

# Heavy-Duty TENSION SENSOR

## Model TE-24

**6 Tension Ranges**  
0–1000 g up to 0–50.0 Kg

Heavy-duty hardened steel rollers makes this model especially suitable for tire cord, wires and similar filaments to high-impact loading.

Built-in signal conditioning with ZERO and SPAN pots provide a high-level, analog output to minimize the chance for signal interference.



## FEATURES

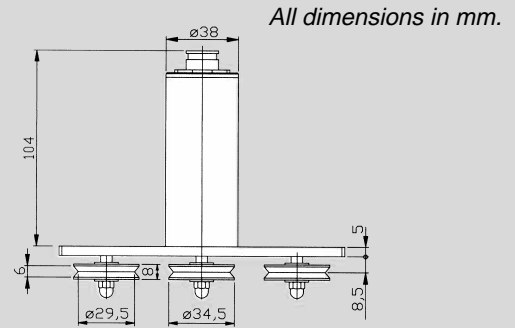
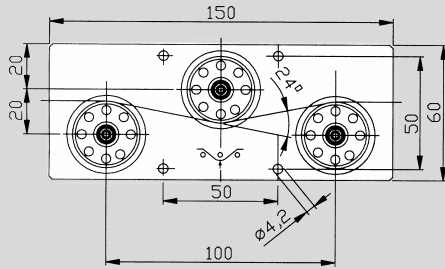
- Precision strain gauge sensing insures highest accuracy and repeatability
- 30 mm hardened steel rollers are rated for linear speeds up to 2400 m / min
- 0–1 V DC output, proportional to tension (0–10 V DC optional)
- Frequency response of 100 Hz
- Surface mount electronics provide long-term reliability
- Optional 5 ft. cable, TE-CABLE-CC is recommended. Longer lengths are available.
- Custom configurations can be supplied to meet nearly any application requirement
- Sensor can be easily mounted using four holes in front panel or using a “collar” around the cylindrical sensor body

### TENSION RANGES

Model #	TE-1K-24-01	TE-2K-24-01	TE-5K-24-03	TE-10K-24-03	TE-20K-24-04	TE-50K-24-04
Range	0–1000 g	0–2000 g*	0–5.00 Kg	0–10.00 Kg	0–20.00 Kg	0–50.0 Kg

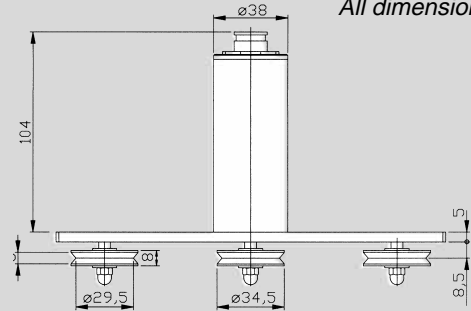
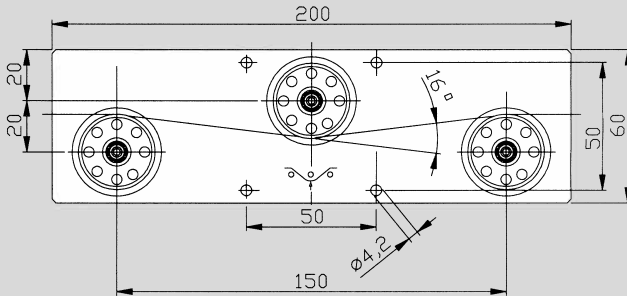
\* Can be supplied with a “03” configuration for wire applications.

**Dimensions – Models TE-XX-24-01**



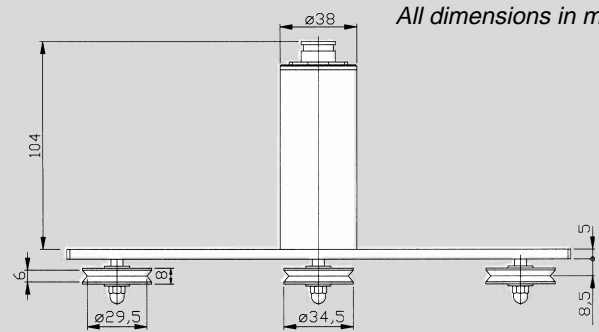
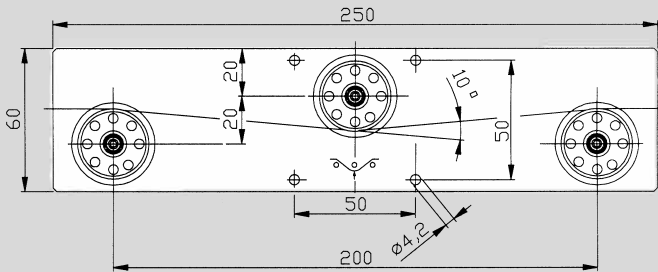
All dimensions in mm.

**Dimensions – Model TE-XX-24-03**



All dimensions in mm.

**Dimensions – Model TE-XX-24-04**



All dimensions in mm.

**Specifications**

<b>Accuracy</b>	±1.5% FS or better
<b>Sensor Excitation</b>	12–18 V DC, 21mA
<b>Middle Roller Deflection</b>	0.5mm (maximum)
<b>Sensor Output</b>	0–1 V DC (standard), 0–10 V DC (optional), proportional to tension
<b>Overload Rating</b>	200% FS

<b>Housing Material</b>	Aluminum
<b>Spacing of Outer Rollers</b>	See dimensions above
<b>Roller Diameter (Root)</b>	29.5 mm
<b>Roller Material</b>	Hardened Steel
<b>Maximum Linear Speed</b>	2400 m/min
<b>Operating Temperature</b>	40 to 105 °F (5–40 °C)

Specifications subject to change without notice.