

No Compromise on Performance



Floor Scales

Use the SLB215 load cell in platform and floor scales. With threaded load-introduction hole, the load cell can be used with a threaded foot for easy levelling. Due to the hermetic welded design reliability in most industrial environments is guaranteed. The full set of approvals provides maximum applicability and safety in these applications.



Tank Weighing

The capacity range from 220kg to 4.4t allows the weighing of tanks, hoppers and silos. Various accessories are available to ease installation and to ensure good performance



Hermetically Sealed

SLB215 load cells are made from nickel plated tool steel but are hermetically sealed, something normally available only on higher end stainless models. This protects the load cell from damp for the best stability and measuring performance.



Accessories

The optional accessories for proper load introduction guarantee the optimal performance in conjunction with thermal expansion and vibration.



SLB215 Beam Load Cells

Easy Integration with Threaded Load Introduction

The SLB215 is approved for use in various applications in Europe, Asia, America and almost everywhere else in the world. If an approval is required, the SLB215 probably already complies.

Every SLB215 beam load cell features:

- Threaded load introduction hole
- OIML C3 and NTEP III M 5,000d approvals (up to 2.2t)
- ATEX Zone1/2 and 21/22 approvals
- FM Class I,II,III Div 1&2 approvals
- Nickel plated steel
- Hermetically sealed design
- IP67 protection class

SLB215 Load Cell Specifications

Parameter	unit of measure	Specification					
Model No.		SLB215					
Rated Capacity (R.C.)	kg (lb, nominal)	220 (500)	550 (1250)	1100 (2500)	2200 (5000)	4400 (10000)	
Rated Output	mV/V @R.C. - kg	1.940 ± 0.002					
	mV/V @R.C. - lb	2.000 ± 0.002					
Zero load Output	%R.C.	≤ 1.0					
Combined Error ¹⁾²⁾	%R.C.	≤ 0.018			≤ 0.03		
Repeatability Error	%A.L. ³⁾	≤ 0.01					
Creep, 30 minute	%A.L.	≤ 0.0167			≤ 0.0167		
Min. Dead Load Output Return (DR), 30 min	%A.L.	≤ 0.0167			≤ 0.0167		
Temperature Effect on	Min. Dead load Output	%R.C./°C (./°F)					
	Sensitivity ²⁾	%A.L./°C (./°F)					
Temperature Range	Compensated	-10 ~ +40 (+14 ~ +104)					
	Operating	-40 ~ +65 (-40 ~ +150)					
	Safe Storage	-40 ~ +80 (-40 ~ +176)					
	OIML Cert. No.	R60/2000-NL1-13.19					
OIML / European Approval ⁴⁾	European Cert. No.	TC8311					
	Class	C3			C1		
	nmax	3000			1000		
	Y	6000					
	PLC	0.7					
	Humidity Symbol	none					
	Min. dead load	kg (lb)	0.4 (0.88)				
	Z		3000			1000	
	Number		13-081				
	Class		III M				
NTEP Approval ⁴⁾	nmax	5000			1600		
	Vmin	kg (lb)	0.037 (0.08)	0.092 (0.20)	0.183 (0.40)	0.367 (0.81)	
	Min. dead load	kg (lb)	0 (0)				
ATEX Approval ⁴⁾	Number, cat. 2	DEKRA 13ATEX0081					
	Number, cat. 3	DEKRA 13ATEX0082					
	Rating	II 2 G Ex ib IIC T4 Gb					
		II 2 D Ex ib IIIC T100°C Db					
		II 3 G Ex ic IIC T4 Gc					
		II 3 G Ex nA IIC T4 Gc					
Factory Mutual Approval ⁴⁾	Entity Parameters	Ui=20V, Ii=600mA, Pi=1.25W, Ci=0.2nF/m (5), Li=1µH/m (5)					
	Number, USA	3005885					
	Rating	IS / I, II, III / 1 / ABCDEFG / T4 Ta =50°C					
		NI / 1 / 2 / ABCD / T6 Ta = 50°C					
		S / II, III / 2 / FG / T6 Ta = 50°C					
	Entity Parameters	Vmax=20V, Imax=600mA, Pi=1.25W, Ci=0, Li=0					
	System Drawing No, USA	30032271					
	Excitation Voltage	Recommended	V DC				
		Max.	5-15				
	Terminal Resistance	Excitation	20				
Output		382±4					
Insulation Resistance @50VDC	MΩ	350±1					
Breakdown Voltage	V AC	>5000					
Material	Spring Element	Alloy Steel					
	Enclosure	304 stainless steel					
	Cable entry fitting	304 stainless steel					
	Cable	PVC					
Finish		nickel plated					
Protection	Type	welded					
	IP Rating	IP67					
	NEMA Rating	NEMA 6					
Load Limit	Safe	%R.C.					
	Ultimate	150					
Safe Side Load	%R.C.	300					
Safe Dynamic Load	%R.C.	100					
Fatigue Life	cycles @R.C.	70					
Direction of Loading		> 1,000,000					
Deflection @ R.C., nominal	mm (in)	0.14 (0.005)	0.23 (0.009)	0.26 (0.01)	0.37(0.015)	0.6(0.024)	
Weight, nominal	kg (lb)	1 (2.2)			1.4 (3.1)	2.4 (5.3)	
Cable	Length	m (ft)					
	Diameter	mm (in)					
Barometric Pressure Effect on Zero Load Output	kg/kPa (lb/in.Hg)	3, 5, 10 (9.8, 16.4, 32.8)					
Overload Protection		none			yes		
	Grade	yes			no		
Mounting Screw	Size/thread	10.9 (Grade 8)			M12 (1/2-13 UNC)		
	Engaged Length	mm (in)					
	Torque, nominal	N.m (ft-lb)			120 (100)		
	Dimensions	30076301					
Drawing No.	2D	30094485					
	3D	30094486					

