

# LMP MULTIPOINT 110 - 120 - 123

**Maximum pressure 80 bar**  
**Flow rates to 200 l/min**



## Technical data

### Filter housing (Materials)

- Head: Aluminium
- Housing: Cathaphoresis-Painted Steel
- Bypass valve: Brass - Aluminium

### Pressure

- Working pressure: 80 bar (8 MPa)
- Test pressure: 120 bar (12 MPa)
- LMP 110 - Burst pressure: 290 bar (29 MPa)
- LMP 120/123 - Burst pressure: 380 bar (38 MPa)
- Pulse pressure fatigue test: 1.000.000 cycles with pressure from 0 to 80 bar (8 MPa)

### Temperature

- From -25 °C to +110 °C

### Bypass valve

- Opening pressure 3,5 bar ±10%
- Other opening pressures on request.

### Δp Elements type

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

### Seals

- Standard NBR series A
- Optional FPM series V

### LMP MULTIPOINT FILTERS ARE PROVIDED FOR VERTICAL MOUNTING

### Weights (kg)

Length	1	2	3	4
• LMP110	1,60	1,80	2,10	2,60
• LMP120	1,90	2,10	2,40	2,90
• LMP123	1,70	1,90	2,20	2,70

### Volumes (dm<sup>3</sup>)

Length	1	2	3	4
• LMP110	0,75	0,81	1,11	1,53
• LMP120	0,75	0,81	1,11	1,53
• LMP123	0,75	0,81	1,11	1,53

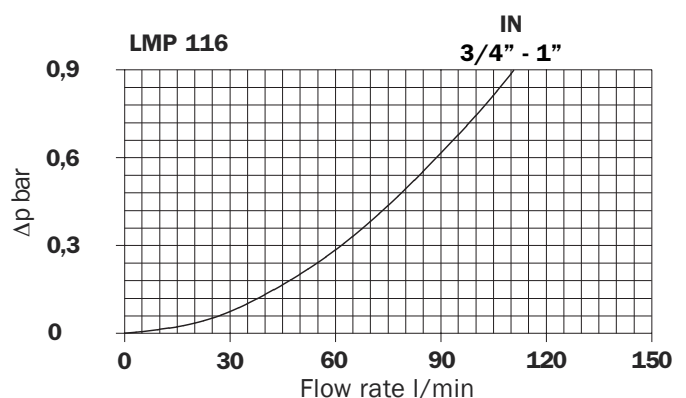
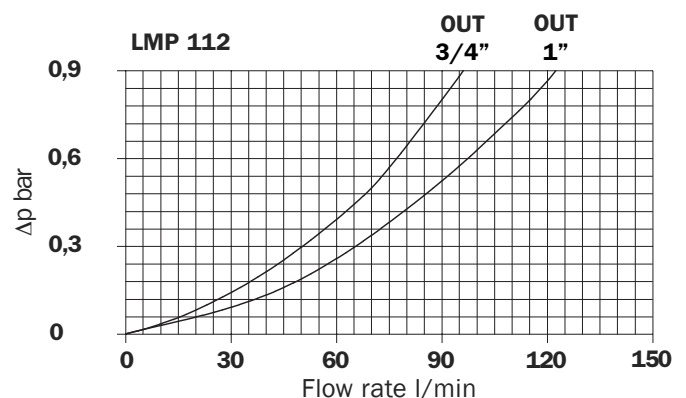
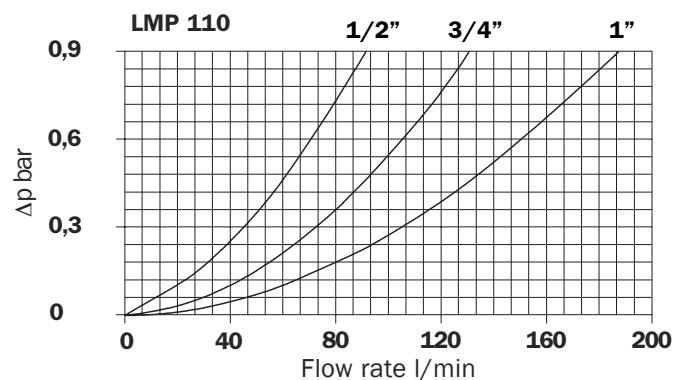
### Connections

