

Cost Efficient Tank Weighing Safe, Accurate, Service Friendly



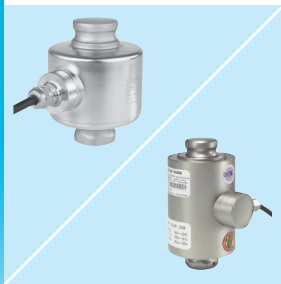
Tank Weighing

SWC415 PinMount offers incomparable value in weigh modules for all applications including tank, hopper, and silo weighing, and this is achieved without sacrificing the well-established features of the PinMount family.



Conveyors and Mixers

SWC415 PinMount™ weigh modules are designed for dynamic-loading applications such as conveyors, mixers, and blenders. SWC415 PinMount™ provides 360 degree 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.



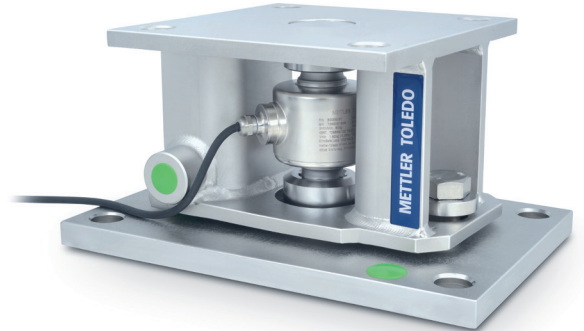
Load Cells

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/IP69K and can be used in all environments. The load cells are easy to inspect or replace.



Stabilizers

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



SWC415 PinMount™ Cost Efficient Tank Weighing

SWC415 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. SWC415 PinMount™ features include:

- Dual integrated lift-off protection
- Dual vertical safety down-stop
- Full 360 degree integrated checking
- Ground strap – welding protection
- SafeLock™ – Weigh module locked for installation
- SafeLock™ – Load cell protected for installation
- Stabilizer option
- Capacity range: 7.5 t – 100 t
- 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

SWC415 PinMount™ Weigh Module Specifications

| Weigh Module | | Unit of measure | Specification | | | | | | |
|---|--------------|--|------------------------------------|----------|-------------|------------|------------|------------|--|
| Model No. | | | SWC415 PinMount™ | | | | | | |
| Size | | | 1 | | 2 | | 3 | | |
| Rated Capacity (R.C.) | | † (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) | 50 (11) | | | 70 (15.4) | | 91 (20.5) | |
| | longitudinal | kN (klb) | 44 (9.7) | | | 105 (23.1) | | 133 (30) | |
| Max. Uplift Force, Rated | | kN (klb) | 44 (9.7) | | | 105 (23.1) | | 133 (30) | |
| 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) | 73 (16.1) | | | 95 (20.9) | | 133 (30) | |
| | longitudinal | kN (klb) | 60 (13.2) | | | 140 (30.8) | | 186 (42) | |
| Max. Uplift Force, Yield | | kN (klb) | 60 (13.2) | | | 140 (30.8) | | 186 (42) | |
| 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) | 145 (31.9) | | | 250 (55) | | 300 (76) | |
| | longitudinal | kN (klb) | 140 (30.8) | | | 275 (60.5) | | 340 (76) | |
| Max. Uplift Force, Ultimate | | kN (klb) | 140 (30.8) | | | 275 (60.5) | | 340 (76) | |
| Restoring Force | | %A.L./mm (./in) ⁵⁾ | 2.4 (61) | 3.4 (87) | 0.8 (19) | 2 (51) | 2(51) | | |
| Max. top plate travel | | transverse longitudinal ⁷⁾ | ± 5 (0.2) | | | | | ± 5 (0.2) | |
| Weight (including load cell), nominal | | kg (lb) | 20 (44) | | 55 (120) | | 70 (154) | | |
| Material | | | carbon steel / 304 stainless steel | | | | | | |
| Finish | | | Zinc Plated / Electropolished | | | | | | |

