

# 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



Starts at  
**\$1175**



- ✓ All Stainless Steel 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  $\pm 0.25\%$  FSO

**Excitation:** 10 Vdc (15 V max)

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

**Hydrostatic Effect on Zero:**  
 $\pm 2.5\%$  FSO per 500 psi  
(10 K  $\pm 0.1\%$  FSO per 100 psi)

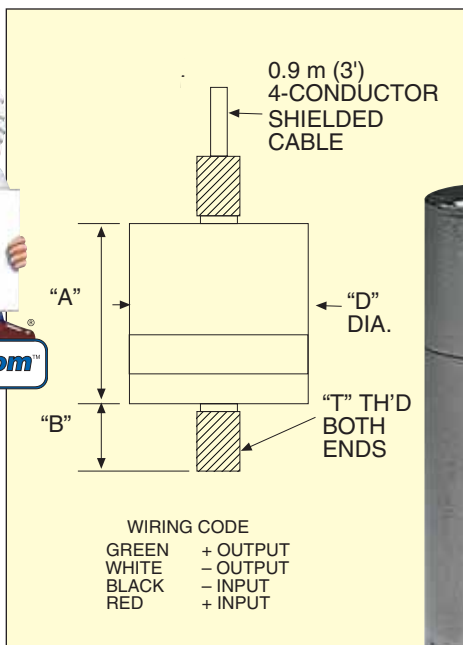
**Zero Balance:**  $\pm 1.0\%$  FSO

**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)

CAPACITY (lb)	A	B	D	T
100 to 1K	64 (2.5)	19 (0.75)	51 (2.0)	1/2-20 UNF-2A
2K to 6K	76 (3.0)	25 (1.0)	64 (2.5)	3/4-16 UNF
10K	137 (5.38)	32 (1.25)	165 (6.5)	1-14 UNS

**MOST POPULAR MODELS HIGHLIGHTED!**

### To Order (Specify Model Number)

CAPACITY		MODEL NO.	PRICE	COMPATIBLE METERS*
lb	kg			
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 meters.

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.