

Globally Approved for Accuracy and Safety



Applications

0743 is ideal for floor scales, tank and hopper scales in process industries. It is constructed of stainless steel which provides excellent corrosion protection. The full set of approvals makes it the right choice for your application.



Tank Weighing

The capacity range from 9t to 20.4t is ideal for mid size tank and hopper weighing in most demanding applications.



Hermetically Sealed

The stainless steel cups are welded in place to create a hermetic seal to prevent moisture from entering the interior of the load cell and deteriorating the weighing performance.



0743 High Capacity Beam Load Cell

The 0743 beam load cell features:

- OIML C3, and NTEP ClassIIIIM 5000d approvals
- ATEX Zone1/2 and 21/22 approvals
- FM Class I,II,III Div 1&2 approvals
- Stainless steel
- Hermetically sealed design
- IP68 protection class

Every 0743 comes with all the approvals listed.

The 0743 is a stainless beam load cell designed for harsh and hazardous environments specifically for the process industry. 0743 is approved for use in various applications in Europe, Asia, America and almost everywhere else in the world. If an approval is required, the 0743 probably already complies.

0743 Load Cell Specifications

Parameter	unit of measure	Specification		
Model No:		0743		
Rated Capacity (R.C.)	† nominal (lb)	9.07 (20000)	13.6 (30000)	20.4 (45000)
Rated Output	mV/V @R.C.	2 ± 0.005		
Zero load Output	%R.C.	≤ 1.5		
Combined Error ^{1) 2)}	%R.C.	≤ 0.018		
Repeatability Error	%A.L. ³⁾	≤ 0.01		
Creep, 30 minute	%A.L.	≤ 0.0167		
Min. Dead Load Output Return (DR), 30 min	%A.L.	≤ 0.0167		
Temperature Effect on	Min Dead load Output	%R.C./°C (./°F) ≤ 0.002 (0.001)		
	Sensitivity ²⁾	%A.L./°C (./°F) ≤ 0.0009 (0.0005)		
Temperature Range	Compensated	°C (°F) -10 to +40 (+14 to +104)		
	Operating	°C (°F) -20 to +65 (-4 to +122)		
	Safe Storage	°C (°F) -40 ~ +80 (-40 ~ +176)		
OIML / European Approval ⁴⁾	OIML Cert. No.	R60/1991-NL-97.31		
	European Cert. No.	NMI TC2977		
	Class	C3		
	n _{max}	3000		
	Y	6000		
	P _{Lc}	0.7		
	Humidity Symbol	none		
NTEP Approval ²⁾	Min. dead load	kg (lb)	50 (110)	100 (220)
	Number		88-008	
	Class		III M	
	n _{max}		5000	
ATEX Approval ⁴⁾	Min. dead load	kg (lb)	1.3 (2.8)	1.9 (4.2) 2.9 (6.4)
	Number, Category 2		KEMA 03ATEX1069	
	Number, Category 3		KEMA 03ATEX1070	
	Ratings		II 2 G Ex ia IIC T4 Gb II 2 D Ex tb IIIC T100 °C Db II 3 G Ex ic IIC T4 T Gc II 3 G Ex na IIC T4 Gc II 3 D Ex tc IIIC T100 °C Dc	
	Entity Parameters		U _i =25V, I _i =600mA, P _i =1.25W, C _i =5nF, L _i =30µH U _n = 25V 3005885	
Factory Mutual Approval ⁴⁾	Number		158574R	
	Rating		IS / I,II,III / 1 / ABCDEF6 / T4 NI / I / 2 / ABCD / T6 S / II,III / 2 / FG / T6	
	Entity Parameters		V _{max} =25V, I _{max} =600mA, P _i =1.25W, C _i =0, L _i =29µH	
	System Drawing No		158574R	
Excitation Voltage	Recommended	V AC/DC	5-15	
	Maximum	V AC/DC	20	
Terminal Resistance	Excitation	Ω	380±20	2200 ± 100
	Output	Ω	350 ± 2	2000 ± 20
Insulation Resistance @50VDC	MΩ	≥ 5000		
Breakdown Voltage	V AC	> 500		
Material	Spring Element		stainless steel	
	Enclosures		304 stainless steel	
	Cable entry fitting		304 stainless steel	
	Cable		Polyurethane	
Protection	Type		welded	
	IP Rating		IP 68	
	NEMA Rating		NEMA 6/6P	
Load Limit	Safe	%R.C.	150	
	Ultimate	%R.C.	300	
Safe Side Load ⁵⁾	%R.C.	100		
Safe Dynamic Load	%R.C.	70		
Fatigue Life	cycles @R.C.	>1,000,000		
Direction of Loading		beam		
Deflection @ R.C., nominal	mm (in)	0.91 (0.036)	1.65(0.065)	
Weight, nominal	kg (lb)	7.0 (15.5)	11.5 (25.5)	
Cable Length	m (ft)	4.5, 9.1, 18.2 (15, 30, 60)		
Barometric Pressure Effect on Zero Load Output	kg/kPa (lb/in.Hg)	none		
Mounting Screw	Grade		8.8 (Grade 5)	
	Size / thread	mm (in)	M24 (1-8 UNC)	M30 (1-1/4-7 UNC)
	Engaged Length	mm (in)	-	
	Torque, nominal	N.m (ft-lb)	600 (475)	1200 (1000)

