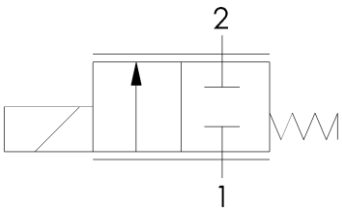
- **Reduced nominal power consumption**
- **2-way proportional miniature NC valve**
- **Compact geometry with an outside diameter of 15 mm**
- **Current controlled**

TECHNICAL DATA

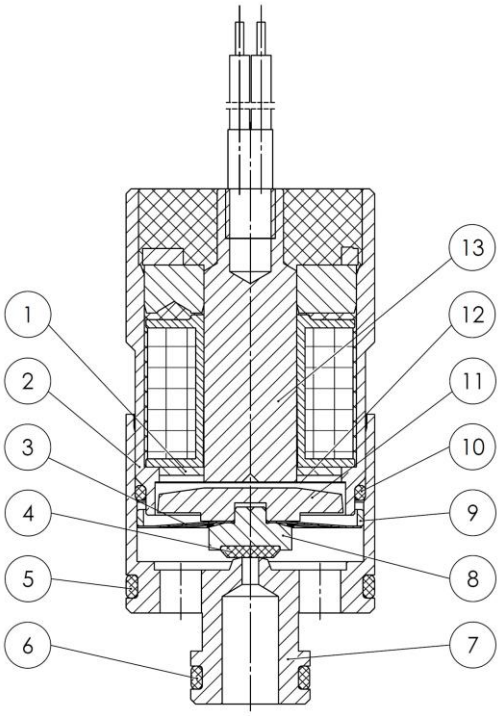
Function	2/2 NC proportional
Pneumatic connection	cartridge
Electrical connection	flying leads, 70 – 80 mm
Media type	air, oxygen, inert gases
Media quality	≤ 10 µm
Orifice	1.5 mm
Operating pressure	0...8 bar(g) / 0...116 psig
Max. flow (air | @ 8 bar(g) | @ 20 °C)	90 l_s/min ± 8 l_s/min
Flow coefficient Kv	up to 0.045 m^3/h
Temperature range, ambient	5 °C to 50 °C
Temperature range, media	5 °C to 50 °C
Temperature range, storage	-40 °C to 80 °C
Internal leakage @ p_{max}	< 1 ml/min
External leakage @ p_{max}	< 1 ml/min
Current range	0 to 200 mA
Nominal coil resistance @ 20 °C	60.5 Ω
Recommended open-circuit voltage	24 V
Nominal power consumption @ 20 °C	max. 2.5 W
Thermal resistance (without flow)	approx. 45 K/W
Duty cycle (without flow)	100 % @ I < 155 mA
Weight	23 g
Current hysteresis	< 8 % of max. current
Mounting position	Any direction

