

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

**Ergonomic and spacious operator's  
compartment**

**Compact design for maximum  
maneuverability**

**Reliability and durability are built  
into every truck**



## ETV 110 / 112

### Sit-Down Moving Mast Reach Truck (2,200, 2,600 lbs.)

The ETV 110 / 112 reach trucks offer the right solution for virtually any application. What features are most important in your application?

- Performance – Can drive up to 6.8 mph (loaded or unloaded) with excellent acceleration characteristics.
- Energy Efficient – Jungheinrich 3<sup>rd</sup> generation AC technology allows for up to two shifts on a single battery charge.

- Extremely Compact Chassis – The Jungheinrich space-saving design allows the operator to efficiently and effectively work in aisles well under 9 feet in width.<sup>1)</sup>

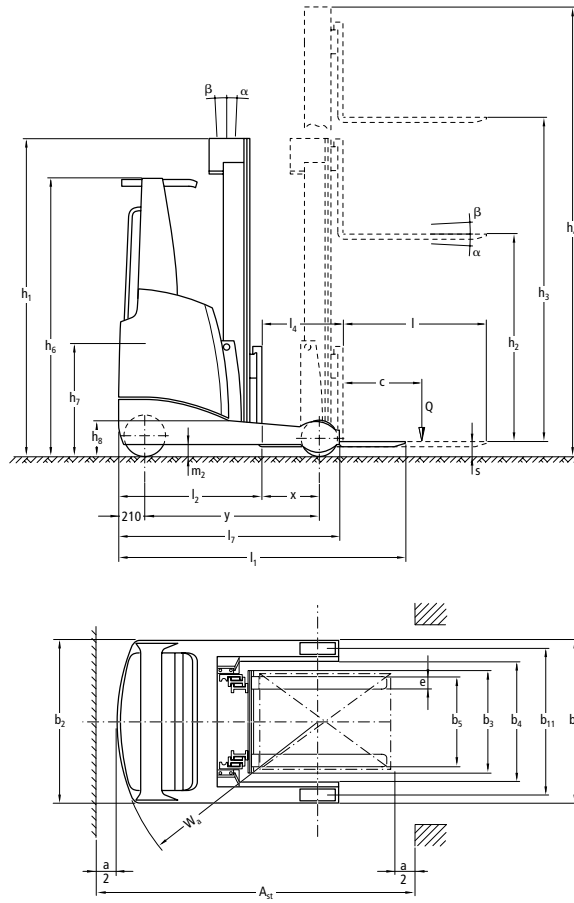
Premium ergonomics come standard with all moving mast reach trucks.

- 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) Minimum aisle width is dependent upon many factors. Contact your local dealer for more information.

# ETV 110 / 112



Mast Table ETV 110 / 112									
Designation	Collapsed mast height $h_1$		Lift height $h_3$		Free lift $h_2^*$		Extended mast height $h_4^*$		Mast tilt forward / backward
	in	mm	in	mm	in	mm	in	mm	$\alpha^\circ/\beta^\circ$
Duplex	81	2,050	121	3,090	3	100	160	3,667	2/5
	87	2,200	133	3,390	3	100	172	3,967	2/5
	91	2,300	141	3,590	3	100	180	4,167	2/5
	94.5	2,400	149	3,790	3	100	188	4,367	2/5
Triplex	81	2,050	179	4,550	39.5	1,408	221	5,192	2/5
	87	2,200	195	5,000	45.5	1,558	238	5,642	1/3
	90	2,280	206	5,240	48.5	1,638	248	5,882	1/3
	91	2,300	208	5,300	49.5	1,658	250	5,942	1/3
	94.5	2,400	220	5,600	53	1,758	262	6,242	1/3
	98.5	2,500	232	5,900	57	1,858	274	6,542	1/3
	103	2,600	244	6,200	61	1,958	286	6,842	1/3
	107	2,700	255	6,500	65	2,058	297	7,142	1/3
111	2,800	267	6,800	69	2,158	309	7,442	1/3	
115	2,900	279	7,100	73	2,258	321	7,742	1/3	

\*Includes standard load backrest with height 39.4 inches.

