

# Комбинированные возвратно-всасывающие фильтры

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THE X CONCEPT FOR OUR FILTERS

Protect the performance of your system with MYclean.  
Quality and efficiency are fundamental for MP Filtri:  
this exclusive new filter element possesses polygon shape geometry and specific seal  
that ensures only original spare parts can be used - ensuring correct operation and  
higher system reliability.

MRSX series

with MYCLEAN RSX Filter Element



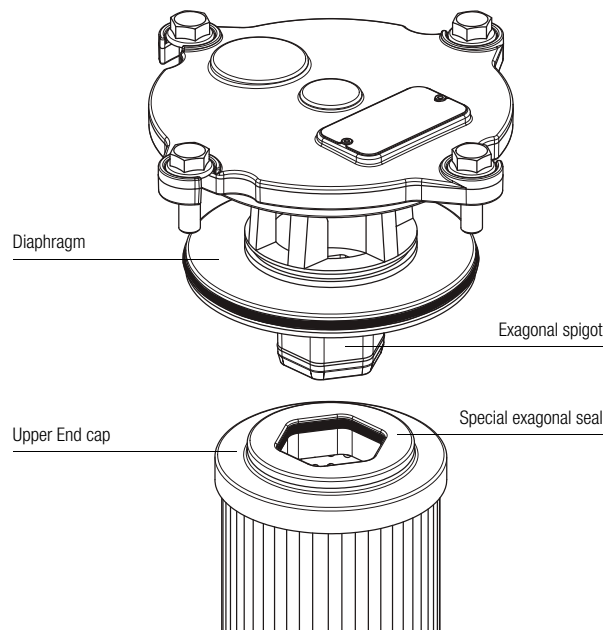
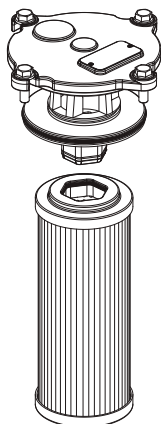
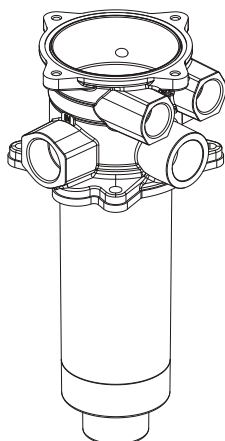
- **Protects the machine from improper use of non-original products.**
- **Safety of constant quality protection & reliability**

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 are protected by:

- Italian Patent n° 102014902261205
- Canadian Patent n° 2,937,258
- European Patent n° 3 124 092 B1
- US Patent n° 20170030384 A1



# MRSX series

Maximum working pressure up to 1 MPa (10 bar) - Flow rate up to 250 l/min



## Description

## Technical data

Return / Suction filter

Tank mounted

**Maximum working pressure up to 1 MPa (10 bar)**  
**Flow rate up to 250 l/min**

MRSX is a range of suction/return 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 fixed to the reservoir, in immersed or semi-immersed position.

The filter output must be always immersed into the fluid to avoid aeration or foam generation into the reservoir.

### Available features:

- Female threaded return connections up to 1 1/4", for a maximum return flow rate of 250 l/min
- Multiple connections, to connect several return and suction lines
- 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
- Anti-cavitation valve with additional suction filter element, to ensure fluid to the feed pump of the hydrostatic systems during cold starts or initial filling
- O-ring or Flat Seal to suit a variety of reservoir surfaces
- Reservoir side mounting, to save space in the machines
- Visual, electrical and electronic clogging indicators
- MYclean interface connection, to protect the product against non-original spare parts
- External protective wrap, to optimize the flow through the element and to save the element efficiency against non-proper handling

### Common applications:

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

### Filter housing materials

- Head: Aluminium
- Cover
  - Polyamide: MRSX 116
  - Aluminium: MRSX 165-166
- Bowl: Polyamide

### Δp element type

- RSX: 10 bar
- Oil flow from exterior to interior.

### Seals

- Standard NBR series A
- Optional FPM series V

### Temperature

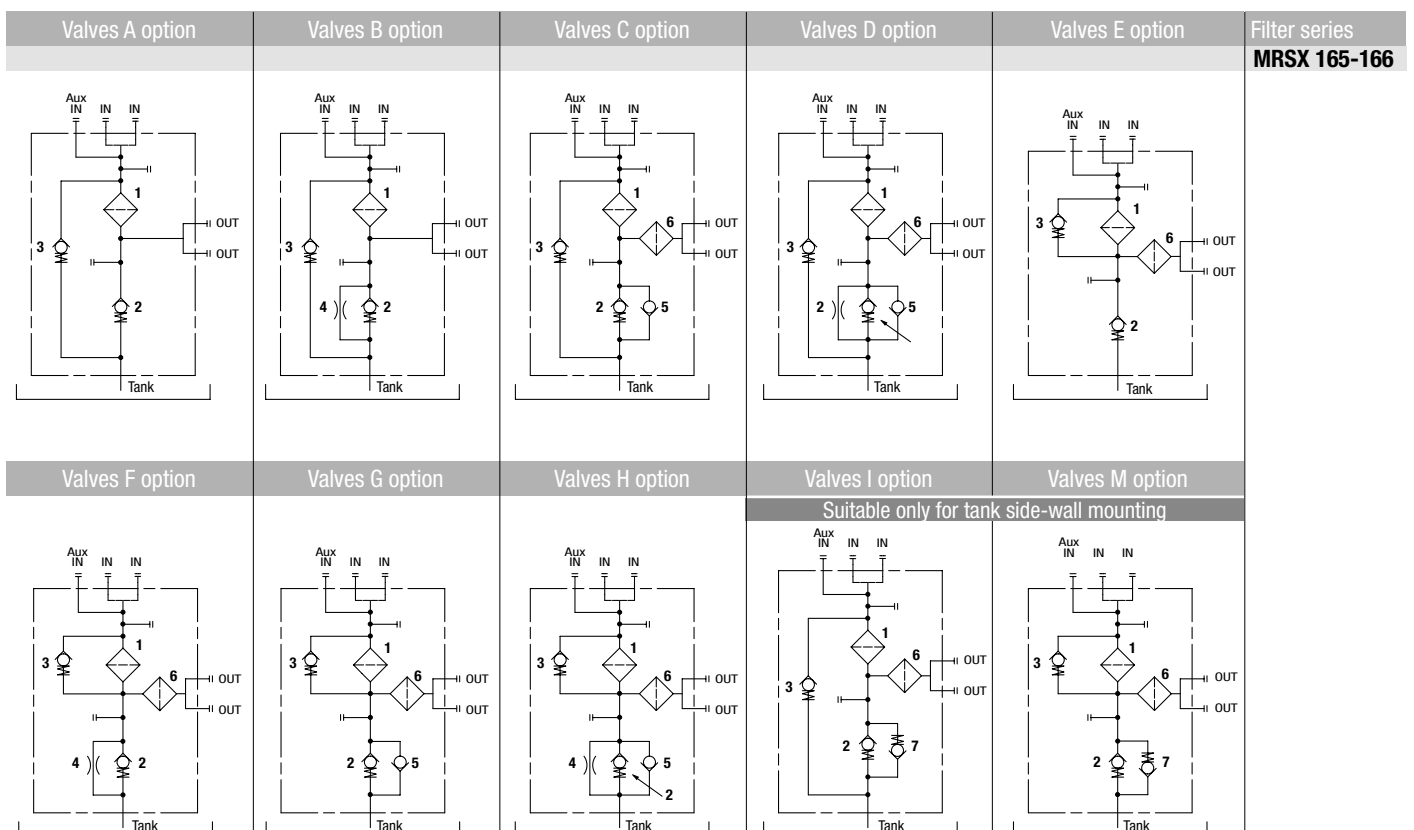
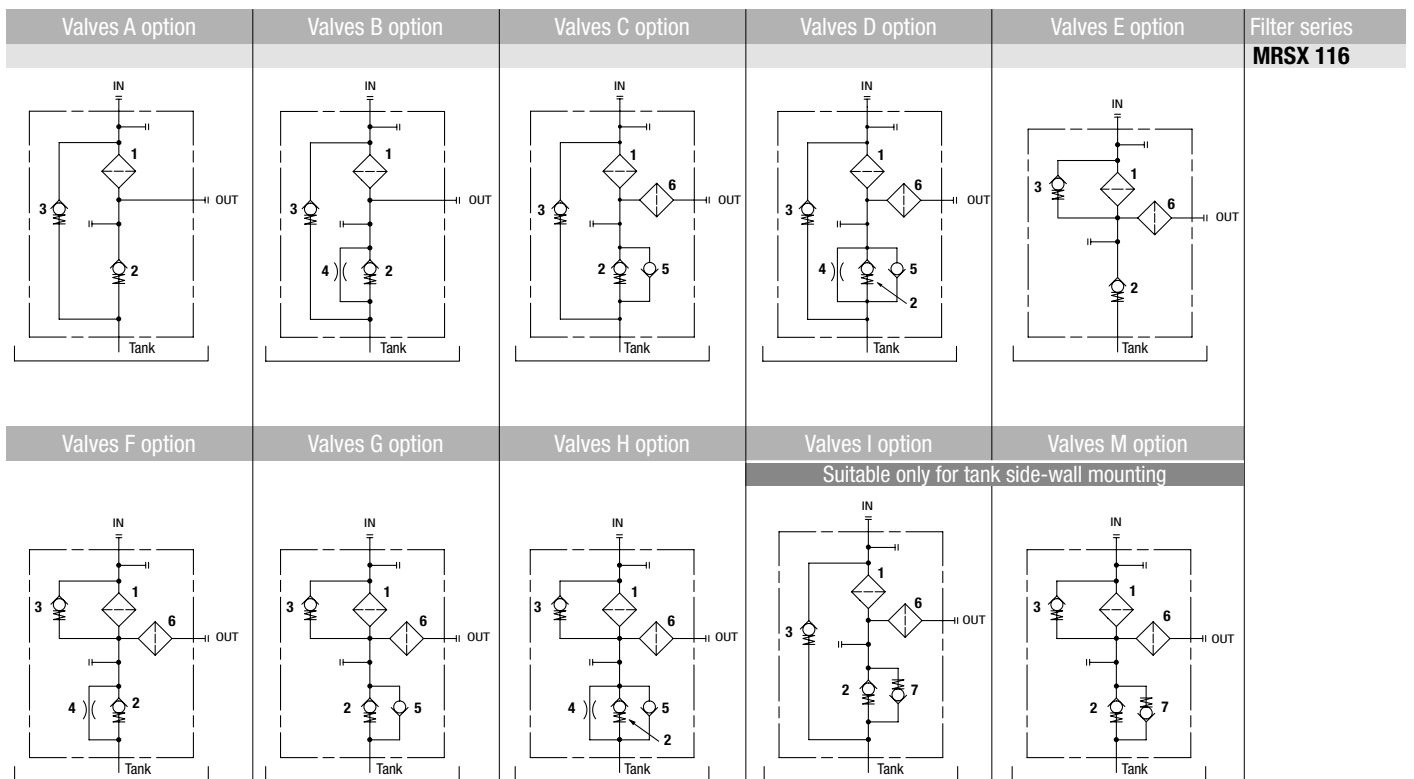
From -25 °C to +110 °C

