

# Vishay Sensortronics

## **Double-Ended Shear Beam Load Cell**









#### **FEATURES**

- Rated capacities of 25,000 to 125,000 pounds, 10 to 45 metric tons
- · Center supported, external pivot loading
- · Integral conduit adaptor
- Trade certified for NTEP Class IIIL:10000 divisions and OIML R60 3000 divisions
- Sensorgage<sup>™</sup> sealed to IP67 standards
- Factory Mutual System Approved for Classes I, II, III; Divisions 1 and 2; Groups A through G. Also, non-incendive ratings (No barriers!).

#### **OPTIONAL FEATURES**

- · Stainless steel available as 65040W
- Internal pivot loading available as 65040-1122

### **DESCRIPTION**

The 65040 is a mid to high capacity nickel plated alloy steel, double ended shear beam load cell.

This product is designed for use in certified truck and rail scales and is available in capacities ranging from 25K to 125Klbs.

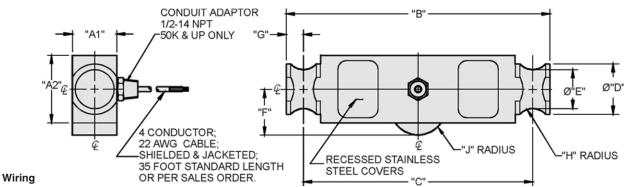
This load cell is rated intrinsically safe by the Factory Mutual System (FM); making it

suitable for use in potentially explosive environments. This load cell is certified for Legal For Trade applications by both American NTEP and International OIML standards.

#### **APPLICATIONS**

- Truck scales
- · Railroad track scales
- "Legal for Trade" tank, bin and hopper weighing

#### **OUTLINE DIMENSIONS** in inches [mm]



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

| CAPACITY    | A1     | A2     | В       | С       | D      | E      | F      | G      | Н      | J      |
|-------------|--------|--------|---------|---------|--------|--------|--------|--------|--------|--------|
| 25K - 40K   | 1.94   | 2.44   | 8.25    | 7.25    | 2.0    | 1.63   | 1.75   | 0.50   | 0.50   | 0.50   |
| 50K - 75K   | 1.94   | 2.94   | 11.50   | 10.00   | 2.2    | 1.70   | 2.00   | 0.75   | 0.75   | 1.00   |
| 100K - 125K | 2.90   | 3.86   | 14.50   | 12.50   | 3.2    | 2.44   | 2.75   | 1.00   | 1.00   | 1.50   |
| [10t]       | [49.3] | [61.9] | [209.6] | [184.2] | [50.8] | [41.4] | [44.5] | [12.7] | [12.7] | [12.7] |
| [25 - 35t]  | [49.3] | [74.7] | [292.1] | [254.0] | [55.9] | [43.2] | [50.8] | [19.1] | [19.1] | [25.4] |
| [45t]       | [73.7] | [98.0] | [368.3] | [317.5] | [81.3] | [62.0] | [69.9] | [25.4] | [25.4] | [38.1] |

Capacities are in pounds [kg/t].



### **Regional Distributor**

Vishay Sensortronics

## Double-Ended Shear Beam Load Cell



### **SPECIFICATIONS**

| PARAMETER                               |                            | VALUE          |          | UNIT              |
|---|----------------------------|----------------|----------|-------------------|
| Rated capacity-R.C. (E <sub>max</sub> ) | 25K, 4                     | lbs            |          |                   |
| riated supusity riior (=max/            |                            | kg/metric tons |          |                   |
| NTEP/OIML Accuracy class                | NTEP IIIL                  | Standard       | OIML R60 |                   |
| Maximum no. of intervals (n)            | 10000 multiple             |                | 3000     |                   |
| $Y = E_{max}/V_{min}$                   | See NTEP cert.<br>86-045A1 |                | 6250     | Maximum available |
| Rated output-R.O.                       |                            | mV/V           |          |                   |
| Rated output tolerance                  |                            | ±% mV/V        |          |                   |
| Zero balance                            |                            | ±% FSO         |          |                   |
| Combined error                          | 0.02                       | 0.03           | 0.02     | ±% FSO            |
| Non-repeatability                       |                            | ±% FSO         |          |                   |
| Creep error (30 minutes)                | 0.025                      | 0.03           | 0.017    | ±% FSO            |
| Temperature effect on zero              | 0.0009                     | 0.0015         | 0.0010   | ±% FSO/°F         |
| Temperature effect on output            | 0.0008                     | 0.0008         | 0.0007   | ±% of load/°F     |
| Compensated temperature range           |                            | °F (°C)        |          |                   |
| Operating temperature range             |                            | °F (°C)        |          |                   |
| Storage temperature range               |                            | °F (°C)        |          |                   |
| Sideload rejection ratio                |                            |                |          |                   |
| Safe sideload                           |                            | % of R.C.      |          |                   |
| Maximum safe central overload           |                            | % of R.C.      |          |                   |
| Ultimate central overload               |                            | % of R.C.      |          |                   |
| Excitation, recommended                 |                            | Vdc or Vac rms |          |                   |
| Excitation, maximum                     |                            | Vdc or Vac rms |          |                   |
| Input impedance                         |                            | Ω              |          |                   |
| Output impedance                        |                            | Ω              |          |                   |
| Insulation resistance at 50VDC          |                            | MΩ             |          |                   |
| Material                                | N                          |                |          |                   |
| Environmental protection                |                            | IP67           |          |                   |

Note: \* Stainless steel available as 65040W

FSO - Full Scale Output

All specifications subject to change without notice.

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# **Legal Disclaimer Notice**



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