

Travel in any direction through electronically controlled all-wheel steering

Precise operation with the ergonomic SOLO-PILOT control handle

3-phase AC technology for the travel, lift and steering systems

Jungheinrich® Curve Control for optimum stability



## ETV Q20 / ETV Q25

Electric multi-directional, moving mast reach trucks (4,400-5,500 lbs.)

Jungheinrich® multi-directional reach trucks can be used for efficient stacking and retrieval at high lift heights and for long loads that need to be transported in narrow aisles. With electric all-wheel steering, these trucks can transport loads up to 26.2 feet long, maximizing space in the warehouse.

A true multi-directional reach truck, the ETV Q series lift truck has five travel programs available, ranging from modified standard travel to rotational travel and all-wheel parallel travel. The enhanced normal travel program further reduces the already small turning radius by steering the load wheels simultaneously with the drive tire.

Other advantages offered by the travel programs include 360° steering, minimum turning radius and rapid direction change. The ETV Q is clearly superior to any conventional 4-way reach truck.

Uncomplicated and intuitive handling with ergonomically-arranged displays and controls provide ideal working conditions for high performance and ease of operation.

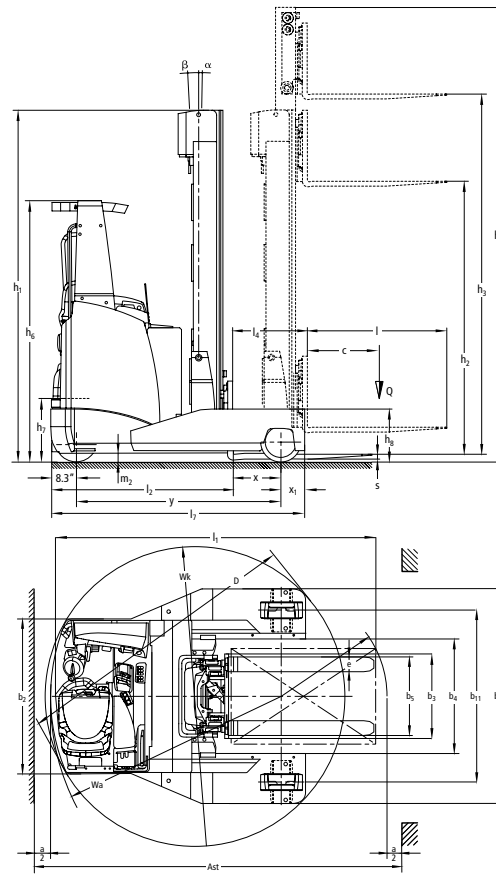
Additional assistance systems also increase productivity:

- Jungheinrich Curve Control reduces the maximum travel speed when cornering, depending on the steer angle.

- Load weight display allows weights to be checked at the press of a button (optional).
- Mast reach cushioning reduces mast sway during stacking and retrieval operations, thereby increasing throughput (optional).

In addition to excellent performance, the trucks offer outstanding efficiency:

- Greater travel and lift performance for more pallet turnover.
- Energy recovery during braking and mast lowering help provide increased uptime (optional).



Mast Table ETV Q20 / ETV Q25										
	Overall Lowered Height (OAL) $h_1$		Maximum Fork Lift Height (MFH) $h_3$		Free Lift $h_2$ <sup>1)</sup>		Overall Extended Height $h_4$ <sup>1)</sup>		Mast Tilt forward / backward	Fork / Carriage Tilt forward / backward
	in	mm	in	mm	in	mm	in	mm	degree	degree
	81	2,050	167	4,250	39	1,000	210	5,316	1 / 5	—
	87	2,200	185	4,700	45	1,150	227	5,766	1 / 5	—
	91	2,300	196	5,000	49	1,250	239	6,066	1 / 5	—
	95	2,400	208	5,300	53	1,350	251	6,366	1 / 5	—
	98	2,480	218	5,560	56	1,430	261	6,626	1 / 3	—
	99	2,500	220	5,600	57	1,450	263	6,666	1 / 3	—
	103	2,600	232	5,900	61	1,550	275	6,966	1 / 3	—
	105	2,650	238	6,050	62.5	1,600	281	7,116	1 / 3	—
	107	2,700	244	6,200	64.5	1,650	287	7,266	1 / 3	2 / 5
	111	2,800	255	6,500	68.5	1,750	298	7,566	0.5 / 2	—
	115	2,900	267	6,800	72.5	1,850	310	7,866	0.5 / 2	2 / 5
	117	2,950	273	6,950	74.5	1,900	316	8,016	0.5 / 2	2 / 5
	119	3,000	279	7,100	76.5	1,950	322	8,166	0.5 / 2	—
	122	3,100	291	7,400	80.5	2,050	334	8,466	0.5 / 2	2 / 5
	130	3,300	314	8,000	88.5	2,250	357	9,066	0.5 / 1	2 / 5
	136	3,440	331	8,420	94	2,390	374	9,486	0.5 / 1	2 / 5
	140	3,540	343	8,720	98	2,490	386	9,786	0.5 / 1	2 / 5
	145	3,670	358	9,110	103	2,620	401	10,176	—	2 / 5
	152	3,840	378	9,620	109	2,790	421	10,686	—	2 / 5
	156	3,950	391	9,950	114	2,900	434	11,016	—	2 / 5
	160	4,040	402	10,220	117	2,990	445	11,286	—	2 / 5
	163	4,140	414	10,520	121	3,090	457	11,586	—	2 / 5
	166	4,200	421	10,700	124	3,150	464	11,766	—	2 / 5