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

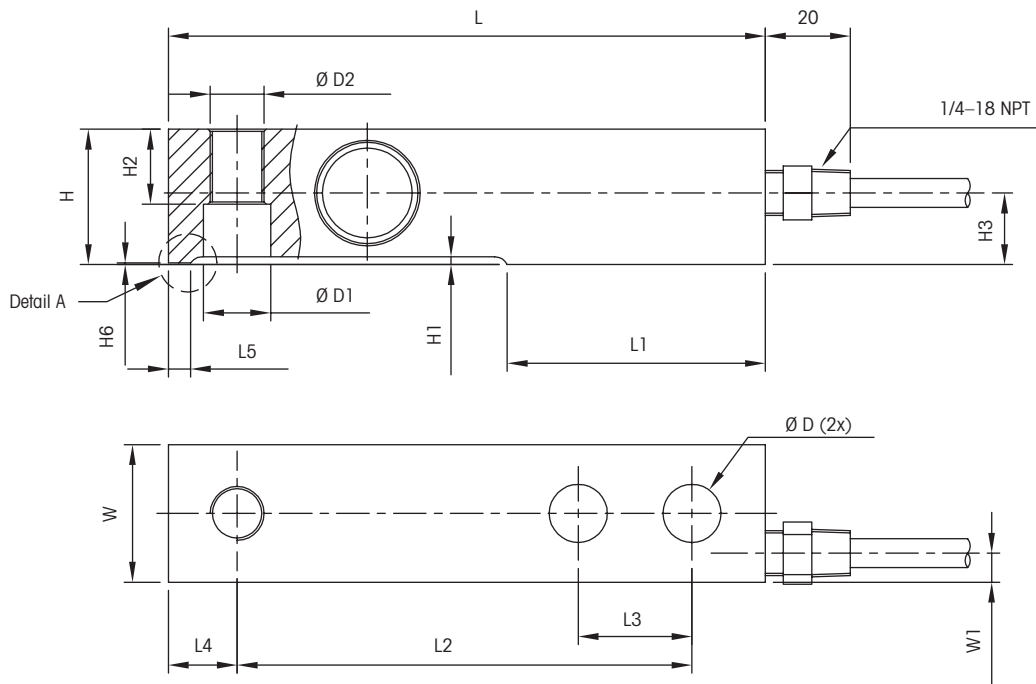
³⁾ A.L. = Applied Load

⁴⁾ See certificate for complete information.

