

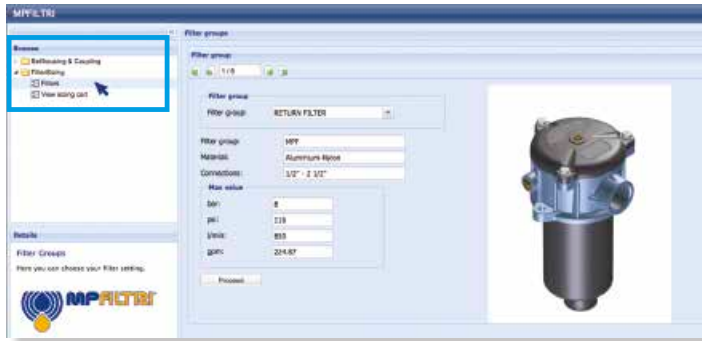
# LMP 952-953-954 series

Maximum working pressure up to 2.5 MPa (25 bar) - Flow rate up to 3000 l/min





**Step 1** Select "FILTERS"



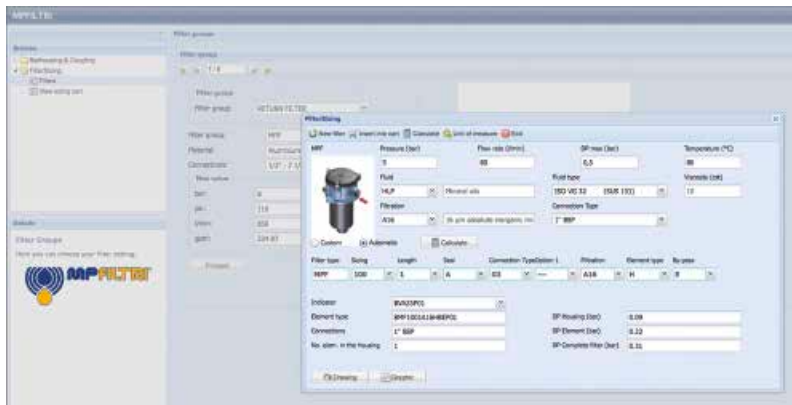
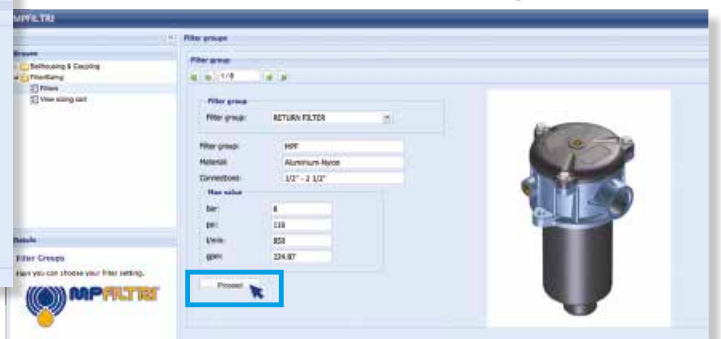
**Step 2** Choose filter group (Return Filter, Pressure Filter, etc.)



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



**Step 4** Push "PROCEED"



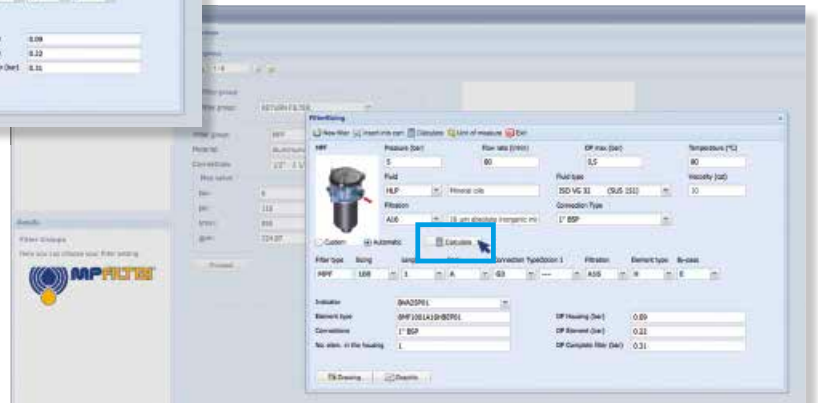
**Step 5**

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 advise which parameter is out of range to allow to modify/adjust the selection



**Step 7**

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

## Description

## Technical data

### Low & Medium Pressure filters

**Maximum working pressure up to 2.5 MPa (25 bar)**  
**Flow rate up to 3000 l/min**

LMP952, LMP953 and LMP954 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
- Base-mounting design, 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
- Manifolds: Welded - Phosphatized Steel
- Bypass valve: Anodized Aluminium

