MICRO-EPSILON

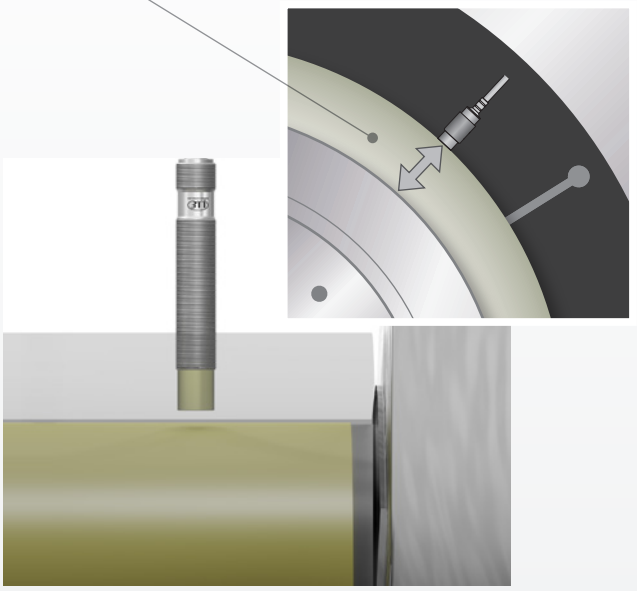
More Precision

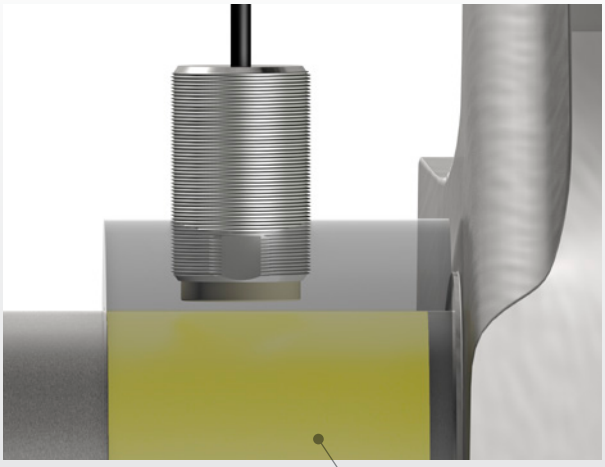
eddyNCDT // Inductive sensors based on eddy currents

Application examples
eddyNCDT

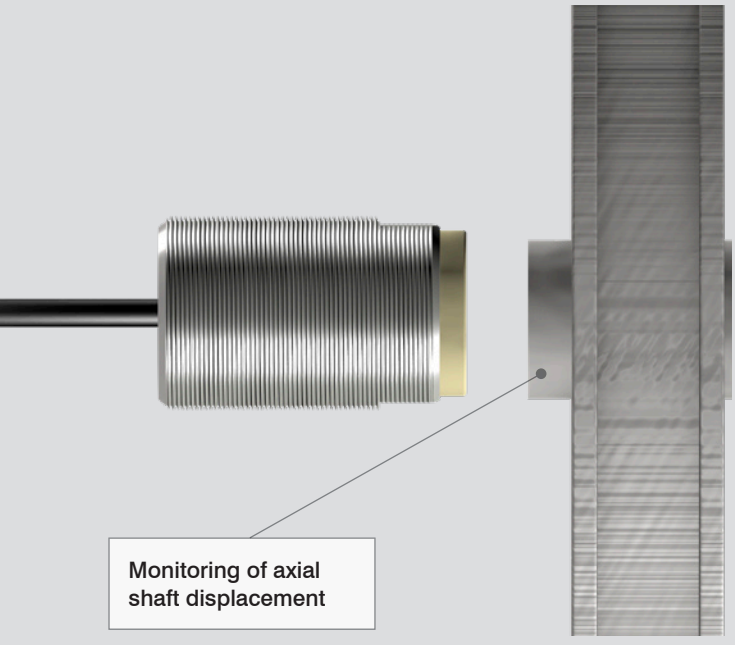
Eddy current sensors from Micro-Epsilon have many possible fields of application. High measurement accuracy and increased frequency response together with an extremely robust design enable measurements where conventional sensors are not suitable.

