

Stainless Steel, Welded Seal Double-Ended Shear Beam Load Cell



FEATURES

- Rated capacities of 10,000 to 100,000 pounds
- Stainless steel, welded seal construction
- Center-link recessed pivot load
- Insensitive to side loads and bending moments
- Load cells have matched outputs for multi-cell systems
- Integral conduit adaptor
- Trade certified for NTEP Class III: 5000 divisions and Class IIIIL: 10000 divisions
- *Sensorgage*[™] sealed to IP68 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

- 65058-TSA companion assemblies for vehicle scales
- 65069-TWA companion assemblies for vessel weighing

DESCRIPTION

Model 65058S is specifically designed to be installed in extremely harsh environments. It is specially suitable for the process industry of food, chemical and pharmaceutical industries.

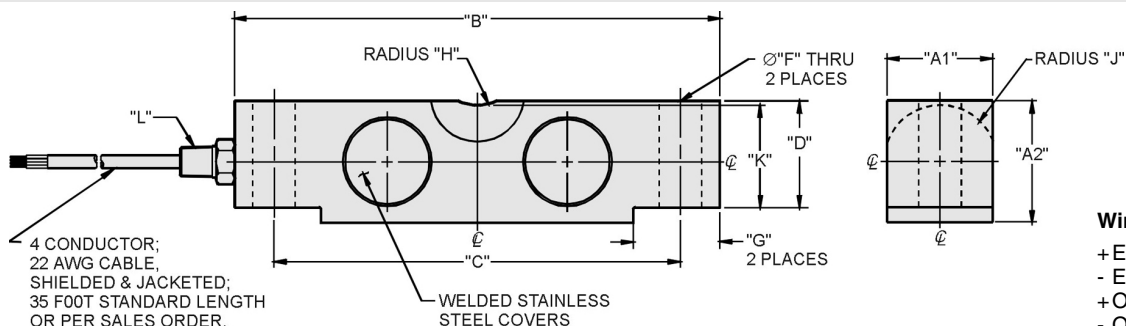
Protected to meet IP68 requirements, the construction of the 65058S load cell uses double - redundant sealing methods, to ensure long and reliable service and constant calibration.

The additional sense wires compensate for changes in lead resistance due to temperature change and/or cable extension. Complete compensation of changes in lead resistance is achieved by feeding this voltage into the appropriate electronics.

APPLICATIONS

- Hostile environments: Food and beverage processing
Chemical processing
Pharmaceutical and biomedical processing
- High performance weighing modules and assemblies
- Tank and reactor weighing
- Batching, blending and mixing systems

OUTLINE DIMENSIONS in inches



| CAPACITY | A1 | A2 | B | C | D | F | G | H | J | K | K |
|-----------|------|------|-------|------|------|------|------|------|------|------|------------|
| 10K - 25K | 1.69 | 1.94 | 7.75 | 6.50 | 1.70 | 0.68 | 1.38 | 0.75 | 0.90 | 1.63 | 1/4-18 NPT |
| 40K | 1.94 | 2.44 | 10.25 | 8.50 | 2.10 | 0.81 | 1.93 | 1.00 | 1.12 | 2.00 | 1/4-18 NPT |
| 50K - 75K | 2.44 | 2.94 | 10.25 | 8.50 | 2.65 | 1.06 | 1.93 | 1.00 | 1.37 | 2.54 | 1/2-14 NPT |
| 100K | 2.44 | 3.44 | 10.25 | 8.50 | 2.65 | 1.06 | 1.93 | 1.00 | 1.37 | 2.54 | 1/2-14 NPT |

Capacities are in pounds.

Model 65058S

Vishay Sensortronics

Stainless Steel, Welded Seal
Double-Ended Shear Beam Load Cell



SPECIFICATIONS

| PARAMETER | VALUE | | | UNIT |
|-----------------------------------|-------------------------------------|----------------|----------|-------------------------------|
| Rated capacity-R.C. (E_{max}) | 10K, 25K, 40K, 50K, 60K, 75K, 100K* | | | lbs |
| NTEP/OIML Accuracy class | NTEP III | NTEP IIIIL | Standard | |
| Maximum no. of intervals (n) | 5000 multiple | 10000 multiple | | |
| $Y = E_{max}/V_{min}$ | See NTEP cert. 86-046A3 | | | Maximum available |
| Rated output-R.O. | 3.0 | | | mV/V |
| Rated output tolerance | ± 0.25 | | | $\pm\%$ mV/V |
| Zero balance | 1.0 | | | $\pm\%$ FSO |
| Combined error | 0.02 | 0.02 | 0.03 | $\pm\%$ FSO |
| Non-repeatability | 0.01 | | | $\pm\%$ FSO |
| Creep error (20 minutes) | 0.030 | 0.030 | 0.03 | $\pm\%$ FSO |
| Temperature effect on zero | 0.0015 | 0.0010 | 0.0015 | $\pm\%$ FSO/ $^{\circ}$ F |
| Temperature effect on output | 0.0008 | 0.0008 | 0.0008 | $\pm\%$ of load/ $^{\circ}$ F |
| Compensated temperature range | 14 to 104 (-10 to 40) | | | $^{\circ}$ F ($^{\circ}$ C) |
| Operating temperature range | 0 to 150 (-18 to 65) | | | $^{\circ}$ F ($^{\circ}$ C) |
| Storage temperature range | -60 to 185 (-50 to 85) | | | $^{\circ}$ F ($^{\circ}$ C) |
| Sideload rejection ratio | 500:1 | | | |
| Safe sideload | 100 | | | % of R.C. |
| Maximum safe central overload | 150 | | | % of R.C. |
| Ultimate central overload | 300 | | | % of R.C. |
| Excitation, recommended | 10 | | | Vdc or Vac rms |
| Excitation, maximum | 25 | | | Vdc or Vac rms |
| Input impedance | 686 - 714 | | | Ω |
| Output impedance | 699 - 707 | | | Ω |
| Insulation resistance at 50VDC | >1000 | | | M Ω |
| Material | Stainless steel | | | |
| Environmental protection | IP68 | | | |

* NTEP approval 20-200Klbs only
FSO - Full Scale Output

All specifications subject to change without notice.

VISHAY TRANSDUCERS (VT) SALES OFFICES

VT Americas
City of Industry, CA
PH: +1-626-858-8899
FAX: +1-626-332-3418
vt.us@vishaymg.com

VT Netherlands
Breda
PH: +31-76-548-0700
FAX: +31-76-541-2854
vt.nl@vishaymg.com

VMG UK
Basingstoke
PH: +44-125-646-2131
FAX: +44-125-647-1441
vt.uk@vishaymg.com

VMG Israel
Netanya
PH: +972-9-863-8888
FAX: +972-9-863-8800
vt.il@vishaymg.com

VMG Germany
Heilbronn
PH: +49-7131-3901-260
FAX: +49-7131-3901-2666
vt.de@vishaymg.com

VT China
Tianjin
PH: +86-22-2835-3503
FAX: +86-22-2835-7261
vt.prc@vishaymg.com

VMG France
Chartres
PH: +33-2-37-33-31-20
FAX: +33-2-37-33-31-29
vt.fr@vishaymg.com

VT Taiwan*
Taipei
PH: +886-2-2696-0168
FAX: +886-2-2696-4965
vt.roc@vishaymg.com
*Asia except China



Notice

Specifications of the products displayed herein are subject to change without notice. Vishay Intertechnology, Inc., or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Vishay's terms and conditions of sale for such products, Vishay assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of Vishay products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Vishay for any damages resulting from such improper use or sale.