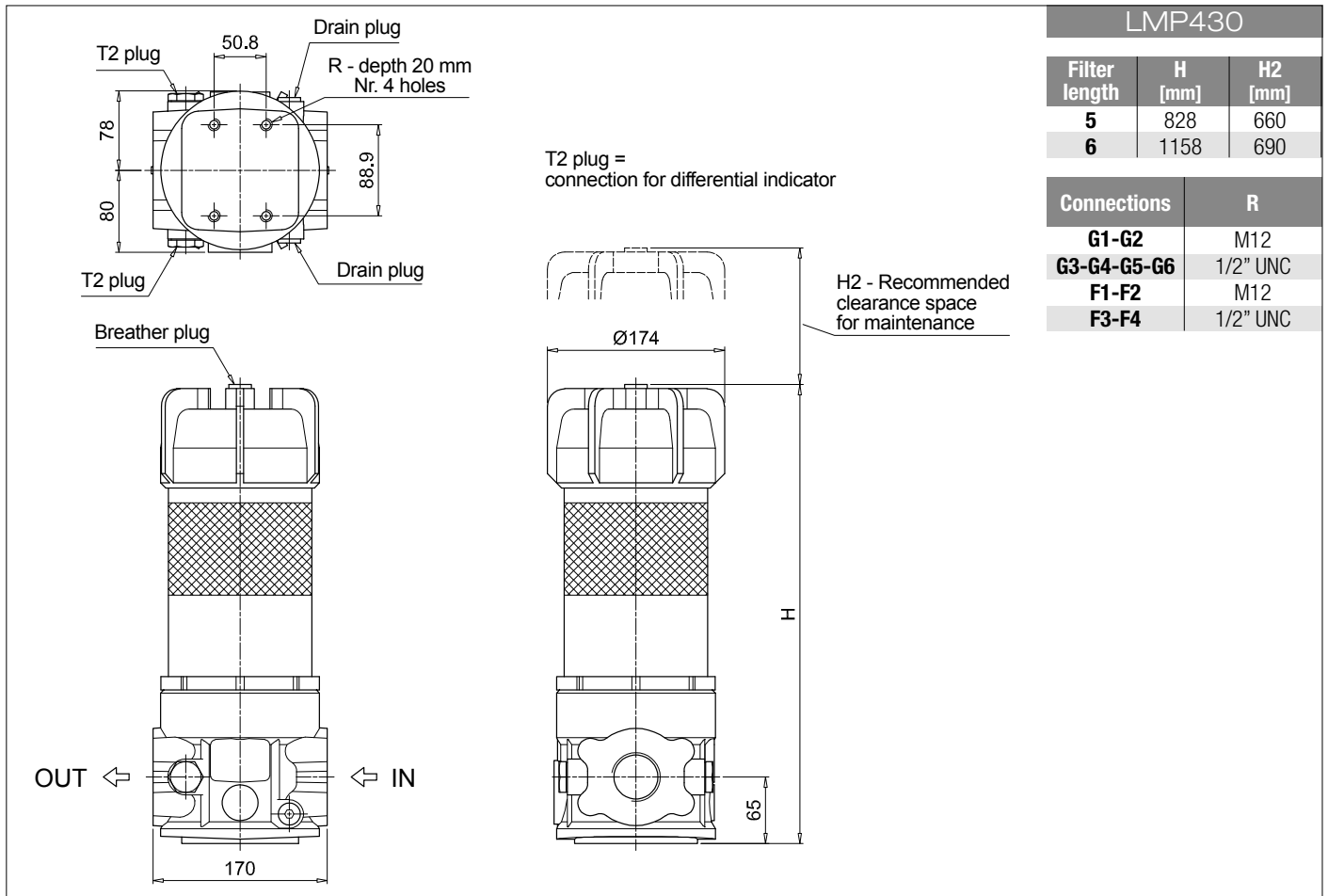
Series and size		Configuration example: <b>LMP431</b>   <b>5</b>   <b>B</b>   <b>A</b>   <b>G1</b>   <b>A10</b>   <b>N</b>   <b>P01</b>									
<b>LMP430</b>   <b>LMP431</b>											
Length											
<b>5</b>   <b>6</b>											
Bypass valve											
<b>S</b> Without bypass		<b>B</b> 3.5 bar									
Seals and treatments		Filtration rating									
		<b>Axx</b>	<b>Mxx</b>	<b>Pxx</b>							
<b>A</b> NBR		•	•	•							
<b>V</b> FPM		•	•	•							
<b>W</b> NBR compatible with fluids HFA-HFB-HFC		•	•								
Connections											
<b>G1</b> G 1 1/2"		<b>F1</b> 2" SAE 3000 psi/M									
<b>G2</b> G 2"		<b>F2</b> 2 1/2" SAE 3000 psi/M									
<b>G3</b> 1 1/2" NPT		<b>F3</b> 2" SAE 3000 psi/UNC									
<b>G4</b> 2" NPT		<b>F4</b> 2 1/2" SAE 3000 psi/UNC									
<b>G5</b> SAE 24 - 1 7/8" - 12 UN											
<b>G6</b> SAE 32 - 2 1/2" - 12 UN											
Filtration rating (filter media)											
<b>A03</b> Inorganic microfiber 3 µm		<b>M25</b> Wire mesh 25 µm									
<b>A06</b> Inorganic microfiber 6 µm		<b>M60</b> Wire mesh 60 µm									
<b>A10</b> Inorganic microfiber 10 µm		<b>M90</b> Wire mesh 90 µm									
<b>A16</b> Inorganic microfiber 16 µm		<b>P10</b> Resin impregnated paper 10 µm									
<b>A25</b> Inorganic microfiber 25 µm		<b>P25</b> Resin impregnated paper 25 µm									
<b>WA025</b> Water absorber inorganic microfiber 25 µm											
		Element Δp		Execution							
		<b>N</b> 20 bar		<b>P01</b> MP Filtri standard							
				<b>P02</b> With internal tube for reduced flow rate							
				<b>Pxx</b> Customized							

