

# SUBMINIATURE TENSION OR COMPRESSION HIGH ACCURACY LOAD CELLS

## STANDARD AND METRIC MODELS

### LCFD/LCMFD Series

Tension/Compression

2.2 lb to 1000 lb

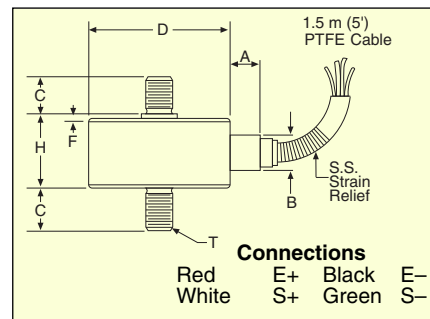
10 to 5000 N

All Models  
**\$750**



Standard

LCFD-100, \$750,  
shown actual size.



Small and capable of highly accurate readings, the LCFD/LCMFD subminiature load cells are designed for precision industrial applications. They are all stainless steel, measure both tension and compression loads, and have male thread studs for load attachment. The exclusive internal design provides superior long-term stability and minimizes the effects of small off-axis loads.

### SPECIFICATIONS

#### Excitation:

- ≤10 lb/50 N: 5 Vdc
- ≥25 lb/100 N: 10 Vdc

#### Output:

- 2.2 lb/10 N: 1.5 mV/V (nom)
- ≥5 lb/20 N: 2 mV/V (nom)

#### Accuracy (Linearity and Hysteresis Combined):

- ≤100 lb/500 N: ±0.15% FSO
- ≥250 lb/1000 N: ±0.20% FSO

#### Repeatability:

- ≤2.2 lb: ±0.15% FSO
- ≥5 lb/10 N: 0.20% FSO

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

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

#### Zero Balance: ±2% FSO

#### Operating Temp Range:

-54 to 121°C (-65 to 250°F)

#### Compensated Temp Range:

16 to 71°C (60 to 160°F)

#### Thermal Effects:

- Span: ±0.009% FSO/°C
- Zero: ±0.009% FSO/°C

#### Safe Overload: 150% of capacity

#### Ultimate Overload: 300% of capacity

#### Bridge Resistance: 350 Ω minimum

#### Construction: Stainless steel

#### Electrical Connection: 1.5 m (5')

4-conductor, shielded cable

- ≤10 lb/50 N: SS overbraided PTFE with temperature compensation board

#### Protection Class: IP65

#### Dimensions: mm (in)

CAPACITY	T, THREAD	F	D DIA.	H	A	B DIA.	C	WEIGHT g (oz)
2.2 kg to 10 lb	#6-32 UNC	2.5 (0.10)	19 (0.75)	14.7 (0.58)	7.8 (0.31)	4.8 (0.19)	6.35 (0.25)	42 (1.48)
25, 50, 100 lb	#10-32 UNF	4.6 (0.18)	25.4 (1.00)	18.5 (0.73)	12.7 (0.5)	6.35 (0.25)	6.35 (0.25)	56 (1.98)
10 to 50 N	M5 x 0.8	2.3 (0.09)	25.4 (1.00)	13.5 (0.53)	12.7 (0.5)	6.35 (0.25)	9.7 (0.38)	68 (2.40)
250 to 1000 lb	1/4-28 UNF							
100 to 1000 N	M6 x 1.00							

#### ☒ MOST POPULAR MODELS HIGHLIGHTED!

### To Order (Specify Model Number)

CAPACITY		MODEL NO.	PRICE	COMPATIBLE METERS*	ACCESSORY ROD ENDS	PRICE
lb	N					
STANDARD MODELS						
2.2	9.8	LCFD-1KG	\$750	DPiS, DP41-S, DP25B-S	REC-006F	\$10
5	22.2	LCFD-5	750	DPiS, DP41-S, DP25B-S	REC-006F	10
10	44.5	LCFD-10	750	DPiS, DP41-S, DP25B-S	REC-006F	10
25	111	LCFD-25	750	DPiS, DP41-S, DP25B-S	REC-010F	10
50	222	LCFD-50	750	DPiS, DP41-S, DP25B-S	REC-010F	10
100	334	LCFD-100	750	DPiS, DP41-S, DP25B-S	REC-010F	10
250	412	LCFD-250	750	DPiS, DP41-S, DP25B-S	REC-014F	10
500	2224	LCFD-500	750	DPiS, DP41-S, DP25B-S	REC-014F	10
1000	4448	LCFD-1K	750	DPiS, DP41-S, DP25B-S	REC-014F	10
CAPACITY		MODEL NO.	PRICE	COMPATIBLE METERS*	ACCESSORY ROD ENDS	PRICE
N	lb					
METRIC MODELS						
10	2.2	LCMFD-10N	\$750	DP41-S, DP25B-S	MREC-M5F	\$25
20	4.5	LCMFD-20N	750	DP41-S, DP25B-S	MREC-M5F	25
50	11	LCMFD-50N	750	DP41-S, DP25B-S	MREC-M5F	25
100	22	LCMFD-100N	750	iSeries, DP41-S, DP25B-S	MREC-M6F	25
200	45	LCMFD-200N	750	iSeries, DP41-S, DP25B-S	MREC-M6F	25
500	112	LCMFD-500N	750	iSeries, DP41-S, DP25B-S	MREC-M6F	25
1000	225	LCMFD-1KN	750	iSeries, DP41-S, DP25B-S	MREC-M6F	25
2000	450	LCMFD-2KN	750	iSeries, DP41-S, DP25B-S	MREC-M6F	25
5000	1124	LCMFD-5KN	750	iSeries, DP41-S, DP25B-S	MREC-M6F	25

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

\* See section D for compatible meters. DPiS meter suitable for one direction measurement only.

**Ordering Examples:** LCFD-1KG, 1000 gram load cell, \$750, matching rod end, REC-006F, \$10 ea. LCFD-500, 500 lb capacity load cell, \$750, matching rod end, REC-014F, \$10 ea.

LCMFD-20N, 20 N capacity load cell, \$750, matching rod end, MREC-M5F, \$25 ea.