



VC

BENDING BEAM LOAD CELL

applications

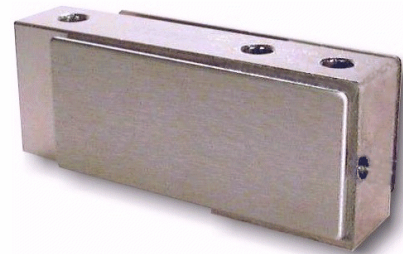
- Packaging Machinery
- Belt and Bagging Scales
- Force/Tensile Testing
- Checkweighing Systems
- OEM and VAR Solutions

features

- 25 to 250 lbs. Capacities
- Compact Size
- Excellent Performance
- 0.03% Accuracy Class
- Steel and Stainless Steel Element
- IP65/IP67 Environmental Sealing
- Low Cost Solution
- Loading Accessories Available
- Two Year Warranty

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Application Tip: *The VC Series is specially designed for applications requiring a compact, cost-effective, low capacity load cell.*

The VC Series is a compact, high performance, bonded foil strain gage load cell constructed of alloy tool steel (VC1) or stainless steel (VC3). The VC Series is designed to accurately measure compression loads in capacities ranging from 25 lbs. to 250 lbs. The "dual-guided" cantilever design reduces sensitivity to off-center and side loading effects. To achieve a seal rating of IP65 and IP67 (thoroughly sealed against airborne particles, the effects of low pressure water spray and the effects of immersion up to 1 meter.) proprietary, composite environmental barriers are integrated, including conformal coatings and potting compounds (IP67) to protect the strain gage area and the cable entry, both high failure mode areas in competitive versions of this load cell. The integral cable is a durable polyurethane-jacketed cable, featuring a braided, tin-copper shield for mechanical protection and to minimize the effects of RFI and EMI. Versatile companion loading accessories are available for convenient weighing of small bins and hoppers, as well as for compression and tensile measurements. The attributes of the VC Series make it an ideal choice for low force measurements and tensile testing, material handling, packaging, bagging scale applications and O.E.M. weighing situations where an environmentally protected, versatile, high performance load cell solution is needed.

Innovative Measurement Solutions





performance

- Compact Load Cell
- Steel and Stainless Steel Construction
- Excellent Price/Performance Ratio

Rated capacities (lbs.):	25 ⁽¹⁾ , 50, 100, 150, 250
Rated output (FSO)	3 mV/V ±10%
Combined error	≤ 0.03 % FSO
Non-linearity	≤ 0.03 % FSO
Hysteresis	≤ 0.02 % FSO
Non-repeatability	≤ 0.01 % FSO
Creep (20 minutes)	≤ 0.03 % of load
Zero balance	≤ 1 % FSO
Zero Return (20 minutes)	Better than 0.03 % FSO

(1) Stainless steel only.

mechanical

Material:	Alloy tool steel (VC1) Stainless steel (VC3)
Finish:	Electroless nickel-plated (VC1) Electro-polished (VC3)
Safe overload	Compression/Tension: 150% FSO Side load: 50% FSO
Ultimate overload	Compression/Tension: 300% FSO Side load: 100% FSO
Deflection (± 10%)	25/50 lbs. (0.008"/.20mm); 100 lbs. (0.010"/.25mm); 150 lbs. (0.012"/.30mm); 250 lbs. (0.016"/.40mm), nominal 1 lbs.
Weight	

electrical

Input impedance	385 ± 5 ohms
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 (blue) + Output (green) - Output (white) Shield (bare)
Cable type	4-conductor, 26 AWG, tin-copper braided shield, polyurethane jacket
Cable termination	Finished conductors

environmental

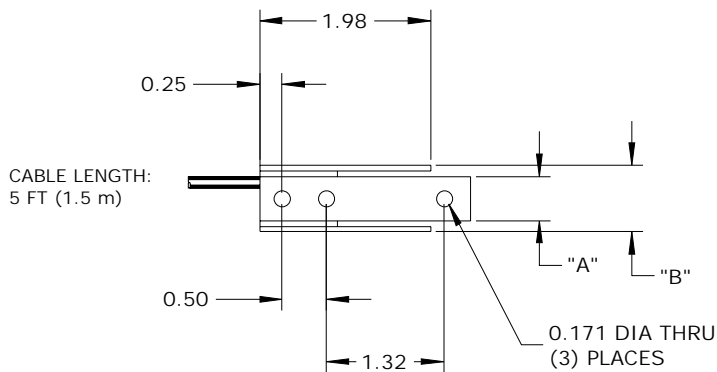


Temperature, operating	0 to +150 °F (-18 to +65°)
Temperature, compensated	14 to +104 °F (-10 to +40°C)
Temperature effects:	Zero < 0.0015% FSO/°F < 0.0026% FSO/°C Output < 0.0008% of Rdg./°F < 0.0014% Rdg./°C
Sealing	IP65/IP67; potted; redundant

options

Shunt calibration, Special cable lengths, MS connectors, Load Introduction Hardware, Hi-Temp operation and Control Instrumentation.

dimensions



CAPACITY	"A"	"B"
25 - 150 LB	0.50	0.75
250 LB	0.75	1.00

