

Jungheinrich® proprietary 3-phase AC technology in drive, lift and steering motors

Solid pneumatic tires and high ground clearance for indoor and outdoor use

Side-facing seat provides excellent visibility when transporting high loads

Smooth and sensitive operation with SOLO-PILOT hydraulic control

Jungheinrich Curve Control for advanced stability during cornering

All weather cabins for frequent outdoor applications (optional)



## ETV C16 / ETV C20

**Electric Moving Mast Reach Truck (3,500; 4,400 lbs.)**

The ETV C16/C20 series of reach trucks is suitable for both indoor and outdoor use, including operation on smooth concrete warehouse floors or for loading/unloading on bumpy asphalt surfaces. Whether handling pallets, operating in single- or multi-shift applications or frequently working outside, these reach trucks provide the ideal solution.

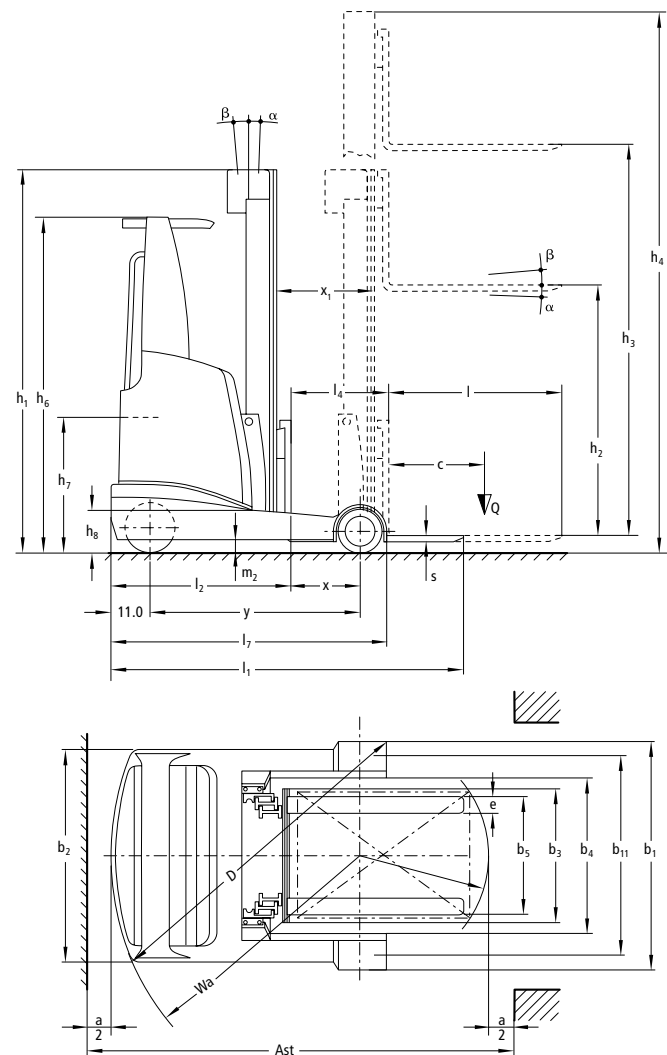
**The key advantages:**

- Flexible for indoor and outdoor operation on different surfaces. Suitable for applications with smooth, concrete

floors in the warehouse or for loading and unloading outside on rough surfaces.

- Compact chassis design allows the truck to work in a narrow working aisle (widths from 111 inches).
- Higher productivity and fewer maintenance requirements due to Jungheinrich's proprietary 3-phase AC technology.
- A highly-adjustable and extremely comfortable operator compartment helps provide a premium experience for the operator.

The ETV C16 / ETV C20 can be used at high levels for efficient stacking and retrieval of pallets that need to be transferred in narrow aisles. Whether handling pallets, working in drive-in racking or operating outside– the ETV C16 / ETV C20 reach trucks provide the ideal solution for virtually every application.



