FLOMEC G2B15N09GMB

FLOMEC G2B15N09GMB G2 Brass Turbine Flowmeter User Manual

Model: G2B15N09GMB

1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of the FLOMEC G2B15N09GMB G2 Brass Turbine Flowmeter. Please read this manual thoroughly before using the device to ensure proper function and longevity.

2. SAFETY INFORMATION

The FLOMEC G2B15N09GMB flowmeter is designed for industrial applications and features robust construction. Observe all local and national safety regulations during installation and operation. This device is certified as Intrinsically Safe and approved for hazardous locations, as indicated by CE and FM markings. Always ensure proper grounding and follow guidelines for electrical connections in potentially hazardous environments. Refer to the warning labels on the device for specific safety instructions.

Figure 2.1: Side view of the FLOMEC G2B15N09GMB flowmeter, highlighting the CE and FM certifications for intrinsically safe operation and use in hazardous locations. Various warning labels are visible on the black electronic housing.

3. PRODUCT OVERVIEW

The FLOMEC G2B15N09GMB is a G2 Series brass turbine flowmeter designed for accurate measurement of fluid flow. It features a 1.5-inch FNPT inlet/outlet and provides an accuracy of +/-0.75 percent of reading for flow rates ranging from 10 to 100 GPM (38 to 380 LPM). The brass housing ensures compatibility with a wide range of water-based applications, including glucose, juice, and lacquer thinner.
Key features include:

- **High Accuracy:** Provides precise flow measurement with +/-0.75% accuracy.
- **Versatile Application:** Compatible with various water applications due to its brass housing and wetted materials.
- **Digital Display:** Equipped with a 6-digit LCD display showing resettable batch total, non-resettable cumulative total, and rate of flow.
- **Modular Design:** Allows for integration with output modules, sensors, and remote transmitters.
- **Easy Maintenance:** Simplified internal parts and field-replaceable batteries contribute to ease of service.

Figure 3.1: Front view of the FLOMEC G2B15N09GMB flowmeter, showing the digital LCD display with 'CALIBRATE' and 'DISPLAY' buttons. The flow direction arrow is visible on the brass body.

4. SETUP AND INSTALLATION

The FLOMEC G2B15N09GMB flowmeter features a compact design for straightforward installation. Ensure the flowmeter is installed in the correct orientation, aligning the flow direction arrow on the meter body with the direction of fluid flow in the pipe. The meter utilizes 1.5-inch FNPT (Female National Pipe Taper) connections for integration into your piping system.

1. **Prepare the Piping:** Ensure the piping system is clean and free of debris before installation.
2. **Apply Sealant:** Use an appropriate thread sealant on the 1.5-inch FNPT connections to prevent leaks.
3. **Install Meter:** Thread the flowmeter into the pipeline, ensuring the flow arrow on the meter body points in the direction of fluid flow. Tighten connections securely but do not overtighten.
4. **Check for Leaks:** After installation, slowly introduce fluid into the system and check all connections for leaks.
5. **Modular Integration:** If using optional output modules, sensors, or remote transmitters, refer to their respective manuals for connection instructions.

5. OPERATION

The FLOMEC G2B15N09GMB flowmeter is equipped with a 6-digit LCD display that provides real-time flow data. The display shows a resettable batch total, a non-resettable cumulative total, and the current rate of flow. The meter is factory calibrated in gallons but allows for field calibration if required.

- **Power On:** The display is powered by two field-replaceable lithium batteries. It will automatically activate when flow is detected or when a button is pressed.
- **Display Modes:** Use the 'DISPLAY' button to cycle through the different display modes: Rate of Flow, Resettable Batch Total, and Non-Resettable Cumulative Total.
- **Resetting Batch Total:** To reset the batch total, navigate to the batch total display mode and press and hold the 'CALIBRATE' button until the total resets.
- **Calibration:** For field calibration, refer to the detailed calibration procedure in the full product manual.

The 'CALIBRATE' button is used in conjunction with specific flow rates to adjust accuracy.

6. MAINTENANCE

Regular maintenance ensures the continued accuracy and reliability of your FLOMEC G2B15N09GMB flowmeter.

- **Battery Replacement:** The meter is powered by two lithium batteries with an approximate 5-year life. When the battery indicator appears, replace the batteries promptly. Non-volatile totals protect meter data during battery replacement.
- **Cleaning:** Periodically inspect the meter for external debris. Clean the display and housing with a damp cloth. Do not use abrasive cleaners or solvents.
- **Internal Parts:** The internal parts are designed for simple replacement, facilitating ease of maintenance. If internal components require service, contact FLOMEC support or a qualified technician.
- **Wetted Materials:** The wetted materials include 316 Stainless Steel, brass, Ceramic, PVDF, and Tungsten Carbide, chosen for compatibility with various fluids. Ensure the fluid being measured is compatible with these materials to prevent corrosion or damage.

7. TROUBLESHOOTING

If you encounter issues with your FLOMEC G2B15N09GMB flowmeter, consider the following basic troubleshooting steps:

- **No Display/Low Battery:** Check the battery indicator. If low, replace the batteries. Ensure proper battery orientation.
- **Inaccurate Readings:** Verify the flow direction is correct. Check for air bubbles or debris in the fluid stream. Consider performing a field calibration if necessary.
- **No Flow Reading:** Ensure there is actual fluid flow through the meter. Check for blockages in the pipeline. Verify the turbine is rotating freely (if accessible and safe to inspect).
- **Leaks:** Re-check all threaded connections for proper sealant and tightness.

