Installation Instructions for
Test and Measurement Load Cells

ISSUE 1
50078933

⚠ 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.

⚠ WARNING

RISK TO LIFE OR PROPERTY

- Never use this product for an application involving serious risk to life or property without ensuring that the system as a whole has been designed to address the risks, and that this product is property rated and installed for the intended use within the overall system.

Failure to comply with these instructions could result in death or serious injury.

GENERAL INFORMATION

OVERLOAD

CAUTION

PRODUCT DAMAGE

- Do not exceed the overload rating. Refer to the product datasheets on web site for overload ratings.
- Low capacity load cells should be handled and installed with care to avoid permanent damage to the load cell. For low-range sensors, avoid product damage during installation by monitoring the load cell signal when application allows this to be done safely.
- Load cells may be damaged by bending moments, off-axis loading, and excessive torque during installation or use.
- Units equipped with mechanical overload stops can still be damaged from bending moments and excessive torques during installation or use.

Failure to comply with these instructions may result in reduced life, or electrical failure.

The Honeywell Test and Measurement family of load cells are designed to withstand high overloads; however, if the overload rating is exceeded, the life of the product may be reduced and either electrical and/ or mechanical failure may occur. Both static and dynamic overloads must be considered, particularly in hydraulic system applications. Honeywell load cells will withstand high overloads, however if the overload rating is exceeded, the life of the load cell may be reduced and electrical failure may occur.

An oscilloscope is recommended for determining if high load transients exist in a system. If system load spikes are expected, choose a sensor with a load rating high enough to allow continuous operation at the highest expected load spikes.

The Honeywell Test and Measurement load cells have been rated for immunity-to-electrical noise; however, care should be taken when used around high voltage sources that emit high levels of radiated electromagnetic energy like variable frequency motor drives, solenoids, radio transmitters and engine ignition systems. The use of shielded cable and proper grounding techniques is also recommended.

ENVIRONMENTAL COMPATIBILTY

CAUTION

PRODUCT DAMAGE

- Do not submerge load cell unless product is rated for submersion.
- Do not submerge or expose load cell to abrasive, corrosive, or chemically incompatible substances.

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

INSTALLATION

CAUTION

PRODUCT DAMAGE

- When installing Honeywell T&M load cell, make sure all mating surfaces are free or dirt and debris, ideally surfaces will be ground flat as well.
- Threads should be inspected for dirt, debris, and damage before installation and cleaned or repaired as needed.
- If a bolt pattern is used to install load cell, bolts should be tightened incrementally in a star pattern.
- Tension or compression loads to be measured must be applied as much as possible along the central axis of the load cell to avoid damage and improve accuracy.
- Do not subject the sensor to high temperatures from soldering, brazing, welding, or operating environments above the specified maximum temperature.

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

ELECTROMAGNETIC ENERGY/NOISE

CAUTION

PRODUCT DAMAGE/ERRATIC OPERATION

- Do not use in areas where electromagnetic energy may affect sensor operation.

Failure to comply with these instructions may result in improper operation and/or product failure.

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BENCH TEST

For incoming inspection or sensor failure evaluation, connect the sensor to a dc voltage supply. The supply voltage should be set within the range specified for the model. Based on the sensors specified output, connect the output lead(s) to an appropriate meter. With no load on the sensor, turn on the power supply and read the output signal on the meter. The reading should correspond to the specification indicated for zero balance. If not, check the connections, wire color code and the setting of the power supply.

WIRING INSTRUCTIONS

The wiring instructions for all Honeywell Test and Measurement Load Products can be found on the serialized calibration certificate supplied with each sensor.

When using a mating connector it is important to use the correct size wire to ensure environmental sealing. Contact the individual connector manufacturer for further mating connector wiring instruction.

If you have an Intrinsically Safe Rated Product, follow the wiring instructions in the Intrinsically Safe Installation Manual shipped with the product or go to the Test & Measurement web site. For model specific product information, refer to the web site.

WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is 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. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

While we provide application 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.

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.

SALES AND SERVICE

Honeywell serves its customers through a worldwide network of sales offices, representatives, and distributors. For application assistance, current specifications, pricing, or name of the nearest Authorized Distributor, contact your local sales office. To learn more about Honeywell test and measurement products, contact us via

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50078933-1-EN IL50 GLO Printed in USA
September 2012