

## 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 <sup>1)</sup>								
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)	
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)		60 (13.4)	
Max. Yield Forces <sup>2) 4)</sup>								
Max. Compressive Force, Yield		kN (klb)	145 (33)	294 (67)	440 (97)	360 (80)	610 (135)	1226 (270)
Max. Horizontal Force, Yield		kN (klb)	105 (24)		135 (30)		190 (43)	
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)	883 (194)	1470 (323)	2940 (647)
Max. Horizontal Force, Ultimate		kN (klb)	210 (47)		360 (80)		430 (96)	
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)	
			transverse	longitudinal <sup>7)</sup>		± 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					
<b>LOAD CELL SLC610, 0782</b>		<b>unit of measure</b>	<b>Specification</b>					
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 <sup>8) 9)</sup>		%R.C.	≤ 0.018					
Temperature Effect on		Min. Dead load Output Sensitivity <sup>9)</sup>	%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)					
		Operating	-10 ~ +40 (-14 ~ +104)					
		Safe Storage	-40 ~ +65 (-40 ~ +149)					
			-40 ~ +80 (-40 ~ +176)					
OIML / European Approval <sup>10)</sup>		Class	C3					
		nmax	3000					
		Y	7800		6666			
		Class	III M		III L M			
NTEP Approval <sup>10)</sup>		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 <sup>10)</sup>		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 <sup>10)</sup>		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/II/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)		3.3 (7.3)	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)	

<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.

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

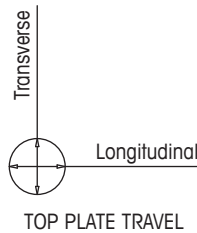
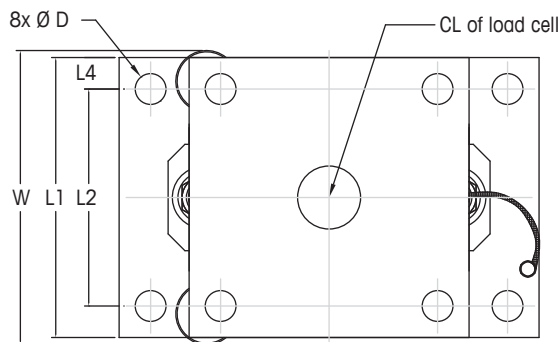
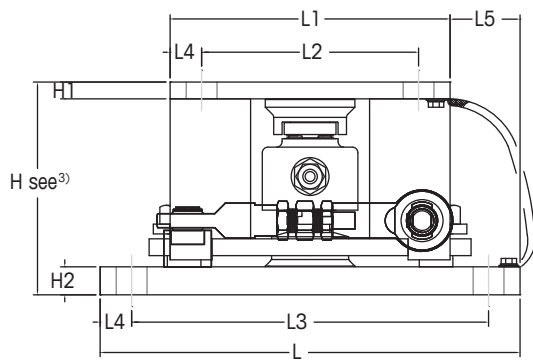
<sup>9)</sup> Typical values only. The sum of errors due to Combined Error and Temperature Effect on Sensitivity comply with the requirements of OIML R60 and NIST HB44

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

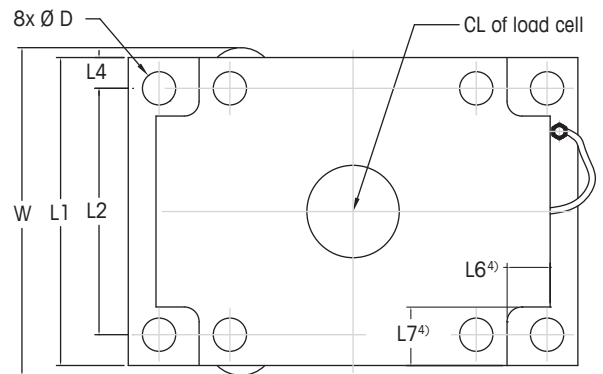
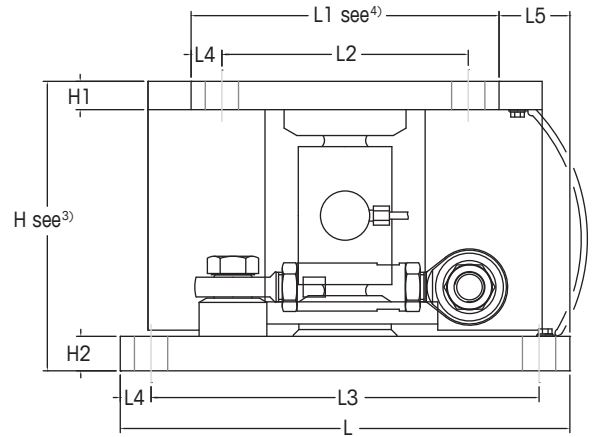


