



We Empower Your Application

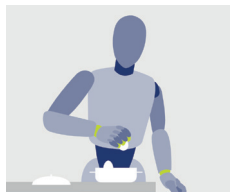
Medical Robotics



Surgical instruments

Haptic input devices

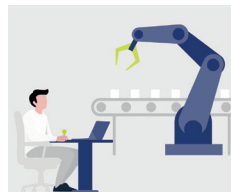
Service Robotics



Humanoid robot wrist

Robot fingertips

Industrial Robotics



Industrial grippers

Control interfaces

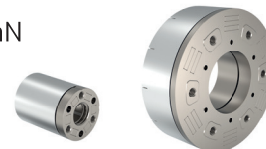
Our Miniature F/T Sensors

HEX 8 / 10 / 12 / 21 / 32

Small size of up to \varnothing 8 mm

Force measurement down to 10 mN

Ready to use sensor kit



Technical Data

	HEX8	HEX10	HEX12	HEX21	HEX32
Dimensions					
Diameter in mm	8.4	10.0	12.5	21.0	32.0
Height in mm	10.9	10.9	10.9	10.9	11.1
Weight in g	1.4	2.0	3.3	9.9	50.0
Nominal measurement range					
Fx, Fy, Fz in N	± 25	± 25	± 25	± 50	± 125
Mx, My, Mz in Nm	± 0.100	± 0.125	± 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	Silicon strain gauges
Cable	Flex cable with axial/radial cable outlet	Round cable with radial cable outlet

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

