

# Subminiature Industrial Compression Load Cell

## Standard and Metric Models



**Compression**  
**0-2.2 lb to 0-1000 lb**  
**0-10 to 0-5000 N**

1 Newton = 0.2248 lb  
 1 daNewton = 10 Newtons  
 1 lb = 454 g  
 1 t = 1000 kg = 2204 lb

### LCKD/LCMKD Series



Standard

Small in size but not in performance, OMEGA's LCKD/LCMKD Series compression load cells are designed to measure load ranges from 1 kg to 1000 lb. Rugged all stainless steel construction and high-performance strain gages ensure superior linearity and stability. Temperature compensation is achieved through a miniature circuit board in the cable. These cells are designed to be mounted on a smooth, flat surface.

### SPECIFICATIONS

**Excitation:** 5 Vdc, 7 Vdc maximum

**Output:** 2 mV/V nominal

**5-Point Calibration:**

0%, 50%, 100%, 50%, 0%

**Linearity:** ±0.25% FSO

**Hysteresis:** ±0.25% FSO

**Repeatability:** ±0.10% FSO

**Zero Balance:** ±2% FSO

**Operating Temp Range:**

-54 to 121°C (-65 to 250°F)

**Compensated Temp Range:**

16 to 71°C (60 to 160°F)

**Thermal Effects:**

**Span:** ±0.018% FSO/°C

**Zero:** ±0.009% FSO/°C

**Safe Overload:** 150% of capacity

**Ultimate Overload:** 300% of capacity

**Bridge Resistance:** 350 Ω minimum

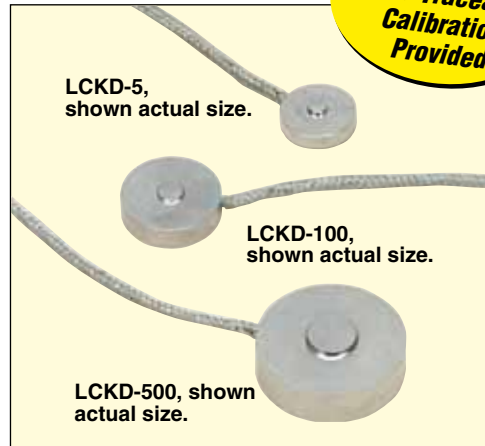
**Full Scale Deflection:** 0.001 to 0.003"

**Electrical Connection:** 1.5 m (5')

4-conductor insulated cable with temperature compensation board

**Weight:** <14 g (<0.5 oz)

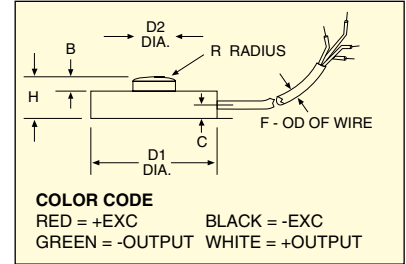
**Protection Class:** IP54



5-Point  
NIST-Traceable  
Calibration  
Provided



LCKD-100, shown larger than actual size.



### Dimensions: mm (inch)

CAPACITY	D1	D2	H	B	C	F	R
10 to 200 N 1 kg to 50 lb	9.6 (0.38)	2.2 (0.09)	3.0 (0.12)	0.76 (0.03)	1.0 (0.04)	1.3 (0.05)	6.3 (0.25)
500 to 1000 N 100 to 250 lb	13 (0.50)	3.0 (0.12)	3.8 (0.15)	0.51 (0.02)	1.5 (0.06)	1.3 (0.05)	13 (0.5)
2000 to 5000 N 500 to 1000 lb	19 (0.75)	6.1 (0.24)	6.4 (0.25)	0.76 (0.03)	2.5 (0.10)	1.3 (0.05)	101 (4)

### STANDARD MODELS

#### To Order

CAPACITY		MODEL NO.	COMPATIBLE METERS
lb	N		
2.2	9.8	LCKD-1KG	DPiS, DP41-S, DP25B-S
5	22.2	LCKD-5	DPiS, DP41-S, DP25B-S
10	46	LCKD-10	DPiS, DP41-S, DP25B-S
25	111	LCKD-25	DPiS, DP41-S, DP25B-S
50	222	LCKD-50	DPiS, DP41-S, DP25B-S
100	445	LCKD-100	DPiS, DP41-S, DP25B-S
250	1112	LCKD-250	DPiS, DP41-S, DP25B-S
500	2224	LCKD-500	DPiS, DP41-S, DP25B-S
1000	4448	LCKD-1000	DPiS, DP41-S, DP25B-S

### METRIC MODELS

CAPACITY		MODEL NO.	COMPATIBLE METERS
N	lb		
10	2.25	LCMKD-10N	DP41-S, DP25B-S, iSeries
20	4.5	LCMKD-20N	DP41-S, DP25B-S, iSeries
50	11.2	LCMKD-50N	DP41-S, DP25B-S, iSeries
100	22.5	LCMKD-100N	DP41-S, DP25B-S, iSeries
200	45	LCMKD-200N	DP41-S, DP25B-S, iSeries
500	112	LCMKD-500N	DP41-S, DP25B-S, iSeries
1000	225	LCMKD-1KN	DP41-S, DP25B-S, iSeries
2000	450	LCMKD-2KN	DP41-S, DP25B-S, iSeries
5000	1124	LCMKD-5KN	DP41-S, DP25B-S, iSeries

Comes complete with 5-point NIST-traceable calibration and 59 kΩ shunt data.

**Ordering Examples:** LCKD-1KG, 1 kg capacity load cell.

LCKD-25, 25 lb capacity load cell.

LCMKD-10N, 10 Newton capacity load cell.

LCMKD-2KN, 2000 Newton capacity load cell.