

3/2-directional valve, Series CD12, single solenoid

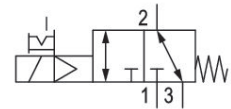
5724555280

CD12

2025-12-10

AVENTICS Series CD12 Directional valves

The AVENTICS Series CD consists of various spool valves with an extremely durable die-cast zinc housing. Its electrical, pneumatic, or mechanical actuating controls (roller, lever, pedal, or plunger) make the Series CD ideal for applications in harsh environments.



Technical data

Industry	Industrial
Activation	Electrically
Valve type	Spool valve, positive overlapping
Switching principle	3/2, with spring return
Valve function	NC/NO
Sealing principle	Soft seal
Connection type	Pipe connection
Manual override	with detent
Compressed air connection type	Internal thread
Standard compressed air connection	according to ISO 228-1
Compressed air connection input	G 1/2
Compressed air connection output	G 1/2
Compressed air connection, exhaust	G 1/2
Pilot control exhaust	with directional pilot air exhaust
Compressed air connection pilot exhaust	M5
Nominal flow Qn	4000 l/min
Nominal flow Qn 1 to 2	4000 l/min

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Nominal flow Qn 2 to 3	4000 l/min
Min. working pressure	2 bar
Max. working pressure	10 bar
Min. control pressure	2 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 AC at 50 Hz	230 V
Voltage tolerance AC 50 Hz	-20 % / +10 %
Operational voltage AC at 60 Hz	230 V
Voltage tolerance AC 60 Hz	-10 % / +20 %
Pilot	Internal
Coil width	30 mm
Pilot valve width	30 mm
Compatibility index	52
Holding power AC 50 Hz	4.4 VA
Holding power AC 60 Hz	3.5 VA
Switch-on power AC 50 Hz	6.9 VA
Switch-on power AC 60 Hz	6.2 VA
Duty cycle	100 %
Typ. switch-on time	34 ms
Typ. switch-off time	90 ms
Temperature resistance	-25 °C cold-resistant
Min. ambient temperature	-25 °C
Max. ambient temperature	50 °C
Min. medium temperature	-25 °C
Max. medium temperature	50 °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

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Weight 0.85 kg

Material

Housing material	Aluminum Polyamide, fiber-glass reinforced
Seal material	Acrylonitrile butadiene rubber Polyurethane

Part No. 5724555280

Technical information

ATEX optional: ATEX version can be produced by combining the basic valve without coil with an ATEX coil. ATEX ID: see ATEX coils catalog page.

option valve: The input and output compressed air connections can be exchanged. The valve can thereby be used in the NC or NO operating mode.

*Note: Basic valves feature a maximum working pressure of 16 bar. When combined with standard CNOMO pilots, the maximum working pressure is 10 bar.

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>).

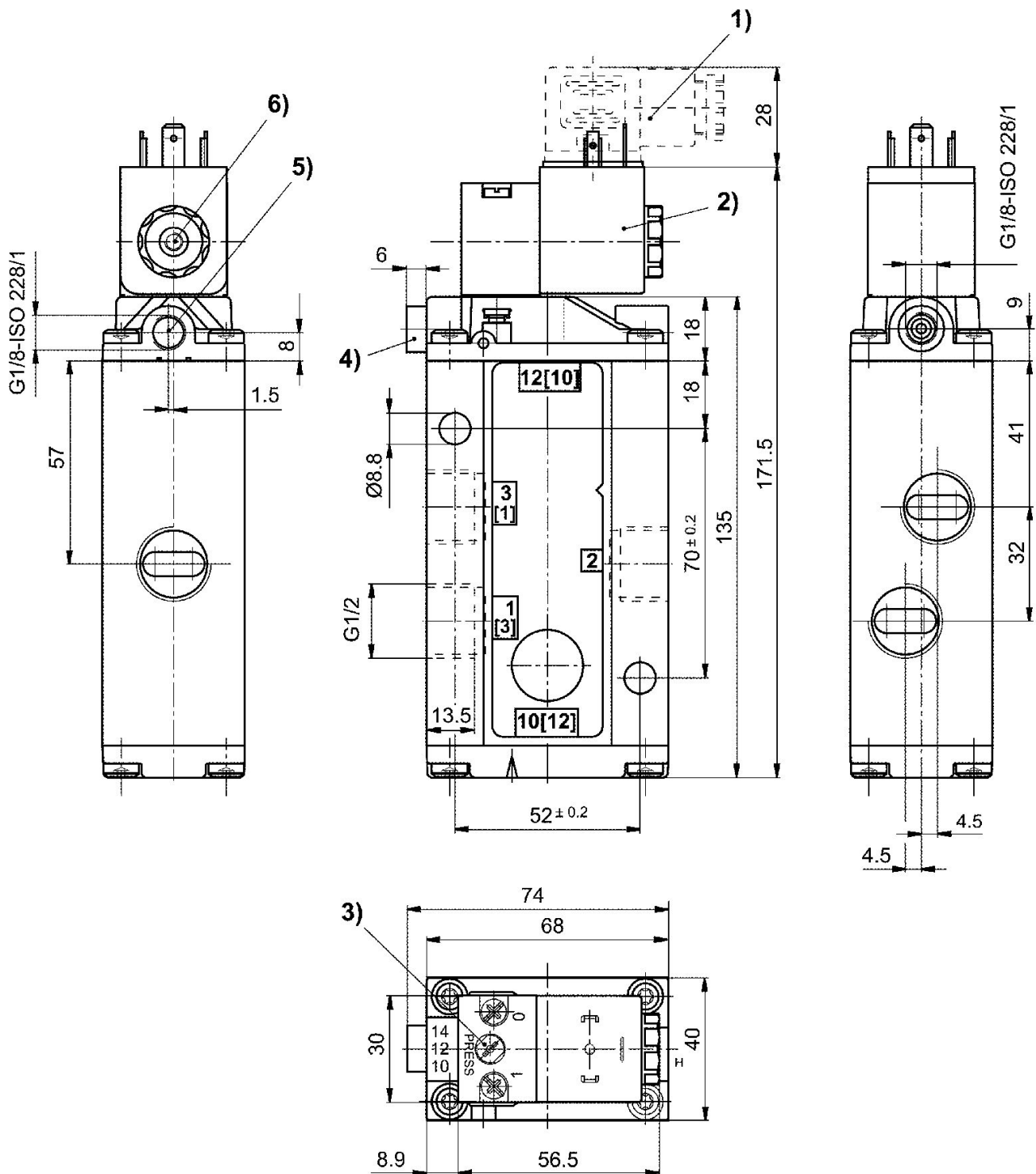
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Dimensions



1) Valve plug connector 2) Coil can be rotated at 90° intervals 3) Manual override
 4) Port X (only for externally piloted valves) 5) Exhaust port of piston 6) Pilot valve exhaust, M5