

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 100t–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.



Check Rods

Gagemount weigh modules are completely self-contained. Each weigh module has a built-in check rod that protects against side loads, while allowing for thermal expansion and contraction. Optional anti-uplift kits are available (only 100t).



Safety Support Block

Each weigh module is constructed with a built-in support block for added safety. In case an extreme overload causes catastrophic load cell failure, the block supports the weight of the scale to protect against further damage or injury (only 100t).



100t



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.

- Hermetically sealed load cells
- Stainless steel load cells (100t–200t)
- Built-in check rods (100t)
- Safety support block (100t)
- Nickel-plated carbon steel 100t–300t or electropolished stainless steel 100t–200t mounting hardware
- Global approvals standard on every load cell (100t)

3390 Weigh Module Specifications

Weigh Module Parameter		Unit of Measure	Specification		
Model No.			3390 Gagemount		
Rated Capacity		f (klb nominal)	100 (220)	200 (441)	300 (661)
Load Limit, safe ⁹⁾		%R.C.	125		
Restoring Force ⁵⁾		%A.L./mm (.../in) ³⁾	2 (51)	1.6 (40)	2.5 (63)
Max. horizontal force	transverse	kN (klb)	0 (0) ⁶⁾	0 (0) ¹⁰⁾	
	longitudinal	kN (klb)	98 (22.0) ⁷⁾		
Max. top plate travel	transverse	± mm (in)	5 (0.20)	6 (0.24) ¹⁰⁾	
	longitudinal	± mm (in)	0 (0)		
Max. Uplift Force		kN (klb)	262 (59) ⁸⁾	0 (0) ¹⁰⁾	
Weight (including load cell), nominal		kg (lb)	110 (243)	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.)		f (klb nominal)	100 (220)	200 (441)	300 (661)
Rated Output		mV/V @ R.C.	2 ± 0.1		
Combined Error ^{1), 2)}		%R.C.	≤ 0.018	≤ 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)	≤ 0.0009 (0.0005)	≤ 0.002 (0.001)	
Temperature Range	Compensated	°C (°F)	-10 to +40 (+14 to +104)		
	Operating	°C (°F)	-30 to +65 (-22 to +150)		
	Safe Storage	°C (°F)	-40 to +80 (-40 to +176)		
OIML/European Approval ⁴⁾	Class		C3		-
	n _{max}		3000		
	Y		6666		
NTEP Approval ⁴⁾	Class		III L M		-
	n _{max}		10000		
	V _{min}	kg (lb)	7.0 (15.0)		
ATEX Approval ⁴⁾	Rating		II 2 GD EEx ib IIC T4-T6 IP68 T60°C		11)
			II 3 GD EEx nL IIC T6 T60°C IP68		
			II 3 GD EEx nA II T6 T60°C IP68		
		Weigh module hardware suitable for hazardous area			
Factory Mutual Approval ⁴⁾	Rating		IS/I,II,III/1/ABCDEF/G/T4		11)
Excitation Voltage	Recommended	V AC/DC	5-15		
	Maximum	V AC/DC	20		
Terminal Resistance	Excitation	Ω	1160 ± 10	1160 ± 15	
	Output	Ω	1000 ± 3		
Material	Spring Element		Stainless steel		4340
Protection	Type		welded		
	IP Rating		IP68		
	NEMA Rating		NEMA 6/6P		
Load Limit	Safe	%R.C.	125		
	Ultimate	%R.C.	300		
Deflection @ R.C., nominal		mm (in)	0.25 (0.010)		
Weight, nominal		kg (lb)	4.5 (9.9)	12.5 (27.6)	21.7 (48)
Cable	Length	m (ft)	13 (42)	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 horizontal force that can be applied to top plate in a direction transverse to the longitudinal axis of the check-rod

⁷⁾ Maximum horizontal force that can be applied to top plate in a direction parallel to the longitudinal axis of the check-rod

⁸⁾ Maximum vertical uplift force that can be applied with the MT Anti-Uplift option correctly installed

