Reach mast technology saves space

Optimum energy efficiency

Spacious operator seat

Sensitive operation

Perfect adaptability



## ETV/ETM 214/216

## Electric reach truck (1,400/1,600 kg)

Compact design, high performance figures, innovative technology and optimum ergonomic working conditions. These are the strengths of our ETM/ETV 214/216 reach trucks – whether for handling pallets or operating in drive-through and drive-in racking, whether for extremely narrow areas, low clearances or for single shift or multi-shift applications: The ETM/ETV 214/216 reach trucks offer the right solution for any application.

The main advantages of this series are:

- Space saving with narrow aisle widths from 2711 mm.
- Residual capacities of 1000 kg to more than 10 metres lift height.
- Greater throughput while simultaneously reducing energy consumption. This is achieved due to the very latest drive and control technology.

Advanced ergonomics and technology promote productivity:

- Generously dimensioned cab and outstanding visibility both during travel and when stacking pallets.
- Automotive layout of the pedals.
- Automatic speed reduction when cornering with curveCONTROL.

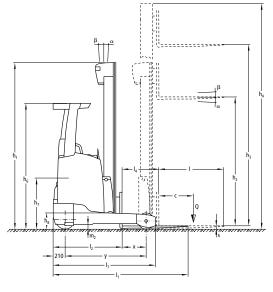
180° and 360° steering: Operator can chose between minimum turning radius and fast change in travel direction. When travelling straight ahead, the steering wheel spinner knob is always positioned at the ergonomically ideal 9 o'clock position.

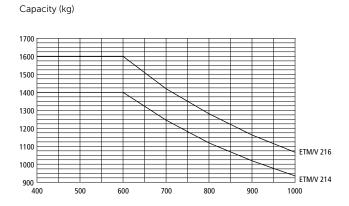
The soloPILOT control lever facilitates sensitive stacking even at high lift heights.

The right configuration for your needs: An extensive catalogue of options with a wide variety of assistance systems and battery versions from 465 to 775 Ah ensures the truck can be adapted to suit any application.

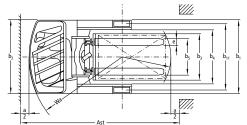


# ETV/ETM 214/216









		ETM 214/ETV 214/E	TM 216/ETV 216 st	andard mast designs		
Designation	Lift h₃ (mm)	Closed height h <sub>1</sub> (mm)	Free lift h <sub>2</sub> (mm)	Extended height h <sub>4</sub> (mm)	Mast tilt forward/ back a/ß (°)	Fork tilt forward backward a/ß (°)
Triplex	4550	2050	1406	5194	1/5	-
DZ	5000	2200	1556	5644	1/5	2/5
	5300	2300	1656	5944	1/5	2/5
	5600	2400	1756	6244	1/3	2/5
	5900	2500	1856	6544	1/3	2/5
	6200	2600	1956	6844	1/3	2/5
	6500	2700	2056	7144	0,5/2	2/5
	6800	2800	2156	7444	0,5/2	2/5
	7100	2900	2256	7744	0,5/2	2/5
	7400	3000	2356	8044	0,5/1	2/5
	7700	3100	2456	8344	0,5/1	2/5
	8000	3200	2556	8644 0,5/1		2/5
	8300	3300	2656	8944	8944 0,5/1	
	8420	3340	2696	9064 0,5/1		2/5
	8720	3440	2796	9364	0,5/1	2/5
	9020	3540	2896	9664	0,5/1	2/5
	9410	3670	3026	10054	-	2/5
	9920	3840	3196	10564	-	2/5
	10250	3950	3306	10894	-	2/5
	10520	4040	3396	11164	-	2/5
	10700	4100	3456	11344	-	2/5

