Tension
Weigh
Modules

Reliable Performance
for Suspended Tanks
and Hoppers

- ☑ Accuracy
- ☑ Serviceability
- ☑ International
  Approvals
- ☑ Easy to Apply
- ☑ Complete
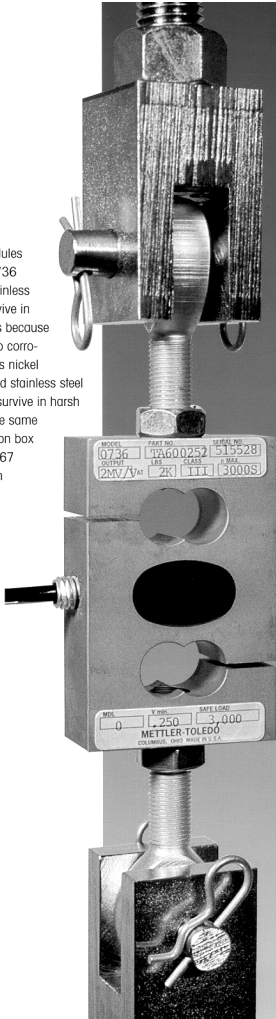 Documentation

METTLER TOLEDO

Tension Weigh Modules for Tank and Hopper Scales

Mettler Toledo® designed tension weigh modules for applications that require suspended mounting installations, such as tanks, hoppers, vessels, and electromechanical conversions. Tension weigh modules tolerate various adverse conditions and environmental conditions commonly present in industrial weighing applications...and still provide exceptional accuracy.

All tension weigh modules provide the same high quality and performance expected from the world's leading manufacturer of weigh modules. Get reliable performance when using tension weigh modules in process weighing industries like petro, chemical, food, grain, plastics, fertilizer, pharmaceutical, and aggregate.

Reliability

Tension weigh modules include the Model 736 load cell. These stainless steel load cells survive in harsh environments because of their resistance to corrosion. The electroless nickel plated hardware and stainless steel Junction Box also survive in harsh environments for the same reasons. The junction box meets NEMA 4X/IP67 standards for use in hazardous areas.

Features	Benefits
Stainless Steel Load Cells	Survive harsh environments.
Electroless Nickel Plated Hardware	Survive harsh environments.
Stainless Steel Junction Box	Survive harsh environments.
International Approvals	Meets global requirements.
Flexible Mounting Hardware	Simple to install.
Model 736 Load Cell Approvals	Increased accuracy.

Flexible Installations

With flexible mounting hardware available in either Metric (mm/kg) or U.S. (in/lb) capacities, installation is quick and easy. The unique mounting hardware ensures the load cell will measure only vertical loads while rejecting side loads.

Mettler Toledo also offers complete application and installation support with several pieces of literature and a global sales and service network. A complete installation guidebook is shipped with every set of weigh modules. Determine individual weigh module requirements prior to a purchase with Mettler Toledo's "Do-It-Yourself Guide to Building Tank Scales."

Check Rods / Bumpers

Normally, tension weigh modules do not require check rods or bumpers to provide an accurate weighing system. However, some applications may require them to restrict lateral movement which could cause misalignment of valves and gates, or slow settling times.
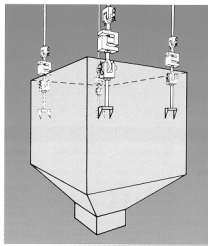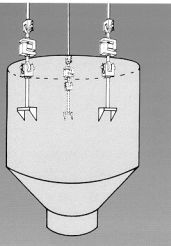
Complete Systems

Complete Mettler Toledo tension weigh module systems include:

- Three or four weigh modules
- A stainless steel NEMA 4X (IP67) junction box
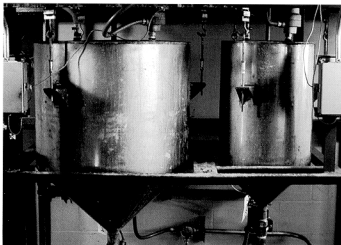- An instrument to suit the application

Each Weigh Module includes:

