Super-elastic tyres and high ground clearance for indoor and outdoor use

Sideways seat offers excellent visibility even with high loads

Smooth and sensitive operation due to "SOLO-PILOT" control lever

Drive, lift and steering in AC technology

Jungheinrich "Curve Control" for safety in corners

All weather cabin for frequent outdoor applications (optional)



### **ETV C16/ETV C20**

### Electric Reach Truck (1600, 2000 kg)

Super-elastic tyres, high ground clearance, space saving design, high performance and ergonomic working place. These are the exceptional strengths of the Jungheinrich Reach Truck ETV C16/ETV C20.

#### The advantages:

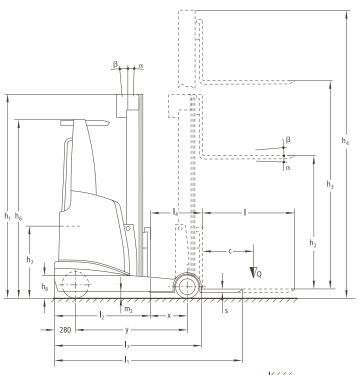
 Flexible for both indoor and outdoor operation on different types of floor.
Suitable for working on smooth floors in warehouses or uneven surfaces during lorry loading and unloading outside.

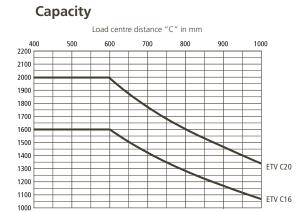
- Space-saving design for narrow working aisle widths from 2829 mm (according to VDI when picking up Euro pallets lengthways).
- Higher productivity whilst reducing service and maintenance requirements through the use of AC technology.
- Easy and intuitive handling due to ergonomically arranged displays and controls.
  Not only does the display and implementation of the instruments contribute to safety but also gives excellent visibility.

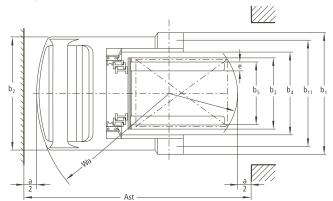
The Jungheinrich Reach Trucks ETV C16/ETV C20 therefore are the basis for cost effective stacking and retrieval at high lift heights as well as in confined spaces. Whether working in pallet or live racking systems, in single shift or multi-shift applications or frequent outdoor use with comfortable weatherproof cabin (optional) – the Reach Trucks ETV C16/ETV C20 is the ideal solution for every application.



# **ETV C16/ETV C20**







		Mast table ET	/ C16/ETV C20		
Designation	Closed mast height h <sub>1</sub> (mm)	Lift height h₃ (mm)	Free lift h <sub>2</sub> (mm)	Extended mast height h <sub>4</sub> (mm)	Fork tilt forward/ backward (α°/β°)
Two-stage ZT	1950	2900	80	3544	2/5
(ETV C16)	2050	3100	80	3744	2/5
	2200	3400	80	4044	2/5
	2300	3600	80	4244	2/5
	2400	3800	80	4444	2/5
	2500	4000	80	4644	2/5
	2700	4400	80	5044	2/5
Three-stage DZ	1950	4250	1306	4894	2/5
(ETV C16)	2050	4550	1406	5194	2/5
	2200	5000	1556	5644	2/5
	2300	5300	1656	5944	2/4
	2400	5600	1756	6244	2/4
	2500	5900	1856	6544	2/4
	2600	6200	1956	6844	2/4
	2700	6500	2056	7144	2/4
	2800	6800	2156	7444	2/4
	2900	7100	2256	7744	2/4
Three-stage DZ	2200	4700	1470	5446	2/5
(ETV C20)	2300	5000	1570	5746	2/5
	2400	5300	1670	6046	2/4
	2500	5600	1770	6346	2/4
	2600	5900	1870	6646	2/4
	2700	6200	1970	6946	2/4
	2900	6800	2170	7546	2/4
	3100	7400	2370	8146	2/4

