



MK

HIGH CAPACITY WEIGH MODULE

applications

- Horizontal Tank Weighing
- Tank, Bin and Silo Weighing
- Bulk Material Inventory/Processing
- Level Monitoring and Control
- High Capacity Weighing



features

- 5,000 to 100,000 lbs. Capacities
- Excellent Overall Performance
- Shear Web Load Cell Technology
- 0.1% Accuracy Class
- Plated Steel Load Cell
- Accommodates Excessive Longitudinal Expansion Common To Horizontal Tanks
- Lateral Self-Checking
- Easy Installation and Set Up
- IP67 Environmental Sealing

application tip:

The Model MK's *PD* Series load cell features Multi-Shear Web Load Cell Technology, an excellent solution for High Capacity Vessel Weighing.

The MK Series is an extremely rugged, high capacity weigh module constructed of steel (MK1). The MK Series weigh modules are designed to accurately measure compression loads in capacities ranging from 0-5,000 lbs. to 0-100,000 lbs. The robust, multi-shear web load cell design integrated into the articulated MK mount, readily accommodates angular, eccentric and side loading effects, with minimal sensitivity to these anomalies. To facilitate installation, a symmetrical mounting bolt pattern is used. The load plate can rotate 360° and articulates approximately 3° in any direction to compensate for misalignment with mating support surfaces during installation. Provisions for thermal expansion and contraction are built-in. The MJ exceeds the structural requirements of the UBC standards for Seismic Zones 1 and 2, which makes it an excellent solution where wind loading is anticipated. To achieve a sealing rating of IP67, proprietary and composite environmental barriers are integrated to protect the load cell. The integral cable is durable polyurethane jacketed and features a braided, tinned-copper shield for mechanical protection and to minimize the effects of RFI and EMI. The attributes of the MK Series make it ideal for horizontal tank weighing and inventory monitoring, bulk material handling, tank and silo weighing, or for any application where a compact and easy-to-install, high capacity weighing solution is needed.

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Innovative Measurement Solutions





performance

Featuring Model PD Series Shear Web Load Cells

Rated capacities ⁽¹⁾ (lbs.):	5K, 7.5K, 20K, 35K, 75K, 100K ⁽²⁾
Rated output (FSO):	3 mV/V (Outputs matched to ± 0.25%)
Combined error:	≤ 0.05 % FSO
Non-linearity:	≤ 0.05 % FSO
Hysteresis:	≤ 0.02 % FSO
Non-repeatability:	≤ 0.01 % FSO
Side Load Rejection Ratio:	≤ 500:1
Creep (20 minutes):	≤ 0.03 % of load
Zero balance:	≤ 1 % FSO
Zero return (20 minutes):	Better than 0.03 % FSO

⁽¹⁾ ("K" = thousand); ⁽²⁾ 100K Output is 4 mV/V.

mechanical

Load Cell Material:	Alloy tool steel (MK1)
Load Cell Finish:	Electroless nickel plated (MK1)
Mount Material:	Mild steel (MK1)
Mount Finish:	Plated (MK1)
Safe overload:	Compression/Tension: 150% FSO Side load: 50% FSO
Ultimate overload:	Compression/Tension: 300% FSO Side load: 100% FSO

electrical

Input impedance:	385 ± 5 ohms
Output impedance:	350 ± 3 ohms
Insulation resistance:	>5000 Megohms @ 50VDC
Excitation Voltage:	10 V AC/DC (15 V maximum)
Cable Color code:	+ Excitation (red) - Excitation (black) + Output (green) - Output (white) Shield (bare)
Cable type:	50 ft; 4-conductor, 22 AWG, tinned-copper braided shield, jacketed
Cable termination:	Finished conductors

environmental



Temperature, operating:	4 to +140 °F (-20 to +60°C)
Temperature, compensated:	14 to +104 °F (-10 to +40°C)
Temperature effects:	Zero < 0.0015% FSO/°F < 0.0026% FSO/°C Output < 0.0008% of Rdg./°F < 0.0014% Rdg./°C
Sealing:	IP67; Multi-redundant

options

Special cable lengths, MS connectors, conduit Adapters, control instrumentation and unique mount requirements.

dimensions

100% CUSTOMER SATISFACTION GUARANTEED