#### Pressure

Test pressure: 3.5 MPa (35 bar)

#### Bypass valve

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

#### $\Delta p$ element type

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

#### Number of filter elements

- LMP 952: 2 filter elements CU950-3
- LMP 953: 3 filter elements CU950-3
- LMP 954: 4 filter elements CU950-3

#### Seals

- Standard NBR series A
- Optional FPM series V

#### Temperature

From -25 °C to +110 °C

#### Connections

LMP 952-953-954:  
In-line Inlet/Outlet

#### Note

LMP 952 - 953 - 954 filters  
are provided for vertical mounting



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

Filter series	Weights [kg]		Volumes [dm <sup>3</sup> ]	
	Length	3	Length	3
<b>LMP 952</b>		96		66
<b>LMP 953</b>		138		99
<b>LMP 954</b>		192		132

Filter series	Length	Filter element design - N Series					
		A03	A06	A10	A16	A25	M25 M60 M90 M250
<b>LMP 952</b>	<b>3</b>	2172	2294	2766	3106	3256	3998
<b>LMP 953</b>	<b>3</b>	2842	2964	3403	3696	3820	4395
<b>LMP 954</b>	<b>3</b>	3259	3372	3770	4026	4133	4618

### 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.

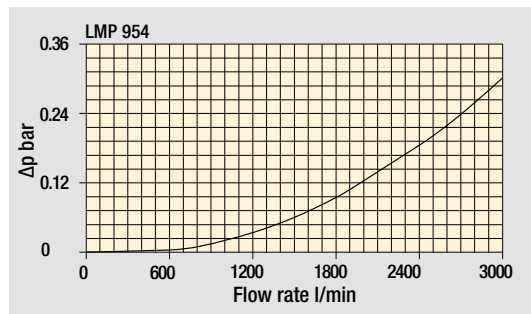
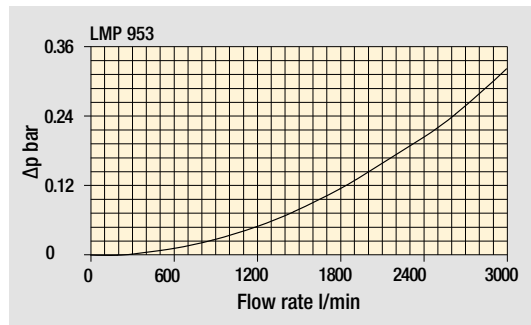
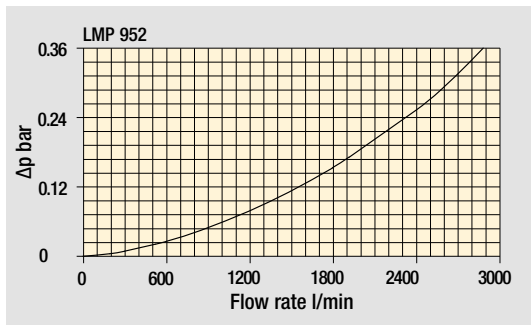
### Hydraulic symbols

Filter series	Execution S - Execution B	Execution S - Execution B	Execution S - Execution B
<b>LMP 952</b>	•	•	•
<b>LMP 953</b>	•	•	•
<b>LMP 954</b>	•	•	•

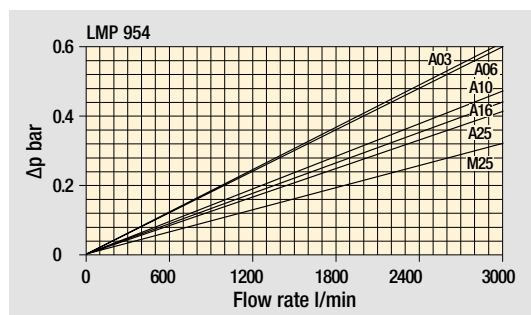
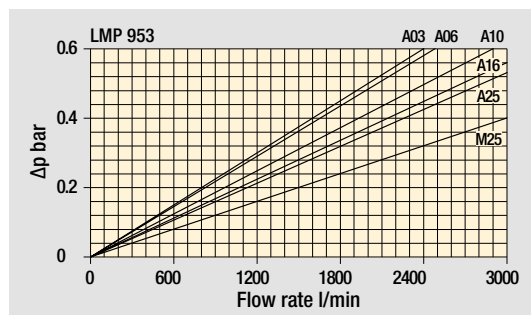
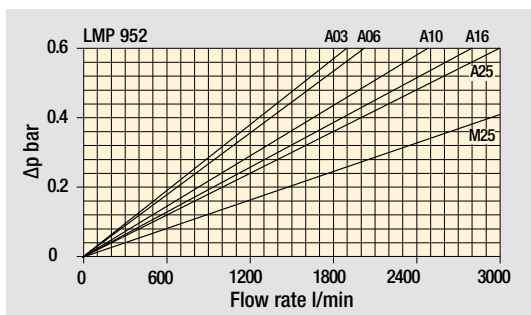
# LMP 952-953-954 GENERAL INFORMATION

