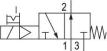
2023-11-02

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

Min. working pressure Max. working pressure

Electrical connection type Electrical connection size

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

Ø 1/4" Ø 1/4" 5/16"

3 bar 8 bar

Plug ISO 15217, form C



3/2-directional valve, Series 589

5894410310

20	23-	-11	-02
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Protection class with connection Reverse polarity protection Operational voltage Operational voltage DC Voltage tolerance DC	IP65 Protected against polarity reversal 12 V DC 12 V -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	0.093 kg	

Material

Housing material Seal material

Part No.

Polyamide Acrylonitrile butadiene rubber Polyurethane 5894410310



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.

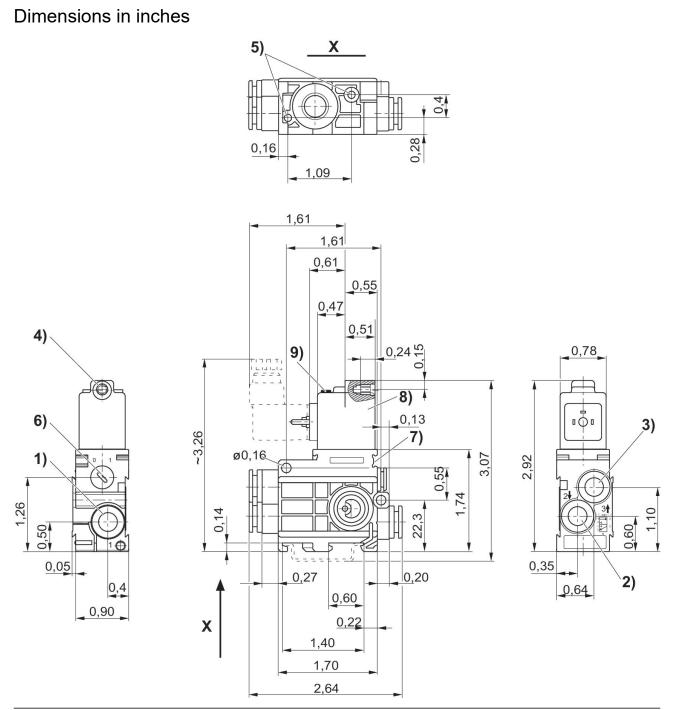
The oil content of compressed air must remain constant during the life cycle.

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

5894410310



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

