

# SuperSC S-TYPE MINIATURE LOAD CELL (U.S. & METRIC)

## FEATURES & BENEFITS

- High force in a compact design
- Environmentally sealed IP66
- Economical general purpose load cell
- High stiffness/low deflection
- Insensitive to off axis loading

## SPECIFICATIONS

| Capacity                          | lbf               | 25          | 50    | 100             | 250   | 500  | 1K       |  |
|-----------------------------------|-------------------|-------------|-------|-----------------|-------|------|----------|--|
|                                   | N                 | 100         | 200   | 500             | 1K    | 2.5K | 5K       |  |
| <b>ACCURACY – (MAX ERROR)</b>     |                   |             |       |                 |       |      |          |  |
| Nonlinearity – %FS                |                   |             |       |                 |       |      | ±0.10    |  |
| Hysteresis – %FS                  |                   |             |       |                 |       |      | ±0.10    |  |
| Nonrepeatability – %RO            |                   |             |       |                 |       |      |          |  |
| Static Error Band – %FS MAX       |                   |             |       |                 |       |      |          |  |
| Creep, in 20 min – % MAX          |                   |             |       |                 |       |      | ±0.05    |  |
| <b>TEMPERATURE</b>                |                   |             |       |                 |       |      |          |  |
| Compensated Range                 | °F                | 0 to +150   |       |                 |       |      |          |  |
|                                   | °C                | -15 to +65  |       |                 |       |      |          |  |
| Operating Range                   | °F                | -65 to +200 |       |                 |       |      |          |  |
|                                   | °C                | -55 to +90  |       |                 |       |      |          |  |
| Effect on Output – % / °F         |                   |             |       |                 |       |      | ±0.0010  |  |
| Effect on Zero – %RO / °F         |                   |             |       |                 |       |      | ±0.0035  |  |
| <b>ELECTRICAL</b>                 |                   |             |       |                 |       |      |          |  |
| Rated Output – mV/V (Nominal)     |                   |             |       |                 |       |      | 2.0 ±15% |  |
| Zero Balance – %RO                |                   |             |       |                 |       |      | ±5.0     |  |
| Bridge Resistance – Ohm (Nominal) |                   |             |       |                 |       |      | 350      |  |
| Excitation Voltage – VDC MAX      |                   |             |       |                 |       |      | 15       |  |
| Insulation Resistance – Megohm    |                   |             |       |                 |       |      | 5000     |  |
| <b>MECHANICAL</b>                 |                   |             |       |                 |       |      |          |  |
| Deflection @ RO                   | in                | 0.001       | 0.002 | 0.001           | 0.002 |      |          |  |
|                                   | mm                | 0.03        | 0.05  | 0.03            | 0.05  |      |          |  |
| Natural Frequency – Hz            |                   | 4880        | 5500  | 5070            | 6200  |      |          |  |
| Calibration                       | Tension           |             |       |                 |       |      |          |  |
| Safe Axial Load – %CAP MAX        |                   |             |       |                 |       |      | 150      |  |
| Weight                            | lb                | 0.05        |       | 0.1             |       | 0.26 |          |  |
|                                   | kg                | 0.02        |       | 0.05            |       | 0.12 |          |  |
| Material                          | Anodized Aluminum |             |       | Stainless Steel |       |      |          |  |

## OPTIONS

- High temperature version up to 300 °F
- Standardized output
- Submersible
- Fatigue rated (half output)
- Special calibrations (ISO 376, E74, 5 point)

## STANDARD CONFIGURATION



Model SSC-25LBF (Shown)



Model SSC-250LBF (Shown)



Model SSC-500LBF (Shown)

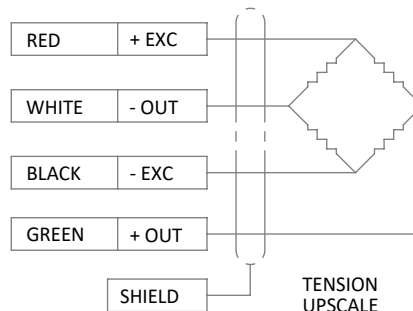
## ACCESSORIES

- Pre-installed rod end bearings (See REB-104 for imperial & REB-204 for metric)