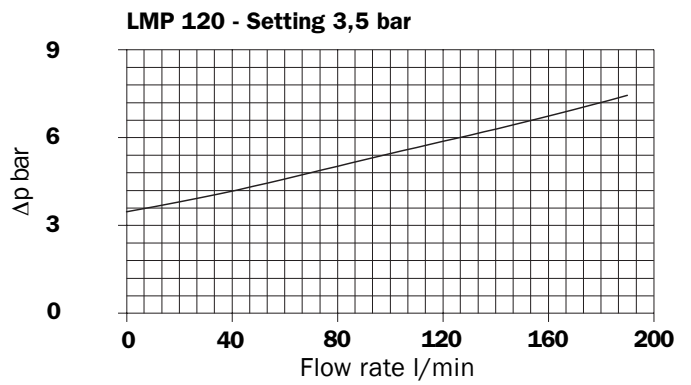
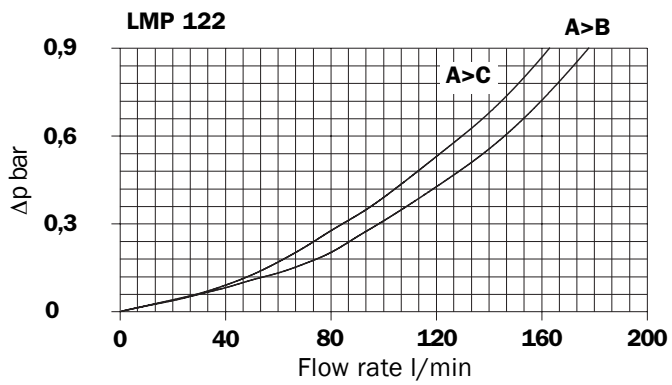
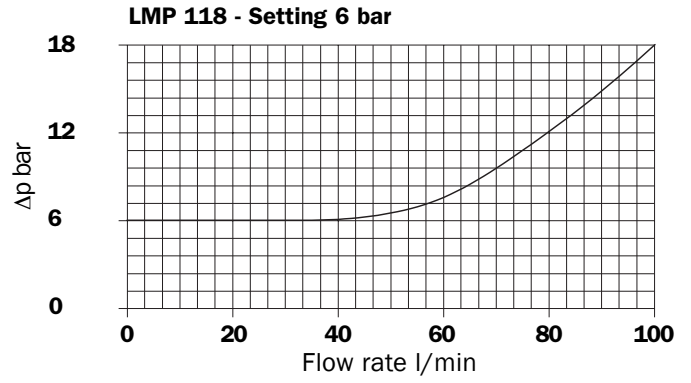
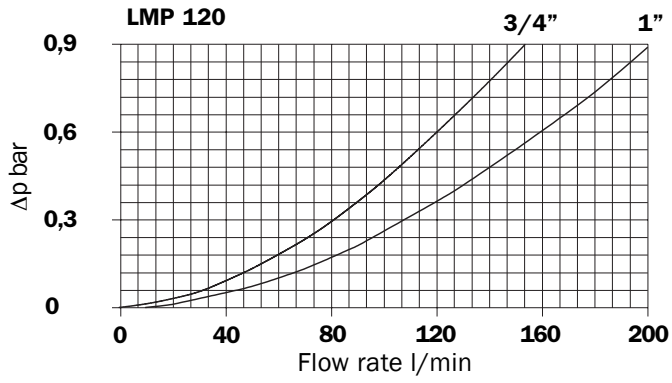
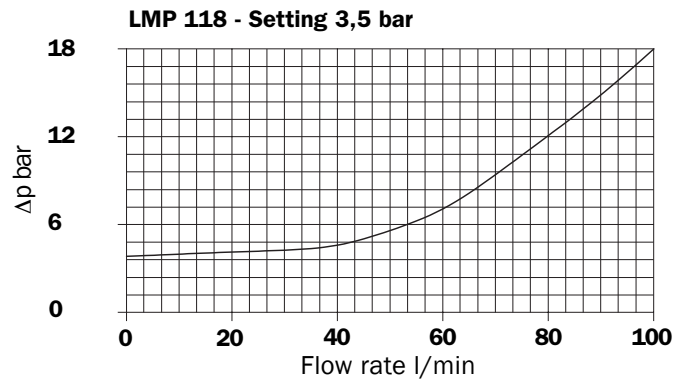
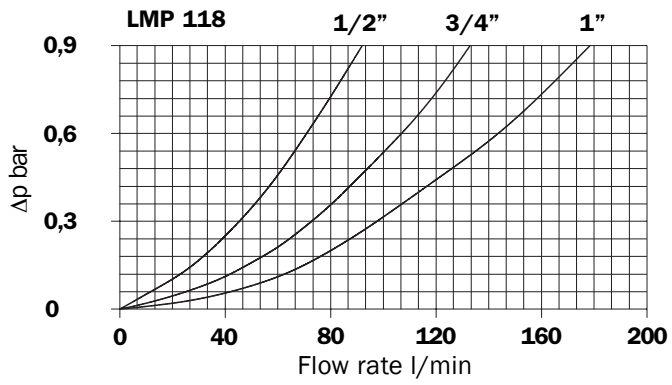
- LMP 110: Inlet/Outlet In-Line
- LMP 112: Inlet/Outlet In-Line + second inlet port 90°
- LMP 116: Inlet/Outlet In-Line + second outlet port 90°
- LMP 118: Inlet/Outlet In-Line + outlet bypass port 90°
- LMP 119: Inlet/Outlet In-Line + outlet safety valve 90°
- LMP 120: Same side
- LMP 123: Same side + 90°

### Filter housings Δp pressure drop

The curves are plotted utilising mineral oil with density of 0,86 kg/dm<sup>3</sup> to ISO 3968.