Pneumatic symbol

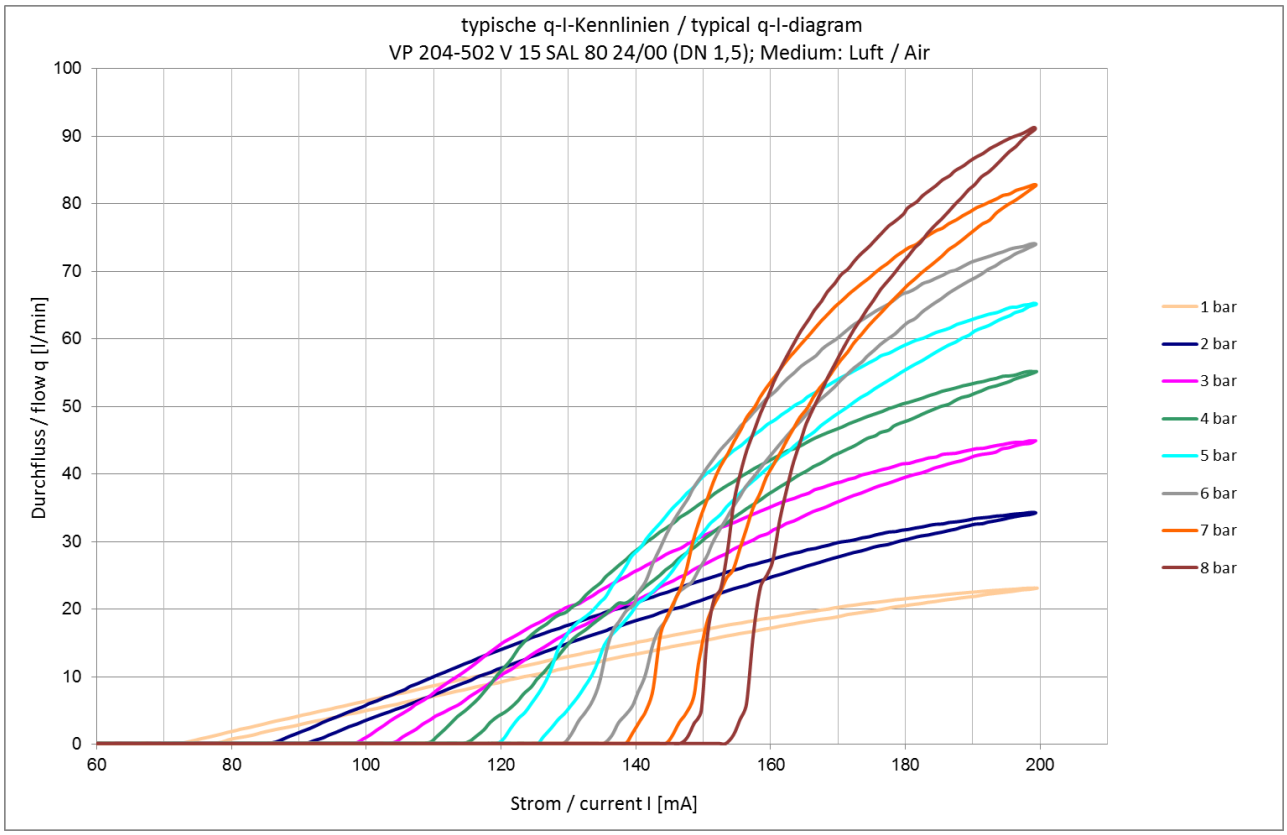


MATERIALS IN CONTACT WITH MEDIUM

Pos.	Material
1	1.4305
2	1.4105
3	1.4310
4	85 FKM 285180
5	70 FKM V70GA
6	70 FKM V70GA
7	1.4305
8	1.4305
9	1.4305
10	70 FKM V70GA
11	1.4105
12	PTFE
13	1.4105



TYPICAL FLOW-CURRENT DIAGRAM



ADDITIONAL TECHNICAL DATA

Protection class (in installed condition) with flying leads	IP60
Protection class (in installed condition) with suitable plug connector	IP65
Service Life	150,000,000 cycles
Burst pressure	> 30 bar

CURRENT DRIVING [A] (recommended)

Continuous operating current @ 20°C without flow	≤ 180 mA
Continuous operating current @ 50°C without flow	≤ 160 mA
Typical continuous operating current @ 50 °C with flow	≤ 200 mA

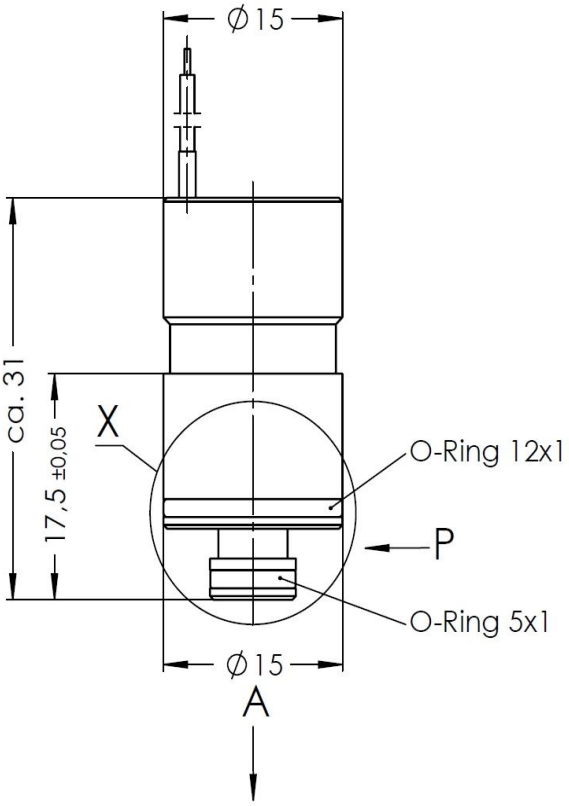
VOLTAGE DRIVING [V] (The permitted current range must not be exceeded)

