

Operator's Manual

Impact Tool Compatible Stationary Transducer

Manual Version 1.0
Crane Electronics Ltd



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UKCA MARKING

Crane Electronics Limited declares that the Impact Stationary Transducer has been assessed and complies with the UK regulatory requirements.



CE MARKING

Crane Electronics Limited declares that the Impact Stationary Transducer has been assessed and complies with the requirements of the relevant CE Directives.



COMPLIANCE

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in particular installations. If this equipment does cause harmful interference to radio or television reception which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNINGS AND SAFETY INFORMATION

IMPORTANT SAFETY INSTRUCTIONS

PLEASE READ THIS THOROUGHLY BEFORE USE. IMPROPER USE OF THIS PRODUCT COULD AFFECT THE SAFETY OF THE OPERATOR OR BYSTANDERS. IMPROPER USE COULD ALSO RESULT IN INCORRECT MEASUREMENT READINGS.



- **Read the manual completely before using the transducer.**
- Observe all equipment, system and manufacturer's warnings, cautions and procedures when using this transducer.
- Always operate, inspect and maintain this unit in accordance with all regulations (local, state, federal and country) that may apply.
- Maintain unit with care. Keep unit clean for better and safer performance.
- Please observe the max. torque limits of the transducer – Overtorquing can cause breakages.
- Do not remove any labels.
- Do not remove any screws or fixings from the transducer.
- Do not immerse in liquids.
- Do not operate this product in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.
- Periodic recalibration is necessary to maintain accuracy (recommended on a yearly basis).
- A transducer which is out of calibration can cause damage to the tool or parts.
- If the capacity of the transducer is suspected to have been exceeded, the calibration must be verified before further use.
- If the transducer is dropped, the calibration must be verified.
- This unit contains no user serviceable parts. Only qualified Crane service personnel should replace or fit parts.
- Changes or modifications to the transducer not expressly approved by Crane Electronics Ltd could void the user's authority to operate the equipment.



- **Always use the appropriate Personal Protective Equipment for the tool used and material worked.**
- All users and observers must wear safety goggles.
- Good professional tool practices must be followed for personal safety and to avoid transducer damage.
- Ensure work pieces are secure. Use clamps or vices to hold work pieces whenever possible. Never use a damaged or malfunctioning tool or accessory with this unit.
- Keep body stance balanced and firm. Do not overreach when operating the tool. Anticipate and be alert for sudden changes in motion, reaction torque, or forces during the operation.



- **WARNING Risk of flying particles.**
- Ensure the transducer and all adaptors, extensions, drivers and sockets are rated to match or exceed the target torque of the application.
- When using an impact tool with this unit, ensure that any adaptors, sockets and extensions are impact tool compatible.
- Use the correct size socket for the tool.
- Follow instructions for changing accessories.
- Do not use broken hand tools as sockets or accessories as these can cause injury.
- Do not use worn or cracked sockets or adaptors.
- Use the transducer solely for the testing of torque tools.
- **Electrical shock can cause injury. Metal body is not electrically isolated.**
- Must NOT be used on live electrical circuits.



PRODUCT DISPOSAL

Applicable in the EU and other European Countries with separate collection systems



The symbol shown here and, on the product, means that the product is classed as Electrical or Electronics Equipment and should not be disposed with normal commercial waste at the end of its working life.

The Waste of Electrical and Electronics Equipment (WEEE) Directive (2012/19/EU) has been put in place to recycle products using best available recovery and recycling techniques to minimise the impact on the environment, treat any hazardous substances and avoid the increasing landfill.

To enable this product to be disposed of properly i.e., cradle to grave, Crane Electronics is willing to accept the return of your product (at your cost) for recycling or alternatively, for more detailed information about recycling of this product please contact your local authority or the Distributor / Company where you have purchased the product.

Battery disposal to take place in line with the AMENDED BATTERIES DIRECTIVE 2013/56/EU. Batteries must **not** go to landfill. Check with local legislation.

Crane Electronics declares that this product does not contain any of the 191 Substances of Very High Concern (SVHC's) identified in the REACH Regulation in used articles make-up.

In Countries outside the EU:

If you wish to discard this product, please contact your local authorities and ask for the correct way of disposal.

Signed for & on behalf of **Crane Electronics Ltd.**

Name: **B. M. Etter**
Title: **Safety & Environmental Advisor**

Signature of Issuer: 

ABOUT THIS MANUAL

This manual covers the Impact Stationary Transducer working with the TorqueStar Lite, Plus and Pro. Actual screen shots represented in this manual may differ slightly depending on version. For information on the operation of a the TorqueStar Lite, Plus and Pro please refer to their own manuals.



Actual screen shots or images represented in this manual may differ slightly from those on the actual product, depending on the version.

OVERVIEW

Crane’s impact stationary torque transducer has been designed to withstand the testing of impact tools. It is also compatible with continuous-drive and impulse power tools and hand torque tools in the workshop and production line-side environment.

