

User Instructions

Table Top Joint Kit for Rotary Transducers

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Crane Electronics Ltd

UTA TABLE TOP JOINT KITS FOR ROTARY TRANSDUCERS

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Declares that this UTA Table Top Joint Kit for Rotary Transducers has been assessed and complies with the requirements of the relevant CE Directives.

SUMMARY

This joint kit is designed as a convenient, repeatable, variable stiffness joint for assessing the performance of torque tools in a practical way. It is designed to be bolted to a table top and used in conjunction with Crane CheckStar transducers for testing power tools.

Each kit may be assembled in different ways to vary the stiffness of the joint. Reference should be made to TABLE 1 to select from the available options. Care should be taken to ensure that as well as choosing the most suitable stiffness, the maximum torque for the joint is not exceeded. Please note that the joint kit is not designed to provide an exact joint stiffness.

Torque tools are influenced by joint hardness. For the most accurate assessment of how your torque tool will perform in production use, Crane recommends the use of an in line transducer (such as CheckStar) to take joint variability into account. See back page for dimensions.

IMPORTANT

Grease the threads before fitting the nut.

Ensure that the threads are kept lubricated.

NOTE: For greasing the threads, a Moly based, high temperature, high impact K48 type grease should be used, and a suitable solvent for cleaning - i.e. a trichoethylene based solvent or substitute. (CEL recommends an industrial rapid drying spray cleaner.) Threads should be cleaned and greased every 50-100 cycles. Eventually the bolt and nut threads will wear and these will require replacement. Use only official CEL replacement parts.

NOTICE

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TABLE 1

NOMINAL JOINT STIFFNESS AVAILABLE								
	JOINT KIT	MAX TORQUE		1st Stack	2nd Stack	SPACER(S) mm		
		Nm	lbin					
SOFT ↓ HARD	1/4"	5.6	50	3	3	17.1		
		13.6	120	6	6	11.5		
		21.5	190	12	12	-		
		28.25	250	24	-	-		
		28.25	250	-	-	11.5+12.3		
SOFT ↓ HARD	3/8"	lbft		5	5	15.5		
		67.8	50				9	9
		120	90				16	-
		100	73.75				-	-
		100	73.75	-	-	5		
		100	73.75	-	-	5+18.6+15.5		
SOFT ↓ HARD	1/2"	135.6	100	5	5	19.5		
		220	160	9	9	-		
		271	200	9	-	23.3		
		271	200	-	-	-		
		271	200	-	-	3.9+23.3+19.5		
SOFT ↓ HARD	3/4"	460	340	5	5	39.5		
		830	610	10	10	-		
		775	570	10	-	41.3		
		1017	750	-	-	-		
		1017	750	-	-	39.2+41.3		
SOFT ↓ HARD	1"	847	625	3	3	24		
		1600	1180	5	5	-		
		1400	1030	9	-	8		
		1695	1250	-	-	-		
		1695	1250	-	-	8+24+32		

PACKING LIST

Each Joint Kit contains the following Items;

- 1X THRUST PLATE
- 1X SPACER SET
- ?X DISC SPRING WASHERS (See table below)
- 1X HARD WASHER
- 1X GUIDE BOLT
- 1 x NUT
- 1X BASEPLATE
- 4X SOCKET CAP SCREWS
- 1X SHROUD (except for 1" where baseplate and shroud are combined)

Please check these items are all present. Notify Crane Electronics Ltd (CEL) immediately of any shortages. Use the diagrams overleaf to identify the arrangement of these items.

JOINT KIT PART NUMBERS			
Part No.	Size	Description	No. of Disc Spring Washers
JK-875-06CR-28-0	1/4"	TABLE TOP JOINT KIT	24
JK-875-07CR-135-0	3/8"	TABLE TOP JOINT KIT	18
JK-875-08CR-271-0	1/2"	TABLE TOP JOINT KIT	18
JK-875-09CR-1017-0	3/4"	TABLE TOP JOINT KIT	20
JK-875-10CR-1695-0	1"	TABLE TOP JOINT KIT	10

BOLT KIT PART NUMBERS (For female joint kits and table top joint kits)		
Part No.	Size	Description
JK-875-13CR-0-0	1/4"	FEMALE BOLT KIT
JK-875-14CR-0-0	3/8"	FEMALE BOLT KIT
JK-875-15CR-0-0	1/2"	FEMALE BOLT KIT
JK-875-16CR-0-0	3/4"	FEMALE BOLT KIT
JK-875-17CR-0-0	1"	FEMALE BOLT KIT

SPARES PARTS LIST						
SIZE	THRUST PLATE	SPACER SET	DISC SPRING WASHERS	HARD WASHER	SHROUD	BASEPLATE
1/4"	1401398	1401399	1401416 (x24)	1401505	1403837	1403832
3/8"	1401402	1401403	1401417 (x18)	1401506	1403838	1403833
1/2"	1401406	1401407	1401418 (x18)	1401507	1403839	1403834
3/4"	1401410	1401411	1400407 (x20)	1401508	1403840	1403835
1"	1401414	1401415	1401419 (x10)	1401509	N/A	1403836

DIMENSIONS

JOINT KIT	ØA	X	Y	NUT A/F	BOLT Ømm	PITCH	PCD
1/4"	100	79	60	13	M8	1.25	80
3/8"	100	100	75	19	M12	1.75	80
1/2"	100	120	88	24	M16	2.00	80
3/4"	140	182	142	36	M24	3.00	120
1"	113	187	137	46	M30	3.50	80

