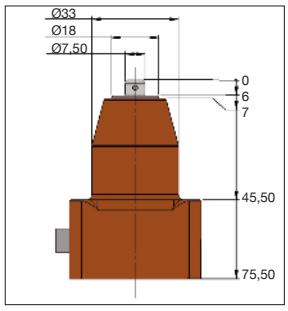
Static Torque Sensors

“Smart” Sensors for use with AFTI display or Advanced Force Gauge (AFG)

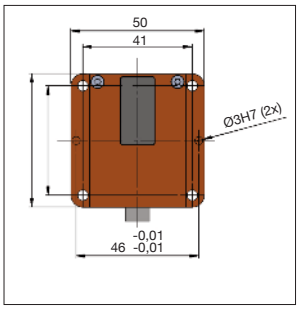
Static Torque Transducer – ‘Smart’ (low-torque)

For mounting to a bench or integrating into a complete test rig.
Equipped with ¼” HEX Socket or 3mm bore for fitting of adaptors.

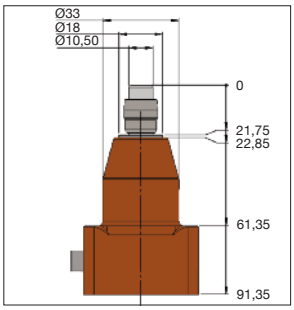
Model	Part No.	Capacity						Drive	H (mm)	W (mm)	D (mm)
TT-ST0.05	872 - 030	50	mN.m	500	gf.cm	7	ozf.in	Bore Ø3 H7	75	50	50
TT-ST0.20	872 - 032	200	mN.m	2000	gf.cm	28	ozf.in	Bore Ø3 H7	75	50	50
TT-ST0.50	872 - 033	500	mN.m	5	kgf.cm	4.5	lbf.in	¼” HEX Socket	91	50	50
TT-ST1	872 - 034	1	N.m	10	kgf.cm	9	lbf.in	¼” HEX Socket	91	50	50
TT-ST2	872 - 035	2	N.m	20	kgf.cm	18	lbf.in	¼” HEX Socket	91	50	50



Side view of
TT-ST0.05 and TTST0.20
(Ø3 H7 bore)



Top View of all TT models

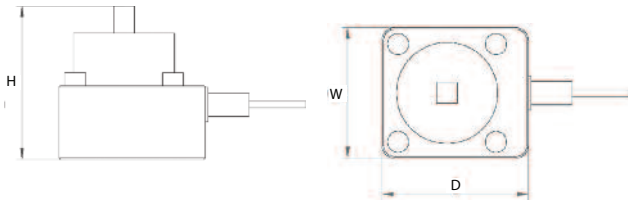


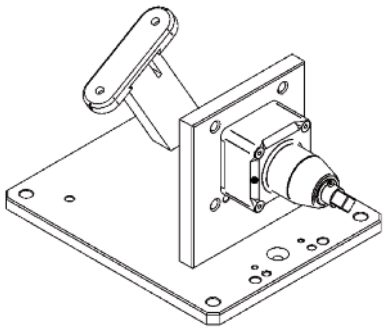
Side view of
TT-ST0.50, TT1 and TT-ST2
(¼” HEX Socket)

Accuracy ±0.5% of full scale

Static Torque Transducer - ‘Smart’ (mid & high-torque)

For mounting to a bench or integrating into a complete test rig.
Equipped with male square drive for easy fitting of adaptors.





Bench Mounting Stand
Part No 432-401 suitable for ‘mid & high-torque’
ST Torque Sensors

Model	Part No.	Capacity						Sq Drive Male	H (mm)	W (mm)	D (mm)
ST1.5	872 - 001	1.5	N.m	15	kgf.cm	13	lbf.in	1/2”	87	80	90
ST6	872 - 009	6	N.m	60	kgf.cm	53	lbf.in	1/2”	87	80	90
ST10	872 - 004	10	N.m	100	kgf.cm	90	lbf.in	1/2”	87	80	90
ST15	872 - 006	15	N.m	150	kgf.cm	133	lbf.in	3/8”	87	80	90
ST60	872 - 008	60	N.m	600	kgf.cm	530	lbf.in	3/8”	87	80	90
ST100	872 - 003	100	N.m	1000	kgf.cm	870	lbf.in	1/2”	93	80	90
ST150	872 - 005	150	N.m	1500	kgf.cm	1300	lbf.in	1/2”	93	80	90
ST600	872 - 007	600	N.m	6000	kgf.cm	5200	lbf.in	3/4”	113.5	78.7	100
ST1000	872 - 002	1000	N.m	10000	kgf.cm	8850	lbf.in	1”	124	78.7	100

