

**Powerful and efficient 3-phase  
AC drive, lift and steer control**

**Ergonomic and spacious operator  
compartment**

**Compact design for maximum  
maneuverability**

**The right performance package to  
meet your application's needs**



## **ETV / ETM 214 / 216**

### **Sit-Down Moving Mast Reach Truck (3,000-3,500 lbs.)**

The ETV / ETM 214 / 216 reach trucks offer the right solution for any application. What features are most important in your application?

- Performance – Can drive up to 8.7 mph<sup>1)</sup> (loaded or unloaded) with excellent acceleration characteristics.
- Energy Efficient – Jungheinrich 4<sup>th</sup> generation AC technology allows for up to two shifts on a single battery charge.
- Outstanding residual capacities – With lift heights over 35 feet, this truck

can reach your tallest racks and can typically retain full capacity over 27 feet (depending on the reach truck configuration).

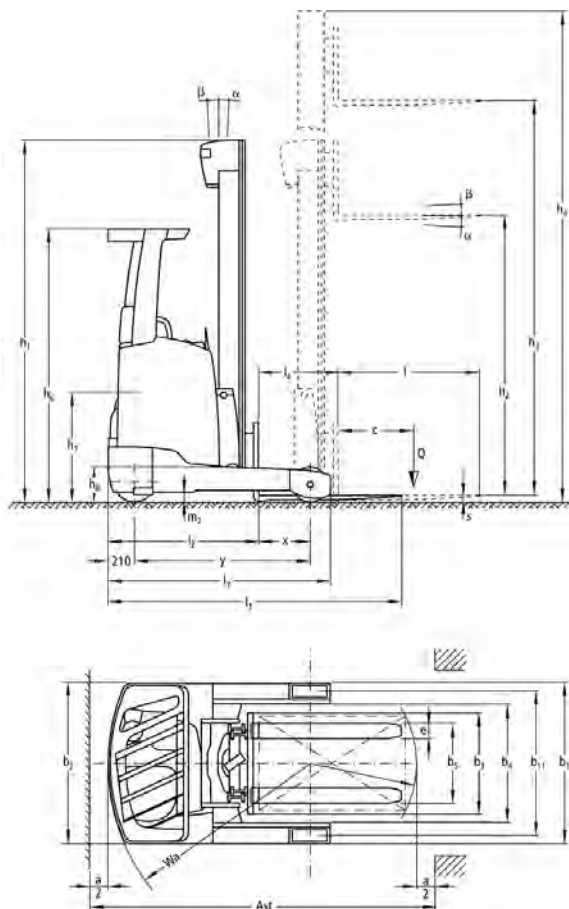
Premium ergonomics come standard with all moving mast reach trucks.

- Spacious, highly-adjustable operator compartment allows for a multitude of operators.
- Automotive-style drive pedals allow for intuitive operation.

- The Solo-Pilot and Multi-Pilot control handles are both ergonomic and highly productive.
- Curve Control (automatic speed reduction during cornering) provides the operator with confidence while driving the truck, particularly when working in confined areas.

1) With "Drive Plus" Option. Refer to specification sheet for standard drive speeds.

# ETV/ETM 214/216



**Mast Table ETV / ETM 214 / 216**

	Collapsed mast height $h_1$		Lift height $h_3$		Free lift $h_2$		Extended mast height $h_4$		Mast tilt forward / backward	Fork tilt* forward / backward
	in	mm	in	mm	in	mm	in	mm	$\alpha^\circ / \beta^\circ$	$\alpha^\circ / \beta^\circ$
Three-stage mast DZ (Full free-lift)	81	2,050	179	4,550	39.5	1,406	221	5,194	1 / 5	—
	87	2,200	196	5,000	45.5	1,556	238	5,644	1 / 5	2 / 5
	91	2,300	208	5,300	49	1,656	250	5,944	1 / 5	2 / 5
	95	2,400	220	5,600	53	1,756	262	6,244	1 / 3	2 / 5
	99	2,500	232	5,900	57	1,856	274	6,544	1 / 3	2 / 5
	103	2,600	244	6,200	61	1,956	286	6,844	1 / 3	2 / 5
	107	2,700	255	6,500	65	2,056	297	7,144	0.5 / 2	2 / 5
	111	2,800	267	6,800	69	2,156	309	7,444	0.5 / 2	2 / 5
	115	2,900	279	7,100	73	2,256	321	7,744	0.5 / 2	2 / 5
	119	3,000	291	7,400	77	2,356	333	8,044	0.5 / 1	2 / 5
	123	3,100	303	7,700	80.5	2,456	345	8,344	0.5 / 1	2 / 5
	126	3,200	314	8,000	84.5	2,556	357	8,644	0.5 / 1	2 / 5
	130	3,300	326	8,300	88.5	2,656	368	8,944	0.5 / 1	2 / 5
	132	3,340	331	8,420	90	2,696	373	9,064	0.5 / 1	2 / 5
	136	3,440	343	8,720	94	2,796	385	9,364	0.5 / 1	2 / 5
	140	3,540	355	9,020	98	2,896	397	9,664	0.5 / 1	2 / 5
	145	3,670	370	9,410	103	3,026	412	10,054	—	2 / 5
	152	3,840	390	9,920	110	3,196	432	10,564	—	2 / 5
	156	3,950	403	10,250	114	3,306	445	10,894	—	2 / 5
	160	4,040	414	10,520	117	3,396	456	11,164	—	2 / 5
162	4,100	421	10,700	120	3,456	463	11,344	—	2 / 5	

