

## Right the First Time

## Safe, Accurate, Service Friendly



### Tank Weighing

SWC615 PowerMount™ 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.



### Easy Maintenance

SWC615 PowerMount™ 200t and 300t weigh modules allow replacing the load cell without lifting the tank. A dedicated cut-out for standard hydraulic cylinders supports the installation process.



### Load Cells

POWERCELL® 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.



### Predictive Diagnostics PDX®

Monitor individual load cells for overload, temperature extremes, zero drift, etc. Breach detection warns if the load cell's hermetic seal has been broken. This enables reaction before the system weighs incorrectly or shuts down completely.



## SWC615 PowerMount™ 200t, 300t Know What's Ahead

SWC615 PowerMount™ features ensure correct scale system installation, right from the start. PowerMount 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.

PowerMount 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
- Capacity range: 200t, 300t
- POWERCELL® load cell
- All load cells with IP68/IP69K and fully stainless steel
- Global approvals standard on each load cell
- Zinc plated mounting hardware
- CalFree™ Plus: Calibration w/o test weights at your finger tip

## SWC615 PowerMount™ 200t, 300t Specifications

| Weigh module  |              | Unit of measure               | Specification      |             |
|---|--------------|-------------------------------|--------------------|-------------|
| Model No.   |              |                               | SWC615 PowerMount™ |             |
| Size  |              |                               | 4                  | 5           |
| Rated capacity (R.C.)   |              | t (klb, nominal)              | 200 (440)          | 300 (660)   |
| <b>Max. rated forces <sup>1)</sup></b>                            |              |                               |                    |             |
| Max. compressive force, rated                                     |              | kN (klb)                      | 1960 (423)         | 2940 (635)  |
| Max. horizontal force, rated                                      | Transverse   | kN (klb)                      | 260 (56)           | 300 (65)    |
|   | Longitudinal |                               |                    |             |
| Max. uplift force, rated  |              | kN (klb)                      | 255 (55)           | 400 (86)    |
| Max. horizontal force (longitudinal) per stabilizer option, rated |              | kN (klb)                      | n/a                |             |
| <b>Max. yield forces <sup>2) 4)</sup></b>                         |              |                               |                    |             |
| Max. compressive force, yield                                     |              | kN (klb)                      | 3430 (740)         | 5150 (1543) |
| Max. horizontal force, yield                                      | Transverse   | kN (klb)                      | 360 (78)           | 420 (91)    |
|   | Longitudinal |                               |                    |             |
| Max. uplift force, yield  |              | kN (klb)                      | 355 (77)           | 560 (120)   |
| <b>Max. ultimate forces <sup>3) 4)</sup></b>                      |              |                               |                    |             |
| Max. compressive force, ultimate                                  |              | kN (klb)                      | 5885 (1270)        | 8830 (1908) |
| Max. horizontal force, ultimate                                   | Transverse   | kN (klb)                      | 815 (175)          | 895 (193)   |
|   | Longitudinal |                               |                    |             |
| Max. uplift force, ultimate                                       |              | kN (klb)                      | 710 (153)          | 950 (205)   |
| Restoring force   |              | %A.L./mm (./in) <sup>5)</sup> | 1.6 (40)           | 2.5 (63)    |
| Max. top plate travel   | Transverse   | ± mm (in)                     | ± 6 (0.24)         |             |
|   | Longitudinal |                               |                    |             |
| Weight (including load cell), nominal                             |              | kg (lb)                       | 152 (335)          | 232 (511)   |
| Material  |              |                               | Carbon steel       |             |
| Finish  |              |                               | Zinc plated        |             |

<sup>1)</sup> The weigh module is rated for these forces in normal operation, a factor of safety has been applied by METTLER TOLEDO.

<sup>2)</sup> 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.

<sup>3)</sup> 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.

<sup>4)</sup> Warning: apply a factor of safety appropriate to the application.

