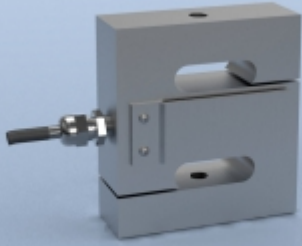


## TYPE: STA-3



# STA-3 Alloy Steel S Type Tension & Compression Load Cell

## Description

The STA-3 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-3 is suitable for many applications 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. This range of products is also ideally suited for many other OEM load measurement projects, offering a highly cost effective solution for a wide variety of industrial applications.

The STA-3 series can be supplied on its own or combined with our extensive range of instrumentation to provide a complete load monitoring system.

## Features

- Ranges from 50 to 1000kg
- Alloy steel nickel plated construction
- Environmentally sealed to IP67
- Can be supplied complete with mating spherical rod-end bearings

## Specification

Rated load (kg)	50, 100, 200, 300, 500, 1000	
Proof load	150% of rated load	
Ultimate breaking load	>300% of rated load	
Output	2mV/V at rated load ( $\pm 0.002\text{mV/V}$ )	
Accuracy	$< \pm 0.02\%$ of rated load	
Non-repeatability	$< \pm 0.01\%$ of rated load	
Excitation voltage	10vdc recommended, 15vdc maximum	
Bridge resistance	350 $\Omega$	
Insulation resistance	>2000M $\Omega$ at 100vdc	
Operating temperature range	-30 to +70°C	
Compensated temperature range	-10 to +40°C	
Zero temperature coefficient	$< \pm 0.004\%$ of rated load/°C	
Span temperature coefficient	$< \pm 0.001\%$ of rated load/°C	
Environmental protection level	IP67	
Connection type	3 metre 6 wire PVC screened cable, via gland cable	
Wiring connections	+supply: Green	-supply: Black
	+signal: Red	-signal: White
	+sense: Blue	-sense: Brown

## Typical Applications

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

## Available Options

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

### AVAILABLE TO BUY ONLINE

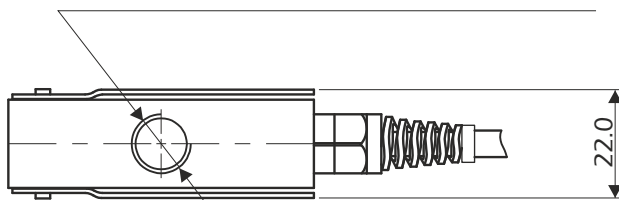
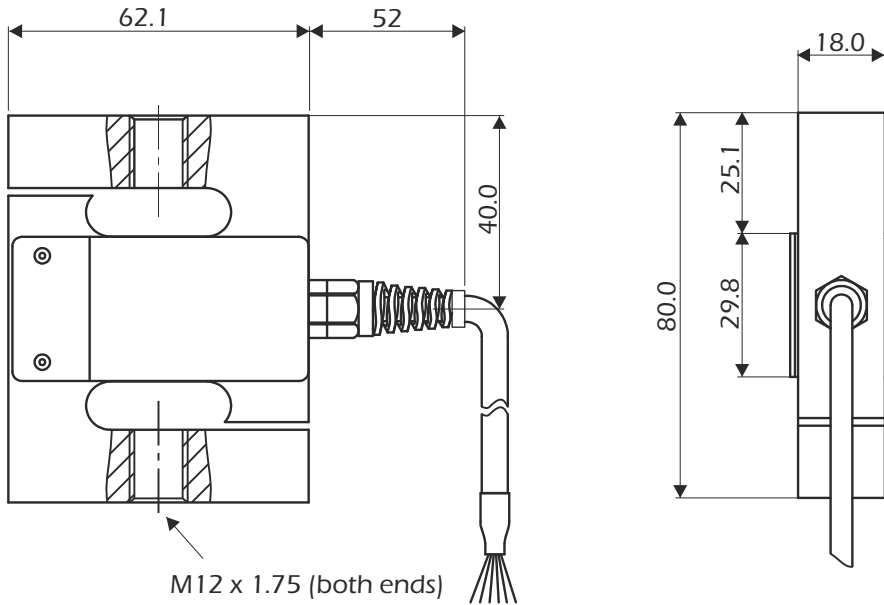
Visit our website [www.lcmsystems.com](http://www.lcmsystems.com)  
(In-stock items usually ship within 48 hours)

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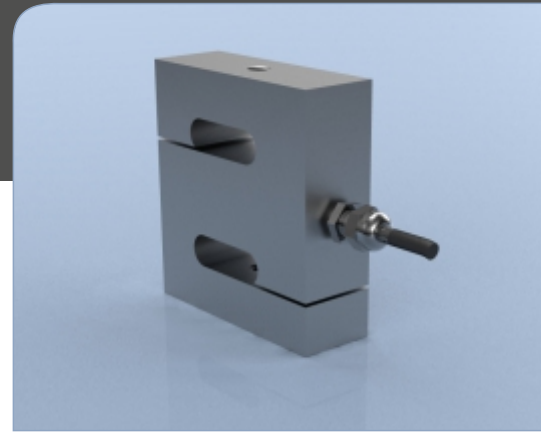
## Dimensions



All dimensions are in mm

Rating (kgs)	Part Number	Weight (kgs)	Resolution (kgs)
50	STA-3-50	1.1	0.005
100	STA-3-100	1.1	0.01
200	STA-3-200	1.1	0.02
300	STA-3-300	1.1	0.02
500	STA-3-500	1.1	0.05
1000	STA-3-1000	1.1	0.1

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

(unapproved if printed)