

LMP 124 series

MULTIPORT

Maximum working pressure up to 8 MPa (80 bar) - Flow rate up to 120 l/min



Description

Technical data

Return / Suction filter

In-line

Maximum working pressure up to 8 MPa (80 bar)
Flow rate up to 120 l/min

LMP124 is a range of return/suction filters for hydraulic systems with two or more circuits (both open and closed loops). They are able to provide pressurized oil cleaned by fine filtration to the feed pump of the hydrostatic systems.

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

Available features:

- Female threaded connections up to 1", for a maximum return flow rate of 120 l/min
- Fine filtration rating, to get a good cleanliness level into the reservoir
- Bypass valve to the tank, to relieve excessive pressure drop across the filter media when the return flow is enough higher than the suction flow
- Bypass valve to the suction line with additional suction filter element, to relieve excessive pressure drop across the filter media when the return flow is not enough higher than the suction flow
- De-pressurization valve, to reduce the pressure inside the filter during the maintenance operations
- Visual, electrical and electronic differential clogging indicators

Common applications:

Mobile machines with hydrostatic systems on board.
 (i.e. skid steer loaders, telehandlers, dumpers, road sweepers)

Filter housing materials

- Head: Aluminium
- Housing: Cataphoresis - Painted steel
- Bypass valve: Brass - Aluminium

Pressure

- Test pressure: 12 MPa (120 bar)
- Min. Burst pressure: 24 MPa (240 bar)
- Pulse pressure fatigue test: 1 000 000 cycles with pressure from 0 to 8 MPa (80 bar)

Bypass valve

- Opening pressure 0.25 MPa (2.5 bar) $\pm 10\%$
- Other opening pressures on request.

Filter element features

Filter LMP 124		Filter element CU	
Δp Element type			
Element media	Construction	Δp Series	Δp
A - Microfiber	Standard	N	20 bar
M - Wire mesh	Standard	N	20 bar
P - Paper	Standard	N	20 bar
Please see ordering code tables to check element Δp series availability based on filter features.			
Flow direction through the filter element: From OUT to IN			

Seals

- Standard NBR series A
- Optional FPM series V

Temperature

From -25 °C to +110 °C

Note

LMP124 filters are provided for vertical mounting

Weights [kg] and volumes [dm³]

Filter series	Weights [kg]					Volumes [dm ³]				
	Length	1	2	3	4	Length	1	2	3	4
LMP 124		1.70	1.90	2.20	2.70		0.75	0.81	1.11	1.53

Flow rates [l/min]

Filter series	Length	Filter element design - N series							
		A03	A06	A10	A16	A25	M25 M60 M90	P10	P25
LMP 124	1	39	41	58	60	69	99	84	85
	2	47	53	68	69	77	99	90	91
	3	59	61	73	77	86	99	92	93
	4	70	78	84	86	93	100	94	95

