



YM

SINGLE POINT LOAD CELL

applications

- Low Profile/High Capacity Platforms
- In-Process Gas Bottle Weighing
- Force Measurements In Presses
- High Moment/Off-Center Loads
- OEM and VAR Solutions

features

- 150 to 600 Lbs. Capacities
- Low Profile/Compact Size
- Excellent Performance
- 0.05 Accuracy Class
- Application Versatility
- Anodized Aluminum Element
- IP67 Environmental Sealing
- Low Price/Performance Ratio
- Two Year Warranty

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Application Tip:

The Model YM load cells are available with an integral 0-5 VDC, 0-10 VDC or 4-20 mA analog transmitter for direct interface to a PLC/DCS.

The YM Series is a high performance, bonded foil strain gage load cell constructed of a transducer-quality aluminum alloy (YM6). The YM6 is designed to accurately measure compression loads for single cell applications in the capacities of 75 lb. and 600 lb. It is particularly well-suited to Gas Bottle Scale weighing applications in water treatment & waste water, semi-conductor manufacturing, inventory management and CO₂ fire prevention system applications. The field proven dual-guided cantilever beam design readily tolerates high moments induced by angular, eccentric and off-center loading, with minimal sensitivity to these anomalies. A unique optional feature is the 0-5 VDC, 0-10 VDC or 4-20 mA high signal level Analog Output. If the application requires excellent noise immunity in high signal-to-noise environments and/or a direct interface to a PLC/DCS, the analog output feature provides a simple, elegant solution. To achieve a sealing rating of IP67 (thoroughly sealed against airborne particles and the effects of immersion in water up to 1 meter.) proprietary, multi-redundant environmental barriers are integrated to protect the strain gage area and all electronic components. 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 attributes of the YG6 Series makes it an ideal choice for low to medium range force measurements, platform weighing, and O.E.M. weighing and force measurement situations where a low profile, sealed, versatile and high performance load cell solution is needed. Non-standard or custom configurations can be accommodated consistent with solutions-driven

Innovative Measurement Solutions





performance

Rated capacities (lb):	150, 300 & 600
Rated output (FSO)	2 mV/V ± 15%
Combined error	≤ 0.05 % FSO
Non-linearity	≤ 0.05 % FSO
Hysteresis	≤ 0.03 % FSO
Non-repeatability	≤ 0.01 % FSO
Moment Sensitivity	See Table Below
Maximum Moment	See Table Below
Creep (30 minutes)	≤ 0.03 % of load
Zero balance	≤ 3 % FSO
Zero return (20 minutes)	Better than 0.03 % FSO

mechanical

Material:	Aluminum Alloy
Finish:	Anodized
Safe overload	Compression/Tension: 150% FSO Side load: 50% FSO
Ultimate overload	Compression/Tension: 300% FSO Side load: 100% FSO
Deflection	.020" at Rated Capacity
Weight	2 lb.

electrical

Input impedance	410 ± 10 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; tin-copper braided shield; polyurethane jacket
Cable termination	Finished conductors

environmental

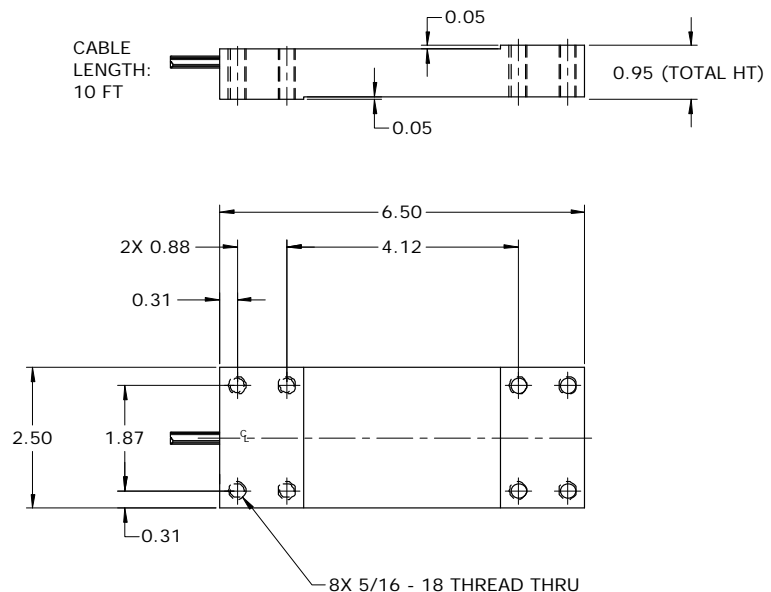


Temperature, operating	4 to +140 °F (-20 to +60°C)
Temperature, compensated	14 to +104 °F (-10 to +40°C)
Temperature effects:	Zero < 0.0015% FSO/°F < 0.0026% FSO/°C Output < 0.0008% of Rdg./°F < 0.0014% Rdg./°C
Sealing	IP67; Dust & limited submersion

options

0-10 v or 4-20 mA Analog Output, Special cable lengths, Custom configurations, Steel or Stainless steel construction.

dimensions



MAX MOMENT/ PLATFORM SIZE	MOMENT SENSITIVITY % READING PER INCH
5 INCH x CAPACITY 12 INCH x 12 INCH	0.005