

Maximum picking performance with the lowest energy consumption

Most powerful motor for highest throughput efficiency

Intuitive operation via jetPILOT multifunctional steering wheel

Individual options for an optimum workstation

Ergonomic order picking with scissor lift for up to two pallets

Optimised picking processes via remote operation easyPILOT (optional)



ECE 320

Horizontal order picker with scissor lift load section (2,000 kg)

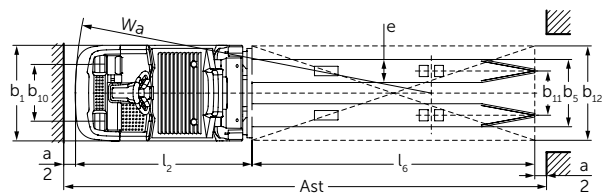
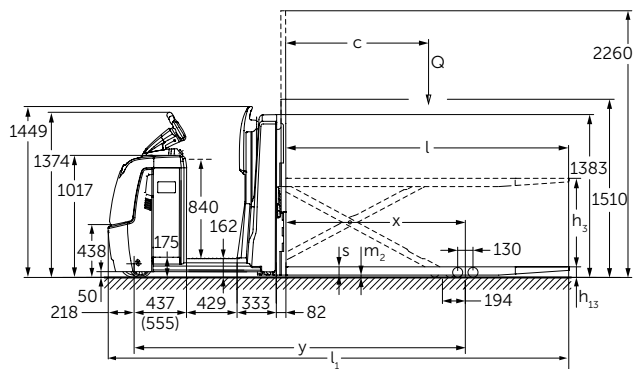
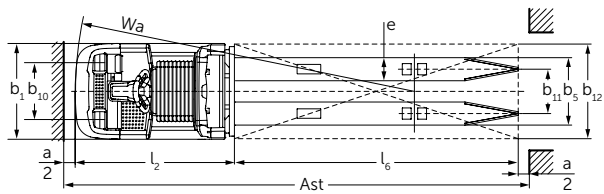
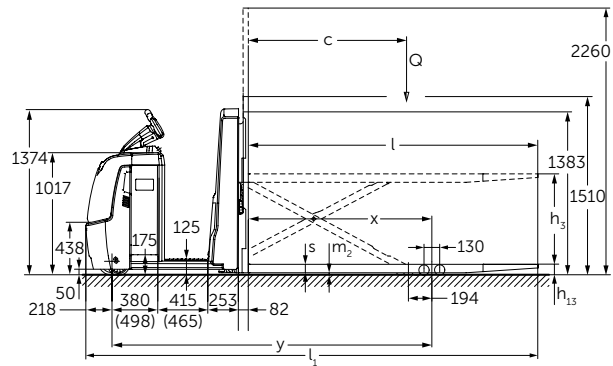
The Jungheinrich ECE 320 combines maximum picking performance with optimum energy efficiency and first-class operator comfort. The basis for this is the combination of high technical performance with a number of ergonomic advantages. Various options packages and the load/steer angle-dependent curveCONTROL assistance system (optional) fully exploit the strengths of the ECE 320: dynamic acceleration, safe cornering and high maximum speed, all the while ensuring best possible energy utilisation.

With scissor lift, the ECE 320 is able to lift loads of up to 2000 kg to an ergonomic height of up to 840 mm so that the operator can conveniently deposit the goods at the "right" height. Users also benefit from a perfect workplace for comfortable order picking thanks to easily accessible controls and accessory parts. The central operator position with its patented jetPILOT multifunction steering wheel also enables intuitive and convenient operation like in a passenger car.

For optimised picking processes with high performance requirements, Jungheinrich offers semi-automatic control of the ECE via a radio control unit in the form of Jungheinrich easyPILOT. This allows the operator to move the truck to the next picking location without having to climb aboard and drive himself. This not only saves unnecessary walking but also increases the picking performance significantly, especially when travelling short distances. Efficiency is further enhanced by driveNAVIGATION, the optional WMS connection for our ECE with easyPILOT.

