

S-Type Load Cell



FEATURES

- Capacities: 25 to 5000kg, 250 to 40Klb
- Alloy steel construction
- Stainless steel available
- Bi-direction(tension/compression)
- Rationalized output
- NTEP Class III 5000S, III L10000 approval from 250lb to 20Klb

OPTIONAL FEATURE

- FM approval available

DESCRIPTION

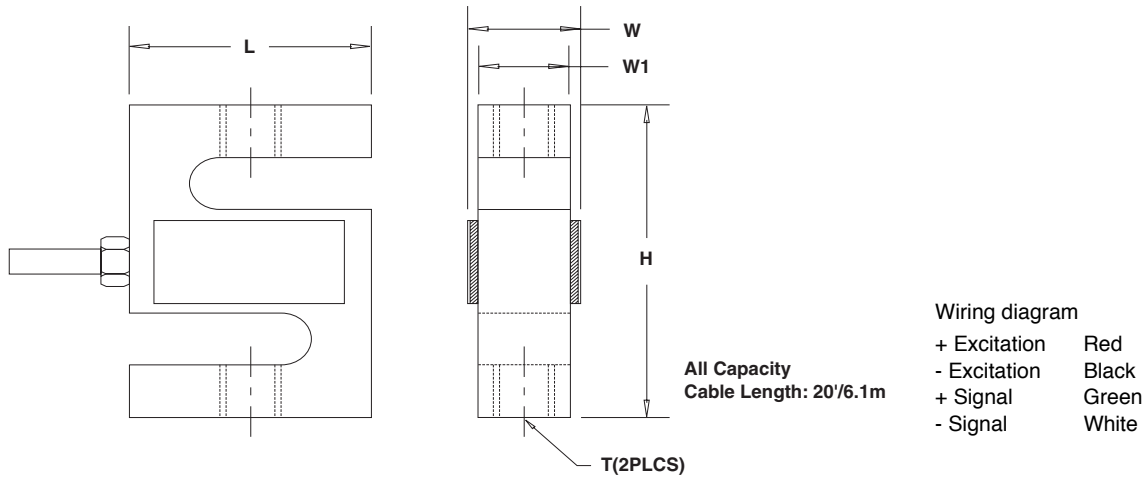
S Type load cell as the name indicated can be easily identified by S-shaped body. They can be loaded either in tension or compression, and used for single or multiple-cell application if the output is rationalized.

STC is made of alloy or stainless steel, sealed to IP67 providing excellent protection against moisture and humidity.

APPLICATIONS

- Electro-mechanical conversion scales
- Silo/hopper/tank weighing
- Crane scales
- Fork-lift scales
- Dosing/filling
- Universal material tester
- Tensile/pulling force measurement

