

HIGH-ACCURACY STAINLESS STEEL CANTILEVER BEAMS

STANDARD AND METRIC MODELS

Tension/Compression
0-50 lb to 0-30,000 lb-
Standard Models
0-25 kgf to 0-10,000 kgf-
Metric Models

STANDARD
LC501-20K, shown
smaller than actual size.

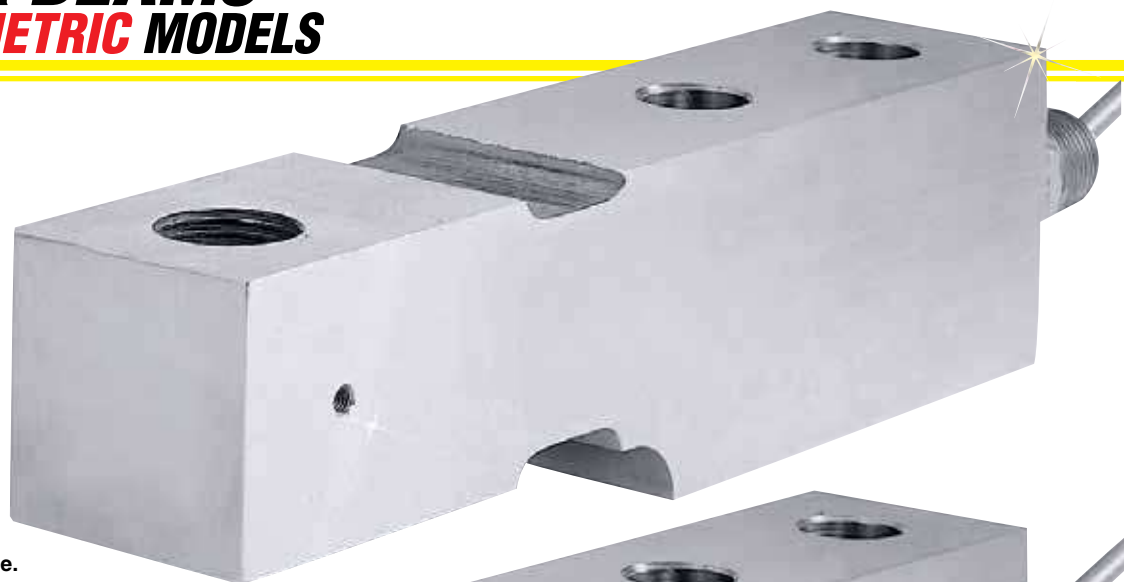
METRIC
LCM501-10K, shown
smaller than actual size.

