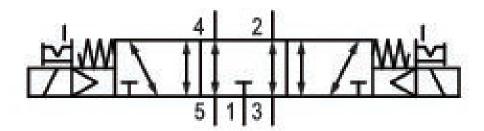
5/3-directional valve, Series CD12

R412000225

General series information Series CD12

■ 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

Switching principle

5/3

Version

Exhausted Center

Compressed air connection output

G 1/2

Working pressure min.

3 bar

Working pressure max

10 bar

Operational voltage AC at 50 Hz

110 V

Operational voltage AC at 60 Hz 110 V

Voltage tolerance AC 50 Hz

-20% / +10%

Voltage tolerance AC 60 Hz

-10% / +20%

Manual override

with detent without detent

Electrical connection type

Plug

Electrical connection size

EN 175301-803, form A



Electrical connection number of poles

3-pin

Actuating control Double Solenoid

Pilot valve width

30 mm Valve type

Spool valve, positive overlapping

Control pressure min.

3 bar

Control pressure max.

10 bar

Min. ambient temperature

-15 °C

Max. ambient temperature

50 °C

Min. medium temperature

-15 °C

Standard compressed air connection

according to ISO 228-1

Compressed air connection input

G 1/2

Compressed air connection, exhaust

G 1/2

Compressed air connection pilot exhaust

M5

Holding power AC 50 Hz

4.3 VA

Holding power AC 60 Hz

3.3 VA

Switch-on power AC 50 Hz

6.8 VA

Switch-on power AC 60 Hz

5.7 VA

Pilot valve width

30 mm

Connector standard EN 175301-803:2006

Protection class with connection

IP65

Sealing principle

Soft Seal

Pilot Internal

Connection type

Pipe connection

Return

With spring return

Max. medium temperature

50 °C

Medium

Compressed air

Max. particle size

50 µm

Oil content of compressed air min.

0 mg/m³

Oil content of compressed air max.

1 mg/m³

Pilot control exhaust

with directional pilot air exhaust

Nominal flow Qn 1 to 2

3600 l/min

Nominal flow Qn 2 to 3

4100 l/min

Compatibility index

13

14

Duty cycle

100 %

Typ. switch-on time

37 ms

Typ. switch-off time

97 ms

Reverse polarity protection

Protected against polarity reversal

Weight

1.3 kg



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

Polyurethane Part No. R412000225

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!

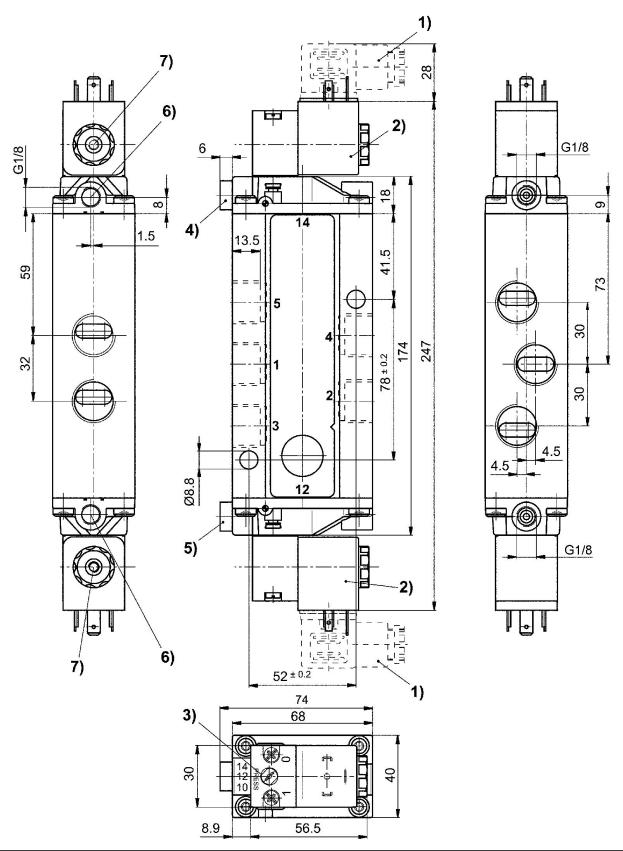
The pressure dew point must be at least 15 $^{\circ}$ C under ambient and medium temperature and may not exceed 3 $^{\circ}$ C .

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).



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