

# MINIATURE INDUSTRIAL COMPRESSION LOAD CELL

## STANDARD AND METRIC MODELS



### Compression

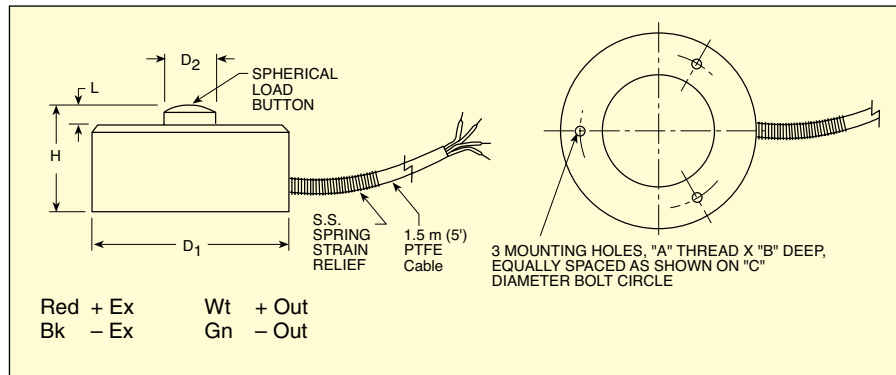
0-25 lb to 0-50,000 lb  
0-100 N to 0-200,000 N

### LCGD/LCMGD Series



Shown actual size.

- ✓ 5-Point NIST Traceable Calibration
- ✓ Stainless Steel
- ✓ High Accuracy
- ✓ Low Profile
- ✓ Miniature Size



The LCGD/LCMGD Series miniature low-profile load cells are compression load cells with excellent long-term stability. An all stainless steel construction ensures reliability in severe industrial environments. These cells are designed to be mounted on a flat surface, and a load button is integral to their basic design.

### SPECIFICATIONS

- Excitation: 10 Vdc
- Output: 2 mV/V nominal
- 5-Point Calibration: 0%, 50% 100%, 50%, 0%
- Linearity:  $\pm 0.25\%$  FSO
- Hysteresis:  $\pm 0.20\%$  FSO
- Repeatability:  $\pm 0.10\%$  FSO
- Zero Balance:  $\pm 2\%$  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:  $\pm 0.018\%$  rdg/°C
  - Zero:  $\pm 0.009\%$  FSO/°C

- Safe Overload: 150% of capacity
- Ultimate Overload: 300% of capacity
- Bridge Resistance: 350  $\Omega$  minimum
- Deflection: 0.076 mm (0.003")

- Construction: Stainless steel
- Electrical Connection: 1.5 m (5') shielded cable
- Protection Class: IP65

### STANDARD Dimensions: mm (inch)

CAPACITY	D1	D2	H	L	A	B	C
25 to 100 lb	25 (1.00)	5.3 (0.21)	16 (0.62)	1.3 (0.05)	#4-40 UNC	4.8 (0.19)	19 (0.75)
250 to 2000 lb	32 (1.25)	8.1 (0.32)	10 (0.39)	1.8 (0.07)	#6-32 UNC	6.4 (0.25)	25.4 (1.00)
5000 to 10,000 lb	38 (1.50)	11 (0.43)	16 (0.63)	2.0 (0.08)	#6-32 UNC	6.4 (0.25)	31.8 (1.25)
15,000 to 30,000 lb	51 (2.00)	15 (0.60)	25 (1.00)	3.0 (0.12)	#6-32 UNC	6.4 (0.25)	41.3 (1.63)
50,000 lb	76 (3.00)	20 (0.78)	38 (1.50)	4.6 (0.18)	#6-32 UNC	6.4 (0.25)	60.3 (2.38)

### METRIC Dimensions: mm (inch)

CAPACITY (N)	D1	D2	H	L	A	B	C
100 to 500	25 (1.00)	5.3 (0.21)	16 (0.62)	1.3 (0.05)	M4 x 0.7	4.8 (0.19)	19.1 (0.75)
1000 to 10,000	32 (1.25)	8.1 (0.32)	10 (0.39)	1.8 (0.07)	M4 x 0.7	6.4 (0.25)	25.4 (1.00)
20,000 to 50,000	38 (1.50)	11 (0.43)	16 (0.63)	2.0 (0.08)	M4 x 0.7	6.4 (0.25)	31.8 (1.25)
60,000 to 120,000	51 (2.00)	15 (0.60)	25 (1.00)	3.0 (0.12)	M4 x 0.7	6.4 (0.25)	41.3 (1.63)
200,000	76 (3.00)	20 (0.78)	38 (1.50)	4.6 (0.18)	M4 x 0.7	6.35 (0.25)	60.3 (2.38)

Shown actual size.



LCMGD-100

LCMGD-2K

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

\* Compatible meters available online.

\*\* 4-digit meter.

Ordering Examples: LCGD-5K, 5000 lb capacity load cell.

LCGD-25, 25 lb capacity load cell.

LCMGD-10KN, 10,000 Newton capacity load cell.

LCMGD-500N, 500 Newton capacity load cell.

## STANDARD MODELS

To Order			
CAPACITY		MODEL NO.	COMPATIBLE METERS*
lb	N		
25	111	LCGD-25	DPiS, DP41-S, DP25B-S
50	222	LCGD-50	DPiS, DP41-S, DP25B-S
100	445	LCGD-100	DPiS, DP41-S, DP25B-S
250	1112	LCGD-250	DPiS, DP41-S, DP25B-S
500	2224	LCGD-500	DPiS, DP41-S, DP25B-S
1000	4448	LCGD-1K	DPiS, DP41-S, DP25B-S
2000	8897	LCGD-2K	DPiS, DP41-S, DP25B-S
5000	22,242	LCGD-5K	DPiS, DP41-S, DP25B-S
10,000	44,484	LCGD-10K	DPiS, DP41-S, DP25B-S
15,000	66,726	LCGD-15K	DPiS**, DP41-S, DP25B-S**
20,000	88,968	LCGD-20K	DPiS**, DP41-S, DP25B-S**
30,000	133,452	LCGD-30K	DPiS**, DP41-S, DP25B-S**
50,000	222,420	LCGD-50K	DPiS**, DP41-S, DP25B-S**

## METRIC MODELS

CAPACITY		MODEL NO.	COMPATIBLE METERS*
N	lb		
100	22.5	LCMGD-100N	DPiS, DP41-S, DP25B-S
200	45	LCMGD-200N	DPiS, DP41-S, DP25B-S
500	112	LCMGD-500N	DPiS, DP41-S, DP25B-S
1000	225	LCMGD-1KN	DPiS, DP41-S, DP25B-S
2000	450	LCMGD-2KN	DPiS, DP41-S, DP25B-S
5000	1124	LCMGD-5KN	DPiS, DP41-S, DP25B-S
10,000	2248	LCMGD-10KN	DPiS**, DP41-S, DP25B-S**
20,000	4496	LCMGD-20KN	DPiS**, DP41-S, DP25B-S**
50,000	11,240	LCMGD-50KN	DPiS**, DP41-S, DP25B-S**
60,000	13,488	LCMGD-60KN	DPiS**, DP41-S, DP25B-S**
80,000	17,984	LCMGD-80KN	DPiS**, DP41-S, DP25B-S**
120,000	26,976	LCMGD-120KN	DPiS**, DP41-S, DP25B-S**
200,000	44,960	LCMGD-200KN	DPiS**, DP41-S, DP25B-S**

## COMPATIBLE METERS

### DP25B/DP41-B



- ✓ mV, V, mA, Strain Gage Thermocouple, RTD Inputs
- ✓ Full Process Unit Scaling
- ✓ Built-In Transducer Power



DP41-B, shown smaller than actual size, see [omega.com/dp41b](http://omega.com/dp41b)

## MONOGRAM SERIES

PATENTED



DP25B-E, shown smaller than actual size, see [omega.com/dp25b](http://omega.com/dp25b)

## To Order

MODEL NO.	DESCRIPTION
DP25B-E	4-digit voltage/current input meter with excitation
DP25B-S	4-digit mV input meter with excitation
DP41-B	6-digit 1/8 DIN universal input meter with excitation

Comes complete with operator's manual.

Ordering Examples: DP25B-E, voltage/current input meter for use with 0 to 5 V, 0 to 10 V, 4 to 20 mA output transducers.

DP25B-S, mV input meter for use with mV/V output transducers, DP41-B, universal input meter for use with all standard transducer outputs.

LOAD CELLS  
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