



Electric reach truck

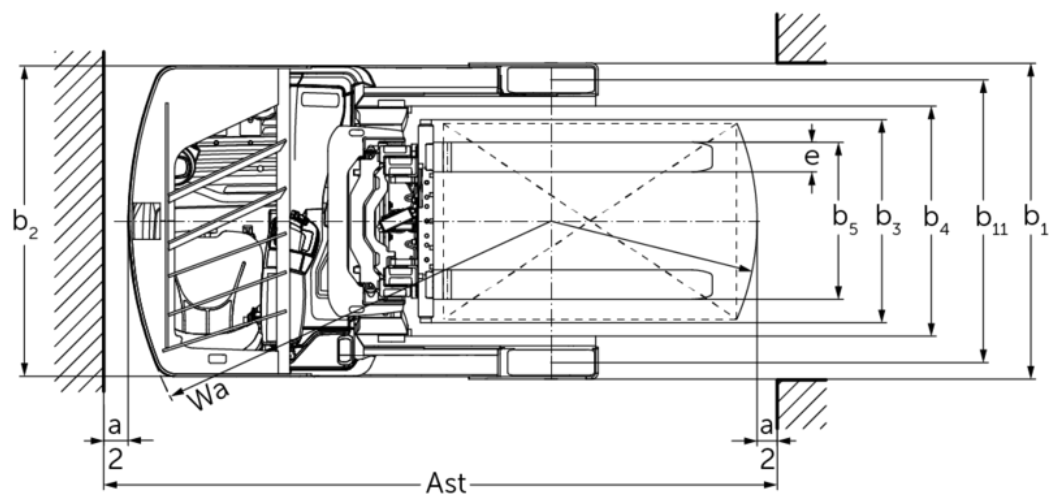
ETV 314i - 325i

Lift height: 4250-14000 mm / Load capacity: 1400-2500 kg



Technical drawing of a vehicle chassis (Fig. 1) showing dimensions and forces. The drawing includes a side view of the chassis and a top view of the wheel assembly. Dimensions are labeled as follows:

- h_1 : Total height of the chassis.
- h_2 : Height of the chassis body.
- h_3 : Height of the chassis body.
- h_4 : Height of the chassis body.
- h_5 : Height of the chassis body.
- h_6 : Height of the chassis body.
- h_7 : Height of the chassis body.
- h_8 : Height of the chassis body.
- l_1 : Total length of the chassis.
- l_2 : Length of the chassis body.
- l_3 : Length of the chassis body.
- l_4 : Length of the chassis body.
- l_5 : Length of the chassis body.
- l_6 : Length of the chassis body.
- l_7 : Length of the chassis body.
- l_8 : Length of the chassis body.
- l_9 : Length of the chassis body.
- l_{10} : Length of the chassis body.
- l_{11} : Length of the chassis body.
- l_{12} : Length of the chassis body.
- l_{13} : Length of the chassis body.
- l_{14} : Length of the chassis body.
- l_{15} : Length of the chassis body.
- l_{16} : Length of the chassis body.
- l_{17} : Length of the chassis body.
- l_{18} : Length of the chassis body.
- l_{19} : Length of the chassis body.
- l_{20} : Length of the chassis body.
- l_{21} : Length of the chassis body.
- l_{22} : Length of the chassis body.
- l_{23} : Length of the chassis body.
- l_{24} : Length of the chassis body.
- l_{25} : Length of the chassis body.
- l_{26} : Length of the chassis body.
- l_{27} : Length of the chassis body.
- l_{28} : Length of the chassis body.
- l_{29} : Length of the chassis body.
- l_{30} : Length of the chassis body.
- l_{31} : Length of the chassis body.
- l_{32} : Length of the chassis body.
- l_{33} : Length of the chassis body.
- l_{34} : Length of the chassis body.
- l_{35} : Length of the chassis body.
- l_{36} : Length of the chassis body.
- l_{37} : Length of the chassis body.
- l_{38} : Length of the chassis body.
- l_{39} : Length of the chassis body.
- l_{40} : Length of the chassis body.
- l_{41} : Length of the chassis body.
- l_{42} : Length of the chassis body.
- l_{43} : Length of the chassis body.
- l_{44} : Length of the chassis body.
- l_{45} : Length of the chassis body.
- l_{46} : Length of the chassis body.
- l_{47} : Length of the chassis body.
- l_{48} : Length of the chassis body.
- l_{49} : Length of the chassis body.
- l_{50} : Length of the chassis body.
- l_{51} : Length of the chassis body.
- l_{52} : Length of the chassis body.
- l_{53} : Length of the chassis body.
- l_{54} : Length of the chassis body.
- l_{55} : Length of the chassis body.
- l_{56} : Length of the chassis body.
- l_{57} : Length of the chassis body.
- l_{58} : Length of the chassis body.
- l_{59} : Length of the chassis body.
- l_{60} : Length of the chassis body.
- l_{61} : Length of the chassis body.
- l_{62} : Length of the chassis body.
- l_{63} : Length of the chassis body.
- l_{64} : Length of the chassis body.
- l_{65} : Length of the chassis body.
- l_{66} : Length of the chassis body.
- l_{67} : Length of the chassis body.
- l_{68} : Length of the chassis body.
- l_{69} : Length of the chassis body.
- l_{70} : Length of the chassis body.
- l_{71} : Length of the chassis body.
- l_{72} : Length of the chassis body.
- l_{73} : Length of the chassis body.
- l_{74} : Length of the chassis body.
- l_{75} : Length of the chassis body.
- l_{76} : Length of the chassis body.
- l_{77} : Length of the chassis body.
- l_{78} : Length of the chassis body.
- l_{79} : Length of the chassis body.
- l_{80} : Length of the chassis body.
- l_{81} : Length of the chassis body.
- l_{82} : Length of the chassis body.
- l_{83} : Length of the chassis body.
- l_{84} : Length of the chassis body.
- l_{85} : Length of the chassis body.
- l_{86} : Length of the chassis body.
- l_{87} : Length of the chassis body.
- l_{88} : Length of the chassis body.
- l_{89} : Length of the chassis body.
- l_{90} : Length of the chassis body.
- l_{91} : Length of the chassis body.
- l_{92} : Length of the chassis body.
- l_{93} : Length of the chassis body.
- l_{94} : Length of the chassis body.
- l_{95} : Length of the chassis body.
- l_{96} : Length of the chassis body.
- l_{97} : Length of the chassis body.
- l_{98} : Length of the chassis body.
- l_{99} : Length of the chassis body.
- l_{100} : Length of the chassis body.



