

# LGP 382 - ULTRA PRECISION LOAD CELL

The LGP 382 is a compression-only, low-profile, shear web designed load cell, which has brought new benefits and broader applications for the user. The resistance to extraneous forces, bending, torsion, side loads, produces high fatigue life and permits less stringent mounting alignment and reduces the possibility of reading errors. The shear webs are contoured in a manner to produce peak strain only under the gage grids. The gage tabs, bridge wiring, and compensation are located in low stress areas. The gages themselves are constructed of high endurance alloy to specified standards of high accuracy and fatigue operation on a shear web. The LGP 382 is shipped with a base plate which is used to ensure the user gets the highest accuracy.

- **COMPRESSION ONLY**
- **ACCURACY TO  $\pm 0.02\%$**
- **HIGH OUTPUT - 4MV/V**
- **ECCENTRIC LOAD COMPENSATED**
- **LOW DEFLECTION**

## SPECIFICATIONS

LOAD RANGES:	1000 lb To 50,000 lb
LINEARITY:	
1,000 - 2,000	$\pm 0.03\%$ F.S.
5,000 - 10,000	$\pm 0.04\%$ F.S.
25,000 - 50,000	$\pm 0.04\%$ F.S.
HYSTERESIS:	
1,000 - 2,000	$\pm 0.02\%$ F.S.
5,000 - 10,000	$\pm 0.04\%$ F.S.
25,000 - 50,000	$\pm 0.04\%$ F.S.
REPEATABILITY:	$\pm 0.01\%$ F.S.
MATERIAL:	Aluminum - 1000 & 2000 Mild Steel - 5000 & up
TEMPERATURE RANGE:	15° to 115° F
OUTPUT:	
1,000 - 2000	2 mv/v
5,000 - 50,000	4 mv/v
BRIDGE RESISTANCE:	350 ohm
EXCITATION:	10 Vdc
SAFE OVERLOAD:	150% of Capacity
DEFLECTION:	0.002" - 0.004"
CONNECTOR:	PCO4E-10-6P (mating connector not included)
NAT. FREQUENCY:	4.5 To 4.6 KHz



RANGES	A	B	C	D	E	F	G	H	I	J	K	L	L <sub>1</sub>
1000; 2000													
5000; 10,000 lb	4.13	1.38	1.25	1.34	6.00	22.5°	3.52	8 Places	1.13	0.03	1.25	5/8-18	0.87 (Deep)
25,000; 50,000	6.06	1.75	1.63	2.65	8.00	15.0°	5.13	12 Places	1.75	0.03	2.25	1 1/4-12	1.40 (Deep)

