

Superior Accuracy Control Your Process Anytime



Superior Accuracy

SLB615D POWERCELL® provides extremely high accuracy up to OIML C10 which is three times better than usual. The internal γ P compensated environmental impacts on the fly.



Tank Weighing

The capacity range from 220kg to 4.4t allows the weighing of tanks and silos. The stainless steel design, hermetic sealing and IP68/IP69K protection provides the best reliability in tank and hopper weighing applications.



PowerMount™ Weigh Module

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



Predictive Maintenance

SLB615D monitors single load cells for overload, zero drift, foundation problems, etc.; prompting action before system shuts down or measures incorrectly.



SLB615D POWERCELL® Know What's Ahead

The SLB615D POWERCELL® is approved for use in various applications in Europe, Asia, America and almost everywhere else in the world. If an approval is required, the SLB615D POWERCELL® already complies.

Every SLB615D beam load cell features:

- μ P controlled accuracy
- Robust output signal
- 10V/m EMC protection
- No junction box connections
- OIML C3, C6, C10 accuracy
- NTEP II M 5K, 10K accuracy
- ATEX Zone 2/22 approvals
- FM Class I, II, III Div.2 approvals for USA & Canada
- Stainless steel
- IP68, IP69K protection class

SLB615D POWERCELL® Load Cell Specification

Parameter	unit of measure	Specification															
Model No.		SLB615D POWERCELL® (5)															
Rated Capacity (R.C.)	kg (klb) nominal	220 (500)		550 (1250)		1100 (2500)		2200 (5000)		4400 (10000)							
Min. Increment Size, typical ³⁾	g (lb)	4.4 (0.01)		11 (0.025)		22 (0.05)		44 (0.1)		88 (0.2)							
Zero load Output	%R.C.	<0.1															
Combined Error ¹⁾²⁾	%R.C.	C3/IIIM n:5: ≤ 0.018 / C6/IIIM n:10: ≤ 0.012 / C10: ≤ 0.007															
Repeatability Error	%A.L. ³⁾	C3/IIIM n:5: ≤ 0.01 / C6/IIIM n:10: ≤ 0.005 / C10: ≤ 0.003															
Creep, 30 minute	%A.L.	C3/IIIM n:5: ≤ 0.017 / C6/IIIM n:10: ≤ 0.008 / C10: ≤ 0.005															
Min. Dead Load Output Retrun (DR), 30 min	%A.L.	C3/IIIM n:5: ≤ 0.017 / C6/IIIM n:10: ≤ 0.008 / C10: ≤ 0.005															
Temperature Effect on	Min. Dead load	%R.C./°C (./°F)	0.0014 (0.0008)		C3/IIIM n:5: ≤ 0.0011 (0.0006) / C6/IIIM n:10: ≤ 0.0007 (0.0004) / C10: ≤ 0.0007 (0.0004)								0.0009 (0.0005)				
	Sensitivity ²⁾	%A.L./°C (./°F)	C3/IIIM n:5: ≤ 0.001 (0.0006); C6/IIIM n:10: ≤ 0.0005 (0.0003); C10: ≤ 0.0003 (0.0002)														
Effective System Update Rate (4 load cells)	Hz	40															
Temperature Range	Compensated	-10 to +40 (+14 to +104)															
	Operating	-20 to +65 (-4 to +150)															
	Safe Storage	-40 to +80 (-40 to +176)															
OIML / European Approval ⁴⁾	European Cert. No.	NMI TC8489															
	Class	C3		C6		C10		C3		C6		C10		C3		C6	
	nmax	3000	6000	10000	3000	6000	10000	3000	6000	10000	3000	6000	10000	3000	6000		
	vmin	20	10	37	25	70	50	150	100	290	250						
	PLC	0.8															
	Humidity Symbol	CH															
	Min. dead load	kg	0														
	Z		3000	6000	10000	3000	6000	10000	3000	6000	10000	3000	6000	10000	3000	6000	
