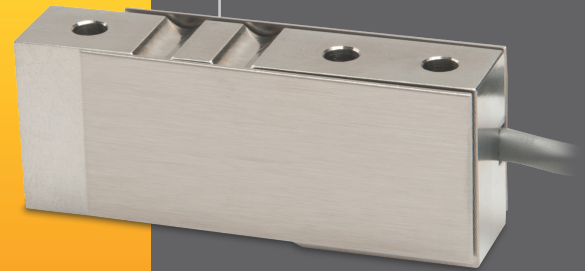




## Bending Beam Load Cell

# VC Series

**The VC Series is a compact, high performance, strain gage load cell constructed of stainless steel. The VC Series is designed to accurately measure compression loads ranging from 0-25 lbs. to 0-250 lbs.**



The VC Series is a compact, high performance, bonded foil strain gage load cell constructed of stainless steel. The VC Series is designed to accurately measure compression loads in capacities ranging from 0-25 lbs. to 0-250 lbs. The dual-guided cantilever design yields exceptional performance in a very compact package. This load cell is Harsh Environment Sealed (IP67-Limited Immersion) by virtue of proprietary, multi-redundant barriers uniquely integrated to protect all internal components, including conformal coatings and potting compounds 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, tinned-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, material handling, packaging, bagging scale applications and O.E.M. weighing situations where an environmentally protected, versatile, high performance load cell solution is needed.



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

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### APPLICATIONS

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

### FEATURES

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

# VC Series Specifications

Innovative Measurement Solutions



## PERFORMANCE

Rated capacities (lbs.)	25, 50, 100, 150, 250
Rated Output (FSO)	3 mV/V
Output Tolerance	$\pm 0.10$ % R.O.
Combined Error Band	$\leq 0.03$ % FSO
Non-Linearity	$\leq 0.03$ % FSO
Hysteresis	$\leq 0.02$ % FSO
Non-Repeatability	$\leq 0.01$ % FSO
Zero Balance	$\pm 1.0$ % FSO
Creep (20 Minutes)	0.03 % of Load

## MECHANICAL

Material	17-4ph Stainless Steel
Finish	Natural
Safe overload	Compression 150 % FSO Side Load 30% FSO
Ultimate overload	Compression 300% FSO Side Load: 50% FSO
Deflection	See Dimensions Table
Weight	See Dimensions Table
Mounting Bolt Torque	<a href="#">Torque Table</a>

## ELECTRICAL

Input Impedance	420 $\pm$ 50 ohms
Output Impedance	350 $\pm$ 3 ohms
Insulation Resistance	>5000 Megohms
Excitation Voltage	10 V AC/DC (15 V maximum)
Cable Color Code	+ Excitation (red) - Excitation (black) + Signal (green) - Signal (white) Shield (natural)
Cable Type	4-conductor, 26 AWG, Polyurethane jacket, Tinned Copper Braid, Diameter: 0.168"
Cable Length	See Dimensions Table
Cable Termination	Finished Conductors
Cable Seal	Epoxy

## ENVIRONMENTAL

Temperature, Operating	0 to +150 °F (-18 to +65°C)
Temperature, Compensated	14 to +104 °F (-10 to +40°C)
Temperature, Storage	-40 to +170 °F (-40 to +77°C)
Temperature Effects	Zero < 0.015% 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

