

LMP 900-901 series

Filters featuring filter elements designed according to DIN 24550

Maximum working pressure up to 3 MPa (30 bar) - Flow rate up to 2000 l/min



LMP 900-901 GENERAL INFORMATION

Filters featuring filter elements designed according to DIN 24550

Description

Low & Medium Pressure filters

Maximum working pressure up to 3 MPa (30 bar)

Flow rate up to 2000 l/min

LMP900 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:

- Flanged connections up to 4", for a maximum flow rate of 2000 l/min
- In line or 90° connections, to meet any type of application
- Filter element designed in accordance with DIN 24550 regulation
- 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
- Lubrication systems

Technical data

Filter housing materials

- Head: Anodized aluminium
- Housing: Anodized aluminium
- Manifolds: Anodized aluminium
- Bypass valve: Steel

Pressure

- Test pressure: 4.5 MPa (45 bar)
- Burst pressure: 12 MPa (120 bar)
- Pulse pressure fatigue test: 1 000 000 cycles with pressure from 0 to 3 MPa (30 bar)

Bypass valve

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

Number of filter elements

LMP 900-1: 1 filter element CU900

LMP 900-2: 2 filter elements CU900

Filter elements

Filter element designed in accordance with DIN 24550

Size: 1000

Δp element type

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

Connections

LMP 900: In-line Inlet/Outlet

LMP 901: 90° Inlet/Outlet

Seals

- Standard NBR series A
- Optional FPM series V

Temperature

From -25 °C to +110 °C

Note

LMP 900 - 901 filters are provided for vertical mounting

Weights [kg] and volumes [dm³]

Filter series	Weights [kg]			Volumes [dm ³]		
	Length	1	2	Length	1	2
LMP 900-901		19.2	30.4		16	24

GENERAL INFORMATION LMP 900-901

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Flow rates [l/min]

Filter series	Length	Filter element design - N Series					
		A03	A06	A10	A16	A25	M25 M60 M90
LMP 900	1	706	877	1264	1291	1444	1803
	2	1100	1264	1556	1573	1668	1867
LMP 901	1	715	899	1337	1369	1552	2000
	2	1147	1337	1689	1710	1828	2081

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 900-901 Length 2

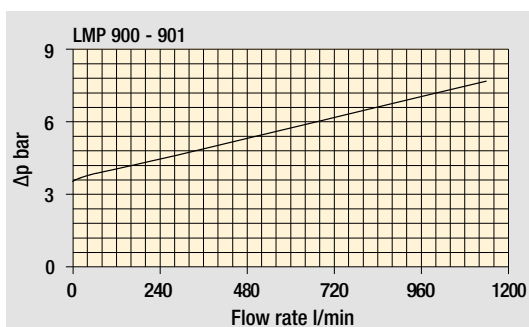
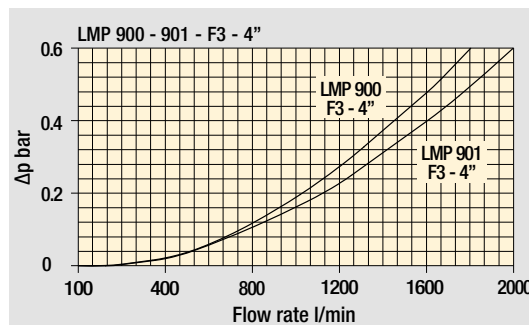
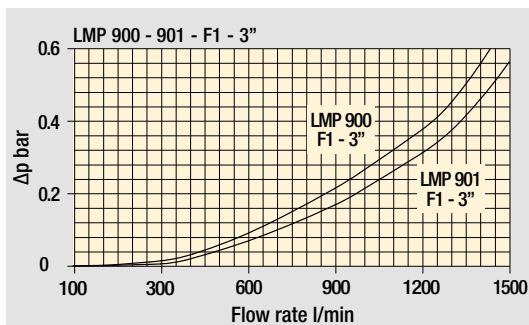


Hydraulic symbols

Filter series	Execution S	Execution B
LMP 900-901	●	●

Pressure drop

Filter housings Δp pressure drop



Bypass valve 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.

