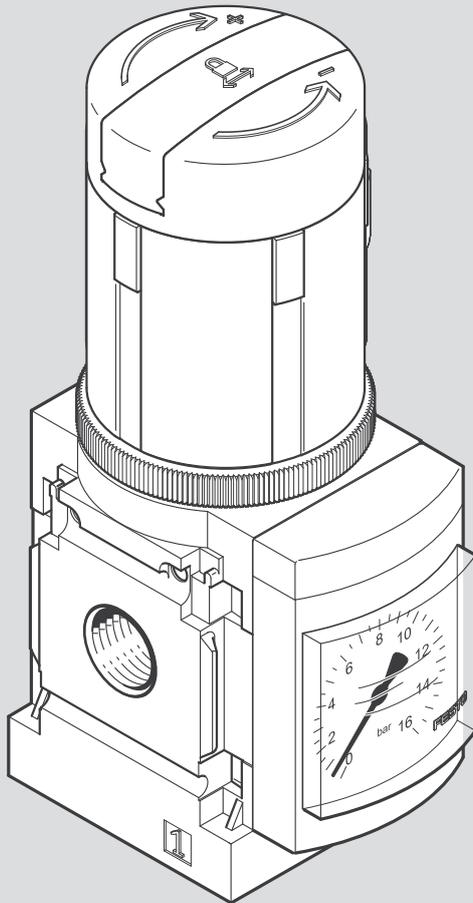


MS4-LR(B)

Pressure regulator

FESTO

Operating instruction



8206763

8206763
2024-11d
[8206765]

Original instructions

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1 Applicable documents



All available documents for the product → www.festo.com/sp.

2 Safety

2.1 Safety instructions

- Only use the product in its original condition without unauthorised modifications.
- Only use the product if it is in perfect technical condition.
- Observe the identifications on the product.
- Take into account the ambient conditions at the location of use.
- Before working on the product, switch off the compressed air supply and lock it to prevent it from being switched on again.

2.2 Intended use

The pressure regulator regulates the compressed air in the downstream string at the specified outlet pressure. The pressure regulator is suitable for a manifold assembly with continuous compressed air supply and independent pressure ranges.

2.3 Training of qualified personnel

Work on the product may only be carried out by qualified personnel who can evaluate the work and detect dangers. The qualified personnel have knowledge and experience in pneumatics.

3 Additional information

- Contact the regional Festo contact if you have technical problems → www.festo.com.
- Accessories and spare parts → www.festo.com/catalogue.

4 Product design

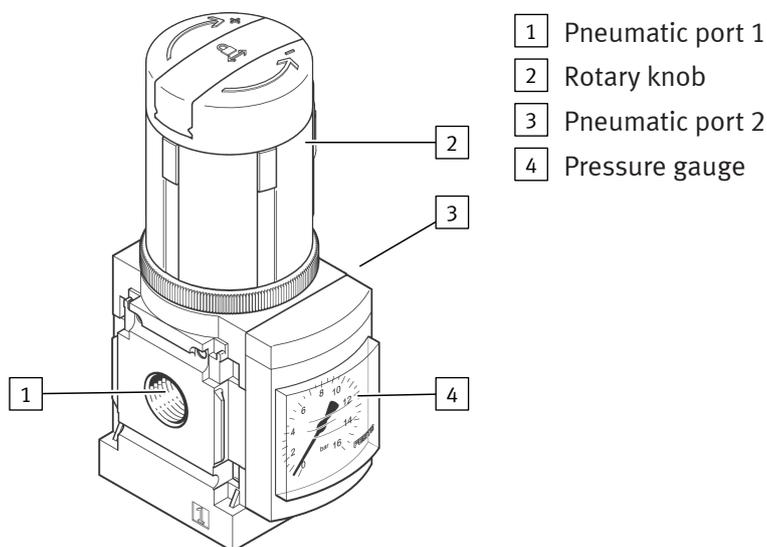


Fig. 1: Product design

5 Mounting

5.1 Direct fastening

Requirements:

- Space required above the product: ≥ 30 mm
 - Maximum permissible wall thickness: 5 mm
 - Shut-off valves are installed in the compressed air supply line.
1. Align the product vertically in the flow direction from 1 to 2. The numbers on the housing are provided for orientation.
 2. Pull the rotary knob upwards. If necessary, remove the padlock and push in the release lock.
 3. Push the regulator head through the drilled hole of the mounting bracket.
 4. Tighten the MS4-WRS hex nut. Tightening torque: $9 \text{ Nm} \pm 10\%$.
 5. Position the rotary knob and press to lock it.

