

CANISTER-STYLE COMPRESSION LOAD CELLS

STANDARD AND METRIC MODELS

LC1001/LCM1001 Series LC1011/LCM1011 Series

Compression

0-500 lb to 0-2 M lb

0-250 to 0-10,000 kgf

LC1011-1K, connector style,
\$895, shown actual size, see
next page for dimensions.

Starts at
\$895



Standard

- ✓ FM/CSA-Approved Intrinsically Safe Models Available
- ✓ 0.25% Interchangeability for Multiple Load Cell Applications
- ✓ 5-Point NIST-Traceable Calibration (Standard)
- ✓ Canister Design Ideal for Axial Compression Applications
- ✓ Heavy-Duty, Environmentally Sealed Case for Harsh Environments
- ✓ Dual-Bridge Models Available



LC1011/LCM1011 models with twist-lock connector.



SPECIFICATIONS

Excitation: 10 Vdc (15 Vdc max)

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

Agency Approvals: CSA

Intrinsically Safe: IS/I.II.III/1/CDEFG

FM Hazardous Location: S/I/1/ABCD
(must be specified at time of order)

5-Point Calibration (in Compression):

0%, 50%, 100%, 50%, 0%
calibrated to full scale up to 300,000 lb;
load cells over 300,000 lb calibrated at
300,000 lb. For a full scale calibration
over 300,000 lb, specify option “-FS”
after model number (consult Sales for
price and delivery).

Protection Class: IP67

Linearity: $\pm 0.05\%$ FSO

Hysteresis: $\pm 0.03\%$ FSO

Repeatability: $\pm 0.02\%$ FSO

Zero Balance: $\pm 1\%$ FS

Operating Temp Range:
-46 to 100°C (-50 to 212°F)

Compensated Temp Range:
16 to 71°C (60 to 160°F)

Thermal Effects:

Zero: $\pm 0.0018\%$ FS/°C

Span: $\pm 0.0018\%$ rdg/°C

Safe Overload: 150% of rated capacity

Ultimate Overload:

300% of rated capacity

Input Resistance: 350 $\pm 10 \Omega$

Output Resistance: 350 $\pm 10 \Omega$

FS Deflection: 0.18 to 0.50 mm
(0.007 to 0.020") typical

Construction:

Metric and Standard Ranges

<500,000 lb: 17-4 PH stainless steel

Ranges $\geq 500,000$ lb: High-alloy steel

Electrical:

LC1001/LCM1001: 4.8 m (15')

4-conductor shielded PVC cable

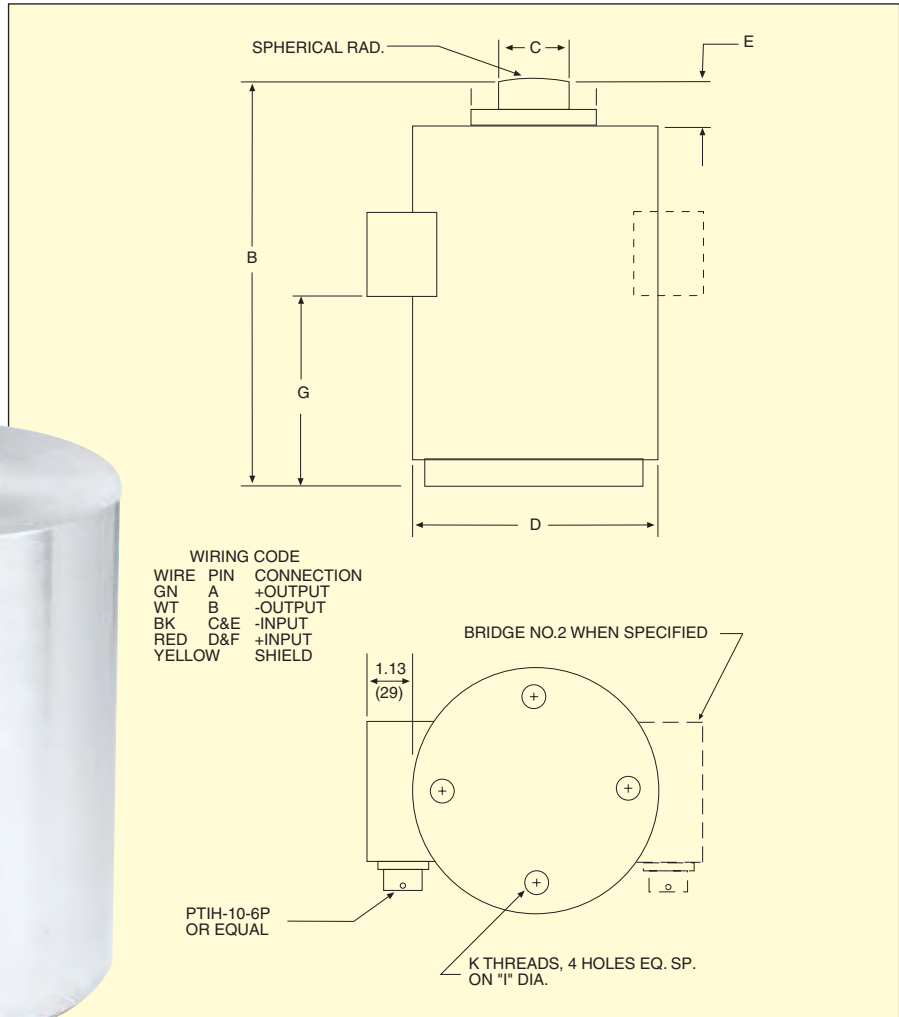
LC1011/LCM1011: PTIH-10-6P
(or equiv.)

