Reach truck 1.4 - 2.5 ton



вт reflex

R & E-series RRE140H/HE RRE160H/HE RRE180H/HE RRE200H/HE RRE250H/HE











Reach truck

| | 1.1 | Manufacturer | | | Toyota | Toyota | Toyota | Toyota | Toyota |
|------------------|--------|---|-----------------|--------|---------------|---------------|---------------|---------------|-------------|
| | 1.2 | Model | | | RRE140H/HE | RRE160H/HE | RRE180H/HE | RRE200H/HE | RRE250H/H |
| = | 1.3 | Drive | | | Electric | Electric | Electric | Electric | Electric |
| Identification | 1.4 | Operator type | | | Seated | Seated | Seated | Seated | Seated |
| ij | 1.5 | Load capacity/rated load | Q | kg | 1400 | 1600 | 1800 | 2000 | 2500 |
| g | 1.6 | Load centre | С | mm | 600 | 600 | 600 | 600 | 600 |
| | 1.8 | Load distance, centre of support arm wheel to face of fork | x | mm | 310 * | 394 * | 373 * | 433 * | 388 * |
| | 1.9 | Wheelbase | у | mm | 1311 | 1395 | 1455 | 1515 | 1575 |
| | 2.1 | Service weight including battery | , | kg | 3390 | 3398 | 3908 | 4091 | 4614 |
| Ħ | 2.3 | Axle load, mast retracted without load, drive/support arm wheel | | kg | 2067/1323 | 2123/1274 | 2357/1551 | 2510/1581 | 2702/1912 |
| Weight | 2.4 | Axle load, mast extended with load, drive/support arm wheel | | kg | 667/4123 | 607/4390 | 717/4991 | 764/5327 | 721/6392 |
| 5 | 2.5 | , | | _ | 1758/3032 | 1887/3110 | 2054/3655 | 2266/3825 | 2339/4775 |
| | 3.1 | Axle load, mast retracted with load, drive/support arm wheel | | kg | | | + | | |
| | | Drive/support arm wheel | | | Polyurethane | Polyurethane | Polyurethane | Polyurethane | Polyurethan |
| <u>s</u> | 3.2 | Wheel size, front | | mm | ø 350x140 | ø 350x140 | ø400x160 | ø400x160 | ø400x160 |
| Wheels | 3.3 | Wheel size, rear | | mm | ø 300x106 | ø 300x106 | ø350x106 | ø350x106 | ø350x106 |
| | 3.5 | Wheels, number front/rear (x = driven wheels) | | | 1x/2 | 1x/2 | 1x/2 | 1x/2 | 1x/2 |
| | 3.7 | Track width, rear | b ₁₁ | mm | 1134 | 1134 | 1134 | 1134 | 1134 |
| | 4.1 | Tilt of fork, forward/backward | α/β | deg | -2°/4° * | -2°/4° * | -2°/4° * | -2°/4° * | -2°/4° * |
| | 4.2 | Height, mast lowered | h ₁ | mm | 2887 * | 2887 * | 2966 * | 2966 * | 2936 * |
| | 4.3 | Free lift | h ₂ | mm | 2403 * | 2403 * | 2459 * | 2459 * | 2449 * |
| | 4.4 | Lift | h ₃ | mm | 6945 * | 6945 * | 6945 * | 6945 * | 6945 * |
| | | Lift height | h ₂₃ | mm | 7000 * | 7000 * | 7000 * | 7000 * | 7000 * |
| | 4.5 | Height, mast extended | h ₄ | mm | 7540 * | 7540 * | 7548 * | 7548 * | 7545 * |
| | 4.7 | Height of overhead guard (cabin) | h ₆ | mm | 2198 | 2198 | 2261 | 2261 | 2261 |
| | 4.8 | Seat height | h, | mm | 1136 | 1136 | 1198 | 1198 | 1198 |
| | 4.10 | Height support arms | h ₈ | mm | 268 | 268 | 330 | 330 | 330 |
| | 4.15 | Height, fork lowered | h ₁₃ | mm | 55 | 55 | 55 | 55 | 55 |
| | 4.19 | Overall length | I ₁ | mm | 2413 | 2413 | 2494 | 2494 | 2599 |
| us | 4.20 | Length to face of forks | l ₂ | mm | 1263 | 1263 | 1344 | 1344 | 1449 |
| Dimensions | 4.21 | Overall width | b, | mm | 1270 | 1270 | 1270 | 1270 | 1270 |
| ime | 4.22 | Fork dimensions | s/e/l | mm | 40/100/1150 * | 40/100/1150 * | 40/120/1150 * | 40/120/1150 * | 45/125/1150 |
