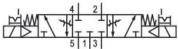
AVENTICS Series 581 - Size 1 Standardized valves

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 = $950 \dots 1400 \text{ l/min}$





Technical data Industry Activation Nominal flow Qn Switching principle Version Compressed air connection output Min. working pressure Max. working pressure **Operational voltage** Operational voltage DC Voltage tolerance DC Manual override Electrical connection type Electrical connection size Sealing principle Pilot Standards Pilot valve width Valve type

Industrial Electrically 1100 l/min 5/3, closed center **Closed Center** Base plate ISO 5599-1 3 bar 10 bar 48 V DC 48 V -10% / +10% with detent Plug Form B, industry Soft seal Internal ISO 5599-1 22 mm Spool valve



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

5811421600

| Blocking principle Connection type | Single base plate principle Plate connection |
|---|---|
| Compressed air connection input | Base plate ISO 5599-1 |
| Compressed air connection, exhaust | Base plate ISO 5599-1 |
| Compressed air connection pilot exhaust | M5 |
| Power consumption DC | 5 W |
| Flow conductance C | 4.3 l/(s*bar) |
| Throttle | with throttle |
| Frame size | ISO 1 |
| Min. control pressure | 3 bar |
| Max. control pressure | 10 bar |
| Min. ambient temperature | -15 °C |
| Max. ambient temperature | 50 °C |
| Min. medium temperature | -15 °C |
| Max. medium temperature | 50 °C |
| Medium | Compressed air |
| Max. particle size | 50 µm |
| Min. oil content of compressed air | 0 mg/m³ |
| Max. oil content of compressed air | 5 mg/m³ |
| Protection class with connection | IP65 |
| Duty cycle | 100 % |
| Typ. switch-on time | 15 ms |
| Typ. switch-off time | 29 ms |
| Mounting screws | with hexagon socket |
| Mounting screw tightening torque | 2 Nm |
| Weight | 0.3 kg |
| Housing material | Polyamide fiber-glass reinforced |
| Seal material | Acrylonitrile butadiene rubber |
| Part No. | 5811421600 |
| | |

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.

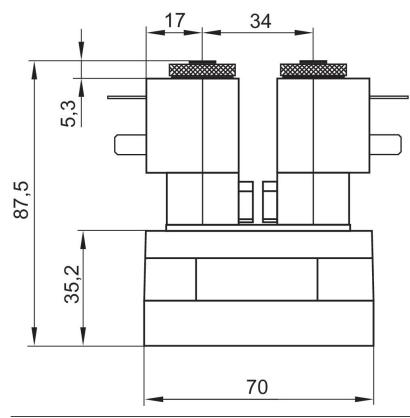
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).

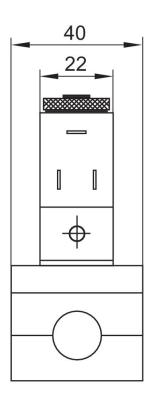


5/3-directional valve, Series 581, size 1

5811421600

Dimensions





The pilot valves can be loosened and turned through 180°.

