

Global Usage

Fully Approved for Accuracy and Safety



Floor Scales

Use the 0745A load cell in platform and floor scales. Due to the hermetic welded design the 0745A is ideal for harsh environments in process and food applications. The full set of approvals provides maximum applicability and safety in these applications.



Tank Weighing

The capacity range from 110kg to 4.4t allows the weighing of tanks and silos. The stainless steel design, hermetic sealing and IP68 protection provides the best reliability in tank and hopper weighing applications in harsh environments in process and food applications.



MultiMount™ Weigh Module

The optional METTLER TOLEDO MultiMount™ weigh module allows one to convert an existing system into a precise weighing system. It is ideal for applications such as tank scales, belt scales and conveyor scales. Available in zinc plated steel or stainless steel.



Hermetically Sealed

0745A load cells are made from stainless steel and hermetically sealed by laser welding. This protects the load cell from damp for the best stability and measuring performance.



0745A Beam Load Cell Fully Approved

The 0745A is approved for use in various applications in Europe, Asia, America and almost everywhere else in the world. If an approval is required, the 0745A probably already complies. Even if needed for hazardous areas later, the 0745A is already prepared.

0745A beam load cell features:

- OIML C3/C6 and NTEP III M 5000/10000 approvals
- ATEX/IECEX Zone1/2 and 21/22 approvals
- FM Class I,II,III Div 1&2 approvals for USA & Canada
- Stainless steel
- Hermetically sealed design
- IP68, IP69K protection class

0745A Load Cell Specifications

Parameter	unit of measure	Specification					
Model No.		0745A					
Rated Capacity (R.C.)	kg (lb, nominal)	110 (250)	220 (500)	550 (1250)	1100 (2500)	2200 (5000)	4400 (10000)
Rated Output	mV/V @R.C.-kg	0.970 ± 0.2%			1.940 ± 0.1%		
	mV/V @R.C.-lb	1.000 ± 0.2%			2.000 ± 0.1%		
Zero Load Output	%R.C.	≤ 2			≤ 1		
Combined Error ^{1) 2)}	%R.C.	≤ 0.03			C3: ≤ 0.018 / C6: ≤ 0.012		
Repeatability Error	%A.L. ³⁾	≤ 0.01			C3: ≤ 0.01 / C6: ≤ 0.005		
Creep, 30 minute	%A.L.	≤ 0.03			C3: ≤ 0.017 / C6: ≤ 0.008		
Min. Dead Load Output Return (DR), 30 min	%A.L.	≤ 0.03			C3: ≤ 0.017 / C6: ≤ 0.008		
Temperature Effect on	Min. Dead load Output	%R.C./°C (./°F)	≤ 0.0027 (0.0015)			C3: ≤ 0.0013 (0.0007) / C6: ≤ 0.0013 (0.0007)	
	Sensitivity ²⁾	%A.L./°C (./°F)	≤ 0.0014 (0.0008)			C3: ≤ 0.001 (0.0006) / C6: ≤ 0.0005 (0.0003)	
Temperature Range	Compensated		-10 to +40 (+14 to +104)				
