

Load Pin Load Cell

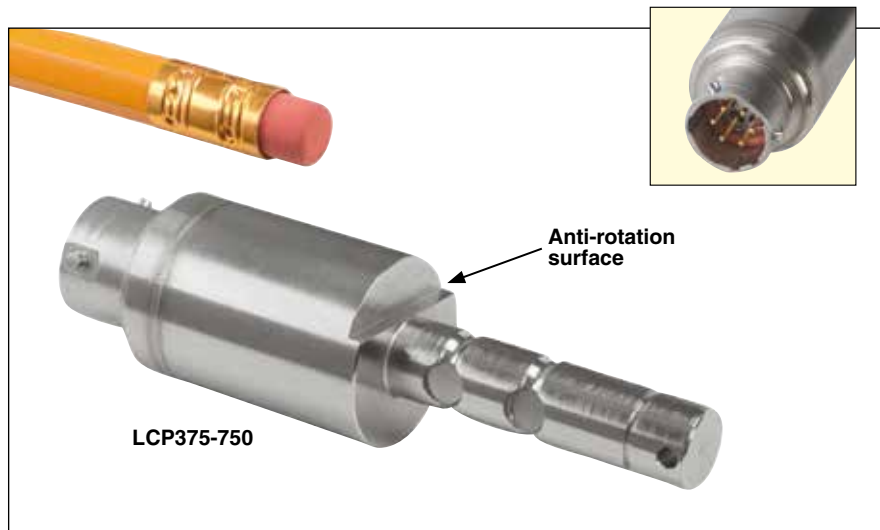


Force Sensing Load Pin
600 to 50,000 lb / 272 to 22,500 kgf

LCP Series



Standard



- ✓ Dual Shear Beam Technology
- ✓ High 0.50% Accuracy Class
- ✓ All Stainless Steel Construction
- ✓ Standard PTIH-10-6P Connector



LCP Series are compact load pins designed for tension and compression measurements. They can be applied on clevis pin shackles, loading cranes, lifting fittings, sprockets and pulley axles by replacing existing shear pins, clevis bolts, clevis pins, shear axles and many other types of pinned joints to control or monitor reaction load on the pins. Applications include measuring of cable tension, structural testing, aerospace and construction, force calibration, lifting systems, mooring systems, hydraulic presses and crane load systems. LCP Series are temperature-compensated.

Specifications

Output: 1 mV/V nominal
Excitation: 10 Vdc (15 Vdc max)
Linearity: $\pm 0.50\%$ FSO
Hysteresis: $\pm 0.50\%$ FSO
Repeatability: $\pm 0.15\%$ FSO
Zero Balance: $\pm 1.0\%$ FSO
Operating Temp Range: -53 to 121°C (-65 to 250°F)
Compensated Temp Range: 16 to 71°C (60 to 160°F)

Thermal Effects:

Zero: $\pm 0.009\%$ FSO/°C
($\pm 0.005\%$ FSO/°F)

Span: 0.009% FSO/°C
($\pm 0.005\%$ FSO/°F)

