# 5/3-directional valve, Series 502

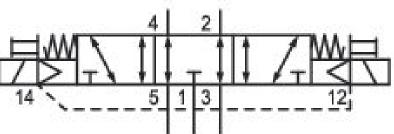
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General series information

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 flu accessories.





## Technical data

Industry Activation Valve type Valve function Sealing principle Connection type Manual override

Pilot control exhaust

Nominal flow Qn

Industrial Electrically Spool valve, positive overlapping Exhausted Center soft seal Plate connection with detent

with directional pilot air exhaust

430 l/min



Working pressure min.	-0.95 bar
Working pressure max	8 bar
Control pressure min.	3 bar
Control pressure max.	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
51	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
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### Material

Housing material Seal material

Die cast zinc Nitrile butadiene rubber Polyurethane



Material front plate	Polyamide
Material end plate	Polyamide
Part No.	R502A2B50M11BF1

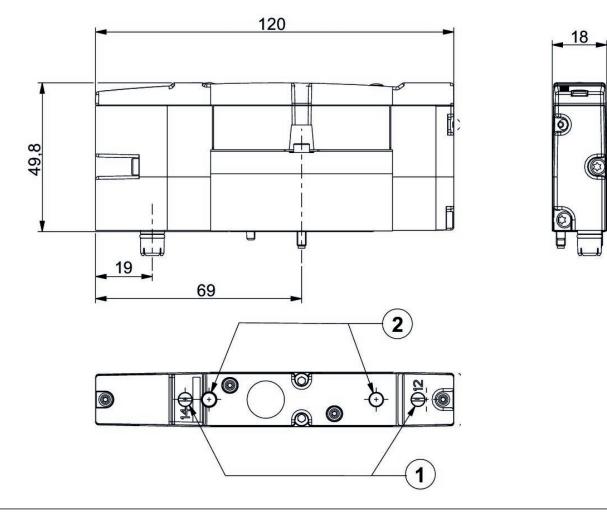
#### Technical information

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





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