

## Vishay Sensortronics

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



#### **FEATURES**

- Rated capacities of 5,000 to 100,000 pounds, 2.3 to 45 metric tons
- High quality alloy tool steel construction
- · Nickel plated for outstanding corrosion resistance
- Replacement for RTI model 5103 (EZM1)
- · Integral conduit adaptor
- 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!).

#### **DESCRIPTION**

The 60058 is a mid to high capacity nickel plated alloy steel, double ended shear beam load cell.

This product is designed for use in industrial and out door environments. Nickel plated steel construction limits corrosion from outdoor use. The IP67 sealing makes it suitable for applications that are subject to high-pressure wash down. Tank weighing is made simple when this load cell is combined with the EZ

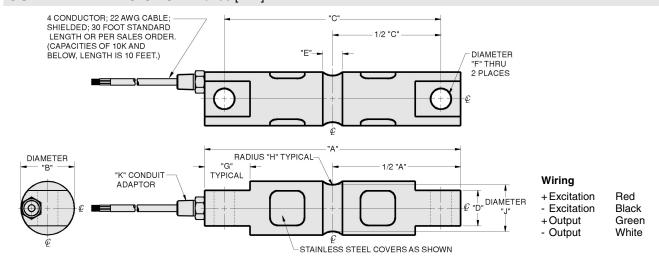
mount mounting hardware it was designed for. Its high accuracy and availability in high capacities make it ideal for certified truck and rail scales.

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 the American NTEP standards.

#### **APPLICATIONS**

- Tank, bin and silo weighing
- · Railroad track scales
- Truck scales

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



CAPACITY	Α	В	С	D	E	F	G	Н	J	K-THREAD
5K - 20K	8.12	1.70	6.88	1.13	0.63	0.65	1.44	0.50	1.48	1/4-18 NPT
30K - 60K	10.25	2.97	8.50	2.38	0.95	1.06	1.94	1.00	2.73	1/2-14 NPT
100K	11.25	3.50	9.50	2.50	1.25	1.06	1.88	1.50	3.24	1/2-14 NPT
[2.3 - 9t]	[206.2]	[43.2]	[174.8]	[28.7]	[16.0]	[16.5]	[36.6]	[12.7]	[37.6]	1/4-18 NPT
[13.6 - 27t]	[260.4]	[75.4]	[215.9]	[60.5]	[24.1]	[26.9]	[49.3]	[25.4]	[69.3]	1/2-14 NPT
[45t]	[285.8]	[88.9]	[241.3]	[63.5]	[31.8]	[26.9]	[47.8]	[38.1]	[82.3]	1/2-14 NPT

Capacities are in pounds [kg/t].

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### Double-Ended Shear Beam Load Cell



### **SPECIFICATIONS**

PARAMETER		UNIT		
Rated capacity-R.C. (E <sub>max</sub> )	5K, 10l	lbs		
riated dapatory riio. (Emax)	2.3, 4.5	tons		
NTEP/OIML Accuracy class	NTEP III	NTEP IIIL	Standard	
Maximum no. of intervals (n)	5000 multiple	10000 multiple		
$Y = E_{max}/V_{min}$	See NTEP o	Maximum available		
Rated output-R.O.		mV/V		
Rated output tolerance		±% mV/V		
Zero balance		±% FSO		
Combined error	0.02	0.02	0.03	±% FSO
Non-repeatability	0.01	0.01	0.01	±% FSO
Creep error (20 minutes)	0.030	0.030	0.03	±% FSO
Temperature effect on zero	0.0015	0.0010	0.0015	±% FSO/°F
Temperature effect on output	0.0008	0.0008	0.0008	±% of load/°F
Compensated temperature range		°F (°C)		
Operating temperature range		°F (°C)		
Storage temperature range		°F (°C)		
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				
Environmental protection				

FSO - Full Scale Output R.C. - Rated Capacity

All specifications subject to change without notice.

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