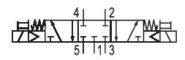
52100010 2023-11-13

Series 521

The AVENTICS Series 521 is a line of solenoid air-operated, mini-spool valves that are ideal for piloting pneumatic cylinders. The valves have high-quality coils resistant to heat and moisture and suitable for high ambient temperatures and harsh environments. They can be mounted on joinable subbases for manifold applications. The AVENTICS Series 521 valves are suitable for automotive, case packing, packaging, and tire manufacturing applications.





Technical data

IndustryIndustrialActivationElectricallyValve typeSpool valve

Switching principle 5/3, closed center Valve function Closed Center Sealing principle Soft seal

Connection type Pipe connection
Manual override without detent

Compressed air connection input G 1/4
Compressed air connection output G 1/4

Nominal flow Qn 1050 I/min

Min. working pressure1.5 barMax. working pressure8 barMin. control pressure1.5 barMax. control pressure8 bar

5/3-directional valve, Series 521

Series 521

52100010 2023-11-13

Electrical connection type Plug

Electrical connection size EN 175301-803, form C

Connector standard EN 175301-803

Protection class with connection IP65
Operational voltage 24 V AC
Operational voltage AC at 50 Hz 24 V

Pilot Internal
Pilot valve width 22 mm
Switch-on power AC 50 Hz 2 VA

Duty cycle 100 %
Typ. switch-on time 20 ms
Typ. switch-off time 50 ms

Min. ambient temperature 5 °C Max. ambient temperature 50 °C

Medium Compressed air

Min. oil content of compressed air 0 mg/m³ Max. oil content of compressed air 5 mg/m³ Max. particle size 5 μ m

Mounting screws M4
Weight 0.21 kg

Material

Housing material Aluminum, anodized
Seal material Nitrile butadiene rubber

Material threaded bushing Aluminum

Material front plate Polyoxymethylene

Part No. 52100010

52100010 2023-11-13

Technical information

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

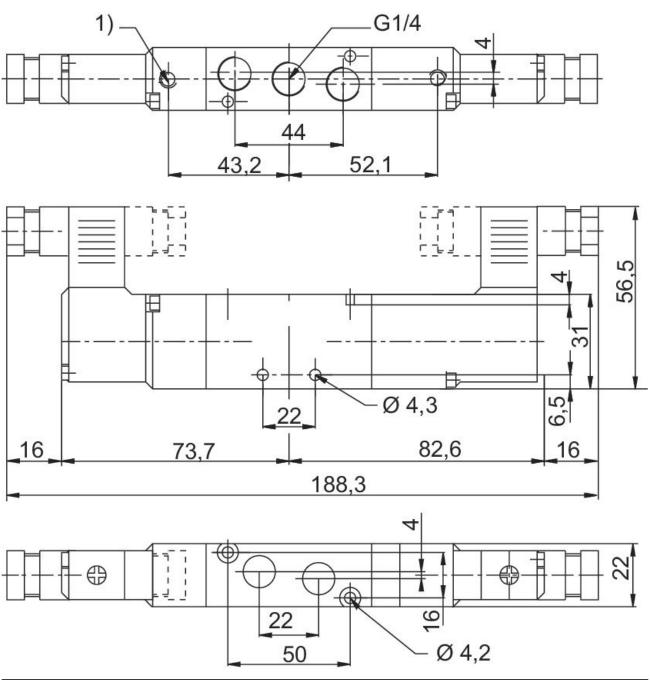
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

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).

52100010 2023-11-13

Dimensions



1) Pilot Exhaust