

# Load Cells

- Different styles for unique applications
- Many capacities available
- Many hardware choices for simple installation
- Free system assembly and calibration



# Dillon Load Cells

*Field proven in thousands of applications*

Dillon load cells are rugged strain gage sensors with field proven history in thousands of applications.

## Different styles for unique applications

- Top performing tension/compression combination cells
- Overhead suspended rated cells – designed for strength and safety
- Robust compression-only cells

## Many capacities available

- Capacities from 25 – 100,000 lb / 10 – 40,000 kg
- Many stock items

## Hardware eases load cell installation

- Choices from lifting eyes, eye nuts, threaded stud, compression bases and load buttons

## Free calibration with Dillon Indicators

- A Dillon load cell and indicator system is ready for measurement, right out of the box. Includes detailed certificate.



## Dillon S-Beam Load Cells

For performance and versatility, the Dillon S-Beam load cell is a top choice.

- Measures both tension and compression
- Alloy steel with nickel plating
- Broad assortment of hardware

Capacities	Cell height	Thread
50 / 100 / 200 lb 22 / 45 / 90 kg	2.50 in 64 mm	¼-28
500 / 1,000 / 2,000 lb 220 / 450 / 900 kg	2.50 in 64 mm	½-20
5,000 / 10,000 lb 2,200 / 4,500 kg	4.00 in 99 mm	¾-16
20,000 lb 9,000 kg	7.00 in 178 mm	1¼-12

See back page & Dillon Load Cells specifications sheet for more dimensions and detail.



Tension Z-cells are suitable for overhead suspended measurement.

## Dillon Z-cells

The most robust Z-cell style load cells available.

- Top-grade material
- Built in overload stops
- Includes hardware

Capacities	Tension height	Compression height
25 / 50* / 100 lb 10 / 22* / 45 kg	7.25 in 185 mm	3.9 in 100 mm
500 / 1,000 lb 220 / 450 kg	8 in 205 mm	4.7 in 120 mm

See back page & Dillon Load Cells specifications sheet for more dimensions and detail  
\*Compression only

## Dillon SGMT / SGMC load cells

Designed to handle extreme applications.

- High-Grade stainless steel body
- 500% Minimum overload safety factor
- Full rated pound and kilogram capacities

Capacities	SGMT height (tension)	SGMC height (compression)
2,000 / 5,000 / 10,000 lb	4.88 in	4.91 in
20,000 lb	6.25 in	5.88 in
50,000 / 100,000 lb	7.91 in	7.38 in

See back page & Dillon Load Cells specifications sheet for more dimensions and detail



**SGMT**  
Designed for overhead suspension. Optional eye nut available.



**SGMC**  
Includes cap and base.

# Specifications

See Dillon Load Cells specifications sheet for dimensions

	S-Beam	Z-Cell	SGMT & SGMC
<b>General</b>			
Application	Tension and Compression	Tension or Compression	Tension SGMT Compression SGMC
Connector or Cable length	20 ft / 6 m *	5-pin connector	5-pin connector
Rated Output	3 ±0.01 mV/V	2 ±0.2 mV/V	2 ±0.2 mV/V
Maximum excitation	15 VDC	15 VDC	15 VDC
Bridge resistance	350Ω ± 4Ω	350Ω ± 2Ω	350Ω ± 2Ω
Overload without zero shift (% FS)	150%	300%	300%
Minimum ultimate safety factor (% FS)	not rated	500%	500%
Suitable for critical suspended loads	No	Yes	Yes
<b>Typical in-system accuracy</b>			
Typical system accuracy FI-521 (% FS)	±0.1%	±0.1%	±0.25%
Typical system accuracy FI-127 (% FS)	±0.1%	±0.1%	±0.25%
Typical system accuracy FI-90 (% FS)	±0.1%	±0.1%	±0.35%
Typical system accuracy FI-80 (% FS)	±0.1%	±0.1%	±0.5%
<b>Specific performance accuracy</b>			
Zero balance (% full scale capacity (FS))	<1%	<10%	<2%
Non-linearity (% FS)	±0.02%	±0.05%	±0.4%
Hysteresis (% FS)	±0.02%	±0.03%	±0.3%
Non-repeatability (% FS)	±0.01%	±0.02%	±0.1%
Creep (% FS in 20 min)	0.03%	0.03%	0.03%
<b>Temperature specifications</b>			
Zero (% FS/100°F)	±0.1%	±0.1%	±2.0%
Output (% load/100°F)	±0.2%	±0.2%	±2.0%
Temp. Comp Range	15 to 140°F	15 to 115°F	15 to 115°F
Operable Temp. Range	-20 to +200°F	-20 to +200°F	-20 to +200°F

\* Available with tinned leads or 7-pin connector



Combine several load cells together and see their total output with a load cell summing box.



Dillon also manufactures highly accurate tensiometers, mechanical dynamometers and crane scales.

## AUTHORIZED DISTRIBUTORS

Ask the experts. Dillon distributors offer complete service capabilities from application assistance to sales and product support. Their experienced representatives are the most knowledgeable experts that you will find in the force measurement industry. We recommend that you consult these capable specialists for all of your measuring needs.

Please call us or visit  
[www.dillonforce.com](http://www.dillonforce.com)  
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# DILLON

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