## Flow rates [l/min]

Filter series	Length	A10	A16	A25
MRSX 116	1	74	82	87
	2	108	113	124
MRSX 165 - 166	1	155	166	178
	2	187	196	200
	3	201	205	217

**Maximum flow rate for a complete return/suction filter with a pressure drop  $\Delta p = 1$  bar.**

The reference fluid has a kinematic viscosity of 30 mm<sup>2</sup>/s (cSt) and a density of 0.86 kg/dm<sup>3</sup>.



### LEGEND

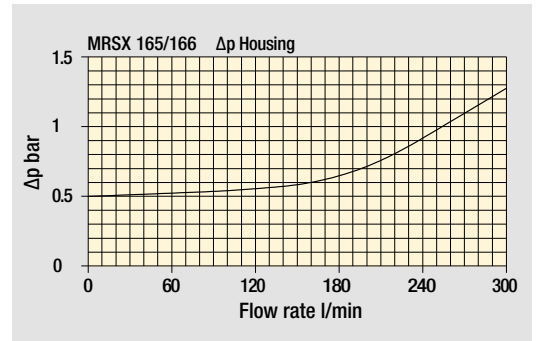
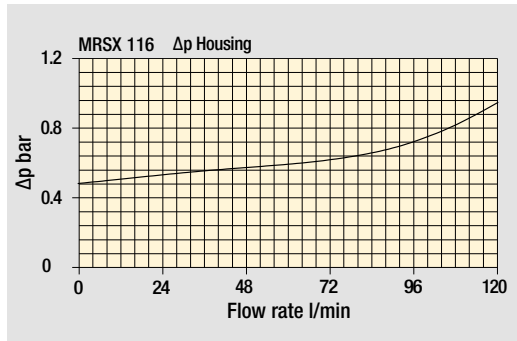
- 1 - Filter element
- 2 - Back-Pressure valve: opening pressure 0.5 bar  $\pm$ 10%
- 3 - Bypass valve: opening pressure 2.5 bar  $\pm$ 10%
- 4 - Depressurization valve

- 5 - Anti-Cavitation valve
- 6 - Safety filter element (wire mesh 60  $\mu$ m)
- 7 - Anti-Cavitation valve / Anti-Emptying valve

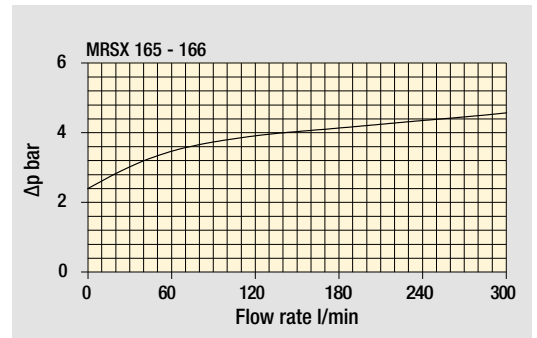
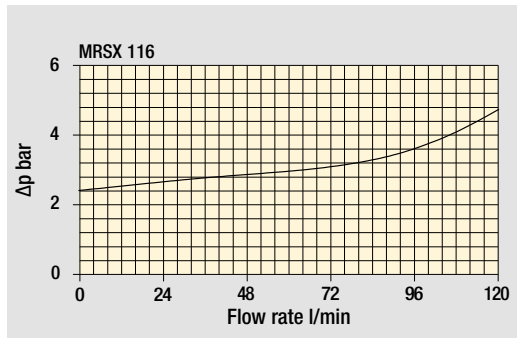
# MRSX GENERAL INFORMATION

## Pressure drop

### Filter housings $\Delta p$ pressure drop



### Bypass valve pressure drop



The curves are plotted using mineral oil with density of 0.86 kg/dm<sup>3</sup> in compliance with ISO 3968.  $\Delta p$  varies proportionally with density.

### Weights [kg] and volumes [dm<sup>3</sup>]

Filter series	Weights [kg]				Volumes [dm <sup>3</sup> ]			
	Length	1	2	3	Length	1	2	3
<b>MRSX 116</b>		1.30	1.40	-		0.80	1.00	-
<b>MRSX 165</b>		3.40	3.80	4.10		2.00	2.60	3.00
<b>MRSX 166</b>		3.40	3.80	4.10		2.00	2.60	3.00

# MRSX MRSX116

## Designation & Ordering code

### COMPLETE FILTER

Series and size **MRSX116** Filter featuring **MY CLEAN** Filter Element Configuration example: **MRSX116** | **1** | **B** | **A** | **G1** | **0** | **A16** | **B** | **P01**

Length **1** | **2**

Hydraulic diagram configuration - see page 275

Bypass valve to tank				Bypass valve to OUT			
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	•	-	-	-
<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	-	-	•	-
<b>I</b>				•	-	-	-
<b>M</b>				-	-	•	-

Seals and treatments

<b>A</b> NBR, O-Ring on head	<b>B</b> NBR, flat seal on head
<b>V</b> FPM, O-Ring on head	<b>D</b> FPM, flat seal on head

Connections IN	Connections OUT
<b>G1</b> G 3/4"	G 3/4"
<b>G2</b> G 1"	G 1"
<b>G3</b> 3/4" NPT	3/4" NPT
<b>G4</b> 1" NPT	1" NPT
<b>G5</b> SAE 12 - 1 1/16" - 12 UN	SAE 12 - 1 1/16" - 12 UN
<b>G6</b> SAE 16 - 1 5/16" - 12 UN	SAE 16 - 1 5/16" - 12 UN
<b>D1</b> G 1"	G 3/4"
<b>D2</b> 1" NPT	3/4" NPT
<b>D3</b> SAE 16 - 1 5/16" - 12 UN	SAE 12 - 1 1/16" - 12 UN

Aux IN connection **0** Without aux IN connection

Filtration rating (filter media)

**A10** Inorganic microfiber 10 µm

**A16** Inorganic microfiber 16 µm

**A25** Inorganic microfiber 25 µm

Mounting position	Valves configuration										
	A	B	C	D	E	F	G	H	I	M	
<b>S</b> Standard	•	•	•	•	•	•	•	•	-	-	
<b>B</b> Tank side-wall mounting	•	•	-	-	•	•	-	-	•	•	

