DTS ScrewMaster Range

Digital torque screwdrivers and wrenches

DTS ScrewMaster - Transducerised screwdriver with integrated display

KEY FEATURES

- ✔ Point of load insensitive
- ✔ 1/4” hex female drive

The DTS ScrewMaster is a simple to use, point of load insensitive, tranducerised screwdriver with an integrated digital display. It features two measurement modes for displaying either peak or real time torque. Upper and Lower Limits can be set in peak mode enabling an audible signal and an LED to indicate HI, OK or LO fastener status.

For traceability up to 100 date and time stamped readings are stored and can be downloaded to a printer or a PC for archiving or further processing of data.

UTA and IS ScrewMaster - Simple transducerised screwdriver for use with an external display

KEY FEATURES

- ✔ Point of load insensitive
- ✔ Measures torque applied during fastening operation or inspection overcheck (move on) in conjunction with TorqueStar Opta
- ✔ Auto ID with Crane readouts (UTA only)

The UTA/IS ScrewMaster is a simple transducerised screwdriver used in conjunction with an external readout/data collector. It measures the torque applied directly to the fastener during the assembly operation or inspection overcheck, communicating the data to a suitable readout for immediate verification and subsequent data collection.

The Industry Standard (IS) version offers the features of the ScrewMaster but allows the user to connect to a readout device from another manufacturer.

The transducer element of both the DTS and UTA/IS ScrewMaster is directly in line with the hex drive, thus making measurement completely independent of the point of load.

DTS Wrench - Low range torque wrench with an integrated display

KEY FEATURES

- ✔ Point of load insensitive
- ✔ Peak or track torque measurement on integrated display

The DTS Wrench is simple to use, point of load insensitive, torque wrench with an integrated digital display. It features two measurement modes for displaying either peak or real time torque. Upper and Lower Limits can be set in peak mode enabling an audible signal and an LED to indicate HI, OK or LO fastener status.

For traceability up to 100 date and time stamped readings are stored and can be downloaded to a printer or a PC for archiving or further processing of data.

DTS ScrewMaster Range Technical Specification

		DTS ScrewMaster	UTA/IS ScrewMaster	DTS Wrench
Physical measurements	Bi-directional torque (clockwise calibration unless otherwise requested)	✔	✔	✔
Integrated display	Complete system – no need for separate readout	✔		✔
Measurement units	Nm, Ncm, kgfcm, kgfm, ozfin, lbfin, lbft	✔		✔
Measurement modes	Track – real time torque Peak (Auto-reset) – display and capture of highest torque value during the cycle; direction determined by threshold setting; value overwritten when new cycle started (i.e. threshold torque exceeded) Peak (Manual-reset) – display of highest absolute torque value since last manual reset; no discrimination between + or – torque direction	✔		
Measurement parameters	Threshold torque; Upper/Lower Specification Limits (USL can be up to 110% of nominal rating)	✔		✔
Cycle status indication	Tri-colour LED indicating HI/OK/LO torque status	✔		✔
Data storage	100 reading non-volatile memory of torque value only	✔		✔
Print modes & PC compatibility	Single reading or page mode with header including serial number and recalibration date via RS232	✔		✔
Interchangeable attachments	Equipped with a 1⁄4” female hexagonal drive – compatible with a wide range of tool adapters		✔	
Construction	Point of load insensitive – transducer element in line with socket drive Aluminium body Shaft material: stainless steel Overload capacity: 125% rated torque 1⁄4” female hexagonal drive	✔	✔	
Calibration	Issued with calibration certificate traceable to National and International Standards IS transducers are normalised calibration unless indicated in table Standard Crane calibration: 10 points; single direction (clockwise unless otherwise requested) 10% to 100% of nominal torque Bi-direction Crane calibration: 10 points; each direction; from 10% to 100% of nominal torque UKAS calibration: calibration to ISO 26789 Recalibration is recommended every 12 months	✔	✔	✔
Zero stability	< ± 0.1% FSD/°C	✔	✔	✔
Static accuracy	± 0.5% FSD (Full Scale Deflection)	✔	✔	✔

DTS ScrewMaster Range Technical Specification (cont.)

		DTS ScrewMaster	UTA/IS ScrewMaster	DTS Wrench
Operating environment	Temperature: 5 – 40°C Humidity: 10 – 75% non-condensing Ingress protection rating: IP40 (indoor use)	✔	✔	✔
Warranty	12 months parts and labour against faulty workmanship or materials	✔	✔	✔
Transducer types	**IS**: 'Industry Standard' version; bridge resistance: 350 Ohms; sensitivity: see table below **UTA**: 'High Output' version; bridge resistance: 350 Ohms; output: 2.5v FSD **Excitation voltage**: 5V		✔	
Connections	HO version: 1m integral cable with strain relief; 25-pin 'D' port (male) for connection to Crane's UTA system readouts IS version: output connector to MIL-C 26482 / BS 9522 FOO 17; shell size 8-4P		✔	
Display	3½ digit LCD display; 10mm characters; incorporating additional mode and status symbols	✔		✔
Keypad	Membrane keypad with 6 function keys	✔		✔
Auto zero	Auto zero on power-up; display indication of excessive zero offset	✔		✔
Power	Standard Alkaline Manganese (supplied) type 'C' cells; 100 hours usage	✔		✔
Power management	User selectable auto power off: 1, 2, 5, 10 minutes	✔		✔
Input/output ports	Serial output: RS232C; user programmable baud rates and protocols Analogue output: ±1V dc at rated torque.	✔		✔
Printer compatibility	RS232 output baud rate: 300; 600; 1200; 2400; 4800; 9600; Stop bits: 1; 2; Parity: odd; even; None	✔		✔

Product Codes

DTS ScrewMaster

SIZE	CODE
1 Nm	DTS-485-0-0
2 Nm	DTS-485-01CR-2-0
5 Nm	DTS-486-0-0

UTA ScrewMaster

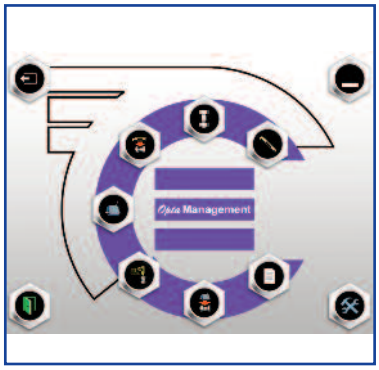
SIZE	CODE
1 Nm	UTA-481-0-1-40-0
2 Nm	UTA-481-0-40
5 Nm	UTA-482-0-40

DTS Wrench

SIZE	CODE
5 Nm	DS-440-01CR-5-0
10 Nm	DS-440-02CR-10-0
25 Nm	DS-440-03CR-25-0

IS ScrewMaster

SIZE	CODE
2 Nm	IS-483-0-1
5 Nm	IS-484-0-1



OMS

- ✔ Single database to store torque information from all departments
- ✔ All data completely traceable and secure

tJRS *Opta*

- ✔ A joint simulator using a threaded fastener and nut
- ✔ Fully automatic quick release of fastener

IQWrench2 *Opta*

- ✔ Point of load insensitive
- ✔ Interchangeable head attachments with auto ID and calibration

TorqueStar *Opta*

- ✔ Torque or force indicator and data collector
- ✔ Simple readout to comprehensive audit tool

CheckStar

- ✔ In line transducer with optional angle measurement
- ✔ Accuracy +/– 0.25% of full scale

Service Centres

- ✔ Centres throughout the world
- ✔ Fully traceable calibration and repair service

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