#### 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

Compressed air connection input Compressed air connection output

Min. working pressure Max. working pressure Min. control pressure Max. control pressure

Protection class with connection Reverse polarity protection Industrial Electrically Poppet valve 3/2, with spring return NO Soft seal Pipe connection

Ø 1/4" Ø 1/4"

0.5 bar 8 bar 2 bar 8 bar

IP65 Protected against polarity reversal



## 3/2-directional valve, Series 579

5794420720

Operational voltage Operational voltage DC Voltage tolerance DC	24 V DC 24 V -10% / +10%
Pilot	External
Coil width	20 mm
Power consumption DC	1.7 W
Duty cycle	100 %
Typ. switch-on time	18 ms
Typ. switch-off time	18 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 5794420720

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#### 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.

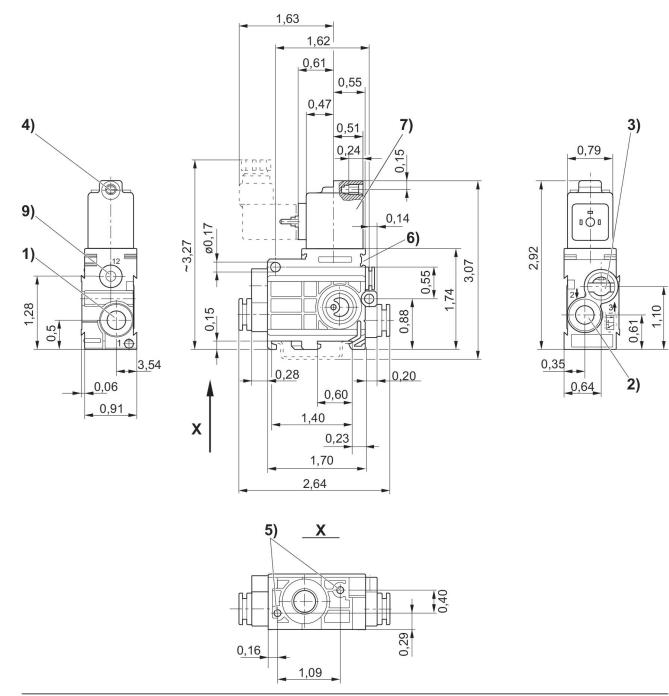
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).



### 3/2-directional valve, Series 579

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#### **Dimensions in inches**



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

