

# Right the First Time

## Safe, Accurate, Service Friendly



### Tank Weighing

SWB505 MultiMount™ weigh modules offer rugged construction and many features for easy installation and accurate and reliable tank weighing. Standard lift-off bolt copes with tipping forces while vertical safety down-stop provides additional safety.



### Conveyors and Mixers

Weigh modules are also designed for dynamic-loading applications such as conveyors, mixers and blenders. SWB505 MultiMount™ provides 360° checking for ease of installation and maximum safety. The rocker pin restores the top plate to its ideal position to maintain accurate, repeatable weight.



### Load Cell

Load cells have a rocker pin design that automatically aligns load forces for accurate weighing. These hermetically sealed load cells are rated IP68 and can be used in all environments. The load cells are easy to inspect or replace.



### Stabilizers

Up to two optional stabilizers can be applied to each weigh module to stabilize a scale subject to heavy vibration, high torque, or in-motion weighing. With stabilizers installed, thermal expansion is still possible, guaranteeing the best weighing performance.

CERTIFIED  
**DIN**  
EN 1090



SWB505  
MultiMount™

## SWB505 MultiMount™ EN1090

### Right the First Time

SWB505 MultiMount™ features ensure correct scale system installation, right from the start. Weigh modules do not compromise on safety – all safety features are built-in. The rocker pin design provides the highest level of weighing accuracy. Service features, including SafeLock™ provide easy and trouble free installation.

#### Features:

- Integrated lift-off protection
- Vertical safety down-stop
- Full 360° integrated checking
- Ground strap – welding protection
- SafeLock™ – Weigh module locked for installation
- SafeLock™ – Load cell protected for installation
- Dual stabilizer option
- All load cells with IP68/IP69K and fully stainless steel
- Global approvals standard on each load cell
- OIML C3/NTEP III M n:5 or OIML C6/NTEP III M n:10
- Zinc plated or stainless steel mounting hardware
- CalFree™: Calibration without test weights
- EN1090 conformity

