

Series 856

Subminiature Compression Load Cell



Select ranges in stock.



Shown (above) actual size

Standard Features

- **Small Size**
- **0.50% Accuracy**
- **Compression**
- **2 mV/V**
- **All Welded Stainless Steel**
- **-40°F to 250°F Operating Temperature**
- **Shock and Vibration Resistant**
- **5 Point Calibration Record Traceable to NIST**

Optional Features

- **Special Calibration**
- **Special Full Scale Ranges**
- **Customer Specified Cable Lengths**
- **-65°F to +400°F Temperature Ranges**

Description

The Series VL856 load cells are subminiature sized compression load cells designed specifically for applications requiring very small size, very little mass and rugged construction. Designed of all welded stainless steel, these bonded foil strain gaged force sensors provide reliable performance for demanding application conditions.

The VL856 comes with a load button machined as an integral part of the sensing element. Additional features include shock and vibration protection. VL856 load cells are ideal for applications involving pharmaceutical presses, non-invasive fluid fill systems, physical therapy devices. Each unit is shipped with a 5 point calibration record traceable to NIST as standard.

Performance

Standard Ranges

(Ranges in Bold Type are available in stock)

10, 25, 50, 100, 250, 500, 1000 lb.

Output

2mV/V nominal.

Accuracy

0.50% BFSL.

Temperature Effect on Zero

0.01% FSO/°F.

Temperature Effect on Span

0.01% Reading/°F.

Zero Balance

3% FSO.

Environmental Characteristics

Operating Temperature Range

-40°F to 250°F.

(-65°F to 400°F optional.)

Compensated Temperature Range

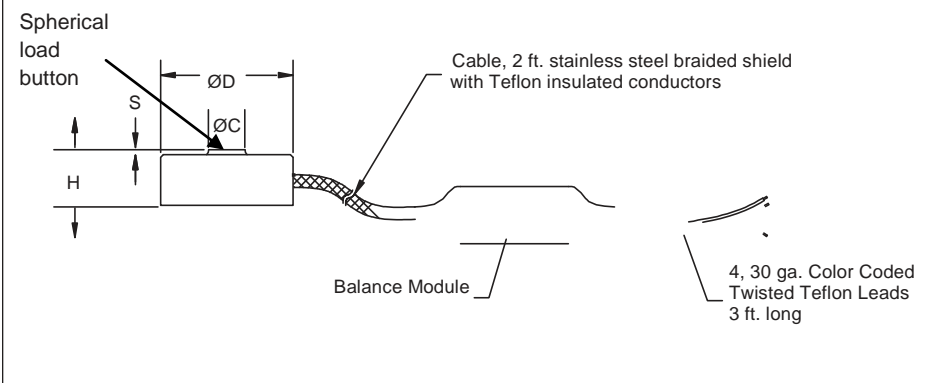
70°F to 170°F.

(-65°F to 400°F optional.)

Series 856 Specifications

Baseline Configuration Specs Represented.
Modifications Encouraged - See Below
Custom Designs Available

Dimensions (inches)



Capacity (lbs.)	ØD	ØC	H	S
10, 25, 50	0.38	0.08	0.13	0.02
100, 250	0.50	0.13	0.15	0.02
500, 1000	0.75	0.28	0.25	0.02

Mechanical Characteristics

Static Overload Without damage
150% FSO.

Calibration
Standard calibration is 5 points (0, 50%, 100%, 50%, 0 of FSO).

Material
Welded stainless steel.

Electrical Characteristics

Bridge Resistance
350 Ohms nominal.

Excitation
5 Vdc or Vac.
Insulation Resistance
Greater than 5000 megaohms
at 50 Vdc.

Electrical Termination
Refer to dimensional drawing (above)

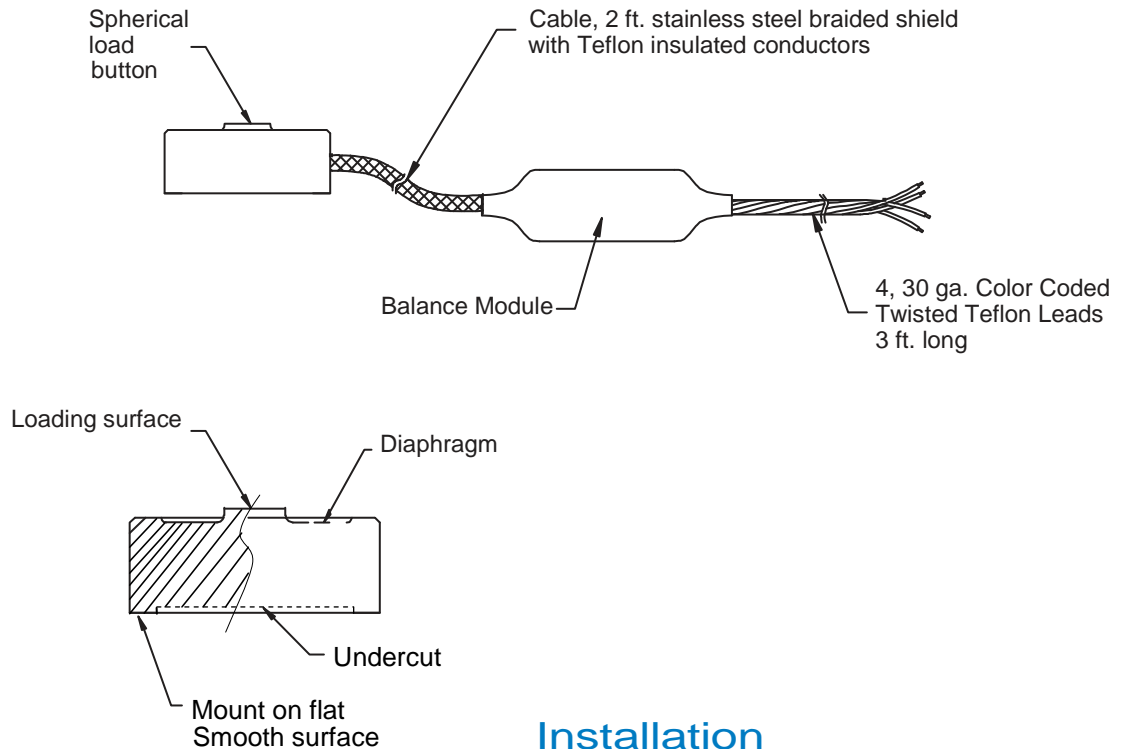
Electrical Characteristics

Connector Pins (Standard)
RED +EXE GREEN -SIG
BLACK -EXE WHITE +SIG

Customer specified wiring codes
are available.

Series 856

Installation Guide



Installation

- CAUTION** - Do not load on diaphragm. Only load on loading surface (spherical button). Damage and/or false readings may occur if the diaphragm is loaded.
- CAUTION** - Do not overload. Low capacity load cells may be damaged if squeezed or handled incorrectly.
- CAUTION** - Do not let glue or other debris accumulate or be contained in the undercut area as this will result in incorrect readings and/or load cell failure.
- For best results, load cells should be mounted on a flat smooth surface.

ISO 9001:2000

T.C.E.

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