



B.N.C.TOOLING Co.,Ltd.

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SCHMIDT
control instruments

Tension Meter

3 Tension ranges available
from 0 - 20 daN up to 0 - 100 daN

Tension Meter TSW



Specifications

Calibration:	According to SCHMIDT factory procedure
Accuracy:	± 1 % full scale and ± 1 digit other calibration material: ± 3 % full scale or better
Overload protection:	100 % of tension range
Measuring principle:	Strain gauge bridge
Measuring roller deflection:	Max. 0.5 mm
Natural frequency:	Approx. 500 Hz, depending on tension range
Signal processing:	Analog
Temperature drift:	Less than ± 0.05 % full scale/ $^{\circ}\text{C}$
Output Signal:	Standard: 0 – 1 V DC (analog) impedance: ≥ 5 k Ω
Option:	0 – 10 V DC (analog), 4 – 20 mA (current) or mV/V (DMS)
Damping (fg):	Standard: 30 Hz (other values on request)
Temperature range:	10 – 45 $^{\circ}\text{C}$
Air humidity:	85 % RH, max.
Power supply:	+15...24 V DC, 21 mA regulated
Code A3:	max. 50 mA regulated
Code A10:	max. +5 V DC, max. 20 mA regulated
Housing material:	Aluminium
Dimensions:	See dimensions
Weight, net (gross):	Approx. 1500 g (approx. 1800 g)



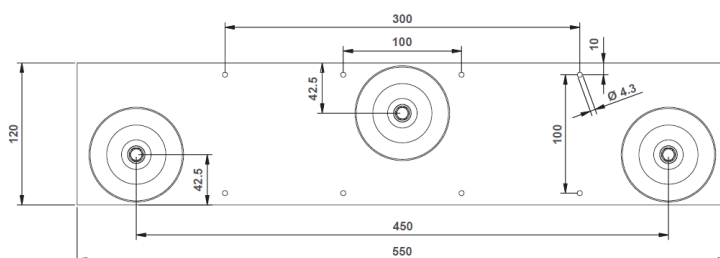
Special Features

- Tension sensor TSW with integrated measuring amplifier
- Guide rollers 60 mm groove Ø, V-grooved or U-grooved, ball-bearing mounted
- Various output signals are available:
 - analog: 0 – 1 V DC (standard), 0 – 10 V DC (optional)
 - current: 4 – 20 mA (optional)
 - analog DMS: mV/V (optional)
- Easy installation, even afterwards, on existing machines
- Different guide rollers are available, according to the application
- Easy calibration to customized material by operator – zero and gain calibration is required
- Measuring principle – load cell with high quality strain gauge bridge
- Tension sensor TSW with mechanical overload protection

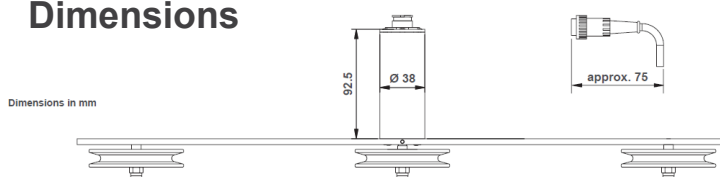
Standard Features

- Tension sensor TSW with rugged aluminum housing
- Required power supply +15...24 V DC (regulated)
- Certificate of Compliance with the order 2.1 according EN 10204 is included
- Optionally available: Inspection Certificate 3.1 according EN 10204 with calibration report

Tension Sensors TSW-20K and TSW-50K



Dimensions



Available Models

Model	Tension Range	Measuring Heas Width*	SCHMIDT Calibration Material**
TSW-20K	0 – 20 daN	550 mm	steel rope 1.50 mm Ø (7x7x0.20)
TSW-50K	0 – 50 daN	550 mm	steel rope 3 mm Ø (6x7x0.30)
TSW-100K	0 – 100 daN	550 mm	steel rope 4 mm Ø (6x7x0.50)