# SWB505 MultiMount™ EN1090 Specifications – Weigh Module

| Weigh Module  | unit of measure                          | Specification  |           |           |           |            |            |            |           |            |            |            |             |             |              |           |
|---|--|--|-----------|-----------|-----------|------------|------------|------------|-----------|------------|------------|------------|-------------|-------------|--------------|-----------|
|   |  | SWB505 MultiMount™ EN1090                                |           |           |           |            |            |            |           |            |            |            |             |             |              |           |
| Model No.   |  | SWB505 MultiMount™ EN1090                                |           |           |           |            |            |            |           |            |            |            |             |             |              |           |
| Size  |  | 1  |           |           |           |            |            |            |           |            | 2          |            |             |             | 3            |           |
| Rated Capacity  | kg (lb, nominal)                         | 5 (11)   | 10 (22)   | 20 (44)   | 30 (66)   | 50 (110)   | 100 (220)  | 200 (440)  | 300 (660) | 110 (250)  | 220 (500)  | 550 (1250) | 1100 (2500) | 2200 (5000) | 4400 (10000) |           |
| Max. Rated Forces <sup>1)</sup>   |  |  |           |           |           |            |            |            |           |            |            |            |             |             |              |           |
| Max. Compressive Force, Rated   | kN (lb)                                  | 0.05 (11)  | 0.1 (22)  | 0.2 (44)  | 0.3 (66)  | 0.5 (110)  | 1 (220)    | 2 (440)    | 3 (660)   | 1.1 (250)  | 2.2 (500)  | 5.4 (1250) | 10.8 (2500) | 21.6 (5000) | 43.2 (10000) |           |
| Max. Horizontal Force, Rated  | transverse<br>longitudinal               | kN (lb) 4.5 (1010)                                       |           |           |           |            |            |            |           |            | 7.5 (1685) |            |             |             | 15 (3370)    |           |
| Max. Uplift Force, Rated  | kN (lb)                                  | 5.5 (1230)   |           |           |           |            |            |            |           |            | 16 (3600)  |            |             |             | 22.2 (5000)  |           |
| Max. horizontal force (longitudinal) per stabilizer option, Rated <sup>7)</sup> | kN (lb)                                  | 1.5 (675)  |           |           |           |            |            |            |           |            | 5 (1120)   |            |             |             | 7.4 (1660)   |           |
| Max. Yield Forces <sup>2) 4)</sup>  |  |  |           |           |           |            |            |            |           |            |            |            |             |             |              |           |
| Max. Compressiv Force, Yield  | kN (lb)                                  | 0.074 (16.5)   | 0.15 (33) | 0.29 (66) | 0.44 (99) | 0.74 (165) | 1.47 (330) | 2.94 (660) | 4.4 (990) | 1.62 (375) | 3.2 (750)  | 8.1 (1875) | 16.2 (3750) | 23.3 (5120) | 50 (11200)   |           |
| Max. Horizontal Force, Yield  | transverse<br>longitudinal               | kN (lb) 6.6 (1480)                                       |           |           |           |            |            |            |           |            | 9.8 (2200) |            |             |             | 22 (4950)    |           |
| Max. Uplift Force, Yield  | kN (lb)                                  | 7.7 (1730)   |           |           |           |            |            |            |           |            | 22 (4950)  |            |             |             | 34 (7640)    |           |
| Max. Ultimate Forces <sup>3) 4)</sup>   |  |  |           |           |           |            |            |            |           |            |            |            |             |             |              |           |
| Max. Compressiv Force, Ultimate <sup>5)</sup>                                   | kN (lb)                                  | 65 (14600)   |           |           |           |            |            |            |           |            | 90 (20000) |            |             |             | 150 (33000)  |           |
| Max. Horizontal Force, Ultimate   | transverse<br>longitudinal               | kN (lb) 17 (3800)  |           |           |           |            |            |            |           |            | 42 (9400)  |            |             |             | 48 (10750)   |           |
| Max. Uplift Force, Ultimate   | kN (lb)                                  | 22 (4590)  |           |           |           |            |            |            |           |            | 50 (11200) |            |             |             | 55 (12350)   |           |
| Restoring Force   | %A.L./mm (.in) <sup>6)</sup>             | 7.4 (190)  |           |           |           |            |            |            |           |            | 4.4 (111)  |            |             |             | 5.5 (140)    |           |
| Max. top plate travel   | transverse<br>longitudinal <sup>8)</sup> | ± mm (in) 2.5 (0.10)                                     |           |           |           |            |            |            |           |            | 3 (0.12)   |            |             |             | 3.5 (0.14)   |           |
| Weight (including load cell), nominal   | kg (lb)                                  | 4 (8.8)  |           |           |           |            |            |            |           |            | 6.6 (14.5) |            |             |             | 7 (15.4)     | 15.4 (34) |
| Material  |  | carbon steel / 304 stainless steel / 316 stainless steel |           |           |           |            |            |            |           |            |            |            |             |             |              |           |
| Finish  |  | Zinc Plated / Electropolished / Electropolished          |           |           |           |            |            |            |           |            |            |            |             |             |              |           |
| EN1090 approval   |  | Yes, execution class EXC2                                |           |           |           |            |            |            |           |            |            |            |             |             |              |           |

<sup>1)</sup> The weigh module is rated for these forces in normal operation, a Factor of Safety has been applied by Mettler Toledo.

<sup>2)</sup> 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.

<sup>3)</sup> 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.

<sup>4)</sup> Warning: apply a Factor of Safety appropriate to the application.

<sup>5)</sup> The top plate will travel downwards by 5 mm (0.2 inches) before the down-stop engages and this ultimate force can be developed.

