

LMP 902-903 series

Filters featuring filter elements designed according to DIN 24550

Maximum working pressure up to 2 MPa (20 bar) - Flow rate up to 3000 l/min



LMP 902-903 GENERAL INFORMATION

Filters featuring filter elements designed according to DIN 24550

Description

Low & Medium Pressure filters

Maximum working pressure up to 2 MPa (20 bar)

Flow rate up to 3000 l/min

LMP902 and LMP903 are ranges of low pressure filter with large filtration surface mainly suitable for lubrication, off-line filtration of the reservoirs and filtration equipment.

Multiple LMP950 filters are connected to a manifold to reduce the pressure drop caused by the filter media and to increase the life time of the filter element.

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

Available features:

- 4" flanged connections, for a maximum flow rate of 3000 l/min
- 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

Technical data

Filter housing materials

- Head: Anodized aluminium
- Housing: Anodized aluminium
- Manifolds: Welded - Phosphatized steel
- Bypass valve: Steel
- Size 1000 filter elements complying with DIN 24550 standard

Pressure

- Test pressure: 3.5 MPa (35 bar)

Bypass valve

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

Number of filter elements

LMP 902: 4 filter elements CU900

LMP 903: 6 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 902-903: In-line Inlet/Outlet

Seals

- Standard NBR series A
- Optional FPM series V

Temperature

From -25 °C to +110 °C

Note

LMP 902 - 903 filters are provided for vertical mounting

Weights [kg] and volumes [dm³]

Filter series	Weights [kg]		Volumes [dm ³]	
	Length	2	Length	2
LMP 902		89.6		58
LMP 903		129.2		87

GENERAL INFORMATION LMP 902-903

Filters featuring filter elements designed according to DIN 24550

Flow rates [l/min]

Filter series	Length	Filter element design - N Series					
		A03	A06	A10	A16	A25	M25 M60 M90
LMP 902	2	2217	2576	3241	3282	3506	3987
LMP 903	2	2838	3170	3720	3755	3926	4278

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.

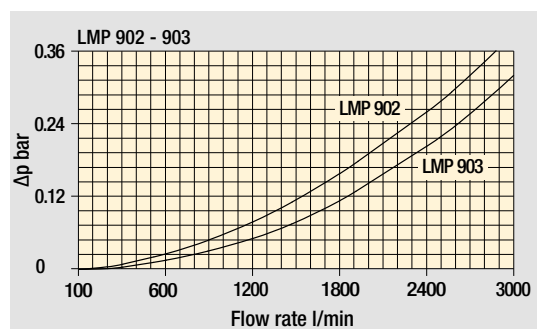
You can also calculate the right size using the formulas present on the FILTER SIZING paragraph at the beginning of the full catalogue or at the beginning of the filter family brochure. Please, contact our Sales Department for further additional information.

Hydraulic symbols

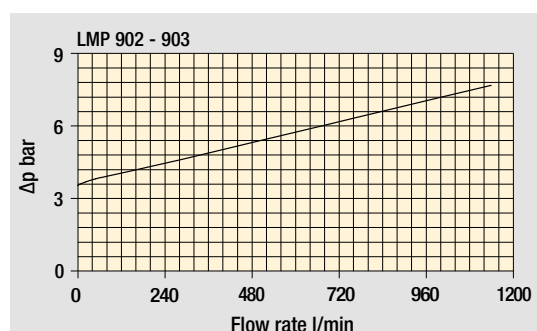
Filter series	Execution S	Execution B	Execution S	Execution B
LMP 902	•	•	-	-
LMP 903	-	-	•	•

