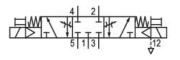
AVENTICS Series 581 - Size 1 Standardized valves

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 3 bar

Max. working pressure 10 bar

Operational voltage 24 V DC

Operational voltage DC 24 V

Voltage tolerance DC -10% / +10%
Manual override without detent

Electrical connection type Plug
Electrical connection number of poles 3-pin
Sealing principle Soft seal
Pilot Internal

Pilot Internal
Standards ISO 5599-1
Pilot valve width 15 mm
Valve type Spool valve

5811461160

Blocking principle Single base plate principle

Connection type Plate connection

Compressed air connection input

Compressed air connection, exhaust

Compressed air connection pilot input

Compressed air connection pilot exhaust

Base plate ISO 5599-1

Base plate ISO 5599-1

Base plate ISO 5599-1

Power consumption DC 2.2 W

Flow conductance C 4.3 l/(s*bar)
Throttle with throttle

0.5 m Cable length Frame size **ISO 1** Min. control pressure 3 bar Max. control pressure 10 bar -10 °C Min. ambient temperature 50 °C Max. ambient temperature Min. medium temperature -10 °C Max. medium temperature 50 °C

Medium Compressed air

Max. particle size $50 \ \mu m$ Min. oil content of compressed air $0 \ mg/m^3$ Max. oil content of compressed air $5 \ mg/m^3$ Protection class with connection IP67
Protective circuit Z-diode

Reverse polarity protection Protected against polarity reversal

LED status display Green
Duty cycle 100 %
Typ. switch-on time 14 ms
Typ. switch-off time 22 ms

Mounting screws with hexagon socket

Mounting screw tightening torque 2 Nm Weight 0.22 kg

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

Part No. 5811461160

5811461160

Technical information

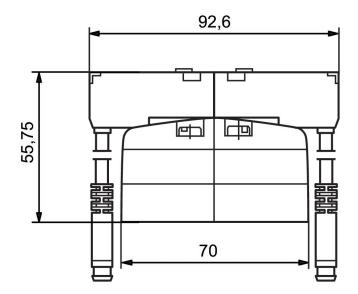
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

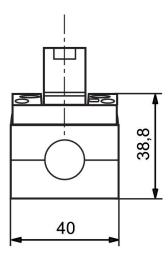
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

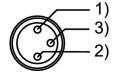
The oil content of compressed air must remain constant during the life cycle.

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 assignment 1) brown (+24 V) 2) green/yellow (ground) 3) blue (0 V) $\,$