Execution

**P01** MP Filtri standard

**Pxx** Customized

### FILTER ELEMENT

Element series and size **RSX116** Filter Element with **MY CLEAN** feature Configuration example: **RSX116** | **1** | **A16** | **A** | **P01**

Element length **1** | **2**

Filtration rating (filter media)

**A10** Inorganic microfiber 10 µm

**A16** Inorganic microfiber 16 µm

**A25** Inorganic microfiber 25 µm

Seals

**A** NBR

**V** FPM

Execution

**P01** MP Filtri standard

**Pxx** Customized

### CLOGGING INDICATORS

See page 722-723

#### Indicators on Return Line

<b>BVA</b> Axial pressure gauge
<b>BVR</b> Radial pressure gauge
<b>BVP</b> Visual pressure indicator with automatic reset
<b>BVQ</b> Visual pressure indicator with manual reset

<b>BEA</b> Electrical pressure indicator
<b>BEM</b> Electrical pressure indicator
<b>BET</b> Electrical pressure indicator
<b>BLA</b> Electrical / visual pressure indicator

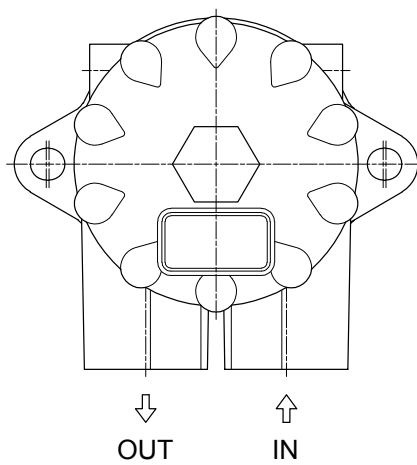
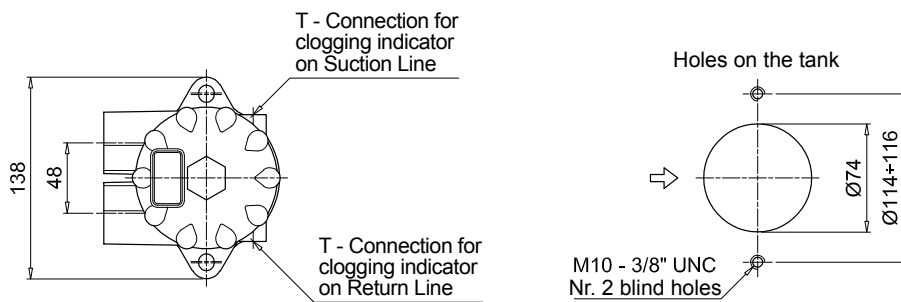
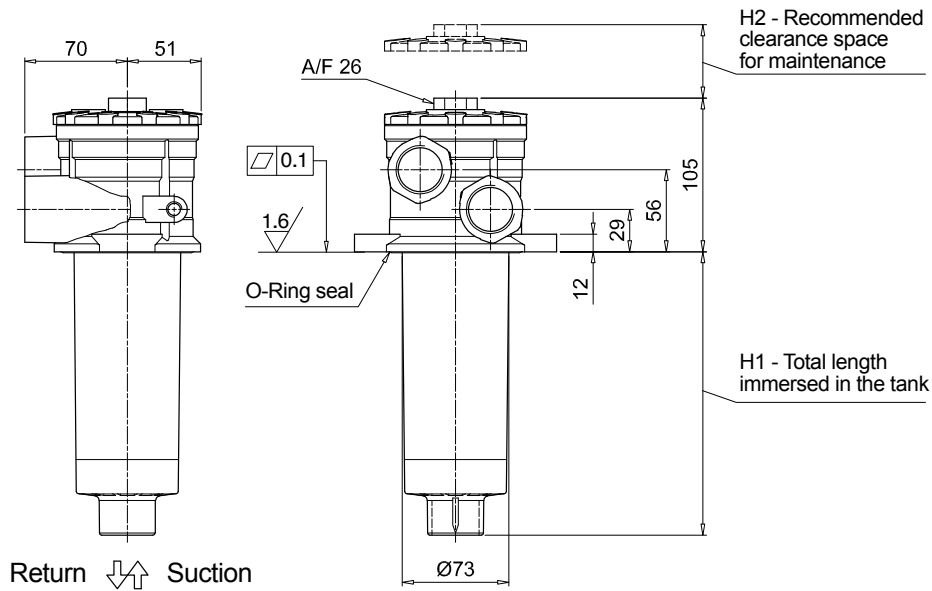
#### Indicators on Suction Line

<b>VVB</b> Axial vacuum gauge
<b>VVS</b> Radial vacuum gauge

<b>VEB</b> Electrical vacuum indicator
<b>VLB</b> Electrical / visual vacuum indicator

MRSX116		
Filter length	H1 [mm]	H2 [mm]
<b>1</b>	203	240
<b>2</b>	263	300

Connections	T
<b>G1 - G2</b>	G 1/8"
<b>G3 - G4</b>	1/8" NPT
<b>G5 - G6</b>	1/8" NPT
<b>D1</b>	G 1/8"
<b>D2 - D3</b>	1/8" NPT



# MRSX MRSX165 - MRSX166

## Designation & Ordering code

### COMPLETE FILTER

Series and size Configuration example: **MRSX166** **2** **C** **V** **G3** **1** **A10** **S** **P01**

**MRSX165** | **MRSX166** Filter featuring **MYCLEAN** Filter Element

Length **1** | **2** | **3**

Hydraulic diagram configuration - see page 275

				Bypass valve to tank		Bypass valve to OUT	
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	•	-	-	-
<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	-	-	•	-
<b>I</b>				•	-	-	-
<b>M</b>				-	-	•	-

Seals and treatments

<b>A</b>	NBR, O-Ring on head	<b>B</b>	NBR, flat seal on head
<b>V</b>	FPM, O-Ring on head	<b>D</b>	FPM, flat seal on head

Connections

	IN (size 165)	IN (size 166)	Aux IN	OUT
<b>G1</b>	G 1 1/4"	G 1"	G 1 1/4"	G 1"
<b>G2</b>	1 1/4" NPT	1" NPT	1 1/4" NPT	1" NPT
<b>G3</b>	SAE 20 - 1 5/8" - 12 UN	SAE 16 - 1 5/16" - 12 UN	SAE 20 - 1 5/8" - 12 UN	SAE 16 - 1 5/16" - 12 UN

Aux IN connection

	MRSX 165	MRSX 166	
<b>0</b>	Without aux IN connection	•	-
<b>1</b>	With aux IN connection - see previous table	•	•

Filtration rating (filter media)

**A10** Inorganic microfiber 10 µm

**A16** Inorganic microfiber 16 µm

**A25** Inorganic microfiber 25 µm

Valves configuration

Mounting position	A	B	C	D	E	F	G	H	I	M
<b>S</b> Standard	•	•	•	•	•	•	•	•	-	-
<b>B</b> Tank side-wall mounting	•	•	-	-	•	•	-	-	•	•

Execution

**P01** MP Filtri standard

**Pxx** Customized

### FILTER ELEMENT

Element series and size Configuration example: **RSX165** **2** **A10** **V** **P01**

**RSX165** Filter Element with **MYCLEAN** feature

Element length **1** | **2** | **3**

Filtration rating (filter media)

**A10** Inorganic microfiber 10 µm

**A16** Inorganic microfiber 16 µm

**A25** Inorganic microfiber 25 µm

Seals

<b>A</b>	NBR
<b>V</b>	FPM

Execution

**P01** MP Filtri standard

**Pxx** Customized

### CLOGGING INDICATORS

See page 722-723

#### Indicators on Return Line

<b>BVA</b>	Axial pressure gauge
<b>BVR</b>	Radial pressure gauge
<b>BVP</b>	Visual pressure indicator with automatic reset
<b>BVQ</b>	Visual pressure indicator with manual reset

<b>BEA</b>	Electrical pressure indicator
<b>BEM</b>	Electrical pressure indicator
<b>BET</b>	Electrical pressure indicator
<b>BLA</b>	Electrical / visual pressure indicator

#### Indicators on Suction Line

<b>VVB</b>	Axial vacuum gauge
<b>VVS</b>	Radial vacuum gauge

<b>VEB</b>	Electrical vacuum indicator
<b>VLB</b>	Electrical / visual vacuum indicator

