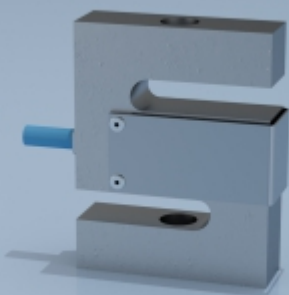




## TYPE: STA-4



# STA-4 Nickel Plated Tool Steel S Type Tension & Compression Load Cell

## Description

The STA-4 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-4 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 concrete batching equipment 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-4 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 50kg to 5000kg
- Nickel plated tool steel construction
- Environmentally sealed to IP67
- Can be supplied complete with mating spherical rod-end bearings

## Specification

Rated load (kg)	50, 100, 300, 500, 1000, 1500, 2000, 3000, 5000	
Proof load	150% of rated load	
Ultimate breaking load	300% of rated load	
Output	2mV/V at rated load $\pm 0.1\%$	
Combined error	$< \pm 0.017\%$ of rated load	
Non-repeatability	$< \pm 0.015\%$ of rated load	
Creep (30 minutes)	$< \pm 0.016\%$ of rated load	
Zero balance	$< \pm 2\%$ of rated load	
Input resistance	400 $\Omega$ $\pm 20\Omega$	
Output resistance	350 $\Omega$ $\pm 3\Omega$	
Insulation resistance	$> 5000M\Omega$ at 100Vdc	
Supply voltage	10vdc recommended, 15vdc maximum	
Temperature effect on zero balance	$< \pm 0.002\%$ of rated load/ $^{\circ}C$	
Temperature effect on span	$< \pm 0.0012\%$ of rated load/ $^{\circ}C$	
Compensated temperature range	-10 to $+40^{\circ}C$	
Operating temperature range	-30 to $+70^{\circ}C$	
Environmental protection level	IP67	
Connection type	5 metre PUR screened cable ( $\varnothing 6.3mm$ ), via gland cable	
Wiring connections	+supply: Red	-supply: Blue
	+signal: Green	-signal: Yellow
	+sense: Black	-sense: White

## Typical Applications

- Hanging scales
- Material test machines
- Conveyors
- Process weighing
- General force measurement

## Available Options

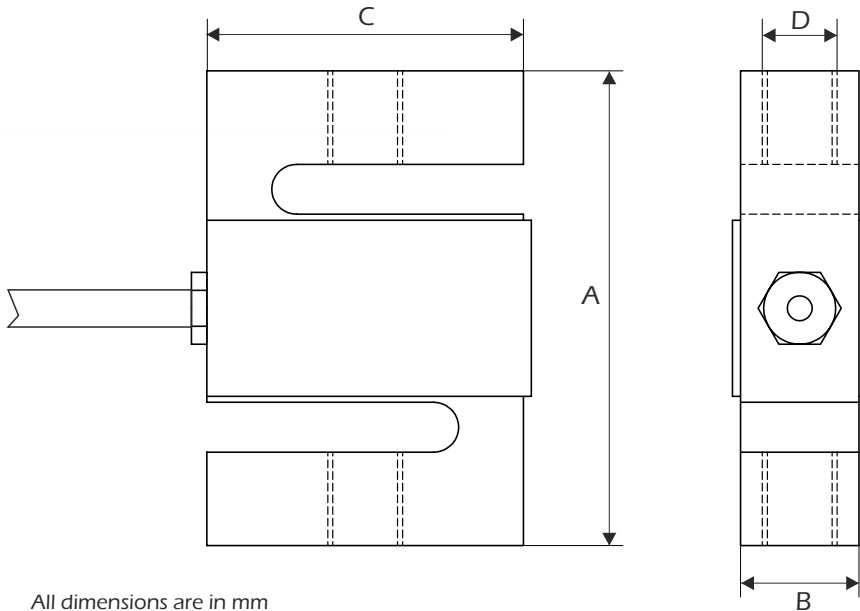
- Spherical seating rod end bearings
- Adaptors for use in compression/bi-directional use
- TEDS option (when used with TR150 handheld display)

AVAILABLE TO BUY ONLINE

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

# STA-4 Nickel Plated Tool Steel S Type Tension & Compression Load Cell

## Dimensions

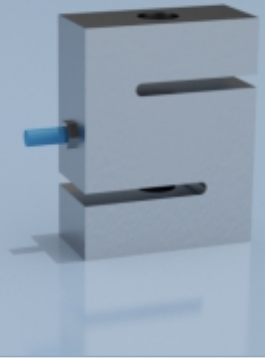


All dimensions are in mm

Rating (kgs)	Part Number	A	B	C	D	Weight (kgs)	Resolution (kgs)
50	STA-4-50	80	19	62.1	M12 X 1.75	0.7	0.005
100	STA-4-100	80	19	62.1	M12 X 1.75	0.7	0.01
300	STA-4-300	80	19	62.1	M12 X 1.75	0.7	0.02
500	STA-4-500	80	19	62.1	M12 X 1.75	0.7	0.05
1000	STA-4-1000	80	19	62.1	M12 X 1.75	0.7	0.1
1500	STA-4-1500	90	32	70	M16 X 2	1.25	0.1
2000	STA-4-2000	90	32	70	M16 X 2	1.25	0.2
3000	STA-4-3000	120	45	100	M24 X 2	3.25	0.2
5000	STA-4-5000	120	45	100	M24 X 2	3.25	0.5

**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).**

When paired with instrumentation, accuracy figures may become subject to system inaccuracies. Please refer to calibration certificate for actual performance.



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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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