



YN

SINGLE POINT LOAD CELL

applications

- Low Force Measurements
- Hopper & Netweighing
- Platform and Checkweighing
- High Moment/Off-Center Loading
- OEM and VAR Solutions

features

- 1 to 250 kg Capacities
- Aluminum or Stainless Steel
- Low Profile/Compact Size
- Excellent Overall Performance
- 0.02% Accuracy Class
- High Temperature Versions
- Exceeds NIST H-44 Requirement
- IP67 Environmental Sealing
- Two Year Warranty

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Application Tip:

The Model YN load cell is ideal for low range measurements when minimized sensitivity to off-center loads is required.

The YN Series is an industrial-grade, high performance, bonded foil strain gage load cell constructed of aluminum alloy (YN6) or electro-polished stainless steel (YN3). The YN Series is designed to accurately measure compression loads for single cell applications in the capacity range of 0-1kg to 0-250kg. The parallelogram design readily tolerates moments induced by angular, eccentric and off-center loading, with minimal sensitivity to these anomalies. To achieve a sealing rating of IP67 (sealed against airborne particles and the effects of limited immersion in water.) 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 YN Series makes it an ideal choice for low range force measurements, netweighing and filling, small hopper and platform weighing, checkweigher scales and O.E.M. weighing situations where an exceptional moment-compensated, well sealed, and high performance load cell solution is needed. Non-standard or custom configurations can be accommodated consistent with solutions-driven requirements, including high temperature operation versions.

Innovative Measurement Solutions





performance

YN Series load cells feature IP67 sealing and low moment sensitivity.

Rated capacities (kg):	1, 3, 5, 7, 10, 15, 20, 30, 50, 100, 150 & 250
Rated output (FSO)	2 mV/V ±10%
Combined error	≤ 0.02 % FSO
Non-linearity	≤ 0.02 % FSO
Hysteresis	≤ 0.02 % FSO
Non-repeatability	≤ 0.01 % FSO
Eccentric Load Error	<0.018%/inch of Applied Load
Maximum Moment	See Table Below
Creep (30 minutes)	≤ 0.03 % of load
Zero balance	≤ 1 % FSO
Zero return (20 minutes)	Better than 0.03 % FSO

mechanical

Material:	Aluminum alloy (YN6) 17-4ph Stainless steel (YN3)
Finish:	Electroless nickel plated (YN1) Electro-polished (YN3)
Safe overload	Compression/Tension: 150% FSO Side load: 50% FSO
Ultimate overload	Compression/Tension: 300% FSO Side load: 100% FSO
Deflection	.015" (nominal)
Weight	225 grams (1/2 lbs.)

electrical

Input impedance	415 ± 15 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) + Output (red) - Output (white) Shield (bare)
Cable type	4-conductor; 22 AWG; tin-copper braided shield; PVC jacket
Cable termination	Finished conductors

environmental



Temperature, operating	4 to +158 °F (-20 to +70°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

Special cable lengths, MS connectors, Custom configurations, High temperature operation and Companion instrumentation.

dimensions



CAPACITY (KG)	"W"
1, 3, 5, 7, 10, 15, 20, 30	0.79
50, 100, 150, 250	1.00