5.2 Wall mounting

Requirements:

- Space required above the product: ≥ 30 mm
 - Shut-off valves are installed in the compressed air supply line.
1. Align the product vertically in the flow direction from 1 to 2. The numbers on the housing are provided for orientation.
 2. Mount the product on the mounting surface with the mounting accessories
→ 3 Additional information.

6 Installation

1. Use fittings, seals and suitable tubing from the Festo catalogue → 3 Additional information.
2. Remove any dirt particles in the supply lines by blowing out the pipes and hoses. This protects the product from premature failure or higher wear.
3. Screw the fittings into the pneumatic ports.
4. Insert suitable tubing into the fitting to the stop.

7 Commissioning

1. Pull the rotary knob to unlock it.
2. Turn the rotary knob completely in the [–] direction.
3. Pressurise the system slowly. Turn the rotary knob in the [+] direction until the desired pressure is reached.
 - Observe the permissible pressure ranges → 10.2 Technical data, pneumatic. The input pressure p_1 should always be at least 0.05 MPa (0.5 bar ; 7.3 psi) higher than the set output pressure p_2 .
4. Press the rotary knob to lock it.

8 Cleaning

- Clean the outside of the product as required with a soft cloth.
Permissible cleaning agents:
 - Soap solution, maximum $+60 \text{ °C}$
 - Petroleum ether, free of aromatic compounds

9 Fault clearance

Malfunction	Cause	Remedy
Low flow rate. The operating pressure drops with air consumption.	The compressed air supply line is constricted	- Check the compressed air supply.
The operating pressure rises above the set working pressure.	The valve disc at the sealing seat is defective.	- Replace the product.
Audible, continuous leakage at the rotary knob.	The valve seat is damaged.	- Replace the product.

Tab. 1: Fault clearance

10 Technical data

10.1 Technical data, general

MS4-LR(B)		
Certificates, declaration of conformity		➔ www.festo.com/sp
Mounting position		Any
Pneumatic port 1		G1/4
Pneumatic port 2		G1/4
Storage temperature		
MS4-LR(B)	[°C]	-10 ... +60
Temperature of medium		
MS4-LR(B)	[°C]	-10 ... +60
MS4-LR(B)-...-AD1 ... -AD12	[°C]	0 ... +50
Ambient temperature		
MS4-LR(B)	[°C]	-10 ... +60
MS4-LR(B)-...-AD1 ... -AD12	[°C]	0 ... +50

Tab. 2: Technical data, general

10.2 Technical data, pneumatic

MS4-LR(B)		
Operating medium		Compressed air to ISO 8573-1:2010 [7:4:4]
Information on the operating medium		Lubricated operation possible, in which case lubricated operation will always be required
Operating pressure	[MPa]	0.08 ... 1.4
	[bar]	0.8 ... 14
	[psi]	11.6 ... 203
Pressure regulation range		
MS4-LR(B)-...-D5	[MPa]	0.03 ... 0.4
	[bar]	0.3 ... 4
	[psi]	4.35 ... 58
MS4-LR(B)-...-D6	[MPa]	0.03 ... 0.7
	[bar]	0.3 ... 7
	[psi]	4.35 ... 101.5
MS4-LR(B)-...-D7	[MPa]	0.05 ... 1.2
	[bar]	0.5 ... 12
	[psi]	7.25 ... 174
MS4-LR(B)-...-D7-AD1 ... -AD12	[MPa]	0.05 ... 1
	[bar]	0.5 ... 10
	[psi]	7.25 ... 145

Tab. 3: Technical data, pneumatic

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