

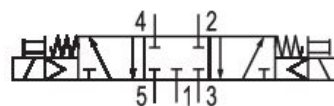
# 5/3-directional valve, Series 519

2023-11-13

51900010

## Series 519

The AVENTICS Series 519 is a line of air-operated mini-spool valves that are ideal for piloting pneumatic cylinders. The 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      |
| Actuating control                | Double Solenoid    |
| Sealing principle                | Soft seal          |
| Connection type                  | Pipe connection    |
| Manual override                  | without detent     |
| Compressed air connection input  | M5                 |
| Compressed air connection output | M5                 |
| Nominal flow Q <sub>n</sub>      | 175 l/min          |
| Min. working pressure            | 1.5 bar            |
| Max. working pressure            | 8 bar              |
| Min. control pressure            | 1.5 bar            |
| Max. control pressure            | 8 bar              |

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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              | 24 V AC               |
| Operational voltage AC at 50 Hz  | 24 V                  |

|                          |          |
|--------------------------|----------|
| Pilot                    | Internal |
| Pilot valve width        | 15 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 <sup>3</sup> |
| Max. oil content of compressed air | 5 mg/m <sup>3</sup> |
| Max. particle size                 | 5 µm                |

|                 |                |
|-----------------|----------------|
| Mounting screws | M2.5 with slot |
| Weight          | 0.14 kg        |

## Material

|                           |                          |
|---------------------------|--------------------------|
| Housing material          | Aluminum, anodized       |
| Seal material             | Nitrile butadiene rubber |
| Material threaded bushing | Aluminum                 |
| Material front plate      | Polyoxymethylene         |
| Part No.                  | 51900010                 |

## 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.

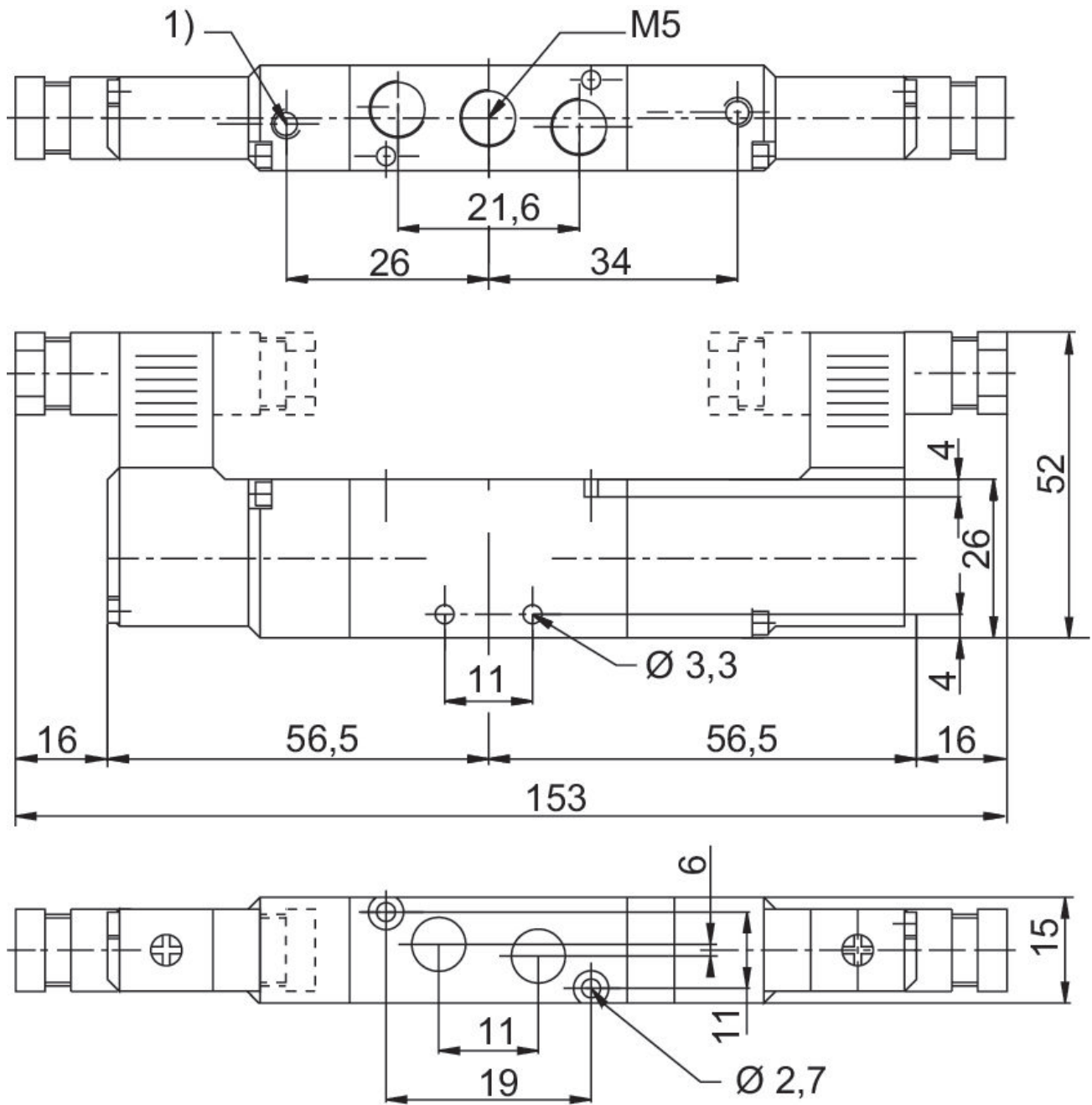
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in <https://www.emerson.com/en-us/support>).

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## Dimensions



1) Pilot Exhaust