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 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:

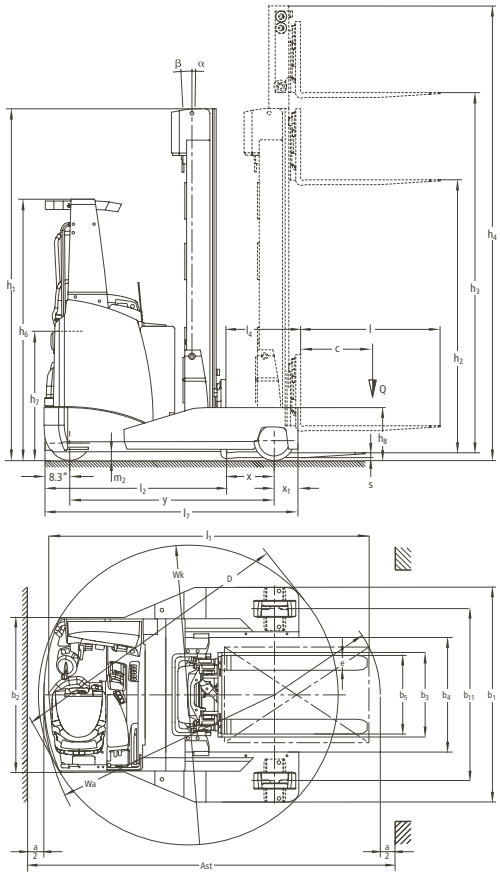
- Jungheinrich Curve Control reduces the maximum travel speed when cornering, depending on the steer angle.
- Load weight display allows weights to be checked at the press of a button.
- Mast reach cushioning reduces mast sway during stacking and retrieval operations, thereby increasing throughput.

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

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

JUNGHEINRICH

ETV Q20/ETV Q25



Mast Table ETV Q20/ETV Q25										
Designation	Overall Lowered Height (OAL) h_1		Maximum Fork Lift Height (MFH) h_3		Free Lift h_2		Overall Extended Height h_4		Mast Tilt forward / backward	Fork / Carriage Tilt forward / backward
	in	*mm*	in	*mm*	in	*mm*	in	*mm*	degree	degree
Triplex mast	81	*2,050*	167	*4,250*	52	*1,320*	197	*4,996*	1 / 5	—
	87	*2,200*	185	*4,700*	58	*1,470*	215	*5,446*	1 / 5	—
	91	*2,300*	196	*5,000*	62	*1,570*	227	*5,746*	1 / 5	—
	95	*2,400*	208	*5,300*	66	*1,670*	238	*6,046*	1 / 5	—
	98	*2,480*	218	*5,560*	69	*1,750*	249	*6,306*	1 / 3	—
	99	*2,500*	220	*5,600*	70	*1,770*	250	*6,346*	1 / 3	—
	103	*2,600*	232	*5,900*	74	*1,870*	262	*6,646*	1 / 3	—
	105	*2,650*	238	*6,050*	76	*1,920*	268	*6,796*	1 / 3	—
	107	*2,700*	244	*6,200*	78	*1,970*	274	*6,946*	1 / 3	*2 / 5*
	111	*2,800*	255	*6,500*	81	*2,070*	286	*7,246*	0.5 / 2	—
	115	*2,900*	267	*6,800*	85	*2,170*	298	*7,546*	0.5 / 2	*2 / 5*
	117	*2,950*	273	*6,950*	87	*2,220*	303	*7,696*	0.5 / 2	*2 / 5*
	119	*3,000*	279	*7,100*	89	*2,270*	309	*7,846*	0.5 / 2	—
	122	*3,100*	291	*7,400*	93	*2,370*	321	*8,146*	0.5 / 2	*2 / 5*
	130	*3,300*	315	*8,000*	101	*2,570*	345	*8,746*	0.5 / 1	*2 / 5*
	136	*3,440*	331	*8,420*	107	*2,710*	361	*9,166*	0.5 / 1	2 / 5
	140	*3,540*	343	*8,720*	111	*2,810*	373	*9,466*	0.5 / 1	*2 / 5*
	145	*3,670*	358	*9,110*	116	*2,940*	388	*9,856*	—	*2 / 5*
	152	*3,840*	378	*9,620*	122	*3,110*	409	*10,366*	—	2 / 5
	156	*3,950*	391	*9,950*	127	*3,220*	422	*10,696*	—	*2 / 5*
	159	*4,040*	402	*10,220*	130	*3,310*	432	*10,966*	—	2 / 5
	163	*4,140*	414	*10,520*	134	*3,410*	444	*11,266*	—	*2 / 5*
	166	*4,200*	421	*10,700*	137	*3,470*	451	*11,446*	—	*2 / 5*

