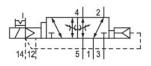
AVENTICS Series 581 - Size 1 Standardized valves

The AVENTICS series 581 complies with the ISO 5599-1 valve standard. Due to the high degree of modularity, the series offers all valve functions, integrated throttle valves, various pilot coils and an extensive range of accessories. $Qn = 950 \dots 1400 \text{ l/min}$





Technical data

Industry Industrial
Activation Electrically
Nominal flow Qn 1400 I/min

Switching principle 5/2, with air spring return Compressed air connection output Base plate ISO 5599-1

Min. working pressure -0.95 bar
Max. working pressure 10 bar
Operational voltage 24 V DC
Operational voltage DC 24 V

Voltage tolerance DC -10% / +10% Manual override with detent

Electrical connection type Plug Electrical connection size M12 Electrical connection number of poles 4-pin Soft seal Sealing principle Pilot External ISO 5599-1 Standards Pilot valve width 22 mm Valve type Spool valve

Blocking principle Single base plate principle

Connection type Plate connection
Return with air spring return
Compressed air connection input Base plate ISO 5599-1
Compressed air connection, exhaust Base plate ISO 5599-1

Compressed air connection pilot exhaust M5
Power consumption DC 0.35 W
Flow conductance C 5.2 l/(s*bar)

Frame size ISO 1

Min. control pressure 3 bar

Max. control pressure 10 bar

Min. ambient temperature 0 °C

Max. ambient temperature 50 °C

Min. medium temperature 0 °C

Max. medium temperature 50 °C

Medium Compressed air

Max. particle size5 μmMin. oil content of compressed air0 mg/m³Max. oil content of compressed air5 mg/m³Protection class with connectionIP65Duty cycle100 %Typ. switch-on time12 msTyp. switch-off time25 ms

Mounting screws with hexagon socket

Mounting screw tightening torque 2 Nm Weight 0.2 kg

Housing material Polyamide fiber-glass reinforced Seal material Acrylonitrile butadiene rubber

Part No. 5811612710

Technical information

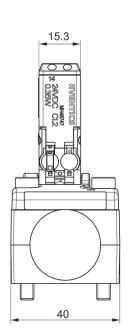
Switch-on power: 1 W for 40 ms

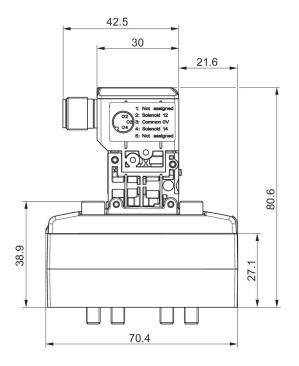
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

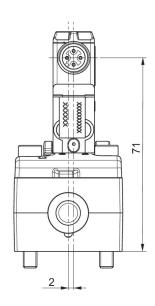
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

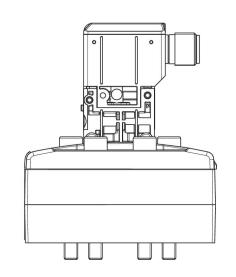
The oil content of compressed air must remain constant during the life cycle.

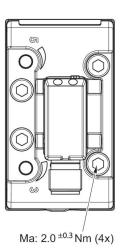
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).



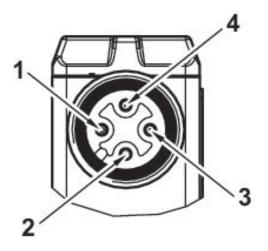








Pin assignments



¹⁾ not assigned 2) Coil 12 3) 0 V DC 4) Coil 14