

# Low Cost TENSION MONITORING SYSTEM

## TELC SYSTEM

TELC Sensor plus TD-1-TE Indicator

Accurately measure the running line tensions of yarns, fibers, wires, cables, films & similar process materials — continuously!

The TELC System detects “out of tolerance” conditions and immediately alerts operating personnel. This enables them to take the appropriate corrective action to maintain the highest product quality.

Additionally, the TELC Tension Sensor can be installed separately, as part of a user-supplied closed-loop control system.

### FEATURES

- Precision strain gauge accuracy of  $\pm 1.5\%$  or better
- User-set high & low alarm limits with relays for alerting operating personnel of “out of tolerance” conditions
- Analog output for recording and control purposes
- For process speeds up to 5000 m/min
- Built-in electronic damping to filter out fluctuating tension readings.

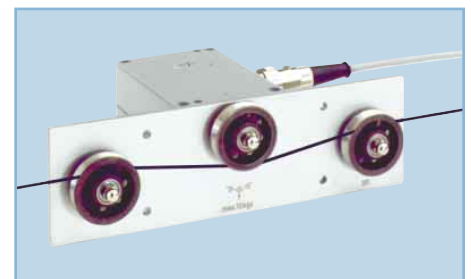


## OTHER STANDARD SENSOR DESIGNS

### Heavy-Duty Model

Uses 30 mm diameter hardened steel rollers for heavy wires, cables, tire cord and similar process materials subjected to high impact loads.

.....Type 24



### Tapes/ Films & Tows

Uses 7, 10, 15, 20 or 30 mm wide cylindrical rollers for “strip” materials. Wider materials can be accommodated with other models.

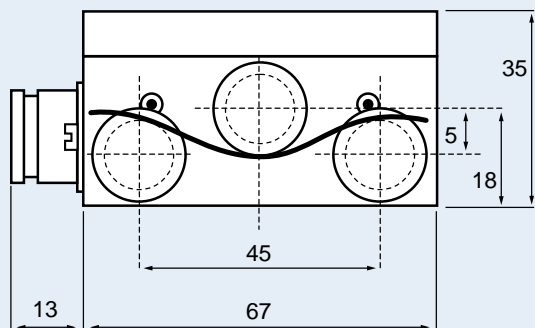
.....Type RX



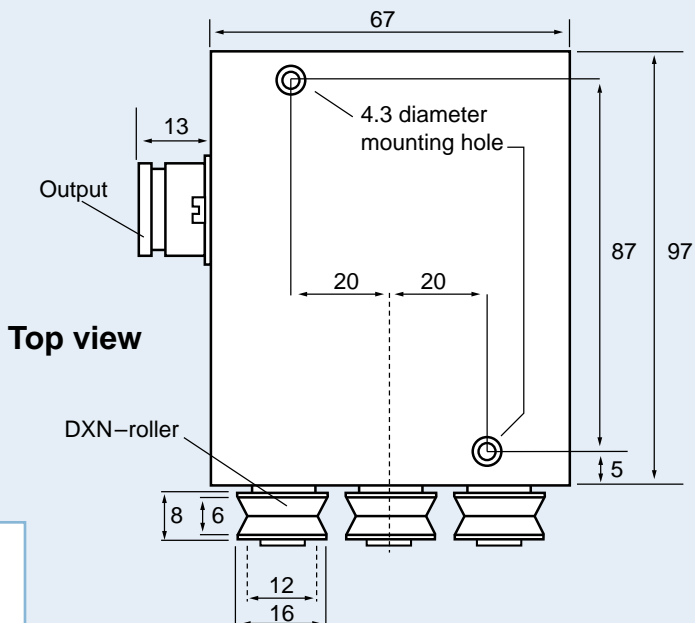
*Custom sensor designs can be developed to meet specific applications requirements. Inquire.*

# TELC Series

## TELC Sensor Dimensions



**Front view**



**Top view**

All dimensions in mm.

*NOTE: Dimensions will vary with different tension range, process material and application. Drawings for the Type 24 and RX are also available. Inquire.*

TELC Sensor Specifications	
<b>Tension Ranges</b>	0–100 g, 0–200 g, 0–500 g 0–1 Kg, 0–2 Kg, 0–5 Kg, 0–10 Kg,
<b>Accuracy</b>	±1.5% or better
<b>Power Required</b>	+15 V DC, regulated (20 mA)
<b>Deflection</b>	0.5 mm maximum
<b>Output (Standard)</b>	0–1 V DC
<b>Output (Optional)</b>	0–10 V DC, 4–20 mA, RS-232 or RS-485 (Addressable)
<b>Frequency Response</b>	50 Hz
<b>Outer Roller Spacing</b>	40–200 mm, depending upon tension range, process material and application
<b>Operating Temperature</b>	40 to 105 ° F (5 – 40 ° C)

TD-1-TE Indicator Specifications	
<b>Display Range</b>	1–1999 (user-set decimal point)
<b>Digital Display</b>	3–1/2 Digit LED (14.4 mm high)
<b>Power Required</b>	115/230 V AC (user-configured)
<b>Sensor Power</b>	Provides +15 V DC, regulated
<b>Analog Output</b>	4–20 mA or 0–10 V DC
<b>Frequency Response</b>	1 Hz (with damping filter) 40 Hz (without damping filter)
<b>Panel Cutout</b>	92 x 44 mm
<b>Dimensions</b>	3.78" L x 1.89" H x 4.04" D (96 x 48 x 103 mm)
<b>Relay Operation</b>	Hi-LO or Hi–Hi/Hi
<b>Relay Rating</b>	1 Amp @ 250 VAC / 30 V DC, resistive load, normally open.

Specifications subject to change without notice.

## ELECTROMATIC EQUIPMENT CO., INC.

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**For additional information  
or to place an order  
CALL TOLL FREE  
1-888-295-4300**