#### 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 Note Valve type Switching principle Valve function Sealing principle Connection type

Compressed air connection input Compressed air connection output Compressed air connection pilot input

Nominal flow Qn

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

Ø 6x1	
Ø 6x1	
Ø 4	

520 l/min





5794420210

Electrical connection type Electrical connection size Protection class with connection Reverse polarity protection Operational voltage Operational voltage DC	Plug ISO 15217, form C IP65 Protected against polarity reversal 12 V DC 12 V
	-10% / +10%
Voltage tolerance DC	-10%7+10%
Pilot	External
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/m <sup>3</sup>
Max. oil content of compressed air	1 mg/m <sup>3</sup>
Max. particle size	5 µm
Weight	0 093 ka

Weight

0.093 kg

### Material Housing material

Seal material

Part No.

Polyamide Acrylonitrile butadiene rubber Polyurethane 5794420210



#### 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.

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.

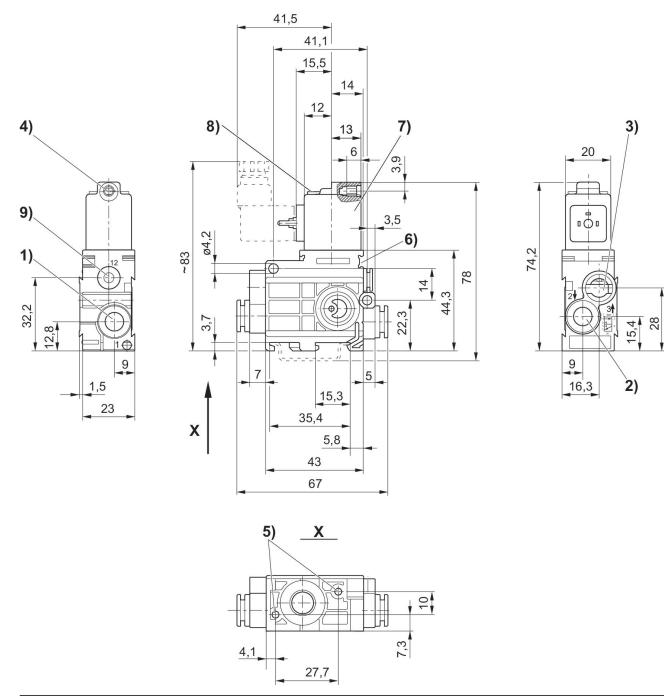
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).



## 3/2-directional valve, Series 579

5794420210

### Dimensions



1) Port 1 2) Port 2 3) Port 3, exhaust air must not be throttled 4) Core Ø for M5 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

