

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–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.



Hermetically Sealed

The stainless steel housing is welded in place to create a hermetic seal to prevent moisture from entering the interior of the load cell and deteriorating the weighing performance or causing failure.



200t–300t

3390 Gagemount Weigh Module For High Capacities

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.

- IP68/IP69K hermetically sealed load cell
- Stainless steel load cells
- Nickel-plated carbon steel 200t–300t or electropolished stainless steel 200t mounting hardware
- ATEX Zone 1/2 and 21/22 approvals
- IECEx Zone 1/2 and 21/22 approvals
- FM class I, II, II DIV 1 and 2 approvals
- Hazardous approval standard on each load cell

3390 Weigh Module Specifications

Weigh Module		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			
Max. top plate travel	transverse	± mm (in)	6 (0.24) ⁷⁾	
	longitudinal			
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		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		-40 ~ +65 (-40 ~ +150)	
	Safe Storage		-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	
IECEX Approval ⁴⁾	Rating		II 3 G Ex nA II T6	
			II 3 D Ex iD A22 IP 68 T60°C	
			Ui=25V, Ii=600mA, Pi=0.57 - 1.25W, Ci=2.6 - 6nF, Li=10.25 - 30µH	
Factory Mutual Approval ⁴⁾	Rating, USA		Ex ib IIC T6 ... T4 Gb	
			Ex ib IIIC T55°C ... T60°C Db	
			Ex ic IIC T6 ... T4 Gc	
Factory Mutual Approval ⁴⁾	Rating, Canada		Ex nA IIC T6 Gc	
			Ex tc IIIC T60°C Dc	
			IS/I, II, III/1/ABCDEF/G/T4	
Excitation Voltage	Recommended	V AC/DC	5 ~ 15	
	Max.		20	
			1150 ± 25	
Terminal Resistance	Excitation	Ω	1000 ± 3	
	Output		stainless steel	
Material	Spring Element		welded	
	Type		IP 68, IP69K	
Protection	IP Rating		NEMA 6/6P	
	NEMA Rating		125	
Load Limit	Safe	%R.C.	300	
	Ultimate			
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)	

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.

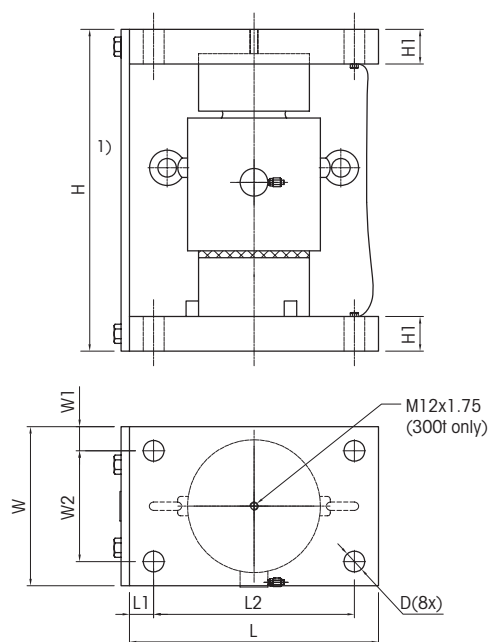
⁵⁾ % of Applied Load (A.L.) per mm (in) displacement of the top plate (transverse & longitudinal).

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



- 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	24	355	40	220	17.5	185	180	22.5	135	± 6	± 6
441K lb	0.94	13.95	1.57	8.66	0.69	7.28	7.09	0.89	5.31	± 0.24	± 0.24
300t	30	465	50	360	35	290	230	35	160	± 6	± 6
661K lb	1.18	18.31	1.97	14.17	1.38	11.42	9.06	1.38	6.30	± 0.24	± 0.24

3390 Weigh Module Ordering Information

Description		Item No.
Weigh module (including load cell), model no.	3390 200t carbon steel	71210092
Weigh module (including load cell), model no.	3390 300t carbon steel	72197823
Weigh module (including load cell), model no.	3390 200t stainless steel	71210170
Load cell, model no.	0782 200t (441 klb) 20m (66ft) cable	71210093
Load cell, model no.	0782 300t (661 klb) 30m (98ft) cable	71210169

Bolded entries are stocked

3390 Cable Colors

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.



Global Approvals

The 3390 Gagemount is provided with all listed approvals. No need to think about options and additional charges. Simplifies the conduct of global business, order processing and service-part stocking.



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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