The Jungheinrich ECE 320 actively helps to raise productivity in the warehouse. In addition to impressive speed and acceleration values, along with the best energy consumption values on the market, the comprehensive options catalogue and the easyPILOT system provide the ideal basis for efficient and ergonomic working.

ECE 320



Technical data in line with VDI 2198

Identification	1.1	Manufacturer (abbreviation)		Jungheinrich	
	1.2	Model		ECE 320 ²⁾	ECE 320 HP ²⁾
	1.3	Drive		Electric	
	1.4	Manual, pedestrian, stand-on, seated, order picker operation		Order pickers	
	1.5	Load capacity/rated load	Q t	2	
	1.6	Load centre distance	c mm	1,200	
	1.8	Load distance	x mm	1,522	
	1.9	Wheelbase	y mm	2,652 ³⁾⁵⁾	2,803 ³⁾⁵⁾
Weights	2.1.1	Net weight incl. battery (see row 6.5)	kg	1,300	1,490
	2.2	Axle load with load front/rear	kg	1,120 / 2,180	1,240 / 2,250
	2.3	Axle load without load front/rear	kg	900 / 400	1,020 / 470
Wheels / frame	3.1	Tyres		Vulkollan	
	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 180 x 65	
	3.5	Wheels, number front/rear (x = driven wheels)		1+1x/4	
	3.6	Tread width, front	b ₁₀ mm	481	
	3.7	Tread width, rear	b ₁₁ mm	345 / 375	
Basic dimensions	4.4	Lift	h ₃ mm	750	
	4.9	Height of tiller in drive position min. / max.	h ₁₄ mm	1,374 / 1,418	
	4.15	Height, lowered	h ₁₃ mm	90	
	4.19	Overall length	l ₁ mm	3,747 ³⁾⁵⁾	3,897 ³⁾⁵⁾
	4.20	Length to face of forks	l ₂ mm	1,347 ³⁾⁵⁾	1,497 ³⁾⁵⁾
	4.21	Overall width	b ₁ /b ₂ mm	810	
	4.22	Fork dimensions	s/e/l mm	70 / 195 / 2,400	
	4.25	Width across forks	b ₅ mm	540 / 570	
	4.32	Ground clearance, centre of wheelbase	m ₂ mm	20	
	4.34	Aisle width for pallets 800 x 1200 lengthways	Ast mm	3,947 ³⁾³⁾⁵⁾	4,097 ³⁾³⁾⁵⁾
	4.35	Turning radius	W _a mm	2,869 ³⁾⁵⁾	3,019 ³⁾⁵⁾
Performance data	5.1	Travel speed laden/unladen - Efficiency	km/h	9.5 / 12.5	
		Travel speed, laden/unladen - drive&ecoPLUS	km/h	9.5 / 14	
		Travel speed Remote, laden/unladen	km/h	5 / 5	
	5.2	Lift speed, laden/unladen	m/s	0.09 / 0.16	
	5.3	Lowering speed, laden/unladen	m/s	0.11 / 0.11	
	5.8	Max. gradeability, laden/unladen	%	6 / 15	
	5.10	Service brake		regenerative	
Electrics	6.1	Drive motor, output S2 60 min. – efficiency/drivePLUS – drive&ecoPLUS	kW	2.8 / 3.2	
	6.2	Lift motor rating at S3 10%	kW	1.5	
	6.3	Battery as per DIN 43531 / 35/36 A, B, C, no		no	
	6.4	Battery voltage/nominal capacity K5	V/Ah	24 / 465 ⁴⁾	
	6.5	Battery weight	kg	370 ⁴⁾	
	6.6	Energy consumption according to VDI cycle efficiency/ drive&ecoPLUS	kWh/h	0.78 / 0.86	0.79 / 0.87
	6.7	Throughput efficiency/drivePLUS	t/h	99 / 104	98 / 104
	6.8	Energy consumption at max. throughput efficiency/ drivePLUS	kWh/h	1.52 / 1.72	1.52 / 1.78
Misc.	8.1	Type of drive control		AC speedCONTROL	
	8.4	Sound pressure level at operator's ear as per EN 12053	dB (A)	62	
	8.6	Steering		Electric steering	

¹⁾ Diagonal in accordance with VDI = value + 200 mm

²⁾ Values for battery compartment L, standard stand-on platform and fork length = 2400 mm

³⁾ With option for extended operator position = value + 50 mm

⁴⁾ With XL battery compartment: 24 V / 620 Ah

⁵⁾ With XL battery compartment = value + 118 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.

