

Accurate, Reliable Weighing for Dynamic Loading Applications



Conveyors and Mixers

CENTERLIGN weigh modules are designed for dynamic-loading applications such as conveyors, mixers, and blenders. The top mounting plate checks against the load cell when horizontal forces are applied, and the rocker pin restores the top plate to its ideal position to maintain accurate, repeatable weight.



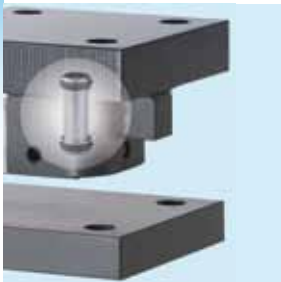
Load Cells

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.



Bumper Stops

Each Centerlign module has three adjustable horizontal stops to check the system in a horizontal plane. As the «live» stops touch the «live end» of the load cell they do not cause a live to dead shunt of the load and do not interfere with the weighing accuracy.



Self-restoring rocker pin

The rocker pin load introduction provides best weighing performance. As the top plate moves laterally away from its ideal position, the rocker pin provides a proportional «restoring force» to push the top plate back to its ideal position. Thus high accuracy is achieved even in rough conditions.



0958 Centerlign Weigh Module

Centerlign weigh modules enable you to convert conveyors, mixers and other dynamic-loading systems into weighing scales. Regardless of the application these easy-to-install weigh modules deliver accurate and reliable performance. The rocker pin function enables self restoring and keeps the system accuracy in place.

- Capacity range 110kg – 4.4.t
- Rocker-pin load introduction for best accuracy
- Hermetically sealed stainless steel IP68 load cell
- Painted or stainless steel mounting hardware
- Provided with locating tool for easy installation
- Global approvals standard on every load cell

0958 Centerlign Specifications

Weigh Module		unit of measure	Specification					
Model No.			0958 Centerlign					
Rated Capacity		kg (lb)	110 (250)	220 (500)	550 (1250)	1100 (2500)	2200 (5000)	4400 (10000)
Load Limit, safe ⁹⁾	carbon steel	kg (lb)	165 (375)	330 (750)	830 (1875)	1670 (3750)	2980 (6700)	5920 (13300)
	stainless steel	kg (lb)					23 (5160)	52 (11700)
Restoring Force ⁵⁾		%A.L./mm (./in) ³⁾	4.4 (111)					5.5 (140)
Max. horizontal force, Carbon Steel	transverse ⁶⁾	kN (lb)	1.1 (250)	2.2 (500)	5.6 (1250)	6.7 (1500)		6.7 (1500)
	longitudinal ⁷⁾	kN (lb)				11.1 (2500)	17.8 (4000)	20 (4500)
Max. horizontal force, Stainless Steel	transverse ⁶⁾	kN (lb)	5.6 (1250)					5.6 (1250)
	longitudinal ⁷⁾	kN (lb)	11.1 (2500)		14.8 (3333)		16.7 (3750)	
Max. top plate travel	transverse	mm (in)	± 2.5					± 3.2
	longitudinal	mm (in)	(0.10)					(0.12)
Max. Uplift Force ⁸⁾		kg (lb)	0 (0)					
Weight (including load cell), nominal		kg (lb)	7.2 (16)			7.6 (17)		17 (37)
Material			carbon steel & 304 stainless steel					

Load Cell		unit of measure	Specification					
Model No.			0745A					
Rated Capacity (R.C.)		kg (lb)	110 (250)	220 (500)	550 (1250)	1100 (2500)	2200 (5000)	4400 (10000)
Rated Output		mV/V @R.C.-kg	0.970 ± 0.002					1.940 ± 0.002
		mV/V @R.C.-lb	1.000 ± 0.002					2.000 ± 0.002
Combined Error ¹⁾		%R.C.	≤ 0.03		≤ 0.018 ²⁾			
Temperature Effect on			see separate Load Cell data sheet					
OIML / European Approval ⁴⁾	Class		-		C3			
	nmax		-		3000			
NTEP Approval ⁴⁾	Vmin	kg (lb)	-	0.032 (0.070)	0.079 (0.175)	0.159 (0.35)	0.317 (0.70)	0.635 (1.40)
	Class		-		III M			
ATEX Approval ⁴⁾	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)
Factory Mutual Approval ⁴⁾	Rating		II 2 G Ex ia IIC T4					
	Rating		II 2 D Ex tD A21 IP6X T100°C					
	Rating		II 3 G Ex nA II T4					
	Rating		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					
Excitation Voltage	Recommended	V AC/DC	5 ~ 15					
	Max.	V AC/DC	20					
	Terminal Resistance	Excitation	Ω					≥ 385
Material	Output	Ω	350 ± 2					
	Spring Element		Stainless steel					
Protection	Type		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.

