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Multiport

by MP Filtri Technology



Maximum pressure 80 bar
Flow rates to 200 l/min



LMP 110



Maximum pressure 80 bar
Flow rates to 160 l/min

Technical data

LMP 110

Filter housing (Materials)

- Head: Aluminium
- Housing: Cataphoresis painting
- Bypass valve: Brass/Aluminium

Pressure

LMP 110 length: 1 - 2 - 3 - 4

- Working pressure: 80 bar (8 MPa)
- Test pressure: 120 bar (12 MPa)
- Burst pressure: 290 bar (29 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

- Series N and W elements: 20 bar
- Oil flow from exterior to interior.

Seals

- Standard NBR series A
- Optional FPM series V

Weights (kg)

Length

- LMP110 - 1 1,6
- LMP110 - 2 1,8
- LMP110 - 3 2,1
- LMP110 - 4 2,6

Volumes (dm³)

Length

- LMP110 - 1 0,75
- LMP110 - 2 0,81
- LMP110 - 3 1,11
- LMP110 - 4 1,53

Connections

- Inlet/Outlet in Line LMP 110
- Inlet/Outlet in Line + second inlet port 90° LMP 112
- Inlet/Outlet in Line + second outlet port 90° LMP 116
- Inlet/Outlet in Line + outlet bypass port 90° LMP 118

Compatibility

- Housings compatible with: Mineral oils to ISO 2943 - aqueous emulsions synthetic fluids, water and glycol.
- The filter elements are compatible with: Mineral oils to ISO 2943, Synthetic fluids Aqueous emulsions, water and glycol (series W required).

- NBR seals series A, compatible with: Mineral oils to ISO 2943 - aqueous emulsions synthetic fluids, water and glycol.
- V series FPM seals, compatible with: Synthetic fluids type HS-HFDR-HFDS-HFDU To ISO 2943

Filter Element Area

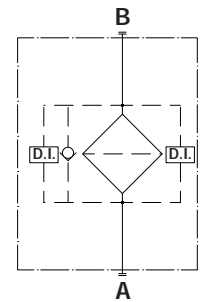
Filter element in stainless steel mesh
Length

Type	1	2	3	4
CU 110	1302	1764	2464	3864
Values expressed in cm ²				

LMP 110



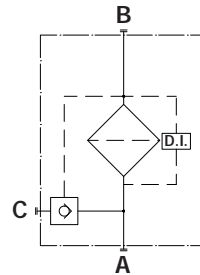
Style
LMP 110



LMP 118



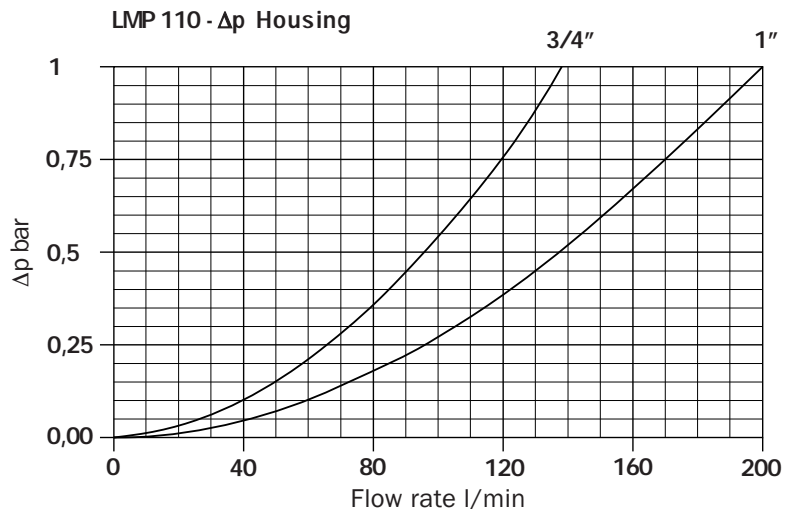
Style
LMP 118



Filter housings Δp pressure drop

The curves are plotted utilising mineral oil with density of 0.86 kg/dm³ to ISO 3968.

Δp varies proportionally with density.



LMP 112



**LMP 112
(plug not included)**

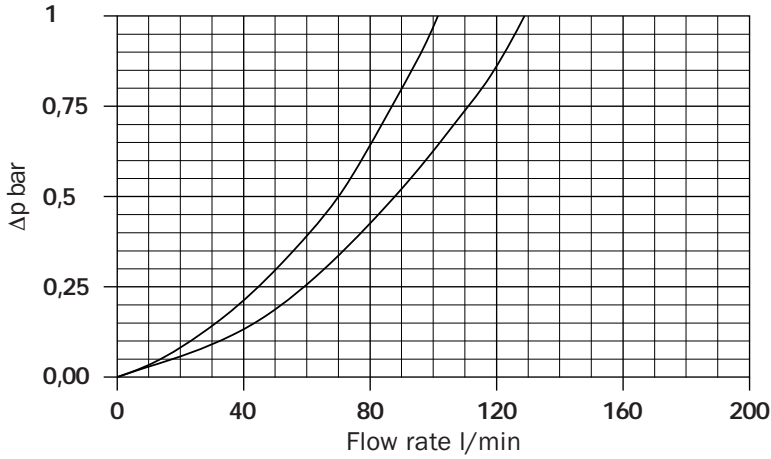


**LMP 116
(plug not included)**

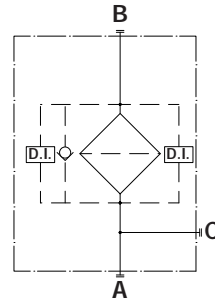


LMP 112 - Δp Housing

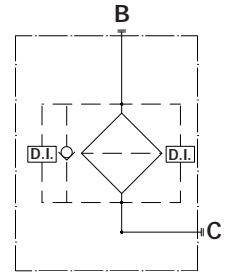
OUT 3/4" OUT 1"



Style
LMP 112

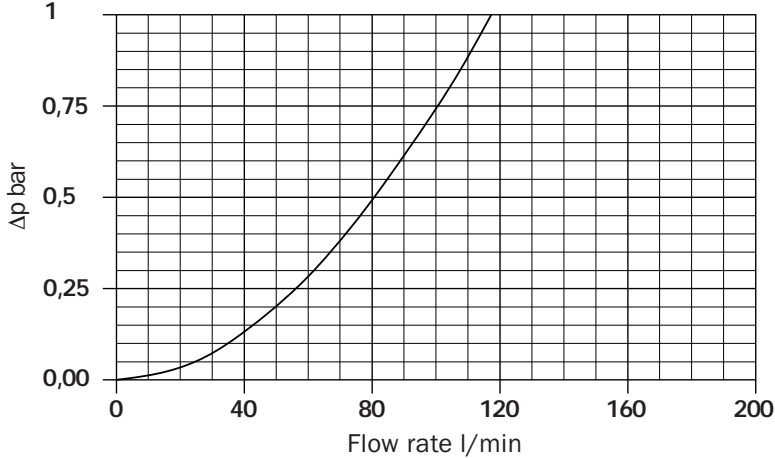


Style
LMP 112

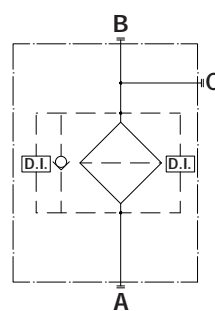


LMP 116 - Δp Housings

IN 3/4" - 1"

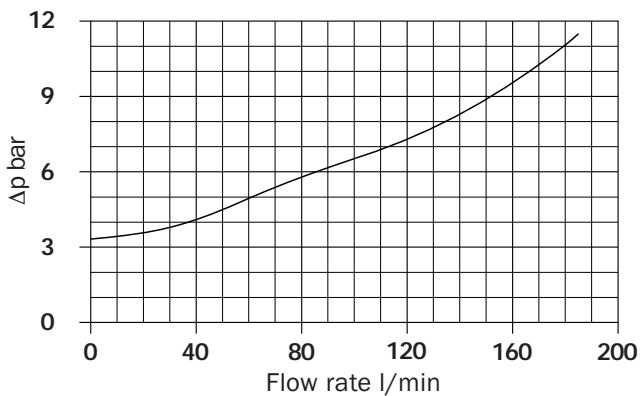


Style
LMP 116



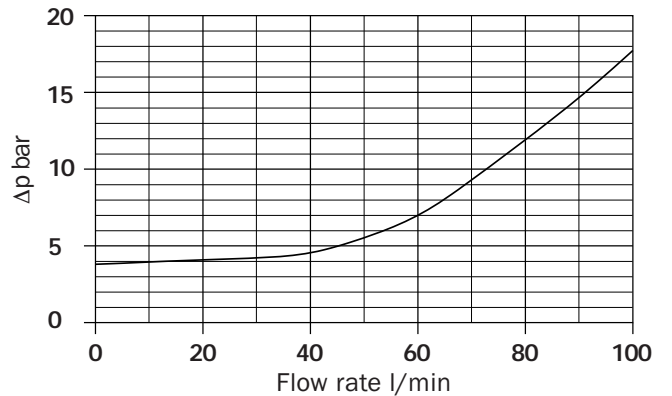
Valves

**Bypass valve pressure drop
LMP 110 - LMP 112 - LMP 116**



Valves

**Bypass valve pressure drop
LMP 118**



Filter Sizing

Correct sizing of the filter must be based on a variable pressure drop depending on the application:

- return filter Δp from 0.4 to 0.6 bar
- filter on lubrication lines Δp from 0.3 to 0.5 bar
- off-line fluid power plants Δp from 0.3 to 0.4 bar
- off-line filter test benches Δp from 0.1 to 0.3 bar
- over-boost filter Δp from 0.4 to 0.6 bar

The pressure drop calculation is performed by adding together the value for the housing and the value for the filter element.

The pressure drop in the housing is proportional to the fluid density kg/dm^3 ; all the graphs in the catalogue are referred to mineral oil with density of 0.86 kg/dm^3 .

The filter element pressure drop value is proportional to viscosity mm^2/s , the Y values in the catalogue are referred to viscosity of $30 \text{ mm}^2/\text{s}$.

Sizing data for single cartridge, head at top

Δp Tot.

