

## 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.



#### Conveyors and Mixers

SWC615 PowerMount™ weigh modules are also designed for dynamic-loading applications such as conveyors, mixers, and blenders. They provide 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

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™

## Right the First Time 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
- Dual stabilizer option
- Capacity range: 7.5 t – 90 t
- POWERCELL® load cell
- All load cells with IP68/IP69K and fully stainless steel
- Global approvals standard on each load cell
- Zinc plated or stainless steel mounting hardware
- CalFree™ Plus: Calibration w/o test weights at your finger tip

# SWC615 PowerMount™ Specifications – Weigh Module

Weigh Module	Unit of Measure	Specification						
		1			2			3A
Model No.		SWC615 PowerMount™						
Size								
Rated Capacity (R.C.)	† (klb, nominal)	7.5 (16.5)	15 (33)	22.5 (49.6)	20 (44)	30 (66)	50 (110)	90 (198)
Max. Rated Forces <sup>1)</sup>								
Max. Compressive Force, Rated	kN (klb)	74 (16.5)	145 (33)	220 (50)	195 (44)	290 (65)	490(110)	880 (198)
Max Horizontal Force, Rated	transverse longitudinal kN (klb)	74 (16.5)			100 (22)			
Max. Uplift Force, Rated	kN (klb)	62 (14)			150 (33)			190 (43)
Max. horizontal force (longitudinal) per stabilizer option, Rated <sup>6)</sup>	kN (klb)	22 (5)			35 (7.7)			50 (11.2)
Max. Yield Forces <sup>2) 4)</sup>								
Max. Compressive Force, Yield	kN (klb)	145 (33)	294 (67)	440 (97)	390 (87)	580 (130)	980 (215)	1756 (388)
Max. Horizontal Force, Yield	transverse longitudinal kN (klb)	105 (24)			135 (30)			140 (31)
Max. Uplift Force, Yield	kN (klb)	85 (19)			200 (45)			265 (60)
Max. Ultimate Forces <sup>3) 4)</sup>								
Max. Compressive Force, Ultimate	kN (klb)	220 (50)	420 (94)	660 (147)	580 (130)	883 (194)	1470 (323)	2648 (582)
Max. Horizontal Force, Ultimate	transverse longitudinal kN (klb)	210 (47)			360 (80)			400 (88)
Max. Uplift Force, Ultimate	kN (klb)	200 (45)			390 (88)			485 (109)
Restoring Force	%A.L./ mm (.in) <sup>5)</sup>	2.4 (61)		3.4 (87)	1.8 (46)			1.6 (41)
Max. top plate travel	transverse longitudinal <sup>7)</sup> ± mm (in)						± 5 (0.2)	
Weight (including load cell), nominal	kg (lb)	20 (44)			55 (120)			110 (242)
Material		Carbon steel / 304 stainless steel / 316 stainless steel			Carbon steel / 304 stainless steel			
Finish		Zinc Plated / Electropolished / Electropolished			Zinc Plated / Electropolished			

<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 & longitudinal).

<sup>6)</sup> 1 or 2 per weigh module. Max permissible longitudinal force per stabilizer.

<sup>7)</sup> 0 with Stabilizer.

