

Alloy Steel Double Ended Shear Beam



ATEX



FEATURES

- Capacities 10K-75Klbs
- Low profile design for weigh bridge and silo applications
- Nickel plated alloy steel construction
- NTEP approved
- IP67 protection

OPTIONAL FEATURES

- EEx ia IIC T6 hazardous area approval
- FM approval available

DESCRIPTION

Model 4158 is a double ended shear beam load cell designed for high capacity silo weighing applications.

This high accuracy load cell is designed to meet NTEP standards. When combined with suitable mounting arrangements, this load cell will provide a simple, accurate and reliable weighing system.

Nickel plated and full environmental sealing assure long term reliability. For hazard-

ous environments, this load cell has a EEX ia IIC T6 approved option.

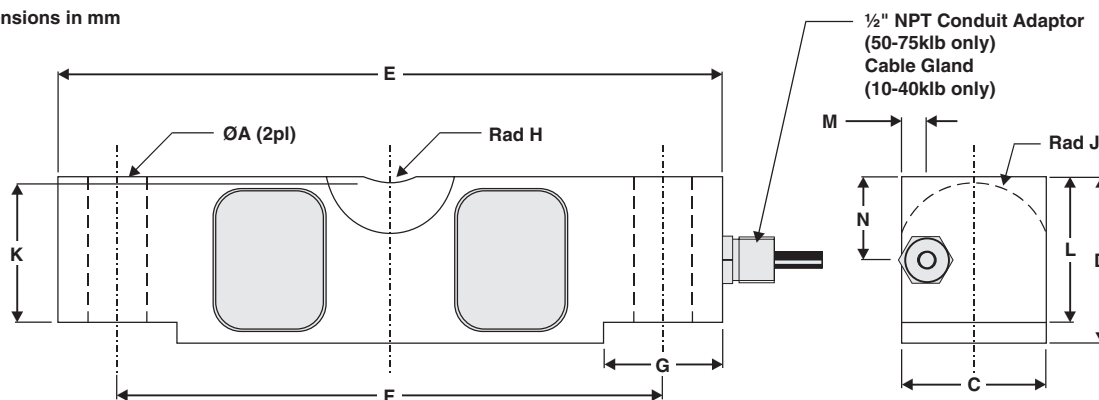
When used in conjunction with Tedea-Huntleigh's custom designed mount, the unit combines ease of installation with both side load and lift-off protection.

APPLICATIONS

- Weigh bridges
- Tank and silo weighing

OUTLINE DIMENSIONS in millimeters

All dimensions in mm



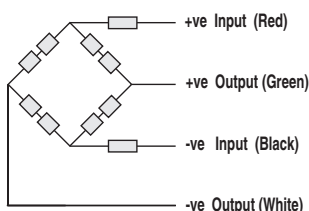
CAPACITY	ØA	C	D	E	F	G	Rad H	Rad J	K	L	M	N
10 - 25Klb	17.3	42.9	49.3	196.9	165.1	35.9	19.1	22.9	41.4	43.2	8.8	13.6
40Klb	20.6	49.3	62.0	260.4	215.9	49.0	25.4	28.5	50.8	53.3	9.0	31.0
50 - 75Klb	26.9	62.0	74.7	260.4	215.9	49.0	25.4	34.8	64.5	67.3	10.4	37.4

SPECIFICATIONS

PARAMETER	VALUE		UNIT
Rated capacity-R.C. (E_{max})	10, 20, 25, 40, 50, 60, 75*		Klbs
NTEP/OIML Accuracy class	NTEP	Non-Approved	
Maximum no. of intervals (n)	10000 IIL	1000	
$Y = E_{max}/V_{min}$	12000	4000	Maximum available
Rated output-R.O.	3.0		mV/V
Rated output tolerance	0.075		±mV/V
Zero balance	0.09		±mV/V
Zero Return, 30 min.	0.030	0.050	±% of applied load
Total Error	0.030	0.050	±% of rated output
Temperature effect on zero	0.0013	0.0067	±% of rated output/°C
Temperature effect on output	0.0025	0.0040	±% of applied load/°C
Temperature range, compensated	-10 to +40		°C
Temperature range, safe	-30 to +70		°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	15		Vdc or Vac rms
Input impedance	780±20		Ohms
Output impedance	705±5		Ohms
Insulation resistance	>1000		Mega-Ohms
Cable length	7.5		m
Cable type	6 wire, braided, PVC, dual floating screen		Standard
Construction	Nickel plated alloy steel		
Environmental protection	IP67		

* 10Klbs is not approved by NTEP.

