

## Double-Ended Beam Load Cell

### FEATURES

- Capacities: 1k to 75k lbs
- Environmental protection: IP67 (DIN 40.050)
- Material: nickel-plated steel
- Center-loaded design
- **Optional**
  - FM certified versions are available for use in potentially explosive atmospheres



### APPLICATIONS

- Silo, tank, hopper weighing
- Custom system designs
- Low capacity vehicle scales

A reliable sealing and mechanical protection of the strain gage area is ensured by the use of potting compound with a metal cover.

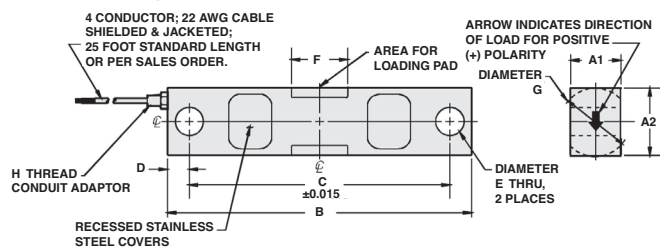
### DESCRIPTION

The Model 5203 is a double-ended shear beam type load cell.

The center-loaded design results in minimal sensitivity to off-center forces.

### OUTLINE DIMENSIONS in inches

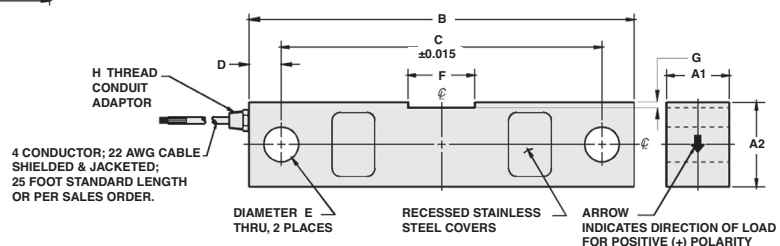
#### 1000 to 50000 lb capacities



#### Wiring

+ Excitation	Red
- Excitation	Black
+ Output	Green
- Output	White

#### 75000 lb capacity



CAPACITY	A1	A2	B	C	D	E	F	G	H
1k-5k	1.25	1.25	7.50	6.25	0.62	0.50	1.22	1.25	1/4-18NPT
10k-25k	1.44	1.94	8.75	7.50	0.62	0.81	1.62	1.99	1/4-18NPT
35k	1.50	2.50	8.75	7.50	0.62	0.81	1.62	2.50	1/4-18NPT
50k	2.44	2.94	13.50	11.50	1.00	1.31	3.25	2.99	1/2-14NPT
75k	2.44	2.94	13.50	11.50	1.00	1.31	3.12	0.18	1/2-14NPT

Capacities are in pounds.

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<b>SPECIFICATIONS</b>		
<b>PARAMETER</b>	<b>VALUE</b>	<b>UNIT</b>
<b>Standard capacities (E<sub>max</sub>)</b>	1k, 1.5k, 2k, 2.5k, 5k, 10k, 15k, 20k, 25k, 35k, 50k, 75k	lbs
<b>Accuracy class</b>	Non Approved - D3	
<b>Rated output (=S)</b>	3	mV/V
<b>Rated output tolerance</b>	0.008	±mV/V
<b>Zero balance</b>	1.0	±% FSO
<b>Combined error</b>	0.03	±% FSO
<b>Creep error (20 minutes)</b>	0.03	±% FSO
<b>Temperature effect on minimum dead load output</b>	0.0015	±% FSO/°F (/5°C)
<b>Temperature effect on sensitivity</b>	0.0008	±% FSO/°F (/5°C)
<b>Maximum safe overload</b>	150	% E <sub>max</sub>
<b>Ultimate overload</b>	300	% E <sub>max</sub>
<b>Maximum safe side load</b>	100	% E <sub>max</sub>
<b>Excitation voltage</b>	10	V
<b>Maximum excitation voltage</b>	15	V
<b>Input resistance</b>	700±14	Ω
<b>Output resistance</b>	697±4	Ω
<b>Insulation resistance</b>	≥1000	MΩ
<b>Compensated temperature range</b>	-10 to +40 (+14 to +104)	°C (°F)
<b>Operating temperature range</b>	-18 to +65 (0 to +150)	°C (°F)
<b>Element material (DIN)</b>	Nickel-plated alloy steel	
<b>Sealing (DIN 40.050 / EN60.529)</b>	IP67	

FSO—Full Scale Output

All specifications subject to change without notice.

**CERTIFICATION MARKINGS**

FM Approval markings (USA and Canada)

IS Class I, II, III, Division 1,

Groups A, B, C, D, E, F and G; T4

Ta = -25°C to +40°C