

Right the First Time

Safe, Accurate, Service Friendly



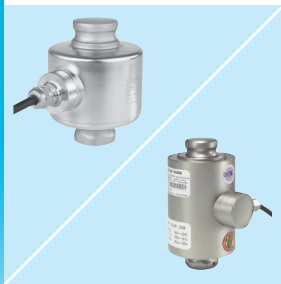
Tank Weighing

SWC515 PinMount™ weigh modules offer rugged construction and many features for easy installation and accurate and reliable tank weighing. Included as standard are 360° stops and two lift-off bolts to cope with wind forces, while two vertical down-stops provide additional safety.



Conveyors and Mixers

SWC515 PinMount™ weigh modules are also designed for dynamic-loading applications such as conveyors, mixers, and blenders. SWC515 PinMount™ provides 360° checking for ease of installation and maximum safety. The rocker pin load cell restores the top plate to its ideal position to maintain accurate, repeatable weight.



Load Cells

The analog load cells have a rocker-pin design that automatically aligns load forces for accurate weighing. These hermetically sealed load cells are rated IP68 and IP69K and can be used in all environments. The load cells are easy to inspect or replace.



Stabilizers

Up to two optional stabilizers can be applied to each weigh module to stabilize a scale subject to heavy vibration, high torque, or used for in-motion weighing. With stabilizers installed, thermal expansion is still possible, guaranteeing the best weighing performance.



SWC515 PinMount™ Right the First Time

SWC515 PinMount™ features ensure correct scale system installation, right from the start. PinMount does not compromise on safety – all safety features are provided as standard. The rocker pin design provides the highest level of weighing accuracy. Installation features including SafeLock™ ensure easy and trouble free installation.

SWC515 PinMount™ features:

- Dual integrated lift-off protection
- Dual vertical safety down-stop
- Full 360° integrated checking
- Ground strap – welding protection
- SafeLock™ – Weigh module locked for installation
- SafeLock™ – Load cell protected for installation
- Dual stabilizer option
- Capacity range: 7.5t – 100t
- All load cells with IP68 and IP69K and fully stainless steel
- Global approvals standard on each load cell
- Zinc plated or stainless steel mounting hardware
- CalFree™: Calibration without test weights

SWC515 PinMount™ Weigh Module Specifications

| WEIGH MODULE | unit of measure | Specification | | | | | |
|---|---|---|----------|-------------|------------------------------------|------------|------------|
| Model No. | | SWC515 PinMount™ | | | | | |
| Size | | 1 | | 2 | | 3 | |
| Rated Capacity (R.C.) | t (klb, nominal) | 7.5 (16.5) | 15 (33) | 22.5 (49.6) | 30 (66) | 50 (110) | 100 (220) |
| Max. Rated Forces ¹⁾ | | | | | | | |
| Max. Compressive Force, Rated | kN (klb) | 74 (16.5) | 145 (33) | 220 (50) | 290 (65) | 490 (110) | 980 (220) |
| Max Horizontal Force, Rated | transverse kN (klb) longitudinal | 74 (16.5) | | 100 (22) | | 130 (28) | |
| Max. Uplift Force, Rated | kN (klb) | 62 (14) | | 150 (33) | | 190 (43) | |
| Max. horizontal force (longitudinal) per stabilizer option, Rated ⁶⁾ | kN (klb) | 22 (5) | | 35 (7.7) | | 60 (13.4) | |
| Max. Yield Forces ^{2) 4)} | | | | | | | |
| Max. Compressive Force, Yield | kN (klb) | 145 (33) | 294 (67) | 440 (97) | 505 (110) | 855 (190) | 1715 (385) |
| Max. Horizontal Force, Yield | transverse kN (klb) longitudinal | 105 (24) | | 135 (30) | | 190 (43) | |
| Max. Uplift Force, Yield | kN (klb) | 85 (19) | | 200 (45) | | 265 (60) | |
| Max. Ultimate Forces ^{3) 4)} | | | | | | | |
| Max. Compressive Force, Ultimate | kN (klb) | 220 (50) | 420 (94) | 660 (147) | 883 (194) | 1470 (323) | 2940 (647) |
| Max. Horizontal Force, Ultimate | transverse kN (klb) longitudinal | 210 (47) | | 360 (80) | | 430 (96) | |
| Max. Uplift Force, Ultimate | kN (klb) | 200 (45) | | 390 (88) | | 485 (109) | |
| Restoring Force | %A.L./mm (./.in) | 2.4 (61) | 3.4 (87) | 0.8 (19) | 2 (51) | | |
| Max. top plate travel | transverse ± mm (in) longitudinal ⁷⁾ | | | | ± 5 (0.2) | | ± 5 (0.2) |
| Weight (including load cell), nominal | kg (lb) | 20 (44) | | 55 (120) | | 75 (165) | |
| Material | | carbon steel / 304 stainless steel / 316 Stainless steel | | | carbon steel / 304 stainless steel | | |
| Finish | | Zinc Plated / Electropolished / Electropolished | | | Zinc Plated / Electropolished | | |

