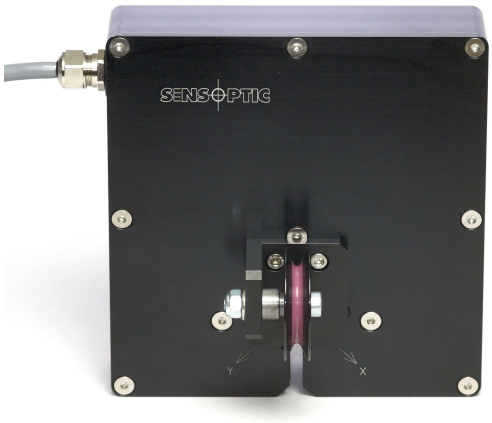
PROFILE SENSOR PXL 100-HR FOR WIRES

APPLICATIONS

Ultra-fast detection of short-term surface faults and diameter irregularities for continuous monitoring of bare and coated wires. Industrial quality control applied to enamelling, drawing, coating, extrusion, jacketing and colouring processes running at high line speeds. Precision detection of lumps, neck-downs, blisters, flaws, scratches, coating dropouts, contusions and surface roughness.

FEATURES AND BENEFITS

- optical measurement in two planes
- continuous IR-LED light beams
- 100 kHz ultra fast response
- micrometric resolution
- continuous real-time monitoring
- analogue output signals
- integrated signal pre-processing
- compact and rugged construction
- reliable and user-friendly
- immune to stray light
- not influenced by wire vibration
- precision roller bearing guides



SWISS MADE

INNOVATIVE CONCEPT

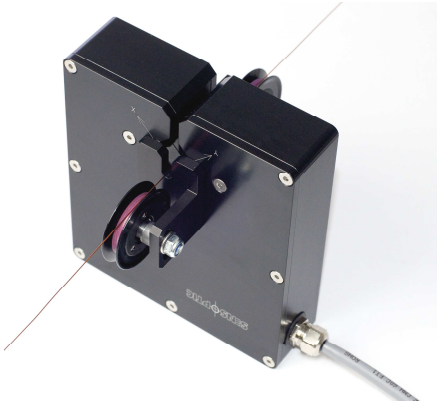
Advanced miniaturised optoelectronic components combined with fast analogue signal processing offer a new dimension in surface fault visualisation. Even at line speeds of 1000 m/min, PROFILE SENSOR allows accurate measurement and characterisation of micrometric short-term defects in real time. Together with SENSYSTEM, the sensor provides a unique surface roughness characterisation with statistically approved values.

DETECTION SPECIFICATIONS

Diameter measuring range:	0.3 mm to 3.0 mm (other ranges available upon request)
Measuring slit aperture:	10 mm x 0.25 mm
Sensitivity at 1000 m/min:	
For a fault length of 0.25 mm:	minimum fault height change of 10 μm

ELECTRONICAL SPECIFICATIONS

Continuous total light signal range (DC):	0 to 10 V
DC-signal set value, bandwidth:	7 ± 0.25 V, DC to 100 kHz
Lump and neckdown output signals:	0 to 10 V
Supply voltage, power consumption:	18 to 36 V DC, 5 W



MECHANICAL SPECIFICATIONS

Housing dimensions (without wire guides):	160 x 140 x 40 mm^3
Wire-guides:	precision bearing pulleys
Housing and wire-guides material:	black anodised aluminium
Net weight:	1500 g