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

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

 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.

STANDARD MODELS

To Order

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

METRIC MODELS

CAPACITY  N  lb  MODEL NO.  COMPATIBLE METERS
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

Central to load cell is a miniature circuit board in the cable...