

# Series RDE900

Rod End Tension Load Cell

## Standard Features

- Ranges From  
5K lbs. to 120K lbs.
- In-Line Loading
- Small Diameter
- Variety of Thread  
Arrangements  
From Which To Choose
- 0.20% Accuracy
- Welded Stainless Steel
- -65°F to 250°F Operation
- mV/V Output and  
Amplified Output Available



## Standard Specifications

### Performance

<b>Capacities</b>	From 5K lbs. FSO to 120K lbs. FSO (see table).
<b>Output</b>	2 mV/V nominal.
<b>Linearity</b>	0.20% FSO.
<b>Hysteresis</b>	0.15% FSO.
<b>Repeatability</b>	0.05% FSO.
<b>Compensated Temperature Range</b>	70°F to 170°F.
<b>Operating Temperature Range</b>	-65°F to 250°F.
<b>Temperature Effect on Zero</b>	0.005% FSO/°F.
<b>Temperature Effect on Span</b>	0.005% Reading/°F.
<b>Zero Balance</b>	1% FSO.
<b>Bridge Resistance</b>	350 Ohms nominal.

### Mechanical Characteristics

<b>Threads</b>	See table.
<b>Calibration</b>	5 Points (0, 50%, 100%, 50%, 0) Tension.
<b>Max. Overload</b>	150% FSO.
<b>Construction</b>	Welded stainless steel.

### Electrical Characteristics

<b>Excitation</b>	10 Vdc or Vac.
<b>Insulation Resistance</b>	Greater than 5000 megaohms at 50 Vdc.
<b>Electrical Termination</b>	PTIH-10-6P Stainless Steel Connector.
<b>Connector Pins</b>	A +EXE    B +SIG C -SIG    D -EXE E NC      F NC

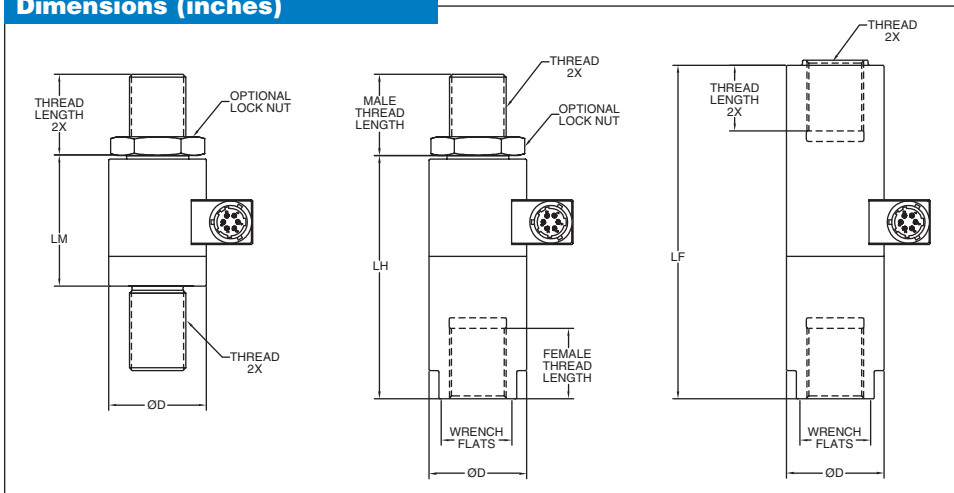
RDE900

**Your Application-Solution Source<sup>SM</sup>**

# Series RDE900 Specifications

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

## Dimensions (inches)



Capacity (lbs.)	D	Thread	LM	Std. Male Thread Lgth.	Short Male Thread Lgth.	Std. Female Thread Lgth.	LH	LF	Wrench Flats
5K, 10K, 15K	Ø1.50	3/4-16 UNF	1.75	1.32	0.90	0.90	3.25	4.75	1.25
25K	Ø1.75	1-14 UN	2.25	1.80	1.25	1.25	4.25	6.00	1.38
50K	Ø2.50	1-1/2-12 UNF	3.00	2.25	1.75	1.75	5.63	8.25	2.00
100K	Ø3.50	2-12 UN	3.75	3.00	2.25	2.25	7.50	11.25	*2

## Available Options

<b>Compensated Temperature Range</b>	Ranges from -65°F up to 400°F.
<b>Operating Temperature Range</b>	Ranges from -65°F up to 400°F.
<b>Calibration</b>	Additional calibration points (in addition to standard 5 points) available (Consult Factory) Special and custom calibration available (Consult Factory)
<b>Bridges</b>	Dual and triple bridges.
<b>Amplifiers</b>	Internal or In-Line (Consult Factory). • Analog (4-20 mA; 0-5 Vdc; 0-10 Vdc). • Digital (RS-232; RS-485; CANbus; MODbus).
<b>Calibration Range</b>	Special full scale ranges (eg: 4000 lbs.).
<b>Connectors</b>	Consult factory for available connectors. Standard connectors are all stainless steel, Gold plated pins are sealed with glass to metal. Connector is sealed to load cell with O-ring seal. Glass to metal hermetic seals available between bolt on connectors and load cell. All welded hermetic connectors available. Connector housing orientation. Consult factory.
<b>Thread Sizes</b>	Special thread sizes and loading ends (clevis and tongue shackles). Consult factory.
<b>Cables</b>	Cable or add a connector to the end of the cable. Consult factory for available connectors and cables.
<b>Submersible Operation</b>	Operations up to 16,000 feet deep.
<b>Shock and Vibration</b>	Special shock and vibration preparation allows use in the most demanding environments.
<b>Supplemental Technical Details</b>	See next page or visit our website at: <a href="http://stellartech.com">stellartech.com</a> .



NOTES: When using a load cell the user must consider load ratings and fatigue life for long term use and structural integrity. Critical loading applications, especially overhead loading, must always be designed with safety redundant load paths. MODIFICATIONS: We realize load cell applications vary greatly and as such our designs are flexible. 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.

Find More Information at:  
[stellartech.com](http://stellartech.com)

Due to the nature of technology, changes are inevitable. For latest technical specifications, see our website.

# Series RDE900

## Supplemental Technical Details

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

### Technical Information

Capacity (lbs.)	Max.Torque (In-Lb)	Max.Bending (In-Lb)	Ringing Frequency (KHz)	Deflection (Full Scale,In.)
5K	200	100	5500	0.003
10K	500	250	7500	0.004
15K	1000	500	8000	0.005
25K	2000	1000	10,000	0.005
50K	6000	3000	8000	0.005
100K	15000	8000	5000	0.006

### Notes

Note 1: Standard length threads allow full 1 diameter thread engagement with optional lock nut.Short thread without optional lock nut available on request.

Note 2: Ø3.50 RDE900 will be supplied with 4 equally spaced Ø0.25" spanner wrench holes.

Note 3: Do not exceed listed maximum torque across load cell (top to bottom).It is permissible to use standard torque values from the nut to the nut mating fixture and the flat to the flat mating fixture.



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