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Designation & Ordering code

COMPLETE FILTER

Series and size **LMP900 | LMP901** Configuration example: **LMP901** **2** **B** **A** **F2** **A10** **N** **P01**

Length
1 | **2**

Bypass valve
S Without bypass | **B** With bypass 3.5 bar

Seals and treatments
A NBR | **V** FPM

Connections
F1 3" SAE 3000 psi/M
F2 3" SAE 3000 psi/UNC
F3 4" SAE 3000 psi/M
F4 4" SAE 3000 psi/UNC

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
A25 Inorganic microfiber 25 µm
WA025 Water absorber inorganic microfiber 25 µm

Element Δp	Execution	Filter length	
		1	2
N 20 bar	P01 MP Filtri standard	•	•
	P02 Maintenance from the bottom of the housing	-	•
	Pxx Customized		

FILTER ELEMENT

Element series and size **CU900** Configuration example: **CU900** **A10** **A** **N** **P01**

Length
1 Nr. 1 filter element
2 Nr. 2 filter elements

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
A25 Inorganic microfiber 25 µm
WA025 Water absorber inorganic microfiber 25 µm

Seals
A NBR | **V** FPM

Element Δp	Execution	Filter length	
		1	2
N 20 bar	P01 MP Filtri standard		
	Pxx Customized		

CLOGGING INDICATORS

See page 726

DEA Electrical differential pressure indicator
DEM Electrical differential pressure indicator
DEU Electrical differential pressure indicator
DLA Electrical / visual differential pressure indicator

DLE Electrical / visual differential pressure indicator
DTA Electronic differential pressure indicator
DVA Visual differential pressure indicator
DVM Visual differential pressure indicator

