

S610 Tension Compression Mini Load Cell



The **S610 Load Cell** is a miniature load cell, which can be used in both tension and compression. Combining overload protection and low profile, the S610 can be used with an in-line force measurement such as scale or medical bag weighing application. With a bridge resistance of 5,000 Ω , it has extremely low power consumption and therefore can be used in portable, ambulatory, and battery operated products. With full-scale capacities of 900 g through 50 kg (100lb) and flexible #4-40 threads on both the top and bottom, the S610 is a flexible platform, which can be configured for many varied force measurement tasks. The load cell comes with a compression fitting which converts it to a pure compression load cell.

Product Specifications:

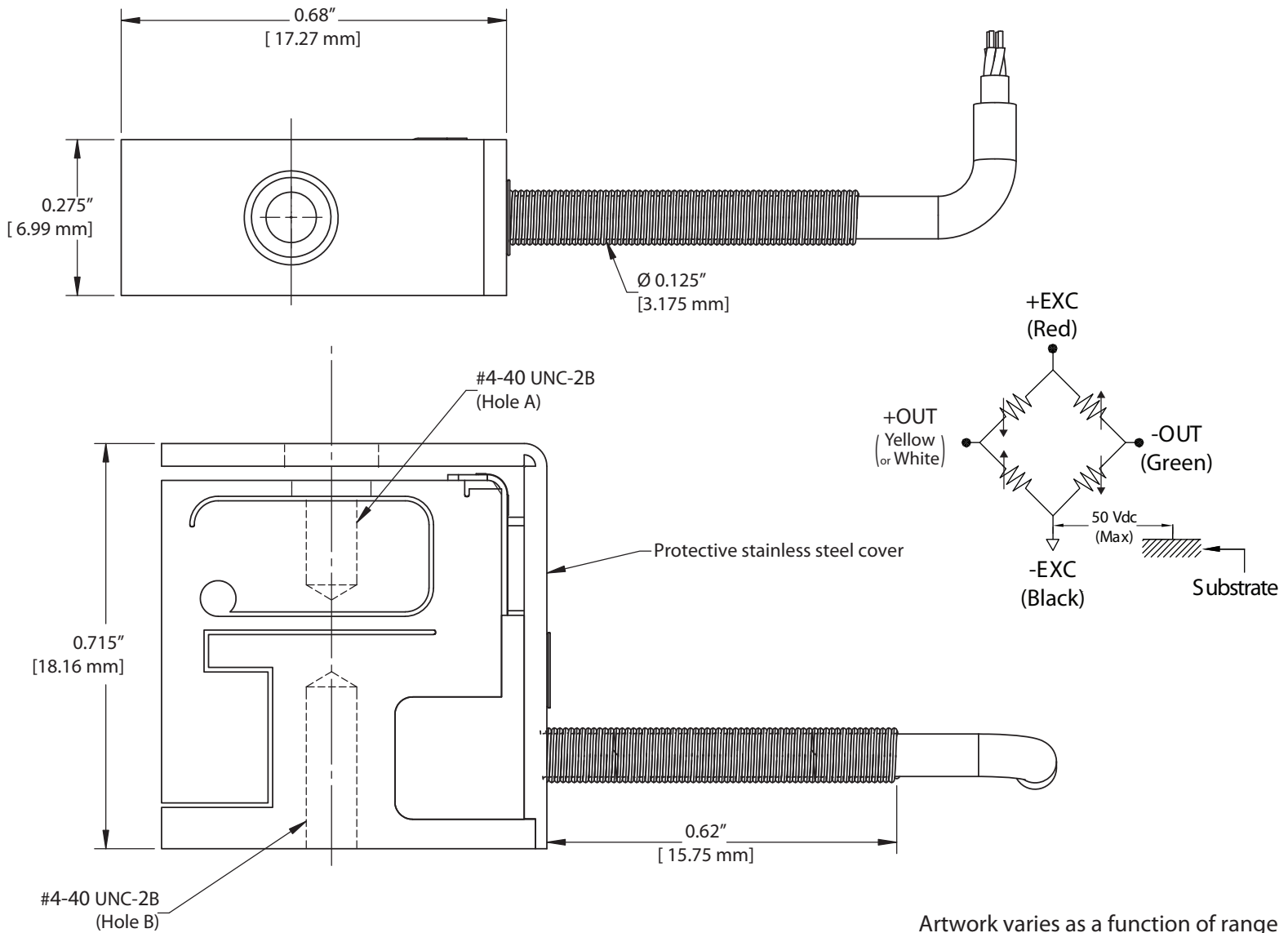
Rated Capacity:	0.90, 2.3, 4.5, 11, 23, 45 kg
Full Scale Output:	2 mV/V Nominal
Hysteresis:	0.5% FSO
Ultimate Overload:	3X Full Scale
Insulation Resistance:	5000 M Ω @ 50 Vdc
Bridge Resistance:	5000 Ω
Bridge Configuration:	4-Wire Closed, Full-Bridge
Temp. Effect on Zero Balance:	0.03% FSO / $^{\circ}\text{C}$
Temp. Effect on Span:	0.03% of Reading / $^{\circ}\text{C}$
Excitation (Recommended):	5 to 10 Vdc (15 Vdc Max)
Electrical Termination:	4C Braided Shield 34 Gauge Cable with Spring Strain Relief
Nonlinearity:	0.10% FSO
NonRepeatability:	0.03% FSO
Operating Temperature:	0 to 80 $^{\circ}\text{C}$

Features:

- Low Profile
- Tension & Compression
- Low Power Consumption
- Long-term, Stability
- Low Hysteresis
- Economical
- Overload Protected

Applications:

- Medical Instrumentation
- Q/C Laboratory
- Robotics
- Force Measurement
- Consumer Products
- Educational



Part Name	Rated Capacity	Hole "A" Depth	Hole "B" Depth	Body Material	Deflection
S610-2LB	2.0 lb [0.90 kg]	0.178"	0.213"	2024-T851	0.008"
S610-5LB	5.0 lb [2.3 kg]	0.187"	0.213"	2024-T851	0.008"
S610-10LB	10 lb [4.5 kg]	0.197"	0.213"	2024-T851	0.006"
S610-25LB	25 lb [11 kg]	0.196"	0.213"	2024-T851	0.006"
S610-50LB	50 lb [23 kg]	0.196"	0.213"	SS 17-4 PH	0.006"
S610-100LB	100 lb [45 kg]	0.196"	0.213"	SS17-4 PH	0.006"