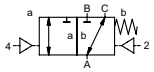
# lateral valve
# type PCD 10 DR

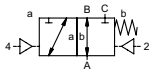
## 5-PCD 10 DR

**valve type with pilot valve**

| | |
|---|---|
| **3/2 way valve** | **externally controlled** |
| **pressure range** | PN 0-250 bar |
| **orifice** | DN 10 mm |
| **connection** | thread |
| **function** | valve<br>normally closed (A ►B)<br>symbol **NC** |



| | |
|---|---|
| | valve<br>normally open (A ►B)<br>symbol **NO** |



| | |
|---|---|
| **design** | pressure balanced, with spring return, intersecting switch-over |
| **body materials** | ① brass ② ③ ⑤ ④ ⑥ stainless steel |
| **valve seat** | synthetic resin on metal |
| **seal materials** | NBR PTFE, FPM, CR, EPDM |

⚠ Above stated body materials refer to the valve port connections that get in contact with the media only!

**details needed for main valve**

- orifice
- port
- function NC/NO
- operating pressure/Δp
- inlet pressure at A, B or C
- flow rate
- media
- media temperature
- ambient temperature
- type of actuation

**details needed for pneumatic actuation**

- nominal voltage
- type of protection
- actuation pressure range min/max
- low wattage coil, actuation pressure range 4-7 bar
- pilot valve type

| general specifications | | | options |
|---|---|---|---|
| **ports** | PCD | threads G 3/8 | |
| **function** | | NC | NO |
| **pressure range** | bar | 0-250 | |
| **Kv value** | m³/h | 1,5 | |
| **vacuum** | leak rate | | |
| **pressure-vacuum** | $P_1 \Leftrightarrow P_2$ | | |
| **back pressure** | $P_2 > P_1$ | | |
| **media** | | gaseous - liquid | |
| **abrasive media** | | | |
| **damping** | opening | | |
| | closing | | |
| **flow direction** | | see pressure range | |
| **switching cycles** | 1/min | 130 | |
| **switching time** | ms | opening 30-3000 closing 30-3000 | |
| **media temperature** | °C | direct mounted pilot valve 60 | remote mounted pilot valve outside tempe- |
| **ambient temperature** | °C | direct mounted pilot valve 50 | rature range of media max.150°C |
| **flush ports** | | | |
| **leak ports** | | | |
| **limit switches** | | | inductive |
| **manual override** | | | |
| **approvals** | | | |
| **mounting** | | | |
| **weight** | kg | 3,5 | |
| **additional equipment** | | | |

| electrical specifications | | | options |
|---|---|---|---|
| **nominal voltage** | $U_n$ | DC 24V | special voltage upon request |
| | $U_n$ | AC 230V 50 Hz | special voltage upon request |
| **power consumption** | DC | 4,8 W | 2,5 W |
| | AC | pick up 11,0 VA holding 8,5 VA | |
| **protection** | IP 65 (P54) | acc. DIN 40 050 | |
| **energized duty rating** | ED | 100% | |
| **connection** | | plug acc. DIN EN 175301-803 form B, 4 positions x 90° / wire diameter 6-8 mm | |
| **additional equipment** | | illuminated plug with varistor | |
| **optional** | M12x1 | connector acc. DESINA | connector acc. VDMA |
| **max. temperature** | media | 60°C | |
| | ambient | 50°C | |
| **explosion proof** | EEx m II T5 | nominal voltage $U_n$ | direct current 24 V 3,25 W |
| | | power consumption | alternating current 230 V 50 Hz 2,90 W |

⚠ The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

⚠ If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application.

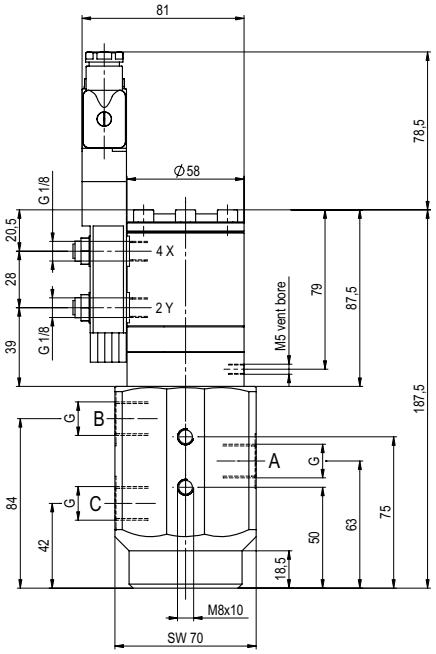
| pneumatic specifications | | | options |
|---|---|---|---|
| **actuation pressure range** | bar | 4-10 | |
| **air consumption** | cm³/stroke | 7 | |
| **cycle speed** | | main valve speed variable by throttles on pilot valve | |
| **control** | | preferably 5/2-way pilot valve | |
| **actuator ports** | 2/4 | G 1/8 | |

| hydraulic specifications | options |
|---|---|
| **actuation pressure range** | |
| **by media** | |
| **control** | |
| **actuator ports** | |

- specifications not highlighted are standard
- specifications highlighted in grey are optional

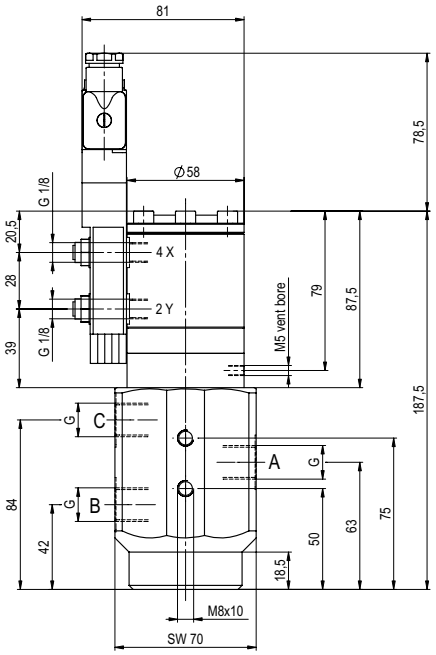
# type **PCD 10 DR**

function: **NC**
closed when not energized (A ►B)

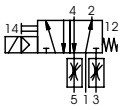



# type **PCD 10 DR**

function: **NO**
open when not energized (A ►B)




**pneumatic actuation (separately)**




5/2-way-pilot valve
flow rate 350 l/min
pressure range 3-10 bar G 1/8

The application-specific layout relating to temperature, pressure conditions, switching behavior, media and its consistency may restrict the range of use or necessitate relevant modifications to materials used and seal arrangements.