



# YG-B

## SINGLE POINT LOAD CELL

### *applications*

- Low Force Measurements
- Hopper & Netweight Weighing
- Platform and Belt Conveyor Scales
- High Moment/Off-Center Loads
- OEM and VAR Solutions

### *features*

- 50 kg to 500 kg Capacities
- Low Profile/Compact Size
- Excellent Performance
- 0.02% Accuracy Class-NTEP
- Application Versatility
- Aluminum Element
- IP67 Environmental Sealing
- Low Price/Performance Ratio
- Two Year Warranty

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#### *NIST H-44 NTEP "Legal-For-Trade" Performance Grade*

- CLASS III: 5,000D/Single
- 50 kg Through 500 kg Capacities

The YG-B Series is a high performance, bonded foil strain gage load cell constructed of a transducer-quality aluminum alloy (YG-B6). The YG-B is designed to accurately measure compression loads for single cell applications in the capacity range of 50 kg to 500 kg. 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. 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. Additional protection is provided by the unique "wrap around" black anodized cover which forms a labyrinth seal, and also serves to enhance the aesthetics of the YG-B as a component of an assembly or measurement system. The cable is a durable PVC-jacketed cable, with a tin-copper braided shield for mechanical protection and to minimize the effects of RFI and EMI. The attributes of the YG-B Series makes it an ideal choice for low to medium range force measurements, small hopper and platform weighing, and O.E.M. weighing situations where a moment-compensated, well sealed, versatile and high performance load cell solution is needed. Non-standard or custom configurations can be accommodated consistent with solutions-driven requirements.

*Innovative Measurement Solutions*





## performance

Rated capacities (kg):	50, 75, 100, 150, 200, 300 & 500
Rated output (FSO)	2 mV/V $\pm$ 10%
Combined error	$\leq$ 0.02 % FSO
Non-linearity	$\leq$ 0.02 % FSO
Hysteresis	$\leq$ 0.02 % FSO
Non-repeatability	$\leq$ 0.01 % FSO
Moment Sensitivity	See Table Below
Maximum Moment	See Table Below
Creep (30 minutes)	$\leq$ 0.017 % of load
Zero balance	$\leq$ 5 % FSO
Zero return (20 minutes)	Better than 0.02 % FSO

## mechanical

Material:	Aluminum Alloy
Finish:	Natural
Safe overload	Compression/Tension: 150% FSO Side load: 50% FSO
Ultimate overload	Compression/Tension: 300% FSO Side load: 100% FSO
Deflection	0.016 inch
Weight	4.8 lb

## electrical

Input impedance	400 $\pm$ 20 ohms
Output impedance	350 $\pm$ 3.5 ohms
Insulation resistance	>5000 Megohms @ 50VDC
Excitation Voltage	10 V AC/DC (15 V maximum)
Cable Color code:	+ Excitation (red); + RS (blue) - Excitation (black); - RS (brown) + Output (green) - Output (white) Shield (clear)
Cable type	6-conductor; 22 AWG; tin-copper braided shield; PVC jacket
Cable termination	Finished conductors

## environmental

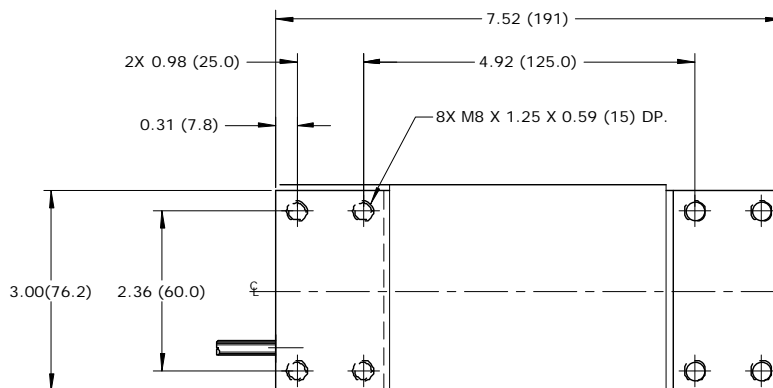
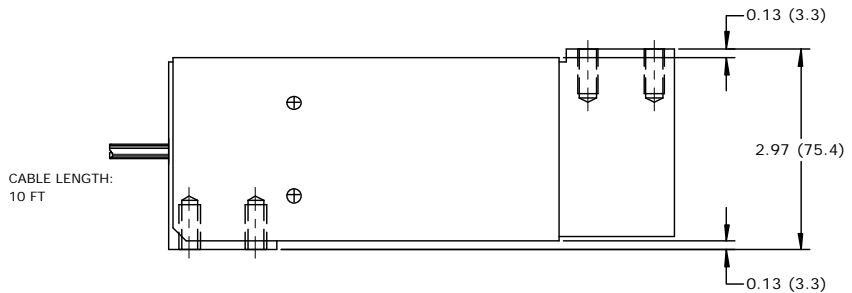


Temperature, operating	50 to +150 °F (-45 to +65°C)
Temperature, compensated	14 to +104 °F (-10 to +40°C)
Temperature effects:	Zero < 0.008% FSO/°F < 0.0014% FSO/°C Output < 0.0006% of Rdg./°F < 0.0011% Rdg./°C
Sealing	IP67; Dust & limited submersion

## options

Special cable lengths, MS connectors, Custom configurations, Steel or Stainless steel construction and Companion instrumentation.

## dimensions



MAX MOMENT/ PLATFORM SIZE	MOMENT SENSITIVITY % READING PER INCH
12 INCH x CAPACITY 24 INCH x 24 INCH	0.002