Δp_c Filter housing

Δp_e Filter element

Y Multiplication factor (see below)

Q l/min = flow rate

V1 = reference viscosity $30 \text{ mm}^2/\text{s}$ (cSt)

V2 = operating viscosity in mm^2/s (cSt)

Δp Tot. = $\Delta p_c + \Delta p_e$

$\Delta p_e = Y : 1000 \times Q \times (V2/V1)$

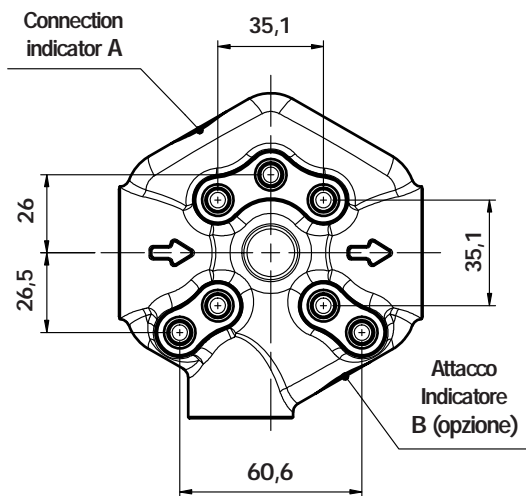
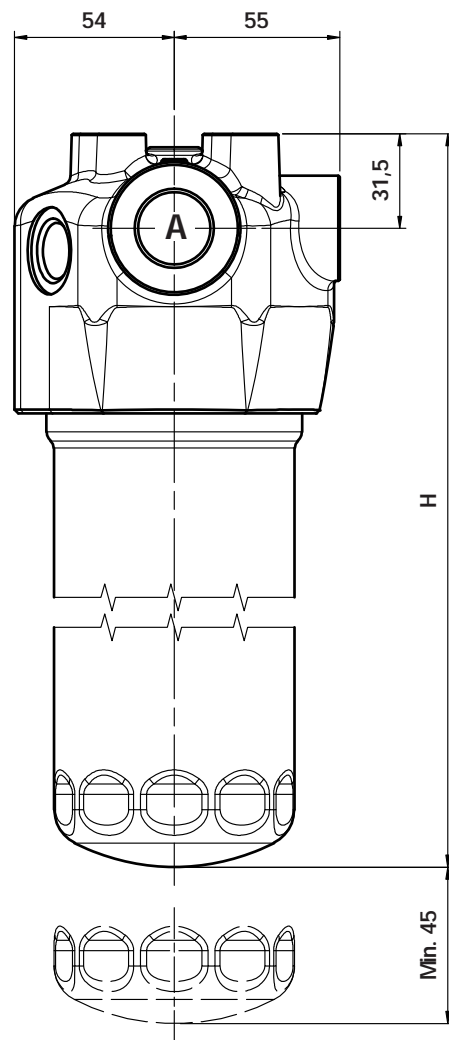
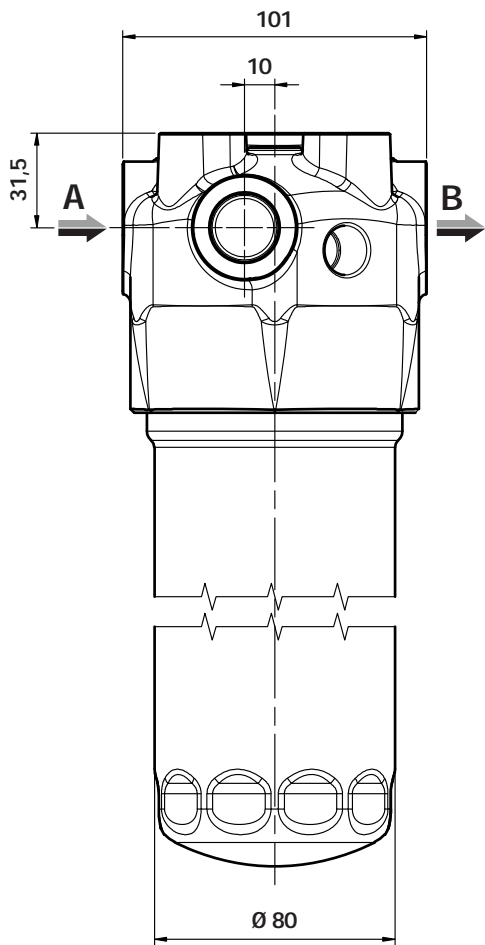
Multiplication factor "Y" for definition of the pressure drop of filter elements.

Reference viscosity $30 \text{ mm}^2/\text{s}$

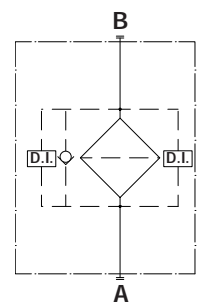
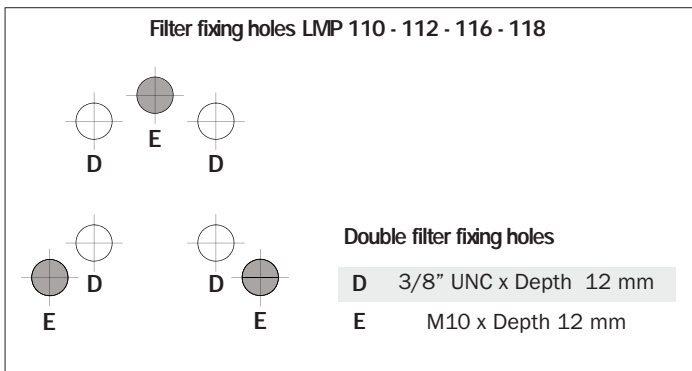
Filter Element	Absolute Filtration					Nominal Filtration		Nominal Filtration
	Series N					Series N		Series N
Type	A 0 3	A 0 6	A 1 0	A 1 6	A 2 5	P 1 0	P 2 5	M 2 5
CU 110 1	16,25	15,16	8,754	8,142	5,875	2,862	2,651	0,1431
2	12,62	10,44	6,111	6,024	4,155	1,598	1,486	0,1253
3	8,571	7,951	5,066	4,066	2,397	1,242	1,153	0,1067
4	5,759	4,051	2,798	2,358	1,142	0,9072	0,8491	0,0558

Dimensions

LMP 110



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

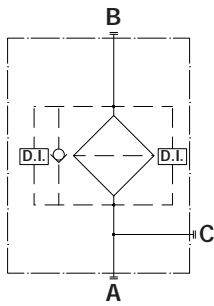
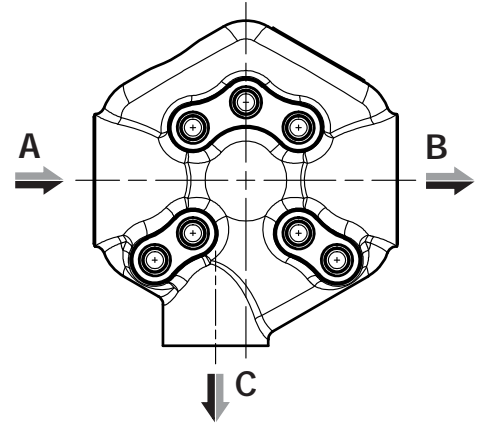
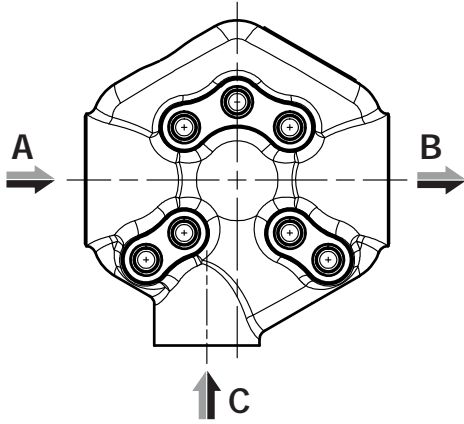


Connections A - B

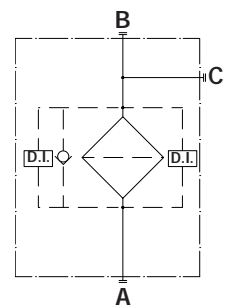
A	G 3/4"
B	G 1"
C	3/4" NPT
D	1" NPT
E	SAE 12
F	SAE 16

LMP 112

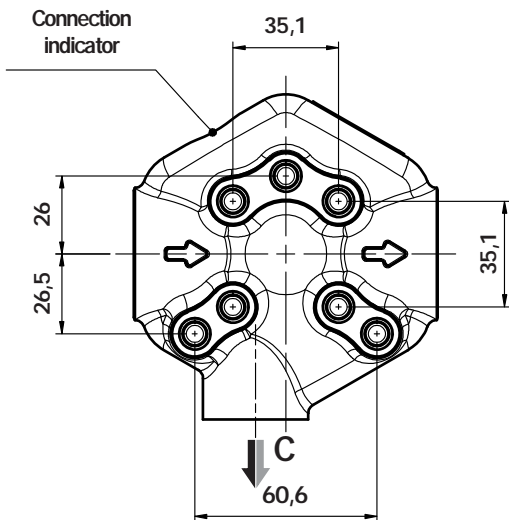
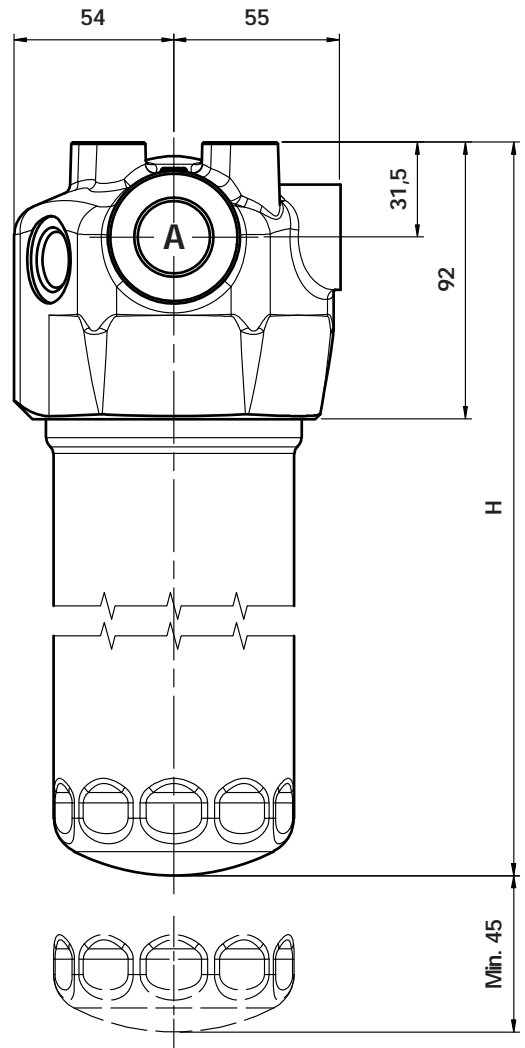
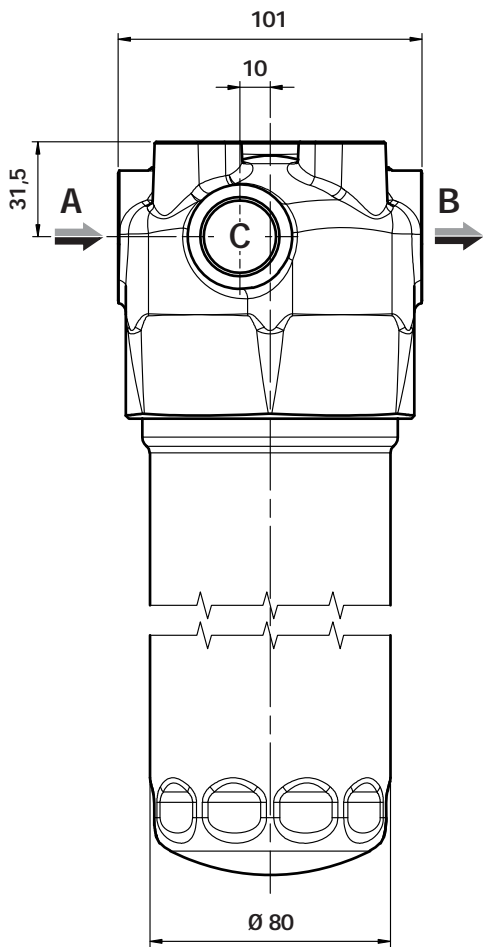
LMP 116