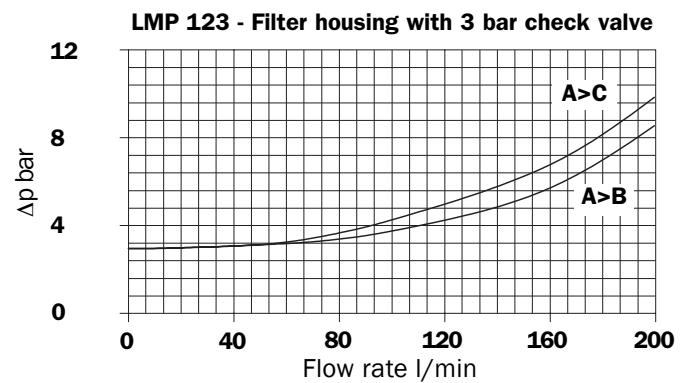
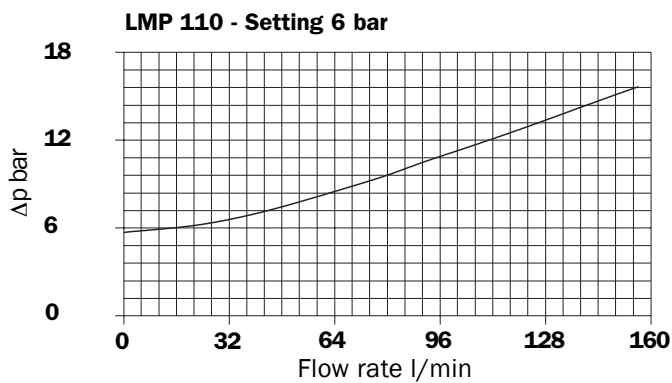
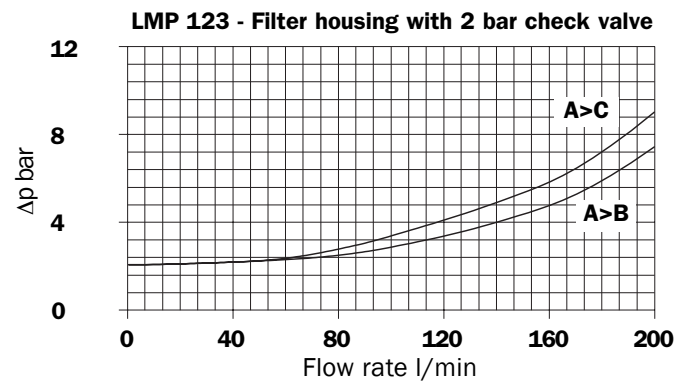
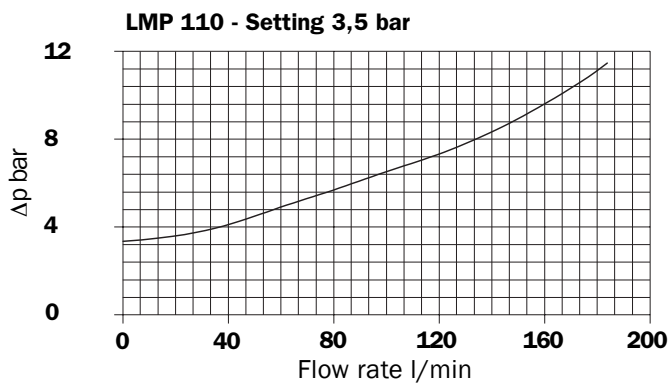
Δp varies proportionally with density.





**Valves**

**Bypass valve pressure drop**



**LMP 110**



**LMP 112**



**LMP 112**  
(plug not included)



**LMP 116**  
(plug not included)



**LMP 118**



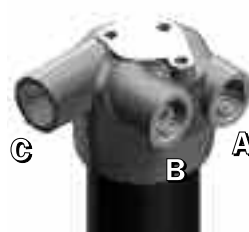
**LMP 120**



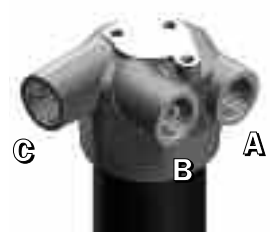
**LMP 122**



**LMP 123**  
Type 1

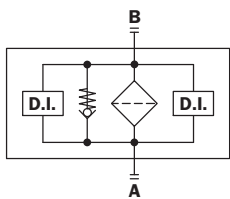


**LMP 123**  
Type 2



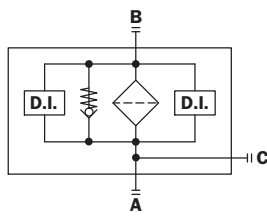
## Hydraulic symbols "MULTIPOINT"