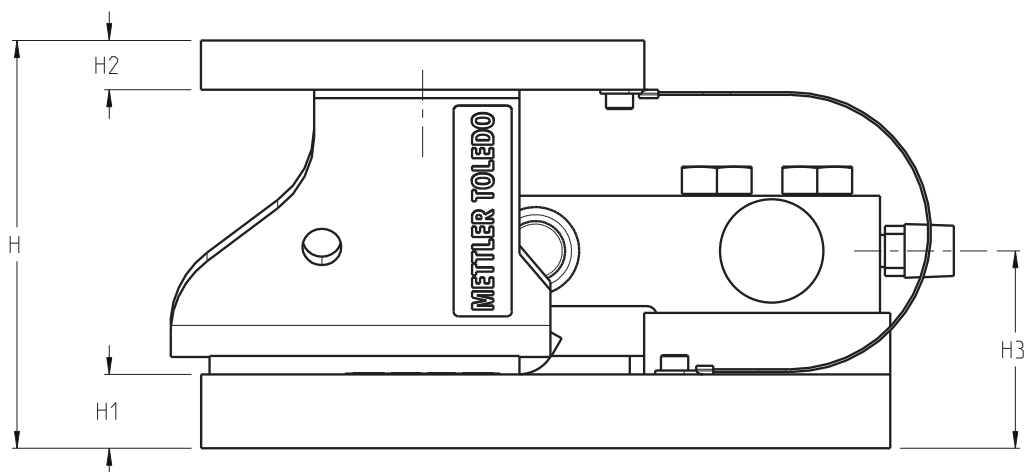
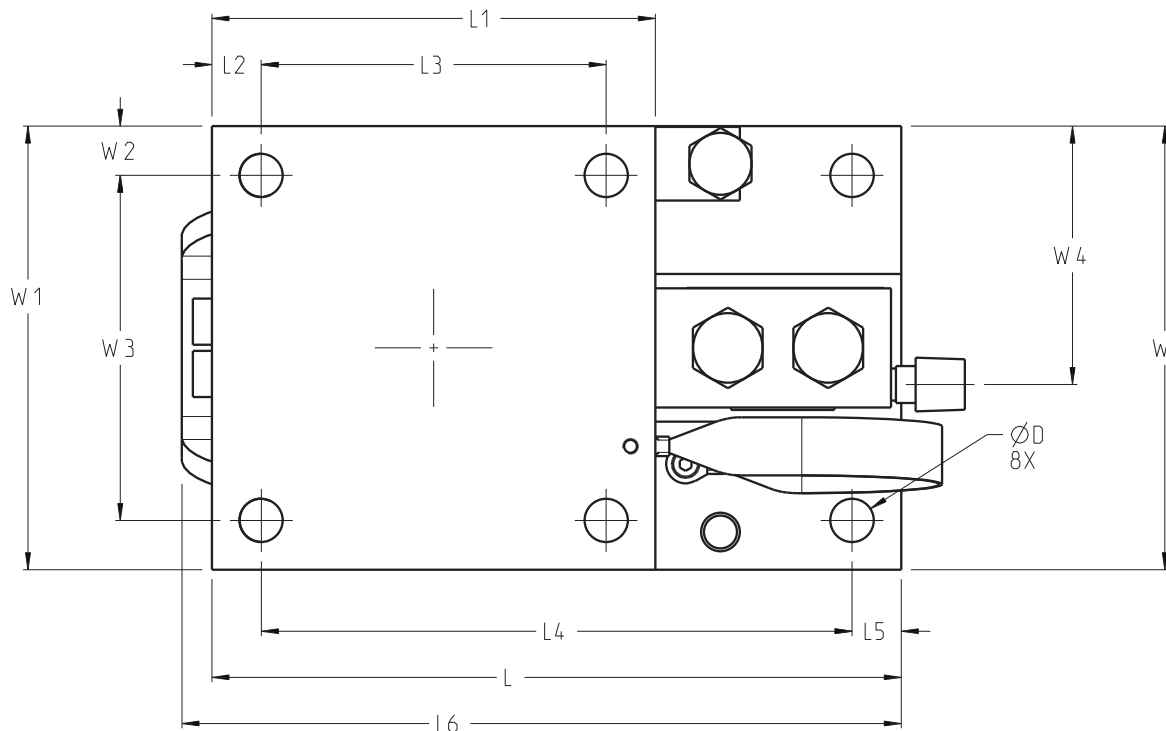
<sup>6)</sup> % of Applied Load (A.L.) per mm (in) displacement of the top plate (transverse & longitudinal).

<sup>7)</sup> 1 or 2 per weigh module. Max permissible longitudinal force per stabilizer.

