

## 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.

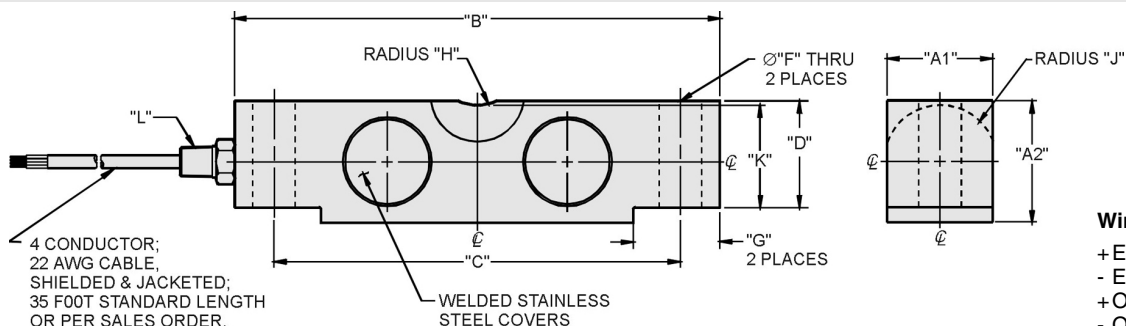
Protected to meet IP68 requirements, the construction of the 65058S load cell uses double - redundant sealing methods, to ensure long and reliable service and constant calibration.

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



#### Wiring

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

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	$\pm 0.25$			$\pm\%$ 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			$\Omega$
Output impedance	699 - 707			$\Omega$
Insulation resistance at 50VDC	>1000			M $\Omega$
Material	Stainless steel			
Environmental protection	IP68			

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

All specifications subject to change without notice.

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