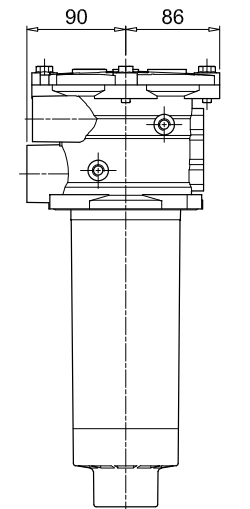
# MRSX165 - MRSX166 MRSX

## Dimensions

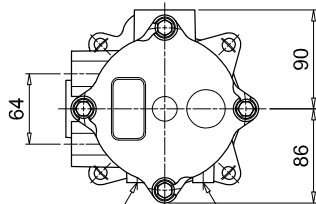
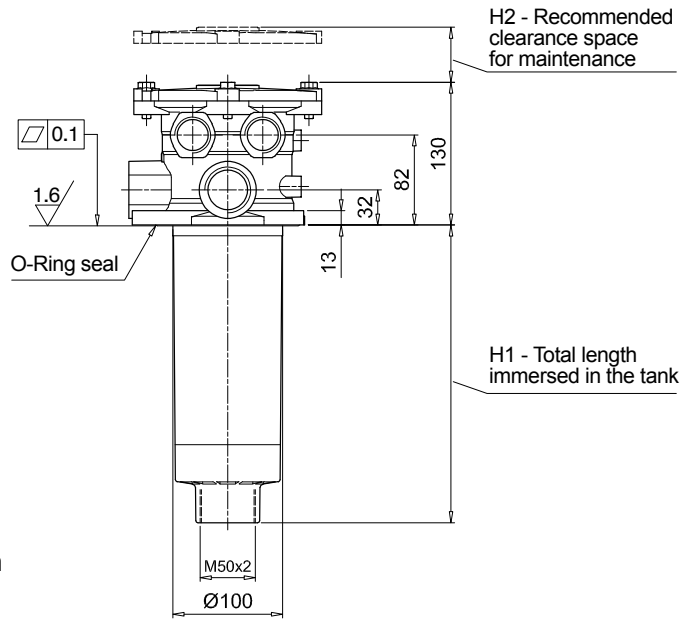
### MRSX165

Filter length	H1 [mm]	H2 [mm]
1	270	320
2	378	430
3	445	500

Connections	T
G1	G 1/8"
G2 - G3	1/8" NPT



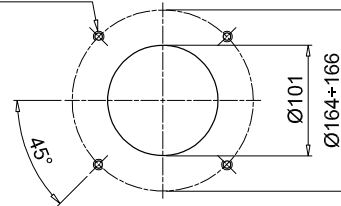
Return ↓ Suction ↑



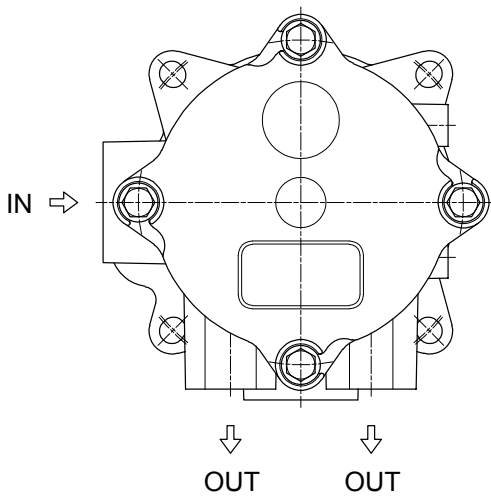
T - Connection for clogging indicator on Return Line