	Barometric Pressure Effect		None														
	Number		13-118A1														
NTEP Approval ⁴⁾	Class	III M n:5	III M n:10	-	III M n:5	III M n:10	-	III M n:5	III M n:10	-	III M n:5	III M n:10	-	III M n:5	III M n:10		
	nmax	5000	10000	-	5000	10000	-	5000	10000	-	5000	10000	-	5000	10000		
	vmin	0.050	0.025	-	0.095	0.065	-	0.19	0.13	-	0.38	0.26	-	0.76	0.65		
	Min. dead load	lb	0														
ATEX Approval ⁴⁾	Number, cat. 3	DEKRA 14ATEX0030															
	Rating	II 3 G Ex nA IIC T6 Gc / II 3 D Ex tc IIIC T85°C Dc															
IECEx Approval ⁴⁾	Entity Parameters	Umax = 28V, Imax = 50mA, Pmax = 0.5W (7)															
	Number, USA / Canada	In preparation for Cat 2GD and Cat 3GD 3050641 / 3050641C															
Factory Mutual Approval ⁴⁾	Rating, USA	NI / I, II, III / 2 / ABCDFG / T6 Ta = 55°C															
	Rating, Canada	NI / I, II / 2 / ABCDFG / T6 Ta = 55°C / DIP / III / 2 / T6 Ta = 55°C															
	Entity Parameters	Vmax = 28V, Imax = 50mA, Ci = 0.3nF, Li = 0															
	System Drawing No, USA	30095703															
	System Drawing No, Canada	30095704															
Insulation Resistance @50VDC	MΩ	≥ 2000															
Breakdown Voltage	V AC	≥ 500															
Supply Voltage	Range (nominal)	10 ~ 26															
	Typical	24															
Non-regulated																	
Overvoltage Protection Max. Tested (IEEE4-95)	A	2000 (no outdoor lightning conditions)															
Warm-up Time from Cold Start	minutes	15															
Communications	Type	Controller Area Network (CAN), Encrypted															
	Protocol	Can open															
Effective System Update Rate (4 load cells)	Hz	40															
ESD rating	kV	8															
Span Stability, typical (peak to peak in 1 min)	Counts	15															
Immunity	OIML R60	V/m															
Material	Spring Element	stainless steel															
	Enclosure	304 stainless steel, Electropolished															
	Connectors	stainless steel															
	Cable	Polyurethane (PU)															
Protection	Type	welded															
	IP Rating	IP68															
	NEMA Rating	NEMA 6/6P															
Overload Protection		yes							no								
Load Limit	Safe	%R.C.															
	Ultimate	150															
Safe Dynamic Load	%R.C.	300															
Fatigue Life	cycles @ R.C.	100															
Direction of Loading		> 1,000,000															
Deflection @ R.C., nominal		Beam															
		0.16 (0.006)		0.25 (0.01)		0.32 (0.013)		0.43 (0.017)		0.72 (0.028)							
Weight, nominal	kg (lb)	1 (2.2)		1.3 (2.9)		2.2 (4.8)											
Cable	Load Cell Cable ⁶⁾	Polyurethane, 11mm Connector, 21mm Branch Housing (200mm Distance to LC), Req. Conduit ≥12mm (0.5")															
	Home-Run Cable ⁶⁾	Polyurethane, 6mm Jacket, 21mm Branch Housing (200mm Distance to LC), 4 Conductors, Internal Shield with Drain Wires, Req. Conduit ≥12mm (0.5")															
Connectors		Quick-Connect															
Mounting Screw	Grade	10.9 (Grade 8)															
	Size/thread	mm (in) M12 (1/2-13 UNC)															
	Torque, nominal	Nm (ft-lb) 120 (100)															

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⁾ Max. 14 load cells / terminal

