Sideways travel improves performance in applications with regular direction change

Ideal for loading and unloading of HGVs and for longer transport distances

**Electric steering** 

High speed and acceleration improving productivity



# ESE 120/220/320

### Electric stand-on / sideways-seated pallet truck (2,000 kg)

ESE 120/220/320 pallet trucks are ideal for horizontal transport over medium to long distances. With their sideways operator position, they offer excellent visibility and relaxed working conditions. This is a great advantage, especially where frequent changes of direction are required.

The width of the ESE 120 stand-on truck is only 760 mm, which is narrower than a Euro pallet. This allows for easy pallet positioning inside an HGV as well as for rapid loading and unloading. The fold-up seat offers additional comfort when travelling over longer distances. The low entry height assists frequent entry and exit.

The ESE 220 with 820 mm truck width and the ESE 320 with 930 mm width are side-seat trucks which offer your operators a high degree of comfort and are therefore ideal for long-distance transport. The adjustable foot-well height ensures a

relaxed working position for all operators.

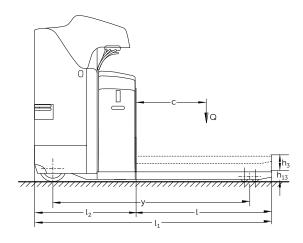
All trucks are fitted with powerful 24 V drive motors for rapid acceleration and high top speeds. In addition they offer the advantages of a sturdy design: The frame and load sections are designed for capacities up to 2000 kg. Other advantages:

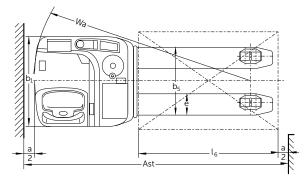
- Rapid travel speeds and acceleration.
- Extremely durable frame for exceptionally high operational demands.
- Display with steering position display and travel program selection (optional for ESE 220 and 320).
- Electric steering for easy manoeuvring with a few turns of the steering wheel.
- Excellent energy management for low operating costs.



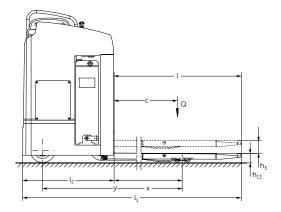
# ESE 120/220/320

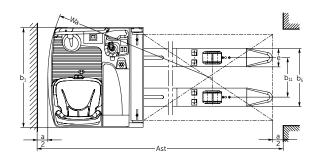
ESE 120





ESE 220/ 320







# Technical data in line with VDI 2198

Wheels / frame Weights Identification	1.1	Manufacturer (abbreviation)			Jungheinrich				
	1.2	Model			ESE 120	ESE 120	ESE 220	ESE 320	
	1.10					Rapid drive			
	1.3	Drive				Electric			
	1.4	Manual, pedestrian, stand-on, seated, order picker operation			stand-on stand-on seat seat				
	1.4	Load capacity/rated load	Q	t	stand-on			sear	
	1.5	Load centre distance	c	mm	2 600				
	1.0	Load distance	x	mm	9644)				
	1.0	Wheelbase			1,5952)	1,7314)	1,5354)	1,5413)	
	2.1.1		У	mm		990			
	2.1.1 2.2	Net weight incl. battery (see row 6.5)		kg	857		1,062	1,074	
		Axle load with load front/rear		kg	1,840 / 1,017	1,900 / 1,090	1,896 / 1,142	1,902 / 1,182	
	2.3	Axle load without load front/rear		kg	215 / 642	240 / 750	258 / 808	264 / 816	
	3.1	Tyres			Polyurethane				
	3.2	Tyre size, front		mm	Ø 230 x 78				
	3.3	Tyre size, rear		mm	Ø 85 x 85				
	3.4	Additional wheels (dimensions)		mm	Ø 140 x 54				
	3.5	Wheels, number front/rear (× = driven wheels)			2+1x/4	1+1x/4	2-1x/4	2-1x/4	
	3.6	Tread width, front	b <sub>10</sub>	mm	475	475	544	645	
	3.7	Tread width, rear	b <sub>11</sub>	mm	340 / 370 / 490	340 / 370 / 490	385	385	
Basic dimensions	4.4	Lift	h <sub>3</sub>	mm	125				
	4.8	Seat height/stand height	h <sub>7</sub>	mm	0	0	1,020	1,020	
	4.8.1	Standing height	h <sub>7</sub>	mm	245	245	0	0	
	4.15	Height, lowered	h <sub>13</sub>	mm	90				
	4.19	Overall length	l <sub>1</sub>	mm	2,024	2,096	2,009	2,009	
	4.20	Length to face of forks	l2	mm	874	946	859	859	
me	4.21	Overall width	b <sub>1</sub> /b <sub>2</sub>	mm	760	760	820	930	
sic di	4.22	Fork dimensions	s/e/l	mm	55 / 170 / 1,150	55 / 170 / 1,150	60 / 185 / 1,150	60 / 185 / 1,150	
Bas	4.25	Width across forks	b <sub>5</sub>	mm	510 / 540 / 660	510 / 540 / 660	540	540	
	4.32	Ground clearance, centre of wheelbase	m,	mm	30	30	25	25	
	4.34	Aisle width for pallets 800 $ imes$ 1200 lengthways	Ast	mm	2,2741)	2,3461)	2,1971)	2,215 <sup>1)</sup>	
	4.35	Turning radius	W,	mm	1,838	1,910	1,665	1,683	
Performance data	5.1	Travel speed, laden/unladen		km/h	8.5 / 10.5	9.5 / 12.5	10 / 12.5	10 / 12.5	
	5.2	Lift speed, laden/unladen		m/s	0.04 / 0.05	0.04 / 0.05	0.06 / 0.07	0.06 / 0.07	
ata	5.2 5.3	Lowering speed, laden/unladen		m/s	0.065 / 0.045	0.065 / 0.045	0.06 / 0.05	0.06 / 0.05	
δp	5.8	Max. gradeability, laden/unladen		%	6 / 12	6 / 12	8 / 13	8 / 13	
D L	5.10	Service brake				elec			
	6.1	Drive motor, output S2 60 min.		kW	2.0	2.5	2.8	2.8	
S	6.2	Lift motor, output at \$3 15%		kW	2.0	2.0	1.5	1.5	
Electrics	6.3	Battery as per DIN 43531 /35/36 A, B, C, no			В	B	no	no	
lec	6.4	Battery voltage/nominal capacity K5		V/Ah	24 / 375	24 / 500	24 / 465	24 / 465	
ш	6.5	Battery weight		kg	297	370	380	380	
ij	8.1	Type of drive control		NY	SpeedControl		AC Speed-	AC Speed-	
Misc.							Control	Control	