1) includes standard load backrest with height 39.5 inches.

Characteristics	Manufacturer (abbreviation)		Jungheinrich		Jungheinrich			
	Manufacturer's type designation		ETV Q20		ETV Q25			
1.4	Type	sit-down moving mast		sit-down moving mast				
1.5	Load capacity / rated load at load center	Q	lbs	kg	4,400	2,000	5,500	2,500
1.6	Load center	c	in	mm	24.0	600	24.0	600
1.8	Load distance (center line of load wheel to fork face)	x	in	mm	15.0	380	19.8	503
	Load distance - extended	$x_1$	in	mm	9.1	230	9.1	230
1.9	Wheelbase	y	in	mm	60.2	1,528	66.3	1,683
2.1	Truck weight including battery (see line 6.5) <sup>1)</sup>		lbs	kg	8,950	4,060	9,150	4,150
2.3	Axle loading, unloaded drive / load		lbs	kg	5,090 / 3,860	2,310 / 1,750	5,490 / 3,660	2,490 / 1,660
2.4	Axle loading, extended, loaded drive / load		lbs	kg	1,480 / 11,870	670 / 5,390	1,320 / 13,330	600 / 6,050
2.5	Axle loading, retracted, loaded drive / load		lbs	kg	4,280 / 9,070	1,940 / 4,120	4,980 / 9,670	2,260 / 4,390
3.1	Tire type	Vulkollan®		Vulkollan®				
3.2	Tire size, drive		in	mm	13.5 x 5.5	343 x 140	13.5 x 5.5	343 x 140
3.3	Tire size, load		in	mm	13.5 x 5.5	343 x 140	13.5 x 5.5	343 x 140
3.5	Wheels, number, drive / load	1 / 2		1 / 2				
3.7	Tread width, (load wheel)	$b_{11}$	in	mm	55.9	1,420	55.9	1,420
4.1	Mast / fork carriage tilt forward / backward <sup>5)</sup>	degree		2° / 5°		2° / 5°		
4.2	Overall lowered height (OAL) <sup>5)</sup>	$h_1$	in	mm	166	4,200	166	4,200
4.3	Free lift <sup>5)</sup>	$h_2$	in	mm	124 <sup>6)</sup>	3,470	124 <sup>6)</sup>	3,470
4.4	Maximum fork height (MFH) <sup>5)</sup>	$h_3$	in	mm	421	10,700	421	10,700
4.5	Overall extended height (OAE) <sup>5)</sup>	$h_4$	in	mm	464 <sup>6)</sup>	11,446	464 <sup>6)</sup>	11,446
4.7	Height of overhead guard (top)	$h_6$	in	mm	84.6	2,150	84.6	2,150
4.8	Step height	$h_7$	in	mm	20.5	520	20.5	520
4.10	Height of baselegs	$h_8$	in	mm	17.4	442	17.4	442
4.19	Overall length (including forks) <sup>1)</sup>	$l_1$	in	mm	95.8	2,433	99.1	2,518
4.20	Length to face of forks <sup>1)</sup>	$l_2$	in	mm	50.5	1,283	53.9	1,368
4.21	Overall width, baseleg / chassis	$b_1/b_2$	in	mm	69.3 / 50.0	1,760 / 1,270	69.3 / 50.0	1,760 / 1,270
4.22	Fork dimensions, thick / width	s/e	in	mm	2.0 / 5.5	50 / 140	2.0 / 5.5	50 / 140
	Fork lengths, minimum / maximum	l	in	mm	26.0 / 79.0	650 / 2,000	26.0 / 79.0	650 / 2,000
4.23	Fork carriage type	ISO Class 2 / B		ISO Class 2 / B				
4.24	Fork carriage width	$b_3$	in	mm	31.5	800	31.5	800
4.25	Width across forks, minimum / maximum	$b_5$	in	mm	14.0 / 29.0	356 / 737	14.0 / 29.0	356 / 737
4.26	Baseleg opening (BLO)	$b_4$	in	mm	37.0	940	37.0	940
4.28	Reach travel <sup>1)</sup>	$l_4$	in	mm	26.1	664	28.6	727
4.32	Ground clearance, center of wheelbase	$m_2$	in	mm	3.7	95	3.7	95
4.33	Minimum aisle width, 90° stack - no clearance, 48" x 40" pallet <sup>1)</sup>	Ast	in	mm	110.3	2,802	113.3	2,878
	Truck diagonal <sup>4)</sup>	D	in	mm	89.6	2,277	95.7	2,432
4.35	Turning radius <sup>4)</sup>	Wa	in	mm	68.5	1,741	74.5	1,893
4.37	Overall length	$l_7$	in	mm	77.0	1,957	83.1	2,112
5.1	Travel speed, loaded / unloaded <sup>2)3)</sup>	mph	km/h	8.7 / 8.7	14 / 14	8.7 / 8.7	14 / 14	
5.2	Lift speed, loaded / unloaded <sup>2)</sup>	ft/min	m/s	63 / 118	0.32 / 0.60	59 / 118	0.30 / 0.60	
5.3	Lowering speed, loaded / unloaded <sup>2)</sup>	ft/min	m/s	98.4 / 98.4	0.5 / 0.5	98.4 / 98.4	0.5 / 0.5	
5.4	Reaching speed, loaded / unloaded <sup>2)</sup>	ft/min	m/s	23.6 / 23.6	0.12 / 0.12	23.6 / 23.6	0.12 / 0.12	
5.7	Gradeability, loaded / unloaded	%	7 / 11		6 / 11			
5.8	Maximum gradeability, loaded / unloaded	%	10 / 15		10 / 15			
5.9	Acceleration time, loaded / unloaded (10 meters)	sec	4.6 / 4.3		5.0 / 4.4			
5.10	Service brake type (drive tire / load wheels)	electric / hydraulic		electric / hydraulic				
6.1	Drive motor rating S2 60 minutes	HP	KW	9.2	6.9	9.2	6.9	
6.2	Lift motor rating at S3 15%	HP	KW	13.4	10	13.4	10	
6.4	Battery voltage, nominal capacity K5 <sup>1)</sup>	V/Ah		48 / 620		48 / 620		
6.5	Battery weight, minimum / maximum <sup>1)</sup>	lb	kg	1,967 / 2,326	892 / 1,055	1,967 / 2,326	892 / 1,055	
	Battery compartment dimensions l / w / h <sup>1)</sup>	in	mm	14.0 / 48.14 / 30.86	356 / 1,223 / 784	14.0 / 48.14 / 30.86	356 / 1,223 / 784	
8.1	Type of drive control	Mosfet / AC		Mosfet / AC				
8.2	Operating pressure for attachments	psi	bar	2,176	150	2,176	150	
8.3	Oil volume for attachments	gal/min	l/min	5.3	20	5.3	20	
8.4	Sound level at the driver's ear (according to EN 12 053)	dB(A)		70		70		