## Pressure drop

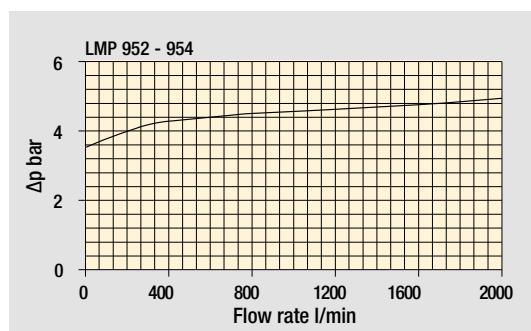
### Filter housings $\Delta p$ pressure drop



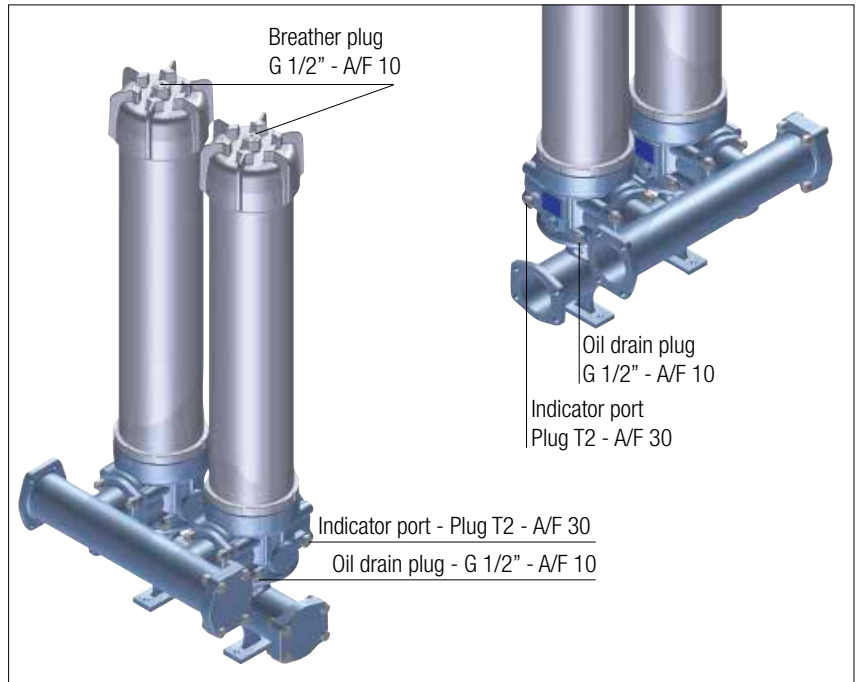
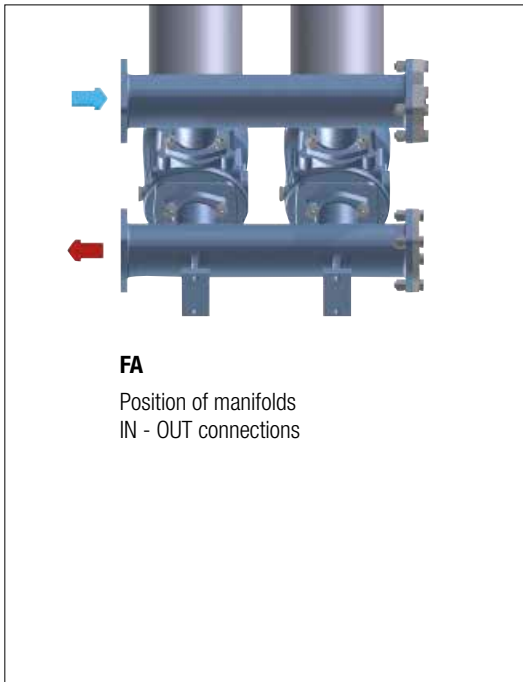
### Pressure drop of filter complete with cartridge, oil viscosity 30 mm<sup>2</sup>/s (cSt)



