

# 5/2-directional valve, Series CD01-PA

- ISO 15407-1
- 26 mm
- 5/2
- With air spring return With spring/air spring return
- single solenoid
- $Q_n = 1.03 \text{ Cv}$
- Compressed air connection output base plate DIN ISO 15407-1
- Electrical connection Plug, EN 175301-803, form C
- Manual override with detent without detent



|                                  |                                                                       |
|----------------------------------|-----------------------------------------------------------------------|
| Type                             | Spool valve, positive overlapping                                     |
| Sealing principle                | Soft sealing                                                          |
| Connection type                  | Plate connection                                                      |
| Standards                        | ISO 15407-1, 26 mm                                                    |
| Connector standard               | EN 175301-803, form C                                                 |
| Certificates                     | Free of substances that impair surface wetting in the coating process |
| Working pressure min./max.       | See table below                                                       |
| Control pressure min./max.       | See table below                                                       |
| Ambient temperature min./max.    | See table below                                                       |
| Medium temperature min./max.     | See table below                                                       |
| Medium                           | Compressed air                                                        |
| Max. particle size               | 50 $\mu\text{m}$                                                      |
| Oil content of compressed air    | 0 ... 5 $\text{mg}/\text{m}^3$                                        |
| Nominal flow $Q_n$               | 1.03 Cv                                                               |
| Compressed air connection        | according to ISO 15407-1                                              |
| Protection class with connection | IP65                                                                  |
| Duty cycle                       | 100 %                                                                 |
| Typ. switch-on time              | See table below                                                       |
| Typ. switch-off time             | See table below                                                       |
| Mounting screw                   | M4 with hexagon socket                                                |
| Mounting screw tightening torque | 1.84 ft./lbs.                                                         |
| Weight                           | 0.463 lbs                                                             |

## Technical data

| Part No.   |                                                                                    | MO                                                                                 | Operational voltage<br>DC | Operational voltage<br>AC 50 Hz |
|------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------|---------------------------------|
| 5763510210 |   |   | 12 V                      | -                               |
| 5763510220 |   |   | 24 V                      | -                               |
| 5763510620 |   |   | 24 V                      | -                               |
| 5763510920 |   |   | 24 V                      | -                               |
| 5763515220 |   |   | -                         | 24 V                            |
| 5763515270 |   |   | -                         | 110 V                           |
| 5763515670 |   |   | -                         | 110 V                           |
| 5763515280 |   |   | -                         | 230 V                           |
| 5763600220 |   |   | 24 V                      | -                               |
| 5763600620 |   |   | 24 V                      | -                               |
| 5763605220 |   |   | -                         | 24 V                            |
| 5763605270 |   |   | -                         | 110 V                           |
| 5763605670 |   |   | -                         | 110 V                           |
| 5763605280 |  |  | -                         | 230 V                           |

| Part No.   | Operational voltage<br>AC 60 Hz | Voltage tolerance<br>DC | Voltage tolerance<br>AC 50 Hz | Voltage tolerance<br>AC 60 Hz |
|------------|---------------------------------|-------------------------|-------------------------------|-------------------------------|
| 5763510210 | -                               | -10% / +10%             | -                             | -                             |
| 5763510220 | -                               | -10% / +10%             | -                             | -                             |
| 5763510620 | -                               | -10% / +10%             | -                             | -                             |
| 5763510920 | -                               | -10% / +10%             | -                             | -                             |
| 5763515220 | 24 V                            | -                       | -10% / +15%                   | -10% / +15%                   |
| 5763515270 | 110 V                           | -                       | -10% / +15%                   | -10% / +15%                   |
| 5763515670 | 110 V                           | -                       | -10% / +15%                   | -10% / +15%                   |
| 5763515280 | 230 V                           | -                       | -10% / +15%                   | -10% / +15%                   |
| 5763600220 | -                               | -10% / +10%             | -                             | -                             |
| 5763600620 | -                               | -10% / +10%             | -                             | -                             |
| 5763605220 | 24 V                            | -                       | -10% / +15%                   | -10% / +15%                   |
| 5763605270 | 110 V                           | -                       | -10% / +15%                   | -10% / +15%                   |
| 5763605670 | 110 V                           | -                       | -10% / +15%                   | -10% / +15%                   |
| 5763605280 | 230 V                           | -                       | -10% / +15%                   | -10% / +15%                   |