	Operating	°C (°F)	-40 to +65 (-40 to +150)				
	Safe Storage		-40 to +80 (-40 to +176)				
OIML / European Approval ⁴⁾	Number, OIML / Europe		R60/2000-NL1-09.07 / NMI TC2154				
	Class		C3 / C6				
	nmax		3000 / 6000				
	Y		11000				
	PLC		0.7				
	Humidity Symbol		none				
	Min. dead load	kg (lb)	0 (0)				
	Z		3000 / 6000				
	Barometric Pressure Effect	Vmin/kPa	none				
NTEP Approval ⁴⁾	Number		92-108				
	Class		III M / III M				
	nmax		5000 / 10000				
	Vmin	kg (lb)	0.022 (0.05)	0.056 (0.125)	0.114 (0.25)	0.227 (0.50)	0.454 (1.0)
	Min. dead load	kg (lb)	0 (0)				
ATEX Approval ⁴⁾	Number		KEMA 03ATEX1069 / KEMA 03ATEX1070				
	Rating		II 2 G Ex ia IIC T4 Gb / II 2 D Ex ia IIC T100°C Db				
	Entity Parameters		II 3 G Ex ic IIC T4 Gc / II 3 G Ex nA IIC T4 Gc / II 3 D Ex tc IIIC T100°C Dc				
IECEX Approval ⁴⁾	Number		IECEX DEK 15.0017				
	Rating		Ex ia IIC T4 Gb / Ex ia IIIC T100°C Db				
	Entity Parameters		Ex ic IIC T4 Gc / Ex nA IIC T4 Gc / Ex tc IIIC T100°C Dc				
Factory Mutual Approval ⁴⁾	Number, USA / Canada		3005885 / 3025753C				
	Rating, USA		IS / I, II, III / 1 / ABCDEFG / T4				
	Rating, Canada		NI / I / 2 / ABCD / T6 / S / II, III / 2 / FG / T6				
	Entity Parameters		IS / I, II, III / 1 / ABCDEFG / T4				
	System Drawing No, USA		NI / I / 2 / ABCD / T6 / DIP / II, III / 2 / FG / T6				
	System Drawing No, Canada		Vmax = 25V, Imax = 600mA, Pi = 1.25W, Ci = 0, Li = 29µH				
Excitation Voltage	Recommended	V AC/DC	C3: 5 ~ 15 / C6: 5 ~ 10				
	Max.		15				
Terminal Resistance	Excitation	Ω	384 ± 10				
	Output		350 ± 2				
Insulation Resistance @50VDC	MΩ	> 5000					
Breakdown Voltage	V AC	> 500					
Material	Spring Element		stainless steel				
	Enclosure		304 stainless steel				
	Cable entry fitting		304 stainless steel				
Protection	Cable		Polyurethane (PU) & FEP				
	Type		welded				
	IP Rating		IP68, IP69K				
Load Limit	NEMA Rating		NEMA 6/6P				
	Safe	%R.C.	150				
Safe Side Load ⁵⁾	Ultimate	%R.C.	300				
		%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)	0.11 (0.004)	0.21 (0.008)	0.23 (0.009)	0.31 (0.012)	0.50 (0.02)	0.82 (0.032)
Overload Protection		yes			no		
Weight, nominal	kg (lb)	0.9 (2)					
Cable Length	Length	m (ft)	PU: 2 (6.6), 3 (9.8), 5 (16.4), 10 (32.8) / FEP: 3 (9.8), 5 (16.4), 10 (32.8)				
	Diameter	mm (in)	PU: 5.2 (0.2) / FEP: 5.3 (0.21)				
	Grade		10.9 (Grade 8)				
Mounting Screw	Size/thread	mm (in)	M12 (1/2-13 UNC)				M18x1.5 (3/4-10 UNC)
	Torque, nominal	N.m (ft-lb)	98 (70)				270 (200)
Drawing No.	Dimensions		30214325				
	To-Scale		30214326				

