

# HIGH-ACCURACY, LOW-PROFILE COMPRESSION LOAD CELL

## STANDARD AND METRIC MODELS

**Models Available  
with Dual Bridge or  
Built-In Amplifiers!**

### LC401/LCM401 Series LC411/LCM411 Series

LC401 (Cable Style)  
LC411 (Connector Style)  
Compression  
0-50 lb to 0-400,000 lb  
0-25 kg to 0-5000 kgf

Starts at  
**\$595**

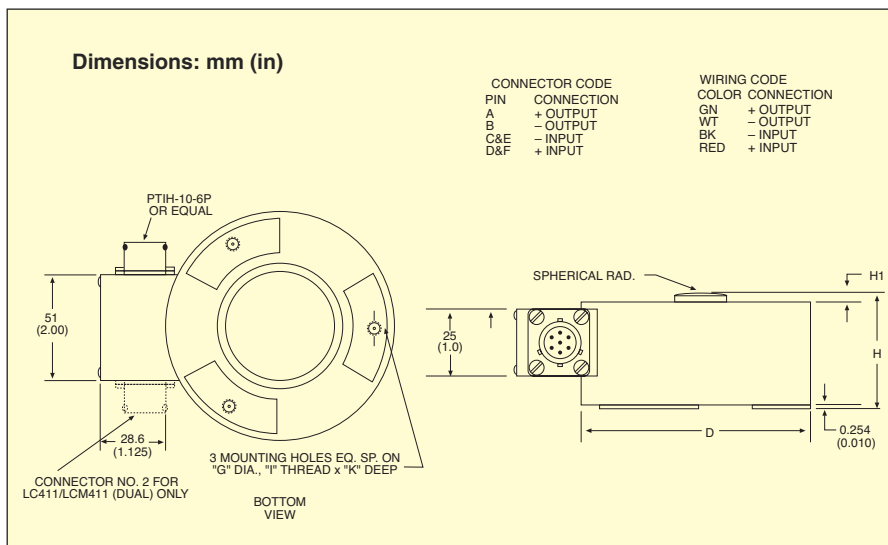


PT06F10-6S,  
mating connector  
required. Sold  
separately, \$26.50.

LC411-20K connector style,  
\$975, shown actual size.



- ✓ FM Intrinsically Safe Rating Standard
- ✓ Dual-Bridge Models Available
- ✓ Models Available with Built-In 5V Amplifiers
- ✓ All Stainless Steel for Harsh Industrial Applications
- ✓ 0.25% Interchangeability for Multiple Load Cell Applications
- ✓ 5-Point Calibration Provided



Dimensions: mm (in)

CAPACITY		D	H	H1	K	G	I
lb	kg						
<b>STANDARD MODELS</b>							
50 to 10,000	23 to 4537	66 (2.62)	32 (1.25)	2.3 (0.09)	6.4 (0.25)	56 (2.188)	6-40 UNF-2
15,000 to 25,000	6806 to 11,343	83 (3.25)	41 (1.62)	2.3 (0.09)	6.4 (0.25)	69 (2.719)	10-32 UNF-2
50,000 to 75,000	22,686 to 34,029	127 (5.00)	64 (2.50)	3.0 (0.12)	6.4 (0.25)	105 (4.125)	3/8-24 UNF-2
100,000	45,372	152 (6.00)	89 (3.50)	3.8 (0.15)	9.4 (0.37)	124 (4.875)	7/16-20 UNF-2
200,000	90,744	203 (8.00)	121 (4.75)	4.6 (0.18)	13 (0.50)	164 (6.438)	5/8-18 UNF-2
300,000	136,116	229 (9.00)	121 (4.75)	4.6 (0.18)	16 (0.63)	191 (7.500)	3/4-16 UNF-2
400,000	181,488	254 (10.00)	121 (4.75)	6.4 (0.25)	19 (0.75)	216 (8.500)	7/8-14 UNF-2
<b>METRIC MODELS</b>							
55 to 11,023	25 to 5000	66 (2.62)	32 (1.25)	2.3 (0.09)	6.4 (0.25)	56 (2.188)	M4 x 0.7

# LOW-PROFILE COMPRESSION LOAD CELLS

See Section Y for a Selection of Scientific, Technical, and Reference Books Available from [omega.com](http://omega.com)

STANDARD MODELS    MOST POPULAR MODELS HIGHLIGHTED!