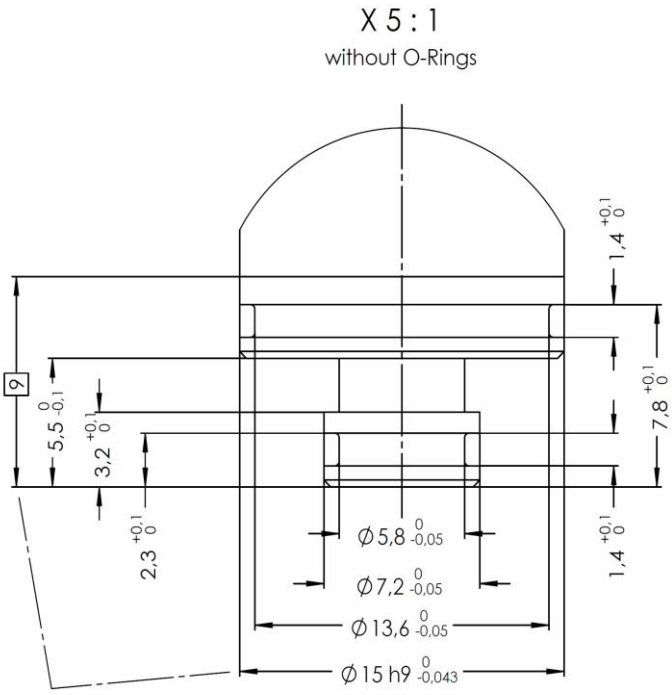
Continuous operating voltage @ 20°C without flow	≤ 16.5 V
Continuous operating voltage @ 50°C without flow	≤ 14.5 V
Typical continuous operating voltage @ 50°C with flow	≤ 19.0 V

PULSE-WIDTH MODULATION (The permitted current range must not be exceeded)

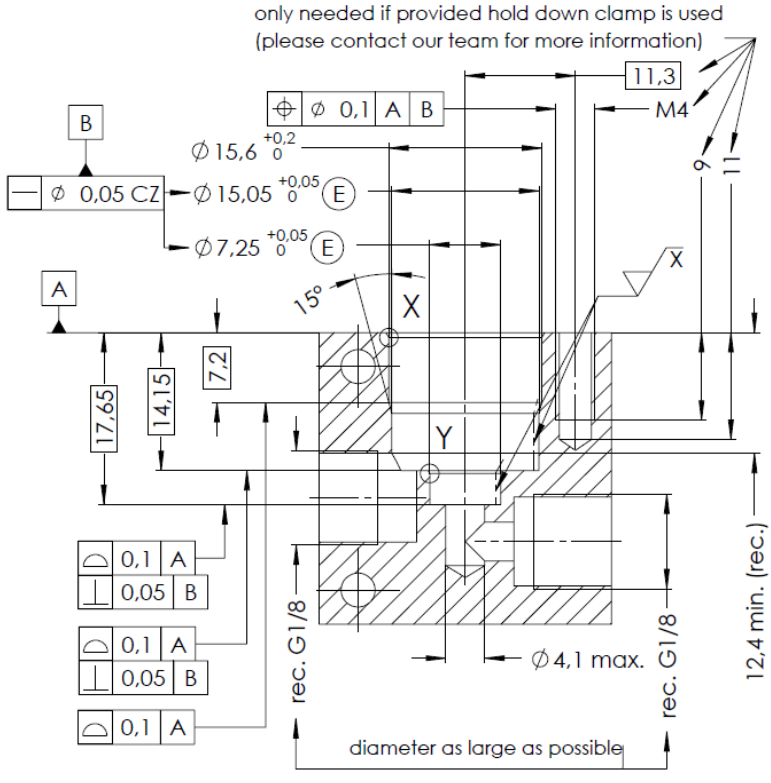
Frequency of the PWM signal	> 3 kHz
PWM duty factor calculation	Operating volt. / Open-circuit volt. * 100 %
Nominal duty factor @ 200 mA and @ 20 °C	50,5 %
Continuous duty factor @ 20°C without flow	≤ 68,5 %
Continuous duty factor @ 50°C without flow	≤ 60,5 %
Typical continuous duty factor @ 50°C with flow	≤ 79 %

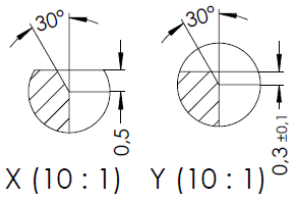
VALVE DIMENSIONS





INSTALLATION GEOMETRY SUGGESTION





Ra 3,2 (X = Rzmax. 6,3)

general tolerance acc. to DIN ISO 2768-mK
tolerances of form and position ISO 1101
tolerancing ISO 8015 : 2011

Status: Released – March 4th 2021