

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 Sensitivity ²⁾	%R.C./°C (./°F)	≤ 0.002 (0.001)	
		%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 +150)	
	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	
	PLC		0.7	
	Humidity Symbol		none	
NTEP Approval ²⁾	Min. dead load	kg (lb)	50 (110)	100 (220)
	Number		NTEP 88-008	
	Class		III M	
	n _{max}		5000	
	V _{min}	kg (lb)	1.3 (2.8)	1.9 (4.2)
ATEX Approval ⁴⁾	Min. dead load	kg (lb)	90 (200)	
	Number, Category 2		KEMA 03ATEX1069 (-40°C ~ +50°C)	
	Number, Category 3		KEMA 03ATEX1070 (-40°C ~ +50°C)	
	Ratings		II 2 G Ex ia IIC T4	
			II 2 D Ex tD A21 IP6X T100°C	
			II 3 G Ex nA II T4	
		II 3 G Ex nL IIC T4		
Entity Parameters		II 3 D Ex tD A22 IP6X T100°C		
Number		U _i /U _n =25V, I _i =600mA, P _i =1.25W, C _i =5nF, L _i =30µH		
Factory Mutual Approval ⁴⁾	System Drawing No		3005885	
	Rating		IS / I,II,III / 1 / ABCDEFG / T4	
			NI / I / 2 / ABCD / T6	
	Entity Parameters		S / II,III / 2 / FG / T6	
System Drawing No		V _{max} =25V, I _{max} =600mA, P _i =1.25W, C _i =0, L _i =29µH		
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		17-4PH Stainless	
	Enclosures		304 Stainless	
	Cable entry fitting		304 Stainless	
	Cable		PU	
Protection	Type		welded covers	
	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	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	
	Grade		8.8 (Grade 5)	
Mounting Screw	Size	mm (in)	M24 (1-8 UNC)	M30 81-1/4-7 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

