



# VE4

## HERMETICALLY SEALED BENDING BEAM LOAD CELL

### *applications*

- 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
- Compact Size
- Excellent Performance
- 0.03% Accuracy Class
- Stainless Steel Design
- Welded, Hermetic Sealing
- Environmentally Sealed-IP66/67
- Companion Weigh Modules
- Two Year Warranty

**Application Tip:** *The Stainless Steel, Hermetically Sealed VE4 Is Designed Specifically For Washdown & Corrosive Environments.*

The Model VE4 is a compact, high performance, bonded foil strain gage load cell constructed of Stainless Steel. The VE4 is designed to accurately measure compression loads in capacities ranging from 10 kg to 250 kg. The "dual-guided" cantilever design reduces sensitivity to off-center and side loading effects. To achieve sealing ratings of IP66 and IP67 (thoroughly sealed against airborne particles, strong jets of water and the effects of immersion up to 1 meter.) composite environmental barriers are incorporated, including a flexible stainless steel bellows and welded seals to protect the strain gage area. The integral cable is durable, polyurethane jacketed and features a braided, tinned-copper shield for mechanical protection and to minimize the effects of common industrial electrical noise, e.g. RFI and EMI. The environmentally sealed cable entry incorporates a stainless steel coupled cable fitting and strain relief for the cable. The attributes of the VE4 make it an ideal choice for reactor, mixer and blender weighing, material handling, packaging, process applications and O.E.M. weighing situations where a well sealed, versatile, high performance load cell solution is needed.

SENTRAN, LLC  
California Commerce Center  
4355 Lowell Street  
Ontario, CA 91761-2225

Toll Free: 1(888) 545-8988  
Phone: 1(909) 605-1544  
Fax: 1(909) 605-6305  
Email: [mail@sentranllc.com](mailto:mail@sentranllc.com)  
URL: [www.sentranllc.com](http://www.sentranllc.com)

**INNOVATIVE MEASUREMENT SOLUTIONS**



## performance

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

Rated capacities (kg):	10, 20, 50, 100, 200, & 250
Rated output (FSO)	2 mV/V $\pm$ .25%
Combined error	$\leq$ 0.03 % FSO
Non-linearity	$\leq$ 0.03 % FSO
Hysteresis	$\leq$ 0.02 % FSO
Non-repeatability	$\leq$ 0.01 % FSO
Creep (20 minutes)	$\leq$ 0.03 % of load
Zero balance	$\leq$ 1 % FSO
Zero Return (20 minutes)	Better than 0.03 % FSO

## mechanical

Material:	17-4ph Stainless steel
Finish:	Electro-polished
Safe overload	Compression/Tension: 150% FSO Side load: 30% FSO
Ultimate overload	Compression/Tension: 300% FSO Side load: 50% FSO
Deflection	0.020" (nominal)
Weight	1 lbs.

## electrical

Input impedance	385 $\pm$ 10 ohms
Output impedance	350 $\pm$ 5 ohms
Insulation resistance	>5000 Megohms @ 50VDC
Excitation Voltage	10 V AC/DC (15 V maximum)
Cable Color code:	+ Excitation (red) + Sense (brown) - Excitation (black) - Sense (yellow) + Output (green) - Output (white) Shield (bare)
Cable type	4-conductor; 22 AWG; tin-copper, braided shield; polyurethane jacket
Cable termination	Finished conductors

## environmental



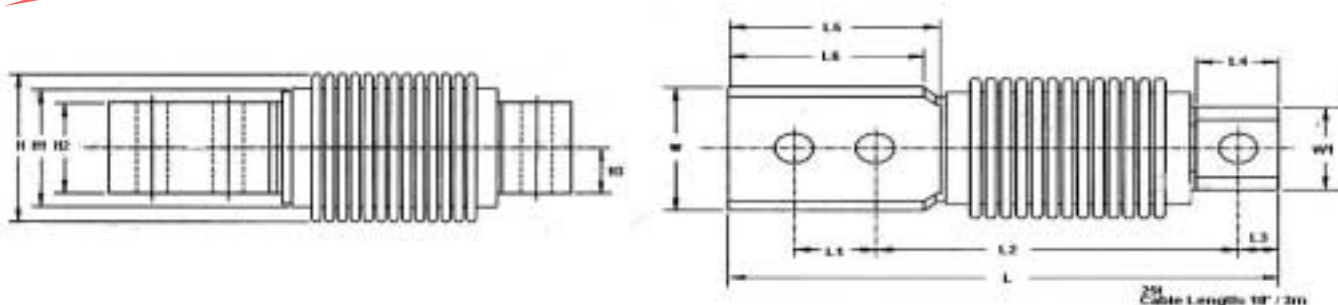
Temperature, operating	-4 to +140 °F (-20 to +60°C)
Temperature, compensated	14 to +104 °F (-10 to +40°C)
Temperature effects:	Zero < 0.0015% FSO/°F < 0.0026% FSO/°C Output < 0.0008% of Rdg./°F < 0.0014% Rdg./°C
Sealing	IP66/IP67; Hermetic; Welded

## options

Special cable lengths, MS connectors, Load Hardware, control instrumentation and Weigh Modules.

## dimensions

100%  
CUSTOMER  
SATISFACTION  
GUARANTEED



Capacity		L	L1	L2	L3	L4	L5	L6	H	H1	H2	H3	W	W1
5,10,20, 50,100, 200,250,500	(mm)	120	18	82	10	19	41	38	41.6	28.2	20	10	31.5	26.6
	(inch)	4.72	.71	3.23	.39	.75	1.61	1.50	1.64	1.11	.79	.39	1.24	1.05