

Jungheinrich Electric Reach Truck Retrak[®] Capacity 3500 lb

ETVC 16



- **Superelastic tires (CSE) for indoor and outdoor use**
- **Trailer loading and off-loading**
- **3-phase AC drive and lift motors**
- **Spacious workplace with SOLO-PILOT**
- **Energy reclamation during braking**

Apart from excellent performance, the Jungheinrich reach trucks have high economic efficiency. The reach trucks, with superelastic tires, are used wherever trailers are loaded and off-loaded and where pallets are to be stored in narrow warehouse aisles.

Driver Workplace: The generous operator module affords the driver a comfortable body posture and effective spinal support during travel in each travel direction.

Seat: The hydraulic cushioning reduces shock and vibration stress. Adjustable to weights from 100 to 300 lb.

Pedals: Automotive type arrangement. Dual pedal control available as an option.

Instruments: Display and setting instrument LISA (LC Information and Service Display). For warning displays, setting important drive and lifting parameters as well as storage of service information. Hour and battery discharge meters are standard.

Steering: Hydraulic steering via 12" dia. steering wheel.

Hydraulic Lever SOLO-PILOT: One valve lever for the hydraulic main functions lifting/lowering, direction of travel, fork

sideshifting (optional) and horn. Separate levers arranged alongside operate mast reach and mast tilt.

Travel Drive: Asynchronous AC motor has high overload capacity, with 6,000 Watt capacity. If the battery cover is unlocked during operation, only reduced travel speed is possible. The motor carries a two- (2) year warranty.

Battery: 48 Volt / 560 or 700 Ah.

Drive and Hydraulic Control: Jungheinrich AC control fitted as standard. Power transistors with high pulse frequencies control the motors in an energy efficient, quiet fashion. The drive control permits jerk-free starting and strong acceleration. Adjustable energy feedback when releasing the drive pedal through regenerative braking. Crawl speed may be selected.

Wheels: Drive wheel and load wheels: 18 x 7-8, with superelastic tires.

Brake: Three independent braking systems are standard:
1. Regenerative braking through releasing the drive pedal or by direction reversal.

2. Foot operated hydraulic drive and load wheel brake.
3. Parking brake.

Hydraulics: Powerful asynchronous AC motor with 12,000 Watts (15 % rating) capacity and smooth running inner gear wheel pump. Individual functions can be controlled sensitively.

Panorama Mast: The mast provides excellent fork, load and reach leg visibility. Mast sections have high rigidity and permit high load capacities. Two and Three-stage masts are available. Standard lift heights up to 256".

Easy Servicing: Reduced service costs through AC technology. Drive motor and electronics cover can be opened quickly and easily for maintenance work. Easy servicing through LISA, as fault reports are being stored.

Options: Side shift, weather protection cab, battery charging systems, and coldstore version.

Safety: The Retrak conforms to the EU Directive **CE** for Industrial Trucks and ANSI B56.1.



ISO-9001, ISO-14001 -
Certification of Quality and
Environment Management.

JUNGHEINRICH

Performance Data

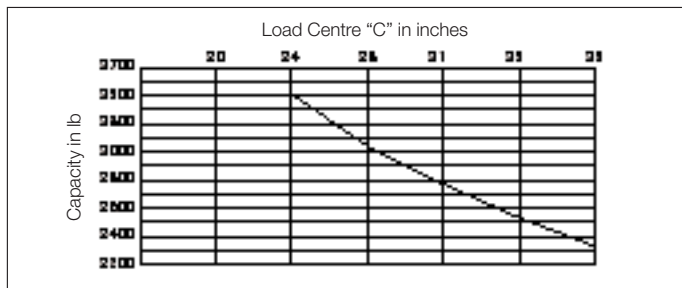
Capacity		3500 lb	1600 kg
Travel speed			
with/without load	in direction of drive unit	7.3 mph	11.8 km/h
	in direction of forks	6.8 mph	11.0 km/h
Lift speed	without load	126 ft/mi	0.64 m/s
	with load	67 ft/mi	0.34 m/s
Lowering speed	without load	98 ft/mi	0.50 m/s
	with load	98 ft/mi	0.50 m/s
Gradient performance	without load		15 %
	with load		10 %
Service weight with triplex mast 209" and 560 Ah battery		7720 lb	3500 kg
Battery sizes		48 V/560 Ah (40.7 x 17.4 x 30"/2070 lb),	
		48 V/700 Ah (40.7 x 21 x 30"/2470 lb).	

