

Model LFH-7I (Top Hat) Subminiature Load Cell

Order Code BL351

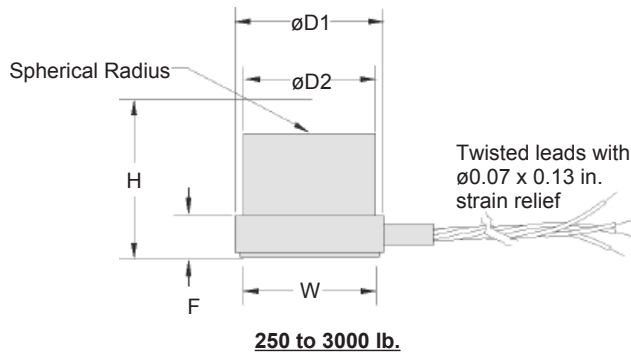
- 250 to 10,000 lb. Range
- Stainless Steel
- Column Construction
- mV/V Output
- 1% Accuracy



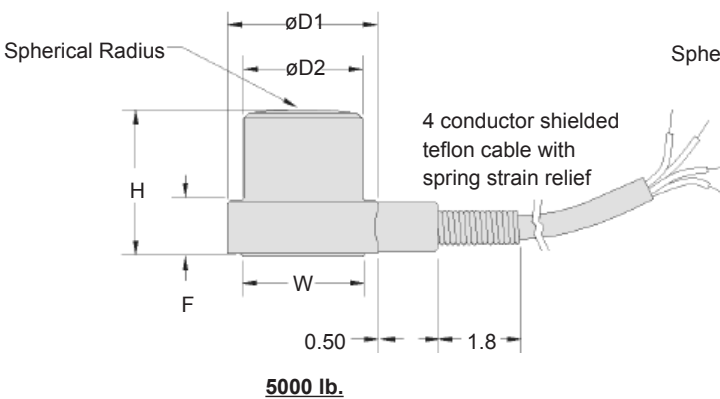
Wiring Code

Connector/ Unamplified

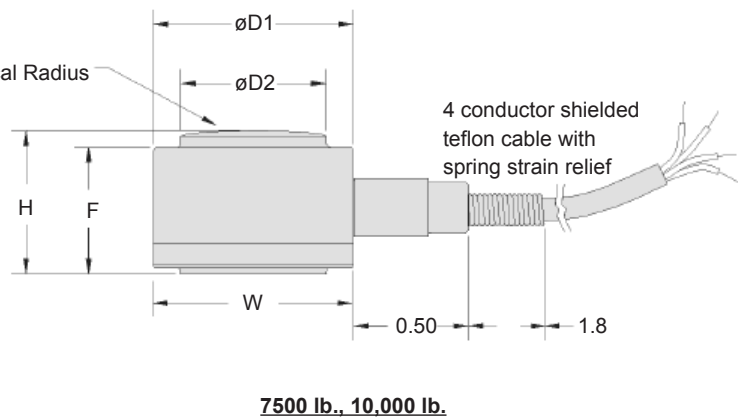
- | | |
|-------|----------------|
| Red | (+) Excitation |
| Black | (-) Excitation |
| Green | (-) Output |
| White | (+) Output |



250 to 3000 lb.



5000 lb.



7500 lb., 10,000 lb.

Dimensions

Ranges (lb.)	$\phi D1$ (in.)	$\phi D2$ (in.)	H (in.)	F (in.)	W (in.)
250	0.50	0.27	0.38	0.13	0.43
500	0.50	0.28	0.38	0.13	0.43
1000	0.50	0.31	0.38	0.13	0.43
2000	0.50	0.41	0.38	0.13	0.43
3000	0.50	0.45	0.38	0.13	0.46
5000	0.63	0.53	0.60	0.23	0.51
7500	0.88	0.63	0.63	0.54	0.63
10,000	0.88	0.63	0.63	0.54	0.63

Performance

Load Ranges.....250 to 10,000 lb.
Accuracy.....+/- 1% Full Scale (note 1)
Tolerance on Output.....1.5 mV/V to 2.5 mV/V
Operation.....Compression only

Environmental

Temperature, Operating.....	-65° to 250° F
Temperature, Compensated.....	60° to 160° F
Storage Temperature.....	-100° to 300° F
Temperature, Effect	
Zero.....	0.01% Full Scale/ °F
Span.....	0.01% Full Scale/ °F (nominal)

Electrical

Strain Gage Type.....	Bonded Foil
Excitation (calibration).....	5 VDC
Insulation Resistance.....	5000 Megohms @ 50 VDC
Bridge Resistance.....	350 Ohms
Zero Balance.....	5% max.
Electrical Termination (std).....	Cable (5ft.)

