Electronically controlled all-wheel steering

Generously designed operator environment

curveCONTROL for optimum travel safety



## **ETV Q20/Q25**

### Electric multi-directional reach truck (2,000/2,500 kg)

Multi-directional reach trucks are used wherever long loads are transported in narrow aisles and need to be elevated to extreme heights. With electric all-wheel steering, loads up to 8m long can be transported optimising use of available space.

There are 5 steering modes available ranging from enhanced normal travel and turning on the spot, through to transverse and parallel travel. In 'enhanced normal travel', the already small turning radius is reduced further by simultaneous load wheel steering. The advantages of 360° steering are also available: Minimum turning radius and rapid direction change. This makes the ETV Q clearly superior to any conventional 4-way reach truck.

Uncomplicated, intuitive handling with ergonomically arranged displays and controls as well as outstanding visibility makes operating the truck simplicity itself. In addition, assistance systems increase productivity:

- Jungheinrich curveCONTROL reduces the maximum travel speed when cornering, depending on the steer angle.
- Weighing systems allow weights to be checked at the press of a button.
- Mast reach cushioning reduces mast sway during stacking and retrieval operations, thereby increasing throughput.

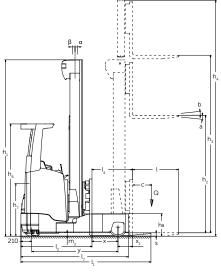
The outstanding performance is complemented by excellent cost-effectiveness:

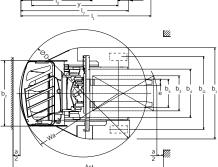
- More pallet throughput thanks to greater travel and lift performances.
- Long operating times thanks to the reduction in energy consumption with the same throughput.
- Less aisle width required as a result of the proven reach principle.

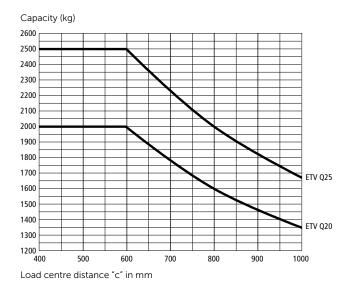
A number of options and battery versions ranging from 620 Ah to 930 Ah ensure that the trucks can be adapted to any application.



# **ETV Q20/Q25**







Standard mast designs ETV Q20/Q25									
	Lift h <sub>3</sub>	Lowered mast height h <sub>1</sub>	Free lift h <sub>2</sub>	Extended mast height h <sub>4</sub>	Mast tilt forward/ back α/β	Tilt forks forward / back α/β			
	(mm)	(mm)	(mm)	(mm)	(°)	(°)			
DZ-V	4250	2050	1320	4996	1/5	-			
	4700	2200	1470	5446	1/5	-			
	5000	2300	1570	5746	1/5	-			
	5300	2400	1670	6046	1/5	-			
	5420	2440	1710	6166	1/3	-			
	5600	2500	1770	6346	1/3	-			
	5900	2600	1870	6646	1/3	-			
	6050	2650	1920	6796	1/3	-			
	6200	2700	1970	6946	1/3	2/5			
	6500	2800	2070	7246	1/3	2/5			
	6800	2900	2170	7546	1/3	2/5			
	6950	2950	2220	7696	1/3	2/5			
	7400	3100	2370	8146	1/3	2/5			
	7700	3200	2470	8446	-	2/5			
	8000	3300	2570	8746	1/3	2/5			
	8420	3440	2710	9166	1/3	2/5			
	8720	3540	2810	9466	1/3	2/5			
	9110	3670	2940	9856	1/3	2/5			
	9620	3840	3110	10366	-	2/5			
	9950	3950	3220	10696	-	2/5			
	10220	4100	3370	10966	-	2/5			
	10520	4200	3470	11266	-	2/5			
	10700	4260	3530	11446	-	2/5			