T - Connection for clogging indicator on Suction Line

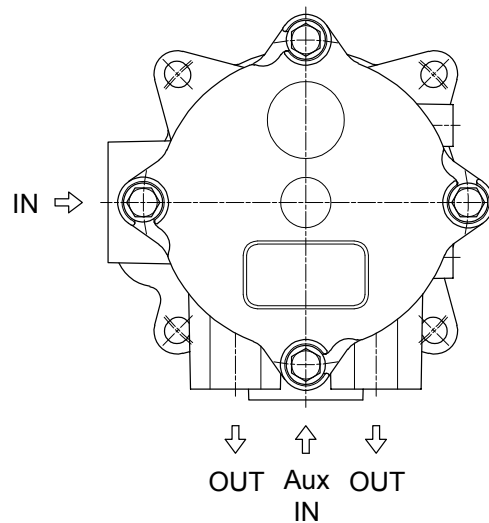
M10 - 3/8" UNC  
Nr. 4 blind holes



Without  
Aux IN connection

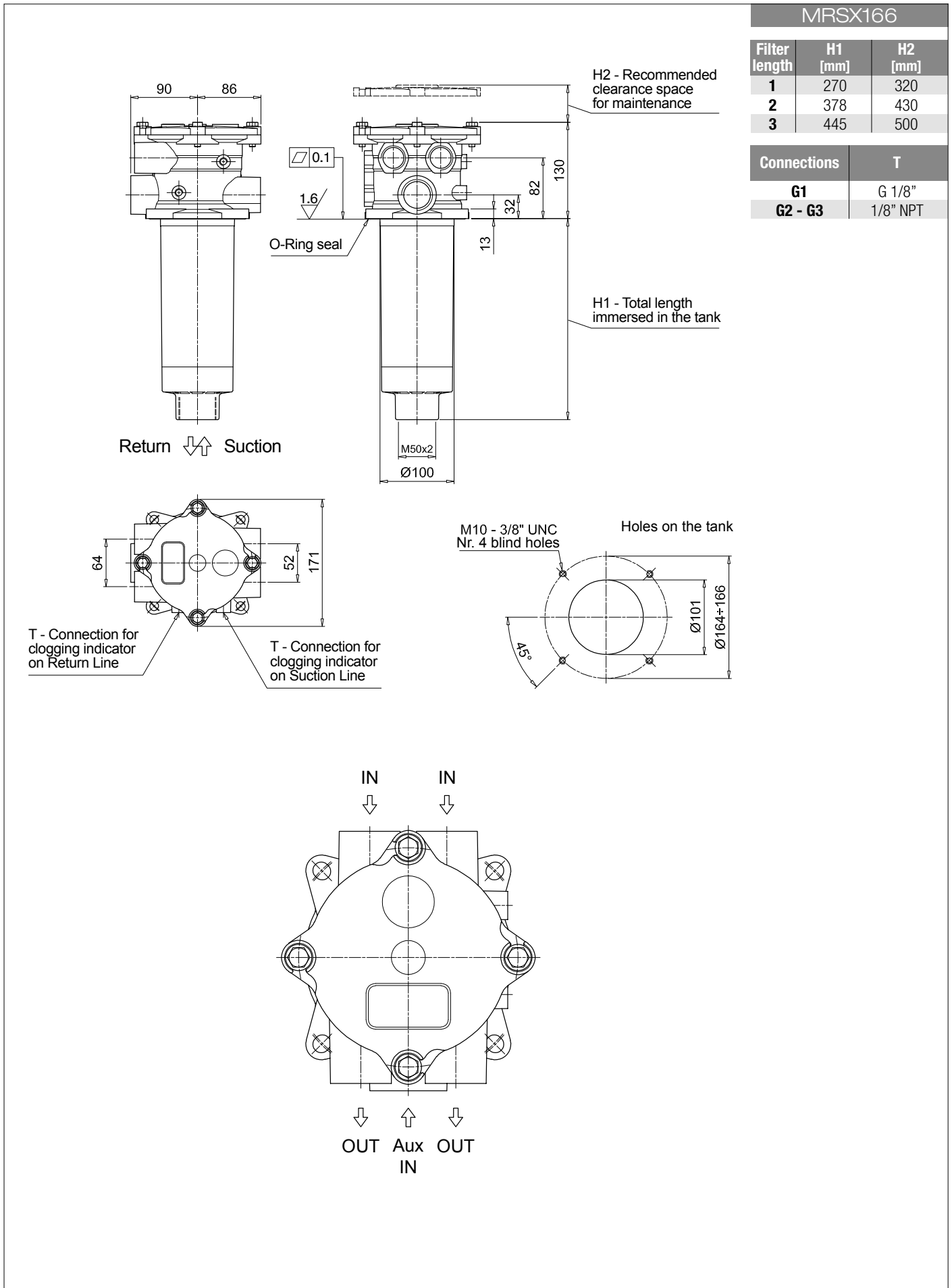


With  
Aux IN connection



# MRSX MRSX165 - MRSX166

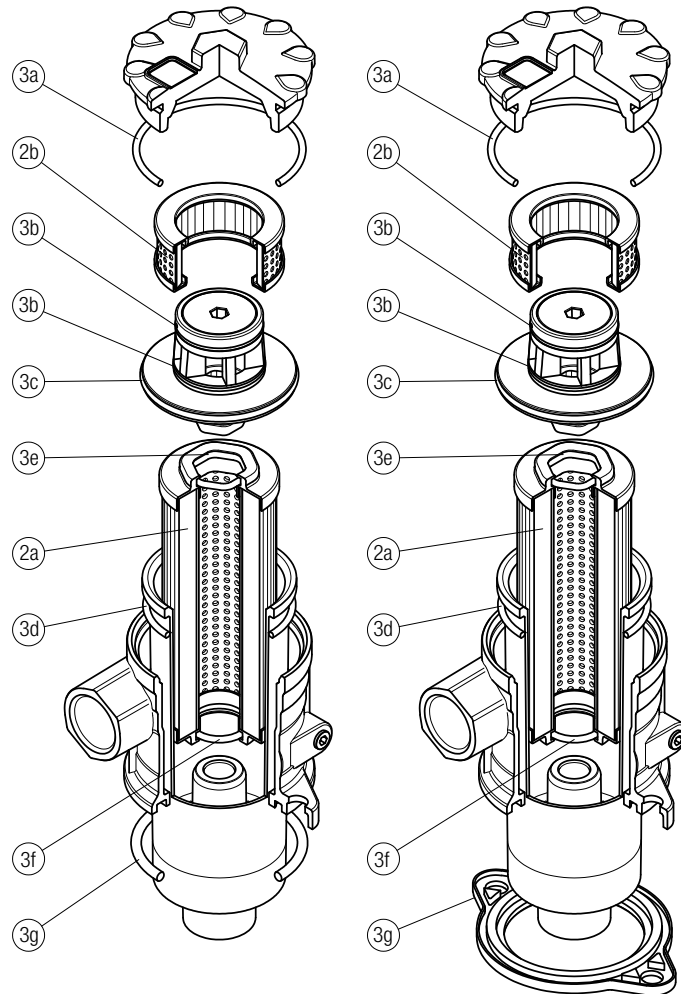
## Dimensions



# MRSX SPARE PARTS

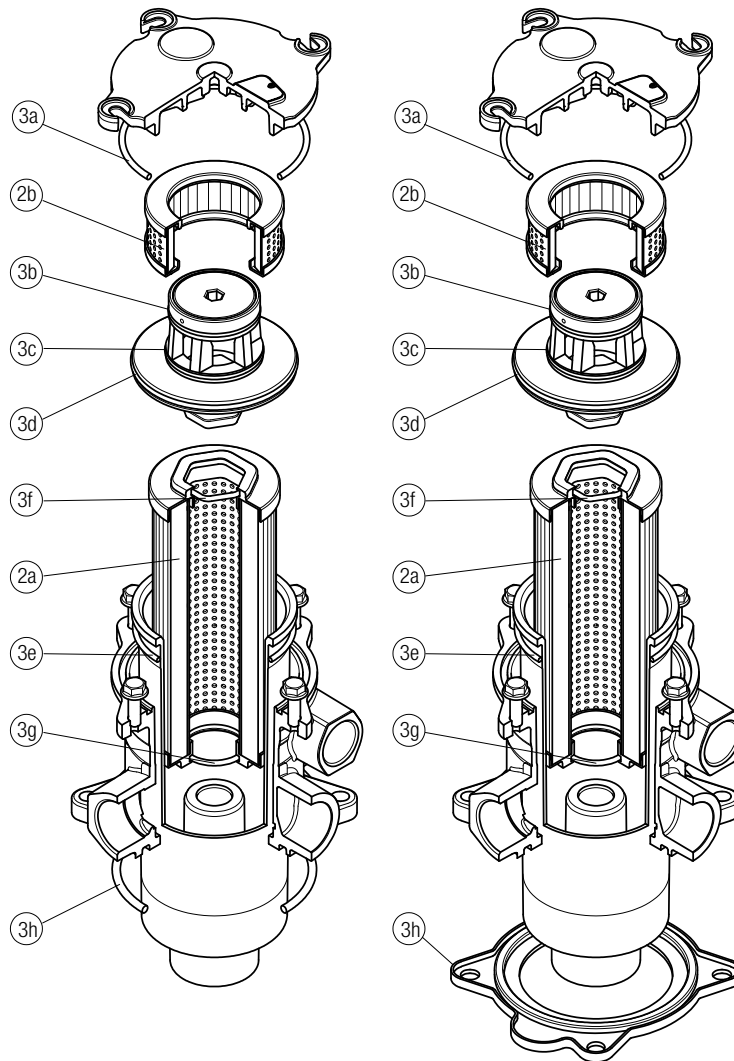
Order number for spare parts

## MRSX 116



Item:	Q.ty: 1 pc.	Q.ty: 1 pc.	O-RING SEAL Q.ty: 1 pc.		FLAT SEAL Q.ty: 1 pc.	
	<b>2a</b>	<b>2b</b>	<b>3</b> (3a ÷ 3g)		<b>3</b> (3a ÷ 3g)	
Filter series	Filter element	Safety filter element	Seal Kit code number		Seal Kit code number	
			NBR	FPM	NBR	FPM
<b>MRSX 116</b>	See order table	S116M60P01	02050617	02050619	02050618	02050620

## MRSX 165 - 166



Item:	Q.ty: 1 pc.	Q.ty: 1 pc.	O-RING SEAL		FLAT SEAL	
	<b>2a</b>	<b>2b</b>	Q.ty: 1 pc.	Q.ty: 1 pc.	Q.ty: 1 pc.	Q.ty: 1 pc.
Filter series	Filter element	Safety filter element	<b>3</b> (3a ÷ 3h)		<b>3</b> (3a ÷ 3h)	
			Seal Kit code number NBR	Seal Kit code number FPM	Seal Kit code number NBR	Seal Kit code number FPM
<b>MRSX 165</b>	See order table	S165M60P01	02050627	02050630	02050628	02050631
<b>MRSX 166</b>			02050627	02050630	02050629	02050632

## Designation & Ordering code

### VACUUM INDICATORS

Series	Configuration example 1:							
<b>VE</b> Electrical vacuum indicator	VE	A	21	V	A	50	P01	EX
<b>VL</b> Electrical/Visual vacuum indicator	Configuration example 2:							
	VL	B	21	A	A	71	P01	
<b>VV</b> Vacuum gauge	Configuration example 3:							
	VV	R	20				P01	

Type VE - VL	Type VV
<b>A</b> Connection EN 10226 - R1/4"	<b>A</b> Axial connection EN 10226 - R1/4"
<b>B</b> Connection EN 10226 - R1/8"	<b>B</b> Axial connection EN 10226 - R1/8"
	<b>R</b> Radial connection EN 10226 - R1/4"
	<b>S</b> Radial connection EN 10226 - R1/8"

Vacuum setting	VE	VL	VV
<b>20</b> -0.16 bar	-	-	•
<b>21</b> -0.21 bar	•	•	-

Seals	VEA - VLA	VEB - VLB
<b>A</b> NBR	•	•
<b>V</b> FPM	•	-

Thermostat	VE	VL
<b>A</b> Without thermostat	•	•

Electrical connections	VE	VL
<b>50</b> Connection EN 175301-803	•	-
<b>51</b> Connection EN 175301-803, transparent base with lamps 24 Vdc	-	•
<b>52</b> Connection EN 175301-803, transparent base with lamps 110 Vdc	-	•
<b>53</b> Connection EN 175301-803, transparent base with lamps 230 Vac	-	•
<b>71</b> Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	•

Option
<b>P01</b> MP Filtri standard
<b>Pxx</b> Customized

Certifications	VEA21A	VEA21V	VEB	VL	VV
Without	•	•	•	•	•
<b>EX</b> ATEX certification	•	•	•	-	-
<b>UL</b> UL certification	•	-	-	-	-

### BAROMETRIC (PRESSURE) INDICATORS

Series	Configuration example 1:							
<b>BE</b> Electrical pressure indicator	BE	M	15	H	A	41	P01	EX
<b>BL</b> Electrical/Visual pressure indicator	Configuration example 2:							
	BL	A	20	H	A	71	P01	
<b>BV</b> Visual pressure indicator	Configuration example 3:							
	BV	R	14				P01	
	Configuration example 4:							
	BV	P	20	H			P01	

Type	BE	BL	BV
<b>A</b> Standard type	•	•	<b>A</b> Axial connection pressure gauge
<b>M</b> With wired electrical connection	•	-	<b>R</b> Radial connection pressure gauge
<b>T</b> With thermal switch	•	-	<b>P</b> Visual indicator with automatic reset
			<b>Q</b> Visual indicator with manual reset

Pressure setting	BEA-BEM	BET	BLA	BVA-BVR	BVP-BVQ
<b>14</b> 1.4 bar	-	-	-	•	-
<b>15</b> 1.5 bar	•	-	•	-	-
<b>20</b> 2.0 bar	•	•	•	-	•
<b>25</b> 2.5 bar	-	•	-	•	-

