

Globally Approved for Accuracy and Safety



Tank Weighing

The SLC611 load cell with capacity range from 7.5t to 22.5t, allows the weighing of mid size tanks, hoppers and silos with ease. The stainless steel design, hermetic sealing and IP68 / IP69K protection provides the best reliability in tank weighing applications.



Hermetically Sealed

The stainless steel housing is welded in place to create a hermetic seal to prevent moisture from entering the interior of the load cell and deteriorating the weighing performance or causing failure.



SWC515 PinMount™

The weigh module SWC515 PinMount™ adds suspension, checking and anti-tipping to your SLC611 load cell and includes top and bottom mounting plates to simplify installation. Available in zinc plated mild steel or stainless steel.

SLC611 Load Cell

Every SLC611 load cell features:

- OIML 3000e, NTEP III M 5000d approvals
- ATEX Zone 0/1/2 and 20/21/22
- FM Class I,II,III Div 1/2 approved
- Stainless steel
- Hermetically sealed design
- IP68, IP69K protection class

The SLC611 is approved for use in various applications in Europe, Asia, America and almost everywhere else in the world. If an approval is required, the SLC611 probably already complies.

SLC611 Load Cell Specifications

| Parameter | unit of measure | Specification | | |
|---|---|---|---------------------|-------------------------|
| Model No. | | SLC611 | | |
| Rated Capacity (R.C.) | f (klb nominal) | 7.5 (16.5) | 15 (33) | 22.5 (49.6) |
| Rated Output | mV/V @ R.C. | 2 ± 0.1% | | |
| Zero load Output | %R.C. | ≤ 1 | | |
| Combined Error ^{1), 2)} | %R.C. | ≤ 0.018 | | |
| Repeatability Error | %A.L. ³⁾ | ≤ 0.01 | | |
| Creep, 30 minute | %A.L. | ≤ 0.017 | | |
| Min. Dead Load Output Return (DR), 30 min | %A.L. | ≤ 0.017 | | |
| Temperature Effect on | Min. Dead Load Output Sensitivity ²⁾ | %R.C./°C (.../°F) | | |
| | | %A.L./°C (.../°F) | | |
| Temperature Range | Compensated | °C (°F) | | |
| | Operating | -10 ~ +40 (-14 ~ +104) | | |
| | Safe Storage | -40 ~ +65 (-40 ~ +149) | | |
| OIML/European Approval ⁴⁾ | OIML Cert. No. | R60/2000-CN1-14.10 | | |
| | European Cert. No. | TC8669 | | |
| | Class | C3 | | |
| | n _{max} | 3000 | | |
| | Y | 7800 | | |
| | PLC | 0.7 | | |
