

# 5/2-directional valve, Series 581, size 2, Basic valve for CNOMO pilot valve

5813181000

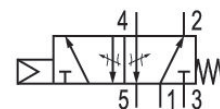
Series 581,  
size 3

2025-10-23

## ISO 5599-1, size 3, series 581

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.

- Standardized valve system
- ISO size 1 to 4 available
- Numerous voltage ranges
- Pressure range up to 16 bar possible
- CNOMO interface
- Small dimensions
- Fast shifting times
- Easy and flexible custom specific configurations via online configurator



## Technical data

Industry

Activation

Nominal flow Q<sub>n</sub>

Switching principle

Compressed air connection output

Min. working pressure

Max. working pressure

Actuating control

Sealing principle

Pilot

Standards

Pilot valve width

Valve type

Blocking principle

Connection type

Return

Compressed air connection input

Compressed air connection, exhaust

Flow conductance C

Industrial

Electrically

4800 l/min

5/2, with spring return

Base plate ISO 5599-1

-0.95 bar

16 bar

Single Solenoid

Soft seal

External

Internal

ISO 5599-1

30 mm

Spool valve

Single base plate principle

Plate connection

With spring return

Base plate ISO 5599-1

Base plate ISO 5599-1

18.9 l/(s\*bar)

# 5/2-directional valve, Series 581, size 2, Basic valve for CNOMO pilot valve

5813181000

Series 581,  
size 3

2025-10-23

|                                    |                                 |
|------------------------------------|---------------------------------|
| Throttle                           | with throttle                   |
| Basic valve equipment              | Basic valve without pilot valve |
| Frame size                         | ISO 3                           |
| Min. control pressure              | 3 bar                           |
| Max. control pressure              | 16 bar                          |
| Min. ambient temperature           | -20 °C                          |
| Max. ambient temperature           | 70 °C                           |
| Min. medium temperature            | -20 °C                          |
| Max. medium temperature            | 70 °C                           |
| Medium                             | Compressed air                  |
| Max. particle size                 | 50 µm                           |
| Min. oil content of compressed air | 0 mg/m <sup>3</sup>             |
| Max. oil content of compressed air | 5 mg/m <sup>3</sup>             |
| Protection class with connection   | IP65                            |
| Duty cycle                         | 100 %                           |
| Mounting screws                    | with hexagon socket             |
| Mounting screw tightening torque   | 10 Nm                           |
| Weight                             | 0.85 kg                         |
| Housing material                   | Aluminum                        |
| Seal material                      | Acrylonitrile butadiene rubber  |
| Part No.                           | 5813181000                      |

## Technical information

\* Note: ATEX version can be produced by combining the basic valve without coil with a series DO30 CNOMO pilot valve and an ATEX coil. ATEX ID: see ATEX coils catalog page.

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>).

# 5/2-directional valve, Series 581, size 2, Basic valve for CNOMO pilot valve

5813181000

Series 581,  
size 3

2025-10-23

## Dimensions

