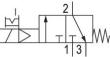
AVENTICS Series 490/579/589 Directional Control Valves

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 NC Soft seal Pipe connection with detent

Ø 8x1 Ø 8x1 Ø 8x1 750 l/min 3 bar

Plug

8 bar



2023-11-02



3/2-directional valve, Series 589

5894600220

Electrical connection size	ISO 15217, form C
Protection class with connection	IP65
Reverse polarity protection	Protected against polarity reversal
Operational voltage	24 V DC
Operational voltage DC	24 V
Voltage tolerance DC	-10% / +10%
Pilot	Internal
Coil width	20 mm
Power consumption DC	1.6 W
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

Material

Housing material Seal material

Part No.

Polyamide Acrylonitrile butadiene rubber Polyurethane 5894600220

0.093 kg



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.

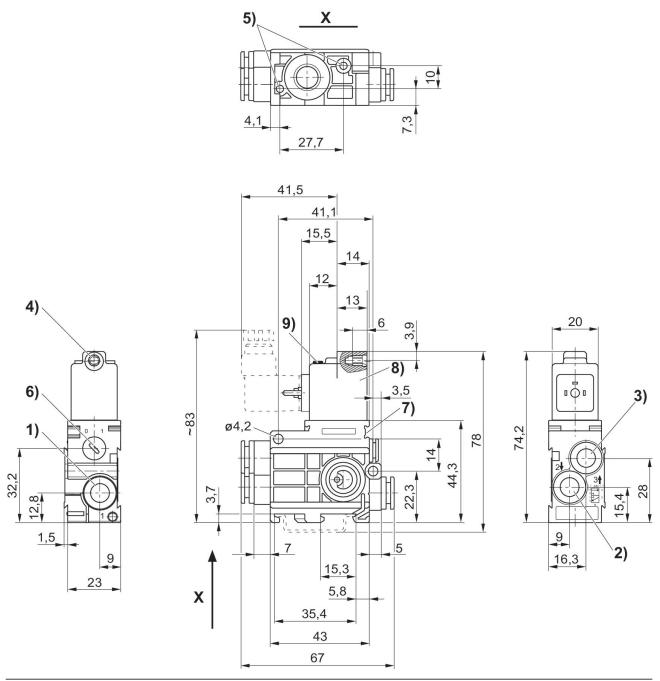
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).



3/2-directional valve, Series 589

5894600220

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