# SWC615 PowerMount™ Specifications – POWERCELL®

Load Cell	Unit of Measure	Specification										
		30092515	30092516	30092517	42904882	42904883	42904884	42904891	42904892	72238150	72238147	
Item No.		POWERCELL® SLC611D					POWERCELL® PDX® SLC820					
Model No.		POWERCELL® SLC611D					POWERCELL® PDX® SLC820					
Rated Capacity (R.C.)	† (klb, nominal)	7.5 (17)	15 (33)	22.5 (50)	20 (44)	30 (66)		50 (110)		90 (198)		
Min. Increment Size, typical <sup>11)</sup>	kg (lb)	0.15 (0.33)	0.3 (0.66)	0.45 (1)	0.4 (0.88)	0.6 (1.3)		1 (2.2)		1.8 (4)		
Zero load Output	%R.C.	≤ 0.5					≤ 0.1					
Combined Error <sup>8) 9)</sup>	%R.C.	≤ 0.018			≤ 0.018		≤ 0.015	≤ 0.018	≤ 0.015	≤ 0.018	≤ 0.015	
Repeatability Error	%A.L.	≤ 0.010			≤ 0.010		≤ 0.008	≤ 0.010	≤ 0.008	≤ 0.010	≤ 0.008	
Creep, 30 minute	%A.L.	≤ 0.015			≤ 0.015		≤ 0.0125	≤ 0.015	≤ 0.0125	≤ 0.015	≤ 0.0125	
Min. Dead Load Output Return (DR), 30 min	%A.L.	≤ 0.015			≤ 0.015		≤ 0.0125	≤ 0.015	≤ 0.0125	≤ 0.015	≤ 0.0125	
Temperature Effect on	Min. Dead load Output	%R.C./°C (./°F)			0.0014 (0.0008)	≤ 0.0028 (0.0016)	≤ 0.0025 (0.0014)	≤ 0.0013 (0.0007)	≤ 0.0018 (0.001)	≤ 0.0013 (0.0007)	≤ 0.0014 (0.0008)	≤ 0.001 (0.0006)
	Sensitivity <sup>9)</sup>	%A.L./°C (./°F)			≤ 0.001 (0.0006)	≤ 0.001 (0.0006)		≤ 0.0008 (0.0004)	≤ 0.001 (0.0006)	≤ 0.0008 (0.0004)	≤ 0.001 (0.0006)	≤ 0.0008 (0.0004)
Temperature Range	Compensated Operating	°C (°F)			-10 ~ +40 (-14 ~ +104)	-10 ~ +40 (-14 ~ +104)						
	Safe Storage				-40 ~ +55 (-40 ~ +131)	-30 ~ +55 (-22 ~ +131)						
					-40 ~ +80 (-40 ~ +176)	-40 ~ +80 (-40 ~ +176)						
OIML / European Approval <sup>10)</sup>	Class	C3			C3	C3	C4	C3	C4	C3	C4	
	nmax	3000			3000	3000	4000	3000	4000	3000	4000	
	Vmin	kg (lb)	0.83	1.67	2.5	3.5	4.7	2.4	5.7	4	8.1	6.3
NTEP Approval <sup>10)</sup>	Class	IIIL M n:5			IIIL M	IIIL M	-	IIIL M	-	IIIL M	-	
	nmax	5000			10000	10000	-	10000	-	10000	-	
	Vmin	kg (lb)	2.2	4.2	6.3	2.9	4	-	4.9	-	7.1	-
ATEX Approval <sup>10)</sup>	Rating	I II 3 G Ex ec IIC T6 Gc / II 3 G Ex nA IIC T6 Gc / II 3 D Ex tc IIIC T85°C			II 3 G Ex nA IIC T6 Gc / II 3 D Ex tc IIIC T85°C Dc IP6X							
IECEx Approval <sup>10)</sup>	Rating	EX ec IIC T6 Gc / Ex nA IIC T6 Gc / Ex tc IIC T85°C Dc			Ex nA IIC T6 Gc / Ex tc IIIC T85°C Dc IP6X							
FM Approval <sup>10)</sup>	Rating	NI / I, II, III Division 2, Groups A, B, C, D, F G T6			-							
UL /cUL Approval <sup>10)</sup>	Rating	-			I, II, III, Division 2, Groups C, D, F, G, T6							
Supply Voltage Non-regulated	Typical	V DC			12-24 (external supply)							
Overvoltage Protection	A	2500			> 80000							
Effective System Update Rate	Hz	100 (with 4 cells)			83 (with 4 cells), 50 (with 6 cells), 25 (with 14 cells), 15 (with 24 cells)							
Material	Spring Element	Stainless steel			Stainless steel							
	Type	welded			welded							
Protection	IP Rating	IP68/IP69K			IP68/IP69K							
	NEMA Rating	NEMA 6/6P			NEMA 6/6P							

<sup>8)</sup> Error due to the combined effect of non-linearity and hysteresis.

<sup>9)</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.