Style  
**LMP 110**



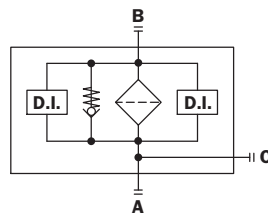
In-Line filter

Style  
**LMP 112**



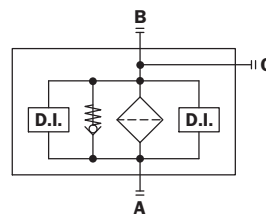
In-Line filter  
Double IN port

Style  
**LMP 112**



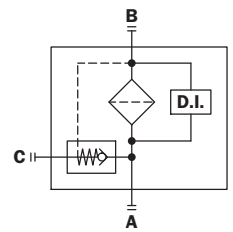
In-Line filter  
Lateral IN port

Style  
**LMP 116**



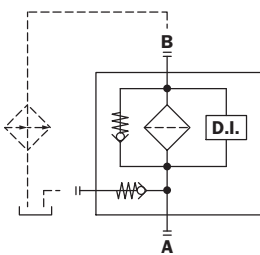
In-Line filter  
Lateral OUT port

Style  
**LMP 118**



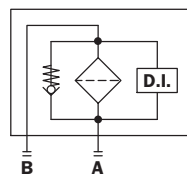
In-Line filter  
Bypass lateral.  
Always cleaning  
fluid in OUT port.

Style  
**LMP 119**



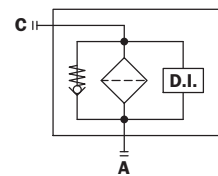
In-Line filter Safety valve 6 bar  
for heat exchanger

Style  
**LMP 120**



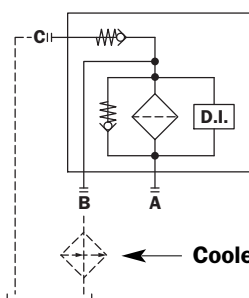
In-Line filter Port IN-OUT on the  
same side

Style  
**LMP 122**



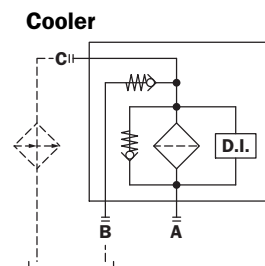
In-Line filter Lateral OUT port  
high flow

Style  
**LMP 123**  
Type 1



In-Line filter  
Bypass valve for heat  
exchanger high flow

Style  
**LMP 123**  
Type 2



Cooler

**Recommended maximum flow rate**

- Pressure drop of filter assembly equal to  $\Delta p$  0,7 bar.
- Oil kinematic viscosity 30 mm<sup>2</sup>/s (cSt).
- Density 0,86 kg/dm<sup>3</sup>.

	Length	Filtration							
		A03	A06	A10	A16	A25	P10	P25	M25
<b>LMP 110 - 119</b>	1	40	42	63	68	83	114	153	111
	2	49	57	80	82	97	130	155	128
	3	45	69	88	98	118	135	158	133
	4	66	98	112	117	136	140	160	140

Flow rate l/min

	Length	Filtration							
		A03	A06	A10	A16	A25	P10	P25	M25
<b>LMP 112</b>	1	36	37	55	57	65	85	112	83
	2	43	49	65	67	75	94	114	93
	3	54	58	70	76	87	96	115	95
	4	66	76	87	88	96	98	115	98

Flow rate l/min

	Length	Filtration							
		A03	A06	A10	A16	A25	P10	P25	M25
<b>LMP 116</b>	1	36	37	53	56	64	80	95	77
	2	43	47	64	65	72	87	96	86
	3	55	56	67	73	83	89	97	88
	4	63	72	79	83	87	92	98	90