Standard mast types														
Lift height	ETV C16		ETV C20		ETV C16		ETV C20		ETV C16		ETV C20		Mast tilt forward / back	
	Lowered mast height				Free lift				Extended mast height					
	h <sub>3</sub>		h <sub>1</sub>		h <sub>2</sub>		h <sub>4</sub> *		h <sub>3</sub>		h <sub>1</sub>			α°/β°
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm			
167.3	4,250	—	—	80.7	2,050	—	—	52.0	1,320	—	—	196.7	4,996	2 / 4
179.1	4,550	80.7	2,050	—	—	55.4	1,406	—	—	204.5	5,194	—	—	2 / 4
185.0	4,700	—	—	86.6	2,200	—	—	57.9	1,470	—	—	214.4	5,446	2 / 4
196.9	5,000	86.6	2,200	90.6	2,300	61.3	1,556	61.8	1,570	222.2	5,644	226.2	5,746	2 / 4
206.3	5,240	89.8	2,280	—	—	64.4	1,636	—	—	231.7	5,884	—	—	2 / 4
208.7	5,300	90.6	2,300	94.5	2,400	65.2	1,656	65.7	1,670	234.0	5,944	238.0	6,046	2 / 4
213.4	5,420	—	—	96.1	2,440	—	—	67.3	1,710	—	—	242.8	6,166	2 / 4
214.6	5,450	92.5	2,350	—	—	67.2	1,706	—	—	239.9	6,094	—	—	2 / 4
220.5	5,600	94.5	2,400	98.4	2,500	69.1	1,756	69.7	1,770	245.8	6,244	249.8	6,346	2 / 4
225.2	5,720	96.1	2,440	—	—	70.7	1,796	—	—	250.6	6,364	—	—	2 / 4
228.7	5,810	97.2	2,470	—	—	71.9	1,826	—	—	254.1	6,454	—	—	2 / 4
232.3	5,900	98.4	2,500	102.4	2,600	73.1	1,856	73.6	1,870	257.6	6,544	261.7	6,646	2 / 4
238.2	6,050	—	—	104.3	2,650	—	—	75.6	1,920	—	—	267.6	6,796	2 / 4
244.1	6,200	102.4	2,600	106.3	2,700	77.0	1,956	77.6	1,970	269.4	6,844	273.5	6,946	2 / 4
255.9	6,500	106.3	2,700	110.2	2,800	80.9	2,056	81.5	2,070	281.3	7,144	285.3	7,246	2 / 4
267.7	6,800	110.2	2,800	114.2	2,900	84.9	2,156	85.4	2,170	293.1	7,444	297.1	7,546	2 / 4
273.6	6,950	—	—	116.1	2,950	—	—	87.4	2,220	—	—	303.0	7,696	2 / 4
279.5	7,100	114.2	2,900	—	—	88.8	2,256	—	—	304.9	7,744	—	—	2 / 4
291.3	7,400	—	—	122.0	3,100	—	—	93.3	2,370	—	—	320.7	8,146	2 / 4

\*Includes standard load backrest with height 39.4 inches.