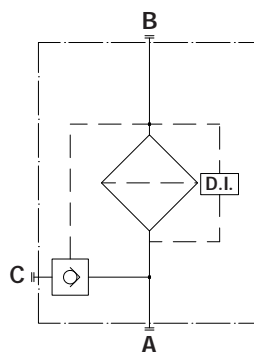
	Connections A - B	Lateral connections C
A	G 3/4"	G 3/4"
B	G 1"	G 3/4"
C	3/4" NPT	3/4" NPT
D	1" NPT	3/4" NPT
E	SAE 12	SAE 12
F	SAE 16	SAE 12



LMP 118



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



Connections	Lateral connections
A - B	C
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	SAE 12
F SAE 16	SAE 12

Ordering information LMP110-118

Filter assembly LMP

Example: LMP

1	2	3	4	5	6	7	8	9
<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

Elemento filtrante CU 110

Example: CU110

2	7	4	8	9
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	A10	A	N	P01

1 - Style

<input type="checkbox"/> 110
<input type="checkbox"/> 112
<input type="checkbox"/> 116
<input type="checkbox"/> 118

6 - Indicator port

<input type="checkbox"/> 1	No
<input type="checkbox"/> 2	A
<input type="checkbox"/> 3	B (excluded LMP 118)
<input type="checkbox"/> 6	A + B (excluded LMP 118)

2 - Filter length

<input type="checkbox"/> 1
<input type="checkbox"/> 2
<input type="checkbox"/> 3
<input type="checkbox"/> 4

7 - Filter element

<input type="checkbox"/> A03	3 µm	} Absolute filtration Inorganic microfibre βx (c) ≥ 1000
<input type="checkbox"/> A06	6 µm	
<input type="checkbox"/> A10	10 µm	
<input type="checkbox"/> A16	16 µm	
<input type="checkbox"/> A25	25 µm	
<input type="checkbox"/> M25	25 µm	} Nominal Filtration Metal mesh
<input type="checkbox"/> M60	60 µm	
<input type="checkbox"/> P10	10 µm	} Nominal Filtration Cellulose
<input type="checkbox"/> P25	25 µm	

3 - Valves

<input type="checkbox"/> S	Without bypass valve (excluded LMP 118)
<input type="checkbox"/> B	With bypass valve Opening pressure: 3,5 bar
<input type="checkbox"/>	With bypass valve Opening pressure: on request

4 - Seals

<input type="checkbox"/> A	NBR
<input type="checkbox"/>	On request

5 - Connection

Type

<input type="checkbox"/> A	G 3/4"
<input type="checkbox"/> B	G 1"
<input type="checkbox"/> C	3/4" NPT
<input type="checkbox"/> D	1" NPT
<input type="checkbox"/> E	SAE 12
<input type="checkbox"/> F	SAE 16

8 - Collapse pressure

<input type="checkbox"/> N	Δp 20 bar
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9 - Options

<input type="checkbox"/> P01	MP Filtri standard
<input type="checkbox"/> Pxx	Customer request

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.

The data in this publication are purely guideline. MP Filtri reserves the right to make changes to the models described herein at any time it deems fit in relation to technical or commercial requirements. The colours of the products shown on the cover are purely guideline. Copyright. All rights reserved.

LMP 120



Maximum pressure 80 bar
Flow rates to 200 l/min

Technical data

LMP 120

Filter housing (Materials)

- Head: Aluminium
- Housing: Cataphoresis painting
- Bypass valve: Brass/Aluminium

Pressure

LMP 120/122/123 length: 1 - 2 - 3 - 4

- Working pressure: 80 bar (8 MPa)
- Test pressure: 120 bar (12 MPa)
- 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 \pm 10%
- Other opening pressures on request.

Δp Elements type

- Series N and W elements: 20 bar
- Oil flow from exterior to interior.

Seals

- Standard NBR series A
- Optional FPM series V

Weights (kg)

Length

- LMP120 - 1 1,9
- LMP120 - 2 2,1
- LMP120 - 3 2,4
- LMP120 - 4 2,9

Volumes (dm³)

Length

- LMP120 - 1 0,75
- LMP120 - 2 0,81
- LMP120 - 3 1,11
- LMP120 - 4 1,53

Compatibility

- Housings compatible with: Mineral oils to ISO 2943 - aqueous emulsions synthetic fluids, water and glycol.
- The filter elements are compatible with: Mineral oils to ISO 2943, Synthetic fluids Aqueous emulsions, water and glycol (series W required).
- NBR seals series A, compatible with: Mineral oils to ISO 2943 - aqueous emulsions synthetic fluids, water and glycol.
- V series FPM seals, compatible with: Synthetic fluids type HS-HFDR-HFDS-HFDU To ISO 2943

Filter Element Area

Filter element in stainless steel mesh

Type	Length			
	1	2	3	4
CU 110	1302	1764	2464	3864
Values expressed in cm ²				

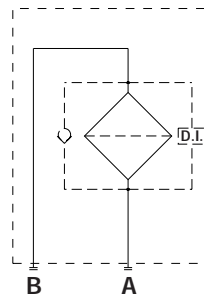
LMP 120



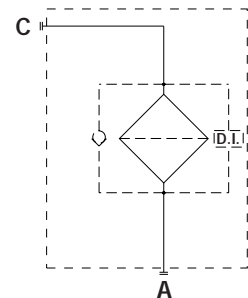
LMP 122



Style
LMP 120



Style
LMP 122

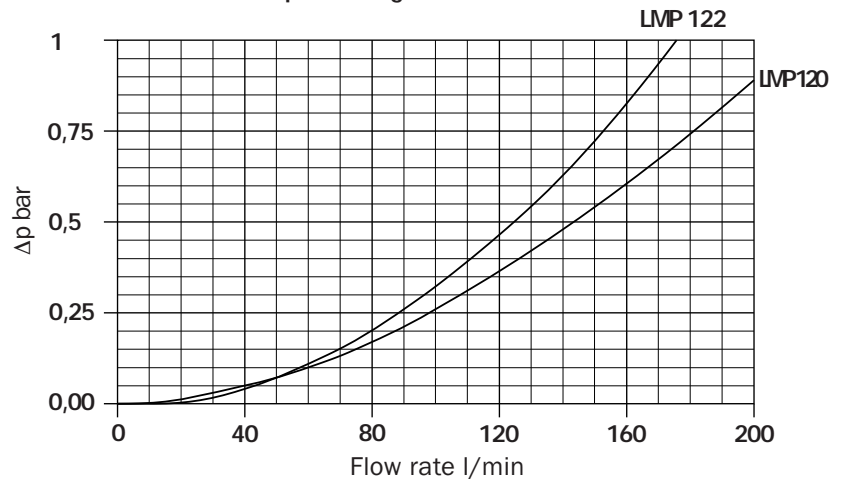


Filter housings Δp pressure drop

The curves are plotted utilising mineral oil with density of 0.86 kg/dm³ to ISO 3968.

Δp varies proportionally with density.

