

Hygienic Weigh Module

Contamination-free with certified equipment



Hygienic Design

The SWB805 is NSF approved assuring compliance in food and pharmaceutical applications. The design avoids contamination and keeps production areas safe.



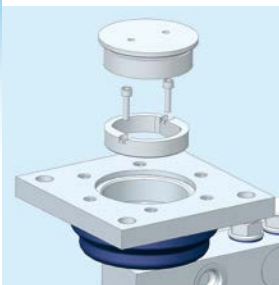
Self-Draining

All surfaces are self-draining for fast drying after wash-down. Avoiding metal-to-metal contact and mirror-polished surfaces keep bacteria out.



Load Cell

A special beam load cell has been developed by METTLER TOLEDO to meet hygienic criteria. Self draining and a mirror polish make it unique.



Stabilizers

The SWB805 can be equipped with an optional stabilizer insert for scales subject to high shear or heavy vibration. Hygienic functions remain untouched.



SWB805
MultiMount™

SWB805 MultiMount™

Contamination free

The SWB805 is a fully approved hygienic weigh module for food and pharmaceutical applications. The design is optimized for avoiding contamination and meets compliance in harsh environments.

Features:

- NSF approval
- Self-draining design
- Mirror polished surfaces
- No metal-to-metal contact
- Available in stainless steel 304 or 316
- Integrated lift-off protection
- Full 360° checking
- Optional stabilizer insert
- OIMLC3/NTEP III M n:5 approved
- ATEX/FM approved
- IP68/69K stainless steel
- CalFree™: Calibration without test weights

SWB805 MultiMount™ Specifications

Weigh Module	Unit of measure	Specification					
Model No.		SWB805 MultiMount					
Size		2				3	
Rated Capacity (R.C.)	kg (lb, nominal)	110 (250)	220 (500)	550 (1,250)	1100 (2,500)	2200 (5,000)	4400 (10,000)
Max. Rated Forces ¹⁾							
Max. Compressive Force, Rated	kN (lb)	1.1 (250)	2.2 (500)	5.4 (1,250)	10.8 (2,500)	21.6 (5,000)	43.2 (10,000)
Max. Horizontal Force, Rated	transverse	1.1 (250)	2.2 (500)	4.3 (968)	4.3 (968)	4.3 (968)	13.9 (3,127)
	longitudinal	1.62 (375)	3.2 (750)	7.8 (1,755)	7.8 (1,755)	7.8 (1,755)	19.5 (4,387)
Max. Uplift Force, Rated	kN (lb)	1.1 (250)	2.2 (500)	5.4 (1,250)	10.8 (2,500)	11.8 (2,600)	22.2 (5,000)
Max. Yield Forces ^{2) 4)}							
Max. Compressive Force, Yield	kN (lb)	1.62 (375)	3.2 (750)	8.1 (1,875)	16.2 (3,750)	23.3 (5,120)	50 (11,200)
Max. Horizontal Force, Yield	transverse	1.1 (250)	2.2 (500)	4.3 (968)	4.3 (968)	4.8 (1,080)	19.3 (4,342)
	longitudinal	1.62 (375)	3.2 (750)	7.8 (1,755)	7.8 (1,755)	10.8 (2,430)	27.1 (6,098)
Max. Uplift Force, Yield	kN (lb)	1.62 (375)	3.2 (750)	8.1 (1,875)	16.2 (3,750)	17.1 (3,848)	33.5 (7,537)
Max. Ultimate Forces ^{3) 4)}							
Max. Compressive Force, Ultimate	kN (lb)	3.2 (750)	6.4 (1,500)	16.2 (3,750)	26 (5,850)	41 (9,225)	110 (24,750)
Max. Horizontal Force, Ultimate	transverse	1.1 (250)	2.2 (500)	5.4 (1,250)	10.8 (2,500)	11 (2,475)	34 (7,650)
	longitudinal	1.62 (375)	3.2 (750)	8.1 (1,875)	16.2 (3,750)	44 (9,900)	68 (15,300)
Max. Uplift Force, Ultimate	kN (lb)	3.2 (750)	6.4 (1,500)	16.2 (3,750)	26 (5,850)	26 (5,850)	53 (11,925)
Restoring Force	%A.L./mm (./.in) ⁵⁾	7.7 (196)					6.3 (160)
Max. Top Plate Travel	transverse	3 (0.12)					3.5 (0.14)
	longitudinal ⁶⁾						
Weight (including load cell), nominal	kg (lb)	6.6 (14.5)			7 (15.4)	15.4 (34)	
Material		304 stainless steel / 316 stainless steel					
Finish		Electro polish, final mirror polish, RA < 0.8μ					

