

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.

- 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.

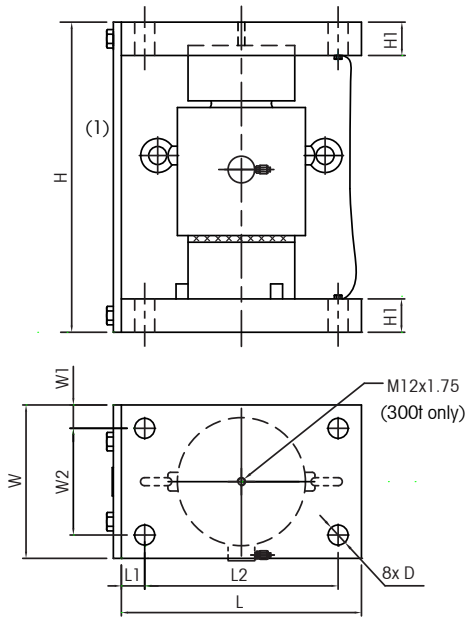
⁴ See certificate for complete information.

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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