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

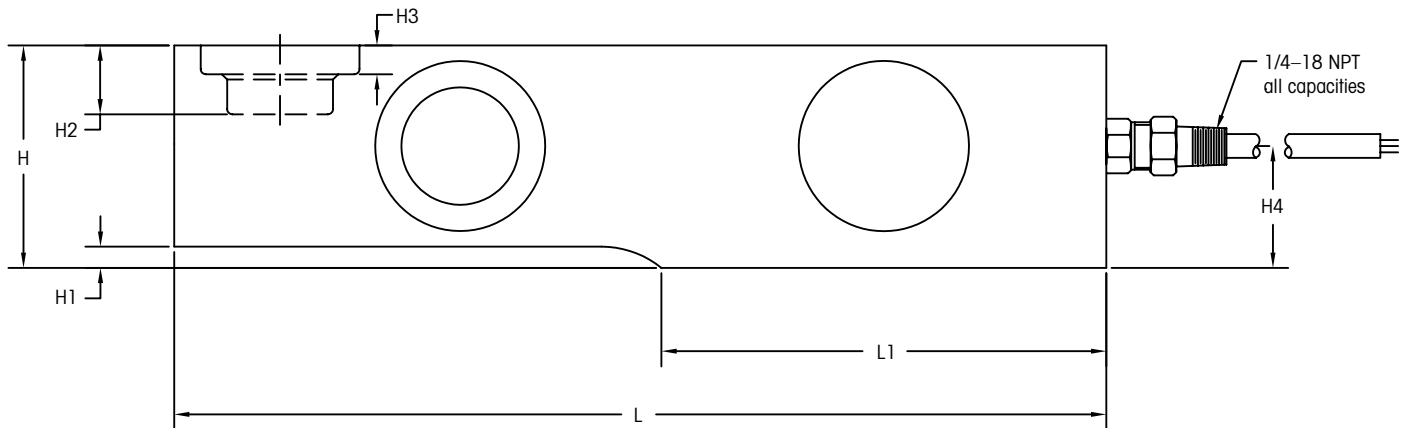
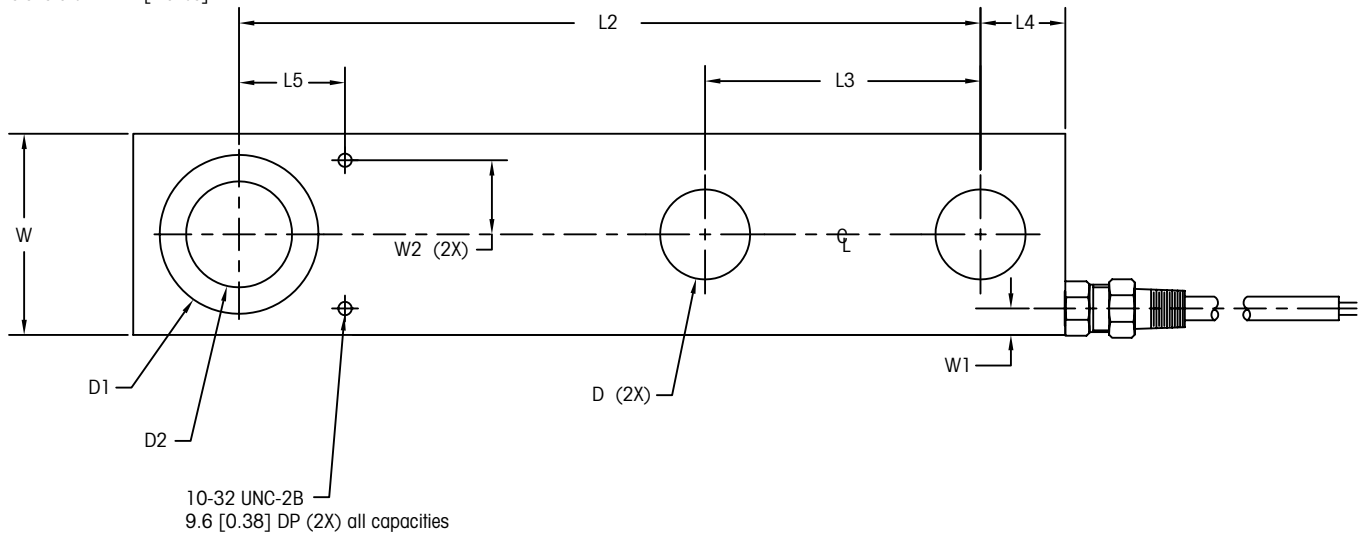
⁴⁾ See certificate for complete information.