Fork tilt for ETV series only

## Technical data in line with VDI 2198

	1.1	Manufacturer (abbreviation)				lungh	einrich		
Identification	1.2	Model			ETM 214	ETV 214	ETM 216	ETV 216	
	1.3	Drive			Electric			217 220	
	1.4	Manual, pedestrian, stand-on, seated, order picker operation			transverse seat				
	1.5	Load capacity/rated load	Q	t	1.4	1.4	1.6	1.6	
	1.6	Load centre distance	С	mm			00		
	1.8	Load distance	x	mm	3531)	4231)	4031)	4131)	
	1.8.1	Load distance, mast reached forward	X <sub>1</sub>	mm		205			
	1.9	Wheelbase	y	mm	1,410	1,410	1,460	1,460	
	2.1.1	Net weight incl. battery (see row 6.5)	y	kg	2,975	3,000	3,110	3,136	
hts	2.3	Axle loading, unladen front/rear		kg	1,785 / 1,190	1,830 / 1,170	1,835 / 1,275	1,882 / 1,254	
Weights	2.4	Axle loading, fork advanced, laden front/rear		kg	481 / 3,894	572 / 3,828	518 / 4,192	521 / 4,215	
Š	2.5	Axle loading, fork retracted, laden front/rear		kg	1,531 / 2,844	1,628 / 2,772	1,649 / 3,061	1,658 / 3,078	
	3.1	Tyres		Ng	Vulkollan®				
<u></u>		Tyre size, front		mm	Ø 343 x 114				
Wheels / frame	3.2 3.3 3.5	Tyre size, rear		mm	Ø 285 x 100				
fra Sh	3.5	Wheels, number front/rear (x = driven wheels)		111111	1x / 2				
>	3.7	Tread width, rear	b <sub>11</sub>	mm	986	1,136	986	1,136	
	4.1	Tilt of mast/fork carriage forward/backward	α/β	0	300		3 <sup>2)</sup>	1,150	
	4.2	Mast height (lowered)	h <sub>1</sub>	mm					
	4.3	Free lift	h <sub>2</sub>	mm	2,400 1,756				
	4.4	Lift	h <sub>3</sub>	mm			500		
	4.5	Extended mast height	h <sub>4</sub>	mm			244		
	4.7	Height of overhead guard	h <sub>6</sub>	mm			.90		
	4.8	Seat height/standing height	h <sub>7</sub>	mm			)57		
	4.10	height of support arms	h <sub>8</sub>	mm			15 <sup>6)</sup>		
	4.19	Overall length		mm	2,4181)	2,3461)	2,4181)	2,4081)	
Suc	4.20	Length to face of forks		mm	1,2681)	1,1981)	1,2681)	1,258 <sup>1)</sup>	
Sic	4.21	Overall width	$b_1/b_2$		1,120 / 1,120	1,270 / 1,270	1,120 / 1,120	1,270 / 1,270	
ner	4.22	Fork dimensions	s/e/l	mm	1,120 / 1,120			1,2/0 / 1,2/0	
⊢i⊨	4.23	Fork carriage ISO 2328, class/type A, B	5/6/1	111111	40 / 120 / 1,150 2B				
Basic dimensions	4.24	Fork carriage width	b <sub>3</sub>	mm	830				
Ba	4.25	Width across forks	b <sub>5</sub>	mm	335 / 560	335 / 730	335 / 560	335 / 730	
	4.26	Width between support arms/loading areas	b <sub>4</sub>	mm	780	940	780	940	
	4.28	Reach distance	l	mm	5581)	6281)	6081)	6181)	
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub>	mm	330			010	
	4.32.1	Ground clearance, certific of wheelbase	1112	mm	80				
	4.33	Aisle width for pallets 1000 × 1200 crossways	Ast	mm	2,7021)	2,6521)	2,7161)	2,7091)	
	4.34	Aisle width for pallets 800 × 1200 lengthways	Ast	mm	2,7571)	2,6941)	2,7621)	2,753 <sup>1)</sup>	
	4.35	Turning radius	W <sub>a</sub>	mm	1,620	1,620	1,670	1,670	
	4.37	Length across support arms	l <sub>2</sub>	mm	1,780	1,780	1,830	1.830	
	5.1	Travel speed, laden/unladen	7	km/h	1,780 1,780 1,830 1,83			1,030	
	5.2	Lift speed, laden/unladen		m/s			0.48 / 0.75)		
Performance data	5.3	Lowering speed, laden/unladen		m/s	0.51 / 0.75   0.51 / 0.75   0.48 / 0.75   0.48 / 0.75			0.40 / 0.7	
<u> </u>	5.4	Reaching speed, laden/unladen		m/s	0.24 / 0.245				
nar	5.7	Gradeability, laden/unladen		%	9 / 13	9 / 13	8 / 12	8 / 12	
or.	5.8	Max. gradeability, laden/unladen		%	3 / 13		/ 15	0712	
erf	5.9	Acceleration time, laden/unladen		S	4.6 / 4.3 <sup>4)</sup>				
_ ₾	5.10	Service brake		3	electric				
	6.1	Drive motor, output S2 60 min.		kW	8.54)				
	6.2	Lift motor, output at S3 15%	kW		15.55)				
Electrics	6.3	Battery as per DIN 43531/35/36 A, B, C, no			DIN 43531 - B		DIN 43531 - B	DIN 43531 - C	
	6.4	Battery voltage/nominal capacity K5		V/Ah	J 15551 B		465	J 15551 C	
	6.5	Battery weight		kg	750				
	6.6	Energy consumption according to VDI cycle		kWh/h	3.43)	3.43)	3.63)	3.63)	
	6.7	Throughput		t/h	643)	64 <sup>3)</sup>	733)	73 <sup>3)</sup>	
	6.8	Energy consumption at max. throughput		kWh/h	3.73)	3.73)	3.83)	3.8 <sup>3)</sup>	
	8.1	Type of drive control		I /	3.7-7			J.U- <sup>1</sup>	
Misc.	8.2	1 7				Mosfet / AC 150			
	8.3	Working pressure for attachments bar Oil flow for attachments I/mir			20				
	8.4	Oil flow for attachments  Sound pressure level at operator's ear as per EN 12053		dB (A)	68				
	0.7	Journa pressure level at Operator's ear as per EIV 12003		ab (A)		0	· ·		

<sup>1)</sup> different battery sizes change these values

all diliterent Dattery 3/225 change 2.22
mast-dependent
with drive&liftPLUS options package
With drivePLUS options package
With liftPLUS options package

<sup>6)</sup> With load wheel cover: + 30 mm

## Benefit from the advantages



Ergonomic cockpit



Unobstructed visibility thanks to panorama roof



soloPILOT



Colour display

### High-performance mast

Our masts ensure maximum safety and effective utilisation of warehouse capacity at extreme heights.

- Triplex masts with lifting heights up to 10,700 mm.
- Excellent visibility of the load.
- Low clearances at high lift heights.
- High residual capacities even at extreme lift heights.
- · Patented mast reach cushioning (optional).
- Optional energy recovery through patented regenerative lowering.

#### Ergonomic cockpit

Maximum performance due to the comfortable operator seat.

- Fabric seat with adjustment options for seating position, backrest and body
- Plenty of storage options.
- Important controls within easy reach.
- Generous space, even for tall oper-
- Electric steering (choose 180° or 360° mode). When driving in a straight line, the steering wheel spinner knob is always at the optimum ergonomic
- Automotive layout of the pedals.
- · Optional panorama overhead guard provides a clear view of the raised load.

#### soloPILOT control lever

• The control lever for activating all hydraulic functions, also selects the direction of travel and the horn.

- All controls are within the operator's field of vision and a single function is clearly assigned to each one.
- Travel direction switch, features intuitive direction change.
- · Sensitive control of all functions for operating accuracy within millimetres.
- · Additional attachments, such as an optional fork positioner are also optimally controlled with the soloPILOT.
- multiPILOT available as an option.

### Easy-to-read operator display

The most important operating data at a

- Display of direction of travel and wheel position.
- · Battery status, with display of time remaining until the next charge required.
- 3 adjustable travel programs for individual adjustment to any requirements.
- · Operating hours and time of day.
- · Lift height (optional).
- · Load weight (optional).
- EasyAccess Keyless access system via softkey, PIN code or optional trans-

## Assistance systems and options

For more power and full load stability:

operationCONTROL continuously measures the load weight and compares it with the residual capacity of the truck. An optical warning on the operator display as well as an acoustic warning are triggered when approaching the limit value.

- positionCONTROL with SNAP function enables simple and fast stacking without additional pressing of buttons.
- liftNAVIGATION transfers stacking orders automatically from the warehouse management system. This prevents stacking errors.
- · The anti-slip system ensures more traction on wet or dusty floors.
- · Fork camera and ergonomically adjustable motor enable especially safe and efficient stacking and retrieval.

### Option packages for different operating conditions

- · 'Efficiency' for long operating times with one battery.
- 'drivePLUS' for frequent journeys over long distances.
- 'liftPLUS' for extensive lifting to high lift
- · Holder for radio data terminal, writing board or video monitor, for example.

### Lithium-ion technology

- · High degree of availability thanks to extremely short charging times.
- · No battery exchange required.
- Cost savings 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.
- · Longer service life with 5-year Jungheinrich guarantee.

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





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

info@jungheinrich.com www.jungheinrich.com