

# 5/2-directional valve, Series CD07, single solenoid

5776980220

CD07

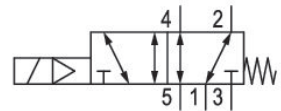
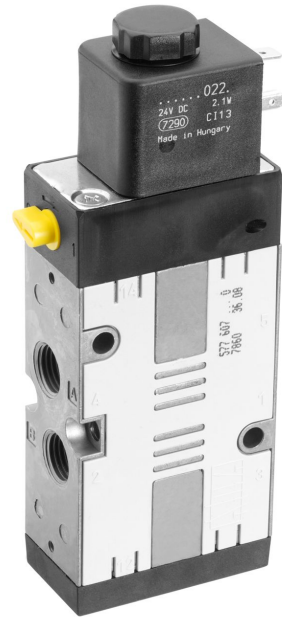
2025-12-08

## AVENTICS Series CD07 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.

For demanding environments

- Durable design
- Assembly on base plate
- Suitable for extreme ambient temperatures
- ATEX version available



## Technical data

Industry

Activation

Frame size

Valve type

Switching principle

Sealing principle

Connection type

Manual override

Industrial

Electrically operated

CD07

Spool valve, positive overlapping

5/2, with spring return

Soft seal

Pipe connection

without

Compressed air connection

Compressed air connection type

Standard compressed air connection

Compressed air connection input

Compressed air connection output

Compressed air connection, exhaust

Pilot control exhaust

G 1/4

Internal thread

according to ISO 228-1

G 1/4

G 1/4

G 1/4

with directional pilot air exhaust

Nominal flow Q<sub>n</sub>

1200 l/min

Nominal flow Q<sub>n</sub> 1 to 2

1200 l/min

# 5/2-directional valve, Series CD07, single solenoid

5776980220

CD07

2025-12-08

|                                       |                                                                       |
|---------------------------------------|-----------------------------------------------------------------------|
| Nominal flow Qn 2 to 3                | 1200 l/min                                                            |
| 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                   | 13<br>14                                                              |
| Power consumption DC                  | 2.1 W                                                                 |
| Duty cycle                            | 100 %                                                                 |
| Typ. switch-on time                   | 25 ms                                                                 |
| Typ. switch-off time                  | 45 ms                                                                 |
| Temperature resistance                | -25 °C cold-resistant                                                 |
| Certificates                          | Free of substances that impair surface wetting in the coating process |
| Min. ambient temperature              | -25 °C                                                                |
| Max. ambient temperature              | 50 °C                                                                 |
| Min. medium temperature               | -25 °C                                                                |
| Max. medium temperature               | 50 °C                                                                 |
| Medium                                | Compressed air                                                        |
| Min. oil content of compressed air    | 0 mg/m <sup>3</sup>                                                   |
| Max. oil content of compressed air    | 1 mg/m <sup>3</sup>                                                   |
| Max. particle size                    | 50 µm                                                                 |
| Mounting on manifold strip            | P-strip                                                               |

# 5/2-directional valve, Series CD07, single solenoid

5776980220

CD07

2025-12-08

|                  |                                                    |
|------------------|----------------------------------------------------|
| Weight           | PRS strip<br>0.57 kg                               |
| Material         |                                                    |
| Housing material | Die cast zinc<br>Polyamide, fiber-glass reinforced |
| Seal material    | Acrylonitrile butadiene rubber                     |
| Part No.         | 5776980220                                         |

## Technical information

Nominal flow  $Q_n$  at 6 bar and  $\Delta p = 1$  bar

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.

Nickel-plated armature guide (only suitable for DC variant), i.e. the base must not be equipped with AC coils.

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>).