LC501/LCM501 Series LC511/LCM511 Series

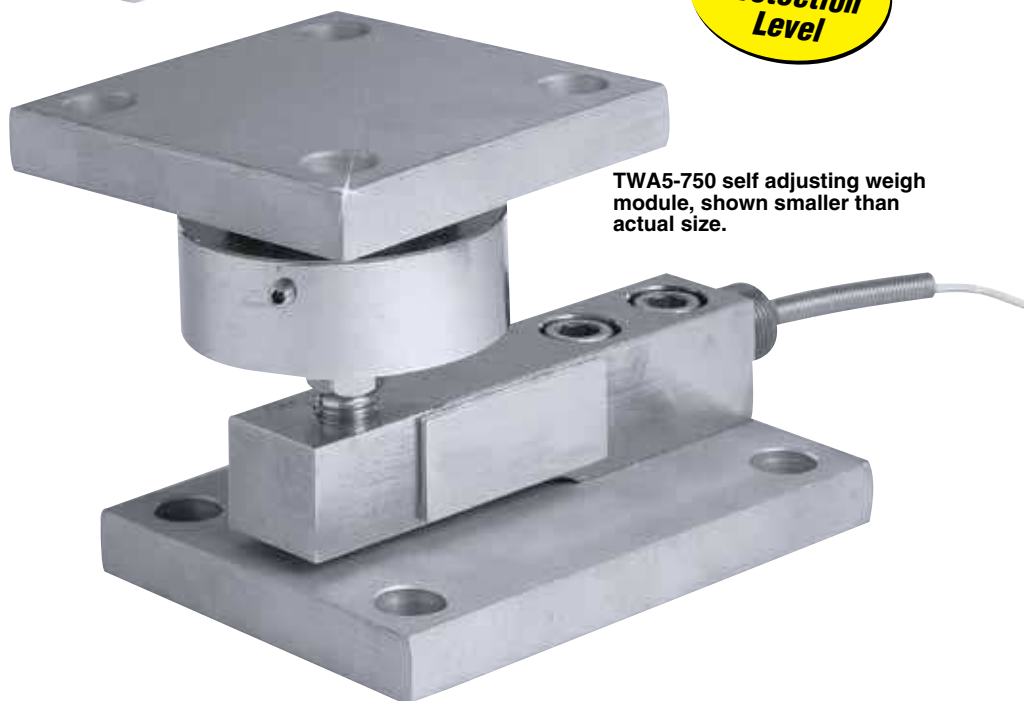


Standard

- ✓ All Stainless Steel Construction for Harsh Industrial Applications
- ✓ 0.25% Interchangeability for Multiple Cell Applications
- ✓ 5-Point Calibration Provided



**IP65
Protection
Level**



TWA5-750 self adjusting weigh module, shown smaller than actual size.

SPECIFICATIONS

Excitation: 10 Vdc, 15 Vdc maximum

Output: 3 mV/V $\pm 0.25\%$

5-Point Calibrated (in Compression):

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

Linearity: $\pm 0.03\%$ FSO

Hysteresis: $\pm 0.02\%$ FSO

Repeatability: $\pm 0.02\%$ FSO

Zero Balance: $\pm 1\%$ FSO

Operating Temp Range:

-34 to 82°C (-30 to 180°F)

Compensated Temp Range:

16 to 71°C (60 to 160°F)

Thermal Effects:

Zero: $\pm 0.001\%$ FSO/°F (0.0018%/°C)

Span: $\pm 0.001\%$ FSO/°F (0.0018%/°C)

Safe Overload: 150% of capacity

Ultimate Overload: 300% of capacity

Input Resistance: 360 Ω minimum

Output Resistance: 350 $\pm 10 \Omega$

FS Deflection: 0.5 mm (0.02") typical

Construction: 17-4 PH stainless steel,
>30,000 lb, high-alloy steel

Electrical:

LC501/LCM501: 4.6 m (15')

4 conductor shielded cable

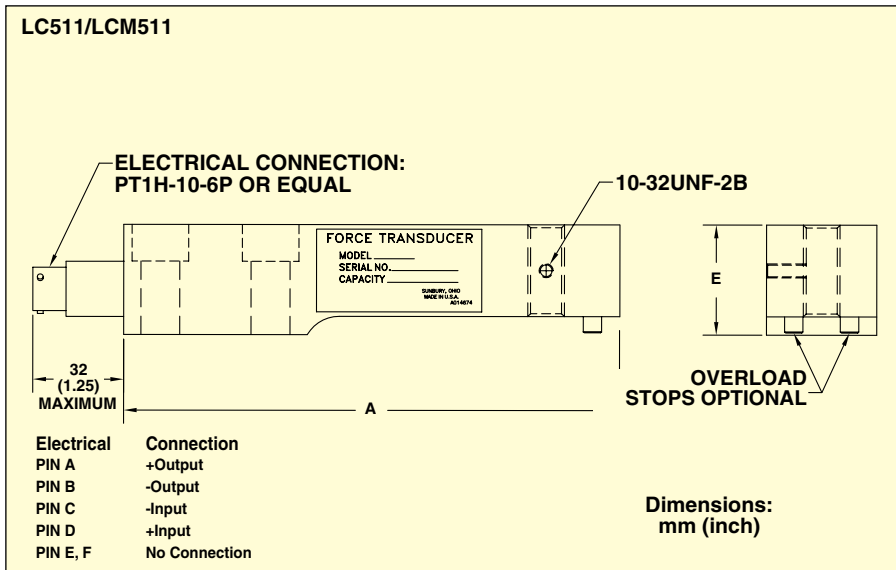
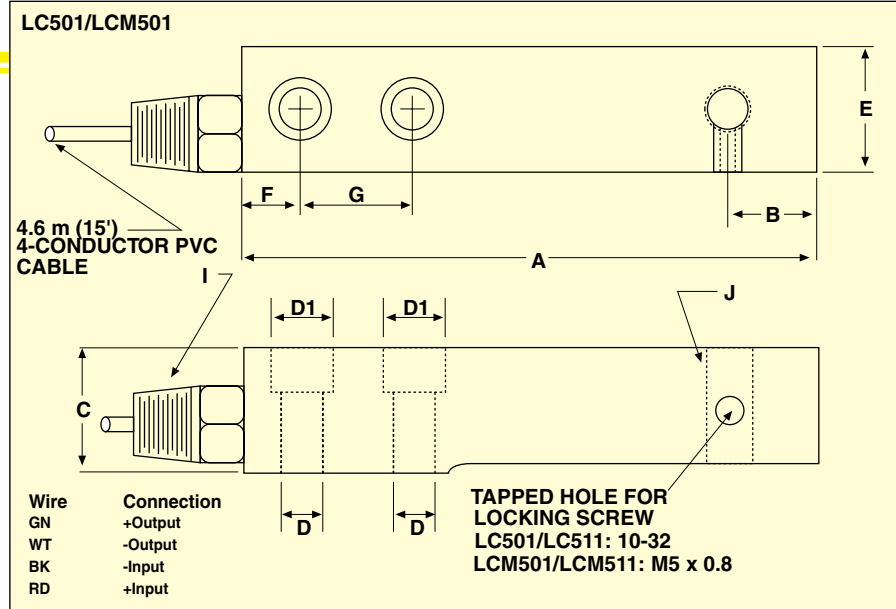
LC511/LCM511: 6-pin DT02H-10-6P
or equivalent