Seals	BE	BLA	BVP-BVQ
<b>H</b> HNBR	•	•	•

Thermostat	BEA-BEM	BET	BLA
<b>A</b> Without thermostat	•	-	•
<b>F</b> With thermostat	-	•	-

Electrical connections	BEA	BEM	BET	BL
<b>10</b> Connection AMP Superseal series 1.5	-	-	•	-
<b>30</b> Connection Deutsch DT-04-2-P	-	-	•	-
<b>41</b> Connection via four-core cable	-	•	-	-
<b>50</b> Connection EN 175301-803	•	-	•	-
<b>51</b> Connection EN 175301-803, transparent base with lamps 24 Vdc	-	-	-	•
<b>52</b> Connection EN 175301-803, transparent base with lamps 110 Vdc	-	-	-	•
<b>53</b> Connection EN 175301-803, transparent base with lamps 230 Vac	-	-	-	•
<b>71</b> Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	-	-	•

Option
<b>P01</b> MP Filtri standard
<b>Pxx</b> Customized

Certifications	BEA	BEM-BET	BL	BV
Without	•	•	•	•
<b>EX</b> ATEX certification	•	-	-	-
<b>UL</b> UL certification	•	-	-	-

**DIFFERENTIAL PRESSURE INDICATORS**

Series	Configuration example 1:								Configuration example 2:		Configuration example 3:		Configuration example 4:		Configuration example 5:		
<b>DE</b> Electrical differential pressure indicator	DE	M	12	H	F	50	P01	DE	U	50	V	A	50	P01	UL		
<b>DL</b> Electrical/Visual differential pressure indicator																	
<b>DT</b> Electronic differential pressure indicator																	
<b>DV</b> Visual differential pressure indicator																	

Type	DE	DL	DT	DV				
<b>A</b> Standard type	•	•	•	<b>A</b> With automatic reset				
<b>M</b> With wired electrical connection	•	-	-	<b>M</b> With manual reset				
<b>U</b> Standard type 210 bar, UL certified	•	-	-					
<b>E</b> For high power supply	-	•	-					

Pressure setting	DEA	DEM	DEU	DLA	DLE	DTA	DVA	DVM
<b>20</b> 2.0 bar	•	•	•	•	•	•	•	•

Seals	DEA	DEM	DEU	DLA	DLE	DTA	DVA	DVM
<b>H</b> HNBR	•	•	-	•	•	•	•	•
<b>V</b> FPM	•	•	•	•	•	•	•	•

Thermostat	DEA	DEM	DEU	DLA	DLE	DT
<b>A</b> Without thermostat	•	•	•	•	•	-
<b>F</b> With thermostat	-	•	-	-	•	•

Electrical connections	DEA	DEM	DEU	DLA	DLE	DT
<b>10</b> Connection AMP Superseal series 1.5	-	•	-	-	-	-
<b>20</b> Connection AMP Timer Junior	-	•	-	-	-	-
<b>30</b> Connection Deutsch DT-04-2-P	-	•	-	-	-	-
<b>35</b> Connection Deutsch DT-04-3-P	-	•	-	-	-	-
<b>50</b> Connection EN 175301-803	•	-	•	-	•	-
<b>51</b> Connection EN 175301-803, transparent base with lamps 24 Vdc	-	-	-	•	-	-
<b>52</b> Connection EN 175301-803, transparent base with lamps 110 Vdc	-	-	-	•	-	-
<b>70</b> Connection IEC 61076-2-101 D (M12)	-	-	-	-	-	•
<b>71</b> Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	-	-	•	-	-

Option	DEU	OTHERS
<b>P01</b> MP Filtri standard	-	•
<b>Pxx</b> Customized	-	-

Certifications	DEU	OTHERS
Without	-	•
<b>UL</b> UL certification	•	-

**PLUGS**

Series	Configuration example	
<b>T2</b> Plug	T2	H

Seals
<b>H</b> HNBR
<b>V</b> FPM

# LMP 124 series

MULTIPOINT

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: Cathaphoresis - 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 [dm<sup>3</sup>]

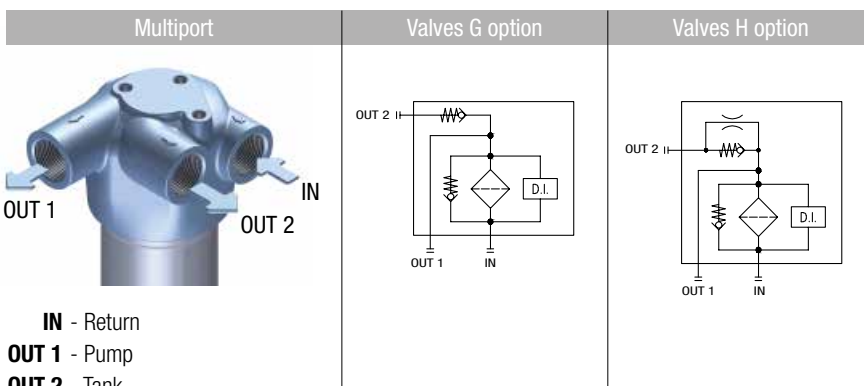
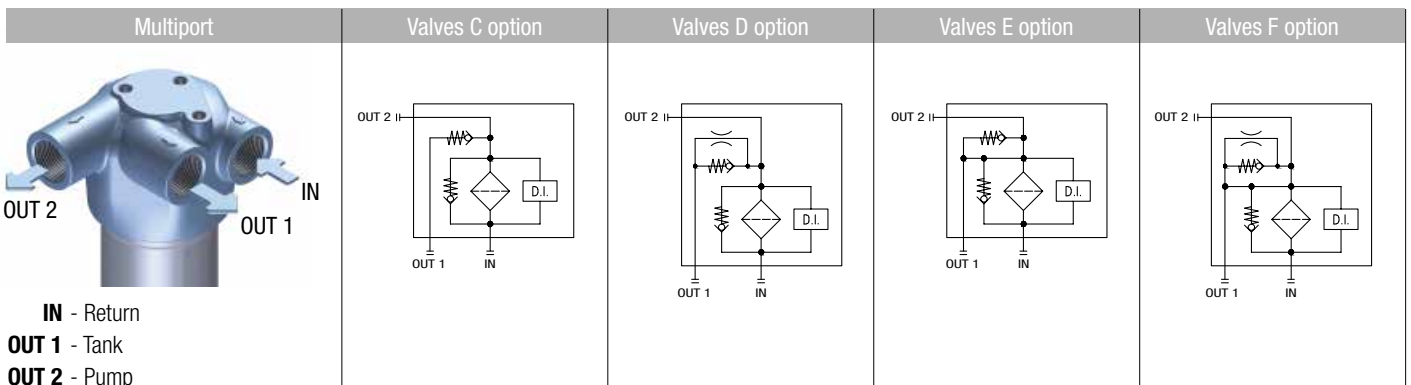
Filter series	Weights [kg]				Volumes [dm <sup>3</sup> ]					
	Length	1	2	3	4	Length	1	2	3	4
<b>LMP 124</b>		1.70	1.90	2.20	2.70		0.75	0.81	1.11	1.53

Flow rates [l/min]

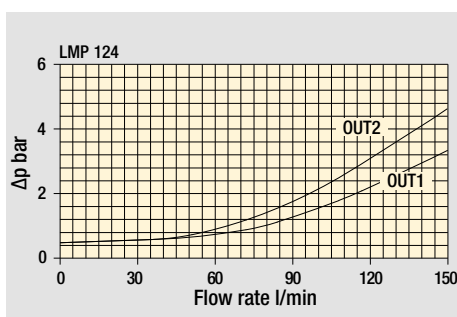
Filter series	Length	Filter element design - N series							
		A03	A06	A10	A16	A25	M25 M60 M90	P10	P25
<b>LMP 124</b>	<b>1</b>	39	41	58	60	69	99	84	85
	<b>2</b>	47	53	68	69	77	99	90	91
	<b>3</b>	59	61	73	77	86	99	92	93
	<b>4</b>	70	78	84	86	93	100	94	95