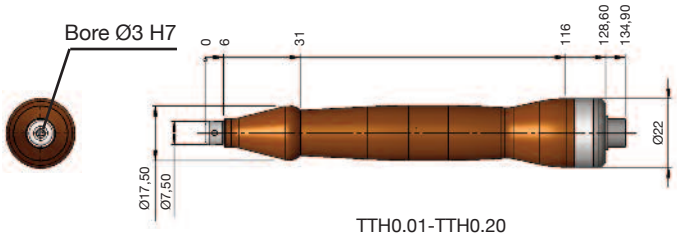
Accuracy ±0.5% of full scale

Static 'Mini' Torque Screwdriver - 'Smart' (low-torque)

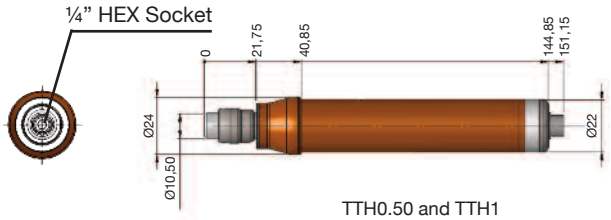
For hand-held applications requiring the measurement of miniature torque below 1 N.m.

Not suitable for applications, which require multiple rotations of the sensor - use Rotary Torque Transducers (see page 9).

Model	Part No.	Capacity			Drive	L1 (mm)	Ø (mm)
TTH0.01	871 - 100	10 mN.m	100 gf.cm	1 ozf.in	Bore Ø3 H7	135	22
TTH0.05	871 - 101	50 mN.m	500 gf.cm	7 ozf.in	Bore Ø3 H7	135	22
TTH0.10	871 - 102	100 mN.m	1000 gf.cm	14 ozf.in	Bore Ø3 H7	135	22
TTH0.20	871 - 105	200 mN.m	2000 gf.cm	28 ozf.in	Bore Ø3 H7	135	22
TTH0.50	871 - 103	500 mN.m	5 kgf.cm	4.5 lbf.in	¼" HEX Socket	151	22
TTH1	871 - 104	1 N.m	10 kgf.cm	9 lbf.in	¼" HEX Socket	151	22



TTH0.01-TTH0.20



TTH0.50 and TTH1

Accuracy ±0.5% of full scale

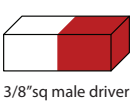
Static Torque Screwdriver - 'Smart' (mid-torque)

For mid capacity applications. Used as hand-held devices or may be mounted in a bench stand for stationary use Part No 432-402. Not suitable for applications, which require multiple rotations of the sensor - use Rotary Torque Transducers (see page 9).

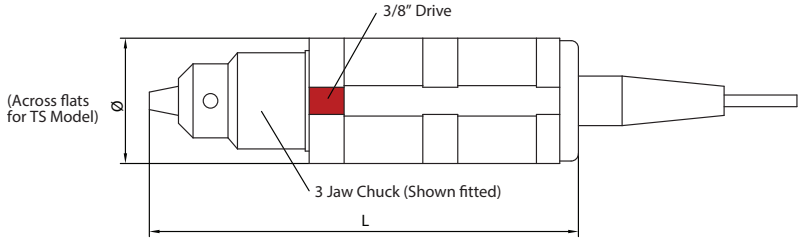
Model	Part No.	Capacity			Drive	L (mm)	Ø (mm)	Weight (g)
TS0.3	871-004	0.3 N.m	3 kgf.cm	2.6 lbf.in	3/8" sq male/3 jaw chuck	143	43	660
TS1.5	871-002	1.5 N.m	15 kgf.cm	13 lbf.in	3/8" sq male/3 jaw chuck	143	43	660
TS3	871-003	3 N.m	30 kgf.cm	26 lbf.in	3/8" sq male/3 jaw chuck	143	43	660
TS6	871-005	6 N.m	60 kgf.cm	53 lbf.in	3/8" sq male/3 jaw chuck	143	43	660
TS10	871-001	10 N.m	100 kgf.cm	90 lbf.in	3/8" sq male/3 jaw chuck	143	43	660