# Technical Data

				Jungheinrich		Jungheinrich		
				ETM 214		ETV 214		
Characteristics	1.1	Manufacturer						
	1.2	Model			GE		GE	
		G=fork; E=integrated sideshifter						
	1.3	Drive			electric		electric	
	1.4	Type of operation			seat		seat	
	1.5	Load capacity / rated load	Q	lbs   kg	3,000   1,380		3,000   1,380	
	1.6	Load center distance	c	in   mm	24   610		24   610	
	1.8	Load distance, center of drive axle to fork	x	in   mm	13.6 <sup>1)</sup>   345 <sup>1)</sup>		16.4 <sup>1)</sup>   417 <sup>1)</sup>	
		Mast pushed forward	x <sub>1</sub>	in   mm	8.1   205		8.1   205	
1.9	Wheelbase	y	in   mm	55.5   1,410		55.5   1,410		
Weights	2.1	Service weight including battery (see line 6.5)			6,545	2,975	6,600	3,000
	2.3	Axle loading – unloaded, drive / load			3,935 / 2,623	1,785 / 1,190	4,034 / 2,574	1,830 / 1,170
	2.4	Axle loading – fork advanced, loaded drive / load			1,060 / 8,585	481 / 3,894	1,262 / 8,440	572 / 3,828
	2.5	Axle loading – fork retracted, loaded drive / load			3,376 / 6,270	1,531 / 2,844	3,590 / 6,112	1,628 / 2,772
Wheels, Chassis	3.1	Tires			Vulkollan®		Vulkollan®	
	3.2	Tire size, drive		in   mm	13.5 x 4.5	343 x 114	13.5 x 4.5	343 x 114
	3.3	Tire size, load		in   mm	11.2 x 3.9	285 x 100	11.2 x 3.9	285 x 100
	3.5	Wheels – number, drive / load (x = driven wheels)			1x / 2		1x / 2	
	3.7	Track width, load side	b <sub>11</sub>	in   mm	38.8	986	44.7	1,136
Dimensions	4.1	Mast – fork carriage tilt, forward / backward			degrees		1 / 3 <sup>2)</sup>	
	4.2	Collapsed mast height	h <sub>1</sub>	in   mm	103	2,600	103	2,600
	4.3	Free-lift	h <sub>2</sub>	in   mm	61 <sup>7)</sup>	1,956	61 <sup>7)</sup>	1,956
	4.4	Maximum fork height (MFH)	h <sub>3</sub>	in   mm	244	6,200	244	6,200
	4.5	Overall extended height (OAE)	h <sub>4</sub>	in   mm	309	6,844	309	6,844
	4.7	Overhead load guard (cab) height	h <sub>6</sub>	in   mm	86.3	2,190	86.3	2,190
	4.8	Seat height / standing height	h <sub>7</sub>	in   mm	37.8	960	37.8	960
	4.10	Height of wheel arms	h <sub>8</sub>	in   mm	12.5	315	12.5	315
	4.19	Overall length	l <sub>1</sub>	in   mm	95.2 <sup>1)</sup>	2,418 <sup>1)</sup>	92.4 <sup>1)</sup>	2,346 <sup>1)</sup>
	4.20	Length to fork face, headlength	l <sub>2</sub>	in   mm	50.0 <sup>1)</sup>	1,268 <sup>1)</sup>	47.1 <sup>1)</sup>	1,196 <sup>1)</sup>
	4.21	Overall width	b <sub>1</sub> / b <sub>2</sub>	in   mm	44.1 / 44.1	1,120 / 1,120	50 / 50	1,270 / 1,270
	4.22	Fork dimensions, thick / width	s / e / l	in   mm	1.6 / 4.7 / 45.3	40 / 120 / 1,150	1.6 / 4.7 / 45.3	40 / 120 / 1,150
	4.23	Fork carriage, class / type A,B			2 / B		2 / B	
	4.24	Fork carriage width	b <sub>3</sub>	in   mm	32.7	830	32.7	830
	4.25	Overall fork width	b <sub>5</sub>	in   mm	13.2 / 22.1	335 / 560	13.2 / 28.7	335 / 730
4.26	Distance between wheel arms / loading surfaces	b <sub>4</sub>	in   mm	30.7	782	37	942	
4.32	Ground clearance, center of wheelbase	m <sub>2</sub>	in   mm	3.14	80	3.14	80	
4.33	Aisle width (for 48 x 40 pallets)	Ast	in   mm	111 <sup>3)</sup>	2,819 <sup>3)</sup>	111 <sup>3)</sup>	2,819 <sup>3)</sup>	
4.37	Length across wheel arms	l <sub>7</sub>	in   mm	70.6	1,792	70.6	1,792	
Performance	5.1	Travel speed, loaded / unloaded			6.8-8.7 <sup>5)</sup>	11-14 <sup>3)</sup>	6.8-8.7 <sup>5)</sup>	11-14 <sup>3)</sup>
	5.2	Lift speed, loaded / unloaded			74.8-100.4 / 137.8 <sup>6)</sup>	0.38-0.51 / 0.070 <sup>4)</sup>	74.8-100.4 / 137.8 <sup>6)</sup>	0.38-0.51 / 0.070 <sup>4)</sup>
	5.3	Lowering speed, loaded / unloaded			108.3	0.55	108.3	0.55
	5.4	Reach speed, loaded / unloaded			39.4-47.2 <sup>6)</sup>	0.20-0.24 <sup>4)</sup>	39.4-47.2 <sup>6)</sup>	0.20-0.24 <sup>4)</sup>
	5.7	Gradeability, loaded / unloaded			9 / 13		9 / 13	
	5.8	Maximum gradeability, loaded / unloaded			10 / 15		10 / 15	
	5.9	Acceleration time, loaded / unloaded			5.1-4.6 / 4.8-4.3 <sup>3)</sup>		5.1-4.6 / 4.8-4.3 <sup>3)</sup>	
	5.10	Service brake			electric		electric	
Motors	6.1	Drive motor (rating S <sub>2</sub> 60 minutes)			4.5-6.9 / 6.0-9.3 <sup>5)</sup>		4.5-6.9 / 6.0-9.3 <sup>5)</sup>	
	6.2	Lift motor rating at S <sub>3</sub> 15%			10-14 / 13.4-18.8 <sup>6)</sup>		10-14 / 13.4-18.8 <sup>6)</sup>	
	6.4	Battery voltage			48	500	48	500
	6.5	Battery weight, minimum			1,653	750	1,653	750
		Battery dimensions, l / w / h			40.7 / 13.9 / 31.0	1,035 / 353 / 787	48.1 / 11.1 / 31.0	1,223 / 283 / 787
Other	8.1	Type of drive control			impulse / AC		impulse / AC	
	8.2	Operating pressure for attachments			2,176	150	2,176	150
	8.3	Oil volume for attachments			5.3	20	5.3	20
	8.4	Sound level at driver's ear			68		68	

- 1) Other battery sizes change these values
- 2) Dependent on mast
- 3) Including 8 inch (200 mm) maneuvering space; second value is for floor storage
- 4) Lift height up to 220.5 inches
- 5) Second value for "Drive Plus" option
- 6) Second value for "Lift Plus" option
- 7) Includes load backrest of 39.5 inches / 1,000 mm

