

# Accurate, Reliable Weighing for Static Tank Scales



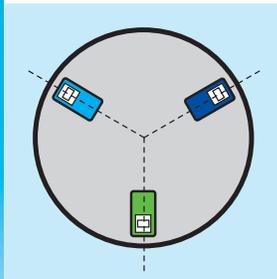
## Tank Weighing

FLEXMOUNT weigh modules offer rugged construction and many features needed for accurate and reliable tank weighing. Available in capacities of 250 to 10,000 lb (110 to 4400 kg), they are designed for easy and economical system integration.



## Load Cells

Model O745A beam load cells are stainless steel and hermetically sealed with IP68 protection. They are ideal for harsh industrial environments such as food or pharmaceutical production facilities. The "blind" load-introduction hole provides optimum loading conditions for accurate weighing.



## Self Checking

Each FLEXMOUNT system consists of three different types of modules: a Fixed-Pin module, a Semi-Floating module, and one or more Full-Floating modules. The combination is self checking and allows for thermal expansion/contraction. Many arrangements are possible to suit tanks with three or more legs in circular, square, or rectangular patterns.



## Anti-Uplift / Jacking Bolt

The anti-uptift bolt restrains the tank from tipping, providing additional protection against wind loads when your system is installed outside. The anti-uptift bolt can also be used to jack empty tanks for service and has a centering washer which locates the top plate correctly for installation.



## 0958 FLEXMOUNT® Weigh Module

FLEXMOUNT weigh modules enable you to convert a tank, silo, or hopper into a weighing scale. The 0958 FLEXMOUNT can be adapted to a wide range of applications, including tanks for filling, batching, and inventory management. Regardless of the application, these easy-to-install weigh modules deliver accurate and reliable performance.

- Capacity range: 250 - 10,000 lb (110 - 4400 kg).
- Self checking for economical system integration.
- Hermetically sealed stainless steel load cells (not 0744).
- Top plate rigidly located for easy installation.
- Uplift protection.
- Large range of thermal expansion/contraction.
- Painted or stainless steel mounting hardware.
- Global approvals standard on load cells (not 0744).

# 0958 Weigh Module Specifications

Weigh Module Parameter		Unit of Measure	Specification					
Model No.			0958 FLEXMOUNT					
Rated Capacity		kg (lb)	113 (250)	220 (500)	550 (1250)	1100 (2500)	2200 (5000)	4400 (10000)
Load Limit, Safe <sup>9</sup>	Carbon Steel	kN (lb)	1.7 (375)	3.3 (750)	8.3 (1875)	16.7 (3750)	29.8 (6700)	59.2 (13300)
	Stainless Steel	kN (lb)	1.7 (375)	3.3 (750)	8.3 (1875)	16.7 (3750)	23 (5160)	52 (11700)
Restoring Force <sup>5</sup>		%A.L./mm (.../in) <sup>3</sup>	0 (0)					
Max. Horizontal Force, Carbon Steel	Transverse <sup>6</sup>	kN (lb)	1.1 (250)	2.2 (500)	5.6 (1250)	7.6 (1700)	7.6 (1700)	20.7 (4660)
	Longitudinal <sup>7</sup>	kN (lb)	1.1 (250)	2.2 (500)	5.6 (1250)	11.1 (2500)	22.2 (5000)	44.5 (10000)
Max. Horizontal Force, Stainless Steel	Transverse <sup>6</sup>	kN (lb)	1.1 (250)	2.2 (500)	4.1 (920)	4.1 (920)	4.1 (920)	10.1 (2260)
	Longitudinal <sup>7</sup>	kN (lb)	1.1 (250)	2.2 (500)	5.6 (1250)	11.1 (2500)	22.2 (5000)	44.5 (10000)
Max. Top Plate Travel	Transverse	± mm (in)	3.0 (0.12)					4.6 (0.18)
	Longitudinal	± mm (in)	3.0 (0.12)					4.6 (0.18)
Max. Uplift Force <sup>8</sup>		kN (lb)	22.2 (5000)					44.5 (10000)
Weight (including load cell), nominal		kg (lb)	7 (15.5)				7.5 (16.5)	16 (35)
Material			carbon steel & 304 stainless steel					

