

# Series PNC740

Fatigue Rated, Precision Pancake Load Cell

PNC740

## 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
- -65° to 250° F Operation
- mV/V Operation



## Standard Specifications

### Performance

<b>Capacities</b>	250, 500, 1000, 2500, 5000, 12.5K, 25K, 50K, 100K lbs.
<b>Output</b>	2 mV/V nominal.
<b>Accuracy</b>	Up to 0.03% FSO BFSL (See Table).
<b>Compensated Temperature Range</b>	15°F to 115°F.
<b>Operating Temperature Range</b>	-65°F to 250°F.
<b>Temperature Effect on Zero</b>	0.0008% FSO/°F.
<b>Temperature Effect on Span</b>	0.0008% Reading/°F.
<b>Creep, in 30 min</b>	0.025% Load.
<b>Off-Axis Sensitivity</b>	0.25% / in.
<b>Zero Balance</b>	1% FSO.
<b>Bridge Resistance</b>	350 Ohms nominal.

### Mechanical Characteristics

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

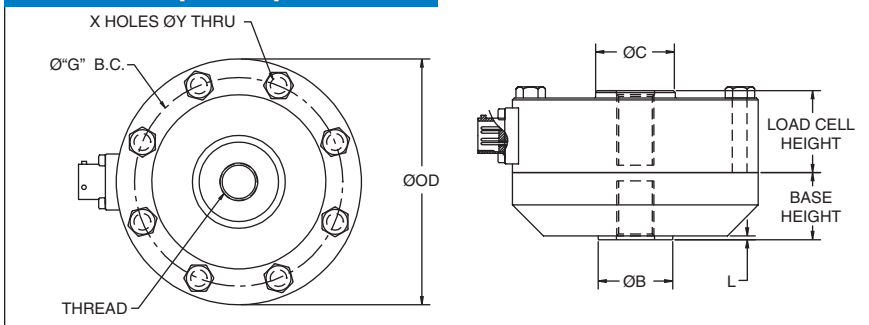
### Electrical Characteristics

<b>Excitation</b>	10 Vdc or Vac.
<b>Maximum Excitation</b>	20Vdc or Vac.
<b>Insulation Resistance</b>	Greater than 5000 megaohms at 50 Vdc at 70°F.
<b>Connector</b>	PTIH-10-6P, Stainless steel with Gold Plated Pins.
<b>Connector Pins</b>	A +EXE    D - EXE B +SIG    E NC C - SIG    F NC

# Series PNC740 Specifications

Baseline Configuration Specs Represented.  
Modifications Encouraged - See Below

## Dimensions (inches)



Capacity (lbs.)	ØOD	Thread	Height	X	ØY	ØG	ØC	Base Height	ØB
250, 500, 1000	4.13	5/8-18 UNF	1.38	8	0.28	3.50	1.34	1.13	1.25
2.5K, 5K	4.13	5/8-18 UNF	1.38	8	0.28	3.50	1.34	1.13	1.25
12.5K, 25K	6.00	1 1/4-12 UN	1.75	12	0.41	5.13	2.65	1.75	2.25
50K	8.00	1 3/4-12 UN	2.50	16	0.53	6.50	3.76	2.00	3.00
75K, 100K	9.00	2 1/2-12 UN	3.00	16	0.66	7.88	4.00	2.75	4.00

## 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	0.001	0.001	0.001	0.002	0.002

## Available Options

<b>Threads</b>	Metric or Custom.
<b>Output</b>	3mV/V, 4mV/V, Custom. Standardized output.
<b>Dimensions</b>	Custom dimensions welcome.
<b>Compensated Temperature Ranges</b>	-65° to 400° F.
<b>Operating Temperature Ranges</b>	-65° to 400° F.
<b>Calibration</b>	Additional calibration points (in addition to standard points) available (Consult Factory). Special and custom calibrations available (Consult Factory)
<b>Amplifiers</b>	Internal and/or In-Line (Consult Factory). • Analog (4-20 mA; 0-5 Vdc; 0-10 Vdc). • Digital (RS-232; RS-485; CANbus; MODbus).
<b>Multiple Bridges</b>	Dual and Triple bridges available.
<b>Calibration Range</b>	Special full scale ranges (Example: 75 lb).
<b>Cables and Cable Length</b>	For Cable types available, consult factory. Specify Cable length.
<b>Cable Connector</b>	Add a connector to the end of the cable. Consult factory for available connectors.
<b>Connectors</b>	Many connectors available (PT04, MS3102, etc.) Consult factory Orientation: Any orientation (radial standard, tangential, up or down or custom). Connector guards.
<b>Hermetically Sealed</b>	Hermetic seal, O-ring Seal and combinations are available. Consult factory.
<b>Overload Protection</b>	Compression. Overload stops take up to 10X F.S. Consult factory.
<b>Shock and Vibration</b>	All Stellar PNC740 load cells come standard with shock and vibration protection.
<b>Custom Options</b>	Other customer requested options welcome.



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## Notes, Modifications, Warranty

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.



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