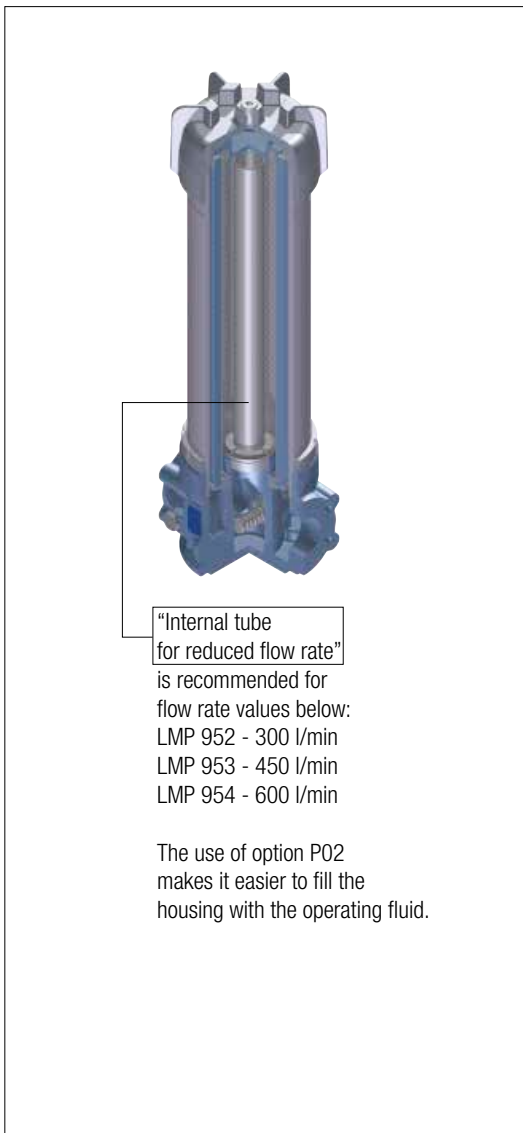
### Bypass valve pressure drop



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.

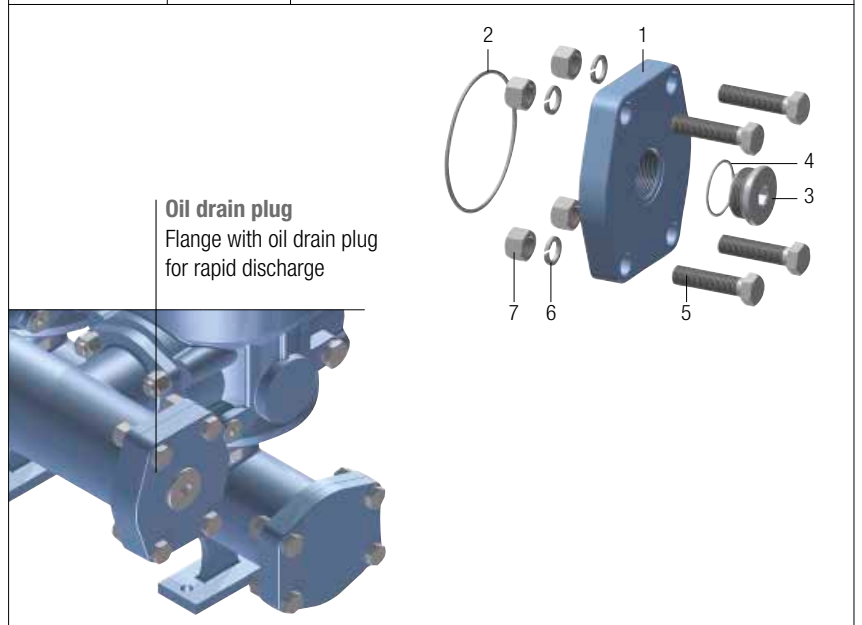


Execution P02



CMV4 & CUV4 Flange options

Code	Thread	Materials
CMV4	G 1 1/4"	1 - 4" SAE flange 2 - O-R 4437 (FPM) for flange 3 - Plug G 1-1/4" 4 - O-R 3168 for plug (FPM) 5 - No. 4 Hex bolt screws UNI-EN 24017 M16 x 65-10.9 6 - No. 4 Spring washers UNI 1751-B 16 7 - No. 4 Nuts UNI 5587 - M16
CUV4	SAE 20	1 - 4" SAE flange 2 - O-R 4437 (FPM) for flange 3 - Plug SAE 20 1 5/8" - 12 UN 4 - 1147 O-R for plug (FPM) 5 - No. 4 Hex bolt screws 5/8" UNC x 2 1/2" 6 - No. 4 Spring washers UNI 1751-B 16 7 - No. 4 Nuts 5/8" UNC