Characteristics	1.1 Manufacturer			Jungheinrich		Jungheinrich		1.1	
	1.2 Model			ETM216		ETV216			1.2
1.3 Drive	G=fork; E=integrated sideshifter			GE		GE		1.3	
	1.4 Type of operation			electric seat		electric seat			1.4
1.5	Load capacity / rated load	Q	lbs	kg	3,500	1,580	3,500	1,580	
1.6	Load center distance	c	in	mm	24	610	24	610	1.6
1.8	Load distance, center of drive axle to fork	x	in	mm	15.6 <sup>1)</sup>	395 <sup>1)</sup>	15.6 <sup>1)</sup>	395 <sup>1)</sup>	1.8
	Mast pushed forward	x <sub>1</sub>	in	mm	8.1	205	8.1	205	
1.9	Wheelbase	y	in	mm	57.5	1,460	57.5	1,460	1.9
2.1	Service weight including battery (see line 6.5)		lbs	kg	6,842	3,110	6,899	3,136	2.1
2.3	Axle loading – unloaded, drive / load		lbs	kg	4,045 / 2,811	1,835 / 1,275	4,149 / 2,765	1,882 / 1,254	2.3
2.4	Axle loading – fork advanced, loaded drive / load		lbs	kg	1,142 / 9,242	518 / 4,192	1,149 / 9,293	521 / 4,215	2.4
2.5	Axle loading – fork retracted, loaded drive / load		lbs	kg	3,636 / 6,749	1,649 / 3,061	3,656 / 6,786	1,658 / 3,078	2.5
3.1	Tires				Vulkollan®		Vulkollan®		3.1
3.2	Tire size, drive		in	mm	13.5 x 4.5	343 x 144	13.5 x 4.5	343 x 144	3.2
3.3	Tire size, load		in	mm	11.2 x 3.9	285 x 100	11.2 x 3.9	285 x 100	3.3
3.5	Wheels – number, drive / load (x = driven wheels)				1x / 2		1x / 2		3.5
3.7	Track width, load side	b <sub>11</sub>	in	mm	38.8	986	44.7	1,136	3.7
4.1	Mast – fork carriage tilt, forward / backward		degrees		1 / 3 <sup>2)</sup>		1 / 3 <sup>2)</sup>		4.1
4.2	Collapsed mast height	h <sub>1</sub>	in	mm	103	2,600	103	2,600	4.2
4.3	Free-lift	h <sub>2</sub>	in	mm	61 <sup>7)</sup>	1,956	61 <sup>7)</sup>	1,956	4.3
4.4	Maximum fork height (MFH)	h <sub>3</sub>	in	mm	244	6,200	244	6,200	4.4
4.5	Overall extended height (OAE)	h <sub>4</sub>	in	mm	309	6,844	309	6,844	4.5
4.7	Overhead load guard (cab) height	h <sub>6</sub>	in	mm	86.3	2,190	86.3	2,190	4.7
4.8	Seat height / standing height	h <sub>7</sub>	in	mm	37.8	960	37.8	960	4.8
4.10	Height of wheel arms	h <sub>8</sub>	in	mm	12.5	315	12.5	315	4.10
4.19	Overall length	l <sub>1</sub>	in	mm	95.2 <sup>1)</sup>	2,418 <sup>1)</sup>	95.2 <sup>1)</sup>	2,418 <sup>1)</sup>	4.19
4.20	Length to fork face, headlength	l <sub>2</sub>	in	mm	50.0 <sup>1)</sup>	1,268 <sup>1)</sup>	50.0 <sup>1)</sup>	1,268 <sup>1)</sup>	4.20
4.21	Overall width	b <sub>1</sub> / b <sub>2</sub>	in	mm	44.1 / 44.1	1,120 / 1,120	50 / 50	1,270 / 1,270	4.21
