



LM Pro

Miniature Proportional Valve



ENGINEERING YOUR SUCCESS.

LM Pro Miniature Proportional Valve

Dynamic Flow, Flawless Control: LM Pro Leading the Way.

Highlights



Exceptional Range of Control

Consistent linearity enables remarkable resolution
Patented linear actuator technology
Large controllable flow range from 2-100% FS

Low Power Consumption

Best-in-class power rating of 2 watts
Highest inlet pressure at rated power
Reduced heat generation

Ease of Integration

Face seal simplifies manifold design
High reliability of 100 million cycle rating
Optional integrated filter reduces contamination

Material Compliance

ISO10993 Biocompatibility
Cleaned for Oxygen use per ISO15001
Reach and RoHS compliant

Maximized Outcomes

Single valve solution for neonate to adult ventilation
Increased device uptime
Reduced design time and risk improves Time to Market
Improved patient health



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Product Specifications

Physical Properties

Valve Type:	2-Way Normally Closed
Media:	Air, Oxygen, Nitrous Oxide, Carbon Dioxide, Heliox and other medical gases
Operating Environment:	32 to 140°F (0 to 55°C)
Storage Temperature:	-40 to 158°F (-40 to 70°C)
Length:	1.57 in (39.9 mm)
Width:	0.72 in (18.3 mm)
Height:	1.44 in (36.5 mm)
Porting:	Face Seal to Manifold with integrated FKM seal and optional inlet filter
Weight:	1.29 oz (36.6 g)

Electrical

Power:	2.0 Watts Nominal 3.0 Watts Maximum
Voltage:	5, 12 and 24 VDC See Table 1 on page 6
Electrical Termination:	Latching Receptacle JST SM02B-PASS-TB

Wetted Materials

Valve Element:	Aluminum FKM Elastomer Fluorosilicone Elastomer Stainless Steel
Regulatory:	Compliant with RoHS directive (2002/95/EC), REACH EC 1907/2006, ISO 15001:2010 and ISO 10993:2010 / ISO 18562

Performance Characteristics

Leak Rate:	Internal: 1 SCCM External: 1 SCCM LM Pro Valve meets leak specification across entire operational pressure range.
Operating Pressure:	Model 2: 0 - 100 psig (6.9 bar), Model 4: 0 - 50 psig (3.45 bar)
Vacuum:	0 - 27 in Hg (0-686 mm Hg)
Proof Pressure:	Model 2: 150 psig (10.39 bar), Model 4: 110 psig (7.6 bar)
Orifice Sizes:	Model 2: 0.121 in (3.07 mm) effective, Model 4: 0.134 in (3.40 mm) effective
Hysteresis:	10% of full scale current (Typical) 15% of full scale current (Maximum)
Optional Filtration:	400 µm
Response time:	<10 ms Typical at 20°C

Ordering Information

Sample Part ID 937		-	02	1	12	0	-	01	0
Description	Series	-	Model Number	Elastomer	Voltage	Body Material	-	Pneumatic Interface	Electric Interface
Options	937	-	02: 100psi/0.121 in (3.07 mm) 04: 50 psi/0.135 in (3.43 mm)	1: FKM Poppet and Fluorosilicone Diaphragm	05: 5 VDC 12: 12 VDC 24: 24 VDC	0: Aluminum	-	00: Manifold Mount No Inlet Filter 01: Manifold Mount with Filter	0: No Wire Leads

Accessories

290-006061-004: 12.5 in (317.5 mm) Wire Leads	** Not supplied with the valve
890-001184-001: Manifold, Single Station	** Not supplied with the valve
190-007063-001: Manifold O-Ring (FKM)	** Supplied with the valve
191-000112-417: Screw #2-56 x ¾, Socket Head Cap	** Not supplied with the valve. See valve mounting recommendations above
195-000291-001: Optional Filter	** Supplied if selected option



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Scan for more detailed information:



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Miniature Solenoid Valves



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