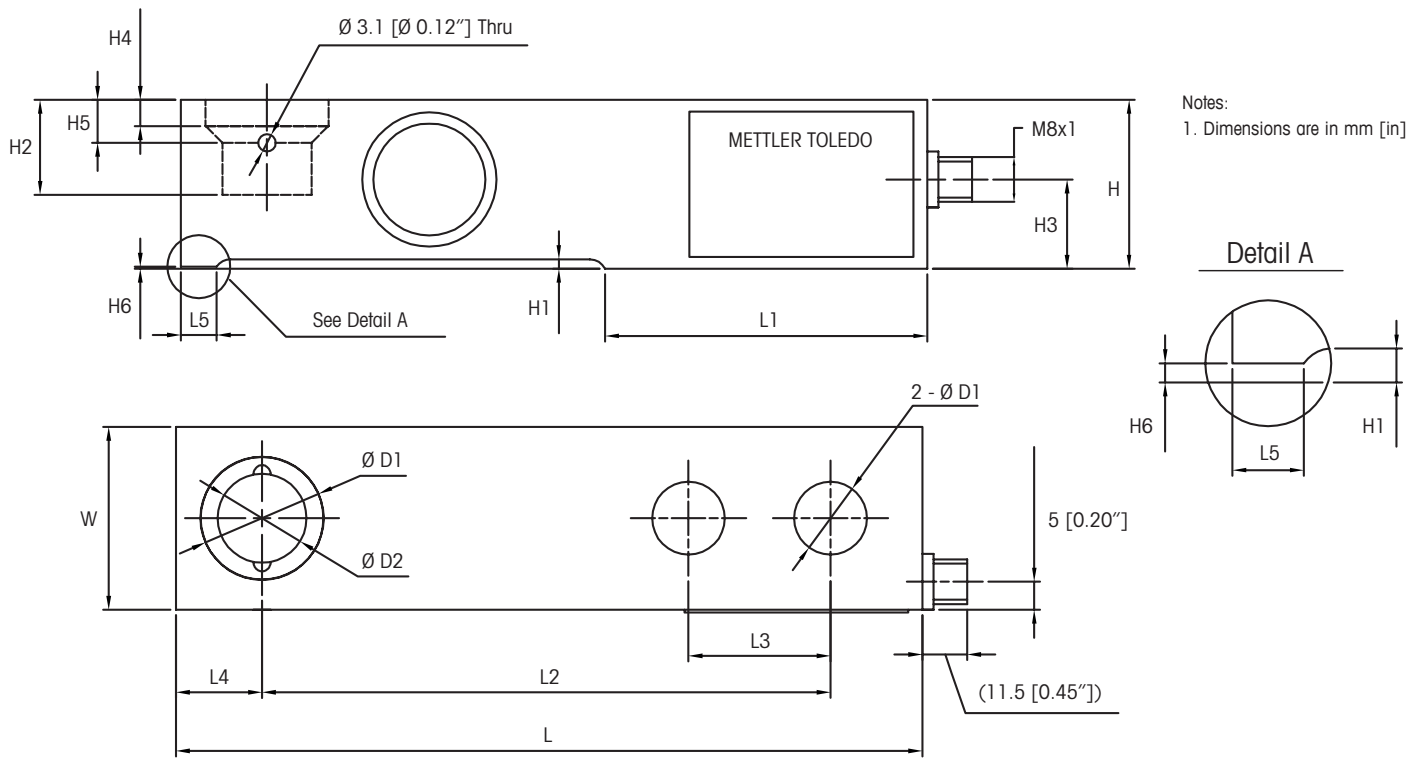
⁶⁾ Max. total cable length 90-300m depending on no. of LC and Terminal.

⁷⁾ / Load Cell

⁸⁾ Calculate the scale's minimum increment size by multiplying this value by the square root of the number of load cells. For non Legal-For-Trade Applications

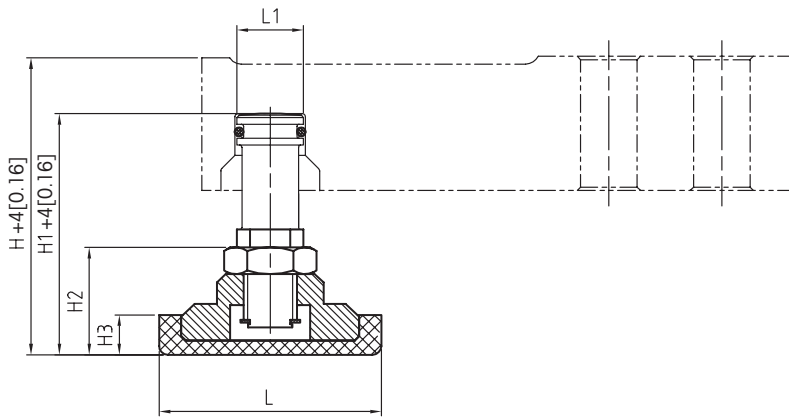


SLB615D POWERCELL® Dimensional Drawings mm [in]