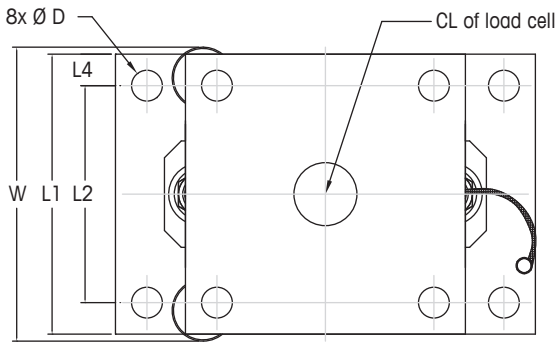
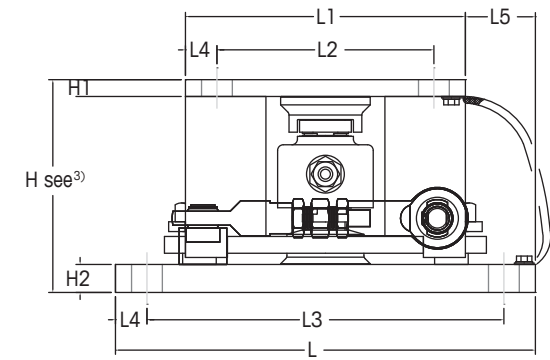
<sup>10)</sup> See certificate for complete information.

<sup>11)</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.

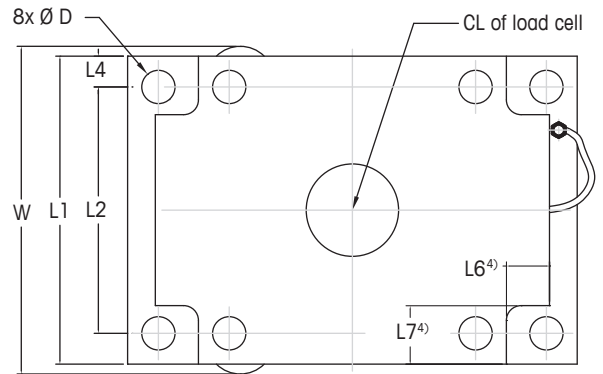
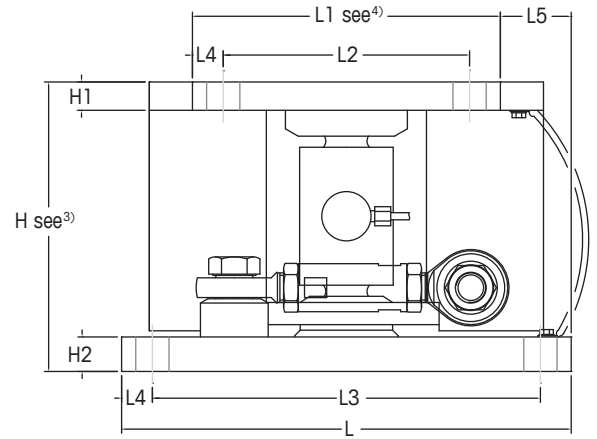


# SWC615 PowerMount™ Weigh Module Dimensions mm [in]

## Size 1



## Size 2 / 3A



Size	Capacity	Dimensions and Locations															Tank Leg Plate	
		D	H	HS <sup>2)</sup>	HP <sup>1)</sup>	H1	H2	L <sup>4)</sup>	L1	L2	L3	L4	L5	L6 <sup>4)</sup>	L7 <sup>4)</sup>	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]
3A	90t	32	329.5	367.5	392.9	30	33	440	300	235	375	32.5	70	40	52.5	321	min 60	300 x 300
	[198klb]	[1.26]	[12.97]	[14.47]	[15.47]	[1.18]	[1.30]	[17.32]	[11.81]	[9.25]	[14.76]	[1.28]	[2.76]	[1.57]	[2.07]	[12.63]	[2.4]	[11.81 x 11.81]

