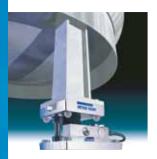
# Accurate, Reliable Weighing

# for Static Tank Weighing



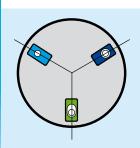
### **Tank Weighing**

Flexmount weigh modules offer rugged construction and many features needed for accurate and reliable tank weighing. Available in capacities from 110kg to 4.4t, they are designed for easy and economical system integration.



#### **Load Cells**

Model 0745 beam load cells provide stainless steel design, hermetic sealing and IP68 protection. Thus they are ideal for harsh industrial environments such as food or pharmaceutical production processes. The "blind" load-introduction hole provides optimum loading conditions for best performance.



### Self checking

Each Flexmount System consists of three different module types .. a Fixed-Pin Module, a Semi-Floating Module and some number of Full-Floating Modules. The combination is self checking while allowing a large range of thermal expansion/contraction. Many arrangements are possible to suit tanks with 3 or more legs in circular, square or rectangular patterns.



### Anti-Uplift/Jacking bolt

The Anti-Upliff bolt restrains the tank from tipping over and can also be used to jack empty tanks for service. Thus Flexmount provides additional safety against wind loads when your system is installed outside. The anti-upliff bolt also 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. The self-checking function allows for economical system integration. Flexmount weigh module features are as follows:

- Capacity range 110kg 4.4t
- Self checking for economic system integration
- Hermetically sealed stainless steel IP68 load cell
- Top plate rigidly located for easy installation
- Uplift protection
- Large range of thermal expansion/contraction possible
- Painted or stainless steel mounting hardware
- Global approvals standard on every load cell



## **0958 Flexmount Specifications**

WEIGH MODULE		unit of measure	Specification						
Model No.			0958 Flexmount						
Rated Capacity		kg (lb)	110	220	550	1100	2200	4400	
Ruleu Cupucity			(250)	(500)	(1250)	(2500)	(5000)	(10000)	
	carbon steel	kg (lb)	165	330	830	1670	2980	5920	
Load Limit, safe 9)			(375)	(750)	(1875)	(3750)	(6700)	(13300)	
Loud Lillii, Sule ->	stainless steel	kg (lb)	165	330	830	1670	2300	5200	
	3101111633 31661	kg (lb)	(375)	(750)	(1875)	(3750)	(5160)	(11700)	
Restoring Force 5)		%A.L./mm (/in) <sup>3)</sup>	0 (0)						
	transverse <sup>6)</sup>	kN (lb)	1.1	2.2	5.6	7.6	7.6	20.7	
Max. horizontal force,			(250)	(500)	(1250)	(1700)	(1700)	(4660)	
carbon steel	longitudinal 7)	kN (lb)	1.1	2.2	5.6	11.1	22.2	44.5	
			(250)	(500)	(1250)	(2500)	(5000)	(10000)	
	transverse <sup>6)</sup>	kN (lb)	1.1	2.2	4.1	4.1	4.1	10.1	
Max. horizontal force.			(250)	(500)	(920)	(920)	(920)	(2260)	
stainless steel	longitudinal 7)	kN (lb)	1.1	2.2	5.6	11.1	22.2	44.5	
			(250)	(500)	(1250)	(2500)	(5000)	(10000)	
	transverse	sverse mm (in)			± 3.0			± 4.6	
Max. top plate travel 10)					(0.12)			(0.18)	
	longitudinal	mm (in)			± 3.0			± 4.6	
	longiludinui				(0.12)			(0.18)	
Max. Upliff Force 8)		kN (lb)			22.2			44.5	
		(ID)			(5000)			(10000)	
Weight (including load cell), nominal kg (lb)		kg (lb)			7 (15.5)		7.5 (16.5)	16 (35)	
Material			carbon steel & 304 stainless steel						

