

# Optic Fiber TENSION SENSOR

## Model TF

### 6 Tension Ranges

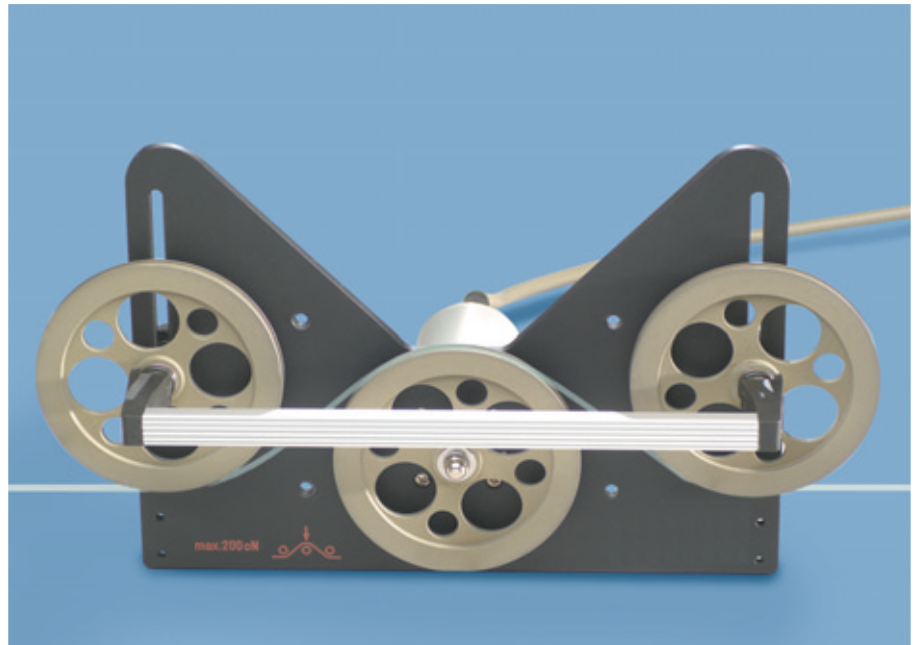
0–100 g up to 0–5.00 Kg

Large 70 mm aluminum rollers minimize bending of material which might damage or break the fragile filament.

The outer rollers are mounted on a movable plate to minimize contact when measurements are not being made.

Tension ranges of 10Kg and higher are available without moveable outer rollers.

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



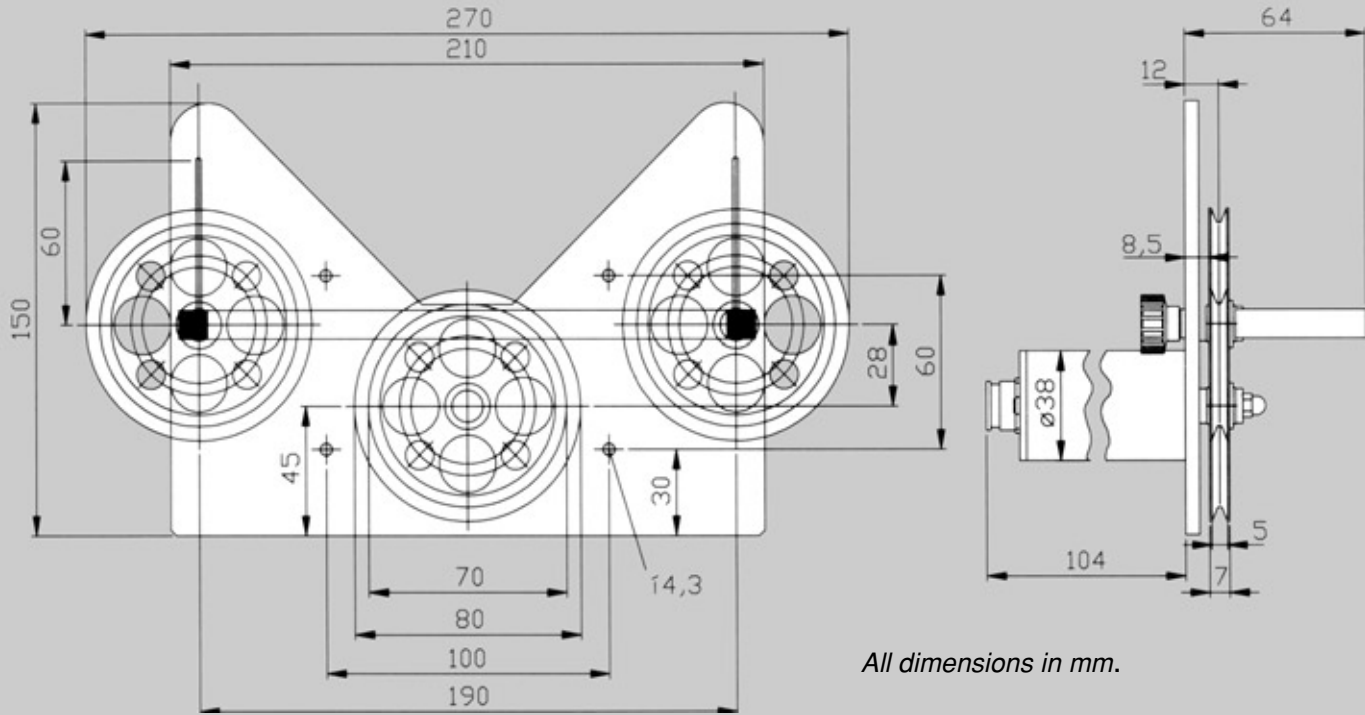
## FEATURES

- 70mm V-grooved rollers are rated for speeds up to 5000 m / min
- Precision strain gauge sensing insures highest accuracy
- Frequency response of 100 Hz
- Surface mount electronics provide long-term reliability
- Optional roller types are available for a wide variety of material profiles
- Optional 5 ft. cable, TE-CABLE-CC is recommended. Longer lengths are available
- 0–1 V DC output, proportional to tension (0–10 V DC optional)

## TENSION RANGES

Model #	TF-100	TF-200	TF-500	TF-1K	TF-2K	TF-5K
Range	0–100 g	0–200 g	0–500 g	0–1000 g	0–2000 g	0–5.00 Kg

## Dimensions



## Specifications

<b>Accuracy</b>	±1.5% FS or better
<b>Sensor Excitation</b>	12–18 V DC, 21 mA
<b>Middle Roller Deflection</b>	0.5 mm (maximum)
<b>Sensor Output</b>	0–1 V DC (standard), 0–10 V DC (optional), proportional to tension
<b>Overload Rating</b>	150% FS
<b>Housing Material</b>	Aluminum

<b>Spacing of Outer Rollers</b>	190mm
<b>Roller Diameter (Root)</b>	70mm
<b>Roller Material</b>	Hard-Anodized Aluminum
<b>Maximum Linear Speed</b>	5000 m/min
<b>Operating Temp.</b>	40 to 105 °F (5–40 °C)

*Specifications subject to change without notice.*