Load Cell Parameter		Unit of Measure	Specification					
Model No.			0744			0745A		
Rated Capacity (R.C.)		kg (lb)	113 (250)	220 (500)	550 (1250)	1100 (2500)	2200 (5000)	4400 (10000)
Rated Output		mV/V @ R.C. -kg	2 ± 0.002		1.940 ± 0.002			
		mV/V @ R.C. -lb	2 ± 0.002		2.000 ± 0.002			
Combined Error <sup>1</sup>		%R.C.	≤ 0.03		≤ 0.018 <sup>2</sup>			
Temperature Effect on	Min. Dead Load Output	%R.C./°C (.../°F)	≤ 0.003 (0.0017)		≤ 0.002 (0.001)			
	Sensitivity	%A.L./°C (.../°F)	≤ 0.0014 (0.0008)		≤ 0.0009 (0.0005) <sup>2</sup>			
OIML/European Approval <sup>4</sup>	Class		-		C3			
	nmax		-		3000			
	Vmin	kg (lb)	-	0.032 (0.070)	0.079 (0.175)	0.159 (0.35)	0.317 (0.70)	0.635 (1.40)
NTEP Approval <sup>4</sup>	Class		-		III M			
	nmax		-		5000			
	Vmin	kg (lb)	-	0.032 (0.070)	0.079 (0.175)	0.159 (0.35)	0.317 (0.70)	0.635 (1.40)
ATEX Approval <sup>4</sup>	Rating		-		II 2 GD EEx ia IIC T4 T1 75°C ; II 3 GD EEx nL IIC T4 T1 35°C ; II 3 GD EEx nA T4 T1 35°C IP65			
Factory Mutual Approval <sup>4</sup>	Rating		IS/I,II,III/1/ABCDEFG/T4 ; NI/II/2/ABCD/T6 ; S/II,III/2/FG/T6					
Excitation Voltage	Recommended	V AC/DC	5 ~ 15					
	Maximum	V AC/DC	20					
Terminal Resistance	Excitation	Ω	≥ 385					
	Output	Ω	350 ± 2					
Material	Spring Element		Stainless steel					
	Type		Potted		Welded			
Protection	IP Rating		IP67		IP68			
	NEMA Rating		NEMA 6/6P					
	Load Limit		150					
	Ultimate	%R.C.	300					

<sup>1</sup> Error due to the combined effect of non-linearity and hysteresis.

<sup>2</sup> 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.

<sup>3</sup> A.L. = Applied Load.

<sup>4</sup> See certificate for complete information.

<sup>5</sup> % of Applied Load (A.L.) per mm (in) displacement of the top plate (transverse and longitudinal).

<sup>6</sup> Maximum horizontal force that can be applied to the top plate in a direction transverse to the longitudinal axis of the load cell. Applies to fixed-pin module and semi-float module assembled in standard (radial mounting) position.

<sup>7</sup> Maximum horizontal force that can be applied to the top plate in a direction parallel to the longitudinal axis of the load cell. Applies to fixed-pin module and semi-float module assembled in nonstandard (tangential mounting) position.

<sup>8</sup> Maximum vertical uplift force that can be applied to the top plate.

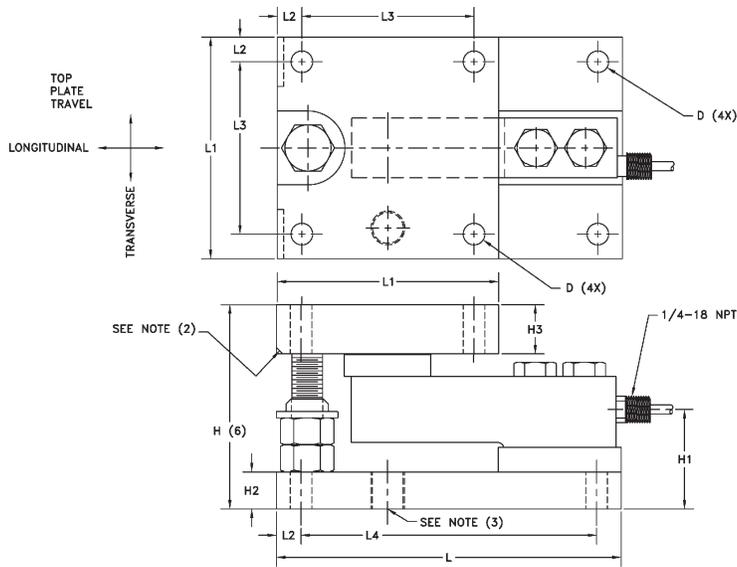
<sup>9</sup> Maximum vertical downward force that can be applied to the top plate.



