

Dwyer WM2-B-C-13

Dwyer® Multi-Jet Water Meter WM2-B-C-13 User Manual

Model: WM2-B-C-13

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of the Dwyer Series WM2 Multi-Jet Water Meter, model WM2-B-C-13. Please read this manual thoroughly before using the device to ensure safe and efficient operation.

2. SAFETY INFORMATION

WARNING:

- This product is **NOT FOR POTABLE WATER USE**. The brass components contain lead in excess of low lead limits.
- Ensure all local codes and regulations are followed during installation and operation.
- Do not exceed the maximum specified temperature of 104°F (40°C) or pressure of 232 psi (16 bar).
- Always depressurize the system before attempting any installation, maintenance, or troubleshooting.

3. PRODUCT DESCRIPTION AND FEATURES

The Dwyer Series WM2 Multi-Jet Water Meter is engineered for commercial and industrial flow measurement applications. Its multi-jet design ensures accurate readings across a wide range of flow rates, including low-flow conditions. The meter features a magnetically driven, hermetically sealed register that is isolated from the water, preventing leaks and fogging, and ensuring long-term, maintenance-free operation even in demanding environments.



Figure 1: Dwyer WM2-B-C-13 Multi-Jet Water Meter. This image shows the meter's blue body, brass register with a protective blue cover, and threaded connections on both ends. The register displays flow readings.

Key Features:

- **Multi-Jet Design:** Provides high accuracy and wide flow range.
- **Hermetically Sealed Register:** Magnetically driven, prevents leaks and fogging.
- **Durable Construction:** Designed for long service life in harsh conditions.
- **Coupling Size:** 1-1/2" BSPT for standard connections.
- **Flow Range:** Max Flow: 20 m³/h; Nominal Flow: 0.8 to 10 m³/h; Transitional Flow: 0.2 m³/h.

4. INSTALLATION AND SETUP

Proper installation is crucial for the accurate and reliable operation of the water meter. Follow these guidelines carefully:

1. **Pre-Installation Check:** Inspect the meter for any visible damage. Ensure the flow direction arrow on the meter body matches the intended flow direction of the pipeline.
2. **System Preparation:** Flush the pipeline thoroughly before installing the meter to remove any debris that could damage the internal components.
3. **Mounting Position:** Install the meter in a horizontal position with the register facing upwards for optimal accuracy and readability.
4. **Connection:** Use the provided 1-1/2" BSPT couplings to connect the meter to the pipeline. Apply appropriate thread sealant to ensure a leak-free connection. Do not overtighten.
5. **Bypass (Recommended):** For systems requiring continuous flow during meter maintenance or replacement, consider installing a bypass line with isolation valves around the meter.
6. **Post-Installation Check:** Slowly open isolation valves to gradually fill the meter and pipeline, allowing air to escape. Check all connections for leaks.

5. OPERATION

The Dwyer WM2-B-C-13 Multi-Jet Water Meter operates automatically once installed in a flowing pipeline. The register displays the cumulative volume of water that has passed through the meter.

- **Reading the Register:** The main numerical display shows the total volume in cubic meters (m³). Smaller dials or indicators may show fractional readings for higher precision.
- **Flow Direction:** Ensure water flows in the direction indicated by the arrow on the meter body. Reverse flow will not be accurately measured and may damage the meter.
- **Operating Limits:** Operate the meter within its specified temperature (104°F / 40°C) and pressure (232 psi / 16 bar) limits to prevent damage and ensure accurate readings.

6. MAINTENANCE

The Dwyer WM2-B-C-13 water meter is designed for maintenance-free operation. However, periodic checks can help ensure its longevity and accuracy.

- **Regular Inspection:** Periodically inspect the meter for any signs of external damage, leaks, or unusual noises.
- **Register Clarity:** Ensure the register remains clear and free from fogging. The hermetically sealed design should prevent this, but any fogging may indicate a seal compromise.
- **Cleaning:** Clean the exterior of the meter with a damp cloth as needed. Do not use abrasive cleaners or solvents.
- **Winterization (if applicable):** In environments where temperatures may drop below freezing, ensure the meter and associated piping are adequately protected from freezing to prevent damage.

7. TROUBLESHOOTING

This section provides solutions to common issues encountered with the water meter.

Problem	Possible Cause	Solution
Meter not registering flow	No flow in pipeline; Meter installed backwards; Debris obstructing impeller.	Verify flow in pipeline; Check flow direction arrow and reinstall if necessary; Flush pipeline (may require meter removal).
Inaccurate readings	Air in pipeline; Meter not installed horizontally; Operating outside specified flow range.	Bleed air from system; Reinstall meter horizontally; Ensure flow rates are within nominal range.
Leaks at connections	Improperly tightened connections; Insufficient thread sealant; Damaged couplings.	Tighten connections; Reapply thread sealant; Replace damaged couplings.
Register fogging	Compromised hermetic seal.	Contact Dwyer customer support for assistance.

8. SPECIFICATIONS

Parameter	Value
Model	WM2-B-C-13

Parameter	Value
Coupling Size	1-1/2" BSPT
Max Flow	20 m³/h
Nominal Flow	0.8 to 10 m³/h
Transitional Flow	0.2 m³/h
Max Temperature	104°F (40°C)
Max Pressure	232 psi (16 bar)
Accuracy (Transitional Flow)	±5%
Accuracy (Nominal Flow)	±2%
Wetted Materials (Body)	Brass, polyethylene
Wetted Materials (Couplings)	Brass
Wetted Materials (Measuring Chamber)	Polyethylene, ABS plastic, ferrite, acetal
Item Weight	13.52 Pounds
Manufacturer	Dwyer Instruments, Inc.

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please contact Dwyer Instruments, Inc. directly. Refer to the official Dwyer website or product packaging for the most current contact details and warranty terms.

Manufacturer: Dwyer Instruments, Inc.

ASIN: B00RDLLBF2

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question