LOAD CELL		unit of measure	Specification							
Model No.			0745A							
Dated Canacity (D.C.)		la (lb)	110	220	550	1100	2200	4400		
Rated Capacity (R.C.)		kg (lb)	(250)	(500)	(1250)	(2500)	(5000)	(10000)		
Rated Output		mV/V @R.Ckg	$0.970 \pm 0.002$ $1.940 \pm 0.002$							
Ralea Oulpul		mV/V @R.Clb	1.000 ± 0.002	$1.000 \pm 0.002$ $2.000 \pm 0.002$						
Combined Error 1)		%R.C.	≤ 0.03				≤ 0.018 <sup>2)</sup>			
Temperature Effect				see separate Load Cell data sheet						
	Class		- C3							
OIML /	nmax		-	- 3000						
European Approval 4)	Vmin	kg (lb)	_	0.032	0.079	0.159	0.317	0.635		
	VIIIIII	kg (lb)	-	(0.070)	(0.175)	(0.35)	(0.70)	(1.40)		
	Class		-	- III M						
NTEP Approval 4)	nmax		-	5000						
NTLF Applovul 9	Vmin	kg (lb)	_	0.032	0.079	0.159	0.317	0.635		
	VIIIIII	kg (lb)	_	(0.070)	(0.175)	(0.35)	(0.70)	(1.40)		
			II 2 G Ex ia IIC T4							
			II 2 D Ex tD A21 IP6X T100°C							
ATEX Approval 4)	Rating		II 3 G Ex nA II T4							
TILX TIPPIOVAL				II 3 G Ex nL IIC T4						
		II 3 D Ex tD A22 IP6X T100°C								
			304 Stainless Weigh module hardware suitable for hazardous area							
						ABCDEFG /T4				
Factory Mutual Approval 4)	Rating		NI / I / 2 / ABCD / T6							
			S / II,III / 2 / FG / T6							
Excitation Voltage	Recommended	V AC/DC	5 ~ 15							
	Max.	V AC/DC	20							
Terminal Resistance	Excitation	Ω	≥ 385							
remindi kesisidhce	Output	Ω	350 ± 2							
Material	Spring Element		Stainless steel							
Protection	Туре			welded						
	IP Rating		IP 68							
	NEMA Rating			NEMA 6/6P						
Load Limit	Safe	%R.C.	150							
	Ultimate	%R.C.	300							





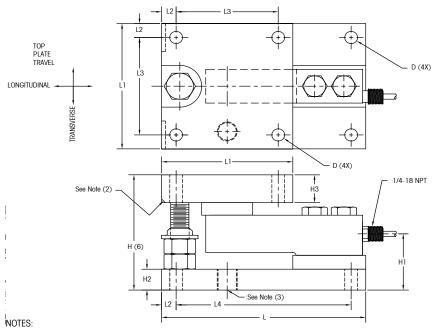




- 1) Error due to the combined effect of non-linearity and hysteresis
- 2) Typical values only. The sum of errors due to Combined Error and Temperature Effect on Sensitivity comply with the requirements of OIML R60 and NIST HB44.
- 3) A.L. = Applied Load
- 4) See certificate for complete information.
- $^{5)}$  % 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 load cell. Applies only to Fixed Pin module and Semi Float module assembled in standard (radial mounting) position.
- 7) Maximum horizontal force that can be applied to top plate in a direction parallel to the longitudinal axis of the load cell. Applies only to Fixed Pin module and Semi Float module assembled in non-standard (tangential mounting) position.
- 8) Maximum vertical uplift force that can be applied to the top plate.
- $^{9)}\,\mathrm{Maximum}$  vertical downward force that can be applied to the top plate.

<sup>10)</sup> See drawing for more detail.

# 0958 Flexmount Dimensional Drawings mm [inch]



- 1) Dimensions are in mm [inches]
- 2) Mount identification (SEMI-FLOAT shown):

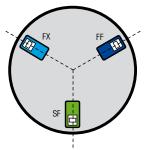
FULL-FLOAT: has no chamfer

SEMI-FLOAT: has two 25-mm [1] chamfers

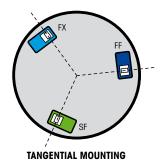
FIXED-PIN: has chamfer all the way across

- $^{3)}$  WM's are shipped as drawn. This alternate location for hold-down screw allows top plates to be rotated 90 DEG for tangential mounting.
- <sup>4)</sup> 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 DEG to provide transverse travel instead.
- 6) Shipping (jacked) height is 1.5 [0.06] higher for 110-4400kg [250-10,000lb].