# Technical Data in line with VDI 2198 as at: 10/2009

	1.1	Manufacturer (abbreviation)		Jungheinrich	Jungheinrich	1.1
	1.2	Manufacturer's type designation		ETV C16 DZ	ETV C20 DZ	1.2
Identification	1.2	G = fork; E = integrated side shift		GE	GE GE	1.2
	1.3	Drive		electric	electric	1.3
	1.4	Operator type		seat	seat	1.4
	1.5	Load capacity/rated load	Q (t)	1.6	2	1.5
	1.6	Load centre distance	c (mm)	600	600	1.6
	1.8	Load distance, centre of drive axle to fork	x (mm)	4001)	4211)	1.8
	1.0	Mast pushed forward	x <sub>1</sub> (mm)	290	290	1.0
	1.9	Wheelbase	y (mm)	1460	1520	1.9
is Weights	2.1	Service weight incl. battery (see line 6.5)	kg	3640	4010	2.1
	2.3	Axle loading, unladen front/rear	kg	2230/1410	2410/1600	2.3
	2.4	Axle loading, fork advanced, laden front/rear	kg	670/4570	510/5500	2.4
	2.5	Axle loading, fork retracted, laden front/rear	kg	1965/3275	2146/3864	2.5
	3.1	Tyres	9	superelastic	superelastic	3.1
Chassis	3.2	Tyre size, front		180/60-10	200/50-10	3.2
ָ כֿ	3.3	Tyre size, rear		180/60-10	180/60-10	3.3
Wheels,	3.5	Wheels, number front rear (x = driven wheels)		1x/2	1x/2	3.5
	3.7	Tread, rear	b <sub>11</sub> (mm)	1210	1240	3.7
_	4.1	Tilt of mast/fork carriage forward/backward	α/β (°)	2/42)	2/42)	4.1
	4.2	Closed mast height	h <sub>1</sub> (mm)	2300	2400	4.2
	4.3	Free lift	h <sub>2</sub> (mm)	1656	1670	4.3
	4.4	Lift	h <sub>3</sub> (mm)	5300	5300	4.4
	4.5	Height, mast extended	h <sub>4</sub> (mm)	5944	6046	4.5
	4.7	Height of overhead guard (cabin)	h <sub>6</sub> (mm)	2250	2250	4.7
	4.8	Seat height/stand height	h <sub>7</sub> (mm)	1060	1060	4.8
	4.10		h <sub>8</sub> (mm)	464	464	4.1
<b>Basic Dimensions</b>	4.19		I <sub>1</sub> (mm)	24841)	25241)	4.1
	4.20	3	l <sub>2</sub> (mm)	13341)	13741)	4.2
	4.21		b <sub>1</sub> /b <sub>2</sub> (mm)	1370/1270	1400/1270	4.2
		Fork dimensions	s/e/I (mm)	40/120/1150	50/140/1150	4.2
		Fork carriage ISO 2328, class/type A, B	37 671 (11111)	2/B	2/B	4.23
		Fork-carriage width	b <sub>3</sub> (mm)	800	800	4.2
		Distance between fork-arms	b <sub>5</sub> (mm)	356/692	356/712	4.2
		Distance between wheel arms/loading surfaces	b <sub>4</sub> (mm)	940	940	4.2
		Reach distance	I <sub>4</sub> (mm)	6901)	7111)	4.2
		Ground clearance, laden, below mast	m <sub>1</sub> (mm)	90	90	4.3
	4.32		m <sub>2</sub> (mm)	803)	803)	4.3
		Aisle width for pallets 1000 x 1200 crossways	Ast (mm)	27841)	28291)	4.3
		Aisle width for pallets 800 x 1200 lengthways	Ast (mm)	28291)	28711)	4.3
		Truck diagonal	D (mm)	2205	2255	5
	4.35	Turning radius	Wa (mm)	1735	1795	4.3
	4.37		I <sub>7</sub> (mm)	1986	2046	4.3
	5.1	Travel speed, laden/unladen	km/h	11.8/12.24)	11.8/12.24)	5.1
g	5.2	Lift speed, laden/unladen	m/s	0.40/0.70	0.32/0.60	5.2
Ca	5.3	Lowering speed, laden/unladen	m/s	0.5	0.5	5.3
Performance Data	5.4	Reaching speed, laden/unladen	m/s	0.22)	0.152)	5.4
	5.7	Gradeability, laden/unladen	%	7/10	6/10	5.7
	5.8	Max. gradeability, laden/unladen	%	10/15	10/15	5.8
	5.9	Acceleration time, laden/unladen	S	5.2/4.8	5.4/4.6	5.9
		Service brake		electric	electric	5.1
Electric Engine	6.1	Drive motor rating S <sub>2</sub> 60 min	kW	6.9	6.9	6.1
	6.2	Lift motor rating at S <sub>3</sub> 15 %	kW	10	10	6.2
	6.3	Battery acc. to DIN 43531/35/36 A, B, C, no		43531 C	43531 C	6.3
	6.4	Battery voltage, nominal capacity $K_5$	V/Ah	48/560	48/560	6.4
	6.5	Battery weight	kg	750	750	6.5
	8.1	Type of drive control		MOSFET control AC	MOSFET control AC	8.1
S	8.2	Operating pressure for attachments	bar	150	150	8.2
Others	8.3	Oil volume for attachments	I/min	20	20	8.3
٦	8.4	Sound level at the driver's ear according to EN 12		70	70	8.4
	, U. T	1		, ,	, , ,	10.5

