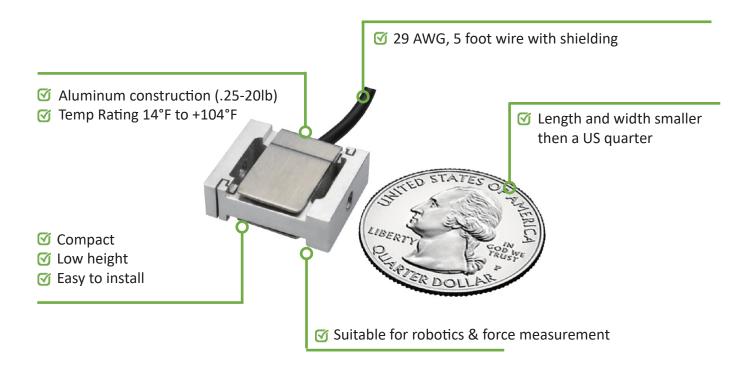


## **Miniature S-Type Load Cell**



Morehouse miniature S-type load cells from 1 lbf to 50 lbf are critical when a small-size load cell with high accuracy and low measurement risk is needed. Based on measured performance, the miniature s-type load cell represents the gold standard for miniature S-type load cells with the industry's lowest range of use, obtaining ASTM E74 Class A verified range of forces from 5 % of capacity.

The Morehouse miniature s-type load cells cost significantly less than other manufacturers selling similar products. The lower uncertainties allow for shorter setup times, less frequent standard changes, and fewer standards to maintain.

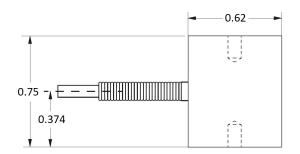
#### **Standard Features**

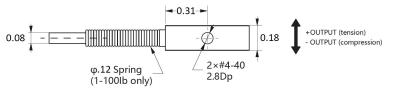
- » Ideal for field use where space is at a minimum
- » Perfect for environments requiring durable construction, such as robotics
- » ASTM E74 performance: Lower Limit Factor (LLF) better than 0.0125%, Class A better than 5 % of capacity using ascending calibration data.
- » Calibration of small force equipment
- » Applications requiring small forces with extremely high overload protection (10x up to 50 lbf capacities, 2x on 50 lbf + capacities)
- » Direct reading applications where an accuracy of better than 0.1 % is required.

# **Technical Specifications**

	Capacity						
Specifications	1.0 lbf	2.0 lbf	5.0 lbf	10 lbf	20 lbf	50 lbf	
Accuracy							
Non-Linearity, % R.O.	±0.3	± 0.2	± 0.2	± 0.1	± 0.1	± 0.1	
Hysteresis, % R.O.	± 0.2	± 0.2	± 0.2	± 0.1	± 0.1	± 0.1	
Non-Repeatability, % R.O.	± 0.1	± 0.1	± 0.1	± 0.1	± 0.1	± 0.1	
Creep, % Rdg / 20 Min.	± 0.015	± 0.015	± 0.015	± 0.015	± 0.015	± 0.015	
Off-Center Load Sensitivity, %/in	±0.1	± 0.1	± 0.1	± 0.1	± 0.1	± 0.1	
Zero Balance, % R.O.	± 0.06	± 0.06	± 0.06	± 0.06	± 0.06	± 0.06	
Temperature							
Range, Compensated, °F	+14 to +104	+14 to +104	+14 to +104	+14 to +104	+14 to +104	+14 to +104	
Range, Operating, °F	-22 to +158	-22 to +158	-22 to +158	-22 to +158	-22 to +158	-22 to +158	
Sensitivity Effect, % Rdg / 100°F	0.036	0.036	0.036	0.036	0.036	0.036	
Zero Effect, % R.O. / 100°F	0.018	0.018	0.018	0.018	0.018	0.018	
Electrical							
Recommended Excitation, VDC	10	10	10	10	10	10	
Bridge Resistance, $\Omega$	1000 +40/-3.5	350 +40/-3.5	350 +40/-3.5	350 +40/-3.5	350 +40/-3.5	350 +40/-3.5	
Insulation Bridge/Case, MegΩ	500 @50 VDC	500 @50 VDC	500 @50 VDC	500 @50 VDC	500 @50 VDC	500 @50 VDC	
Maximum Excitation, VDC	20	20	20	20	20	20	
Mechanical							
Safe Overload, % R.O.	150	150	150	150	150	150	
Weight, lb	.01	.01	.01	.01	.01	.01	
Spring Included	No	Yes	Yes	Yes	Yes	Yes	
Flexure Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Steel	

### **Dimensions**





Base Height (in/mm)	Base Width (in/mm)	Base Depth (in/mm)	Mounting Hole Diameter (in/mm)	Thread Size, Depth (in-TPI)	
.18 / 4.7	.75 / 19.1	.62 / 16	.11 / 2.8	#4-40	

## Wiring

Miniature S-T	Miniature S-Type Load Cell			
Connector Pin	Description			
Red	Excitation +			
Green	Signal +			
White	Signal -			
Black	Excitation -			

