

# LMP 900-901 series

Filter element 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

## Filter element 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)  $\pm 10\%$
- 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

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Size: 1000

#### $\Delta p$ 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 [dm<sup>3</sup>]

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

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FILTER ASSEMBLY SIZING  
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 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).

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.

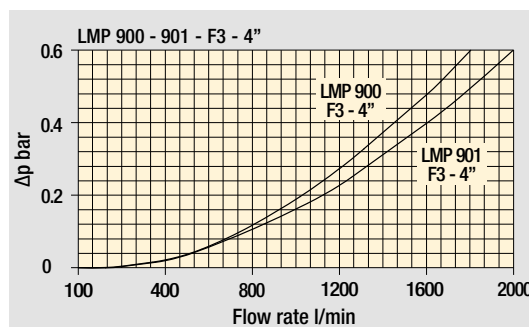
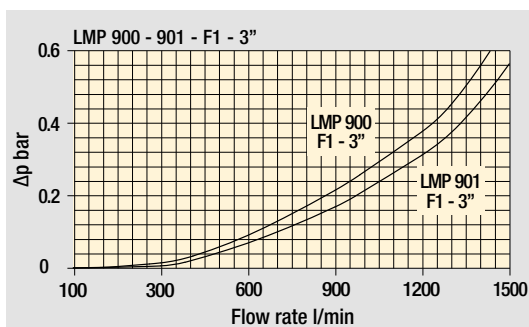
## LMP 900-901 Length 2



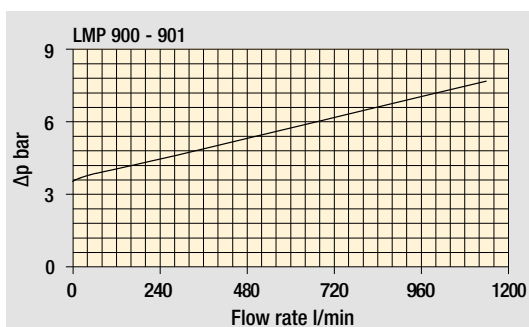
## Hydraulic symbols

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

## Pressure drop Filter housings $\Delta p$ 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.  $\Delta p$  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)

<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>A25</b> Inorganic microfiber 25 µm	

**WA025** Water absorber inorganic microfiber 25 µm

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

<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>A25</b> Inorganic microfiber 25 µm	

