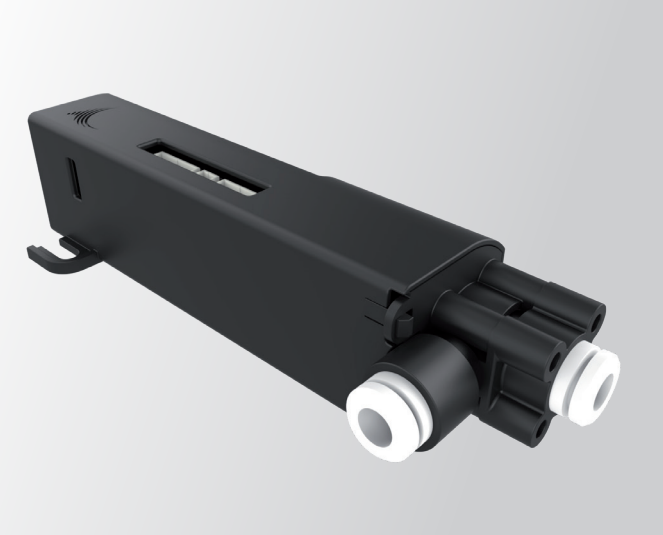
High pressure smart proportional valve

Find out more

High pressure smart proportional valves from Dolphin Fluidics are 2-way medium separated, normally closed, valves for precision dosing, dispensing and mixing.
This device integrates sensors capabilities and electronic communication enabling management, maintenance and data collection of fluidics performance from remote. Our valve is the smartest, cleanest, lightest, smallest and most efficient solution to control proportionally in close loop high pressure flow.
Each product can be fully customized according to application needs, in terms of interfaces, fluidics performance and electronic control input.

Advantages:

- High pressure liquid dosing, dispensing and mixing valve
- Closed loop proportional control
- Simple and light, 10 times lighter than existing valves
- Reliable sealing system with medium separation
- Low power actuator, 20 times less than existing valves
- Noiseless operation
- Wireless data communication, remote control and maintenance
- Patented design
- NSF/FDA material compliancy



MAIN APPLICATIONS

- Hot and cold beverage
- Medical equipment
- Agriculture
- White goods
- Industrial

TECHNICAL INFORMATION

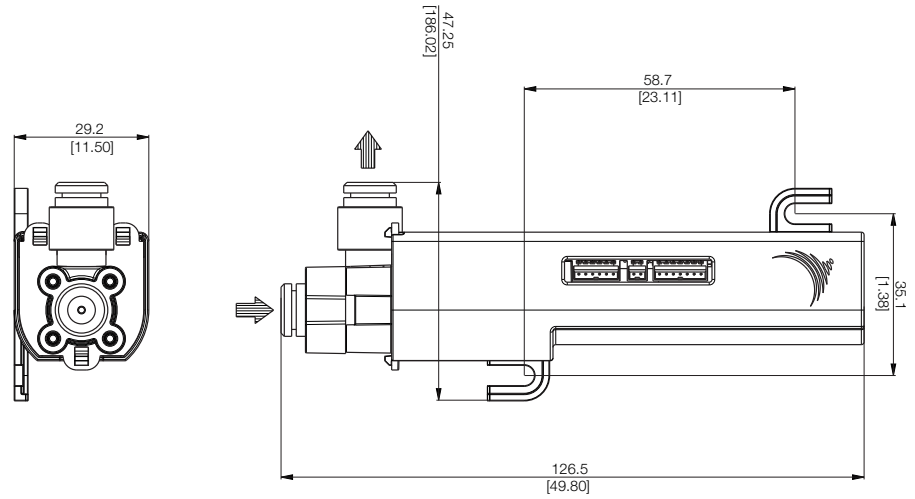
DFD.SSP.000.120
Direct valve NC 2/2
Medium separated valve
Closed loop proportional control
100% duty cycle and continuous duty
Liquids
Body materials: POM, PEEK, PPS, PP, PPO, PA
Seal materials: EPDM, FPM, VMQ, PTFE, SBR, FFPM, NBR

FLUIDIC PERFORMANCE

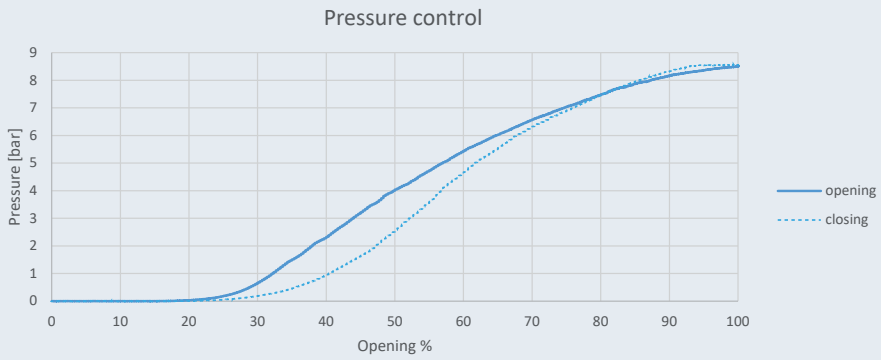
ΔP min.	0 bar (0 psi)
ΔP max.	12 bar (174 psi)
Kv	0.008 m^3h/bar
Orifice diameter	1.3 mm (0.05 in)
Assembling	Any direction
Fluidic connections	Push fit 6/4
Operating temperature	-10 °C... +65 °C (+14 °F... +149 °F)
Fluid temperature	-10 °C... +130 °C (+14 °F... +266 °F)

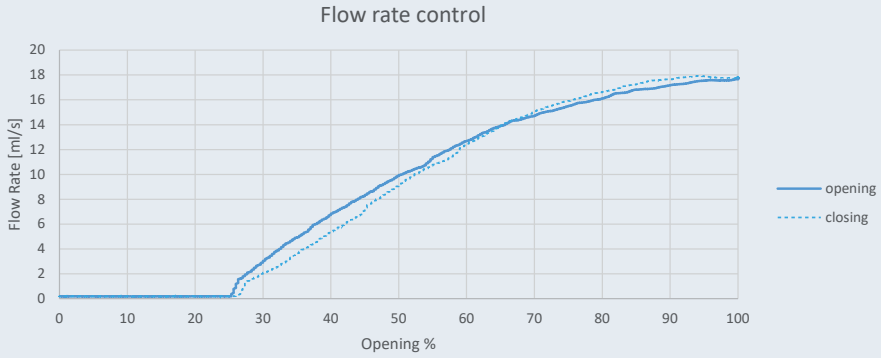
ELECTRONIC CHARACTERISTICS

Power supply	5 - 24 VDC
Steady-state power	< 1.00 W @ 5 VDC
Stand-by power	0.15 W @ 5 VDC
Actuation time	300 ms
Expected life	Million cycles (depending on application)
Proportional control input	Analog / PWM / Serial RS-485 / I²C / BLE
Sensors input	Analog / Pulses / I²C
Communication and user interface	Serial RS-485 / I²C / BLE / Digital I/Os / Status LEDs



Dimensions in mm [inches]





Dolphin Fluidics reserves the right to alter the specifications indicated in this catalogue at any time and without prior notice.

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