



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

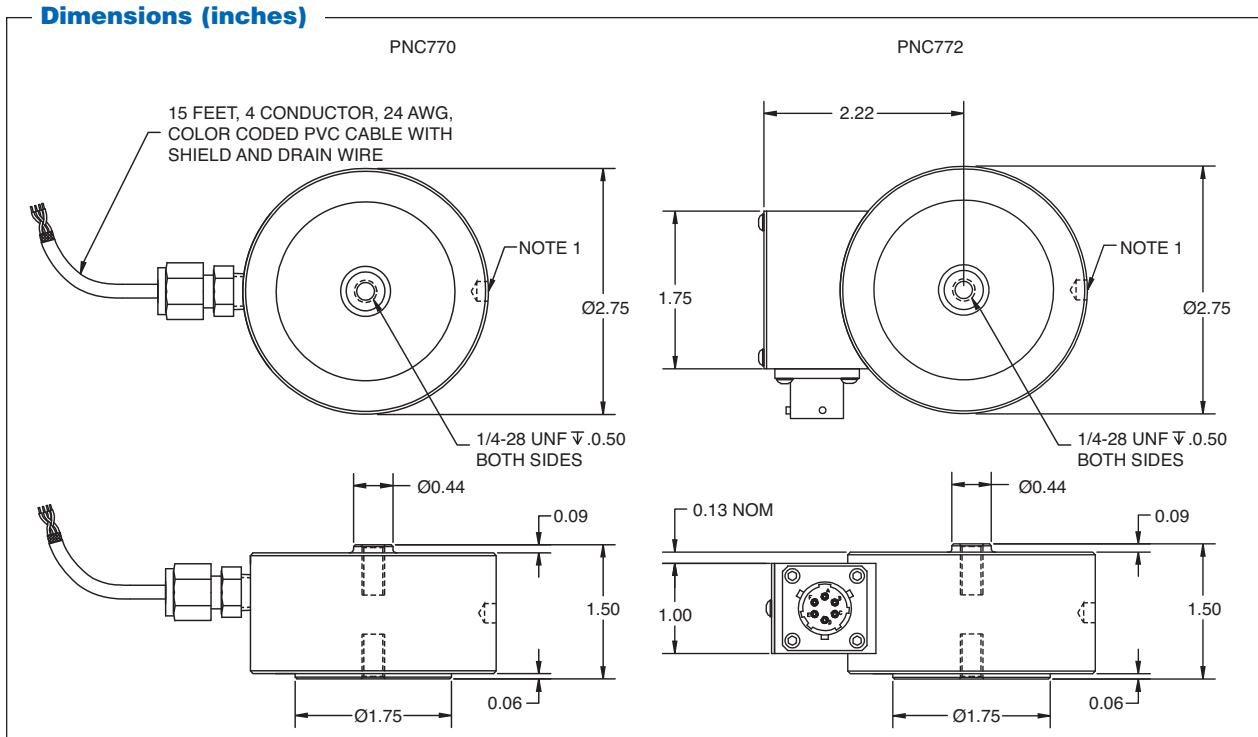
-65°F to 130°F.

Compensated Temperature Range

30°F to 130°F.

Series PNC770/2 Specifications

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



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)	Ring 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% Range.

Calibration

Standard calibration is 5 pts (0, 50%, 100%, 50%, 0 of Range) 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 megohms 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

Outputs

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.



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.



ISO 9001/AS9100

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

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