ETV 314i - 325i

ETV 314i, ETV 316i	Lift (h3)	Retracted mast height (h1)	Free lift (h2)	Extended mast height (h4)	Forward/backward tilt of mast	Forward/backward tilt of fork carriage
Fork tilt / Triplex mast DZ / cold-formed	5000 mm	2200 mm	1546 mm	5654 mm		2 / 5 °
	5300 mm	2300 mm	1646 mm	5954 mm		2 / 5 °
	5600 mm	2400 mm	1746 mm	6254 mm		2 / 5 °
	5900 mm	2500 mm	1846 mm	6554 mm		2 / 5 °
	6200 mm	2600 mm	1946 mm	6854 mm		2 / 5 °
	6500 mm	2700 mm	2046 mm	7154 mm		2 / 5 °
	6800 mm	2800 mm	2146 mm	7454 mm		2 / 5 °
	7100 mm	2900 mm	2246 mm	7754 mm		2 / 5 °
	7400 mm	3000 mm	2346 mm	8054 mm		2 / 5 °
	7700 mm	3100 mm	2446 mm	8354 mm		2 / 5 °
	8000 mm	3200 mm	2546 mm	8654 mm		2 / 5 °
	8300 mm	3300 mm	2646 mm	8954 mm		2 / 5 °
	8420 mm	3340 mm	2686 mm	9074 mm		2 / 5 °
	8720 mm	3440 mm	2786 mm	9374 mm		2 / 5 °
	9020 mm	3540 mm	2886 mm	9674 mm		2 / 5 °
	9410 mm	3670 mm	3016 mm	10064 mm		2 / 5 °
	9920 mm	3840 mm	3186 mm	10574 mm		2 / 5 °
	10250 mm	3950 mm	3296 mm	10904 mm		2 / 5 °
	10520 mm	4040 mm	3386 mm	11174 mm		2 / 5 °
	10700 mm	4100 mm	3446 mm	11354 mm		2 / 5 °
Mast tilt / Triplex mast DZ / cold-formed	4550 mm	2050 mm	1396 mm	5204 mm	1 / 5 °	
	5000 mm	2200 mm	1546 mm	5654 mm	1 / 5 °	
	5300 mm	2300 mm	1646 mm	5954 mm	1 / 5 °	
	5600 mm	2400 mm	1746 mm	6254 mm	1 / 3 °	
	5900 mm	2500 mm	1846 mm	6554 mm	1 / 3 °	
	6200 mm	2600 mm	1946 mm	6854 mm	1 / 3 °	
	6500 mm	2700 mm	2046 mm	7154 mm	0.5 / 2 °	
	6800 mm	2800 mm	2146 mm	7454 mm	0.5 / 2 °	