| | Humidity Symbol | CH | | |
| | Min. dead load | kg (lb) | 0 (0) | |
| | Z | | 3000 | |
| | Barometric Pressure Effect | Vmin/kPa | < 1 | |
| NTEP Approval ⁴⁾ | Number | 15-011 | | |
| | Class | III M | | |
| | n _{max} | 5000 | | |
| | V _{min} | kg (lb) | 0.96 (2.12) | 1.92 (4.24) 2.88 (6.36) |
| | Min. dead load | kg (lb) | 0 (0) | |
| ATEX Approval ⁴⁾ | Number | DEKRA 15ATEX0015 X | | |
| | Rating | II 1 G Ex ia IIC T6...T4 Ga / II 1 D Ex ia IIIC T100°C Da II 3 G Ex nA IIC T6...T4 Gc / II 3 G Ex ic IIC T6...T4 Gc / II 3 D Ex tc IIIC T100°C Dc Ui = 25V, Ii = 600mA, Ci = 6nF, Li = 30µH, Pi = 1.25W(T4), 0.86W(T5), 0.51W(T6) | | |
| | Entity Parameters | | | |
| Factory Mutual Approval ⁴⁾ | Number, USA | 3013511 | | |
| | Number, Canada | 3028342C | | |
| | Rating, USA | IS / I, II, III / 1 / ABCDEFG / T5 | | |
| | | NI / I, II, III, / 2 / ABCDFG / T6 | | |
| | Rating, Canada | IS / I, II, III / 1 / ABCDEFG / T5 | | |
| | | NI / 1 / 2 / ABCD / T6 DIP / II, III / 2 / FG | | |
| | Entity Parameters | Vmax = 25V, Imax = 600mA, Pi = 1.25W, Ci = 4nF ⁴⁾ , Li = 20µH ⁴⁾ | | |
| Excitation Voltage | Recommended | V AC/DC | 5 ~ 15 | |
| | Max. | | 20 | |
| Terminal Resistance | Excitation | Ω | 1150 ± 50 | |
| | Output | | 1000 ± 2 | |
| Insulation Resistance @50VDC | MΩ | > 5000 | | |
| Breakdown Voltage | V AC | > 500 | | |
| Material | Spring Element | stainless steel | | |
| | Enclosure | 304 stainless steel | | |
| | Cable entry fitting | 304 stainless steel | | |
| | Cable | Polyurethane (PU) & FEP | | |
| Protection | Type | welded | | |
| | IP Rating | IP68, IP69K | | |
| | NEMA Rating | NEMA 6/6P | | |
| Load Limit | Safe | %R.C. | 200 | |
| | Ultimate | | 300 | |
| Safe Dynamic Load | %R.C. | 70 | | |
| Fatigue Life | cycles @R.C. | 1000000 | | |
| Direction of Loading | | compression | | |
| Restoring Force ⁵⁾ | %A.L./mm (.../in) ³⁾ | 2.4 (61) | | 3.4 (87) |
| Max Horizontal Travel ⁶⁾ | ± mm (in) | 8 (0.31) | 7 (0.27) | 5 (0.2) |
| Deflection @ R.C., nominal | mm (in) | 0.25 (.01) | | |
| Weight, nominal | kg (lb) | 1 (2.2) | | |
| Cable | Length | m (ft) | 12, 20 (39.4, 65.6) | |
| | Diameter | mm (in) | 5.2 (0.20) | |
| Drawing No. | Dimensions | 30220610 | | |
| | To-Scale | 30220594 | | |

