

# Series RDE915

Rod-End Tension and Compression Load Cell



## Description

The Series RDE915 load cells are rod-end configurations for both in-line tension or in-line compression force applications. Constructed of high strength tool steel, these bonded foil strain gaged force sensors are compact in size and provide reliable performance for demanding application conditions. The RDE915 features low deflection along with shock and vibration protection. In addition, these load cells are environmentally sealed. RDE915 load cells are used in many in-line tension applications such as actuator testing, aircraft and automotive component testing, and materials testing. Each unit is shipped with a 5 point calibration record traceable to NIST as standard.



## Standard Features

- 0.25% Accuracy
- Ranges from 5,000 lbf to 25,000 lbf
- Low Deflection
- In-Line Tension or In-Line Compression
- High Strength Tool Steel
- -65°F to 250°F Standard Operating Temperature
- Environmentally Sealed
- Shock and Vibration Resistant
- 5 Point Tension Calibration Record Traceable to NIST

## Optional Features

- Metric Versions
- Special Full Scale Ranges
- Special Calibrations
- Dual or Triple Bridges
- -40°F to +400°F Operating Temperature

## Performance

### Standard Ranges

5K, 10K, 15K, 20K, 25K lbs.

### Output

2mV/V nominal.

### Linearity

0.25% FSO.

### Hysteresis

0.15% FSO.

### Repeatability

0.05% FSO..

### Temperature Effect on Zero

0.002% FSO/°F.

### Temperature Effect on Span

0.002% Reading/°F.

### Zero Balance

1% FSO.

## Environmental Characteristics

### Operating Temperature Range

-40°F to 250°F.

(-40°F to 400°F optional.)

### Compensated Temperature Range

70°F to 170°F.

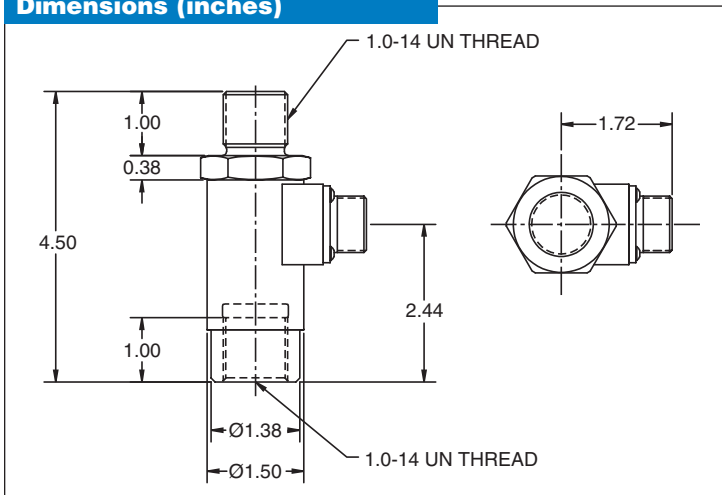
(-40°F to 400°F optional.)

RDE915

# Series RDE915 Specifications

Baseline Configuration Specs Represented.  
Modifications Encouraged - See Below  
Custom Designs Available

## Dimensions (inches)



## Mechanical Characteristics

### Static Overload Without Damage

150% FSO.

### Standard Calibration

#### Tension only:

5 points (0, 50%, 100%, 50%, 0 of FSO).

### Optional Calibrations

#### • Compression only:

5 points (No charge option)

#### • Tension and Compression:

5 points in each direction

#### • Special multipoint calibration

(customer specified):

in tension or compression or both tension and compression.

### Material

High strength steel,  
environmentally sealed.

## Electrical Characteristics

### Bridge Resistance

350 Ohms nominal.

### Excitation

10 Vdc or Vac.

### Maximum Excitation

20 Vdc or Vac.

### Insulation Resistance

Greater than 5000 megaohms  
at 50 Vdc.

### Electrical Termination

MS3102E-14S-5P.

## Electrical Characteristics

### Connector Pins (Standard)

A	+EXE	B	+SIG
C	-SIG	D	-EXE
E	NC		

Customer specified wiring codes  
are available.



## Modifications and Warranty

MODIFICATIONS: We realize transducer applications vary greatly and as such our designs are flexible. Choice of pressure port, electrical termination, material compatibility and performance characteristics are a few of the many options available. Specifications on this datasheet represent the standard configuration only. Product and company names listed are trademarks of their respective companies. Specifications subject to change without notice.

WARRANTY: Stellar Technology warrants that its product shall be free from defective workmanship and/or material for a twelve month period from the date of shipment, provided that Stellar Technology's obligation hereunder shall be limited to correcting any defective material FOB our factory. No allowance will be made for any expenses incurred for correcting any defective workmanship and/or material without written consent by Stellar Technology. This warranty is in lieu of all other warranties expressed or implied.

**LORD SENSING**  
Stellar Technology

ISO 9001/AS9100

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