# Technical data in line with VDI 2198

	1.1	Manufacturar (abbraviation)			Junghoir	arich		
		Manufacturer (abbreviation)			Jungheir			
_	1.2	Model			ETV Q20	ETV Q25		
ō	1.3	Drive			Electr			
Identifica	1.4	Manual, pedestrian, stand-on, seated, order picker operation			transverse			
	1.5	Load capacity/rated load	Q	t	2	2.5		
	1.6	Load centre distance	С	mm	600			
	1.8	Load distance	x	mm	4491	)		
	1.8.1	Load distance, mast reached forward	X <sub>1</sub>	mm	230			
	1.9	Wheelbase	У	mm	1,528	1,638		
ght	2.1.1	Net weight incl. battery (see row 6.5)		kg	3,700	)		
	2.3	Axle loading, unladen front/rear		kg	2,264 / 1	2,264 / 1,436		
	2.4	Axle loading, fork advanced, laden front/rear		kg	602 / 5,	602 / 5,598		
	2.5	Axle loading, fork retracted, laden front/rear		kg	2,032 / 4	1.168		
	3.1	Tyres		J		Vulkollan®		
		Tyre size, front		mm		Ø 343 x 140		
e e	3.2 3.3 3.5	Tyre size, rear		mm		Ø 355 x 135		
Wheels / frame	3.5	Wheels, number front/rear (x = driven wheels)		111111	1x / 2			
5	3.7	Tread width, rear	h	ma ma	1,420			
		· · · · · · · · · · · · · · · · · · ·	b <sub>11</sub>	mm •				
	4.1	Tilt of mast/fork carriage forward/backward	α/β			1/5 <sup>2)</sup>		
	4.2	Mast height (lowered)	h <sub>1</sub>	mm		2,400		
	4.3	Free lift	h <sub>2</sub>	mm	1,670			
	4.4	Lift	h <sub>3</sub>	mm	5,300			
	4.5	Extended mast height	h <sub>4</sub>	mm	6,046			
	4.7	Height of overhead guard	h <sub>6</sub>	mm	2,190	)		
	4.8	Seat height/standing height	h <sub>7</sub>	mm	1,057	1,057		
	4.10	height of support arms	h <sub>8</sub>	mm	440			
s	4.19	Overall length	l <sub>1</sub>	mm	2,4391)	2,5111)		
Basic dimensions	4.20	Length to face of forks	l <sub>2</sub>	mm	1,2891)	1,3611)		
ısı	4.21	Overall width	b <sub>1</sub> /b <sub>2</sub>	mm	1,770 / 1	,270		
ш	4.22	Fork dimensions	s/e/l		50 / 140 /	1,150		
ē	4.23	Fork carriage ISO 2328, class/type A, B			2B			
isic	4.24	Fork carriage width	b <sub>3</sub>	mm	830			
Ва	4.25	Width across forks	b <sub>5</sub>	mm		356 / 750		
	4.26	Width between support arms/loading areas	b <sub>4</sub>	mm	940			
	4.28	Reach distance	l	mm	6791)	7621)		
	4.32	· ·				702-		
		Ground clearance, centre of wheelbase	m <sub>2</sub>	mm	95			
	4.32.1	Ground clearance at lowest point	A - 1	mm	2.7560	2.05.40		
	4.33	Aisle width for pallets 1000 × 1200 crossways	Ast	mm	2,7561)	2,8541)		
	4.34	Aisle width for pallets 800 × 1200 lengthways	Ast	mm	2,7921)	2,8721)		
	4.35	Turning radius	W <sub>a</sub>	mm	1,741	1,893		
	4.37	Length across support arms	l <sub>7</sub>	mm	1,957	2,112		
_	5.1	Travel speed, laden/unladen		km/h	14 / 1	4		
ate	5.2	Lift speed, laden/unladen		m/s	0.38 / 0.64	0.35 / 0.64		
e	5.3	Lowering speed, laden/unladen		m/s	0.55 / 0	).55		
ũ	5.4	Reaching speed, laden/unladen		m/s	0.2 / 0	).2		
Па	5.7	Gradeability, laden/unladen		%	7 / 11	1		
for	5.8	Max. gradeability, laden/unladen		%	10 / 1	5		
	5.9	Acceleration time, laden/unladen		S	5.4 / 4.8	5.6 / 5.1		
	5.10	Service brake			electr			
	6.1	Drive motor, output S2 60 min.		kW	8.5			
	6.2	Lift motor, output at S3 15%		kW		15.5		
Electrics	6.3	Battery as per DIN 43531/35/36 A, B, C, no				DIN 43531 - C		
	6.4	Battery voltage/nominal capacity K5		V/Ah		48 / 620		
	6.5	Battery weight		kg		1,005		
	6.6	1		kWh/h	5.1	6		
	1	Energy consumption according to VDI cycle						
	6.7	Throughput		t/h	78.6	95.3		
	6.8	Energy consumption at max. throughput		kWh/h	4.12	4.4		
SC.	8.1	Type of drive control			Mosfet /			
	8.2	Working pressure for attachments		bar	150			
	8.3	Oil flow for attachments		l/min	20			
	8.4	Sound pressure level at operator's ear as per EN 12053		dB (A)	70			