¹⁾ The weigh module is rated for these forces in normal operation. A Factor of Safety has been applied by METTLER TOLEDO.

²⁾ Warning: If loaded statically one time in excess of these forces, the weigh module may yield and need replacing. The Max. Yield Forces do not consider fatigue/cyclic loading and should be approached only in exceptional circumstances.

³⁾ Warning: If loaded statically one time in excess of these forces, the weigh module may break with potential for serious injury and/or property damage.

⁴⁾ Warning: Apply a Factor of Safety appropriate to the application.

⁵⁾ % of Applied Load (A.L.) per mm (in) displacement of the top plate (transverse & longitudinal).

⁶⁾ O with Stabilizer

SWB805 MultiMount™ Specifications – Load Cell

Load Cell		Unit of measure	Specification					
Item No.	0.03%		30362469					
	C1 / III M n:1.6						30207494	
	C3 / III M n:5		30207477	30207481	30207485	30207489		
Model No.			SBL815					
Rated Capacity (R.C.)		kg (lb, nominal)	110 (250)	220 (500)	550 (1,250)	1100 (2,500)	2200 (5,000)	4400 (10,000)
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%					
Combined Error ^{7) 8)}		%R.C.	≤ 0.03				≤ 0.017	≤ 0.026
Temperature Effect on	Min. Dead Load Output	%R.C./°C (./°F)	≤ 0.0027 (0.0015)		≤ 0.0013 (0.0007)		≤ 0.0016 (0.0009)	
	Sensitivity ⁸⁾	%A.L./°C (./°F)	≤ 0.0014 (0.0008)		≤ 0.001 (0.0006)			≤ 0.002 (0.0001)
Temperature Range	Compensated		-10 ~ +40 (+14 ~ +104)					
	Operating	°C (°F)	-40 ~ +65 (-40 ~ +150)					
	Safe Storage		-40 ~ +80 (-40 ~ +176)					
OIML / European Approval ⁹⁾	Class		C3				C1	
	nmax		3,000				1,000	
	Vmin	g	25	50	100	250	500	
NTEP Approval ⁹⁾	Class		III M					
	nmax		5,000				1,600	
	Vmin	lb	0.05	0.125	0.25	0.5	1	
ATEX Approval ⁹⁾	Rating		II 2 G Ex ia 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 / II 3 D Ex tc IIIC T100°C Dc					
Factory Mutual Approval ⁹⁾	Rating, USA		IS / I, II, III / 1 / ABCDEFG / T4					
			NI / I / 2 / ABCD / T6; S / II, III / 2 / FG / T6					
	Rating, Canada		IS / I, II, III / 1 / ABCDEFG / T4					
Hygienic Approval ¹⁰⁾			NSF					
Excitation Voltage	Recommended	V AC/DC	5 ~ 15					
	Max.		15					
Terminal Resistance	Excitation	Ω	384 ± 10					
	Output		350 ± 1					
Material	Spring Element		17-4 PH stainless steel					
	Type		welded					
Protection	IP Rating		IP68, IP69K					
	NEMA Rating		NEMA 6/6P					
Cable	Length	m (ft)	5 (16.4)				10 (33)	
	Diameter	mm (in)	PVC: 5.2 (0.2)					