| ۵ | 4.23 | Fork carriage ISO 2328, class/type A, B | 3/0/1 | 111111 | 2A | 2A | 2A | 2A | 2A |
| | 4.24 | Fork carriage iso 2320, class/type A, B | h | mm | 819 | 819 | 819 | 819 | 819 |
| | 4.25 | Width over forks | b ₃ | mm | 252 - 698 | 252 - 698 | 272 - 718 | 272 - 718 | 277 - 723 |
| | | | b ₅ | mm | | 900 * | 900 * | | |
| | 4.26 | Distance between wheel arms/loading surfaces | b ₄ | mm | 900 * | | | 900 * | 900 * |
| | 4.28 | Reach distance | I ₄ | mm | 506 * | 590 * | 594 * | 654 * | 609 * |
| | 4.31 | Ground clearance, with load, below mast | m ₁ | mm | 68 | 68 | 68 | 68 | 68 |
| | 4.32 | Ground clearance, center of wheelbase 2) | m ₂ | mm | 74 | 74 | 74 | 74 | 74 |
| | 4.34.1 | Aisle width for pallets 1000x1200 crossways | A _{st} | mm | 2687 | 2710 | 2785 | 2802 | 2894 |
| | 4.34.2 | Aisle width for pallets 800x1200 lengthways | A _{st} | mm | 2749 | 2757 | 2836 | 2842 | 2942 |
| | 4.35 | Turning radius | W _a | mm | 1573 | 1657 | 1717 | 1777 | 1837 |
| | 4.37 | Length across support arms | l ₇ | mm | 1744 | 1828 | 1913 | 1973 | 2033 |
| | 5.1 | Travel speed, with/without load | | km/h | 10,3/11 1) | 10/11 1) | 11/11 | 11/11 | 11/11 |
| | 5.1 | Travel speed, with/without load (High speed version) | | km/h | 14/14 | 14/14 | 14/14 | 14/14 | 14/14 |
| ata | 5.2 | Lift speed, with/without load | | m/s | 0,38/0,68 | 0,36/0,68 | _ | _ | _ |
| Performance data | 5.2 | Lift speed, with/without load (High speed version) | | m/s | 0,50/0,68 | 0,50/0,68 | 0,46/0,68 | 0,43/0,68 | 0,37/0,64 |
| nan | 5.3 | Lowering speed, with/without load | | m/s | 0,55/0,59 | 0,55/0,59 | 0,55/0,60 | 0,55/0,60 | 0,53/0,58 |
| form | 5.4 | Reach speed, with/without load | | m/s | 0,20/0,28 | 0,20/0,28 | 0,20/0,28 | 0,20/0,28 | 0,20/0,28 |
| Per | 5.8 | Max. gradeability, with/without load 3) | | % | 10/15 | 10/15 | 10/15 | 10/15 | 7/12 |
| | 5.9 | Acceleration time with/without load (over 10 m) | | s | 5,4/4,9 | 5,5/4,9 | 4,9/4,4 | 5,0/4,5 | 5,4/4,7 |
| | 5.10 | Service brake | | | Electric | Electric | Electric | Electric | Electric |
| | 6.1 | Drive motor rating S2 60 min | | kW | 7,5 | 7,5 | 9,0 | 9,0 | 9,0 |
| | 6.2 | Lift motor rating S3 15% | | kW | 11,0 | 11,0 | Ĺ | _ | _ |
| | 6.2 | Lift motor rating S3 15% (High speed version) | | kW | 15,0 | 15,0 | 15,0 | 15,0 | 15,0 |
| tor | 6.4 | Battery voltage, nominal capacity K _s | | V/Ah | 48/465 * | 48/465 * | 48/620 * | 48/620 * | 48/775 * |
| S m | 6.5 | Battery weight | | kg | 685 * | 685 * | 875 * | 875 * | 1055 * |
| Electric motor | 6.6 | | | _ | | 3,7 | 3,9 | | |
| Ele | 0.0 | Energy consumption according to VDI cycle | | kWh/h | | | | 4,7 | 5,2 |
| | 0.7 | Energy consumption according to EN16796:2016 | | kWh/h | | 3,1 | 3,3 | 3,9 | 4,4 |
| | 6.7 | Turnover output | | t/h | 56 | 66 | 76 | 84 | 105 |
| | 6.8 | Energy consumption at turnover output | | kWh/h | | 3,3 | 3,7 | 4,2 | 4,7 |
| Other | 8.1 | Type of drive control | | | Variable AC | Variable AC | Variable AC | Variable AC | Variable AC |
| | 8.4 | Sound level at the driver's ear according to EN 12 053 | 1 | dB(A) | 166 | 66 | 66 | 66 | 66 |

^{1) 11/11} km/h with support wheel brake.

^{2) 15} mm under studs.

3) Measured according to company standard.

* Other alternatives are available.

Battery compartment

| | Dimensions | | | RRE140H/HE | | RRE160H/HE | | | | | |
|------|--|----------------|----|--------------------|--------------------|-------------|--------------------|--------------------|--------------------|-------------|--|
| | Mast type | | | Tr | iplex Hi-Lo - | Α | | Triplex I | Hi-Lo - A | | |
| | Battery compartment | | mm | 275 | 347 | 419 | 275 | 347 | 419 | 491 | |
| 1.8 | Load distance, centre of support arm wheel to face of forks | Х | mm | 310 1) | 238 1) | 157 | 394 1) | 322 1) | 250 ¹) | 169 | |
| 4.20 | Length to face of forks | l, | mm | 1263 ²⁾ | 1335 ²⁾ | 1416 | 1263 ²⁾ | 1335 ²⁾ | 1407 ²⁾ | 1488 | |
| 4.33 | Aisle width for pallets 1000x1200 crossways | A _c | mm | 2687 | 2743 | 2808 | 2710 | 2762 | 2817 | 2882 | |
| 4.34 | Aisle width for pallets 800x1200 lengthways | A _e | mm | 2749 | 2815 | 2890 | 2757 | 2822 | 2888 | 2963 | |
| 4.35 | Turning radius | W. | mm | 1573 | 1573 | 1573 | 1657 | 1657 | 1657 | 1657 | |
| 6.4 | Battery voltage (48V), nominal capacity K _s , Lead-acid | | Ah | 465 | 620 | 775 | 465 | 620 | 775 | 930 | |
| 6.4 | Battery voltage (48V), nominal capacity K _s , Li-Ion | | Ah | _ | 308, 448 | 308, 448 | 308, 448 | 308, 448 | 308, 448 | 308, 448 | |
| 6.5 | Battery weight, min max. | | kg | 685 - 825 | 875 - 1030 | 1055 - 1235 | 685 - 825 | 875 - 1030 | 1055 - 1235 | 1250 - 1440 | |