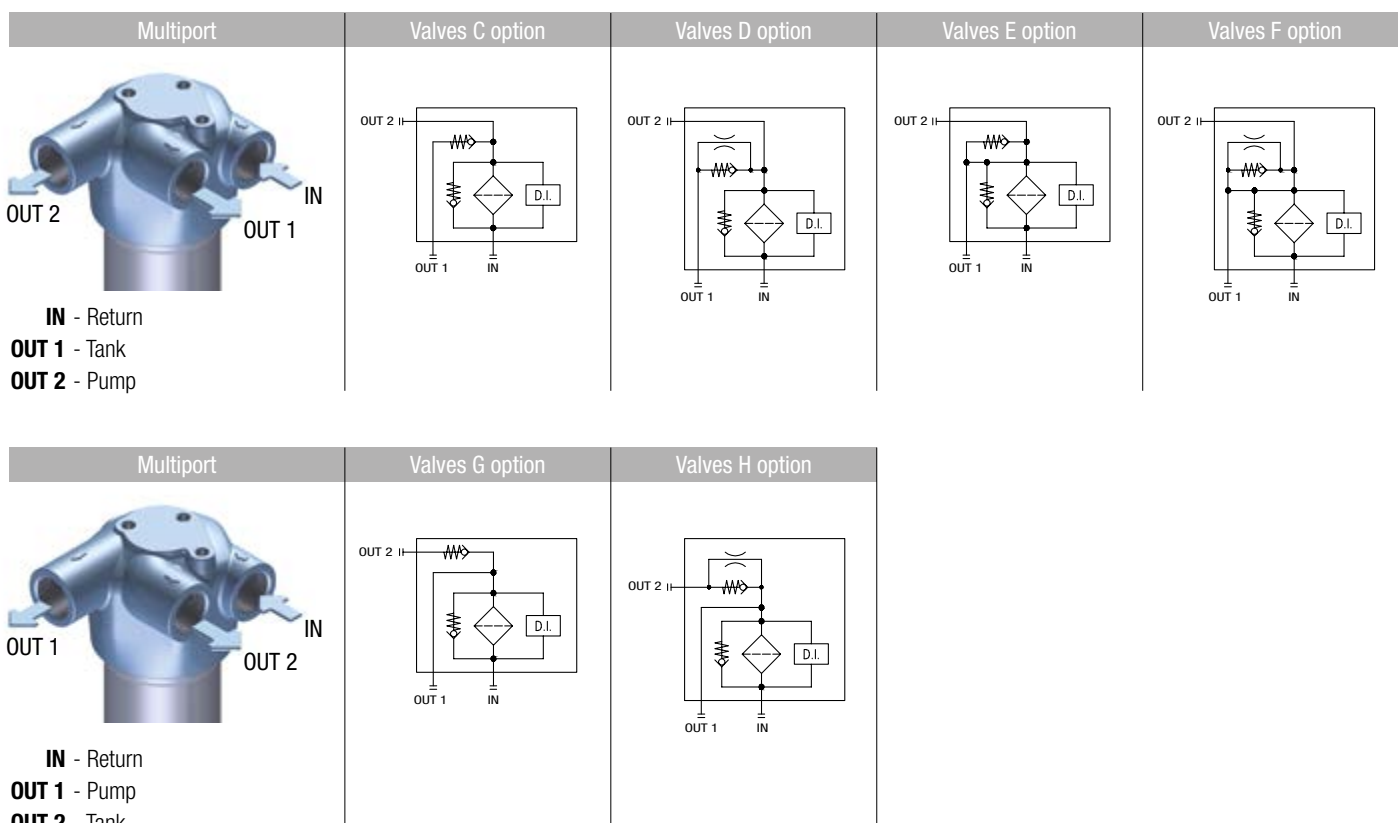
Maximum flow rate for a complete return/suction filter with a pressure drop $\Delta p = 1.2$ bar.

The reference fluid has a kinematic viscosity of 30 mm²/s (cSt) and a density of 0.86 kg/dm³.

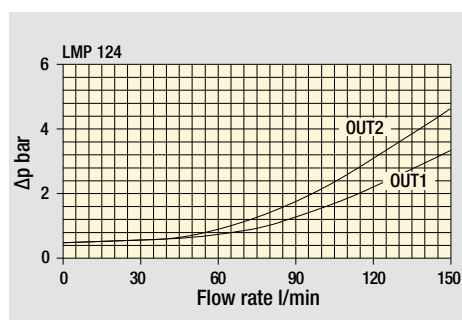
For different pressure drop or fluid viscosity we recommend to use our selection software available on www.mpfiltri.com.

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.

