

Accurate, Reliable Weighing for Heavy-Capacity Tanks



Tank Weighing

GageMount weigh modules offer the rugged construction needed for use with heavy-capacity tank scales. Available in capacities of 200t to 300t, they are designed to handle extremely heavy loads.



Load Cells

Model 0782 analog load cells have a rocker-column design that automatically aligns load forces for accurate weighing. These hermetically sealed load cells are rated IP68 and can be used in all environments. Because there are no bolted connections, the load cells are easy to inspect or replace.



200t-300t

3390 GageMount Weigh Module

GageMount weigh modules enable you to convert a heavy-capacity tank, silo, or hopper into a scale. They can be adapted to a wide range of applications, including tanks used for filling, mixing, batching, and inventory management. Regardless of the application, these easy-to-install weigh modules can deliver accurate and repeatable performance in heavy-duty weighing environments. External restraint must be provided to the weigh module.

- Hermetically sealed load cells.
- Stainless steel load cells (200t).
- Nickel-plated carbon steel (200t-300t) or electropolished stainless steel (200t) mounting hardware.

3390 Weigh Module Specifications

Weigh Module Parameter	Unit of Measure	Specification	
Model No.		3390 GageMount	
Rated Capacity (R.C.)	t (klb, nominal)	200 (441) 300 (661)	
Load Limit, Safe ⁶	%R.C.	125	
Restoring Force ⁵	%A.L./mm (.../in) ³	1.6 (40) 2.5 (63)	
Max. Horizontal Force	Transverse	kN (klb)	0 (0) ⁷
	Longitudinal	kN (klb)	0 (0) ⁷
Max. Top Plate Travel	Transverse	± mm (in)	6 (0.24) ⁷
	Longitudinal	± mm (in)	6 (0.24) ⁷
Max. Uplift Force	kN (klb)	0 (0) ⁷	
Weight (including load cell), nominal	kg (lb)	55 (121) 125 (275)	
Material		Carbon steel / 304 stainless steel Carbon steel	
Finish		Nickel plated / Electropolished Nickel plated	

Load Cell Parameter	Unit of Measure	Specification	
Model No.		0782	
Rated Capacity (R.C.)	t (klb, nominal)	200 (441) 300 (661)	
Rated Output	mV/V @ R.C.	2 ± 0.1%	
Combined Error ^{1, 2}	%R.C.	≤ 0.05 ≤ 0.06	
Temperature Effect on	Min. Dead Load Output	%R.C./°C (.../°F)	≤ 0.002 (0.001)
	Sensitivity ²	%A.L./°C (.../°F)	≤ 0.002 (0.001)
Temperature Range	Compensated	°C (°F)	-10 ~ +40 (+14 ~ +104)
	Operating	°C (°F)	-30 ~ +65 (-22 ~ +150)
	Safe Storage	°C (°F)	-40 ~ +80 (-40 ~ +176)
ATEX Approval ⁴	Rating		II 2 G Ex ib IIC T4...T6
			II 2 D Ex ibD 21 IP68 T60°C
			II 3 G Ex nL IIC T6
			II 3 G Ex nA II T6
Number		II 3 D Ex tD A22 IP68 T60°C	
Factory Mutual Approval ⁴	Rating		KEMA 06ATEX0122, KEMA 02ATEX1249 X
			IS/I,II,III/1/ABCDEF/T4
			NI/I,II,III/2/ABCDEF/T4
			3013511
Number, USA		3028342C	
Excitation Voltage	Recommended	V AC/DC	5~15
	Maximum	V AC/DC	20
Terminal Resistance	Excitation	Ω	1160 ± 15
	Output	Ω	1000 ± 3
Material	Spring Element		Stainless steel 4340
	Type		Welded
Protection	IP Rating		IP68
	NEMA Rating		NEMA 6/6P
Load Limit	Safe	%R.C.	125
	Ultimate	%R.C.	300
Deflection @ R.C., nominal	mm (in)	0.32 (0.013) 0.42 (0.017)	
Weight, nominal	kg (lb)	12.5 (27.6) 21.7 (48)	
Cable	Length	m (ft)	20 (66) 30 (98)
	Diameter	mm (in)	5.8 (0.23)

Produced in a facility that is



¹ Error due to the combined effect of non-linearity and hysteresis.

² 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.

³ A.L. = Applied Load.

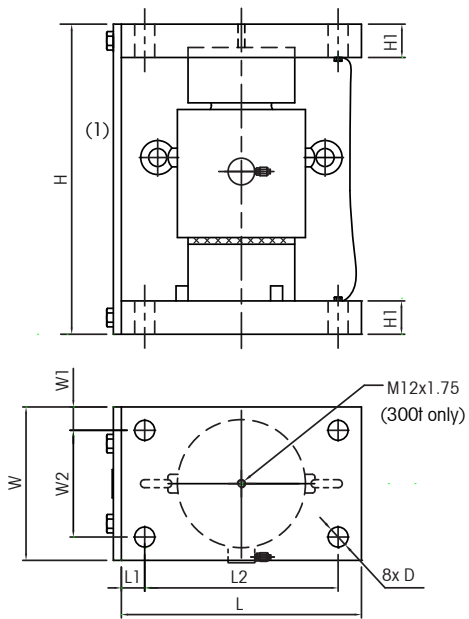
⁴ See certificate for complete information.

⁵ % of Applied Load (A.L.) per mm (in) displacement of the top plate (transverse and longitudinal).

⁶ Maximum vertical downward force that can be applied to the top plate.

⁷ Horizontal restraint, down stop, and anti-uplift protection must be provided externally for the 200t and 300t weigh modules.

3390 Weigh Module Dimensions, 200t-300t



Notes:

(1) Each weigh module is supplied with a shipping/installation plate to keep the top and bottom plates rigidly aligned during shipping and installation.

Capacity	D	H	H1	L	L1	L2	W	W1	W2	Top Plate Travel	
										Longitudinal	Transverse
200t 441klb	24 [0.94]	355 [13.98]	40 [1.57]	220 [8.66]	17.5 [0.69]	185 [7.28]	180 [7.09]	22.5 [0.89]	135 [5.31]	± 6 [± 0.24]	± 6 [± 0.24]
300t 661klb	30 [1.18]	465 [18.31]	50 [1.97]	360 [14.17]	35 [1.38]	290 [11.42]	230 [9.06]	35 [1.38]	160 [6.30]	± 6 [± 0.24]	± 6 [± 0.24]

Dimensions in mm [inches].

3390 Weigh Module Ordering Information

Description	Item No.
3390 Weigh Module (with load cell), 200t/441klb Carbon Steel	71210092
3390 Weigh Module (with load cell), 300t/661klb Carbon Steel	72197823
3390 Weigh Module (with load cell), 200t/441klb Stainless Steel	71210170
0782 Load Cell, 200t/441klb, 20m/66ft cable	71210093
0782 Load Cell, 300t/661klb, 30m/98ft cable	71210169

3390 Cable Colors

Color	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.

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, and checkweighing.

www.mt.com/weighmodule

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Specifications subject to change without notice.

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03/2014
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