Pressure drop

Filter housings Δp pressure drop



Bypass valve pressure drop

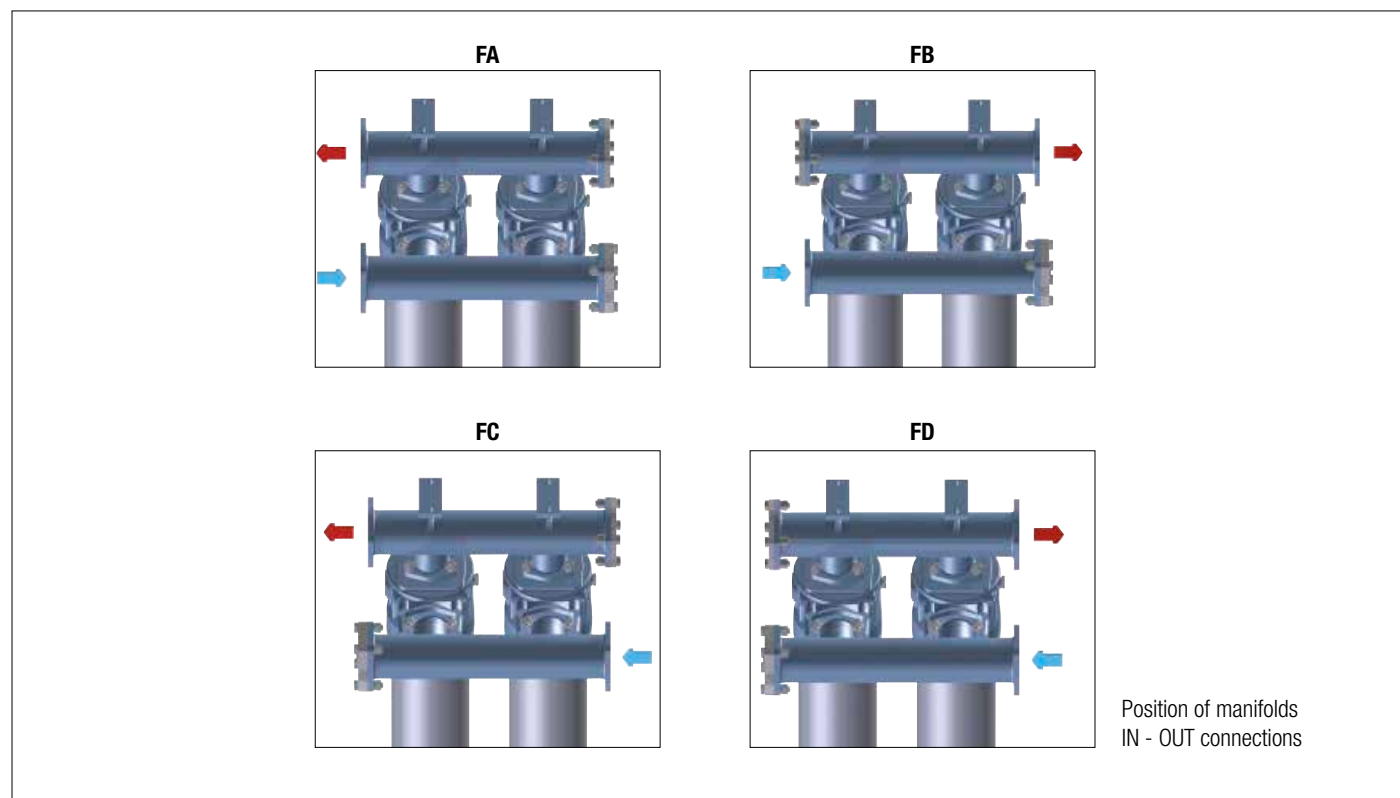


The curves are plotted using mineral oil with density of 0.86 kg/dm³ in compliance with ISO 3968. Δp varies proportionally with density.

