

Vikye TL-136

Vikye TL-136 Liquid Level Sensor User Manual

Model: TL-136 (0-5m)

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of the Vikye TL-136 Liquid Level Sensor. Please read this manual thoroughly before using the product to ensure correct operation and to prevent damage. Keep this manual for future reference.

2. PRODUCT OVERVIEW

The Vikye TL-136 is a high-precision liquid level transmitter designed for accurate monitoring of water, oil, and other non-corrosive liquids. It features a robust design suitable for various industrial and domestic applications.



Figure 2.1: Vikye TL-136 Liquid Level Sensor with its integrated cable.

Key Features:

- Input level transmitter with high-precision diffused silicon for accurate water level monitoring.
- All-digital conditioning circuit ensuring stable 4-20mA signal output.
- IP68 multilayer waterproof protection for enhanced durability and safety.
- 45-degree oblique angle anti-shock design.
- Detachable anti-blocking connector for ease of maintenance.
- Suitable for measuring water, oil, and other liquids that do not corrode stainless steel.

- ☑ Measuring Range: 0-1m / 0-2m / 0-3m / 0-4m / 0-1m / 0-5m (optional)
- ☑ Measurement Accuracy: 0.2% FS-0.5% FS (conventional)
- ☑ Product Material: 304 stainless steel



Figure 2.2: The TL-136 sensor submerged, illustrating its application in liquid level measurement.

3. SPECIFICATIONS

Parameter	Value
Model	TL-136
Measuring Range	0-5m (for this variant)
Input Voltage	12-32VDC
Output Signal	4-20mA
Measurement Accuracy	0.2% FS - 0.5% FS (conventional)
Material	304 Stainless Steel
Protection Rating	IP68
Item Weight	1.27 pounds (approx. 0.57 kg)
Sensor Body Dimensions	Length: 108mm, Diameter: 28mm (approx.)
Manufacturer Part Number	Vikyegwiq2n5b1c-15



Figure 3.1: Dimensional drawing of the TL-136 sensor and a typical installation diagram.

4. SAFETY INFORMATION

Adhere to the following safety guidelines to prevent injury or damage to the device:

- Ensure power is disconnected before installation or maintenance.
- Verify that the power supply voltage matches the sensor's requirements (12-32VDC).
- Do not use the sensor with corrosive liquids unless confirmed compatible with 304 stainless steel.
- Avoid physical shock or excessive force on the sensor body or cable.
- Ensure proper sealing and cable routing to maintain IP68 rating in submerged applications.

5. SETUP AND INSTALLATION

5.1 Wiring Instructions

The TL-136 sensor uses a two-wire connection for power and signal output. Connect the wires as follows:

- **Red Wire:** Connect to the positive (+) terminal of the 12-32VDC power supply.

- **Black Wire:** Connect to the negative (-) terminal of the 12-32VDC power supply and the signal input of your monitoring device.



Figure 5.1: Close-up view of the sensor's red and black wires for power and signal connection.

5.2 Sensor Placement

The sensor is designed for submersible installation. Lower the sensor into the liquid to be measured, ensuring the sensing end is at the desired lowest measurement point. The air guide cable should extend above the maximum liquid level to allow for atmospheric pressure compensation.

Input liquid level transmitter
High-precision diffused silicon for
more accurate water level monitoring



Figure 5.2: The TL-136 sensor correctly submerged in a liquid for level measurement.

The detachable anti-blocking connector at the sensor tip helps prevent debris from interfering with measurements. Ensure it is securely attached before deployment.



IP68 multilayer waterproof protection

45 degree bevel protection

Removable anti-blocking designed

All digital conditioning circuit, 4-20mA signal output is more stable

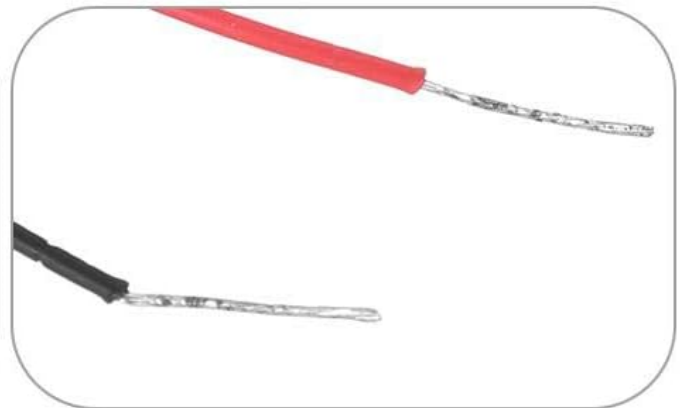


Figure 5.3: Detailed view of the sensor's tip, highlighting the anti-blocking design and cable entry point.

6. OPERATING INSTRUCTIONS

Once properly installed and powered, the TL-136 sensor will continuously measure the liquid level and output a corresponding 4-20mA current signal. This signal can be read by a PLC, data logger, or other compatible monitoring equipment.

- A 4mA output typically corresponds to the minimum measured level (e.g., 0m).
- A 20mA output typically corresponds to the maximum measured level (e.g., 5m for this variant).
- Intermediate current values represent proportional liquid levels within the specified range.

Refer to your monitoring equipment's manual for scaling and interpreting the 4-20mA signal into actual liquid level units.

7. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of the sensor.

- **Cleaning:** Periodically inspect the sensor tip for accumulation of dirt, sediment, or biological growth. Clean gently with a soft brush and water if necessary. Ensure the anti-blocking connector is clear.
- **Cable Inspection:** Check the cable for any signs of damage, cuts, or wear, especially at entry points or where it might rub against surfaces.
- **Connection Check:** Verify that all electrical connections remain secure and free from corrosion.
- **Air Guide Cable:** Ensure the air guide cable remains unobstructed and extends above the liquid surface to allow for proper atmospheric pressure compensation.

Caution:

- Do not use abrasive cleaners or solvents that could damage the stainless steel body or cable insulation.
- Avoid bending the cable sharply, especially near the sensor body.

8. TROUBLESHOOTING

If the sensor is not functioning as expected, consider the following:

Problem	Possible Cause	Solution
No signal output (0mA)	No power, incorrect wiring, damaged cable.	Check power supply (12-32VDC). Verify wiring connections (Red to +, Black to -/signal). Inspect cable for damage.
Inaccurate readings	Sensor tip obstructed, air guide cable blocked, incorrect calibration of monitoring device.	Clean sensor tip and anti-blocking connector. Ensure air guide cable is clear. Check and recalibrate your monitoring equipment.
Signal stuck at 4mA or 20mA	Liquid level outside measuring range, sensor fault.	Confirm liquid level is within 0-5m range. If level is within range and signal is stuck, the sensor may be faulty.
Intermittent signal	Loose connections, electrical interference.	Secure all wiring connections. Ensure proper grounding. Shield signal cables if interference is suspected.

9. WARRANTY AND SUPPORT

For warranty information or technical support, please contact Vikye customer service through your original point of purchase or visit the official Vikye website. Please have your model number (TL-136) and purchase details available when contacting support.

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