

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

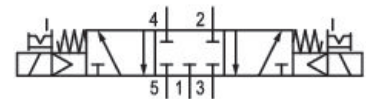
5725650920

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	5/3, closed center
Valve function	Closed Center
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
Nominal flow Qn	3800 l/min
Nominal flow Qn 1 to 2	3800 l/min
Nominal flow Qn 2 to 3	3800 l/min

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

5725650920

CD12

2025-12-10

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	-10 % / +10 %
Pilot	Internal
Coil width	30 mm
Pilot valve width	30 mm
Compatibility index	52
Power consumption DC	2.1 W
Duty cycle	100 %
Typ. switch-on time	37 ms
Typ. switch-off time	97 ms
Min. ambient temperature	-15 °C
Max. ambient temperature	50 °C
Min. medium temperature	-15 °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
Weight	1.3 kg
Material	
Housing material	Aluminum

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

5725650920

CD12

2025-12-10

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

Part No.	5725650920
----------	------------

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>).

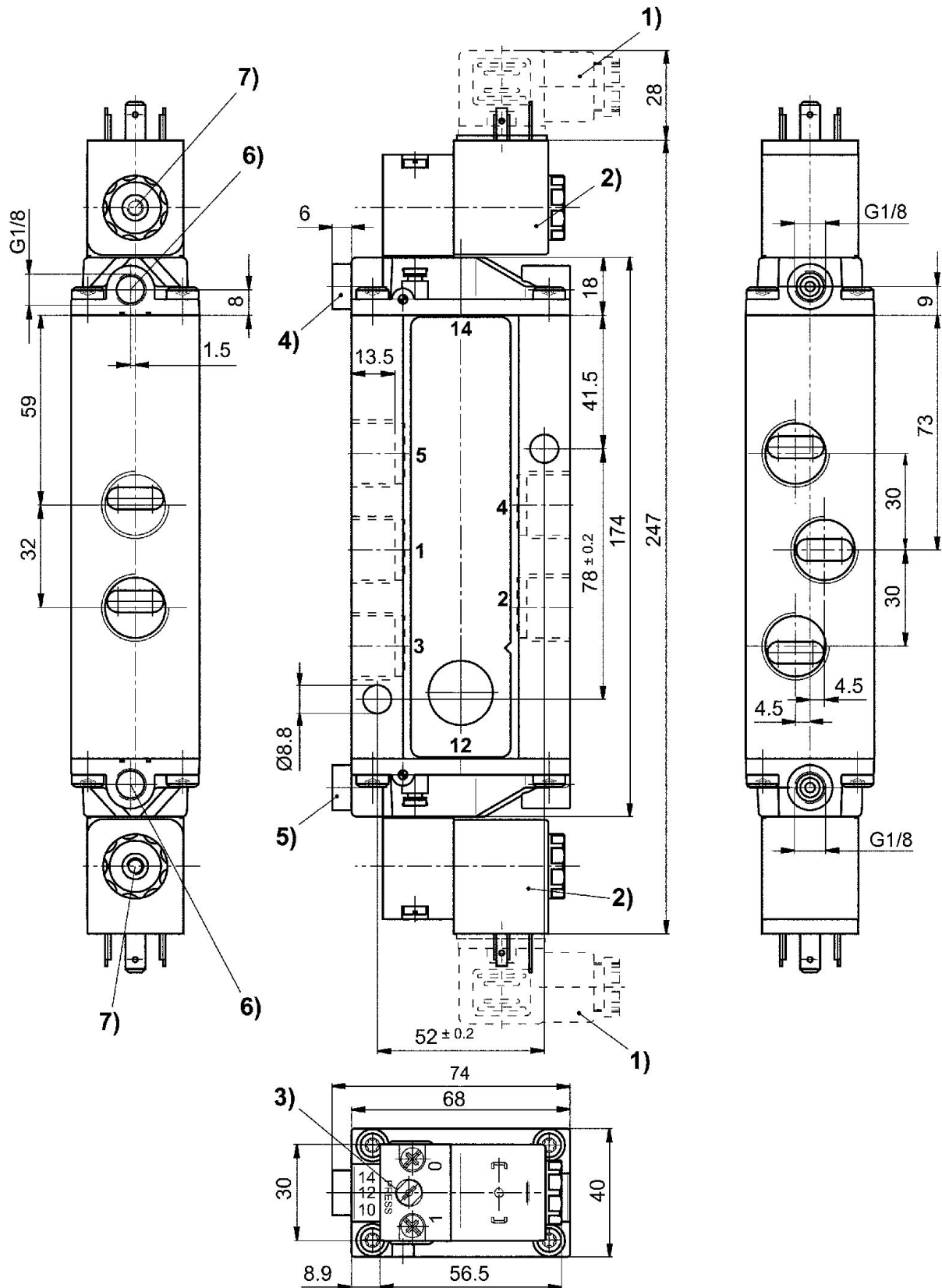
5/3-directional valve, Series CD12, double solenoid

5725650920

CD12

2025-12-10

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