

Load Cell Weigh Modules

FEATURES

- Capacity range: 500, 1.25K, 2.5K, 5K, and 10K lb (227, 567, 1.13K, 2.27K, and 4.5K kg)
- High-grade, welded, stainless-steel load beams (1.25K to 10K lb)
- Sealed to IP67 standards for washdown service
- Fixed, full-floating, and semi-floating mounting
- NTEP Certificate of Conformance
- FM and CSA approved

APPLICATIONS

- Storage tank weighing
- Bin/hopper scale conversion
- Level system measurement

DESCRIPTION

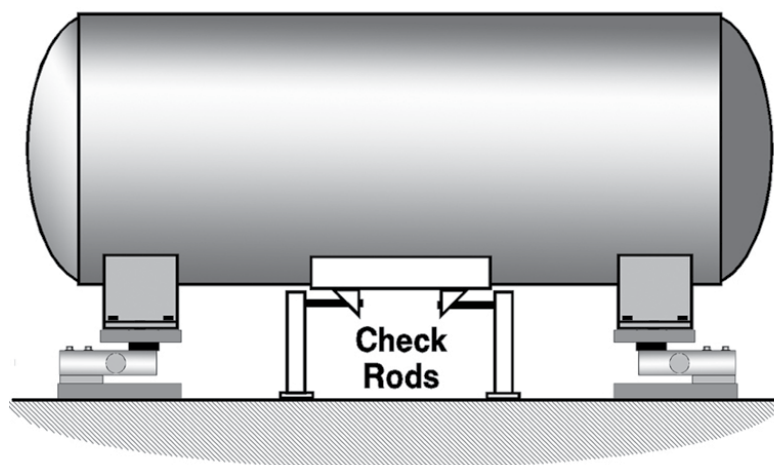
BLH Nobel EconoMount Weigh Modules are well suited for general industrial applications that require retrofitting an existing structure or hopper into a scale. The EconoMount System uses a stainless steel beam transducer coupled with fixed, full-floating, or semi-floating mounting hardware. The combination of all three types, under a structure, results in a checkless system that also can accommodate moderate degrees of thermal expansion and contraction.

EconoMount units come in standard capacity ranges of 500, 1.25K, 2.5K, 5K, and 10K pounds with either zinc chromate plated alloy (standard) or stainless steel



(optional) mounting hardware. Load beam sealing meets NEMA 4 and IP67 requirements. EconoMount 1.25K through 10K pound modules are NTEP Certified for Class III and III L scale systems.

CONFIGURATION



Load Cell Weigh Modules

MODULE CONFIGURATION ADVANTAGES

The BLH Nobel EconoMount System consists of three types of module mounting hardware. Each three or four support weigh system consists of a combination of fixed, semi-floating, and full-floating mounting hardware types. The full combination results in a checkless weigh system that accommodates moderate amounts of thermal expansion and contraction.

Fixed Mounting Modules

The fixed type mounting module design restricts movement in both horizontal directions while allowing a moderate degree of mounting plate angular movement to accommodate construction variances. This module type is installed on only one support to provide a fixed system 'anchor'.

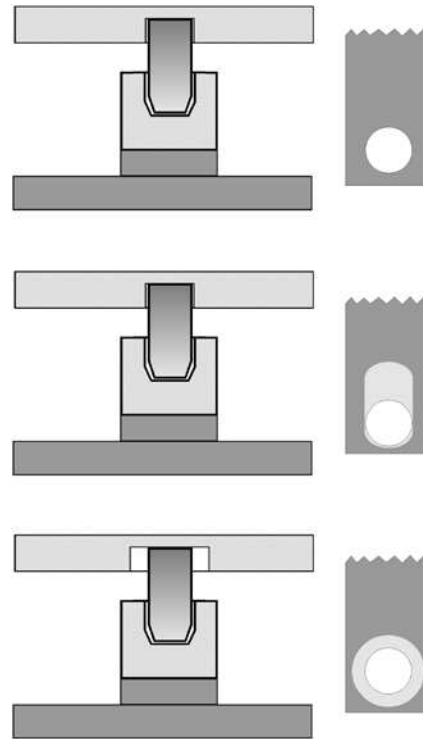
Semi-Floating Modules

The semi-floating module design restricts lateral horizontal movement, but allows radial horizontal movement and a moderate degree of mounting plate angular movement to accommodate construction variances. This module type is installed at one support only to provide a guide for thermal expansion and contraction.