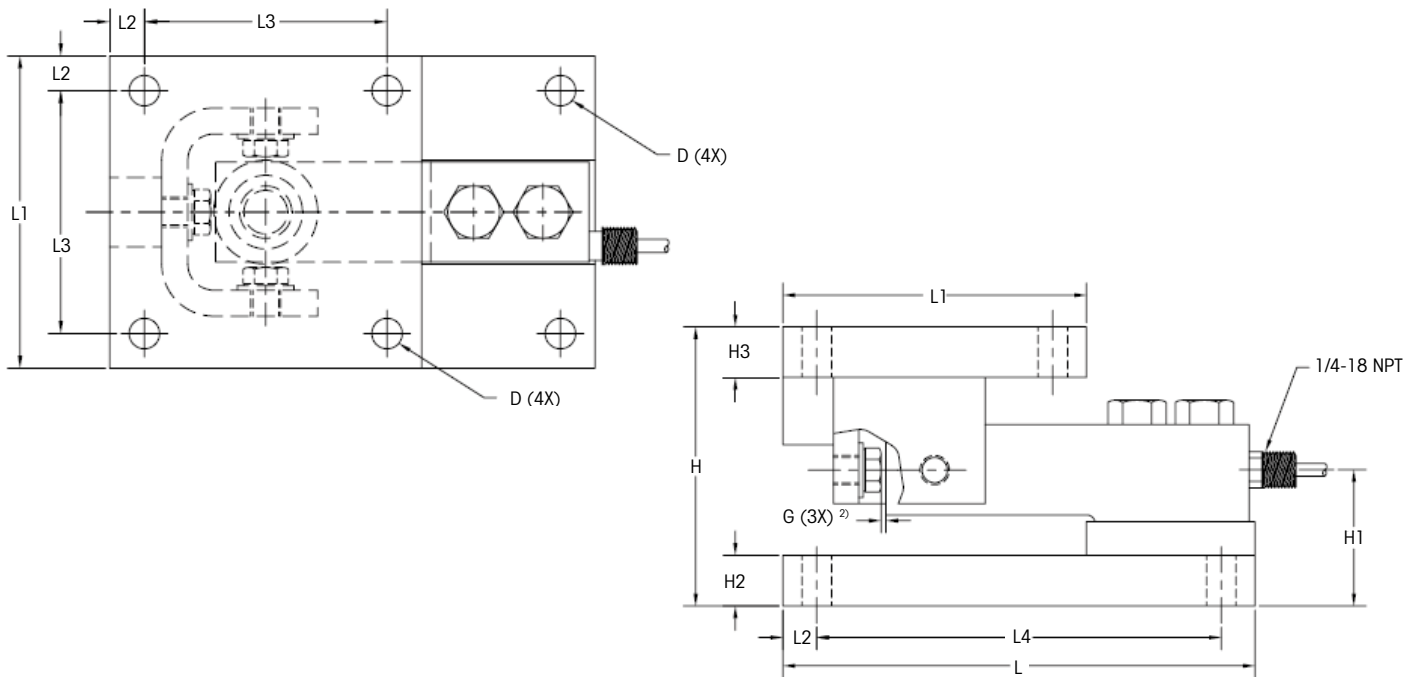
⁷⁾ Maximum horizontal force that can be applied to top plate in a direction parallel to the longitudinal axis of the load cell towards the nose of the load cell only (one direction only)

⁸⁾ Maximum vertical uplift force that can be applied to the top plate.

⁹⁾ Maximum vertical downward force that can be applied to the top plate.



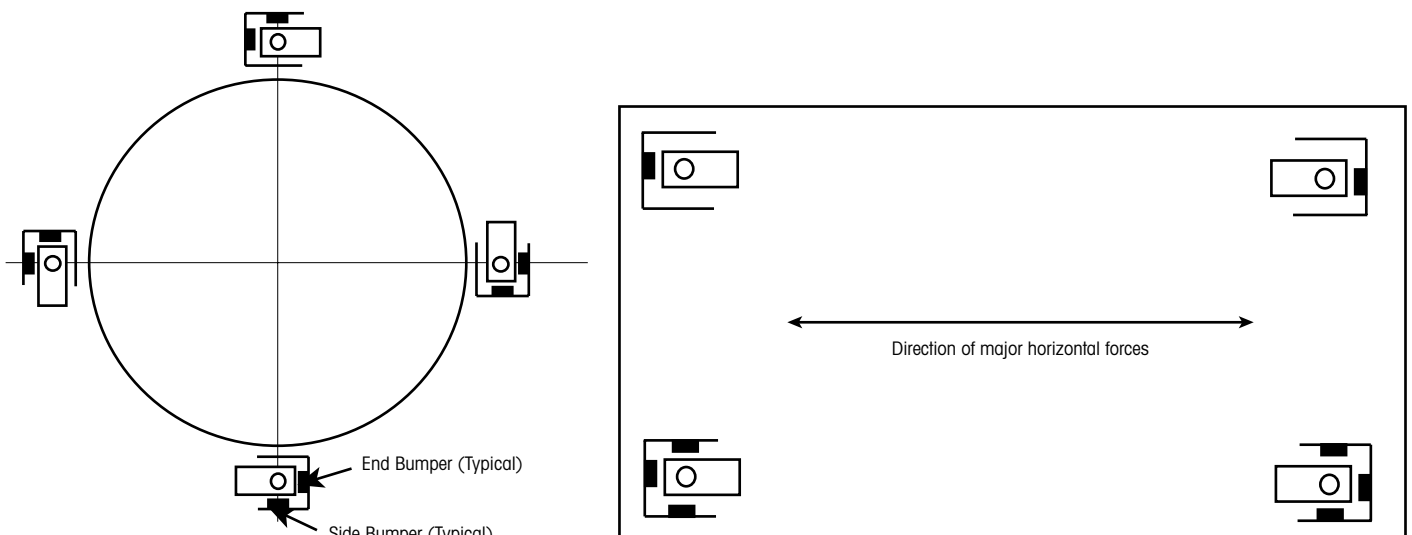
0958 Centerline Dimensional Drawings mm [inch]