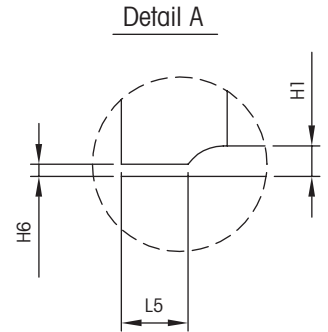
⁵⁾ /m Load Cell Cable



SLB215 Load Cell Dimensional Drawings mm [in]

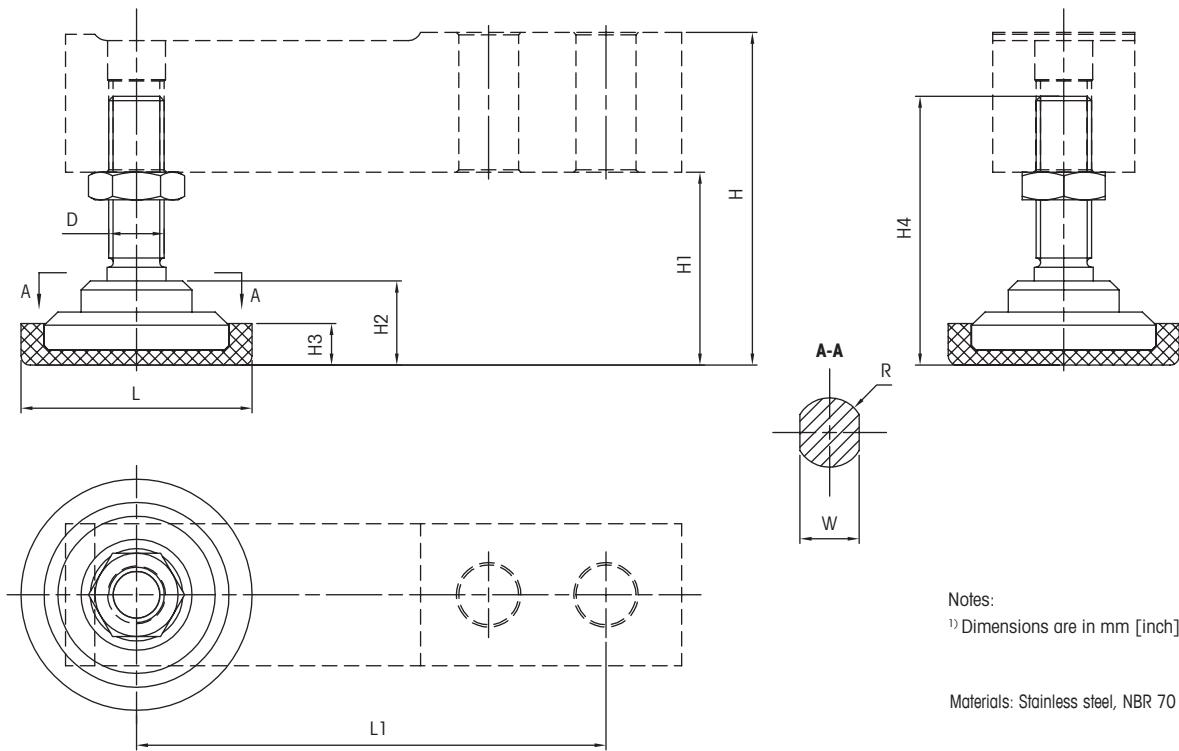


- Notes:
- Dimensions are in mm [in]
 - Cable length 3m, 5m, 10m
 - Overload stop on 220-1100kg [500-2500lb] only



Model	Capacity	Dimensions and locations															
		D (2x)	D1	D2	H	H1	H2	H3	H6	L	L1	L2	L3	L4	L5	W	W1
SLB215	220-1100 kg	13.0	12.5	M12	30.2	1.8	20	16.0	0.48	133.4	56.5	101.6	25.4	15.4	6.4	30.7	6.5
	[500-2500 lb]	[0.51]	[0.49]		[1.19]	[0.07]	[0.79]	[0.63]	[0.02]	[5.25]	[2.22]	[4.00]	[1.00]	[0.61]	[0.25]	[1.21]	[0.26]
SLB215	2200 kg	13.0	12.5	M12	36.6	2.6	20	19.6	2.6	136.7	55.6	101.6	25.4	18.4		36.8	6.0
	[5000 lb]	[0.51]	[0.49]		[1.44]	[0.10]	[0.79]	[0.77]	[0.10]	[5.38]	[2.19]	[4.00]	[1.00]	[0.72]		[1.45]	[0.24]
SLB215	4400 kg	20.5	22.2	M20	42.9	2.5	20	22.7	2.5	171.5	73.8	133.4	38.1	21.4		42.9	6.0
	[10 000 lb]	[0.81]	[0.87]		[1.69]	[0.10]	[0.79]	[0.89]	[0.10]	[6.75]	[2.91]	[5.25]	[1.50]	[0.84]		[1.69]	[0.24]