### FILTER ELEMENT

Element series and size		Configuration example: <b>CU400</b>   <b>5</b>   <b>A10</b>   <b>A</b>   <b>N</b>   <b>P01</b>									
<b>CU400</b>											
Element length											
<b>5</b>   <b>6</b>											
Filtration rating (filter media)											
<b>A03</b> Inorganic microfiber 3 µm		<b>M25</b> Wire mesh 25 µm									
<b>A06</b> Inorganic microfiber 6 µm		<b>M60</b> Wire mesh 60 µm									
<b>A10</b> Inorganic microfiber 10 µm		<b>M90</b> Wire mesh 90 µm									
<b>A16</b> Inorganic microfiber 16 µm		<b>P10</b> Resin impregnated paper 10 µm									
<b>A25</b> Inorganic microfiber 25 µm		<b>P25</b> Resin impregnated paper 25 µm									
<b>WA025</b> Water absorber inorganic microfiber 25 µm											
Seals		Filtration rating									
		<b>Axx</b>	<b>Mxx</b>	<b>Pxx</b>							
<b>A</b> NBR		•	•	•							
<b>V</b> FPM		•	•	•							
<b>W</b> NBR compatible with fluids HFA-HFB-HFC		•	•								
		Element Δp		Execution							
		<b>N</b> 20 bar		<b>P01</b> MP Filtri standard							
				<b>Pxx</b> Customized							