⁹⁾ Maximum vertical downward force that can be applied to the top plate

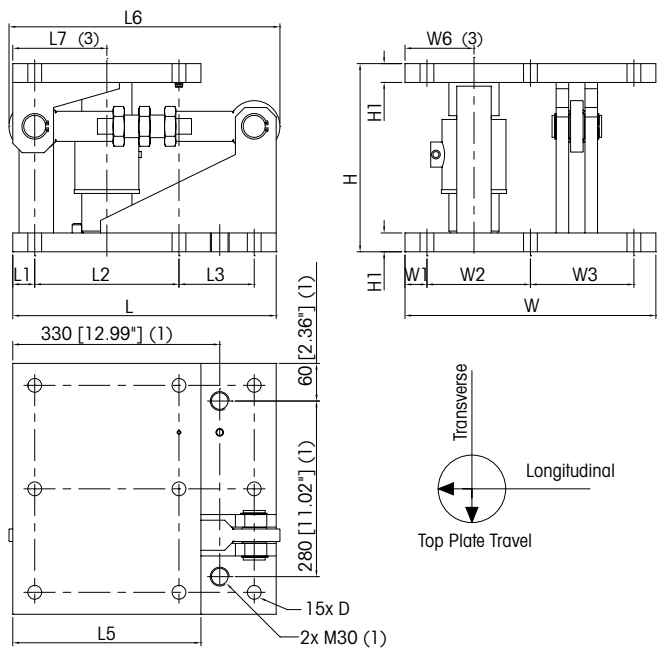
¹⁰⁾ Horizontal restraint, down stop and anti-uplift protection must be provided externally for the 200t and 300t weigh modules

¹¹⁾ In process, consult factory.



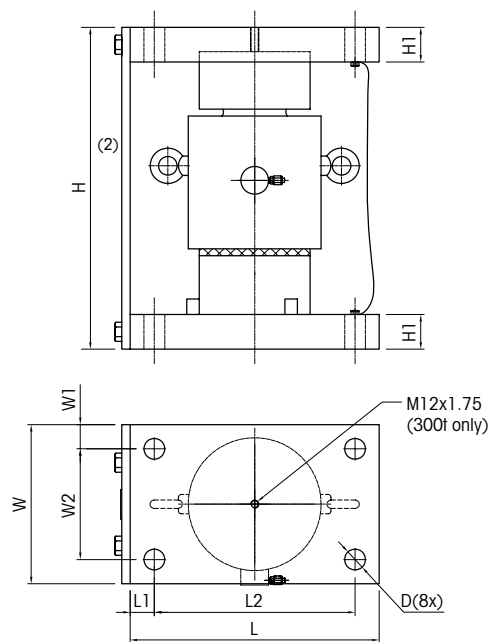
3390 Weigh Module Dimensions 100t

Dimensions in mm [inches]



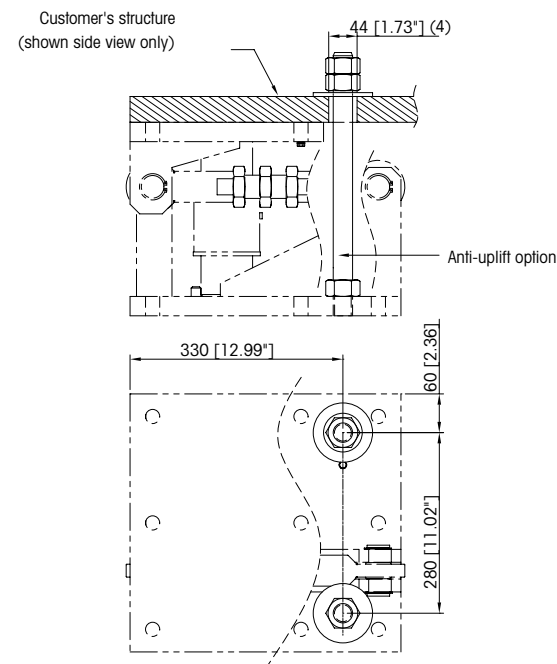
- Notes:
- (1) M30 holes for attachment of anti-uplift options on 100t only, see below.
 - (2) Each weigh module is supplied with a shipping/installation plate to keep the top and bottom plates rigidly aligned during shipping and installation.
 - (3) Dimensions to center line of load cell