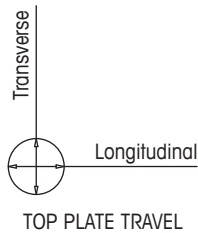
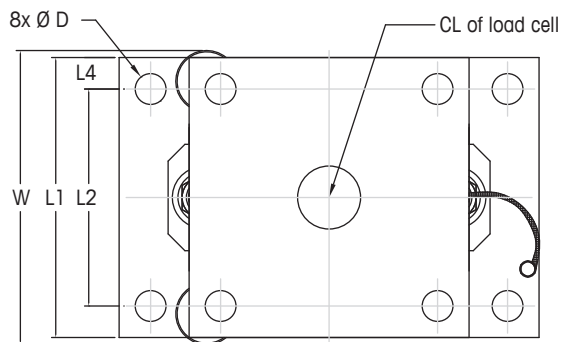
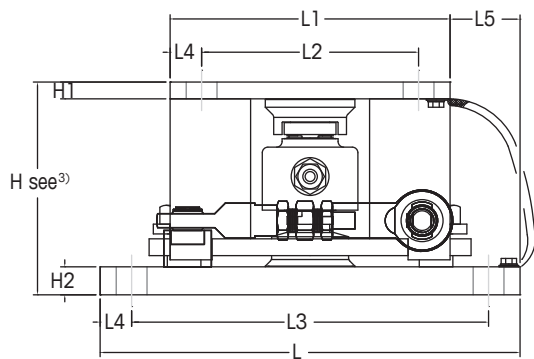
| LOAD CELL SLC611, 0782 | unit of measure | Specification | | | | | |
|---|--|--|-------------|-------------|--|-----------|------------|
| Item No. | | 30058060 | 30058061 | 30058062 | 71201709 | 71201710 | 71201711 |
| Model No. | | SLC611 | | | 0782 | | |
| Rated Capacity (R.C.) | t (klb, nominal) | 7.5(16.5) | 15 (33) | 22.5 (49.6) | 30 (66) | 50 (110) | 100 (220) |
| Rated Output | mV/V @R.C. | 2 ± 0.1 % | | | | | |
| Combined Error ^{8) 9)} | %R.C. | ≤ 0.018 | | | | | |
| Temperature Effect on | Min. Dead load Output Sensitivity ⁹⁾ | ≤ 0.0018 (0.0010) | | | ≤ 0.0021 (0.0011) | | |
| | %A.L./°C (. / °F) | ≤ 0.001 (0.0006) | | | | | |
| Temperature Range | Compensated Operating Safe Storage | °C (°F) -10 ~ +40 (-14 ~ +104) -40 ~ +65 (-40 ~ +149) -40 ~ +80 (-40 ~ +176) | | | | | |
| OIML / European Approval ¹⁰⁾ | Class nmax Y | C3 3000 7800 | | | 6666 | | |
| | Class | III M | | | III L M | | |
| NTEP Approval ¹⁰⁾ | nmax Vmin | 5000 | | | 10000 | | |
| | kg (lb) | 0.96 (2.12) | 1.92 (4.24) | 2.88 (6.36) | 2.1 (4.5) | 3.5 (7.5) | 7.0 (15.0) |
| ATEX Approval ¹⁰⁾ | Rating | II 1 G Ex ia IIC T6...T4 Ga / II 1 D Ex ia IIIC T100°C Da | | | II 2 G Ex ib IIC T4 ... T6 / II 2 D Ex ibD 21 IP68 T60°C | | |
| | | 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 | | | II 3 G Ex nL IIC T6 / II 3 D Ex tD A22 IP 68 T60°C / II 3 D Ex tD A22 IP 68 T60°C | | |
| IECEX Approval | Rating | Ex ia IIC T6...T4 Ga / Ex ia IIIC T100°C Da | | | Ex ib IIC T6 ...T4 Gb / Ex ib IIIC T55°C ... T60°C Db | | |
| | | Ex nA IIC T6...T4 Gc / Ex ic IIC T6...T4 Gc / Ex tc IIIC T100°C Dc | | | Ex ic IIC T6 ... T4 Gc / Ex nA IIC T6 Gc / Ex tc IIIC T60°C Dc | | |
| Factory Mutual Approval ¹⁰⁾ | Rating, USA Rating, Canada | IS / I, II, III / 1 / ABCDEFG / T5 NI / I, II, III / 2 / ABCDFG / T6 IS / I, II, III / 1 / ABCDEFG / T5 NI / I / 2 / ABCD / T6 DIP / II, III / 2 / FG | | | IS / I, II, III / 1 / ABCDEFG / T4 NI / I, II, III / 2 / ABCDFG / T4 IS / I, II, III / 1 / ABCDEFG / T4 NI / I / 2 / ABCD / T4 DIP / II, III / 2 / FG | | |
| Excitation Voltage | Recommended Max. | V AC/DC 5 ~ 15 20 | | | | | |
| Terminal Resistance | Excitation Output | Ω 1150 ± 50 1000 ± 2 | | | 1150 ± 25 1000 ± 3 | | |
| Material | Spring Element Type | stainless steel welded | | | | | |
| Protection | IP Rating NEMA Rating | IP68, IP69K | | | IP68, IP69K | | |
| Weight, nominal | kg (lb) | 1 (2.2) | | | 3 (6.6) | | 4.5 (9.9) |
| Cable | Length Diameter | m (ft) 5.2 (0.20) | | | 13 (42.5) | | 5.8 (0.23) |