⁵⁾ Protect mounting screws from shear

0743 Load Cell Dimensional Drawings

Capacity	Dimensions and Locations																
	D (2x)	D1	D2	H	H1	H2	H3	H4	L	L1	L2	L3	L4	L5	W	W1	W2 (2x)
9072-13608 kg [20,000-30,000 lb]	27.0 [1.06]	47.6 [1.88]	31.8 [1.25]	66.7 [2.36]	6.4 [0.25]	20.6 [0.81]	8.6 [0.34]	36.5 [1.44]	279.4 [11.00]	133.4 [5.25]	222.3 [8.75]	82.6 [3.25]	25.4 [1.00]	31.8 [1.25]	60.4 [2.38]	7.9 [0.31]	22.2 [0.88]
20412 kg [45,000 lb]	33.3 [1.31]	54.0 [2.13]	38.1 [1.50]	82.6 [3.25]	12.7 [0.50]	24.2 [0.95]	9.5 [0.38]	47.6 [1.87]	317.5 [12.50]	152.4 [6.00]	247.7 [9.75]	88.9 [3.50]	31.8 [1.25]	34.9 [1.38]	69.9 [2.75]	10.9 [0.43]	25.4 [1.00]

Notes:
Dimensions are in mm [inches]



0743 Load Cell Order Information

Description	Item No.
Load cell, model no. 0743, 9t (20klb) 4.5m (15ft) cable	71208065
Load cell, model no. 0743, 9t (20klb) 9.1m (30ft) cable	71208066
Load cell, model no. 0743, 9t (20klb) 18.2m (60ft) cable	71208067
Load cell, model no. 0743, 13.6t (20klb) 4.5m (15ft) cable	71208068
Load cell, model no. 0743, 13.6t (20klb) 9.1m (30ft) cable	71208069
Load cell, model no. 0743, 13.6t (20klb) 18.2m (60ft) cable	71208070
Load cell, model no. 0743, 20.4t (20klb) 4.5m (15ft) cable	71208071
Load cell, model no. 0743, 20.4t (20klb) 9.1m (30ft) cable	71208072
Load cell, model no. 0743, 20.4t (20klb) 18.2m (60ft) cable	71208073

Bolded entries are stocked

0743 Load Cell Cable Colours

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

Full Connectivity

Our sensors and instruments are professional communicators. METTLER TOLEDO supplies you with various data communication interfaces that allow you to communicate with your PLCs, MES or ERP systems.



Global Approvals

The 0743 is provided with all listed approvals. No need to think about options and additional charges. Simplifies the conduct of global business, order processing and service-part stocking.



METTLER TOLEDO Service

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, checkweighing.



Quality certificate ISO 9001
Environment certificate ISO 14001

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