# Series PNC770/2

## Low Profile, Light Weight, Precision Pancake Load Cells

PNC770/2

*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

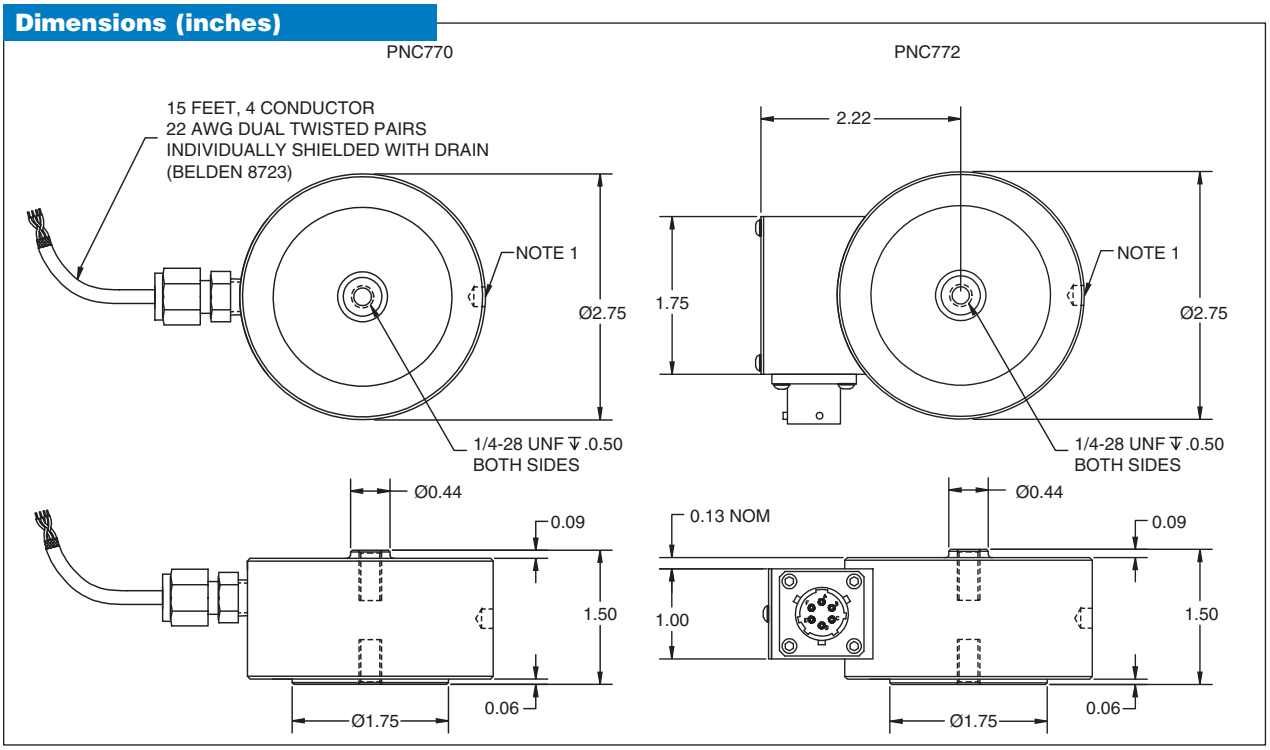
**Operating Temperature Range**
-65°F to 130°F.
**Compensated Temperature Range**
30°F to 130°F.

*Your Application-Solution Source℠*

# Series PNC770/2
## Specifications

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

### Dimensions (inches)




*NOTE 1: Spanner wrench hole is 0.22 in diameter x 0.13 deep.*

| Capacity (Lbs) | Max Static Overload (%FSO) | Max Shear Load (Lbs) | Max Bending Load (In-Lbs) | Max 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 PVC, 22 AWG Dual twisted pairs with shield.
***PNC772***
PTIH-10-6P Stainless Steel Receptacle.

### Electrical Characteristics

**Connector Pins (Standard)**

| Description | PNC770 | PNC772 |
|---|---|---|
| +EXE | RED | PIN A |
| +SIG | GREEN | PIN B |
| - SIG | WHITE | PIN C |
| - EXE | BLACK | PIN D |

Customer specified wiring codes are available.

CE

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**

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

ISO 9001

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