¹⁾ The weigh module is rated for these forces in normal operation, a Factor of Safety has been applied by Mettler Toledo.
²⁾ Warning: if loaded statically one time in excess of these forces, the weigh module may yield and need replacing. The Max. Yield Forces do not consider fatigue/cyclic loading and should be approached only in exceptional circumstances.
³⁾ Warning: if loaded statically one time in excess of these forces, the weigh module may break with potential for serious injury and/or property damage.
⁴⁾ Warning: apply a Factor of Safety appropriate to the application.
⁵⁾ % of Applied Load (A.L.) per mm (in) displacement of the top plate (transverse & longitudinal).
⁶⁾ 1 or 2 per weigh module. Max permissible longitudinal force per stabilizer.
⁷⁾ 0 with Stabilizer.
⁸⁾ Error due to the combined effect of non-linearity and hysteresis.
⁹⁾ 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
¹⁰⁾ See certificate for complete information.

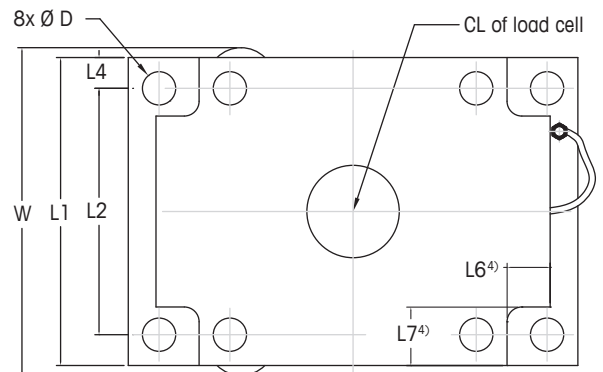
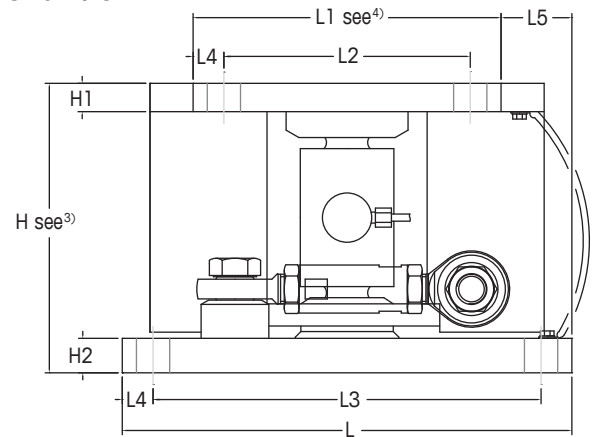


SWC515 PinMount™ Weigh Module Dimensions mm [in]