<sup>5)</sup> % of Applied Load (A.L.) per mm (in) displacement of the top plate (transverse and longitudinal).

| Load cell                              |                           | Unit of measure  | Specification   |           |
|--|---------------------------|------------------|---|-----------|
| Item No.                               |                           |                  | 30220694  | 30314022  |
| Model No.                              |                           |                  | SLC820  |           |
| Rated capacity (R.C.)                  |                           | t (klb, nominal) | 200(440)  | 300 (660) |
| Min. Increment size, typical           |                           | kg (lb)          | 4 (8.8)   | 6 (13.2)  |
| Zero load output <sup>4)</sup>         |                           | %R.C.            | ≤ 0.1   |           |
| Combined error <sup>1) 2)</sup>        |                           | %R.C.            | ≤ 0.026   |           |
| Repeatability error                    |                           | %A.L.            | ≤ 0.02  |           |
| Temperature effect on                  | Min. Dead load output     | %R.C./°C (./°F)  | 0.0016 (0.0009)   |           |
|  | Sensitivity <sup>2)</sup> | %A.L./°C (./°F)  | ≤ 0.002 (0.0012)  |           |
| Temperature range                      | Compensated               | °C (°F)          | -10 ~ +40 (-14 ~ +104)  |           |
|  | Operating                 |                  | -40 ~ +55 (-40 ~ +131)  |           |
|  | Safe storage              |                  | -40 ~ +80 (-40 ~ +176)  |           |
| OIML / European approval <sup>3)</sup> | Class                     |                  | C1  |           |
|  | nmax                      |                  | 1000  |           |
|  | vmin                      | kg               | 20  | 30        |
| NTEP approval <sup>3)</sup>            | Class                     |                  | IIIL M n:5  |           |
|  | nmax                      |                  | 5000  |           |
|  | Vmin                      | lb               | 17  | 25        |
| ATEX approval <sup>3)</sup>            | Rating                    |                  | II 3 G Ex nA IIC T6 Gc / II 3 D Ex tc IIIC T85 °C Dc IP6X                       |           |
| IECEx approval <sup>3)</sup>           | Rating                    |                  | Ex nA IIC T6 Gc / Ex tc IIIC T85 °C Dc IP6X                                     |           |
| UL approval <sup>3)</sup>              | Rating, USA               |                  | I, II, III, Division 2, Groups C, D, F, G, T6                                   |           |
|  | Rating, Canada            |                  |   |           |
| Supply voltage non-regulated           | Recommended               | V DC             | 12-24 (external supply)   |           |
| Overvoltage protection                 |                           | A                | > 80000   |           |
| Effective system update rate           |                           | Hz               | 83 (with 4 cells), 50 (with 6 cells),<br>25 (with 14 cells), 15 (with 24 cells) |           |
| Material                               | Spring element            |                  | Stainless steel   |           |
|  | Type                      |                  | Welded  |           |
| Protection                             | IP rating                 |                  | IP68, IP69K   |           |
|  | NEMA rating               |                  | NEMA 6/6P   |           |
| Weight, nominal                        |                           | kg (lb)          | 12.8 (28.2)   | 29 (63.9) |

<sup>1)</sup> Error due to the combined effect of non-linearity and hysteresis.