#### **High-performance mast**

Jungheinrich masts ensure maximum safety and maximise space utilisation even at high lift heights:

- Excellent load visibility.
- Integrated side shift.
- Lowest overhead clearance requirement at high lift heights.
- Smooth mast tilt.
- High quality profiles provide an extremely long lifespan.
- High residual lift capacity even at high lift heights.
- Lift heights of up to 7400 mm.
- Integrated hose routing, also for auxiliary hydraulics (no hose reel).

#### **Ergonomic operator cabin**

The operator's cabin provides the ideal working conditions to achieve both high performance and ease of operation.



Ergonomic operator cabin

- Entry/Exit step plate can be seen from above
- Horizontally and vertically adjustable steering wheel.
- Comfort seat, fully adjustable for each operator (seat position/backrest/bodyweight).
- The side facing seat arrangement offers perfect visibility, even when transporting high loads.
- Large number of in-cab storage areas.

- Important truck controls are within easy reach.
- Generous space availability.
- Electric 180° steering and optimally positioned steering wheel.
- Automatic centering of the side shift at the push of a button (optional).



SOLO-PILOT

#### Easy control using "SOLO PILOT"

The control lever to activate all hydraulic functions including the selection of travel direction and horn.

- All controls are visible and have a clearly allocated function.
- Also auxiliary equipment, e.g. forkpositioner (optional) can be comfortably controlled with the "SOLO-PILOT".
- Precise control through smooth activation of all functions.
- Adjustable arm rest allows relaxed posture of the operator's arm.

#### Easy to read operator display

High quality instruments for displaying the most important operating data.

- Travel direction and drive wheel position display.Battery condition with discharge status
- Battery condition with discharge status display.
- Three adjustable travel programmes to cater for every requirement.
- Operating hours and clock.
- Lift height (optional).
- Load weight (optional).

## More efficiency and economy using 3rd Generation AC technology

Powerful 3<sup>rd</sup> Generation AC technology for drive, lift and steering offers many advantages over conventional DC motors.

- Powerful acceleration.
- Quick reversing without delay.
- High operational availability due to maintenance free motors without carbon brushes.
- Longer operational times through regenerative battery charging when reducing travel speed.
- Two year guarantee on drive and lift motors.

#### All weather cabin (optional)

- All weather cabin in 3 variations (Economy/Comfort 1/Comfort 2) for the protection of the operator in regular outdoor usage.
- "Economy" with roof and front screen.
- "Comfort 1" with roof, front and side screens for protection against frequent rain.
- "Comfort 2" with roof, front & side screens and door for all round protection.



Ergonomic operator cabin

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