⁷⁾ Error due to the combined effect of non-linearity and hysteresis

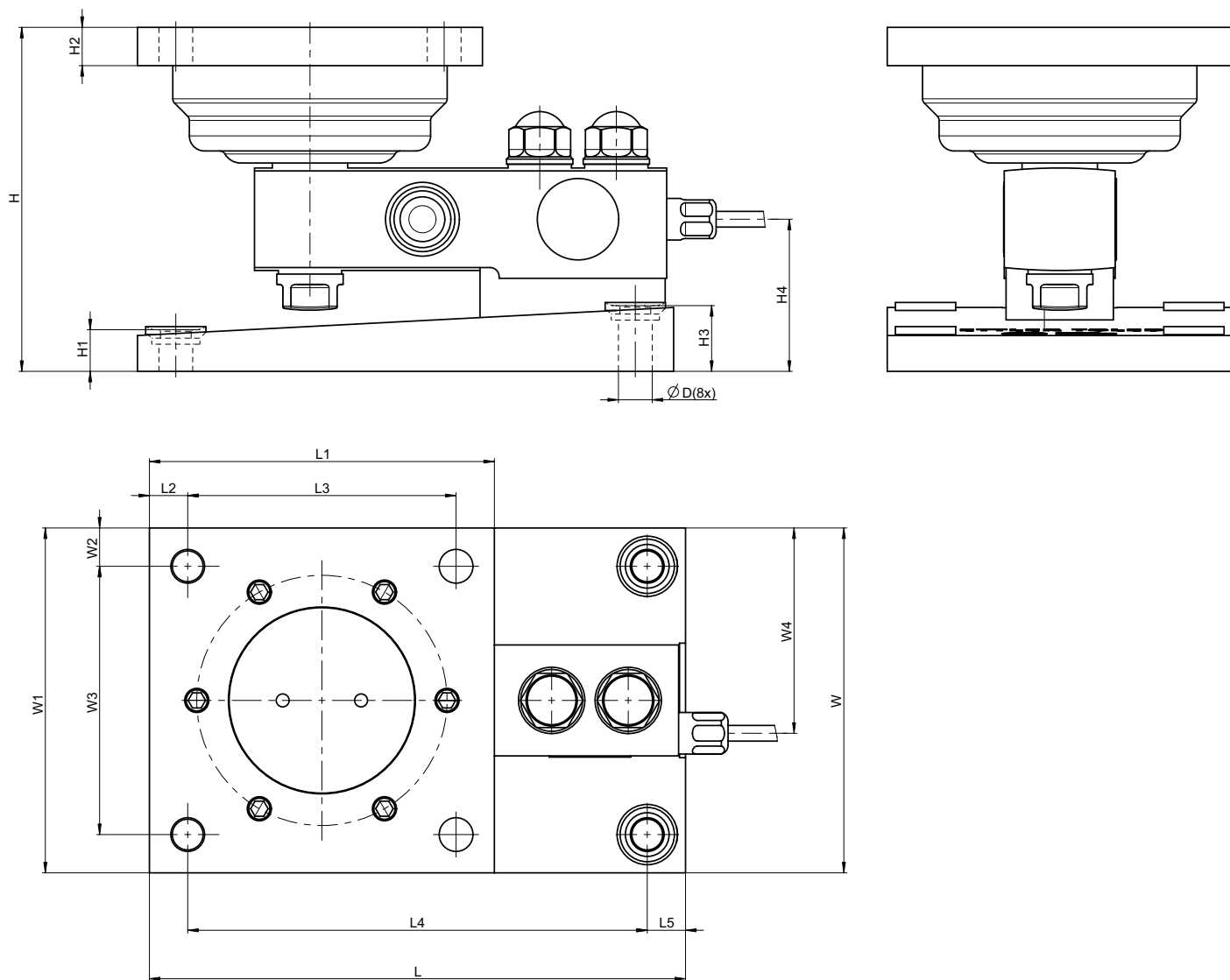
⁸⁾ Typical values only. The sum of errors due to Combined Error and Temperature Effect on Sensitivity comply with the requirements of OIML R60 and NIST HB44.