**WA025** Water absorber inorganic microfiber 25 µm

Seals **A** NBR | **V** FPM

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

## CLOGGING INDICATORS

See page 716

**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 737

**T2** Plug - Filter length 1 - 2

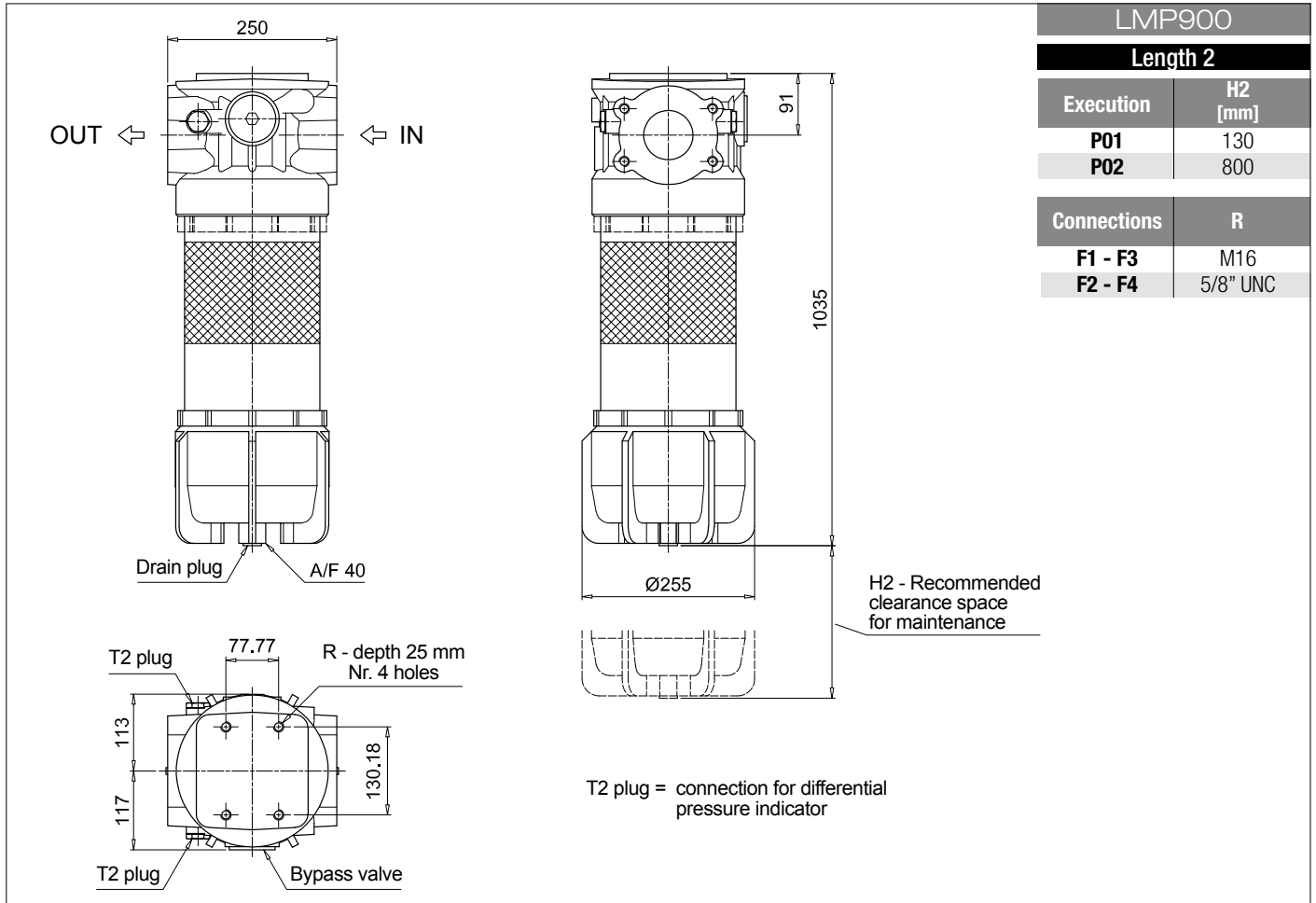
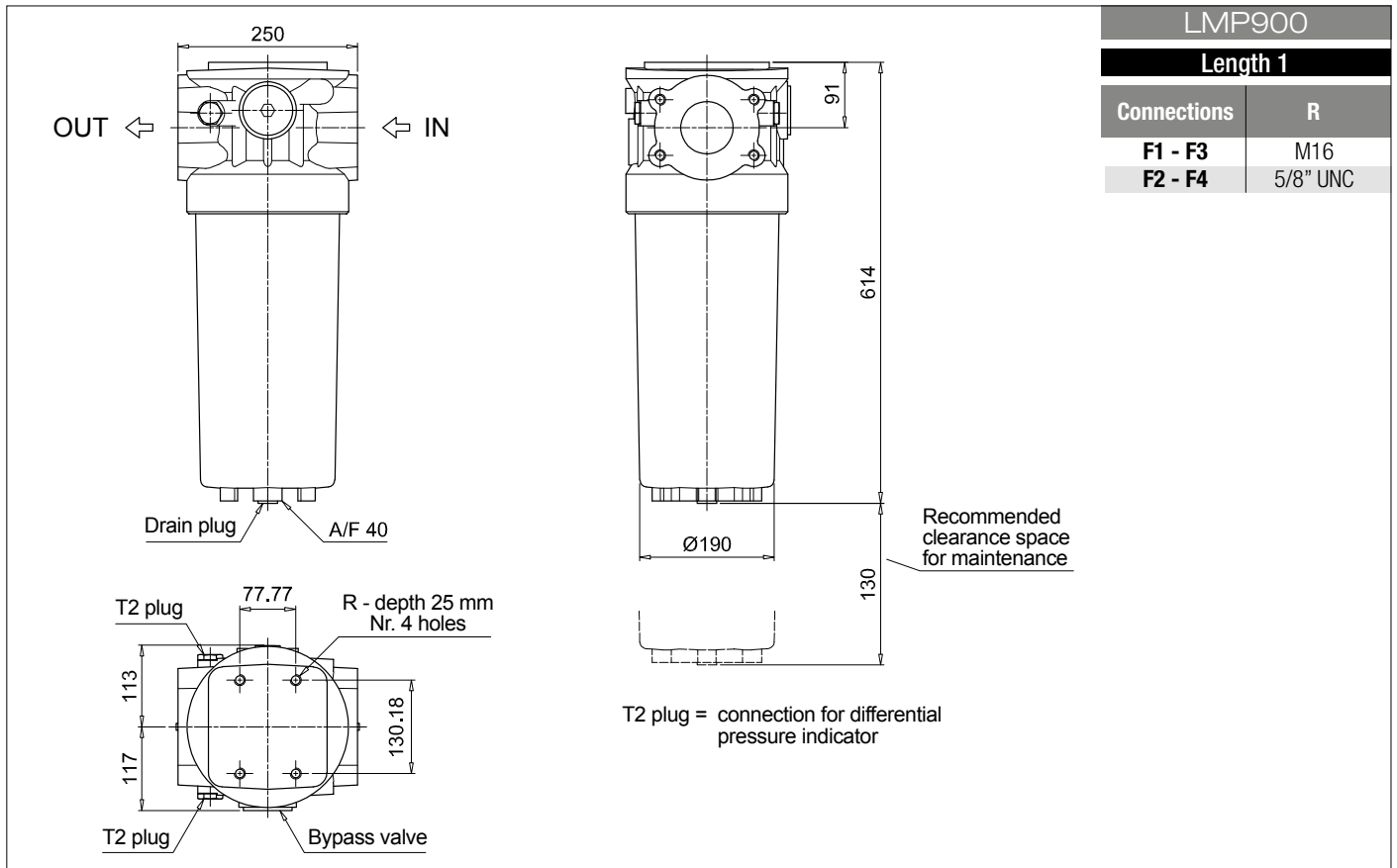
## ACCESSORIES

