

Technical Data for Water Flow L Meters & LC & LCR Water Flow Controllers

Specification	L Series	LC Series	LCR Series	Description
Available Ranges	0.5CCM to 10LPM	1CCM to 500CCM	1LPM to 5LPM	Full Scale
Accuracy	± 2 %			Full Scale
Repeatability	± 2 %			Full Scale
Operating Range	2% to 100% Full Scale			Measure or Control
Typical Response Time	20	100		Milliseconds (Adjustable)
Operating Temperature	+10 to + 50			°Celsius
Zero Shift	0.02%			Full Scale / °Celsius / Atm
Span Shift	0.02%			Full Scale / °Celsius / Atm
Flow Rate	128% Measurable	102.4% Controllable		Full Scale
Common Mode Pressure	100			PSIG
Supply Current	0.040	0.250	0.750	Amp
Supply Voltage	7—30 ²	12—30 ²	24-30	Vdc
Input /Output Signal Digital	Pressure, Temperature and Flow			RS-232 Serial or RS-485 Serial or PROFIBUS or DeviceNet ¹
Input /Output Signal Analog	Volumetric Flow			0-5Vdc
Optional Input / Output Signal Secondary Analog	Pressure, Temperature or Flow			0-5 Vdc; 0-10Vdc;4-20mA ²
Electrical Connections	8 Pin Mini-DIN or DB-15			
Mounting Attitude Sensitivity	None	Control response somewhat sensitive to inverted operation.		Tare after installation
Wetted Materials ³	303 & 302 Stainless Steel, Viton®, Silicone RTV (Rubber), Polyetherimide, Silicon, Glass. LC Controllers Add: 430FR Stainless Steel, Brass. LCR Controllers Add 416 Stainless Steel, Delrin®.			

1. If selecting PROFIBUS or DeviceNet no analog signal is available. PROFIBUS / DeviceNet units do not have the display. See PROFIBUS or DeviceNet specifications for PROFIBUS or DeviceNet supply voltages and currents.
2. 15 volts required for 4-20mA output.
3. If your application demands a different material, please contact Application Assistance for available options.

Mechanical Specifications

Full Scale Flow	Mechanical Dimensions	Process Connections ¹	Pressure Drop ² (PSID)
L Series			
0.5CCM to 1CCM	4.4"H x 2.4"W x 1.1"D	M-5 (10-32) Female Thread*	2.0
2CCM to 500CCM	4.6"H x 2.4"W x 1.1"D	1/8" NPT Female	2.0
1LPM			4.0
2LPM	4.7"H x 2.7"W x 1.1"D	1/4" NPT Female	4.0
5LPM			10.0
10LPM			20.0
LC Series			
1CCM	4.4"H 3.4"W x 1.1"D	M-5 (10-32) Female Thread*	5.0
5CCM to 50CCM	4.6"H x 3.6"W x 1.1"D	1/8" NPT Female	5.0
100CCM			5.0
200CCM to 500CCM			7.5
LCR Series			
1LPM	5.5"H x 7.9"W x 2.3"D	1/8" & 1/4"NPT Female	4.0
2LPM	5.5"H x 6.7"W x 2.3"D	1/4" NPT Female	4.0
5LPM			10.0

*Units ≤1CCM F.S. are shipped with M-5 (10-32) Male Buna-N O-ring face seal to 1/8" Female NPT fittings. These adaptor fittings were selected for customer convenience in process connection. It should be noted that the 1/8" Female NPT introduces additional dead volume. To minimize dead volume, please see [Accessories](#) for the M-5 (10-32) Male to 1/8"OD compression fitting.

1. Compatible with Beswick®, Swagelok® tube, Parker®, face seal, push connect and compression adapter fittings.
2. Lower Pressure Drops Available, Please contact the manufacturer.