⁹⁾ See certificate for complete information.

¹⁰⁾ When installed in accordance with METTLER TOLEDO's Installation Manual

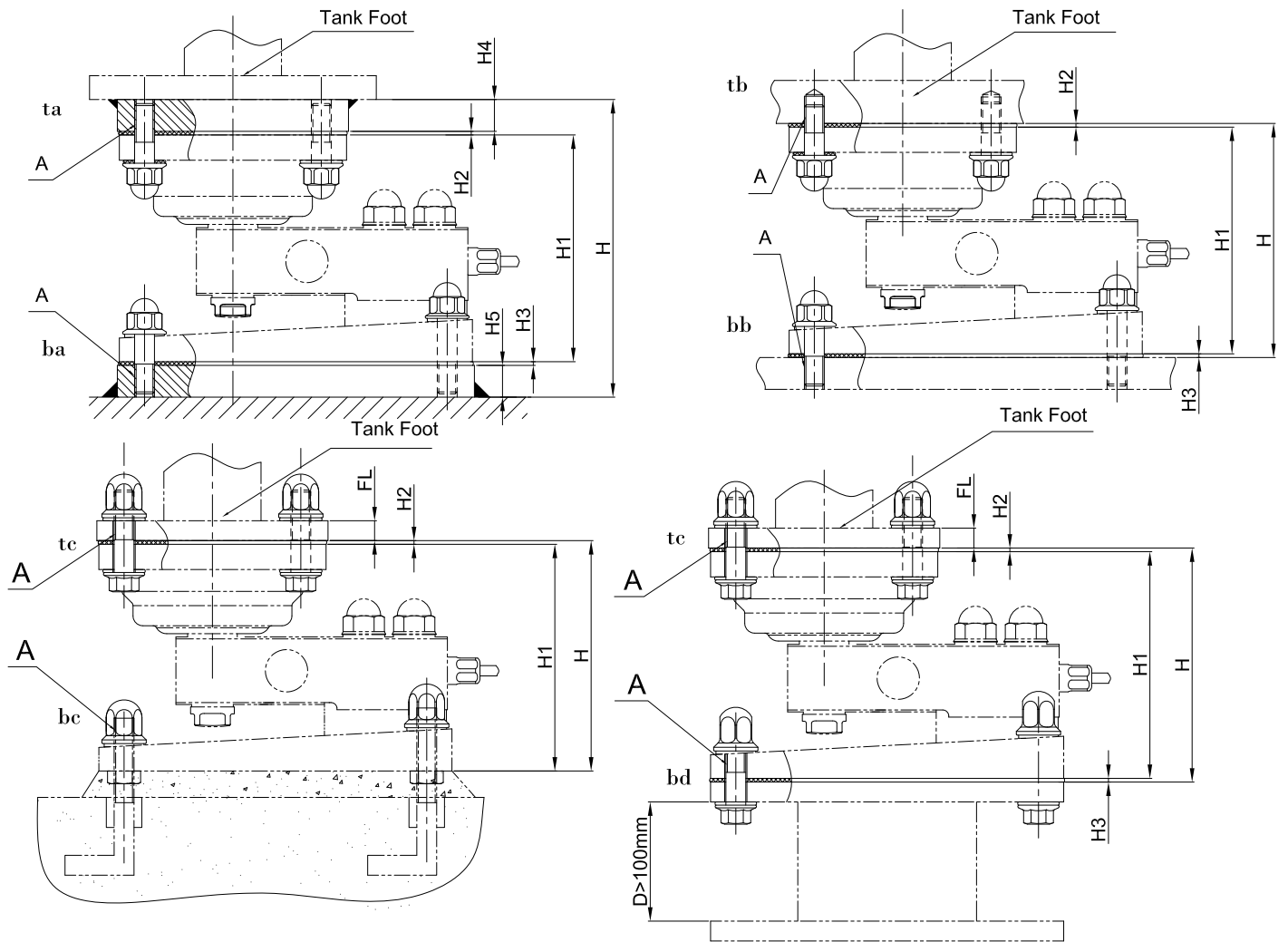


SWB805 MultiMount™ Weigh Module Dimensions mm [in]