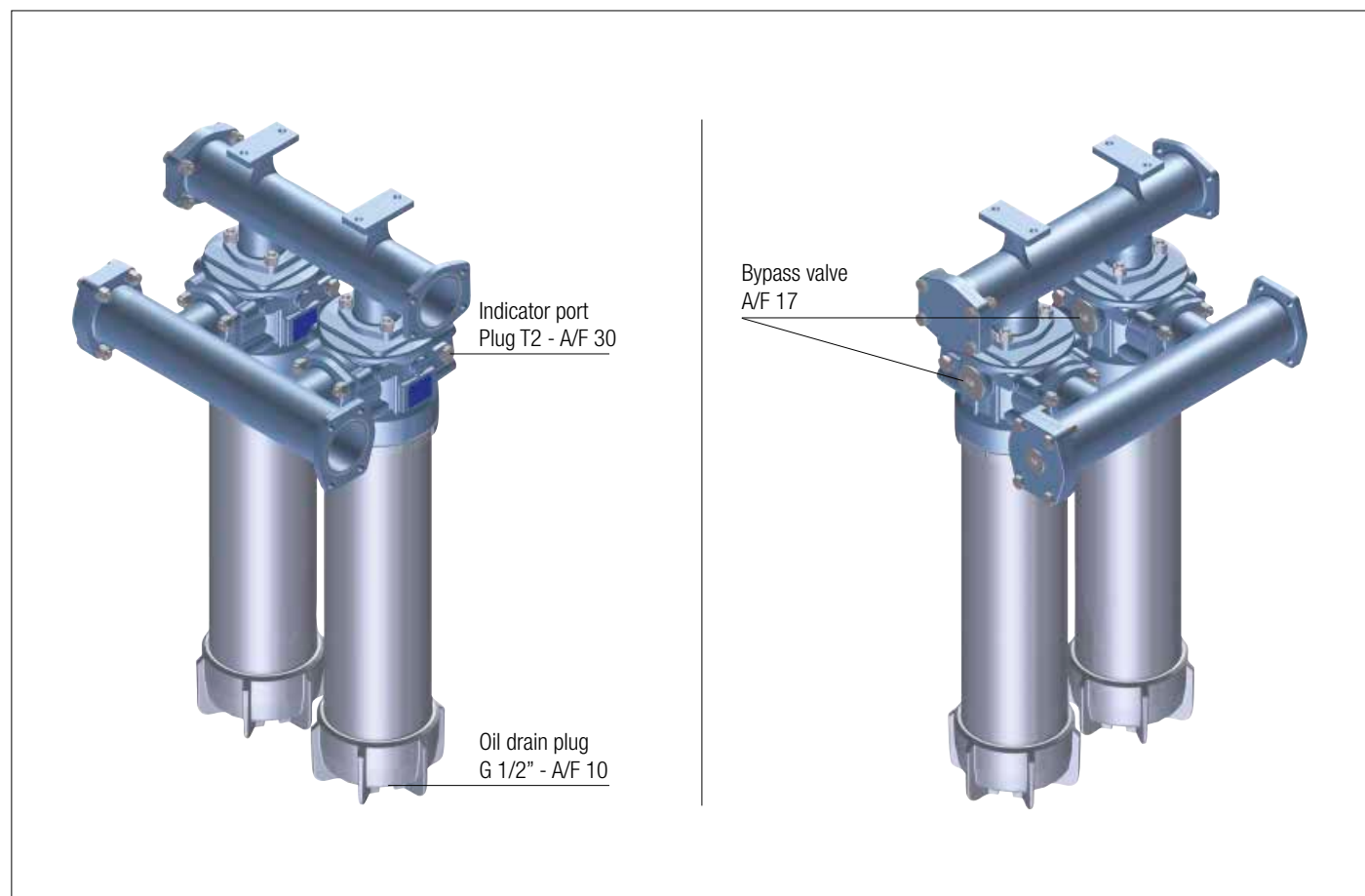
LMP 902-903 GENERAL INFORMATION

Filters featuring filter elements designed according to DIN 24550

Manifolds



Focus on



LMP 902-903

Filters featuring filter elements designed according to DIN 24550

Designation & Ordering code

COMPLETE FILTER

Series and size		Configuration example: LMP902							
LMP902 LMP903		2	B	A	FA	A10	N	P01	
Length									
2									
Bypass valve									
S Without bypass		B With bypass 3.5 bar							
Seals and treatments									
A NBR									
V FPM									
Connections		IN	OUT						
FA 4" SAE 3000 psi		left	left						
FB 4" SAE 3000 psi		left	right						
FC 4" SAE 3000 psi		right	left						
FD 4" SAE 3000 psi		right	right						
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					
		N 20 bar		P01 MP Filtri standard					
				Pxx Customized					

FILTER ELEMENT

Element series and size		Configuration example: CU900				
CU900		A10	A	N	P01	
Filter series and size						
LMP902 Nr. 4 filter elements						
LMP903 Nr. 6 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		
		N 20 bar		P01 MP Filtri standard		
				Pxx Customized		