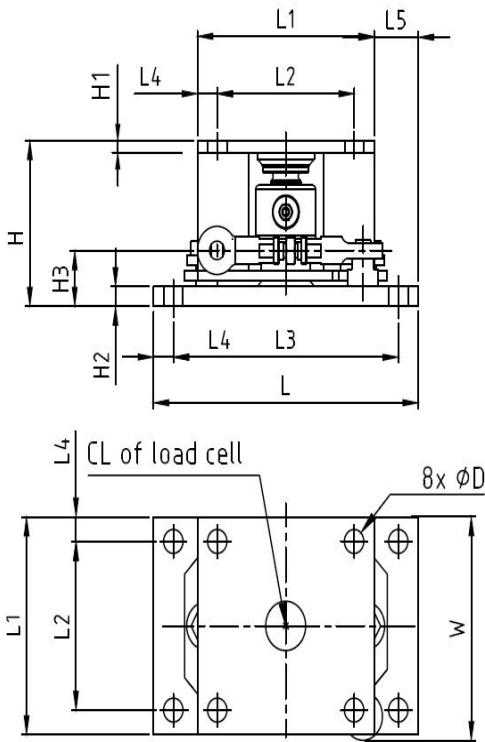
| LOAD CELL SLC611, 0782 | | Unit of measure | Specification | | | | | | |
|---|---------------------------|------------------|---|-------------|-------------|---|------------|-----------|--|
| Item No. | | | 30058060 | 30058061 | 30058062 | 71201709 | 71201710 | 71201711 | |
| Model No. | | | SLC611 | | | 0782 | | | |
| Rated Capacity (R.C.) | | † (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 | %R.C./°C (./°F) | ≤ 0.0018 (0.0010) | | | ≤ 0.0021 (0.0011) | | | |
| | Sensitivity ⁹⁾ | %A.L./°C (./°F) | ≤ 0.001 (0.0006) | | | | | | |
| Temperature Range | Compensated | | -10 ~ +40 (-14 ~ +104) | | | | | | |
| | Operating | °C (°F) | -40 ~ +65 (-40 ~ +149) | | | | | | |
| | Safe Storage | | -40 ~ +80 (-40 ~ +176) | | | | | | |
| OIML / European Approval ¹⁰⁾ | Class | | C3 | | | | | | |
| | nmax | | 3000 | | | | | | |
| NTEP Approval ¹⁰⁾ | Y | | 7800 | | | 6666 | | | |
| | Class | | III M | | | III L M | | | |
| ATEX Approval ¹⁰⁾ | nmax | | 5000 | | | | | 10000 | |
| | Vmin | kg (lb) | 0.96 (2.12) | 1.92 (4.24) | 2.8 (6.36) | 2.1 (4.5) | 3.5 (7.5) | 7.0 (15) | |
| IECEX Approval ¹⁰⁾ | Rating | | II 1 G Ex ia IIC T6...T4 Gc / 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 | | | |
| | Rating | | 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 ic IICT6...T4 Gc ; II 3 G Ex nA IIC T6 Gc ; II 3 G Ex ec IIC T6 Gc ; II 3 D Ex tc IIIC T60°C Dc | | | |
| Factory Mutual Approval ¹⁰⁾ | Rating, USA | | IS / I, II, III / 1 / ABCDEFG / T5 | | | IS / I, II, III / 1 / ABCDEFG / T4 Ta = -40°C to +50°C | | | |
| | Rating, Canada | | NI / I, II, III / 2 / ABCDFG / T6 | | | NI / I,II,III / 2 / ABCDFG / T4 Ta = -40°C to +50°C | | | |
| Excitation Voltage | Recommended | V AC/DC | 5 ~ 15 | | | | | | |
| | Max. | | 20 | | | | | | |
| Terminal Resistance | Excitation | Ω | 1150 ± 50 | | | 1150 ± 25 | | | |
| | Output | | 1000 ± 2 | | | 1000 ± 3 | | | |
| Material | | Spring Element | stainless steel | | | | | | |
| Protection | | Type | welded | | | | | | |
| Weight, nominal | IP Rating | | IP68, IP69K | | | IP68 | | | |
| | NEMA Rating | | NEMA 6/6P | | | | | | |
| Cable | Length | m (ft) | 1 (2.2) | | 3 (6.6) | | 4.5 (9.9) | | |
| | Diameter | mm (in) | 12 (39.4) | | 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 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.