Size 1



Size 2 / 3



| Size | Capacity | Dimensions and locations | | | | | | | | | | | | | | Tank Leg Plate | | |
|------|---------------------|--------------------------|---------|------------------|------------------|--------|--------|-----------------|---------|--------|---------|--------|--------|------------------|------------------|----------------|-----------|-----------------|
| | | D | H | HS ²⁾ | HP ¹⁾ | H1 | H2 | L ⁴⁾ | L1 | L2 | L3 | L4 | L5 | L6 ⁴⁾ | L7 ⁴⁾ | W | Thickness | Dimensions |
| 1 | 7.5, 15, 22.5t | 22 | 152 | 167 | 192.4 | 12 | 20 | 300 | 200 | 155 | 255 | 22.5 | 50 | - | - | 210 | min 25 | 200 x 200 |
| | [16.5, 33, 49.6klb] | [0.87] | [5.98] | [6.57] | [7.57] | [0.47] | [0.79] | [11.8] | [7.87] | [6.1] | [10.04] | [0.89] | [1.97] | - | - | [8.27] | [1] | [7.87 x 7.87] |
| 2 | 20, 30, 50t | 26 | 235 | 268 | 293.4 | 23 | 28 | 365 | 250 | 200 | 315 | 25 | 57.5 | 35 | 47.5 | 273 | min 50 | 250 x 250 |
| | [44, 66, 110klb] | [1.02] | [9.25] | [10.55] | [11.55] | [0.91] | [1.1] | [14.37] | [9.84] | [7.87] | [12.4] | [0.98] | [2.26] | [1.38] | [1.87] | [10.75] | [2] | [9.84 x 9.84] |
| 3 | 100t | 32 | 263 | 301 | 326.4 | 30 | 33 | 440 | 300 | 235 | 375 | 32.5 | 70 | 40 | 52.5 | 324 | min 60 | 300 x 300 |
| | [220klb] | [1.26] | [10.35] | [11.85] | [12.85] | [1.18] | [1.30] | [17.32] | [11.81] | [9.25] | [14.76] | [1.28] | [2.76] | [1.57] | [2.07] | [12.75] | [2.4] | [11.81 x 11.81] |

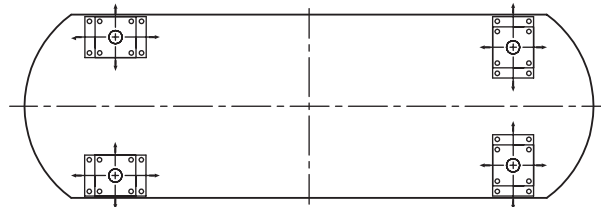
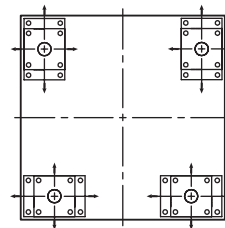
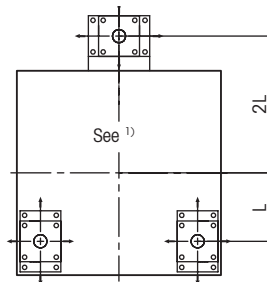
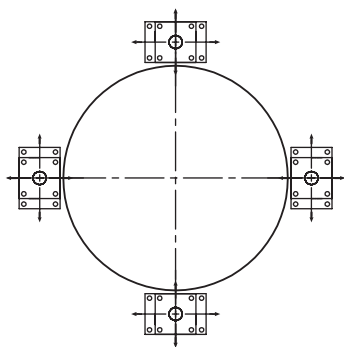
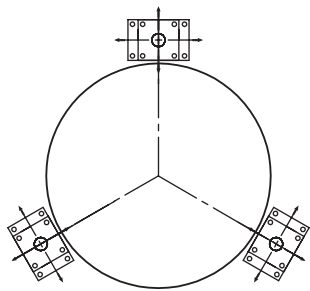
¹⁾ Height when using thermal isolation pad or shock/vibration pad

²⁾ Height when using spacer plate

³⁾ Shipping/Installation height is 2 mm [0.08 in] taller

⁴⁾ Designed for square tank leg plate above top plate

SWC515 PinMount™ Weigh Module Arrangements



¹⁾ Provides equal load distribution, but the stability of this arrangement must be assured.