Oil gap measurement of drive shafts



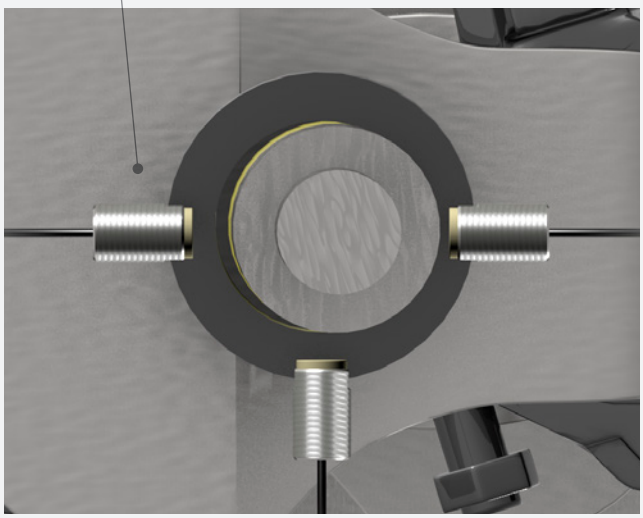


Run-out monitoring of rolls



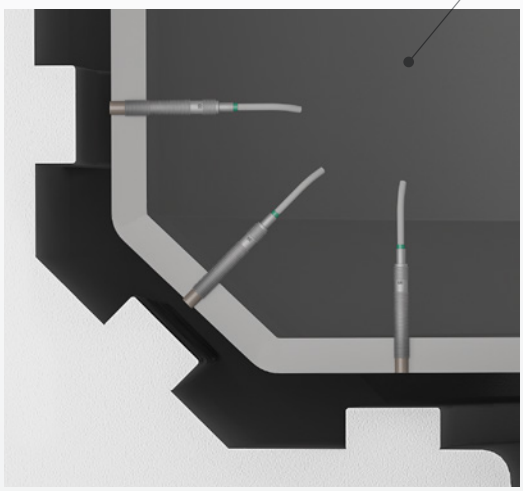
Monitoring of axial shaft displacement

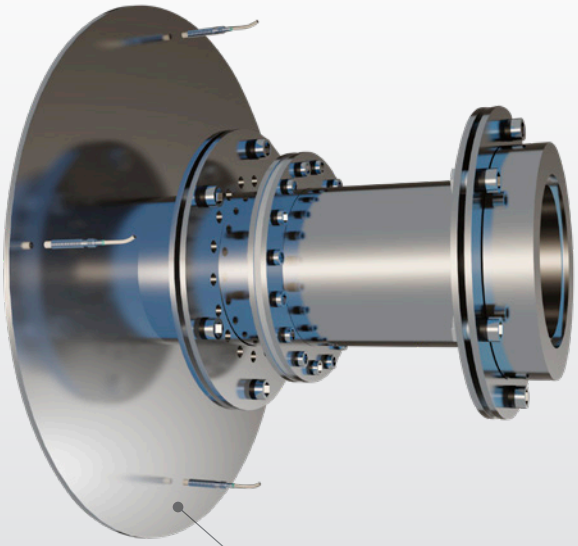
Measuring the radial shaft expansion



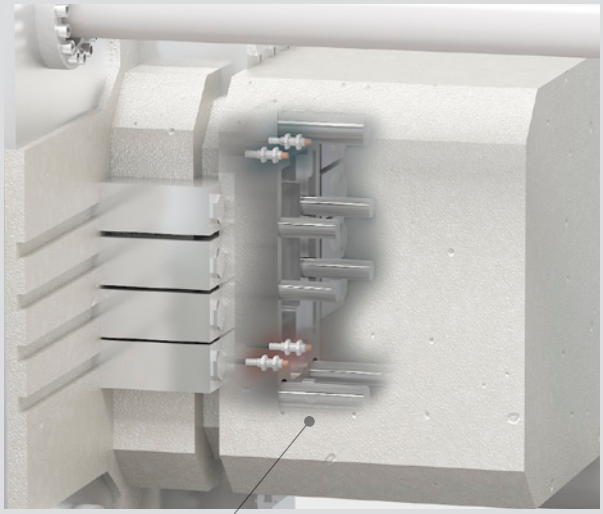
Environmental influences such as oil, temperature, pressure and moisture are largely compensated for and have a minimal effect on the signal. For this reason, the sensors are ideal in demanding application areas, such as industrial mechanical engineering and test bench construction.

