## HYDROSTATICALLY COMPENSATED LOAD CELLS FOR UNDERWATER APPLICATIONS

## **LCUW Series**

*Tension/Compression Calibrated in Tension 0-100 lb to 0-10,000 lb 0-45 kg to 0-4537 kg* 

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





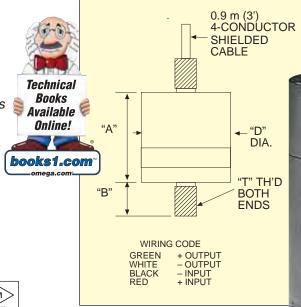
Construction

- ✓ 0.25% Accuracy
- Heavy-Duty Construction for High-Capacity Loads
- FM Intrinsically Safe Models (Standard)

The LCUW Series hydrostatically compensated load cells are designed for operation underwater. Applications include dry docks, marine weighing, submerged platforms, and industrial weighing where pit flooding occurs. The all stainless steel construction and rugged design make the LCUW a high-accuracy, high-reliability load cell in the difficult submerged environment.

#### **SPECIFICATIONS**

Output: 2 mV/V ±0.25 % FSO Excitation: 10 Vdc (15 V max) Accuracy: 0.25% FSO combined linearity, hysteresis and repeatability Hydrostatic Effect on Zero: ±2.5% FSO per 500 psi (10 K ±0.1% FSO per 100 psi) Zero Balance: ±1.0% FSO Agency Approvals: FM Intrinsically Safe IS/I.II.III/1/CDEFG Operating Temp Range: 2 to 93°C (35 to 200°F) Compensated Temp Range: 16 to 71°C (60 to 160°F) Protection Class: IP68



Thermal Effects: Zero:  $\pm 0.005\%$  FSO/°F Span:  $\pm 0.005\%$  rdg/°F Safe Overload: 150% of capacity Ultimate Overload: 300% of capacity Input Resistance: 360  $\Omega$  minimum Output Resistance: 350  $\pm 5 \Omega$ Construction: 17-4 PH stainless steel Electrical: 0.9 m (3') 4-conductor TFE wrapped cable

#### Dimensions: mm (in)

| ,          |                           |  |  |
|------------|---------------------------|--|--|
| Α          | В                         | D  | Т  |
| 64 (2.5)   | 19 (0.75)                 | 51 (2.0)                                     | ½-20 UNF-2A  |
| 76 (3.0)   | 25 (1.0)                  | 64 (2.5)                                     | ¾-16 UNF   |
| 137 (5.38) | 32 (1.25)                 | 165 (6.5)                                    | 1-14 UNS   |
|            | A<br>64 (2.5)<br>76 (3.0) | A B   64 (2.5) 19 (0.75)   76 (3.0) 25 (1.0) | A B D   64 (2.5) 19 (0.75) 51 (2.0)   76 (3.0) 25 (1.0) 64 (2.5) |

#### MOST POPULAR MODELS HIGHLIGHTED!

| To Order <i>(Specify Model Number)</i>  |      |           |        |                         |  |  |
|---|------|-----------|--------|-------------------------|--|--|
| CAPACITY  |      |           |        |                         |  |  |
| lb  | kg   | MODEL NO. | PRICE  | COMPATIBLE METERS*      |  |  |
| 100   | 45   | LCUW-100  | \$1175 | DP41-B, DP41-S, DP25B-S |  |  |
| 250   | 114  | LCUW-250  | 1175   | DP41-B, DP41-S, DP25B-S |  |  |
| 500   | 227  | LCUW-500  | 1175   | DP41-B, DP41-S, DP25B-S |  |  |
| 1000  | 455  | LCUW-1K   | 1175   | DP41-B, DP41-S, DP25B-S |  |  |
| 2000  | 909  | LCUW-2K   | 1395   | DP41-B, DP41-S, DP25B-S |  |  |
| 6000  | 2721 | LCUW-6K   | 1395   | DP41-B, DP41-S, DP25B-S |  |  |
| 10,000  | 4537 | LCUW-10K  | 2595   | DP41-B, DP41-S, DP25B-S |  |  |
| Comes with 5-point NIST-traceable calibration. * See section D for compatible meter |      |           |        |                         |  |  |

Comes with 5-point NIST-traceable calibration. Consult Engineering for quotation on side cable exit.

Ordering Example: LCUW-100, 100 lb capacity hydrostatically compensated universal load cell, 0.9 m (3') cable, \$1175.

#### ACCESSORY

| MODEL NO. | PRICE | DESCRIPTION                         |  |
|-----------|-------|-------------------------------------|--|
| OP-17     | \$15  | Reference Book: Measure for Measure |  |
|           |       |                                     |  |





LCUW-1K-SE, \$1175, shown larger than actual size.

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