CLOGGING INDICATORS

See page 726

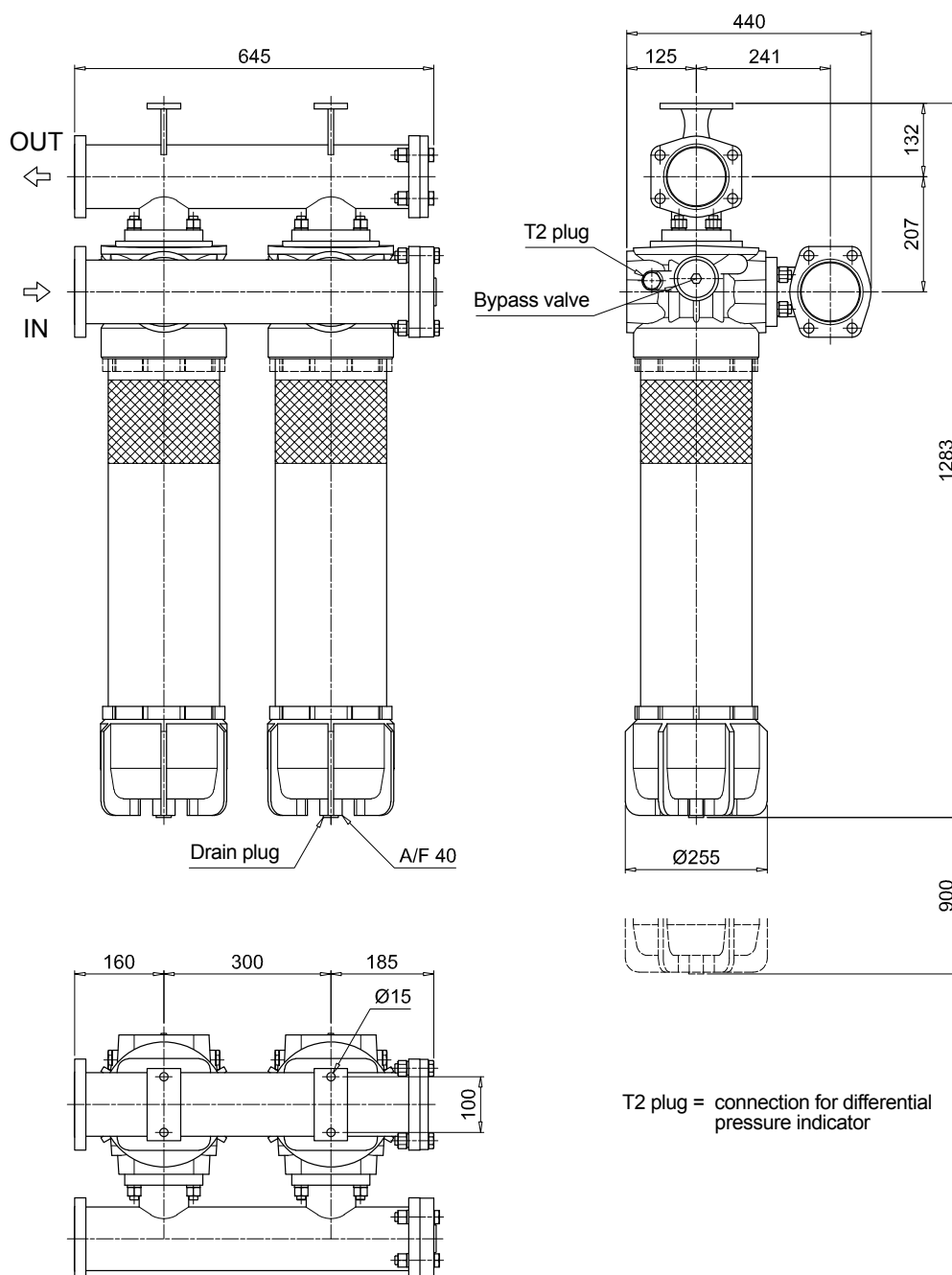
DEA Electrical differential pressure indicator	DLE Electrical / visual differential pressure indicator
DEM Electrical differential pressure indicator	DTA Electronic differential pressure indicator
DEU Electrical differential pressure indicator	DVA Visual differential pressure indicator
DLA Electrical / visual differential pressure indicator	DVM Visual differential pressure indicator