Technical Data

as of: 1/2011

Characteristics	1.1	Manufacturer (abbreviation)				Jungheinrich		Jungheinrich		1.1
	1.2	Manufacturer's type designation				**ETV Q20**		**ETV Q25**		1.2
	1.4	Type				sit-down moving mast		sit-down moving mast		1.4
	1.5	Load capacity / rated load at load center	Q	lbs	*kg*	4,400	*2,000*	5,500	*2,500*	1.5
	1.6	Load center	c	in	*mm*	24.0	*600*	24.0	*600*	1.6
	1.8	Load distance (center line of load wheel to fork face)	x	in	*mm*	15.0	*380*	19.8	*503*	1.8
		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*	1.9
Weights	2.1	Truck weight including battery (see line 6.5) [1]		lbs	*kg*	8,950	*4,060*	9,150	*4,150*	2.1
	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*	2.3
	2.4	Axle loading, extended, loaded drive / load		lbs	*kg*	1,480 / 11,870	*670 / 5,390*	1,320 / 13,330	*600 / 6,050*	2.4
	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*	2.5
Wheels, Chassis	3.1	Tire type				Vulkollan®		Vulkollan®		3.1
	3.2	Tire size, drive		in	*mm*	13.5 x 5.5	*343 x 140*	13.5 x 5.5	*343 x 140*	3.2
	3.3	Tire size, load		in	*mm*	13.5 x 5.5	*343 x 140*	13.5 x 5.5	*343 x 140*	3.3
	3.5	Wheels, number, drive / load				1 / 2		1 / 2		3.5
	3.7	Tread width, (load wheel)	b_{11}	in	*mm*	55.9	*1,420*	55.9	*1,420*	3.7
Basic Dimensions	4.1	Mast / fork carriage tilt forward / backward [5]		degree		2° / 5°		2° / 5°		4.1
	4.2	Overall lowered height (OAL) [5]	h_1	in	*mm*	166	*4,200*	166	*4,200*	4.2
	4.3	Free lift [5]	h_2	in	*mm*	137	*3,470*	137	*3,470*	4.3
	4.4	Maximum fork height (MFH) [5]	h_3	in	*mm*	421	*10,700*	421	*10,700*	4.4
	4.5	Overall extended height (OAE) [5]	h_4	in	*mm*	451	*11,446*	451	*11,446*	4.5
	4.7	Height of overhead guard (top)	h_6	in	*mm*	84.6	*2,150*	84.6	*2,150*	4.7
	4.8	Step height	h_7	in	*mm*	20.5	*520*	20.5	*520*	4.8
	4.10	Height of baselegs	h_8	in	*mm*	17.4	*442*	17.4	*442*	4.10
	4.19	Overall length (including forks) [1]	l_1	in	*mm*	95.8	*2,433*	99.1	*2,518*	4.19
	4.20	Length to face of forks [1]	l_2	in	*mm*	50.5	*1,283*	53.9	*1,368*	4.20
	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*	4.21
	4.22	Fork dimensions, thick / width	s/e	in	*mm*	2.0 / 5.5	*50 / 140*	2.0 / 5.5	*50 / 140*	4.22
		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		4.23
	4.24	Fork carriage width	b_3	in	*mm*	31.5	*800*	31.5	*800*	4.24
	4.25	Width across forks, minimum / maximum	b_5	in	*mm*	14.0 / 29.0	*356 / 737*	14.0 / 29.0	*356 / 737*	4.25
	4.26	Baseleg opening (BLO)	b_4	in	*mm*	37.0	*940*	37.0	*940*	4.26
	4.28	Reach travel [1]	l_4	in	*mm*	26.1	*664*	28.6	*727*	4.28