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.

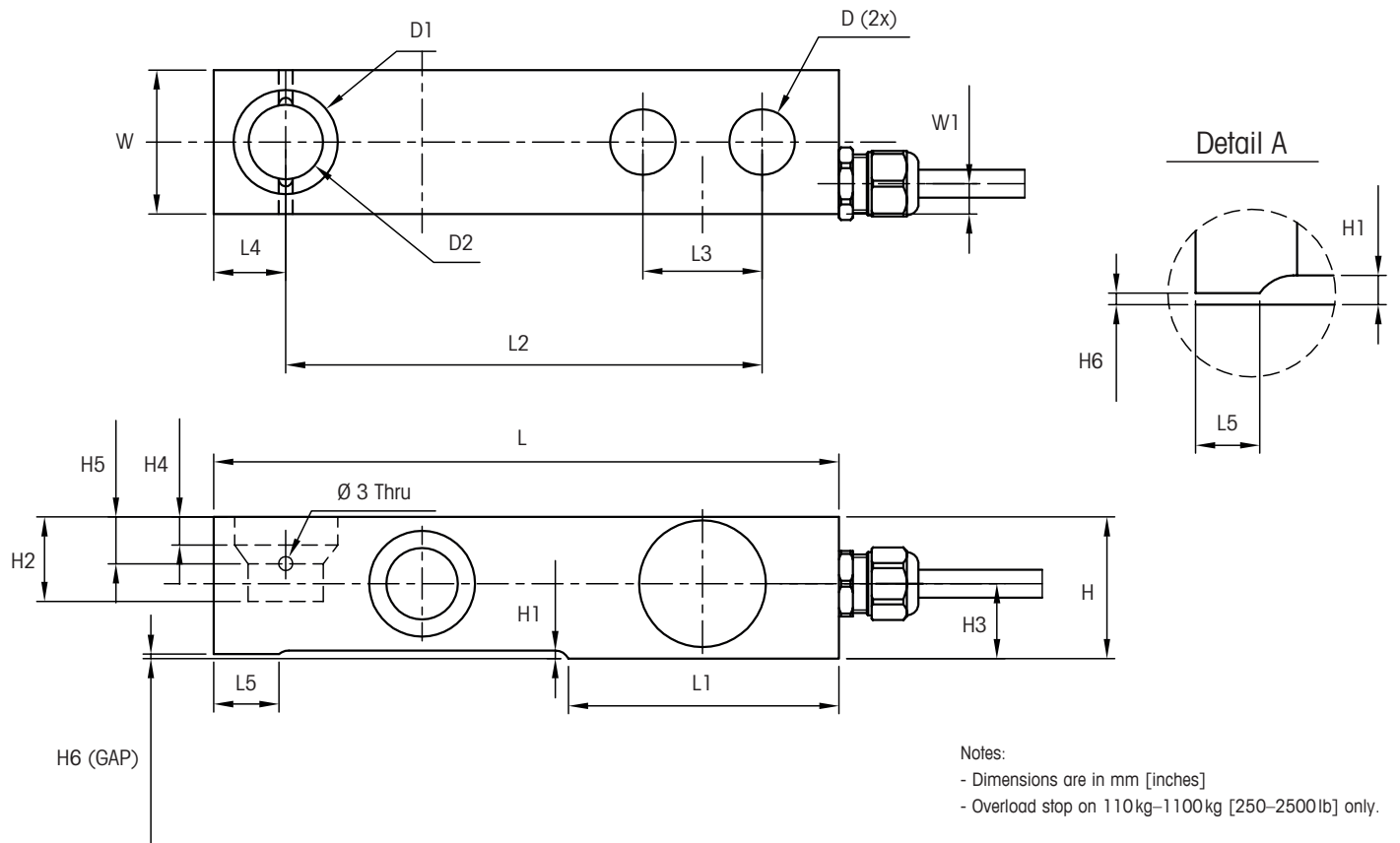
³⁾ A.L. = Applied Load

⁴⁾ See certificate for complete information.

⁵⁾ Protect mounting screws from shear.

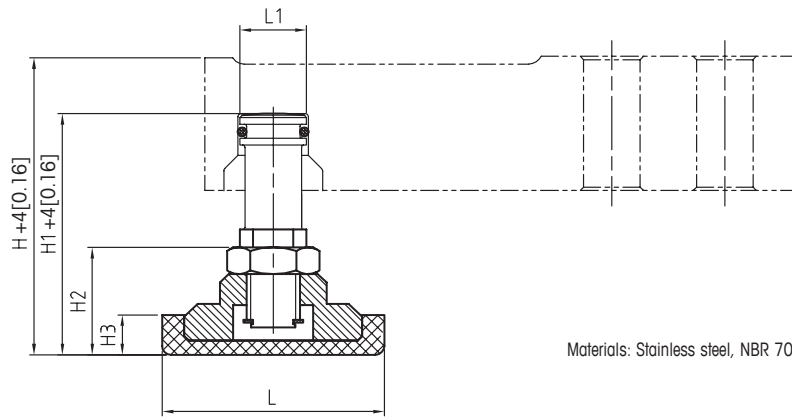


0745A Load Cell Dimensional Drawings mm [in]