See page 466

**CFA** Retaining clamp - Filter length 2

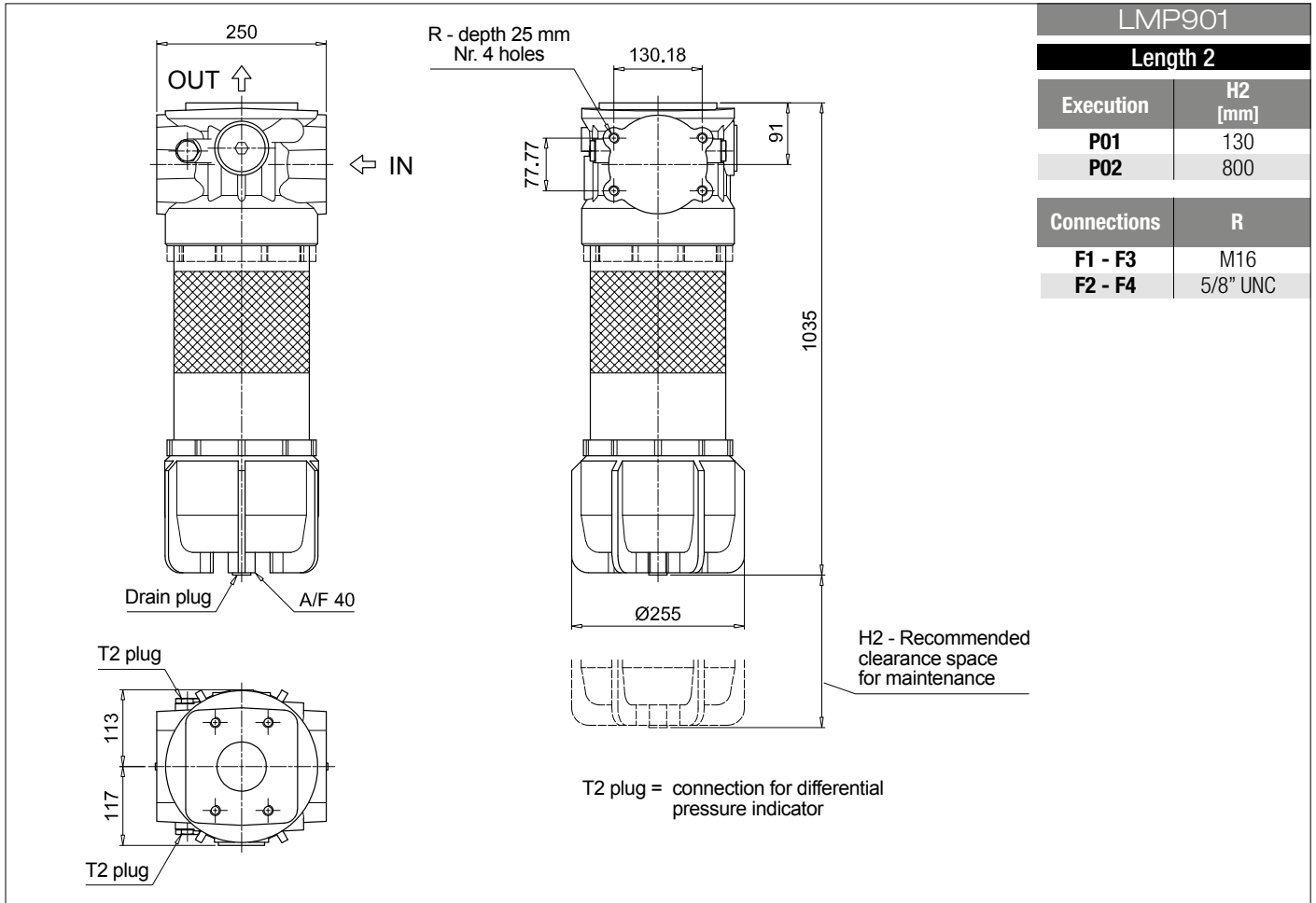
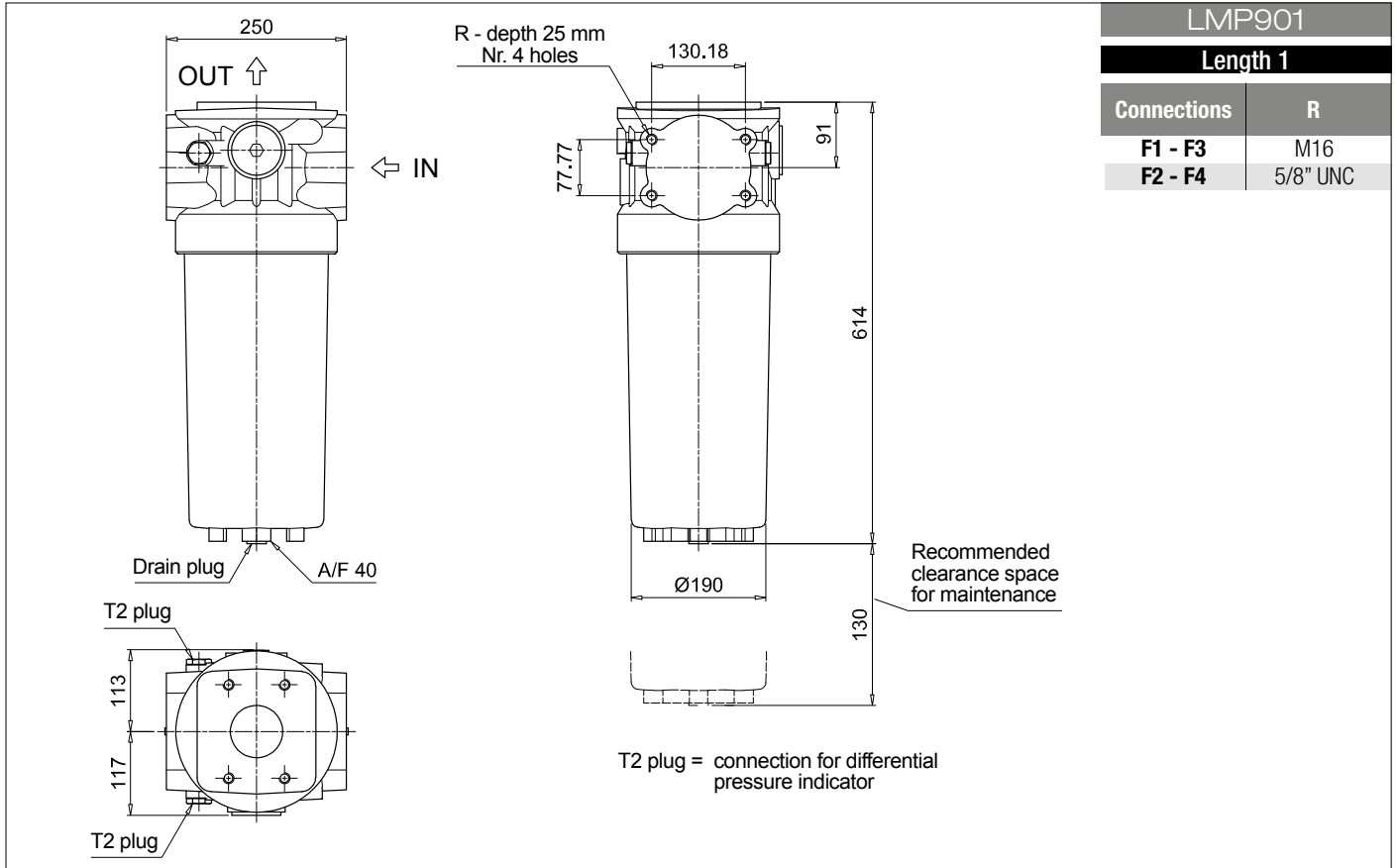
# Filter element according to DIN 24550 LMP 900-901