PLUGS

See page 747

T2 Plug

LMP902



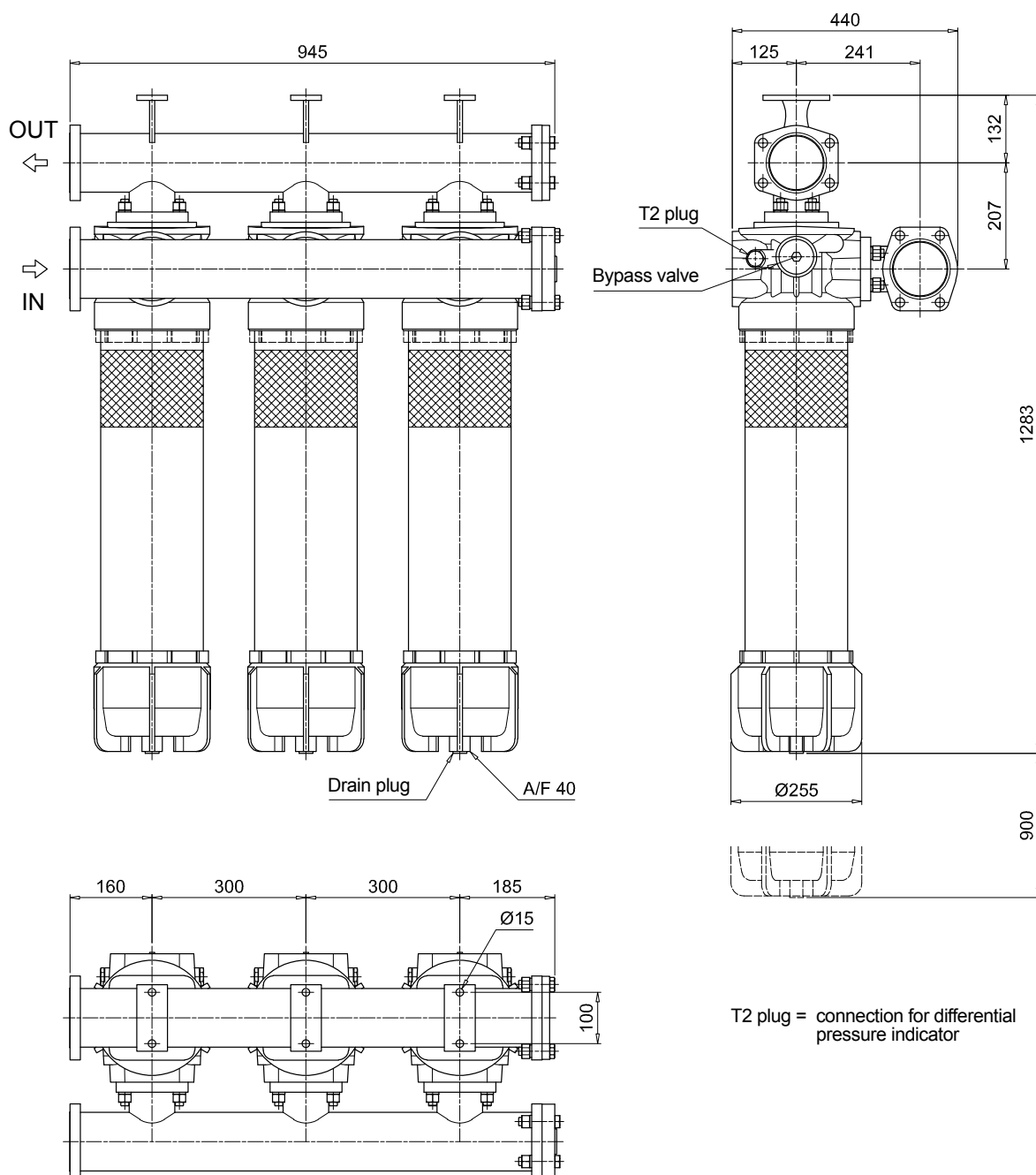
T2 plug = connection for differential pressure indicator