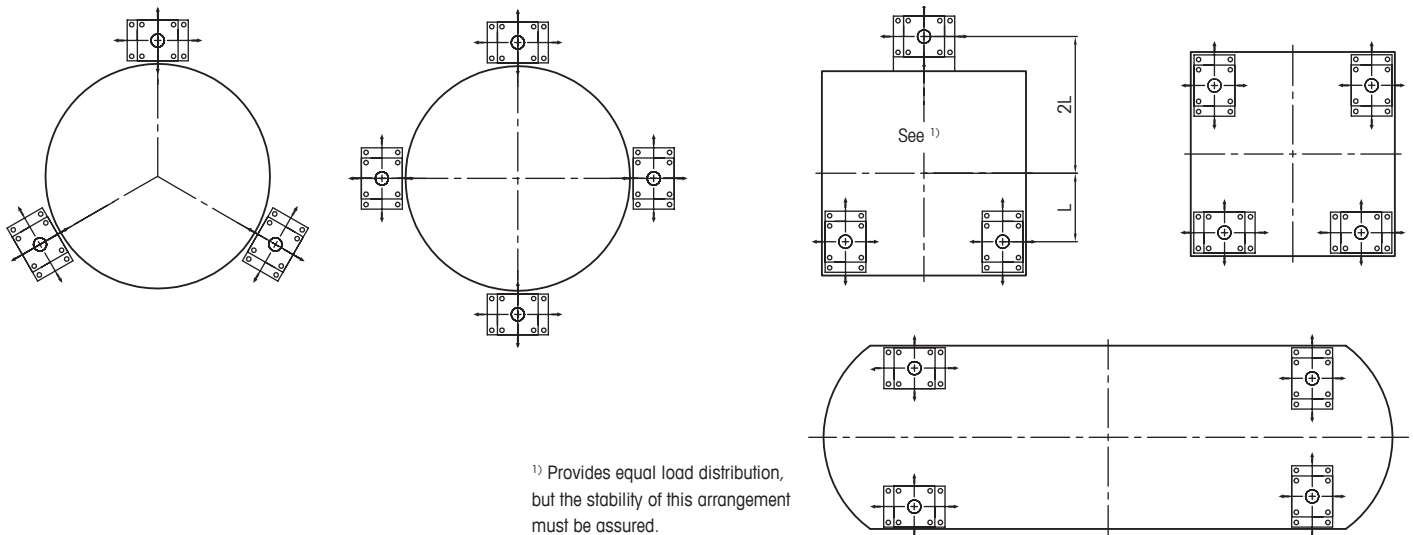
<sup>1)</sup> Height when using thermal isolation pad or shock/vibration pad

<sup>2)</sup> Height when using spacer plate

<sup>3)</sup> Shipping/Installation height is 2 mm [0.08 inches] taller

<sup>4)</sup> Designed for square tank leg plate above top plate

## SWC615 PowerMount™ Weigh Module Arrangements



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

# Order Information SWC615 PowerMount™ – Weight Module including Load Cell

Order Information, Weigh Module Assembly				Item No.		
Size	Rated Capacity	Description	Class	Material, Weigh Module		
				Zinc Plated	304	316
1	7.5 t / 17 klb	Weigh Module Assembly	C3 / III M n:5	<b>30256336</b>	<b>30256337</b>	30256338
	15 t / 33 klb			<b>30256339</b>	<b>30256340</b>	30256341
	22.5 t / 50 klb			<b>30256342</b>	<b>30256343</b>	30256344
	7.5 - 22.5 t / 17 - 50 klb	Stabilizer <sup>1)</sup>	-	<b>72205444</b>	<b>72205445</b>	72242585
		Spacer Plate		<b>72245532</b>	<b>72206153</b>	72247333
		Dead Stand		<b>72206154</b>	<b>72206155</b>	-
		Shock/Vibration Pad <sup>2)</sup>		<b>72246646</b>	<b>72207262</b>	72247334
		Thermal Isolation Pad 80°C <sup>2)</sup>		<b>72246647</b>	<b>72207263</b>	72247335
Thermal Isolation Pad 170°C <sup>2)</sup>		<b>72246648</b>		<b>72207264</b>	72247336	
2	20 t / 44 klb	Weigh Module Assembly	C3 / III L M n:10	<b>72262440</b>	<b>72262441</b>	-
	30 t / 66 klb			<b>72255118</b>	<b>72255120</b>	
	50 t / 110 klb			<b>72255119</b>	<b>72255121</b>	
	20 - 50 t / 44 - 110 klb	Stabilizer <sup>1)</sup>	<b>72248968</b>	<b>72248969</b>		
		Spacer Plate	<b>72249203</b>	<b>72249206</b>		
		Dead Stand	72249173	72249174		
		Shock/Vibration Pad <sup>2)</sup>	72255072	72255075		
		Thermal Isolation Pad 80°C <sup>2)</sup>	72255073	72255076		
		Thermal Isolation Pad 170°C <sup>2)</sup>	72255074	72255077		
	3A	90 t / 198 klb	Weigh Module Assembly	C3 / III L M n:10	<b>30057238</b>	
90 t / 198 klb		Stabilizer	-	<b>72248970</b>	<b>72248971</b>	
		Spacer Plate <sup>1)</sup>		<b>72249213</b>	<b>72249214</b>	
		Dead Stand		72249175	72249176	
		Shock/Vibration Pad <sup>2)</sup>		72255078	72255081	
		Thermal Isolation Pad 80°C <sup>2)</sup>		72255079	72255082	
		Thermal Isolation Pad 170°C <sup>2)</sup>		72255080	72255083	

