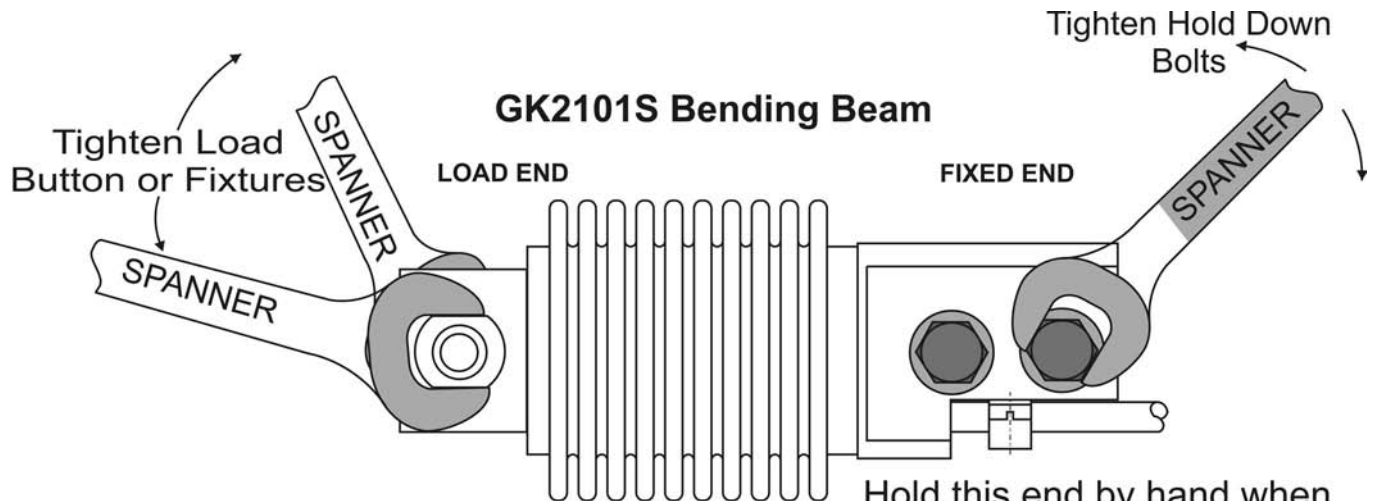


MOUNTING BOLT SELECTION, TORQUE and CLAMPING FORCE.

This Installation Note contains recommendations for fixing GK2101S Bending Beam Load Cells to Mounting Structures using two bolts at the mounting locations in the cell. The note applies whether the cells are mounted on base plates or mounted on part of a structure. The cantilever nature of Bending Beam Load Cells results in high bending moments in the larger capacity load cells which produce high tensile forces in the mounting bolts. Care must be taken to use high quality bolts of at least the strength as specified here. If thin section bases are used, they must be of high strength material.



Always react the tightening torque at the same end of the Load Cell as shown, or damage to the cell may result. This is particularly important with low capacity load cells.

When attaching fixtures to low capacity cells, first loosen the cell mounting bolts so the tightening torque cannot be applied to the load cell by mistake.

Hold this end by hand when tightening hold down bolts until bolt tension is sufficient for bolts to react the torque of the spanner.

WARNING - THE INFORMATION BELOW IS A GUIDE ONLY. YOU SHOULD VERIFY THE INFORMATION AND MAKE SURE IT IS APPROPRIATE FOR YOUR INSTALLATION. ALWAYS USE A PLAIN WASHER AND SINGLE COIL SPRING WASHER WITH THE MOUNTING BOLTS.

USING LOWER GRADE BOLTS, LESS THREAD ENGAGEMENT, LOWER STRENGTH BASE PLATE MATERIALS OR HIGHER TORQUE VALUES MAY RESULT IN BROKEN BOLTS OR STRIPPED THREADS OCCURRING DURING INSTALLATION OR SERVICE.

IF A LOWER STRENGTH BASE MATERIAL IS USED THEN CHECK TO ENSURE ADEQUATE THREAD DEPTH IS USED.

USE OF A SINGLE COIL SPRING WASHER UNDER THE HEAD OF THE MOUNTING BOLTS IS RECOMMENDED, PARTICULARLY FOR THE LOW TORQUE/LOW CAPACITY LOAD CELLS.

GK2101S Model Capacity kg	Size and MINIMUM Bolt Grade for Stainless Steel Cap Screws.	Bolt Yield Stress MPa	Torque Bolts to kg-m	Resulting Clamping Force per Bolt at 0.20 K Factor kg	Recommended Thread Engagement in 250MPa Yield Strength Bases mm
200 to 500	M8x1.25/A2orA4-70	450	2.0	1,250	10 to 12
50 to 100	M8x1.25/A2orA4-70	450	1.0	630	8 to 10
5 to 30	M8x1.25/A2orA4-70	450	0.3	210	8 to 10

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