SLB215 Foot Kit FTKT mm [in]

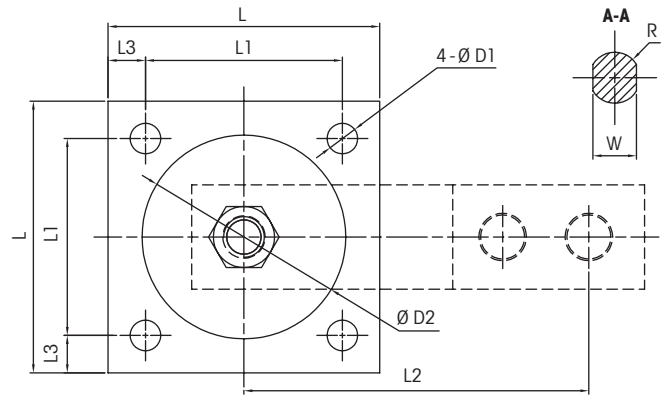
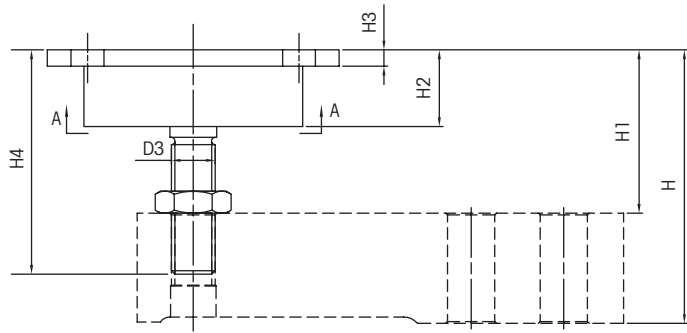


Notes:
¹⁾ Dimensions are in mm [inch]

Materials: Stainless steel, NBR 70

Model	Capacity	Dimensions and locations											
		L	L1	D	H		H1		H2	H3	H4	R	W
					min	max	min	max					
FTKT	220–1100 kg	Ø50	101.6	M12	60	72	29.8	41.8	18.2	9	58.2	7.5	12.8
	[500–2500 lb]	[Ø1.97]	[4.00]		[2.36]	[2.84]	[1.17]	[1.65]	[0.72]	[0.35]	[2.29]	[0.30]	[0.50]
FTKT	2200 kg	Ø50	101.6	M12	66.4	78.4	29.8	41.8	18.2	9	58.2	7.5	12.8
	[5000 lb]	[Ø1.97]	[4.00]		[2.61]	[3.09]	[1.17]	[1.65]	[0.72]	[0.35]	[2.29]	[0.30]	[0.50]
FTKT	4400 kg	Ø70	133.4	M20	91	110	48.1	67.1	29.5	17	87.5	10	20.8
	[10 000 lb]	[Ø2.76]	[5.25]		[3.58]	[4.33]	[1.89]	[2.64]	[1.16]	[0.67]	[3.44]	[0.39]	[0.82]

SLB215 Expansion + Vibration Kit EVKT mm [in]



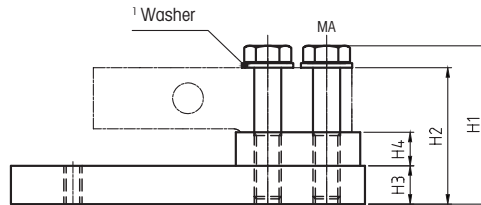
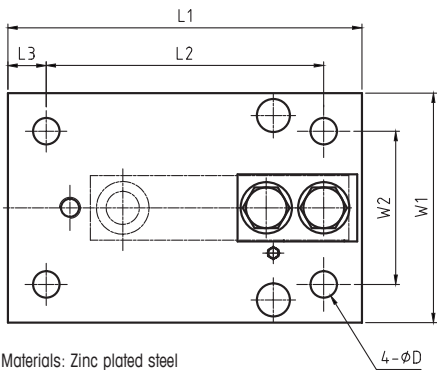
Notes:
 1) Dimensions are in mm [inch]

