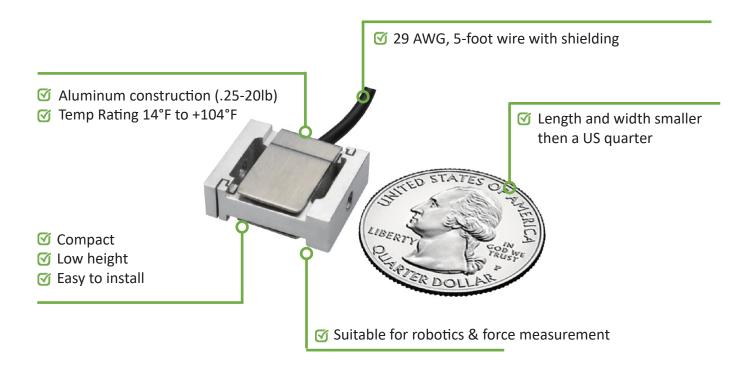


Miniature S-Type Load Cell



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.

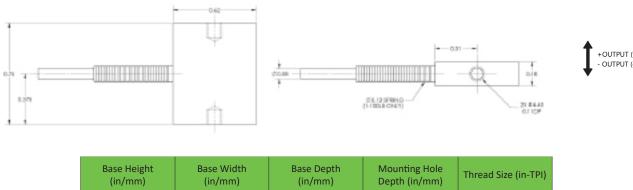
Standard Features

- » 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

Specifications	Capacity					
	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, Ω	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, % Full Scale	250	1,000	1,000	1,000	1,000	200
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



.62 / 16

.11 / 2.8

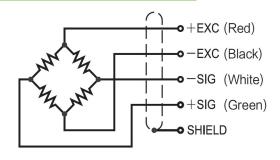
+OUTPUT (tension) - OUTPUT (compression)

Wiring

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

.75 / 19.1

.18 / 4.7



#4-40