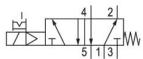
AVENTICS Series 490/579/589 Directional Control Valves

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 Industrial
Activation Electrically
Valve type Poppet valve

Switching principle 5/2, with spring return

Sealing principle Soft seal

Connection type Pipe connection

Manual override with detent

Compressed air connection input \emptyset 1/4" Compressed air connection output \emptyset 1/4" Compressed air connection, exhaust 5/16"

Min. working pressure 3 bar Max. working pressure 8 bar

Electrical connection type Plug

Electrical connection size ISO 15217, form C

Protection class with connection IP65

5/2-directional valve, Series 589

2023-11-02

5894700320

Reverse polarity protection Protected against polarity reversal

Operational voltage 24 V DC
Operational voltage DC 24 V

Voltage tolerance DC -10% / +10%

Pilot Internal
Coil width 20 mm
Power consumption DC 1.6 W

Duty cycle 100 %
Typ. switch-on time 27 ms
Typ. switch-off time 28 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 μ m

Weight 0.133 kg

Material

Housing material Polyamide

Seal material Acrylonitrile butadiene rubber

Polyurethane

Part No. 5894700320

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]

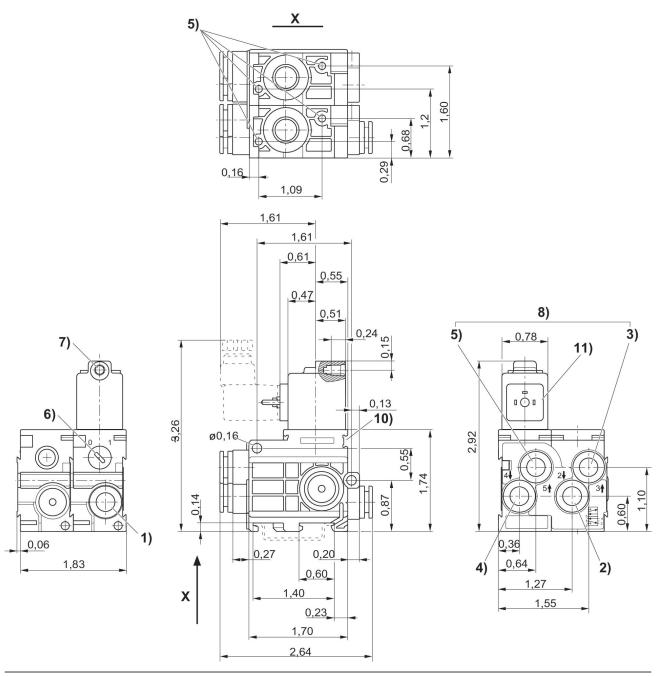
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

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.

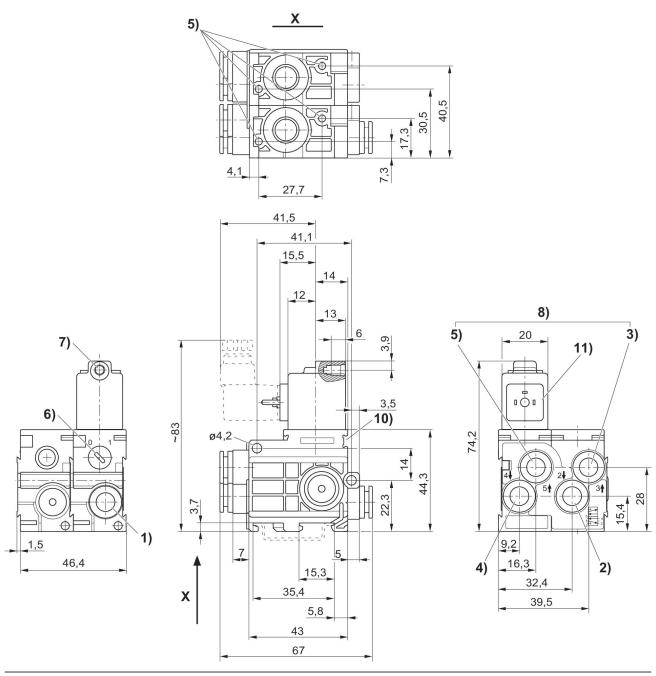
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).

Dimensions in inches



1) port 1 2) port 2 3) port 3 4) port 4 5) port 5 6) manual override 7) core Ø for M 5 8) exhaust air must not be throttled 9) pocket hole 6 mm deep for 3.5 self-tapping screw 10) mounting space for name plate 11) coil can be rotated at 180° intervals

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