Flow rate l/min

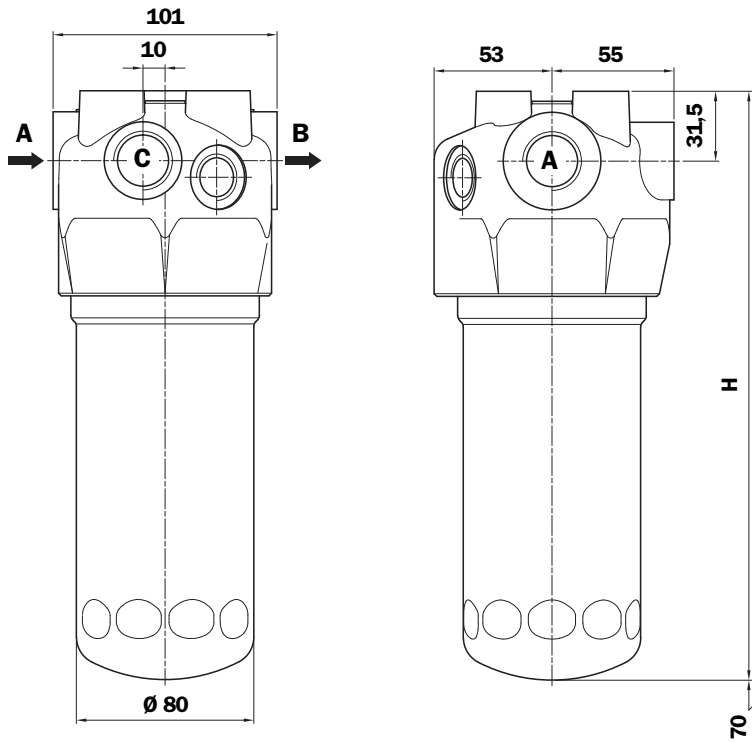
	Length	Filtration							
		A03	A06	A10	A16	A25	P10	P25	M25
<b>LMP 120</b>	1	39	42	66	69	87	129	187	126
	2	48	57	86	88	108	153	187	150
	3	67	72	97	110	136	161	188	158
	4	88	108	128	135	162	170	190	168

Flow rate l/min

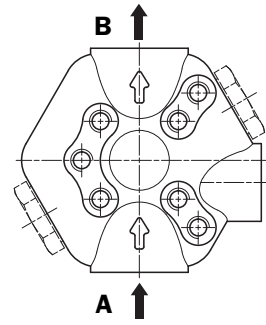
	Length	Filtration							
		A03	A06	A10	A16	A25	P10	P25	M25
<b>LMP 120</b>	1	42	44	70	74	92	137	205	132
	2	52	61	90	91	115	163	205	159
	3	72	77	100	113	141	173	208	169
	4	93	113	133	143	172	180	215	178

Flow rate l/min

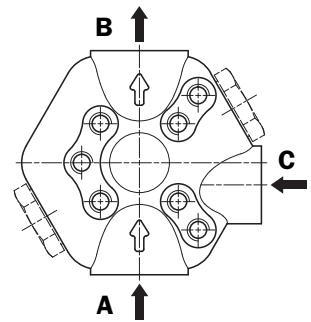
# LMP 110 - 112 - 116 - 118 - 119



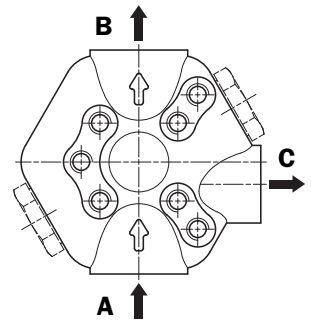
**LMP 110**



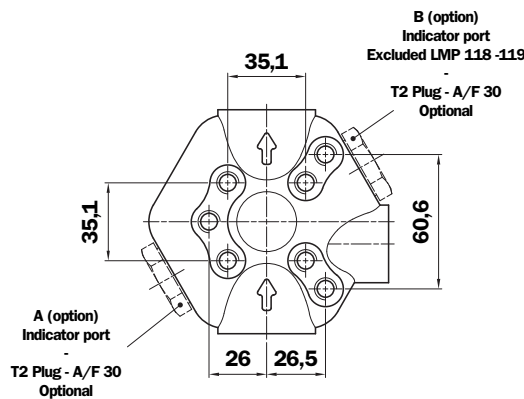
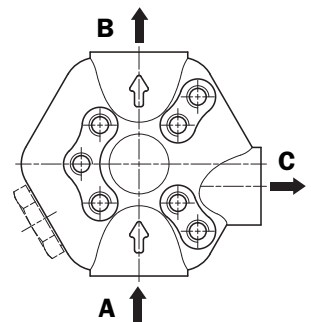
**LMP 112**



**LMP 116**



**LMP 118 - 119**



**LMP 110 - 112 - 116 - 118 - 119**

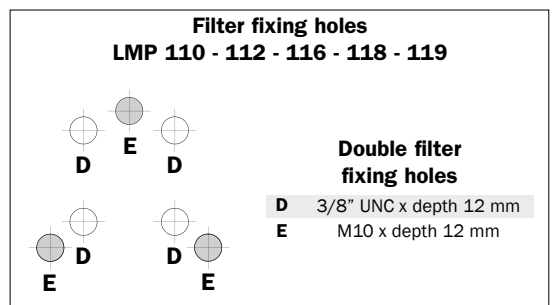
Length Filter	H mm
1	182
2	215
3	265
4	365

