# 5/3-directional valve, Series 502

## R502A1B60M11BF1

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 fle accessories.



#### Technical data

Industry Industrial Activation Electrically

Valve type Spool valve, positive overlapping

Valve function

Actuating control

Sealing principle

Connection type

Closed Center

Double Solenoid

metal/metal sealing

Plate connection

Pilot control exhaust with directional pilot air exhaust

Nominal flow Qn 420 I/min



Working pressure min.

Working pressure max

Control pressure min.

Control pressure max.

-0.95 bar

8 bar

1.5 bar

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

Typ. switch-on time 12 ms
Typ. switch-off time 12 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.  $0 \text{ mg/m}^3$  Oil content of compressed air max.  $5 \text{ mg/m}^3$  Max. particle size  $50 \mu\text{m}$ 

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. R502A1B60M11BF1

### **Technical information**

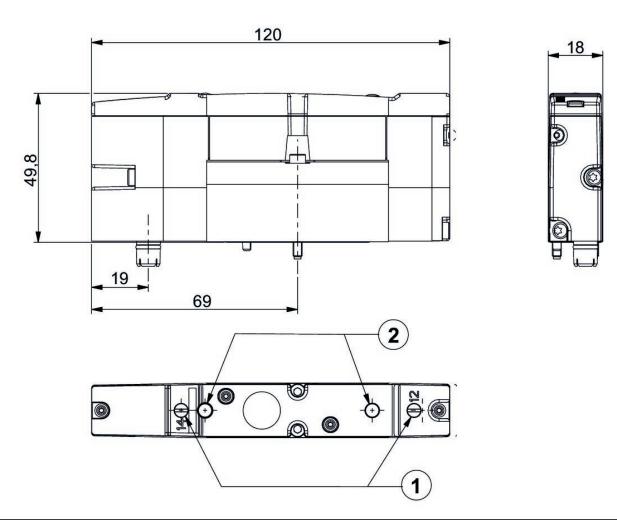
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

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**





<sup>2)</sup> LED