# LMP 952-953-954

## Designation & Ordering code

### COMPLETE FILTER

<b>Series and size</b>	Configuration example: <b>LMP952</b>   <b>3</b>   <b>B</b>   <b>A</b>   <b>FA</b>   <b>A10</b>   <b>N</b>   <b>P01</b>																	
<b>LMP952</b>   <b>LMP953</b>   <b>LMP954</b>																		
<b>Length</b>	<b>3</b>																	
<b>Bypass valve</b>	<b>S</b> Without bypass   <b>B</b> 3.5 bar																	
<b>Seals and treatments</b>	<b>A</b> NBR <b>V</b> FPM																	
<b>Connections</b>	<b>FA</b> 4" SAE 3000 psi																	
<b>Filtration rating (filter media)</b>	<table border="0"> <tr> <td><b>A03</b> Inorganic microfiber 3 µm</td> <td><b>M25</b> Wire mesh 25 µm</td> </tr> <tr> <td><b>A06</b> Inorganic microfiber 6 µm</td> <td><b>M60</b> Wire mesh 60 µm</td> </tr> <tr> <td><b>A10</b> Inorganic microfiber 10 µm</td> <td><b>M90</b> Wire mesh 90 µm</td> </tr> <tr> <td><b>A16</b> Inorganic microfiber 16 µm</td> <td></td> </tr> <tr> <td><b>A25</b> Inorganic microfiber 25 µm</td> <td></td> </tr> </table>								<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	
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<b>A25</b> Inorganic microfiber 25 µm																		
<b>WA025</b> Water absorber inorganic microfiber 25 µm																		
	<b>Element Δp</b>				<b>Execution</b>													
	<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

<b>Element series and size</b>	Configuration example: <b>CU950</b>   <b>3</b>   <b>A10</b>   <b>A</b>   <b>N</b>   <b>P01</b>																
<b>CU950</b>																	
<b>Element length</b>	<b>3</b>																
<b>Filter series and size</b>	<b>LMP952</b> Nr. 2 filter elements <b>LMP953</b> Nr. 3 filter elements <b>LMP954</b> Nr. 4 filter elements																
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<b>Seals</b>	<b>A</b> NBR <b>V</b> FPM																
	<b>Element Δp</b>				<b>Execution</b>												
	<b>N</b> 20 bar				<b>P01</b> MP Filtri standard <b>Pxx</b> Customized												

