

Key Features

- Measures torque applied during fastening operation or inspection overcheck
- Point of load insensitive
- Plug & Play with Crane display systems (Auto ID)
- Rugged construction

Product Overview

Crane’s UTA and IS torque wrenches have proven reliability in the workplace.

UTA and IS wrenches measure the torque applied directly to the fastener during the assembly operation or inspection overcheck, communicating the data to a suitable indicator for immediate verification and subsequent data collection.

The transducer element of the wrench is directly in line with the drive, thus making the wrench 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.

UTA wrenches form a key part of the Crane UTA torque system, enabling plug and play operation with Crane readout devices. On board intelligence means the UTA wrench is automatically recognised by the Crane readout device, eliminating set-up errors and enabling logging of serial number against measurements for complete traceability. An Industry Standard (IS) version is also available, without Auto ID, where a user needs the features of the Crane wrench but already has a readout device from another manufacturer.

Specifications

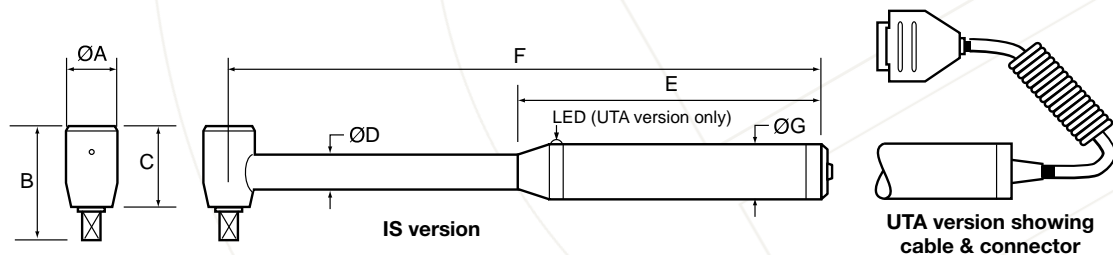
Functional Attributes

Special features	Slim body design helps with joints that have limited access
Physical measurements	Bi-directional torque (clockwise calibration unless otherwise requested)
Plug & Play transducer data	UTA readout devices read the following information from the UTA chip incorporated in the transducer device: Torque range, serial number, calibration due date
Cycle status indication (UTA only)	Tri-colour LED gives LO/OK/HI torque status indication when used with a suitable Crane readout

Physical Attributes

Calibration	<p>Issued with calibration certificate traceable to National and International Standards. IS transducers are normalised calibration unless indicated in table.</p> <p>Standard Crane calibration: (optional) 10 points; single direction (clockwise unless otherwise requested); 10% to 100% of nominal torque.</p> <p>Bi-direction Crane calibration: (optional) 10 points; each direction; from 10% to 100% of nominal torque.</p> <p>UKAS calibration: calibration to ISO 26789 Recalibration is recommended every 12 months</p>
Transducer types	<p>UTA: incorporate data chip enabling Plug & Play operation with compatible Crane readouts IS: 'Industry Standard' version. Bridge resistance: 350 Ohms. Sensitivity: see table on page 3</p>
Construction	<p>Point of load insensitive – transducer element in line with socket drive Wrench material: steel Handle: aluminium Shaft material: steel Overload capacity: 125% rated torque Square drives fitted with ball and spring socket retainer</p>
Connections	<p>UTA version: 1m integral curly 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</p>
Zero stability	< ± 0.1% FSD/°C
Static accuracy	± 0.5% FSD
Operating environment	<p>Temperature: 5 – 40°C Humidity: 10 – 75% non-condensing Ingress protection rating: IP40 – Designed for indoor use only</p>
Warranty	12 months parts and labour against faulty workmanship or materials

Dimensions & weights



Dimensions in mms								
SQUARE DRIVE SIZE	A	B	C	D	E	F	G	Weight (Kg)
UTA WRENCH								
1/4"	26.0	52.0	44.0	19.0	166.0	206.0	28.0	0.800
3/8"	26.0	56.0	44.0	19.0	166.0	296.0	28.0	0.960
1/2" (135 Nm / 100 ft lbf)	32.0	67.0	51.0	19.0	166.0	524.0	28.0	1.950
1/2" (271 Nm) / 200 ft lbf)	40.0	72.0	54.0	22.2	166.0	524.0	32.0	2.500
3/4"	50.0	102.0	80.0	31.8	166.0	1036.0	32.0	5.200
1"	65.0	114.0	85.0	38.1	166.0	1771.0	40.0	10.50
IS WRENCH								
1/4"	26.0	52.0	44.0	19.0	150.0	190.0	28.0	0.440
3/8"	26.0	56.0	44.0	19.0	150.0	280.0	28.0	0.570
1/2" (135 Nm / 100 ft lbf)	32.0	67.0	51.0	19.0	150.0	508.0	28.0	1.100
1/2" (271 Nm) / 200 ft lbf)	40.0	72.0	54.0	22.2	150.0	508.0	32.0	1.100
3/4"	50.0	102.0	80.0	31.8	150.0	1020.0	32.0	5.000

UTA / IS Wrenches



Transducerised torque wrenches

Physical Attributes (cont.)

Shipping list	Wrench unit
	Integral cable (UTA versions only)
	Blow moulded storage case
	Calibration certificate
	User manual

Order Codes

Order Code	Drive	Nominal torque	
		Nm	Imperial (ftlbf)
UTA Wrench			
UTA-116-1-25	1/4"	5.6	50 (inlbf)
UTA-117-1-25	1/4"	11.3	100 (inlbf)
UTA-118-1-25	1/4"	22.6	200 (inlbf)
UTA-119-1-35	3/8"	67.8	50
UTA-120-1-35	1/2"	135	100
UTA-121-1-35	1/2"	271	200
UTA-122-0-480-0-0	3/4"	480	350
UTA-123-1-35	3/4"	678	500
UTA-480-1-35	1"	1356	1000
IS Wrench – 2 mV/V Sensitivity			
IS-301-0-1	1/4"	5.6	50 (inlbf)
IS-302-0-1	1/4"	11.3	100 (inlbf)
IS-303-0-1	1/4"	22.6	200 (inlbf)
IS-304-0-1	3/8"	67.8	50
IS-305-0-1	1/2"	135	100
IS-306-0-1	1/2"	271	200
IS-307-0-1	3/4"	480	350
IS-416-0-1	3/4"	678	500

Accessories List

Item	Description	Order code
IS Wrench to Crane indicator cable	Connect IS transducer to TorqueStar <i>Opta</i>	700-1500
IS Wrench to Crane indicator curly cable	Connect IS transducer to TorqueStar <i>Opta</i>	CBL-760-0-0-0-0

UTA Wrenches have an integral cable for Plug & Play connection to Crane indicators. Various other cables available for connecting IS transducers to 3rd party indicators – see separate cables datasheet for information.

System Components

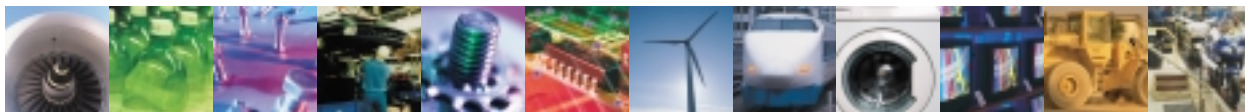
Crane's UTA / IS Wrenches may be used in conjunction with the following items:

Item	Description
TorqueStar <i>Opta</i>	In-line torque measurement, break-away torque measurement and joint analysis

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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