

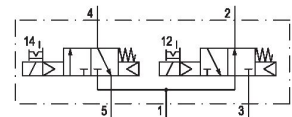
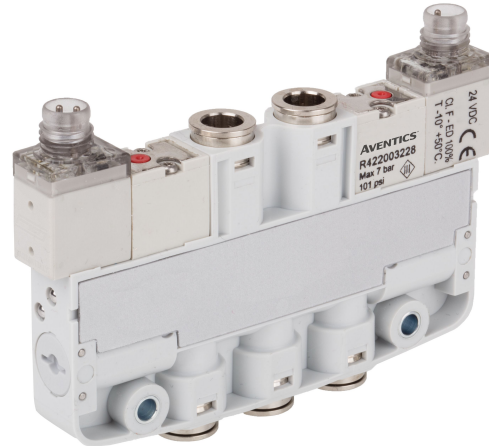
# 3/2 directional valve, LS04-AF series

R422103594

2024-12-13

## AVENTICS Series LS04 Directional valves

The AVENTICS Series LS04 are lightweight spool valves and save space with their polyamide and aluminium housing. The valves are suitable for direct mounting onto moving machines and system parts.



## Technical data

|                                    |                                   |
|------------------------------------|-----------------------------------|
| Industry                           | Industrial                        |
| Activation                         | Electrically                      |
| Valve type                         | Spool valve, positive overlapping |
| Switching principle                | 2x 3/2 NC/NO, with spring return  |
| Valve function                     | NC/NO                             |
| Sealing principle                  | Soft seal                         |
| Connection type                    | Pipe connection                   |
| Manual override                    | with detent                       |
| Compressed air connection input    | Ø 6                               |
| Compressed air connection output   | Ø 6                               |
| Compressed air connection, exhaust | Ø 6                               |
| Nominal flow Qn                    | 250 l/min                         |
| Flow conductance b                 | 0.25                              |
| Flow conductance C                 | 1.2 l/(s*bar)                     |
| Min. working pressure              | 3 bar                             |
| Max. working pressure              | 7 bar                             |

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|  |                     |
|--|---------------------|
| Electrical connection type                   | Plug                |
| Electrical connection size                   | M8                  |
| Electrical connection number of poles        | 3-pin               |
| Connector standard                           | DIN EN 60947-5-2    |
| Protection class acc. to DIN EN 61140        | Class III           |
| Protection class with connection             | IP65                |
| Protective circuit                           | Z-diode             |
| Operational voltage                          | 24 V DC             |
| Operational voltage DC                       | 24 V                |
| Voltage tolerance DC                         | -10 % / +10 %       |
|  |                     |
| Pilot  | Internal            |
| LED status display                           | Yellow              |
| Power consumption DC                         | 0.8 W               |
|  |                     |
| Duty cycle                                   | 100 %               |
| Typ. switch-on time                          | 12 ms               |
| Typ. switch-off time                         | 15 ms               |
| Generic emission standard in accordance with | EN 61000-6-4:2002   |
| Generic immunity standard in accordance with | IEC 61000-6-2:2005  |
|  |                     |
| Min. ambient temperature                     | -10 °C              |
| Max. ambient temperature                     | 50 °C               |
| Min. medium temperature                      | -10 °C              |
| Max. medium 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                              | M3                  |
| Mounting screw tightening torque             | 0.5 Nm              |
| Weight                                       | 0.064 kg            |

## Material

|                  |   |
|------------------|---|
| Housing material | Polyoxymethylene  |
| Seal material    | Acrylonitrile butadiene rubber<br>Hydrogenated nitrile butadiene rubber |

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Polyurethane

Part No.

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## 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>).

A duty cycle of 100 percent is only valid for single valves.