<sup>1)</sup> different battery sizes change these values

<sup>2)</sup> mast-dependent

## Benefit from the advantages







Fork positioner (optional)



Ergonomic workstation



5 different steering modules

#### Safety

- Electric brakes on all 3 wheels ensure that the ETV Q stays in the lane when braking during sideways movement.
- Optional reversing camera provides a better view during sideways travel in reverse.
- Optional panorama roof provides a clear view of the raised load.

### **High-performance mast**

Our masts ensure maximum safety and effective utilisation of warehouse capacity at extreme heights:

- Lift heights up to 10,700 mm.
- Low clearances at high lift heights.
- Extremely long life through cold-rolled mast sections.
- High residual capacities even at extreme lift heights.
- Optional, patented mast-reach cushioning reduces mast sway when stacking and retrieving.

### Fork positioner with extended fork shank (optional)

Optimum adaptation for different load widths for the safe transportation of long loads:

- Easy adjustment at the press of a button.
- Straddle width up to 2060 mm.
- Integrated design with short chassis length for narrow aisle widths.
- 3 versions with different frame widths available

#### **Ergonomic workstation**

Maximum performance due to the comfort of an ideal operator's seat:

- 5 buttons for simple and fast selection of the steering modes.
- Comfort seat, fully adjustable for all operators (seat position, backrest, bodyweight).
- Plenty of storage options.
- · Generous space.
- 3-phase steering of all 3 wheels can be changed from 180° to 360°.
- Automotive layout of the pedals.

### Assistance systems and options

For more power and full load stability:

- operationCONTROL continuously measures the load weight and compares it with the residual capacity of the truck. An optical warning on the operator display as well as an acoustic warning are triggered when approaching the limit value.
- positionCONTROL with SNAP function enables simple and fast stacking without additional pressing of buttons.
- liftNAVIGATION transfers stacking orders automatically from the warehouse management system, preventing stacking errors.
- Fork camera and ergonomically adjustable motor enable especially safe and efficient stacking and retrieval.

### soloPILOT control lever

The control lever for activating all hydraulic functions is also used for selecting the direction of travel and ac-

tivation of the horn:

- All controls are within the operator's field of vision and a single function is clearly assigned to each one.
- Maximum handling capacity through the simultaneous use of 2 hydraulic functions (e.g. lifting and reaching).
- Convenient control of additional attachments, e.g. a fork positioner (optional).
- Precision operation by sensitive activation of all functions.
- Comfortable posture with padded armrest.
- multiPILOT (optional).

### Easy-to-read colour display

- Display of direction of travel and wheel position.
- Battery status with residual time display.
- 3 adjustable travel programs for individual adjustment to any requirements.
- · Operating hours and time of day.
- · Lift height (optional).
- Load weight (optional).

### Lithium-ion technology

- High degree of availability thanks to extremely short charging times.
- No battery exchange required.
- Cost savings due to longer service life and low maintenance compared with lead-acid batteries.
- No charging rooms and ventilation required as there is no build up of gas.
- Longer service life with 5-year Jungheinrich guarantee.

### Jungheinrich UK Ltd.

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ISO 1400