## SPECIFICATIONS

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

**Output:** 3 mV/V ±0.25%

**5-Point Calibration:** Calibrated at 0%, 50%, 100%, 50%, 0%. Note: Models >300,000 lb are calibrated to 300,000 lb. Full scale calibration above 300,000 lb within ±1% available.

### Linearity:

>3000 lb: 0.10% FSO  
 ≤3000 lb: 0.13% FSO

### Hysteresis:

>3000 lb: 0.10% FSO  
 ≤3000 lb: 0.12% FSO

**Repeatability:** 0.05% FSO

**Zero Balance:** ±1% FSO

### Agency Approval:

FM Intrinsically Safe  
 IS/II.III/1/CDEFG (standard)

### Operating Temp Range:

-54 to 107°C (-65 to 225°F)

### Compensated Temp Range:

16 to 71°C (60 to 160°F)

### Thermal Effects:

**Zero:** 0.0045% FSO/°C  
**Span:** 0.006% FSO/°C

**Safe Overload:** 150% FS capacity

**Ultimate Overload:** 300% FS capacity

**Bridge Resistance:** 350 ±5 Ω

**FS Deflection:** 0.001 to 0.003" typical

**Construction:** 17-4 PH stainless steel

### Electrical Connection:

**LC401:** 4.8 m (15') 4-conductor shielded PVC cable

**LC411:** PTIH-10-6P twist-lock connector (or equivalent)

**Mating Connector:** PT06F10-6S

(sold separately) \$26.50

**Protection Class:** IP65

## POPULAR OPTIONS

Price

**0 to 5 Vdc Output:** “-5V” \$175

(ranges ≥ 15K lb)

**Overload Stops:** “-OL” Consult Factory

**Dual Bridge:**

≤5000 lb “-DUAL” 250

≤1500 kg “-DUAL” 250

>5000 lb “-DUAL” 350

>1500 kg “-DUAL” 350

### Extended Temperature Range:

-45 to 93°C “-TC1” 50

(-50 to 200°F)

-45 to 177°C “-TC2” 225

(-50 to 350°F)

**Watertight Cable Exit:** “-WTC” 125

**Additional Cable Length:** 2.00/ft

## To Order (Specify Model Number)

CAPACITY		MODEL NO.		PRICE	COMPATIBLE METERS**
lb	kgf	CABLE	CONNECTOR		
50	23	LC401-50	LC411-50	\$595	DP41-B, DP41-S, DP25B-S
100	45	LC401-100	LC411-100	595	DP41-B, DP41-S, DP25B-S
250	114	LC401-250	LC411-250	595	DP41-B, DP41-S, DP25B-S
500	227	LC401-500	LC411-500	595	DP41-B, DP41-S, DP25B-S
1000	455	LC401-1K	LC411-1K	595	DP41-B, DP41-S, DP25B-S
1500	682	LC401-1.5K	LC411-1.5K	635	DP41-B, DP41-S, DP25B-S
2000	909	LC401-2K	LC411-2K	635	DP41-B, DP41-S, DP25B-S
3000	1361	LC401-3K	LC411-3K	635	DP41-B, DP41-S, DP25B-S
5000	2269	LC401-5K	LC411-5K	635	DP41-B, DP41-S, DP25B-S
10,000	4537	LC401-10K	LC411-10K	790	DP41-B, DP41-S, DP25B-S
15,000	6806	LC401-15K	LC411-15K	790	DP41-B, DP41-S, DP25B-S*
20,000	9074	LC401-20K	LC411-20K	975	DP41-B, DP41-S, DP25B-S*
25,000	11,343	LC401-25K	LC411-25K	975	DP41-B, DP41-S, DP25B-S*
50,000	22,686	LC401-50K	LC411-50K	†	DP41-B, DP41-S, DP25B-S*
75,000	34,029	LC401-75K	LC411-75K	†	DP41-B, DP41-S, DP25B-S*
100,000	45,372	LC401-100K	LC411-100K	†	DP41-B, DP41-S, DP25B-S*
200,000	90,744	LC401-200K	LC411-200K	†	DP41-B, DP41-S, DP25B-S*
300,000	136,116	LC401-300K	LC411-300K	†	DP41-B, DP41-S, DP25B-S*
400,000	181,488	LC401-400K	LC411-400K	†	DP41-B, DP41-S, DP25B-S*

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

\* 4-digit meter. \*\* See section D for compatible meters. † Consult factory.

