

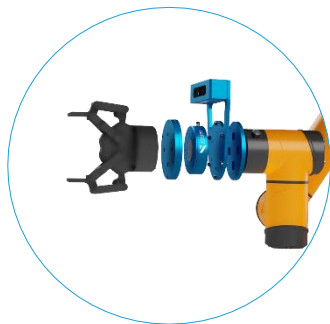
Key Features

Nordbo Robotics 50 kg 6-axis force torque sensor is rigid, robust and ideal for mounting on robots for precise force control. The sensor will only compress $2.3\mu\text{m}$ in z-axis given a 10kg load. This minimal deformation when being exposed to forces makes the NRS-6 ideal for applications such as grinding, polishing, buffing and deburring where high tool precision is required.

- High stiffness
- High resolution
- No programming needed
- Compact design
- Optional signal filtering
- Dust- & waterproof (IP67)



Applications



Pick and Place

Assembly

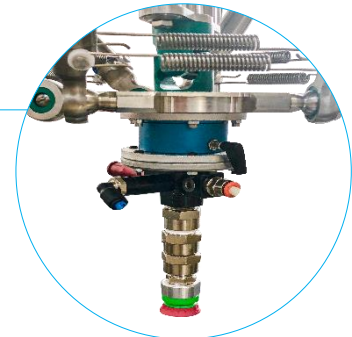
Quality Testing & Control

Part picking

Deburring

Machine Tending

Grinding & Polishing



Technical Specifications

Dimensions (Diameter x Height)	80 x 22 mm			
Weight	300 g			
Software	UR, AUBO & Codesys			
Hysteresis	< 0,2 %			
Crosstalk	< 5 %			
Maximum sampling frequency	1000 Hz			
Operating temperature	0° to 50°			
Operating humidity	< 85%			
Power requirement (CAN)	5 VDC @ 250 mA			
Power requirement (Ethernet)	6-40 VDC @ 1000 mA			
	F_x, F_y	F_z	T_x, T_y	T_z
Max force/torque	± 500 N	± 500 N	± 10 Nm	± 5 Nm
Resolution*	0,015 N	0,015 N	0,32*10 ⁻³ Nm	0,25*10 ⁻³ Nm
Overload**	± 700 N	± 1200 N	± 15 Nm	± 15 Nm
Signal noise**	0,025 N	0,032 N	0,35*10 ⁻³ Nm	0,4*10 ⁻³ Nm
Noise-free resolution	0,1 N	0,15 N	1,5*10 ⁻³ Nm	0,002 Nm
Full scale non-linearity	< 4%	< 4%	< 4%	< 4%
Axis deformation	30 µm	27 µm	0,2°	0,05°

* Signal noise is defined as the standard deviation of a typical one second no-load signal

** The sensor is not overload protected and may break if forces are not kept below the overload values for each axis.

Mechanical Dimensions

