

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.

CERTIFIED
DIN
EN 1090



SWC515 PinMount™ EN1090 Right the First Time

SWC515 PinMount™ EN1090 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
- EN1090 conformity

SWC515 PinMount™ EN1090 Weigh Module Specifications

WEIGH MODULE		unit of measure	Specification						
Model No.			SWC515 PinMount™ EN1090						
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		kN (klb)	74 (16.5)		100 (22)		130 (28)		
									transverse
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		kN (klb)	105 (24)		135 (30)		190 (43)		
									transverse
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		kN (klb)	210 (47)		360 (80)		430 (96)		
									transverse
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		± mm (in)	± 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			
EN1090 approval			Yes, execution class EXC2						
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⁾	%R.C./°C (. /°F)		≤ 0.0018 (0.0010)		≤ 0.0021 (0.0011)		
		%A.L./°C (. /°F)	≤ 0.001 (0.0006)						
Temperature Range		Compensated	°C (°F)					-10 ~ +40 (-14 ~ +104)	
		Operating						-40 ~ +65 (-40 ~ +149)	
		Safe Storage						-40 ~ +80 (-40 ~ +176)	
OIML / European Approval ¹⁰⁾		Class	C3						
		nmax	3000						
		Y	7800		6666				
		Class	III M			III L M			
NTEP Approval ¹⁰⁾		nmax	5000					10000	
		Vmin	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 ib D 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	IS / I, II, III / 1 / ABCDEFG / T5			IS / I, II, III / 1 / ABCDEFG / T4			
			NI / I, II, III / 2 / ABCDFG / T6			NI / I, II, III / 2 / ABCDFG / T4			
		Rating, Canada	IS / I, II, III / 1 / ABCDEFG / T5			IS / I, II, III / 1 / ABCDEFG / T4			
			NI / I / 2 / ABCD / T6 DIP / II, III / 2 / FG			NI / I / 2 / ABCD / T4 DIP / II, III / 2 / FG			
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						
		Type	welded						
Protection		IP Rating	IP68, IP69K			IP68, IP69K			
		NEMA Rating	NEMA 6/6P						
Weight, nominal		kg (lb)	1 (2.2)		3 (6.6)		4.5 (9.9)		
Cable		Length	m (ft)		12 (39.4)		13 (42.5)		
		Diameter	mm (in)		5.2 (0.20)		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.

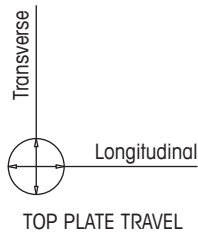
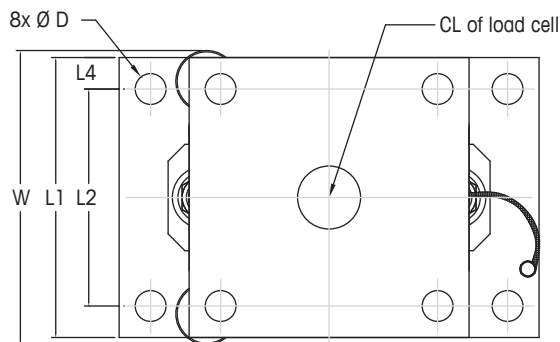
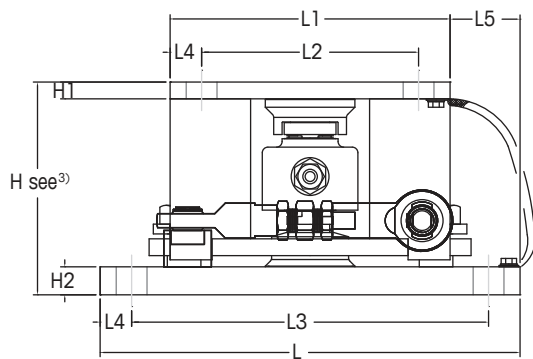
⁹⁾ Typical values only. The sum of errors due to Combined Error and Temperature Effect on Sensitivity comply with the requirements of OIML R60 and NIST HB44.

¹⁰⁾ See certificate for complete information.

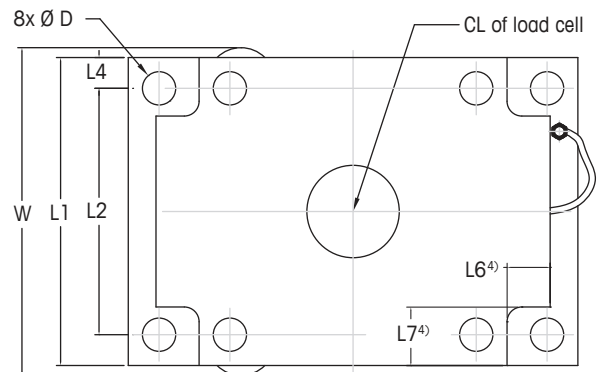
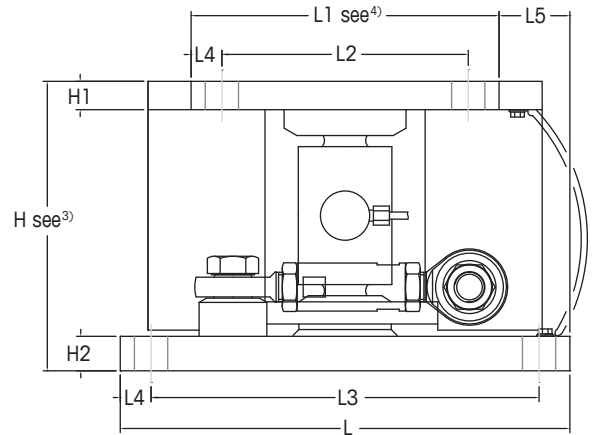


