# Q9 DISPLAY





The **Q9 Display** is the latest version of the popular FLOMEC® computer displays. It incorporates many of the most requested features over the years including low battery indication and the ability to display custom units with a name label. Optional plug-in daughterboard for 4-20mA, scaled pulse, and external power supply are easily added as original equipment or as a retrofit in the field. All of the daughterboard parameters are addressable through the two buttons on the Q9 display. An additional new feature is the ability to display velocity as well as rate and totals. Packaged in the same form as the familiar FLOMEC display, the Q9 operates on two AAA batteries with approximately 2 years of operation and maintains all of the same intrinsically safe approvals of past products.

## **SPECIFICATIONS**

Standard Factory Configuration:	2 Totals (1 Resettable, 1 Cumulative); Factory Calibration in gallons or litres; User Calibration and Rate of Flow Indication			
Display Electronics:	Q9 Electronics can be used on G2, TM, A1, and QSE Series Meters			
Totalizing Registers:	Cumulative and Batch			
K-Factor Limits:	Min: 0.001 pulses/unit; Max: 999,999 pulses/unit			
Field Calibration:	Field calibrate by user methods:     K-factor entry     Correction Factor (% Adjust)     Dispense Display			
Readout Totals:	LCD with floating decimal: Minimum Display = 0.001 units; Maximum Display = 999,999 x 100 units (6 digits)			
Input Pulse Rate:	Frequency Range is 0.25 Hz - 3 kHz			
Turbine Display:				
Internal Power Supply:	2 Alkaline AAA batteries at 1.5 volts each			
Alkaline Battery Life:	Typically 2 Years			
Temperatures:				
Operating Temperature (FM/ATEX Approved Meters):	0°F to +129°F (-18°C to +54°C)			
Operating Temperature (Non-Approved Meters):	0°F to +140°F (-18°C to +60°C)			
Storage Temperature:	-40°F to +158°F (-40°C to +70°C)			

## FEATURES / BENEFITS

- Highly Visible LCD characters against a yellow-tinted background
- Many Field Configurable options for ease of operation including diagnostic mode and custom unit name
- Easily retrofit to most existing FLOMEC® turbines
- Maximum versatility with optional pre-configured plug-in daughterboard to supply 4-20mA and Scaled Pulse
- Convenient Battery Power Level indication with automatic low battery warning
- Safety first design with FM Class 1, Div 1; ATEX; IECex; cFM; CE approvals on select A1 and G2 models
- Providing operator consistency for all of your meters, the Q9 can be used with G2, TM, A1, and QSE Series Meters
- Ultimate ease of operation with permanent preprogrammed 5 point factory calibration
- Accommodates a wide range of technical expertise with 3 Field calibration methods (K-Factor, Correction Factor or Dispense Display)
- For simple Plug and Play installation, the Q9 is factory calibrated set to display Cumulative Total, Re-Settable Batch Total and Rate

#### APPROVALS\*\*





#### Select A1 & G2 models\*









<sup>\*</sup>See A1 & G2 Data Sheets for models that qualify for approvals.
\*\*All Q9 Displays have the CE approval.

### **USER CONFIGURATION**

- · PIN Protected, four-digit user selectable
- 11 preprogrammed engineering units and one userconfigurable custom unit
- Alphanumeric information line for on-screen instructions and custom unit name
- Four preprogrammed, user-selectable time bases (Day, Hour, Min., Sec.)
- Configurable screen update frequency
- · A user-selectable low-frequency filter
- Field Calibration is retained when switched to Factory Cal so you can have two accessible calibrations available
- Three field calibration methods available (1 point Dispense Display, 5 point Correction Factor, 5 point K-Factor)
- Diagnostic mode shows % battery life remaining





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## OTHER ELECTRONICS OPTIONS†

42 = 4-20 mA Module installed between the local display and the meter body

- Provides a 4-20 mA signal
- · Provides a Scaled NPN Open Collector Pulse
- · Can provide External Power to the local display
- · Comes with 10 feet of installed cable

PO = Pulse Output Module installed in place of the display (blind meter)

- Provides an Unscaled NPN Open Collector Pulse
- R9 = Replacement Q9 Computer Display for a meter body that has an old 09 display<sup>1</sup>
  - Comes with the extra parts required to retrofit a Q9 display in place of an 09 display

<sup>†</sup>Separate data sheets available.

<sup>1</sup>FM/ATEX Approved when replacing a FM/ATEX Approved 09 display on a FM/ATEX Approved A1 or G2 meter.

### **DIMENSIONS**

Length "A"	Height "B"	Height (Mounted) "C"	Width (Widest Point) "D"
3.40 in.	0.85 in.	0.72 in.	2.14 in.
(8.6 cm)	(2.1 cm)	(1.8 cm)	(5.4 cm)



