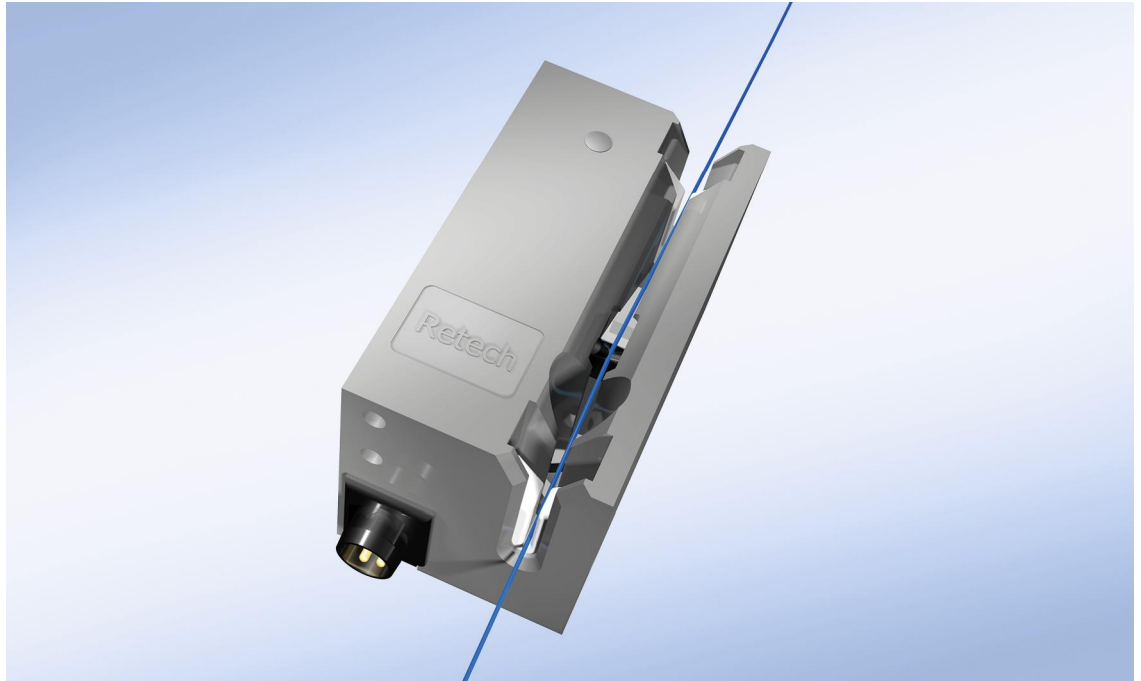# RETECH

Yarn Tension Sensors

Components in production process of synthetic filaments
Yarn tension sensors

The monitoring of the yarn tension of textile machines is used as quality characteristic. With the aid of the measurement and the following control system of the yarn tension, better results could be achieved at the processing of the yarn. Also quality degradations such as thin places and knurls could be avoided.

Previous methods and technology for the measurement of the yarn tension are strongly affected by influences of the environment. Mechanical systems are afflicted with wear. The characteristics of the yarn tension sensor are improved by the use of innovative Hall technology. In practice they offer an advantage of non wastage and an optimum of long-term precision.

This yarn tension sensor is able to be used for highly reliable and exact supervision in the texturing and other industrial machines for tension monitoring.

Advantages
– Highest requirements on economic and secure processes
– Innovative digital Hall sensor technology
– Electronics protected from environment
– Designed for highest reliability
– Optimal long-term drift, temperature drift and accuracy
– Tension overload protection
– Protected against electrostatic discharge and machine vibrations
– Improved against abrasion
– Resistance to common spin finishes
– Simple installation and implementation (little space required, easy integration into threadpath)
– Compatible with existing units
– Application in texturing and other industrial machines for tension surveillance