**LMP 110**  
Thread connections

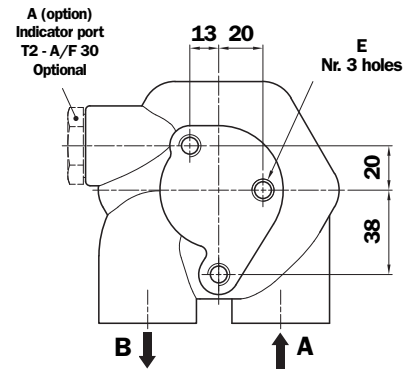
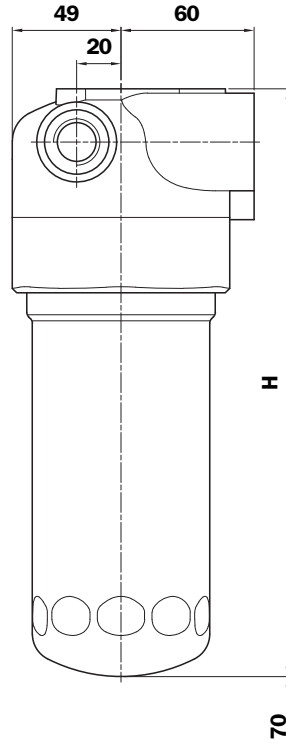
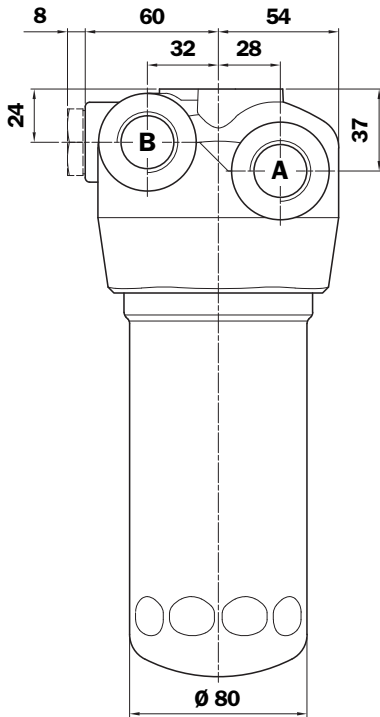
Type	Size
A	G 3/4"
B	G 1"
C	3/4"NPT
D	1" NPT
E	SAE 12 - 1 1/16" - 12 UN
F	SAE 16 - 1 5/16" - 12 UN

**LMP 112 - 116 - 118 - 119**  
Thread connections

Type	Size	C Lateral connections
A	G 3/4"	G 3/4"
B	G 1"	G 3/4"
C	3/4"NPT	3/4"NPT
D	1" NPT	3/4" NPT
E	SAE 12 - 1 1/16" - 12 UN	SAE 12 - 1 1/16" - 12 UN
F	SAE 16 - 1 5/16" - 12 UN	SAE 12 - 1 1/16" - 12 UN



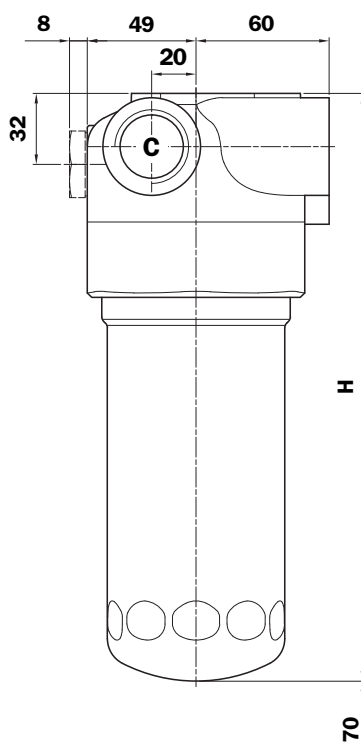
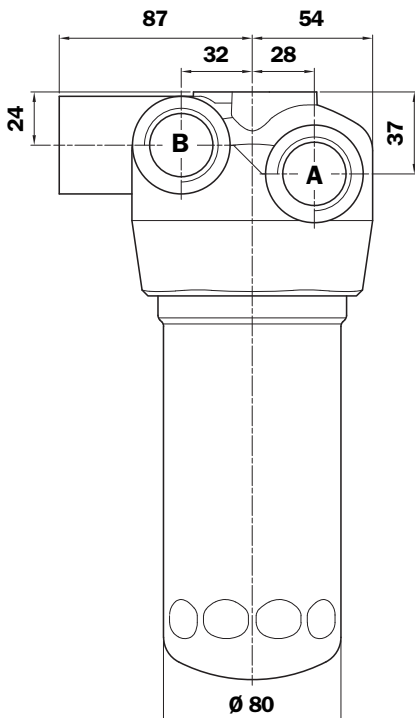
# LMP 120