Characteristics	1.1 Manufacturer		Jungheinrich		ETV C16		ETV C20	
	Model		GE		electric		electric	
1.3 Drive	GE		electric		transverse seat		transverse seat	
1.4 Type of operation	G = fork, E = integrated sideshift		transverse seat		transverse seat		transverse seat	
1.5 Load capacity / rated load	Q	lbs	kg	3,500	1,580	4,400	1,980	
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	15.7 <sup>1)</sup>	400 <sup>2)</sup>	16.6 <sup>1)</sup>	421 <sup>2)</sup>	
1.9 Wheelbase	y	in	mm	57.5	1,460	59.8	1,520	
2.1 Service weight without battery			lbs	5,959	2,703	6,775	3,073	
2.1.1 Service weight including battery (see line 6.5)			lbs	7,926	3,595	8,741	3,965	
2.3 Axle loading – unloaded, drive / load			lbs	4,856 / 3,070	2,202 / 1,393	5,253 / 3,488	2,383 / 1,582	
2.4 Axle loading – fork advanced, loaded drive / load			lbs	1,461 / 9,965	662 / 4,513	1,115 / 12,026	504 / 4,549	
2.5 Axle loading – fork retracted, loaded drive / load			lbs	4,285 / 7,141	1,941 / 3,234	4,692 / 8,449	2,123 / 3,822	
3.1 Tires			SE		SE		SE	
3.2 Tire size, drive			200 / 50-10		200 / 50-10		200 / 50-10	
3.3 Tire size, load			180 / 60-10		180 / 60-10		180 / 60-10	
3.5 Wheels – number, drive / load (x = driven wheels)			1x / 2		1x / 2		1x / 2	
3.7 Track width, load side	b <sub>11</sub>	in	mm	47.6	1,210	48.8	1,240	
4.1 Mast – fork carriage tilt, forward / backward			degrees	2° / 4° <sup>2)</sup>		2° / 4° <sup>2)</sup>		
4.2 Collapsed mast height	h <sub>1</sub>	in	mm	91.0 <sup>2)</sup>	2,300 <sup>2)</sup>	94.5 <sup>2)</sup>	2,400 <sup>2)</sup>	
4.3 Free-lift	h <sub>2</sub>	in	mm	65.2 <sup>2)</sup>	1,656 <sup>2)</sup>	65.7 <sup>2)</sup>	1,670 <sup>2)</sup>	
4.4 Maximum fork height (MFH)	h <sub>3</sub>	in	mm	208.5 <sup>2)</sup>	5,300 <sup>2)</sup>	208.5 <sup>2)</sup>	5,300 <sup>2)</sup>	
4.5 Overall extended height (OAE)	h <sub>4</sub>	in	mm	250.0 <sup>2)5)</sup>	5,944 <sup>2)5)</sup>	254.0 <sup>2)5)</sup>	6,046 <sup>2)5)</sup>	
4.7 Overhead load guard (cab) height	h <sub>6</sub>	in	mm	90.2	2,290	90.2	2,290	
4.8 Seat height / standing height	h <sub>7</sub>	in	mm	45.9	1,166	45.9	1,166	
4.10 Height of outriggers	h <sub>8</sub>	in	mm	18.3	464	18.3	464	
4.19 Overall length	l <sub>1</sub>	in	mm	97.8 <sup>1)6)</sup>	2,484 <sup>1)6)</sup>	99.4 <sup>1)6)</sup>	2,524 <sup>1)6)</sup>	
4.20 Length to fork face, headlength	l <sub>2</sub>	in	mm	51.9 <sup>1)</sup>	1,320 <sup>1)</sup>	53.5 <sup>1)</sup>	1,360 <sup>1)</sup>	
4.21 Overall width	b <sub>1</sub> / b <sub>2</sub>	in	mm	54.4 / 50.0	1,382 / 1,270	55.5 / 50.0	1,409 / 1,270	
4.22 Fork dimensions, thick / width	s / e / l	in	mm	1.6 / 4.8 / 45.3	40 / 120 / 1,150	1.6 / 4.8 / 45.3	40 / 120 / 1,150	
4.23 Fork carriage, class / type A,B			2 / B		2 / B		2 / B	
4.24 Fork carriage width	b <sub>3</sub>	in	mm	32.7	830	32.7	800	
4.25 Overall fork width	b <sub>5</sub>	in	mm	13.2 / 28.7	335 / 730	14.0 / 29.5	356 / 750	
4.26 Distance between outriggers	b <sub>4</sub>	in	mm	37.0	940	37.0	940	
4.28 Reach distance	l <sub>4</sub>	in	mm	27.2 <sup>1)</sup>	690 <sup>1)</sup>	28.0 <sup>1)</sup>	711 <sup>1)</sup>	
4.32 Ground clearance, center of wheelbase	m <sub>2</sub>	in	mm	3.1	80	3.1	80	
4.32.1 Ground clearance, at lowest point			in	mm	2.2	55	2.2	
4.33 Aisle width (for 48 x 40 in / 1,219 x 1,016 mm pallets)	Ast	in	mm	110.3 <sup>1)3)</sup>	2,802 <sup>1)3)</sup>	112.1 <sup>1)3)</sup>	2,847 <sup>1)3)</sup>	
4.34 Aisle width (for 48 x 48 in / 1,219 x 1,219 mm pallets)	Ast	in	mm	116.4 <sup>1)3)</sup>	2,956 <sup>1)3)</sup>	118.1 <sup>1)3)</sup>	2,999 <sup>1)3)</sup>	
4.35 Turning radius	Wa	in	mm	68.3	1,735	70.7	1,795	
4.37 Length to tip of outrigger	l <sub>7</sub>	in	mm	78.2	1,986	80.6	2,046	
5.1 Travel speed, loaded / unloaded			mph	km/h	7.3 / 7.6 <sup>4)</sup>	11.8 / 12.2 <sup>4)</sup>	7.3 / 7.6 <sup>4)</sup>	
5.2 Lift speed, loaded / unloaded			ft / min	m / s	78.7 / 137.8	0.40 / 0.70	63.0 / 118.1	
5.3 Lowering speed, loaded / unloaded			ft / min	m / s	98.4 / 98.4	0.5 / 0.5	98.4 / 98.4	
5.4 Reach speed, loaded / unloaded			ft / min	m / s	39.4 / 39.4 <sup>2)</sup>	0.20 / 0.20 <sup>2)</sup>	29.5 / 29.5 <sup>2)</sup>	
5.7 Gradeability, loaded / unloaded			%		7 / 10		6 / 10	
5.8 Maximum gradeability, loaded / unloaded			%		10 / 15		10 / 15	
5.9 Acceleration time, loaded / unloaded			sec		5.2 / 4.8		5.4 / 4.6	
5.10 Service brake			electric		electric		electric	
6.1 Drive motor (rating S <sub>2</sub> 60 minute)			hp	kW	9.3	6.9	9.3	
6.2 Lift motor rating at S <sub>3</sub> 15%			hp	kW	15.4	11.5	15.4	
6.4 Battery voltage / nominal capacity			48 / 560		48 / 560		48 / 560	
6.5 Battery weight, minimum / maximum			lbs	kg	1,966 / 2,173 <sup>1)</sup>	892 / 986 <sup>1)</sup>	1,966 / 2,173 <sup>1)</sup>	
6.5 Battery dimensions, l / w / h			in	mm	13.97 / 48.15 / 30.87 <sup>1)</sup>	355 / 1,223 / 784 <sup>1)</sup>	13.97 / 48.15 / 30.87 <sup>1)</sup>	
8.1 Type of drive control			AC technology		AC technology		AC technology	
8.2 Operating pressure for attachments			psi	bar	2,175	150	2,175	
8.3 Flowrate for attachments			gal / min	l / min	5.3	20	5.3	
8.4 Sound level at driver's ear			dB (A)		70		70	