3390 Weigh Module Dimensions 200t–300t



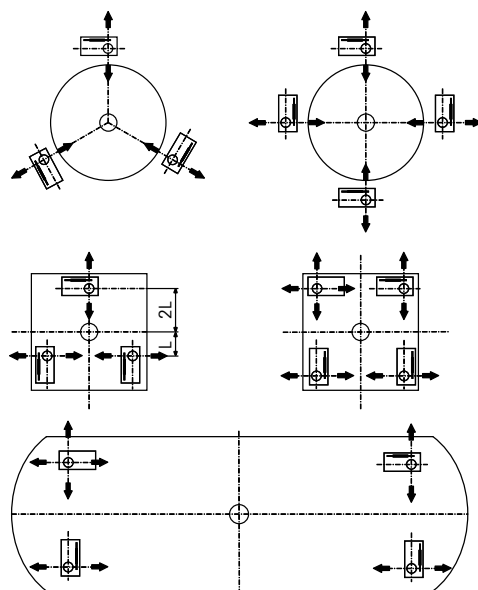
Capacity	D	H	H1	L	L1	L2	L3	L5	L6	L7 (3)	W	W1	W2	W3	W6 (3)	Top Plate Travel	
																Longitudinal	Transverse
100t	22	300	30	420	35	230	120	300	432	150	400	35	165	165	110	NA	± 5
220K lb	0.87	11.81	1.18	16.54	1.38	9.06	4.72	11.81	17.01	5.91	15.75	1.38	6.50	6.50	4.33	NA	± 0.20
200t	24	355	40	220	17.5	185	NA	NA	NA	NA	180	22.5	135	NA	NA	± 6	± 6
441K lb	0.94	13.95	1.57	8.66	0.69	7.28	NA	NA	NA	NA	9.06	1.38	5.31	NA	NA	± 0.24	± 0.24
300t	30	465	50	360	35	290	NA	NA	NA	NA	230	35	160	NA	NA	± 6	± 6
661K lb	1.18	18.31	1.97	14.17	1.38	11.42	NA	NA	NA	NA	9.06	1.38	6.30	NA	NA	± 0.24	± 0.24

3390 Anti-Uplift Option (2x 7218827) for 100t Gagemount



- Note:
- (4) Required hole diameter in customer's structure.

3390 Mounting Arrangements 100t



Rectangular or Square Mounting (Plan View)

Note: Two of the rectangular and square mounting arrangements shown above use four weigh modules. For those installations, remove the check rod from one of the modules (as shown). Arrangement 200t-300t please ask.

3390 Weigh Module Ordering Information

Description	Item No.
Weigh module (including load cell), model no. 3390 100t carbon steel	71202687
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 100t stainless steel	71202701
Weigh module (including load cell), model no. 3390 200t stainless steel	71210170
Weigh module (without load cell), model no. 3390 100t carbon steel	72186435
Weigh module (without load cell), model no. 3390 100t stainless steel	72186436
Load cell, model no. 0782 100t (220klb) 13m (42.5ft) cable C3/IIILM10	71201711
Load cell, model no. 0782 200t (441klb) 20m (66ft) cable	71210093
Load cell, model no. 0782 300t (661klb) 30m (98ft) cable	71210169

Options

Anti-Uplift Option Stainless Steel, 3390, 100t (220klb)	72188827 ¹⁾
Spacer Plate, stainless steel, 3390, 100t (220klb)	72192266
Dummy load cell, 0782, 100t (220klb)	72188112
Dead Stand, carbon steel, 3390, 100t (220klb)	72194572

Bolded entries are stocked

¹⁾ = 2 required for 100t

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

Model 0782 load cells 100t used in 3390 Gagemount have global certifications for metrological performance and hazardous area applications. There is no need for options or additional charges.

METTLER TOLEDO Service

Our extensive service network is among the best in the world and ensures maximum availability and service life of your product.



Quality certificate ISO 9001
Environment certificate ISO 14001

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