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# Series PNC770/2

Low Profile, Light Weight, Precision Pancake Load Cells



PNC772 shown

## **Description**

The Series PNC770 and PNC772 load cells are low profile "pancake" designs for both tension and compression applications. These force transducers are constructed of light weight aircraft aluminum for weight-limited applications. Both load cells incorporate an integral base for a more compact design. The PNC770 utilizes an integral cable while the PNC772 is designed with a bolt-on flange electrical connector. Additional features include shock and vibration protection and barometric compensation. Each unit is shipped with a 5 point calibration record traceable to NIST as standard.

## **Standard Features**

- 0.05% Accuracy
- Compact Size
- Tension and Compression
- Integral Base
- Low Off-Axis Sensitivity
- 10 Million Cycle Life
- 2 mV/V Output
- Light Weight (Aircraft Aluminum)
- -65°F to +130°F Operating Temperature
- Barometrically Compensated
- Shock and Vibration Resistant
- 5 Point Calibration Record Traceable to NIST

# **Optional Features**

- Customer Specified Connectors/Cable Lengths
- Metric Versions
- Special Calibrations
- Internal Amplifier for High Level Analog and/or Digital Output
- Dual Bridges

#### Performance

Standard Ranges 25, 50, 100, 200, 300lbs. Output 2 mV/V +/-0.25% FSO. Accuracy 0.05% FSO BFSL. Temperature Effect on Zero 0.002% FSO/ F. Temperature Effect on Span 0.002% Reading/°F. Creep, in 30 min 0.025% Load. Zero Balance

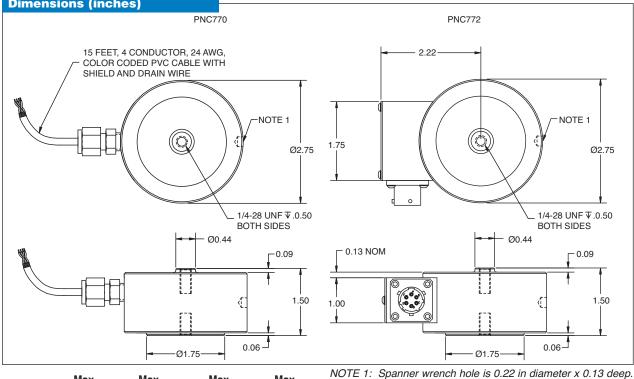
1% FSO.

**Environmental Characteristics** 

**Operating Temperature Range** -65°F to 130°F. **Compensated Temperature Range** 30°F to 130°F.

# Series PNC770/2 Specifications





	Max Max	Max	Max	NOTE 1: Spanner wrench ho			
Capacity (Lbs)	Static Overload (%FSO)	Shear Load (Lbs)	Bending Load (In-Lbs)	Torque Load (In-Lbs)	Deflection (Inches)	Ringing Frequency (Hz)	
25	150	150	150	40	0.003	2100	
50	150	150	150	40	0.003	2600	
100	150	250	180	40	0.003	4000	
200	150	250	180	40	0.003	6000	
300	150	250	180	40	0.003	7500	

#### **Mechanical Characteristics**

#### **Static Overload Without Damage** 150% FSO. Calibration Standard calibration is 5 pts (0, 50%, 100%, 50%, 0) tension and compression. **Load Limits** See Table **Material** Aluminum

### **Electrical Characteristics**

**Bridge Resistance** 350 Ohms nominal. Excitation 10 Vdc or Vac. **Maximum Excitation** 20Vdc or Vac. **Insulation Resistance** Greater than 5000 megaohms at 50 Vdc. **Electrical Termination PNC770** 15 FEET, 4 conductor 24 AWG color coded PVC cable with shield and drain wire. **PNC772** PTIH-10-6P Stainless Steel Receptacle.

### **Electrical Characteristics**

Connector Pins (Standard)							
<b>Description</b>	<b>PNC770</b>	PNC772					
+EXE	RED	PIN A					
+SIG	GREEN	PIN B					
- SIG	WHITE	PIN C					
- EXE	BLACK	PIN D					
Customer specified wiring codes							

are available.

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#### **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.



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