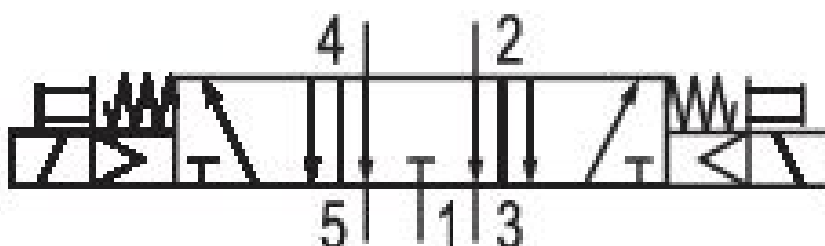


# 5/3-directional valve, Series 581, size 3

## 5813590190

ISO 5599-1, size 3, series 581

- $Q_n = 4100 \dots 4800 \text{ l/min}$



### Technical data

Industry  
Industrial

Activation  
Electrically

Nominal flow  $Q_n$   
4100 l/min

Switching principle  
5/3

Version  
Exhausted Center

Compressed air connection output  
Base plate ISO 5599-1

Working pressure min.  
3 bar

Working pressure max  
10 bar

DC operating voltage  
24 V

Voltage tolerance DC  
-10% / +10%

Manual override  
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> 30x30 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>Duty cycle</b> 100 %
<b>Compressed air connection pilot exhaust</b> G 1/8	<b>Typ. switch-on time</b> 22 ms
<b>Power consumption DC</b> 6 W	<b>Typ. switch-off time</b> 61 ms
<b>Flow conductance C</b> 14.1 l/(s*bar)	<b>mounting screws</b> with hexagon socket
<b>Frame size</b> ISO 3	<b>Mounting screw tightening torque</b> 10 Nm
<b>Control pressure min.</b> 3 bar	<b>Weight</b> 1.22 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> 5813590190

## 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

