## Sensortronics



# **Tank Weighing Assembly**







#### **FEATURES**

- Capacity ranges of 50,000 to 1,000,000 pounds
- Mounts directly to foundation or structural support
- Self-checking with provisions for thermal expansion and contraction
- No check rods required
- Monolithic element design
- · Exceptional sideloading tolerance
- Low profile/low deflection
- Symmetrical mounting bolt pattern simplifies installation
- Integral conduit adaptor
- Exceeds structural requirements of Uniform Building Code Standards for Seismic Zones 1 and 2
- Sensorgage™ 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 65092-TWA is a high capacity steel or stainless steel weighing assembly.

This product has a unique design for silo and hopper weighing. It has high side load rejection, and is able to withstand loads in all directions up to and exceeding its rated capacity with no permanent damage. It is also designed to move in the direction of thermal expansion, guaranteeing accurate measurements regardless of conditions.

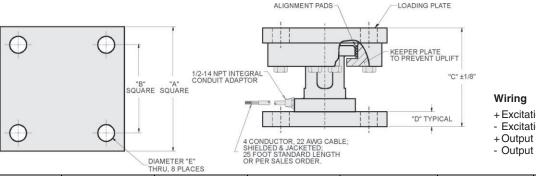
Nickel plating or stainless steel and IP67 rated sealing make this load cell suitable for use in outdoor applications as well as applications that are subject to high pressure wash down.

This load cell is rated intrinsically safe by the Factory Mutual (FM), making it suitable for use in potentially explosive environments.

#### **APPLICATIONS**

- Tank, bin, and silo weighing
- Level and inventory monitoring
- · High capacity weighing

### **OUTLINE DIMENSIONS** in inches



Wiring	
+ Excitation	Red
<ul> <li>Excitation</li> </ul>	Black
+Output	Green
- Output	White

CAPACITY	Α	В	С	D	E	WEIGHT
50K	8.00	6.00	5.13	0.94	0.78	100.0
100K	10.00	6.50	7.38	1.19	1.12	150.0
200K	12.00	8.50	9.50	1.44	1.63	225.0
300K	14.00	9.50	11.00	1.94	1.63	350.0
500K	17.00	12.00	12.63	2.44	2.13	650.0
750K	24.00	16.50	21.75	3.90	3.50	1800.0
1M	24.00	16.50	21.75	3.90	3.50	2000.0

Capacities are in pounds.



## Tank Weighing Assembly

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PARAMETER	VALUE	UNIT
Rated capacity-R.C. (E <sub>max</sub> )	50K, 100K, 200K*	lbs
NTEP/OIML Accuracy class	Standard	
Rated output-R.O.	2	mV/V
Rated output tolerance	0.25	±% mV/V
Zero balance	1.0	±% FSO
Combined error	0.10	±% FSO
Non-repeatability	0.07	±% FSO
Creep error (20 minutes)	0.03	±% FSO
Temperature effect on zero	0.0015	±% FSO/°F
Temperature effect on output	0.0008	±% of applied load/°I
Compensated temperature range	14 to 104 (-10 to 40)	°F (°C)
Operating temperature range	0 to 150 (-18 to 65)	°F (°C)
Storage temperature range	-60 to 185 (-50 to 85)	°F (°C)
Safe sideload	30	% of R.C.
Maximum safe central overload	150	% of R.C.
Ultimate central overload compression	300	% of R.C.
Ultimate central overload tension	100	% of R.C.
Excitation, recommended	10	Vdc or Vac rms
Excitation, maximum	18	Vdc or Vac rms
Input impedance	400 - 500	Ω
Output impedance	349 - 355	Ω
Insulation resistance at 50VDC	>1000	MΩ
Material load cell	Nickel plated alloy tool steel or stainless steel	
Material assembly	Zinc plating	
Environmental protection	IP67	

<sup>\*</sup> Consult factory for capacities up to 1 million lbs.

FSO -Full Scale Output

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