4.22	Fork dimensions, thick / width	s / e / l	in	mm	1.6 / 4.7 / 45.3	40 / 120 / 1,150	1.6 / 4.7 / 45.3	40 / 120 / 1,150	4.22
4.23	Fork carriage, class / type A,B				2 / B		2 / B		4.23
4.24	Fork carriage width	b <sub>3</sub>	in	mm	32.7	830	32.7	830	4.24
4.25	Overall fork width	b <sub>5</sub>	in	mm	13.2 / 22.1	335 / 560	13.2 / 28.7	335 / 730	4.25
4.26	Distance between wheel arms / loading surfaces	b <sub>4</sub>	in	mm	30.7	782	37	942	4.26
4.32	Ground clearance, center of wheelbase	m <sub>2</sub>	in	mm	3.14	80	3.14	80	4.32
4.33	Aisle width (for 48 x 40 pallets)	Ast	in	mm	112 <sup>3)</sup>	2,845 <sup>3)</sup>	112 <sup>3)</sup>	2,845 <sup>3)</sup>	4.33
4.37	Length across wheel arms	l <sub>7</sub>	in	mm	72.5	1,842	72.5	1,842	4.37
5.1	Travel speed, loaded / unloaded		mph	kmh	6.8-8.7 <sup>5)</sup>	11-14 <sup>3)</sup>	6.8-8.7 <sup>5)</sup>	11-14 <sup>3)</sup>	5.1
5.2	Lift speed, loaded / unloaded		ft / min	m/s	68.9-94.5 / 137.8 <sup>6)</sup>	0.35-0.48 / 0.070 <sup>4)</sup>	68.9-94.5 / 137.8 <sup>6)</sup>	0.35-0.48 / 0.070 <sup>4)</sup>	5.2
5.3	Lowering speed, loaded / unloaded		ft / min	m/s	108.3	0.55	108.3	0.55	5.3
5.4	Reach speed, loaded / unloaded		ft / min	m/s	39.4-47.2 <sup>6)</sup>	0.20-0.24 <sup>4)</sup>	39.4-47.2 <sup>6)</sup>	0.20-0.24 <sup>4)</sup>	5.4
5.7	Gradeability, loaded / unloaded		%		8 / 12		8 / 12		5.7
5.8	Maximum gradeability, loaded / unloaded		%		10 / 15		10 / 15		5.8
5.9	Acceleration time, loaded / unloaded		sec		5.1-4.6 / 4.8-4.3 <sup>3)</sup>		5.1-4.6 / 4.8-4.3 <sup>3)</sup>		5.9
5.10	Service brake				electric		electric		5.10
6.1	Drive motor (rating S <sub>2</sub> 60 minutes)		kW / hp		4.5-6.9 / 6.0-9.3 <sup>5)</sup>		4.5-6.9 / 6.0-9.3 <sup>5)</sup>		6.1
6.2	Lift motor rating at S <sub>3</sub> 15%		kW / hp		10-14 / 13.4-18.8 <sup>6)</sup>		10-14 / 13.4-18.8 <sup>6)</sup>		6.2
6.4	Battery voltage		V	Ah	48	500 <sup>1)</sup>	48	500 <sup>1)</sup>	6.4
6.5	Battery weight, minimum		lbs	kg	1,653	750	1,653	750	6.5
	Battery dimensions, l / w / h		in	mm	40.7 / 13.9 / 31.0	1,035 / 353 / 787	48.1 / 11.1 / 31.0	1,223 / 283 / 787	
8.1	Type of drive control				impulse / AC		impulse / AC		8.1
8.2	Operating pressure for attachments		psi	bar	2,176	150	2,176	150	8.2
8.3	Oil volume for attachments		gal / min	l / min	5.3	20	5.3	20	8.3
8.4	Sound level at driver's ear		dB (A)		68		68		8.4