Materials: Stainless steel, NBR 70

Model	Capacity	Dimensions and locations																		
		D1	D2	D3	H		H1		H2	H3	H4	L	L1	L2	L3	R	W	SH _{MAX} *	SV _{MAX} **	Max. Side load ratings
					min	max	min	max												
EVKT	220–1100 kg [500–2500 lb]	Ø9 [Ø0.35]	Ø60 [Ø2.36]	M12	63 [2.48]	75 [2.95]	32.8 [1.29]	44.8 [1.76]	21.5 [0.85]	4.5 [0.18]	61.5 [2.42]	80 [3.15]	58 [2.28]	101.6 [4.00]	11 [0.43]	7.5 [0.30]	12.8 [0.50]	±3 [±0.12]	1 [0.04]	2100N
EVKT	2200 kg [5000 lb]	Ø9 [Ø0.35]	Ø60 [Ø2.36]	M12	69.4 [2.73]	81.4 [3.19]	32.8 [1.29]	44.8 [1.76]	21.5 [0.85]	4.5 [0.18]	61.5 [2.42]	80 [3.15]	58 [2.28]	101.6 [4.00]	11 [0.43]	7.5 [0.30]	12.8 [0.50]	±3 [±0.12]	1.6 [0.07]	2400N
EVKT	4400 kg [10 000 lb]	Ø11 [Ø0.43]	Ø72 [Ø2.83]	M20	91 [3.58]	110 [4.33]	48.1 [1.89]	67.1 [2.64]	29.5 [1.16]	9.5 [0.37]	87.5 [3.44]	100 [3.94]	76 [2.99]	133.4 [5.25]	12 [0.47]	10 [0.39]	20.8 [0.82]	±3 [±0.12]	2.2 [0.09]	2800N

* Max Lateral displacement
 ** Max vertical displacement incl. load cell

SLB215 Base Plate Kit BPK mm [in]



Materials: Zinc plated steel

Capacity	Dimensions and Locations											2 MAcs	3 MAss
	L1	L2	L3	W1	W2	H1	H2	H3	H4	D			
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]	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]	12.7 [0.5]	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

SLB215 Load Cell Order Information

Description	Item No.
Load cell, model no.	SLB215-220kg (500lb) C3 5m (16.4ft) Ex 72258650
Load cell, model no.	SLB215-220kg (500lb) C3 10m (32.8ft) Ex 72258654
Load cell, model no.	SLB215-550kg (1250lb) C3 5m (16.4ft) Ex 72258656
Load cell, model no.	SLB215-550kg (1250lb) C3 10m (32.8ft) Ex 72258660
Load cell, model no.	SLB215-1.1t (2500lb) C3 5m (16.4ft) Ex 72258693
Load cell, model no.	SLB215-1.1t (2500lb) C3 10m (32.8ft) Ex 72258697
Load cell, model no.	SLB215-2.2t (5000lb) C3 5m (16.4ft) Ex 72258699
Load cell, model no.	SLB215-2.2t (5000lb) C3 10m (32.8ft) Ex 72258703
Load cell, model no.	SLB215-4.4t (10000lb) C1 5m (16.4ft) Ex 72258710
Load cell, model no.	SLB215-4.4t (10000lb) C1 10m (32.8ft) Ex 72258714

Options

Base Plate Kit BPK	Carbon Steel 110kg-1.1t (250-2500lb)	30265369
Base Plate Kit BPK	Carbon Steel 2.2t (5000lb)	30265371
Base Plate Kit BPK	Carbon Steel 4.4t (1000lb)	30265373
Expansion+Vibr Kit EVKT	Stainless Steel 220kg-2.2t (500-5000lb)	30076302
Expansion+Vibr Kit EVKT	Stainless Steel 4.4t (10000lb)	30076303
Foot Kit FTKT	Stainless Steel 220kg-2.2t (500-5000lb)	30076304
Foot Kit FTKT	Stainless Steel 4.4t (10000lb)	30076305

Bolded entries are stocked

Global Approvals

The SLB215 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.

SLB215 Load Cell Cable Colours

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

* Connected to Spring Element

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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