Monitoring the supporting moments in wind turbines





Displacement measurement of the gear coupling



Gap measurement in aluminum die-casting molds

Run-out monitoring of gear shafts

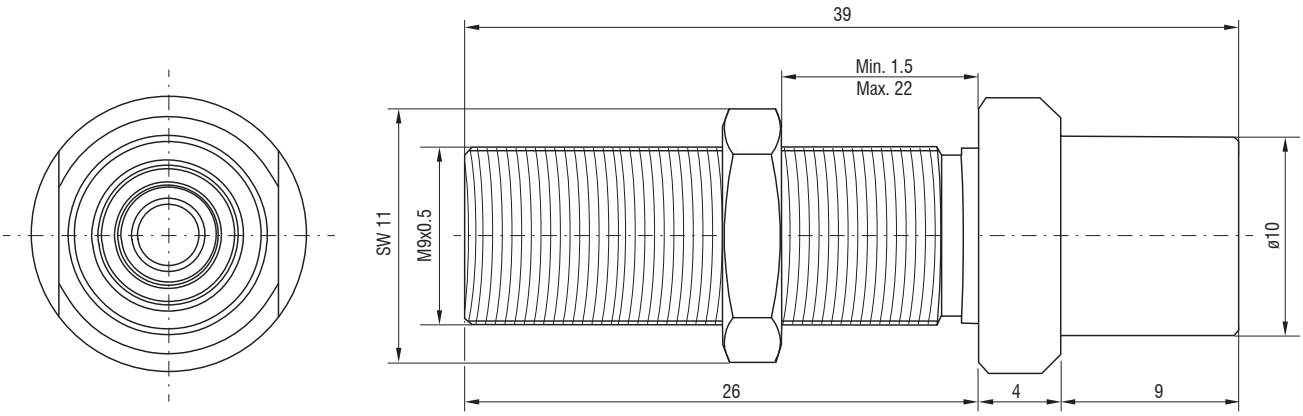
Plug system for vacuum applications
Vacuum feedthrough eddy/fB0/fB0/triax

The eddyNCDT series delivers high-precision measurement results even in airless rooms. The eddy/fB0/fB0/triax vacuum feedthrough also enables eddyNCDT products to be used in vacuum applications.

- Application in vacuums
- Application as a wall duct
- Pluggable version
- Compatible with all common eddyNCDT products

Vacuum feedthrough eddy/fB0/fB0/triax	
Housing material	CuZn39Pb3
O-ring material	FPM (Viton®)
Max. leakage rate (IEC standard 60068-2-17)	$<10^{-8}$ mbar*l/s
Operating temperature [1]	from -20 °C to 150 °C
Mating cycles (IEC 60512-5-9a)	10,000
Vibration (MIL-STD-202 Method 204 Condition B)	10 to 2,000 Hz, 1.5 mm or 15 g, 12 pass cycles per axis, 20 minutes per 10-2000-10 Hz pass cycle, no discontinuity >1 µs
Insulation resistance	10^{10} Ω

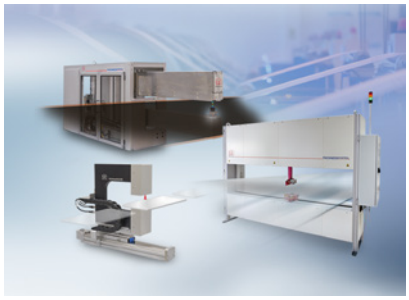
[1] Min. connection temperature: 0 °C



Sensors and Systems from Micro-Epsilon

Sensors and systems for displacement, distance and position

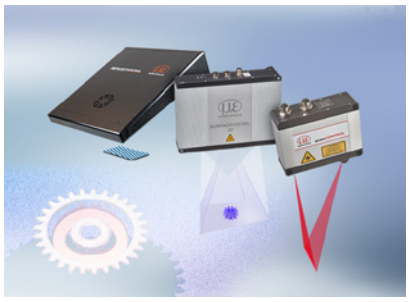
Sensors and measurement devices for non-contact temperature measurement



Measuring and inspection systems for metal strips, plastics and rubber

Optical micrometers and fiber optics, measuring and test amplifiers

Color recognition sensors, LED analyzers and inline color spectrometers



3D measurement technology for dimensional testing and surface inspection

MICRO-EPSILON

MICRO-EPSILON Headquarters
Koenigbacher Str. 15 · 94496 Ortenburg / Germany
Tel. +49 (0) 8542 / 168-0 · Fax +49 (0) 8542 / 168-90
info@micro-epsilon.com · **www.micro-epsilon.com**