

Right the First Time

Safe, Accurate, Service Friendly

CERTIFIED
DIN
EN 1090



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™ EN1090 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
- EN1090 conformity

SWC615 PowerMount™ EN1090 Specifications – Weigh Module

Weigh Module	Unit of Measure	Specification						
		SWC615 PowerMount™ EN1090						
Model No.		SWC615 PowerMount™ EN1090						
Size		1			2			3A
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 ¹⁾								
Max. Compressive Force, Rated	kN (klb)	74 (16.5)	145 (33)	220 (50)	195 (44)	290 (65)	490(110)	880 (198)
Max Horizontal transverse Force, Rated 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 ⁶⁾	kN (klb)	22 (5)			35 (7.7)			50 (11.2)
Max. Yield Forces ^{2) 4)}								
Max. Compressive Force, Yield	kN (klb)	145 (33)	294 (67)	440 (97)	390 (87)	580 (130)	980 (215)	1756 (388)
Max. Horizontal transverse Force, Yield longitudinal	kN (klb)	105 (24)			135 (30)			140 (31)
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)	580 (130)	883 (194)	1470 (323)	2648 (582)
Max. Horizontal transverse Force, Ultimate 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) ⁵⁾	2.4 (61)		3.4 (87)	1.8 (46)			1.6 (41)
Max. top plate travel	transverse longitudinal ⁷⁾	± 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			
EN1090 approval		Yes, execution class EXC2						

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.

SWC615 PowerMount™ EN1090 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 ¹¹⁾	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 ^{8) 9)}	%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 ⁹⁾	%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	°C (°F)			-40 ~ +55 (-40 ~ +131)		-30 ~ +55 (-22 ~ +131)					
	Safe Storage	°C (°F)			-40 ~ +80 (-40 ~ +176)		-40 ~ +80 (-40 ~ +176)					
OIML / European Approval ¹⁰⁾	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 ¹⁰⁾	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 ¹⁰⁾	Rating	In preparation for Cat 3GD					II 3 G Ex nA IIC T6 Gc / II 3 D Ex tc IIIC T85°Dc IP6X					
IECEX Approval ¹⁰⁾	Rating	In preparation for Cat 3GD					Ex nA IIC T6 Gc / Ex tc IIIC T85° C Dc IP6X					
FM Approval ¹⁰⁾	Rating	In preparation for Div. 2					-					
UL /cUL Approval ¹⁰⁾	Rating	-					I, II, III, Division 2, Groups C, D, F, G, T6					
Supply Voltage Non-regulated	Typical	V DC	12-24 (external supply)			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					
	IP Rating	IP68/IP69K					IP68/IP69K					
Protection	NEMA Rating	NEMA 6/6P					NEMA 6/6P					
Deflection @ R.C., nominal	mm (in)	0.2 (0.008)	0.37 (0.015)	0.49 (0.019)	0.36 (0.014)	0.51 (0.02)		0.71 (0.028)		1.02 (0.04)		
Weight, nominal	kg (lb)	1.2 (2.6)			3.0 (6.6)		3.2 (7.0)		7.5 (16.6)			

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.

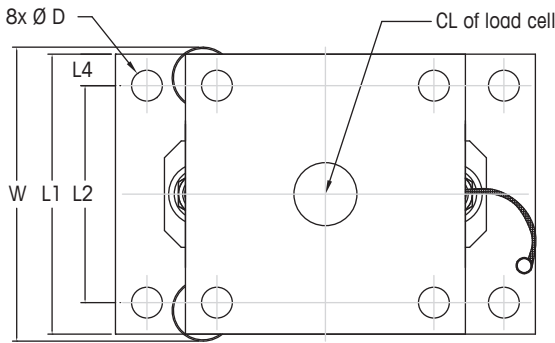
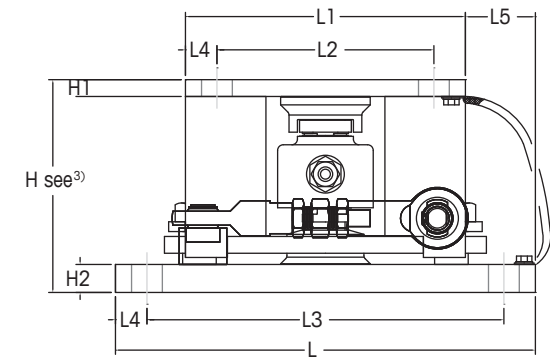
¹⁰⁾ See certificate for complete information.

¹¹⁾ 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.

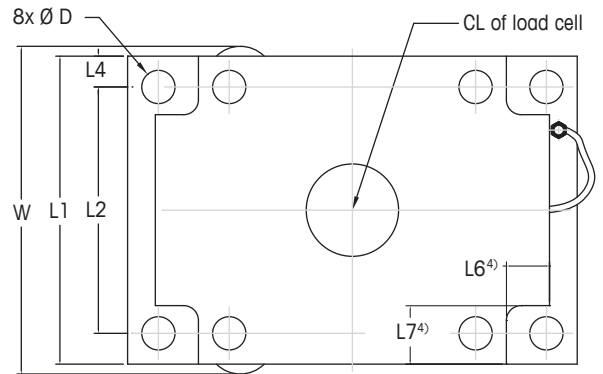
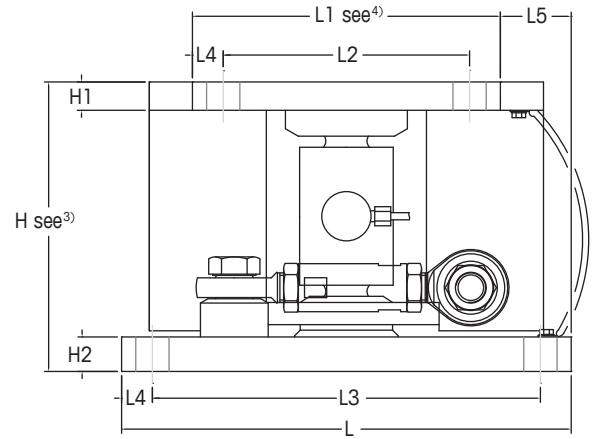