Model	Capacity	Dimensions and locations																		
		D (2x)	D1	D2	H	H1	H2	H3	H4	H5	H6	L	L1	L2	L3	L4	L5	W	W1	
0745A	110-550 kg [250-1250 lb]	13.0 [0.51]	22.2 [0.88]	15.9 [0.62]	30.2 [1.19]	1.8 [0.07]	17.3 [0.68]	16 [0.63]	4.8 [0.19]	7.9 [0.31]	0.38 [0.015]	133.4 [5.25]	57.7 [2.27]	101.6 [4.00]	25.4 [1.00]	15.4 [0.61]	6.4 [0.25]	30.7 [1.21]	6.48 [0.26]	
	1100 kg [2500 lb]	13.0 [0.51]	22.2 [0.88]	15.9 [0.62]	30.2 [1.19]	1.8 [0.07]	17.3 [0.68]	16 [0.63]	4.8 [0.19]	7.9 [0.31]	0.51 [0.02]	133.4 [5.25]	57.7 [2.27]	101.6 [4.00]	25.4 [1.00]	15.4 [0.61]	6.4 [0.25]	30.7 [1.21]	6.48 [0.26]	
	2200 kg [5000 lb]	13.0 [0.51]	22.2 [0.88]	15.9 [0.62]	36.6 [1.44]	4 [0.16]	22.9 [0.90]	20.3 [0.80]	9.5 [0.37]	12.7 [0.50]	4 [0.16]	136.6 [5.38]	57.9 [2.28]	101.6 [4.00]	25.4 [1.00]	18.4 [0.72]		36.7 [1.44]	6.48 [0.26]	
	4400 kg [10 000 lb]	19.3 [0.76]	34.9 [1.38]	22.2 [0.88]	42.9 [1.69]	2.3 [0.09]	20 [0.79]	29.3 [1.16]	11 [0.43]	17.4 [0.68]	2.3 [0.09]	171.5 [6.75]	73.8 [2.91]	133.3 [5.25]	38.1 [1.50]	21.5 [0.84]		42.9 [1.69]	6.48 [0.26]	

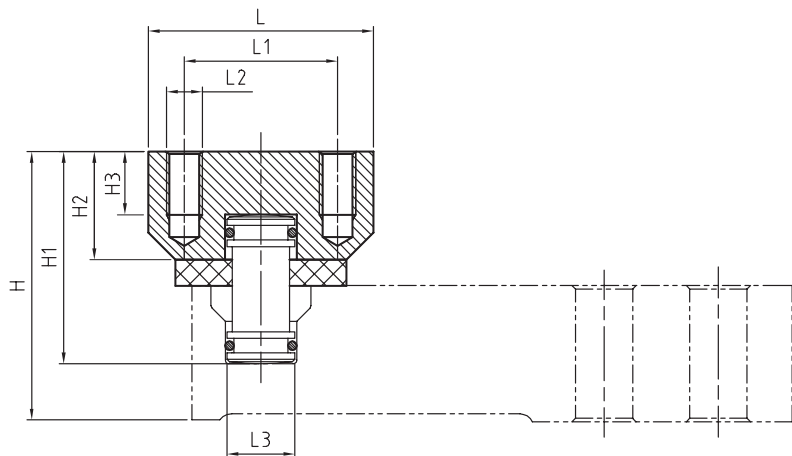
0745A Foot Kit FTK mm [in]



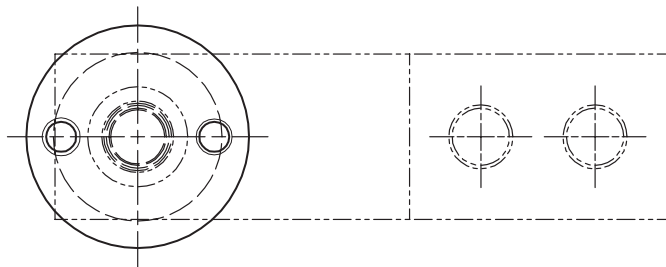
Materials: Stainless steel, NBR 70

Capacity	Dimensions and Locations					
	L	L1	H	H1	H2	H3
110 kg-1.1 t	ø50 [ø1.97]	ø15 [ø0.59]	66.8 [2.14]	54.3 [2.14]	24.2 [0.95]	9 [0.35]
2.2 t	ø50 [ø1.97]	ø15 [ø0.59]	66.5 [2.14]	54.3 [2.14]	24.2 [0.95]	9 [0.35]
4.4 t	ø70 [ø2.76]	ø15 [ø0.59]	91.2 [3.59]	80 [3.15]	38.5 [1.52]	17 [0.67]

0745A Expansion Kit EK mm [in]



