

LMP 400-401 & 430-431 series

Maximum working pressure up to 6 MPa (60 bar) - Flow rate up to 780 l/min



Low & Medium Pressure filters

Maximum working pressure up to 6 MPa (60 bar)

Flow rate up to 780 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.

For further information, see the Contamination Management document and the dedicate leaflet.

- 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



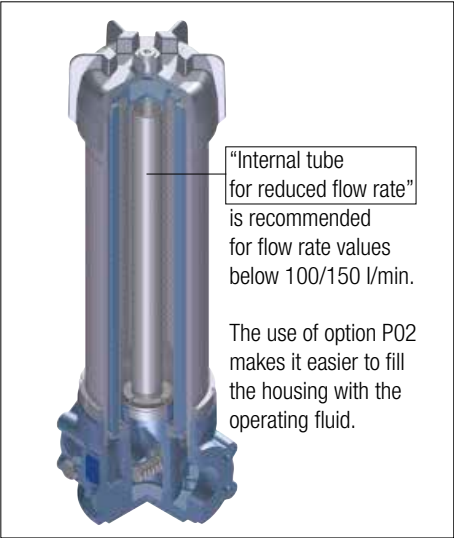
Weights [kg] and volumes [dm³]

Filter series	Weights [kg]						Volumes [dm³]					
	Length	2	3	4	5	6	Length	2	3	4	5	6
LMP 400-401 & 430-431		7.20	8.10	8.80	11.90	14.40		3.50	5.00	6.50	9.50	13.50

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

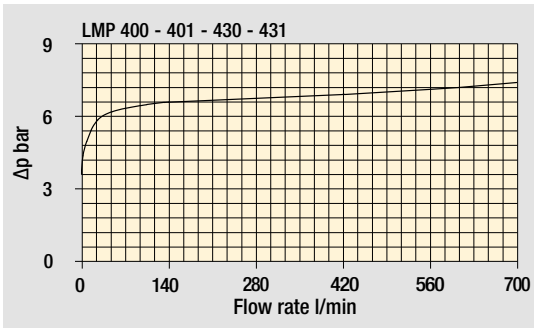
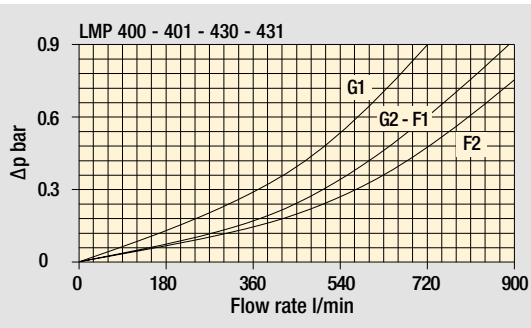
Maximum flow rate for a complete low and medium pressure filter with a pressure drop $\Delta p = 0.7$ bar.
The reference fluid has a kinematic viscosity of 30 mm²/s (cSt) and a density of 0.86 kg/dm³.
For different pressure drop or fluid viscosity we recommend to use our selection software available 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.

LMP 430-431: execution P02



Hydraulic symbols

Filter series	Execution S	Execution B
LMP 400-401 & 430-431	•	•



The curves are plotted using mineral oil with density of 0.86 kg/dm³ in compliance with ISO 3968. Δp varies proportionally with density.

