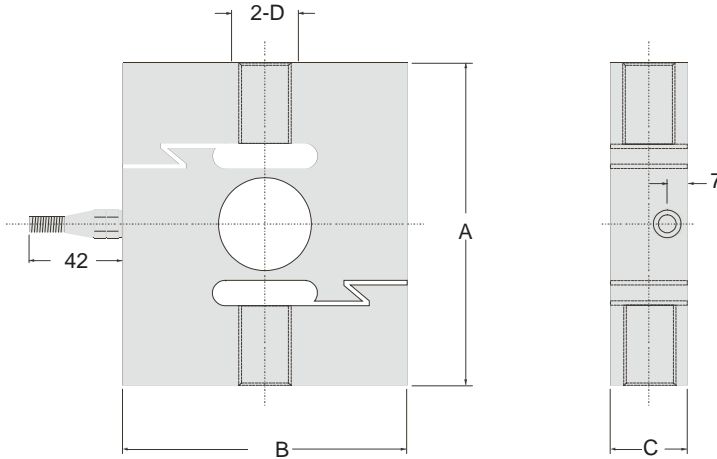


# Model 123 Load Cell

Order Code BL810

- Low Cost
- 2,000 to 40,000 lb. (1,000 to 20,000 kg) Range
- +/- 0.03% Total Error



## Wiring Code

Red (+) Supply  
 Black (-) Supply  
 Green (+) Output  
 White (-) Output

## Dimensions

Range (lb.)	A (in.)	B (in.)	C (in.)	D
2,000; 3,000	3.1	2.8	1.0	M12
4,000 to 10,000	4.2	3.7	1.0	M18x1
15,000; 20,000	7.0	5.1	2.0	M30x2
30,000; 40,000	7.5	6.3	2.4	M39x2

Range (kg)	A (mm)	B (mm)	C (mm)	D
1,000; 1,500	80	70	25	M12
2,000 to 5,000	108	95	25	M18x1
7,500; 10,000	178	130	51	M30x2
15,000; 20,000	190	160	60	M39x2

## Performance

Load Ranges.....2,000 to 20,000 lb.; 1,000 to 20,000 kg  
 Total Error.....+/- 0.03% Full Scale  
 Output (tolerance).....3.0 +/- 0.01mV/V  
 Creep (max.).....+/- 0.03% Full Scale (30 minutes)

## Environmental

Temperature, Operating.....-20° to 160° F (-30° to 70° C)  
 Temperature, Compensated.....0° to 130° F (-20° to 55° C)  
 Temperature, Effect  
 Zero.....+/- 0.03% Full Scale/ 10° C  
 Span.....+/- 0.03% Full Scale/ 10° C  
 Protection Class.....IP67

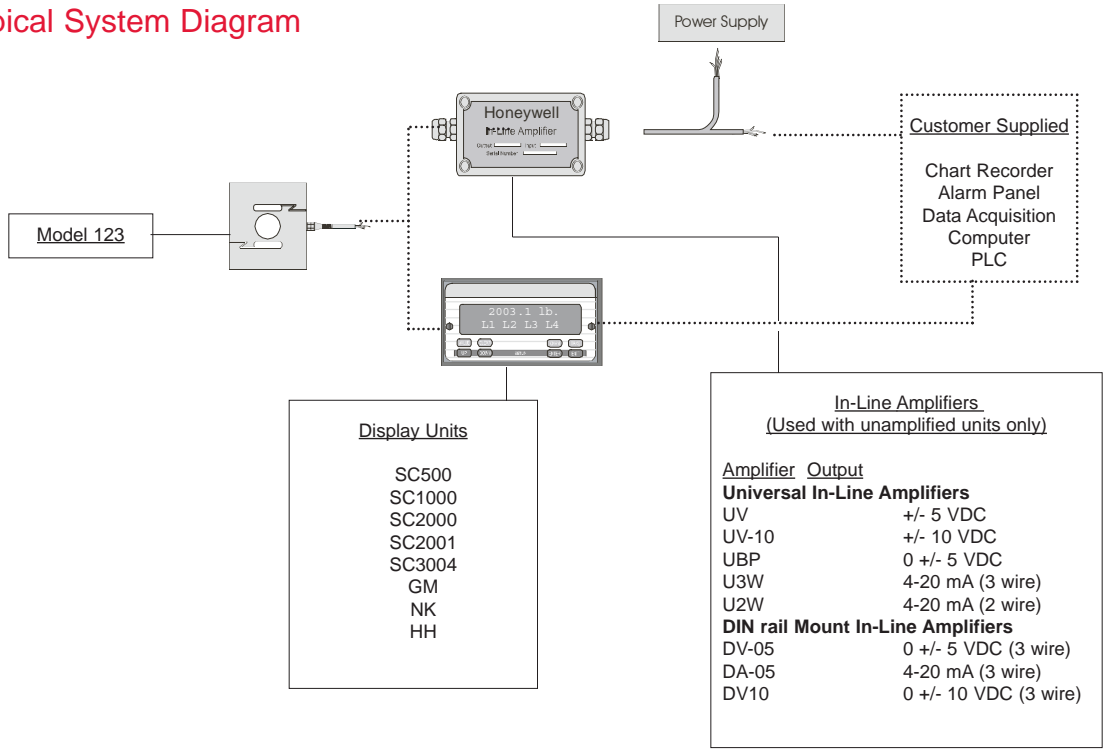
## Electrical

Strain Gage Type.....Foil  
 Excitation (acceptable).....10-12 VDC  
 Excitation (max.).....15 VDC  
 Insulation Resistance.....>= 5,000 MegaOhms  
 Bridge Resistance (tolerance)  
 Input Resistance.....400 +/- 10 Ohms (nominal)  
 Output Resistance.....352 +/- 2 Ohms (nominal)  
 Zero Balance (tolerance).....+/- 1% Full Scale  
 Electrical Termination (std).....6m of 5mm diameter cable

**Mechanical**

Safe Overload Capacity.....20% over capacity (note 1)  
 Later Load Limit.....100% over capacity  
 Material.....Alloy Steel  
 Life Cycles (approx.).....10 million cycle[s]

**Typical System Diagram**



**Range Codes**

Range	Range Code	Range	Range Code
2,000 lb.	DL	1,000 kg	LN
3,000 lb.	DN	1,500 kg	LP
4,000 lb.	DP	2,000 kg	LQ
6,000 lb.	DS	3,000 kg	LS
10,000 lb.	DV	5,000 kg	LU
15,000 lb.	DJ	7,500 kg	LV
20,000 lb.	EL	10,000 kg	LW
30,000 lb.	EN	15,000 kg	LY
40,000 lb.	EQ	20,000 kg	LZ

**Notes**

1. Allowable Maximum Loads- Maximum load to be applied without damage \*2.
2. 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 and the range code.

Sample Code: **BL810** **DS**  
 Order Code      Range Code