5/3-directional valve, Series 502

R502A2B50MA00F1

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 Exhausted Center

Sealing principle soft seal

Connection type Plate connection

Manual override without detent

Pilot control exhaust with directional pilot air exhaust

Nominal flow Qn 430 I/min



Working pressure min.

Working pressure max

Control pressure min.

Control pressure max.

-0.95 bar

8 bar

8 bar

Protection class with connection IP65

Protective circuit TVS 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 36 ms
Typ. switch-off time 21 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/m³
Oil content of compressed air max. 5 mg/m³
Max. particle size 50 µm

mounting screws with hexagon socket

Mounting screw tightening torque 2 Nm Weight 0.167 kg

Material

Housing material Die cast zinc

Seal material Nitrile butadiene rubber

Polyurethane



Material front plate Polyamide

Material end plate Polyamide

Part No. R502A2B50MA00F1

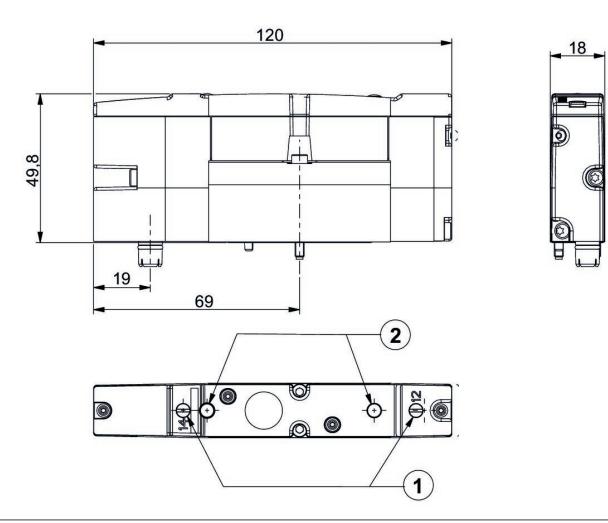
Technical information

At operating voltage 24 V DC, power consumption for coil (cold) = 1.3 W, coil (hot) = 1.1 W 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.

Dimensions





2) LED