### ACCESSORIES

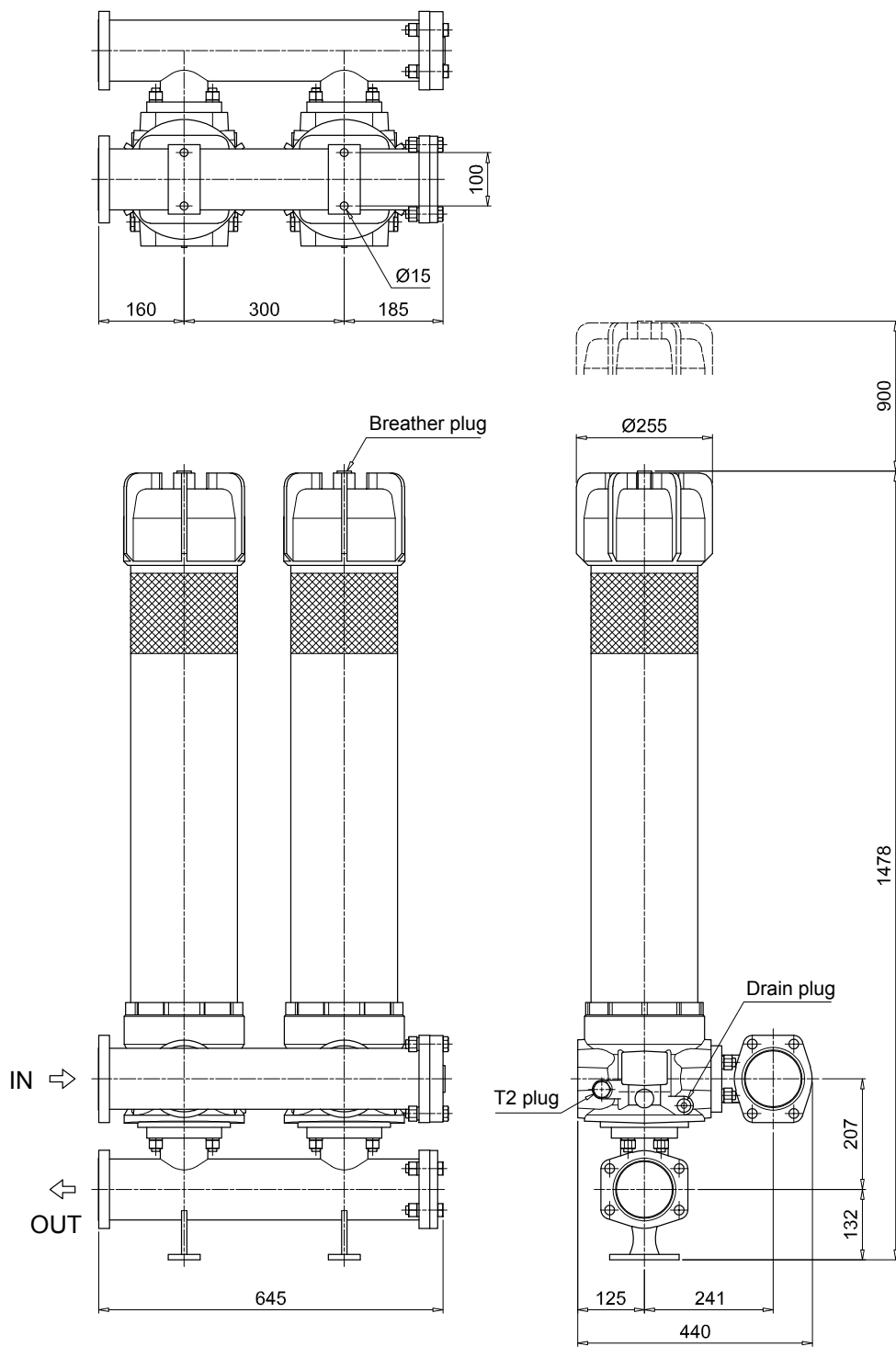
<b>Differential indicators</b>	page		page
<b>DEA</b> Electrical differential indicator	445	<b>DTA</b> Electronic differential indicator	448
<b>DEM</b> Electrical differential indicator	445-446	<b>DVA</b> Visual differential indicator	448
<b>DLA</b> Electrical / visual differential indicator	446-447	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