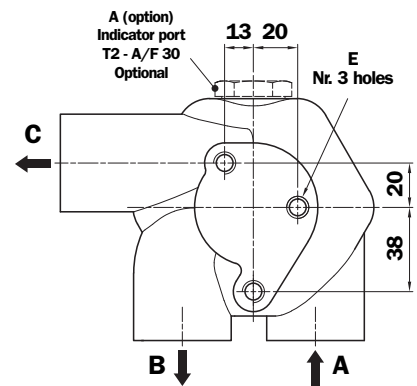
## LMP 120 Thread connections

Type	Size	E Depth 12 mm
A	G 3/4"	M10
B	G 1"	M10
C	3/4" NPT	3/8" UNC
D	1" NPT	3/8" UNC
E	SAE 12 - 1 1/16" - 12 UN	3/8" UNC
F	SAE 16 - 1.5/16" - 12 UN	3/8" UNC

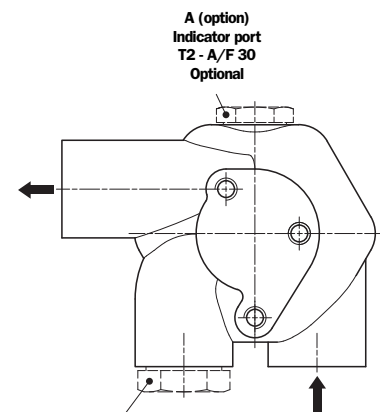
# LMP 122 - 123



## LMP 122



## LMP 123



LMP 122  
Plug not included

## LMP 120 - 122 - 123

Length Filter	H mm
1	182
2	215
3	265
4	365

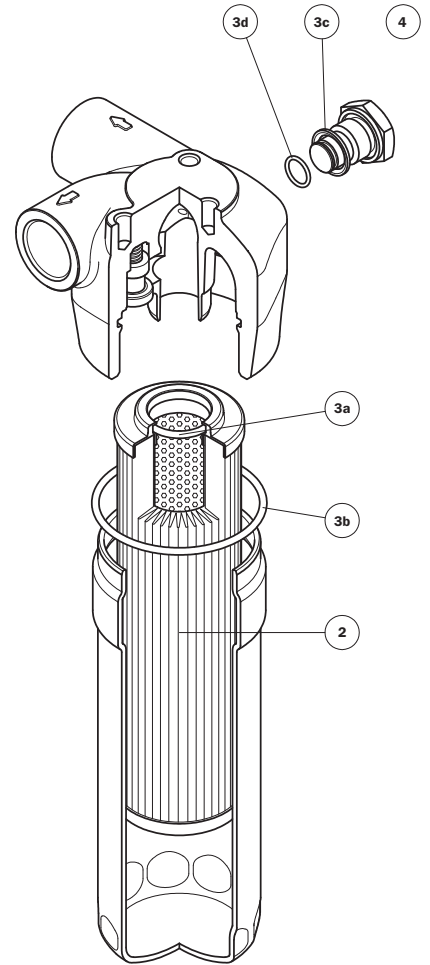
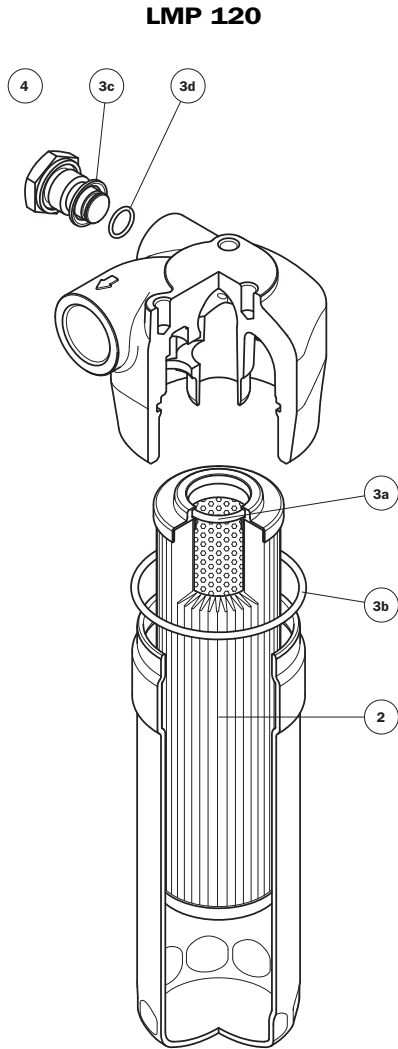
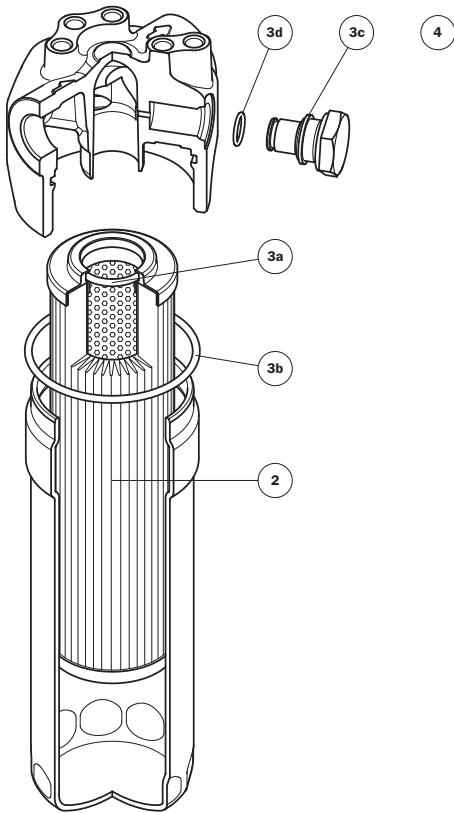
## LMP 122 - 123 Thread connections