ECE 320



Lateral comfort charging plug for lithium-ion batteries (optional)



Individually adjustable, sprung comfort stand-on platform (optional)



Options bracket with radio data terminal WMT 110 (optional)

Dimensions independent of fork length								
Width across forks b_5	Fork length l	Fork overhang	Overall length l_1 1) 2) 3)	Wheelbase y 1) 2) 3)	Turning radius W_a 1) 2) 3)	Load distance x	Aisle width A_{st} 1) 2) 3) 4)	Fork shape
(mm)	(mm)	(mm)	(mm)	mm	mm	mm	mm	
540	2400	878	3747	2652	2869	1522	3947	Round
570	2400	878	3747	2652	2869	1522	3947	Tip
570	2850	1025	4197	2955	3172	1825	4397	Round

¹⁾With XL battery compartment = value + 118 mm

²⁾With option for extended operator position = value + 50 mm

³⁾With the lifting stand-on platform (HP/HP-LJ) = values + 150 mm

⁴⁾Ast value for GL2400 with 2 pallets (2x) 1200x800 mm. All other values without projecting load (fork length = load length)

ECE 320



Benefit from the advantages



Scissor lift for order picking at an ergonomic height



Lifting and lowering from the backrest



Lifting stand-on platform (HP-LJ) for order picking from the 2nd racking level (optional)

Powerful and efficient drive concept

- Powerful acceleration and high top speed.
- Optional drivePLUS option package with highly efficient 3.2 kW motor for even greater drive and acceleration performance.
- Safe cornering speed thanks to load-dependent curveCONTROL (optional).
- Optional drive&ecoPLUS option package for additional energy saving.

Long operating times

Energy-efficient 3-phase AC technology and high battery capacities allow for long operating times:

- Different batteries available from 375-620 Ah.
- Lateral battery exchange for multi-shift applications (optional).

Ideal workplace for maximum picking performance

- Generous space, even for tall operators.
- Diverse and individualised storage options such as the shrink wrap holder on the front cover.
- Additional cushioned stand-on platform (optional).
- Touch mode in the backrest for faster order picking (optional).
- Scissor lift for ergonomic order picking, raising max. 2 pallets weighing up to 2 tonnes to a maximum height of 840 mm.

- Automatic pallet lowering to the optimum height (optional).

Comfortable and safe order picking

The hydraulic lifting stand-on platform (HP) is ideal for frequent order picking from the second racking level (optional):

- Safe and rapid raising of the operator up to the height of the battery panel.
- Operation of platform via foot pedal, leaving hands free for order picking.
- The jetPILOT can be raised together with the platform (HP-LJ), allowing the truck to be positioned even when the platform is raised (optional).

Rugged construction for the toughest applications

- Impact-resistant steel drive panel.
- High-quality stainless steel skirt raised extra high on the front panel.

Complete overview provided by central display and setting instrument

- Activation of the truck by EasyAccess via softkey, PIN code or transponder card (optional).
- The 2-inch display provides information on the battery discharge status, number of operating hours, travel speed as well as error codes and offers the option of selecting from three travel programs via softkey (optional).

All the better to see and be seen

- Integrated dayLED front spotlight for better visibility in poorly lit halls (optional).
- Floor spot: The risk of collision at blind spots is significantly reduced by a red light spot projected on the floor approximately 3 m in front of the truck (optional).

Lithium ion technology

- High truck availability due to extremely short charging times: After a boost charging time of just 30 minutes, the battery is charged to 50% and after 80 minutes to 100%.
- No battery changing necessary.
- Proof voltage always ensures full power.
- Costs are saved due to longer service life and low maintenance compared with lead-acid batteries.
- No charging rooms and ventilation required as there is no build up of gas.

