Electric Lift Trucks Superelastic Tires

EPX**16** EPX**18** EPX**20s**

ß

1600 kg 1800 kg 2000 kg

EPX16/18/20s





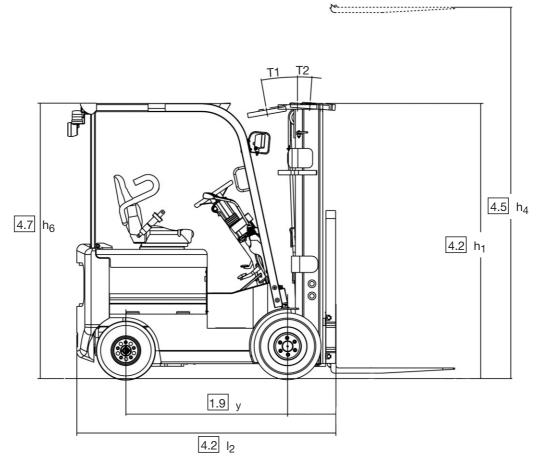
CLARK THE FORKLIFT Europe North Amerika

South Korea

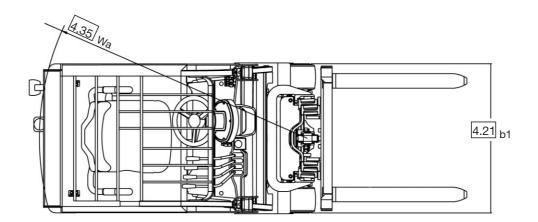
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EPX16/18/20s

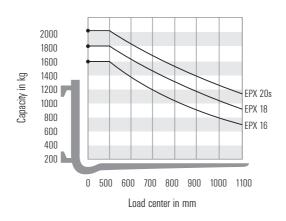


 $A_{st} = W_a + x + I_6 + a$ a = 200 mm (safety distance)

For corresponding data see Specification Chart.



Truck Capacities Capacity at different load centres



Note:

The listed capacities are valid only for the standard upright in vertical position with standard fork carriage and standard forks, up to max. lifting height of 3085 mm. The centre of gravity of the load may be displaced by max. 100 mm against the longitudinal centre plane of the truck. Load centre is determined from top and front face of the forks. The values are based on a 1000 mm cube load configuration with the centre of gravity at the true centre of the cube With upright tilted forward lower capacity values are valid. Attachments, longer forks, exceptional load dimensions and higher lifting heights can reduce the capacity. Please talk to your CLARK dealer if you require further information.

Upright table

Capacity at different load centres

Upright table metrics in mm

| CLARK Ref. | max. fork height h3 | overall heig lowered h1 | jht free lift h2h5* |
|------------------|---------------------------|-------------------------------|---------------------------|
| Standard | EPX 16, 18, | 200 | _ |
| (2 Stage Mast, s | | 203 | |
| V | 2545 | 1864 | 105 |
| V | 2795 | 1989 | 105 |
| V | 3085 | 2134 | 105 |
| V | 3285 | 2234 | 105 |
| V | 3640 | 2411 | 105 |
| V | 4070 | 2684 | 105 |
| V | 4365 | 2884 | 105 |
| V | 4655 | 3079 | 105 |

* without LBR

1.1.2.2.11

| Upright | table metrics i | n mm | |
|-----------------------------|----------------------------------|------------------------------|---------------------------|
| CLARK Ref. | max. fork height h3 | overall hei lowered h1 | ght free lift h2h5* |
| Triple EP (3 Stage Mast, | X 16, 18, 20s full free lift) | | |
| Μ | 3970 | 1864 | 1232 |
| М | 4345 | 1989 | 1357 |
| Μ | 4780 | 2134 | 1502 |
| М | 5185 | 2284 | 1652 |
| Μ | 5565 | 2444 | 1812 |
| М | 5740 | 2509 | 1877 |
| Μ | 6015 | 2634 | 2002 |
| М | 6470 | 2824 | 2192 |
| | | | |