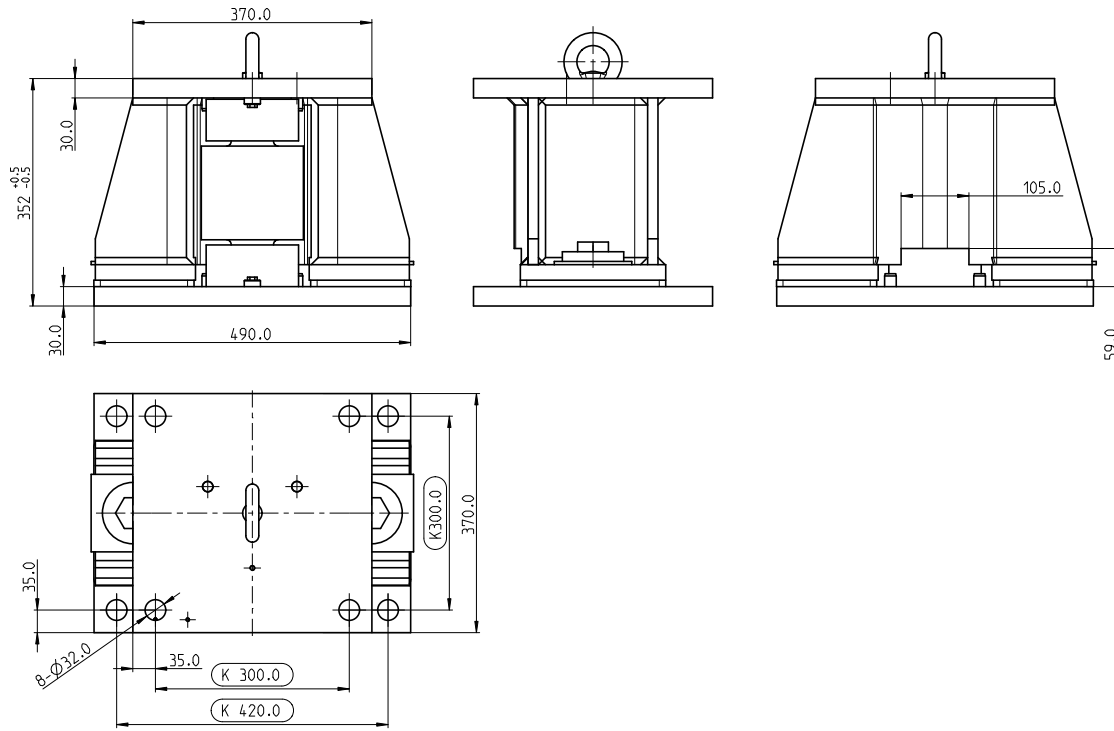
<sup>2)</sup> Typical values only. The sum of errors due to combined error and temperature effect on sensitivity comply with the requirements of OIML R60 and NIST HB44.

<sup>3)</sup> See certificate for complete information.

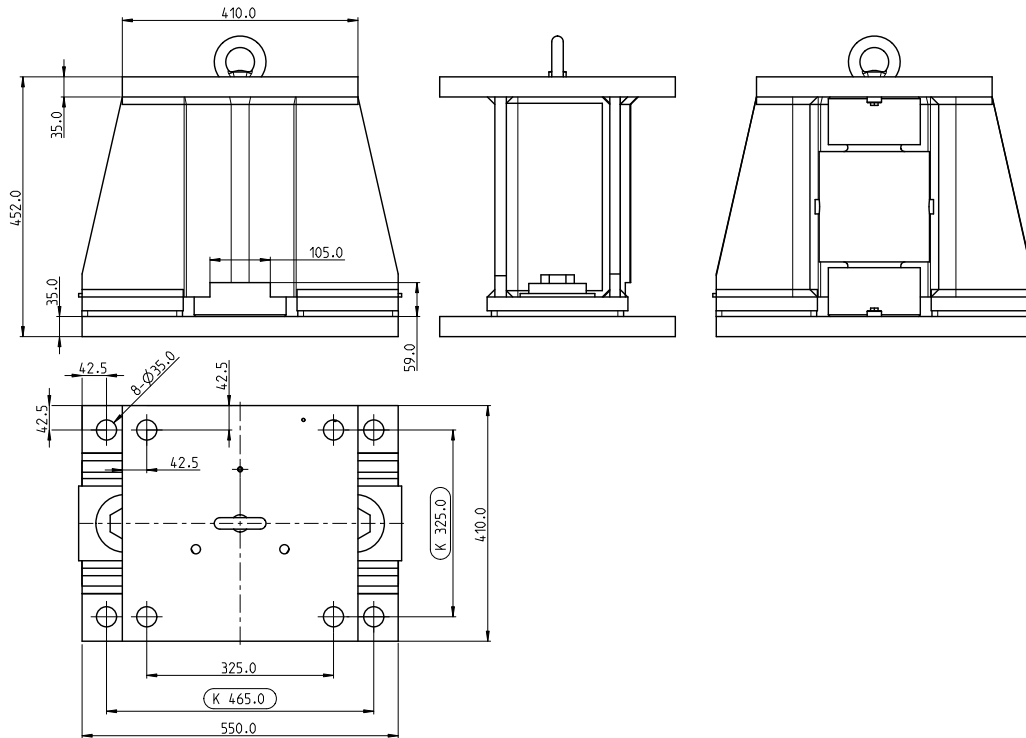
<sup>4)</sup> Calculate the scale's minimum increment size by multiplying this value by the square root of the number of load cells. For non Legal-For-Trade Applications.