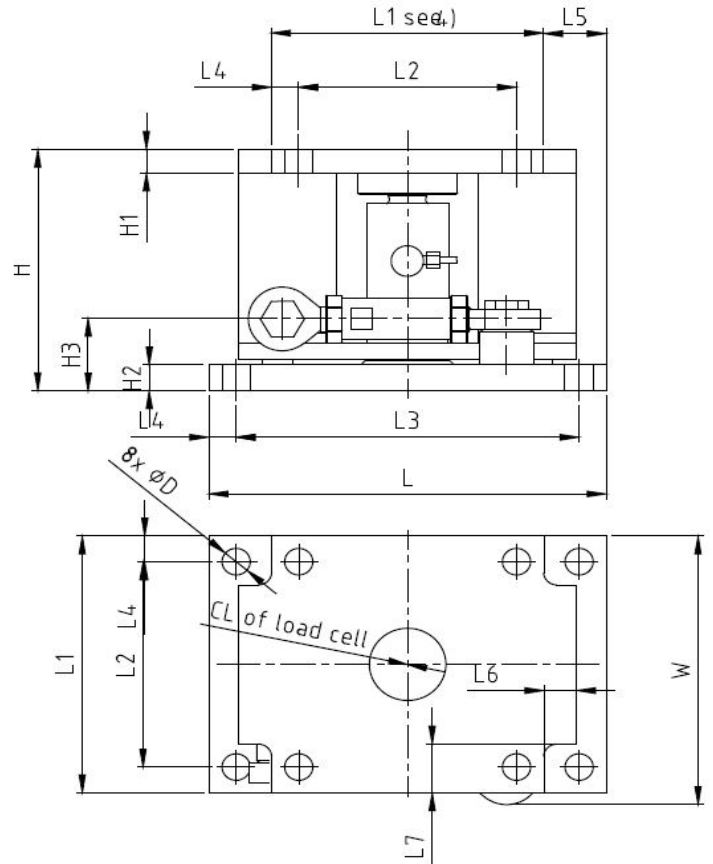


SWC415 PinMount™ Weigh Module Dimensions mm (in)

Size 1



Size 2 , Size 3



| Size | Capacity | Dimensions and Locations | | | | | | | | | | | | | | | Tank Leg Plate | | |
|------|---|--------------------------|----------------|------------------|------------------|--------------|--------------|----------------|-----------------|----------------|---------------|----------------|----------------|--------------|------------------|------------------|------------------|-----------------|----------------------------|
| | | D | H | HS ²⁾ | HP ¹⁾ | H1 | H2 | H3 | L ⁴⁾ | L1 | L2 | L3 | L4 | L5 | L6 ⁴⁾ | L7 ⁴⁾ | W | Thickness | Dimensions |
| 1 | 7.5, 15, 22.5 † (16.5, 33, 49.6 klb) | 22 (0.87) | 152 (5.98) | 167 (6.57) | 192.4 (7.57) | 11 (0.43) | 18 (0.71) | 51 (11.8) | 300 (11.8) | 200 (7.87) | 155 (6.1) | 255 (10.04) | 22.5 (0.89) | 50 (1.97) | - | - | 205 (8.1) | min 25 (1.0) | 200 x 200 (7.87 x 7.87) |
| 2 | 20, 30, 50 † (44, 66, 110 klb) | 26 (1.02) | 235 (9.25) | 268 (10.55) | 293.4 (11.55) | 23 (0.91) | 25 (0.98) | 69.5 (2.75) | 365 (14.37) | 250 (9.84) | 200 (7.87) | 315 (12.4) | 25 (0.98) | 55 (2.16) | 27.5 (1.08) | 47.5 (1.87) | 261.5 (10.29) | min 50 (2.0) | 250 x 250 (9.84 x 9.84) |
| 3 | 100† (200klb) | 32 (1.26) | 263 (10.35) | 301 (11.85) | 326.4 (12.85) | 27 (1.08) | 28 (1.1) | 86.5 (3.4) | 440 (17.32) | 300 (11.81) | 235 (9.25) | 375 (14.75) | 32.5 (1.28) | 70 (2.75) | 40 (1.57) | 52.5 (2.07) | 313 (12.3) | min 60 (2.4) | 300 x 300 (11.8 x 11.8) |