# LMP 952-953-954

Dimensions

LMP952

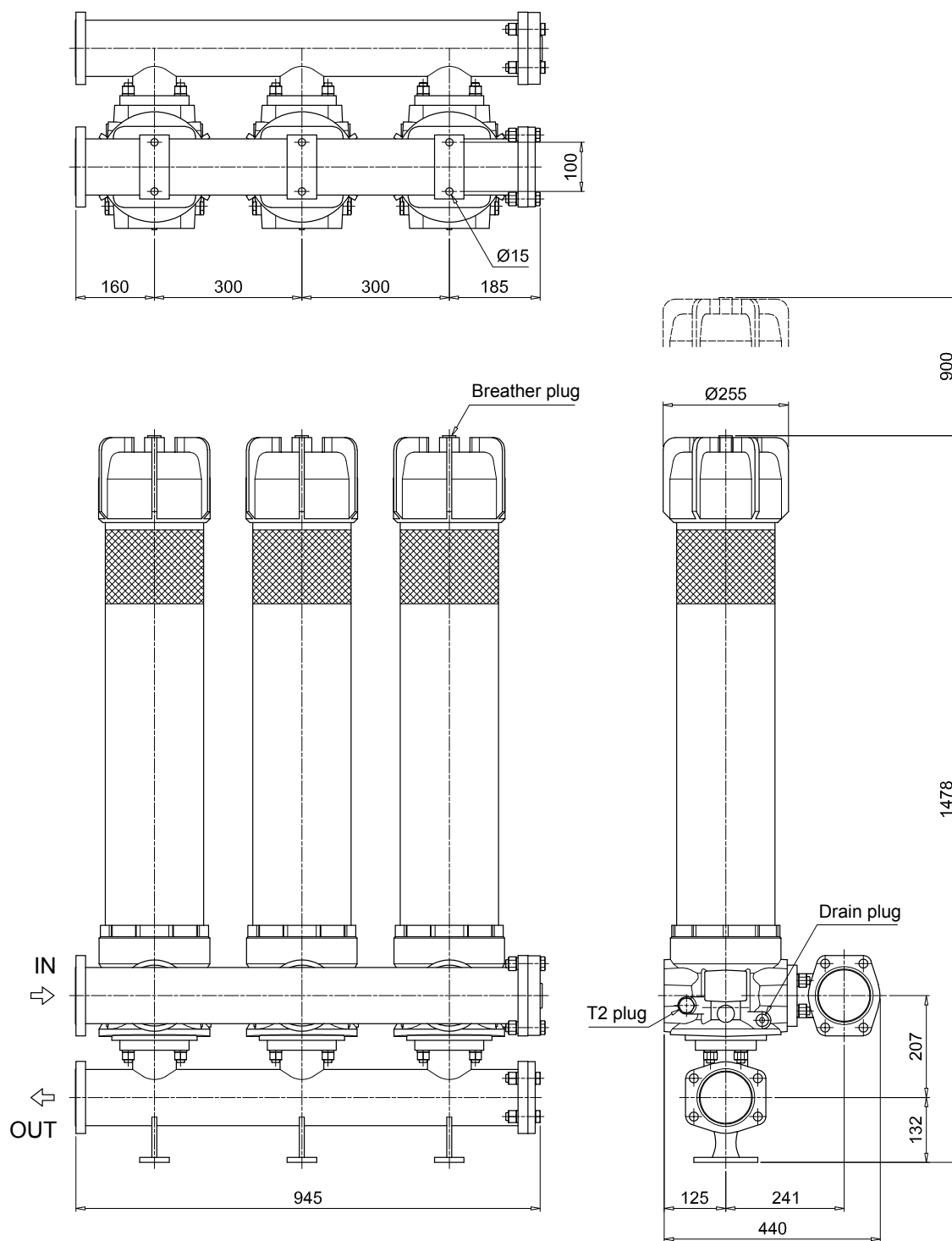


T2 plug =  
connection for differential indicator

# LMP 952-953-954

## Dimensions

LMP953

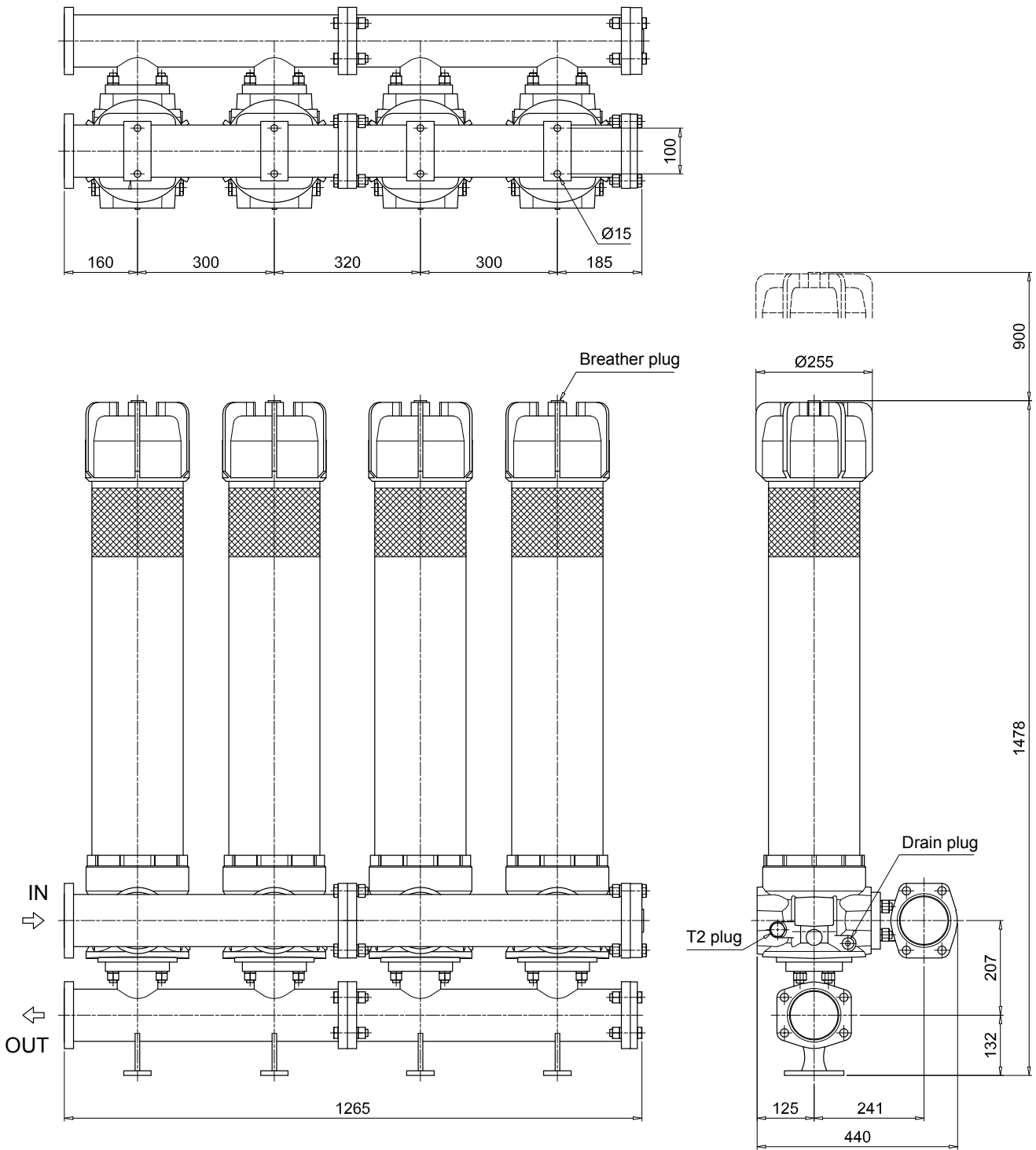


T2 plug =  
connection for differential indicator

# LMP 952-953-954

Dimensions

LMP954

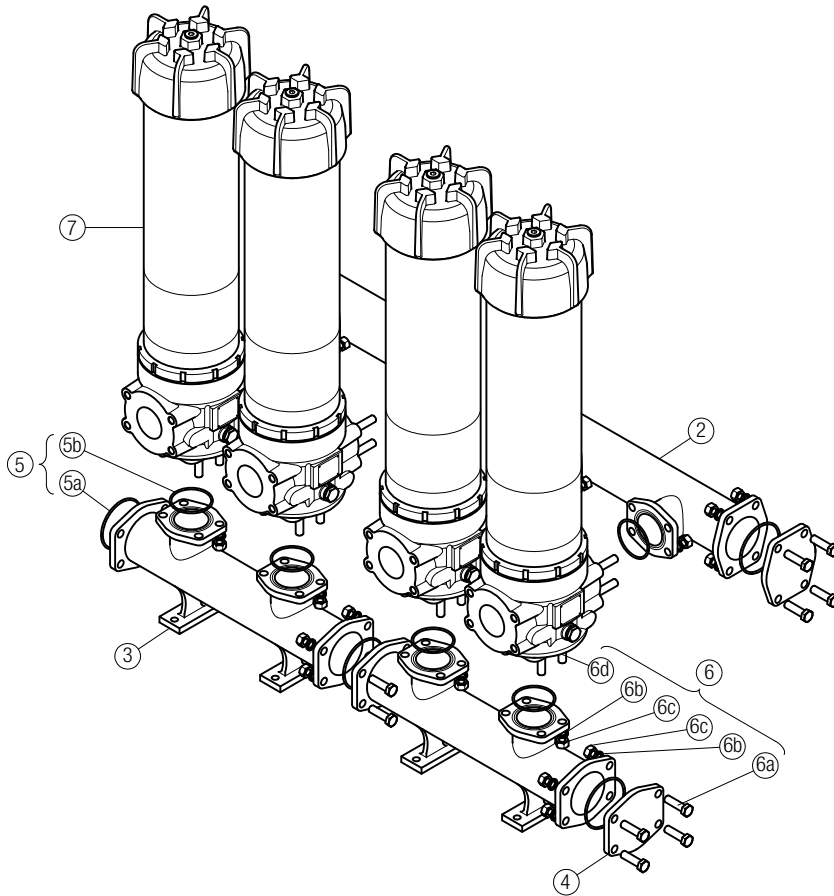


T2 plug =  
connection for differential indicator

# LMP 952-953-954 SPARE PARTS

Order number for spare parts

LMP 952 - 953 - 954



Item 7:  
for complete filter code and  
spare parts, see  
LMP 950 - 951 series chapter

Quantity:  
- filter spare parts:  
LMP 952 - 2 pcs.  
LMP 953 - 3 pcs.  
LMP 954 - 4 pcs.

- filter seal kit:  
LMP 952 - 2 pcs.  
LMP 953 - 3 pcs.  
LMP 954 - 4 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	Q.ty	Manifolds seal kit		Q.ty	Threaded fasteners kit		Q.ty	Filter
LMP 952	1 pc.	01039270	01039271	2 pcs.	01042012	1 pc.	02050404	02050405	1 pc.	02049051	2 pcs.	LMP9513xxF1xxxNP0x
LMP 953	1 pc.	01039337	01039338	2 pcs.		1 pc.	02050404	02050405	1 pc.	02049052	3 pcs.	
LMP 954	2 pcs.	01039270	01039271	2 pcs.		1 pc.	02050406	02050407	1 pc.	02049053	4 pcs.	