



SENTRAN

Welded Sealed Bending Beam Load Cell

VE4-C Series

The VE4-C Series is a compact, high performance, strain gage load cell constructed stainless steel. The VE4-C Series is designed to accurately measure tension and compression loads ranging from 0-5 KG to 0-500 KG.



The VE4-C Series is a high performance cantilever beam load cell constructed of heat treated stainless steel. The VE4-C is designed to accurately measure tension and compression forces in capacities ranging from 0-5 KG to 0-500 KG. The VE4-C Series features a field proven dual-guided cantilever beam design that readily tolerates moments induced by angular, eccentric, or off-center loading, with minimal sensitivity to these extraneous loads, producing excellent performance in a small, compact package. The inherent low deflection of the VE4-C Series yields a high dynamic response and superior output resolution for a wide range of applications. The VE4-C Series load cell is Harsh Environment Sealed to IP68 incorporating a welded bellows seal to protect all internal components. The load cell output signals are calibrated to a close tolerance to facilitate in situ interchangeability and multiple load cell summing applications. The integral premium instrumentation grade cable features a durable PVC jacket over a tinned-copper braided shield for superior mechanical protection and to minimize the unwanted electrical effects of RFI and EMI. The attributes of the VE4-C Series make it convenient for weighing small bins and hoppers, making it an ideal choice for low force measurements, material handling, packaging, or bagging scale applications where a precision load cell solution is required.

APPLICATIONS

- Tension/Compression Measurements
- Washdown/Corrosive Environments
- Process Control Weighing
- Belt and Bagging Scales
- Tank, Bin and Hopper Weighing
- Reactor, Mixer and Blender Weighing

FEATURES

- 5 KG to 500 KG Capacities
- 0.02% Accuracy Class
- 2 mV/V Full Scale Output
- 10 FT PVC Cable
- FM Approved, Intrinsically Safe
- Compact Size
- IP68 Environmental Sealing
- Stainless Steel Construction
- Dual Guided Beam Design
- Universal - Tension and Compression



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

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PERFORMANCE

Rated capacities (KG)	5, 10, 20, 30, 50, 100, 200, 350, 500
Rated Output (FSO)	2 mV/V
Output Tolerance	± 0.25 % R.O.
Combined Error Band	≤ 0.03 % FSO
Non-Linearity	≤ 0.02 % FSO
Hysteresis	≤ 0.02 % FSO
Non-Repeatability	≤ 0.02 % FSO
Zero Balance	± 2.5 % FSO (5KG - 20KG) ± 1.0 % FSO (30KG - 500KG)
Creep (30 Minutes)	≤ 0.03 % of Load

MECHANICAL

Material	17-4ph Stainless Steel
Finish	Natural Bright
Safe overload	Compression 150 % FSO
	Tension 150 % FSO
	Side Load 100% FSO
Ultimate overload	Compression 300% FSO
	Tension 300% FSO
	Side Load: 200% FSO
Deflection	See Dimension Table
Weight	See Dimension Table
Mounting Bolt Torque	See Dimension Table
Sealing	IP68; Continual Immersion Tolerance

ELECTRICAL

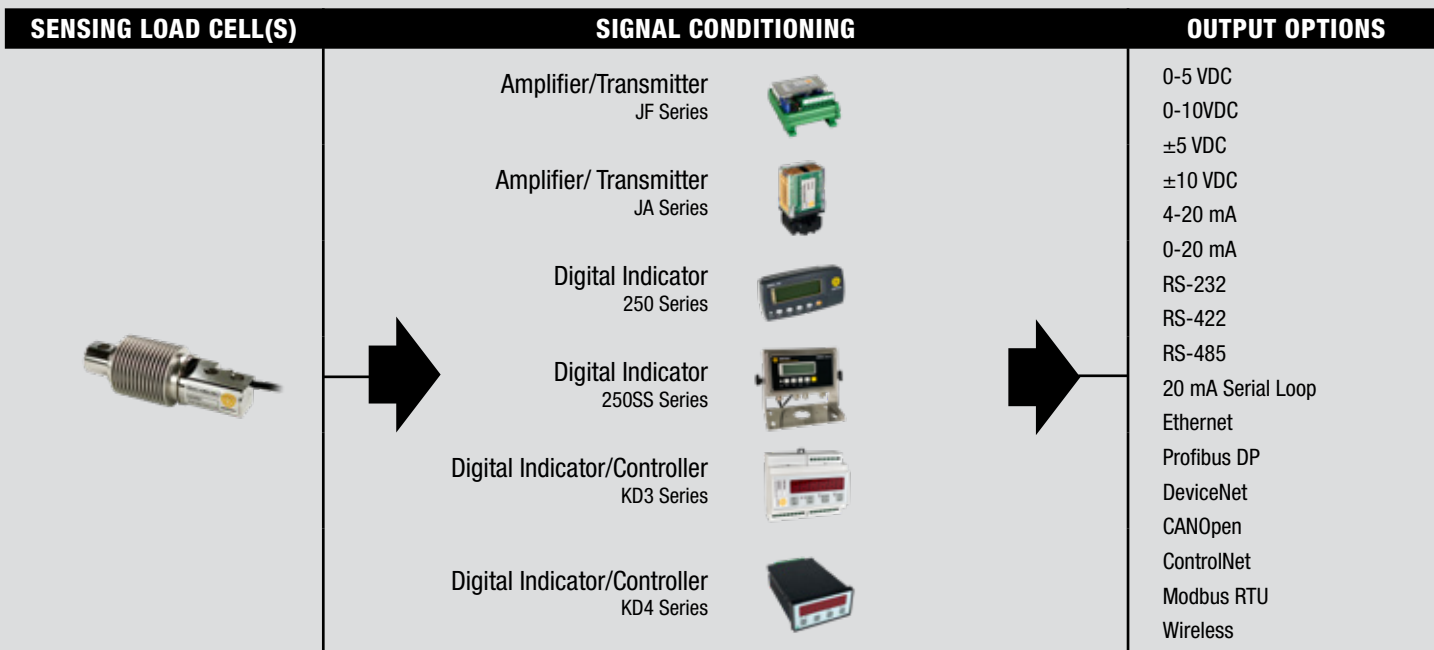
Input Impedance	400 ± 20 ohms
Output Impedance	350 ± 3 ohms
Insulation Resistance	>2000 Megohms
Excitation Voltage	10 V AC/DC (15 V maximum)
Cable Color Code	+ Excitation (red)
	- Excitation (black)
	+ Signal (green)
	- Signal (white)
	Shield (bare)
Cable Type	4 conductor, 24 AWG, PVC, Tinned Copper Braid, Diameter: 0.200"
Cable Length	See Dimension Table
Cable Termination	Finished Conductors
Cable Seal	Epoxy Gland Seal

