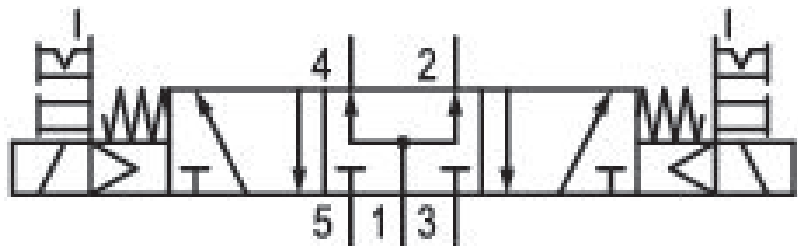
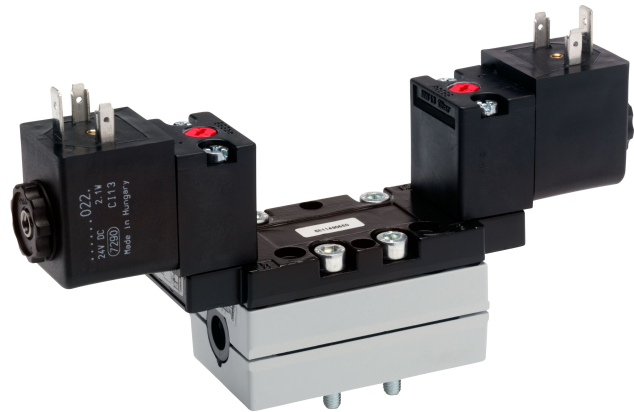


# 5/3-directional valve, Series 581, size 1

## 5811790450

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.  
3 bar

Working pressure max  
10 bar

Operational voltage AC at 50 Hz  
230 V

Voltage tolerance AC 50 Hz  
-10% / +10%

Manual override  
with detent  
without detent

Electrical connection type  
Plug

Electrical connection size  
EN 175301-803, form A

Sealing principle  
Soft Seal

<b>Pilot</b> Internal	<b>Min. medium temperature</b> -15 °C
<b>Standards</b> ISO 5599-1	<b>Max. medium temperature</b> 50 °C
<b>Pilot valve width</b> 30x22 mm CNOMO	<b>Medium</b> Compressed air
<b>Valve type</b> Spool valve	<b>Max. particle size</b> 50 µm
<b>Blocking principle</b> Single base plate principle	<b>Oil content of compressed air min.</b> 0 mg/m <sup>3</sup>
<b>Connection type</b> Plate connection	<b>Oil content of compressed air max.</b> 5 mg/m <sup>3</sup>
<b>Compressed air connection input</b> Base plate ISO 5599-1	<b>Protection class with connection</b> IP65
<b>Compressed air connection, exhaust</b> Base plate ISO 5599-1	<b>Compatibility index</b> 14
<b>Compressed air connection pilot exhaust</b> M5	<b>Duty cycle</b> 100 %
<b>Holding power AC 50 Hz</b> 4.8 VA	<b>Typ. switch-on time</b> 14 ms
<b>Switch-on power AC 50 Hz</b> 7 VA	<b>Typ. switch-off time</b> 28 ms
<b>Flow conductance C</b> 4.3 l/(s*bar)	<b>mounting screws</b> with hexagon socket
<b>Frame size</b> ISO 1	<b>Mounting screw tightening torque</b> 2 Nm
<b>Control pressure min.</b> 3 bar	<b>Weight</b> 0.5 kg
<b>Control pressure max.</b> 10 bar	<b>Housing material</b> Aluminum
<b>Min. ambient temperature</b> -15 °C	<b>Seal material</b> Acrylonitrile butadiene rubber
<b>Max. ambient temperature</b> 50 °C	<b>Part No.</b> 5811790450

## 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 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>).

## Dimensions

