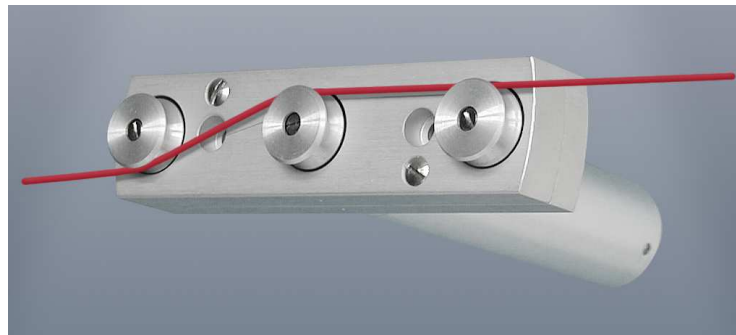
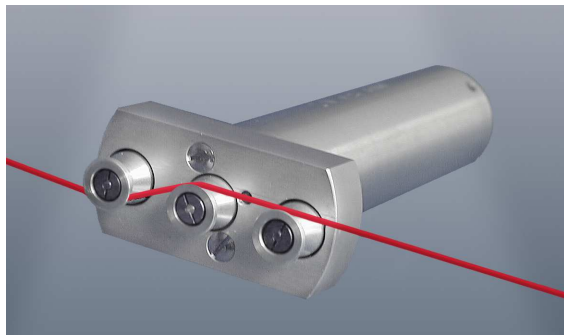


Tensile Force Measuring head Series M 124 and M 134



Series M 124 and M 134 are compact sensors for measuring tensile forces.

By means of its smooth and precise ball-bearings as well very less tension on elastic yarn can be measured.

Easy threading of the material, turn the sensor.

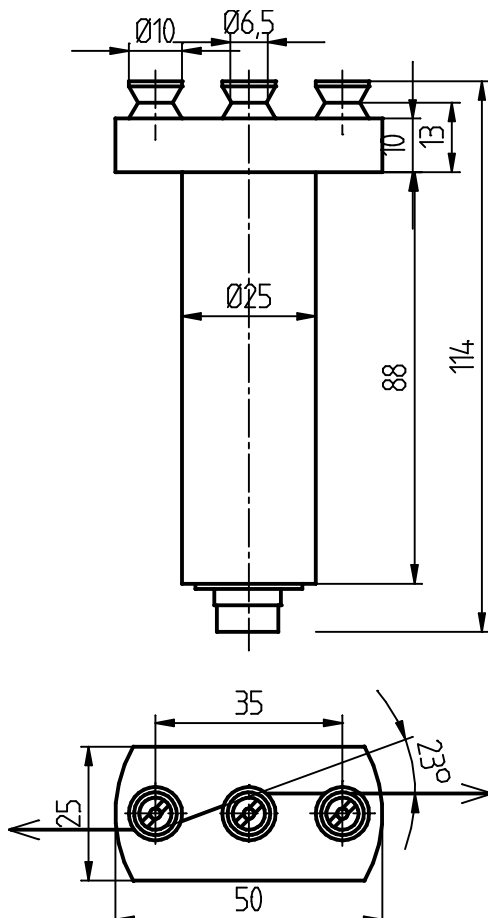
By means of the outer precise guide-rollers, the material is guided in a defined angle around the measuring-roller. Due to the deviation - the resulting radialforce - is measured by the sensor. It is proportional to the tensile force.

<i>Application:</i>	tensionmeasurement on : filaments, threads, elastic yarn, finest wires for fixing inline or for labs
<i>Advantages:</i>	it is suited to measure very less tensile forces
<i>Nominal loads:</i>	M 124: 5 dN (50cN), 1 N, 2 N, 3 N, 5N M 134: 5 N, 1 daN, 2 daN, 3 daN, 4 daN
<i>Measuring principle:</i>	capacitive the sensor transforms the, on the measuring-roller active radial force, into a porportional electric outputsignal.
<i>Roller material:</i>	AlCuMgPb
<i>Material speed:</i>	up to 2000 m/min.
<i>Option:</i>	ceramic coated roller, built-in amplifier
<i>Remark:</i>	Sensor series M 124, M 334 needs a separate Tensometric amplifier. Sensor series M 324, M 334 is equipped with built-in amplifier. M 324 needs a service voltage of 5 V, 12 V, 24 V, or $\pm 15V$ and supplies an analog outputsignal of 0 - 10 V corresponding 0 - 100 % of the nominal load of the sensor.
<i>Accessories:</i>	connection cable, amplifier - with or without display

Technical data :

Tensile Force Sensor series M 124

Dimensions



M 124

<i>Nominal loads:</i>	5 dN, 1 N, 2 N, 3 N, 5 N
<i>Measuring-range:</i>	ca. 5 % -- 100 % of the nominal load
<i>Error of the system:</i>	< 1%
<i>Measuring-principle:</i>	capacitive
<i>Natural frequency:</i>	150 Hz -- 300 Hz dep.on the nom.load
<i>Overload-protection:</i>	min. 10 times for loads up to 1 N min. 5 times for loads more than 1N
<i>Angle of contact around the meas.roller:</i>	30 °
<i>Charact.temp.range:</i>	+ 10°...+ 35°C
<i>Coef. of temperature:</i>	< ± 0,1 % / °C
<i>Protection:</i>	IP 40
<i>electrical connection:</i>	5 pol. connector
<i>Volume of delivery:</i>	Sensor with 5 pol connector. Instr. manual

M 324 (M 124 with built-in amplifier)

Technical data same as M 124 , but the tube is approx. 40 mm longer. (88 mm now 128 mm).
Connection cable is fixed, length 3m

<i>Service voltage:</i>	5 V, 12 V, 24 V or ± 15V
<i>Outputsignal:</i>	0 - 10 V, corresponding 0 - 100 % of the nominal load
<i>Calibration:</i>	potentiometer to adjust the electrical ZERO and for the GAIN are assessable at the connection-cable-side by means of a screw-driver

Included in delivery Sensor with fixed connection-cable, instr. manual