LMP 400-401

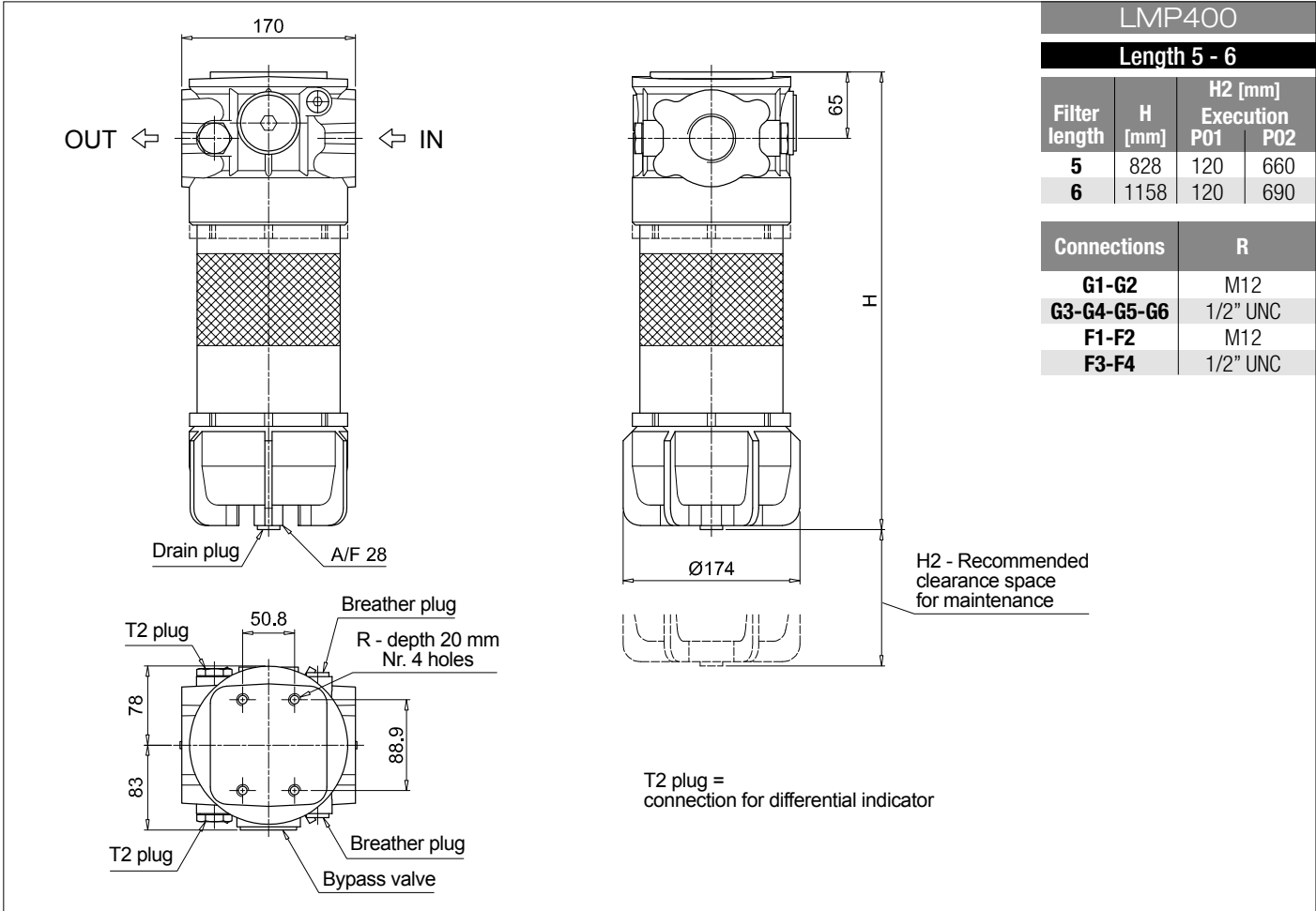
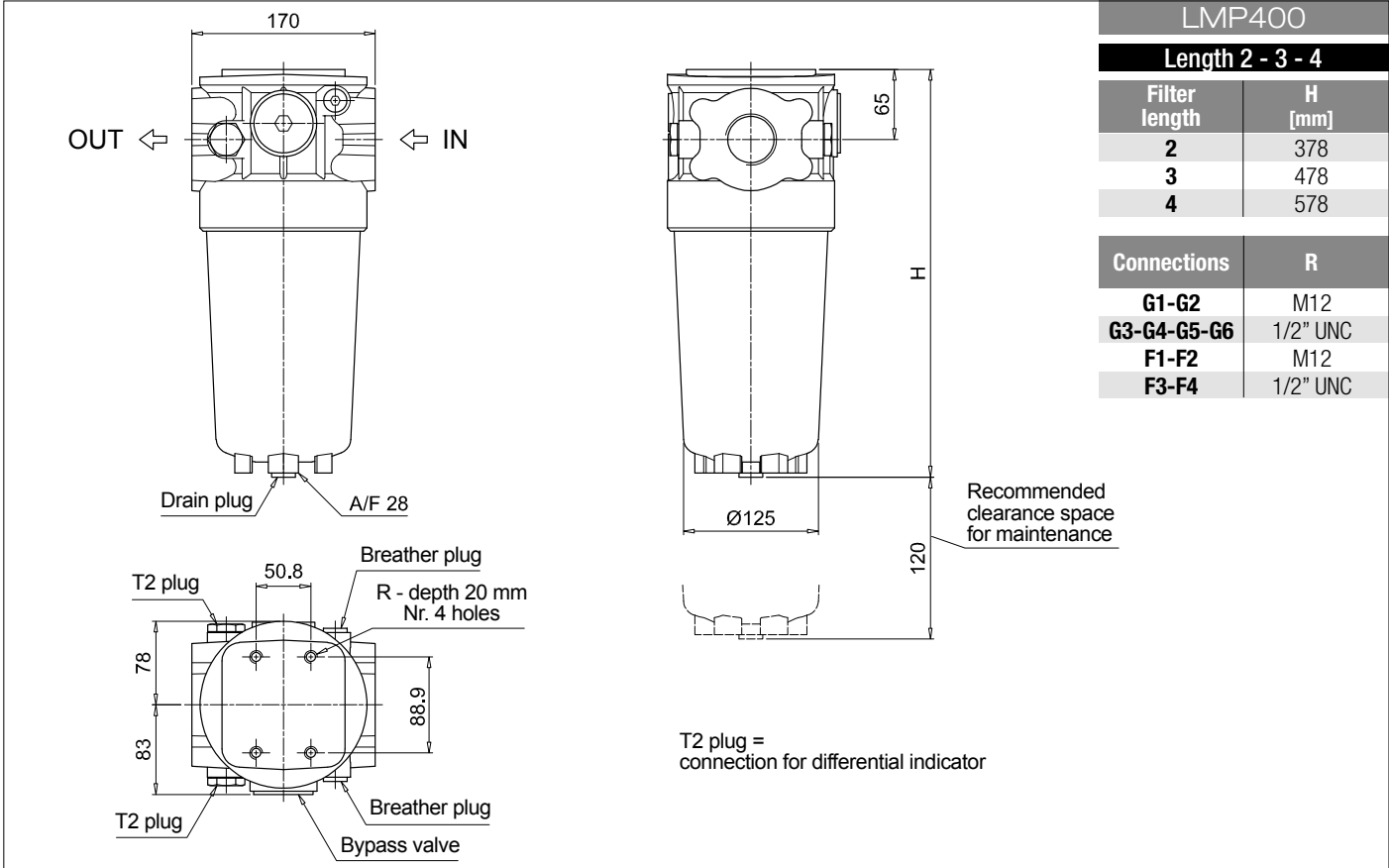
Designation & Ordering code