Produced in a facility that is

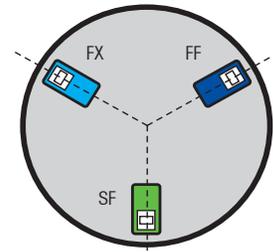


# 0958 Weigh Module Dimensions

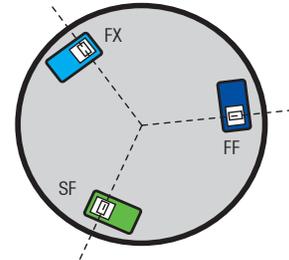


- 1 Dimensions are in mm (inches).
- 2 Mount identification (Semi-Float shown):  
 Full-Float has no chamfer  
 Semi-Float has two 25-mm (1-inch) chamfers  
 Fixed-Pin has chamfer all the way across
- 3 Weigh modules are shipped as drawn. This alternate location for hold-down screw allows top plates to be rotated 90 degrees for tangential mounting.
- 4 Does not apply to fixed-pin module, which prevents top plate travel in both directions.
- 5 Semi-Float module allows travel in one direction only (longitudinal direction as shipped). Its top plate may be rotated 90 degrees to provide transverse travel instead.
- 6 Shipping (jacked) height is 1.5 mm (0.06 inch) higher for 110-4400 kg (250-10000 lb).

# 0958 Mounting Arrangements



Radial Mounting (Plan View)



Tangential Mounting (Plan View)



Rectangular Mounting (Plan View)

FX = Fixed  
 SF = Semi-Float  
 FF = Full-Float

Capacity	D	H <sup>6</sup>	H1	H2	H3	L	L1	L2	L3	L4
110-1100 kg (250-2500 lb)	11.2 (0.44)	104.4 (4.11)	47.7 (1.88)	19.0 (0.75)	25.4 (1.00)	177.8 (7.00)	114.3 (4.50)	12.7 (0.50)	88.9 (3.50)	152.4 (6.00)
2200 kg (5000 lb)	11.2 (0.44)	105.2 (4.14)	51.3 (2.02)	19.0 (0.75)	25.4 (1.00)	177.8 (7.00)	114.3 (4.50)	12.7 (0.50)	88.9 (3.50)	152.4 (6.00)
4400 kg (10000 lb)	17.5 (0.69)	136.6 (5.38)	67.1 (2.64)	25.4 (1.00)	31.8 (1.25)	235.4 (9.25)	152.4 (6.00)	25.4 (1.00)	101.6 (4.00)	184.1 (7.25)

### Top Plate Travel<sup>4</sup>

Capacity	Full-Float		Semi-Float <sup>5</sup>	
	Longitudinal	Transverse	Longitudinal	Transverse
110-1100 kg (250-2500 lb)	± 3.0 (± 0.12)	± 3.0 (± 0.12)	± 3.0 (± 0.12)	0 (0)
2200 kg (5000 lb)	± 3.0 (± 0.12)	± 3.0 (± 0.12)	± 3.0 (± 0.12)	0 (0)
4400 kg (10000 lb)	± 4.6 (± 0.18)	± 4.6 (± 0.18)	± 4.6 (± 0.18)	0 (0)

# 0958 Cable Colors

Color	Function
Green	+ Excitation
Black	- Excitation
White	+ Signal
Red	- Signal
Yellow	Shield

## 0958 FLEXMOUNT Weigh Module Ordering Information

Contact your local sales representative for ordering numbers, pricing, and availability.

### Global Approvals

Model 0745A load cells have global certifications for metrological performance and hazardous area applications. There is no need for options or additional charges.

**ServiceXXL**  
Tailored Services

### Tailored Services

Our qualified and equipped specialists are committed to providing timely local and personal service, backed by global depth and expertise. Choose from our ServiceXXL portfolio to tailor a program that meets your needs and budget. You will get professional, factory service with superior results, ensuring maximum benefit from your weighing system.

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METTLER TOLEDO embeds intelligence into weighing applications. Our industry leading scale electronics enable users to integrate their gravimetric measurement with applications running on PCs, PLCs, or DCS systems. Our products are designed specifically for industries subject to regulatory controls, such as pharmaceutical, chemical, food and beverage, and has been confirmed by multiple global agency standards including UL, CE, NTEP, and OIML.

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