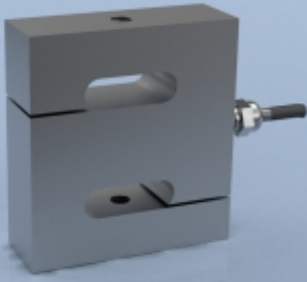


TYPE: STA-1



STA-1 Aluminium S Type Tension & Compression Load Cell

Description

The STA-1 load cell series is ideal for measuring both tensile and compressive forces. The standard metric threads at each end of the load cell are designed to accept standard spherical seating rod-end bearings.

The STA-1 is suitable for many applications, including harsh environments, where a tension and compression load cell is required for high accuracy measurements. Applications such as vessel weighing, material test machines and dynamometers are a few examples.

The STA-1 series can be supplied on its own or combined with our extensive range of instrumentation to provide a complete load monitoring system.

Specification

Rated load (kg)	50, 100, 200, 300	
Proof load	150% of rated load	
Ultimate breaking load	>300% of rated load	
Output	2mV/V at rated load ($\pm 0.2\%$)	
Accuracy	$< \pm 0.02\%$ of rated load	
Non-repeatability	$< \pm 0.01\%$ of rated load	
Excitation voltage	10vdc recommended, 15vdc maximum	
Bridge resistance	415 Ω	
Insulation resistance	>2000M Ω at 100vdc	
Operating temperature range	-30 to +70°C	
Compensated temperature range	-10 to +40°C	
Zero temperature coefficient	$< \pm 0.002\%$ of rated load/°C	
Span temperature coefficient	$< \pm 0.001\%$ of rated load/°C	
Environmental protection level	IP67	
Connection type	3 metres PVC screened cable, via gland cable	
Wiring connections	+supply: Green	-supply: Black
	+signal: Red	-signal: White
	+sense: Blue	-sense: Brown

Available Options

- Spherical seating rod end bearings
- Compression load button
- TEDS option (when used with TR150 handheld display)

Features

- Ranges: 50, 100, 200, 300kg
- Aluminium alloy construction
- Environmentally sealed to IP67
- Can be supplied complete with mating spherical rod-end bearings
- Suitable for use in harsh environments

Typical Applications

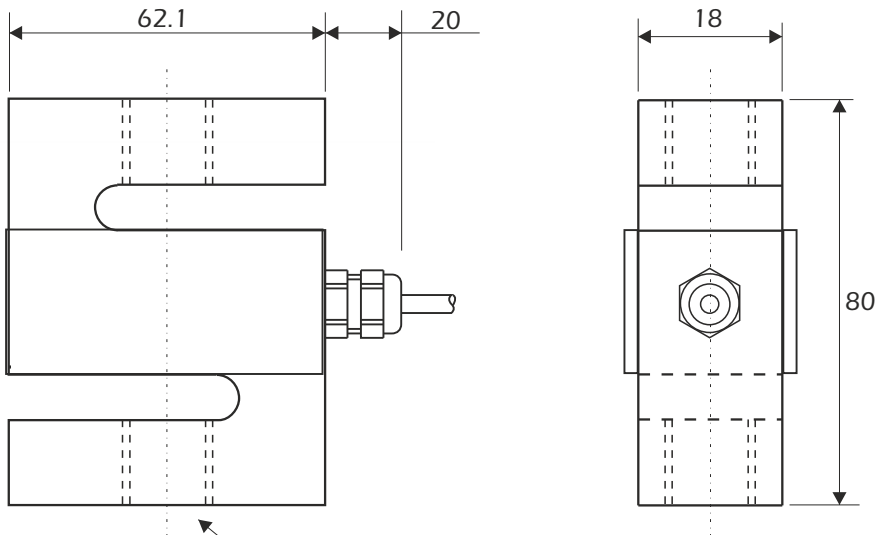
- Hanging scales
- Material test machines
- Engine/motor dynamometers
- Hopper/tank weighing
- General force measurement

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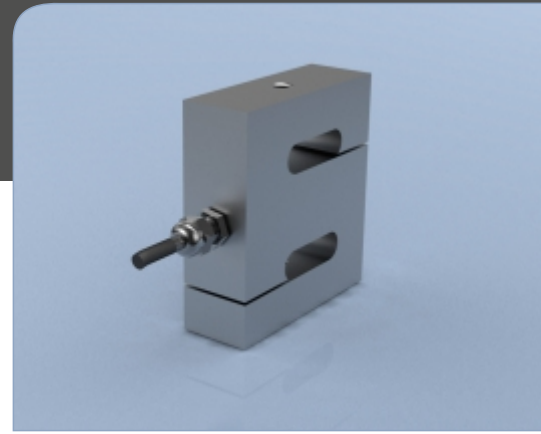
Dimensions



End Threads
M12 x 1.75 (both ends)

Rating (kgs)	Part Number	Weight (g)	Resolution (kgs)
50	STA-1-50	429	0.005
100	STA-1-100	429	0.01
200	STA-1-200	429	0.02
300	STA-1-300	429	0.02

Note: default calibration of these load cells will be in tension. If you require calibration in compression or both tension & compression, please state at time of order (additional charges may apply).



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Due to continual product development, LCM Systems Ltd reserves the right to alter product specifications without prior notice.

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APPROVED

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