RETECH

## Components in production process of synthetic filaments
Yarn tension sensors

Standard Dimensions
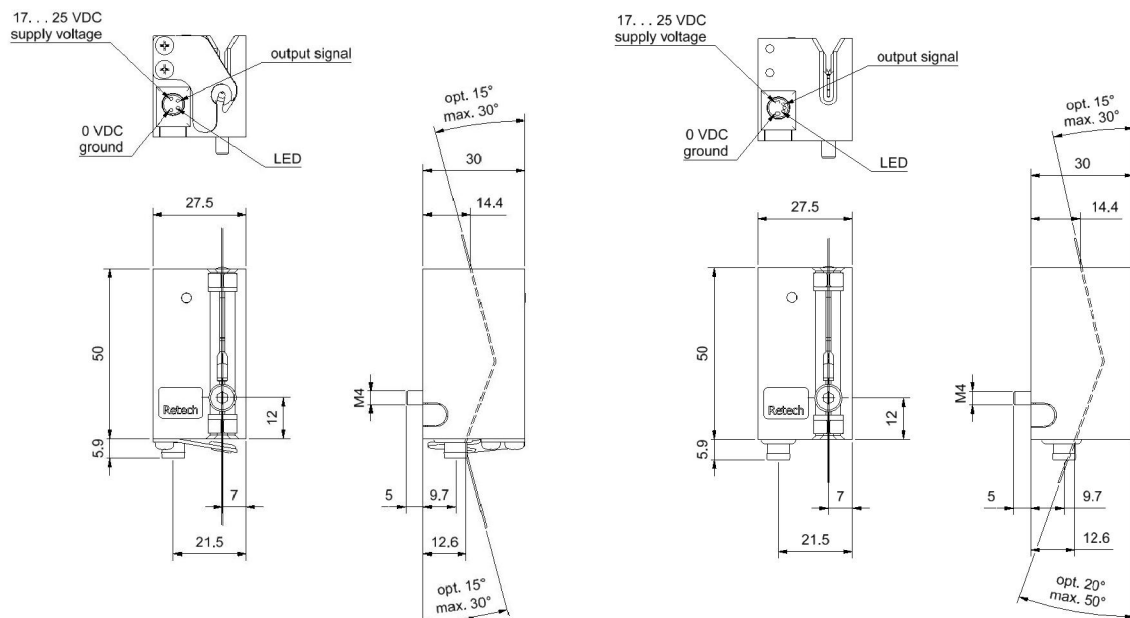
Brief Technical Specification

Supply voltage	17 . . . 25 VDC stabilised
Output	0.5 . . . 10 VDC
Current	≤ 15 mA
Accuracy	≤ ± 1.25 %
Zero drift	≤ - 0.5 . . . + 1.5 % per year
Temperature range	+ 10 . . . + 60 °C
Temperature drift	≤ 0 . . . + 0.3 % per 10 °C
Humidity	max. 90 % RH at 20 °C
Mechanical resonance	0/60 cN: 90 Hz
	0/120 cN: 115 Hz

Measuring Range
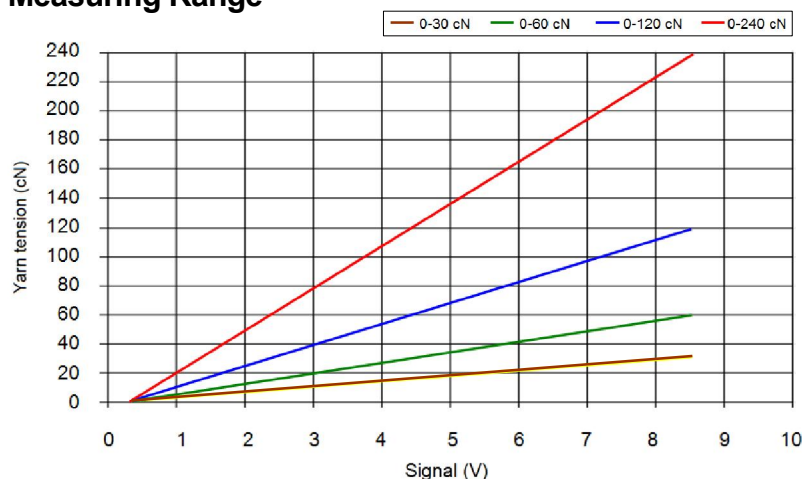
Available Ranges:

0-30 cN, 0-60 cN, 0-120 cN, 0-240 cN