PLUGS

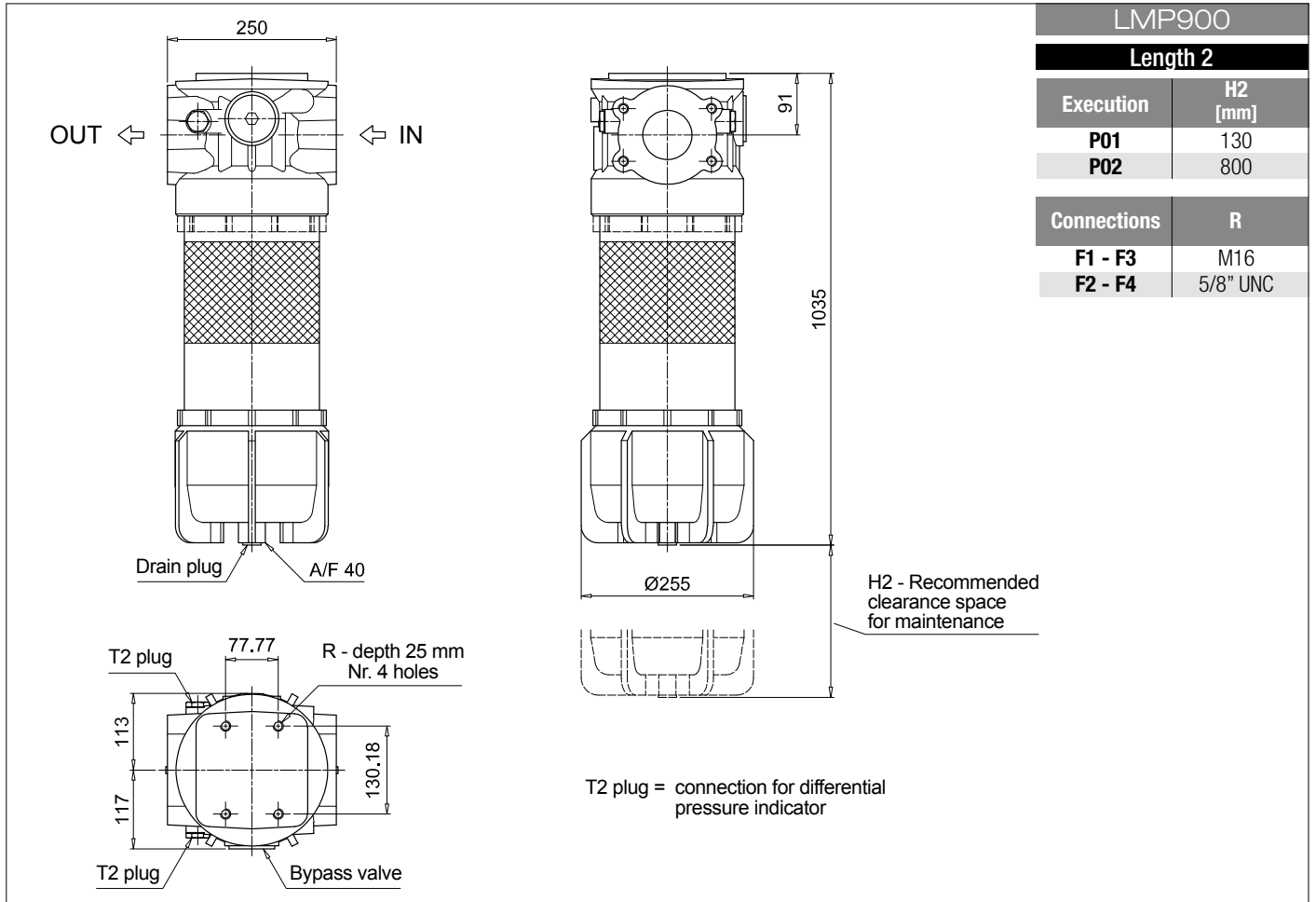
