

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.

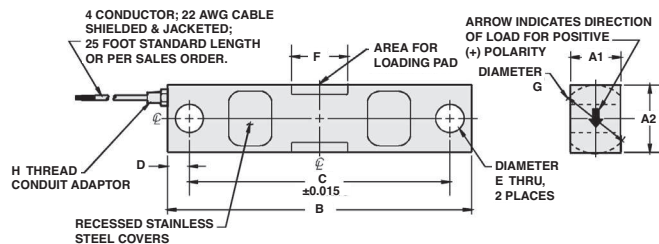
DESCRIPTION

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

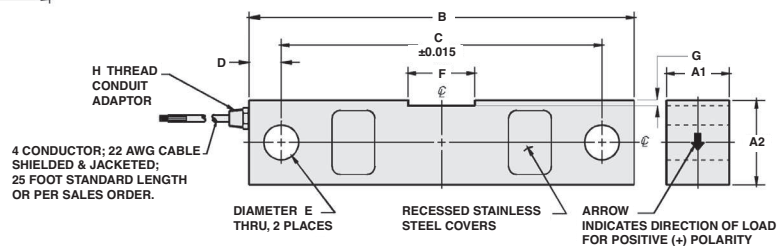
1000 to 50000 lb capacities



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.

Double-Ended Beam Load Cell

| SPECIFICATIONS | | |
|--|---|--------------------|
| PARAMETER | VALUE | UNIT |
| Standard capacities (E _{max}) | 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 _{max} |
| Ultimate overload | 300 | % E _{max} |
| Maximum safe side load | 100 | % E _{max} |
| 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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