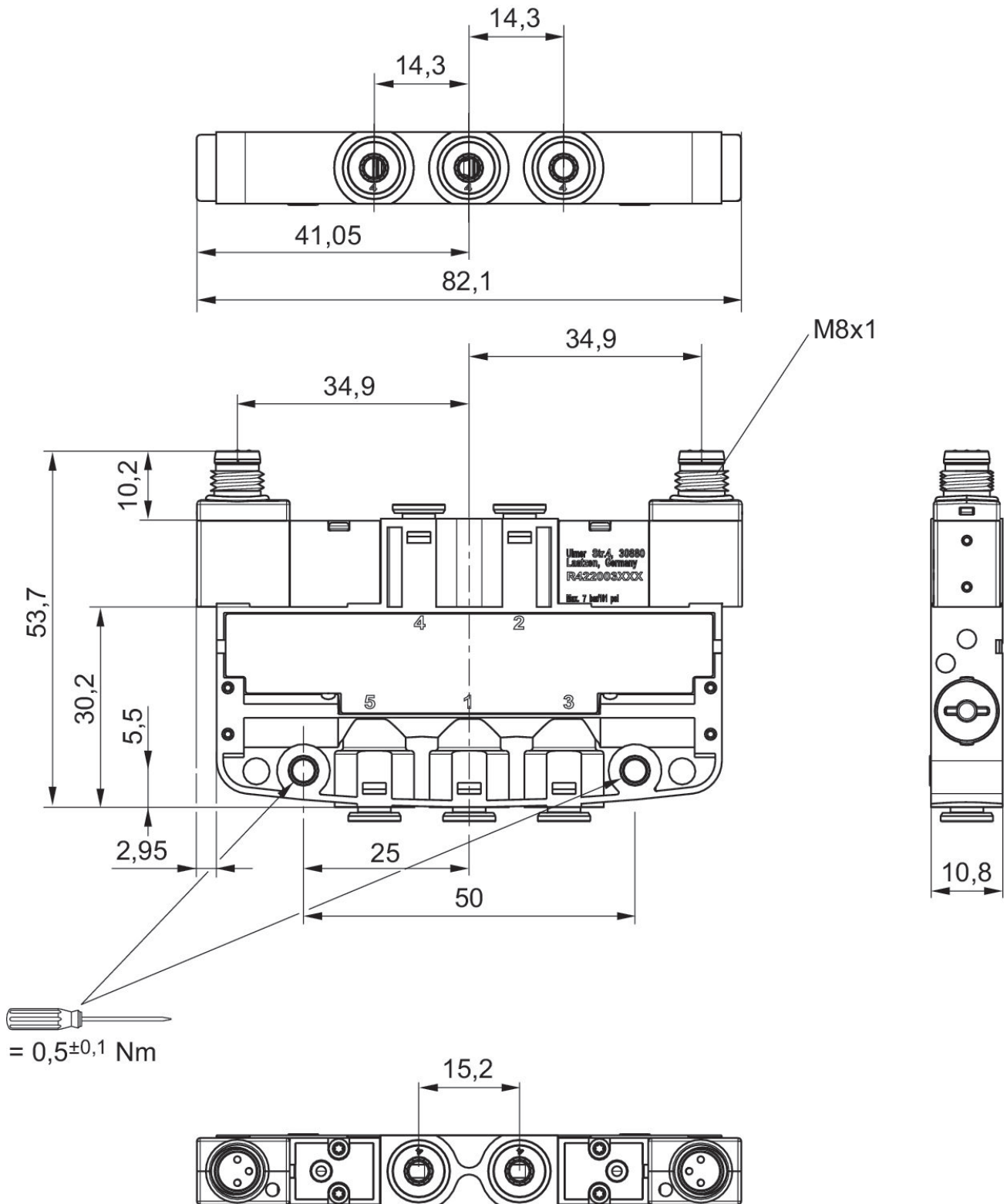
## Dimensions

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Double Solenoid



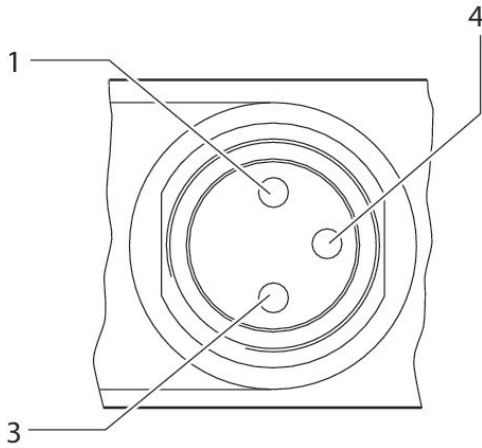
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PIN assignment for valve plug  
connectors

3-pin



1) Pin not assigned 3) 0 V 4) 24 V Note: Bi-polar protective circuit to prevent overvoltage