SWC415 PinMount™

Cost Efficient Tank Weighing

Safe, Accurate, Service Friendly

Tank Weighing

SWC415 PinMount offers incomparable value in weigh modules for all applications including tank, hopper, and silo weighing, and this is achieved without sacrificing the well-established features of the PinMount family.

Conveyors and Mixers

SWC415 PinMount™ weigh modules are designed for dynamic-loading applications such as conveyors, mixers, and blenders. SWC415 PinMount™ provides 360 degree 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/IP69K and can be used in all environments. The load cells are easy to inspect or replace.

Stabilizers

An optional stabilizer can be applied to each weigh module to stabilize a scale subject to heavy vibration or high torque, or used for in-motion weighing. With a stabilizer installed, thermal expansion is still possible, guaranteeing the best weighing performance.

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SWC415 PinMount™ 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. SWC415 PinMount™ features include:

- Dual integrated lift-off protection
- Dual vertical safety down-stop
- Full 360 degree integrated checking
- Ground strap – welding protection
- SafeLock™ – Weigh module locked for installation
- SafeLock™ – Load cell protected for installation
- Stabilizer option
- Capacity range: 7.5 t – 100 t
- 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

METTLER TOLEDO

SWC415 PinMount™ Weigh Module Specifications

Weigh Module		Unit of measure	Specification					
Model No.			SWC415 PinMount™					
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	transverse	kN (klb)	50 (11)			70 (15.4)		91 (20.5)
	longitudinal							
Max. Uplift Force, Rated		kN (klb)	44 (9.7)			105 (23.1)		133 (30)
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)	685 (190)	1715 (385)
Max. Horizontal Force, Yield	transverse	kN (klb)	73 (16.1)			95 (20.9)		133 (30)
	longitudinal							
Max. Uplift Force, Yield		kN (klb)	60 (13.2)			140 (30.8)		186 (42)
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	transverse	kN (klb)	145 (31.9)			250 (55)		300 (76)
	longitudinal							
Max. Uplift Force, Ultimate		kN (klb)	140 (30.8)			275 (60.5)		340 (76)
Restoring Force		%A.L./mm (../in) [5]	2.4 (61)		3.4 (87)	0.8 (19)	2 (51)	2(51)
Max. top plate travel	transverse	± mm (in)	± 5 (0.2)					
	longitudinal [7]		± 5 (0.2)					
Weight (including load cell), nominal		kg (lb)	20 (44)			55 (120)		70 (154)
Material			carbon steel / 304 stainless steel					
Finish			Zinc Plated / Electropolished					

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	%R.C./°C (../°F)	≤ 0.0018 (0.0010)			≤ 0.0021 (0.0011)		
	Sensitivity [9]	%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		
NTEP Approval [10]	Class		III M			III L M		
	nmax		5000			10000		
	Vmin	kg (lb)	0.96 (2.12)	1.92 (4.24)	2.8 (6.36)	2.1 (4.5)	3.5 (7.5)	7.0 (15)
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 ibD 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 ic IICT6 ..T4 Gc ; II 3 G Ex nA IIC T6 Gc ; II 3 G Ex ec IIC T6 Gc ; II 3 D Ex tc IIIC T60°C Dc		
IECEx Approval [10]	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 ec IIC T6 Gc ; Ex tc IIIC T60°C Dcc		
Factory Mutual Approval [10]	Rating, USA		IS / I, II, III / 1 / ABCDEFG / T5			IS / I, II, III / 1 / ABCDEFG / T4 Ta = -40°C to +50°C		
			NI / I, II, III / 2 / ABCDFG / T6			NI / I,II,III / 2 / ABCDFG / T4 Ta = -40°C to +50°C		
	Rating, Canada		IS / I, II, III / 1 / ABCDEFG / T5 TA= -40°C to +55°C; NI / I / 2 / ABCD / T6 Ta = -40°C to +55°C, DIP/II,III/2/FG			IS / I,II,III / 1 / ABCDEFG / T4 Ta = -40°C to +50°C ; NI / I / 2 / ABDC / T4 Ta = -40°C to +50°C, DIP/II,III/2/FG		
			Comply			Class I, Division 1, Groups A, B, C and D; Class II, Groups E, F and G; Class III		
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					
Protection	Type		welded					
	IP Rating		IP68, IP69K			IP68		
	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)		

[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 per weigh module. Max permissible longitudinal force per stabllizer.

[7] 0 with Stabilizer.