1) values with minimum battery box length and 45" long forks. These values change with different battery box sizes.  
 2) maximum speed attainable, after break-in period, varies with truck, weight, rolling resistance, mast height, options and battery condition.  
 3) 6.8 mph (11 km/h) in fork direction, both loaded and unloaded.  
 4) turning radius for turning on the spot: 48.4 inches (1,230 mm).  
 5) with maximum height triplex mast.  
 6) includes standard load backrest with height 39.5 inches.

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 towards the load.
- Lift heights over 35 feet.
- Extremely durable and reliable due to high-quality mast profiles.
- High residual capacities at maximum fork height.
- Patented mast reach cushioning (optional).
- Energy recovery through regenerative lowering (optional).



Jungheinrich mast design reduces sway at high lift heights.

## Jungheinrich's proprietary 3-phase AC technology

Powerful 3-phase AC technology for 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 and lowering of the load (optional).

## Ergonomic operator position

The operator position provides ideal working conditions for relaxed performance.

- Five buttons for easy travel program selection.
- Full-suspension comfort seat with adjustment features, such as seating position, backrest and body weight.
- Numerous storage options.
- Generous overall space.
- Automotive style pedals.



Ergonomic operator compartment

## Easy-to-read operator display

- 360° steer direction indicator.
- Battery discharge indicator with residual battery run time display.
- A choice of three performance modes for individual adaptation to each application.
- Operation hour meter and date and time.
- Lift height indicator (optional).
- Load weight display (optional).



SOLO-PILOT

## SOLO-PILOT control handle

The control lever allows the operator to activate all hydraulic functions, select the direction of travel and sound the horn from one location at his fingertips.

- All the controls are within the operator's reach and are clearly designated for a specific function.
- Maximum throughput efficiency due to simultaneous operation of two hydraulic functions (e.g. lifting and sideshifting).
- Additional hydraulic attachments are also controlled by the SOLO-PILOT.
- Precise operation through application of all functions.
- Comfortable posture with padded armrest.

\* Built in compliance with ANSI/ITSDF B56.1 design specifications in place at time of manufacture.

