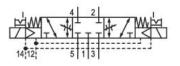
# AVENTICS Series 581 - Size 1 Standardized valves

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 ... 1400 l/min





#### Technical data

Industry Industrial
Activation Electrically
Nominal flow Qn 1100 I/min

Switching principle 5/3, closed center Version Closed Center

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
Sealing principle Soft seal
Pilot External
Standards ISO 5599-1
Pilot valve width 22 mm

Valve type Spool valve

Blocking principle Single base plate principle

Connection type Plate connection

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 4.3 l/(s\*bar)
Throttle with throttle

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 size $5 \, \mu m$ Min. oil content of compressed air $0 \, mg/m^3$ Max. oil content of compressed air $5 \, mg/m^3$ Protection class with connectionIP65Duty cycle $100 \, \%$ Typ. switch-on time $12 \, ms$ Typ. switch-off time $25 \, ms$ 

Mounting screws with hexagon socket

Mounting screw tightening torque 2 Nm Weight 0.18 kg

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

Part No. 5811423710

#### Technical information

Switch-on power: 1 W for 40 ms

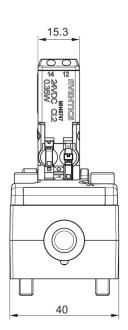
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

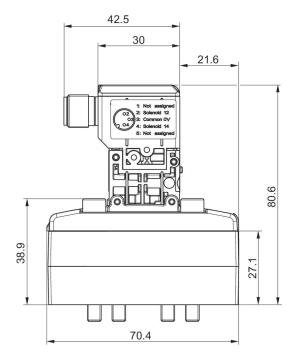
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

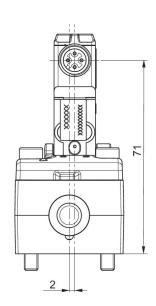
The oil content of compressed air must remain constant during the life cycle.

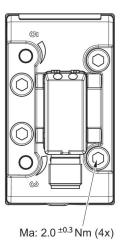
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).

### **Dimensions**

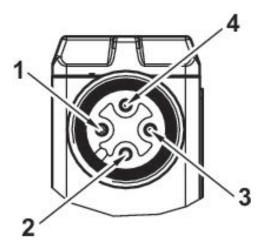








## Pin assignments



<sup>1)</sup> not assigned 2) Coil 12 3) 0 V DC 4) Coil 14