<sup>8)</sup> 0 with Stabilizer.



# SWB505 MultiMount™ EN1090 Weigh Module Dimensions mm [in]



| Size | Capacity                             | Locations and Dimensions |                 |                |                |                |                 |                 |                |                 |                 |                |                 |                 |                 |                |                 |                |
|------|--------------------------------------|--------------------------|-----------------|----------------|----------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|-----------------|----------------|-----------------|----------------|
|      |                                      | D                        | H               | H1             | H2             | H3             | L               | L1              | L2             | L3              | L4              | L5             | L6              | W               | W1              | W2             | W3              | W4             |
| 1    | 5 kg – 300 kg<br>(11 lb – 600 lb)    | 10<br>(0.4)              | 83<br>(3.3)     | 12.7<br>(0.50) | 8<br>(0.3)     | 41.0<br>(1.61) | 165<br>(6.5)    | 102<br>(4.0)    | 10<br>(0.4)    | 82<br>(3.2)     | 145<br>(5.7)    | 10<br>(0.4)    | -               | 102<br>(4.0)    | 102<br>(4.0)    | 10<br>(0.4)    | 82<br>(3.3)     | 60.0<br>(2.36) |
| 2    | 110 kg – 1.1 t<br>(250 lb – 2.5 klb) | 11.2<br>(0.44)           | 105.2<br>(4.14) | 19.1<br>(0.75) | 12.7<br>(0.50) | 50.9<br>(2.00) | 177.9<br>(7.00) | 114.4<br>(4.50) | 12.7<br>(0.50) | 89.0<br>(3.5)   | 152.4<br>(6.00) | 12.7<br>(0.50) | 185.6<br>(7.31) | 114.4<br>(4.50) | 114.4<br>(4.50) | 12.7<br>(0.50) | 89.0<br>(3.5)   | 66.6<br>(2.62) |
|      | 51.3<br>(2.02)                       |                          |                 |                |                | 69.7<br>(2.74) |                 |                 |                |                 |                 |                |                 |                 |                 |                |                 |                |
| 3    | 4.4 t<br>(10 klb)                    | 17.5<br>(0.69)           | 136.6<br>(5.38) | 25.4<br>(1.00) | 19.1<br>(0.75) | 70.3<br>(2.77) | 235.0<br>(9.25) | 152.4<br>(6.00) | 25.4<br>(1.00) | 101.6<br>(4.00) | 184.2<br>(7.25) | 25.4<br>(1.00) | -               | 152.4<br>(6.00) | 152.4<br>(6.00) | 25.4<br>(1.00) | 101.6<br>(4.00) | 91.7<br>(3.61) |

