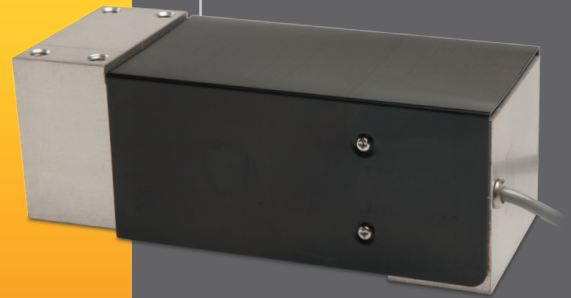




Single Point Load Cell

YG-B Series

The YG-B Series is a high performance strain gage load cell constructed of aluminum alloy. It is designed to accurately measure compression loads in capacity ranges of 0-50 kg to 0- 500 kg.



The YG-B Series is a high performance, bonded foil strain gage load cell constructed of a transducer-quality aluminum alloy. The YG-B Series is designed to accurately measure compression loads for single cell applications in capacities ranging from 0-50 kg to 0-500 kg. Developed specifically to tolerate unusually high moments resulting from off-center loading in single load cell platform applications, this design has been adapted to small hopper applications such as loss-in-weight, net weighing and conveyor scales. The YG-B Series unique three beam construction and element geometry delivers exceptional performance and readily tolerates moments induced by angular, eccentric and off-center loading, with minimal sensitivity to these anomalies. This load cell is Environmentally Sealed (IP65-Low Pressure Jets) by virtue of proprietary, multi-redundant barriers uniquely integrated to protect all internal components. The integral premium, instrumentation grade cable features a durable PVC jacket over a foil/Mylar shield for superior mechanical protection and to minimize the unwanted electrical effects of RFI and EMI. The YG-B Series is particularly well suited to low to medium range force measurements, providing an excellent solution for O.E.M. weighing applications in packaging, filling, bulk material handling, conveyor and monorail scales where a moment-compensated, well sealed, high performance load cell solution is required.



APPLICATIONS

- Compression Measurements
- Platform and Belt Conveyor Scales
- Hopper and Net Weight Weighing
- High Moment Off-Center Loads
- OEM and VAR Solutions

FEATURES

- 50 kg to 500 kg Capacities
- Low Profile/Compact Size
- 0.02% Accuracy Class - NTEP Grade
- Application Versatility
- Aluminum Alloy
- IP65 Environmental Sealing
- Excellent Price/Performance Ratio
- Two Year Warranty

For more information call **1-888-545-8988**

SENTRAN, LLC 4355 LOWELL STREET, ONTARIO, CA 91761, U.S.A.

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YG-B Series Specifications

Innovative Measurement Solutions



PERFORMANCE

Rated Capacities (kg)	50, 75, 100, 150, 200, 300, 500
Rated Output (FSO)	2 mV/V
Output Tolerance	$\pm 10\%$ R.O
Combined Error Band	$\leq 0.02\%$ FSO
Non-Linearity	$\leq 0.02\%$ FSO
Hysteresis	$\leq 0.02\%$ FSO
Non-Repeatability	$\leq 0.01\%$ FSO
Zero Balance	$\pm 10\%$ FSO
Creep (30 Minutes)	$\leq 0.017\%$ of load
Zero Return (30 Minutes)	0.01 % of load
Moment Sensitivity	0.018 % FSO/Inch
Maximum Moment	See Dimensions Page
Ultimate Moment	200 % of Maximum Moment

MECHANICAL

Load Cell Material	Aluminum
Load Cell Finish	Anodized
Safe Overload	Compression 150 % FSO Side Load 30% FSO
Ultimate Overload	Compression 300% FSO Side Load: 100% FSO
Deflection	See Dimensions Table
Weight	See Dimensions Table
Mounting Bolt Torque	Torque Table

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) - Excitation (black) + Signal (green) - Signal (white) + Sense (blue) - Sense (brown) Shield (natural)
Cable Type	6-conductor, 22 AWG, PVC jacket, Tinned Copper Braided Shield, Diameter: 0.200"
Cable Length	See Dimensions Table
Cable Termination	Finished Conductors
Cable Seal	Epoxy Conformal Seal