* without LBR

Upright table metrics in mm

| CLARK Ref. | max. fork height h3 | overall heigh Iowered h1 | t free lift h2h5* |
|---------------------|---------------------------|--------------------------------|-------------------------|
| | 10 10 00 | | |
| HI-LO EPX | 16, 18, 20s | | |
| (2 Stage Mast, full | free lift) | | |
| Н | 2925 | 1989 | 1363 |
| Н | 3215 | 2134 | 1508 |
| Н | 3515 | 2284 | 1658 |
| Н | 3695 | 2374 | 1748 |
| Н | 3810 | 2444 | 1818 |

Performance may vary +5% and - 10% due to motor and system efficiency tolerance. The performance shown represents nominal values which may be obtained under typical operating conditions of a machine. CLARK products and specifications are subject to change without notice. **GENERAL DATA**



ELECTRIC RIDERS

| | 1.1 | Manufacture (Abbreviation) | | CLARK | CLARK | CLARK |
|--------------------|-----|---|--------------------|-----------------|-----------------|-----------------|
| | 1.2 | Manufacture's designation | | EPX16 | EPX18 | EPX20s |
| Specifications | 1.3 | Drive Unit | | Elec-48V | Elec-48V | Elec-48V |
| | 1.4 | Operator type stand on / driver seated | | Rider-seated | Rider-seated | Rider-seated |
| | 1.5 | Load Capacity / rated load | Q(Kg) | 1600 | 1800 | 2000 |
| | 1.6 | Load Center distance | c (mm) | 500 | 500 | 500 |
| | 1.8 | Load Center distance, centre of drive axle to fork face | x (mm) | 375 | 375 | 375 |
| | 1.9 | Wheelbase | y (mm) | 1250 | 1250 | 1250 |
| Ħ | 2.1 | Service weight | kg | 3155 | 3300 | 3455 |
| Weight | 2.2 | Axle loading, laden front / rear 5) | kg | 4058/697 | 4375/725 | 4655/790 |
| 5 | | Axle loading, unladen front / rear | kg | 1388/1817 | 1315/1987 | 1265/2190 |
| | 3.1 | Tire type, P=pneumatic, SE=superelastic, C=cushion 3) | | SE | SE | SE |
| SIS | | Tire size, front | | 21x8-9 | 21x8-9 | 21x8-9 |
| Tires, Chassis | | Tire size, rear | | 5.00-8 | 5.00-8 | 5.00-8 |
| res, | | Wheels, number front/rear (x=drive wheels) | | 2x/2 | 2x/2 | 2x/2 |
| μ | | Tread, front | b10 (mm) | 845 | 845 | 880 |
| | | Tread, rear | b11 (mm) | 900 | 900 | 900 |
| | | Tilt of upright/fork carriage, $lpha/eta$ | deg | 6/10 | 6/10 | 6/10 |
| | | Height, upright lowered | h1 (mm) | 2135 | 2135 | 2135 |
| | | Freelift | h2 (mm) | 105 | 105 | 105 |
| | | Lift height 1) | h3 (mm) | 3085 | 3085 | 3085 |
| | | Height upright extended 2) | h4 (mm) | 4305 | 4305 | 4305 |
| | | Height overheadguard (cab): Std / Container | h6 (mm) | 2145 | 2145 | 2145 |
| ns | | Overall length | l1 (mm) | 2945 | 2965 | 3010 |
| nsio | | Length to face of forks | 12 (mm) | 2025 | 2045 | 2090 |
| Dimensions | | Width | b1(mm) | 1035 | 1035 | 1070 |
| | | Fork dimensions | s*e*l (mm) | 40X100X920 | 40X100X920 | 40X100X920 |
| | | Fork carriage ISO 2328, A, B | | CL 11A | CL 11A | CL 11A |
| | | Fork carriage width | b3 (mm) | 940 | 940 | 940 |
| | | Ground clearance minimum, unladen | m1 (mm) | 115 | 115 | 115 |
| | | Ground clearance center of wheelbase | m2 (mm) | 115 | 115 | 115 |
| | | Turning radius | Wa (mm) | 1805 | 1835 | 1880 |
| (1) | | Right Angle Stack Aisle (add Ioad leng & clearnce) | b13 (mm) | - | - | |
| Performance | | Travel speed laden/unladen | km/h | 17/17 | 17/17 | 17/17 |
| form | | Lift speed laden/unladen | m/s | 0.45/0.60 | 0.43/0.60 | 0.41/0.54 |
| Per | | Lowering speed laden/unladen | m/s | 0.50/0.45 | 0.50/0.45 | 0.50/0.45 |
| | | Type of battery | | Lead-acid | Lead-acid | Lead-acid |
| | | Maximum capacity of battery 4) | AH/5hr | 500(580) | 580 | 580 |
| ЭС | | Minimum weight of battery | kg | 848 | 888 | 888 |
| Drive Line | | Diameter of drive motor | mm | 200 | 200 | 200 |
| Driv | | Diameter of hydraulic motor | mm | 170 | 170 | 170 |
| | | Drive motor control | | Mosfet/Inverter | Mosfet/Inverter | Mosfet/Inverter |
| | | Speed control | | Mosfet/Inverter | Mosfet/Inverter | Mosfet/Inverter |
| 1.00 | | Hydraulic motor control | | Mosfet/Inverter | Mosfet/Inverter | Mosfet/Inverter |
| Miscel- laneous | 8.1 | Operating pressure for attachments | kg/cm ³ | 140 | 140 | 140 |
| Ian Ian | 8.2 | Sound level, driver's ear 6) | dB(A) | 72 | 72 | 72 |