## Order Information SWB505 MultiMount™ EN1090 – Weigh Module including Load Cell

| Order Information, Weigh Module Assembly |                          |                             |                            |                        | Item No.        |                 |                 |
|--|--------------------------|-----------------------------|----------------------------|------------------------|-----------------|-----------------|-----------------|
| Size                                     | Rated Capacity           | Description                 | Class / Description        | Cable, Material/Lenght | Material        |                 |                 |
|  |                          |                             |                            |                        | CS              | 304             | 316             |
| 1  | 5kg / 11lb               | Weigh Module Assembly       | 0.05%                      | PVC / 3 m (9.8ft)      | <b>30263244</b> | <b>30263245</b> | <b>30263246</b> |
|  | 10kg / 22lb              |                             | C3 / III s n:3 / III M n:5 |                        | <b>30263247</b> | <b>30263248</b> | <b>30263249</b> |
|  | 20kg / 44lb              |                             | C3 / III s n:3 / III M n:5 |                        | <b>30263250</b> | <b>30263251</b> | <b>30263252</b> |
|  | 30kg / 66lb              |                             | C6                         |                        | <b>30263440</b> | <b>30263441</b> | <b>30263442</b> |
|  | 50kg / 110lb             |                             | C3 / III s n:3 / III M n:5 |                        | <b>30263253</b> | <b>30263254</b> | <b>30263255</b> |
|  |                          |                             | C6                         |                        | <b>30263443</b> | <b>30263444</b> | <b>30263445</b> |
|  | 100kg / 220lb            |                             | C3 / III s n:3 / III M n:5 |                        | <b>30263256</b> | <b>30263257</b> | <b>30263258</b> |
|  |                          |                             | C6                         |                        | <b>30265354</b> | <b>30265355</b> | <b>30265356</b> |
|  | 200kg / 440lb            |                             | C3 / III s n:3 / III M n:5 |                        | <b>30263259</b> | <b>30263260</b> | <b>30263261</b> |
|  |                          | C6                          | <b>30265357</b>            | <b>30265358</b>        | <b>30265359</b> |                 |                 |
|  | 300kg / 661lb            | C3 / III s n:3 / III M n:5  | <b>30263262</b>            | <b>30263263</b>        | <b>30263264</b> |                 |                 |
|  |                          | C6                          | <b>30265360</b>            | <b>30265361</b>        | <b>30265362</b> |                 |                 |
|  | 5-300kg / 11-661lb       | Stabilizer                  | -                          | -                      | <b>30040930</b> |                 | <b>30040931</b> |
| Dead Stand                               |                          | <b>30025909</b>             |                            |                        | <b>30025913</b> |                 |                 |
| Shock/Vibration Pad                      |                          | <b>30040932</b>             |                            |                        |                 |                 |                 |
| Thermal Isolation Pad 80°C               |                          | <b>30040933</b>             |                            |                        |                 |                 |                 |
| Thermal Isolation Pad 170°C              |                          | <b>30040935</b>             |                            |                        |                 |                 |                 |
| 2  | 110kg / 250lb            | Weigh Module Assembly       | 0.03%                      | PU / 5 m (32.8ft)      | <b>30263265</b> | <b>30263266</b> | <b>30263267</b> |
|  | 220kg / 500lb            |                             | C3 / III M n:5             |                        | <b>30263268</b> | <b>30263269</b> | <b>30263270</b> |
|  |                          |                             | C6 / III M n:10            |                        | <b>30263283</b> | <b>30263287</b> | <b>30263291</b> |
|  | 550kg / 1,250lb          |                             | C3 / III M n:5             |                        | <b>30263271</b> | <b>30263272</b> | <b>30263273</b> |
|  |                          |                             | C6 / III M n:10            |                        | <b>30263284</b> | <b>30263288</b> | <b>30263292</b> |
|  | 1100kg / 2,500lb         |                             | C3 / III M n:5             |                        | <b>30263274</b> | <b>30263275</b> | <b>30263276</b> |
|  |                          |                             | C6 / III M n:10            |                        | <b>30263285</b> | <b>30263289</b> | <b>30263293</b> |
|  | 2200kg / 5,000lb         |                             | C3 / III M n:5             |                        | <b>30263277</b> | <b>30263278</b> | <b>30263279</b> |
|  |                          |                             | C6 / III M n:10            |                        | <b>30263286</b> | <b>30263290</b> | <b>30263294</b> |
|  | 110-2200kg / 250-5,000lb | Stabilizer                  | -                          | -                      | <b>61046399</b> | <b>61046400</b> | <b>61046401</b> |
|  |                          | Dead Stand                  |                            |                        | <b>61010624</b> | <b>61046402</b> | <b>61946403</b> |
|  |                          | Shock/Vibration Pad         |                            |                        | <b>61005965</b> |                 |                 |
|  |                          | Thermal Isolation Pad 80°C  |                            |                        | <b>61010620</b> |                 |                 |
| Thermal Isolation Pad 170°C              |                          | <b>61024642</b>             |                            |                        |                 |                 |                 |
| 3  | 4400kg / 10,000lb        | Weigh Module Assembly       | C3 / III M n:5             | PU / 10 m (32.8ft)     | <b>30263280</b> | <b>30263281</b> | <b>30263282</b> |
|  |                          |                             | C6 / III M n:10            | PU / 10 m (32.8ft)     | <b>30263307</b> | <b>30263308</b> | <b>30263309</b> |
|  | 4400kg / 10,000lb        | Stabilizer                  | -                          | -                      | <b>61046404</b> | <b>61046405</b> | <b>61046406</b> |
|  |                          | Dead Stand                  |                            |                        | <b>61010625</b> | <b>61046407</b> | <b>61046408</b> |
|  |                          | Shock/Vibration Pad         |                            |                        | <b>61005938</b> |                 |                 |
|  |                          | Thermal Isolation Pad 80°C  |                            |                        | <b>61010621</b> |                 |                 |
|  |                          | Thermal Isolation Pad 170°C |                            |                        | <b>61037510</b> |                 |                 |