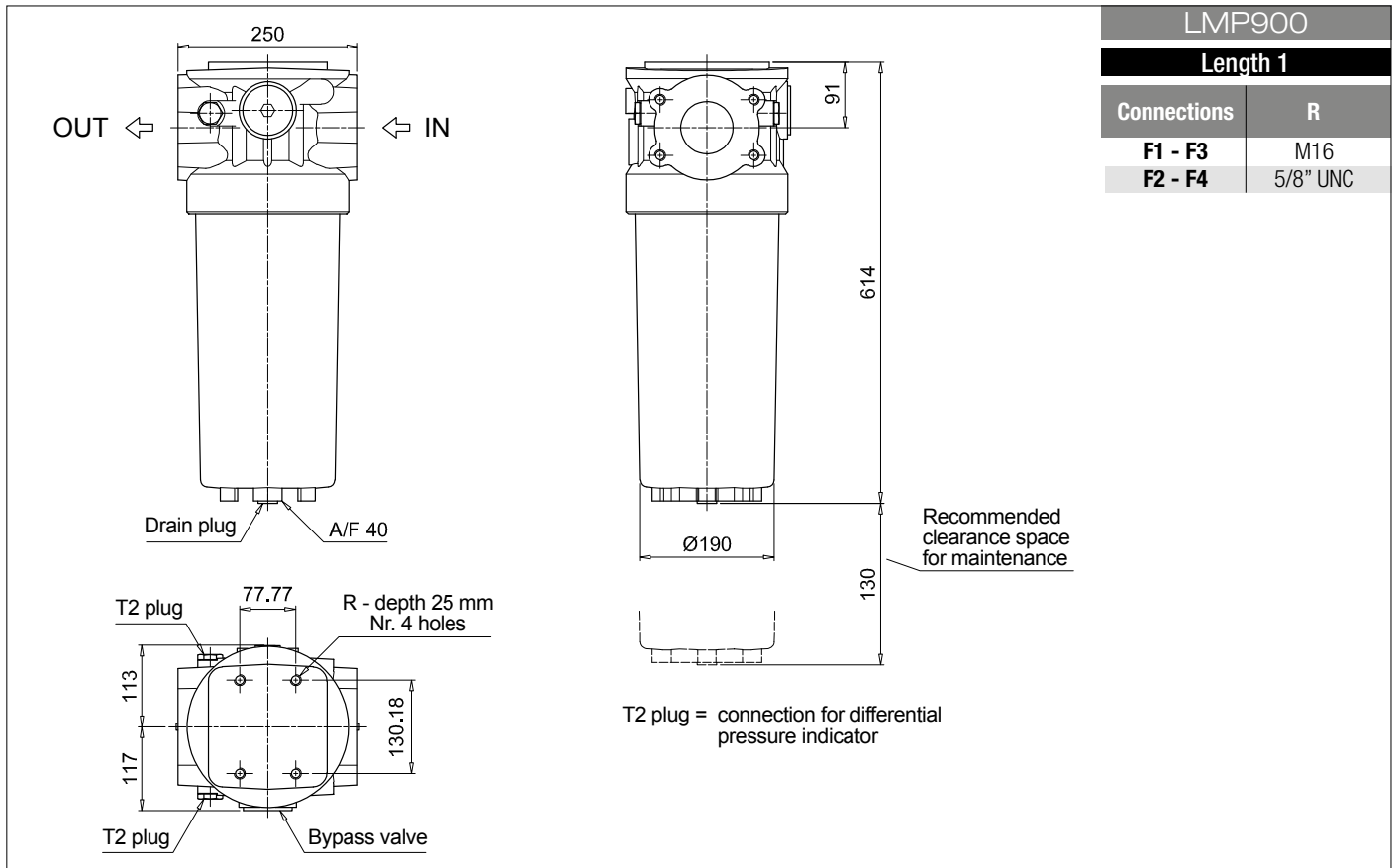
See page 747