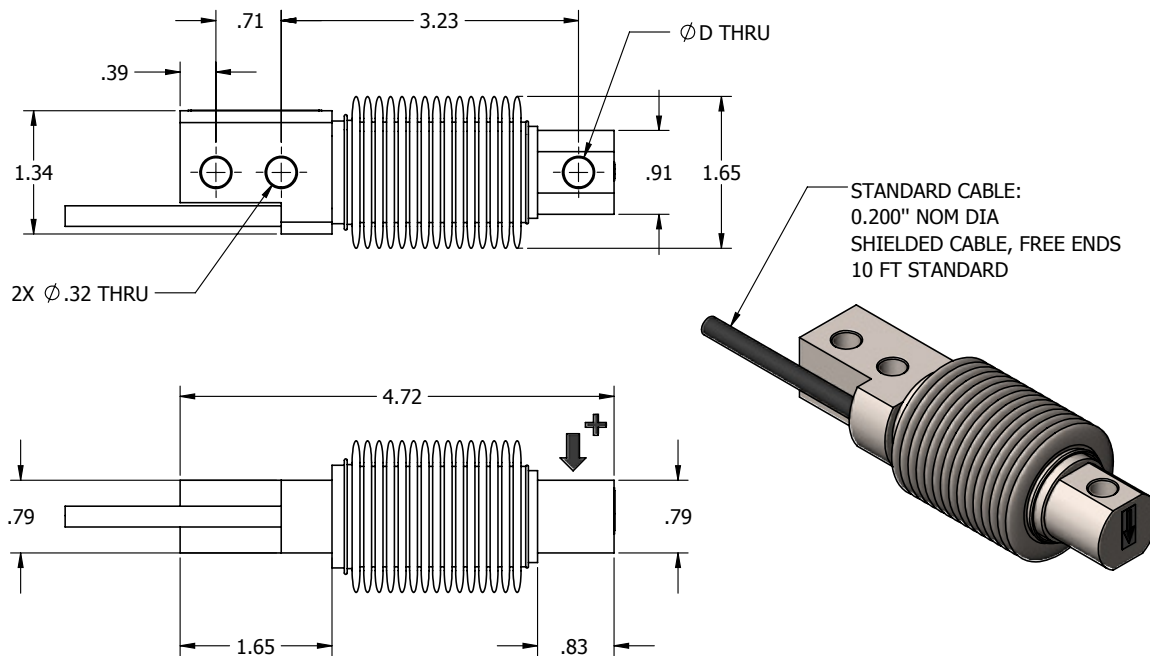
ENVIRONMENTAL

Temperature, Operating	-20 to +160 °F (-30 to +70°C)
Temperature, Compensated	14 to +122 °F (-10 to +50°C)
Temperature, Storage	-58 to +185 °F (-50 to +85°C)
Temperature Effects	Zero < 0.0015% FSO/°F
	< 0.0026% FSO/°C
Temperature Effects	Output < 0.0008% of Rdg./°F
	< 0.0014% Rdg./°C
Sealing	IP68; Continual Immersion Tolerance
FM Approval	Per Sentran: FM Certificate of Conformity: FM24US00012X and FM24CA0005X

FM approved versions carry a "-FM" suffix to the part number. Every Sentran unit of an FM APPROVED product will bear an FM compliant label indicating the application level (e.g., Class 1, Division 1, Groups) corresponding to the type of protection required.

VE4-C Typical System Configuration

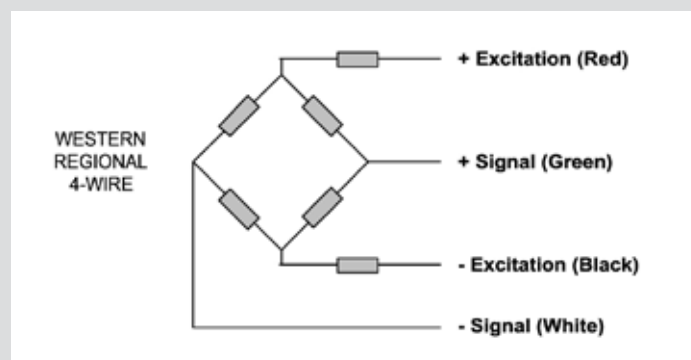




DIMENSIONS IN INCHES

Capacity (KG)	D	RECOMMENDED BOLT TORQUE	DEFLECT	WEIGHT
5, 10, 20, 30, 50, 100, 200	0.32	17 FT-LB	0.010"	1.5 LB
350, 500	0.41	17 FT-LB	0.013"	1.5 LB

VE4-C Wiring Diagram



Legal Disclaimer



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