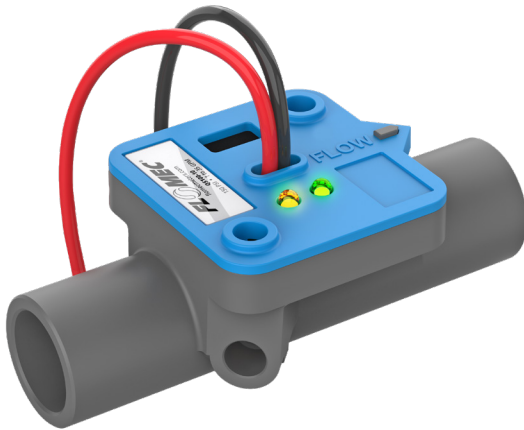


QS 100 SERIES

INLINE ULTRASONIC FLOW SENSOR



The **FLOMEC® QS100 Flow Sensor** is an economical and easy-to-use flow sensor designed for residential and commercial irrigation and sub-metering applications. Utilizing ultrasonic technology, the QS100 provides flow ranges of 0.22-33 GPM (0.83-124.92 L/min). This wide turndown (150:1 turndown ratio) makes it possible to accurately monitor all of your zones from small drips (minimum flow of 0.22 GPM [0.83 L/min] detectable) to large sprayer applications. The flow sensor can also detect small leaks. The QS100 is 100% maintenance-free with no moving parts and will not be damaged by debris and wintertime blowdowns.

FEATURES / BENEFITS

- High accuracy: $\pm 2\%$ of reading (compared to full scale on most other brands)
- Flow range of 0.22-33 GPM (0.83-124.92 L/min) so you can monitor all of your zones with a single flow sensor
- No moving parts for maintenance-free operation
- Can be used in above or below grade installations for maximum versatility
- A simple two wire connection for pulse and power make installation easy
- LED light indicators visually display power and operational mode
- Onboard diagnostics simplify system maintenance by utilizing the LED indicators to show low flow and high flow
- Compatible with most irrigation controllers
- Wire leads have UL Style 116666 direct burial insulation to ensure durability
- The QS100 is suitable for use with reclaimed water for those environmentally sensitive applications

APPLICATIONS (Typical application but not limited to)

- Agriculture Irrigation
- Turf / Landscape Irrigation Systems
- Greenhouse and Growhouse
- Micro Irrigation Systems
- Groundwater Monitoring

APPROVALS / WARRANTY

CE IP68



SPECIFICATIONS

Technology:		Ultrasonic
Line Size:		1 in.
Accuracy (% of Reading):		$\pm 2\%$ of Reading
Material Housing:		Schedule 80 PVC
Fitting Type:		1 in. Spigot (male)
Flow Range:		0.1 to 15 fps (0.03 to 4.6 m/s)
Transducer Excitation:	ON State Current	(Supply Voltage / (Supply Impedance + 50 Ω))
	ON State V-Low	ON State Current $\times$ 50 Ω
Pressure Rating:		150 PSI @ 70°F (10.3 bar @ 21°C)
Operating Temperature:		+32°F to +140°F (0°C to +60°C)
Wetted Materials:		PVC (Polyvinyl chloride)
Coverplate Materials:		PC/ABS (Polycarbonate/Acrylonitrile Butadiene Styrene)
Out Frequency:		0 to 100 Hz
Output Pulse Width:		13 ft/s [4 m/s] (Approx.)
Unit of Measure:		Controller Dependant
Uncertainty:		0.04 GPM / 0.018 ft/sec (0.15 L/min / 0.005 m/s)
Field Calibration:		No
Electrical:		
Powered By:	DC power provided by customer controller 7.5V (DC) min to 36V (DC) max	
	OFF State Current	200 μ A (Typical)
	OFF State V-High	Supply Voltage - (OFF State Current $\times$ Supply impedance)



Wichita · Sydney

GREAT PLAINS INDUSTRIES



QS100 SERIES INLINE ULTRASONIC FLOW SENSOR

Pipe Schedule	Typical ¹ K-Factor	Hydrawise® ² K-Factor (Litre/Pulse)	Rain Master® K-Factor	Offset	Reference	
					Pulses/Gal	Pulses/Litre
Sch 40	0.4211*	0.0266	115	0	142.5	37.6
Sch 80	0.3963**	0.0250	108	0	151.4	40.0

¹ Controller Brands: Baseline™, Calsense, Hunter®, HydroPoint® (WeatherTrak®), ©TUCOR, Rain Bird®, and Toro®.
² Hydrawise® HCC models only.
 *Based on 142.5 pulses per gallon. **Based on 151.4 pulses per gallon.

K-Factor Information:
 FLOMEC® ultrasonic flow sensors use K-factor values for greater accuracy during calibration. These values are derived by calibrating the sensor using NIST traceable instrumentation. The K-factor value for this sensor is listed below.

IMPORTANT: The K-factor provided is for reference. Accuracy can be affected by plumbing configuration, fluid condition, adjoining pipe schedule, and entrapped air. Customers should always validate accuracy and adjust K-factor as needed using the K-factor adjustment menu of your controller.

DIMENSIONS

Dimension "A"	Dimension "B"	Dimension "C"
5.3 in. (13.5 cm)	2.6 in. (6.6 cm)	2 in. (5.1 cm)