- 1) Other battery sizes change these values
- 2) Dependent on mast
- 3) Including 8 inch (200 mm) maneuvering space; second value is for floor storage
- 4) Lift height up to 220.5 inches
- 5) Second value for "Drive Plus" option
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- 7) Includes load backrest of 39.5 inches / 1,000 mm



# The Jungheinrich® Advantage



# The Jungheinrich® Advantage

## Jungheinrich's AC technology

- Jungheinrich's 4<sup>th</sup> generation AC technology provides improved performance and energy efficiency.
- Sealed motors, controllers and connectors provide for better durability especially when working in dusty or damp applications.
- AC Electric Power Steering provides improved serviceability, performance and energy efficiencies.
- Lower maintenance costs by removing wear items, such as contactors, brushes and springs.

## Premium ergonomics

- Full suspension fabric seat with fore/aft, backrest and weight adjustment.
- Highly-adjustable operator compartment, which allows operators of many sizes to be both comfortable and productive.
- Ergonomic and intuitive operator controls.
- All drive and hydraulic functions are comfortably controlled by either the Multi-Pilot or Solo-Pilot control handles.

- Low effort AC electric power steering.
- LCD operator display.
- Provides immediate feedback to both the operator and technician.
- 360° steer direction indicator.
- Battery discharge indicator.
- Three performance modes which can be modified to suit any application.
- Optional readouts such as lift height indicator and load weight display.

## Robust and durable mast design

- Outstanding residual capacities.
- Excellent visibility both through and around the mast.
- Patented and proprietary mast reach cushioning allows for an improvement in operational productivities.
- Optional regenerative lowering can provide even more battery life, especially in those high lift applications.



The controls for every application

## Performance-enhancing options to meet your application

- "Drive Plus" option increases drive speeds to 8.7 mph which can be especially beneficial for those large warehouse applications.
- "Lift Plus" option increases lift speeds which can be especially beneficial for those high lift applications.
- Anti-Slip Regulation (ASR) option for controlled acceleration on smooth or wet surfaces.
- A multitude of lift and lower limit options.



Ergonomic cab