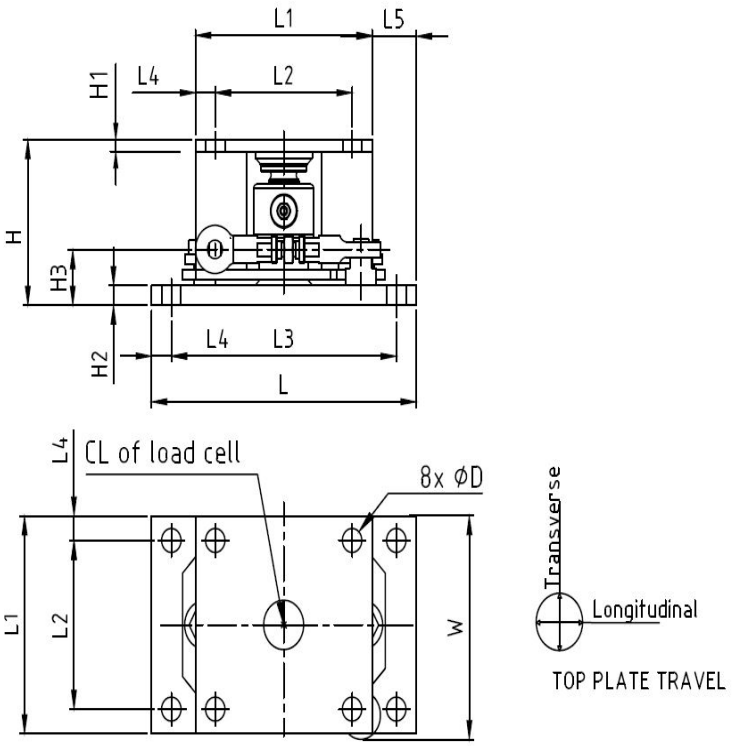
[8] Error due to the combined effect of non-linearity and hysteresis.

[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.

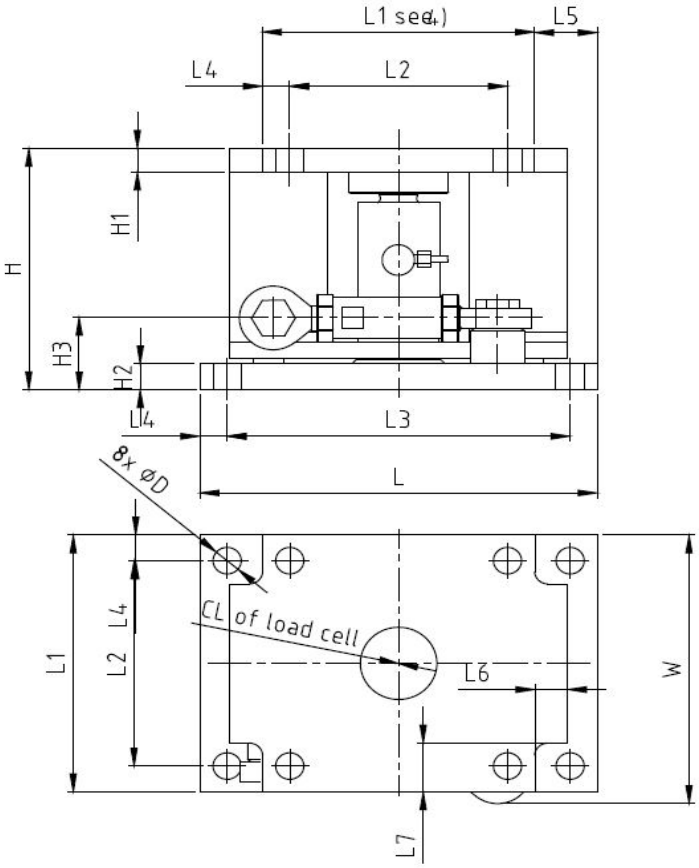
[10] See certificate for complete information.

SWC415 PinMount™ Weigh Module Dimensions mm (in)

Size 1



Size 2 , Size 3



		Dimensions and Locations																Tank Leg Plate	
Size	**Capacity**	**D**	**H**	**HS[2]**	**HP[1]**	**H1**	**H2**	**H3**	**L[4]**	**L1**	**L2**	**L3**	**L4**	**L5**	**L6[4]**	**L7[4]**	**W**	**Thickness**	**Dimensions**
1	7.5, 15, 22.5 t (16.5, 33, 49.6 klb)	22 (0.87)	152 (5.98)	167 (6.57)	192.4 (7.57)	11 (0.43)	18 (0.71)	51 (11.8)	300 (11.8)	200 (7.87)	155 (6.1)	255 (10.04)	22.5 (0.89)	50 (1.97)	–	–	205 (8.1)	min 25 (1.0)	200 x 200 (7.87 x 7.87)
2	20, 30, 50 t (44, 66, 110 klb)	26 (1.02)	235 (9.25)	268 (10.55)	293.4 (11.55)	23 (0.91)	25 (0.98)	69.5 (2.75)	365 (14.37)	250 (9.84)	200 (7.87)	315 (12.4)	25 (0.98)	55 (2.16)	27.5 (1.08)	47.5 (1.87)	261.5 (10.29)	min 50 (2.0)	250 x 250 (9.84 x 9.84)
3	100t (200klb)	32 (1.26)	263 (10.35)	301 (11.85)	326.4 (12.85)	27 (1.08)	28 (1.1)	86.5 (3.4)	440 (17.32)	300 (11.81)	235 (9.25)	375 (14.75)	32.5 (1.28)	70 (2.75)	40 (1.57)	52.5 (2.07)	313 (12.3)	min 60 (2.4)	300 x 300 (11.8 x 11.8)

