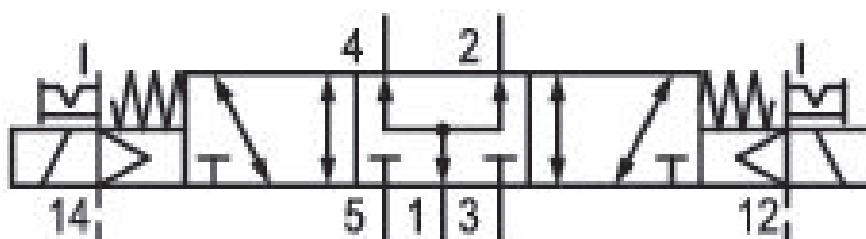


5/3-directional valve, Series CD12

R412000153

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
Pressurized 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

Connection type
Pipe connection

Valve type
Spool valve, positive overlapping

Return
With spring return

Control pressure min.
3 bar

Max. medium temperature
50 °C

Control pressure max.
10 bar

Medium
Compressed air

Min. ambient temperature
-15 °C

Max. particle size
50 µm

Max. ambient temperature
50 °C

Oil content of compressed air min.
0 mg/m³

Min. medium temperature
-15 °C

Oil content of compressed air max.
1 mg/m³

Standard compressed air connection
according to ISO 228-1

Compressed air connection pilot exhaust
M5

Compressed air connection input
G 1/2

Pilot control exhaust
with directional pilot air exhaust

Compressed air connection, exhaust
G 1/2

Nominal flow Q_n 1 to 2
4100 l/min

Compressed air connection pilot input
G 1/8

Nominal flow Q_n 2 to 3
3800 l/min

Power consumption DC
2.1 W

Duty cycle
100 %

Compatibility index
13
14

Typ. switch-on time
37 ms

Typ. switch-off time
97 ms

Pilot valve width
30 mm

Reverse polarity protection
Protected against polarity reversal

Connector standard
EN 175301-803:2006

Weight
1.3 kg

Protection class with connection
IP65

Housing material
Aluminum
Polyamide fiber-glass reinforced

Polyurethane
Part No.
R412000153

Seal material
Acrylonitrile butadiene rubber

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