**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 mm<sup>2</sup>/s (cSt) and a density of 0.86 kg/dm<sup>3</sup>.

### Hydraulic symbols - Valves option

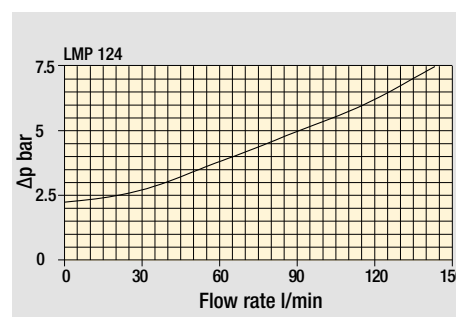


Filter housings  $\Delta p$  pressure drop



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

Bypass valve pressure drop



Pressure drop

## Designation & Ordering code

### COMPLETE FILTER

<b>Series and size</b>	Configuration example: <b>LMP124</b>   <b>4</b>   <b>C</b>   <b>A</b>   <b>F</b>   <b>1</b>   <b>A10</b>   <b>N</b>   <b>P01</b>									
<b>LMP124</b>										
<b>Filter length</b>	<b>1</b>   <b>2</b>   <b>3</b>   <b>4</b>									
<b>Hydraulic diagram configuration</b> - see page 289	<b>C</b>   <b>D</b>   <b>E</b>   <b>F</b>   <b>G</b>   <b>H</b>									
<b>Seals and treatments</b>	<b>A</b> NBR <b>V</b> FPM									
<b>Connections</b>	<b>B</b> G 1" <b>F</b> SAE 16 - 1 5/16" - 12 UN									
<b>Connection for indicator</b>	<b>1</b> Without <b>2</b> With connection G 1/8" for clogging indicator <b>3</b> With connection G 1/4" for clogging indicator <b>4</b> With connection for differential pressure indicator									
<b>Filtration rating (filter media)</b>	<b>A03</b> Inorganic microfiber 3 µm <b>A06</b> Inorganic microfiber 6 µm <b>A10</b> Inorganic microfiber 10 µm <b>A16</b> Inorganic microfiber 16 µm <b>A25</b> Inorganic microfiber 25 µm	<b>M25</b> Wire mesh 25 µm <b>M60</b> Wire mesh 60 µm <b>M90</b> Wire mesh 90 µm <b>P10</b> Resin impregnated paper 10 µm <b>P25</b> Resin impregnated paper 25 µm								
			<b>Element Δp</b> <b>N</b> 20 bar					<b>Execution</b> <b>P01</b> MP Filtri standard <b>Pxx</b> Customized		

### FILTER ELEMENT

<b>Element series and size</b>	Configuration example: <b>CU110</b>   <b>4</b>   <b>A10</b>   <b>A</b>   <b>N</b>   <b>P01</b>					
<b>CU110</b>						
<b>Element length</b>	<b>1</b>   <b>2</b>   <b>3</b>   <b>4</b>					
<b>Filtration rating (filter media)</b>	<b>A03</b> Inorganic microfiber 3 µm <b>A06</b> Inorganic microfiber 6 µm <b>A10</b> Inorganic microfiber 10 µm <b>A16</b> Inorganic microfiber 16 µm <b>A25</b> Inorganic microfiber 25 µm	<b>M25</b> Wire mesh 25 µm <b>M60</b> Wire mesh 60 µm <b>M90</b> Wire mesh 90 µm <b>P10</b> Resin impregnated paper 10 µm <b>P25</b> Resin impregnated paper 25 µm				
			<b>Seals</b> <b>A</b> NBR <b>V</b> FPM	<b>Element Δp</b> <b>N</b> 20 bar		<b>Execution</b> <b>P01</b> MP Filtri standard <b>Pxx</b> Customized

### CLOGGING INDICATORS

See page 722-723

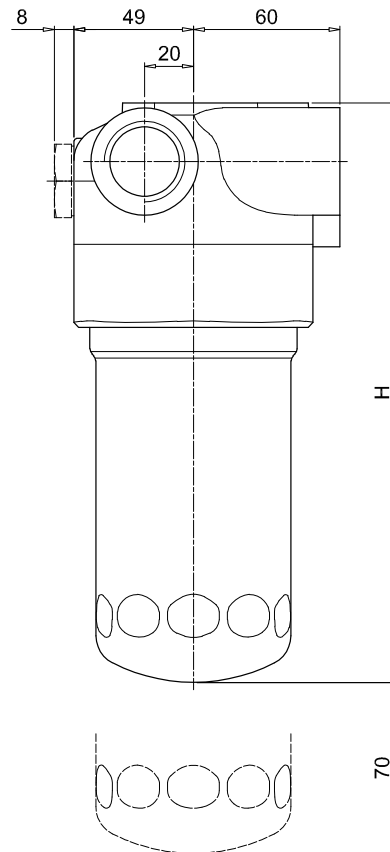
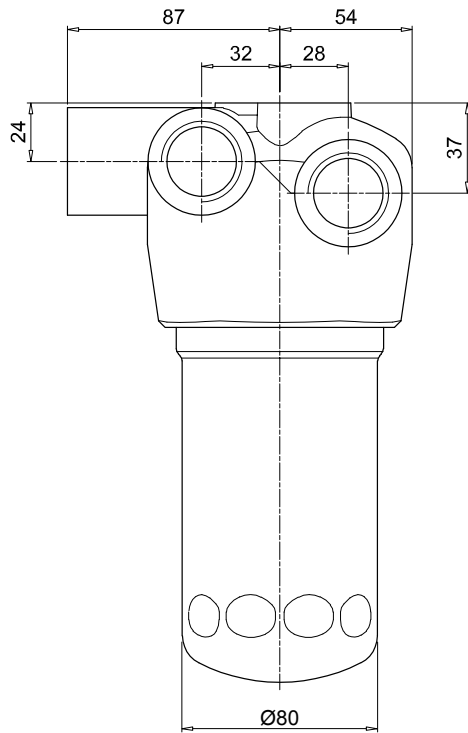
<b>Indicators on Return Line</b>	
<b>BVA</b> Axial pressure gauge	<b>BEA</b> Electrical pressure indicator
<b>BVR</b> Radial pressure gauge	<b>BEM</b> Electrical pressure indicator
<b>BVP</b> Visual pressure indicator with automatic reset	<b>BET</b> Electrical pressure indicator
<b>BVQ</b> Visual pressure indicator with manual reset	<b>BLA</b> Electrical / visual pressure indicator
<b>Differential pressure indicators</b>	
<b>DEA</b> Electrical differential pressure indicator	<b>DLE</b> Electrical / visual differential pressure indicator
<b>DEM</b> Electrical differential pressure indicator	<b>DTA</b> Electronic differential pressure indicator
<b>DEU</b> Electrical differential pressure indicator	<b>DVA</b> Visual differential pressure indicator
<b>DLA</b> Electrical / visual differential pressure indicator	<b>DVM</b> Visual differential pressure indicator

### PLUGS

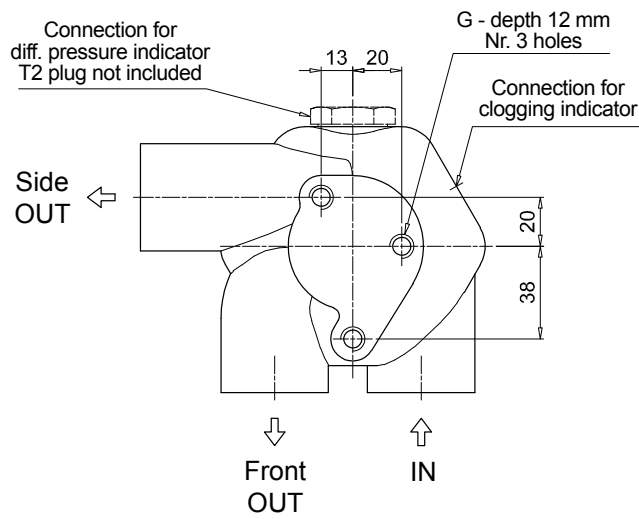
See page 747

<b>T2</b> Plug (not included)
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LMP 124	
MULTIPORT	
Filter length	H [mm]
1	182
2	215
3	265
4	365
Connections	R
B	M10
F	3/8" UNC