T2 Plug - Filter length 1 - 2

ACCESSORIES

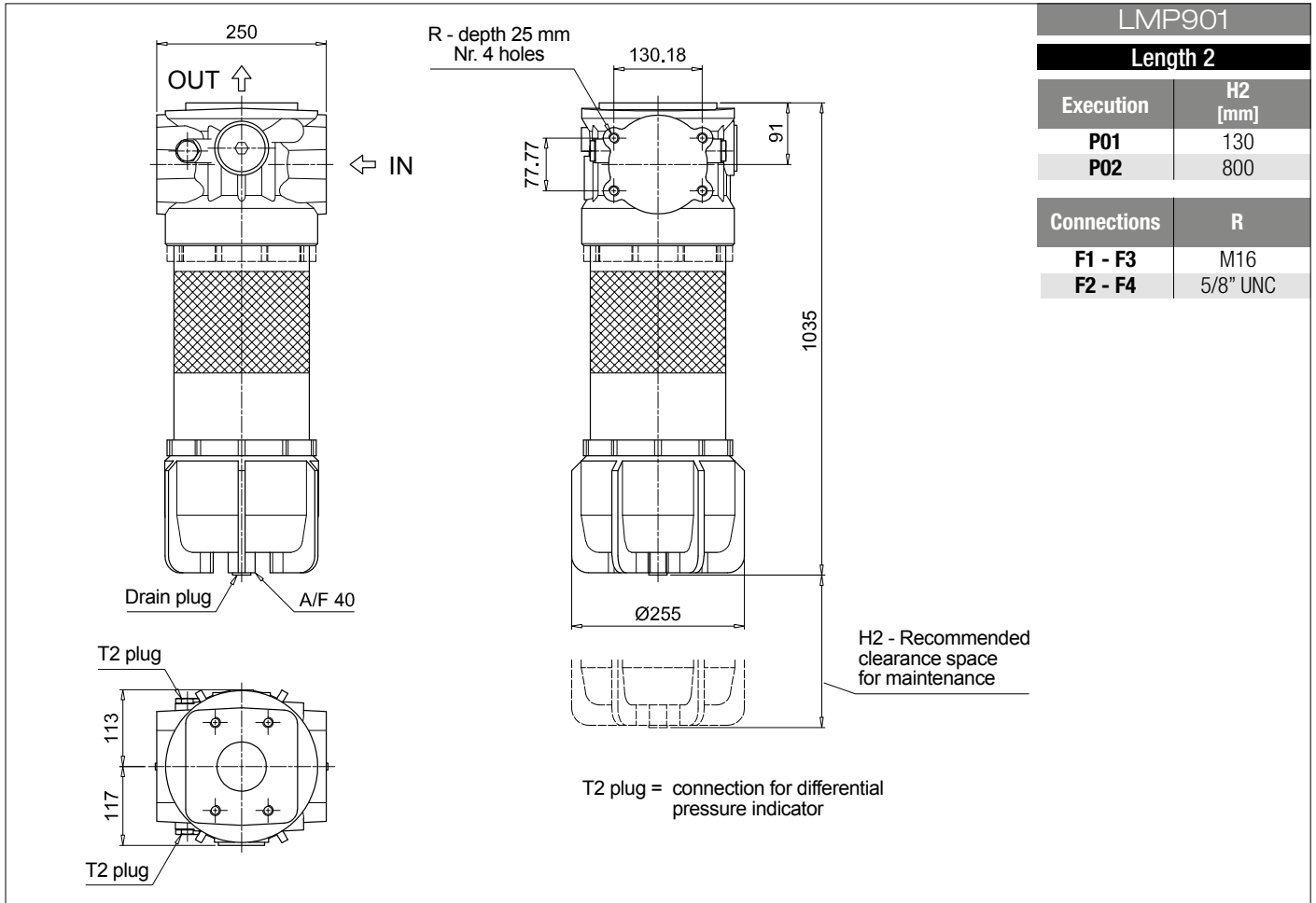
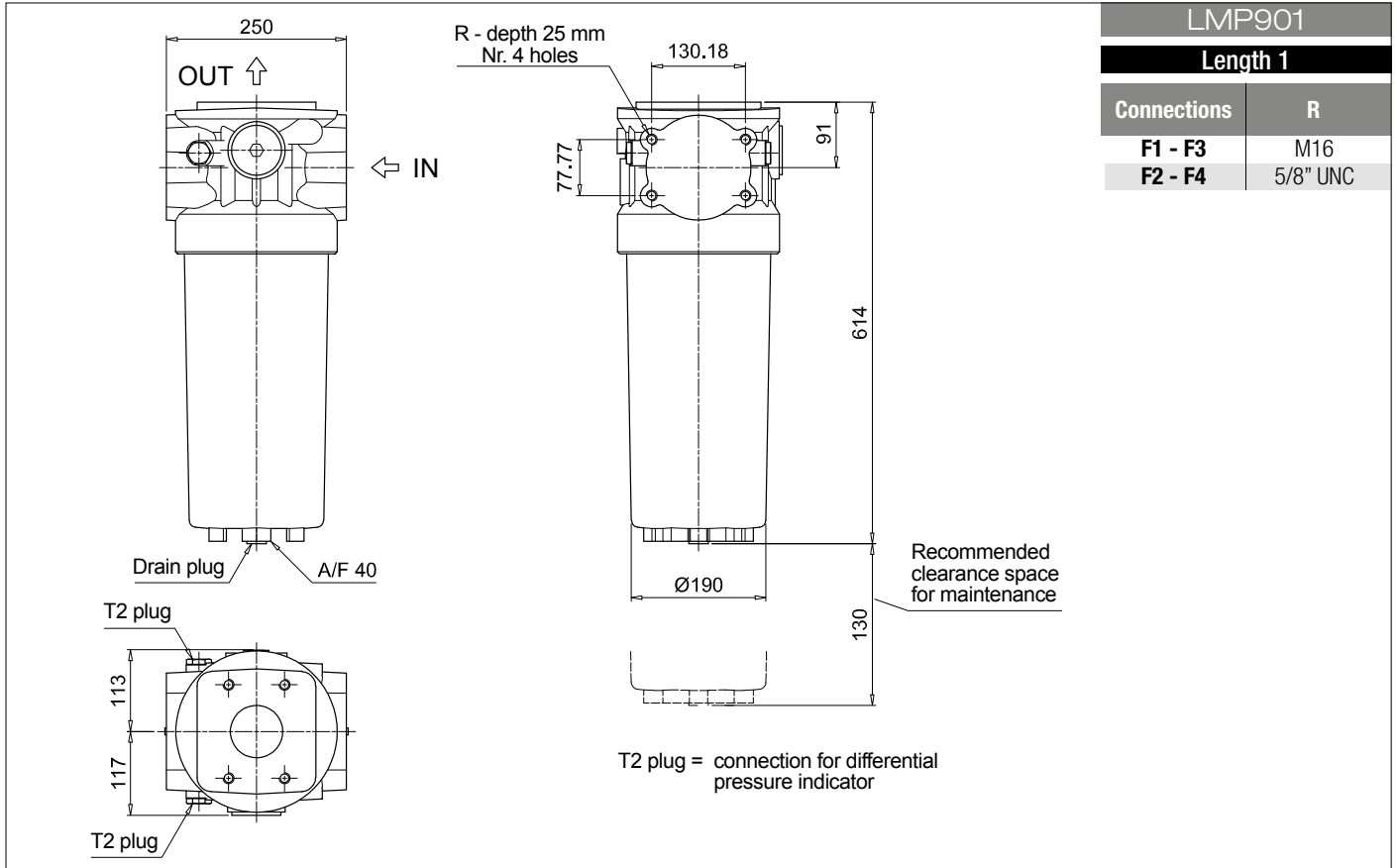
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CFA Retaining clamp - Filter length 2



