

Model 11 Load Cell Installation Instructions

Introduction

Model 11 load cells (order code BL321) with low-range capacity (range codes AL through BR) require some care in handling and installation to avoid permanent damage to the load cell.

Installation

1. The top active stud of the load cell rests on a flexible diaphragm. It is this diaphragm which deflects, causing a change in the output.
2. The threaded stud on the base of the load cell is machined as an integral part of the load cell. The base can be threaded into the customer's part by grasping the main body of the load cell, rotating load cell and cable assembly until finger-tight.
3. Caution should be used when attaching the active threaded stud to the customer's fixture. The customer's fixture should not be threaded below the shoulder at the bottom of the active threaded stud. No wrenches should be used in assembling these parts.

CAUTION

The customer's fixture should not be tightened more than 0.7 N m [6 in lb] which is about finger-tight.

Failure to comply with these instructions may result in product damage.

4. The tension or compression force to be measured must be applied as much as possible in a vertical direction along the center line of the mounting studs.

CAUTION

Bending moments in excess of the values shown in the table below could cause permanent damage to the load cell.

Capacity	Maximum Bending	
	N m	in lb
150 g	0.02	0.2
250 g	0.05	0.4
500 g	0.06	0.5
1000 g	0.02	0.2
5 lb	0.05	0.4
10 lb	0.06	0.5
25 lb	0.08	0.7
50 lb	0.1	0.9
100 lb	0.1	0.9

Failure to comply with these instructions may result in product damage.

Excessive Zero Balance

The Model 11 load cell may be damaged by either a bending moment or excessive torque during installation. The most obvious result of damage to the load cell is the residual unbalance of the strain-gage bridge. The strain-gage bridge is balanced at the factory to within two percent of the full rated output in millivolts. The addition of the customer's fixture will change the zero balance depending upon the weight of the fixture. Excessive unbalance can be attributed to damage resulting from excess torque or bending moment.

The above specifications are to be used as guidelines only and the loads specified are static loads. Damage may occur from shock loads or dynamic loads that never exceed the above limits.

Warranty

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. The foregoing is the Buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

While we provide applications assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

 **WARNING**
PERSONAL INJURY

DO NOT USE these products as safety or emergency stop devices, or in any other application where failure of the product could result in personal injury. **Failure to comply with these instructions could result in death or serious injury.**

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