SWC615 PowerMount™ 200t, 300t Weigh Module Dimensions mm (in)

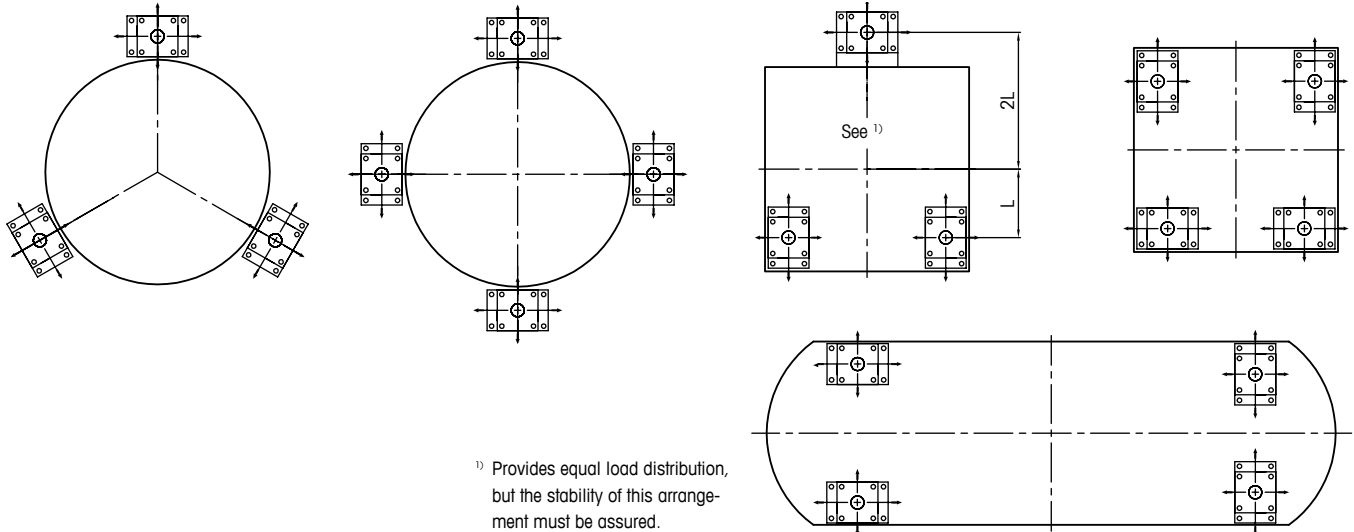
200t – Size 4



300t – Size 5



## SWC615 PowerMount™ 200t, 300t Weigh Module Arrangements



## Order Information SWC615 PowerMount™ 200t, 300t – Weigh Module Assembly

### Order information, weigh module assembly

| Size | Rated capacity | Description                  | Class   | Item No.               |             |
|------|----------------|------------------------------|---------|------------------------|-------------|
|      |                |                              |         | Material, weigh module |             |
|      |                |                              |         | Zinc plated            | Region      |
| 4    | 200t / 440klb  | Weigh module assembly        | OIML C1 | 304 595 18             | All regions |
|      |                | Weigh module assembly EN1090 |         | 304 595 20             | Europe only |
| 5    | 300 t / 660klb | Weigh module assembly        | OIML C1 | 304 595 19             | All regions |
|      |                | Weigh module assembly EN1090 |         | 304 595 21             | Europe only |

