

- 2/2 way proportional NC valve
- Low weight and compact geometry with an outside diameter of 15 mm
- Precisely controllable
- Current controlled



#### TECHNICAL DATA

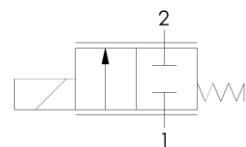
|                                         |                                       |
|-----------------------------------------|---------------------------------------|
| Function                                | 2/2 NC                                |
| Pneumatic connection                    | Cartridge                             |
| Orifice size                            | 1.5 mm                                |
| Weight                                  | 23 g                                  |
| Mounting position                       | any                                   |
| IP protection class (scope of delivery) | IP60                                  |
| IP protection class (suitable plug)     | IP65                                  |
| Operating pressure                      | 0 – 8 bar(g)                          |
| Pressure resistance                     | > 30 bar(g)                           |
| Flow rate with air @ 8 bar(g) and 20 °C | 90 ± 8 l/min                          |
| Flow coefficient kv                     | up to 0.75 l/min                      |
| Service life (switching cycles)         | 150 million cycles                    |
| Temperature range, environment          | 5 – 50 °C                             |
| Temperature range, medium               | 5 – 50 °C                             |
| Temperature range, storage              | -40 – 80 °C                           |
| Internal tightness                      | < 1 ml/min                            |
| External tightness                      | < 1 ml/min                            |
| Media quality                           | ≤ 10 µm                               |
| Media                                   | Air, oxygen, inert gases <sup>1</sup> |



#### ELEKTRICAL DATA

|                                              |                     |
|----------------------------------------------|---------------------|
| Electrical connection                        | Flying leads        |
| Length electrical connection                 | 80 mm               |
| Nominal voltage                              | 24 V DC (± 5 %)     |
| Current range                                | 0 – 200 mA          |
| Nominal coil resistance @ 20 °C              | 60,5 Ω              |
| Current hysteresis (related to max. current) | < 8 %               |
| Nominal power consumption @ 20 °C            | max. 2.5 W          |
| Thermal resistance (without flow)            | ca. 45 K/W          |
| Duty cycle (without flow)                    | 50.5 % @ I < 200 mA |

#### PNEUMATIC SYMBOL

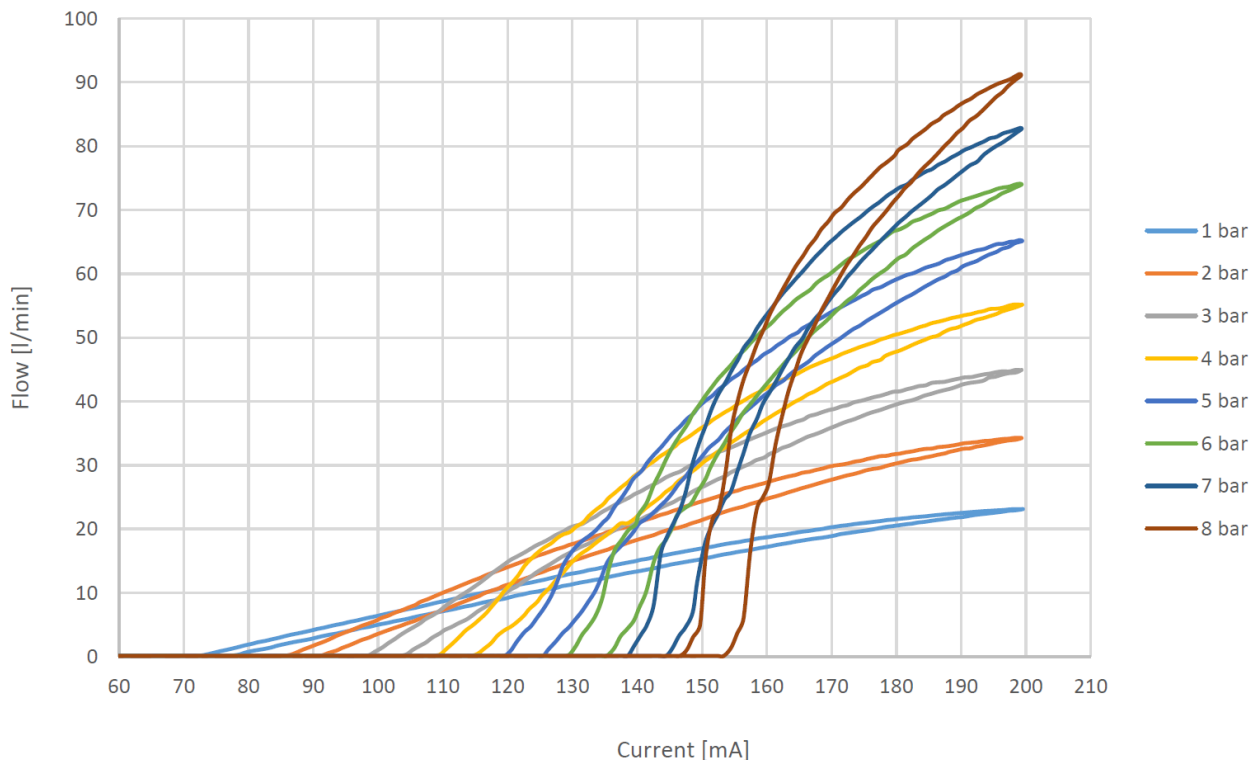


#### MATERIALS IN CONTACT WITH MEDIUM

1.4305, 1.4105, 1.4310  
 FKM, PTFE

<sup>1</sup> Due to the use of stainless steel, the valve is suitable for many other media (including liquids) after prior testing. Please contact us for more information.