- 1) Other battery sizes change these values
- 2) Dependent on type of mast
- 3) For floor storage with 8 inches (200 mm) total maneuvering clearance included
- 4) In load direction 6.2 mph (9.98 km/hr)
- 5) Includes load backrest with height of 39.4 inches (1,000 mm)
- 6) Different fork lengths change these values

This specification sheet only provides technical values for the standard truck. Non-standard tires, different masts, additional equipment, etc., could produce other values. Rights reserved for technical changes and improvements.

# The Jungheinrich Advantage

## Powerful mast

Jungheinrich masts provide maximum space utilization at high lift heights.

- Excellent visibility to the load.
- Integrated sideshift.
- Low collapsed heights combined with high lift heights.
- Smooth mast tilt.
- High residual capacities at maximum fork height.
- Lift heights up to 24.3 feet.
- Integrated hose routing for auxiliary hydraulics (no hose reel).

## Ergonomic operator compartment

The operator compartment provides ideal working conditions for high performance and ease of operation.

- Horizontally- and vertically-adjustable steering wheel.
- Full-suspension comfort seat with adjustment features such as seating position, backrest and body weight.
- Side-facing seat offers enhanced visibility when transporting heavy loads.
- Numerous storage options.
- Generous space available in compartment.
- Automatic centering of sideshift at the push of a button (optional).



Ergonomic operator compartment

## Easy control with SOLO-PILOT

- Multiple control handles are used to activate all hydraulic functions, including lifting / lowering, travel direction, sideshift and the horn.
- All operating controls are visible and have a designated function. Mast reach and mast tilt are controlled by two separate levers.
- SOLO-PILOT also controls auxiliary equipment, such as the fork positioner (optional).
- Precise operation through application of all functions.
- Comfortable posture with padded armrest.



SOLO-PILOT

## Easy-to-read operator display

- Travel direction and wheel position display.
- Battery discharge indicator.
- Three adjustable travel programs to suit every application.
- Operating hours and clock.
- Lift height and load weight (optional).

## Jungheinrich's proprietary 3-phase AC technology

Powerful 3-phase AC technology in drive, lift and steering motors offers several advantages over traditional DC motors.

- Powerful acceleration.
- Quick plugging without hesitation.
- Greater operational availability due to maintenance-free motors without carbon brushes, brush springs or commutators.
- Longer operating times due to energy reclamation during braking.

## Additional options

- Lift height pre-selection with SNAP function.
- Floor spot light.
- Panoramic overhead guard roof.
- Load weight indicator.

## Parts when you need them

Jungheinrich's Parts Fast or Parts Free Guarantee ensures next-business-day delivery by 5:00 p.m. of all Jungheinrich parts in the United States, or they're free, including freight. For customers in Canada and Mexico, the guarantee ensures shipping of parts within 24 hours from the time the order was placed by the dealer. See your local Jungheinrich dealer for program details.

\* Programs may be subject to change without notice and may vary by region. Please ask your local Jungheinrich dealer for complete terms and conditions.

