

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.

- Integrated connections
- Individual or block assemblies available
- Extensive voltage range
- Series suitable for dusty environments



Technical data

Industry	Industrial
Activation	Electrically
Frame size	579
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 type	Push-in fitting
Compressed air connection input	Ø 1/4"
Compressed air connection output	Ø 1/4"
Min. working pressure	2 bar
Max. working pressure	8 bar
Protection class with connection	IP65
Reverse polarity protection	Protected against polarity reversal

3/2-directional valve, Series 579

5794705380

Series
490/579/589

2026-02-03

Operational voltage	230 V AC
Operational voltage AC at 50 Hz	230 V
Operational voltage AC at 60 Hz	230 V
Voltage tolerance AC 60 Hz	-10 % / +15 %

Pilot	Internal
Coil width	20 mm
Holding power AC 50 Hz	2.3 VA
Holding power AC 60 Hz	2 VA
Switch-on power AC 50 Hz	3.2 VA
Switch-on power AC 60 Hz	2.8 VA

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/m ³
Max. oil content of compressed air	1 mg/m ³
Max. particle size	5 µm

Weight	0.133 kg
--------	----------

Material

Housing material	Polyamide Polyurethane
------------------	---------------------------

Part No.	5794705380
----------	------------

Technical information

At an ambient temperature of $[[40]]^{\circ}\text{C}$ the max. working pressure is $[[10]]\text{ bar}$.

Versions with voltage of less than 50 V DC do not have a protective ground.

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.

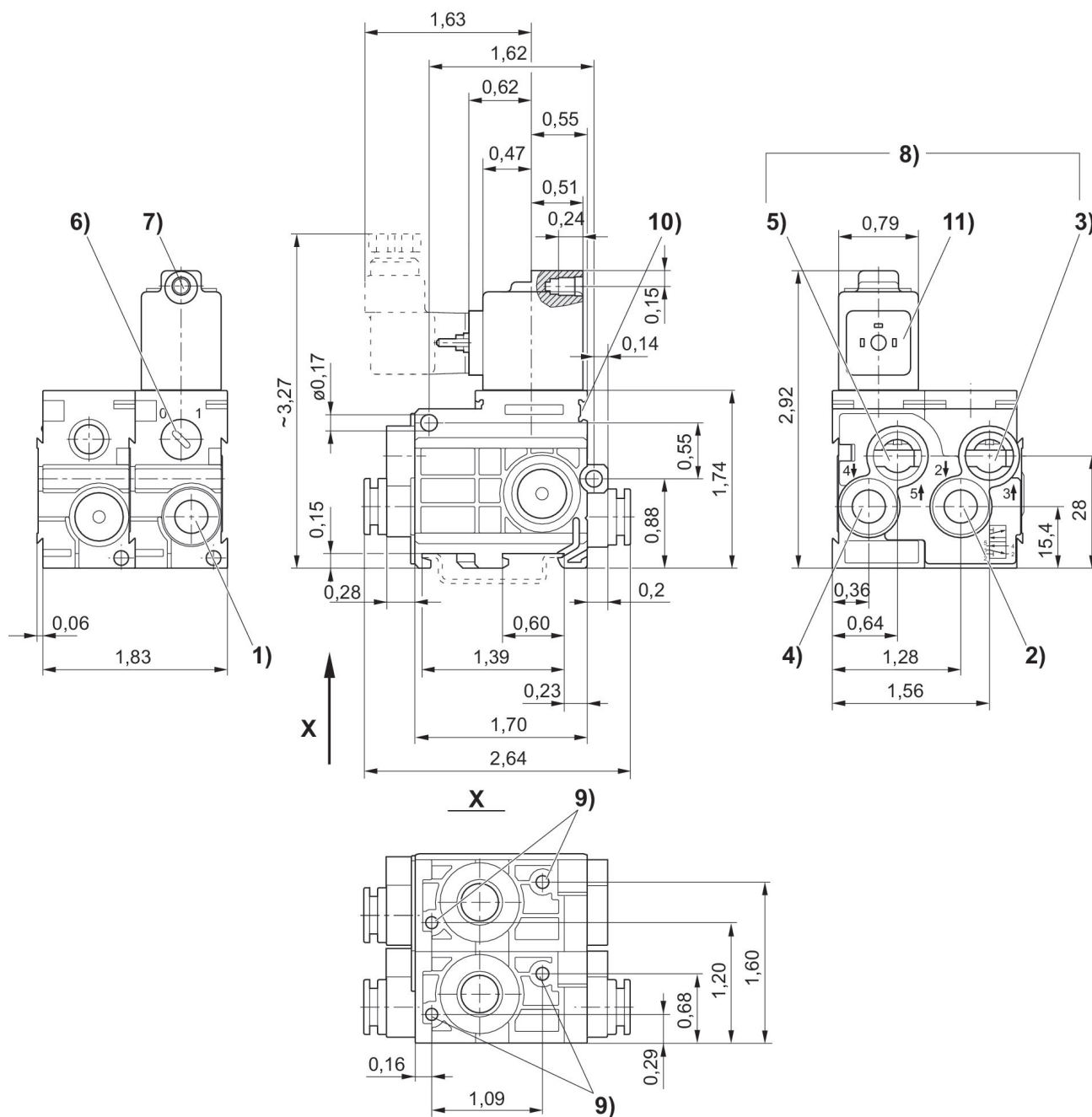
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in <https://www.emerson.com/en-us/support>).

5794705380

Series
490/579/589

2026-02-03

Dimensions



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