





PRECISION SHEAR BEAM LOAD CELL

applications

- Compression Measurements
- Process Control Weighing
- Tank, Bin and Hopper Weighing
- Reactor, Mixer and Blender Weighing
- OEM and VAR Solutions

features

- 500 to 20,000 lbs. Capacities
- Excellent Performance
- Application Versatility
- Load Introduction Hardware
- Steel or Stainless Steel Element
- 0.02% Accuracy Class-NTEP
- IP67 Environmental Sealing
- Matched Output Sensitivities
- Companion Weigh Modules
- Two Year Warranty

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NIST H-44 NTEP CERTIFIED "LEGAL-FOR-TRADE"

- CLASS III: 3,000D/Single and 5,000D/Multiple
- 1,000 Through 10,000 lbs. in Steel or Stainless Steel

The XA Series is a high performance, bonded foil strain gage load cell constructed of alloy tool steel (XA1) or stainless steel (XA3). The XA series is designed to accurately measure compression loads in capacities ranging from 500 lbs. to 20,000 lbs. The robust, rectangular shear beam design readily tolerates angular, eccentric and side loading effects, with minimal sensitivity to these anomalies. To achieve a sealing rating of IP67 (thoroughly sealed against airborne particles and the effects of immersion up to 1 meter.) proprietary, composite environmental barriers are integrated to protect the strain gage area. The cable is a durable polyurethane-jacketed cable with a tin-copper braided shield for mechanical protection and to minimize the effects of RFI and EMI. The XA Series output signals are calibrated to a close tolerance to facilitate their use with summing/ junction devices for multiple load cell applications. Versatile companion weighing modules, the MB Series, MF Series and the MG Series, are available for convenient weighing of tanks, bins, hoppers and similar vessels. The attributes of the XA Series make it an ideal choice for reactor, mixer and blender weighing, material handling, and O.E.M. weighing situations where a versatile, high performance load cell solution is needed.

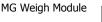






MB Weigh Module

MF FlexPoint Weigh Module





Innovative Measurement Solutions



specifications

<i>performance</i>	CLASS III: 3,000D/Single and 5,000D/Multiple 1,000 Through 10,000 lbs. Steel & Stainless Steel	mechanical	
Rated capacities ⁽¹⁾ (lbs.):	500, 1K, 2K, 2.5K, 4K, 5Kse, 5K, 10K, 15K & 20K	Material:	Alloy tool steel (XA1) 17-4ph Stainless steel (XA3)
Rated output (FSO) Combined error	$3 \text{ mV/V} \pm 0.25\%$ $\leq 0.03\%$ FSO	Finish:	Electroless nickel plated (XA1) Electro-polished (XA3)
Non-linearity	≤ 0.03 % FSO ≤ 0.03 % FSO	Safe overload	Compression/Tension: 150% FSC
Hysteresis	≤ 0.02 % FSO		Side load: 100% FSO
Non-repeatability Side Load Rejection Ratio	≤ 0.01 % FSO ≤ 500:1	Ultimate overload	Compression/Tension: 300% FSC Side load: 200% FSO
Creep (20 minutes)	≤ 0.03 % of load	Deflection	See Table Below
Zero balance	≤ 1 % FSO	Weight	See Table Below
Zero return (20 minutes)	Better than 0.01 % FSO		
⁽¹⁾ ("K" = thousand)			
electrical		environmental	67
	385 ± 5 ohms	Temperature, operating	4 to +140 °F (-20 to +60°C)
Output impedance	350 ± 3 ohms	Temperature, compensated	14 to +104 °F (-10 to +40°C)
Output impedance Insulation resistance	350 ± 3 ohms >5000 Megohms @ 50VDC		
Output impedance Insulation resistance Excitation Voltage	350 ± 3 ohms >5000 Megohms @ 50VDC 10 V AC/DC (15 V maximum) + Excitation (red)	Temperature, compensated	14 to +104 °F (-10 to +40°Ć) Zero < 0.0015% FSO/°F < 0.0026% FSO/°C Output < 0.0008% of Rdg./°F
Output impedance Insulation resistance Excitation Voltage	350 ± 3 ohms >5000 Megohms @ 50VDC 10 V AC/DC (15 V maximum) + Excitation (red) - Excitation (black)	Temperature, compensated Temperature effects:	14 to +104 °F (-10 to +40°Ć) Zero < 0.0015% FSO/°F < 0.0026% FSO/°C Output < 0.0008% of Rdg./°F < 0.0014% Rdg./°C
Input impedance Output impedance Insulation resistance Excitation Voltage Cable Color code:	350 ± 3 ohms >5000 Megohms @ 50VDC 10 V AC/DC (15 V maximum) + Excitation (red)	Temperature, compensated	14 to +104 °F (-10 to +40°Ć) Zero < 0.0015% FSO/°F < 0.0026% FSO/°C Output < 0.0008% of Rdg./°F
Output impedance Insulation resistance Excitation Voltage Cable Color code:	350 ± 3 ohms >5000 Megohms @ 50VDC 10 V AC/DC (15 V maximum) + Excitation (red) - Excitation (black) + Output (green)	Temperature, compensated Temperature effects:	14 to +104 °F (-10 to +40°Ć) Zero < 0.0015% FSO/°F < 0.0026% FSO/°C Output < 0.0008% of Rdg./°F < 0.0014% Rdg./°C
Output impedance Insulation resistance Excitation Voltage	350 ± 3 ohms >5000 Megohms @ 50VDC 10 V AC/DC (15 V maximum) + Excitation (red) - Excitation (black) + Output (green) - Output (white) Shield (bare)	Temperature, compensated Temperature effects: Sealing <i>options</i>	14 to +104 °F (-10 to +40°Ć) Zero < 0.0015% FSO/°F < 0.0026% FSO/°C Output < 0.0008% of Rdg./°F < 0.0014% Rdg./°C

dimensions

