AVENTICS Series 490/579/589 Directional Control Valves

The AVENTICS Series 490/579/589 have a robust polymer housing that can be mounted individually or as a block. They cover a large range of voltages and feature fast connections for pneumatic tubing.



Technical data
Industry
Activation
Valve type
Switching principle
Valve function
Sealing principle
Connection type
Manual override

Compressed air connection input Compressed air connection output Compressed air connection, exhaust

Nominal flow Qn

Min. working pressure Max. working pressure

Electrical connection type

Industrial Electrically Poppet valve 3/2, with spring return NO Soft seal Pipe connection with detent

Ø 6x1 Ø 6x1 Ø 8x1 520 l/min 3 bar

8 bar

Plug





3/2-directional valve, Series 589

5894415220

Electrical connection size Protection class with connection Reverse polarity protection Operational voltage Operational voltage AC at 50 Hz Voltage tolerance AC 50 Hz Voltage tolerance AC 60 Hz	ISO 15217, form C IP65 Protected against polarity reversal 24 V AC 24 V -10% / +15% 24 V -10% / +15%
Pilot	Internal
Coil width	20 mm
Holding power AC 50 Hz	2.2 VA
Holding power AC 60 Hz	1.8 VA
Switch-on power AC 50 Hz	3 VA
Switch-on power AC 60 Hz	2.6 VA
Duty cycle	100 %
Typ. switch-on time	18 ms
Typ. switch-off time	16 ms
Blocking principle	Single valve
Min. ambient temperature	-15 °C
Max. ambient temperature	50 °C
Min. medium temperature	-15 °C
Max. medium temperature	50 °C
Medium	Compressed air
Min. oil content of compressed air	0 mg/m³
Max. oil content of compressed air	1 mg/m³
Max. particle size	5 μm
Weight	0.093 kg

Material

Housing material Seal material

Part No.

Polyamide Acrylonitrile butadiene rubber Polyurethane 5894415220

Technical information

At an ambient temperature of [[40] °C] the max. working pressure is [[10] bar].

Versions with voltage of less than 50 V DC do not have a protective ground.

Working pressure with vacuum operation, connection 1: min. [[3] bar], connection 3: min. -[[0.95] bar]

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.

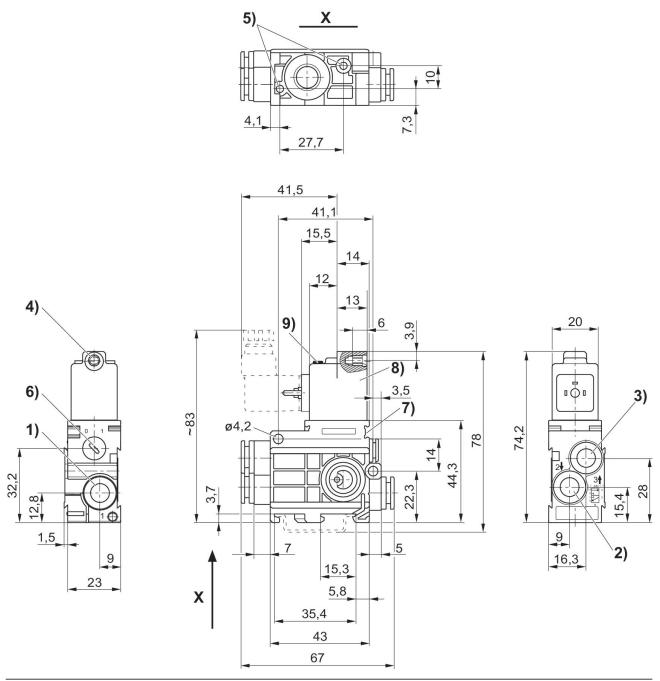
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).



3/2-directional valve, Series 589

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Dimensions



1) port 1 2) port 2 3) port 3 4) core Ø for M 5 5) pocket hole 6 mm deep for 3.5 self-tapping screw 6) manual override 7) Pilot valve 8) coil can be rotated at 180° intervals

