## **S100** Thin Film Load Cell



The Series 100 Thin-Film Load Cell using proprietary sputtered thin film strain gauge technology to create a rugged sensor with exceptional long term stability. These highly sophisticated thin film force senors are manufactured in high quantities using state-of-the-art equipment. The compact sensor with it's simple beam mounting configuration, the compact sensor can be used to electronically measure force or displacement in a wide variety of applications. Custom characteristics can be provided for high volume OEM users.

Product Specifications:					
Capacity:	0.5, 1, 2, 5, 10, 20, 50, 125 N				
Hysteresis:	0.03% R.O.				
Non Repeatability:	0.05% R.O.				
Creep (30 mins):	0.05 R.O.				
Static Overload (Safe):	200% R.C.				
Temperature Range:	-10°C to 70°C				
Temp. Effect on Zero Balance:	0.03% R.O./°C				
Temp. Effect on Output:	0.03% Reading/°C				
Rated Output:	1 mV/V Nominal				
Zero Balance:	1 mV/V				
Excitation (Recommended):	10 V ac/dc				
Terminal Resistance (Input-Output):	1000 Ω				
Insulation Resistance:	1000 MΩ @ 50 Vdc				

Rated Capacity: (N)								
Natural Frequency: (Hz)	80	130	180	350	500	590	830	TBD

## **Features:**

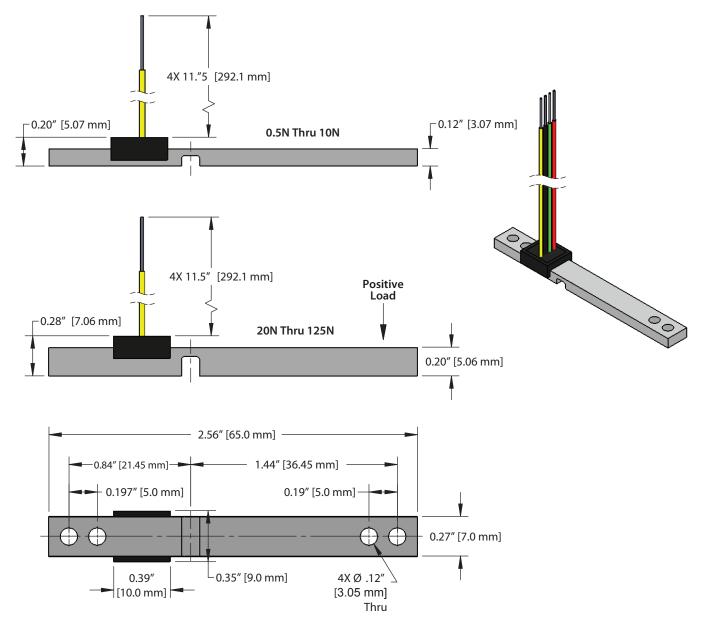
- · Compact, Low Profile Design
- · High Long Term Zero Point Stability
- · Ideally Suited for OEM Applications
- · Low Power Consumption
- · Low Hysteresis

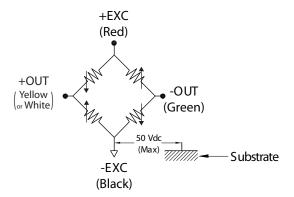
## **Applications:**

- · Medical Instrumentation Force, Displacement
- · Acceleration Measurement
- · Battery Powered Equipment
- · Food Dispensing Equipment
- · Robotics

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Part Name	Description
S100-000A	0.5 N, Aluminum, Deflection: 0.030"
S100-001	1 N, Stainless Steel, Deflection: 0.022"
S100-002	2 N, Stainless Steel, Deflection: 0.016"
S100-005	5 N, Stainless Steel, Deflection: 0.011"
S100-010	10 N, Stainless Steel, Deflection: 0.009"
S100-020	20 N, Stainless Steel, Deflection: 0.010"
S100-050	50 N, Stainless Steel, Deflection: 0.006"
S100-125	125 N, Stainless Steel, Deflection: 0.017"

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