¹⁾ Error due to the combined effect of non-linearity and hysteresis

²⁾ Typical values only. The sum of errors due to Combined Error and Temperature Effect on Sensitivity comply with the requirements of OIML R60 and NIST HB44.

³⁾ A.L. = Applied Load

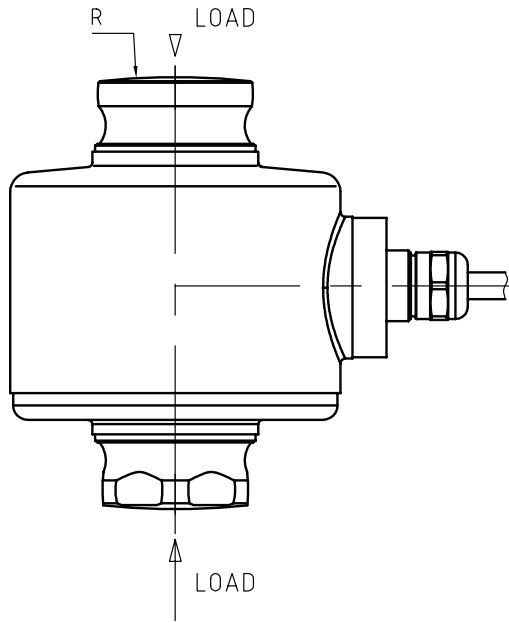
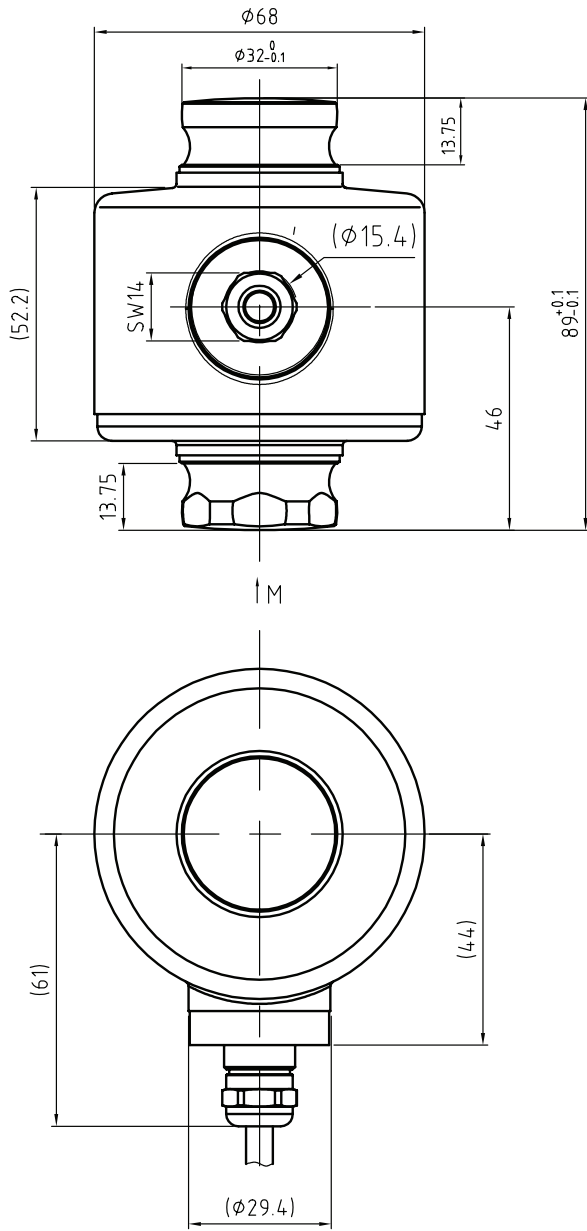
⁴⁾ See certificate for complete information

⁵⁾ % of Applied Load (A.L.) per mm (in) displacement of the top button relative to the bottom button

⁶⁾ Maximum horizontal displacement of the top button relative to the bottom button



SLC611 Load Cell Dimensions mm



| Capacity | R | Max horiz. travel |
|----------|-----|-------------------|
| 7.5t | 140 | 8 |
| 15t | | 7 |
| 22.5t | 180 | 5 |

SLC611 Load Cell Order Information

| Order Information | Class | Item No. | | | |
|-------------------|--------------|--------------------------|--------------------|---------------------|---------------------|
| | | Cable, Material / Length | | | |
| | | PU / 12 m (39.4ft) | PU / 20 m (65.6ft) | FEP / 12 m (39.4ft) | FEP / 20 m (65.6ft) |
| 7.5 t / 16.5 klb | C3/III M n:5 | 30058060 | 30058064 | 30105781 | 30105786 |
| 15 t / 33 klb | C3/III M n:5 | 30058061 | 30058065 | 30105783 | 30105788 |
| 22.5 t / 49.6 klb | C3/III M n:5 | 30058062 | 30058066 | 30105784 | 30105789 |

Bolded entries are stocked

SLC611 Load Cell Cable Colors

| Colour | Function |
|--------|--------------|
| Green | + Excitation |
| Black | - Excitation |
| White | + Signal |
| Red | - Signal |
| Yellow | Shield |

Global Approvals

The SLC611 is provided with all listed approvals. No need to think about options and additional charges. Simplifies the conduct of global business, order processing and service-part stocking.

Full Connectivity

METTLER TOLEDO supplies various data communication interfaces that enable our sensors and instruments to communicate with your PLC, MES, or ERP systems.



Weighing Electronics

METTLER TOLEDO offers a complete family of electronics from simple weighing to application solutions for filling, stock control, batching, formulation, counting, and checkweighing.

METTLER TOLEDO Service

Our extensive service network is among the best in the world and ensures maximum availability and service life of your product.



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Subject to technical changes
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For more information