Wiring Schematic Diagram



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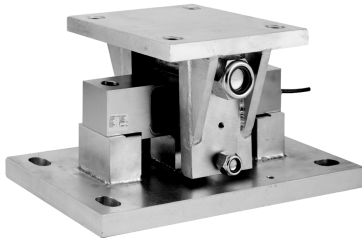
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Heavy Duty Silo Mount for Use With 4158 Load Cell

FEATURES

- Capacities upto 75klb
- Use on tanks or silos
- All steel construction
- Low profile
- Simple installation



DESCRIPTION

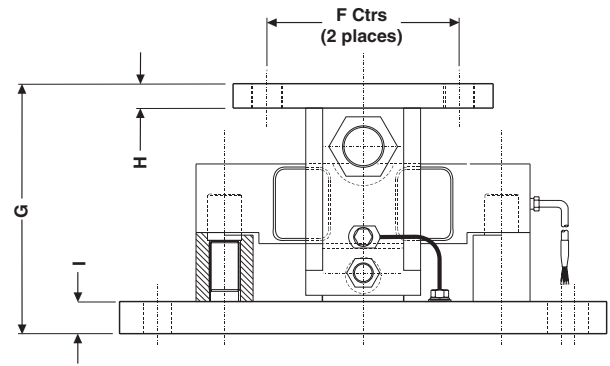
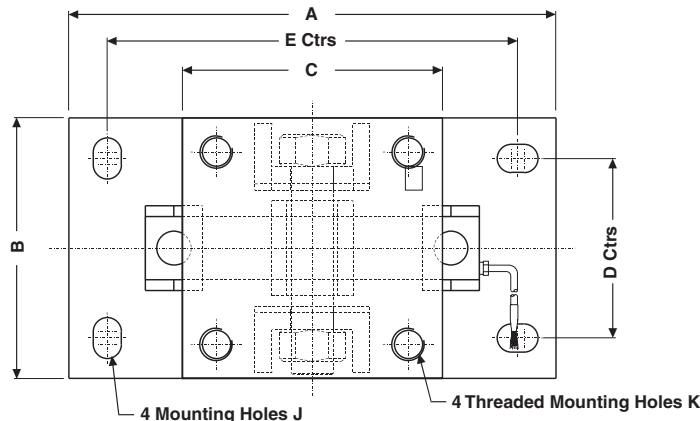
The 4158 silo mount is suitable for the support of tanks and silos, making it ideal for indoor or outdoor process control applications.

It is designed to support a uniformly distributed load and will allow tilt in any direction up to a maximum of $\pm 3^\circ$.

It forms a compact assembly which is rugged and tolerant of heavy industrial environments. Heavy gauge steel plate provides a rigid, robust load cell mount for high accuracy and prolonged life.

It incorporates lift-off protection and allows for thermal expansion of the weighing vessel.

OUTLINE DIMENSIONS in millimeters



This mount is designed for a uniformly distributed load on the top and bottom surfaces

Each comprises base plate assy, top plate assy, loading pin & support, bottom pin, mounting posts, retaining clips, earth strap with bolts & washers.

CAPACITY	A	B	C	D	E	F	G	H	I	J	K
10 - 25klb	240	180	180	130	190	190	142	12.7	19	Ø18x28	M20
40klb	380	203	203	140	320	150	195	19	25	Ø22x32	M24
50 - 75klb	380	203	203	140	320	150	210	19	25	Ø22x32	M24

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