LMP 124 series
MULTIPORT

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

TYPICAL FILTER SIZING Selection Software

Step 1

Select “FILTER SIZING SOFTWARE” after login

OR

Select “FILTER SIZING” after login from a product page

Step 2

Choose the type of filter family.
Enter the main data for sizing the filter
then push CALCULATE.

Enter the main data for sizing the filter
then push CALCULATE.

Step 3

Select the desidered options to choose the appropriate filter type for the application.

Step 4

Choose the most suitable filter from the proposed list.

Step 5

A SAVE YOUR FILTER'S REPORT

B MANUAL EDIT

It is possible to change the filter modifying every parameter.

SAVE IN YOUR ARCHIVE
typing your reference data and then SAVE AS PDF

A new browser window displays the pdf

see **A**

Close the report window

By clicking your WELCOME button, the SHOW REPORTS is displayed: select it to see your filters list.

MY CLEAN

THE NEW FILTER CONCEPT

MRSX RSX series

NEW FILTER ELEMENT WITH EXCLUSIVE INTERFACE CONNECTION

- **Protects the machine from improper use of non-original products.**
- **Safety of constant quality protection & reliability**

With exclusive filter element you are sure that only MP Filtri filter elements can be used, ensuring the best cleaning level of the oil due to the use of originals filter elements.

The products identified as MRSX and RSX are protected by:

- Italian Patent n° 102014902261205
- Canadian Patent n° 2,937,258
- European Patent n° 16181725.9
- US Patent n° 15/224,337

LMP 124 GENERAL INFORMATION
MULTIPORT

Description

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 200 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)

Technical data

Filter housing materials
- Head: Aluminium
- Housing: Cataphoresis - Painted Steel
- Bypass valve: Brass - Aluminium

Pressure
- Test pressure: 12MPa (120 bar)
- Burst pressure: 38 MPa (380 bar)
- Pulse pressure fatigue test: 1 000 000 cycles with pressure from 0 to 80 bar (8 MPa)

Bypass valve
- Opening pressure 250 kPa (2.5 bar) ±10%
- Other opening pressures on request.

Δp element type
- Microfibre filter elements - series N - W: 20 bar
- Fluid flow 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 [dm³]				
	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

FILTER ASSEMBLY SIZING
Flow rates [l/min]

		Filter element design - N series							
Filter series	Length	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 Δp = 1.2 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 - Multiport styles

Multiport	Valves C option	Valves D option	Valves E option	Valves F option

IN - Return
OUT 1 - Tank
OUT 2 - Pump

Multiport	Valves G option	Valves H option

IN - Return
OUT 1 - Tank
OUT 2 - Pump

Pressure drop

Filter housings Δp pressure drop

Bypass valve pressure drop

Valves

Filter length: **1 - 2 - 3 - 4**

STYLE **C - D - E - F**

STYLE **G - H**

The curves are plotted using mineral oil with density of 0.86 kg/dm^3 in compliance with ISO 3968. Δp varies proportionally with density.

Designation & Ordering code

COMPLETE FILTER

Configuration example: LMP124 | 4 | C | A | F | 1 | A10 | N | P01

Series and size
LMP124

Filter length
1 | 2 | 3 | 4 |

Hydraulic diagram configuration - see page 268
C | D | E | F | G | H |

Seals and treatments		Filtration rating Axx	Mxx	Pxx
A	NBR	•	•	•
V	FPM	•	•	•
W	NBR compatible with fluids HFA-HFB-HFC	•	•	

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 indicator

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	**P10**	Resin impregnated paper 10 µm
A25	Inorganic microfiber 25 µm	**P25**	Resin impregnated paper 25 µm

Element Δp
N 20 bar

Execution
P01 MP Filtri standard
Pxx Customized

FILTER ELEMENT

Configuration example: CU110 | 4 | A10 | A | N | P01

Element series and size
CU110

Element length
1 | 2 | 3 | 4 |

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	**P10**	Resin impregnated paper 10 µm
A25	Inorganic microfiber 25 µm	**P25**	Resin impregnated paper 25 µm

Seals		Filtration rating Axx	Mxx	Pxx
A	NBR	•	•	•
V	FPM	•	•	•
W	NBR compatible with fluids HFA-HFB-HFC	•	•	

Element Δp
N 20 bar

Execution
P01 MP Filtri standard
Pxx Customized

ACCESSORIES

Indicators on Return Line		page
BVA	Axial pressure gauge	278
BVR	Radial pressure gauge	278
BVP	Visual pressure indicator with automatic reset	279
BVQ	Visual pressure indicator with manual reset	279
BEA	Electrical pressure indicator	276
BEM	Electrical pressure indicator	276
BET	Electrical pressure indicator	276-277
BLA	Electrical / visual pressure indicator	277-278

Differential indicators		page
DEA	Electrical differential indicator	280
DEM	Electrical differential indicator	280-281
DLA	Electrical / visual differential indicator	281-282
DLE	Electrical / visual differential indicator	282
DTA	Electronic differential indicator	283
DVA	Visual differential indicator	283
DVM	Visual differential indicator	283

Additional features		page
T2	Plug	284

LMP 124 MULTIPORT	
Filter length	**H [mm]**
1	182
2	215
3	265
4	365

Connections	R
B	M10
F	3/8" UNC

Order number for spare parts

LMP 124 MULTIPORT

Item:	Q.ty: 1 pc. 2	Q.ty: 1 pc. 3 (3a ÷ 3d)		Q.ty: 1 pc. 4	
Filter series	Filter element	Seal Kit code number NBR	FPM	Indicator connection plug NBR	FPM
LMP 124 MULTIPORT	See order table	02050478	02050479	T2H	T2V