LMP 120/122 - Δp Housing



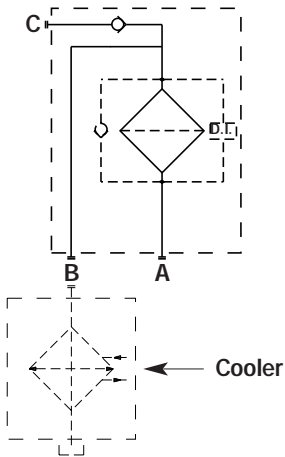
**LMP 123
Type 1**



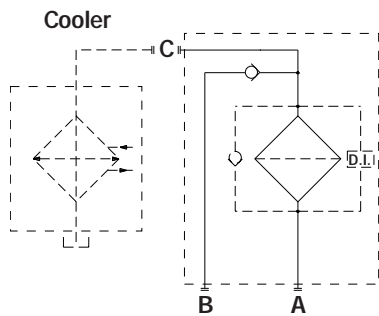
**LMP 123
Type 2**



Style
LMP 123
Type 1



Style
LMP 123
Type 2

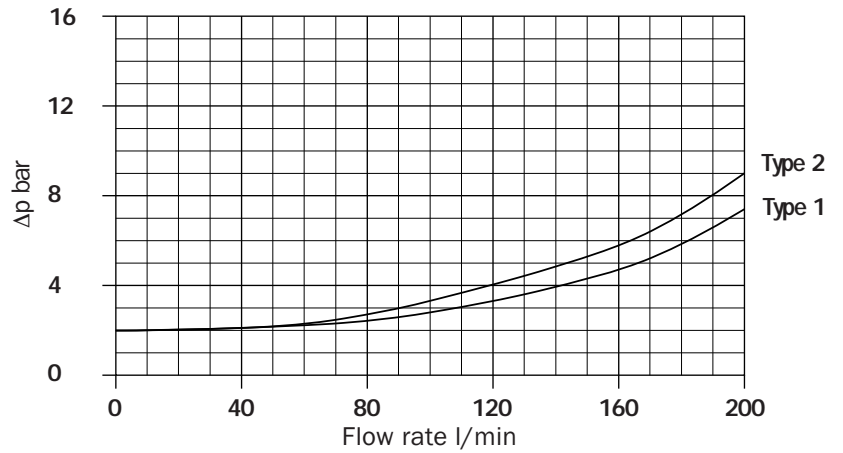


Filter housings Δp pressure drop

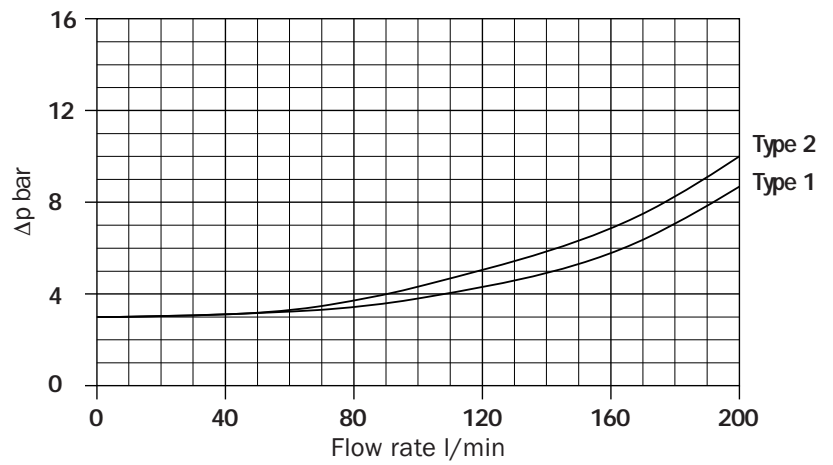
The curves are plotted utilising mineral oil with density of 0.86 kg/dm³ to ISO 3968.

Δp varies proportionally with density.

LMP 123 - Δp Housing with check valve 2 bar setting



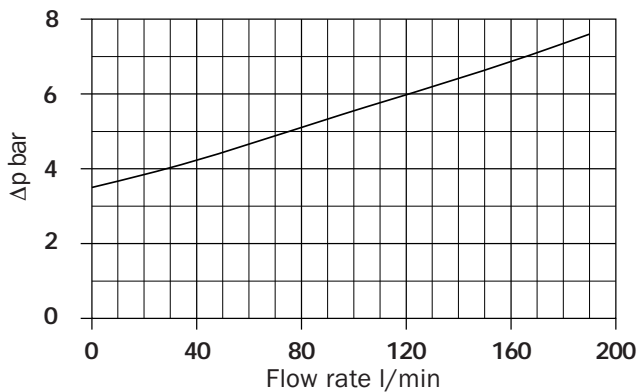
LMP 123 - Δp Housing with check valve 3 bar setting



Valves

Bypass valve pressure drop

LMP 120/LMP 123



Filter sizing

Correct sizing of the filter must be based on a variable pressure drop depending on the application:

- return filter Δp from 0.4 to 0.6 bar
- filter on lubrication lines Δp from 0.3 to 0.5 bar
- off-line fluid power plants Δp from 0.3 to 0.4 bar
- off-line filter test benches Δp from 0.1 to 0.3 bar
- over-boost filter Δp from 0.4 to 0.6 bar

The pressure drop calculation is performed by adding together the value for the housing and the value for the filter element.

The pressure drop in the housing is proportional to the fluid density kg/dm^3 ; all the graphs in the catalogue are referred to mineral oil with density of 0.86 kg/dm^3 .

The filter element pressure drop value is proportional to viscosity mm^2/s , the Y values in the catalogue are referred to viscosity of $30 \text{ mm}^2/\text{s}$.

Sizing data for single cartridge, head at top

Δp Tot.

Δp_c Filter housing

Δp_e Filter element

Y Multiplication factor (see below)

Q l/min = flow rate

V1 = reference viscosity $30 \text{ mm}^2/\text{s}$ (cSt)

V2 = operating viscosity in mm^2/s (cSt)

Δp Tot. = $\Delta p_c + \Delta p_e$

$\Delta p_e = Y : 1000 \times Q \times (V2/V1)$

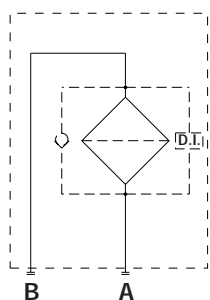
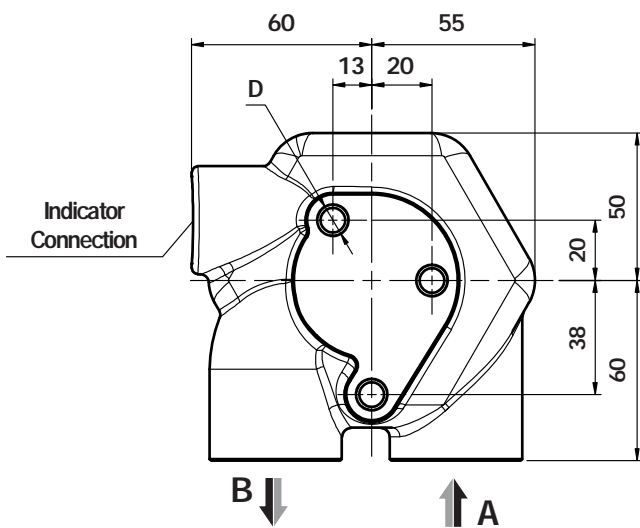
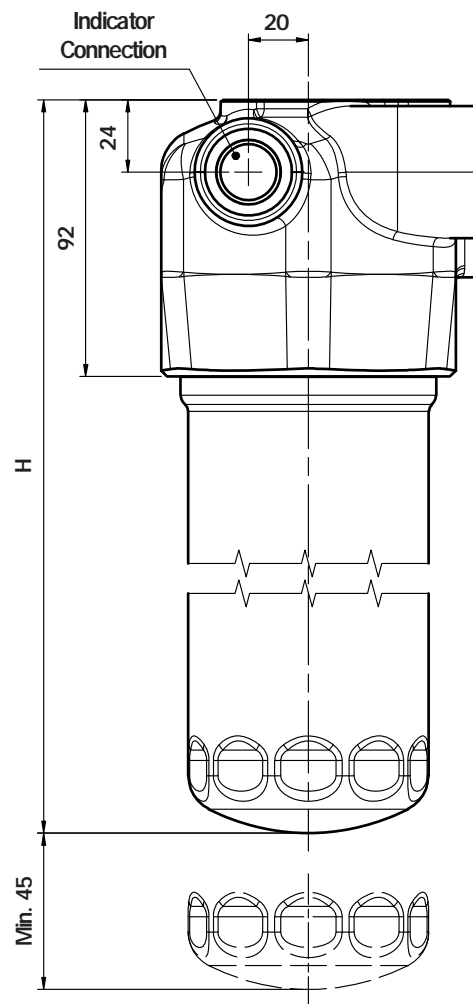
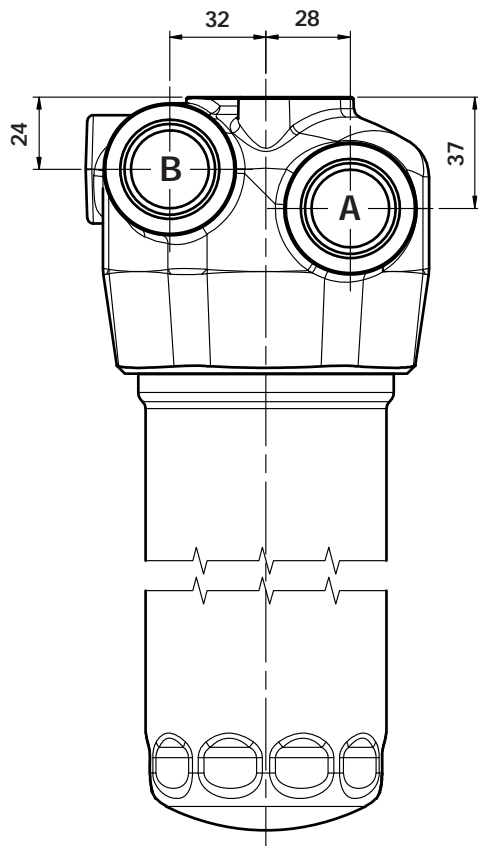
Multiplication factor "Y" for definition of the pressure drop of filter elements.

Reference viscosity $30 \text{ mm}^2/\text{s}$

Filter Element	Absolute Filtration					Nominal Filtration		Nominal Filtration
	Series N					Series N		Series N
Type	A 0 3	A 0 6	A 1 0	A 1 6	A 2 5	P 1 0	P 2 5	M 2 5
CU 110 1	16,25	15,16	8,754	8,142	5,875	2,862	2,651	0,1431
2	12,62	10,44	6,111	6,024	4,155	1,598	1,486	0,1253
3	8,571	7,951	5,066	4,066	2,397	1,242	1,153	0,1067
4	5,759	4,051	2,798	2,358	1,142	0,9072	0,8491	0,0558

