

# HIGH-CAPACITY UNIVERSAL CANISTER LOAD CELLS

## RUGGED STAINLESS STEEL CASE

Models Available with Built-In Amplifiers! See Next Page.

**Tension/Compression\***  
**Calibrated in Tension**  
**LC1103 (Cable Style)**  
**LC1113 (Connector Style)**  
**50 lb to 500,000 lb**  
**23 kg to 226,860 kg**

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

### LC1103/LC1113 Series



Standard

- ✓ 5-Point Calibration Included
- ✓ 0.25% Interchangeability for Multiple Cell Load Applications
- ✓ Dual-Bridge Models Available
- ✓ High Accuracy
- ✓ Environmentally Protected



LC1103-10K, cable style shown actual size, see next page for dimensions.

### SPECIFICATIONS

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

**Output:** 2 mV/V  $\pm$ 0.25 % FSO

**5-Point Calibration (in Tension):**

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

**Linearity:**

$\leq$ 10 K:  $\pm$ 0.05% FSO

$>$ 10 K:  $\pm$ 0.1% FSO

**Hysteresis:**  $\pm$ 0.05% FSO

**Repeatability:**  $\pm$ 0.05% FSO

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

**Operating Temp Range:**

LC1103: -46 to 107°C (-50 to 225°F)

LC1113: -46 to 121°C (-50 to 250°F)

**Compensated Temp Range:**

16 to 71°C (60 to 160°F)

**Thermal Effects:**

**Zero:**  $\pm$ 0.0018% FSO/°C

**Span:**  $\pm$ 0.0018% FSO/°C

**Safe Overload:** 150% of capacity

**Ultimate Overload:** 300% of capacity

**Input Resistance:** 350  $\pm$ 10  $\Omega$

**Output Resistance:** 350  $\pm$ 10  $\Omega$

**Full Scale Deflection:** 0.08 to 0.13 mm (0.003 to 0.005") typical

**Construction:** Stainless steel

**Electrical:** 4.6 m (15') 4-conductor, shielded, color-coded PVC cable

**Protection Class:** IP67

\*  $\geq$ 100,000 lb calibrated in compression

### POPULAR OPTIONS

0 to 5 Vdc Output

Consult Factory

"5V"

Overload Stops:

"-OL"

Dual Bridge:

$\leq$ 2000 kg

"-DUAL"

$>$ 2000 kg

"-DUAL"

Extended Temperature Range:

-45 to 93°C

"-TC1"

-45 to 177°C

(-50 to 350°F)

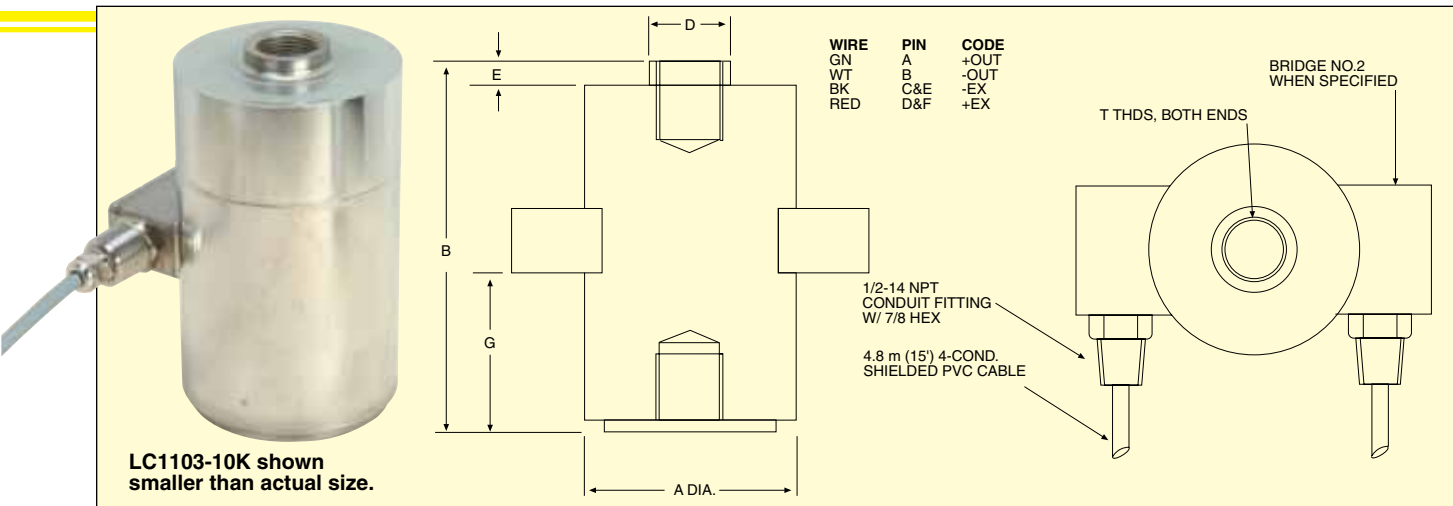
"-TC2"

Watertight Cable Exit:

"-WTC"

Additional Cable Length: add cost/ft

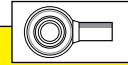
# HIGH-CAPACITY UNIVERSAL CANISTER LOAD CELLS



LC1103-10K shown smaller than actual size.

