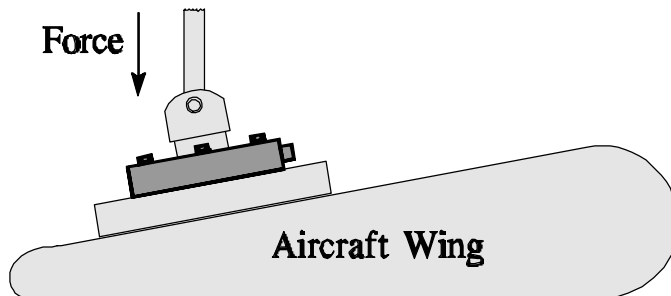


LPT- Low Profile Transducer**Applications:**

**Materials Testing Machines
Aircraft Structural Fatigue Testing**



- **Fatigue Resistant Design Combined with Precision Performance**
- **Low Deflection and High Natural Frequency**
- **High Accuracy Under Application of Side and Eccentric Loads**
- **All Stainless Steel Construction (2-10K)**
- **Tension and Compression Loads**
- **FM and CSA Approved**

**Product Description**

LPT load cells incorporate a new patented design that provides fatigue resistance in excess of 10 million cycles, as well as precision performance. It has minimal deflection at full load and high natural frequency. The shear design provides high resistance to extraneous forces developed from bending, torsion, or side loads.

The patented design offers precision specifications for combined error (non-linearity and hysteresis) of +/- 0.03% full scale. Repeatability is within +/- 0.01% full scale.

LPT transducers are particularly well suited for materials testing machines, aircraft structural fatigue testing, and other difficult applications requiring the ultimate in life and accuracy.

The model LPT is also an excellent choice for weighing applications requiring compact size, high accuracy, and superior environmental protection.

ThermoBLH
An ISO 9001 Registered Company

Product Specifications and Outline Dimensions

PERFORMANCE (% of Rated Output)

Rated Output (RO)	2 mV/V \pm 0.10% [compression]
Combined Error	\pm 0.03
Repeatability	\pm 0.01
Creep (60 minutes)	\pm 0.03 %RO
Output Variance Between Compression and Tension	less than 0.005 mV/V
Effect of Concentric - Angular Load	less than .03% at 1°

ELECTRICAL

Recommended Excitation	10V AC or DC
Maximum Excitation	20V AC or DC
Zero Balance - %RO	1.0
Input Resistance	350 \pm 3 ohms
Output Resistance	350 \pm 1.5 ohms
Insulation Resistance	5 G-ohms
Electrical Connection	Bendix Connector PC0 1A-10-6P

APPROVALS

Factory Mutual (FM)	3611
CSA	C22.2 (all applicable sections)

TEMPERATURE

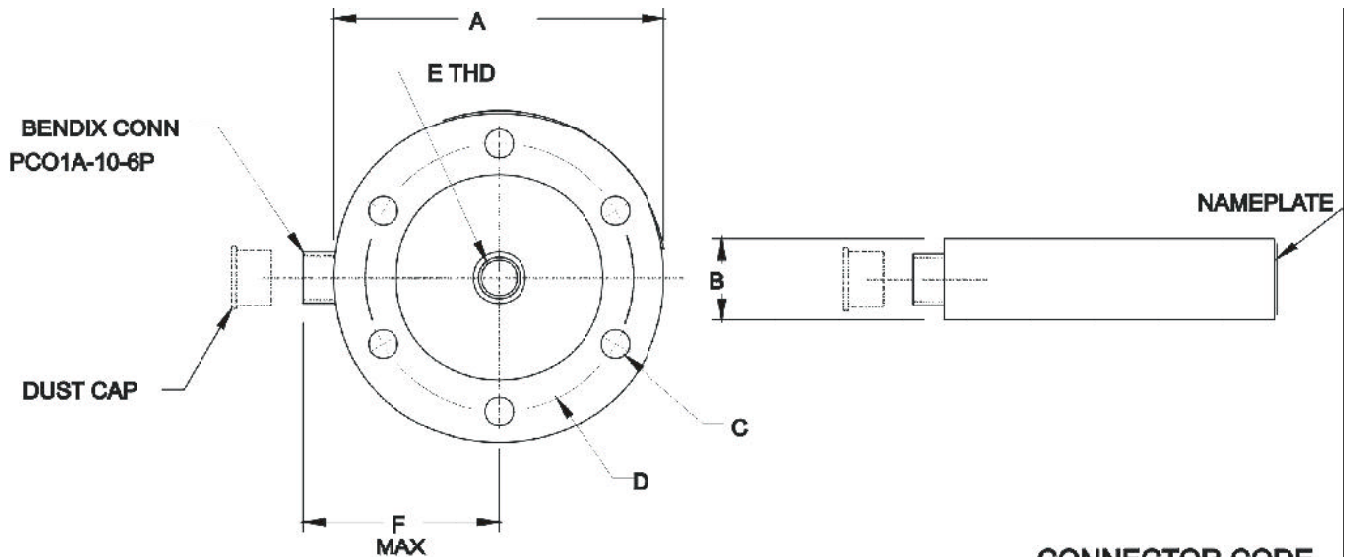
Safe Range	- 40°F to + 220°F
Compensated Range	+ 15°F to + 115°F
Effect on Zero Balance	0.0015% RO/°F
Effect on Rated Output	0.0008% Load/°F

SEALING

All Capacities	IP67
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ADVERSE LOAD RATINGS (% Rated Capacity)

Safe Overload	150%
Ultimate Overload	300%
Maximum Sideload	100% of axial load capacity
Maximum Torque	100% rated capacity lbf-in capacity in lbf - in
Thread Without Damage	12 x 10 ⁶ cycles
Fatigue Rating (2K-10K) (Stainless Steel)	(One cycle: 0 to full scale tension to full scale compression)
Fatigue Rating (1K) (Aluminum)	12 x 10 ⁶ cycles
	(One cycle: 0 to full scale tension to full scale compression)



CONNECTOR CODE

INPUT { AF + GRN
DE - BLK

OUTPUT { B + WH
C - RED

CAP (LB)	A	B	C	D	E	F	BODY MATL
1K	4.000	1.000	.344	3.25	1/2-20UNF-2B	2.40	AL
2K				3.70			SST
5K	4.500	1.200	.450	4.25	1-14UNS-2B	2.90	SST
10K	5.000			4.25			

Dimensions are shown in inches

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ISO 9001

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