Supplied as standard with both 3/8" sq male drive & 3/8" opening 3 jaw chuck

Part No 432-113 1/2" opening Chuck Assembly for use with 'TS' Torque Screwdriver (optional extra)



3/8"sq male driver



Accuracy ±0.5% of full scale

Rotary Torque Sensors

“Smart” Sensors for use with AFTI display or Advanced Force Gauge (AFG)

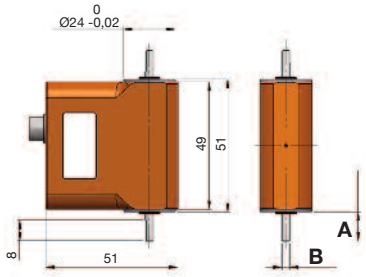
Mini Rotary Torque Transducers- ‘Smart’ (low-torque)

A complete range of mini sensors for measuring rotary torque below 1 N.m.

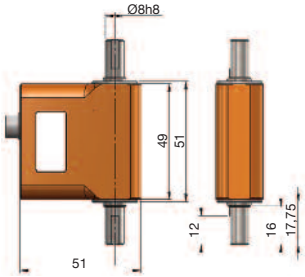
‘Mini’ (low-torque) TTR range

Model	Part No.	Capacity						A Shaft Length (mm)	B Shaft Ø (mm)
TTR0.05	877 - 030	50	mN.m	500	gf.cm	7	ozf.in	11.2	Ø 3h8
TTR0.10	877 - 031	100	mN.m	1000	gf.cm	14	ozf.in	10.4	Ø 5h8
TTR0.20	877 - 032	200	mN.m	2000	gf.cm	28	ozf.in	10.4	Ø 5h8
TTR0.50	877 - 033	500	mN.m	5	kgf.cm	4.5	lbf.in	17.75	Ø 8h8
TTR1	877 - 034	1	N.m	10	kgf.cm	9	lbf.in	17.75	Ø 8h8

Accuracy ±0.5% of full scale



TTR0.05 - TTR0.20



TTR0.50 - TTR1

Rotary Torque Transducers - ‘Smart’ (mid & high-torque)

A complete range of sensors for measuring rotary torque. Suitable for dynamic torque applications with multiple revolutions (e.g. window-winder mechanism).

‘FAST’ (mid and high torque) range

Model	Part No.	Capacity						Drive	L1 (mm)	L2 (mm)	L3 (mm)	Ø (mm)	Max rpm
FAST 2 N.m sq	877 - 020	2	N.m	20	kgf.cm	18	lbf.in	1/4” square	70	16	10	40	1000
FAST 2 N.m rd	877 - 021	2	N.m	20	kgf.cm	18	lbf.in	Ø 9mm round*	70	28	28	40	5000
FAST 6 N.m sq	877 - 022	6	N.m	60	kgf.cm	53	lbf.in	1/4” square	70	16	10	40	1000
FAST 6 N.m rd	877 - 023	6	N.m	60	kgf.cm	53	lbf.in	Ø 9mm round*	70	28	28	40	5000
FAST 15 N.m sq	877 - 024	15	N.m	150	kgf.cm	133	lbf.in	1/4” square	70	16	10	40	1000
FAST 15 N.m rd	877 - 025	15	N.m	150	kgf.cm	133	lbf.in	Ø 9mm round*	70	28	28	40	5000
FAST 60 N.m sq	877 - 026	60	N.m	600	kgf.cm	530	lbf.in	3/8” square*	70	24	13	50	1000
FAST 60 N.m rd	877 - 027	60	N.m	600	kgf.cm	530	lbf.in	Ø 14mm round*	70	28	28	50	5000
FAST 150 N.m sq	877 - 028	150	N.m	15.3	kgf.m	111	lbf.ft	1/2” square	70	35	19	50	1000
FAST 150 N.m rd	877 - 029	150	N.m	15.3	kgf.m	111	lbf.ft	Ø 19mm round*	70	55	55	50	5000

- Maximum axial force is 40 N
- Maximum lateral radial force is 50 N
- Accuracy ±1% of full scale

* fitted with keyway