## **Mounting Arrangements**



**RADIAL MOUNTING** 





RECTANGULAR MOUNTING

FX = Fixed SF = Semi Float FF = Full Float

Capacity	D	<b>H</b> 6)	H1	H2	Н3	L	L1	L2	L3	L4
110 - 1100kg	11.2	104.4	47.7	19.0	25.4	177.8	114.3	12.7	88.9	152.4
[250 - 2500lb]	[0.44]	[4.11]	[1.88]	[0.75]	[1.00]	[7.00]	[4.50]	[0.50]	[3.50]	[6.00]
2200kg	11.2	105.2	51.3	19.0	25.4	177.8	114.3	12.7	88.9	152.4
[5000lb]	[0.44]	[4.14]	[2.02]	[0.75]	[1.00]	[7.00]	[4.5]	[0.5]	[3.5]	[6.00]
4400kg	17.5	136.6	67.1	25.4	31.8	235.4	152.4	25.4	101.6	184.1
[10000lb]	[0.69]	[5.38]	[2.64]	[1.00]	[1.25]	[9.25]	[6.00]	[1.00]	[4.00]	[7.25]

#### Top Plate Travel 4)

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

# **0958 Flexmount Order Information**

Description	Item No.		
	Fixed Pin	Semi Float	Full Float
0958 Flexmount CS 110kg/250lb WM assy (including 0745A load cell) 4.5m (15ft) cable	61043761	61043763	61043764
0958 Flexmount CS 220kg/500lb WM assy (including 0745A load cell) 4.5m (15ft) cable	61000050	61000051	61000052
0958 Flexmount CS 550kg/1250lb WM assy (including 0745A load cell) 4.5m (15ft) cable	61000053	61000054	61000055
0958 Flexmount CS 1.1t/2500lb WM assy (including 0745A load cell) 4.5m (15ft) cable	61000056	61000057	61000058
0958 Flexmount CS 2.2t/5000lb WM assy (including 0745A load cell) 4.5m (15ft) cable	61000059	61000060	61000061
0958 Flexmount CS 4.4t/10000lb WM assy (including 0745A load cell) 9.1m (30ft) cable	61000062	61000063	61000064
0958 Flexmount SS 110kg/250lb WM assy (including 0745A load cell) 4.5m (15ff) cable	61043765	61043766	61043767
0958 Flexmount SS 220kg/500lb WM assy (including 0745A load cell) 4.5m (15ft) cable	61000077	61000078	61000079
0958 Flexmount SS 550kg/1250lb WM assy (including 0745A load cell) 4.5m (15ft) cable	61000080	61000081	61000082
0958 Flexmount SS 1.1t/2500lb WM assy (including 0745A load cell) 4.5m (15ft) cable	61000083	61000084	61000085
0958 Flexmount SS 2.21/5000lb WM assy (including 0745A load cell) 4.5m (15ft) cable	61000086	61000087	61000088
0958 Flexmount SS 4.4t/10000lb WM assy (including 0745A load cell) 9.1m (30ft) cable	61000089	61000090	61000091
Options			
FABREEKA PAD 0-2.21 FM-CL	61005965		
FABREEKA PAD 4.4t FM-CL	61005938		
ACETAL PAD 0-2.21 FM-CL	61010620		
ACETAL PAD 4.4t FM-CL	61010621		
ULTEM PEI PADO-2.2t FM-CL	61024642		
ULTEM PEI PAD 4.4† FM-CL	61037510		
DEADSTAND 0-2.2t FM-CL	61010624		
DEADSTAND 4.4† FM-CL	61010625		
Load cell DUMMY 0-1.1t 745	68000714		
Load cell DUMMY 2.2t 745	61005963		
Load cell DUMMY 4.4t 745	61005964		
ADAPTER CONDUIT ZN	61005937		
ADAPTER CONDUIT SS	61010683		
Belded and terminal and terminal			

**Bolded entries are stocked** 

# 0958 Flexmount Cable Colours

Colour	Function
Green	+ Excitation
Black	<ul><li>Excitation</li></ul>
White	+ Signal
Red	- Signal
Yellow	+ Shield



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Use METTLER TOLEDO service including fast parts availability from our local supply or one of our logistics centers in Europe, Asia and America. Trained technicians can assist in professional service, installation and approval worldwide.



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METTLER TOLEDO offers a complete family of electronics from simple weighing to application solutions for filling, stock control, batching, formulation, counting, checkweighing.



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