**Bolded entries are stocked**

## Order Information SWB505 MultiMount™ EN1090 – Weigh Module without Load Cell

- SafeLock™ allows to install weigh module hardware without load cell to avoid sensor damage
- Combine weigh module with special cable length and cable material
- Use weigh module with dummy load cell for level detection systems

| Order Information, Weigh Module Kit |                  | Item No.        |                 |                 | Suitable Load Cells        |                          |                    |                 |                 |          |          |          |                 |                 |                 |          |                 |          |  |  |  |  |  |  |  |  |  |
|-------------------------------------|------------------|-----------------|-----------------|-----------------|----------------------------|--------------------------|--------------------|-----------------|-----------------|----------|----------|----------|-----------------|-----------------|-----------------|----------|-----------------|----------|--|--|--|--|--|--|--|--|--|
| Size                                | Rated Capacity   | Material        |                 |                 | Class                      | Item No.                 |                    |                 |                 |          |          |          |                 |                 |                 |          |                 |          |  |  |  |  |  |  |  |  |  |
|                                     |                  | CS              | 304             | 316             |                            | Cable, Material / Length |                    |                 |                 |          |          |          |                 | Dummy Load Cell |                 |          |                 |          |  |  |  |  |  |  |  |  |  |
|                                     |                  |                 |                 |                 |                            | PVC / 3 m (10ft)         | PVC / 5 m (16.6ft) |                 |                 |          |          |          |                 |                 |                 |          |                 |          |  |  |  |  |  |  |  |  |  |
| 1                                   | 5kg / 11lb       | <b>30263232</b> | <b>30263233</b> | <b>30263234</b> | 0.05%                      | -                        | -                  | -               | -               | -        | -        | -        | -               | <b>30025910</b> |                 |          |                 |          |  |  |  |  |  |  |  |  |  |
|                                     | 10kg / 22lb      |                 |                 |                 | C3 / III S n:3 / III M n:5 |                          |                    |                 |                 |          |          |          |                 |                 | <b>71209934</b> | 72208033 | <b>71209642</b> | 72208034 |  |  |  |  |  |  |  |  |  |
|                                     | 20kg / 44lb      |                 |                 |                 | C3 / III S n:3 / III M n:5 |                          |                    |                 |                 |          |          |          |                 |                 | <b>71201556</b> | 72208035 | <b>30212721</b> | 30226939 |  |  |  |  |  |  |  |  |  |
|                                     | 30kg / 66lb      |                 |                 |                 | C6                         |                          |                    |                 |                 |          |          |          |                 |                 | <b>71201557</b> | 72208036 | <b>30212722</b> | 30226940 |  |  |  |  |  |  |  |  |  |
|                                     | 50kg / 110lb     |                 |                 |                 | C3 / III S n:3 / III M n:5 |                          |                    |                 |                 |          |          |          |                 |                 | <b>71201558</b> | 72208037 | <b>30212723</b> | 30226941 |  |  |  |  |  |  |  |  |  |
|                                     | 100kg / 220lb    |                 |                 |                 | C6                         |                          |                    |                 |                 |          |          |          |                 |                 | <b>71201559</b> | 72208038 | <b>30212724</b> | 30226942 |  |  |  |  |  |  |  |  |  |
|                                     | 200kg / 440lb    |                 |                 |                 | C3 / III S n:3 / III M n:5 |                          |                    |                 |                 |          |          |          |                 |                 | <b>71201560</b> | 72208039 | <b>30212725</b> | 30226943 |  |  |  |  |  |  |  |  |  |
|                                     | 300kg / 661lb    |                 |                 |                 | C6                         |                          |                    |                 |                 |          |          |          |                 |                 |                 |          |                 |          |  |  |  |  |  |  |  |  |  |
