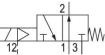
# AVENTICS Series 490/579/589 Directional Control Valves

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

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

Nominal flow Qn

Min. working pressure Max. working pressure Min. control pressure Max. control pressure Industrial Electrically Poppet valve 3/2, with spring return NO Soft seal Pipe connection

Ø	8x1
Ø	8x1
Ø	8x1
Ø	4

750 l/min

0.5 bar 8 bar 3 bar 10 bar



5894625270

Electrical connection type 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	Plug ISO 15217, form C IP65 Protected against polarity reversal 110 V AC 110 V -10% / +15% 110 V -10% / +15%
Pilot	External
Coil width	20 mm
Holding power AC 50 Hz	3 VA
Holding power AC 60 Hz	2.4 VA
Switch-on power AC 50 Hz	4.2 VA
Switch-on power AC 60 Hz	3.4 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 5894625270



#### **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 control pressure must be at least as high as the working pressure.

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.

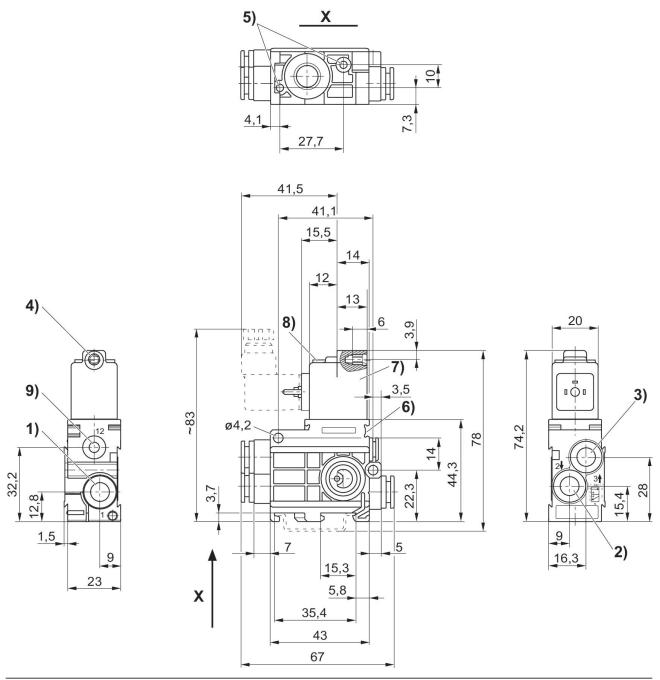
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).



## 3/2-directional valve, Series 589

5894625270

### Dimensions



1) port 1 2) port 2 3) port 3 4) Ø for M 5 5) pocket hole 6 mm deep for 3.5 self-tapping screw 6) mounting space for name plate 7) coil can be rotated at 180° intervals 8) LED 9) port 12