



Series RSL0740

Fatigue Rated, Precision Low Profile Load Cell

RSL0740

Standard Features

- Tension / Compression
- All Welded Stainless Steel
- Barometrically Compensated
- Accuracy to 0.03%
- Fatigue Rated
- 100 million Cycle life
- 0.25% Off-Axis Sensitivity
- -50° to 120° C Operation
- mV/V Operation



Shown with optional base

Standard Specifications

Performance

Capacities	250, 500, 1000, 2500, 5000, 12.5K, 25K, 50K, 100K lbs.
Output	2 mV/V nominal.
Accuracy	Up to 0.03% FSO BFSL (See Table).
Compensated Temperature Range	-9°C to 46°C.
Operating Temperature Range	-50°C to 120°C.
Temperature Effect on Zero	0.0015% FSO/°C.
Temperature Effect on Span	0.0015% Reading/°C.
Creep, in 30 min	0.025% Load.
Off-Axis Sensitivity	0.25% / in.
Zero Balance	1% FSO.
Bridge Resistance	350 Ohms nominal.

Mechanical Characteristics

Calibration	5 Points (0, 50%, 100%, 50%, 0) Tension/Compression.
Static Overload Capacity	200% FSO.
Construction	Welded stainless steel.

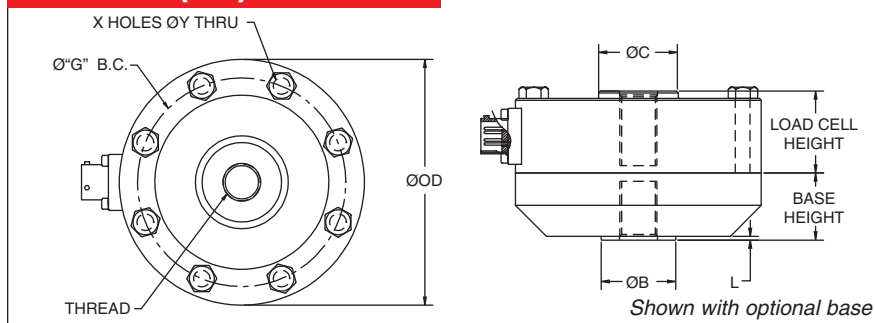
Electrical Characteristics

Excitation	10 Vdc or Vac.
Maximum Excitation	20Vdc or Vac.
Insulation Resistance	Greater than 5000 megaohms at 50 Vdc at 20°C.
Connector	PTIH-10-6P, Stainless steel with Gold Plated Pins.
Connector Pins	A +EXE D - EXE B +SIG E NC C - SIG F NC

Series RSL0740 Specifications

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

Dimensions (mm)



Capacity (lbs.)	ØOD	Thread	Height	X	ØY	ØG	ØC	Base Height	ØB
250, 500, 1000	104.9	5/8-18 UNF	35.1	8	7.1	88.90	34.0	28.7	31.8
2.5K, 5K	104.9	5/8-18 UNF	35.1	8	7.1	88.90	34.0	28.7	31.8
12.5K, 25K	152.4	1 1/4-12 UN	44.5	12	10.4	130.30	67.3	44.5	57.2
50K	203.2	1 3/4-12 UN	63.5	16	13.4	165.10	95.5	50.8	76.2
75K, 100K	228.6	2 1/2-12 UN	76.2	16	16.7	200.15	101.6	69.9	101.6

MECHANICAL CHARACTERISTICS AND RATINGS

CAPACITY (LBS)	250, 500, 1K	2.5K, 5K	12.5K, 25K	50K	75K, 100K
Accuracy (%FSO BFSL)	0.03	0.04	0.05	0.05	0.06
Linearity (%FSO)	0.04	0.04	0.05	0.05	0.05
Hysteresis (%FSO)	0.03	0.04	0.05	0.05	0.06
Repeatability (%FSO)	0.02	0.02	0.02	0.02	0.02
Deflection @ FSO (micron)	25	25	25	51	51

Available Options

Threads	Metric or Custom.
Base	Base can be assembled with load cell or sold separately.
Output	3mV/V, 4mV/V, Custom. Standardized output.
Dimensions	Custom dimensions welcome.
Compensated Temperature Ranges	-50°C to 200° C.
Operating Temperature Ranges	-50°C to 200° C.
Calibration	Additional calibration points (in addition to standard points) available (Consult Factory). Special and custom calibrations available (Consult Factory)
Amplifiers	Internal and/or In-Line (Consult Factory). • Analog (4-20 mA; 0-5 Vdc; 0-10 Vdc). • Digital (RS-232; RS-485; CANbus; MODbus).
Multiple Bridges	Dual and Triple bridges available.
Calibration Range	Special full scale ranges (Example: 75 lb).
Cables and Cable Length	For Cable types available, consult factory. Specify Cable length.
Cable Connector	Add a connector to the end of the cable. Consult factory for available connectors.
Connectors	Many connectors available (PT04, MS3102, etc.) Consult factory Orientation: Any orientation (radial standard, tangential, up or down or custom). Connector guards.
Hermetically Sealed	Hermetic seal, O-ring Seal and combinations are available. Consult factory.
Overload Protection	Compression. Overload stops take up to 10X F.S. Consult factory.
Shock and Vibration	Special shock and vibration preparation allows use in the most demanding environments.
Custom Options	Other customer requested options welcome.



MODIFICATIONS: We realize load cell applications vary greatly and as such our designs are flexible. Choice of 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: RDP 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 RDP'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 RDP. This warranty is in lieu of all other warranties expressed or implied.

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

RDP Electronics Ltd. • Grove Street, Heath Town • Wolverhampton WV10 0PY

Tel: 01902 457512 • **Fax:** 01902 452000

E-mail: sales@rdpe.com • **Website:** www.rdpe.com