Dimensions

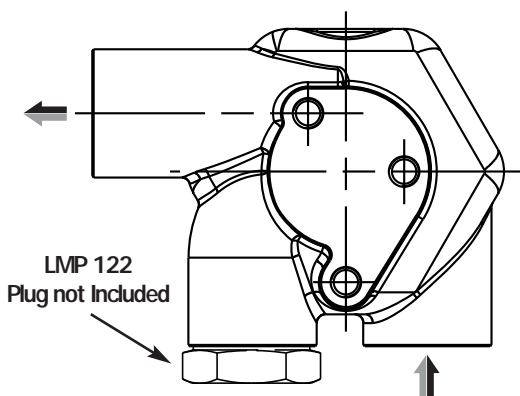
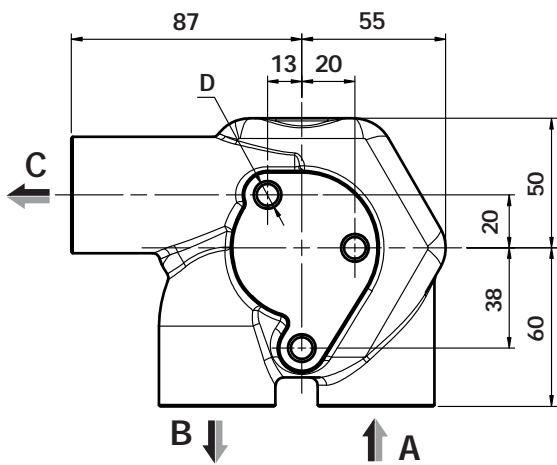
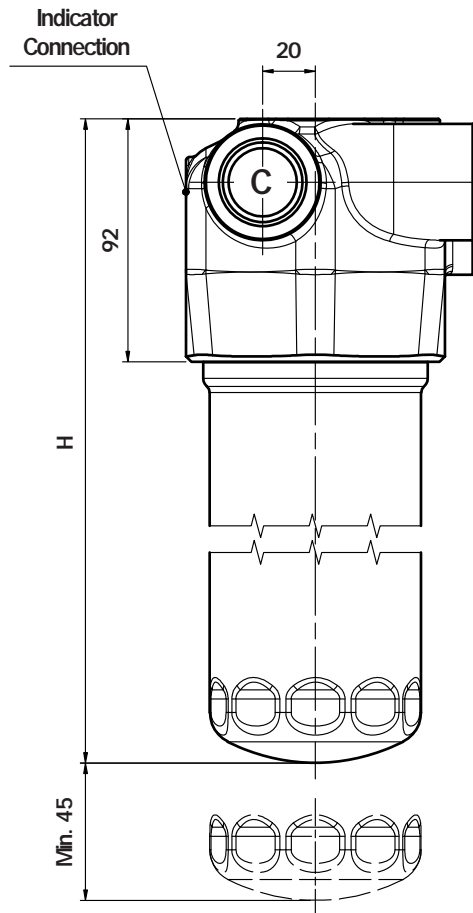
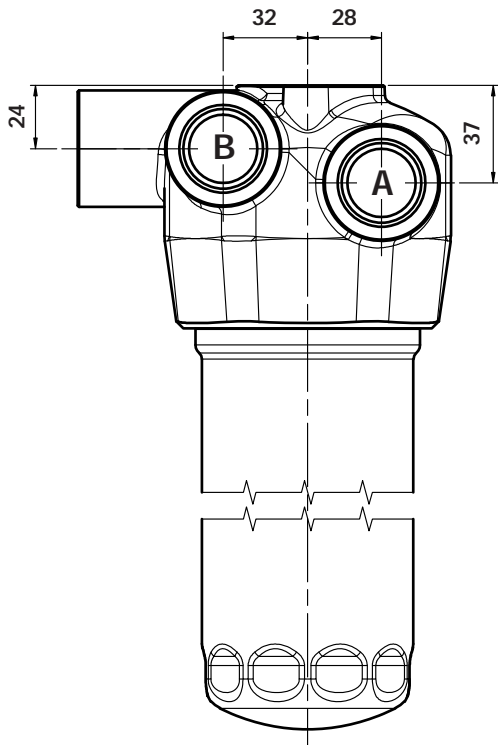
LMP 120



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

	Connections A - B	Fixing holes D
A	G 3/4"	M10 x Depth 12 mm
B	G 1"	M10 x Depth 12 mm
C	3/4" NPT	3/8" UNC x Depth 12 mm
D	1" NPT	3/8" UNC x Depth 12 mm
E	SAE 12	3/8" UNC x Depth 12 mm
F	SAE 16	3/8" UNC x Depth 12 mm

LMP 122/123



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

	Connections A - B - C	Fixing holes D
B	G 1"	M10 x Depth 12 mm
D	1" NPT	3/8" UNC x Depth 12 mm
F	SAE 16	3/8" UNC x Depth 12 mm

Ordering Information LMP120/122

Filter assembly LMP

	1	2	3	4	5	6	7	8	9
	<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"/>
Example: LMP	122	2	B	A	B	2	A10	N	P01

Filter element CU 110

	2	7	4	8	9
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Example: CU110	2	A10	A	N	P01

1 - Style

120
122

2 - Filter length

1
2
3
4

3 - Valves

S	Without bypass
B	With bypass valve Opening pressure: 3,5 bar
<input type="checkbox"/>	With bypass valve Opening pressure: on request

4 - Seals

A	NBR
<input type="checkbox"/>	On request

5 - Connections

Type	
A	G 3/4" (not for LMP 122)
B	G 1"
C	3/4" NPT (not for LMP 122)
D	1" NPT
E	SAE 12 (not for LMP 122)
F	SAE 16

6 - Indicator port

1	Without indicator port
2	With indicator port

7 - Filter element

A03	3 µm	Absolute filtration Inorganic microfibre βx (c) ≥ 1000
A06	6 µm	
A10	10 µm	
A16	16 µm	
A25	25 µm	
M25	25 µm	Nominal Filtration Metal mesh
M60	60 µm	
P10	10 µm	Nominal Filtration Cellulose
P25	25 µm	

8 - Collapse pressure

N	Δp 20 bar
---	-----------

9 - Options

P01	MP Filtri standard
Pxx	Customer request

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Ordering Information LMP123

Filter assembly LMP

Example: LMP

1	2	3	4	5	6	7	8	9
<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"/>
123	2	C	A	B	2	A10	N	P01

Filter element CU 110

Example: CU110

2	7	4	8	9
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	A10	A	N	P01

1 - Style

123

2 - Filter length

1
 2
 3
 4

3 - Valves

Type 1 - Without bypass valve

C Check valve 2 bar
 D Check valve 3 bar

Type 2 - Without bypass valve

G Check valve 2 bar
 H Check valve 3 bar

Type 1 - With bypass valve

M Check valve 2 bar
 N Check valve 3 bar

Type 2 - With bypass valve

Q Check valve 2 bar
 R Check valve 3 bar

4 - Seals

A NBR
 On request

5 - Connections

Type

B G 1"
 F SAE 16

6 - Indicator port

1 Without indicator port
 2 With indicator port

7 - Filter element

<input type="checkbox"/> A03	3 µm	Absolute filtration Inorganic microfibre $\beta_x(c) \geq 1000$
<input type="checkbox"/> A06	6 µm	
<input type="checkbox"/> A10	10 µm	
<input type="checkbox"/> A16	16 µm	
<input type="checkbox"/> A25	25 µm	
<input type="checkbox"/> M25	25 µm	Nominal Filtration Metal mesh
<input type="checkbox"/> M60	60 µm	
<input type="checkbox"/> P10	10 µm	Nominal Filtration Cellulose
<input type="checkbox"/> P25	25 µm	

8 - Collapse pressure

N Δp 20 bar

9 - Options

P01 MP Filtri standard
 Pxx Customer request

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LMP 124

In-Line Suction and Return Filter



**Maximum pressure 80 bar
Flow rates to 160 l/min**

Technical data

LMP 124

Filter housing (Materials)

- Head: Aluminium
- Housing: Cathaphoresis painting
- Bypass valve: Brass/Aluminium

Pressure

LMP 124 length: 1 - 2 - 3 - 4

- Working pressure: 80 bar (8 MPa)
- Test pressure: 120 bar (12 MPa)
- 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 2.5 bar \pm 10%
- Other opening pressures on request.

Δp Elements type

- Series N and W elements: 20 bar
- Oil flow from exterior to interior.

Seals

- Standard NBR series A
- Optional FPM series V

Weights (kg)

length

- LMP124 - 1 1,7
- LMP124 - 2 1,9
- LMP124 - 3 2,2
- LMP124 - 4 2,7

Volumes (dm³)

length

- LMP124 - 1 0,75
- LMP124 - 2 0,81
- LMP124 - 3 1,11
- LMP124 - 4 1,53

Compatibility

- Housings compatible with: Mineral oils to ISO 2943 - aqueous emulsions synthetic fluids, water and glycol.
- The filter elements are compatible with: Mineral oils to ISO 2943, Synthetic fluids Aqueous emulsions, water and glycol (series W required).
- NBR seals series A, compatible with: Mineral oils to ISO 2943 - aqueous emulsions synthetic fluids, water and glycol.
- V series FPM seals, compatible with: Synthetic fluids type HS-HFDR-HFDS-HFDU To ISO 2943

Filter Element Area

Filter element in stainless steel mesh

Tipo	Length			
	1	2	3	4
CU 110	1302	1764	2464	3864
Values expressed in cm ²				

LMP 124

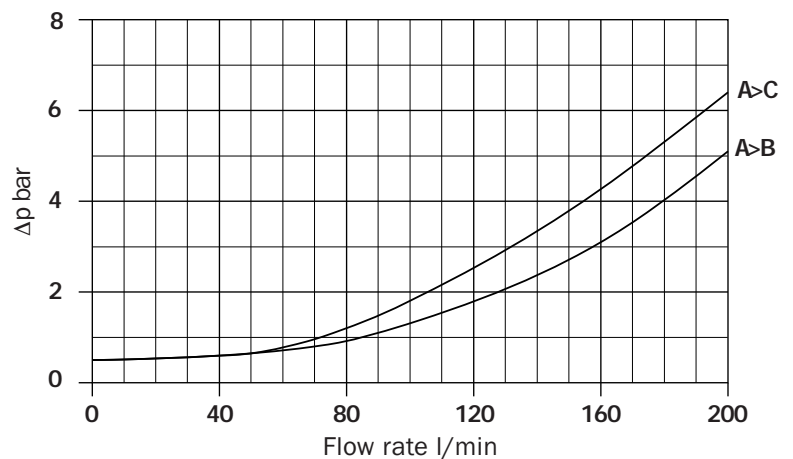


Filter housings Δp pressure drop

The curves are plotted utilising mineral oil with density of 0.86 kg/dm³ to ISO 3968.

Δp varies proportionally with density.