| Part No.   | Power consumption<br>DC | Holding power<br>AC 50 Hz | Holding power<br>AC 60 Hz | Switch-on power<br>AC 50 Hz |
|------------|-------------------------|---------------------------|---------------------------|-----------------------------|
| 5763510210 | 1.6 W                   | -                         | -                         | -                           |
| 5763510220 | 1.6 W                   | -                         | -                         | -                           |
| 5763510620 | 1.6 W                   | -                         | -                         | -                           |
| 5763510920 | 2.06 W                  | -                         | -                         | -                           |
| 5763515220 | -                       | 2.2 VA                    | 1.85 VA                   | 3 VA                        |
| 5763515270 | -                       | 3 VA                      | 2.4 VA                    | 4.2 VA                      |
| 5763515670 | -                       | 3 VA                      | 2.4 VA                    | 4.2 VA                      |
| 5763515280 | -                       | 2.3 VA                    | 2 VA                      | 3.2 VA                      |
| 5763600220 | 1.6 W                   | -                         | -                         | -                           |
| 5763600620 | 1.6 W                   | -                         | -                         | -                           |

| Part No.   | Power consumption<br>DC | Holding power<br>AC 50 Hz | Holding power<br>AC 60 Hz | Switch-on power<br>AC 50 Hz |
|------------|-------------------------|---------------------------|---------------------------|-----------------------------|
| 5763605220 | -                       | 2.2 VA                    | 1.85 VA                   | 3 VA                        |
| 5763605270 | -                       | 3 VA                      | 2.4 VA                    | 4.2 VA                      |
| 5763605670 | -                       | 3 VA                      | 2.4 VA                    | 4.2 VA                      |
| 5763605280 | -                       | 2.3 VA                    | 2 VA                      | 3.2 VA                      |

| Part No.   | Switch-on power<br>AC 60 Hz | Pilot    | Nominal flow 1 ► 2 | Nominal flow 2 ► 3 |
|------------|-----------------------------|----------|--------------------|--------------------|
| 5763510210 | -                           | Internal | 1.03 Cv            | 1.03 Cv            |
| 5763510220 | -                           | Internal | 1.03 Cv            | 1.03 Cv            |
| 5763510620 | -                           | Internal | 1.03 Cv            | 1.03 Cv            |
| 5763510920 | -                           | Internal | 1.03 Cv            | 1.03 Cv            |
| 5763515220 | 2.6 VA                      | Internal | 1.03 Cv            | 1.03 Cv            |
| 5763515270 | 3.4 VA                      | Internal | 1.03 Cv            | 1.03 Cv            |
| 5763515670 | 3.4 VA                      | Internal | 1.03 Cv            | 1.03 Cv            |
| 5763515280 | 2.8 VA                      | Internal | 1.03 Cv            | 1.03 Cv            |
| 5763600220 | -                           | External | 1.03 Cv            | 1.03 Cv            |
| 5763600620 | -                           | External | 1.03 Cv            | 1.03 Cv            |
| 5763605220 | 2.6 VA                      | External | 1.03 Cv            | 1.03 Cv            |
| 5763605270 | 3.4 VA                      | External | 1.03 Cv            | 1.03 Cv            |
| 5763605670 | 3.4 VA                      | External | 1.03 Cv            | 1.03 Cv            |
| 5763605280 | 2.8 VA                      | External | 1.03 Cv            | 1.03 Cv            |

| Part No.   | Working pressure min./max. | Control pressure min./max. |
|------------|----------------------------|----------------------------|
| 5763510210 | 44 ... 145 psi             | 44 ... 145 psi             |
| 5763510220 | 44 ... 145 psi             | 44 ... 145 psi             |
| 5763510620 | 44 ... 145 psi             | 44 ... 145 psi             |
| 5763510920 | 29 ... 232 psi             | 29 ... 232 psi             |
| 5763515220 | 44 ... 145 psi             | 44 ... 145 psi             |
| 5763515270 | 44 ... 145 psi             | 44 ... 145 psi             |
| 5763515670 | 44 ... 145 psi             | 44 ... 145 psi             |
| 5763515280 | 44 ... 145 psi             | 44 ... 145 psi             |
| 5763600220 | 0 ... 232 psi              | 44 ... 145 psi             |
| 5763600620 | 0 ... 232 psi              | 44 ... 145 psi             |
| 5763605220 | 0 ... 232 psi              | 44 ... 145 psi             |
| 5763605270 | 0 ... 232 psi              | 44 ... 145 psi             |
| 5763605670 | 0 ... 232 psi              | 44 ... 145 psi             |
| 5763605280 | 0 ... 232 psi              | 44 ... 145 psi             |

