

DIGITAL ROLLER LOADCELLS



The TSC Roller Loadcell has been designed to meet the needs of industry where a moving load measurement or web tension display and control is required.

The unit will accurately measure and display the web tension irrespective of the material position on the roller by employing novel mechanical and strain gauge structures. Electronic signal processing* is carried out within the transducer with a high level output for interfacing with a tension controller or a remote load indicator.

The loadcell's integrated digital display directly indicates the web tension or load with calibration in pounds or kilograms. The loadcell is available in a wide range of full-scale sensitivities and with three roller lengths as standard. Mounting is a single bolt fixing with electrical connections via an eight pin connector mounted in the shaft end.

Applications

For the display and precise control of input unwind, intermediate and rewind processes, rotary die cutting, printing and web tension, laminating and print registration in label manufacture, medical and automotive products, coiling and uncoiling of materials and many other process control or load monitoring applications.

Features

- Direct Display of load in imperial or metric units.
- Accurate measurement independent of material position on the roller.
- On board signal processing with high level output for tension control.
- Single point mounting.
- Strain gauge only version available.
- Automatic programming of FSD and decimal point when used in conjunction with TSC display instrumentation and tension control equipment.

Specification

Display:	3.5 digit LCD digital display. Decimal point and FSD set by the Transducer.
Accuracy:	±0.5% of FSD.
Repeatability:	±0.25% of FSD.
Signal output:	Bipolar ± 1.000V for rated FSD.
Power supply requirements:	±5 to ± 12V@ 100mA.
Frequency response:	Better than 1ms.
Overload capacity:	In excess of 200% of rated capacity.
Operating temp range:	-10 to + 40 degs C.
Load ranges:	1 to 20Kgs. or 2 to 50lbs FSD in three frame sizes.

*Non amplified version with 350 ohm strain gauges in full bridge configuration.

We reserve the right to change specifications as deemed necessary with continuous improvement.

Timesync Controls Ltd



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Web Tension Control

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