Size	Capacity	Locations and Dimensions																
		D	H	H1	H2	H3	H4	L	L1	L2	L3	L4	L5	W	W1	W2	W3	W4
2	110kg – 1.1t (250lb – 2.5klb)	11.2 (0.44)	114 (4.49)	13.8 (0.54)	12.7 (0.50)	21.8 (0.86)	52.9 (2.08)	177.8 (7.00)	114.4 (4.5)	12.7 (0.50)	89.0 (3.50)	152.4 (6.00)	12.7 (0.5)	114.4 (4.50)	114.4 (4.50)	12.7 (0.50)	89.0 (3.5)	65.3 (2.57)
	2.2t (5 klb)						50.5 (2.0)											68.1 (2.68)
3	4.4t (10 klb)	17.5 (0.69)	148.3 (5.84)	19.5 (0.77)	18 (0.71)	29.5 (1.16)	64.4 (2.54)	228 (8.98)	152.4 (6.00)	25.4 (2.00)	101.6 (4.00)	184.2 (7.25)	18.4 (0.72)	152.4 (6.00)	152.4 (6.00)	25.4 (1.00)	101.6 (4.00)	90.2 (3.55)

SWB805 MultiMount™ Weigh Module Mounting Kits



Install Kit		Item Number in SAP			
Item	Description	SWB805 S2		SWB805 S3	
ta	Top Welding Kit	30382088	H4=16	30382094	H4=20
tb	Top Threaded Kit	30382089		30382095	
tc	Top Through-Hole Kit	30382090	FL=3-8	30382096	FL=5-15
		30382091	FL=8-13	30382097	FL=15-25
		30382092	FL=13-18	30382098	FL=25-32
		30382093	FL=18-23		
ba	Bottom Welding Kit	30382099	H5=16	30382105	H5=20
bb	Bottom Threaded Kit	30382100		30382106	
bc	Bottom Through-Hole Kit	30382101	FL=7-10	30382107	FL=7-16
		30382102	FL=10-15	30382108	FL=16-26
		30382103	FL=15-20	30382109	FL=26-32
		30382104	FL=20-25		
bd	Bottom Concrete Kit	30382110		30382111	

		Installation Method of SWB805								
Item	Method	Capacity t (klb)	Dimension mm (in)							A
			H	H1	H2	H3	H4	H5		
1	ta&ba	0.11-2.2 (0.25-5)	150 (5.91)	114 (4.49)	2 (0.08)	2 (0.08)	16 (0.63)	16 (0.63)	M10	
		4.4 (10)	192.3 (7.57)	148.3 (5.84)	2 (0.08)	2 (0.08)	20 (0.79)	20 (0.79)	M16	
2	tb&bb	0.11-2.2 (0.25-5)	118 (4.65)	114 (4.49)	2 (0.08)	2 (0.08)	-	-	M10	
3	tc&bd	4.4 (10)	152.3 (6)	148.3 (5.84)	2 (0.08)	2 (0.08)	-	-	M16	
4	tb&bd	0.11-2.2 (0.25-5)	116 (4.57)	114 (4.49)	2 (0.08)	-	-	-	M10	
5	tc&bb	4.4 (10)	150.3 (5.92)	148.3 (5.84)	2 (0.08)	-	-	-	M16	
7	tb&bc tc&bc	0.11-2.2 (0.25-5)	134 (5.28)	114 (4.49)	2 (0.08)	2 (0.08)	16 (0.63)	-	M10	
		4.4 (10)	170.3 (6.7)	148.3 (5.84)	2 (0.08)	-	20 (0.79)	-	M16	
8 9	ta&bb ta&bd	0.11-2.2 (0.25-5)	132 (5.2)	114 (4.49)	2 (0.08)	-	16 (0.63)	-	M10	
		4.4 (10)	172.3 (6.78)	148.3 (5.84)	2 (0.08)	2 (0.08)	20 (0.79)	-	M16	
10	ta&bc	0.11-2.2 (0.25-5)	134 (5.28)	114 (4.49)	2 (0.08)	2 (0.08)	-	16 (0.63)	M10	
		4.4 (10)	172.3 (6.78)	148.3 (5.84)	2 (0.08)	2 (0.08)	-	20 (0.79)	M16	
11 12	tb&ba tc&ba	0.11-2.2 (0.25-5)	134 (5.28)	114 (4.49)	2 (0.08)	2 (0.08)	-	16 (0.63)	M10	
		4.4 (10)	172.3 (6.78)	148.3 (5.84)	2 (0.08)	2 (0.08)	-	20 (0.79)	M16	