Mating Connector: PT06F10-6S,
\$26.50 (sold separately)

HEAVY-DUTY CANISTER STYLE COMPRESSION LOAD CELLS

Models Available with Built-In Amplifiers!

LC1011-10K, connector style, \$895, shown smaller than actual size.



Dimensions: mm (in)

CAPACITY kgf (lb)	B	C	D	E	G	I ±.005	K (THREAD)	WEIGHT kg (lb)
250 to 1K (500 to 10K)	116 (4.6)	32 (1.25)	89 (3.50)	6 (0.25)	32 (1.25)	60 (2.375)	M10 x 1.5 x ¾ DP ¾-24 UNF-2B x ¾ DP	2.7 (6)
2K to 5K (5K to 10K)	151 (5.9)	32 (1.25)	89 (3.50)	19 (0.75)	46 (1.81)	60 (2.375)	M10 x 1.5 x ¾ DP ¾-24 UNF-2B x ¾ DP	4.5 (10)
10K (20K to 50K)	191 (7.5)	32 (1.25)	114 (4.50)	19 (0.75)	77 (3.44)	60 (2.375)	M10 x 1.5 x ¾ DP ¾-24 UNF-2B x ¾ DP	9 (20)
(100,000)	232 (9.1)	44 (1.75)	141 (5.56)	27 (1.06)	121 (4.75)	102 (4.000)	½-20 UNF-2B x ½ DP	88 (40)
(200,000)	295 (11.6)	64 (2.50)	168 (6.63)	27 (1.06)	159 (6.25)	140 (5.500)	¾-18 UNF-2B x 1 DP	43 (95)
(300,000)	356 (14)	76 (3.00)	219 (8.63)	33 (1.31)	194 (7.63)	140 (5.500)	¾-16 UNF-2B x 1 ¼ DP	48 (105)
(400,000)	356 (14)	89 (3.50)	219 (8.63)	33 (1.31)	194 (7.63)	140 (5.500)	¾-16 UNF-2B x 1 ¼ DP	64 (140)
(500,000)	356 (14)	89 (3.50)	219 (8.63)	22 (0.88)	194 (7.63)	89 (3.500)	½-20 UNF-2B x ¾ DP	77 (170)
(1,000,000)	356 (14)	140 (5.50)	219 (8.63)	22 (0.88)	140 (5.50)	114 (4.500)	¾-18 UNF-2B x 1.0 DP	115 (250)
(2,000,000)	406 (16)	178 (7.00)	273 (10.75)	25 (1.00)	152 (6.00)	140 (5.500)	1-14 UNS-2B x 1 ¼ DP	182 (400)

POPULAR OPTIONS

Price

0 to 5 Vdc Output “-5V” \$175

Overload Stops: “-OL” Consult Factory

Dual Bridge:

≤2000 kgf (≤5000 lb) “-DUAL” 250

>2000 kgf (>5000 lb) “-DUAL” 350

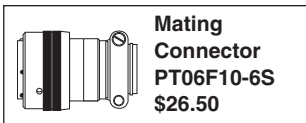
Extended Temperature Range:

-45 to 93°C (-50 to 200°F) “-TC1” 50

-45 to 177°C (-50 to 350°F) “-TC2” 225

Watertight Cable Exit: “-WTC” 125

Additional Cable Length: 6.50/ft



MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

Canister-Style Compression Load Cells						Accessories			
CAPACITY		CABLE STYLE	CONNECTOR STYLE	PRICE	COMPATIBLE METERS*	BASE PLATE**	PRICE	TOP PLATE**	PRICE
kgf	lb					MODEL NO.		MODEL NO.	
STANDARD MODELS									
227	500	LC1001-500	LC1011-500	\$895	DP41-W, DP41-S	LC1000-BP4	\$48	LC1000-TP4	\$48
455	1000	LC1001-1K	LC1011-1K	895	DP41-W, DP41-S	LC1000-BP4	48	LC1000-TP4	48
1134	2500	LC1001-2.5K	LC1011-2.5K	895	DP41-W, DP41-S	LC1000-BP4	48	LC1000-TP4	48
2269	5000	LC1001-5K	LC1011-5K	895	DP41-W, DP41-S	LC1000-BP4	48	LC1000-TP4	48
4537	10 K	LC1001-10K	LC1011-10K	895	DP41-W, DP41-S	LC1000-BP4	48	LC1000-TP4	48
9074	20 K	LC1001-20K	LC1011-20K	895	DP41-W, DP41-S	LC1000-BP4	48	LC1000-TP4	48
22,686	50 K	LC1001-50K	LC1011-50K	895	DP41-W, DP41-S	LC1000-BP4	48	LC1000-TP4	48
45,372	100 K	LC1001-100K	LC1011-100K	1250	DP41-W, DP41-S	LC1000-BP6	68	LC1000-TP6	68
90,744	200 K	LC1001-200K	LC1011-200K	†	DP41-W, DP41-S	LC1000-BP8	126	LC1000-TP8	126
136,116	300 K	LC1001-300K	LC1011-300K	†	DP41-W, DP41-S	LC1000-BP9	146	LC1000-TP9	136
226,860	500 K	LC1001-500K	LC1011-500K	†	DP41-W, DP41-S	n/a		n/a	
453,721	1 M	LC1001-1M	LC1011-1M	†	DP41-W, DP41-S	n/a		n/a	
746,483	2 M	LC1001-2M	LC1011-2M	†	DP41-W, DP41-S	n/a		n/a	
METRIC MODELS									
250	551	LCM1001-250	LCM1011-250	\$895	DP41-B, DP41-S	LCM1000-BP4	\$48	LCM1000-TP4	\$48
500	1102	LCM1001-500	LCM1011-500	895	DP41-B, DP41-S	LCM1000-BP4	48	LCM1000-TP4	48
1000	2205	LCM1001-1K	LCM1011-1K	895	DP41-B, DP41-S	LCM1000-BP4	48	LCM1000-TP4	48
2000	4409	LCM1001-2K	LCM1011-2K	895	DP41-B, DP41-S	LCM1000-BP4	48	LCM1000-TP4	48
5000	11,023	LCM1001-5K	LCM1011-5K	895	DP41-B, DP41-S	LCM1000-BP4	48	LCM1000-TP4	48
10,000	22,046	LCM1001-10K	LCM1011-10K	895	DP41-B, DP41-S	LCM1000-BP4	48	LCM1000-TP4	48

ACCESSORY

MODEL NO.	PRICE	DESCRIPTION
PT06F10-6S	\$26.50	Mating connector for LC1011/LCM1011 series load cells

Visit omega.com/lc1000-tp for top mounting plates.
Visit omega.com/lc1000-bp for base plates.

Comes complete with 5-point NIST-traceable calibration and 59 kΩ shunt data.

* See section D for compatible meters.

** Base plates and top plates referenced are carbon steel.

† Consult sales for current price.

To order stainless steel models, visit omega.com/lc1103

To order CSA-approved Intrinsically Safe version, add suffix “-CSA” to model number (no extra charge).

To order dual-bridge load cell, add suffix “-DUAL” to model number (see F-95 page for pricing).

Ordering Examples: LC1001-100K, 100,000 lb capacity cable-style load cell, \$1250.

LC1000-BP6, accompanying base plate, \$68. LC1000-TP6, accompanying top plate, \$68.

LCM1001-10K, 10 ton capacity cable-style load cell, LCM1000-BP4, accompanying base plate,

LCM1000-TP4, accompanying top plate, \$895 + 48 + 48 = \$991.

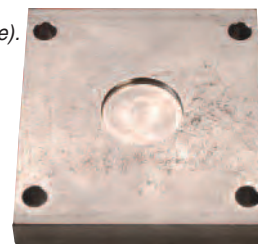
LCM1011-500-Dual, dual-bridge 500 kgf capacity connector-style load cell, \$895 + 250 = \$1145.

PT06F10-6S, mating connector (not included), \$26.50.

LC1000-BP4, base plates, \$48, shown smaller than actual size.



LC1000-TP4, top plates, \$48, shown smaller than actual size.



See Page D-157 for Details

BRIDGE/STRAIN GAGE INPUT SIGNAL CONDITIONER

DRG-SC models are available for a wide variety of process signals, shown smaller than actual size.

DRG-SC-BG
\$310

- ✓ Five Field Configurable Output Ranges: 0 to 5 V, 0 to 10 V, 0 to 1 mA, 0 to 20 mA, and 4 to 20 mA
- ✓ Slim Housing Mounts on DIN Rail for High Density Installations
- ✓ 1800 V Isolation Between Input, Output and Power Supply



DIN Rail Mount





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• Flow and Level

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• Data Acquisition

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• Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters