



ESA121

Electric Pedestrian Stacker 1.2 ton



- Modern, compact, robust, reliable, multipurpose stacker equipped with “plug and play” solutions
- H beam mast with two side cylinders for improved stability and visibility
- Faster lifting and lowering speeds delivering higher stacking performance and efficiency
- User-friendly cover with document, objects and cup pocket and optional USB port to charge any device
- Both AGM and lithium batteries available to suit different needs
- Integrated charger as standard offering charging convenience
- Market-proven drive unit for reliability assurance
- Mono mast and duplex mast in fork and straddle configurations to meet various needs



| Manufacturer | | | EP | | |
|----------------------------------|-------|------|-------------|-------------|---------------------|
| Model designation | | | ESA121 | ESA121-M | ESA121-D |
| Drive | | | Electric | Electric | Electric |
| Load capacity | Q | kg | 1200 | 1200 | 1200 |
| Load center distance | c | mm | 600 | 600 | 600 |
| Service weight | | kg | 700 | 496 | 826 |
| Retracted mast height | h1 | mm | 1995 | 1951 | 2425 |
| Lift height | h3 | mm | 2930 | 1530 | 3730 |
| Length to face of forks | l2 | mm | 610 | 592 | 650 |
| Overall width | b1/b2 | mm | 826 | 826 | 1156/1232/1308/1384 |
| Fork dimensions | s/e/l | mm | 60/170/1150 | 60/170/1150 | 40/100/1070 |
| Turning radius | Wa | mm | 1480 | 1452 | 1475 |
| Max. gradeability, laden/unladen | | % | 3/10 | 3/10 | 3/10 |
| Travel speed, laden/unladen | | km/h | 4.0/4.5 | 4.0/4.5 | 4.0/4.5 |
| Lifting speed, laden/unladen | | m/s | 0.15/0.24 | 0.15/0.25 | 0.15/0.24 |
| Lowering speed, laden/unladen | | m/s | 0.21/0.20 | 0.19/0.14 | 0.2/0.21 |
| Battery voltage/nominal capacity | | V/Ah | 24/105 | 24/105 | 24/105 |

FEATURE

■ Improved mast offering stable operation and good visibility

Safety is a top priority. The structure of the ESA121 is common as heavy duty stackers: two side lifting cylinders grant an excellent visibility and the H-beam mast ensures a robust and rigid structure that grant less frame torsion when carrying heavier loads. These offer the best residual capacity (800kg at 3600mm elevation) and the higher elevation (4100mm) in its class.



■ Higher lifting and lowering performance for productivity boost

Compared to the ES12-12ES, the lifting power of the ESA121 is improved from 2.2kW to 3.0kW, which naturally improves the lifting and lowering speeds and increase turnover efficiency. Soft landing fork is one of the standard feature, providing low noise and perfect handling of fragile loads and the automatic speed reduction when lifting up to top is available as an option for safety assurance.

■ Maintenance-free battery with integrated charger

The ESA121 offers options of AGM battery and lithium battery, both of which are maintenance-free, to fulfill various needs. It comes with a standard integrated charger for charging convenience.

■ User-centered design improving daily convenience

The new cover is designed around user-centered advantages to offer maximum convenience for daily use. The operator is allowed to take paper documents and cups even charge electronic devices on the go.



Electric Pedestrian Stacker (Duplex mast / Mono mast / Straddle) 1200kg ESA121 / ESA121-M / ESA121-D

| | | | | | | | | |
|---------------------|------------------|---|-----------------------------|-------|-----------------|-----------------|---------------------|---------|
| Distinguishing mark | 1.1 | Manufacturer | | | EP | EP | EP | |
| | 1.2 | Model designation | | | ESA121 | ESA121-M | ESA121-D | |
| | 1.3 | Drive | | | Electric | Electric | Electric | |
| | 1.4 | Operator type | | | Pedestrian | Pedestrian | Pedestrian | |
| | 1.5 | Load capacity | Q | kg | 1200 | 1200 | 1200 | |
| | 1.5.1 | Load capacity, load with mast lift | Q1 | kg | — | — | — | |
| | 1.5.2 | Load capacity, load with support arm lift | Q2 | kg | — | — | — | |
| | 1.6 | Load center distance | c | mm | 600 | 600 | 600 | |
| | 1.8 | Load distance, centre of drive axle to fork | x | mm | 808 | 808 | 773 | |
| | 1.9 | Wheelbase | y | mm | 1230 | 1210 | 1235 | |
| Service weight | 2.1 | Service weight | | | 700 | 496 | 826 | |
| | 2.2 | Axle loading, laden front/rear | | kg | 750/1150 | 586/1110 | 800/1226 | |
| Tyres/chassis | 2.3 | Axle loading, unladen front/rear | | kg | 540/160 | 380/116 | 630/196 | |
| | 3.1 | Tyre type | | | Polyurethane | Polyurethane | Polyurethane | |
| | 3.2.1 | Tyre size, front | | mm | Ø210×70 | Ø214×70 | Ø214×70 | |
| | 3.3.1 | Tyre size, rear | | mm | Ø80×60 | Ø80×60 | Ø100×50 | |
| | 3.4 | Additional wheels (castor wheels) | | mm | Ø130×55 | Ø130×55 | Ø130×55 | |
| | 3.5 | Wheels, number front/rear (x=drive wheels) | | mm | 1x , 1/4 | 1x , 1/4 | 1x , 1/4 | |
| | 3.6.1 | Tread width, front | b10 | mm | 543 | 543 | 543 | |
| | 3.7.1 | Tread width, rear | b11 | mm | 400 | 400 | 1070/1146/1222/1298 | |
| | 4.0 | Max. Lift Height | H | mm | — | — | — | |
| | 4.2 | Retracted mast height | h1 | mm | 1995 | 1951 | 2425 | |
| Dimensions | 4.3 | Free lift | h2 | mm | — | 1530 | — | |
| | 4.4 | Lift height | h3 | mm | 2930 | 1530 | 3730 | |
| | 4.5 | Height, mast extended | h4 | mm | 3460 | 1991 | 4700 | |
| | 4.6 | Initial lift | h5 | mm | — | — | — | |
| | 4.9 | Height of tiller handle in drive position min./max. | h14 | mm | 760/1140 | 760/1140 | 760/1140 | |
| | 4.10 | Height of wheel arms | h8 | mm | — | — | 100 | |
| | 4.15 | Lowered height | h13 | mm | 90 | 90 | 63 | |
| | 4.19 | Overall length | l1 | mm | 1760 | 1742 | 1720 | |
| | 4.20 | Length to face of forks | l2 | mm | 610 | 592 | 650 | |
| | 4.21 | Overall width | b1/b2 | mm | 826 | 826 | 1156/1232/1308/1384 | |
| | 4.22 | Fork dimensions | s/e/l | mm | 60/170/1150 | 60/170/1150 | 40/100/1070 | |
| | 4.24 | Fork carriage width | b3 | mm | 680 | 700 | 826 | |
| | 4.25 | Distance between fork-arms | b5 | mm | 570 | 570 | 200-780 | |
| | 4.26 | Distance between wheel arms/loading surfaces | b4 | mm | — | — | 991/1067/1143/1219 | |
| | 4.31 | Ground clearance, laden, below mast | m1 | mm | — | — | 30 | |
| | 4.32 | Ground clearance, center of wheelbase | m2 | mm | 23 | 23 | 40 | |
| | 4.34.1 | Aisle width for pallets 1000×1200 crossways | Ast | mm | 2310 | 2282 | 2375 | |
| | 4.34.2 | Aisle width for pallets 800×1200 lengthways | Ast | mm | 2240 | 2212 | 2263 | |
| | Performance data | 4.35 | Turning radius | Wa | mm | 1480 | 1452 | 1475 |
| | | 5.1 | Travel speed, laden/unladen | | km/ h | 4.0/4.5 | 4.0/4.5 | 4.0/4.5 |
| 5.2 | | Lifting speed, laden/unladen | | m/s | 0.15/0.24 | 0.15/0.25 | 0.15/0.24 | |
| 5.3 | | Lowering speed, laden/unladen | | m/s | 0.21/0.20 | 0.19/0.14 | 0.2/0.21 | |
| 5.8 | | Max. gradeability, laden/unladen | | % | 3/10 | 3/10 | 3/10 | |
| 5.10 | | Service brake | | | Electromagnetic | Electromagnetic | Electromagnetic | |
| 6.1 | | Drive motor rating S2 60 min | | kW | 0.65 | 0.65 | 0.65 | |
| 6.2 | | Lift motor rating at S3 15% | | kW | 3.0 | 3.0 | 3.0 | |
| 6.4 | | Battery voltage/nominal capacity | | V/Ah | 24V/105Ah | 24V/105Ah | 24V/105Ah | |
| 6.5 | | Battery weight | | kg | 61 | 61 | 61 | |
| Electric-engine | 6.6 | Energy consumption according to DIN EN 16796 | | kWh/h | — | — | — | |
| | 6.7 | Turnover output according to VDI 2198 | | t/h | — | — | — | |
| | 6.8 | Turnover efficiency according to VDI 2198 | | t/kWh | — | — | — | |
| Addition data | 8.1 | Type of drive control | | | DC | DC | DC | |
| | 10.5 | Steering design | | | Mechanical | Mechanical | Mechanical | |
| | 10.7 | Sound pressure level at the driver's ear | | dB(A) | 74 | 74 | 74 | |

If there are improvements of technical parameters or configurations, no further notice will be given.
The diagram shown may contain non-standard configurations.

Mono-mast option ESA121-M

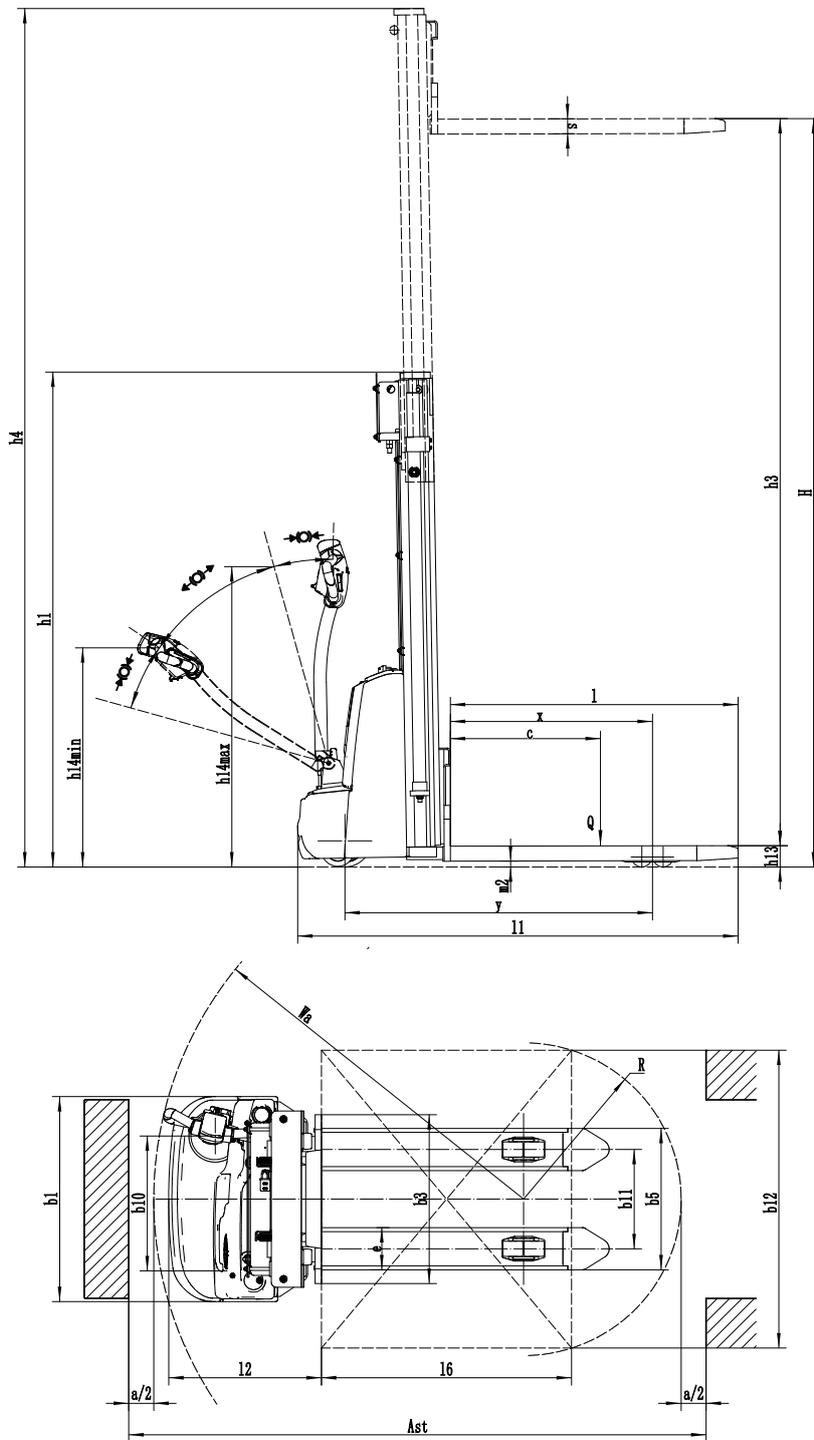
The ESA121 can be fitted with a mono mast and lift goods up to 1953mm. It's ideal for stacking pallets in indoor spaces with low ceilings and containers thanks to its free lift height.



Straddle option ESA121-D

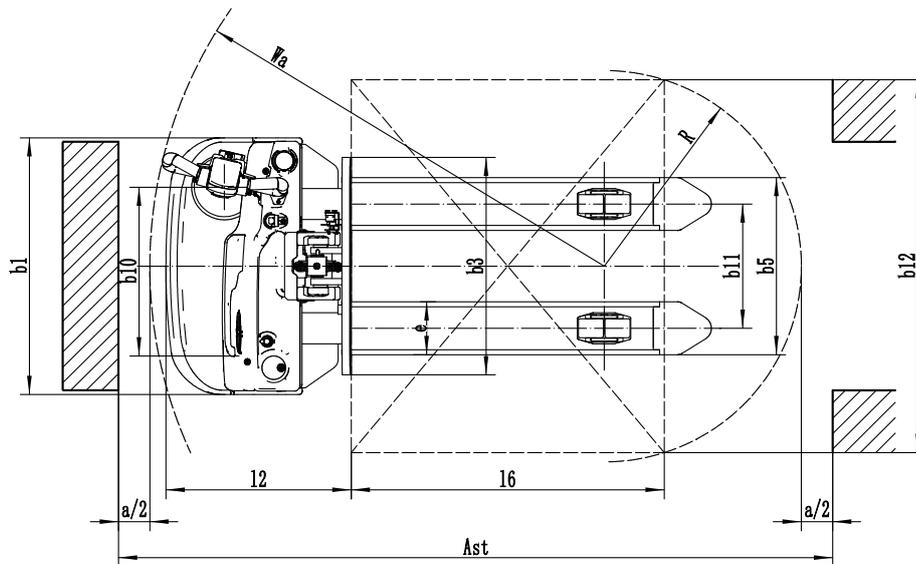
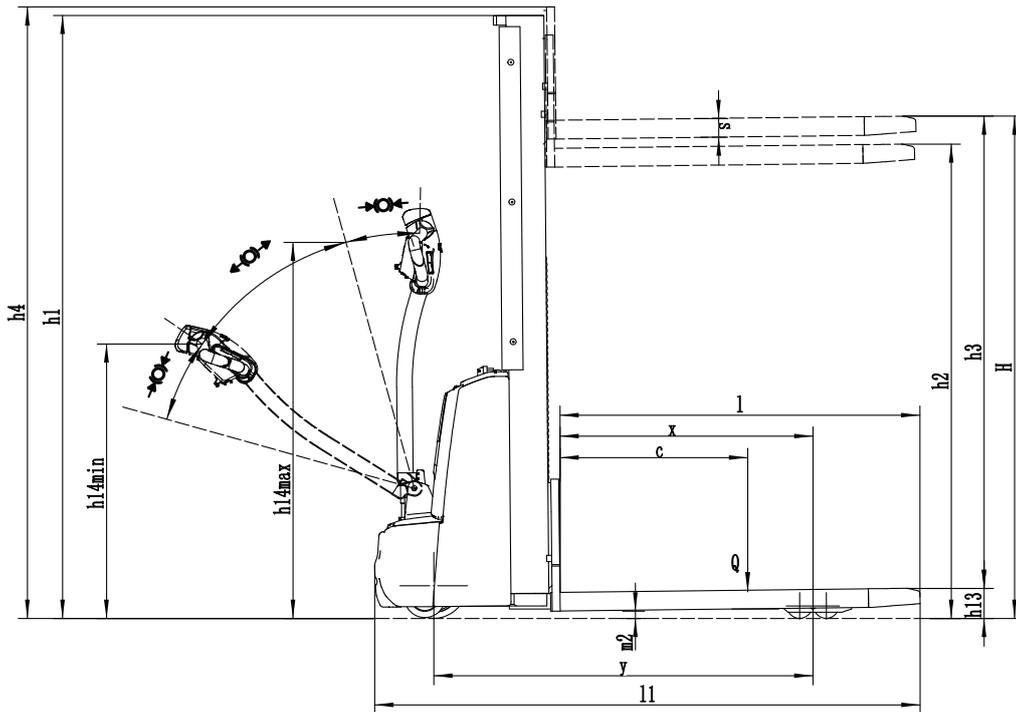
The ESA121 offers a straddle version and its straddle legs are flexibly and easily adjusted with 4 widths from narrow to wide. With its adjustable and stable straddle legs, the ESA121 can lift multiple pallets at ease.





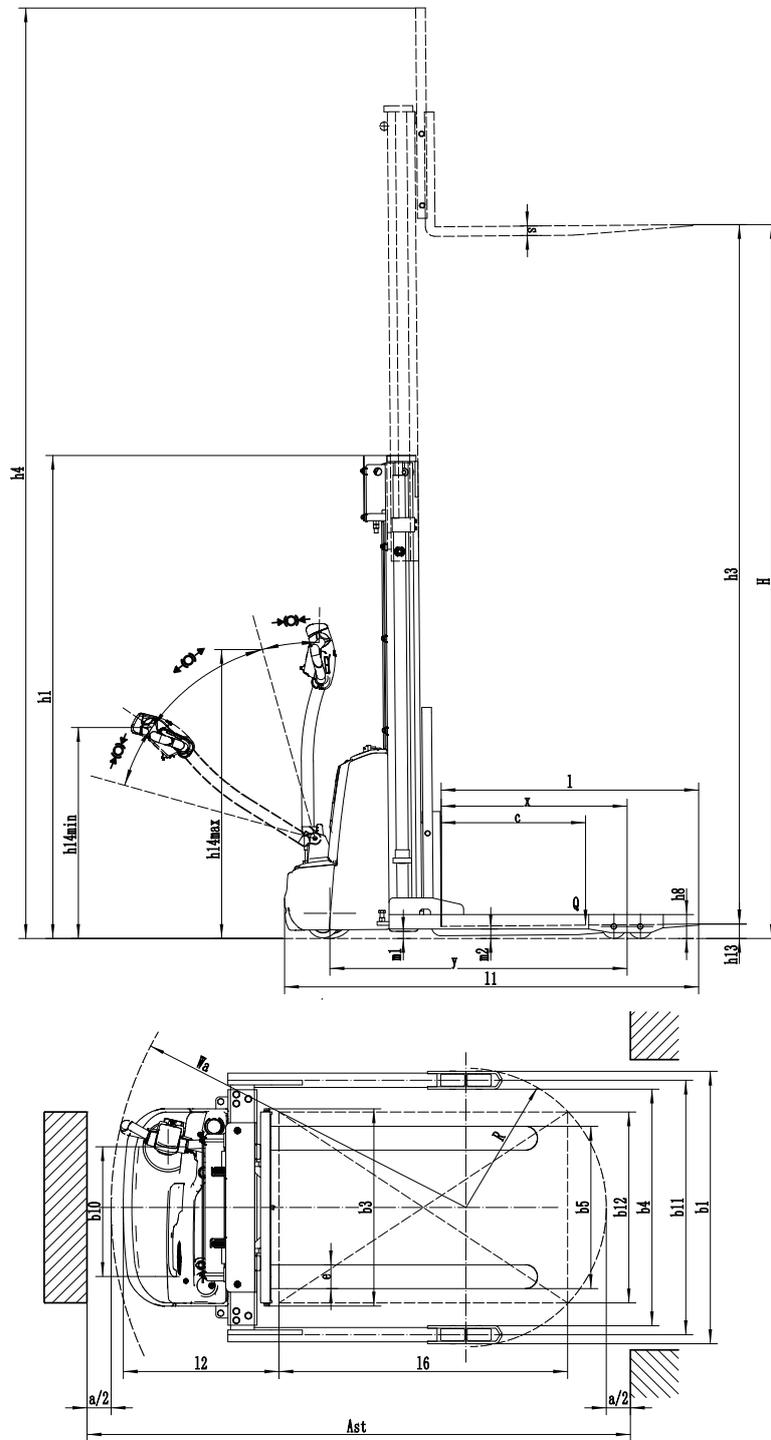
ESA121 Mast Option

| Mast types | Lift height h3+h13(mm) | Height, mast lowered h1(mm) | Free lift h2(mm) | Height, mast extended h4(mm) |
|--------------------|---------------------------|--------------------------------|---------------------|---------------------------------|
| 2-Standard Mast | 2513 | 1745 | — | 2960 |
| | 2713 | 1845 | — | 3160 |
| | 3013 | 1995 | — | 3460 |
| | 3313 | 2145 | — | 3760 |
| | 3613 | 2295 | — | 4060 |
| | 3813 | 2395 | — | 4260 |
| | 3913 | 2445 | — | 4360 |
| | 4113 | 2545 | — | 4560 |



ESA121-M Mast Option

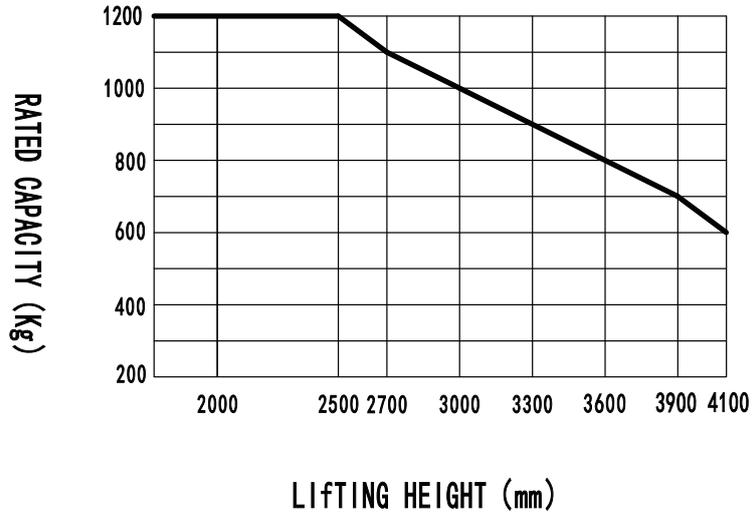
| Mast types | Lift height h_3+h_{13} (mm) | Height, mast lowered h_1 (mm) | Free lift h_2 (mm) | Height, mast extended h_4 (mm) |
|--------------|----------------------------------|------------------------------------|-------------------------|-------------------------------------|
| Simplex Mast | 1613 | 1951 | 1530 | 1991 |
| | 1953 | 2291 | 1860 | 2336 |



ESA121-D Mast Option

| Mast types | Lift height h_3+h_{13} (mm) | Height, mast lowered h_1 (mm) | Free lift h_2 (mm) | Height, mast extended h_4 (mm) |
|--------------------|----------------------------------|------------------------------------|-------------------------|-------------------------------------|
| 2-Standard Mast | 2480 | 1775 | — | 3400 |
| | 2680 | 1875 | — | 3600 |
| | 2980 | 2025 | — | 3900 |
| | 3280 | 2175 | — | 4200 |
| | 3580 | 2325 | — | 4500 |
| | 3780 | 2425 | — | 4700 |
| | 3880 | 2475 | — | 4800 |
| | 4080 | 2575 | — | 5000 |

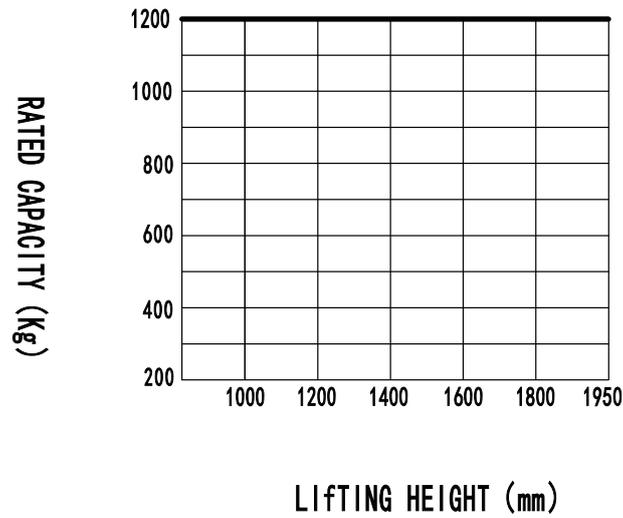
RATED CAPACITIES GRAPH



ESA121 Option

| No. | Optional items | ESA121 |
|---|-----------------------------------|--|
| 1.1 | Fork dimension | ●570*1150○685*1150○570*1000 ○685*1000○570*1220○685*1220 |
| 1.3 | Fork lowered height | ●90 |
| 1.4 | Fork carriage width | ●680mm○770mm |
| 2.1 | Load wheel type | ●Double |
| 2.2 | Load wheel material | ●PU |
| 2.3 | Drive wheel material | ●PU |
| 2.7 | Battery capacity | ●105Ah(AGM)○125Ah(AGM)○100Ah(Li-ion) |
| 2.8 | Charger | ●24V-15A integrated (AGM)○24V-30A integrated(Li-ion) |
| 2.9 | Battery indicator | ●With time |
| 2.16 | handle head type | ●Hands big handle head |
| 3.3 | Castor wheels | ●Yes and not customized |
| 3.16 | Turtle speed | ●Yes and not customized |
| 3.26 | USB Outlets | ●No○Yes and not customized |
| 3.27 | Automatic lifting speed reduction | ●No○Yes and not customized |
| Note: ●Standard ○ Optional - Inconformity | | |

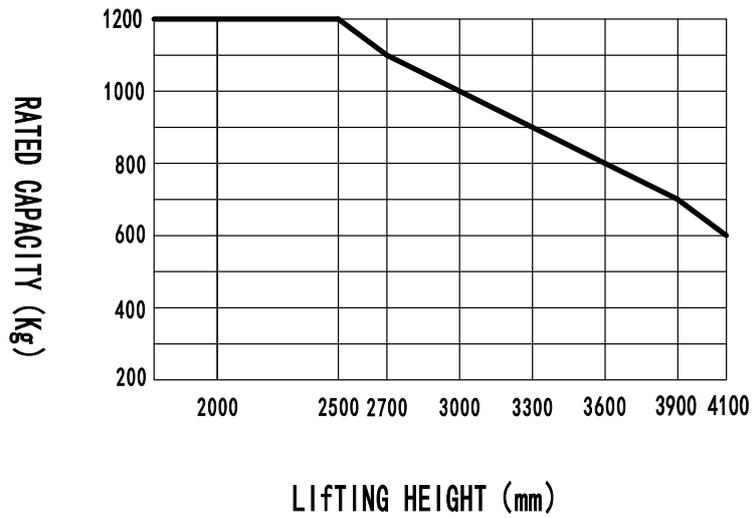
RATED CAPACITIES GRAPH



ESA121-M Option

| No. | Optional items | ESA121-M |
|---|-----------------------------------|--|
| 1.1 | Fork dimension | ●570*1150○685*1150○570*1000 ○685*1000○570*1220○685*1220 |
| 1.3 | Fork lowered height | ●90 |
| 1.4 | Fork carriage width | ●700mm○800mm |
| 2.1 | Load wheel type | ●Double |
| 2.2 | Load wheel material | ●PU |
| 2.3 | Drive wheel material | ●PU |
| 2.7 | Battery capacity | ●105Ah(AGM)○125Ah(AGM)○100Ah(Li-ion) |
| 2.8 | Charger | ●24V-15A integrated (AGM)○24V-10A integrated (Li-ion) |
| 2.9 | Battery indicator | ●With time |
| 2.16 | handle head type | ●Hands big handle head |
| 3.3 | Castor wheels | ●Yes and not customized |
| 3.16 | Turtle speed | ●Yes and not customized |
| 3.26 | USB outlet | ●No○Yes and not customized |
| 3.27 | Automatic lifting speed reduction | ●No○Yes and not customized |
| Note: ●Standard ○ Optional - Inconformity | | |

RATED CAPACITIES GRAPH



ESA121-D Option

| No. | Optional items | ESA121-D |
|---|-----------------------------------|--|
| 1.1 | Fork dimension | ●570*1150○685*1150○570*1000 ○685*1000○570*1220○685*1220 |
| 1.3 | Fork lowered height | ●63 |
| 1.4 | Fork carriage width | ●826mm |
| 2.1 | Load wheel type | ●Double |
| 2.2 | Load wheel material | ●PU |
| 2.3 | Drive wheel material | ●PU |
| 2.7 | Battery capacity | ●105Ah(AGM)○125Ah(AGM)○100Ah(Li-ion) |
| 2.8 | Charger | ●24V-15A integrated (AGM)○24V-30A integrated(Li-ion) |
| 2.9 | Battery indicator | ●With time |
| 2.16 | handle head type | ●Hands big handle head |
| 3.3 | Castor wheels | ●Yes and not customized |
| 3.16 | Turtle speed | ●Yes and not customized |
| 3.26 | USB Outlet | ●No○Yes and not customized |
| 3.27 | Automatic lifting speed reduction | ●No○Yes and not customized |
| Note: ●Standard ○ Optional - Inconformity | | |