



YD

SINGLE POINT LOAD CELL

applications

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

features

- 5 kg to 100 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
- All Capacities

The YD Series is a high performance, bonded foil strain gage load cell constructed of a transducer-quality aluminum alloy (YD6). The YD Series is designed to accurately measure compression loads for single cell applications in the capacity range of 5 kg to 100 kg. The field proven dual-guided cantilever beam 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 (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" extruded aluminum cover, which also serves to enhance the aesthetics as a component of an assembly or measurement system. 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 YD Series makes it an ideal choice for low 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):	5, 7, 10, 15, 20, 30, 50 & 100
Rated output (FSO)	2 mV/V ± 10%
Combined error	≤ 0.025 % FSO
Non-linearity	≤ 0.02 % FSO
Hysteresis	≤ 0.02 % 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 0.01 % 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" (0.4 mm) nominal
Weight	See Table Below

electrical

Input impedance	410 ohms (nominal)
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

67 **IP** ENVIRONMENTAL PROTECTION RATING

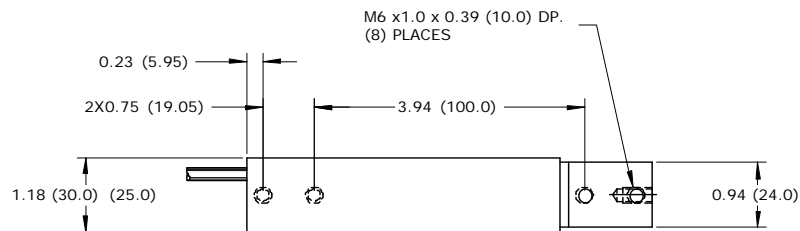
Temperature, operating	4 to +140 °F (-20 to +60°C)
Temperature, compensated	14 to +104 °F (-10 to +40°C)
Temperature effects:	Zero < 0.0015% FSO/°F < 0.0026% FSO/°C Output < 0.0008% of Rdg./°F < 0.0014% Rdg./°C
Sealing	IP67; Dust & limited submersion

options

Non-standard variations, Special cable lengths, MS connectors, Shunt calibration and Companion instrumentation.

dimensions

100% CUSTOMER SATISFACTION GUARANTEED



CAPACITY	MAX MOMENT/ PLATFORM SIZE	MOMENT SENSITIVITY % READING PER INCH
5 - 15 KG	6 INCH x CAPACITY 12 INCH x 12 INCH	0.007
20 - 100 KG	8 INCH x CAPACITY 16 INCH x 16 INCH	0.005

