

Description

The Rope Tension Load Cell is mainly for use in Hoist and Crane weighing systems or in general where the tension in a steel wire needs to be measured. The load cells are clamped directly on the fixed end of a lifting wire rope and fitted with strain gauges allowing them to produce a signal proportional to the measured load.

The Rope Tension Load Cell has a unique advantage that it is suitable for most commonly used rope sizes and can be clamped directly on to the wire rope, hence eliminating the requirement for any mechanical changes in the machine.

Operation

When force is applied to the Load Pin along its sensitive axis, the effect on the strain gauge results in an output signal proportional to the force applied.

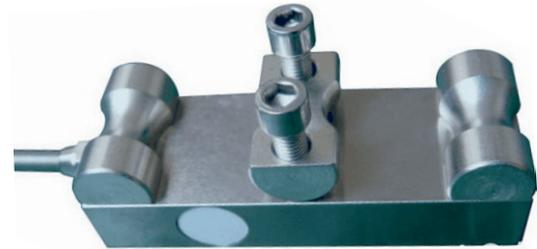
The diagram at the right shows the typical diagram how force is to be applied on the Rope Tension Load Cell.

The load cell is then to be connected to an ADC based display system for calibration of the appropriate load for weighing / overload

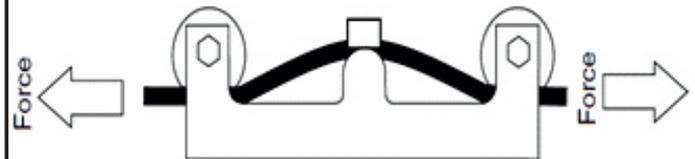
Specifications

| | |
|--------------------------------|-----------------|
| Rated Load | 2T/5T/10T |
| Wire Rope Diameter | 8mm - 22mm |
| Rated output | 2 mV/V + 0.02% |
| Input resistance | 760 ± 10Ω |
| Output resistance | 700 ± 2Ω |
| Insulation resistance | ≥ 5000MΩ |
| Hysteresis | ≤ 0.03%FS |
| Repeatability | < 0.02%FS |
| Creep | < 0.03%FS/30min |
| Zero balance | < 1%FS |
| Safe overload | 150%FS |
| Recommended supply voltage | 5~12V |
| Use temp. range | -10~+60°C |
| Zero temp. coefficient | < 0.04%FS/10°C |
| Rated output temp. coefficient | < 0.04%FS/10°C |
| Cable flexible | 4 core 5 meter |

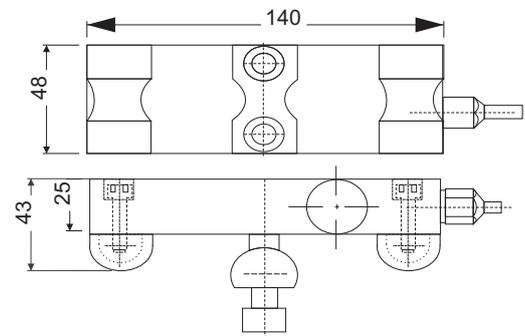
Rope Tension Load Cell



Load Cell Installation



Dimensions :



Wiring :