CAPACITY	DIMENSIONS AND LOCATIONS										TOP PLATE TRAVEL	
	D	H	H1	H2	H3	L	L1	L2	L3	L4	G (as shipped)	G MAX ²⁾
110-1100kg [250-2500lb]	11.2 [0.44]	104.4 [4.11]	47.7 [1.88]	19.0 [0.75]	19.0 [0.75]	177.8 [7.00]	114.3 [4.50]	12.7 [0.50]	88.9 [3.50]	152.4 [6.00]	1.6 [0.06]	2.5 [0.10]
2200kg [5000lb]	11.2 [0.44]	105.2 [4.14]	51.3 [2.02]	19.0 [0.75]	19.0 [0.75]	177.8 [7.00]	114.3 [4.50]	12.7 [0.50]	88.9 [3.50]	152.4 [6.00]	1.6 [0.06]	2.5 [0.10]
4400kg [10000lb]	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]	1.6 [0.06]	3.2 [0.12]

²⁾ Reduce the No. washers under the head to increase gap to maximum dimension «Gmax»

Mounting Arrangements



0958 Centerlign Order Information

Description	Item No.
0958 Centerlign CS 110kg/250lb WM assy (including 0745A load cell) 4.5m (15ft) cable	61043769
0958 Centerlign CS 220kg/500lb WM assy (including 0745A load cell) 4.5m (15ft) cable	61000102
0958 Centerlign CS 550kg/1250lb WM assy (including 0745A load cell) 4.5m (15ft) cable	61000103
0958 Centerlign CS 1.1t/2500lb WM assy (including 0745A load cell) 4.5m (15ft) cable	61000104
0958 Centerlign CS 2.2t/5000lb WM assy (including 0745A load cell) 4.5m (15ft) cable	61000105
0958 Centerlign CS 4.4t/10000lb WM assy (including 0745A load cell) 9.1m (30ft) cable	61000106
0958 Centerlign SS 110kg/250lb WM assy (including 0745A load cell) 4.5m (15ft) cable	61043768
0958 Centerlign SS 220kg/500lb WM assy (including 0745A load cell) 4.5m (15ft) cable	61000111
0958 Centerlign SS 550kg/1250lb WM assy (including 0745A load cell) 4.5m (15ft) cable	61000112
0958 Centerlign SS 1.1t/2500lb WM assy (including 0745A load cell) 4.5m (15ft) cable	61000113
0958 Centerlign SS 2.2t/5000lb WM assy (including 0745A load cell) 4.5m (15ft) cable	61000114
0958 Centerlign SS 4.4t/10000lb WM assy (including 0745A load cell) 9.1m (30ft) cable	61000115

Options

FABREEKA PAD 0-2.2t FM-CL	61005965
FABREEKA PAD 4.4t FM-CL	61005938
ACETAL PAD 0-2.2t FM-CL	61010620
ACETAL PAD 4.4t FM-CL	61010621
ULTEM PEI PADO-2.2t FM-CL	61024642
ULTEM PEI PAD 4.4t FM-CL	61037510
DEADSTAND 0-2.2t FM-CL	61010624
DEADSTAND 4.4t 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

Bolded entries are stocked

Global Approvals

The 0745A is provided with C3 approval acc. to OIML R60. Thus best weighing performance is guaranteed at all specified conditions. Benefit from METTLER TOLEDO experience.

Full Connectivity

METTLER TOLEDO supplies various data communication interfaces that enable our sensors and instruments to communicate with your PLC, MES, or ERP systems.



ServiceXXL[®]

Tailored Services

Worldwide Services

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.



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Environment certificate ISO 14001

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