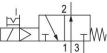
AVENTICS Series 490/579/589 Directional Control Valves

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

5894415320

Protection class with connection	IP65
Reverse polarity protection	Protected against polarity reversal
Operational voltage	24 V AC
Operational voltage AC at 50 Hz	24 V
Operational voltage AC at 60 Hz	24 V
Voltage tolerance AC 60 Hz	-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/m ³
Max. oil content of compressed air	1 mg/m ³
Max. particle size	5 µm
Weight	0.093 kg

MaterialPolyamideHousing materialPolyamideSeal materialAcrylonitrile butadiene rubber
PolyurethanePart No.5894415320



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.

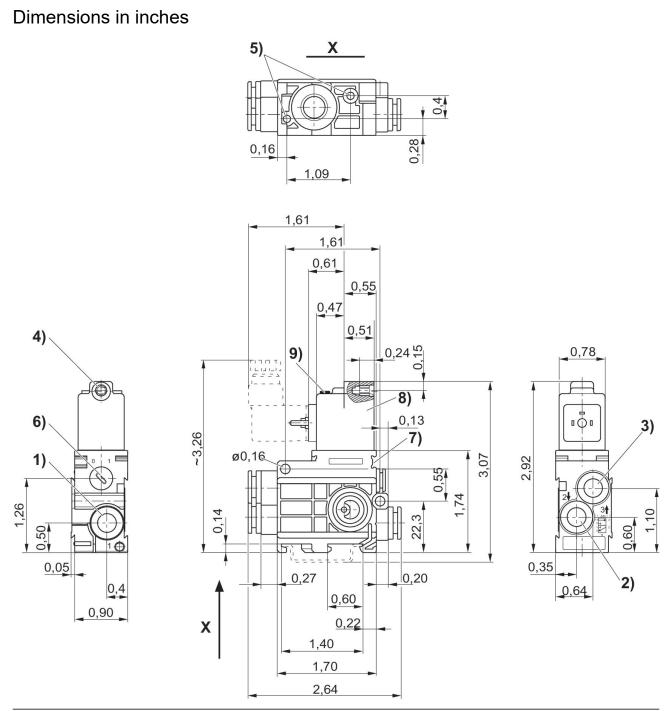
The oil content of compressed air must remain constant during the life cycle.

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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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