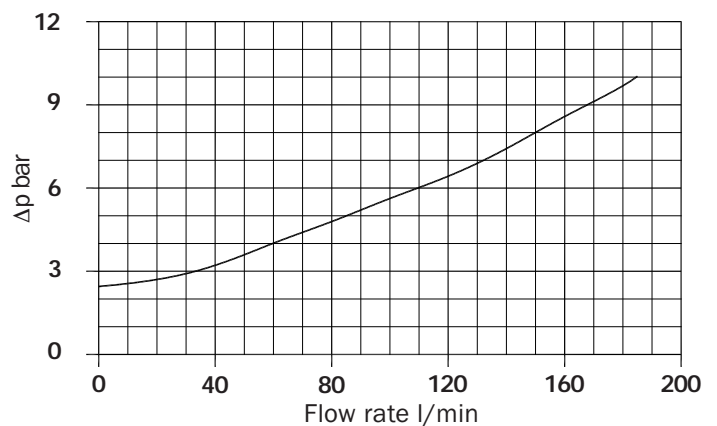
LMP 124 - Δp Housing



Valves

Bypass valve pressure drop

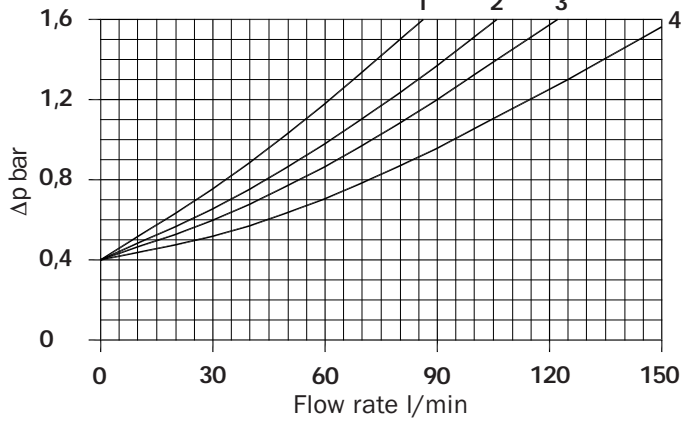
LMP 124



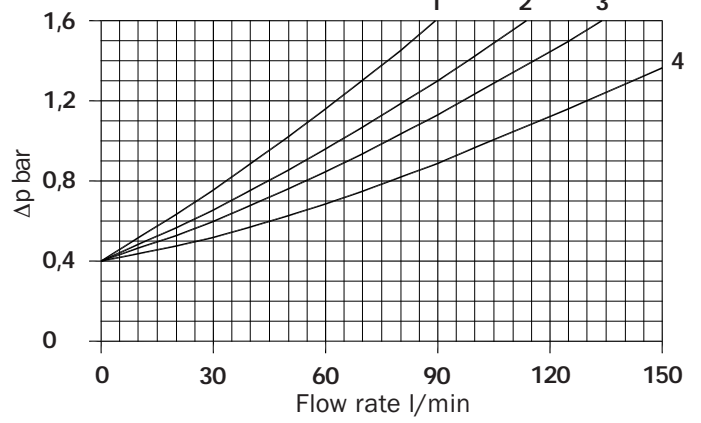
Style C - D - E - F

Style G - H

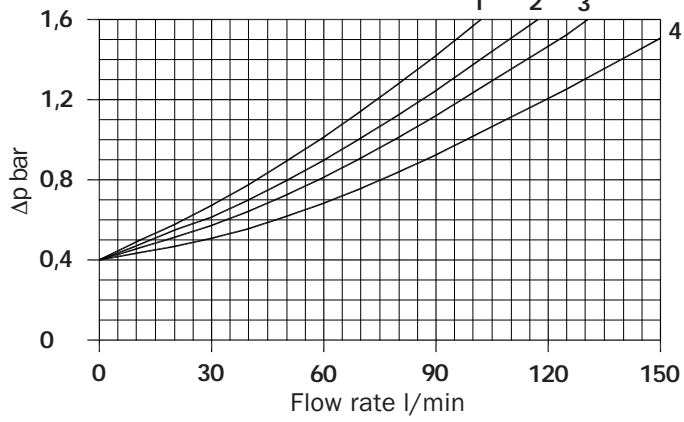
Absolute filtration A10



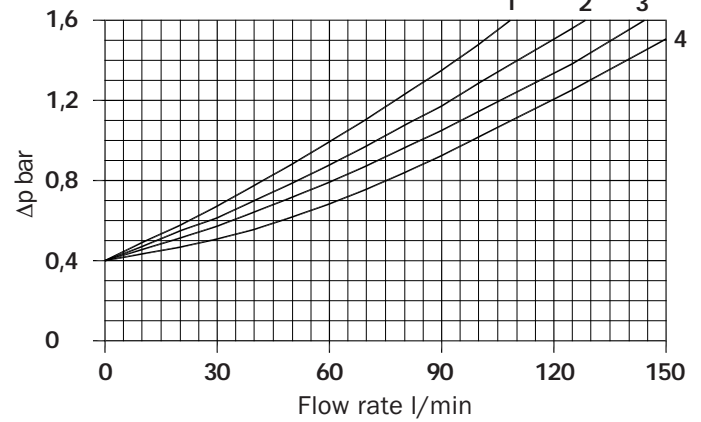
Absolute filtration A10



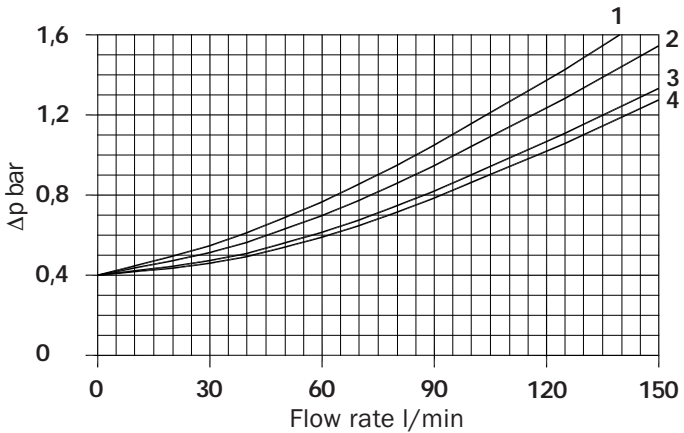
Absolute filtration A16



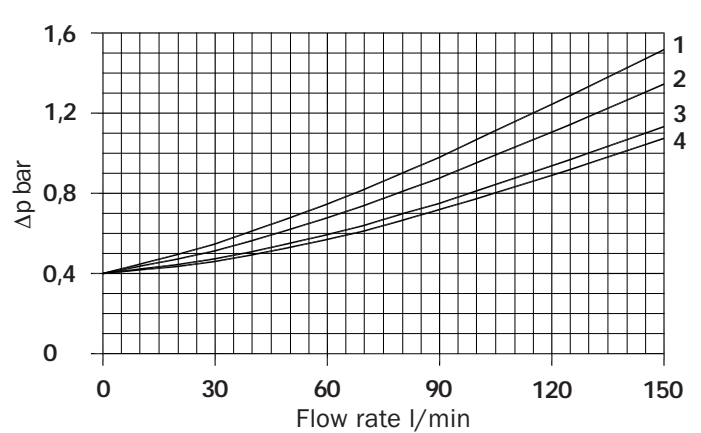
Absolute filtration A16



Absolute filtration A25



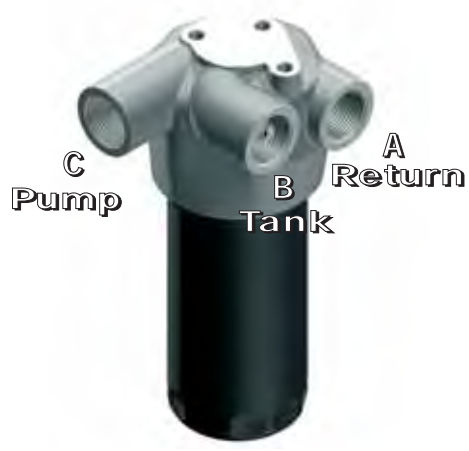
Absolute filtration A25



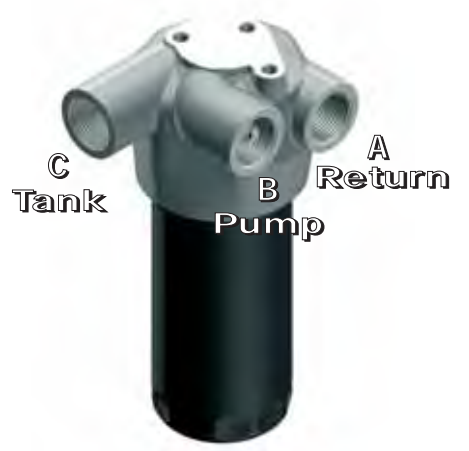
Filter length

- 1
- 2
- 3
- 4

LMP 124
Style C - D - E - F

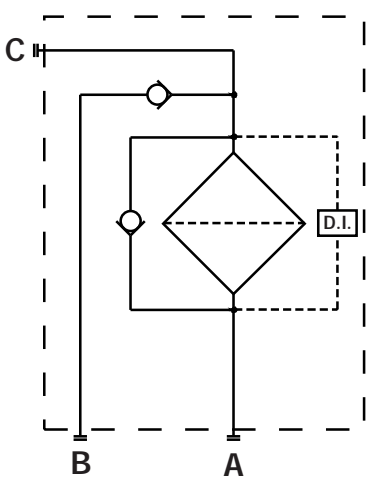


LMP 124
Style G - H

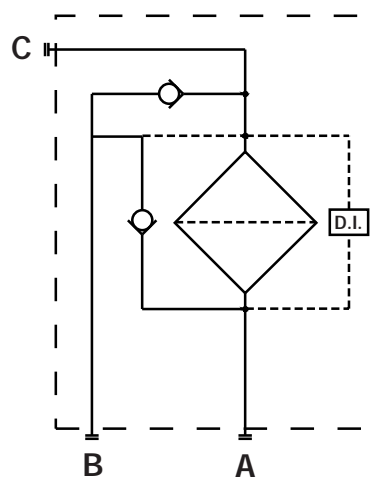


Symbols

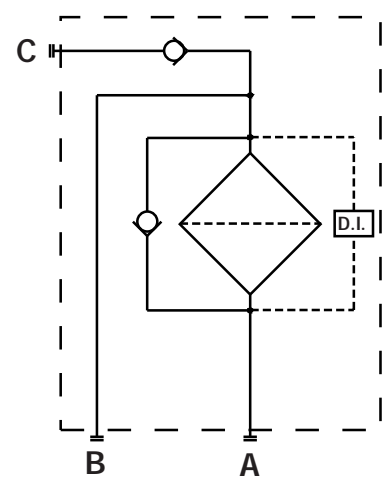
Style C
LMP 124



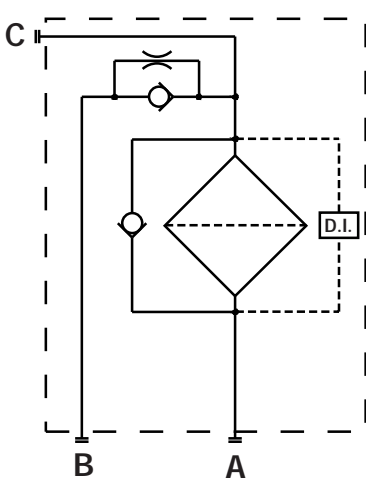
Style E
LMP 124



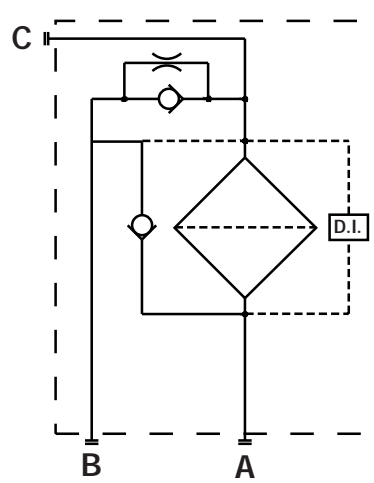
Style G
LMP 124



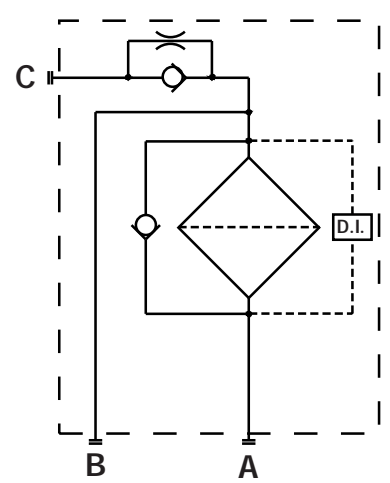
Style D
LMP 124



Style F
LMP 124



Style H
LMP 124



Filter sizing

Correct sizing of the filter must be based on a variable pressure drop depending on the application:

- return filter Δp from 0.4 to 0.6 bar
- filter on lubrication lines Δp from 0.3 to 0.5 bar
- off-line fluid power plants Δp from 0.3 to 0.4 bar
- off-line filter test benches Δp from 0.1 to 0.3 bar
- over-boost filter Δp from 0.4 to 0.6 bar

The pressure drop calculation is performed by adding together the value for the housing and the value for the filter element.

The pressure drop in the housing is proportional to the fluid density kg/dm^3 ; all the graphs in the catalogue are referred to mineral oil with density of 0.86 kg/dm^3 .

The filter element pressure drop value is proportional to viscosity mm^2/s , the Y values in the catalogue are referred to viscosity of $30 \text{ mm}^2/\text{s}$.

Sizing data for single cartridge, head at top

Δp Tot.

Δp_c Filter housing

Δp_e Filter element

Y Multiplication factor (see below)

Q l/min = flow rate

V1 = reference viscosity $30 \text{ mm}^2/\text{s}$ (cSt)

V2 = operating viscosity in mm^2/s (cSt)

Δp Tot. = $\Delta p_c + \Delta p_e$

$\Delta p_e = Y : 1000 \times Q \times (V2/V1)$

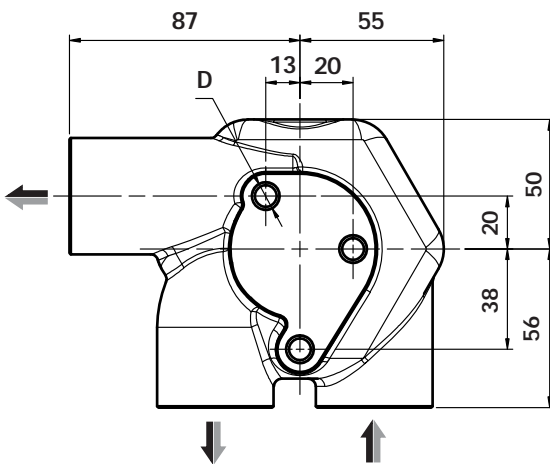
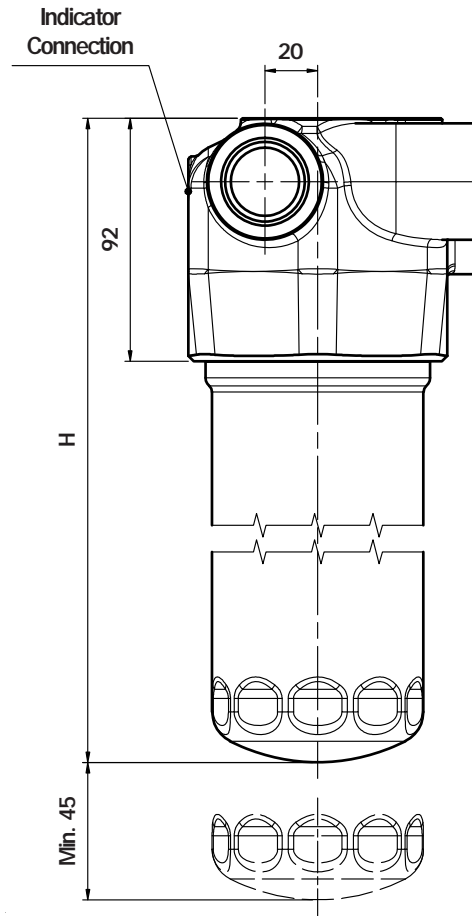
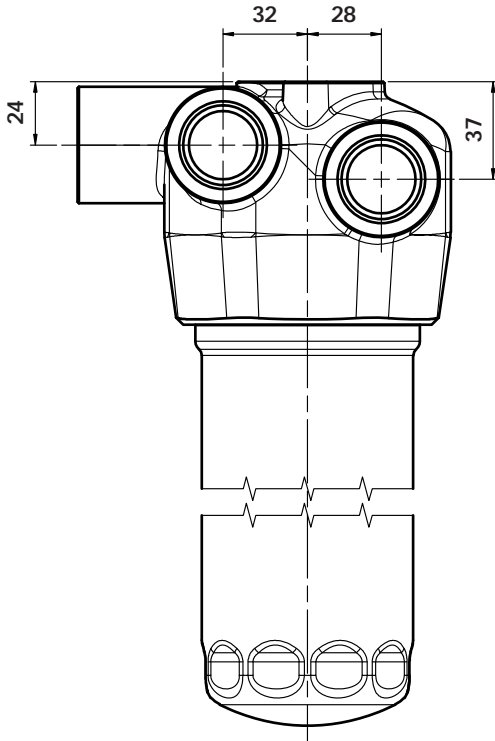
Multiplication factor "Y" for definition of the pressure drop of filter elements.

Reference viscosity $30 \text{ mm}^2/\text{s}$

Filter Element	Absolute Filtration					Nominal Filtration		Nominal Filtration
	Serie N					Serie N		Serie N
Type	A 0 3	A 0 6	A 1 0	A 1 6	A 2 5	P 1 0	P 2 5	M 2 5
CU 110 1	16,25	15,16	8,754	8,142	5,875	2,862	2,651	0,1431
2	12,62	10,44	6,111	6,024	4,155	1,598	1,486	0,1253
3	8,571	7,951	5,066	4,066	2,397	1,242	1,153	0,1067
4	5,759	4,051	2,798	2,358	1,142	0,9072	0,8491	0,0558

Dimensions

LMP 124

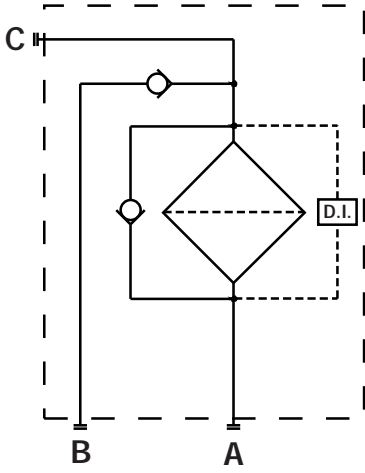


Length Filter	H mm
1	182
2	215
3	265
4	365

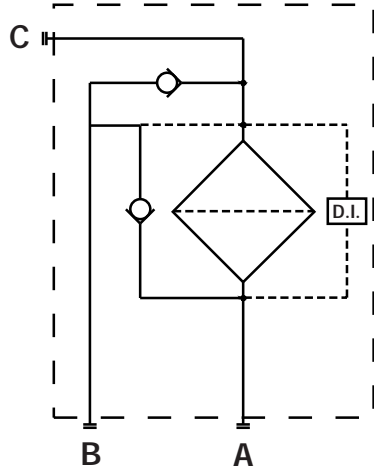
	Threaded Connections A - B - C	Fixing holes D
B	G 1"	M10x Depth 12 mm
F	SAE 16	3/8" UNCx Depth 12 mm

Symbols

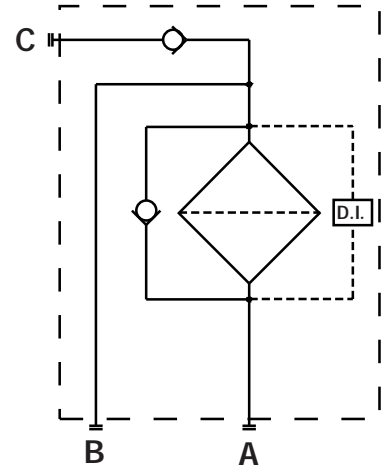
Style C
LMP 124



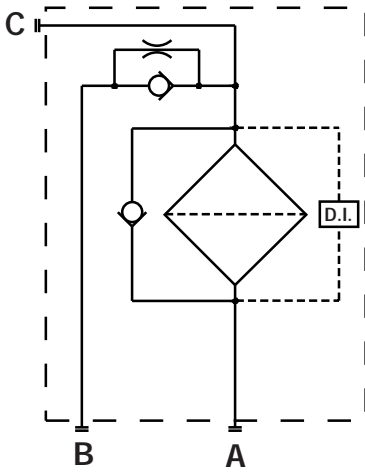
Style E
LMP 124



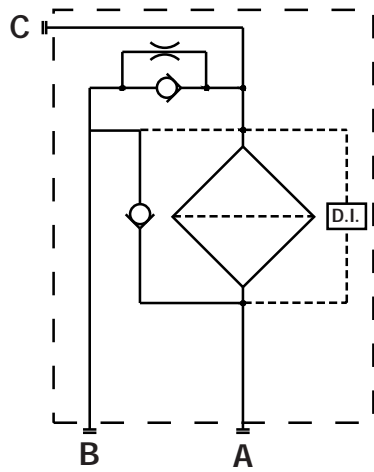
Style G
LMP 124



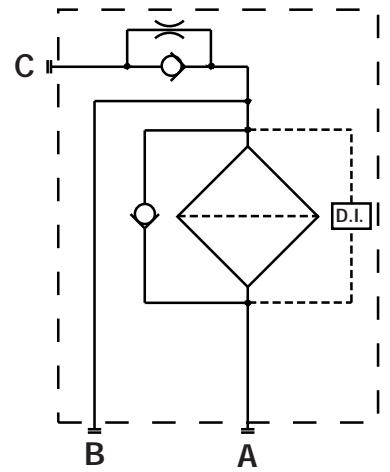
Style D
LMP 124



Style F
LMP 124



Style H
LMP 124



Ordering information LMP124

Filter assembly LMP

Example: LMP

1	2	3	4	5	6	7	8	9
<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"/>
124	2	C	A	B	2	A10	N	P01