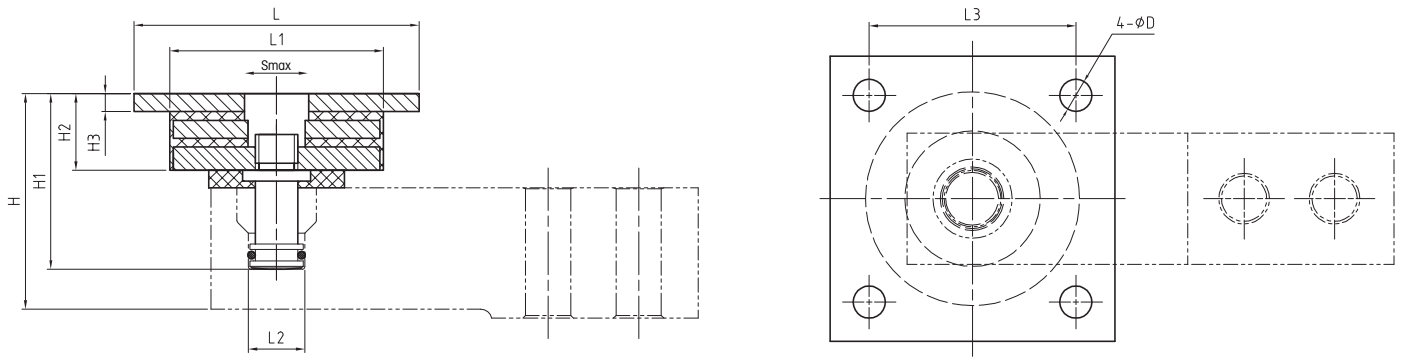
Materials: Stainless steel, Polyethylene foam



Capacity	Dimensions and Locations									
	L	L1	L2	L3	H	H1	H2	H3	Smax*	
110 kg-1.1 t	ø50 [ø1.97]	34 [1.34]	M8	ø15 [ø0.59]	59.6 [2.35]	47.1 [1.85]	24 [0.94]	14 [0.55]	±3 mm [±0.12]	
2.2 t	ø50 [ø1.97]	34 [1.34]	M8	ø15 [ø0.59]	63.5 [2.50]	52.3 [2.06]	24 [0.94]	14 [0.55]	±3 mm [±0.12]	
4.4 t	ø60 [ø2.36]	45 [1.77]	M10	ø21.5 [ø0.85]	73.6 [2.90]	62.4 [2.46]	28 [1.10]	17 [0.67]	±3 mm [±0.12]	

* Max lateral displacement

0745A Expansion + Vibration Kit EVK mm [in]



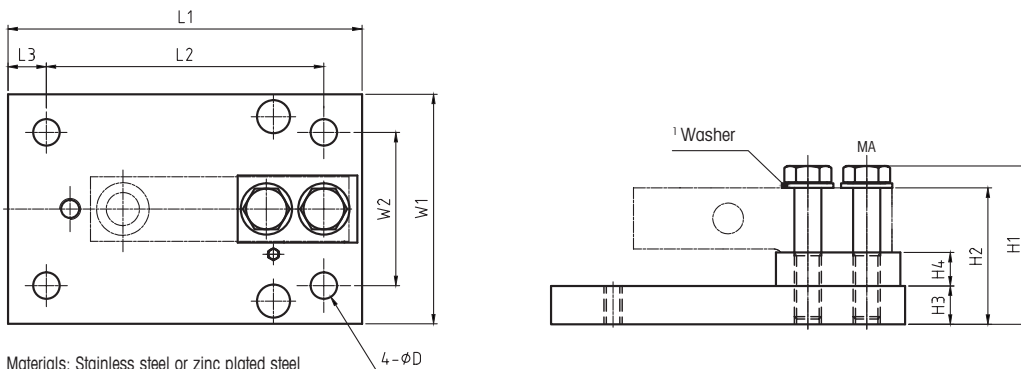
Materials: Stainless steel, NBR 70, Polyethylene foam

