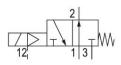
5790520210

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 3/2, with spring return

Valve function NO Sealing principle Soft seal

Connection type Pipe connection

Compressed air connection input Ø 8x1
Compressed air connection output Ø 6x1
Compressed air connection pilot input Ø 4

Nominal flow Qn 520 I/min

Min. working pressure0.5 barMax. working pressure8 barMin. control pressure2 barMax. control pressure8 bar

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Electrical connection type Plug

Electrical connection size ISO 15217, form C

Protection class with connection IP65

Reverse polarity protection Protected against polarity reversal

Operational voltage 12 V DC
Operational voltage DC 12 V

Voltage tolerance DC -10% / +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 Inlet valve

Can be assembled into blocks

Can be assembled into blocks

Min. ambient temperature $-15\,^{\circ}\text{C}$ Max. ambient temperature $50\,^{\circ}\text{C}$ Min. medium temperature $-15\,^{\circ}\text{C}$ Max. medium temperature $50\,^{\circ}\text{C}$

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 μ m

Weight 0.093 kg

Material

Housing material Polyamide

Seal material Acrylonitrile butadiene rubber

Polyurethane

Part No. 5790520210

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.

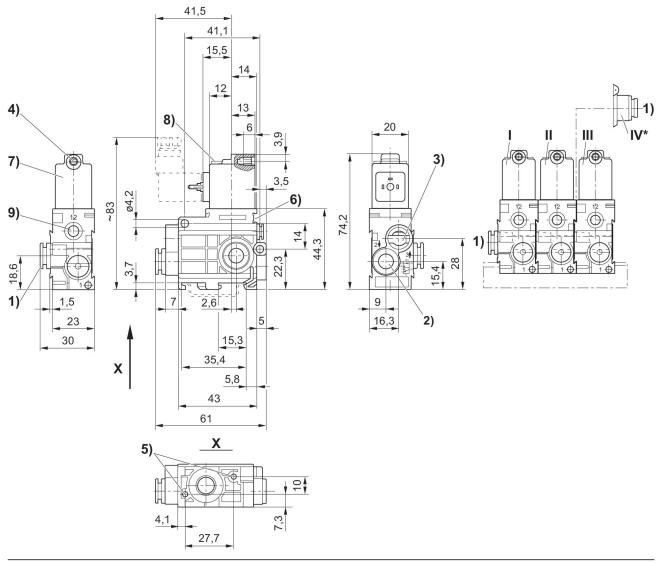
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

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).

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 * Air connection module (item IV) mounted onto stacking valve (item II) permits additional air supply from right hand side. End valve (item III) not required.

I = Inlet valve, II = Stacking valve, III = End valve