| Part No.   | Ambient temperature min./max. | Medium temperature min./max. |
|------------|-------------------------------|------------------------------|
| 5763510210 | 5 ... 122 °F                  | 5 ... 122 °F                 |
| 5763510220 | 5 ... 122 °F                  | 5 ... 122 °F                 |
| 5763510620 | 5 ... 122 °F                  | 5 ... 122 °F                 |
| 5763510920 | 32 ... 122 °F                 | 32 ... 122 °F                |
| 5763515220 | 5 ... 122 °F                  | 5 ... 122 °F                 |
| 5763515270 | 5 ... 122 °F                  | 5 ... 122 °F                 |

| Part No.   | Ambient temperature min./max. | Medium temperature min./max. |
|------------|-------------------------------|------------------------------|
| 5763515670 | 5 ... 122 °F                  | 5 ... 122 °F                 |
| 5763515280 | 5 ... 122 °F                  | 5 ... 122 °F                 |
| 5763600220 | 5 ... 122 °F                  | 5 ... 122 °F                 |
| 5763600620 | 5 ... 122 °F                  | 5 ... 122 °F                 |
| 5763605220 | 5 ... 122 °F                  | 5 ... 122 °F                 |
| 5763605270 | 5 ... 122 °F                  | 5 ... 122 °F                 |
| 5763605670 | 5 ... 122 °F                  | 5 ... 122 °F                 |
| 5763605280 | 5 ... 122 °F                  | 5 ... 122 °F                 |

| Part No.   | Typ. switch-on time | Typ. switch-off time | Electrical connection<br>Pilot valve |
|------------|---------------------|----------------------|--------------------------------------|
| 5763510210 | 29 ms               | 42 ms                | Plug EN 175301-803, form C           |
| 5763510220 | 29 ms               | 42 ms                | Plug EN 175301-803, form C           |
| 5763510620 | 29 ms               | 42 ms                | Plug EN 175301-803, form C           |
| 5763510920 | 29 ms               | 42 ms                | Plug EN 175301-803, form C           |
| 5763515220 | 29 ms               | 42 ms                | Plug EN 175301-803, form C           |
| 5763515270 | 29 ms               | 42 ms                | Plug EN 175301-803, form C           |
| 5763515670 | 29 ms               | 42 ms                | Plug EN 175301-803, form C           |
| 5763515280 | 29 ms               | 42 ms                | Plug EN 175301-803, form C           |
| 5763600220 | 34 ms               | 35 ms                | Plug EN 175301-803, form C           |
| 5763600620 | 34 ms               | 35 ms                | Plug EN 175301-803, form C           |
| 5763605220 | 34 ms               | 35 ms                | Plug EN 175301-803, form C           |
| 5763605270 | 34 ms               | 35 ms                | Plug EN 175301-803, form C           |
| 5763605670 | 34 ms               | 35 ms                | Plug EN 175301-803, form C           |
| 5763605280 | 34 ms               | 35 ms                | Plug EN 175301-803, form C           |

| Part No.   | Power consumption     |    |
|------------|-----------------------|----|
| 5763510210 | -                     | -  |
| 5763510220 | -                     | -  |
| 5763510620 | -                     | -  |
| 5763510920 | Low power consumption | -  |
| 5763515220 | -                     | -  |
| 5763515270 | -                     | -  |
| 5763515670 | -                     | -  |
| 5763515280 | -                     | -  |
| 5763600220 | -                     | 1) |
| 5763600620 | -                     | 1) |
| 5763605220 | -                     | 1) |
| 5763605270 | -                     | 1) |
| 5763605670 | -                     | 1) |
| 5763605280 | -                     | 1) |

Nominal flow Q<sub>n</sub> at 87 psi and Δp = 14.5 psi, MO = Manual override

1) Control pressure: see diagram for min., max. 10 bar

Technical information

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 27 °F under ambient and medium temperature and may not exceed 5.4 °F .

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 the MediaCentre).