## Dimensions: mm (inch)

Capacity (lb)	A	B	D	E	G	T
50 to 300	89 (3.5)	114 (4.5)	22 (0.88)	6.4 (0.25)	76 (3.0)	3/8-24 UNF x 3/16 DP
500 to 3K	89 (3.5)	116 (4.6)	38 (1.5)	6.4 (0.25)	32 (1.25)	1/2-20 UNF x 1/2 DP
5K to 15K	89 (3.5)	133 (5.25)	38 (1.5)	6.4 (0.25)	51 (2.0)	1-14 UNS x 1.0 DP
20K to 75K	114 (4.5)	197 (7.75)	54 (2.13)	6.4 (0.25)	83 (3.25)	1 1/2-12 UNF x 2.0 DP
100K to 150K	219 (8.63)	451 (17.75)	89 (3.5)	13 (0.50)	197 (7.75)	3-8 UN x 3 1/2 DP
200K to 300K	219 (8.63)	451 (17.75)	127 (5.0)	13 (0.50)	197 (7.75)	4-8 UN x 4.0 DP
500K	219 (8.63)	451 (17.75)	140 (5.5)	13 (0.50)	197 (7.75)	4-8 UN x 4.0 DP



To Order Visit [omega.com/lc1103](http://omega.com/lc1103) for Pricing and Details

CAPACITY		CABLE STYLE	CONNECTOR STYLE	COMPATIBLE METERS**	LOAD BUTTON	ROD END
lb	kg				MODEL NO.	MODEL NO.
50	23	LC1103-50	LC1113-50	DP41-W, DP41-S, DP25B-S	LBC-038	REC-038M
100	45	LC1103-100	LC1113-100	DP41-W, DP41-S, DP25B-S	LBC-038	REC-038M
300	136	LC1103-300	LC1113-300	DP41-W, DP41-S, DP25B-S	LBC-038	REC-038M
500	227	LC1103-500	LC1113-500	DP41-W, DP41-S, DP25B-S	LBC-012	REC-012M
1000	455	LC1103-1K	LC1113-1K	DP41-W, DP41-S, DP25B-S	LBC-012	REC-012M
2500	1134	LC1103-2.5K	LC1113-2.5K	DP41-W, DP41-S, DP25B-S	LBC-012	REC-012M
5000	2269	LC1103-5K	LC1113-5K	DP41-W, DP41-S, DP25B-S	LBC-100	REC-100M
10,000	4537	LC1103-10K	LC1113-10K	DP41-W, DP41-S, DP25B-S	LBC-100	REC-100M
20,000	9074	LC1103-20K	LC1113-20K	DP41-W, DP41-S, DP25B-S*	LBC-112	REC-112M
50,000	22,686	LC1103-50K	LC1113-50K	DP41-W, DP41-S, DP25B-S*	LBC-112	REC-112M
100,000	45,372	LC1103-100K	LC1113-100K	DP41-W, DP41-S, DP25B-S*	LBC-300-8	—
200,000	90,744	LC1103-200K	LC1113-200K	DP41-W, DP41-S, DP25B-S*	—	—
300,000	136,116	LC1103-300K	LC1113-300K	DP41-W, DP41-S, DP25B-S*	—	—
500,000	226,860	LC1103-500K	LC1113-500K	DP41-W, DP41-S, DP25B-S*	—	—

## ACCESSORY

MODEL NO.	DESCRIPTION
PT06F10-6S	Mating connector for LC1113 series load cells
CA-6PC24-3-015	Cable assembly with twist-lock connector for LC1113 series load cells

Comes complete with 5-point NIST-traceable calibration. \* 4-digit meter. \*\* Visit [omega.com](http://omega.com) for compatible meters.

**Note:** Models >300,000 lb are calibrated at 300,000 lb. Full scale calibration above 300,000 lb within ±1% available: add suffix “-FS” to the model number and consult Sales for price and delivery. To order a dual-bridge version, add suffix “-DUAL” to model number and cost to price.

**Ordering Examples:** LC1103-2.5K, 2500 lb capacity cable-style load cell.

LC1113-100K, 100,000 lb capacity connector-style load cell.

PT06F10-6S, mating connector (sold separately).

LC1103-100K-DUAL, 100,000 lb capacity, dual-bridge, cable-style load cell.