Filter element CU 110

Example: CU110

2	7	4	8	9
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	A10	A	N	P01

1 - Style

124

2 - Filter length

- 1
- 2
- 3
- 4

3 - Valves

- C
- D
- E
- F
- G
- H

see "SYMBOLS" (see page 21 and 24)

4 - Seals

- A NBR
- V FPM

5 - Connections

Type

<input type="checkbox"/> B	G 1"
<input type="checkbox"/> F	SAE 16

6 - Indicator port

<input type="checkbox"/> 1	No
<input type="checkbox"/> 2	Port G 1/8" For pressure switch
<input type="checkbox"/> 3	Port G 1/4" For pressure switch
<input type="checkbox"/> 4	Differential indicator port

7 - Filter element

<input type="checkbox"/> A10	10 µm	Absolute filtration Inorganic microfibre βx (c) ≥ 1000
<input type="checkbox"/> A16	16 µm	
<input type="checkbox"/> A25	25 µm	

8 - Collapse pressure

<input type="checkbox"/> N	Δp 20 bar
----------------------------	-----------

9 - Opzione

<input type="checkbox"/> P01	MP Filtri standard
<input type="checkbox"/> Pxx	Customer request

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Recommended maximum flow rate

- Pressure drop of filter assembly equal to-
- Oil kinematic viscosity 30 mm²/s (cSt).
- Density 0,86 kg/dm³.

LMP	110/118	112	116	120	122	
Filtration	Flow rate l/min	Flow rate l/min	Flow rate l/min	Flow rate l/min	Flow rate l/min	Filter length
A03	40	36	36	39	42	1
A06	42	37	37	42	44	
A10	63	55	53	66	70	
A16	68	57	56	69	74	
A25	83	65	64	87	92	
M25	111	83	77	126	132	
P10	114	85	80	129	137	
P25	153	112	95	187	205	
A03	49	43	43	48	52	2
A06	57	49	47	57	61	
A10	80	65	64	86	90	
A16	82	67	65	88	91	
A25	97	75	72	108	115	
M25	128	93	86	150	159	
P10	130	94	87	153	163	
P25	155	114	96	187	205	
A03	45	54	55	67	72	3
A06	69	58	56	72	77	
A10	88	70	67	97	100	
A16	98	76	73	110	113	
A25	118	87	83	136	141	
M25	133	95	88	158	169	
P10	135	96	89	161	173	
P25	158	115	97	188	208	
A03	66	66	63	88	93	4
A06	98	76	72	108	113	
A10	112	87	79	128	133	
A16	117	88	83	135	143	
A25	136	96	87	162	172	
M25	140	98	90	168	178	
P10	140	98	92	170	180	
P25	160	115	98	190	215	

Differential indicators

Order code



Example: **NM 7 H A 11 P01**

1 - Styles

NR	Electrical
KR	Electrical-Visual
NM	Electrical IP 67
Z	Visual
U	Visual

2 - Differential trip pressure

6	2 bar ± 10% (with bypass filter)
7	5 bar ± 10% (without bypass filter)

3 - Power supply voltage

(only for style KR - only voltage DC)

1	24 Volt
2	110 Volt

4 - Seals

H	HNBR Standard
V	FPM
x	Others on request

5 - Thermostat (only for style NM)

A	Without
C	50°

6 - Electrical connector (only for style NM)

11	Connector AMP superseal series 1.5
21	Connector AMP timer
31	Connector DEUTSCH DT 04-2-P
32	Connector DEUTSCH DT 04-3-P
41	Length electrical cable 0,5 m

7 - Option

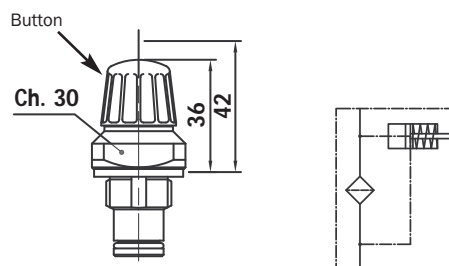
P01	MP standard
------------	-------------

Pressure:

Working pressure 420 bar

Pulse pressure fatigue test: 1.000.000 cycles with pressure from 0 to 420 bar (42 MPa)

SERIES Z VISUAL



Visual indicator with manual reset.

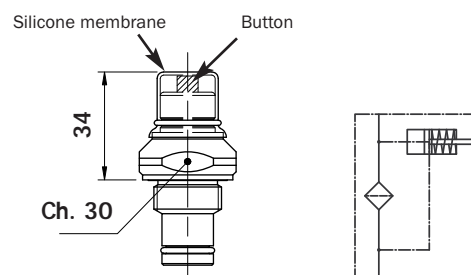
Nylon signalling button.

Button depressed position = cartridge clean.
Button raised position, Red = cartridge clogged.

Weight: 118 gr.

Tightening torque: 60 Nm.

SERIES U VISUAL



Visual indicator

Nylon signalling button.

Button depressed position = cartridge clean.
Button raised position, Green = cartridge clean.
Button raised position, Red = cartridge clogged.

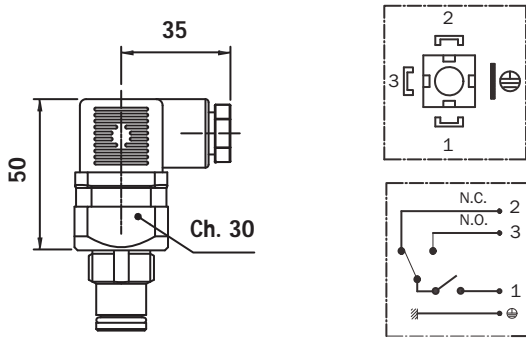
Connection G 1/2"

Tightening torque: 65 Nm

Weight: 128 gr

SERIES NR ELECTRICAL

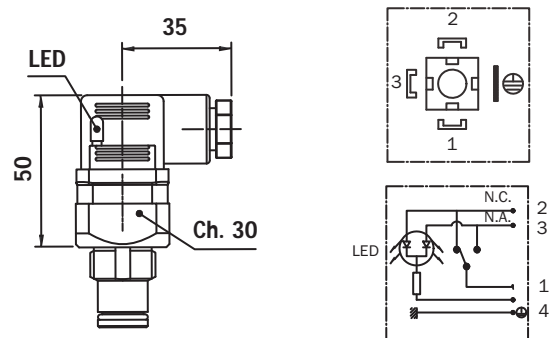
Connector EN 175301-803 A/ISO 4400



Switching type	N/O or N/C contacts (change over Contact)
Max. contact rating	0,8 A / 24 Vdc 0,17 A / 115 Vdc
Max power supply voltage	230Vac
Electrical connection	EN 175301-803
Cable gland	PG 9
Protection rating	IP 65
Connection	G 1/2"
Tightening torque:	65 Nm
Weight:	123 gr

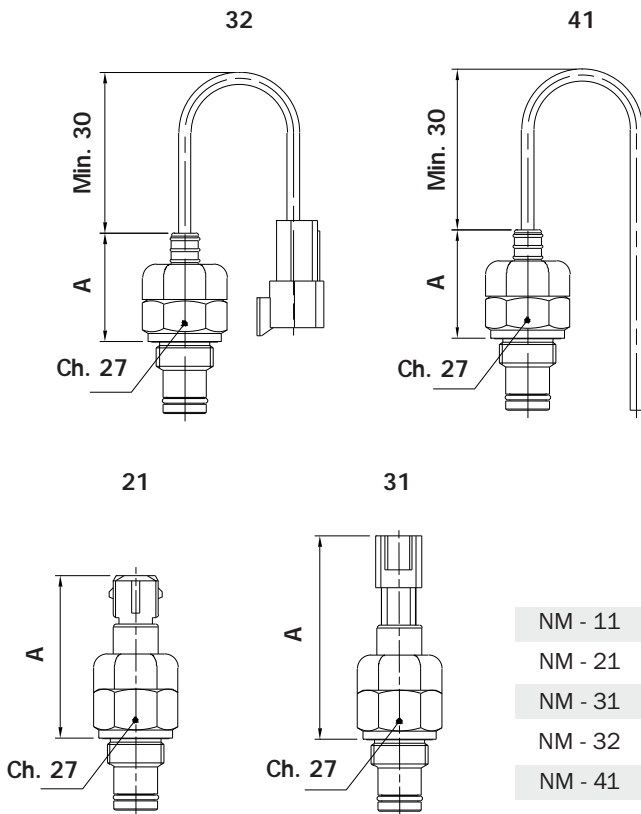
SERIES KR ELECTRICAL/VISUAL

Connector EN 175301-803 A/ISO 4400



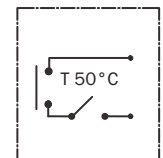
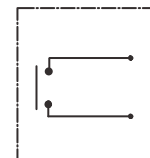
Switching type	N/O or N/C contacts (change over Contact)
Max. contact rating	0,8 A / 24 Vdc 0,17 A / 115 Vdc
Max power supply voltage	24Vdc - 115 Vdc/ac - 230 Vac
Electrical connection	EN 175301-803 visual indicator by LED GREEN LED = Clean element. RED LED = Blocced element.
Cable gland	PG 9
Protection rating	IP 65
Connection	G 1/2"
Tightening torque:	65 Nm
Weight:	123 gr

SERIES NM ELECTRICAL



Length indicator NM

	A	
	Without thermostat	With thermostat
NM - 11	40	50
NM - 21	60	70
NM - 31	75	85
NM - 32	40	50
NM - 41	40	50



Switching type	N/O contacts	Protection rating	IP 67
Thermostat switching type	N/O contacts	Connection	G 1/2"
Max. contact rating	0,8 A / 24 Vdc 0,17 A / 115 Vdc	Tightening torque:	65 Nm
Max power supply voltage	Max. 120Vdc	Weight:	125 gr
Electrical connection	11 Connector AMP superseal series 1.5 21 Connector AMP timer 31 Connector DEUTSCH DT 04-2-P 32 Connector DEUTSCH DT 04-3-P 41 Length electrical cable 0,5 m		