1) See Upright Table. Contact CLARK Representative for additional lift heights

2) Specifications are given with the upright noted in line 10

3) Solid pneumatic only

4) Reduces capacity, contact factory

5) Loaded axle weights are based on 24" load center for English units and 500 mm for metric

6) Equivalent permanent sound-preassure level L pAeq,T in accordance with DIN EN



Operator cell

The lower step height, the steel step plate and all ergonomics are designed for customer's comfort and convenience. Large floorboard area accommodates large boots. The clear arranged display provides important truck information so that the operator is well informed and able to do safety work all the time.

Motor

All new AC-motors are fully enclosed to keep out dust and contaminates. Wet invironment is not an issue. No brushes have to be changed or commutator to turn over at the induction motors. Only serviceable parts are bearings and seals. All motors are equipped with a thermistor which constantly monitors temperature. Should the temperature approach the thermal limit, the control gradually cuts back current. Limiting current does not limit maximum travel speed. Once motor temperature decreases, full power is automatically restored. Operator may never feel the cut-back.

Latest Zapi-AC-system is minimizing ernergy consumption.

Brakes

Regenerative braking returns energy into the battery, not into the brakes in the form of heat and is standard on the EPX. This is accomplished one of three ways; via releasing the accelerator pedal, changing direction of travel or applying the service brake. Using regenerative braking also prolongs the life of the truck's service brakes.

Steering

Because of its hydrostatic steering system the EPX 16/18/20s is easily maneuverable.

Hydraulic system

One AC motor for lifting and steering operation. A flow control valve ensures that steering has priority. Linear potentiometer on lift handle provides fully proportional lift. At conserving energy, motor only runs as fast as needed. Motor speed can be adjusted to meet attachement needs. The pump motor is designed to reduce steering and lift noise.

Upright

Sealed and canted rollers minimize deflection and free-play in both the upright and carriage. Six carriage load rollers spread out the load significantly improving roller life. Side thrust rollers help prevent racking during off-center loading and massive high-strength steel fork bars significantly extend component life. Visibility is critical to an operator's performance and safety. CLARK's nested upright rails provide positive rail interlock and narrow "column" to maximize the vision window. The overhead guard safety bars run parallel to the operator's line of sight. This results in less product damage when picking and pulling loads from rack locations. A clear, unobstructed view also protects your most valuable asset – your employees.

Miscellaneous standard

A complete light package and an amber strobe beacon lamp, a multi-function diagnostic dash display with hour meter and battery discharge indicator with lift interrupt is standard. The standard painting is CLARK-green, the operator's compartement and upright is black.

Supplementary equipment

Great assortement of supplementary equipment is available. It is possible to set up the truck performance to customer's requirement.

Safety

The ramp start feature provides additional torque to eliminate roll back when starting on an incline. EPX-series has an CC-certificate and conforms to european safety standards.



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