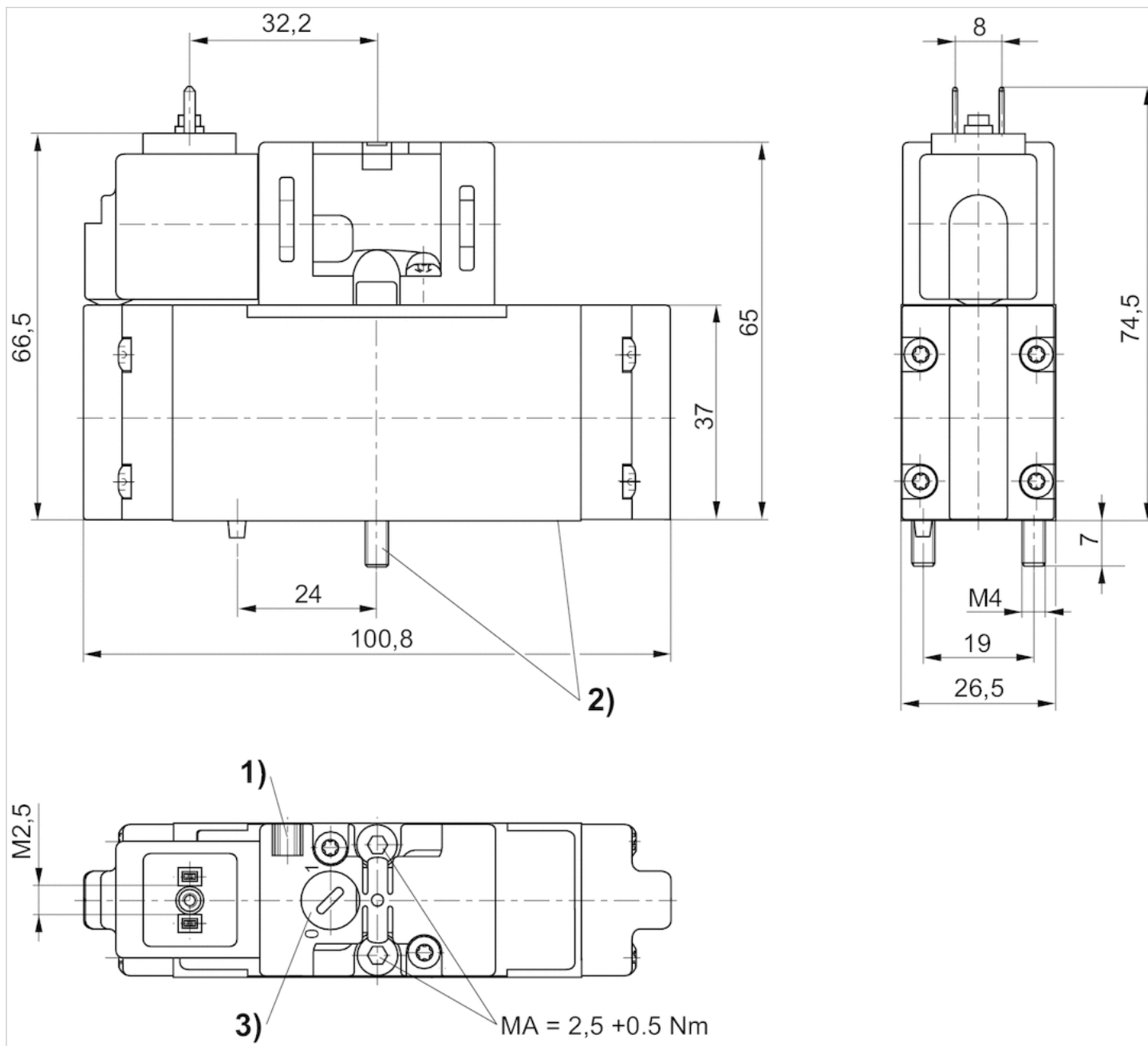
Versions with voltage of less than 50 V DC do not have a protective ground.

Technical information

|         |                                |
|---------|--------------------------------|
| Housing | Polyamide Polyoxymethylene     |
| Seals   | Acrylonitrile butadiene rubber |

## Dimensions

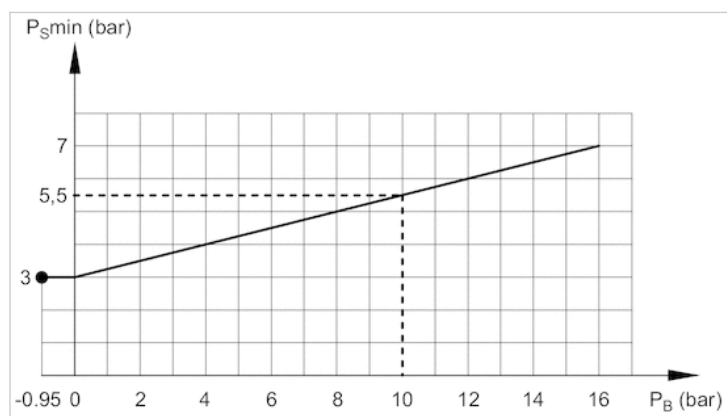
### Dimensions



1) mounting space for name plate 2) screws and seals captive 3) manual override

## Diagrams

Minimum control pressure for externally piloted valves (depending on the working pressure)



PB= Working pressure

PS = control pressure