SWC515 PinMount™ EN1090 Weigh Module Dimensions

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 [16.5, 33, 49.6klb]	22 [0.87]	152 [5.98]	167 [6.57]	192.4 [7.57]	12 [0.47]	20 [0.79]	300 [11.8]	200 [7.87]	155 [6.1]	255 [10.04]	22.5 [0.89]	50 [1.97]	-	-	210 [8.27]	min 25 [1]	200 x 200 [7.87 x 7.87]
2	20, 30, 50t [44, 66, 110klb]	26 [1.02]	235 [9.25]	268 [10.55]	293.4 [11.55]	23 [0.91]	28 [1.1]	365 [14.37]	250 [9.84]	200 [7.87]	315 [12.4]	25 [0.98]	57.5 [2.26]	35 [1.38]	47.5 [1.87]	273 [10.75]	min 50 [2]	250 x 250 [9.84 x 9.84]
3	100t [220klb]	32 [1.26]	263 [10.35]	301 [11.85]	326.4 [12.85]	30 [1.18]	33 [1.30]	440 [17.32]	300 [11.81]	235 [9.25]	375 [14.76]	32.5 [1.28]	70 [2.76]	40 [1.57]	52.5 [2.07]	324 [12.75]	min 60 [2.4]	300 x 300 [11.81 x 11.81]

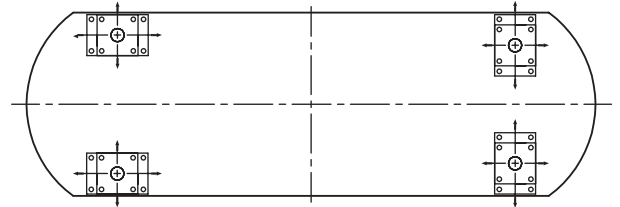
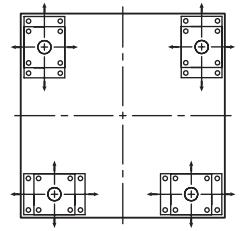
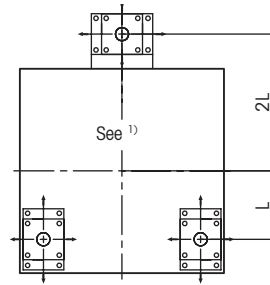
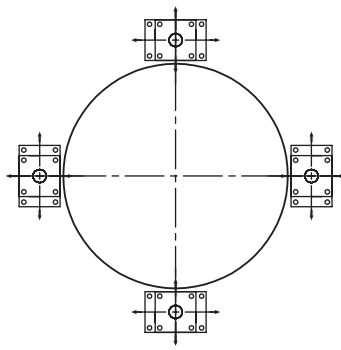
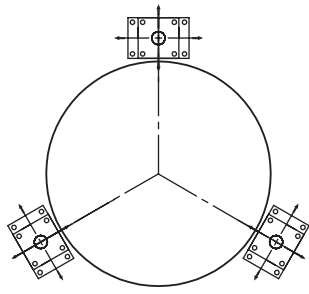
¹⁾ Height when using thermal isolation pad or shock/vibration pad

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™ EN1090 Weigh Module Arrangements



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

Order Information SWC515 PinMount™ EN1090 – 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)	30263197	30263198	30263199
	15 t / 33 klb				30263200	30263201	30263202
	22.5 t / 49.6 klb				30263203	30263204	30263205
	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)	30263206	30263207	-
	50 t / 110 klb				30263208	30263209	
	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)	30263210	30263211	-
	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™ EN1090 – Weigh Module without Load

- 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.					
		Zinc Plated	304	316		Cable, Material / Length					Dummy Load Cell
						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	30256422	30263187	30263188	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	30263189	30263190	-	C3/III M n:10	-	-	-	-	71201709	72188111
	50 t / 110 klb				C3/III M n:10	-	-	-	-	71201710	
3	100 t / 220 klb	30263191	30263192	-	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.



Mettler Toledo GmbH

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

Local contact: www.mt.com/contacts

Subject to technical changes
© 01/2018 Mettler-Toledo GmbH
MarCom Switzerland
MTSI Document-No: 30242868

www.mt.com

For more information