Order Information SWC515 PinMount™ – Weight Module Assembly

| Order Information, Weigh Module Assembly | | | | | Item No. | | |
|---|--------------------------------|---|---------------|------------------------|------------------------|-----------------|----------|
| Size | Rated Capacity | Description | Class | Cable, Material/Length | Material, Weigh Module | | |
| | | | | | Zinc Plated | 304 | 316 |
| 1 | 7.5 t / 16.5 klb | Weigh Module Assembly | C3/III M n:5 | PU / 12 m (39.4ft) | 30131976 | 30131977 | 30131978 |
| | 15 t / 33 klb | | | | 30131979 | 30131980 | 30131981 |
| | 22.5 t / 49.6 klb | | | | 30131982 | 30131983 | 30131984 |
| | 7.5 - 22.5 t / 16.5 - 49.6 klb | Stabilizer ¹⁾ | - | - | 72205444 | 72205445 | 72242585 |
| | | Spacer Plate | | | 72245532 | 72206153 | 72247333 |
| | | Dead Stand | | | 72206154 | 72206155 | - |
| | | Shock/Vibration Pad ²⁾ | | | 72246646 | 72207262 | 72247334 |
| Thermal Isolation Pad 80°C ²⁾ | | 72246647 | | | 72207263 | 72247335 | |
| Thermal Isolation Pad 170°C ²⁾ | 72246648 | 72207264 | 72247336 | | | | |
| 2 | 30 t / 66 klb | Weigh Module Assembly | C3/III M n:10 | PVC / 13 m (42.5ft) | 72249169 | 72249170 | - |
| | 50 t / 110 klb | | | | 72249204 | 72249205 | |
| | 30 - 50 t / 66 - 110 klb | Stabilizer ¹⁾ | - | - | 72248968 | 72248969 | |
| | | Spacer Plate | | | 72249203 | 72249206 | |
| | | Dead Stand | | | 72249173 | 72249174 | |
| | | Shock/Vibration Pad ²⁾ | | | 72255072 | 72255075 | |
| | | Thermal Isolation Pad 80°C ²⁾ | | | 72255073 | 72255076 | |
| Thermal Isolation Pad 170°C ²⁾ | 72255074 | 72255077 | | | | | |
| 3 | 100 t / 220 klb | Weigh Module Assembly | C3/III M n:10 | PVC / 13 m (42.5ft) | 72249171 | 72249172 | - |
| | 100 t / 220 klb | Stabilizer ¹⁾ | - | - | 72248970 | 72248971 | |
| | | Spacer Plate | | | 72249213 | 72249214 | |
| | | Dead Stand | | | 72249175 | 72249176 | |
| | | Shock/Vibration Pad ²⁾ | | | 72255078 | 72255081 | |
| | | Thermal Isolation Pad 80°C ²⁾ | | | 72255079 | 72255082 | |
| | | Thermal Isolation Pad 170°C ²⁾ | | | 72255080 | 72255083 | |

Bolded entries are stocked

¹⁾ 1 or 2 per weigh module.

²⁾ Includes Spacer Plate.

Order Information SWC515 PinMount™ – Weigh Module without Load Cell

- SafeLock™ allows installation of weigh module hardware without load cell to avoid sensor damage
- Combine weigh module with other load cells (special cable lengths, etc.)
- Use weigh module with dummy load cell for level detection systems

| Order Information, Weigh Module Kit | | Item No. | | | Suitable Load Cells | | | | | | |
|-------------------------------------|------------------|------------------------|-----------------|----------|---------------------|--------------------------|--------------------|---------------------|---------------------|--------------------|-----------------|
| Size | Rated Capacity | Material, Weigh Module | | | Class | Item No. | | | | | Dummy Load Cell |
| | | Zinc Plated | 304 | 316 | | Cable, Material / Length | | | | | |
| | | | | | | PU / 12 m (39.4ft) | PU / 20 m (65.6ft) | FEP / 12 m (39.4ft) | FEP / 20 m (65.6ft) | PVC / 13m (42.5ft) | |
| 1 | 7.5 t / 16.5 klb | 30131985 | 30131986 | 30131987 | C3/III M n:5 | 30058060 | 30058064 | 30105781 | 30105786 | - | 30238196 |
| | C3/III M n:5 | | | | 30058061 | 30058065 | 30105783 | 30105788 | | | |
| | C3/III M n:5 | | | | 30058062 | 30058066 | 30105784 | 30105789 | | | |
| 2 | 30 t / 66 klb | 72248964 | 72248965 | - | C3/III M n:10 | - | - | - | - | 71201709 | 72188111 |
| | 50 t / 110 klb | | | | C3/III M n:10 | - | - | - | - | 71201710 | |
| 3 | 100 t / 220 klb | 72248966 | 72248967 | - | C3/III M n:10 | - | - | - | - | 71201711 | 72188112 |

Bolded entries are stocked

0782 Cable Colour

| Colour | Function |
|---------------|--------------|
| Green | + Excitation |
| Black | - Excitation |
| White | + Signal |
| Red | - Signal |
| Yellow | + Sense |
| Blue | - Sense |
| Yellow (long) | Shield |

SLC611 Cable Colour

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

Full Connectivity

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



METTLER TOLEDO Service

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

Weighing Electronics

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



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