Walfront Walfront2oska6i7ev-02

Walfront Portable S-Type Beam High Precision Load Cell Scale Sensor - 100kg Instruction Manual

1. Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of the Walfront Portable S-Type Beam High Precision Load Cell Scale Sensor. This device is designed for accurate weight measurement in various industrial applications, including mixing stations, batching machines, and asphalt stations. Please read this manual thoroughly before use to ensure proper functionality and safety.

Image 1.1: Walfront S-Type Beam Load Cell with integrated cable.

2. Product Features

The Walfront S-Type Beam Load Cell offers several key features designed for reliable and precise performance:

- **Material:** Constructed from durable metal for longevity.
- **Resilient Design:** Engineered to be oil-proof and waterproof, suitable for various challenging environments.
- **Stable Structure:** Features an S-beam pattern for consistent performance and ease of installation.
- **Versatile Applications:** Ideal for use in mixing stations, batching machines, asphalt stations, and other industrial weighing systems.
- **Process:** Utilizes film processing for enhanced durability.

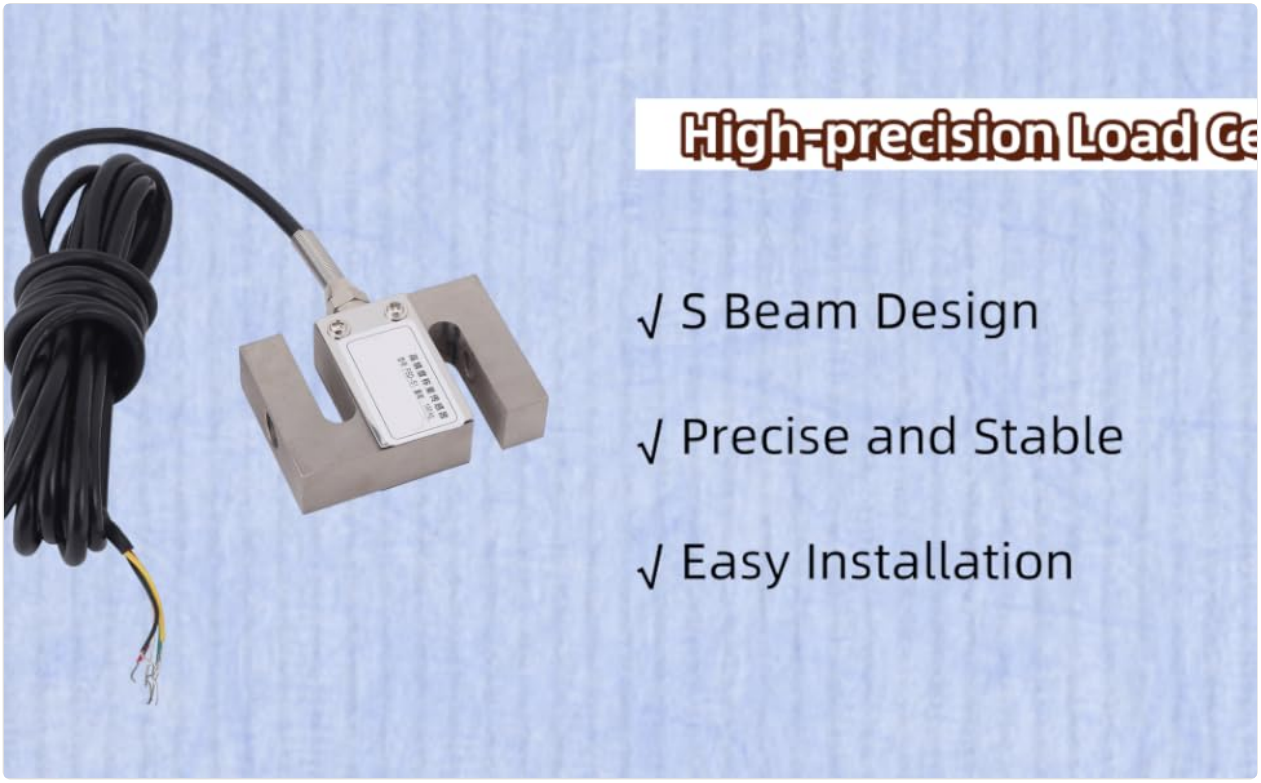


Image 2.1: Key features of the Walfront S-Type Load Cell.

Image 2.2: Environmental resistance of the load cell, including oil-proof, waterproof, and anti-corrosion capabilities.

3. Specifications

Refer to the following table for detailed product specifications:

Specification	Value
Model Number	Walfront2oska6i7ev-02
Capacity	100 kg (other capacities available: 50kg, 300kg, 2000kg)
Material	Metal
Product Dimensions	3.94 x 1.57 x 1.57 inches
Item Weight	1.21 Pounds
Environmental Protection	Oil-proof, Waterproof
UPC/Barcode	9787020050642

4. Setup Instructions

4.1 Mounting

The S-type load cell is designed for both tension and compression applications. Ensure the mounting surface is flat, rigid, and capable of supporting the maximum intended load. Use appropriate bolts and washers to secure the load cell firmly at its designated mounting points. Avoid overtightening, which can distort the load cell body and affect accuracy. Ensure the load is applied axially through the center of the load cell to prevent side loading or bending moments.

