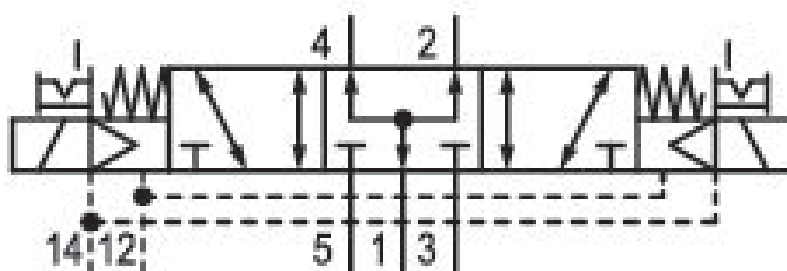


# 5/3-directional valve, Series 581, size 1

## 5811722710

General series information  
ISO 5599-1, size 1, series 581

- The AVENTICS Series 581 complies with the valve standard ISO 5599-1. Due to the level of modularity, the Series offers all valve functions, integrated throttle valves, various pilot coils, and a comprehensive range of accessories.
- $Q_n = 950 \dots 1400$  l/min



### Technical data

Industry  
Industrial

Activation  
Electrically

Nominal flow  $Q_n$   
1100 l/min

Switching principle  
5/3

Version  
Pressurized Center

Compressed air connection output  
Base plate ISO 5599-1

Working pressure min.  
-0.95 bar

Working pressure max  
10 bar

DC operating voltage  
24 V

Voltage tolerance DC  
-10% / +10%

Manual override  
with detent

Electrical connection type  
Plug

Electrical connection size  
M12

Electr. connection  
4-pin

Sealing principle Soft Seal	Min. medium temperature 0 °C
Pilot External	Max. medium temperature 50 °C
Standards ISO 5599-1	Medium Compressed air
Pilot valve width 22 mm	Max. particle size 5 µm
Valve type Spool valve	Oil content of compressed air min. 0 mg/m <sup>3</sup>
Blocking principle Single base plate principle	Oil content of compressed air max. 5 mg/m <sup>3</sup>
Connection type Plate connection	Protection class with connection IP65
Compressed air connection input Base plate ISO 5599-1	Duty cycle 100 %
Compressed air connection, exhaust Base plate ISO 5599-1	Typ. switch-on time 12 ms
Compressed air connection pilot exhaust M5	Typ. switch-off time 25 ms
Power consumption DC 0.35 W	mounting screws with hexagon socket
Flow conductance C 4.3 l/(s*bar)	Mounting screw tightening torque 2 Nm
Frame size ISO 1	Weight 0.18 kg
Control pressure min. 3 bar	Housing material Polyamide fiber-glass reinforced
Control pressure max. 10 bar	Seal material Acrylonitrile butadiene rubber
Min. ambient temperature 0 °C	Part No. 5811722710
Max. ambient temperature 50 °C	

## Technical information

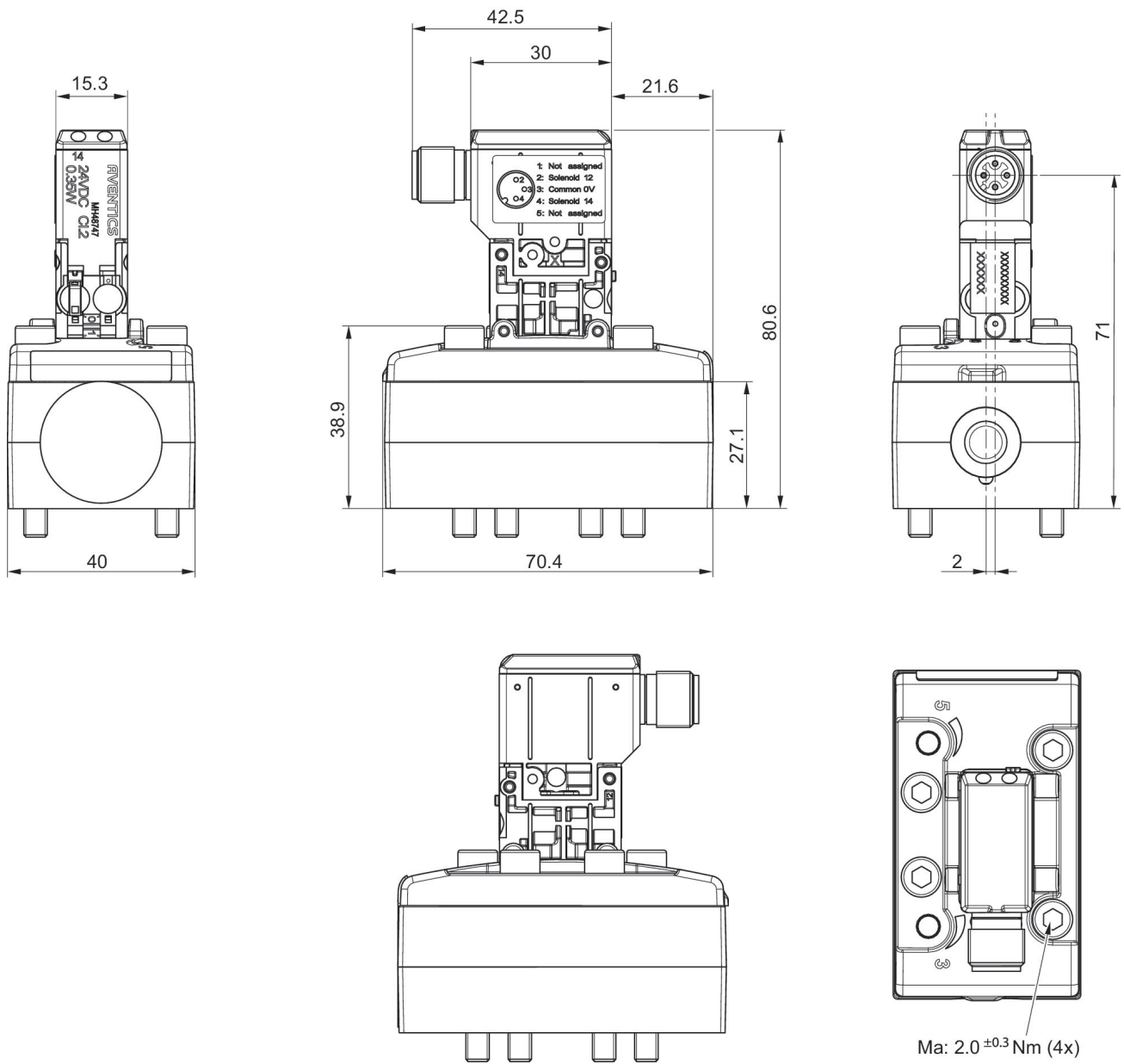
Switch-on power: 1 W for 40 ms

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

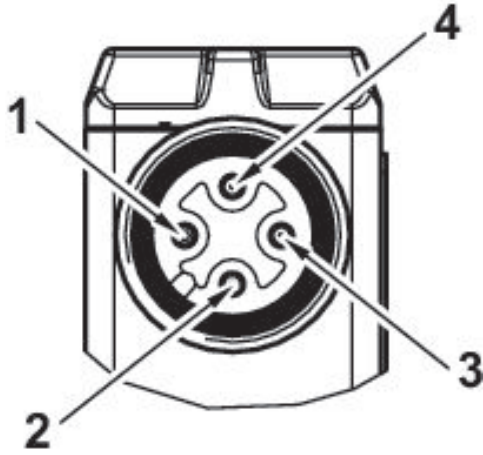
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

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