

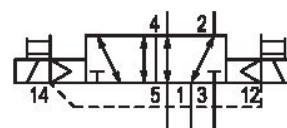
5/2-directional valve, Series 502

R502A1B40MA00F1

General series information

AVENTICS Series 502 Directional Control Valves

- The AVENTICS Series 502 is a line of general purpose automation valves designed for directional control and piloting applications requiring higher flow rates; less power consumption; and exceptionally easy on-site installation, configuration, and modification. The compact (18 mm), modular 502 Series is ideally suited for automotive and tire, food and beverage, pharmaceutical, and packaging machinery applications. The valve has the flexibility of meeting the ISO 15407-2 standard while maintaining its high-flow characteristics. In addition, no other valve in its class offers such a broad range of pressure regulator, pressure shut-off, and exhaust flow control accessories.



Technical data

Industry

Industrial

Activation

Electrically

Valve type

Spool valve, positive overlapping

Actuating control

Double Solenoid

Sealing principle

metal/metal sealing

Connection type

Plate connection

Pilot control exhaust

with directional pilot air exhaust

Nominal flow Q_n

470 l/min

Working pressure min.

-0.95 bar

Working pressure max.

8 bar

Control pressure min.

2 bar

Control pressure max.

8 bar

| | |
|------------------------------------|---|
| Protection class with connection | IP65 |
| Protective circuit | Z-diode |
| Reverse polarity protection | Protected against polarity reversal |
| Operational voltage | 24 V DC |
| Voltage tolerance DC | -15% / +10% |
| Pilot | External |
| LED status display | Yellow |
| Power consumption DC | 1.1 W |
| Duty cycle | 100 % |
| Typ. switch-on time | 16 ms |
| Typ. switch-off time | 16 ms |
| Blocking principle | Single base plate principle, can be assembled into blocks |
| Can be assembled into blocks | Can be assembled into blocks |
| Min. ambient temperature | -10 °C |
| Max. ambient temperature | 50 °C |
| Min. medium temperature | -10 °C |
| Max. medium temperature | 50 °C |
| Medium | Compressed air |
| Oil content of compressed air min. | 0 mg/m ³ |
| Oil content of compressed air max. | 5 mg/m ³ |
| Max. particle size | 50 µm |
| mounting screws | with hexagon socket |
| Mounting screw tightening torque | 2 Nm |
| Weight | 0.169 kg |

Material

| | |
|----------------------|--|
| Housing material | Die cast zinc |
| Seal material | Nitrile butadiene rubber Polyurethane |
| Material front plate | Polyamide |
| Material end plate | Polyamide |
| Part No. | R502A1B40MA00F1 |

Technical information

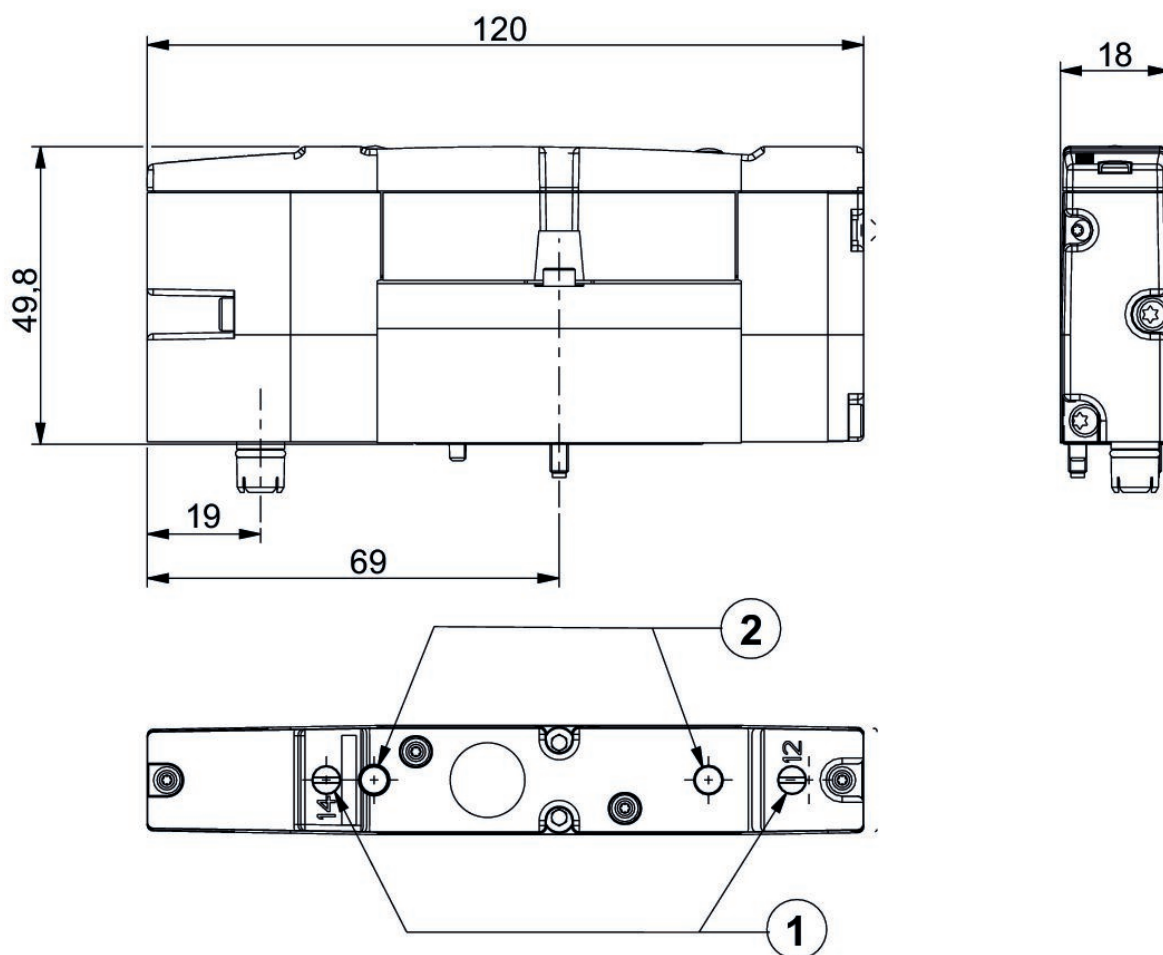
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in <https://www.emerson.com/en-us/support>).

Dimensions



- 1) Manual override
- 2) LED