Capacity	Dimensions and Locations											
	D	L	L1	L2	L3	H	H1	H2	H3	SHmax*	SVmax**	Max. Side load ratings
110 kg–1.1 t	ø9 [ø0.35]	ø80 [ø3.15]	ø58 [ø2.28]	ø15 [ø0.59]	58 [2.28]	56.6 [2.23]	44.1 [1.74]	21.5 [0.85]	5 [0.20]	±2.8 mm [±0.11]	1 mm [0.04]	2100N
2.2 t	ø9 [ø0.35]	ø80 [ø3.15]	ø58 [ø2.28]	ø15 [ø0.59]	58 [2.28]	60.5 [2.38]	49.3 [1.94]	21.5 [0.85]	5 [0.20]	±3 mm [±0.12]	1.6 mm [0.07]	2400N
4.4 t	ø11 [ø0.43]	ø100 [ø3.94]	ø72 [ø2.83]	ø21.5 [ø0.85]	76 [2.99]	75.6 [2.98]	64.4 [2.54]	30 [1.18]	10 [0.39]	±3 mm [±0.12]	2.2 mm [0.09]	2800N

* Max lateral displacement

** Max vertical displacement incl. load cell

0745A Base Plate Kit BPK mm [in]



Materials: Stainless steel or zinc plated steel

Capacity	Dimensions and Locations											
	L1	L2	L3	W1	W2	H1	H2	H3	H4	D	² MAcs	³ MAss
110 kg–1.1 t [250–2500 lb]	177.9 [7.00]	152.4 [6.00]	12.7 [0.50]	114.4 [4.50]	89.0 [3.50]	72.6 [2.86]	65.1 [2.56]	19.1 [0.75]	15.88 [0.625]	11.2 [0.44]	98Nm [72lb–ft]	98Nm [72lb–ft]
2.2 t [5000 lb]									12.7 [0.5]			
4.4 t [10,000 lb]	235.0 [9.25]	184.2 [7.25]	25.4 [1.00]	152.4 [6.00]	101.6 [4.00]	105.0 [4.13]	90.5 [3.56]	25.4 [1.00]	22.2 [0.87]	17.5 [0.69]	270Nm [200lb–ft]	270Nm [200lb–ft]

¹ Two washers only for 4.4t

² Torque carbon steel version

³ Torque stainless steel version

0745A Load Cell Order Information

Rated Capacity	Class	Cable Material and Length						
		PU 2m (6.6ft)	PU 3m (10ft)	PU 5m (16.6ft)	PU 10m (33ft)	FEP 3m (10ft)	FEP 5m (16.6ft)	FEP 10m (33ft)
110kg/250lb	0.03%	30129790	30129729	30129791	30129792	30129793	30129794	30129795
220kg/500lb	C3/N5K	30091034	30129604	30091046	30094384	42111204	30094412	30094432
220kg/500lb	C6/N10K	30091035	30129605	30091047	30094385	42111205	30094413	30094433
550kg/1.25klb	C3/N5K	30091038	30129606	30091050	30094388	42111224	30094416	30094436
550kg/1.25klb	C6/N10K	30091039	30129607	30091051	30094389	42111225	30094417	30094437
1.1t/2.5klb	C3/N5K	30091042	30129608	30091054	30094392	42111244	30094420	30094440
1.1t/2.5klb	C6/N10K	30091043	30129609	30091055	30094393	42111245	30094421	30094441
2.2t/5klb	C3/N5K	30091026	30039031	30039033	30094396	30094404	30094424	30094444
2.2t/5klb	C6/N10K	30091027	30039032	30039034	30094397	30094405	30094425	30094445
4.4t/10klb	C3/N5K	30091030	30039041	30039043	30094400	30094408	30094428	30094448
4.4t/10klb	C6/N10K	30091031	30039042	30039044	30094401	30094409	30094429	30094449

Bolded entries are stocked

0745A Load Cell Options

Rated Capacity	Item No.					
	Base Plate Kit BPK, CS	Base Plate Kit BPK, 304	Expansion Kit EK	Expansion + Vibr Kit EVK	Foot Kit FTK	Adapter, Conduit
110kg/250lb	30265369	30265370	72208662	72208670	72208674	30095581
220kg/500lb						
550kg/1250lb						
1100kg/2500lb						
2200kg/5000lb	30265371	30265372				
4400kg/10000lb	30265373	30265374	72208663	72208671	72208675	

0745A Load Cell Cable Colours

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

*Connected to Spring Element

Global Approvals

The 0745A 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.



Weighing Electronics

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



METTLER TOLEDO Service

Our extensive service network is among the best in the world and ensures maximum availability and service life of your product.



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Subject to technical changes
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