¹⁾ With battery in sleigh - 9 mm 2) With battery in sleigh + 9 mm

| | Dimensions | | | | RRE18 | OH/HE | | | | | | RRI | E200H | /HE | | | | F | RRE25 | 0H/HE | | |
|------|---|-----------------|----|--------------|---------------|---------------|--------------|---------------|---------------|--------------|---------------|---------------|--------------|---------------|---------------|--------------|---------------|---------------|---------------|---------------|----------------------|---------------|
| | Mast type | | | Triple | ex Hi-l | .o - B | Triple | x Hi-L | .o - C | Triple | ex Hi-L | .o - B | Triple | ex Hi-L | .o - C | Triple | ex Hi-L | .o - D | Trip Hi-Le | lex o - C | Triplex Hi-Lo - D | |
| | Battery compartment | | mm | 347 | 419 | 491 | 347 | 419 | 491 | 347 | 419 | 491 | 347 | 419 | 491 | 347 | 419 | 491 | 419 | 491 | 419 | 491 |
| 1.8 | Load distance, centre of support arm wheel to face of forks | Х | mm | 373 | 301 | 229 | 340 | 268 | 196 | 433 | 361 | 289 | 400 | 328 | 256 | 345 | 273 | 201 | 388 | 316 | 333 | 261 |
| 4.20 | Length to face of forks | l, | mm | 1344 | 1416 | 1488 | 1377 | 1449 | 1521 | 1344 | 1416 | 1488 | 1377 | 1449 | 1521 | 1432 | 1504 | 1576 | 1449 | 1521 | 1504 | 1576 |
| 4.33 | Aisle width for pallets 1000x1200 crossways | A _{et} | mm | 2785 | 2838 | 2894 | 2809 | 2863 | 2920 | 2802 | 2853 | 2907 | 2825 | 2878 | 2933 | 2865 | 2920 | 2976 | 2894 | 2947 | 2934 | 2989 |
| 4.34 | Aisle width for pallets 800x1200 lengthways | A _{st} | mm | 2836 | 2901 | 2967 | 2865 | 2931 | 2998 | 2842 | 2906 | 2972 | 2871 | 2936 | 3002 | 2921 | 2987 | 3053 | 2942 | 3007 | 2992 | 3058 |
| 4.35 | Turning radius | W | mm | 1717 | 1717 | 1717 | 1717 | 1717 | 1717 | 1777 | 1777 | 1777 | 1777 | 1777 | 1777 | 1777 | 1777 | 1777 | 1837 | 1837 | 1837 | 1837 |
| 6.4 | Battery voltage (48V), nominal capacity K ₅ , Lead-acid | | Ah | 620 | 775 | 930 | 620 | 775 | 930 | 620 | 775 | 930 | 620 | 775 | 930 | 620 | 775 | 930 | 775 | 930 | 775 | 930 |
| 6.4 | Battery voltage (48V), nominal capacity K ₅ , Li-lon | | Ah | 308, 448 | 308, 448 | 308, 448 | 308, 448 | 308, 448 | 308, 448 | 308, 448 |
| 6.5 | Battery weight, min max. | | kg | 875- 1030 | 1055- 1235 | 1250- 1440 | 1055- 1235 | 1250- 1440 | 1055- 1235 | 1250- 1440 |

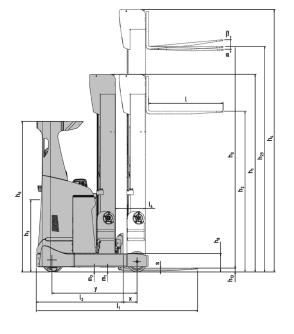
Mast dimensions

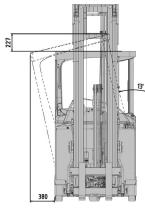
| RRE140/160, H/HE | | | | Triplex Hi-Lo - A | | | | | | | | | | | | | | |
|------------------|----------------------|-----------------|----|-------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|
| | Lift height | h ₂₃ | mm | 4900 | 5400 | 5700 | 6300 | 7000 | 7250 | 7500 | 8000 | 8500 | 9000 | 9500 | 10000 | 10250 | 10500 | 11000 |
| 4.4 | Lift | h ₃ | mm | 4845 | 5345 | 5645 | 6245 | 6945 | 7195 | 7445 | 7945 | 8445 | 8945 | 9445 | 9945 | 10195 | 10445 | 10945 |
| 4.2 | Height, mast lowered | h, | mm | 2187 | 2354 | 2454 | 2654 | 2887 | 2971 | 3054 | 3221 | 3387 | 3554 | 3721 | 3887 | 3971 | 4054 | 4221 |
| 4.3 | Free lift | h, | mm | 1703 | 1871 | 1971 | 2171 | 2403 | 2487 | 2571 | 2737 | 2903 | 3071 | 3237 | 3403 | 3487 | 3571 | 3737 |
| 4.5 | Heigh, mast extended | h, | mm | 5440 | 5941 | 6241 | 6841 | 7540 | 7792 | 8041 | 8542 | 9040 | 9541 | 10042 | 10540 | 10791 | 11041 | 11542 |

