

Chatillon® TLC Series Load Cells

Specification Sheet

SS-TLC-0210

February 2010

The CHATILLON® TLC Series loadcells are full-bridge strain gauge sensors complete with 15-pin plug. These loadcells are used with the Chatillon TCD Series digital force testers or DFS-R-ND Series digital indicator. TLC Series load cells must be calibrated with the TCD Console for compliance with ASTM E4 requirements.

TLC Sensors are optimized for use with a TCD Series Force Tester. These "plug & play" sensors meet or exceed ASTM E4, BS 1610, DIN 51221, ISO 7500-1, EN 10002-2 and AFNOR A03-501 standards when calibrated on-site by an authorized Chatillon Representative.

Your TLC Sensor will be calibrated to 0.1% full scale from the factory when the sensor is ordered as part of a TCD System. The sensor is supplied with a Certificate of Calibration with NIST data and uncertainty.

Your TLC Sensor will be calibrated to 0.25% full scale from the factory when the sensor is ordered separately. The sensor is supplied with a Certificate of Calibration with NIST data and uncertainty. The sensor can be plugged into your TCD Series Console or to a DFS-R-ND Series force gauge for immediate use. However, if you require a higher accuracy, you must re-calibrate the sensor on the device (TCD Tester or DFS-R-ND Gauge) that the sensor is to be used on. Because the electronics and processing speeds are different on the TCD compared to the DFS gauge, it is important for you to re-characterize the sensor to the mating device each time it is used.

Features

- Plug & Play Operation
 - DFS-R-ND Gauge
 - TCD110, TCD225 or TCD1100 Digital Testers
- Accuracy up to 0.1% FS
- NIST Calibration with Data
- 1 Year Warranty

Specifications

Accuracy:	±0.1% of Full Scale
Input Resistance:	1000 ohms ±100
Output Resistance:	1000 ohms ±100
Rated Output:	2.0 mV/V
Safe Overload:	150% Full Scale
Non-Linearity:	±0.05% Full Scale
Hysteresis:	±0.05% of Full Scale
Zero Balance:	±0.1% of Full Scale
Operating Temperature:	40°F to 110°F 5°C to 45°C
Instrument Weight:	1 lb (0.5 kg)
Shipping Weight:	1.5 lbs (0.7 kg)



Shown: TLC Sensor attached to the Chatillon TCD225 force tester.



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Force Measurement

Ordering

TLC Series

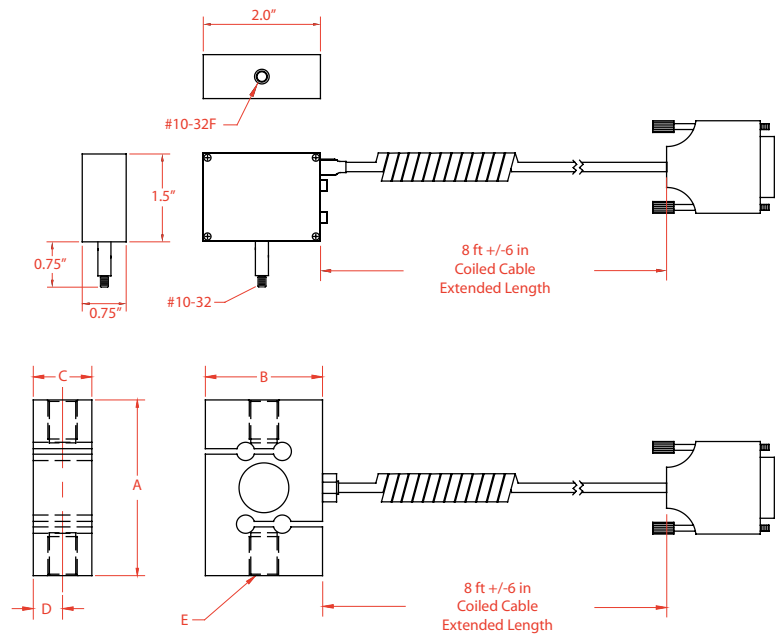
Model	ozf	lbf	gf	kgf	N
TLC-250G	8 x 0.002	0.5 x 0.0001	250 x 0.05	1 x 0.0001	2.5 x 0.0005
TLC-0002	32 x 0.005	2 x 0.0002	1000 x 0.1	1 x 0.0001	10 x 0.001
TLC-0010	160 x 0.02	10 x 0.001	5000 x 0.5	5 x 0.0005	50 x 0.005
TLC-0025	400 x 0.05	25 x 0.002	10000 x 1	10 x 0.001	100 x 0.01
TLC-0050	800 x 0.1	50 x 0.005	25000 x 2	25 x 0.002	250 x 0.02
TLC-0100	1600 x 0.2	100 x 0.01	50000 x 5	50 x 0.005	500 x 0.05
TLC-0200	-	200 x 0.02	-	100 x 0.01	1000 x 0.1
TLC-0500	-	500 x 0.05	-	250 x 0.02	2500 x 0.2
TLC-1000	-	1000 x 0.01	-	500 x 0.05	5000 x 0.2



Shown: TLC Series load cells for the TCD Series testers are supplied with a 5/8" eye end, two locking rings, grip pin and spanner wrench.

Accessories

Part No.	Description
SPK-TLC-001	Low Capacity TLC Mounting Kit
NC003139	5/8" Eye End, #10-32F Thread, Aluminum
NC003140	Locking Rings (2 ea), Aluminum
NC003141	Grip Pin, Aluminum
SPK-TLC-002	Medium Capacity TLC Mounting Kit
NC003137	5/8" Eye End, 1/4-28M Thread, Stainless Steel
NC003131	Locking Rings (2 ea), Stainless Steel
NC000612	Grip Pin, Stainless Steel
SPK-TLC-003	High Capacity TLC Mounting Kit
NC003138	5/8" Eye End, 1/2-20M Thread, Stainless Steel
NC003131	Locking Rings (2 ea), Stainless Steel
NC000612	Grip Pin, Stainless Steel



Capacity	A	B	C	D	E
50 lbf	2.48"	2.0"	0.61"	0.31"	1/4-28F
100 lbf	2.48"	2.0"	0.61"	0.31"	1/4-28F
200 lbf	2.48"	2.0"	0.61"	0.31"	1/4-28F
500 lbf	2.98"	2.0"	0.98"	0.49"	1/2-20F
1000 lbf	2.98"	2.0"	0.98"	0.49"	1/2-20F

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