

# MINIATURE UNIVERSAL LOAD CELLS

## STUD MOUNT STYLE, 25 mm (1") TO 35 mm (1.38") DIAMETER

### STANDARD AND METRIC MODELS

**Tension/Compression**  
**Calibrated in Tension**  
**0-50 lb to 0-10,000 lb**  
**0-22 kg to 0-4537 kg**  
**0-100 to 0-50,000 N**

## LC202/LCM202 Series



- Miniature Package for Test Stands and Difficult Locations
- Heavy-Duty Construction
- Dual Mounting Studs for Easy Installation
- 5-Point Calibration

OMEGA's LC202/LCM202 Series compact load cells have ranges of 50 to 10,000 lb and accuracy of 0.25%. The all stainless steel construction and rugged design ensure long life in industrial and commercial applications.

### SPECIFICATIONS

**Excitation:** 10 Vdc, 15 Vdc max

**Output:** 2 mV/V nominal

**Accuracy:** ±0.25% FSO linearity, hysteresis, repeatability combined

**5-Point Calibration:**

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

**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:**

**Zero:** 0.009% FSO/°C

**Span:** 0.009% FSO/°C

**Safe Overload:** 150% of capacity

**Ultimate Overload:** 300% of capacity

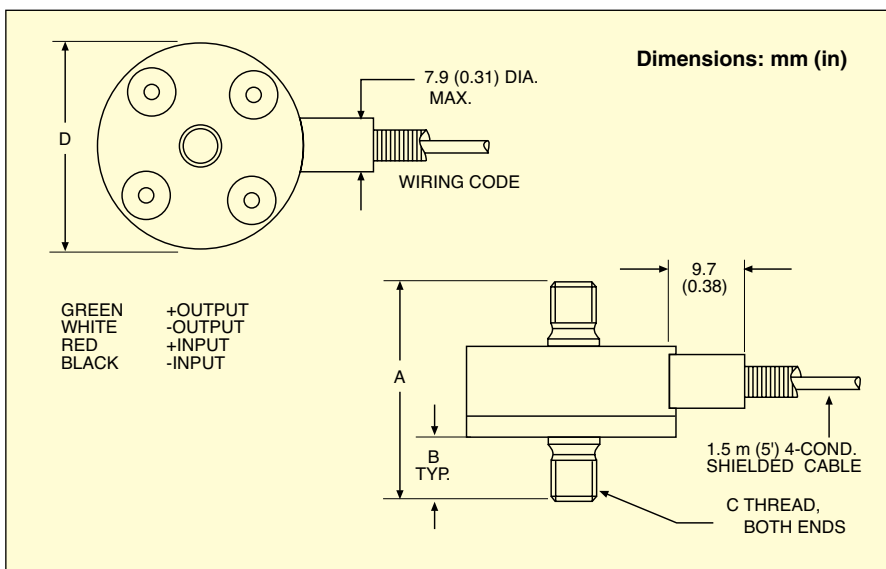
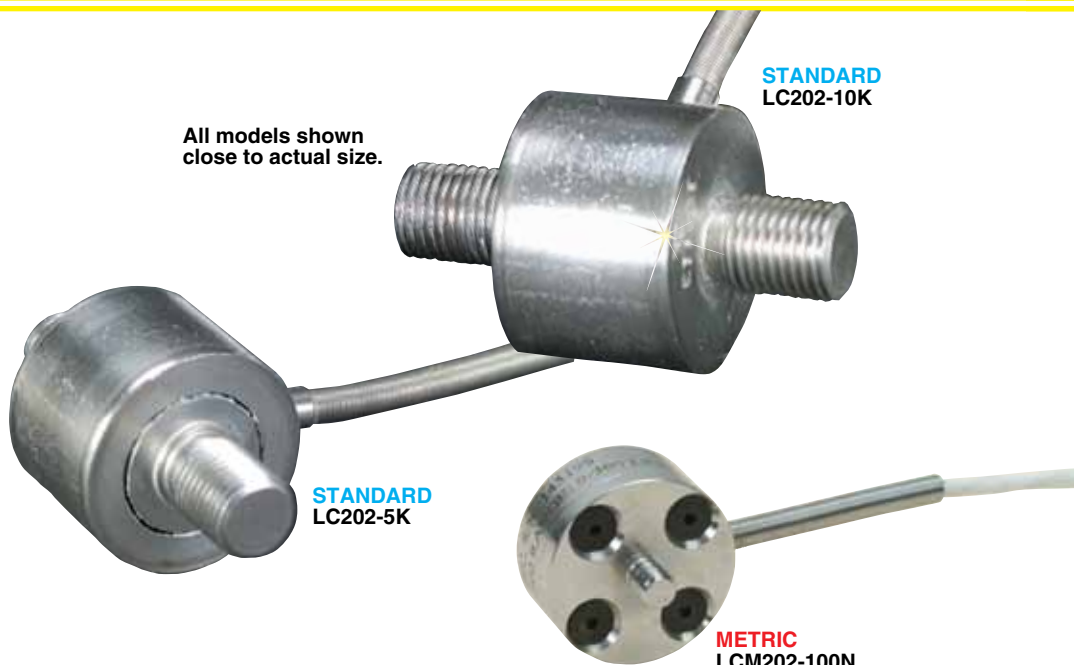
**Input Resistance:** 360 Ω minimum