## CONNECTOR OPTIONS

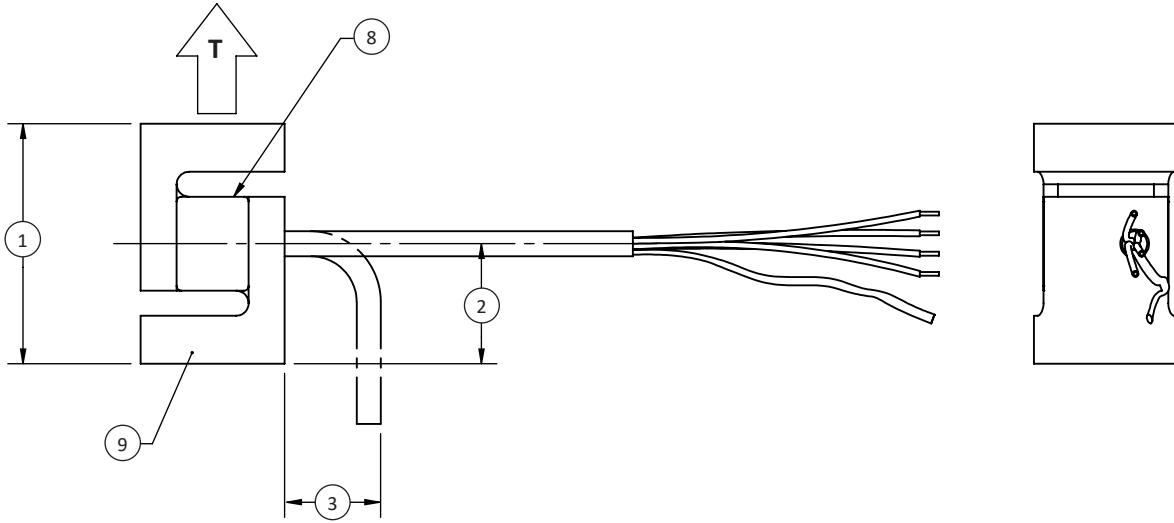
- 5 ft (1.5 m) integral cable

## WIRING DIAGRAM

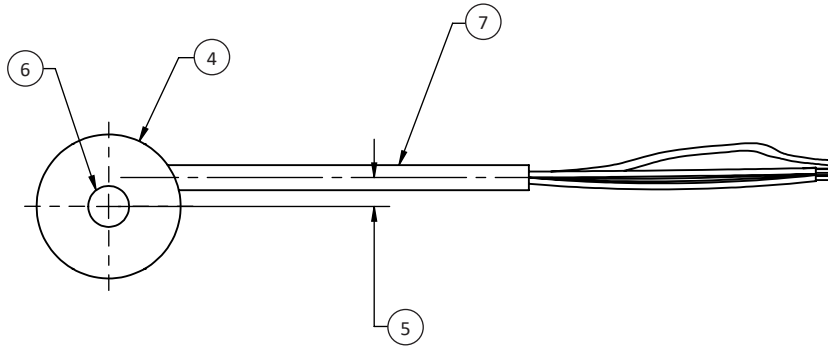


## SuperSC S-TYPE MINIATURE LOAD CELL (U.S. & METRIC)

**SIDE VIEW**



**TOP VIEW**



**Notes:**  
 \* T indicates tension load direction / primary axis

### DIMENSIONS

| See Drawing | CAPACITY   |   |  |   |  |   |             |  |
|-------------|--|---|--|---|--|---|-------------|--|
|             | US (lbf)   |   | Metric (N)   |   | US (lbf)   |   | Metric (kN) |  |
|             | 25, 50   | 100, 200  | 100, 250   | 500, 1000   | 500, 1000  | 2.5, 5  |             |  |
|             | in   | mm  | in   | mm  | in   | mm  |             |  |
| (1)         | 1.25   | 31.8  | 1.25   | 31.8  | 1.63   | 41.3  |             |  |
| (2)         | 0.63   | 15.9  | 0.63   | 15.9  | 0.81   | 20.6  |             |  |
| (3)         | 0.50   | 12.7  | 0.50   | 12.7  | 0.50   | 12.7  |             |  |
| (4)         | ∅0.75  | ∅19.1   | ∅0.75  | ∅19.1   | ∅1.00  | ∅25.4   |             |  |
| (5)         | 0.15   | 3.8   | 0.15   | 3.8   | 0.17   | 4.4   |             |  |
| (6)         | ¼-28 UNF-2B  | M6 x 1-6H   | ¼-28 UNF-2B  | M6 x 1-6H   | ⅜-24 UNF-2B  | M8 X 1.25-6H  |             |  |
| (7)         | 0.13 O.D. 4 Conductor 28 Gauge PVC Shielded Ultra-Flex Cable | 3.3 O.D. 4 Conductor 28 Gauge PVC Shielded Ultra-Flex Cable | 0.13 O.D. 4 Conductor 28 Gauge PVC Shielded Ultra-Flex Cable | 3.3 O.D. 4 Conductor 28 Gauge PVC Shielded Ultra-Flex Cable | 0.13 O.D. 4 Conductor 28 Gauge PVC Shielded Ultra-Flex Cable | 3.3 O.D. 4 Conductor 28 Gauge PVC Shielded Ultra-Flex Cable |             |  |
| (8)         | Silicone Potting   |   |  |   |  |   |             |  |
| (9)         | Anodized Aluminum  |   |  | Stainless Steel   |  |   |             |  |