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# TLC Series Loadcells for TCD Series Force Testers

Specification Sheet  
SS-FM-3015-0208  
February 2008

The CHATILLON® TLC Series loadcells are full-bridge strain gauge sensors complete with 15-pin plug. These loadcells are used exclusively with the all-new Chatillon TCD Series digital force testers. They may also be used with the Chatillon DFS-R-ND digital indicator (recalibration with the DFS-R-ND is required). The loadcell values and sensitivity factors are stored in memory within the sensor plug. When connected to a TCD Series tester or DFS-R-ND indicator, the capacity and calibration points are automatically recognized by the instrument. The instrument then becomes a full-featured load measurement instrument. The loadcells are connected to the TLC Series tester or DFS-R-ND with a retractable cord that extends fully to nearly 9 ft. (3 m).

## Remote Sensors- Load Measurement

	Model	ozf	gf	lbf	kgf	N	Deflection	Accuracy
Low	TLC-250G	8 x 0.002	250 x 0.05	0.5 x 0.0001	0.25 x 0.0001	2.5 x 0.0005	0.013 ±0.004	±0.1%
	TLC-0002	32 x 0.005	1000 x 0.1	2 x 0.0002	1 x 0.0001	10 x 0.001	0.013 ±0.004	±0.1%
	TLC-0010	160 x 0.02	5000 x 0.5	10 x 0.001	5 x 0.0005	50 x 0.005	0.013 ±0.004	±0.1%
	TLC-0025	400 x 0.05	10,000 x 1	25 x 0.002	10 x 0.001	100 x 0.01	0.015 ±0.004	±0.1%
	TLC-0050	800 x 0.1	25,000 x 2	50 x 0.005	25 x 0.002	250 x 0.02	0.006 ±0.003	±0.1%
High	TLC-0100	1600 x 0.2	50,000 x 5	100 x 0.01	50 x 0.005	500 x 0.05	0.008 ±0.003	±0.1%
	TLC-0200	-	-	200 x 0.02	100 x 0.01	1000 x 0.1	0.008 ±0.003	±0.1%
	TLC-0500	-	-	500 x 0.05	250 x 0.02	2500 x 0.2	0.008 ±0.003	±0.1%
	TLC-1000	-	-	1000 x 0.1	500 x 0.05	5000 x 0.5	0.012 ±0.003	±0.1%

The TLC Series sensor may be calibrated on-site to better than 0.25% of reading. Measurement system meets or exceeds ASTM E4, BS 1610, DIN 51221, ISO 7500-1, EN 10002-2 and AFNOR A03-501.

AMETEK recommends system verification on-site at the time of installation by an authorized Chatillon representative, as required by ASTM E4 and ISO 7500-1.

## Specifications

- 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% Full Scale
- Zero Balance:** ±1.0% Full Scale
- Operating Temp:** 30° to 120°F (-40° to 82°C)



TCD225-0200 includes TLC-0200 Sensor calibrated to 0.1% FS

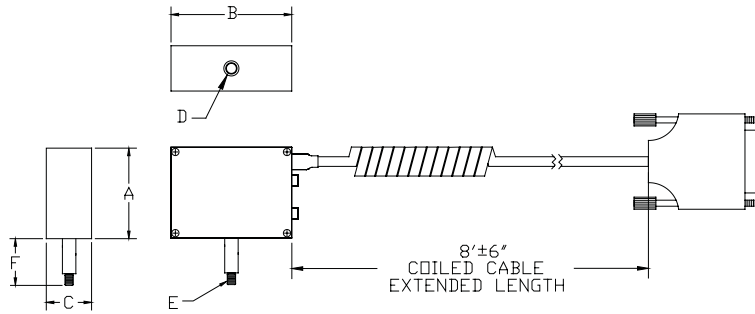


You Get More with Your CHATILLON Gauge.