ENVIRONMENTAL

Temperature, Operating	0 to +150 °F (-18 to +66°C)
Temperature, Compensated	14 to +104 °F (-10 to +40°C)
Temperature Effects	Zero < 0.0008% FSO/°F < 0.0014% FSO/°C
Temperature Effects	Output < 0.0006% of Rdg./°F < 0.0011% Rdg./°C
Temperature, Storage	-40 to +170 °F (-40 to +77°C)
Sealing	IP65; Multi-redundant; Low Pressure Resistant

YG-B Typical System Configuration

SENSING LOAD CELL(S)



SIGNAL CONDITIONING

Analog Transmitters



Serial Transmitters



Digital Indication



Process Control



Batch Control

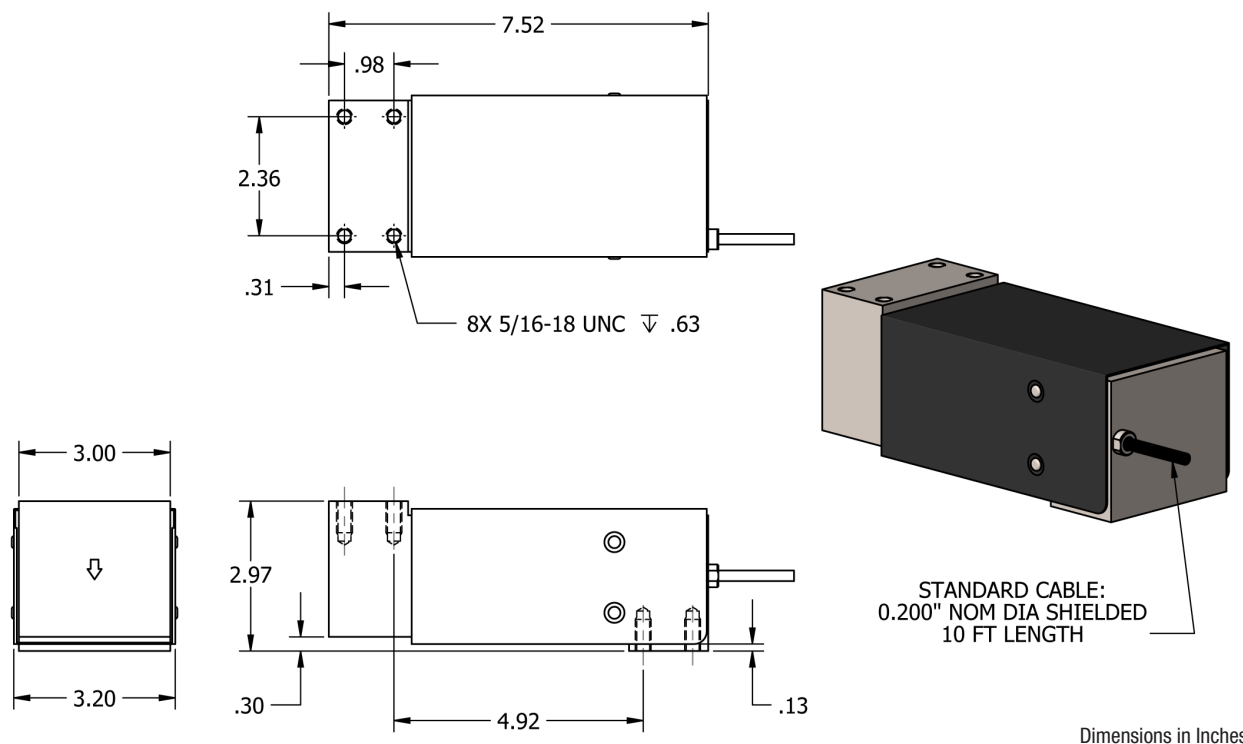


Data Acquisition



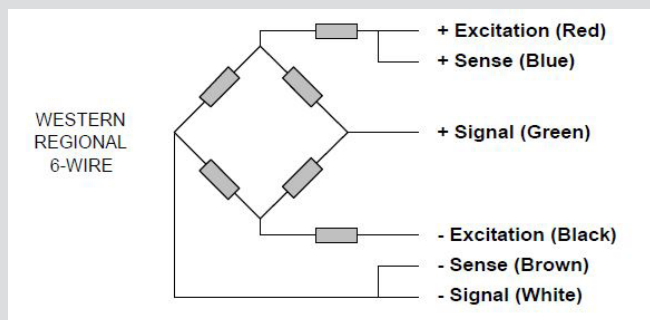
OUTPUT OPTIONS

0-5 VDC
0-10VDC
 ± 5 VDC
 ± 10 VDC
4-20 mA
0-20 mA
RS-232
RS-422
RS-485
20 mA Serial Loop
Ethernet
Profibus DP
DeviceNet
CANOpen
ControlNet
Modbus RTU
Wireless