Recommended clearance space for maintenance

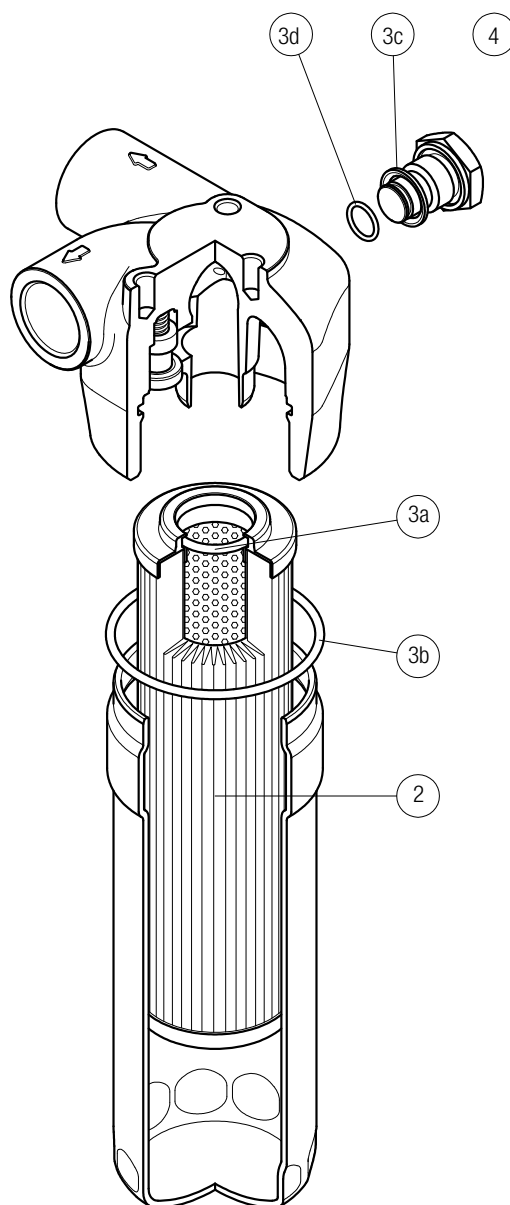


# LMP 124 SPARE PARTS

MULTIPOINT

Order number for spare parts

## LMP 124 MULTIPOINT



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

## Designation & Ordering code

### VACUUM INDICATORS

Series	Configuration example 1:							
<b>VE</b> Electrical vacuum indicator	VE	A	21	V	A	50	P01	EX
<b>VL</b> Electrical/Visual vacuum indicator	Configuration example 2:							
	VL	B	21	A	A	71	P01	
<b>VV</b> Vacuum gauge	Configuration example 3:							
	VV	R	20				P01	

Type VE - VL	Type VV
<b>A</b> Connection EN 10226 - R1/4"	<b>A</b> Axial connection EN 10226 - R1/4"
<b>B</b> Connection EN 10226 - R1/8"	<b>B</b> Axial connection EN 10226 - R1/8"
	<b>R</b> Radial connection EN 10226 - R1/4"
	<b>S</b> Radial connection EN 10226 - R1/8"

Vacuum setting	VE	VL	VV
<b>20</b> -0.16 bar	-	-	•
<b>21</b> -0.21 bar	•	•	-

Seals	VEA - VLA	VEB - VLB
<b>A</b> NBR	•	•
<b>V</b> FPM	•	-

Thermostat	VE	VL
<b>A</b> Without thermostat	•	•

Electrical connections	VE	VL
<b>50</b> Connection EN 175301-803	•	-
<b>51</b> Connection EN 175301-803, transparent base with lamps 24 Vdc	-	•
<b>52</b> Connection EN 175301-803, transparent base with lamps 110 Vdc	-	•
<b>53</b> Connection EN 175301-803, transparent base with lamps 230 Vac	-	•
<b>71</b> Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	•

Option
<b>P01</b> MP Filtri standard
<b>Pxx</b> Customized

Certifications	VEA21A	VEA21V	VEB	VL	VV
Without	•	•	•	•	•
<b>EX</b> ATEX certification	•	•	•	-	-
<b>UL</b> UL certification	•	-	-	-	-

### BAROMETRIC (PRESSURE) INDICATORS

Series	Configuration example 1:							
<b>BE</b> Electrical pressure indicator	BE	M	15	H	A	41	P01	EX
<b>BL</b> Electrical/Visual pressure indicator	Configuration example 2:							
	BL	A	20	H	A	71	P01	
<b>BV</b> Visual pressure indicator	Configuration example 3:							
	BV	R	14				P01	
	Configuration example 4:							
	BV	P	20	H			P01	

Type	BE	BL	BV
<b>A</b> Standard type	•	•	<b>A</b> Axial connection pressure gauge
<b>M</b> With wired electrical connection	•	-	<b>R</b> Radial connection pressure gauge
<b>T</b> With thermal switch	•	-	<b>P</b> Visual indicator with automatic reset
			<b>Q</b> Visual indicator with manual reset

Pressure setting	BEA-BEM	BET	BLA	BVA-BVR	BVP-BVQ
<b>14</b> 1.4 bar	-	-	-	•	-
<b>15</b> 1.5 bar	•	-	•	-	-
<b>20</b> 2.0 bar	•	•	•	-	•
<b>25</b> 2.5 bar	-	•	-	•	-

Seals	BE	BLA	BVP-BVQ
<b>H</b> HNBR	•	•	•

Thermostat	BEA-BEM	BET	BLA
<b>A</b> Without thermostat	•	-	•
<b>F</b> With thermostat	-	•	-

Electrical connections	BEA	BEM	BET	BL
<b>10</b> Connection AMP Superseal series 1.5	-	-	•	-
<b>30</b> Connection Deutsch DT-04-2-P	-	-	•	-
<b>41</b> Connection via four-core cable	-	•	-	-
<b>50</b> Connection EN 175301-803	•	-	•	-
<b>51</b> Connection EN 175301-803, transparent base with lamps 24 Vdc	-	-	-	•
<b>52</b> Connection EN 175301-803, transparent base with lamps 110 Vdc	-	-	-	•
<b>53</b> Connection EN 175301-803, transparent base with lamps 230 Vac	-	-	-	•
<b>71</b> Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	-	-	•

Option
<b>P01</b> MP Filtri standard
<b>Pxx</b> Customized

Certifications	BEA	BEM-BET	BL	BV
Without	•	•	•	•
<b>EX</b> ATEX certification	•	-	-	-
<b>UL</b> UL certification	•	-	-	-

**DIFFERENTIAL PRESSURE INDICATORS**

Series		Configuration example 1:							
<b>DE</b> Electrical differential pressure indicator		DE	M	12	H	F	50	P01	
<b>DL</b> Electrical/Visual differential pressure indicator		Configuration example 2:							
<b>DT</b> Electronic differential pressure indicator		DE	U	50	V	A	50	P01	UL
<b>DV</b> Visual differential pressure indicator		Configuration example 3:							
		DL	E	20	V	A	71	P01	
		Configuration example 4:							
		DT	A	50	H	F	70	P01	
		Configuration example 5:							
		DV	M	70	V			P01	

Type	DE	DL	DT	DV				
<b>A</b> Standard type	•	•	•	<b>A</b> With automatic reset				
<b>M</b> With wired electrical connection	•	-	-	<b>M</b> With manual reset				
<b>U</b> Standard type 210 bar, UL certified	•	-	-					
<b>E</b> For high power supply	-	•	-					

Pressure setting	DEA	DEM	DEU	DLA	DLE	DTA	DVA	DVM
<b>20</b> 2.0 bar	•	•	•	•	•	•	•	•

Seals	DEA	DEM	DEU	DLA	DLE	DTA	DVA	DVM
<b>H</b> HNBR	•	•	-	•	•	•	•	•
<b>V</b> FPM	•	•	•	•	•	•	•	•

Thermostat	DEA	DEM	DEU	DLA	DLE	DT
<b>A</b> Without thermostat	•	•	•	•	•	-
<b>F</b> With thermostat	-	•	-	-	•	•

Electrical connections	DEA	DEM	DEU	DLA	DLE	DT
<b>10</b> Connection AMP Superseal series 1.5	-	•	-	-	-	-
<b>20</b> Connection AMP Timer Junior	-	•	-	-	-	-
<b>30</b> Connection Deutsch DT-04-2-P	-	•	-	-	-	-
<b>35</b> Connection Deutsch DT-04-3-P	-	•	-	-	-	-
<b>50</b> Connection EN 175301-803	•	-	•	-	•	-
<b>51</b> Connection EN 175301-803, transparent base with lamps 24 Vdc	-	-	-	•	-	-
<b>52</b> Connection EN 175301-803, transparent base with lamps 110 Vdc	-	-	-	•	-	-
<b>70</b> Connection IEC 61076-2-101 D (M12)	-	-	-	-	-	•
<b>71</b> Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	-	-	•	-	-

Option
<b>P01</b> MP Filtri standard
<b>Pxx</b> Customized

Certifications	DEU	OTHERS
Without	-	•
<b>UL</b> UL certification	•	-

**PLUGS**

Series	Configuration example	
<b>T2</b> Plug	T2	H

Seals
<b>H</b> HNBR
<b>V</b> FPM

## По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04  
Ангарск (3955)60-70-56  
Архангельск (8182)63-90-72  
Астрахань (8512)99-46-04  
Барнаул (3852)73-04-60  
Белгород (4722)40-23-64  
Благовещенск (4162)22-76-07  
Брянск (4832)59-03-52  
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Кемерово (3842)65-04-62  
Киров (8332)68-02-04  
Коломна (4966)23-41-49  
Кострома (4942)77-07-48  
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Курган (3522)50-90-47  
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Ноябрьск (3496)41-32-12  
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Омск (3812)21-46-40  
Орел (4862)44-53-42  
Оренбург (3532)37-68-04  
Пенза (8412)22-31-16  
Петрозаводск (8142)55-98-37  
Псков (8112)59-10-37  
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15  
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