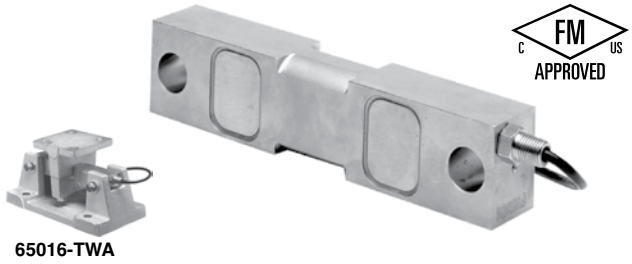
Double-Ended Shear Beam Load Cell

FEATURES

- Rated capacities of 1000 to 100,000 pounds
- Insensitive to side loads and bending moments
- High output—well suited to high deadload/low liveload applications
- Load cells have matched outputs for multi-cell systems
- Excellent combined error and repeatability
- Integral conduit adaptor
- *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!);
- **Optional**
  - ❍ Weighing assemblies available—65016 TWA
  - ❍ EDOC option available; product appearance will differ from the photograph due to coating

APPLICATIONS

- Tank, bin, and silo weighing
- Batching, blending and mixing systems
- Level and inventory monitoring



65016-TWA

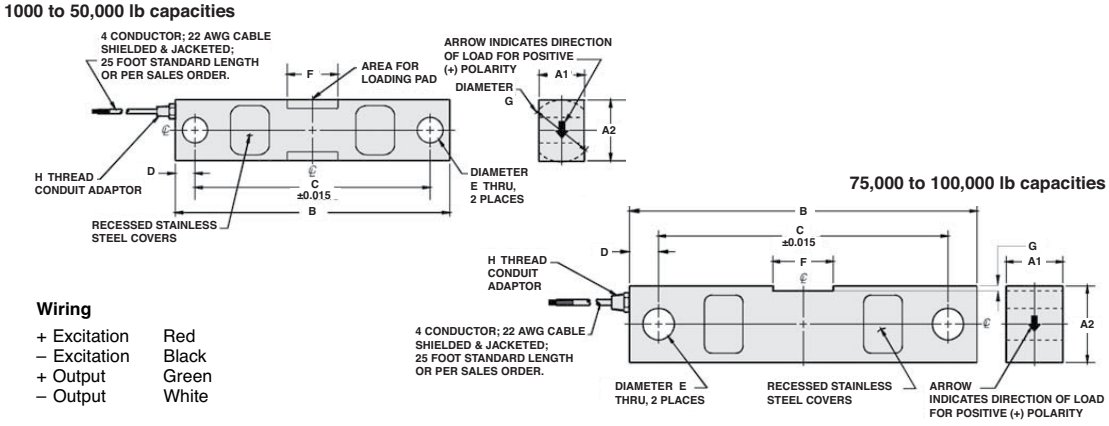
DESCRIPTION

The Model 65016 is a double-ended shear beam load cell constructed from nickel-plated alloy steel. The double-ended mounting provides good restraint to possible movement of the tanks and, in many cases, eliminates the need for check rods. The double Shear Beam design gives excellent performance for high capacity loading.

The output is rationalized to facilitate multiple-cell applications.

This load cell is constructed of alloy tool steel and is potted to IP67 providing excellent protection against moisture and humidity.

OUTLINE DIMENSIONS in millimeters



Wiring

+ Excitation	Red
– Excitation	Black
+ Output	Green
– Output	White

CAPACITY	A1	A2	B	C	D	E	F	G	H
1k–5k	1.25	1.25	7.50	6.25	0.62	0.50	1.22	1.25	1/4-18NPT
10k–25k	1.44	1.94	8.75	7.50	0.62	0.81	1.62	1.99	1/4-18NPT
35k	1.50	2.50	8.75	7.50	0.62	0.81	1.62	2.50	1/4-18NPT
50k	2.44	2.94	13.50	11.50	1.00	1.31	3.25	2.99	1/2-14NPT
75k	2.44	2.94	13.50	11.50	1.00	1.31	3.12	0.18	1/2-14NPT
100k	2.94	3.94	18.50	15.00	1.75	1.63	3.25	0.25	1/2-14NPT

Above dimensions apply to non-EDOC-coated load cells.

Double-Ended Shear Beam Load Cell

SPECIFICATIONS		
PARAMETER	**VALUE**	**UNIT**
Rated capacity—R.C. (E_{max})	1k, 1.5k, 2.5k, 5k, 10k, 15k, 25k, 35k, 50k, 75k, 100k	lbs
NTEP/OIML accuracy class	Standard	
Maximum no. of intervals (n)	—	
Rated output—R.O.	3.0	mV/V
Rated output tolerance	0.25	±% mV/V
Zero balance	1.0	±% FSO
Combined error	0.03	±% FSO
Non-repeatability	0.01	±% FSO
Creep error (20 minutes)	0.03	±% FSO
Temperature effect on zero	0.0015	±% FSO/°F
Temperature effect on output	0.0008	±% of load/°F
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)
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	15	VDC or VAC RMS
Excitation, maximum	25	VDC or VAC RMS
Input impedance	700±14	Ω
Output impedance	703±4	Ω
Insulation resistance at 50 VDC	>1000	MΩ
Material	Nickel-plated alloy tool steel	
Environmental protection	IP67	

Notes

FSO—Full Scale Output

All Specifications subject to change without notice.

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