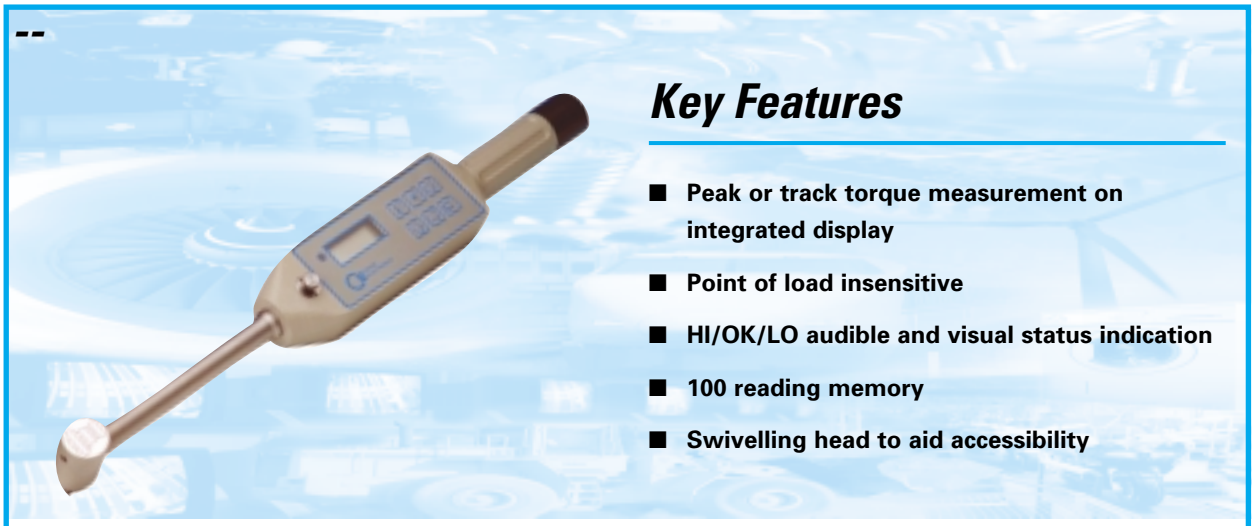
DTW

Digital torque wrench



Key Features

- **Peak or track torque measurement on integrated display**
- **Point of load insensitive**
- **HI/OK/LO audible and visual status indication**
- **100 reading memory**
- **Swivelling head to aid accessibility**

Product Overview

DTW is a simple to use, point of load insensitive, transducerised torque wrench with an integrated digital display.

DTW 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.

The transducer element of the DTW is directly in line with the wrench drive, thus making the DTW's measurement completely independent of the point of load. This means that the operator can be assured of a correct measurement however the wrench is held and torque applied – particularly useful in limited access situations where the drive head of the DTW can also be swivelled through +/- 135° in 45° increments to aid accessibility. For traceability up to 100 date and time stamped readings are stored and can be downloaded to a printer or PC for archiving or further processing of data.

The DTS-W subrange of lower torque wrenches feature a display in a separate housing, connected to the wrench by a curly cable, supplied with a neckstrap.

Specifications

Functional Attributes

Special features	Swivelling head to aid accessibility – 135° movement in 45° increments
Integral display	Complete system – no need for separate readout
Physical measurements	Bi-directional torque (clockwise calibration unless otherwise requested)
Measurement units	Nm, Ncm, kgfcm, kgfm, ozfin, lbfin, lbfft
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 (i.e. + or -) torque value since last manual reset; no discrimination between + or – torque direction.

