TUNA WEIGHING AND ELECTRONIC SYSTEMS

Tuna LTr 4 Transmitter
User Manuel

1.DEFİNİTİON

LTr 4 uses high-performance components inside, which accurately amplify the sensor output signal, internally stabilize the voltage, constant current bridge supply, impedance adaptation, linear compensation, temperature compensation, etc. The mechanical is converted into standard current and voltage signal output, which can be switched between 0~5V and 0~10V. It can be directly connected to the interface of automatic control equipment PLC single chip microcomputer, upper computer terminal or computer network. With standard signal external zero adjustment, external gain adjustment function, input over-voltage protection, output short-circuit protection.

2.Function parameter:

A. Wide input range, 0.4~6mV/V can be connected to most strain bridge load cells
B. Strong load capacity can be connected with 1 piece 350Ω sensor
C. Using high quality electronic components, high response frequency and good long-term stability, comprehensive accuracy reaches ±0.05%FS
D. Input power reverse connection protection and output short circuit protection
E. Power supply 16~24V
F. Suitable for various strain bridge transducers such as pressure, tension, torque, etc.

3.Technical parameter:

1. Power supply voltage: DC: 16V-24V
2. Sensitivity: 0.4V~6 mv/v
3. Load cell excitation voltage: 5 VDC
4. Comprehensive accuracy: ≦0.05% FS
5. Rated output: 0~5V, 0-10V(The above signals can be switched, no need to return to factory)
6. Sampling frequency: ≧100hz
7. Working temperature: -30℃~60℃
8. Protection class: IP64

NOTE: In terms of safety, the following operations are recommended. Please use a test instrument to determine the input power. After power-on, do not connect the load cells to test whether the arch bridge voltage meets the load cells requirements

4.Using instructions:

1. Connect the wires according to the wiring requirements
2. Connect the specified DC power supply to the transmitter
3. Connect the load cell, and adjust it to the corresponding zero point output value through the zero point adjustment potentiometer under the condition of no-load installation (for example: 0~10v output that is adjusted to 0.000v)
4. After adjusting the zero point, add load to the load cell(preferably the maximum value of the capacity), and then adjust the gain potentiometer to the corresponding value (for example: 0~10v input is adjusted to 10.000v), or it can be adjusted to any value as needed value.
5. After adjusting the parameters (preferably repeat the calibration 2-3 times) and confirm it, then disconnect the power supply
6.Seal the adjustment potentiometer screw with a coagulant such as wax or nail polish to prevent errors caused by jitter.

5. Connection Diagram

Connect the cables in accordance with the wiring standard.

OUT/ANALOG : PİN1 → +24 V
PİN2→ GND
PİN3→ 0-10V

LOADCELL : PİN1→EXC+
PİN2→EXC-
PİN3→SİGNAL+
PİN4→SİGNAL-