

YA

Single Point



LOAD CELL

Model YA Series load cells are a value-oriented solution with exceptional performance characteristics, designed for low sensitivity to off-center loading.



applications

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

features

*3 kg to 90 kg Capacities
Adjustable Compression Overload Stop
Excellent Performance
0.02% Accuracy Class
Application Versatility
Aluminum Alloy or Stainless Steel
IP67 Environmental Sealing
UNC and Metric Threads Available
Excellent Price/Performance Ratio
Two Year Warranty*

100%
CUSTOMER
SATISFACTION
GUARANTEED



specifications

performance

Rated capacities (kg):	3, 5, 7, 10, 15, 20, 30, 50 & 90
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:	\leq .015 % of rated load/inch
Maximum Moment:	See Table
Creep (30 minutes):	\leq 0.03 % of load
Zero balance:	\leq 10 % FSO
Zero return (20 minutes):	Better than 0.01 % FSO

electrical

Input impedance:	410 ohms (nominal)
Output impedance:	350 \pm 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, shield, PVC jacket
Cable length:	10 ft

mechanical

Material:	Aluminum Alloy (YA6) Stainless steel (YA3)
Finish:	Natural (YA6) Electro-polished (YA3)
Safe overload:	Compression/Tension: 150% FSO Side load: 50% FSO
Ultimate overload:	Compression/Tension: 300% FSO Side load: 100% FSO
Deflection:	< 0.016" (nominal)
Weight:	3-10 kg: 1 lbs; 15-50 kg: 2 lbs
Bolt torque:	3-30 kg: 60 in-lb; 50/90 kg: 90 in-lb

environmental

67

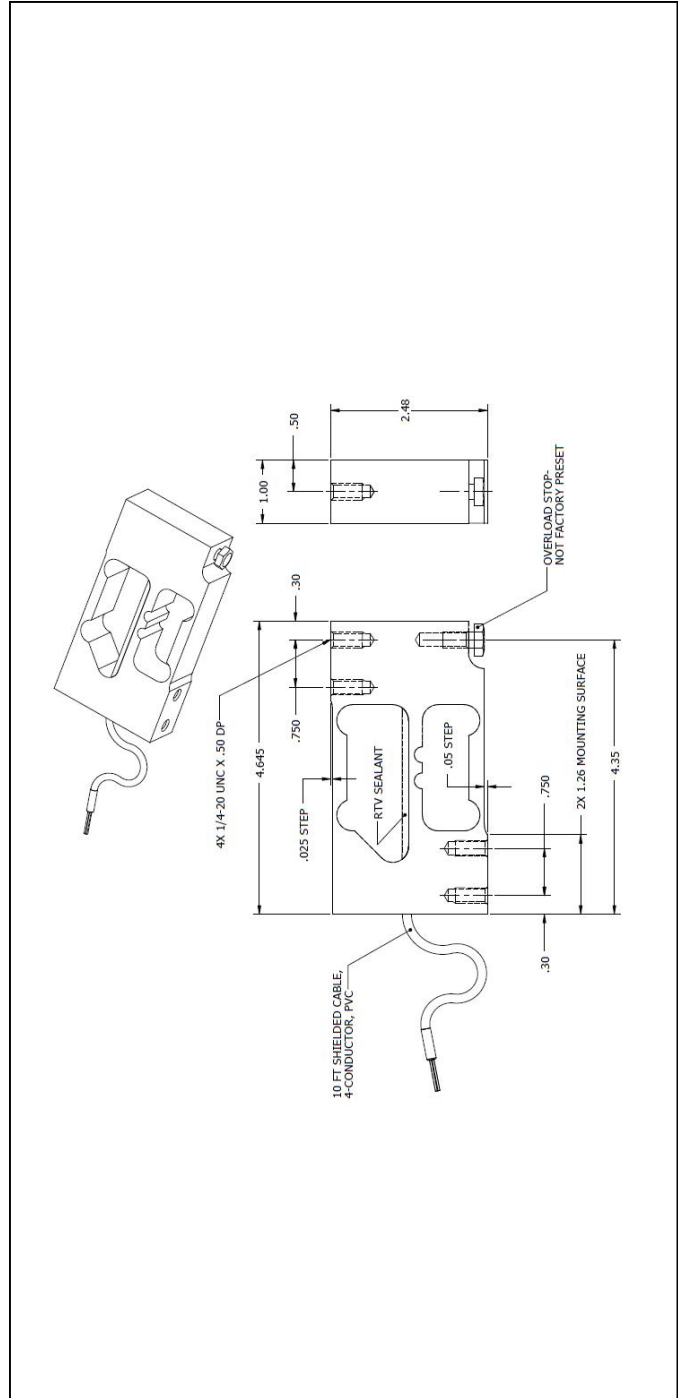


Temperature, operating	4 to +140 °F (-20 to +60°C)
Temperature, compensated	14 to +104 °F (-10 to +40°C)
Temperature effects:	Zero < 0.0015% FSO/°F < 0.0026% FSO/°C Output < 0.0008% of Rdg./°F < 0.0014% Rdg./°C
Sealing	IP67; Dustproof/Limited submersion

options

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

dimensions



application information

The YA Series load cells require appropriate mounting bolts and bolt torques for proper operation. This product is to be used in accordance with design limits for safety and performance reasons. Consult SENTRAN's Limited Warranty Statement for complete details, cheerfully provided on request.