Order Information – Weigh Module including Load Cell

Order Information, Weigh Module Assembly					Item No.		
Size	Rated Capacity	Description	Class / Description	Cable, Material / Length	Material, Weigh Module		Suitable Junction Box
					304	316	Stainless 304
2	110kg / 250lb	Weigh Module Assembly	0.03%	PVC / 5 m (16.4ft)	30335568	30335571	30219978
	220kg / 500lb		C3 / III M n:5		30335569	30335572	
	550kg / 1,250lb		C3 / III M n:5		30335570	30335573	
	1100kg / 2,500lb		C3 / III M n:5		30295792	30295827	
	2200kg / 5,000lb		C3 / III M n:5		30131952	30295804	
	110-2200kg / 250-5,000lb	Stabilizer Insert	–	–	30335574		
	Stabilizer Install Tool	–	–	30382116			
3	4400kg / 10,000lb	Weigh Module Assembly	C1 / III M n:1.6	PVC / 10 m (32.8ft)	30248301	30335576	
		Stabilizer Insert	–	–	30335575		
		Stabilizer Install Tool	–	–	30382117		

Bolded entries are stocked

Order Information – Mounting Kits

Order Information, Weigh Module Mounting Kits				Item No.				
Size	Rated Capacity	Description		Flange Thickness FL mm (inch)				
2	110kg-2200kg / 250lb-5,000lb	Top Welding Kit +H16	30382088					
		Top Threaded Kit	30382089					
		Top Through-Hole Kit			FL 3-8 (0.12-0.3) 30382090	FL 8-13 (0.3-0.5) 30382091	FL 13-18 (0.5-0.7) 30382092	FL 18-23 (0.7-0.9) 30382093
		Bottom Welding Kit +H16	30382099					
		Bottom Threaded Kit	30382100					
		Bottom Through-Hole Kit			FL 7-10 (0.28-0.4) 30382101	FL 10-15 (0.4-0.6) 30382102	FL 15-20 0.6-0.8 30382103	FL 20-25 (0.8-1.0) 30382104
		Bottom Concrete Kit	30382110					
3	4400kg / 10000lb	Top Welding Kit +H20	30382094					
		Top Threaded Kit	30382095					
		Top Through-Hole Kit			FL 5-15 (0.2-0.6) 30382096	FL 15-25 (0.6-1.0) 30382097	FL 25-32 (1.0-1.25) 30382098	
		Bottom Welding Kit +H20	30382105					
		Bottom Threaded Kit	30382106					
		Bottom Through-Hole Kit			FL 7-16 (0.3-0.63) 30382107	FL 16-26 (0.63-1.0) 30382108	FL 26-32 (1.0-1.25) 30382109	
		Bottom Concrete Kit	30382111					

Bolded entries are stocked

SWB805 MultiMount™ Cable Colour Code

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

Full Connectivity

METTLER TOLEDO supplies various data communication interfaces that enable our sensors and instruments to communicate with your PLC, MES or ERP systems.



METTLER TOLEDO Service

Our extensive service network is among the best in the world and ensures maximum availability and service for the 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 and checkweighing.



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