OUTLINE DIMENSIONS



| CAPACITY | | L | W | W1 | H | T |
|-----------------------------|--------|-------|-------|------|-------|------------|
| 25/50/75kg | mm | 50.8 | 26.7 | 12.7 | 63.5 | M6 x 1.0 |
| | (inch) | 2.00 | 1.05 | 0.50 | 2.50 | |
| 100/150kg | mm | 50.8 | 22.92 | 19.1 | 76.2 | M10 x 1.5 |
| | (inch) | 2.00 | 0.9 | 0.75 | 3.00 | |
| 250/300lb | mm | 50.8 | 26.7 | 12.7 | 76.2 | 3/8-24UNF |
| | (inch) | 2.00 | 1.05 | 0.50 | 3.00 | |
| 250kg 500/750lb | mm | 50.8 | 30.4 | 19.1 | 76.2 | M12 x 1.75 |
| | (inch) | 2.00 | 1.2 | 0.75 | 3.00 | 1/2-20UNF |
| 500/750kg | mm | 50.8 | 25.4 | 19.1 | 76.2 | M12 x 1.75 |
| | (inch) | 2.00 | 1.00 | 0.75 | 3.00 | |
| 1K/1.5Klb | mm | 50.8 | 26.1 | 19.1 | 76.2 | 1/2-20UNF |
| | (inch) | 2.00 | 1.03 | 0.75 | 3.00 | |
| 1000/1500kg 2K/2.5K/3Klb | mm | 50.8 | 31.8 | 25.4 | 76.2 | M12 x 1.75 |
| | (inch) | 2.00 | 1.25 | 1.00 | 3.00 | 1/2-20UNF |
| 5K/7.5Klb | mm | 76.2 | 31.8 | 25.4 | 107.9 | 3/4-16UNF |
| | (inch) | 3.00 | 1.25 | 1.00 | 4.25 | |
| 2000/2500/5000kg | mm | 76.2 | 38.1 | 31.8 | 100.4 | M20 x 1.5 |
| | (inch) | 3.00 | 1.50 | 1.25 | 3.95 | |
| 10Klb | mm | 88.9 | 31.8 | 25.4 | 120.7 | 3/4-16UNF |
| | (inch) | 3.50 | 1.25 | 1.00 | 4.75 | |
| 15Klb | mm | 101.6 | 38.1 | 31.8 | 139.7 | 1-14UNS |
| | (inch) | 4 | 1.50 | 1.25 | 5.50 | |
| 20Klb | mm | 127 | 55.7 | 50.8 | 177.8 | 11/4-12UNF |
| | (inch) | 5 | 2.19 | 2 | 7.00 | |
| 40Klb | mm | 152.4 | 69.9 | 63.5 | 254.0 | 11/2-12UNF |
| | (inch) | 6.00 | 2.75 | 2.50 | 10.00 | |



SPECIFICATIONS

| PARAMETER | VALUE | | UNIT |
|---|---|------------------|-----------------------|
| | NTEP III & IIL | Non-Approved | |
| NTEP/OIML Accuracy class | | | |
| Maximum no. of intervals (n) | III 5000 single* IIL 10000 single* | 2000 | |
| $Y = E_{max}/V_{min}$ | 10000 | 5000 | Maximum available |
| Standard capacities (E_{max}) | 25, 50, 75, 100, 250, 500, 750, 1000, 1500, 2000, 2500, 5000 | | kg |
| Standard capacities (E_{max}) | 250, 300, 500, 750, 1K, 1.5K, 2K, 2.5K, 3K, 5K, 7.5K, 10K, 15K, 20K, 40K | | lbs |
| Rated output-R.O. | 3.0 | | mV/V |
| Rated output tolerance | 0.25 | | ±% of rated output |
| Zero balance | 1 | | ±% of rated output |
| Non linearity | 0.020 | 0.020 (SS: 0.05) | ±% of rated output |
| Hysteresis | 0.020 | 0.020 (SS: 0.05) | ±% of rated output |
| Non-repeatability | 0.020 | | ±% of rated output |
| Creep error (20 minutes) | 0.030 | | ±% of rated output |
| Zero return (20 minutes) | 0.030 | | ±% of rated output |
| Temperature effect on min. dead load output | 0.0015 | 0.0026 | ±% of rated output/°C |
| Temperature effect on sensitivity | 0.0010 | 0.0015 | ±% of applied load/°C |
| Compensated temperature range | -10 to +40 | | °C |
| Operating temperature range | -20 to +60 | | °C |
| Safe overload | 150 | | % of R.C. |
| Ultimate overload | 300 | | % of R.C. |
| Excitation, recommended | 10 | | Vdc or Vac rms |
| Excitation, maximum | 15 | | Vdc or Vac rms |
| Input impedance | 385±5 | | Ohms |
| Output impedance | 350±3 | | Ohms |
| Insulation resistance | >5000 | | Mega-Ohms |
| Construction | Nickel plated alloy steel** | | |
| Environmental protection | IP67 | | |

* Capacities 250-20Klbs

** Stainless steel available

All specifications listed subject to change without notice.

FM Approval

Intrinsically Safe: Class I, II, III; Div. 1 Groups A-G

Non-Incendive: Class I; Div. 2 Groups A-D

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