

High pressure smart proportional valve



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

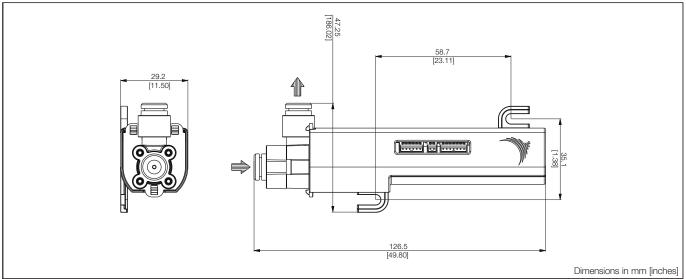
- Hot and cold beverage
- Medical equipment
- Agriculture
- White goods
- Industrial

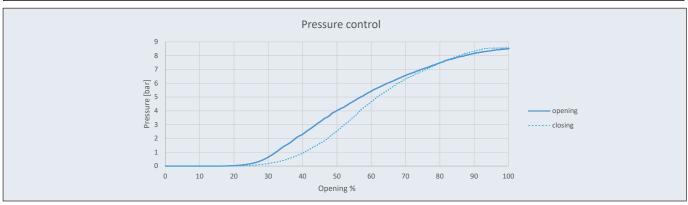
TECHNICAL INFORMATION	
DFD.SSP.000.120	
Direct valve NC 2/2	
Medium separated valve	
Closed loop proportional control	
100% duty cycle and continuous duty	
Liquids	
Body materials: POM, PEEK, PPS, PP, PPO, PA	
Seal materials: EPDM, FPM, VMQ, PTFE, SBR, FFPM, NBR	

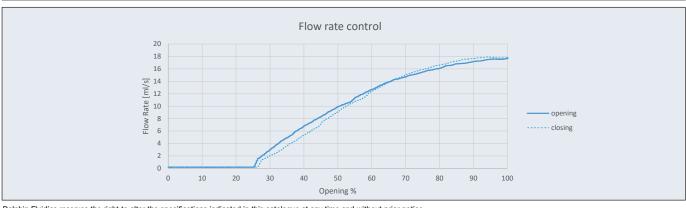
FLUIDIC PERFORMANCE		
ΔP min.	0 bar (0 psi)	
ΔP max.	12 bar (174 psi)	
Kv	0.008 m³h/bar	
Orifice diameter	1.3 mm (0.05 in)	
Assembling	Any direction	
Fluidic connections	Push fit 6/4	
Operating temperature	-10 °C +65 °C (+14 °F +149 °F)	
Fluid temperature	-10 °C +130 °C (+14 °F +266 °F)	



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 / I ² C / BLE	
Sensors input	Analog / Pulses / I ² C	
Communication and user interface	Serial RS-485 / I ² C / BLE / Digital I/Os / Status LEDs	







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

Dolphin Fluidics srl Via Leonardo da Vinci, 40 20094 Corsico, Milano, Italy Tel. +39 02 9995 01 www.dolphinfluidics.com info@dolphinfluidics.com