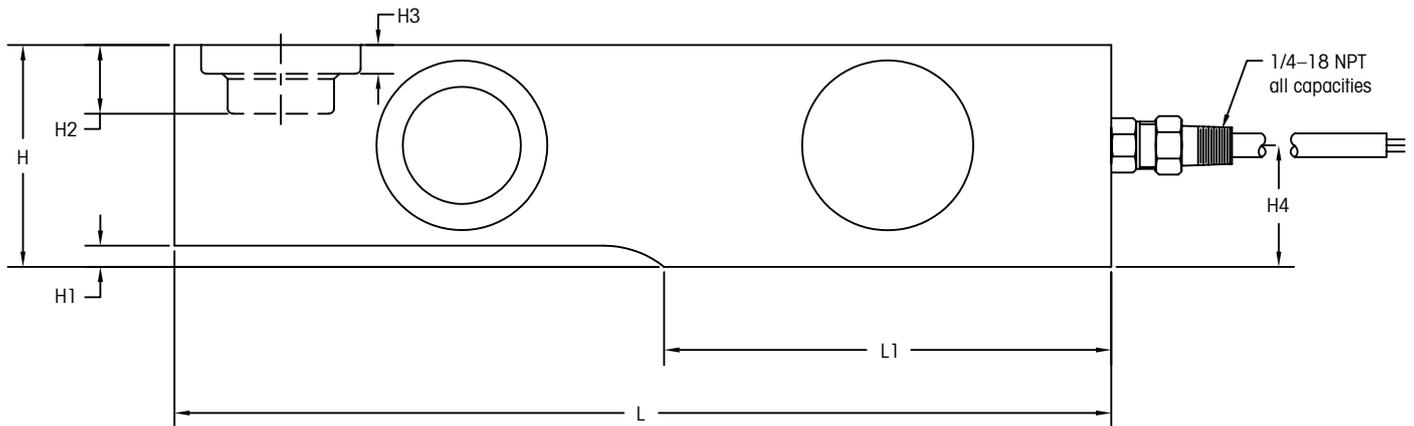
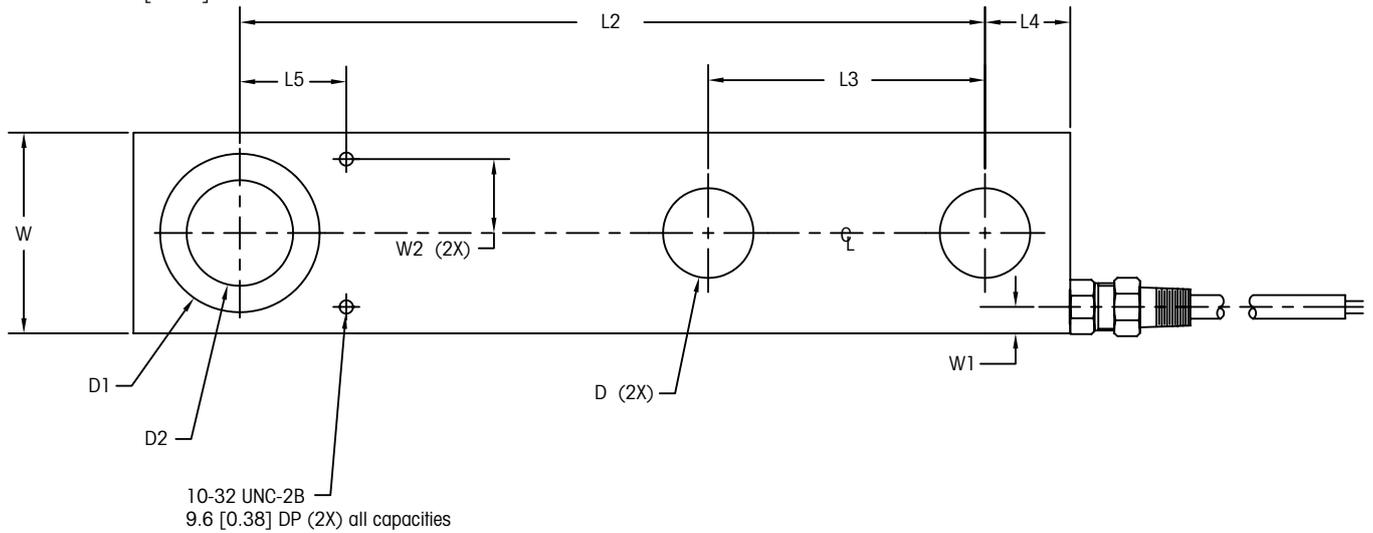
⁴⁾ See certificate for complete information.

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	47.6	31.8	66.7	6.4	20.6	8.6	36.5	279.4	133.4	222.3	82.6	25.4	31.8	60.4	7.9	22.2
	[1.06]	[1.88]	[1.25]	[2.36]	[0.25]	[0.81]	[0.34]	[1.44]	[11.00]	[5.25]	[8.75]	[3.25]	[1.00]	[1.25]	[2.38]	[0.31]	[0.88]
20412 kg [45,000 lb]	33.3	54.0	38.1	82.6	12.7	24.2	9.5	47.6	317.5	152.4	247.7	88.9	31.8	34.9	69.9	10.9	25.4
	[1.31]	[2.13]	[1.50]	[3.25]	[0.50]	[0.95]	[0.38]	[1.87]	[12.50]	[6.00]	[9.75]	[3.50]	[1.25]	[1.38]	[2.75]	[0.43]	[1.00]

Notes:
Dimensions are in mm [inches]



0743 Load Cell Order Information

Description	Item No.
LC 743 9t 15ft C3/III5M 20,000lb	71208065
LC 743 9t 30ft C3/III5M 20,000lb	71208066
LC 743 9t 60ft C3/III5M 20,000lb	71208067
LC 743 13.6t 15ft C3/III5M 30,000lb	71208068
LC 743 13.6t 30ft C3/III5M 30,000lb	71208069
LC 743 13.6t 60ft C3/III5M 30,000lb	71208070
LC 743 20.4t 15ft C3/III5M 45,000lb	71208071
LC 743 20.4t 30ft C3/III5M 45,000lb	71208072
LC 743 20.4t 60ft C3/III5M 45,000lb	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.



ServiceXXL[®]

Tailored Services

Worldwide Services

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.

Weighing Electronics

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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Environment certificate ISO 14001

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