



MF

FLEXPOINT WEIGH MODULE

applications

- Tank, Bin and Hopper Weighing
- Mixer and Blender Weighing
- *Clean-In-Place* (CIP) Washdown
- In-Motion/Conveyor Weighing
- OEM and VAR Solutions

features

- 500 to 20,000 lbs. Capacities
- 0.02% Accuracy Class-NTEP
- Steel or Stainless Steel
- Load Plate Omni-Articulation
- Planar Alignment Compensation
- Shock/Vibration Isolation Mount
- Self-Checking
- IP66/IP67 Environmental Sealing
- Matched Output Sensitivities
- Two Year Warranty

SENTRAN, LLC
California Commerce Center
4355 Lowell Street
Ontario, CA 91761-2225

Toll Free: 1(888) 545-8988
Phone: 1(909) 605-1544
Fax: 1(909) 605-6305
Email: mail@sentranllc.com
URL: www.sentranllc.com



NIST H-44 NTEP CERTIFIED "LEGAL-FOR-TRADE" XA1, XA3 & XA4 SERIES LOAD CELLS

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

The MF Series is a high performance, low profile weigh module constructed of steel (MF1), stainless steel (MF3), or hermetically sealed stainless steel (MF4). The MF 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. The optional neoprene *LRP* (load receiver pad) reduces the effects of shock loading and vibration, in conjunction with load plate articulation of 4° in all directions. Intrinsic planar misalignment compensation accommodates vessel support alignment, sloped flooring, thermal expansion/contraction, and similar application variables. This easy-to-install weigh module mounts directly to the floor or structural supports, and is completely self-checking. To achieve a sealing rating of *IP67* (sealed against airborne particles and the effects of immersion up to 1 meter.) proprietary, composite environmental barriers protect the load cell. Ideal for Clean-In-Place washdown, the hermetically sealed version is rated *IP66* (sealed against airborne particles and the effects of strong jets of water.) The cable is a durable PE/PVC DuoWrap® jacketed cable, with a tinned-copper braided shield for mechanical protection and to minimize the effects of RFI and EMI.



XA1 Steel



XA3 Stainless Steel



XA4 Stainless Hermetic

Innovative Measurement Solutions





performance



CLASS III: 3,000D/Single and 5,000D/Multiple
1,000 Through 10,000 lbs. XA1/XA3 Load Cells

Rated capacities ⁽¹⁾ (lbs.):	500, 1K, 2K, 2.5K, 5K, 10K, 15 & 20K
Rated output (FSO)	3 mV/V ± 0.25%
Combined error	≤ 0.03 % FSO
Non-linearity	≤ 0.03 % 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 0.01 % FSO

⁽¹⁾ ("K" = thousand)

mechanical

Load Cell Material:	Alloy tool steel (MF1) 17-4ph Stainless steel (MF3 & MF4)
Load Cell Finish:	Electroless nickel plated (MF1) Electro-polished; 32 μ-finish (MF3 & MF4)
Mount Material:	Mild steel (MF1) Stainless steel (MF3 & MF4)
Mount Finish:	Plated (MF1) Bead Blasted (MF3 & MF4)
Clean-In-Place Configuration	Electro-polished (MF3 & MF4)
Safe overload	Compression/Tension: 150% FSO Side load: 50% FSO
Ultimate overload	Compression/Tension: 300% 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	4-conductor, 22 AWG, tinned-copper braided shield, PE/PVC DuoWrap [®] jacket

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 (MF1/MF3); IP66 (MF4)

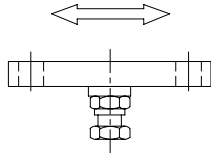
options

Special cable lengths, MS connectors, Conduit Adapters, Hi-Temperature operation, control instrumentation and unique mount

dimensions

100% CUSTOMER SATISFACTION GUARANTEED

MISALIGNMENT AND THERMAL COMPENSATION +/- 1/8" ALL DIRECTIONS



ANGULAR MISALIGNMENT +/- 4 DEG ALL DIRECTIONS

ADJUSTABLE HEIGHT 1/2" RANGE

DIMENSIONAL TAB BLOCK

CAPACITY (LB)	"A"	"B"	"C"	"D"	"E" ADJUSTABLE	"F"	"G"	WEIGHT (LB)
500	7.12	6.00	4.00	5.00	3.75 - 4.25	0.60	0.63	15
1K - 5Kse	7.12	6.00	4.00	5.00	4.00 - 4.50	0.60	0.63	15
5K - 10K	8.50	7.00	4.00	5.00	5.00 - 5.50	0.94	0.63	26
15K - 20K	10.88	9.13	4.50	6.00	7.00 - 7.50	1.20	0.88	49

