

# 5/2-directional valve, Series CD07-LT, single solenoid, G1/4, -40 °C cold-resistant, external

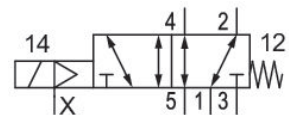
R414011872

CD07-LT

2025-10-23

## Series CD07-LT

AVENTICS series CD07-LT consists of various spool valves with an extremely durable aluminum housing. CD07-LT is designed to operate under extreme ambient temperatures from -40 °C to +70 °C and extended voltage tolerance from -30 % to +25 %. The CD07-LT series is ideal for applications in harsh environments and complies with international standards for railroad applications.



## Technical data

Industry

Activation

Frame size

Valve type

Switching principle

Valve function

Actuating control

Sealing principle

Connection type

Manual override

Rail

Electrically operated

CD07-LT

Spool valve, positive overlapping

5/2, with spring return

NC

Single Solenoid

Soft seal

Pipe connection

without

Compressed air connection

Compressed air connection input

Compressed air connection output

Compressed air connection, exhaust

Compressed air connection pilot exhaust

G 1/4

G 1/4

G 1/4

G 1/4

G 1/8

Nominal flow Qn

Nominal flow Qn 1 to 2

1200 l/min

1200 l/min

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|                                       |                                     |
|---------------------------------------|-------------------------------------|
| Nominal flow Qn 2 to 3                | 1200 l/min                          |
| Min. working pressure                 | 3 bar                               |
| Max. working pressure                 | 10 bar                              |
| Min. control pressure                 | 3 bar                               |
| Max. control pressure                 | 10 bar                              |
| Electrical connection type            | Plug                                |
| Electrical connection size            | EN 175301-803, form A               |
| Electrical connection number of poles | 3-pin                               |
| Connector standard                    | EN 175301-803:2006                  |
| Protection class with connection      | IP65                                |
| Reverse polarity protection           | Protected against polarity reversal |
| Operational voltage                   | 24 V DC                             |
| Operational voltage DC                | 24 V                                |
| Voltage tolerance DC                  | -30 % / +25 %                       |
| Pilot                                 | External                            |
| Pilot valve width                     | 30 mm                               |
| Power consumption DC                  | 5.5 W                               |
| Duty cycle                            | 100 %                               |
| Typ. switch-on time                   | 80 ms                               |
| Typ. switch-off time                  | 80 ms                               |
| Temperature resistance                | -40 °C cold-resistant               |
| Min. ambient temperature              | -40 °C                              |
| Max. ambient temperature              | 70 °C                               |
| Min. medium temperature               | -40 °C                              |
| Max. medium temperature               | 70 °C                               |
| Medium                                | Compressed air                      |
| Min. oil content of compressed air    | 0 mg/m <sup>3</sup>                 |
| Max. oil content of compressed air    | 1 mg/m <sup>3</sup>                 |
| Max. particle size                    | 50 µm                               |
| Weight                                | 0.554 kg                            |

## Material

|                  |                    |
|------------------|--------------------|
| Housing material | Aluminum, anodized |
|------------------|--------------------|

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|               |                                                                               |
|---------------|-------------------------------------------------------------------------------|
| Material Coil | Polyamide, fiber-glass reinforced<br>Stainless Steel                          |
| Seal material | Polyamide<br>Hydrogenated nitrile butadiene rubber<br>Polyurethane<br>Silicon |
| Part No.      | R414011872                                                                    |

## Technical information

Nominal flow Qn at 6 bar and  $\Delta p = 1$  bar

Pilot valve mounting on the side

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>).

The protection class is only ensured when the plug is mounted properly. For detailed information, see operating instructions.

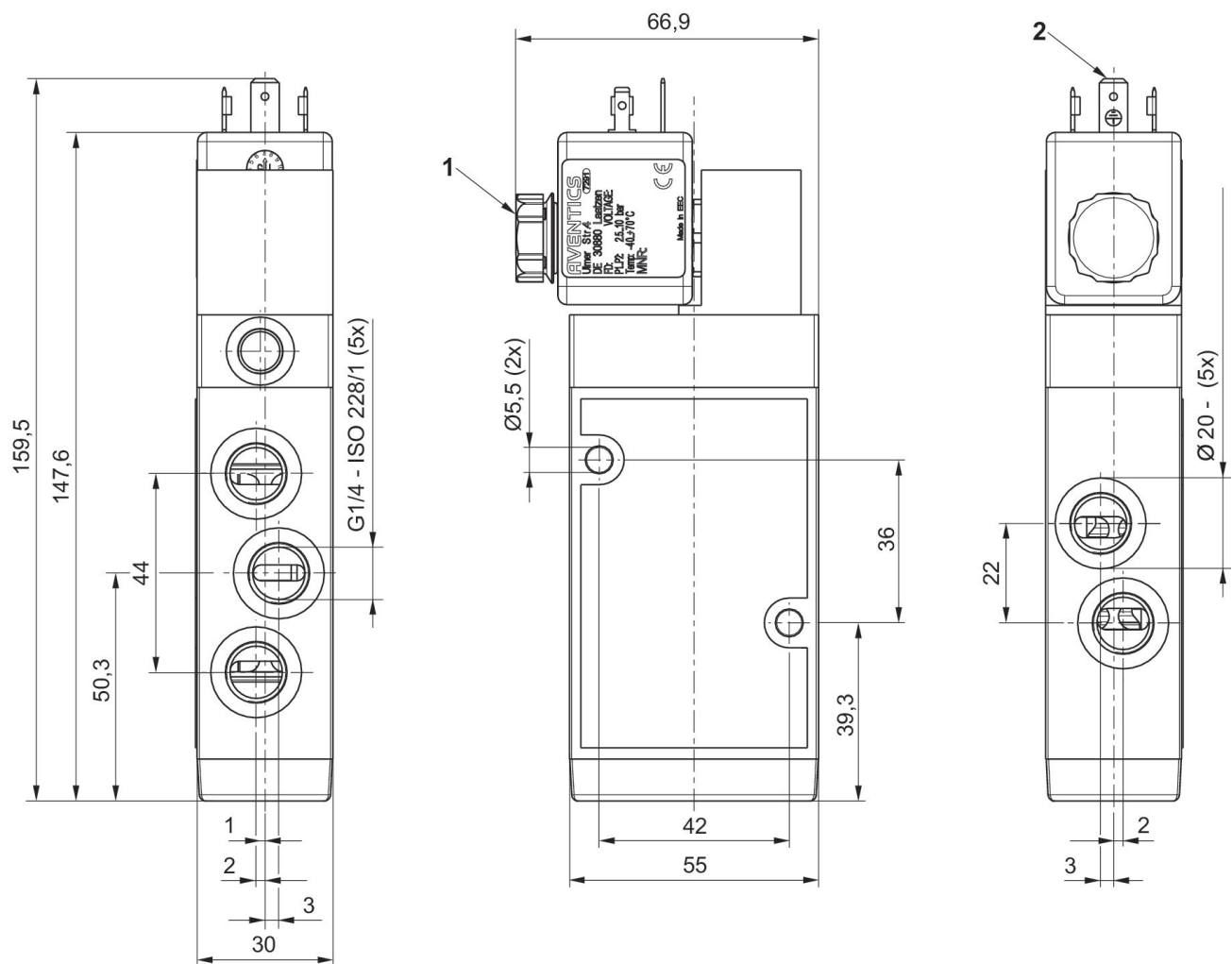
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## Dimensions in mm



1) Silencer

2) Valve plug connector form A, EN 175301-803