LMP 952-953-954 series

Maximum working pressure up to 2.5 MPa (25 bar) - Flow rate up to 4500 l/min
**Low & Medium Pressure filters**

Maximum working pressure up to 2.5 MPa (25 bar)
Flow rate up to 4500 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 4500 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

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**Technical data**

**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) ±10%
- Other opening pressures on request.

**Δp 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

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**Weights [kg] and volumes [dm³]**

<table>
<thead>
<tr>
<th>Filter series</th>
<th>Weights [kg]</th>
<th>Volumes [dm³]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Length</td>
<td></td>
</tr>
<tr>
<td>LMP 952</td>
<td>96</td>
<td>66</td>
</tr>
<tr>
<td>LMP 953</td>
<td>138</td>
<td>99</td>
</tr>
<tr>
<td>LMP 954</td>
<td>192</td>
<td>132</td>
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</tbody>
</table>
Flow rates [l/min]

<table>
<thead>
<tr>
<th>Filter series</th>
<th>Length</th>
<th>A03</th>
<th>A06</th>
<th>A10</th>
<th>A16</th>
<th>A25</th>
<th>M25</th>
<th>M60</th>
<th>M90</th>
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<tr>
<td>LMP 952</td>
<td>3</td>
<td>2172</td>
<td>2294</td>
<td>2766</td>
<td>3106</td>
<td>3256</td>
<td>3998</td>
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<tr>
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<td>2842</td>
<td>2964</td>
<td>3403</td>
<td>3696</td>
<td>3820</td>
<td>4395</td>
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<tr>
<td>LMP 954</td>
<td>3</td>
<td>3259</td>
<td>3372</td>
<td>3770</td>
<td>4026</td>
<td>4133</td>
<td>4618</td>
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</tr>
</tbody>
</table>

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$^2$/s (cSt) and a density of 0.86 kg/dm$^3$.

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**

<table>
<thead>
<tr>
<th>Filter series</th>
<th>Execution S - Execution B</th>
<th>Execution S - Execution B</th>
<th>Execution S - Execution B</th>
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</thead>
<tbody>
<tr>
<td>LMP 952</td>
<td>•</td>
<td>-</td>
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<tr>
<td>LMP 953</td>
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<tr>
<td>LMP 954</td>
<td>-</td>
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</tbody>
</table>
The curves are plotted using mineral oil with density of 0.86 kg/dm³ in compliance with ISO 3968. Δp varies proportionally with density.
**GENERAL INFORMATION LMP 952-953-954**

### Manifolds

**FA**
Position of manifolds
IN - OUT connections

**Execution P02**

**CMV4 & CUV4 Flange options**

<table>
<thead>
<tr>
<th>Code</th>
<th>Thread</th>
<th>Materials</th>
</tr>
</thead>
</table>
| 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 |

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**“Internal tube for low flow rate”**
is recommended for flow rate values below:
LMP 952 - 300 l/min  
LMP 953 - 450 l/min  
LMP 954 - 600 l/min

The use of option P02 makes it easier to fill the housing with the operating fluid.
### Complete Filter

<table>
<thead>
<tr>
<th>Series and size</th>
<th>Configuration example: LMP952</th>
<th>3</th>
<th>B</th>
<th>A</th>
<th>FA</th>
<th>A10</th>
<th>N</th>
<th>P01</th>
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<tr>
<td>LMP954</td>
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</tr>
</tbody>
</table>

**Length**

- 3

**Bypass valve**

- S Without bypass
- B With bypass 3.5 bar

**Seals and treatments**

- A NBR
- V FPM

**Connections**

- FA 4” SAE 3000 psi

**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 dp**

- N 20 bar

**Execution**

- P01 MP Filtri standard
- P02 With internal tube for low flow rate
- Pxx Customized

### Filter Element

<table>
<thead>
<tr>
<th>Element series and size</th>
<th>Configuration example: CU950</th>
<th>3</th>
<th>A10</th>
<th>A</th>
<th>N</th>
<th>P01</th>
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<tr>
<td>CU950</td>
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</table>

**Element length**

- 3

**Filter series and size**

- LMP952 Nr. 2 filter elements
- LMP953 Nr. 3 filter elements
- LMP954 Nr. 4 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 dp**

- N 20 bar

**Execution**

- P01 MP Filtri standard
- P02 With internal tube for low flow rate
- Pxx Customized

### Clogging Indicators

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

**PLUGS**

- T2 Differential indicator plug

See page 686

See page 706
T2 plug = connection for differential indicator
LMP 952-953-954

Dimensions

T2 plug = connection for differential indicator
LMP 952-953-954

Dimensions

T2 plug = connection for differential indicator
**LMP 952-953-954 SPARE PARTS**

Order number for spare parts

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**Item:**

- **2** Filter series:
  - LMP 952
  - LMP 953
  - LMP 954

<table>
<thead>
<tr>
<th>Filter series</th>
<th>Q.ty</th>
<th>Manifold IN</th>
<th>OUT</th>
<th>4&quot; SAE 3000 psi plugged flange</th>
<th>Q.ty</th>
<th>Manifolds seal kit</th>
<th>NBR</th>
<th>FPM</th>
<th>Threaded fasteners kit</th>
<th>Q.ty</th>
<th>Filter</th>
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</thead>
<tbody>
<tr>
<td>LMP 952</td>
<td>1 pc.</td>
<td>01039270</td>
<td>01039271</td>
<td>2 pcs. 01042012</td>
<td>1 pc.</td>
<td>02050404</td>
<td>02050405</td>
<td>1 pc. 02049051</td>
<td>1 pc. 02049052</td>
<td>3 pcs. LMP9513xxF1xxNP0x</td>
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<tr>
<td>LMP 953</td>
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<td>01039338</td>
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<td>1 pc.</td>
<td>02050404</td>
<td>02050405</td>
<td>1 pc. 02049051</td>
<td>1 pc. 02049052</td>
<td>3 pcs. LMP9513xxF1xxNP0x</td>
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<tr>
<td>LMP 954</td>
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<td>01039271</td>
<td>2 pcs.</td>
<td>1 pc.</td>
<td>02050406</td>
<td>02050407</td>
<td>1 pc. 02049053</td>
<td>4 pcs.</td>
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</tbody>
</table>

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**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.

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

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**LMP 952 - 953 - 954**

Low & Medium Pressure filters