Dimensions



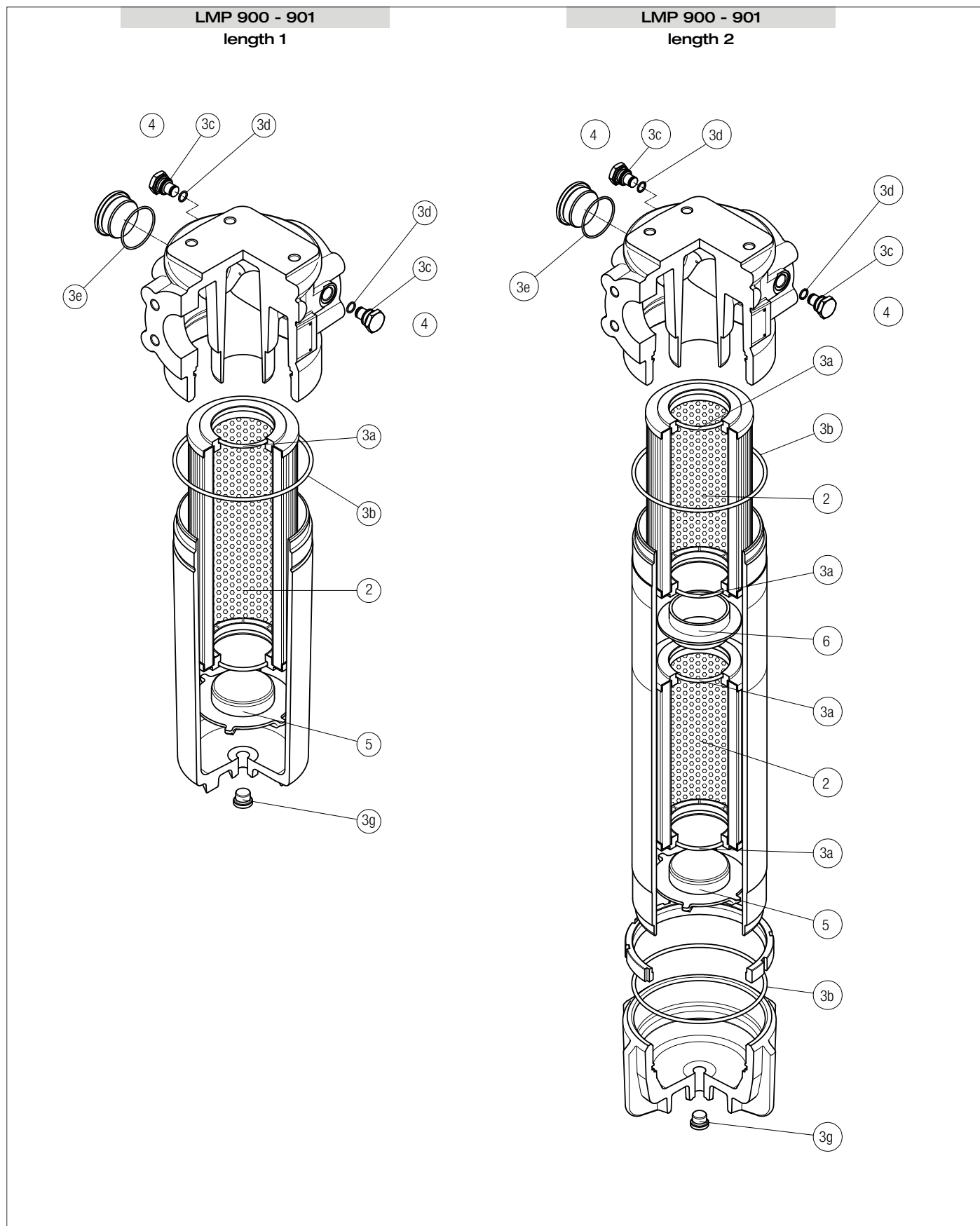
# LMP 900-901 Filter element according to DIN 24550