COMPLETE FILTER									
Series and size		Configuration example: LMP401 3 B A G1 A10 N P01							
LMP400 LMP401									
Length									
2 3 4 5 6									
Bypass valve									
S Without bypass		B 3.5 bar							
Seals and treatments		Filtration rating							
A NBR		Axx Mxx Pxx							
V FPM									
W NBR compatible with fluids HFA-HFB-HFC									
Connections									
G1 G 1 1/2"		F1 2" SAE 3000 psi/M							
G2 G 2"		F2 2 1/2" SAE 3000 psi/M							
G3 1 1/2" NPT		F3 2" SAE 3000 psi/UNC							
G4 2" NPT		F4 2 1/2" SAE 3000 psi/UNC							
G5 SAE 24 - 1 7/8" - 12 UN									
G6 SAE 32 - 2 1/2" - 12 UN									
Filtration rating (filter media)									
A03 Inorganic microfiber 3 µm		M25 Wire mesh 25 µm							
A06 Inorganic microfiber 6 µm		M60 Wire mesh 60 µm							
A10 Inorganic microfiber 10 µm		M90 Wire mesh 90 µm							
A16 Inorganic microfiber 16 µm		P10 Resin impregnated paper 10 µm							
A25 Inorganic microfiber 25 µm		P25 Resin impregnated paper 25 µm							
WA025 Water absorber inorganic microfiber 25 µm									
Element Δp		Filter length							
N 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: CU400 3 A10 A N P01							
CU400									
Element length									
2 3 4 5 6									
Filtration rating (filter media)									
A03 Inorganic microfiber 3 µm		M25 Wire mesh 25 µm							
A06 Inorganic microfiber 6 µm		M60 Wire mesh 60 µm							
A10 Inorganic microfiber 10 µm		M90 Wire mesh 90 µm							
A16 Inorganic microfiber 16 µm		P10 Resin impregnated paper 10 µm							
A25 Inorganic microfiber 25 µm		P25 Resin impregnated paper 25 µm							
WA025 Water absorber inorganic microfiber 25 µm									
Seals		Filtration rating							
A NBR		Axx Mxx Pxx							
V FPM									
W NBR compatible with fluids HFA-HFB-HFC									
Element Δp		Execution							
N 20 bar		P01 MP Filtri standard							
Pxx Customized									