Technical Data

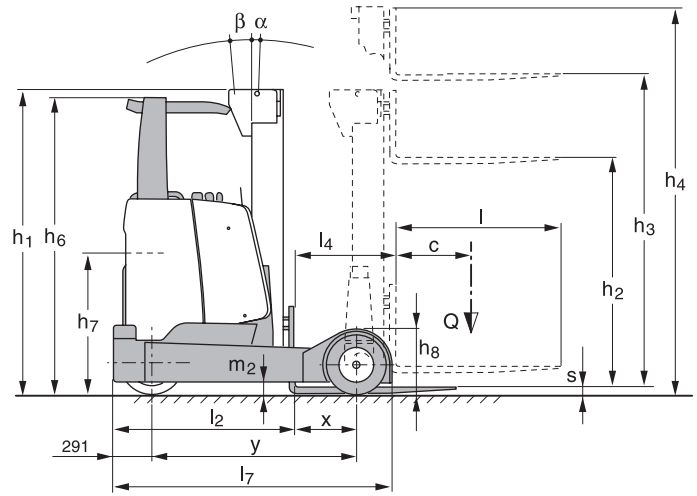
Q	— Capacity	3500 lb	1600 kg
c	— Load centre	24"	600 mm
l_2	— Length incl. back of forks (two stage)*	54.8"	1392 mm
	(triplex)*	55.7"	1414 mm
l_4	— Reach (two-stage)*	24.3"	617 mm
	(triplex)*	23.4"	595 mm
l_7	— Length without forks	77"	1953 mm
b_1	— Maximum width	52.8"	1340 mm
b_2	— Width at driver's side	48.8"	1238 mm
b_3	— Fork carriage width (top)	31.5"	800 mm
	(bottom)	26.8"	680 mm
b_4	— Width between reach legs	35.4"	900 mm
b_5	— Width across forks, max.	28"	717 mm
b_{11}	— Track width	47"	1190 mm
h_6	— Height of overhead guard	89.4"	2270 mm
h_7	— Seat height	43"	1090 mm
h_8	— Height of reach legs	18.2"	462 mm
Wa	— Turning radius	67"	1705 mm
s	— Fork thickness	1.6"	40 mm
e	— Fork width	4.7"	120 mm
l	— Standard fork length	45.3"	1150 mm
x	— Load distance (two-stage)*	11.7"	297 mm
	(triplex)*	10.8"	275 mm
y	— Wheelbase	55.7"	1414 mm
	— Rear overhang	11.4"	291 mm
m_2	— Ground clearance centre wheelbase	3.5"	90 mm
a	— Safety clearance	8"	200 mm
α	— Forward mast tilt		
β	— Backward mast tilt		
h_1	— Closed mast height		
h_2	— Free lift		
h_3	— Lift		
h_4	— Extended mast height		
Ast	— Working aisle width		

* stated dimensions incl. sideshift and 560 Ah battery (700 Ah +/- 90 mm / 3.5")

individual tables



Right to make changes and technical improvements reserved.



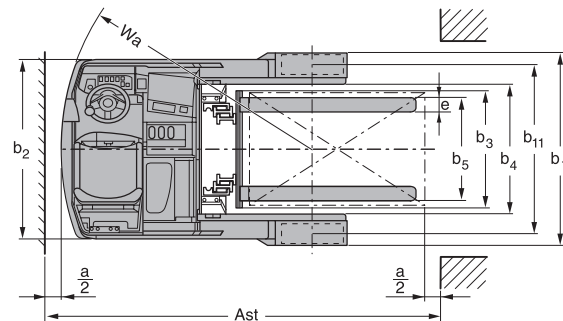
Standard Mast Designs

Two-stage Masts ZT

h_1	h_3	h_2	h_4	α	β				
inch	mm	inch	mm	(°)	(°)				
77"	1950	114"	2900	3.1"	80	140"	3544	2	5
81"	2050	122"	3100	3.1"	80	147"	3744	2	5
87"	2200	134"	3400	3.1"	80	159"	4044	2	5
91"	2300	142"	3600	3.1"	80	167"	4244	2	5
94"	2400	150"	3800	3.1"	80	175"	4444	2	5
98"	2500	157"	4000	3.1"	80	183"	4644	2	5
106"	2700	173"	4400	3.1"	80	199"	5044	2	5

Three-stage Masts DZ

h_1	h_3	h_2	h_4	α	β				
inch	mm	inch	mm	(°)	(°)				
77"	1950	167"	4250	51"	1306	193"	4894	2	5
81"	2050	179"	4550	55"	1406	204"	5194	2	5
87"	2200	197"	5000	61"	1556	222"	5644	2	5
91"	2300	209"	5300	65"	1656	234"	5944	2	4
94"	2400	220"	5600	69"	1756	246"	6244	2	4
98"	2500	232"	5900	73"	1856	258"	6544	2	4
102"	2600	244"	6200	77"	1956	269"	6844	2	4
106"	2700	256"	6500	81"	2056	281"	7144	2	4



Working Aisle Widths

Pallet	Position	Ast incl. 8" safety clearance	
		two-stage	triplex
40" x 48"	crosswise	112" 2848 mm	113" 2865 mm
	lengthwise	117" 2959 mm	117" 2978 mm

(with 700 Ah battery + 90 mm / 3.5")