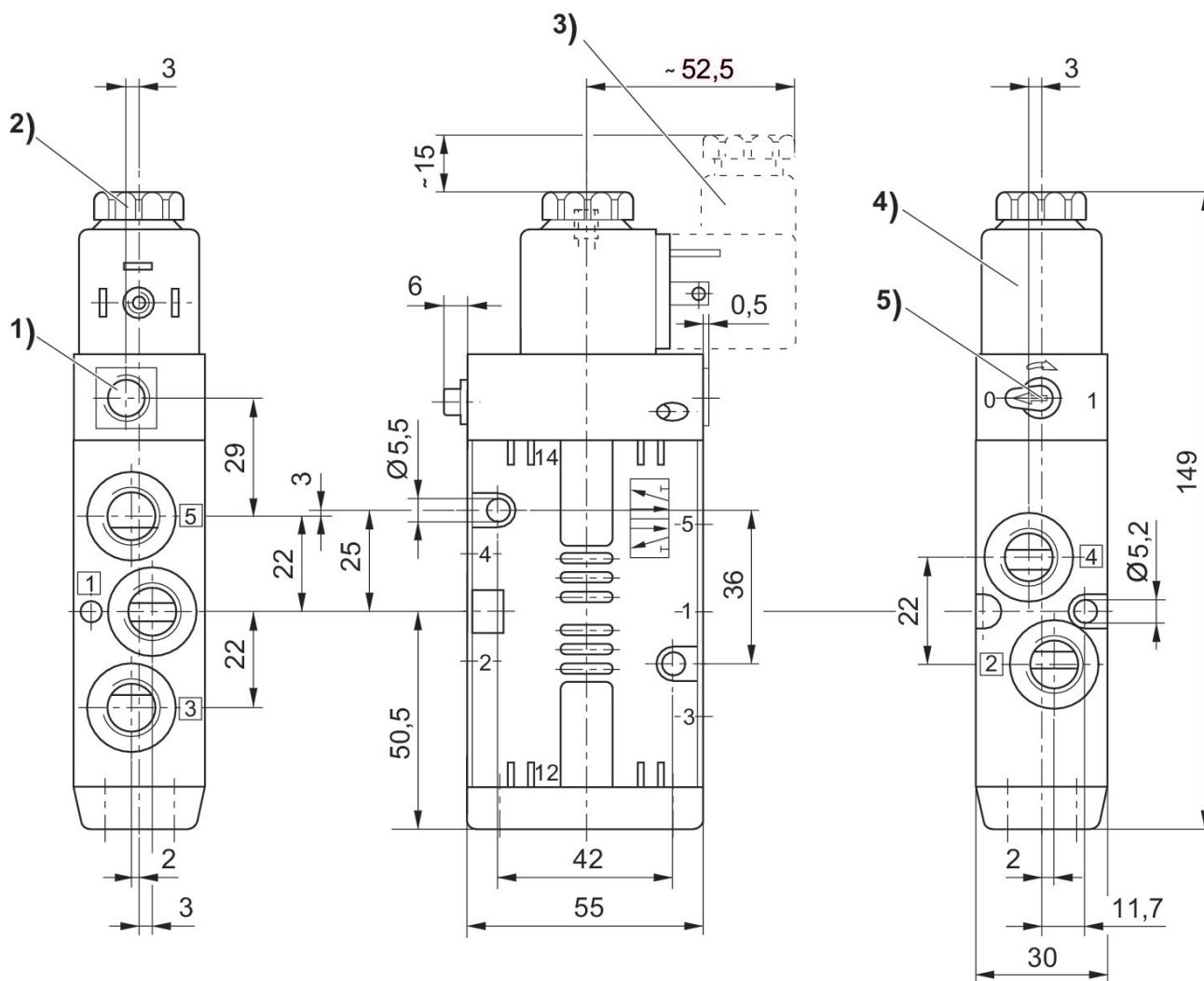
# 5/2-directional valve, Series CD07, single solenoid

5776980220

CD07

2025-12-08

Dimensions in mm



- 1) Only with separate pilot control G 1/8
- 2) After removal of cap M 5 internal thread
- 3) Valve plug connector
- 4) Coil pluggable at 45° intervals
- 5) Manual override