Additional optional equipment

A comprehensive range of accessories allows for individual tailoring to your requirements:

- Various equipment for safe working at the second rack-level.
- Sturdy, universally applicable options bracket, e.g. for radio data transmission components.

ECE 320



More efficient picking processes

Enhanced picking performance and operator relief thanks to intelligent switching between different control options:

- Long distances: manual travel and positioning with jetPILOT.
- Medium distances: full concentration on the picking process. The ECE is moved forwards by double-tapping the easyPILOT radio control unit (optional).
- Short distances: Positioning at the correct pallet and fine adjustment via the easyPILOT travel buttons or using touch mode on the backrest (optional).

High versatility when order picking with easyPILOT

- The travel commands of the easyPILOT are triggered by tapping on an intuitive radio control unit (optional). The operator always has his hands free for order picking.
- Double and triple taps can be used for different travel distances.
- Routes are individually and freely configurable.

The correct pallet, every time, with easyPILOT

When order picking with multiple pallets or roll containers, direct proximity to the correct rack compartment is of utmost importance:

- The ECE stops automatically after a pre-set distance.
- A single tap on the radio control unit immediately stops the truck.

Individual carrying of the easyPILOT radio control unit

- An integrated belt clip allows the control unit to be attached directly to a belt or trouser pocket.
- The optional belt holder ensures an optimum carrying position.

Simple pairing of the easyPILOT radio control unit

- Rapid and easy connection of the radio control unit to the truck via an NFC interface.
- Every radio control unit can be connected to be any ECE – with a 1-to-1 connection established throughout the usage period.

Simple positioning in the racking aisle with easyPILOT

- Two laser scanners protect against collisions and are responsible for safe navigation and positioning in the racking aisle.
- The ECE automatically aligns itself with the nearest rack and navigates along the corresponding rack side (optional).
- The ECE automatically maintains the distance from the rack as set by the operator by stopping the truck.

Optimum safety for the operator and environment with easyPILOT

The operator has full control over the truck at all times:

- Side-mounted, easily visible signal lights indicate the truck status at all times.

- During remote operation, the DayLEDs flash in addition to the signal lights.
- When objects are encountered in the area in front of the truck, the multi-level collision protection immediately stops the ECE.

Simple retrofitting and high availability of easyPILOT

All remote components of the easyPILOT are located in the drive panel and are thus entirely within the truck geometry:

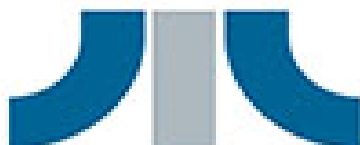
- Impact-protected position of laser scanners: optimum protection for toughest applications or in case of collisions.
- Simple retrofitting: with a corresponding preparation, existing ECE trucks can be quickly and easily retrofitted by replacing the panel (optional).
- High availability: all trucks of the ECE product range are available with easyPILOT.

Enhanced efficiency thanks to optional WMS connection driveNAVIGATION

Our logistics interface connects the easyPILOT with your Warehouse Management System (WMS) for increased efficiency and enhanced process reliability in the warehouse.

- The WMS sends the order, which is transferred to the truck via the logistics interface.
- The operator starts the ECE via the double-tap function.
- The ECE automatically stops at the next pick position.

مجموعة الجذور
العربية



Roots Group
ARABIA

Earth Moving and Material Handling Equipment
Jeddah-Al-Nahda Dist-Prince Sultan Str.
Kingdom of Saudi Arabia
P.O. Box 52289 Jeddah 21583
Email kbahaa@arabian-roots.com
Mob +966 590950582
Tel +966 126996628 Ext: 245
Fax +966 126221473

Jungheinrich Aktiengesellschaft

Friedrich-Ebert-Damm 129
D-22047 Hamburg
Telephone +49 40 6948-0
Telefax +49 40 6948-1777

info@jungheinrich.com
www.jungheinrich.com

The German production
facilities in Norderstedt,
Moosburg and Landsberg
are certified. **ISO 9001**
ISO 14001

Jungheinrich fork lift
trucks meet European
safety requirements.



JUNGHEINRICH
Machines. Ideas. Solutions.