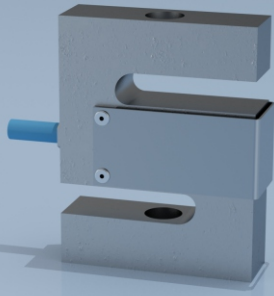




TYPE: STA-4



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.

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 Ω $\pm 20\Omega$ | |
| Output resistance | 350 Ω $\pm 3\Omega$ | |
| 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 |

Available Options

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

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



SCIGATE AUTOMATION (S) PTE LTD

No.1 Bukit Batok Street 22 #01-01 Singapore 659592

Tel: (65) 6561 0488

Fax: (65) 6562 0588

Email: sales@scigate.com.sg

Web: www.scigate.com.sg

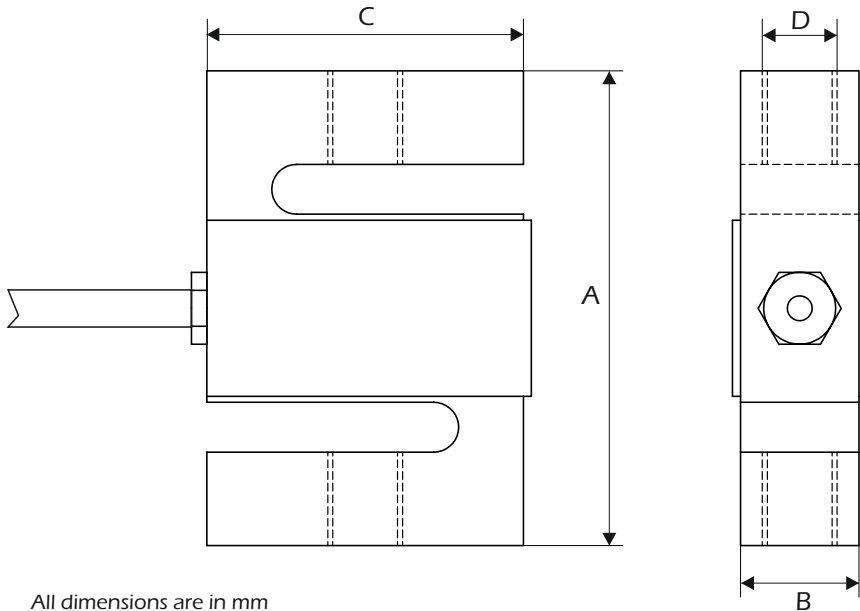
Business Hours: Monday - Friday 8.30am - 6.15pm

Typical Applications

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

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

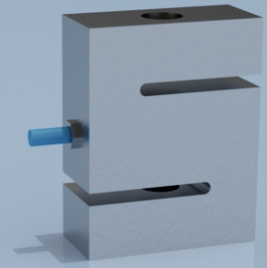
Dimensions



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).



LCM Systems Ltd

Unit 15, Newport Business Park, Barry Way
Newport, Isle of Wight PO30 5GY UK

Tel: +44 (0)1983 249264

sales@lcm systems.com

www.lcm systems.com

LCM Systems (România)

Strada Ștefan Cel Mare 26a,
Tunari, cod.077180, Ilfov, România

Tel: +40 (0)77 4641899

ro@lcm systems.com

www.lcm systems.ro

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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