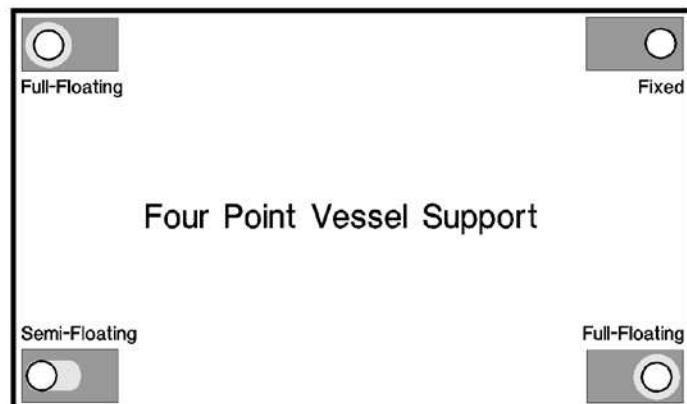
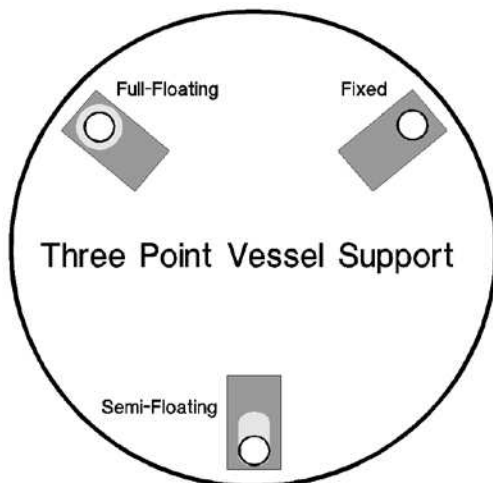
Full-Floating Modules

The full-floating module allows movement in both horizontal directions and angular movement of the mounting plate. At least one, full-floating module is needed in each system to accommodate thermal expansion and contraction in all directions.

All three module types use the same load beams, base plates, and assembly bolts. All types also conform to the same outline dimensions and performance specifications.



RECOMMENDED MOUNTING ARRANGEMENTS



Load Cell Weigh Modules

SPECIFICATIONS		
PARAMETER	VALUE	
PERFORMANCE		
Capacities	500, 1.25K, 2.5K, 5K, 10K lb (227, 567, 1.13K, 2.27K, 4.5K kg)	
Rated output (RO)	2.0 mV/V (±0.25%)	
Repeatability	0.01% RO	
Combined error	0.02% RO (beam only), 0.10% module assembly	
Zero balance	1.0% RO	
Creep (30 minutes)	0.024% RO	
Temperature effects on zero balance	0.0012% RO/°F	
Temperature effects on rated output	0.0008% Load/°F	
ELECTRICAL		
Recommended excitation	10 VDC (15 VDC max.)	
Input resistance	350 Ω (±7)	
Output resistance	350 Ω (±5)	
Cable length	20 ft, 4-conductor cable	
TEMPERATURE		
Safe temperature	-58 to +149°F	
Compensated range	+14 to +104°F	
PARAMETER	VALUE	
ADVERSE LOAD RATINGS		
Safe overload	150% rated capacity	
Safe sideload	100% rated capacity	
Ultimate overload	300% rated capacity	
MATERIAL		
	Zinc Chromate Plated	Stainless
Load beam	17-4 PH stainless steel*	17-4 PH stainless steel
Load button	17-4 PH stainless steel	17-4 PH stainless steel
Bases and load plates	zinc chromate plated steel**	high grade stainless steel
Beam spacer	304 stainless steel	304 stainless steel
Locating washer	304 stainless steel	304 stainless steel
SEALING		
Load beam	NEMA 4 and IP67	
DEFLECTION		
500 lb	0.013 in	
1.25 to 5K lb	0.017–0.025 in	
10K lb	0.025–0.035 in	

* 500 lb beam—alloy tool steel, electroless nickel plated

** single component, waterborne polyurethane copolymer—high gloss

BLH Nobel is continually seeking to improve product quality and performance. Specifications may change accordingly.



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