

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

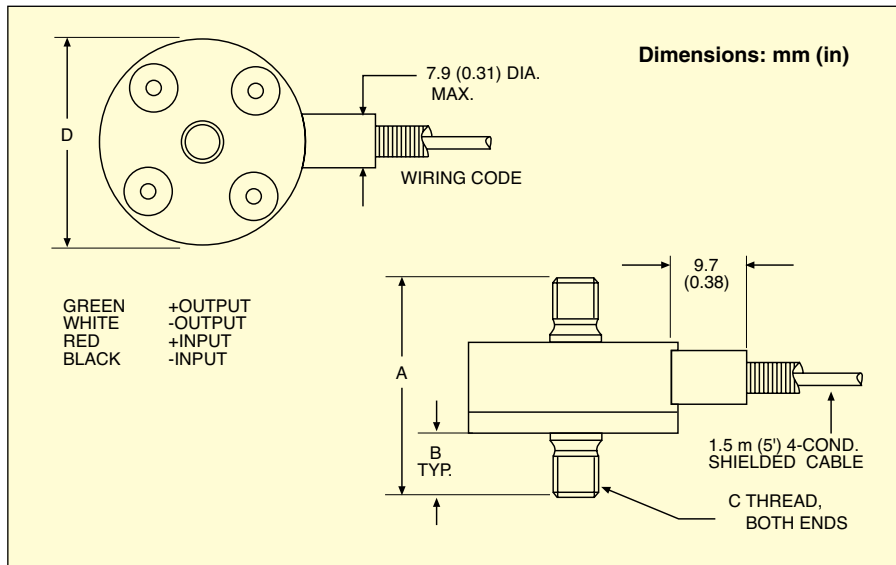
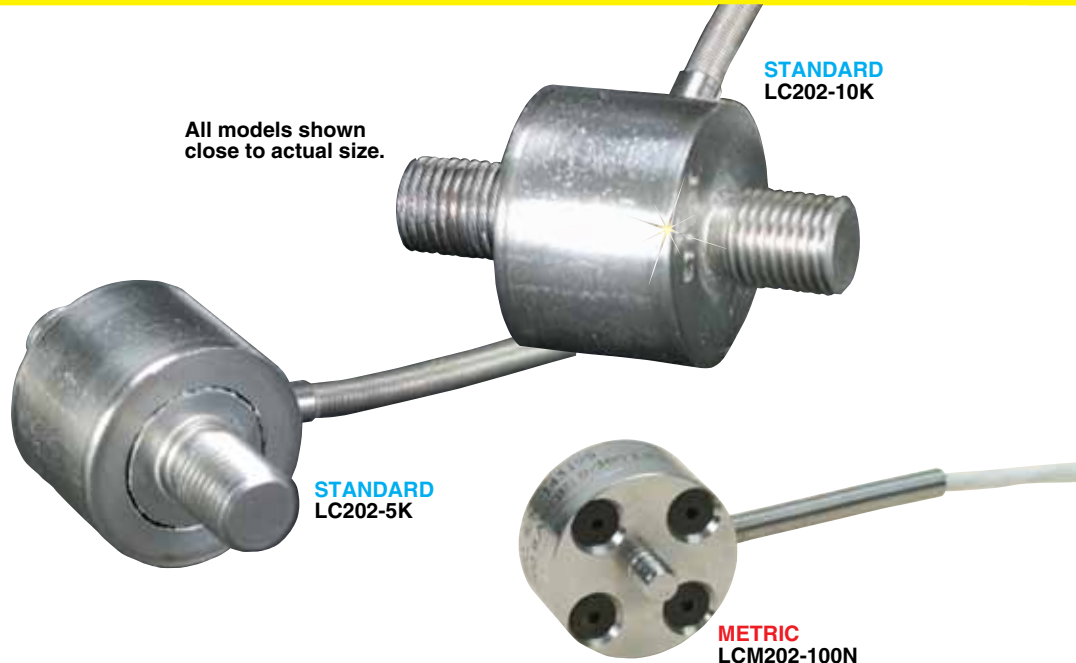


- Miniature Package for Test Stands and Difficult Locations
- Heavy-Duty Construction
- Dual Mounting Studs for Easy Installation
- 5-Point Calibration

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.

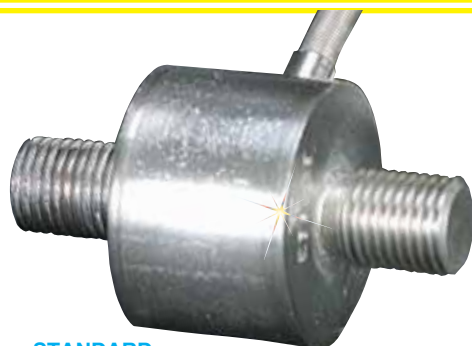
METRIC MODELS

| 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.