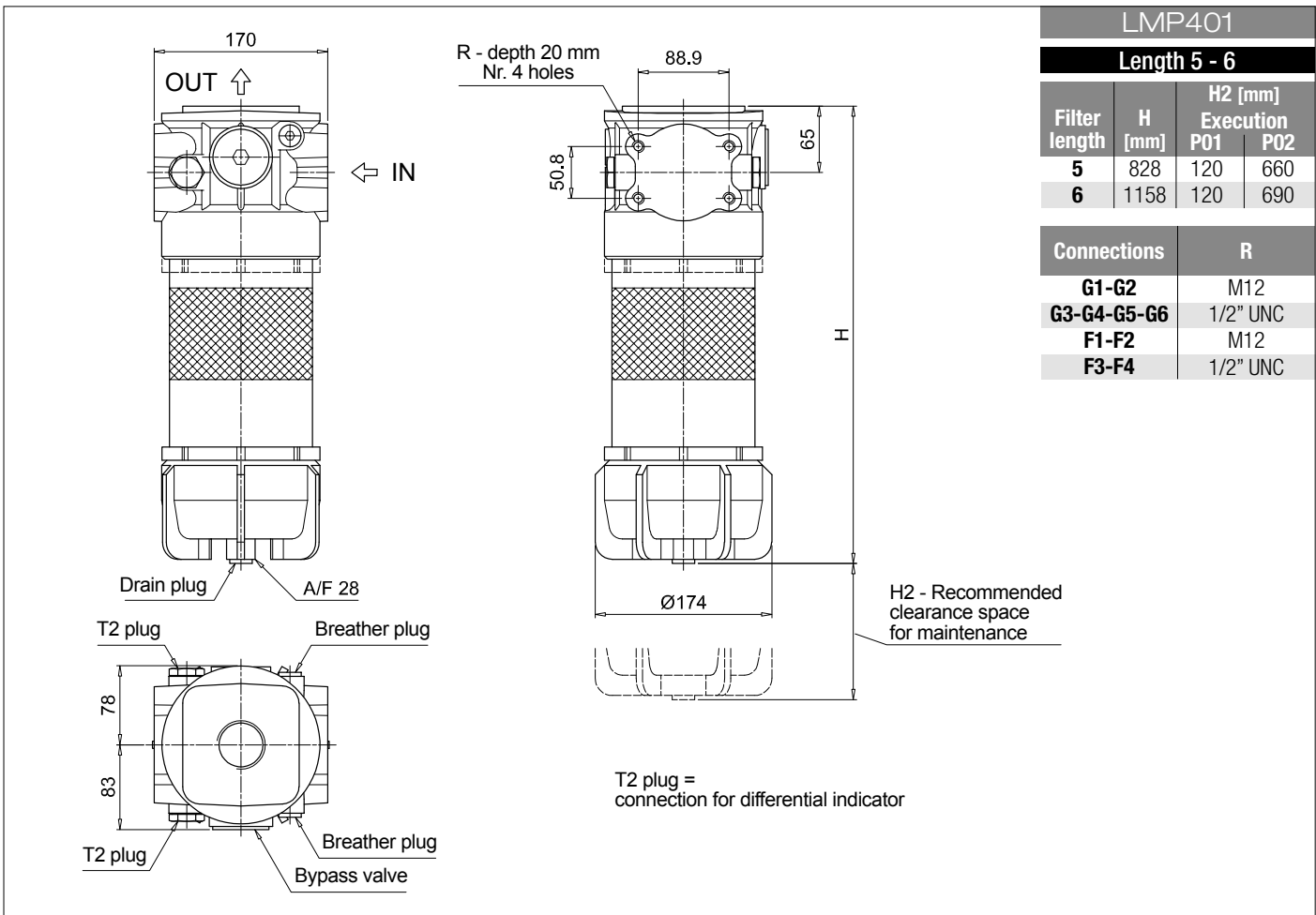
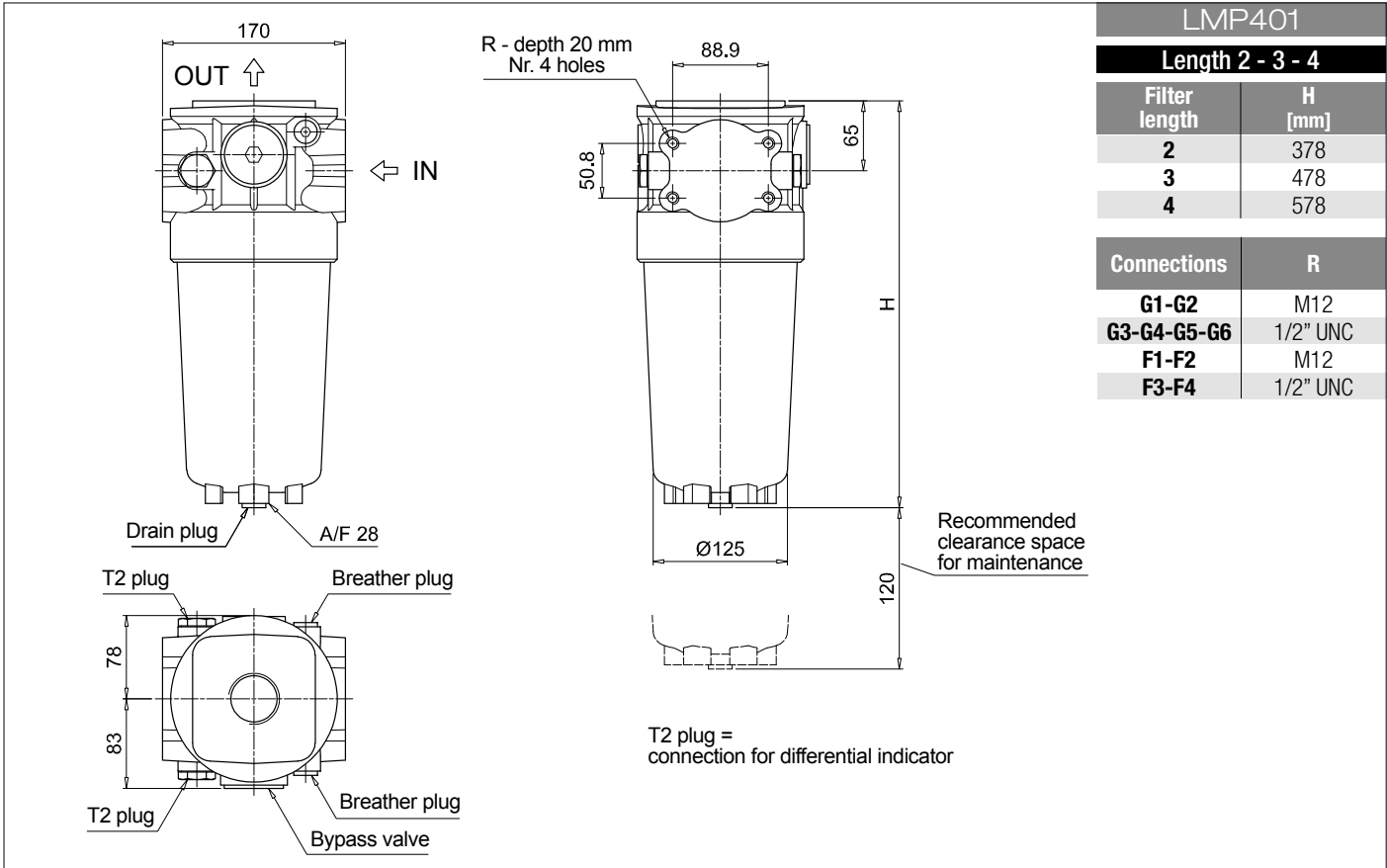
ACCESSORIES			
Differential indicators		page	
DEA	Electrical differential indicator	445	DTA Electronic differential indicator 448
DEM	Electrical differential indicator	445-446	DVA Visual differential indicator 448
DLA	Electrical / visual differential indicator	446-447	DVM Visual differential indicator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





