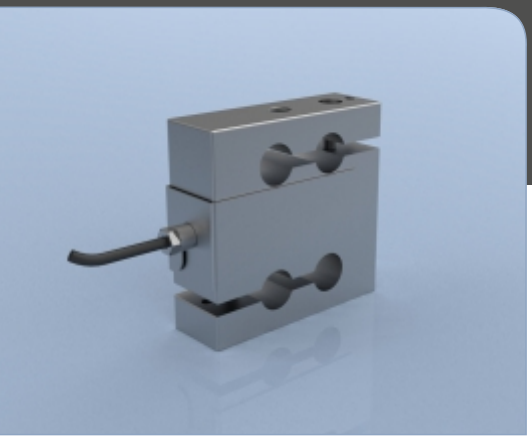
TYPE: STA-7



STA-7 Aluminium Alloy S Type Low Range Tension/Compression Load Cell

Features

- Ranges: 1, 2, 5, 10, 25, 50kg
- High accuracy
- Aluminium alloy
- Weighs only 300g
- Integral overload stops on 1, 2 & 5kg versions

Typical Applications

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

AVAILABLE TO BUY ONLINE
Visit our website www.lcmsystems.com
(In-stock items usually ship within 48 hours)

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Description

The STA-7 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-7 is suitable for many applications where a tension and compression load cell is required for high accuracy measurements, including material test machines, weighing and general force measurement. Tension and compression overload stops are supplied as standard on all ranges up to 5kg. This feature helps to protect the load cell against accidental damage up to 500% of the load cell range.

The STA-7 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)	1, 2, 5, 10, 25, 50
Proof load	1, 2, 5kg: 500% of rated load (using overload stops) 10, 25, 50kg: 150% of rated load
Ultimate breaking load	300% of rated load
Maximum transverse load	<50% of rated load
Output	2mV/V (±0.1%)
Zero balance	<±1% of rated load
Linearity	<±0.03% of rated load
Hysteresis	<±0.03% of rated load
Non-repeatability	<±0.01% of rated load
Transverse load effect (at 10%)	<±0.03% of rated load
Excitation voltage	10vdc recommended, 15vdc maximum
Input resistance	440Ω ±20Ω
Output resistance	350Ω ±2Ω
Insulation resistance	>5GΩ @ 50vdc
Compensated temperature range	-10 to +40°C
Operating temperature range	-20 to +70°C
Storage temperature range	-20 to +80°C
Zero temperature coefficient	<±0.003% of rated load/°C
Span temperature coefficient	<±0.003% of rated load/°C
Environmental protection level	IP20
Natural frequency	1kg 2kg 5kg 10kg 25kg 50kg 220Hz 500Hz 750Hz 1kHz 1.5kHz 2kHz
Connection type	3 metres PVC screened cable, via gland cable
Wiring connections	+supply: Red -supply: Black +signal: White -signal: Yellow

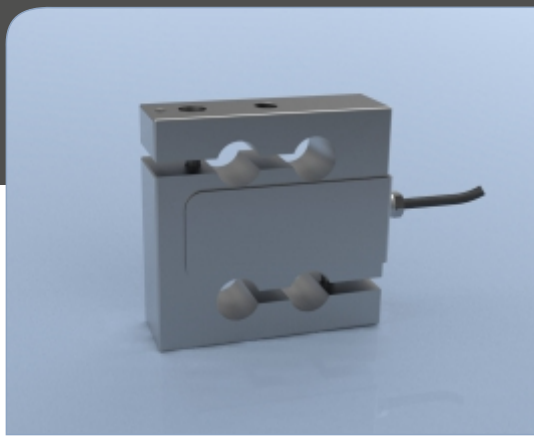
Available Options

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

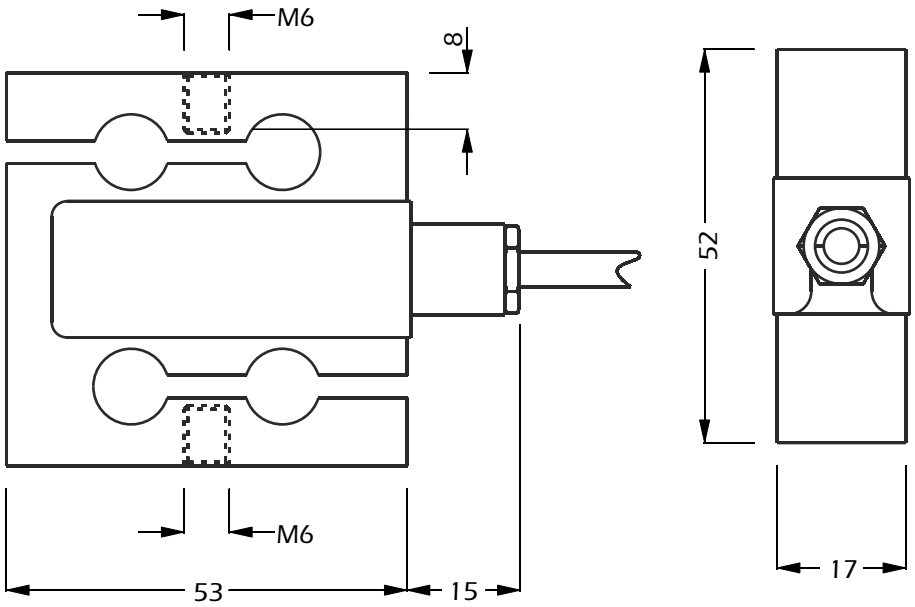
LCM SYSTEMS
Solutions in Load Cell Technology

TYPE: STA-7

STA-7 Aluminium Alloy S Type Low Range Tension/Compression Load Cell



Dimensions



All dimensions are in mm

Rating (kgs)	Part Number	Weight (kgs)	Resolution (kgs)
1	STA-7-1	300	0.0002
2	STA-7-2	300	0.0002
5	STA-7-5	300	0.001
10	STA-7-10	300	0.002
25	STA-7-25	300	0.005
50	STA-7-50	300	0.01

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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