

## Double Ended Beam Load Cell



### FEATURES

- Capacities: 1K to 75Klbs
- Environmental protection: IP67 (DIN 40.050)
- Material: nickel plated steel
- Center loaded design

### OPTIONAL FEATURE

- FM certified versions are available for use in potentially explosive atmospheres

### DESCRIPTION

The 5203 is a Double Ended Shear Beam type load cell.

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

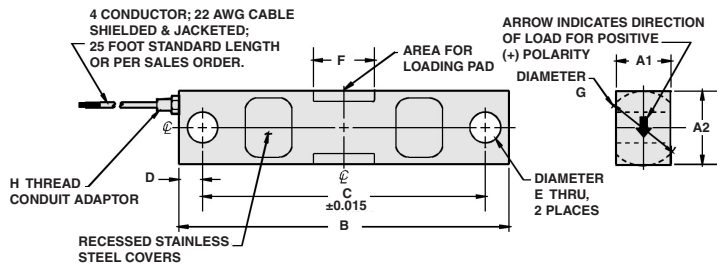
The center loaded design results in minimal sensitivity to off-center forces.

### APPLICATIONS

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

### OUTLINE DIMENSIONS in inches

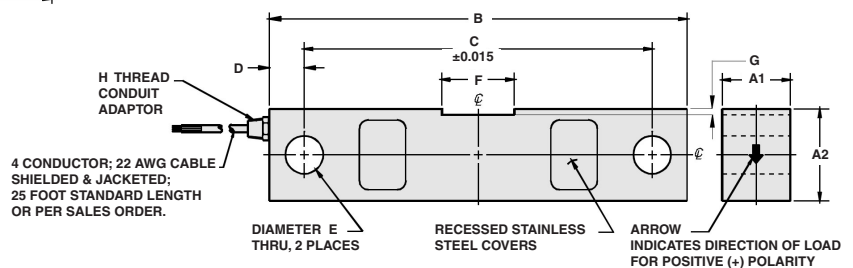
#### 1000 to 50000lb capacities



#### Wiring

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

#### 75000lb 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.



### SPECIFICATIONS

| PARAMETER                               | VALUE   | UNIT              |
|---|---|-------------------|
| Standard capacities (E <sub>max</sub> ) | 1, 1.5, 2, 2.5, 5, 10, 15, 20, 25, 35, 50, 75 | Klbs              |
| Accuracy class                          | <b>Non Approved - D3</b>                      |                   |
| 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            |
| Temp. effect on min. dead load output   | 0.0015  | ±% FSO/5°C (°F)   |
| Temperature effect on sensitivity       | 0.0008  | ±% FSO/5°C (°F)   |
| Maximum safe over load                  | 150   | %E <sub>max</sub> |
| Ultimate over load                      | 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

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