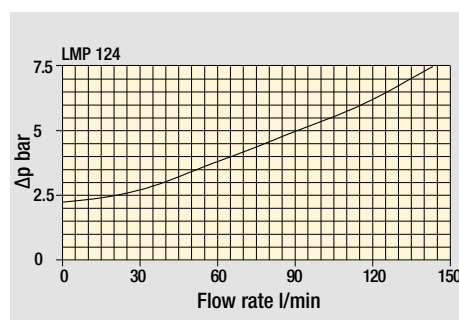
Hydraulic diagram - Valves option



Filter housings Δp pressure drop



Bypass valve pressure drop



Pressure drop

OUT 1: Valves option G/H
OUT 2: Valves option C/D/E/F

Designation & Ordering code

COMPLETE FILTER

Series and size LMP124	Configuration example: LMP124										4	C	A	F	1	A10	N	P01
Filter length 1 2 3 4																		
Hydraulic diagram configuration - see page 293 C D E F G H																		
Seals and treatments A NBR V FPM																		
Connections B G 1" F SAE 16 - 1 5/16" - 12 UN																		
Connection for indicator 1 Without 2 With connection G 1/8" for clogging indicator 3 With connection G 1/4" for clogging indicator 4 With connection for differential pressure indicator																		
Filtration rating (filter media) A03 Inorganic microfiber 3 µm A06 Inorganic microfiber 6 µm A10 Inorganic microfiber 10 µm A16 Inorganic microfiber 16 µm A25 Inorganic microfiber 25 µm M25 Wire mesh 25 µm M60 Wire mesh 60 µm M90 Wire mesh 90 µm P10 Resin impregnated paper 10 µm P25 Resin impregnated paper 25 µm																		
										Element Δp N 20 bar		Execution P01 MP Filtri standard Pxx Customized						

CLOGGING INDICATORS

See pages 282-285

Indicators on Return Line

BVA Axial pressure gauge
BVR Radial pressure gauge
BVP Visual pressure indicator with automatic reset
BVQ Visual pressure indicator with manual reset

BEA Electrical pressure indicator
BEM Electrical pressure indicator
BET Electrical pressure indicator
BLA Electrical / visual pressure indicator

Differential pressure indicators

DEA Electrical differential pressure indicator
DEM Electrical differential pressure indicator
DEU Electrical differential pressure indicator
DLA Electrical / visual differential pressure indicator
DLE Electrical / visual differential pressure indicator

DTA Electronic differential pressure indicator
DTI I-O Link electronic differential pressure indicator
DVA Visual differential pressure indicator
DVM Visual differential pressure indicator

PLUGS

See page 807

T2 Plug (not included)

FILTER ELEMENT

Element series and size

CU110

Configuration example:

CU110

4

A10

A

N

P01

Element length

1 | 2 | 3 | 4 |

Filtration rating (filter media)

A03	Inorganic microfiber	3 µm
A06	Inorganic microfiber	6 µm
A10	Inorganic microfiber	10 µm
A16	Inorganic microfiber	16 µm
A25	Inorganic microfiber	25 µm
M25	Wire mesh	25 µm
M60	Wire mesh	60 µm
M90	Wire mesh	90 µm
P10	Resin impregnated paper	10 µm
P25	Resin impregnated paper	25 µm

Seals and treatments

A NBR

V FPM

Element Δp

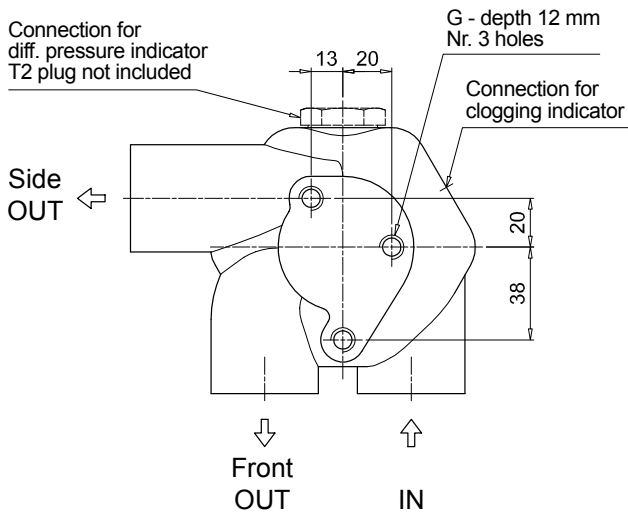
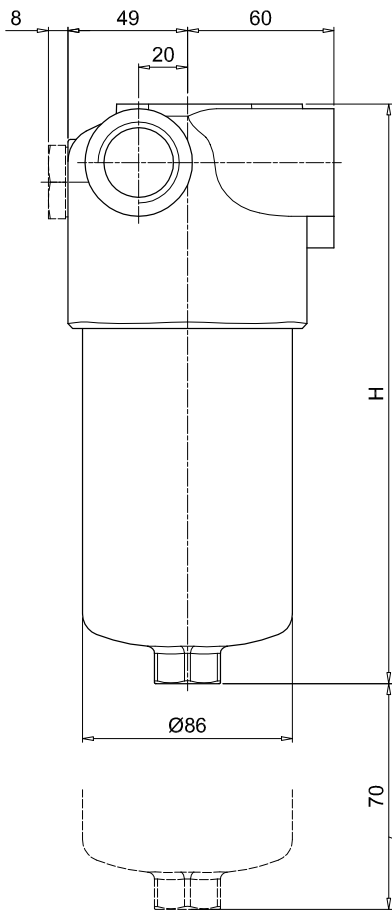
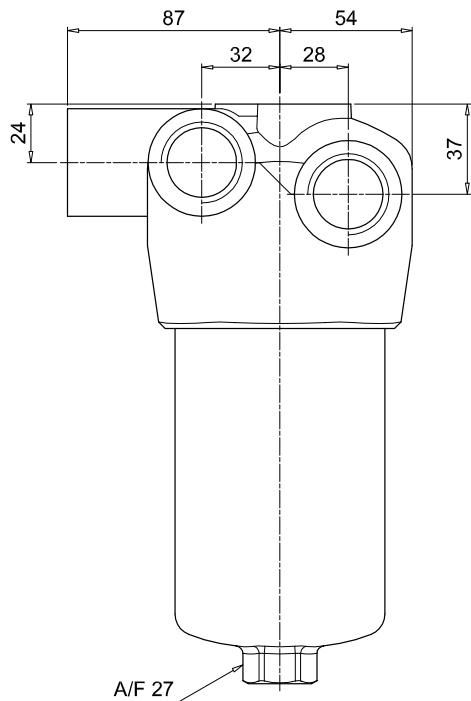
N 20 bar