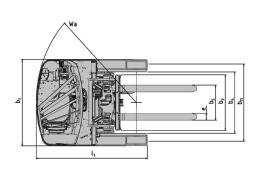
| | RRE180H/HE | | | Triplex Hi-Lo - B | | | | | | | | | | | | Triplex Hi-Lo - C | | | | |
|-----|----------------------|----------------|----|-------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------------------|-------|-------|-------|-------|
| | Lift height | h,, | mm | 4850 | 5400 | 5700 | 6300 | 7000 | 7500 | 8000 | 8500 | 9000 | 9500 | 10000 | 10500 | 11000 | 11500 | 12000 | 12500 | 13000 |
| 4.4 | Lift | h ₃ | mm | 4795 | 5345 | 5645 | 6245 | 6945 | 7445 | 7945 | 8445 | 8945 | 9445 | 9945 | 10445 | 10945 | 11445 | 11945 | 12445 | 12945 |
| 4.2 | Height, mast lowered | h, | mm | 2249 | 2432 | 2532 | 2732 | 2966 | 3132 | 3299 | 3466 | 3632 | 3799 | 3966 | 4132 | 4299 | 4463 | 4630 | 4797 | 4963 |
| 4.3 | Free lift | h, | mm | 1741 | 1925 | 2025 | 2225 | 2459 | 2625 | 2791 | 2959 | 3125 | 3291 | 3459 | 3625 | 3791 | 3949 | 4117 | 4283 | 4449 |
| 4.5 | Heigh mast extended | h | mm | 5397 | 5946 | 6246 | 6846 | 7548 | 8046 | 8547 | 9048 | 9546 | 10047 | 10548 | 11046 | 11547 | 12045 | 12546 | 13047 | 13545 |

| | RRE200H/HE | | | | Triplex Hi-Lo - B | | | | | | | | | | Triplex Hi-Lo - C | | | Triplex Hi-Lo - D | | | |
|-----|----------------------|----------------|----|------|-------------------|------|------|------|------|------|------|------|-------|-------|-------------------|-------|-------|-------------------|-------|-------|--|
| | Lift height | h,, | mm | 4850 | 5400 | 5700 | 6300 | 7000 | 7500 | 8000 | 8500 | 9000 | 9500 | 10000 | 10500 | 11000 | 11500 | 12000 | 12500 | 13000 | |
| 4.4 | Lift | h ₃ | mm | 4795 | 5345 | 5645 | 6245 | 6945 | 7445 | 7945 | 8445 | 8945 | 9445 | 9945 | 10445 | 10945 | 11445 | 11945 | 12445 | 12945 | |
| 4.2 | Height, mast lowered | h, | mm | 2249 | 2432 | 2532 | 2732 | 2966 | 3132 | 3299 | 3466 | 3632 | 3799 | 3963 | 4130 | 4297 | 4463 | 4630 | 4797 | 4963 | |
| 4.3 | Free lift | h, | mm | 1741 | 1925 | 2025 | 2225 | 2459 | 2625 | 2791 | 2959 | 3125 | 3291 | 3449 | 3617 | 3783 | 3949 | 4117 | 4283 | 4449 | |
| 4.5 | Heigh, mast extended | h, | mm | 5397 | 5946 | 6246 | 6846 | 7548 | 8046 | 8547 | 9048 | 9546 | 10047 | 10545 | 11046 | 11547 | 12045 | 12546 | 13047 | 13545 | |

| | RRE250H/HE | | Triplex Hi-Lo - C | | | | | | | | | Triplex Hi-Lo - D | | | | | | | | |
|-----|----------------------|-----------------|-------------------|------|------|------|------|------|------|------|------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Lift height | h ₂₃ | mm | 4850 | 5400 | 5700 | 6300 | 7000 | 7500 | 8000 | 8500 | 9000 | 9500 | 10000 | 10500 | 11000 | 11500 | 12000 | 12500 | 13000 |
| 4.4 | Lift | h, | mm | 4795 | 5345 | 5645 | 6245 | 6945 | 7445 | 7945 | 8445 | 8945 | 9445 | 9945 | 10445 | 10945 | 11445 | 11945 | 12445 | 12945 |
| 4.2 | Height, mast lowered | h, | mm | 2247 | 2430 | 2530 | 2730 | 2936 | 3130 | 3297 | 3463 | 3630 | 3797 | 3963 | 4130 | 4297 | 4463 | 4630 | 4797 | 4963 |
| 4.3 | Free lift | h, | mm | 1733 | 1917 | 2017 | 2217 | 2449 | 2617 | 2783 | 2949 | 3117 | 3283 | 3449 | 3617 | 3783 | 3949 | 4117 | 4283 | 4449 |
| 4.5 | Heigh, mast extended | h, | mm | 5397 | 5946 | 6246 | 6846 | 7545 | 8046 | 8547 | 9045 | 9546 | 10047 | 10545 | 11046 | 11547 | 12045 | 12546 | 13047 | 13545 |







| TMHF.Toyota Material Handling Europe — 749995,040 versio | 7 2010-11-07 | TOYOTA | |
|--|--------------|--------|--|

MATERIAL HANDLING