Type	Size	E Depth 12 mm
B	G 1"	M10
D	1" NPT	3/8" UNC
F	SAE 16 - 1.5/16" - 12 UN	3/8" UNC

# Spare parts

## LMP 110 - 112 - 116 - 118 - 119

## LMP 122 - 123



Item	Description	Q.ty	FILTER Series LMP MULTIPORT	
1	Filter assembly	1	See order table	
2	Filter element	1	See order table	
3	Seal Kit	1	NBR 02050478	FPM 02050479
3a	O-Ring for filter element	1	O-R 4125 Ø 31,34 x 3,53	
3b	O-Ring for housing	1	O-R 4312 Ø 78,97 x 3,53	
3c	Seal for indicator	1	NBR 01030058	FPM 01030046
3d	O-Ring for indicator	1	O-R 2050 Ø 12,42 x 1,78	
4	Indicator connection plug	1	T2H	T2V
-	Indicator	1	See order table	

# Ordering information LMP 110 - 120 - 123

## Filter assembly

### LMP

Example: LMP

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**110 2 B A B 3 A10 N P01**

## Filter element

### CU

Example: CU

	<b>1</b>	<b>2</b>	<b>7</b>	<b>4</b>	<b>8</b>	<b>9</b>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**110 2 A10 A N P01**

### 1 - Style

#### Filter

- 110
- 112
- 116
- 118
- 119
- 120
- 122
- 123

#### Filter element

- 110
- 110
- 110
- 110
- 110
- 110
- 110
- 110

### 2 - Filter length

- 110
- 112
- 116
- 118
- 119
- 120
- 122
- 123



### 3 - Valves

- S** Without bypass (excluded LMP 118 - 119)
- B** With bypass

### LMP 123

#### Type 1 - Without bypass

- C** Check valve 2 bar
- D** Check valve 3 bar

#### Type 2 - Without bypass

- G** Check valve 2 bar
- H** Check valve 3 bar

#### Type 1 - With bypass

- M** Check valve 2 bar
- N** Check valve 3 bar

#### Type 2 - With bypass

- Q** Check valve 2 bar
- R** Check valve 3 bar

### 4 - Filter seals

- A** NBR
- V** FPM
- W** NBR (compatible with fluid HFA, HFB, HFC)

### 5 - Connections

#### Threaded

Type	Size
<b>A</b>	G 3/4"
<b>B</b>	G 1"
<b>C</b>	3/4"NPT
<b>D</b>	1" NPT
<b>E</b>	SAE 12 - 1.1/16" - 12 UN
<b>F</b>	SAE 16 - 1.5/16" - 12 UN

**A - C - E:**  
Not available for LMP 122  
**A - C - D - E:**  
Not available for LMP 123

### 6 - Indicator port

- 1** Without
- 2** With style LMP 110 - pos. A
- 3** With style LMP 110 - pos. B (excluded LMP 118-119-120-122-123)
- 6** With style LMP 110 - pos. A + B (excluded LMP 118-119-120-122-123)

### 7 - Filter element

- A03** Inorganic microfibre 3 µm
  - A06** Inorganic microfibre 6 µm
  - A10** Inorganic microfibre 10 µm
  - A16** Inorganic microfibre 16 µm
  - A25** Inorganic microfibre 25 µm
  - M25** Wire mesh 25 µm
  - M60** Wire mesh 60 µm
  - M90** Wire mesh 90 µm
  - P10** Resin - Impregnated paper
  - P25** Resin - Impregnated paper
- Absolute filtration  
 Inorganic  
 Microfibre  
 βx (c) ≥ 1000  
 Nominal  
 Filtration  
 Nominal  
 Filtration

### 8 - Max filter element differential pressure

- N** Δp 20 bar

### 9 - Option

- P01** MP Filtri standard
- Pxx** On request

**For Clogging Indicator:**  
See page 318

**MP Filtri** - The filter functions as described in this bulletin are valid exclusively for original MP Filtri filter elements and replacement parts. All rights reserved.

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