To order dual-bridge models, add suffix “-DUAL” to model number; for ≤5000 lb add \$250 to price; for >5000 lb add \$350 to price. To order optional 0 to 5 V output, add suffix “-5V” to model number and \$175 to price.

**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; consult Sales for price and availability.

**Ordering Examples:** LC401-1K, 1000 lb capacity cable-style load cell, \$595.

LC411-10K-DUAL, 10,000 lb capacity connector-style load cell with dual-bridge option, \$790 + 350 = \$1140. PT06F10-6S, mating connector (2 required on dual models), sold separately, \$26.50 ea.

## METRIC MODELS

CAPACITY		MODEL NO.		PRICE	COMPATIBLE METERS**
kgf	lb	CABLE	CONNECTOR		
25	55	LCM401-25	LCM411-25	\$595	iSeries, DP41-S, DP25B-S
50	110	LCM401-50	LCM411-50	595	iSeries, DP41-S, DP25B-S
100	220	LCM401-100	LCM411-100	595	iSeries, DP41-S, DP25B-S
150	331	LCM401-150	LCM411-150	595	iSeries, DP41-S, DP25B-S
250	551	LCM401-250	LCM411-250	595	iSeries, DP41-S, DP25B-S
500	1102	LCM401-500	LCM411-500	595	iSeries, DP41-S, DP25B-S
750	1653	LCM401-750	LCM411-750	635	iSeries, DP41-S, DP25B-S
1000	2205	LCM401-1K	LCM411-1K	635	iSeries, DP41-S, DP25B-S
1500	3307	LCM401-1.5K	LCM411-1.5K	635	iSeries, DP41-S, DP25B-S
2500	5512	LCM401-2.5K	LCM411-2.5K	635	iSeries, DP41-S, DP25B-S
5000	11,023	LCM401-5K	LCM411-5K	790	iSeries, DP41-S, DP25B-S

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

\*\* See section D for compatible meters.

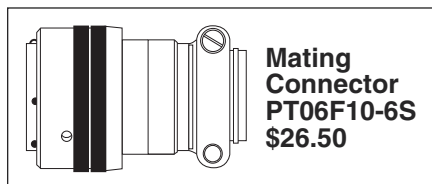
To order dual-bridge models, add suffix “-DUAL” to model number; for ≤1500 kg, add \$250; for >1500 kg, add \$350. To order optional 0 to 5 V output, add suffix “-5V” to model number and \$135 to price.

**Ordering Examples:** LCM401-500, 500 kgf capacity cable-style load cell, \$595.

LCM401-2.5K-DUAL, 2500 kgf capacity cable-style dual-bridge load cell, \$635 + 350 = \$985. PT06F10-6S, mating connector (2 required on dual-bridge models), sold separately, \$26.50 ea.

## ACCESSORY

MODEL NO.	PRICE	DESCRIPTION
PT06F10-6S	\$26.50	Mating connector for LC411/LCM411 series load cells



LOAD CELLS F



#### UNITED STATES

[www.omega.com](http://www.omega.com)  
1-800-TC-OMEGA  
Stamford, CT.

#### CANADA

[www.omega.ca](http://www.omega.ca)  
Laval(Quebec)  
1-800-TC-OMEGA

#### GERMANY

[www.omega.de](http://www.omega.de)  
Deckenpfronn, Germany  
0800-8266342

#### UNITED KINGDOM

[www.omega.co.uk](http://www.omega.co.uk)  
Manchester, England  
0800-488-488

#### FRANCE

[www.omega.fr](http://www.omega.fr)  
Guyancourt, France  
088-466-342

#### CZECH REPUBLIC

[www.omegaeng.cz](http://www.omegaeng.cz)  
Karviná, Czech Republic  
596-311-899

#### BENELUX

[www.omega.nl](http://www.omega.nl)  
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