**Output Resistance:** 350 ±10 Ω

**Construction:** Stainless steel

**Electrical:** 1.5 m (5') 4-conductor cable

**Protection Class:** IP65



#### STANDARD Dimensions: mm (in)

CAPACITY (lb)	A	B	C THREAD	D
50 to 500	25 (1.00)	6.3 (0.25)	10-32 UNF-2A	25 (1.00)
1000	33 (1.31)	9.7 (0.38)	¼-28 UNF-2A	25 (1.00)
2000 to 3000	44 (1.75)	13 (0.50)	⅜-24 UNF-2A	25 (1.00)
4000 to 5000	57 (2.23)	16 (0.63)	½-20 UNF-2A	32 (1.25)
7500 to 10,000	73 (2.89)	22 (0.88)	¾-16 UNF-2A	35 (1.38)

#### METRIC Dimensions: mm (in)

CAPACITY (N)	A	B	C THREAD	D
100-2000	25 (1.00)	6.3 (0.25)	M5 x 0.8 - 6g	25 (1.00)
5000	33 (1.31)	9.7 (0.38)	M6 x 1.00 - 6g	25 (1.00)
10,000	44 (1.75)	13 (0.50)	M10 x 1.5 - 6g	25 (1.00)
20,000	57 (2.23)	16 (0.63)	M12 x 1.75 - 6g	32 (1.25)
50,000	73 (2.89)	22 (0.88)	M20 x 1.5 - 6g	35 (1.38)

## STANDARD MODELS

To Order			
CAPACITY		MODEL NO.	COMPATIBLE METERS
lb	N		
50	222	LC202-50	DPiS, DP41-S, DP25B-S
100	445	LC202-100	DPiS, DP41-S, DP25B-S
300	1334	LC202-300	DPiS, DP41-S, DP25B-S
500	2224	LC202-500	DPiS, DP41-S, DP25B-S
1000	4448	LC202-1K	DPiS, DP41-S, DP25B-S
2000	8896	LC202-2K	DPiS, DP41-S, DP25B-S
3000	13,344	LC202-3K	DPiS, DP41-S, DP25B-S
5000	22,240	LC202-5K	DPiS, DP41-S, DP25B-S
7500	33,360	LC202-7.5K	DPiS, DP41-S, DP25B-S
10,000	44,480	LC202-10K	DPiS, DP41-S, DP25B-S

Comes complete with 5-point NIST-traceable calibration.

DPiS meter suitable for one direction measurement only.

Ordering Examples: LC202-100, 100 lb capacity miniature universal load cell.

LC202-1K, 1000 lb capacity miniature universal load cell.

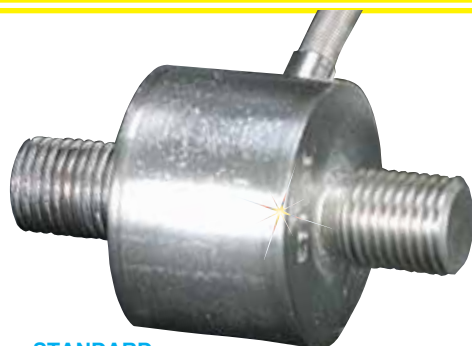
## METRIC MODELS

CAPACITY		MODEL NO.	COMPATIBLE METERS
N	lb		
100	22	LCM202-100N	DPiS, DP41-S, DP25B-S
200	45	LCM202-200N	DPiS, DP41-S, DP25B-S
300	67	LCM202-300N	DPiS, DP41-S, DP25B-S
500	112	LCM202-500N	DPiS, DP41-S, DP25B-S
1000	225	LCM202-1KN	DPiS, DP41-S, DP25B-S
1500	337	LCM202-1.5KN	DPiS, DP41-S, DP25B-S
2000	450	LCM202-2KN	DPiS, DP41-S, DP25B-S
5000	1124	LCM202-5KN	DPiS, DP41-S, DP25B-S
10,000	2248	LCM202-10KN	DPiS, DP41-S, DP25B-S
20,000	4496	LCM202-20KN	DPiS, DP41-S, DP25B-S
50,000	11,241	LCM202-50KN	DPiS, DP41-S, DP25B-S

Comes complete with 5-point NIST-traceable calibration.

Ordering Examples: LCM202-100N, 100 N capacity miniature universal load cell.

LCM202-1KN, 1000 N capacity miniature universal load cell.



**STANDARD**  
LC202-10K, shown close to actual size.



**METRIC**  
LCM202-20KN, shown close to actual size.



**METRIC**  
LCM202-1.5KN, shown close to actual size.

## STRAIN GAGE/BRIDGE TRANSDUCER-SIGNAL CONDITIONERS



- ✓ Unipolar/Bipolar 30 mV to 100 mV
- ✓ 13-Bit Resolution
- ✓ 10 Vdc Excitation
- ✓ 0.2% FS Accuracy
- ✓ 1800 Vdc Isolation

The iDRN-ST and iDRX-ST signal conditioners provide highly accurate, stable, isolated measurement for strain gage transducers such as load cells, torque transducers, non-amplified pressure transducers, and other bridge based transducers. Both models can accept signals from 30 to 100 mV full scale and provide 10 Vdc reference voltage which may be used for transducer excitation.