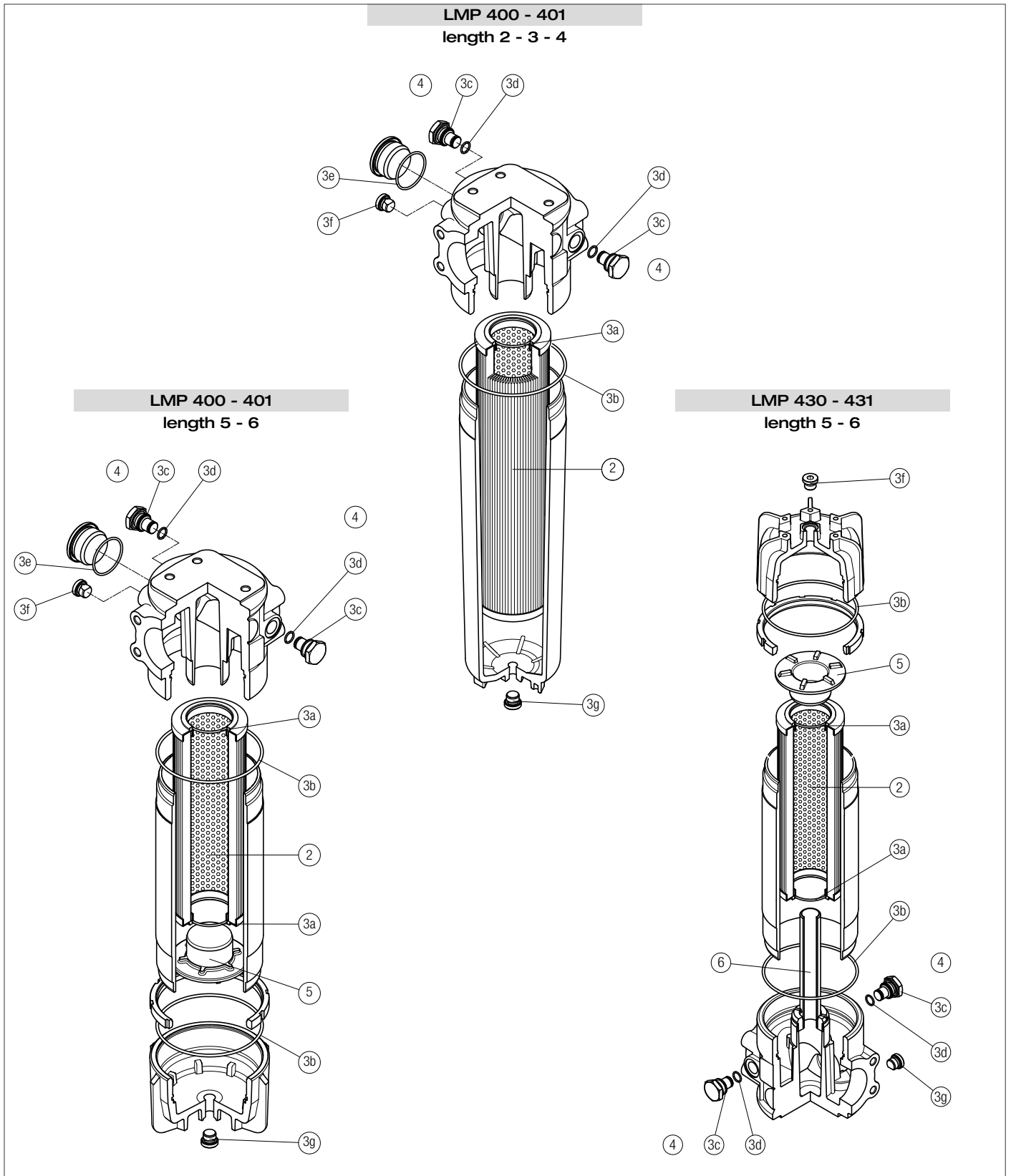
### ACCESSORIES

Differential indicators		page			page
<b>DEA</b>	Electrical differential indicator	445	<b>DTA</b>	Electronic differential indicator	448
<b>DEM</b>	Electrical differential indicator	445-446	<b>DVA</b>	Visual differential indicator	448
<b>DLA</b>	Electrical / visual differential indicator	446-447	<b>DVM</b>	Visual differential indicator	448
<b>DLE</b>	Electrical / visual differential indicator	447			
Additional features		page			
<b>T2</b>	Plug	449			





Order number for spare parts



Item:	Q.ty: 1 pc.	Q.ty: 1 pc.	Q.ty: 2 pcs.	Q.ty: 2 pcs.	Q.ty: 1 pc.
Filter series	Filter element	Seal Kit code number NBR FPM	Indicator connection plug NBR FPM	Housing spigot no bypass with bypass	Tube assembly
LMP 400-401 length 2-3-4	See order table	02050391 02050392	T2H T2V	01044108	
LMP 400-401 length 5-6		02050393 02050394		01044108	02001414
LMP 430-431 length 5-6		02050393 02050394			Length 5: 02025041   Length 6: 02025042