LMP 400-401

Dimensions



LMP 430-431

Designation & Ordering code

COMPLETE FILTER

Series and size

LMP430 | LMP431

Length

5 | 6

Bypass valve

S Without bypass | B 3.5 bar

Seals and treatments

A NBR

V FPM

W NBR compatible with fluids HFA-HFB-HFC

Connections

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

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

WA025 Water absorber inorganic microfiber 25 µm

Configuration example:

LMP431

5

B

A

G1

A10

N

P01

Filtration rating

Axx

Mxx

Pxx

A NBR

V FPM

W NBR compatible with fluids HFA-HFB-HFC

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

M25 Wire mesh 25 µm

M60 Wire mesh 60 µm

M90 Wire mesh 90 µm

P10 Resin impregnated paper 10 µm

P25 Resin impregnated paper 25 µm

Element Δp

N 20 bar

Execution

P01 MP Filtri standard

P02 With internal tube for reduced flow rate

Pxx Customized

FILTER ELEMENT

Element series and size

CU400

Element length

5 | 6

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

WA025 Water absorber inorganic microfiber 25 µm

Configuration example:

CU400

5

A10

A

N

P01

Filtration rating

Axx

Mxx

Pxx

A NBR

V FPM

W NBR compatible with fluids HFA-HFB-HFC

M25 Wire mesh 25 µm

M60 Wire mesh 60 µm

M90 Wire mesh 90 µm

P10 Resin impregnated paper 10 µm

P25 Resin impregnated paper 25 µm

Element Δp

N 20 bar

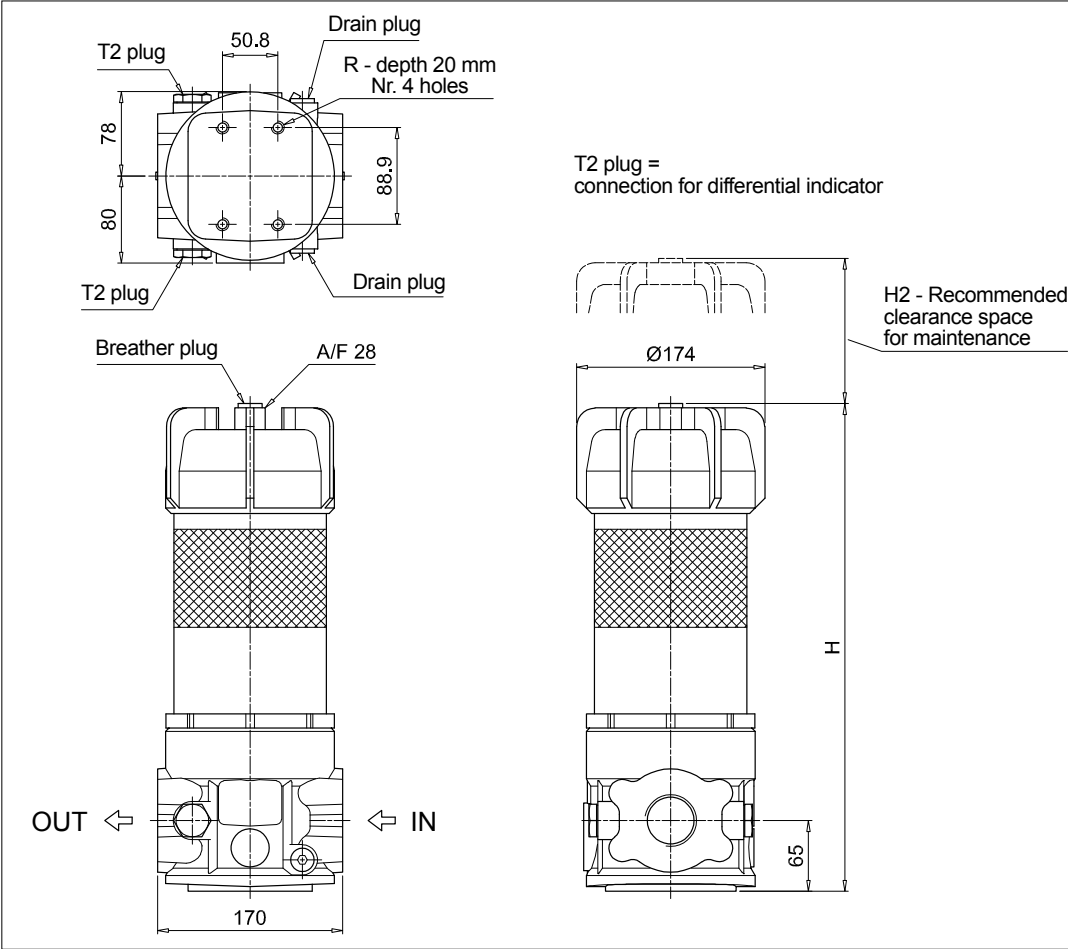
Execution

P01 MP Filtri standard

Pxx Customized

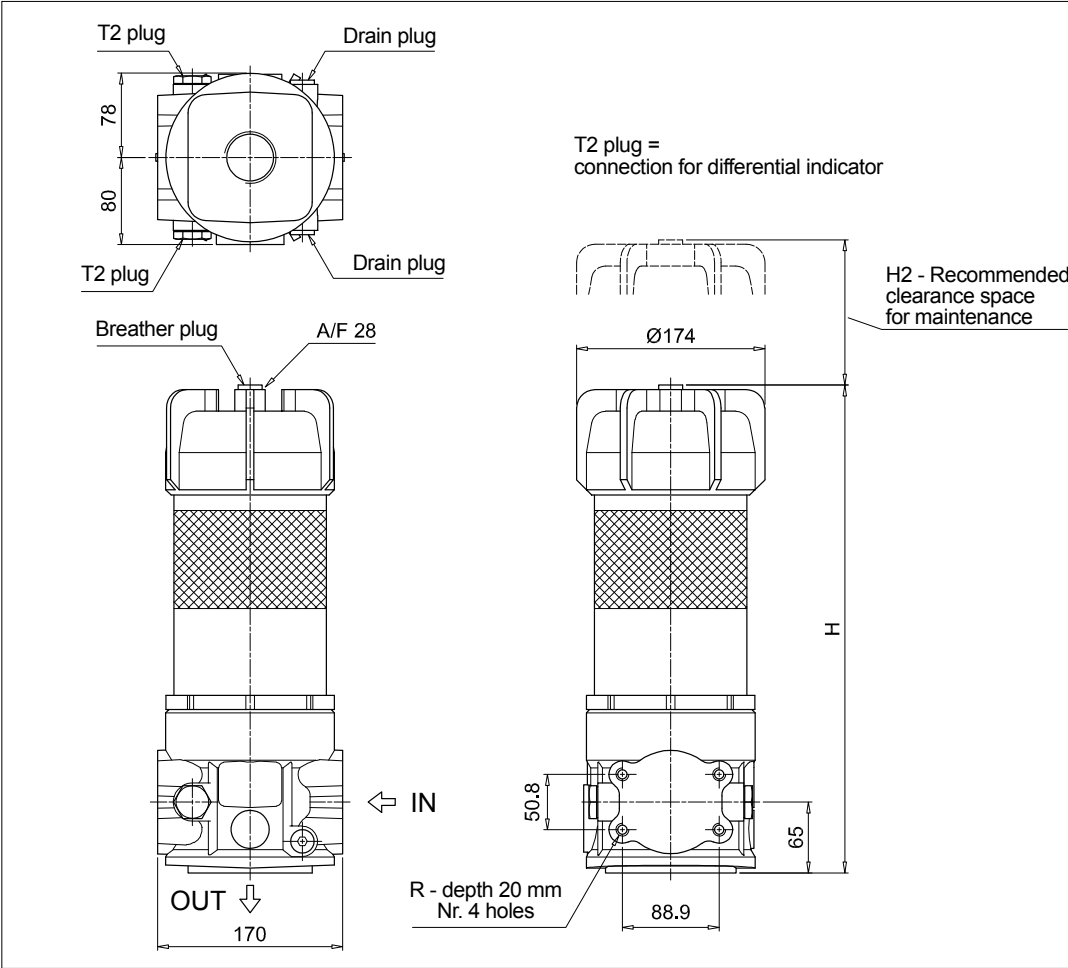
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DLA	Electrical / visual differential indicator	446-447	DVM Visual differential indicator 448
DLE	Electrical / visual differential indicator	447	
Additional features		page	
T2	Plug	449	





LMP430		
Filter length	H [mm]	H2 [mm]
5	828	660
6	1158	690

Connections	R
G1-G2	M12
G3-G4-G5-G6	1/2" UNC
F1-F2	M12
F3-F4	1/2" UNC



LMP431		
Filter length	H [mm]	H2 [mm]
5	828	660
6	1158	690

Connections	R
G1-G2	M12
G3-G4-G5-G6	1/2" UNC
F1-F2	M12
F3-F4	1/2" UNC

Order number for spare parts

LMP 400 - 401
length 2 - 3 - 4

LMP 400 - 401
length 5 - 6

LMP 430 - 431
length 5 - 6

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