Mating Connector: PT06F10-6S

(sold separately)

Accessory Hardware:

TWA/TWAM Series
Self-Adjusting Weigh Modules
Nickel-Plated Carbon Steel or
Stainless Steel



Dimensions: mm (inch)



CAPACITY	A	B	C	D	D1	E	F	G	I	J	WEIGHT kg (lb)
STANDARD											
50 to 750 lb	121 (4.75)	19 (0.75)	25 (1.0)	9.9 (0.39)	15 (0.59)	25 (1.0)	13 (0.50)	25 (1.0)	3/8-18 UNC	1/2-20	0.9 (2)
1K to 7.5K lb	173 (6.75)	25 (1.0)	38 (1.5)	13 (0.53)	20 (0.77)	38 (1.5)	13 (0.50)	38 (1.5)	1/2-14 UNC	1/2-20	1.8 (4)
10K lb	197 (7.75)	25 (1.0)	38 (1.5)	20 (0.77)	n/a	38 (1.5)	19 (0.75)	51 (2.0)	1/2-14 UNC	3/8-16	2.3 (5)
20K lb	241 (9.50)	25 (1.0)	64 (2.5)	20 (0.77)	n/a	51 (2.0)	25 (1.00)	57 (2.25)	1/2-14 UNC	1-12	5 (11)
30K lb	241 (9.50)	25 (1.0)	64 (2.5)	27 (1.06)	n/a	51 (2.0)	25 (1.00)	57 (2.25)	1/2-14 UNC	1-12	n/a
METRIC											
25 to 250 kgf	121 (4.75)	19 (0.75)	25 (1.0)	9.9 (0.39)	15 (0.59)	25 (1.0)	13 (0.50)	25 (1.0)	3/8-18 UNC	M12 x 1.75	0.9 (2)
500 to 2500 kgf	173 (6.75)	25 (1.0)	38 (1.5)	13 (0.53)	20 (0.77)	38 (1.5)	13 (0.50)	38 (1.5)	1/2-14 UNC	M12 x 1.75	1.8 (4)
5000 kgf	197 (7.75)	25 (1.0)	38 (1.5)	20 (0.77)	n/a	38 (1.5)	19 (0.75)	51 (2.0)	1/2-14 UNC	M20 x 1.5	2.3 (5)
10,000 kgf	241 (9.50)	25 (1.0)	64 (2.5)	20 (0.77)	n/a	51 (2.0)	25 (1.00)	57 (2.25)	1/2-14 UNC	M24 x 2.0	5 (11)