# VC Typical System Configuration

## SENSING LOAD CELL(S)



## SIGNAL CONDITIONING

Analog Transmitters



Serial Transmitters



Digital Indication



Process Control



Batch Control

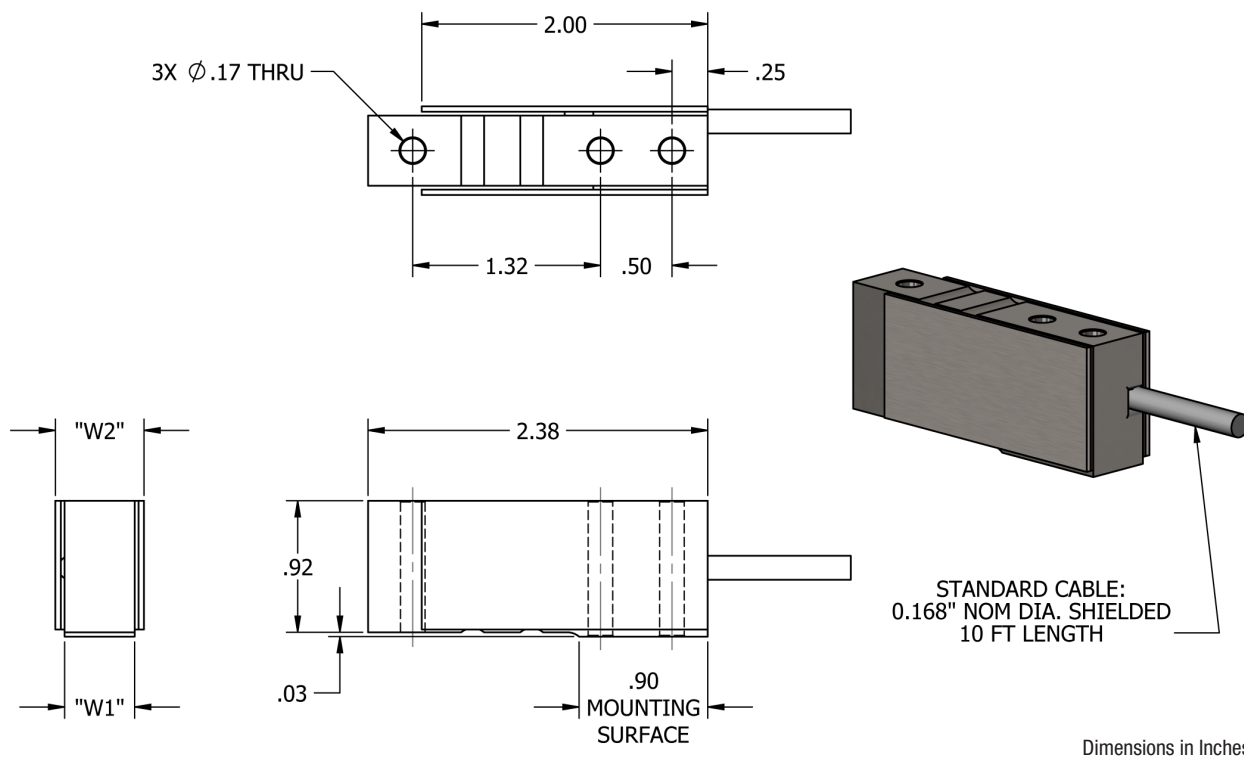


Data Acquisition



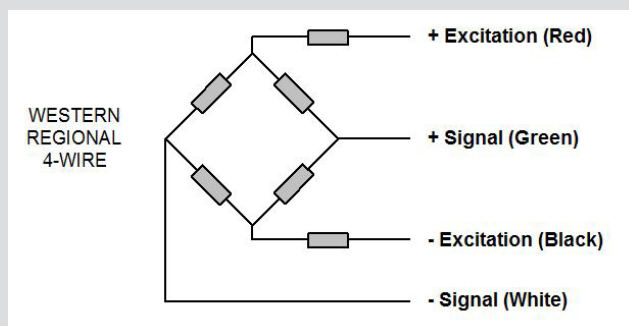
## OUTPUT OPTIONS

0-5 VDC  
0-10VDC  
 $\pm 5$  VDC  
 $\pm 10$  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



Capacity (LBS)	W1	W2	Deflect DIMENSIONS (INCHES)	Weight
25, 50	0.50	0.75	0.008"	0.5 LBS
100	0.50	0.75	0.010"	0.5 LBS
150	0.50	0.75	0.012"	0.5 LBS

## VC Wiring Diagram



## Legal Disclaimer



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