



SENTRAN

Single Point Load Cell

YN6 Series

The YN6 Series is a moment compensated load cell constructed of transducer-quality aluminum alloy. YN6 is designed to accurately measure tension and compression forces for applications ranging from 0-3 KG to 0-100 KG.



The YN6 Series is a moment compensated load cell constructed of transducer-quality aluminum alloy. YN6 is designed to accurately measure tension and compression forces for applications ranging from 0-3 KG to 0-100 KG. The YN6 Series features a field proven dual-guided cantilever beam design that readily tolerates moments induced by angular, eccentric, or off-center loading, with minimal sensitivity to these extraneous loads, producing excellent performance. The YN6 Series is specifically designed to reject the undesirable measurement effects of off-center loading, a requirement for platform scale applications. The load cell is environmentally sealed to IP67 (limited immersion) 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 tinned-copper braided shield for superior mechanical protection and for minimizing the unwanted electrical effects of RFI and EMI. The attributes of the YN6 Series make it convenient for weighing bins and hoppers. The YN6 Series is an ideal choice for plastic injection molding hoppers, material handling, packaging, or bagging scale applications where a precision, versatile, high accuracy, moment compensated load cell solution is required.



APPLICATIONS

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

FEATURES

- 3 KG to 100 KG Capacities
- 0.02% Accuracy Class
- 2 mV/V Full Scale Output
- 10 FT (6-conductor) PVC Cable
- Low Profile - 1.57" Height
- IP67 Environmental Sealing
- Anodized Aluminum Construction
- Dual Guided Beam Design
- Universal - Tension and Compression
- Moment Compensated

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

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

888-545-8988 T: 909-605-1544 FAX: 909-605-6305 www.sentranllc.com

YN6 Series Specifications

Innovative Measurement Solutions



PERFORMANCE

Rated Capacities (KG)	3, 5, 7, 10, 15, 20, 30, 50, 75, 100
Rated Output (FSO)	2 mV/V
Output Tolerance	±10 % R.O
Combined Error Band	≤ 0.02 % FSO
Non-Linearity	≤ 0.02 % FSO
Hysteresis	≤ 0.02 % FSO
Non-Repeatability	≤ 0.01 % FSO
Zero Balance	≤ 5 % FSO
Creep (30 Minutes)	≤ 0.03 % of load
Moment Sensitivity	≤ 0.018 % Applied load per inch
Maximum Moment	See Dimensions Page
Ultimate Moment	175 % of Maximum Moment

MECHANICAL

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

ELECTRICAL

Input Impedance	405 ± 20 ohms
Output Impedance	350 ± 3 ohms
Insulation Resistance	>5000 Megohms @ 50VDC
Excitation Voltage	10 V AC/DC (15 V maximum)
Cable Color Code	+ Excitation (Green)
	- Excitation (Black)
	+ Signal (Red)
	- Signal (White)
	+ Sense (Blue)
	- Sense (Brown)
	Shield (Natural)
Cable Type	6-conductor, 26 AWG, PVC jacket, Aluminum Mylar Shield, Diameter: 0.188"
Cable Length	See Dimensions Table
Cable Termination	Finished Conductors
Cable Seal	Epoxy; Conformal

ENVIRONMENTAL

Temperature, Operating	0 to +150 °F (-18 to +66°C)
Temperature, Compensated	14 to +104 °F (-10 to +40°C)
Temperature, Storage	-40 to +170 °F (-40 to +77°C)
Temperature Effects	Zero < 0.0015% FSO/°F
	< 0.0026% FSO/°C
Temperature Effects	Output < 0.0008% of Rdg./°F
	< 0.0014% Rdg./°C
Sealing	IP67, Multi-redundant; Limited Immersion Tolerance

YN6 Typical System Configuration

SENSING LOAD CELL(S)