|                                     |                  |                 |                 |                 |                            |                          |                    |                 |                 |          |          |          |                 |                 |                 |          |                 |          |  |  |  |  |  |  |  |  |  |
|                                     |                  |                 |                 |                 |                            |                          |                    |                 |                 |          |          |          |                 |                 |                 |          |                 |          |  |  |  |  |  |  |  |  |  |
| 2                                   | 110kg / 250lb    | <b>30263235</b> | <b>30263236</b> | <b>30263237</b> | 0.03%                      | 30129790                 | 30129729           | <b>30129791</b> | 30129792        | 30129793 | 30129794 | 30129795 | <b>68000714</b> |                 |                 |          |                 |          |  |  |  |  |  |  |  |  |  |
|                                     | 220kg / 500lb    |                 |                 |                 | C3 / III M n:5             | 30091034                 | 30129604           | <b>30091046</b> | 30094384        | 42111204 | 30094412 | 30094432 |                 |                 |                 |          |                 |          |  |  |  |  |  |  |  |  |  |
|                                     | 550kg / 1250lb   |                 |                 |                 | C6 / III M n:10            | 30091035                 | 30129605           | <b>30091047</b> | 30094385        | 42111205 | 30094413 | 30094433 |                 |                 |                 |          |                 |          |  |  |  |  |  |  |  |  |  |
|                                     | 1100kg / 2500lb  |                 |                 |                 | C3 / III M n:5             | 30091038                 | 30129606           | <b>30091050</b> | 30094388        | 42111224 | 30094416 | 30094436 |                 |                 |                 |          |                 |          |  |  |  |  |  |  |  |  |  |
|                                     | 2200kg / 5000lb  |                 |                 |                 | C6 / III M n:10            | 30091039                 | 30129607           | <b>30091051</b> | 30094389        | 42111225 | 30094417 | 30094437 |                 |                 |                 |          |                 |          |  |  |  |  |  |  |  |  |  |
|                                     |                  |                 |                 |                 | C3 / III M n:5             | 30091042                 | 30129608           | <b>30091054</b> | 30094392        | 42111244 | 30094420 | 30094440 |                 |                 |                 |          |                 |          |  |  |  |  |  |  |  |  |  |
| 3                                   | 4400kg / 10000lb | <b>30263241</b> | <b>30263242</b> | <b>30263243</b> | C6 / III M n:10            | 30091026                 | 30039031           | <b>30039033</b> | 30094396        | 30094404 | 30094424 | 30094444 | <b>61005963</b> |                 |                 |          |                 |          |  |  |  |  |  |  |  |  |  |
|                                     |                  |                 |                 |                 | C6 / III M n:10            | 30091027                 | 30039032           | <b>30039034</b> | 30094397        | 30094405 | 30094425 | 30094445 |                 |                 |                 |          |                 |          |  |  |  |  |  |  |  |  |  |
|                                     |                  |                 |                 |                 | C3 / III M n:5             | 30091030                 | 30039041           | 30039043        | <b>30094400</b> | 30094408 | 30094428 | 30094448 | <b>61005964</b> |                 |                 |          |                 |          |  |  |  |  |  |  |  |  |  |
|                                     |                  |                 |                 |                 | C6 / III M n:10            | 30091031                 | 30039042           | 30039044        | <b>30094401</b> | 30094409 | 30094429 | 30094449 |                 |                 |                 |          |                 |          |  |  |  |  |  |  |  |  |  |

Bolded entries are stocked

## SWB505 MultiMount™ EN1090 Cable Colour MTB

| Colour        | Function     |
|---------------|--------------|
| Green         | + Excitation |
| Black         | - Excitation |
| White         | + Signal     |
| Red           | - Signal     |
| Yellow        | + Sense      |
| Blue          | - Sense      |
| Yellow (long) | Shield       |

## SWB505 MultiMount™ EN1090 Cable Colour 0745A

| 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 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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