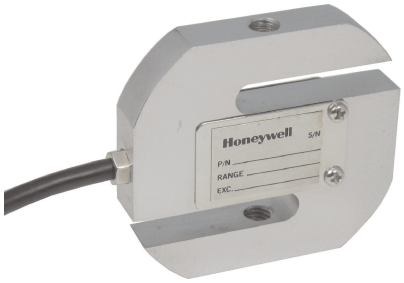
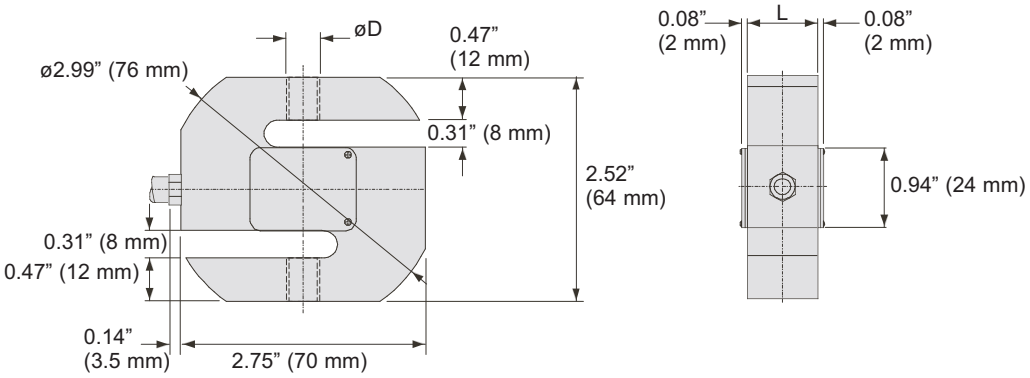
Model 102 Load Cell

Order Code BL804

- Low Cost
- 50 to 2,000 lb. (20 to 1,000 kg) Range
- +/- 0.02% Total Error





Wiring Code

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

Dimensions

Load (lb.)	Load (kg)	D (in.)	D	L (in.)	L (mm)
50 - 300	20 - 150	0.31	M8	0.47	12
400 - 1000	200 - 500	0.47	M12	0.79	20
1500 - 2000	700 - 1000	0.47	M12	0.98	25

Performance

Load Ranges.....50; 100; 250; 400; 600; 1,000; 2,000 lb.
20; 50; 100; 200; 300; 500; 1,000 kg
Total Error.....+/- 0.02% Full Scale
Output (tolerance).....2.0 +/- 0.002mV/V (nominal)
Creep (max.).....+/- 0.02% Full Scale (30 minute)

Environmental

Temperature, Operating.....-20° to 160°F (-30° to 70° C)
Temperature, Compensated.....0° to 130° F (-20° to 55° C)
Temperature, Effect
Zero.....+/- 0.02% Full Scale/ 10° C
Span.....+/- 0.02% Full Scale/ 10° C
Protection Class.....IP67

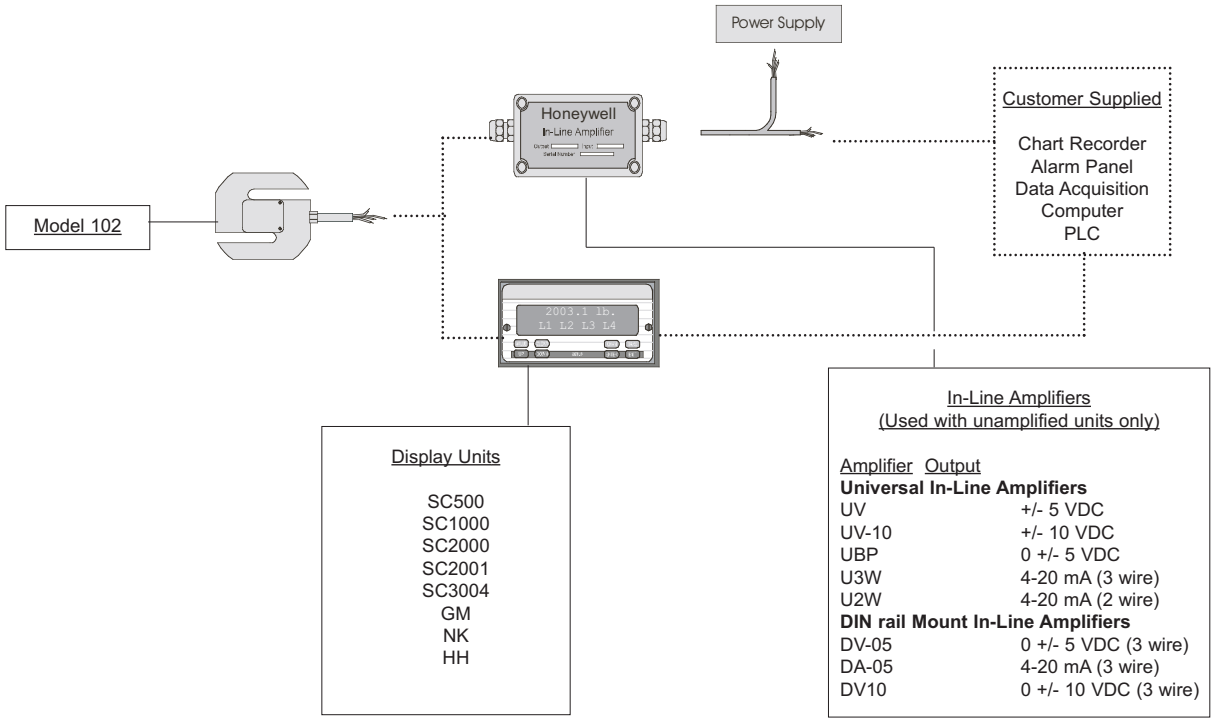
Electrical

Strain Gage Type..... Bonded Foil
Excitation (acceptable).....10-12 VDC
Excitation (max.).....15 VDC
Insulation Resistance.....>= 5000 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).....9.8 ft. (3m) Cable (flying leads)

Mechanical

Static Overload Capacity.....50% over capacity (note 1)
Material.....Alloy Steel or Stainless Steel
Life Cycles (approx.).....10 million cycles
Deflection.....Less than or equal to 0.02 in. (0.5mm)

Typical System Diagram



Range Codes

Range	Range Code	Range	Range Code
50 lb.	BN	20 kg	LD
100 lb.	BR	30 kg	LE
150 lb.	CJ	50 kg	LF
250 lb.	CN	75 kg	LG
300 lb.	CP	100 kg	LH
400 lb.	CQ	150 kg	LJ
500 lb.	CR	200 kg	LK
600 lb.	CS	250 kg	LL
1000 lb.	CV	300 kg	LM
1500 lb.	DJ	500 kg	LN
2000 lb.	DL	1000 kg	LQ

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: BL804 (Order Code) CN (Range Code)