

Fowler 72-585-155-0

Fowler X-Proof Water Resistant Indicator Set 72-585-155-0

Instruction Manual

INTRODUCTION

This manual provides essential information for the proper setup, operation, and maintenance of your Fowler X-Proof Water Resistant Indicator Set, model 72-585-155-0. This precision instrument is designed for accurate dimensional measurements in various industrial and scientific applications. The set includes an IP54 X-Proof Indicator and a Magnetic Base.

The indicator features a 1-inch travel with a reading of .001 inches and a continuous reading of 0-100. It is an AGD Group 2 indicator with a 2-1/4 inch diameter, lugback, and carbide point. Its robust, shockproof design incorporates rubber bellows on the stem, an O-ring seal on the safety cap, O-ring protection for the bezel and rotating dial, and a sealed back plate for water resistance.

The magnetic base (model 72-585-010-0) provides a strong 85 lb. pull and includes a fine adjustment mechanism. Its dimensions are 2" x 2-11/32" x 1-13/16" and it features an On-Off lever release magnet. The V-base design allows for stable placement on round surfaces, and it can also mount test indicators with a 1/4" post.

SETUP

Follow these steps to assemble and prepare your indicator set for use:

- 1. Unpack Components:** Carefully remove the magnetic base and the dial indicator from their protective packaging.
- 2. Attach Indicator to Base:** The magnetic base is designed to securely hold the dial indicator. Insert the stem of the dial indicator into the appropriate mounting hole on the magnetic base. Ensure it is firmly seated.
- 3. Secure Indicator:** Tighten the locking screw or clamp on the magnetic base to hold the indicator in place. Ensure the indicator is oriented correctly for your measurement task.
- 4. Position Magnetic Base:** Place the magnetic base on a clean, ferrous surface. Engage the magnet by moving the On-Off lever to the "On" position. The V-base allows for secure placement on cylindrical

objects.

5. **Adjust Indicator Position:** Use the fine adjustment mechanism on the magnetic base to precisely position the indicator's contact point against the surface to be measured.



Image: The Fowler X-Proof Water Resistant Indicator Set, including the magnetic base and dial indicator, ready for assembly and use.

OPERATING INSTRUCTIONS

To achieve accurate measurements with your Fowler indicator set, follow these operational guidelines:

1. **Surface Preparation:** Ensure the measurement surface and the magnetic base contact area are clean and free of debris, oil, or rust to ensure maximum magnetic adhesion and measurement accuracy.
2. **Engage Magnetic Base:** Place the magnetic base firmly on the desired ferrous surface. Move the lever to the "On" position to activate the magnet. For round surfaces, utilize the V-base feature for stability.
3. **Zero the Indicator:** Gently bring the indicator's carbide point into contact with the reference surface. Rotate the bezel of the dial indicator until the main needle points to zero. If tolerance markers are present, set them according to your measurement requirements.
4. **Perform Measurement:** Move the object or the indicator setup across the surface to be measured. Observe the needle's movement on the dial. The reading indicates the deviation from the zero reference point. The indicator provides a continuous reading from 0-100.
5. **Read the Dial:** Each major division on the dial represents .001 inches. The smaller dial (if present) typically tracks full revolutions of the main needle, indicating total travel.
6. **Disengage Magnetic Base:** Once measurements are complete, move the lever on the magnetic base to the "Off" position to release it from the surface.

MAINTENANCE

Proper maintenance ensures the longevity and accuracy of your Fowler X-Proof Water Resistant Indicator Set:

- **Cleaning:** After each use, wipe down the indicator and magnetic base with a clean, soft cloth. For stubborn grime, a mild, non-abrasive cleaner can be used, ensuring no liquid enters the indicator mechanism.
- **Water Resistance:** The IP54 rating signifies protection against dust ingress and splashing water. While designed to be water resistant with rubber bellows, O-ring seals, and a sealed back plate, avoid submerging the indicator in liquids. If exposed to water, dry it thoroughly immediately.
- **Storage:** Store the indicator set in its original protective case in a dry, temperature-controlled environment to prevent corrosion and damage.
- **Lubrication:** The internal mechanisms of the indicator are factory-lubricated. Do not attempt to lubricate them yourself unless specifically instructed by Fowler technical support.
- **Inspection:** Periodically inspect the carbide point for wear or damage. Check the magnetic base for any signs of damage or reduced magnetic pull.

TROUBLESHOOTING

If you encounter issues with your indicator set, consider the following:

- **Inaccurate Readings:**
 - Ensure the indicator is securely mounted and zeroed correctly.
 - Check for any debris between the contact point and the measurement surface.

- Verify the magnetic base is fully engaged and stable on the surface.
- Inspect the carbide point for wear or damage that might affect contact.
- **Magnetic Base Not Holding:**
 - Ensure the On-Off lever is fully in the "On" position.
 - Clean the contact surface of the magnetic base and the ferrous object.
 - Confirm the surface is indeed ferrous (magnetic).
- **Sticking or Jerky Indicator Movement:**
 - Check for dirt or foreign particles on the stem or contact point.
 - Ensure the indicator is not overtightened in its mount.
 - If the issue persists, the internal mechanism may require professional servicing.

For issues not resolved by these steps, please contact Fowler customer support.

SPECIFICATIONS

Model Number	72-585-155-0
Indicator Travel	1 inch
Indicator Reading	.001 inch
Continuous Reading	0-100
Indicator Diameter	2-1/4 inches (AGD Group 2)
Indicator Features	Lugback, Carbide Point, Robust, Shockproof Design, Rubber Bellows on Stem, O-ring Seal on Safety Cap, O-ring Protection for Bezel and Rotating Dial, Sealed Back Plate
Magnetic Base Pull	85 lb.
Magnetic Base Dimensions	2" x 2-11/32" x 1-13/16"
Magnetic Base Features	Fine Adjustment, On-Off Lever Release Magnet, V-base for Round Surfaces, Mounts Test Indicators with 1/4" Post
Water Resistance Rating	IP54 (X-Proof)
Item Weight	3.7 pounds
Material	Metal

Power Source	Hand-powered
Measurement Accuracy	+/-0.05%

WARRANTY AND SUPPORT

This Fowler X-Proof Water Resistant Indicator Set is covered by a manufacturer's warranty. For specific details regarding the warranty period and coverage, please refer to the documentation included with your purchase or contact Fowler directly.

For technical assistance, troubleshooting beyond the scope of this manual, or warranty claims, please contact Fowler customer support. Keep your purchase receipt and model number (72-585-155-0) readily available when contacting support.

Manufacturer: Fowler & Nsk