

HERMETICALLY SEALED SHEAR BEAM LOAD CELL

applications

- Harsh Environments
- Clean-In-Place/Washdown
- Tank, Bin and Hopper Weighing
- Reactor, Mixer and Blender Weighing
- OEM and VAR Solutions

features

- 1,000 to 10,000 lbs. Capacities
- Excellent Performance
- Stainless Steel Construction
- 0.02% Accuracy Class-NTEP
- IP66/67/68 Environmentally Sealed
- Matched Output Sensitivities
- Application Versatility
- Load Introduction Hardware
- Companion Weigh Modules
- Two Year Warranty

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

- CLASS III: 5,000D/Single and CLASS IIIL: 10,000D/Single
- 1,000 Through 10,000 lbs.

The XA4 is a high performance, bonded foil strain gage load cell constructed of stainless steel and hermetically sealed. The XA4 is designed to withstand the rigors of harsh environmental conditions and to accurately measure compression loads in capacities ranging from 1,000 lbs. to 10,000 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 load cell. Sealing ratings of IP 66 (high pressure wash down) and IP 68 (submersion) are achieved using suitable conduit and the standard cable conduit adapter. The cable is a durable polyurethane-jacketed cable, shielded for mechanical protection and to minimize the effects of RFI and EMI. The XA4 output signals are calibrated to a close tolerance to facilitate their use with summing/ junction devices for multiple load cell applications. Versatile, stainless steel companion weigh 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 XA4 makes it an ideal choice for reactor, mixer and blender weighing, material handling, and O.E.M. weighing situations where a well sealed, high performance load cell solution is needed.







MB Weigh Module

MF FlexPoint Weigh Module

MG Weigh Module

Innovative Measurement Solutions



performance

Rated output (FSO)

Combined error

Non-linearity

Hysteresis



CLASS III: 5,000D/Single and CLASS IIIL: 10,000D/Single
500 Through 10,000 lbs.

Rated capacities (1) (lbs.):

5K, & 10K $3 \text{ mV/V} \pm 0.25\%$ ≤ 0.03 % FSO ≤ 0.03 % FSO ≤ 0.02 % FSO ≤ 0.01 % FSO

Non-repeatability Side Load Rejection Ratio Creep (20 minutes) Zero balance

Zero return (20 minutes)

 $^{(1)}$ ("K" = thousand)

electrical

1K, 2K, 2.5K, 4K, 5Kse,

≤ 500:1

≤ 0.03 % of load ≤ 1 % FSO

Better than 0.01 % FSO

Input impedance Output impedance

Insulation resistance >5000 Megohms @ 50VDC **Excitation Voltage** 10 V AC/DC (15 V maximum) Cable Color code:

- Excitation (black) + Output - Output

Cable type

Cable termination

 385 ± 5 ohms

 350 ± 3 ohms

+ Excitation (red)

(green) (white) Shield (bare)

4-conductor; 22 AWG; tin-copper, braided shield; polyurethane jacket

Finished conductors

mechanical

Material:

Deflection

Weight

17-4ph Stainless steel Electro-polished; Better than 32 micro-finish Clean-In-Place Finish:

Safe overload

Compression/Tension: 150% FSO

Side load: 100% FSO

Ultimate overload Compression/Tension: 300% FSO

Side load: 200% FSO See Table Below

See Table Below

environmental



4 to +140 °F (-20 to +60°C)



Temperature, operating Temperature, compensated Temperature effects:

14 to +104 °F (-10 to +40°C) < 0.0015% FSO/°F < 0.0027% FSO/°C

Output < 0.0008% of Rdg./°F < 0.0014% Rdg./°C

IP66/IP67; Hermetic; Welded Sealing

options

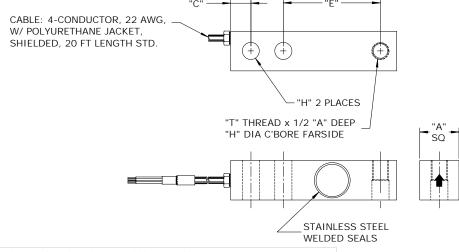
Shunt calibration, Special cable lengths, MS connectors, Hi-Temp operation, control instrumentation and MB, MG & MF Weigh Modules

dimensions

100% CUSTOMER SATISFACTION GUARANTEED

DIMENSIONAL TAB BLOCK

CAPACITY (LB)	"A1"	"A2"	"B"	"C"	"D"	"E"	"H"	"T"	DEFLECTION	WEIGHT
1K - 2.5K	1.22	1.22	5.12	0.62	1.00	3.00	0.53	1/2-20 UNF-2B	0.014"	2.5 LBS. (1.1 KG)
4K - 5Kse	1.22	1.22	5.12	0.62	1.00	3.00	0.53	1/2-20 UNF-2B	0.022"	2.5 LBS. (1.1 KG)
5K	1.47	1.47	6.75	0.75	1.50	3.75	0.78	3/4-16 UNF-2B	0.020"	4 LBS. (1.8 KG)
10K	1.47	1.47	6.75	0.75	1.50	3.75	0.78	3/4-16 UNF-2B	0.027"	4 LBS. (1.8 KG)



XA4 B&W.01-0505