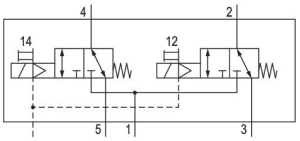
# 2x3/2-directional valve, Series 502

## R502A2BD0MA00F1

General series information
AVENTICS Series 502 Directional Control Valves

- The AVENTICS Series 502 is a line of general purpose automation valves designed for directional control and piloting applications requiring higher flow rates; less power consumption; and exceptionally easy on-site installation, configuration, and modification. The compact (18 mm), modular 502 Series is ideally suited for automotive and tire, food and beverage, pharmaceutical, and packaging machinery applications. The valve has the flexibility of meeting the ISO 15407-2 standard while maintaining its high-flow characteristics. In addition, no other valve in its class offers such a broad range of pressure regulator, pressure shut-off, and exhaust flow control accessories.




## Technical data

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|---|---|
| Industry | Industrial |
| Activation | Electrically |
| Valve type | Spool valve, positive overlapping |
| Valve function | NC/NC |
| Sealing principle | soft seal |
| Connection type | Plate connection |
| Manual override | without detent |
| Pilot control exhaust | with directional pilot air exhaust |
| Nominal flow Qn | 650 l/min |
| Working pressure min. | 2 bar |
| Working pressure max | 8 bar |
| Control pressure min. | 3 bar |

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|---|---|
| Control pressure max. | 8 bar |
| Protection class with connection | IP65 |
| Protective circuit | TVS diode |
| Reverse polarity protection | Protected against polarity reversal |
| Operational voltage | 24 V DC |
| Voltage tolerance DC | -15% / +10% |
| Pilot | External |
| LED status display | Yellow |
| Power consumption DC | 1.1 W |
| Typ. switch-on time | 39 ms |
| Typ. switch-off time | 19 ms |
| Blocking principle | Single base plate principle, can be assembled into blocks |
| Can be assembled into blocks | Can be assembled into blocks |
| Standards | ISO 8573-1: class 7-4-4 |
| Min. ambient temperature | -10 °C |
| Max. ambient temperature | 50 °C |
| Min. medium temperature | -10 °C |
| Max. medium temperature | 50 °C |
| Medium | Compressed air |
| Oil content of compressed air min. | 0 mg/m³ |
| Oil content of compressed air max. | 5 mg/m³ |
| mounting screws | with hexagon socket |
| Mounting screw tightening torque | 2 Nm |
| Weight | 0.169 kg |

## Material

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|---|---|
| Housing material | Die cast zinc |
| Seal material | Nitrile butadiene rubber<br>Polyurethane |
| Material front plate | Polyamide |
| Material end plate | Polyamide |
| Part No. | R502A2BD0MA00F1 |

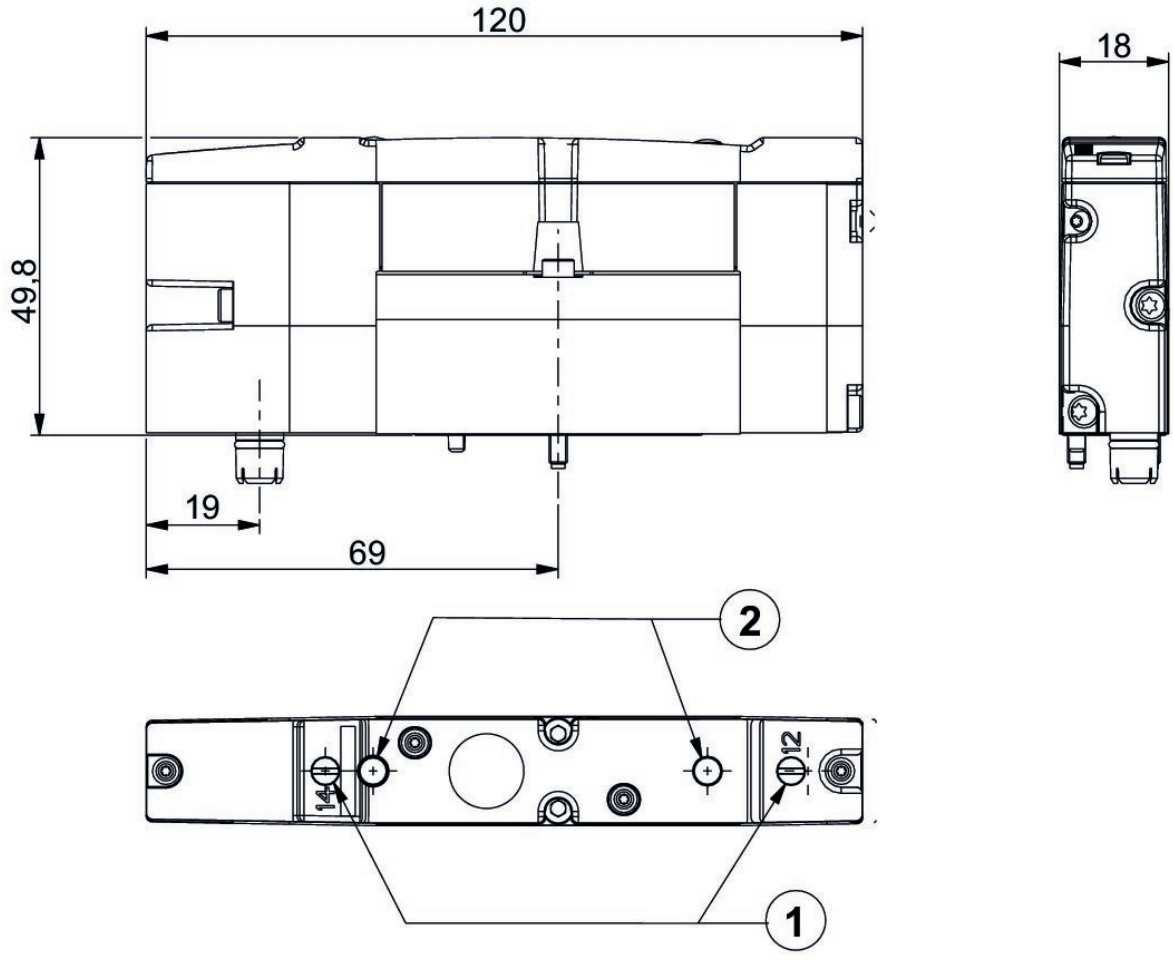
## Technical information

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.

## Dimensions




1) Manual override
2) LED