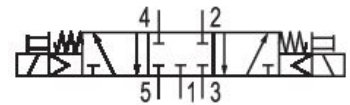


Series 521

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

| | |
|----------------------------------|--------------------|
| Industry | Industrial |
| Activation | Electrically |
| Valve type | Spool 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 l/min |
| Min. working pressure | 1.5 bar |
| Max. working pressure | 8 bar |
| Min. control pressure | 1.5 bar |
| Max. control pressure | 8 bar |

5/3-directional valve, Series 521

Series 521

52100012

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| | |
|----------------------------------|-----------------------|
| Electrical connection type | Plug |
| Electrical connection size | EN 175301-803, form C |
| Connector standard | EN 175301-803 |
| Protection class with connection | IP65 |
| Operational voltage | 230 V AC |
| Operational voltage AC at 50 Hz | 230 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/m ³ |
| Max. oil content of compressed air | 5 mg/m ³ |
| Max. particle size | 5 µm |

| | |
|-----------------|---------|
| 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. | 52100012 |

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>).

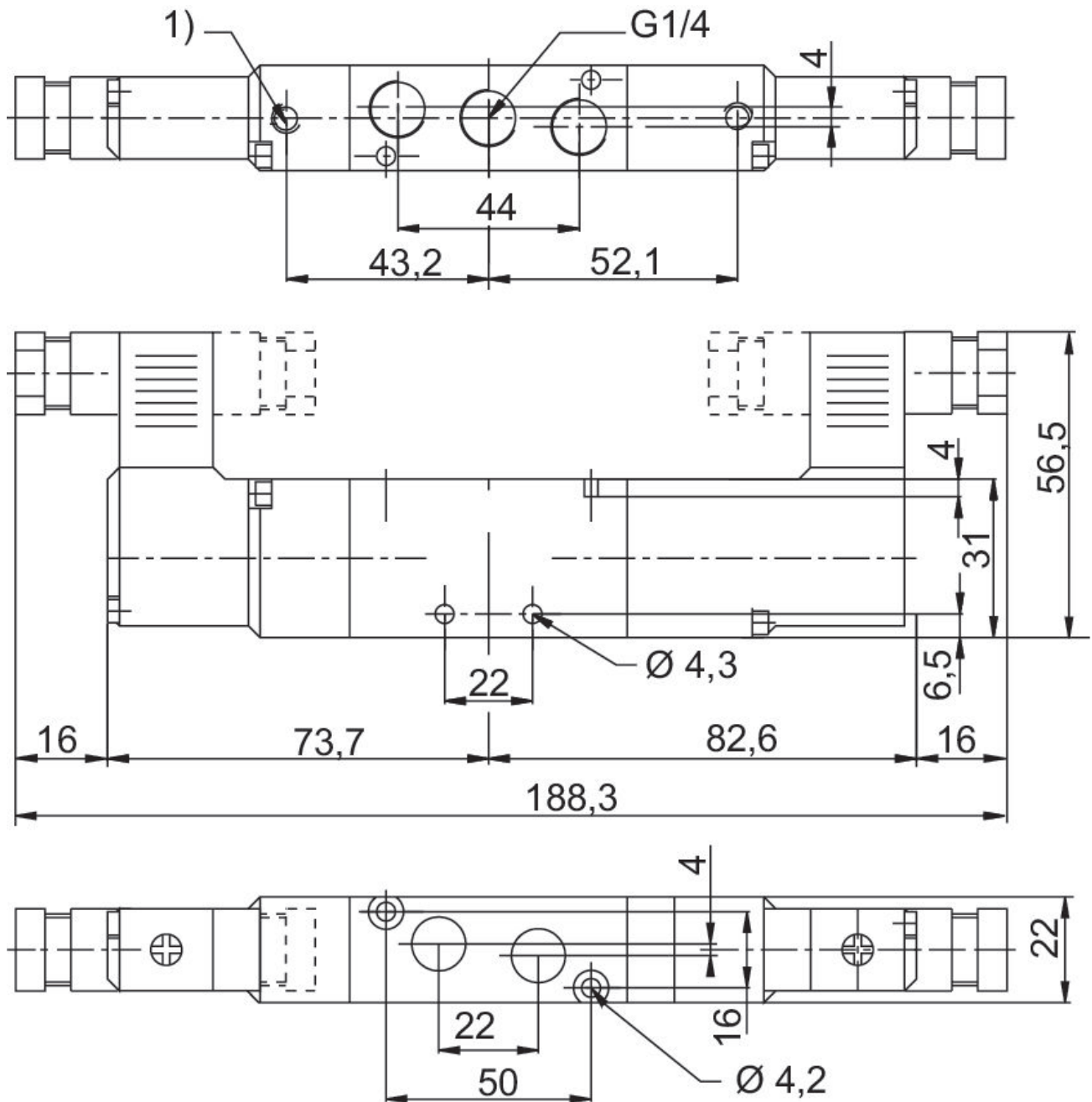
5/3-directional valve, Series 521

Series 521

52100012

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Dimensions



1) Pilot Exhaust