



Series PNC720

General Purpose Compression Pancake Load Cell



Description

The Series PNC720 load cells are low profile “pancake” designs for compression force applications. These load cells incorporate an integral spherical load button with welded dual diaphragms for improved accuracy and rigidity. The PNC720 series is constructed of welded stainless steel for very demanding application environments. Hermetic stainless steel electrical connectors with gold plated pins are standard. 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

- Up to 0.10% FSO Accuracy
- Low Profile Design
- Compression Loading
- 3 mV/V output
- Welded Stainless Steel
- Shock and Vibration Resistant
- -65°F to +250°F Standard Operating Temperature
- Barometrically Compensated
- 5 Point Calibration Record Traceable to NIST

Optional Features

- Customer Specified Electrical Termination
- Metric Versions
- Overload Stops
- Special Calibrations
- Internal Amplifier for High Level Analog and/or Digital Output
- Dual Bridges
- - 320°F to 400°F Operating Temperature

Performance

Accuracy

see table

Standard Ranges

100 lbs. FSO to 120,000 lbs. FSO. (see table)

Output

3 mV/V $\pm 0.50\%$ FSO.

Repeatability

0.03% FSO.

Temperature Effect on Zero

0.002% FSO/°F.

Temperature Effect on Span

0.002% Reading/°F.

Zero Balance

1% FSO.

Environmental Characteristics

Operating Temperature Range

-65°F to 250°F.

(-320°F to 400°F optional.)

Compensated Temperature Range

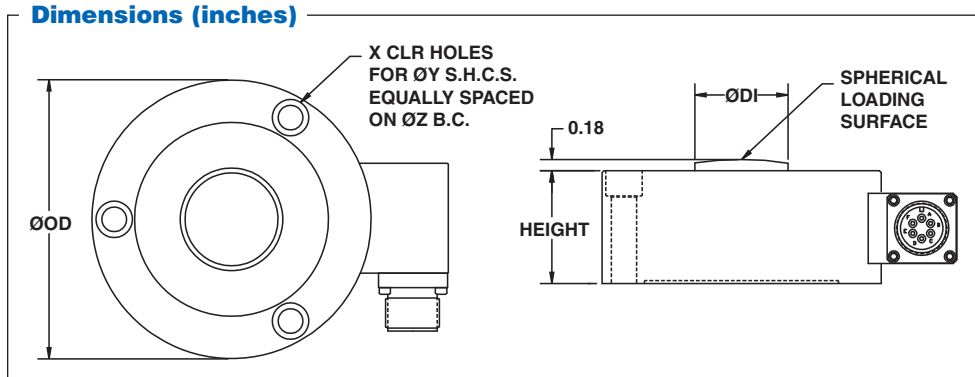
70°F to 170°F.

(-65°F to 400°F optional.)

Series PNC720

Specifications

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



Capacity (lbs.)	ØOD	Height	X	Y	Z	D1	Accuracy BFSL (% FSO)	Linearity Typical (% FSO)	Hysteresis Typical (% FSO)	Connector
100, 250, 500, 1000	3.00	1.00	6	1/4	2.250	0.56	0.10	0.10	0.08	PTH-10-6P
2K, 5K	3.50	1.00	6	5/16	2.625	0.66	0.10	0.10	0.08	PTH-10-6P
10K, 20K	4.50	1.82	3	3/8	3.790	1.50	0.10	0.10	0.08	MS3102-14S-6P
50K	4.50	1.82	3	3/8	3.790	1.50	0.20	0.10	0.15	MS3102-14S-6P

Mechanical Characteristics

Static Overload Without Damage

150% Range.

Calibration

Standard calibration is 5 pts (0, 50%, 100%, 50%, 0) of range.

Material

Welded stainless steel.

Electrical Characteristics

Bridge Resistance

350 Ohms nominal.

Excitation

10 Vdc or Vac.

Insulation Resistance

Greater than 5000 megaohms at 50 Vdc.

Electrical Termination

Ranges Up To 5000 lbs.

Hermetic Welded PTH-10-6P Stainless Steel Connector or equivalent.

Ranges Over 5000 lbs.

Bolted Hermetic MS3102-14S-6P Stainless Steel Connector with O-ring seal.

Electrical Characteristics

Connector Pins (Standard)

A +EXE D - EXE
B +EXE E - SIG
C - EXE F +SIG

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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