For persistent issues or complex problems, contact FLOMEC technical support.

8. SPECIFICATIONS

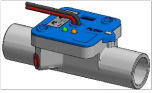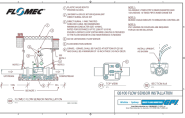| Parameter	Specification
Model Number	G2B15N09GMB
Flow Rate Range	10-100 GPM (38-380 LPM)
Accuracy	+/-0.75% of reading
Connection Size	1.5-inch FNPT
Housing Material	Brass
Wetted Materials	316 Stainless Steel, Brass, Ceramic, PVDF, Tungsten Carbide
Display	6-digit LCD (Batch, Cumulative, Rate of Flow)

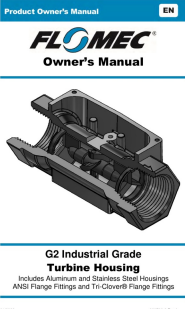| Parameter	Specification
Power Source	2x Lithium Batteries (5-year life)
Certifications	Intrinsically Safe, CE, FM Approved
Approximate Package Dimensions	9.3 x 5.5 x 4.6 inches
Approximate Package Weight	2.2 Pounds

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please contact FLOMEC or Great Plains Industries directly. Retain your purchase receipt for warranty claims. Contact details can typically be found on the manufacturer's website or product packaging.

Related Documents - G2B15N09GMB

[FLOMEC TM Series Electronic Water Flowmeters Owner's Manual](#)
Owner's manual for FLOMEC TM Series Electronic Water Flowmeters (1/2 inch - 2 inch sizes). Covers specifications, installation, operation, maintenance, and warranty for models TM05XXXXXX to TM20XXXXXX.

[FLOMEC 4-20mA Module Product Owner's Manual](#)
Comprehensive owner's manual for the FLOMEC 4-20mA Module, detailing specifications, installation, wiring, operation, calibration, and troubleshooting for use with FLOMEC turbine meters.

[FLOMEC TM Series Electronic Water Flowmeters User Manual](#)
Comprehensive user manual for FLOMEC TM Series Electronic Water Flowmeters (3-inch and 4-inch models TM30XXXXXX, TM40XXXXXX). Covers installation, operation, maintenance, specifications, and troubleshooting for reliable water flow measurement.

	[FLOMEC QS100-10 In-line Irrigation Ultrasonic Flowmeter Product Owner's Manual](#) This manual provides instructions for the FLOMEC QS100-10 In-line Irrigation Ultrasonic Flowmeter, covering usage requirements, safety, specifications, installation, operation, troubleshooting, and warranty information.
	[FLOMEC Remote Kit Assembly (Gen 2) Owner's Manual and Installation Guide](#) Comprehensive guide for installing, operating, and maintaining the FLOMEC Remote Kit Assembly (Gen 2), including specifications, parts list, and warranty information. FM Approved for hazardous locations.
	[FLOMEC QS100 Ultrasonic Flow Sensor Installation Guide](#) Detailed installation instructions for the FLOMEC QS100 Ultrasonic Flow Sensor, covering component requirements, wiring, and proper placement for irrigation systems. Includes diagrams and technical notes.

Documents - FLOMEC – G2B15N09GMB

[pdf] User Manual Owner's Manual

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Owner s Manual G2 Industrial Grade Turbine Housing Includes Aluminum and Stainless Steel Housings ANSI Flange Fittings and Tri-Clover Flange Fittings 01/2022 920708-3 Rev L 1 1.888.610.7664 15 10 20 5 25 0 30 www.calcert.com sales calcert.com To the owner Congratulations on rec...

lang:en score:33 filesize: 2.61 M page_count: 59 document date: 2022-11-24

[pdf] Specifications Datasheet

datasheet FLOMEC G2B15N09GMB Flow Meter Industrial Brass 1 2 Npt g2b15n09gmb itm s cache ||| G2 INDUSTRIAL METERS BRASS BRASS SPECIFICATIONS Fitting Type: NPT or ISO Female Housing Material: Brass Meter Sizes Available: 1/2 3/4 1 1-1/2 2 Flow Range: 1/2 B05 3/4 B07 1 B10 1-1/2 B15 2 B20 1 - 10 GPM 3.8 - 37.9 LPM 2 - 20 GPM 7.6 - 75.7 LPM 5 - 50 GPM 18.9...

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ITM Datasheet Template datasheet FLOMEC G2B15N09GMB Flow Meter Industrial Brass 1 2 Npt g2b15n09gmb calcert s cache ||| G2 INDUSTRIAL METERS BRASS BRASS SPECIFICATIONS Fitting Type: NPT or ISO Female Housing Material: Brass Meter Sizes Available: 1/2 3/4 1 1-1/2 2 Flow Range: 1/2 B05 3/4 B07 1 B10 1-1/2 B15 2 B20 1 - 10 GPM 3.8 - 37.9 LPM 2 - 20 GPM 7.6 - 75.7 LPM 5 - 50 GPM 18.9...

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