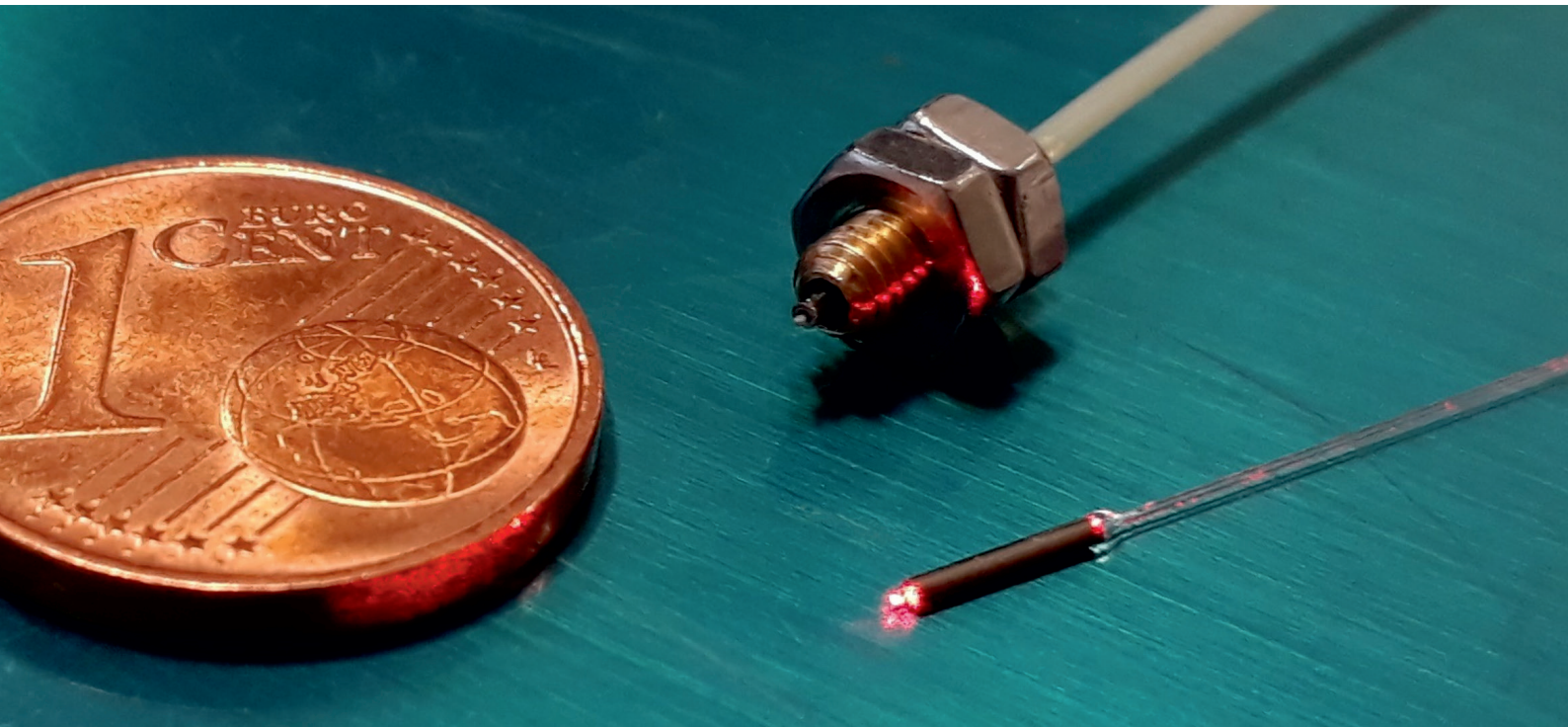


ULTRA PRECISE FIBER OPTICAL MICRO CONTACT PRESSURE SENSOR



AT A GLANCE

Miniaturized fiber optical contact pressure sensor for ultra precise tactile measurements.

Features

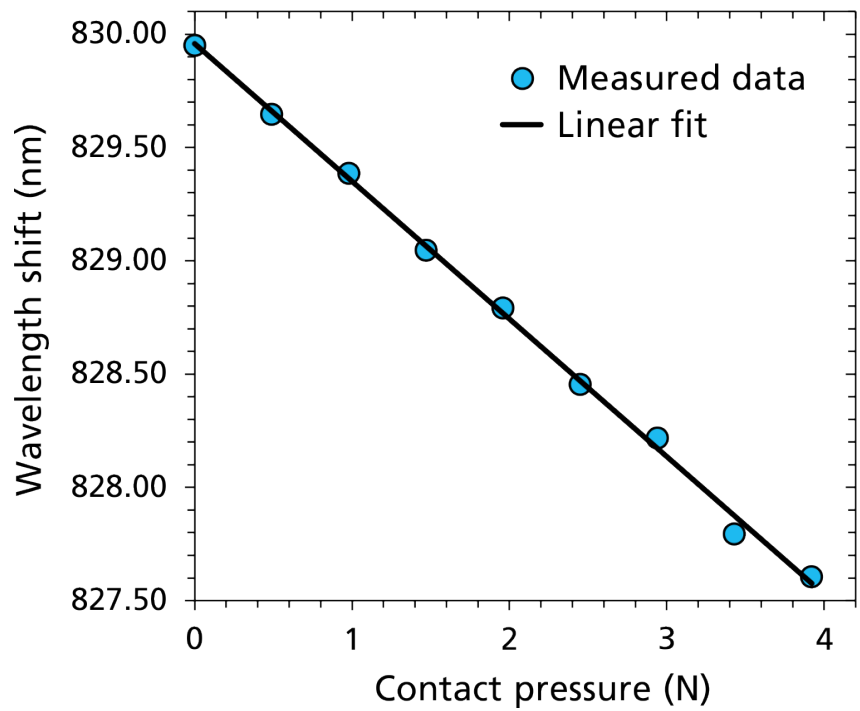
- Microsized dimension $\varnothing < 0.7$ mm
- High sensitivity
- Realtime data acquisition
- Single-mode fiber with standard plug

Applications

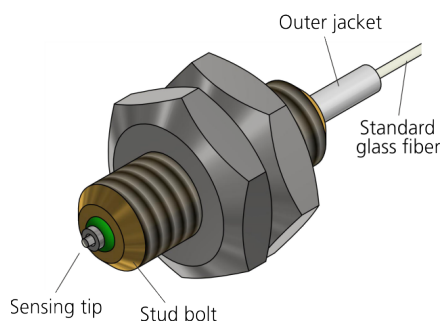
- Tactile monitoring
- Robotics
- Medical therapy

Technical Background

The fiber optical contact pressure sensor is based on the fiber Bragg grating (FBG) technology and enables contact pressure monitoring with high accuracy of < 0.18 N. In combination with the novel, ultra compact FBG interrogating system, a small, robust, and ultra precise contact pressure sensor can be offered for various applications.

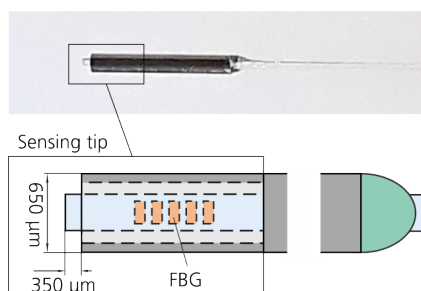


Measurement of the fiber optical contact pressure sensor: relation between applied contact pressure and wavelength shift



Specifications

- Sensitivity
0.60 nm/N
- Resolution
0.18 N (depending on interrogating system)
- Measuring range
Up to 4 N
- Dimensions
Ø 0.65 x 5.00 mm²



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