

5/3-directional valve, Series CD12, double solenoid

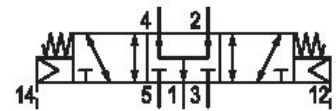
R412000160

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

Activation

Valve type

Basic valve equipment

Switching principle

Valve function

Sealing principle

Connection type

Industrial

Electrically

Spool valve, positive overlapping

Basic valve without pilot valve

5/3, pressurized center

Pressurized Center

Soft seal

Pipe connection

Compressed air connection type

Standard compressed air connection

Compressed air connection input

Compressed air connection output

Compressed air connection, exhaust

Pilot control exhaust

Compressed air connection pilot input

Internal thread

according to ISO 228-1

G 1/2

G 1/2

G 1/2

with directional pilot air exhaust

G 1/8

Nominal flow Qn 1 to 2

4100 l/min

Nominal flow Qn 2 to 3

3800 l/min

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Min. working pressure	-0.95 bar
Max. working pressure	16 bar
Min. control pressure	3 bar
Max. control pressure	16 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
Pilot	External
Coil width	30 mm
Pilot valve width	30 mm
Duty cycle	100 %
ATEX	ATEX optional
Min. ambient temperature	-15 °C
Max. ambient temperature	70 °C
Min. medium temperature	-15 °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	1 kg
Material	
Housing material	Aluminum Polyamide, fiber-glass reinforced
Seal material	Acrylonitrile butadiene rubber Polyurethane
Part No.	R412000160

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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.

*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>).

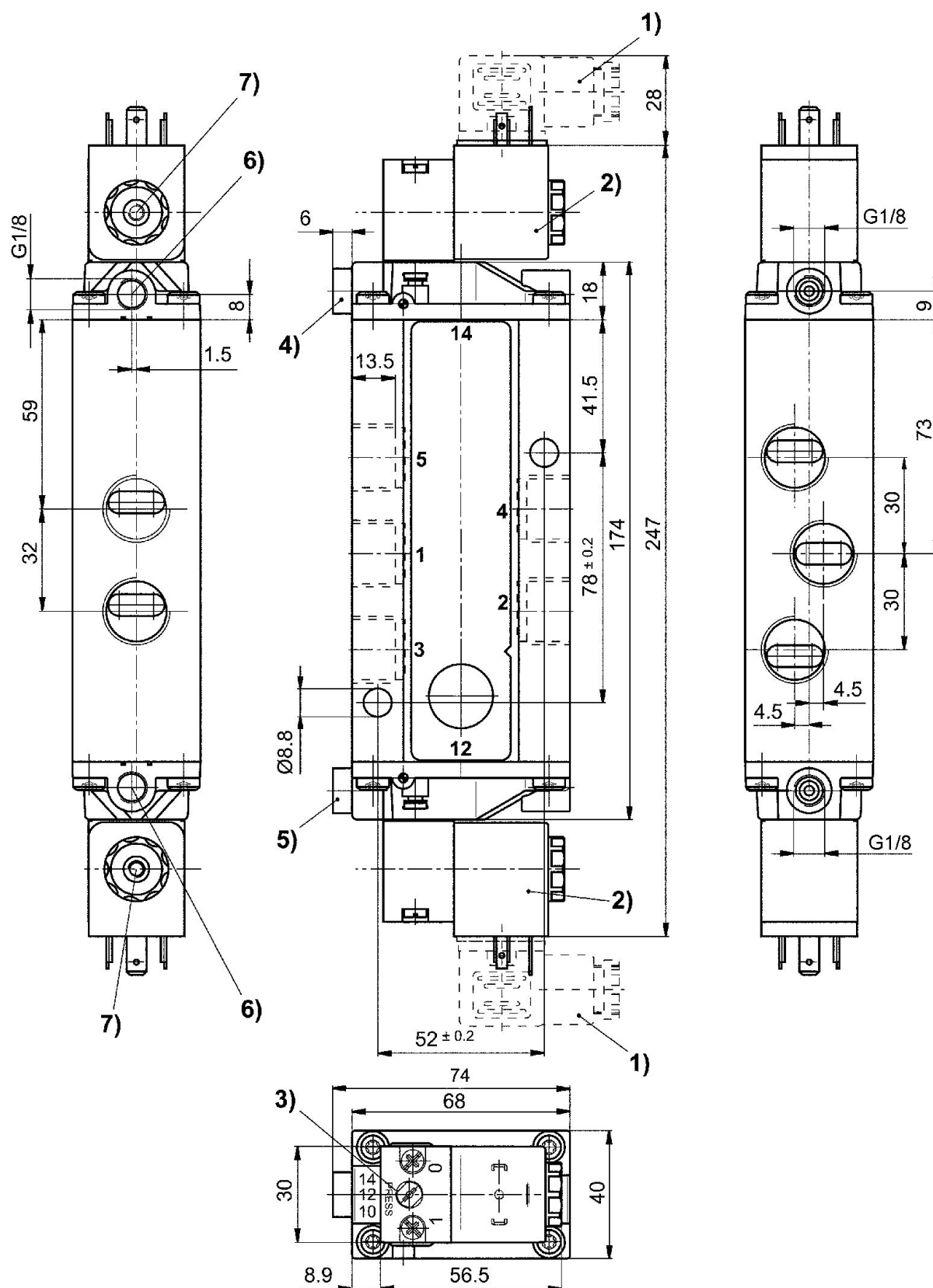
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Dimensions



- 1) Valve plug connector 2) Coil can be rotated at 90° intervals 3) Manual override
4) Port X, side 14 5) Port X, side 12 6) Port without function 7) Pilot valve exhaust, M5