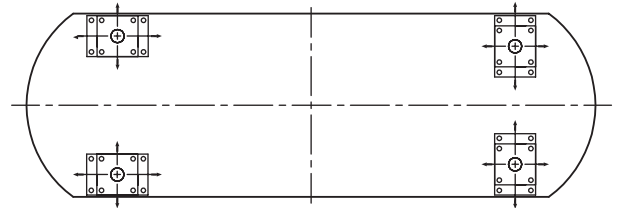
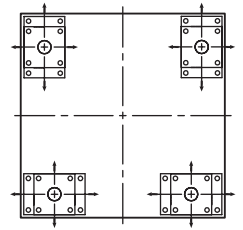
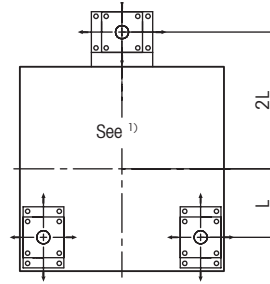
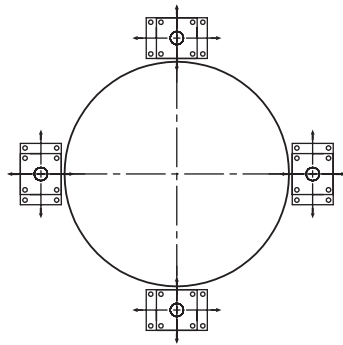
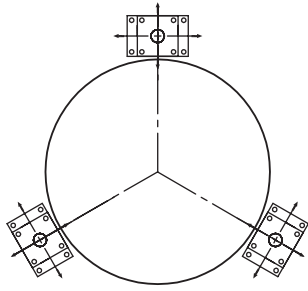
¹⁾ Height when using thermal isolation pad or shock/vibration pad

²⁾ Height when using spacer plate

³⁾ Shipping/Installation height is 2 mm (0.08 inches) taller

⁴⁾ Designed for square tank leg plate above top plate

SWC415 PinMount™ Weigh Module Arrangements



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

Order Information SWC415 PinMount™ – Weigh Module Assembly

| Order Information, Weigh Module Assembly | | | | | Item No. | |
|---|---|--|---------------|------------------------|------------------------|-----------------|
| Size | Rated Capacity | Description | Class | Cable, Material/Lenght | Material, Weigh Module | |
| | | | | | Zinc Plated | 304 |
| 1 | 7.5 t / 16.5 klb | Weigh Module Assembly | C3/III M n:5 | PU / 12 m (39.4ft) | 30295853 | 30295854 |
| | 15 t / 33 klb | | | | 30295855 | 30295856 |
| | 22.5 t / 49.6 klb | | | | 30295857 | 30295858 |
| | 7.5 - 22.5 t / 16.5 - 49.6 klb | Stabilizer ¹⁾ | - | - | 72205444 | 72205445 |
| | | Spacer Plate | | | 72245532 | 72206153 |
| | | Dead Stand | | | 72206154 | 72206155 |
| | | Shock/Vibration Pad ²⁾ | | | 72246646 | 72207262 |
| Thermal Isolation Pad 80°C ²⁾ | | 72246647 | | | 72207263 | |
| Thermal Isolation Pad 170°C ²⁾ | 72246648 | 72207264 | | | | |
| 2 | 30 t / 66 klb | Weigh Module Assembly | C3/III M n:10 | PVC / 13 m (42.5ft) | 30295859 | 30295860 |
| | 50 t / 110 klb | | | | 30315453 | 30315454 |
| | 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) | 30396062 | 30396063 |
| | 100 t / 220 klb | Stabilizer | - | - | 72248970 | 72248971 |
| | | Spacer Plate ¹⁾ | | | 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 per weigh module.

Order Information SWC415 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 | | 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 | 30265377 | 30256400 | C3/III M n:5 | 30058060 | 30058064 | 30105781 | 30105786 | - | 30238196 |
| | 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 | | |
| 2 | 30 t / 66 klb | 30265450 | 30265427 | C3/III M n:10 | - | - | - | - | 71201709 | 72188111 |
| | 50 t / 110 klb | | | C3/III M n:10 | - | - | - | - | 71201710 | |
| 3 | 100 t / 220 klb | 30366582 | 30366574 | C3/III M n:10 | - | - | - | - | 71201711 | 72188112 |

Bolded entries are stocked

SLC611 Cable Colour Code

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

0782 Cable Colour Code

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

EtherNet/IP™

DeviceNet™

ControlNet™



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, and checkweighing.



Quality certificate ISO 9001
Environment certificate ISO 14001

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