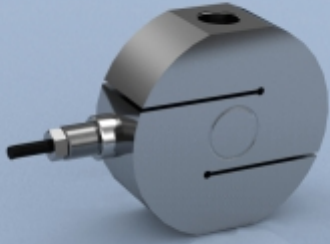


TYPE: STA-8



STA-8 Stainless Steel S Type Tension & Compression Load Cell

Description

The STA-8 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-8 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.

The STA-8 series can be supplied on its own or combined with our extensive range of instrumentation to provide a complete load monitoring system.

Features

- Ranges: 10kg to 10te
- Stainless steel fully welded construction
- Environmentally sealed to IP68
- Can be supplied complete with mating spherical rod-end bearings

Specification

Rated load (kg/tonne)	10, 25, 50, 100, 200, 300, 500 kg 1, 2, 2.5, 5, 7.5, 10 tonne
Proof load	150% of rated load
Ultimate breaking load	>300% of rated load
Output	2mV/V at rated load (±0.1%)
Accuracy	<±0.023% of rated load
Non-repeatability	<±0.015% of rated load
Excitation voltage	10vdc recommended, 18vdc maximum
Bridge resistance	350Ω
Insulation resistance	>5GΩ
Operating temperature range	-20 to +70°C
Compensated temperature range	-10 to +40°C
Storage temperature range	-20 to +80°C
Zero temperature coefficient	<±0.0028% of rated load/°C
Span temperature coefficient	<±0.0012% of rated load/°C
Displacement at full load	~0.2mm
Maximum dynamic load	50%
Environmental protection level	IP68 (100h at 1m submersion)
Connection type	5 metres PVC screened cable, via gland cable
Wiring connections	+supply: Red -supply: Black +signal: White -signal: Yellow

Typical Applications

- Vessel weighing
- Hanging scales
- Multipoint structural weighing
- Material/tensile test machines
- General force measurement

Available Options

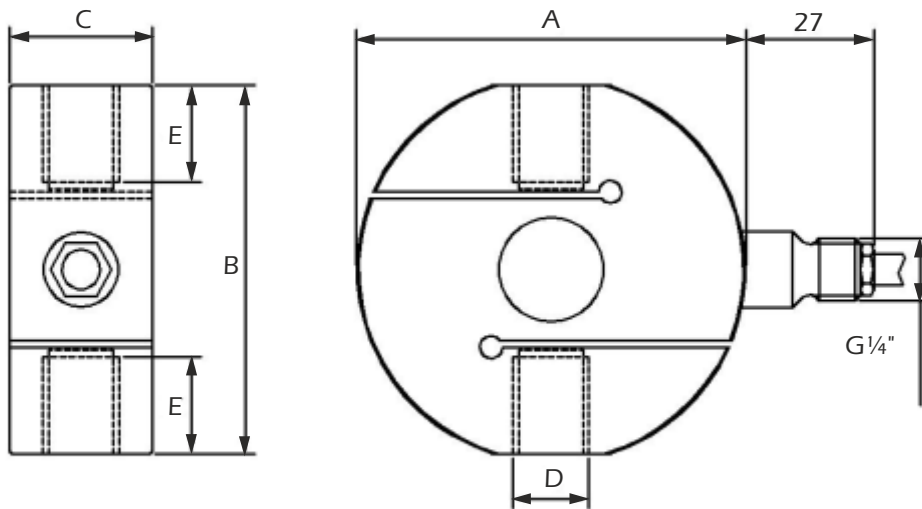
- Spherical seating rod end bearings
- TEDS option (when used with TR150 handheld display)

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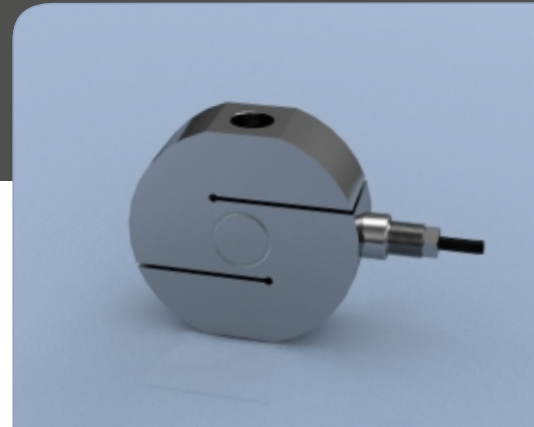
STA-8 Stainless Steel S Type Tension & Compression Load Cell

Dimensions



Rating	Part Number	A	B	C	D	E	Natural Frequency	Resolution	Weight (kg)
10kg	STA-8-10	63.5	59.5	22	M12 x 1.75	12	~0.35kHz	0.002	0.6
25kg	STA-8-25	63.5	59.5	22	M12 x 1.75	12	~0.65kHz	0.005	0.6
50kg	STA-8-50	63.5	59.5	22	M12 x 1.75	12	~1.05kHz	0.01	0.6
100kg	STA-8-100	63.5	59.5	22	M12 x 1.75	12	~1.25kHz	0.01	0.6
200kg	STA-8-200	63.5	59.5	22	M12 x 1.75	12	~1.75kHz	0.02	0.6
300kg	STA-8-300	63.5	59.5	22	M12 x 1.75	12	~1.75kHz	0.02	0.6
500kg	STA-8-500	63.5	59.5	22	M12 x 1.75	12	~1.8kHz	0.05	0.6
1te	STA-8-1TE	82	78	30	M16 x 2	20	~2.5kHz	0.1	1.2
2te	STA-8-2TE	82	78	30	M16 x 2	20	~2.5kHz	0.2	1.2
2.5te	STA-8-2.5TE	82	78	30	M20 x 1.5	20	~3.25kHz	0.2	1.2
5te	STA-8-5TE	102	90	45	M24 x 2	21.5	~3.2kHz	0.5	2.6
7.5te	STA-8-7.5TE	102	90	45	M24 x 2	21.5	~3kHz	0.5	2.6
10te	STA-8-10TE	127	120	50	M30 x 2	29	~3.25kHz	1	4.4

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)