Safe Overload: 150% of capacity

Ultimate Overload: $\geq 300\%$ of Capacity

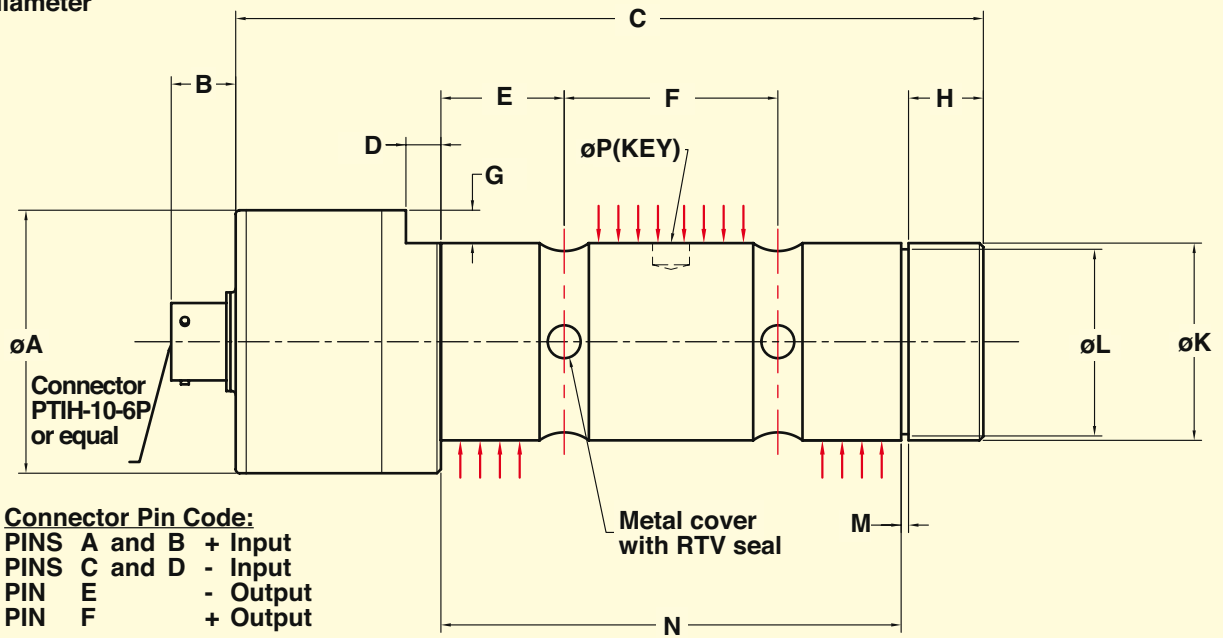
Bridge Resistance: 350 Ω nominal

Construction: Stainless Steel

Electrical Connector: PTIH-10-6P
(or equivalent)

Protection Class: IP65

LCP750, LCP1000, LCP1250, LCP1500
Dimensions: mm (inch)
 ϕ = diameter



**Red arrows indicate direction of positive loading.
 Calibration in positive direction standard.**

Model No.	Capacity kgf (lb)	ϕ A	B	C	D	E	F	G	H	ϕ K	ϕ L	M	N	ϕ P
LCP750-5K	2268 (5000)	38.1 (1.50)	12.4 (0.49)	101.3 (3.99)	5.1 (0.20)	15.0 (0.59)	25.4 (1.00)	6.4 (0.25)	7.9 (0.31)	19.0 (0.748) 19.1 (0.75)	17.9 (0.70)	1.2 (0.05)	55.4 (2.18)	4.0 (0.16)
LCP750-6K	2722 (6000)	38.1 (1.50)	12.4 (0.49)	101.3 (3.99)	5.1 (0.20)	15.0 (0.59)	25.4 (1.00)	6.4 (0.25)	7.9 (0.31)	19.0 (0.748) 19.1 (0.75)	17.9 (0.70)	1.2 (0.05)	55.4 (2.18)	4.0 (0.16)
LCP1000-10K	4536 (10,000)	38.1 (1.50)	12.4 (0.49)	108.2 (4.26)	5.1 (0.20)	16.0 (0.63)	25.4 (1.00)	6.4 (0.25)	12.7 (0.50)	25.3 (0.998) 25.4 (1.00)	23.9 (0.94)	1.2 (0.05)	57.4 (2.26)	5.6 (0.22)
LCP1000-12.5K	5670 (12,500)	38.1 (1.50)	12.4 (0.49)	108.2 (4.26)	5.1 (0.20)	16.0 (0.63)	25.4 (1.00)	6.4 (0.25)	12.7 (0.50)	25.3 (0.998) 25.4 (1.00)	23.9 (0.94)	1.2 (0.05)	57.4 (2.26)	5.6 (0.22)
LCP1250-18K	8165 (18,000)	50.1 (2.00)	12.4 (0.49)	133.4 (5.25)	6.9 (0.27)	20.6 (0.81)	35.1 (1.38)	6.4 (0.25)	16.0 (0.63)	31.7 (1.248) 31.8 (1.25)	30.0 (1.20)	1.4 (0.06)	76.2 (3.00)	5.6 (0.22)
LCP1250-20K	9072 (20,000)	50.1 (2.00)	12.4 (0.49)	133.4 (5.25)	6.9 (0.27)	20.6 (0.81)	35.1 (1.38)	6.4 (0.25)	16.0 (0.63)	31.7 (1.248) 31.8 (1.25)	30.0 (1.20)	1.4 (0.06)	76.2 (3.00)	5.6 (0.22)
LCP1500-30K	13,608 (30,000)	50.1 (2.00)	12.4 (0.49)	157.5 (6.20)	6.9 (0.27)	23.9 (0.94)	41.1 (1.62)	6.4 (0.25)	14.5 (0.57)	38.0 (1.498) 38.1 (1.50)	35.7 (1.41)	1.4 (0.06)	88.9 (3.50)	7.1 (0.28)

Models with Integral Connector (PTIH-10-6P or Equal)

Capacity		Model No.	Compatible Meters
lb	kgf		
5000	2268	LCP750-5K	DPiS, DP41-S, DP25B-S
6000	2722	LCP750-6K	DPiS, DP41-S, DP25B-S
10,000	4536	LCP1000-10K	DPiS, DP41-S, DP25B-S
12,500	5670	LCP1000-12.5K	DPiS, DP41-S, DP25B-S
18,000	8165	LCP1250-18K	DPiS, DP41-S, DP25B-S
20,000	9072	LCP1250-20K	DPiS, DP41-S, DP25B-S
30,000	13,608	LCP1500-30K	DPiS, DP41-S, DP25B-S

Comes complete with NIST traceable calibration certificate.

Ordering Example: LCP750-5K, 2268 kgf (5000 lb) capacity load pin with integral twist-lock connector.

Custom capacities and sizes not shown on this page are available, please contact OMEGA for details.