- Model 736 Load Cell
- Spherical Rod Ends
- Clevises
- Clevis Pins
- Hitch Pins

Approvals

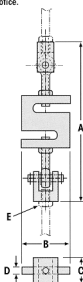|	
NTEP	Meet or exceed NIST Handbook 44 accuracy requirements for Class III 3000 division applications. Model 736 load cells have been issued an NTEP Certificate of conformance #91-090. (Except 10,000 lb version.)
OIML	Meet or exceed OIML C3 3000d requirements. Model 736 load cells have been approved on European Certificate T2206 for Class III & IV devices nmax 3000 divisions by the Nederlands Meetinstituutt (NMi).
CE	Model 736 load cells meet European Standards and have been issued a CE Declaration of Conformance.
FM	Model 736 load cells are Factory Mutual Approved for use in hazardous areas when used with Mettler Toledo Intrinsically safe instrumentation.
EX	Model 736 load cells have European Approval for use in hazardous areas when used with Mettler Toledo Intrinsically safe instrumentation.

Load Cell Capacity	NIST H44 U.S. STANDARD MODULES (lb)										OIML STANDARD MODULES (kg)						
	50	100	200	300	500	1000	2000	3000	5000	10000	50	100	200	500	1000	2000	5000
Model Number	736										736						
Excit. Volt. (VDC or VAC rms)	20 max.										20 max.						
Rated Output (mV/V)	2.0 ±0.005										2.0 ±0.005						
Input Resistance (Ohms)	350										350						
Output Resistance (Ohms)	350 ±3										350 ±3						
Zero Balance (mV/V)	±0.02										±0.02						
Combined Error (% FSO)	<0.03										<0.03						
Non-Repeatability (% FSO)	<0.01										<0.01						
Creep in 20 Min. (% FSO)	<0.03										<0.03						
Temp. Comp. Range	-10°C to+40°C										-10°C to+40°C						
Temp. Effect – Output	0.08%/100°F										0.08%/55°C						
Temp. Effect – Zero Balance	0.15%/100°F										0.15%/55°C						
Deflection @Rated Capacity		0.006"		0.007"	0.006"	0.010"	0.012"		0.015"		0.152 mm			0.254mm		0.381 mm	
Standard Cable Length	25'										7.62 M						
Material	17-4ph Stainless Steel										17-4ph Stainless Steel						
Certificate Number	NTEP COC #91-090								*NA		EU Test Cert. TC2826 / EU Type Approval T2206						
Accuracy Class	III										R60 C3						
Nmax	3000										3000						
Vmin	0.006	0.012	0.025	0.037	0.062	0.125	0.25	0.375	0.625	1.25	0.006	0.012	0.025	0.062	0.125	0.25	0.625
Min. Dead Load	0										0						
Safe Overload (% FSO)	150										150						
Ultimate Overload (% FSO)	300										300						
Safe Side Load (% FSO)	100										100						

* 10,000 lb Model 736 load cell is not NTEP Certified.
Specifications subject to change without notice.

0978
Weigh Module Dimensions

NOTE: It is recommended that safety chains, or other means to prevent damage or physical harm, be used in case of component failure when used in suspended overhead installation.

FLEXMOUNT®

STATIC

CENTERLIGN™

DYNAMIC

TENSION

TENSION

Learn More About Mettler Toledo Weigh Modules

Call or write your authorized Mettler Toledo distributor for a copy of the "Do-It-Yourself Guide to Building Tank Scales." You'll become acquainted with the full line of Mettler Toledo Weigh Modules for all your static, dynamic and tension weighing applications.

	NIST H44 U.S. STANDARD MODULES				OIML STANDARD MODULES			
Capacity	50-300 lb	500-3,000 lb	5,000 lb	10,000 lb	50-100 kg	200-1000 kg	2000 kg	5000 kg
Unit of Measure	in	in	in	in	mm	mm	mm	mm
A	7 5/8	10 9/16	12 5/8	12 5/8	180	250	450	450
B	2	2 1/4	2 3/4	3	51	58	70	77
C	1 3/4	2 1/4	2 3/4	3	32	49	83	83
D	19/32	15/16	1 3/16	1 7/16	15	24	30	37
E	3/8 - 16	3/4 - 10	1 - 8	1 - 8	M8X1.25	M12X1.75	M24X2	M24X2

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