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To Order Visit newportUS.com/lc501 for Pricing and Details

CAPACITY		MODEL NO.		COMPATIBLE METERS	BASE PLATE
kgf	lb	CABLE STYLE	CONNECTOR STYLE		
STANDARD MODELS					
45	100	LC501-100	LC511-100	DP41-B, DP41-S, DP25B-S	BP-10
91	200	LC501-200	LC511-200	DP41-B, DP41-S, DP25B-S	
227	500	LC501-500	LC511-500	DP41-B, DP41-S, DP25B-S	
341	750	LC501-750	LC511-750	DP41-B, DP41-S, DP25B-S	
455	1000	LC501-1K	LC511-1K	DP41-B, DP41-S, DP25B-S	BP-15
909	2000	LC501-2K	LC511-2K	DP41-B, DP41-S, DP25B-S	
1361	3000	LC501-3K	LC511-3K	DP41-B, DP41-S, DP25B-S	
2269	5000	LC501-5K	LC511-5K	DP41-B, DP41-S, DP25B-S	
3402	7500	LC501-7.5K	LC511-7.5K	DP41-B, DP41-S, DP25B-S	
4537	10,000	LC501-10K	LC511-10K	DP41-B, DP41-S, DP25B-S	BP-20
9074	20,000	LC501-20K	LC511-20K	DP41-B, DP41-S, DP25B-S*	
13,612	30,000	LC501-30K	LC511-30K	DP41-B, DP41-S, DP25B-S*	
METRIC MODELS					
25	55	LCM501-25	LCM511-25	DPiS, DP41-S, DP25B-S	BP-10
50	110	LCM501-50	LCM511-50	DPiS, DP41-S, DP25B-S	
250	551	LCM501-250	LCM511-250	DPiS, DP41-S, DP25B-S	
500	1102	LCM501-500	LCM511-500	DPiS, DP41-S, DP25B-S	BP-15
1000	2205	LCM501-1K	LCM511-1K	DPiS, DP41-S, DP25B-S	
2500	5512	LCM501-2.5K	LCM511-2.5K	DPiS, DP41-S, DP25B-S	
5000	11,023	LCM501-5K	LCM511-5K	DPiS, DP41-S, DP25B-S	
10,000	22,046	LCM501-10K	LCM511-10K	DPiS*, DP41-S, DP25B-S*	BP-20

ACCESSORIES

MODEL NO.	DESCRIPTION	LOAD BUTTON	ROD END
STANDARD MODELS			
LBC-012	Load button for ranges 100 to 7500 lb		
LBC-034	Load button for LC501/511-10K		
LBC-101	Load button for LC501/511-20K, LC501/511-30 K		
REC-012M	Rod end for ranges 100 to 7500 lb		
REC-034M	Rod end for LC501/511-10K		
METRIC MODELS			
MLBC-M12	Load button for ranges 25 to 2500 kgf		
MLBC-M20	Load button for LCM501-5K, LCM511-5K		
MLBC-M24	Load button for LCM501-10K, LCM511-10K		
MREC-M12M	Rod end for ranges 25 to 2500 kgf		
MREC-M20M	Rod end for LCM501-5K, LCM511-5K		
MREC-M24M	Rod end for LCM501-10K, LCM511-10K		
COMMON			
PT06F10-6S	Mating connector for LC511/LCM511 series load cells		
CA-4PC24-2-015	4.6 m (15') PVC cable with PT06F10-6S, LC511/LCM511 cable assembly		

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

* 4-digit meter. ** Visit newportUS.com for compatible meters.

Note: Base plates are nickel-plated carbon steel.

To order stainless steel base plates (see Accessories), specify **BP-10-SS**, **BP-15-SS**, **BP-20-SS**.

To order load cells with a twist-lock connector, specify **LC511** (standard) or **LCM511** (metric), no extra charge. **PT06F10-6S**, mating connector (sold separately).

Ordering Examples: **LC501-5K**, 5000 lb capacity load cell. **REC-012M**, optional rod end, **BP-15**, optional base plate.

LCM511-5K, 5000 kgf capacity load cell with twist lock connector, **PT06F10-6S**, mating connector.

MREC-M20M, optional rod end, **BP-15**, optional base plate.