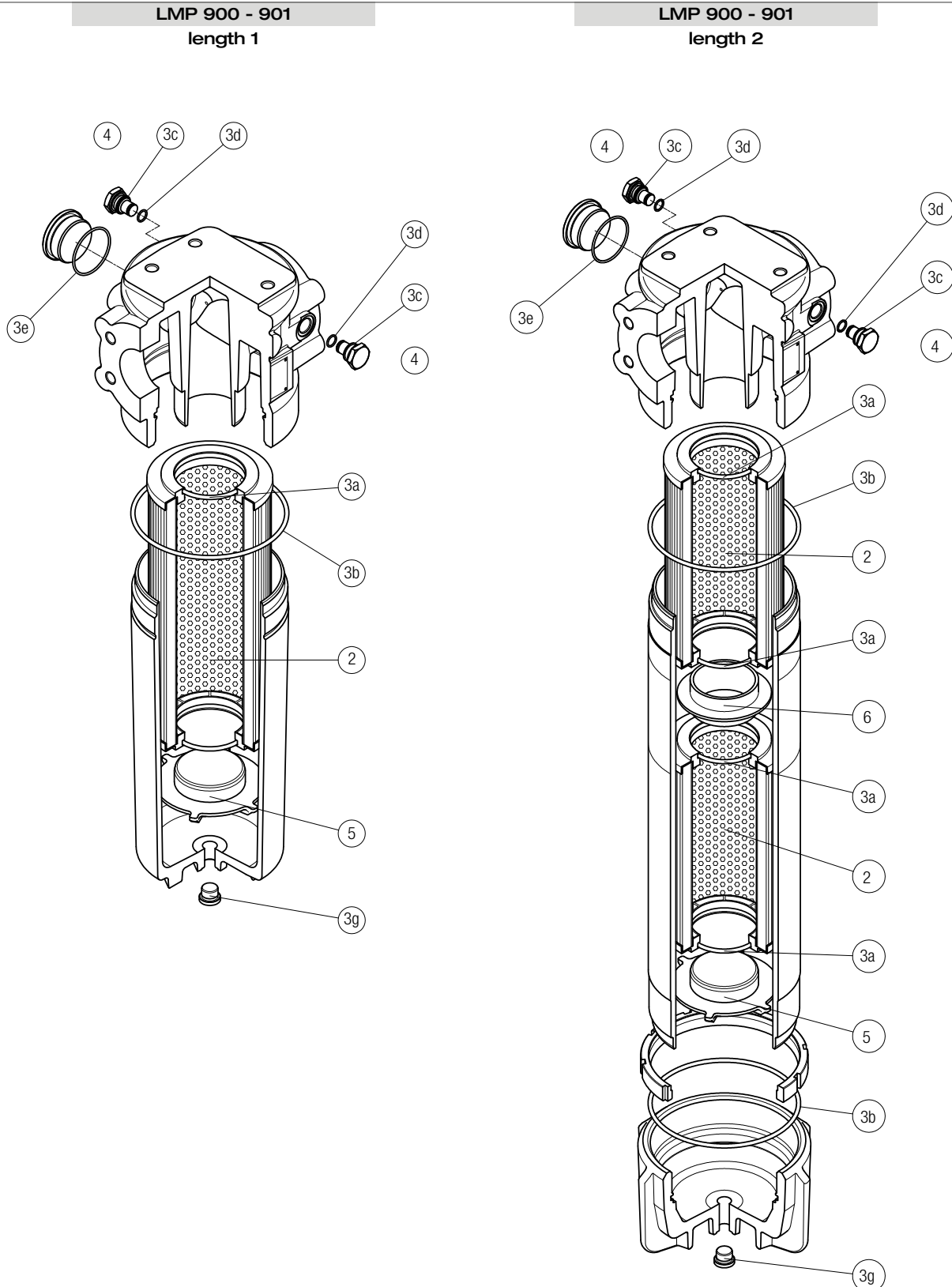
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Dimensions