	4.32	Ground clearance, center of wheelbase	m_2	in	*mm*	3.7	*95*	3.7	*95*	4.32
	4.33	Minimum aisle width, 90° stack - no clearance, 48" x 40" pallet [1]	Ast	in	*mm*	110.3	*2,802*	113.3	*2,878*	4.33
		Truck diagonal [4]	D	in	*mm*	89.6	*2,277*	95.7	*2,432*	
	4.35	Turning radius [4]	Wa	in	*mm*	68.5	*1,741*	74.5	*1,893*	4.35
	4.37	Overall length	l_7	in	*mm*	77.0	*1,957*	83.1	*2,112*	4.37
Performance Data	5.1	Travel speed, loaded / unloaded [2] [3]		mph	*km/h*	8.7 / 8.7	*14 / 14*	8.7 / 8.7	*14 / 14*	5.1
	5.2	Lift speed, loaded / unloaded [2]		ft/min	*m/s*	63 / 118	*0.32 / 0.60*	59 / 118	*0.30 / 0.60*	5.2
	5.3	Lowering speed, loaded / unloaded [2]		ft/min	*m/s*	98.4 / 98.4	*0.5 / 0.5*	98.4 / 98.4	*0.5 / 0.5*	5.3
	5.4	Reaching speed, loaded / unloaded [2]		ft/min	*m/s*	23.6 / 23.6	*0.12 / 0.12*	23.6 / 23.6	*0.12 / 0.12*	5.4
	5.7	Gradeability, loaded / unloaded		%		7 / 11		6 / 11		5.7
	5.8	Maximum gradeability, loaded / unloaded		%		10 / 15		10 / 15		5.8
	5.9	Acceleration time, loaded / unloaded (10 meters)		sec		4.6 / 4.3		5.0 / 4.4		5.9
	5.10	Service brake type (drive tire / load wheels)				electric / hydraulic		electric / hydraulic		5.10
Motors	6.1	Drive motor rating S2 60 min.		HP	*KW*	9.2	*6.9*	9.2	*6.9*	6.1
	6.2	Lift motor rating at S3 15%		HP	*KW*	13.4	*10*	13.4	*10*	6.2
	6.4	Battery voltage, nominal capacity K5 [1]		V/Ah		48 / 620		48 / 620		6.4
	6.5	Battery weight, minimum / maximum [1]		lb	*kg*	1,967 / 2,326	*892 / 1,055*	1,967 / 2,326	*892 / 1,055*	6.5
		Battery compartment dimensions l / w / h [1]		in	*mm*	14.0 / 48.14 / 30.86	*356 / 1,223 / 784*	14.0 / 48.14 / 30.86	*356 / 1,223 / 784*	
Other Details	8.1	Type of drive control				Mosfet / AC		Mosfet / 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 the driver's ear according to EN 12 053		dB(A)		70		70		8.4

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.

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.

Ergonomic operator compartment

- 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, for all drivers.
- Numerous storage options.
- Generous overall space.
- Automotive style pedals.

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.
- Precision operation through application of all functions.
- Comfortable posture with padded armrest.

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

Built in compliance with ITSDF B56.1 design specifications* for Type E industrial trucks with Type E battery.

* In accordance to specifications in place at time of manufacture.

1-877-JH-FORKS

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