# Technical Data

as of: 11/2011

Characteristics	1.1 Manufacturer			Jungheinrich		Jungheinrich		1.1			
	1.2 Model			ETV 110		ETV 112			1.2		
G = fork, E = integrated sideshift				GE		GE					
1.3 Drive				electric		electric		1.3			
1.4 Type of operation				seated		seated		1.4			
Weights	1.5	Load capacity / rated load	Q	lbs	kg	2,175	990	2,600	1,190	1.5	
	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	13.6 <sup>1)</sup>	345	16.9 <sup>1)</sup>	430	1.8	
		Mast pushed forward	x <sub>1</sub>	in	mm	6.7	170	6.7	170		
	1.9	Wheelbase	y	in	mm	51.2	1,300	54.5	1,385	1.9	
	2.1	Service weight including battery (see line 6.5)		lbs	kg	5,644	2,560	5,688	2,580	2.1	
	2.3	Axle loading – unloaded, drive / load		lbs	kg	3,499 / 2,145	1,587 / 973	3,499 / 2,189	1,587 / 993	2.3	
	2.4	Axle loading – fork advanced, loaded drive / load		lbs	kg	1,398 / 6,451	634 / 2,926	1,138 / 7,196	516 / 3,264	2.4	
	2.5	Axle loading – fork retracted, loaded drive / load		lbs	kg	2,826 / 5,022	1,282 / 2,278	3000 / 5,333	1,361 / 2,419	2.5	
Wheels, Chassis	3.1	Tires				Vulkollan®		Vulkollan®		3.1	
	3.2	Tire size, drive		in	mm	13.5 x 4.5	343 x 114	13.5x4.5	343 x 114	3.2	
	3.3	Tire size, load		in	mm	9.0 x 3.3	230 x 85	9.0x3.3	230 x 85	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	39.1	993	39.1	993	3.7	
Dimensions	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	1,958 <sup>3)</sup>	61	1,958 <sup>3)</sup>	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	286 <sup>3)</sup>	6,842	286 <sup>3)</sup>	6,842	4.5	
	4.7	Overhead load guard (cab) height	h <sub>6</sub>	in	mm	84.6	2,150	84.6	2,150	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	11.6	295	11.6	295	4.10	
	4.19	Overall length	l <sub>1</sub>	in	mm	91.1 <sup>1)</sup>	2,315	91.1 <sup>1)</sup>	2,315	4.19	
	4.20	Length to fork face, headlength	l <sub>2</sub>	in	mm	45.9 <sup>1)</sup>	1,165	45.9 <sup>1)</sup>	1,165	4.20	
	4.21	Overall width	b <sub>1</sub> / b <sub>2</sub>	in	mm	44.1 / 44.1	1,120 / 1,120	44.1 / 44.1	1,120 / 1,120	4.21	
	4.22	Fork dimensions, thick / width	s / e / l	in	mm	1.6 / 3.1 / 45.3	40 x 80 x 1,150	1.6 / 3.1 / 45.3	40 x 80 x 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	31.5	800	31.5	800	4.24	
	4.25	Baseleg opening (BLO)	b <sub>5</sub>	in	mm	11.7 / 26.6	296 / 677	11.7 / 26.6	296 / 677	4.25	
	4.26	Width across forks minimum / maximum	b <sub>4</sub>	in	mm	35.4	900	35.4	900	4.26	
	4.28	Reach distance	l <sub>4</sub>	in	mm	20.3 <sup>1)</sup>	515	23.6 <sup>1)</sup>	600	4.28	
4.32	Ground clearance, center of wheelbase	m <sub>2</sub>	in	mm	3.1	85	3.1	85	4.32		
4.33	Aisle width (for 48 x 40 pallets L x W)	Ast	in	mm	110 <sup>1)3)</sup>	2,803 <sup>1)3)</sup>	111 <sup>1)3)</sup>	2,809 <sup>1)3)</sup>	4.33		
4.34	Aisle width (for 48 x 48 pallets L x W)	Ast	in	mm	112 <sup>1)3)</sup>	2,854 <sup>1)3)</sup>	112 <sup>1)3)</sup>	2,864 <sup>1)3)</sup>	4.34		
4.35	Turning radius	Wa	in	mm	59.6	1,515	62.8	1,595	4.35		
4.37	Length across wheel arms	l <sub>7</sub>	in	mm	64.6	1,640	68.0	1,725	4.37		
Performance	5.1	Travel speed, loaded / unloaded		mph	kph	6.8 / 6.8 <sup>4)</sup>	11 / 11	6.8 / 6.8 <sup>4)</sup>	11 / 11	5.1	
	5.2	Lift speed, loaded / unloaded		ft / min	m / s	94.5 / 137.8	0.48 / 0.70	94.5 / 137.8	0.43 / 0.70	5.2	
	5.3	Lowering speed, loaded / unloaded		ft / min	m / s	98.4 / 98.4	0.50 / 0.50	98.4 / 98.4	0.50 / 0.50	5.3	
	5.4	Reach speed, loaded / unloaded		ft / min	m / s	39.4 / 39.4 <sup>2)</sup>	0.20 / 0.20	39.4 / 39.4 <sup>2)</sup>	0.20 / 0.20	5.4	
	5.7	Gradeability, loaded / unloaded			%	7 / 10		7 / 10		5.7	
	5.8	Maximum gradeability, loaded / unloaded			%	10 / 15		10 / 15		5.8	
	5.9	Acceleration time, loaded / unloaded			s	4.8 / 4.4		4.9 / 4.4		5.9	
	5.10	Service brake				electric		electric		5.10	
	Motors	6.1	Drive motor (rating 60 minutes)		hp	kW	9.3	6.9	9.3	6.9	6.1
		6.2	Lift motor rating at 15%		hp	kW	13.4	10	13.4	10	6.2
6.4		Battery voltage			V	48		48		6.4	
		Battery, nominal capacity			Ah	375 <sup>1)</sup>		375 <sup>1)</sup>			
6.5		Battery weight, minimum		lbs	kg	1,562	556	1,562	556	6.5	
	Battery dimensions, l x w x h		in	mm	40.7 x 13.9 x 30.9	1,034x353x785	40.7 x 13.9 x 30.9	1,034x353x785			
Other	8.1	Type of drive control				MOSFET/AC		MOSFET/AC		8.1	
	8.2	Operating pressure for attachments		psi	bar	2,175	150	2,175	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) For floor storage with 8 inches maneuvering space included
- 4) In load direction 6.2 mph
- 5) Includes backrest with height of 39.4 inches / 1,000 mm

# The Jungheinrich® Advantage

## Jungheinrich's AC technology

Jungheinrich's 3<sup>rd</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 and backrest.
- Highly-adjustable operator compartment, which allows for 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.



SOLO-PILOT



Ergonomic cab

## 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.

## Robust and durable mast design

- Capacities above 23 feet utilizing either a simplex or triplex mast.
- Outstanding residual capacities (able to retain full capacity above 22 feet).
- Excellent visibility both through and around the mast.
- Includes integral sideshifter.