<sup>1)</sup> Diagonal in accordance with VDI: + 188 mm

<sup>2)</sup> Load section lowered: +65 mm
<sup>3)</sup> Load section lowered: +95 mm

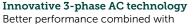
<sup>4)</sup> Load section lowered: 90 mm

In accordance with VDI Guideline 2198 this specification sheet provides details of the standard truck only. Non-standard tyres, different masts, optional equipment, etc. may result in different values.

## Benefit from the advantages



ESE 120: Controls for speed regulation and lift function



reduced operating costs. Make use of these advantages (for ESE 220/320): • High level of efficiency with excellent

- energy management.Powerful acceleration.
- Rapid change in direction of travel.
- No carbon brushes, maintenance-free drive motor.

#### Productivity-enhancing ergonomics

The arrangement of the operator workstation, sideways to the direction of travel, ensures optimum visibility and reduces potential neck complaints due to frequent changes in direction. A safety switch in the footwell ensures maximum safety.

ESE 120

- Fold-up seat acts as a backrest when the operator is standing.
- Footrest for better support when sitting.

ESE 220/320

- Comfortable seat with adjustment for body weight.
- Padded armrest.
- Padded knee area.



ESE 120 stand-on truck with easily accessible controls and fold-up seat

### Comfortable and safe operation

Safe speed regulation with SpeedControl. SpeedControl ensures maximum safety and effortless control of speed in all situations.

- Roll-back protection on gradients with automatically activated brake.
- Constant travel speed on gradients/ descents.
- Energy recovery with regenerative braking.
- Particularly smooth stepless operation.

### Easy operation and good all-round visibility

The central position of the operator within the enclosed truck contours means they are well protected and have optimum all-round visibility. The easy-to-operate electric steering and the easily accessible controls provide additional comfort:

ESE 120:

- Speed regulation by drive switch.
- Lift function button can be operated without changing grip.
- Stable drive handle provides a secure grip when standing. ESE 220/320:



All drive and lift functions controlled by the multi-functional joystick on the ESE 220/320



• Drive and lift control via multifunction lever.

### Powerful battery

- ESE 120 • Short battery compartment: 3 PZS 375 Ah
- Long battery compartment: 4 PZS 500 Ah.
- Lateral battery exchange.
- ESE 220/320
- 3 PZS 465 Ah.
- Lateral battery exchange.

#### Robustness and ease of servicing

- Easy access to the controller and electronics.
- Robust, enclosed frame.

#### Additional equipment

- Different load wheels (depending on the application).
- Cold store version.
- Code lock.
- Steering wheel on the left (ESE 120).
- Load guard.
- Unloading and steering position display (optional on the ESE 220/320).



Earth Moving and Material Handling Equipment Jeddah-Al-Nahda Dist-Prince Sultan Str. Kingdom of Saudi Arabia P.O. Box 52269 Jeddah 21563 Email kbahaa@arabian-roots.com Mob +966 590950582 Tel +966 126996628 Ext: 245 Fax +966 126221473 The German production facilities in Norderstedt, Moosburg and Landsber are certified.



