

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

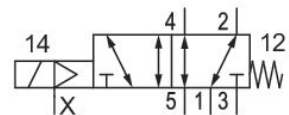
R414012378

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

with detent

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 ³
Max. oil content of compressed air	1 mg/m ³
Max. particle size	50 µm
Weight	0.554 kg

Material

Housing material	Aluminum, anodized
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Material Coil	Polyamide, fiber-glass reinforced Stainless Steel
Seal material	Polyamide Hydrogenated nitrile butadiene rubber Polyurethane Silicon
Part No.	R414012378

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.

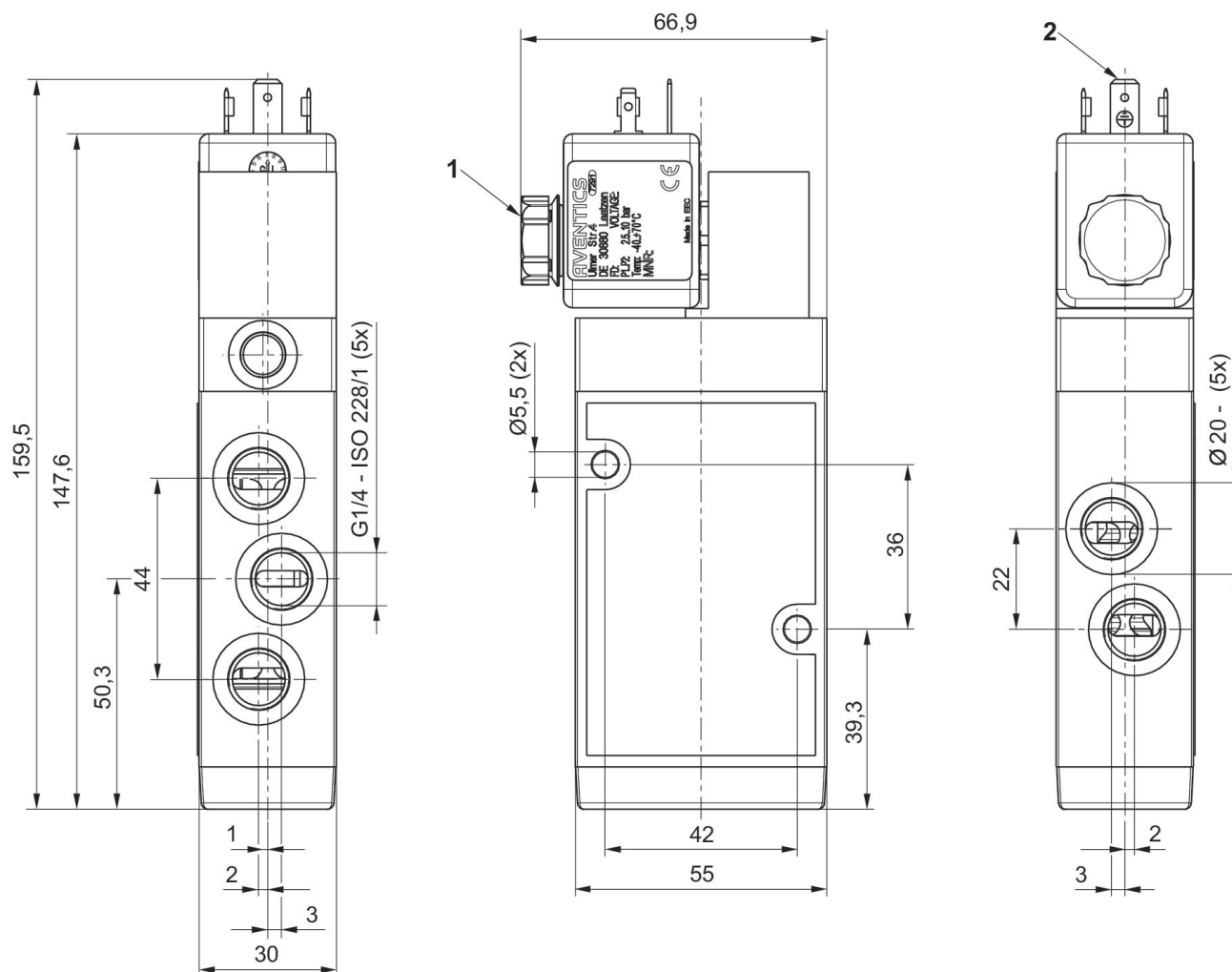
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Dimensions in mm



1) Silencer

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