Impact stationary transducers are used in multiple testing applications both off-line in testing workshops or line-side on mobile test stations. Combined with Crane joint kits that represent the production joint condition, they form an effective off-line test for verification of assembly tool performance.

Impact stationary transducers form an essential part of the Crane auto-ID torque system, enabling automatic transducer recognition with Crane readout devices. On board intelligence means the auto-ID transducer is automatically recognised by the readout, eliminating set-up errors and enabling the logging of a serial number against measurements for complete traceability.

PACKING LIST

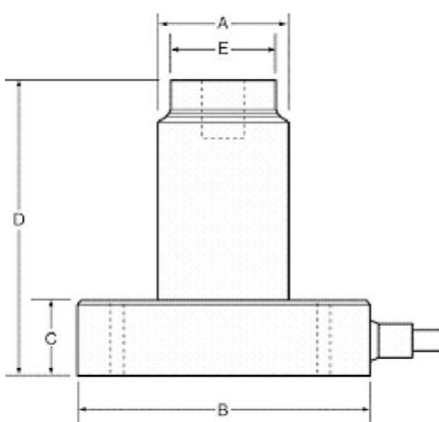
When purchasing this product you will receive:

Impact Stationary Transducer x 1

SPARES & ACCESORIES

JK-874-07CR-135-0 Female Stationary Joint Kit 3/8"
JK-874-08CR-271-0 Female Stationary Joint Kit 1/2"
JK-874-09CR-1017-0 Female Stationary Joint Kit 3/4"

WEIGHTS AND DIMENSIONS



Drive Size	Dimensions in mm					Est. Weight (Kg)
	A	B	C	D	E	
3/8"	54	100	25	86	24	1.93
1/2"	54	100	25	95	30	2.1
3/4"	50	100	25	112	44	2.11
1"	59	100	25	124	53	2.63

Table 1

SPECIFICATION

Transducer type: Auto-ID: incorporates data chip enabling Plug & Play operation with compatible Crane readouts and data collectors.

Construction: Stainless steel housing
Overload capacity: 125% rated torque
Square drives to ANSI B107-4 - 1982; BS4006 - 1992; DIN 3121 - 1987

Connections: 1m integral cable with strain relief; 25-pin 'D' port (male) for connection to Crane readouts and data collectors.

Zero stability: $<\pm 0.1\%$ of FSD/ $^{\circ}\text{C}$

Static accuracy: $\pm 0.25\%$ FSD

Operating env: Temperature: +5 to +40 $^{\circ}\text{C}$ (-10 to +60 $^{\circ}\text{C}$ with reduced specification)
Humidity: 10 - 75% non-condensing
Ingress Protection rating: IP40

Warranty: 12 months parts and labour against faulty workmanship or materials

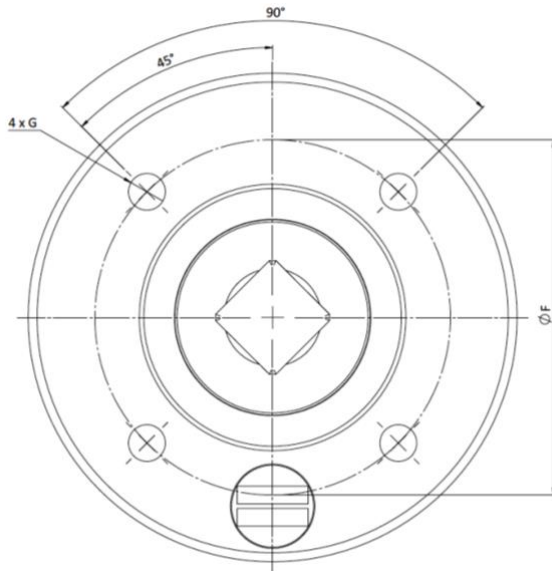
Calibration: All torque equipment should be re-calibrated every 12 months.

OPERATION

Basic operation of the transducer is as follows:

- The impact tool compatible stationary transducer can be used alongside a Crane torque wrench when setting up an impact tool and for verification both off-line in workshops or line-side on mobile testing stations.
- Select a suitable size of impact stationary transducer that is appropriate to the maximum torque rating of the tool to be used.
- A suitably sized transducer top joint kit should also be selected, configured to the required joint conditions (see user instructions for transducer top joint kits) and fitted to the female square drive of the stationary transducer.
- Connect the transducer to the readout, select an appropriate operating mode then operate the tool in the normal way.
- In the interests of accuracy it is essential to maintain the correct alignment between the stationary transducer, joint kit and power tool.
- Exceeding the maximum torque rating may cause irreversible damage to the transducer.
- When using an impact tool with this unit, ensure that any adaptors, sockets and extensions are impact tool compatible.

MOUNTING DETAILS



Dimensions in mm		
Drive Size	F	G
3/8"	80	8.3
1/2"	80	8.3
3/4"	80	8.3

Table 2

TORQUE VALUES

Drive Size	Torque Value (Nm)
3/8"	75
1/2"	180
3/4"	340
3/4"	600

Table 3


CONTACT US

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