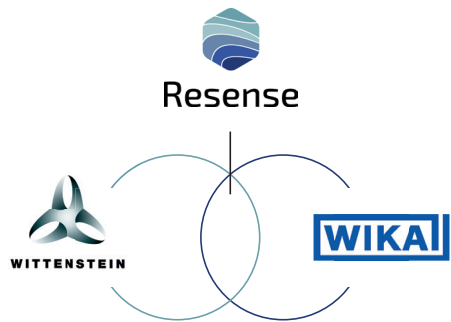


Resense is a Joint Venture of Two German Family Companies



Market Leader in Industrial Drive Technology

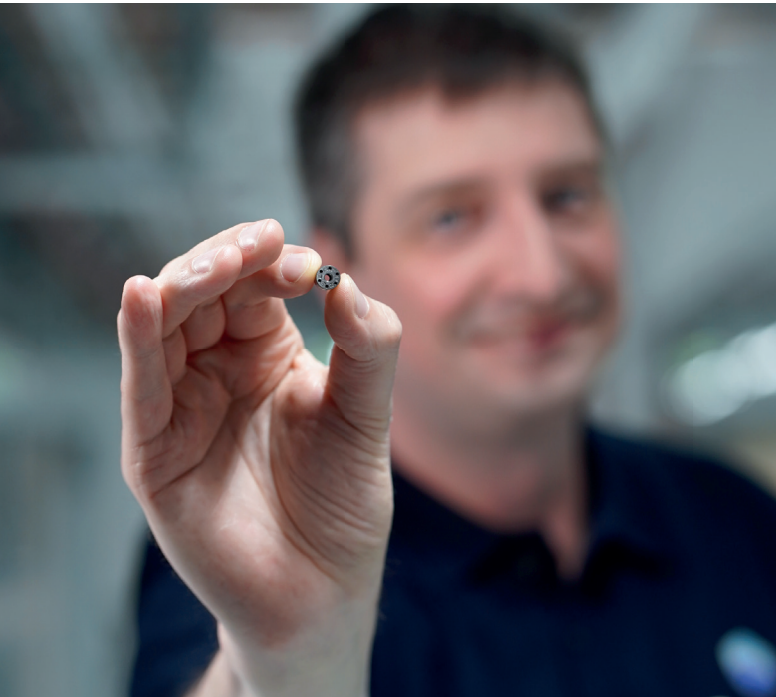
2,800 employees and
> 500 million EUR revenue

Innovation partner:
pre-development started
at WITTENSTEIN

Market Leader in Measurement Technology

11,000 employees and
> 1 billion EUR revenue

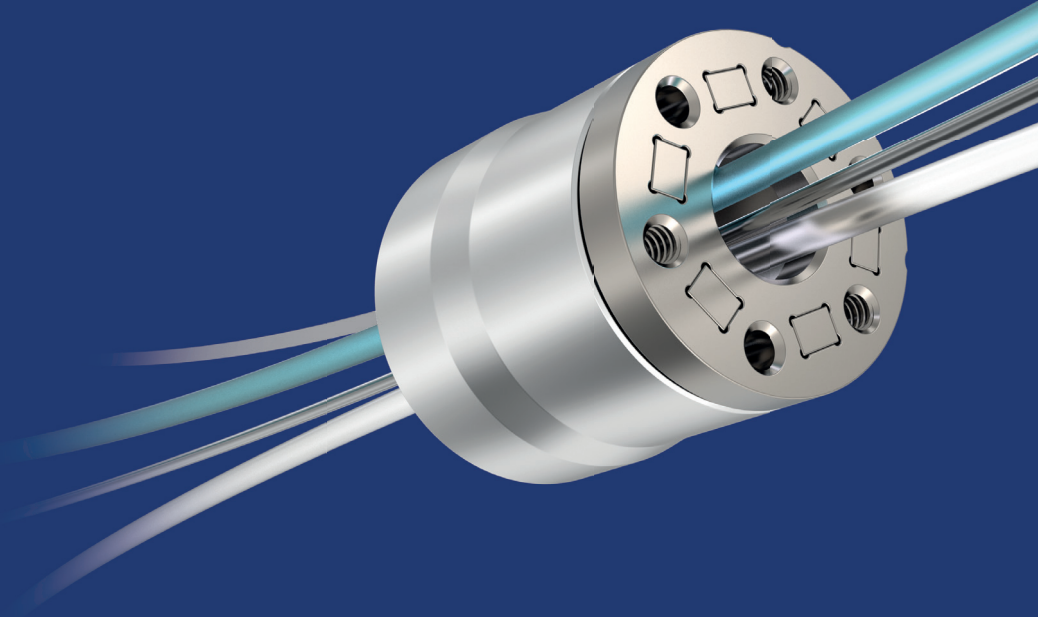
Manufacturing partner:
> 45 million sensors
sold per year



Sabrina Hock
Business Development
sabrina.hock@resense.io



Resense
A Sense of Touch



Resense GmbH

Alexander-Wiegand-Str. 30, 63911 Klingenberg, Germany
info@resense.io | +49 9372 132-0 | www.resense.io

Follow us on 

Force/Torque Sensors

www.resense.io



We Empower Your Application

Medical Robotics



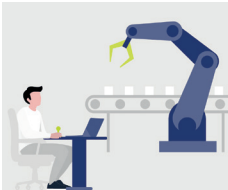
Surgical instruments
Haptic input devices

Service Robotics



Humanoid robot wrist
Robot fingertips

Industrial Robotics

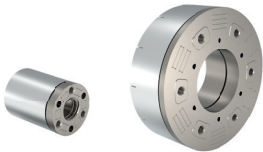


Industrial grippers
Control interfaces

Our Miniature F/T Sensors

HEX 8 / 12 / 21 / 32

- Small size of up to Ø 8 mm
- Force measurement down to 10 mN
- Ready to use sensor kit



Technical Data

	HEX8	HEX12	HEX21	HEX32
Dimensions				
Diameter in mm	8.4	12.5	21.0	32.0
Height in mm	10.9	10.9	10.9	11.1
Weight in g	1.4	3.3	9.9	50.0
Nominal measurement range				
Fx, Fy, Fz in N	± 25	± 25	± 50	± 125
Mx, My, Mz in Nm	± 0.100	± 0.125	± 0.500	± 2.250

Technical specifications

Resolution	± 10 bit (true), 3 σ
Accuracy	1%
Crosstalk	3%
Overload capacity	300 %

Product features

Material	Titanium grade 5
Protection class	IP20
Temperature range	0 - 50 °C
Technology	Silicon strain gauges, fullbridge
Cable	Flex cable with AXT connector Round cable directly connected to electronics

Our Sensor Kit

Miniature Electronics Box

- 6-channel force/torque and temperature
- Matrix calculation and compensation
- Embedded signal and filtering options

Technical Data

Dimensions	54 x 25 x 12.6 mm
Supply voltage	5 V
Interfaces	USB, UART
Sample rate	100 Hz, 500 Hz, 1 kHz
Resolution (ADC)	24 bit
Temperature range	0 - 50 °C



Force/Torque Explorer

- View & record real-time sensor data
- Export and import data in multiple formats
- Additional C++/Python utilities available