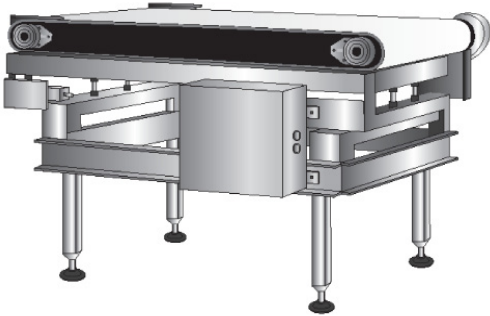
Capacity (KG)	Maximum Moment (Inches X Capacity)	Deflect	Weight
50	10	0.020"	4.8 LBS
75	10	0.020"	4.8 LBS
100	10	0.020"	4.8 LBS
150	10	0.020"	4.8 LBS
200	10	0.020"	4.8 LBS
300	8	0.020"	4.8 LBS
500	8	0.020"	4.8 LBS

YG-B Wiring Diagram

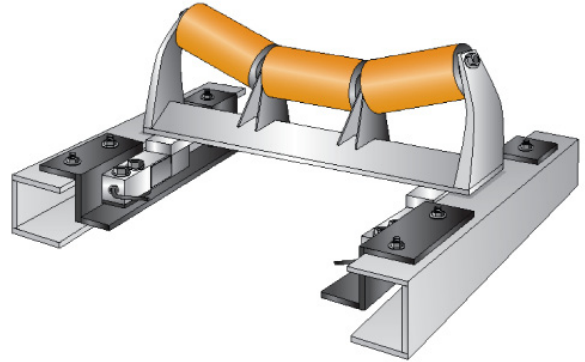




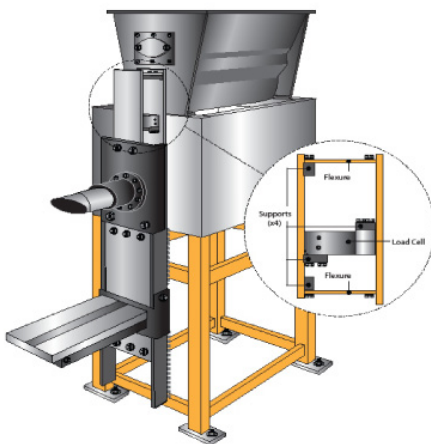
Check Weighing



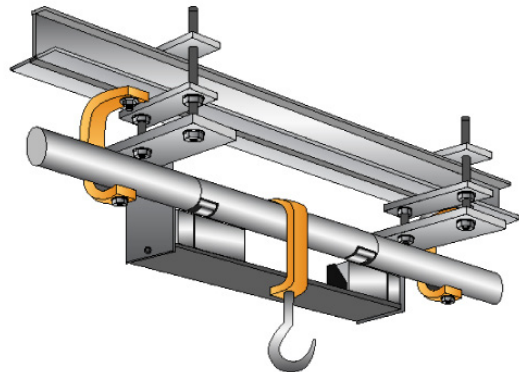
Belt Conveyor Scale



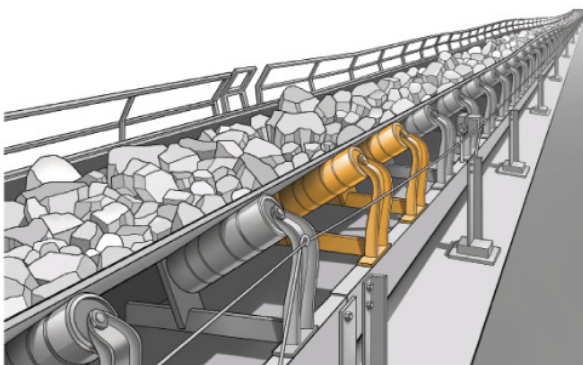
Automated Bagging



Monorail Scale



Volume and Rate Control



Platform Weighing - Front View



Legal Disclaimer



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