**Bolded entries are stocked**

<sup>1)</sup> 1 or 2 per weigh module.

<sup>2)</sup> Includes Spacer Plate

## Order Information SWC615 PowerMount™ Cables

Order Information, Cables	Item No.							
	Cable, Material / Length							
Description	PU / 3 m (10 ft)	PU / 5 m (16.4 ft)	PU / 10 m (32.8 ft)	PU / 20 m (65.5 ft)	PU / 30 m (100 ft)	PU / 50 m (166 ft)	PU / 100 m (333 ft)	PU / 150 m (500 ft)
Cable Kit, 3 Load Cells	<b>30302750</b>	<b>30302751</b>	<b>30302752</b>	<b>30302753</b>	-	-	-	-
Cable Kit, 4 Load Cells	<b>30302754</b>	<b>30302755</b>	<b>30302756</b>	<b>30302757</b>	-	-	-	-
Load Cell – Load Cell Cable	<b>30302766</b>	<b>30302767</b>	<b>30302768</b>	<b>30302769</b>	-	-	-	-
Home Run Cable	-	<b>30302758</b>	<b>30302759</b>	<b>30302760</b>	<b>30302761</b>	<b>30302762</b>	<b>30302763</b>	<b>30302764</b>
Braded Cable Kit, 3 Load Cells	-	<b>61045291</b>	<b>61045292</b>	-	-	-	-	-
Braded Cable Kit, 4 Load Cells	-	<b>61045293</b>	<b>61045294</b>	-	-	-	-	-
Braded Home Run Cable	-	-	<b>61044730</b>	<b>61044731</b>	<b>61044732</b>	<b>61044734</b>	<b>61044739</b>	<b>61044749</b>
Cable Extension Adapter	<b>30220628</b>							
CAN Termination Load Cell	<b>30303770</b>							
Blind Cap Connector Load Cell	<b>30302771</b>							
Cable Gland for Home Rund Cable with IND780PDX	<b>30095839</b>							

**Bolded entries are stocked**

## Order Information SWC615 PowerMount™ – 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 (with C4, 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			Item No.		Dummy Load Cell
		Zinc Plated	304	316	Class		
					C3 / IIII M n:10	C4	
1	7.5 t / 17 klb	<b>30131985</b>	<b>30131986</b>	30131987	<b>30092515</b>	–	30238196
	15 t / 33 klb				<b>30092516</b>	–	
	22.5 t / 50 klb				<b>30092517</b>	–	
2	20 t / 44 klb	<b>72255116</b>	<b>72255117</b>	–	<b>42904882</b>	–	72255084
	30 t / 66 klb				<b>42904883</b>	<b>42904884</b>	
	50 t / 110 klb				<b>42904891</b>	<b>42904892</b>	
3A	90 t / 198 klb	<b>30069755</b>	<b>30069754</b>	–	<b>72238150</b>	72238147	30085236

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.



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Subject to technical changes  
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