

51 mm (2") MINIATURE STAINLESS STEEL COMPRESSION LOAD CELL WITH MOUNTING HOLES

STANDARD AND METRIC MODELS

LC305/LCM305 (Cable Style)
LC315/LCM315 (Connector Style)
Compression
0-25 lb to 0-20,000 lb
0-100 to 50,000 N

LC305/LC315 Series LCM305/LCM315



Standard

- ✓ 0.25% Interchangeability
- ✓ Built-In Load Button for Easy Installation
- ✓ 5-Point Calibration

OMEGA's LC305/LCM305 Series consists of heavy-duty miniature (2" diameter) compression load cells. A small size and a low profile make these cells ideal for test benches, prototype structures, and industrial weighing applications.

SPECIFICATIONS

Excitation: 10 Vdc, 15 Vdc maximum

Output: 2 mV/V ($\pm 1\%$)

5-Point Calibration:

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

Linearity: $\pm 0.15\%$ FSO

Hysteresis: <20k lbs $\pm 0.10\%$ FSO

>20k lbs $\pm 0.15\%$ FSO

Repeatability: $\pm 0.05\%$ FSO

Zero Balance: $\pm 2\%$ FSO

Deflection: 0.025 to 0.075 mm
(0.001 to 0.003")

Operating Temp Range:
-46 to 107°C (-50 to 225°F)

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

Thermal Effects:

Zero: 0.0025% FSO/°F

Span: 0.005% FSO/°F

LC305-1K, shown
actual size.



Available with cable or
twist-lock connector.

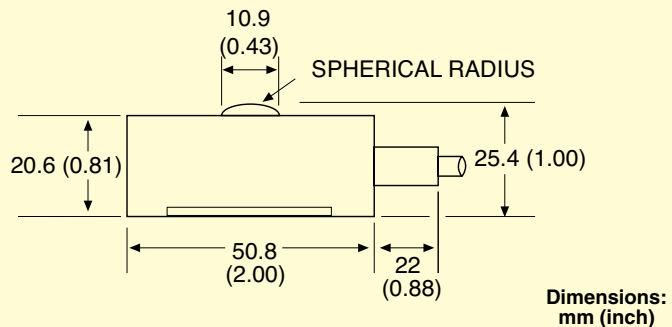


LCM315-2KN, shown
actual size.

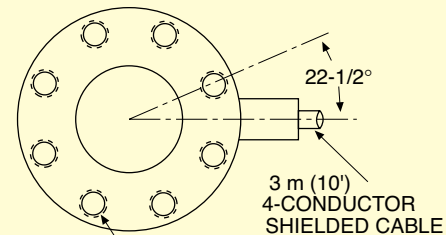
Bottom view of
all models shows
mounting holes.



Safe Overload: 150% of capacity
Ultimate Overload: 300% of capacity
Protection Class: IP65
Input Resistance: 360 Ω minimum
Output Resistance: 350 $\Omega \pm 10 \Omega$
Construction: Stainless steel
Electrical: 3 m (10') 4-conductor,
color-coded, shielded PVC cable;
LC315 mating connector,
PT06F10-6S, (sold separately)



Wiring Code		
Wire Connector		
GN	A	+Output
WT	B	-Output
BK	C	-Input
RED	D	+Input
	E	N/C
	F	N/C



LC305: 10-32 UNF x 10.2 (0.40) DP
 LCM305: M5 x 0.8 x 10.2 (0.40) DP
 8 MOUNTING HOLES EQ. SP
 ON A 42.8 (1.687) DIAMETER

LC315-500,
shown actual size.



LC315/LCM315 models
with twist-lock connector.

Bottom view of
all models shows
mounting holes.



LC305/LCM305 models
with 3 m (10') cable.



LCM305-2KN, shown
actual size.

STANDARD MODELS

To Order

CAPACITY		MODEL NO.		COMPATIBLE METERS
lb	N	CABLE	CONNECTOR	
25	111	LC305-25	LC315-25	DPiS, DP41-S, DP25B-S
50	222	LC305-50	LC315-50	DPiS, DP41-S, DP25B-S
100	445	LC305-100	LC315-100	DPiS, DP41-S, DP25B-S
200	890	LC305-200	LC315-200	DPiS, DP41-S, DP25B-S
300	1334	LC305-300	LC315-300	DPiS, DP41-S, DP25B-S
500	2224	LC305-500	LC315-500	DPiS, DP41-S, DP25B-S
1000	4448	LC305-1K	LC315-1K	DPiS, DP41-S, DP25B-S
2000	8896	LC305-2K	LC315-2K	DPiS, DP41-S, DP25B-S
2500	11,120	LC305-2.5K	LC315-2.5K	DPiS, DP41-S, DP25B-S
5000	22,240	LC305-5K	LC315-5K	DPiS, DP41-S, DP25B-S
8000	35,584	LC305-8K	LC315-8K	DPiS, DP41-S, DP25B-S
10,000	44,480	LC305-10K	LC315-10K	DPiS, DP41-S, DP25B-S
20,000	88,960	LC305-20K	LC315-20K	DPiS, DP41-S, DP25B-S*

Comes complete with 5-point NIST-traceable calibration and 59 kΩ shunt data.
* 4-digit meter.

Ordering Examples: LC305-1K, 1000 lb capacity cable-style load cell.

LC315-20K, 20,000 lb capacity connector-style load cell, and PT06F10-6S, mating connector (sold separately).

METRIC MODELS

CAPACITY		MODEL NO.		COMPATIBLE METERS
N	lb	CABLE	CONNECTOR	
100	22.5	LCM305-100N	LCM315-100N	iSeries, DP41-S, DP25B-S
200	45	LCM305-200N	LCM315-200N	iSeries, DP41-S, DP25B-S
500	112	LCM305-500N	LCM315-500N	iSeries, DP41-S, DP25B-S
1000	225	LCM305-1KN	LCM315-1KN	iSeries, DP41-S, DP25B-S
2000	450	LCM305-2KN	LCM315-2KN	iSeries, DP41-S, DP25B-S
5000	1124	LCM305-5KN	LCM315-5KN	iSeries, DP41-S, DP25B-S
10,000	2248	LCM305-10KN	LCM315-10KN	iSeries, DP41-S, DP25B-S
20,000	4496	LCM305-20KN	LCM315-20KN	iSeries, DP41-S, DP25B-S
50,000	11,240	LCM305-50KN	LCM315-50KN	iSeries, DP41-S, DP25B-S

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

Ordering Example: LCM315-10KN, 10,000 N capacity connector-style load cell.
PT06F10-6S, mating connector, sold separately.

ACCESSORY

MODEL NO.	DESCRIPTION
PT06F10-6S	Mating connector for LC315/LCM315 series load cells
CA-4PC24-2-015	Cable assembly with twist-lock connector for LC315/LCM315 series load cells

Compatible Meters/Controllers for LC305 Series Load Cells

The iSeries is available in 1/32, 1/16, and 1/8 DIN programmable process controllers with serial and embedded Internet/Ethernet communications (Order EI Option CNI16D). The iSeries features programmable color displays, free software and ActiveX Controls, selectable full autotune PID control, and NEMA 4 (IP65) rated front bezel.

Ordering Examples: DPiS8, strain/process (monitor only), 1/8 DIN, CNI8, strain/process controller with 2 control outputs.

