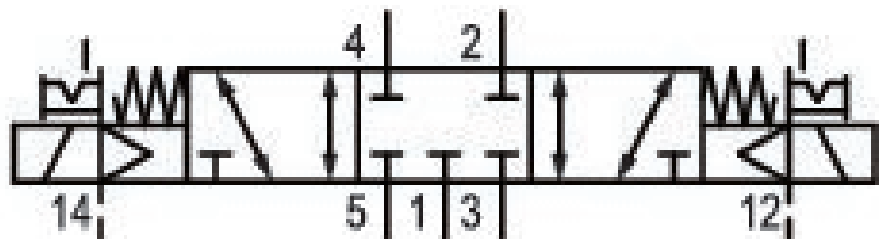


# 5/3-directional valve, Series CD12

R412000127

## 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

Nominal flow Q<sub>n</sub>  
3800 l/min

Switching principle  
5/3

Version  
Closed Center

Compressed air connection output  
G 1/2

Working pressure min.  
-0.95 bar

Working pressure max  
16 bar

DC operating voltage  
24 V

Voltage tolerance DC  
-10% / +10%

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  
Sealing principle  
Soft Seal

Pilot  
External

Pilot valve width  
30 mm  
Valve type  
Spool valve, positive overlapping

Connection type  
Pipe connection  
Return  
With spring return

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

Max. medium temperature  
50 °C  
Medium  
Compressed air  
Max. particle size  
50 µm  
Oil content of compressed air min.  
0 mg/m<sup>3</sup>  
Oil content of compressed air max.  
1 mg/m<sup>3</sup>

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 input  
G 1/8

Compressed air connection pilot exhaust  
M5  
Pilot control exhaust  
with directional pilot air exhaust  
Nominal flow Q<sub>n</sub> 1 to 2  
3800 l/min  
Nominal flow Q<sub>n</sub> 2 to 3  
3800 l/min

Power consumption DC  
2.1 W  
Compatibility index  
13  
14

Duty cycle  
100 %  
Typ. switch-on time  
37 ms  
Typ. switch-off time  
97 ms

Pilot valve width  
30 mm  
Connector standard  
EN 175301-803:2006  
Protection class with connection  
IP65

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.  
R412000127

## 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 under 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>).

## 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