Model	Capacity	Dimensions																
		D	D1	D2	H	H1	H2	H3	H4	H5	H6	L	L1	L2	L3	L4	L5	W
SLB615D	220-1100 kg [500-2500 lb]	13.0 [0.51]	22.2 [0.87]	15.9 [0.63]	30.2 [1.19]	1.7 [0.07]	17.3 [0.68]	16 [0.63]	4.7 [0.19]	7.9 [0.30]	0.38 [0.015]	134.4 [5.29]	57.7 [2.27]	101.6 [4.00]	25.4 [1.00]	16.4 [0.65]	6.4 [0.25]	32.7 [1.29]
	2200 kg [5000 lb]	13.0 [0.51]	22.2 [0.87]	15.9 [0.63]	36.6 [1.44]	6 [0.24]	22.9 [1.31]	21.3 [0.84]	9.5 [0.37]	12.7 [0.50]	6 [0.236]	136.7 [5.38]	57.9 [2.28]	101.6 [4.00]	25.4 [1.00]	18.4 [0.72]		36.8 [1.45]
	4400 kg [10000 lb]	19.3 [0.76]	34.9 [1.37]	22.2 [0.87]	42.9 [1.69]	2.3 [0.09]	29.3 [1.61]	22.7 [0.89]	11 [0.43]	17.8 [0.70]	2.3 [0.09]	171.5 [6.75]	73.8 [2.91]	133.3 [5.25]	38.1 [1.50]	21.5 [0.85]		42.9 [1.69]

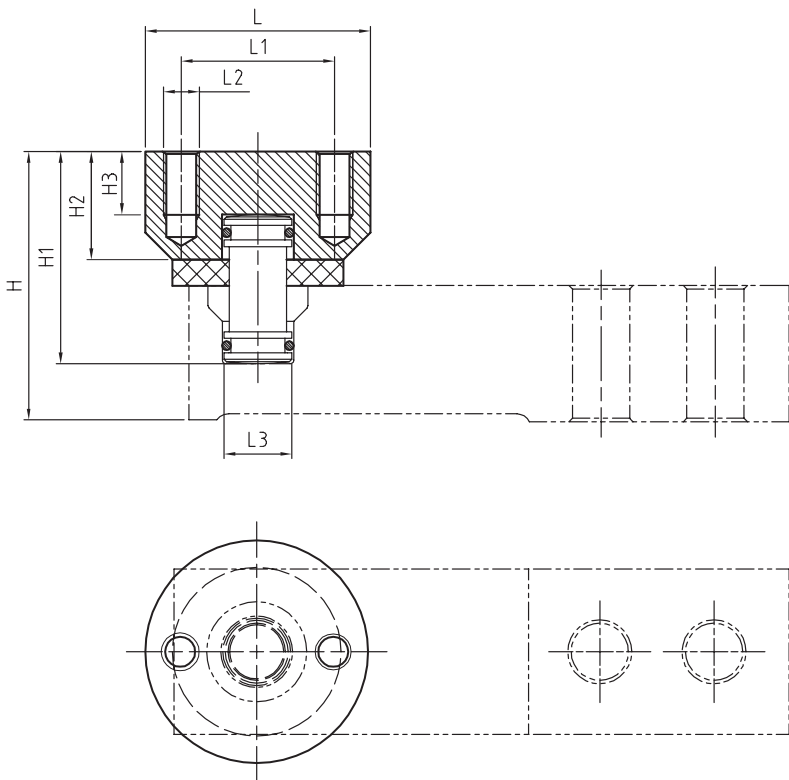
SLB615D POWERCELL® Foot Kit FTK mm [in]



Materials: Stainless steel, NBR 70

Capacity	Dimensions and Locations					
	L	L1	H	H1	H2	H3
220 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]

SLB615D POWERCELL® Expansion Kit EK mm [in]