4.2 Wiring

Connect the load cell to a compatible weighing indicator or amplifier using the provided cable. The standard wiring color code for load cells is typically:

- **Red:** Excitation + (E+)
- **Black:** Excitation - (E-)
- **Green:** Signal + (S+)
- **White:** Signal - (S-)
- **Yellow/Shield:** Shield/Ground

Always refer to the specific wiring diagram of your weighing indicator for correct connections. Ensure all connections are secure and protected from environmental factors, especially in wet or dusty conditions, to maintain signal integrity.

Image 4.1: Detailed view of the load cell's cable connection and label, showing the UPC.

5. Operating Instructions

5.1 Initial Power-Up and Calibration

After installation and wiring, power on your weighing indicator. Allow a brief warm-up period for the system to stabilize. Perform a calibration procedure according to your weighing indicator's manual. This typically involves:

1. Setting the zero point with no load applied.
2. Applying a known test weight (span calibration).
3. Verifying linearity with multiple test weights across the operating range.

5.2 Measurement

Once calibrated, the load cell system is ready for use. Apply the load smoothly and avoid sudden impacts or shocks, which can affect measurement accuracy and potentially damage the load cell. Monitor the readings on your weighing indicator. For optimal accuracy, ensure the load is centered and stable during measurement.

6. Maintenance

Regular maintenance helps ensure the longevity and accuracy of your load cell:

- **Cleaning:** Keep the load cell and its surroundings clean. Remove any dust, debris, or corrosive substances that may accumulate on the surface. Use a soft cloth and mild cleaning agents if necessary, avoiding harsh chemicals.
- **Inspection:** Periodically inspect the load cell body, mounting bolts, and cable for any signs of damage, corrosion, or wear. Check for loose connections.
- **Environmental Protection:** While the load cell is oil-proof and waterproof, prolonged exposure to extreme conditions should be minimized. Ensure protective covers or enclosures are intact if used.
- **Recalibration:** Depending on usage and environmental conditions, periodic recalibration may be necessary to maintain accuracy. Consult your system's requirements for recommended recalibration intervals.

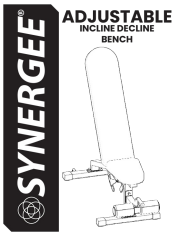
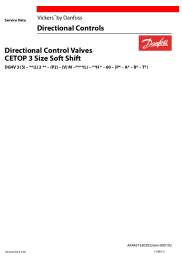
7. Troubleshooting

If you encounter issues with your load cell, consider the following common problems and solutions:

Problem	Possible Cause	Solution
No output or unstable readings	Loose wiring, damaged cable, incorrect wiring, faulty indicator	Check all cable connections, inspect cable for damage, verify wiring against diagram, test with a known good indicator.
Inaccurate readings	Improper calibration, side loading, temperature drift, mechanical binding	Recalibrate the system, ensure load is applied axially, check for obstructions, allow for temperature stabilization.
Load cell not responding	No excitation voltage, internal damage to load cell	Verify excitation voltage from indicator, check load cell resistance (consult specifications), replace if damaged.
Readings drift over time	Temperature changes, creep, unstable power supply	Ensure stable operating temperature, allow warm-up time, check power supply stability.

8. Warranty and Support

For warranty information, technical support, or service inquiries, please refer to the documentation provided with your purchase or contact Walfront customer service. You can also visit the official Walfront store for more product information and support resources: Walfront Store on Amazon.

	Right Weigh 201-EBT-02(B) Onboard Load Scale Installation and Operation Manual Comprehensive guide for installing and operating the Right Weigh 201-EBT-02(B) exterior digital onboard load scale, covering setup, calibration, operating modes, troubleshooting, and warranty information.
	Rohnson RF-01 & RF-02 Electronic Body Fat Scale Instruction Manual Comprehensive instruction manual for the Rohnson RF-01 and RF-02 electronic body fat scales, covering setup, usage with the Fitdays app, features, troubleshooting, and safety guidelines.
	Synergee Adjustable Incline Decline Bench Assembly Manual Comprehensive assembly guide for the Synergee Adjustable Incline Decline Bench, detailing all parts, hardware, and step-by-step instructions for proper setup.
	KERN CKE Counting Balance: Operating Instructions and Technical Specifications Comprehensive operating instructions and technical specifications for KERN CKE series counting balances (TCKE-A, TCKE-B). Covers setup, operation, maintenance, and troubleshooting for accurate piece counting and weighing.
	Garmin Index S2 Smart Scale Owner's Manual User manual for the Garmin Index S2 Smart Scale, covering setup, measurements, device information, troubleshooting, and specifications.
	Vickers Danfoss DG4V 3 CETOP 3 Directional Control Valves Service Data Comprehensive service data for Vickers by Danfoss DG4V 3 and CETOP 3 soft shift directional control valves, including model codes, part numbers, specifications, and orifice changing procedures for optimal hydraulic system performance.