# SWC515 PinMount™ EN1090 Weigh Module Dimensions

## Size 1



## Size 2 / 3



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]
3	100t	32	263	301	326.4	30	33	440	300	235	375	32.5	70	40	52.5	324	min 60	300 x 300
	[220klb]	[1.26]	[10.35]	[11.85]	[12.85]	[1.18]	[1.30]	[17.32]	[11.81]	[9.25]	[14.76]	[1.28]	[2.76]	[1.57]	[2.07]	[12.75]	[2.4]	[11.81 x 11.81]

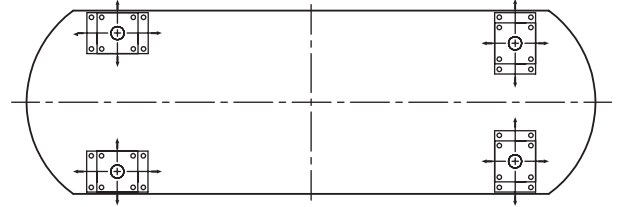
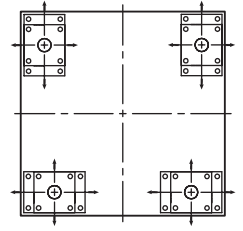
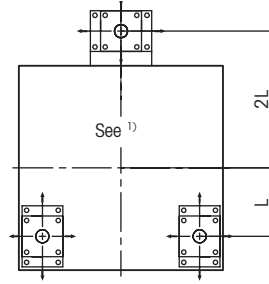
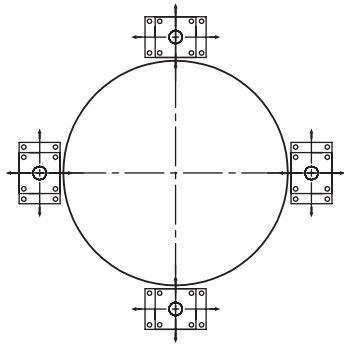
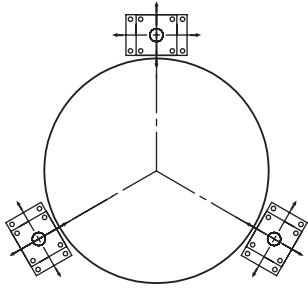
<sup>1)</sup> Height when using thermal isolation pad or shock/vibration pad

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

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

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

# SWC515 PinMount™ EN1090 Weigh Module Arrangements



<sup>1)</sup> 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)	<b>30263197</b>	<b>30263198</b>	30263199
	15 t / 33 klb				<b>30263200</b>	<b>30263201</b>	30263202
	22.5 t / 49.6 klb				<b>30263203</b>	<b>30263204</b>	30263205
	7.5 - 22.5 t / 16.5 - 49.6 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	30 t / 66 klb	Weigh Module Assembly	C3/III M n:10	PVC / 13 m (42.5ft)	<b>30263206</b>	<b>30263207</b>	-
	50 t / 110 klb				<b>30263208</b>	<b>30263209</b>	
	30 - 50 t / 66 - 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					
3	100 t / 220 klb	Weigh Module Assembly	C3/III M n:10	PVC / 13 m (42.5ft)	<b>30263210</b>	<b>30263211</b>	-
	100 t / 220 klb	Stabilizer <sup>1)</sup>	-	-	<b>72248970</b>	<b>72248971</b>	
		Spacer Plate			<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 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	<b>30256422</b>	<b>30263187</b>	30263188	C3/III M n:5	<b>30058060</b>	30058064	30105781	30105786	-	30238196
	C3/III M n:5				<b>30058061</b>	30058065	30105783	30105788			
	C3/III M n:5				<b>30058062</b>	30058066	30105784	30105789			
2	30 t / 66 klb	<b>30263189</b>	<b>30263190</b>	-	C3/III M n:10	-	-	-	-	71201709	72188111
	50 t / 110 klb				C3/III M n:10	-	-	-	-	71201710	
3	100 t / 220 klb	<b>30263191</b>	<b>30263192</b>	-	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.

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, checkweighing.



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