## Dimensions



# SPARE PARTS LMP 900-901

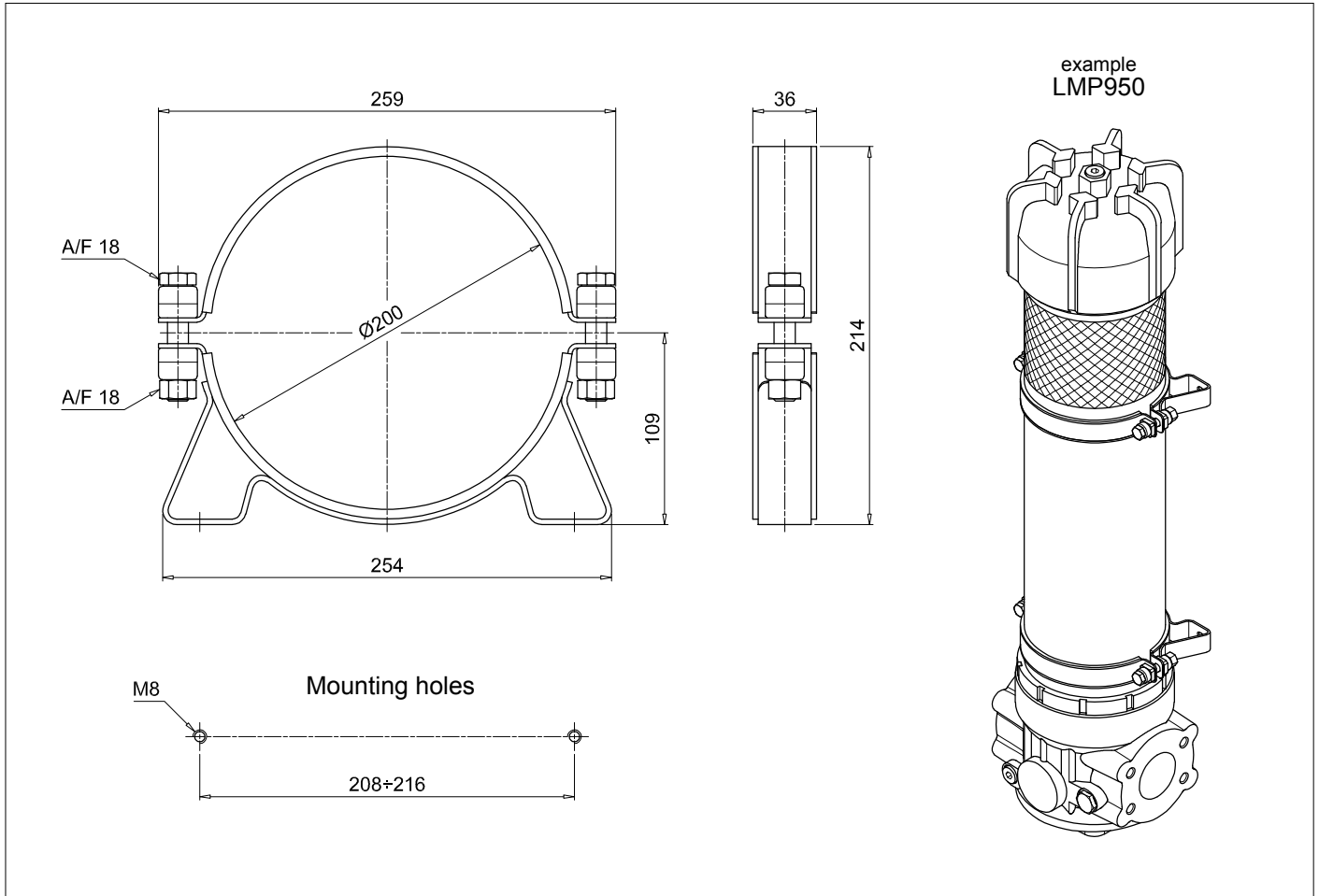
Order number for spare parts



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	-
LMP 900-901 length 2	2 pcs.		1 pc.	02050365	02050366	2 pcs.			1 pc.	01044099	1 pc.

# Accessories

## RETAINING CLAMP



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