**Bolded entries are stocked**

## Order Information SWC615 PowerMount™ 200t, 300t – Cables

### Order information, cables

| Description                                   | Item No.                 |                       |                        |                        |                       |                       |                        |                        |
|---|--------------------------|-----------------------|------------------------|------------------------|-----------------------|-----------------------|------------------------|------------------------|
|   | Cable, material / length |                       |                        |                        |                       |                       |                        |                        |
|   | PU / 3 m<br>(10 ft)      | PU / 5 m<br>(16.4 ft) | PU / 10 m<br>(32.8 ft) | PU / 20 m<br>(65.6 ft) | PU / 30 m<br>(100 ft) | PU / 50 m<br>(166 ft) | PU / 100 m<br>(333 ft) | PU / 150 m<br>(500 ft) |
| Cable kit, 3 load cells                       | <b>303 027 50</b>        | <b>303 027 51</b>     | <b>303 027 52</b>      | <b>303 027 53</b>      | –                     | –                     | –                      | –                      |
| Cable kit, 4 load cells                       | <b>303 027 54</b>        | <b>303 027 55</b>     | <b>303 027 56</b>      | <b>303 027 57</b>      | –                     | –                     | –                      | –                      |
| Load cell – load cell cable                   | <b>303 027 66</b>        | <b>303 027 67</b>     | <b>303 027 68</b>      | <b>303 027 69</b>      | –                     | –                     | –                      | –                      |
| Home run cable                                | –                        | <b>303 027 58</b>     | <b>303 027 59</b>      | <b>303 027 60</b>      | <b>303 027 61</b>     | <b>303 027 62</b>     | <b>303 027 63</b>      | <b>303 027 64</b>      |
| Braided cable kit, 3 load cells               | –                        | <b>610 452 91</b>     | <b>610 452 92</b>      | –                      | –                     | –                     | –                      | –                      |
| Braided cable kit, 4 load cells               | –                        | <b>610 452 93</b>     | <b>610 452 94</b>      | –                      | –                     | –                     | –                      | –                      |
| Braided home run cable                        | –                        | –                     | <b>610 447 30</b>      | <b>610 447 31</b>      | <b>610 447 32</b>     | <b>610 447 34</b>     | <b>610 447 39</b>      | <b>610 447 49</b>      |
| Cable extension adapter                       | <b>302 206 28</b>        |                       |                        |                        |                       |                       |                        |                        |
| CAN termination load cell                     | <b>303 027 70</b>        |                       |                        |                        |                       |                       |                        |                        |
| Blind cap connector load cell                 | <b>303 027 71</b>        |                       |                        |                        |                       |                       |                        |                        |
| Cable gland for home run cable with IND780PDX | <b>300 956 39</b>        |                       |                        |                        |                       |                       |                        |                        |

**Bolded entries are stocked**

## Order Information SWC615 PowerMount™ 200t, 300t – Weigh Module without Load Cell

- SafeLock™ allows installation of weigh module hardware without load cell to avoid sensor damage
- Use weigh module with dummy load cell for level detection systems

| Order information, weigh module kit |                |                         | Item No.               |             | Suitable load cells |                   |
|-------------------------------------|----------------|-------------------------|------------------------|-------------|---------------------|-------------------|
| Size                                | Rated capacity | Description             | Material, weigh module |             | Class               | Item No.          |
|                                     |                |                         | Zinc plated            | Region      |                     |                   |
| 4                                   | 200t / 440klb  | Weigh module kit        | 304 594 62             | All regions | OIML C1             | <b>302 206 94</b> |
|                                     |                | Weigh module kit EN1090 | 304 595 12             | Europe only |                     |                   |
| 5                                   | 300 t / 660klb | Weigh module kit        | 304 594 71             | All regions | OIML C1             | <b>303 140 22</b> |
|                                     |                | Weigh module kit EN1090 | 304 595 13             | Europe only |                     |                   |

**Bolded entries are stocked**

### 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, 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.

#### METTLER TOLEDO Group

Industrial Division  
Local contact: [www.mt.com/contacts](http://www.mt.com/contacts)

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For more information

