

Torque sensors

for rotating and non-rotating applications



Torque sensors for non-rotating applications

	8625	8630	8631
Rel. Non-Linearity ($\leq \pm \% \text{ F.S.}$)	0.05	0.1	0.1
Measuring Ranges smallest: largest:	0 ... 0.01 Nm 0 ... 200 Nm	0 ... 2 Nm 0 ... 200 Nm	0 ... 5 Nm 0 ... 500 Nm
Special Features	High precision, compact design, optional integrated amplifier + USB, various accessories for different mounting possibilities, with burster TEDS available	Compact design, optional integrated amplifier + USB, immune to side loads thanks to built-in support bearings, various accessories for different mounting possibilities	Robust, reliable, precise, easy handling, for static and dynamic applications, with burster TEDS available, optional integrated amplifier + USB
Main Application Fields, Examples of Application	Reference sensor for experimental set-ups in precision engineering, determination of bearing friction torques, measurement of very small adjusting torques on vehicle operating elements	Checking tightening torques, determining frictional torques, measuring opening torques e.g. on screw caps	Static and dynamic measurements of non-rotating torque transmissions such as agitator drives, reaction torques of motors

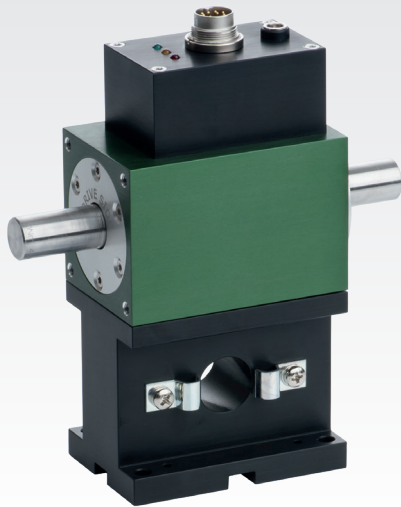
Torque sensors for rotating applications

	86403/86413/86423	8645/8646	8661
Rel. Non-Linearity ($\leq \pm \% \text{ F.S.}$)	0.1	1	0.05
Measuring Ranges smallest: largest:	0 ... 1 Nm 0 ... 1000 Nm	0 ... 2.5 Nm 0 ... 500 Nm	0 ... 0.02 Nm 0 ... 1000 Nm
Special Features	Small size, reliable, precise, rotating, turns clockwise or counter clockwise, for static and dynamic measurements, slip-ring transmission	Maintenance-free through contactfree signal transmission, integrated amplifier, round or square shaft versions, speed of rotation up to 5000 min ⁻¹ , very economical	Maintenance-free operation, 0 ... $\pm 10 \text{ V}$ voltage output, operational status indicator, high quality material and bearings, rotational speeds up to 25000 rpm Options: Angle and speed measurement with up to 2000 increments, 2 measuring ranges, shaft end with keyway, USB incl. software
Main Application Fields, Examples of Application	Inspection and adjustment of bolting tools such as screw-drivers, testing screwed joints, drag torque of motors and pumps, friction torques in gearboxes, bearings and seals, testing torsion springs, adjusting equipment in the automobile industry	Automobile technology (steering, gear-boxes, engines), drilling systems, bolting tools, textile machines, test beds, printing technology, pumps, fitness equipment, conveying equipment, household devices	Measurement of actuating, holding, breakaway or tightening torques, USB interface makes on-side measurements with visualization and archival of measurement values possible, robust and vibration-proof, operation in bio, precision and micro mechanics, at engine test-benches, in medical and test-bench engineering



Torque Sensor Accessories

Mounting block 8661-Z00X

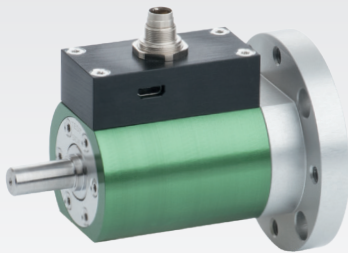


The mounting block has a central hole and special design allowing a range of options for reliable cable attachment. Two clips ensure the sensor is fixed securely.

Thanks to locating pins, the sensor can be replaced quickly if necessary, with no need for time-consuming realignment.

For further information please see accessories data sheet.

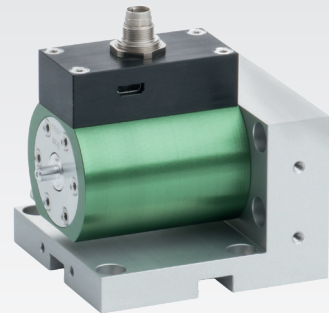
Flange-mounted model 8625-Z001



The flange adapter allows easy integration of the sensor in existing equipment with a flange connection.

For further information please see accessories data sheet.

Bracket-mounted model 8625-Z002



The bracket provides a quick-to-fit and stable fixture for the sensor.

For further information please see accessories data sheet.

Metal-bellow coupling series 8690



Metal-bellows couplings provide optimum misalignment correction. For an optimal compensation of misalignment we recommend torsionally-free metal bellow couplings. They are characterized by their excellent torsional stiffness during torque load and their low restoring forces.

For further information please see accessories data sheet.

Metal-bellows coupling series 8691



Metal-bellows couplings provide optimum misalignment correction. For an optimal compensation of misalignment we recommend torsionally-free metal bellow couplings. The clamp fasteners come in two parts for easy and reliable fitting/removal.

For further information please see accessories data sheet.