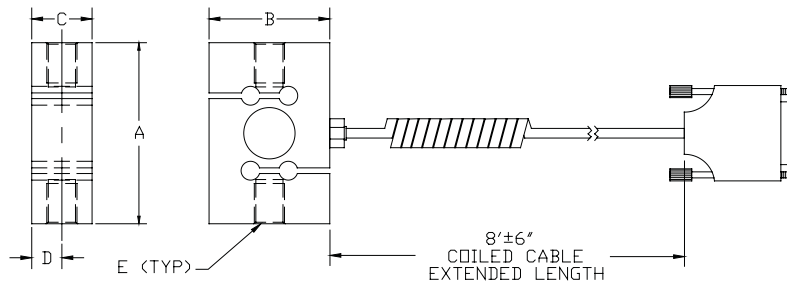


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# Dimensions - TLC Series

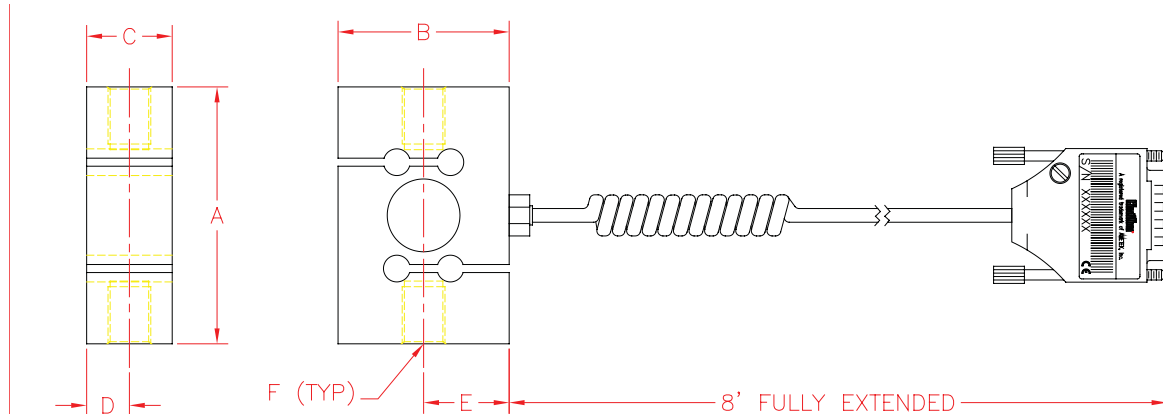


25 LBF	1.50 [38.1]	2.00 [50.8]	.75 [19.0]	#10-32	#10-32	.75
10 LBF	1.50 [38.1]	2.00 [50.8]	.75 [19.0]	#10-32	#10-32	.75
2 LBF	1.50 [38.1]	2.00 [50.8]	.75 [19.0]	#10-32	#10-32	.75
250 G	1.50 [38.1]	2.00 [50.8]	.75 [19.0]	#10-32	#10-32	.75
CAPACITY	A	B	C	D FEMALE THREAD	E MALE THREAD	F



1000 LBF	2.98 [75.7]	2.50 [63.5]	.98 [24.9]	.49 [12.4]	1/2-20
500 LBF	2.98 [75.7]	2.00 [50.8]	.98 [24.9]	.49 [12.4]	1/2-20
200 LBF	2.48 [63.0]	2.00 [50.8]	.61 [15.5]	.31 [7.9]	1/4-28
100 LBF	2.48 [63.0]	2.00 [50.8]	.61 [15.5]	.31 [7.9]	1/4-28
50 LBF	2.48 [63.0]	2.00 [50.8]	.61 [15.5]	.31 [7.9]	1/4-28
CAP.	A	B	C	D	E THREAD

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50 KN	3.937±.015	3.00	1.43	.718	1.500	3/4-16
25 KN	3.937±.015	2.75	1.19	.594	1.375	3/4-16
10 KN	3.437±.015	2.25	.94	.469	1.125	1/2-20
CAPACITY	A	B	C	D	E	F THREAD

E96-383



## MEASUREMENT & CALIBRATION TECHNOLOGIES

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