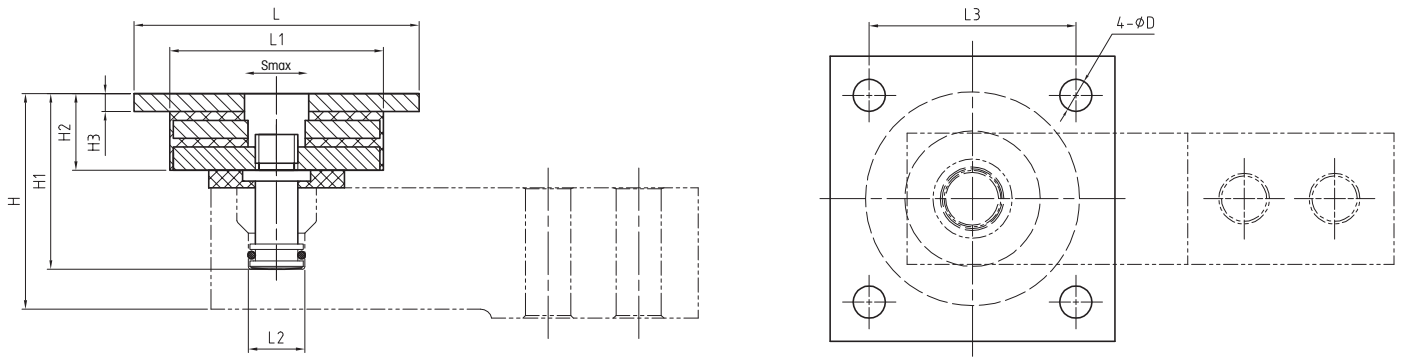


Materials: Stainless steel, Polyethylene foam

Capacity	Dimensions and Locations								
	L	L1	L2	L3	H	H1	H2	H3	Smax*
220 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

SLB615D POWERCELL® Expansion + Vibration Kit EVK mm [in]



Materials: Stainless steel, NBR 70, Polyethylene foam

Capacity

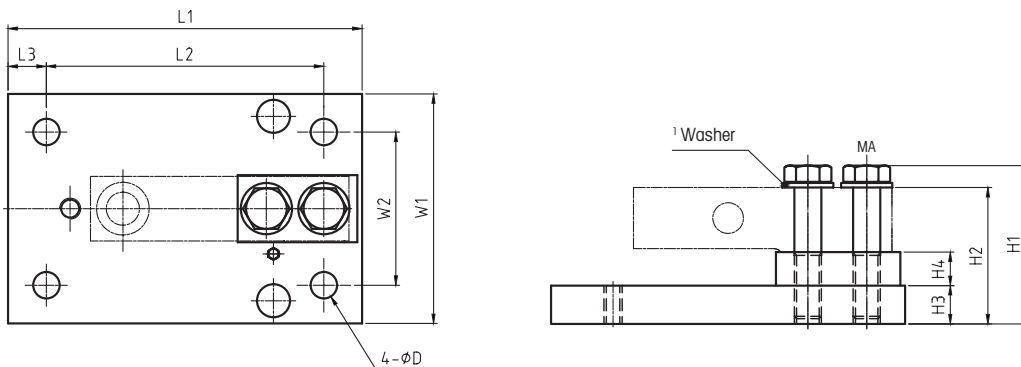
Dimensions and Locations

	D	L	L1	L2	L3	H	H1	H2	H3	SHmax*	SVmax**	Max. Side load ratings
220 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

SLB615D POWERCELL® 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

SLB615D POWERCELL® Order Information

Rated Capacity	Item No., Load Cell			Item No., Options					
	Class			Base Plate Kit BPK, CS	Base Plate Kit BPK, 304	Expansion Kit EK	Expansion+ Vibr Kit EVK	Foot Kit FTK	Adapter, Conduit
	C3/III M n:5	C6/III M n:10	C10						
220kg/500lb	72261196	72261209	72261204	30265369	30265370	72208662	72208670	72208674	30095581
550kg/1.25klb	72261197	72261210	72261205						
1100kg/2500lb	72261198	72261211	72261206						
2200kg/5000lb	72261199	72261212	72261207						
4400kg/10000lb	72261200	72261195	-						

Bolded entries are stocked

SLB615D POWERCELL® Order Information, Cables

Description	Item No.						
	Cable, Material / Length						
	PU / 2.5m (8.2ft)	PU / 5m (16.4ft)	PU / 10m (32.8ft)	PU / 15m (49.2ft)	PU / 20m (65.6ft)	PU / 30m (98.4ft)	PU / 50m (164ft)
Cable Kit, 3 Load Cells	30207546	30765515	30765516	-	-	-	-
Cable Kit, 4 Load Cells	30207547	30765517	30765518	-	-	-	-
Load Cell Y-Cable	30207922	30765513	30765514	-	-	-	-
Home Run Cable	-	30765519	30208862	30765520	30765521	30095713	30095714
Extension Cable	-	30095636	30095637	-	-	-	-
CAN Termination	30207923						
Blind plug	72263681						
Cable Gland for Home Run Cable with IND780PDX	30095639						

Bolded entries are stocked

SLB615D POWERCELL® Cable Colours

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

* Connected to Spring Element



Global Approvals

The SLB615D 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.



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Subject to technical changes
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