LMP 902-903

Filters featuring filter elements designed according to DIN 24550

Dimensions

LMP903

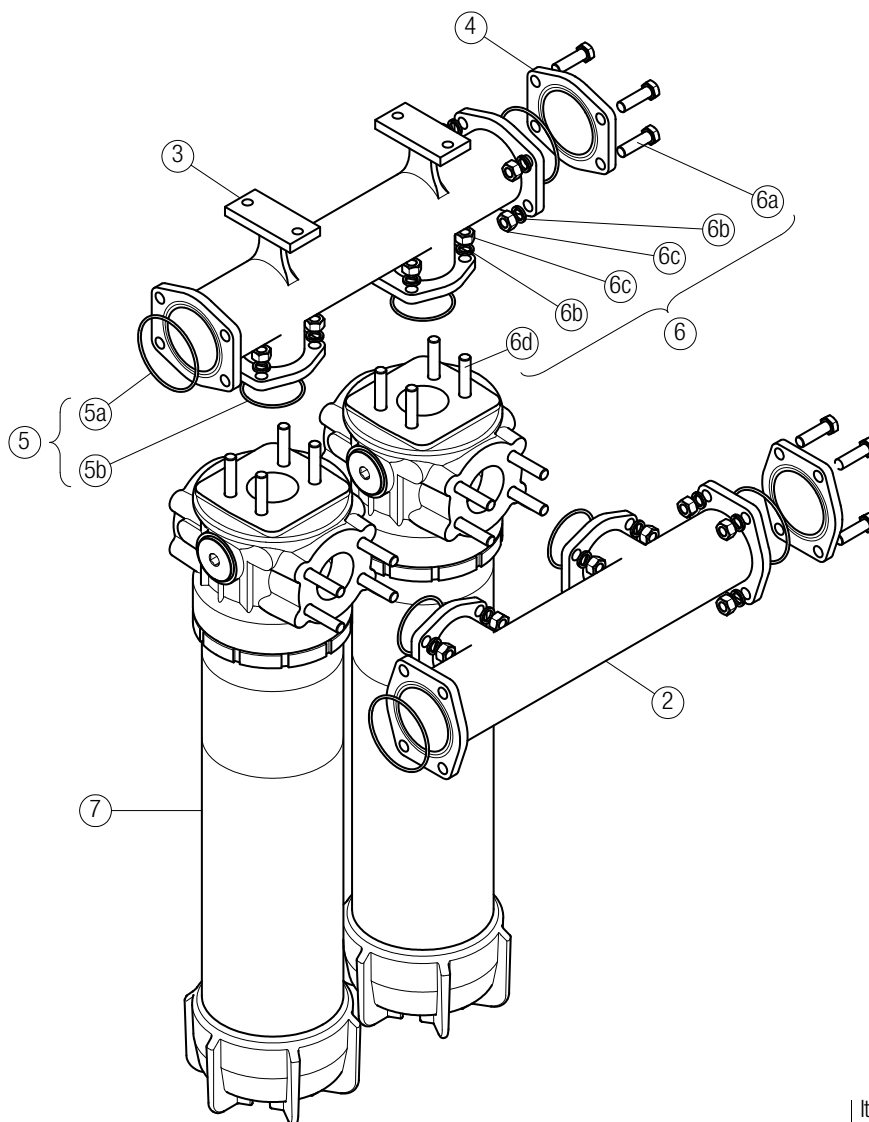


T2 plug = connection for differential pressure indicator

SPARE PARTS LMP 902-903

Order number for spare parts

LMP 902 - 903



Item 7:
for complete filter code and
spare parts, see
LMP 900 - 901 series chapter

Quantity:
- filter spare parts:
LMP 902 - 2 pcs.
LMP 903 - 3 pcs.

- filter seal kit:
LMP 902 - 2 pcs.
LMP 903 - 3 pcs.

Item:	2	3	4	5 (5a-5b)	6 (6a ÷ 6d)	7
Filter series	Q.ty	Manifold IN OUT	4" SAE 3000 psi plugged flange Q.ty	Manifolds seal kit Q.ty NBR FPM	Threaded fasteners kit Q.ty	Filter Q.ty
LMP 902	1 pc.	01039270 01039271	2 pcs.	1 pc. 02050404 02050405	1 pc. 02049051	2 pcs.
LMP 903	1 pc.	01039337 01039338	2 pcs.	1 pc. 02050404 02050405	1 pc. 02049052	3 pcs.

CLOGGING INDICATORS LOW & MEDIUM PRESS. FILTERS

Designation & Ordering code

DIFFERENTIAL PRESSURE INDICATORS

Series										
Configuration example 1:										
Configuration example 2:										
Configuration example 3:										
Configuration example 4:										
Configuration example 5:										
Type										
Type										
Pressure setting										
Seals										
Thermostat										
Electrical connections										
Option										
Certifications										

PLUGS

Series										
Configuration example										
Type										
Seals										
Type										