

"Slim" Torque Transducer SCHATZ®INSPECT

SCHATZ®
ADVANCED QUALITY



previously

now

- measurement range from 0.2 to 50 N·m
- accuracy class 0.5
- reference measurement of multiple nutrunners with a sting measure from 32 mm
- impulse nutrunner proof
- SCHATZ-AUTOCODE identification

Application

The torque transducer with rotary shaft is particularly suitable for dynamic measurement of torques during bolted assembly. Air powered, electric or impulse nutrunners can be tested or monitored during the working sequence in production and in the workshop or laboratory.

For the first time the slim style of this transducer is offering reference measurements of multiple nutrunners with a sting measure from 32 mm.

The transducer is suitable for regular random-sample testing of repeatable accuracy of nutrunners in mass- production assembly because the square drives enable it to be fitted quickly.

The torque transducer can also be used for static operation or for continuous operation in measuring of friction.

Description

The measurement shaft of the torque transducer is fitted with strain gauges. Power is supplied and the measurement signals transferred via extremely low wear sliprings.

The drive of the torque transducer is fitted with female square drive and male square output according to ISO 1174.

This enables the transducer to be fitted quickly between nutrunner and socket tool.

A rugged aluminium housing protects the internal parts of the torque transducer, so that measurements are possible under rough production conditions.

The transducers are equipped with a permanently 5-metre connecting cable provided with a connecting plug for SCHATZ measuring instruments or alternatively with a LEMO plug.

The integrated SCHATZ-AUTOCODE-System automatically identifies and calibrates the transducer at connection.

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Technical Data	5413-1160					
Model-No.	/1	/2	/5	/10	/20	/50
Capacity N-m / lb-ft	1 / 0.738	2 / 1.475	5 / 3.688	10 / 7.38	20 / 14.75	50 / 36.88
Square	1/4"	1/4"	1/4"	1/4"	1/4"	3/8"
Weight/kg (without cable)	0.2	0.2	0.2	0.2	0.2	0.25
Maximum permissible axial force/N	20	40	100	200	400	1000
Maximum permissible bending/N-m	0.07	0.10	0.20	0.20	0.40	1.00
Accuracy class to DIN 51309	0,5					
Accuracy	± 0.25 %					
Maximum service load	1.2 x measurement range (20% overload)					
Breaking load	1.5 x measurement range (50% overload)					
Bridge resistance	350 Ω					
Calibration resistance	40 kΩ					
Nominal sensitivity	2 mV/V					
Nominal sensor supply voltage range	10 V					
Maximum sensor supply voltage	15V					
Rated temperature range	0...70°C					
Service temperature range	-20...80°C					
Storage temperature range	-40...85°C					
Maximum rotational speed	5000 U/min					

These transducers are also available with plug (LEMO/2G/14 pts) instead of the standard 5 m cable.

Dimensions/connection dimensions			
Connecting cable	permanently connected, 5 m long		
Plug	ODU-Mini-Snap Serie B 16-pole pin		
Dimensions/mm	A	94	75
	B	20	8
	C	18.5	11.5
	D Ø	10	12
			83
			11.5
			16
			20