Execution

P01 MP Filtri standard

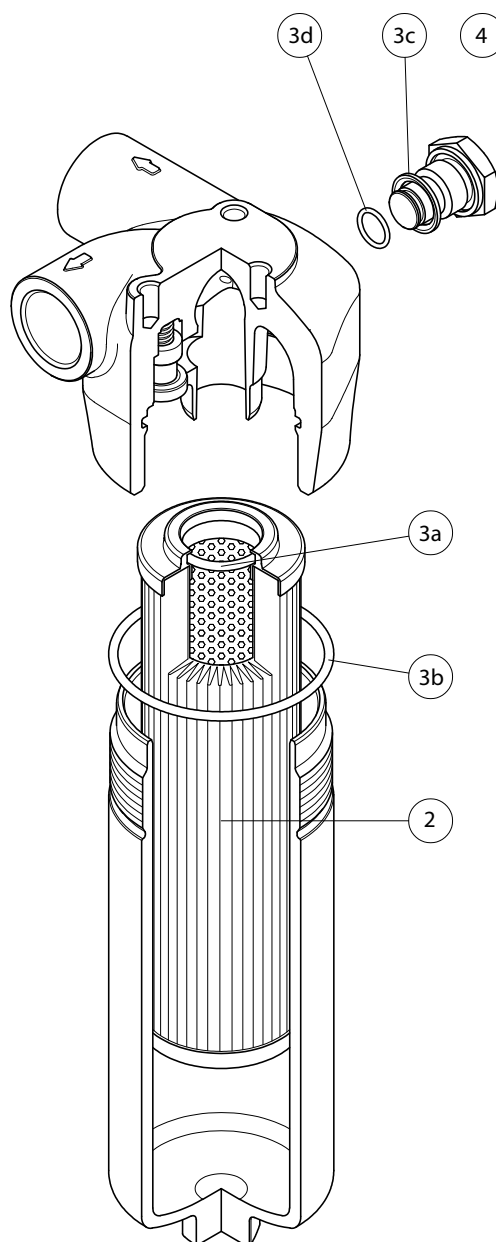
Pxx Customized

Dimensions



LMP 124	
MULTIPORT	
Filter length	H [mm]
1	197
2	230
3	280
4	380
Connections	G
B	M10
F	3/8" UNC

LMP 124 MULTIPORT



Item:	Q.ty: 1 pc.	Q.ty: 1 pc.	Q.ty: 1 pc.
Filter series	Filter element	Seal Kit code number	Indicator connection plug
LMP 124 MULTIPORT	See order table	NBR	NBR
		FPM	FPM
		02050478	T2H
		02050479	T2V