SPARE PARTS LMP 900-901

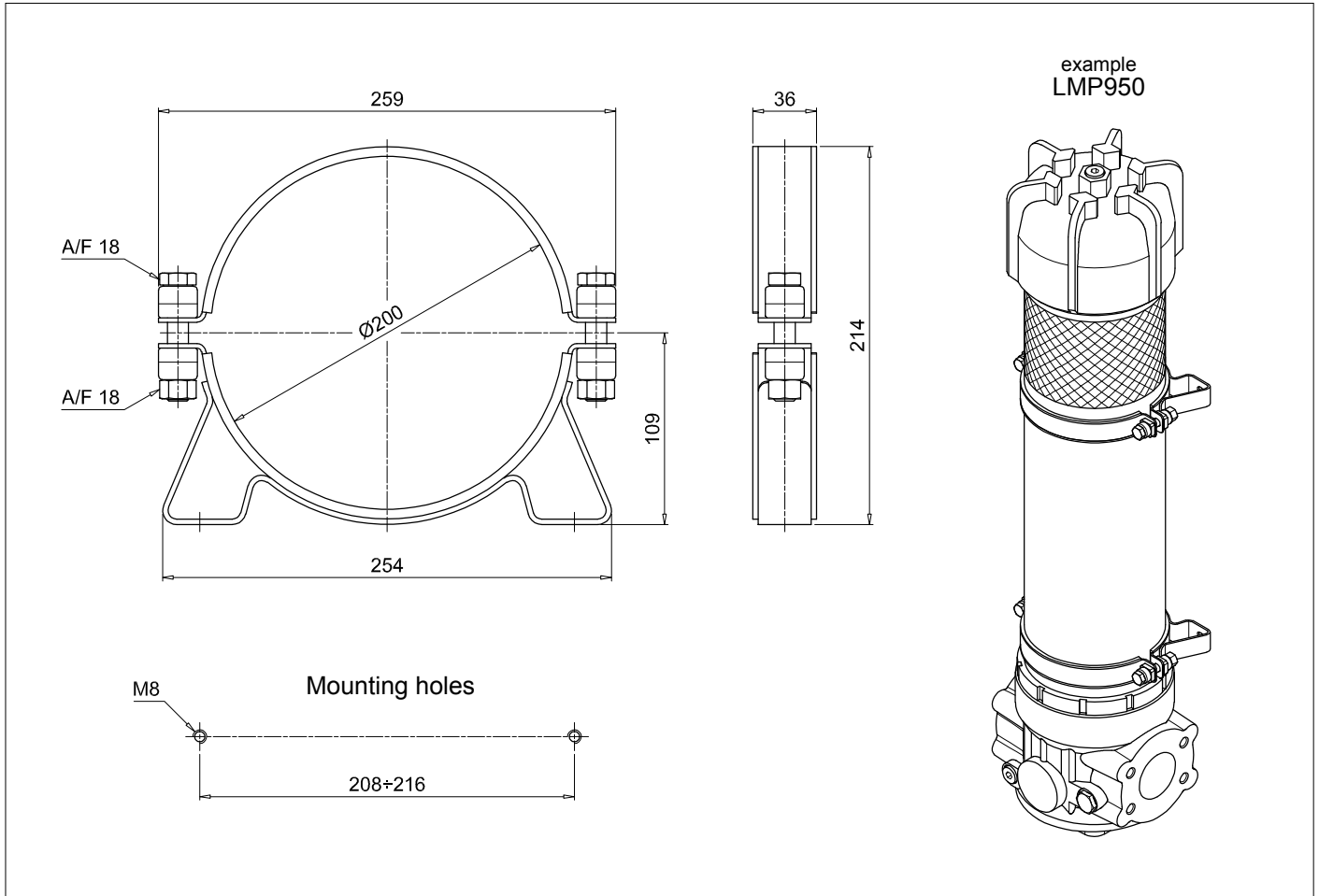
Order number for spare parts



Item:	2		3 (3a ÷ 3g)		4		5		6			
Filter series	Filter element		Seal Kit code number		Indicator connection plug		Housing spigot		Coupling spigot			
	Q.ty		Q.ty	NBR	FPM	Q.ty	NBR	FPM	Q.ty	Q.ty		
LMP 900-901 length 1	1 pc.	See order table	1 pc.	02050363	02050364	2 pcs.	T2H	T2V	1 pc.	01044104	-	01044099
LMP 900-901 length 2	2 pcs.		1 pc.	02050365	02050366	2 pcs.			1 pc.		1 pc.	

Accessories

RETAINING CLAMP



Series	CFA	Retaining clamp	Configuration example:	CFA	20	M	P01
Size	20						
Screw	M	Metric					
Execution	P01	MP Filtri standard					

CLOGGING INDICATORS LOW & MEDIUM PRESS. FILTERS

Designation & Ordering code

DIFFERENTIAL PRESSURE INDICATORS

Series	Configuration example 1:	DE	M	20	H	F	50	P01	
DE Electrical differential pressure indicator	Configuration example 2:	DE	U	50	V	A	50	P01	UL
DL Electrical/Visual differential pressure indicator	Configuration example 3:	DL	E	50	V	A	71	P01	
DT Electronic differential pressure indicator	Configuration example 4:	DT	A	20	H	F	70	P01	
DV Visual differential pressure indicator	Configuration example 5:	DV	M	50	V			P01	

Type	DE	DL	DT	DV
A Standard type	•	•	•	A With automatic reset
M With wired electrical connection	•	-	-	M With manual reset
U Standard type 210 bar, UL certified	•	-	-	S With automatic reset
E For high power supply	-	•	-	
S Compact version	•	-	-	

Pressure setting	DEA	DEM	DEU	DES	DLA	DLE	DTA	DVA	DVM	DVS
12 1.2 bar	•	•	-	•	•	•	•	•	•	•
20 2.0 bar	•	•	•	-	•	•	•	•	•	-
25 2.5 bar	-	-	-	-	-	-	-	-	-	•
40 4.0 bar	-	-	-	•	-	-	-	-	-	•
50 5.0 bar	•	•	•	-	•	•	•	•	•	-

Seals	DEA	DEM	DEU	DES	DL	DT	DVA	DVM	DVS
H HNBR	•	•	-	•	•	•	•	•	•
V FPM	•	•	•	-	•	•	•	•	-

Thermostat	DEA	DEM	DEU	DES	DLA	DLE	DT
A Without thermostat	•	•	•	•	•	•	-
F With thermostat	-	•	-	-	-	•	•

Electrical connections	DEA	DEM	DEU	DES	DLA	DLE	DT
10 Connection AMP Superseal series 1.5	-	•	-	•	-	-	-
20 Connection AMP Timer Junior	-	•	-	-	-	-	-
30 Connection Deutsch DT-04-2-P	-	•	-	•	-	-	-
35 Connection Deutsch DT-04-3-P	-	•	-	-	-	-	-
50 Connection EN 175301-803	•	-	•	-	-	•	-
51 Connection EN 175301-803, transparent base with lamps 24 Vdc	-	-	-	-	•	-	-
52 Connection EN 175301-803, transparent base with lamps 110 Vdc	-	-	-	-	•	-	-
70 Connection IEC 61076-2-101 D (M12)	-	-	-	-	-	-	•
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	-	-	-	•	-	-
80 Connection Stud #10-32 UNF	-	-	-	•	-	-	-

Option
P01 MP Filtri standard
Pxx Customized

Certifications	DEU	OTHERS
Without	-	•
UL UL certification	•	-

PLUGS

Series	Configuration example	T2	H
T2 Plug			
T4 Plug			

Seals	T2	T4
A NBR	-	•
H HNBR	•	-
V FPM	•	-