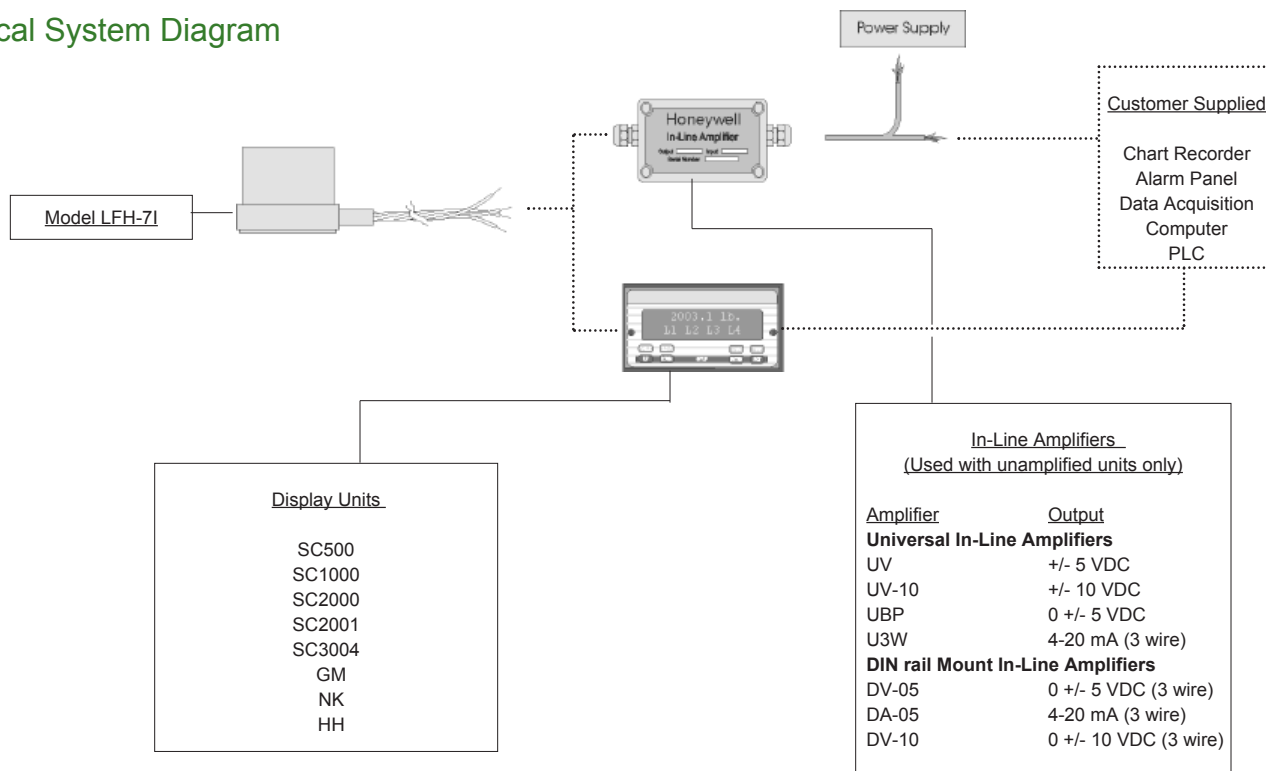
Mechanical

Maximum Allowable Load.....	150% F.S. (note 2)
Weight.....	See table
Material.....	17-4PH Stainless Steel
Deflection Full Scale.....	See table
Natural Frequency.....	See table

Deflections and Ringing Frequencies

Capacity (lb.)	Deflection at Full Scale (in.)	Ringing Frequency (kHz)	Weight (grams)
250	0.0005	30	10
500	0.0005	34	10
1000	0.001	37	10
2000	0.001	44	10
3000	0.001	46	10
5000	0.001	47	30
7500	0.0015	44	30
10,000	0.002	40	30

Typical System Diagram



Range Codes

Range	Range Code
250 lb.	CN
500 lb.	CR
1000 lb.	CV
2000 lb.	DL
3000 lb.	DN
4000 lb.	DP
5000 lb.	DR
7500 lb.	DT
10,000 lb.	DV

Options

	Built to Order
Load Range	250; 500; 1000; 2000; 3000; 4000; 5000; 7500; 10,000 lb.
Temperature Compensation	1a. 60° to 160° F 1b. 30° to 130° F 1f. 0° to 185° F 1b. -20° to 130° F 1f. -20° to 200° F 1b. 70° to 250° F 1f. 0° to 50° C 1b. -20° to 85° C 1f. -25° to 110° C
Internal Amplifiers	2u. Unamplified, mV/V output
Electrical Termination	6e. Integral cable: Teflon 6h. Integral cable: Silicone 6v. Phoenix connector on end of cable 15d. Connector on end of cable
Special Calibration	9a. 10 point (5 up/5 down) 20% increments @ 70° F 9b. 20 point (10 up/10 down) 10% increments @ 70° F
Shock & Vibration	44a. Shock and Vibration resistance

 Supplied as standard

Notes

1. Accuracies stated are expected for Best Fit Straight Line for all errors including linearity, hysteresis and repeatability through zero.
2. Allowable Maximum Loads- Maximum load to be applied without damage (note 2).
3. Without Damage- loading to this level will not cause excessive zero shift or performance degradation. The user must consider fatigue life for long term use and structural integrity. All structurally critical applications (overhead loading, etc.) should always be designed with safety redundant load paths.

How to Order

Combine the order code, the range code and the options code.

Sample Code:   
 Order Code Range Code Options Code