

## 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.

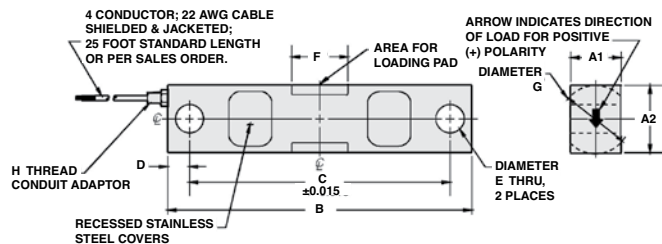
### DESCRIPTION

The 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

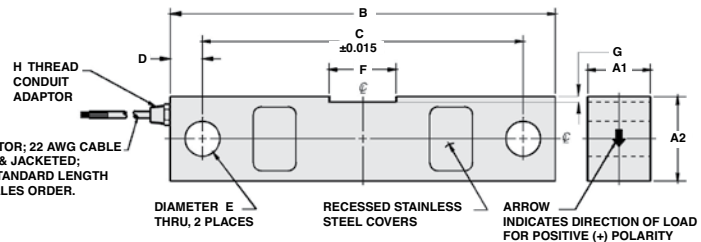
#### 1000 to 50000 lb capacities



#### 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.

### Double-Ended Beam Load Cell

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

FSO—Full Scale Output

All specifications subject to change without notice.



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