SWC615 PowerMount™ EN1090 Weigh Module Dimensions mm [in]

Size 1



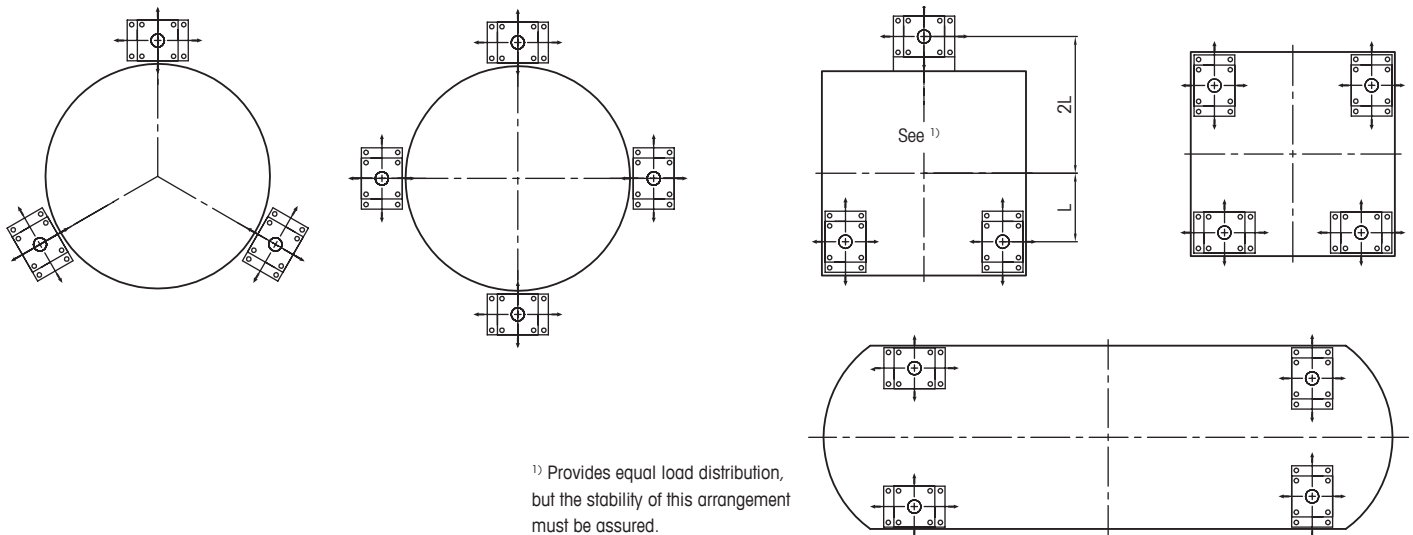
Size 2 / 3A



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]
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]

- 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

SWC615 PowerMount™ EN1090 Weigh Module Arrangements



Order Information SWC615 PowerMount™ – EN1090 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	30295829	30295830	30295831
	15 t / 33 klb			30295832	30295833	30295834
	22.5 t / 50 klb			30295835	30295836	30295837
	7.5 - 22.5 t / 17 - 50 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	20 t / 44 klb	Weigh Module Assembly	C3 / III L M n:10	30263212	30263213	-
	30 t / 66 klb			30263214	30263215	
	50 t / 110 klb			30263216	30263217	
	20 - 50 t / 44 - 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		
		90 t / 198 klb	Weigh Module Assembly	C3 / III L M n:10	30263218	
3A	90 t / 198 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 or 2 per weigh module.

²⁾ Includes Spacer Plate

Order Information SWC615 PowerMount™ EN1090 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	30302750	30302751	30302752	30302753	-	-	-	-
Cable Kit, 4 Load Cells	30302754	30302755	30302756	30302757	-	-	-	-
Load Cell – Load Cell Cable	30302766	30302767	30302768	30302769	-	-	-	-
Home Run Cable	-	30302758	30302759	30302760	30302761	30302762	30302763	30302764
Braded Cable Kit, 3 Load Cells	-	61045291	61045292	-	-	-	-	-
Braded Cable Kit, 4 Load Cells	-	61045293	61045294	-	-	-	-	-
Braded Home Run Cable	-	-	61044730	61044731	61044732	61044734	61044739	61044749
Cable Extension Adapter	30220628							
CAN Termination Load Cell	30303770							
Blind Cap Connector Load Cell	30302771							
Cable Gland for Home Rund Cable with IND780PDX	30095839							

Bolded entries are stocked

Order Information SWC615 PowerMount™ EN1090 – 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	30256422	30263187	30263188	30092515	–	30238196
	15 t / 33 klb				30092516	–	
	22.5 t / 50 klb				30092517	–	
2	20 t / 44 klb	30263193	30263194	-	42904882	–	72255084
	30 t / 66 klb				42904883	42904884	
	50 t / 110 klb				42904891	42904892	
3A	90 t / 198 klb	30263195	30263196	-	72238150	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.



Mettler Toledo GmbH

CH-8606 Greifensee
Switzerland
Tel. +41 44 944 22 11
Fax +41 44 944 30 60

Subject to technical changes
© 12/2017 Mettler-Toledo GmbH
MarCom Switzerland
MTSI Document-No: 30242878

www.mt.com

For more information