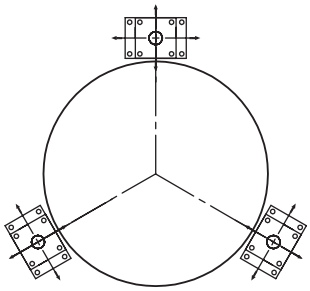
[1] Height when using thermal isolation pad or shock/vibration pad

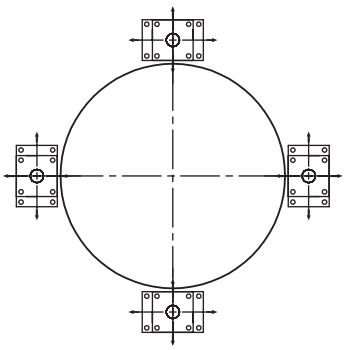
[2] Height when using spacer plate

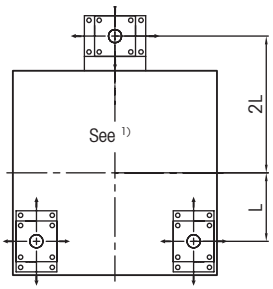
[3] Shipping/Installation height is 2 mm (0.08 inches) taller

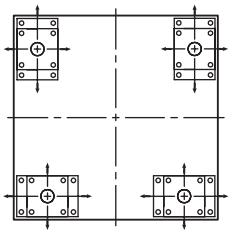
[4] Designed for square tank leg plate above top plate

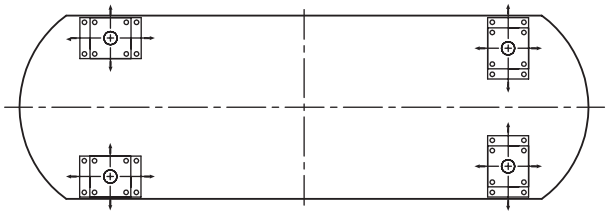
SWC415 PinMount™ Weigh Module Arrangements











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

Order Information SWC415 PinMount™ – Weigh Module Assembly

Order Information, Weigh Module Assembly					Item No.	
Size	Rated Capacity	Description	Class	Cable, Material/Lenght	Material, Weigh Module	
					Zinc Plated	304
1	7.5 t / 16.5 klb	Weigh Module Assembly	C3/III M n:5	PU / 12 m (39.4ft)	**30295853**	**30295854**
	15 t / 33 klb				**30295855**	**30295856**
	22.5 t / 49.6 klb				**30295857**	**30295858**
	7.5 - 22.5 t / 16.5 - 49.6 klb	Stabilizer [1]	–	–	**72205444**	**72205445**
		Spacer Plate			**72245532**	**72206153**
		Dead Stand			**72206154**	**72206155**
		Shock/Vibration Pad [2]			**72246646**	**72207262**
		Thermal Isolation Pad 80°C [2]			**72246647**	**72207263**
		Thermal Isolation Pad 170°C [2]			**72246648**	**72207264**
2	30 t / 66 klb	Weigh Module Assembly	C3/IIIL M n:10	PVC / 13 m (42.5ft)	**30295859**	**30295860**
	50 t / 110 klb				**30315453**	**30315454**
	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/IIIL M n:10	PVC / 13 m (42.5ft)	**30396062**	**30396063**
	100 t / 220 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 per weigh module.

Order Information SWC415 PinMount™ – 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 (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.					
					Cable, Material / Length					Dummy Load Cell
		Zinc Plated	304		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	**30265377**	**30256400**	C3/III M n:5	**30058060**	30058064	30105781	30105786	–	30238196
	15 t / 33 klb			C3/III M n:5	**30058061**	30058065	30105783	30105788		
	22.5 t / 49.6 klb			C3/III M n:5	**30058062**	30058066	30105784	30105789		
2	30 t / 66 klb	**30265450**	**30265427**	C3/IIIL M n:10	–	–	–	–	**71201709**	72188111
	50 t / 110 klb			C3/IIIL M n:10					**71201710**	
3	100 t / 220 klb	**30366582**	**30366574**	C3/IIIL M n:10	-	-	-	**-**	**71201711**	72188112

Bolded entries are stocked

SLC611 Cable Colour Code

Colour	Function
Green	+ Excitation
Black	– Excitation
White	+ Signal
Red	– Signal
Yellow	Shield

0782 Cable Colour Code

Colour	Function
Green	+ Excitation
Black	– Excitation
White	+ Signal
Red	– Signal
Yellow	+ Sense
Blue	– Sense
Yellow (long)	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

PROFIBUS ROCKWELL AUTOMATION ENCOMPASS GLOBAL PARTNER ENABLED BY ALLEN-BRADLEY TECHNOLOGY ModConnect

Weighing Electronics

METTLER TOLEDO offers a complete family of electronics from simple weighing to application solutions for filling, stock control, batching, formulation, counting, and 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.

ISO 9001 ISO 14001

Quality certificate ISO 9001
Environment certificate ISO 14001

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