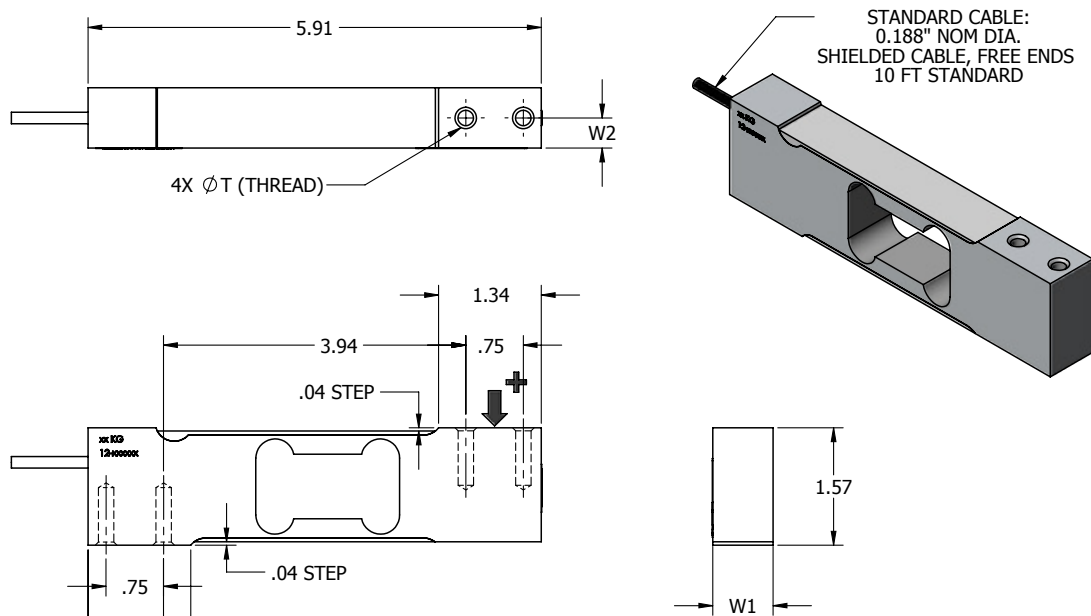


SIGNAL CONDITIONING

Amplifier/Transmitter JF Series	
Amplifier/ Transmitter JA Series	
Digital Indicator 250 Series	
Digital Indicator 250SS Series	
Digital Indicator/Controller KD3 Series	
Digital Indicator/Controller KD4 Series	

OUTPUT OPTIONS

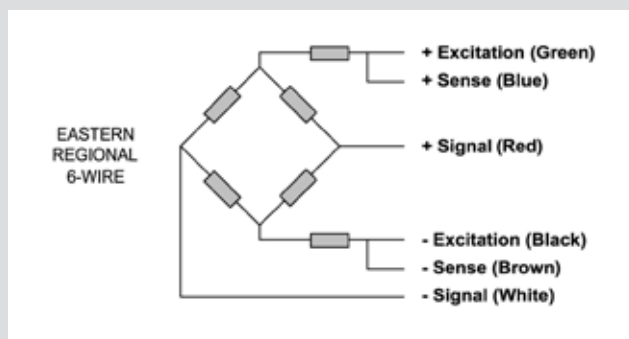
0-5 VDC
 0-10VDC
 ±5 VDC
 ±10 VDC
 4-20 mA
 0-20 mA
 RS-232
 RS-422
 RS-485
 20 mA Serial Loop
 Ethernet
 Profibus DP
 DeviceNet
 CANOpen
 ControlNet
 Modbus RTU
 Wireless



DIMENSIONS IN INCHES

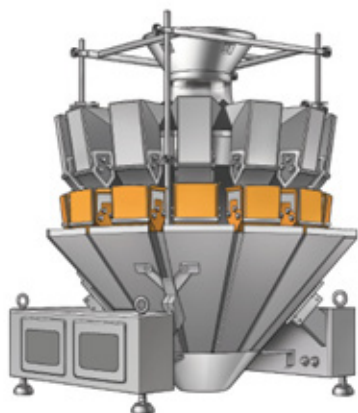
CAPACITY (KG)	W	W2	T(THREAD)	MAX MOMENT	DEFLECT	WEIGHT
3, 5, 7, 10, 15	0.79	0.394	1/4-20 UNC-2B X 0.50 DP	7 INCH X CAPACITY	0.011	0.5 LB
20, 30	0.79	0.394	1/4-20 UNC-2B X 0.50 DP	6 INCH X CAPACITY	0.011	0.5 LB
50	1.00	0.500	1/4-20 UNC-2B X 0.50 DP	5 INCH X CAPACITY	0.013	0.5 LB
75, 100	1.00	0.500	1/4-20 UNC-2B X 0.50 DP	3 INCH X CAPACITY	0.013	0.5 LB

YN6 Wiring Diagram





Net Weighing



Precious Gas Scale



Gravimetric Multi-Component Feeder



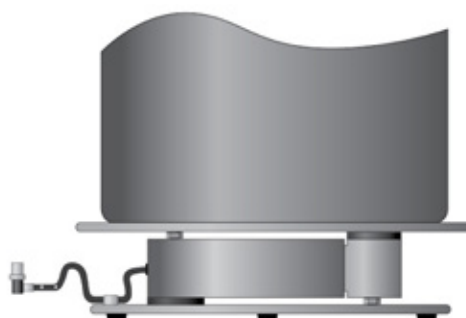
Loss-In-Weight



Solids Flow Control



Bottle/Tank Platform Weighing



Legal Disclaimer



ALL PRODUCTS, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Sentran, LLC, Incorporated, its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Sentran, LLC"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product. The product specifications do not expand or otherwise modify Sentran, LLC's terms and conditions of purchase, including but not limited to, the warranty expressed therein. Sentran, LLC makes no warranty, representation or guarantee other than as set forth in the terms and conditions of purchase. To the maximum extent permitted by applicable law, Sentran, LLC, disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability. Information provided in datasheets and/or specifications may vary from actual results in different applications and performance may vary over time. Statements regarding the suitability of products for certain types of applications are based on Sentran, LLC's knowledge of typical requirements that are often placed on Sentran, LLC products. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. No license, express, implied, or otherwise, to any intellectual property rights is granted by this document, or by any conduct of Sentran, LLC. The products shown herein are not designed for use in life-saving or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Sentran, LLC products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Sentran, LLC for any damages arising or resulting from such use or sale. Please contact authorized Sentran, LLC personnel to obtain written terms and conditions regarding products designed for such applications.



SENTRAN, LLC

4355 LOWELL STREET
ONTARIO, CA 91761-2225, U.S.A.
T: 909-605-1544 F: 909-605-6305

www.sentranllc.com

Innovative Measurement Solutions