## TYPICAL FLOW-CURRENT DIAGRAM WITH AIR



## EXTENDED DATA FOR VALVE CONTROL

### CURRENT DRIVING [A] (recommended)

|                                                          |          |
|----------------------------------------------------------|----------|
| Continuous operating current @ 20 °C without flow        | ≤ 180 mA |
| Continuous operating current @ 50 °C without flow        | ≤ 160 mA |
| Continuous operating current @ 50 °C with flow ≥ 5 l/min | ≤ 200 mA |

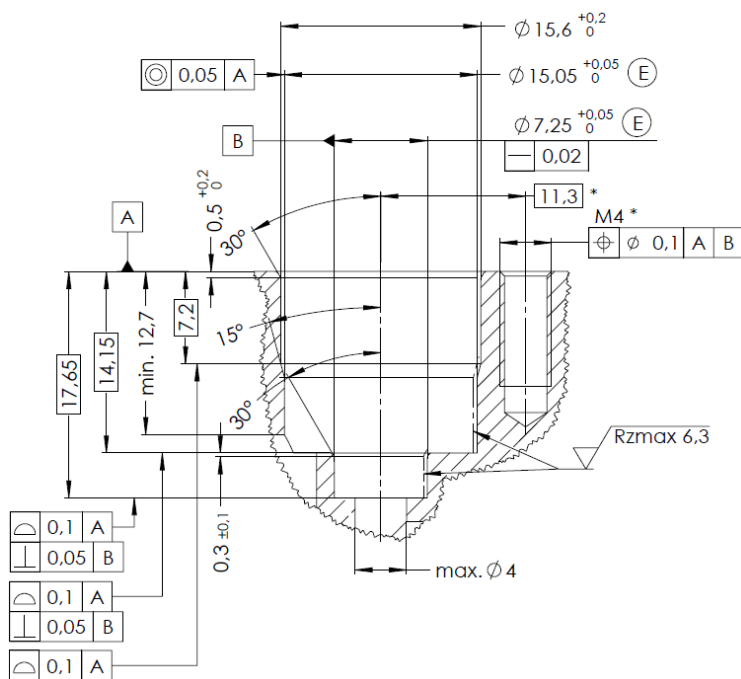
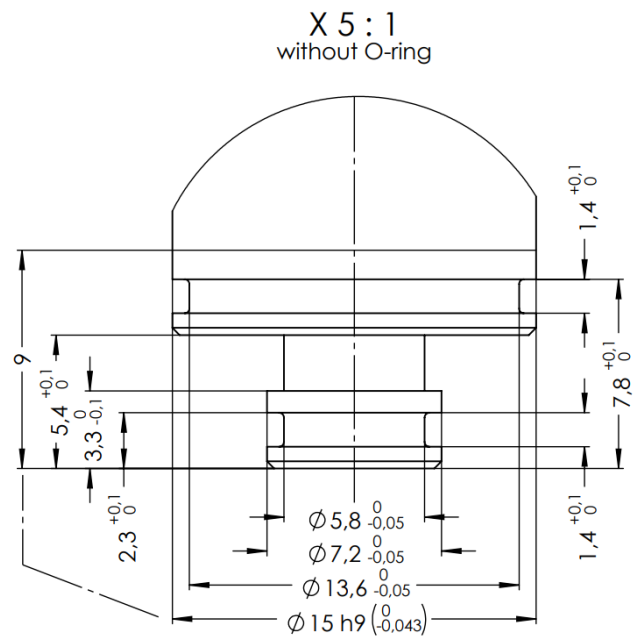
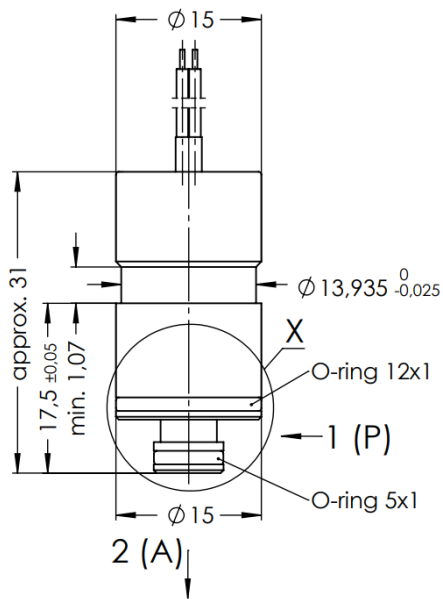
### VOLTAGE DRIVING [V] (The permitted current range must not be exceeded)

|                                                          |             |
|----------------------------------------------------------|-------------|
| Continuous operating voltage @ 20 °C without flow        | ≤ 16.5 V DC |
| Continuous operating voltage @ 50 °C without flow        | ≤ 14.5 V DC |
| Continuous operating voltage @ 50 °C with flow ≥ 5 l/min | ≤ 19 V DC   |

### PULSE-WIDTH MODULATION<sup>2</sup> (The permitted current range must not be exceeded)

|                                                    |          |
|----------------------------------------------------|----------|
| Frequency of the PWM signal                        | ≥ 3 kHz  |
| Nominal duty factor @ 200 mA and @ 20 °C           | 50.5 %   |
| Continuous duty factor @ 20 °C without flow        | ≤ 68.5 % |
| Continuous duty factor @ 50 °C without flow        | ≤ 60.5 % |
| Continuous duty factor @ 50 °C with flow ≥ 5 l/min | ≤ 79 %   |

<sup>2</sup> PWM duty factor calculation: Operating voltage / Open-circuit voltage \* 100 %



Allgemeintoleranz nach DIN ISO 2768-mK  
Tolerierung nach DIN EN ISO 8015:2011  
Maße nach DIN EN ISO 14405  
Form- und Lagertoleranz nach DIN EN ISO 1101