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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

Physical Attributes

Calibration	Issued with calibration certificate traceable to National and International Standards. **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:** ISO 26789 Recalibration is recommended every 12 months. The calibration due date is stored in memory and is included in the RS232 output header.
Construction	Point of load insensitive – transducer element in line with socket drive Body: aluminium. Wrench head/arm: steel Shaft material: steel Swivelling wrench head to aid accessibility Overload capacity: 125% rated torque Square drives fitted with ball and spring socket retainer Lower torque range DTW feature separate display housing connected by curly cable
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; typ. 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. Battery charge: NiCad batteries only, via external port without removing from unit
Printer compatibility	RS232 output baud rate: 300; 600; 1200; 2400; 4800; 9600. Stop bits: 1; 2. Parity: odd; even; none
Zero stability	< ± 0.1% FSD/°C
Static accuracy	± 0.5% FSD
Operating environment	Temperature: 5 – 40°C (0 – 50°C with reduced specification) Humidity: 10 – 75% non-condensing Ingress Protection rating: IP40. Designed for indoor use only.
Warranty	12 months parts and labour against faulty workmanship or materials
Shipping list	DTW wrench unit Injection moulded storage case Calibration certificate User manual Quick menu 'jogger card'

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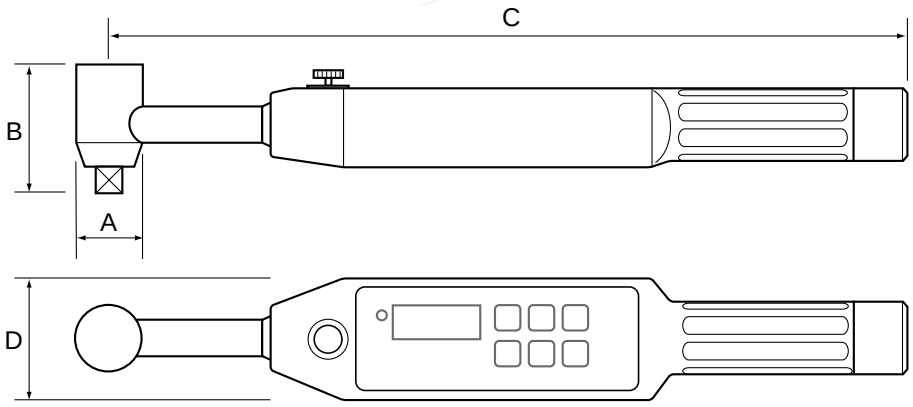
Dimensions & weights



Dimensions in mm						
Drive	Torque Capacity	A	B	C	D	Weight (Kg)
¼" AF	25Nm	26	52	365	68	1.8
⅜"AF	75Nm	26	56	365	68	1.8
½" AF	150Nm	32	67	504	68	2.1
½" AF	300 Nm	40	72	804	68	3
¾" AF	750 Nm	50	102	1204	68	5.5
1" AF	1500 Nm	65	114	1870	68	11

Order Codes

Order Code	*Drive*	*Nominal torque*	
		Nm	*Imperial (ft lbf)*
DTW with separate display housing			
DS-440-01CR-5-0	¼"	5	44(in lbf)
DS-440-02CR-10-0	¼"	10	7.4
DS-440-03CR-25-0	¼"	25	18
DTW			
DTW-432-0-0	¼"	25	18
DTW-433-0-0	⅜"	75	55
DTW-434-0-0	½"	150	111
DTW-435-0-0	½"	300	221
DTW-436-0-0	¾"	750	553
DTW-684-0-1500-0-0	1"	1500	1106

Accessories List

Item	*Description*	*Order code*
DTW RS232 to printer cable	Connection cable for printer	727-1500
DTW RS232 to PC cable	Connection cable for PC	CBL-729-0-0-0-0

Calibration service

Crane Electronics Ltd operates a calibration laboratory accredited by UKAS, the UK Accreditation Service. All Crane products are issued with a calibration certificate traceable to National and International Standards. It is recommended that torque instrumentation is recalibrated at least every 12 months.

Crane Electronics Ltd operates a policy of continuous product development and improvement, and so technical specifications may change without notice. Please clarify with Crane or your distributor that you are referring to the latest technical data sheet.

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The force in torque management

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