	7100 mm	2900 mm	2246 mm	7754 mm	0.5 / 2 °	
	7310 mm	2970 mm	2316 mm	7964 mm	0.5 / 1 °	
	7400 mm	3000 mm	2346 mm	8054 mm	0.5 / 1 °	
	7700 mm	3100 mm	2446 mm	8354 mm	0.5 / 1 °	
	8000 mm	3200 mm	2546 mm	8654 mm	0.5 / 1 °	
	8300 mm	3300 mm	2646 mm	8954 mm	0.5 / 1 °	
	8420 mm	3340 mm	2686 mm	9074 mm	0.5 / 1 °	
	8720 mm	3440 mm	2786 mm	9374 mm	0.5 / 1 °	
	9020 mm	3540 mm	2886 mm	9674 mm	0.5 / 1 °	
ETV 318i, ETV 320i, ETV 325i		Lift (h3)	Retracted mast height (h1)	Free lift (h2)	Extended mast height (h4)	Forward/backward tilt of mast Forward/backward tilt of fork carriage
Fork tilt / Triplex mast DZ / cold-formed	6200 mm	2700 mm	1970 mm	6930 mm	2 / 5 °	
	6500 mm	2800 mm	2070 mm	7230 mm	2 / 5 °	
	6800 mm	2900 mm	2170 mm	7530 mm	2 / 5 °	
	7400 mm	3100 mm	2370 mm	8130 mm	2 / 5 °	
	7700 mm	3200 mm	2470 mm	8430 mm	2 / 5 °	
	8000 mm	3300 mm	2570 mm	8730 mm	2 / 5 °	
	8420 mm	3440 mm	2710 mm	9150 mm	2 / 5 °	
	8720 mm	3540 mm	2810 mm	9450 mm	2 / 5 °	
	9110 mm	3670 mm	2940 mm	9840 mm	2 / 5 °	
	9620 mm	3840 mm	3110 mm	10350 mm	2 / 5 °	
	9950 mm	3950 mm	3220 mm	10680 mm	2 / 5 °	
	10220 mm	4100 mm	3370 mm	10950 mm	2 / 5 °	
	10520 mm	4200 mm	3470 mm	11250 mm	2 / 5 °	
	10700 mm	4260 mm	3530 mm	11430 mm	2 / 5 °	
	10880 mm	4320 mm	3590 mm	11610 mm	2 / 5 °	
	11120 mm	4400 mm	3670 mm	11850 mm	2 / 5 °	
	11510 mm	4530 mm	3800 mm	12240 mm	2 / 5 °	
	12020 mm	4700 mm	3970 mm	12750 mm	2 / 5 °	
	12530 mm	4870 mm	4140 mm	13260 mm	2 / 5 °	

Mast tilt / Triplex mast DZ / cold-formed	4250 mm	2050 mm	1320 mm	4980 mm	1 / 5 °	
	4700 mm	2200 mm	1470 mm	5430 mm	1 / 5 °	
	5000 mm	2300 mm	1570 mm	5730 mm	1 / 5 °	
	5300 mm	2400 mm	1670 mm	6030 mm	1 / 5 °	
	5600 mm	2500 mm	1770 mm	6330 mm	1 / 3 °	
	5900 mm	2600 mm	1870 mm	6630 mm	0.5 / 2 °	
	6200 mm	2700 mm	1970 mm	6930 mm	0.5 / 2 °	
	6500 mm	2800 mm	2070 mm	7230 mm	0.5 / 2 °	
	6800 mm	2900 mm	2170 mm	7530 mm	0.5 / 2 °	
	6950 mm	2950 mm	2220 mm	7680 mm	0.5 / 1 °	
	7400 mm	3100 mm	2370 mm	8130 mm	0.5 / 1 °	
	8000 mm	3300 mm	2570 mm	8730 mm	0.5 / 1 °	
	8420 mm	3440 mm	2710 mm	9150 mm	0.5 / 1 °	
	8720 mm	3540 mm	2810 mm	9450 mm	0.5 / 1 °	
	9110 mm	3670 mm	2940 mm	9840 mm	0.5 / 1 °	
ETV 320i, ETV 325i	Lift (h3)	Retracted mast height (h1)	Free lift (h2)	Extended mast height (h4)	Forward/backward tilt of mast	Forward/backward tilt of fork carriage
Fork tilt / Triplex mast DZ / cold-formed	12830 mm	4970 mm	4240 mm	13560 mm		2 / 5 °
	13000 mm	5026 mm	4296 mm	13728 mm		2 / 5 °
	13505 mm	5425 mm	4695 mm	14235 mm		2 / 5 °
	14000 mm	5590 mm	4860 mm	14730 mm		2 / 5 °

VDI table

Characteristic	1.1	Manufacturer (abbreviated description)			Jungheinrich					
	1.2	Manufacturer's type designation			ETV 314i	ETV 316i	ETV 318i	ETV 320i	ETV 325i	
	1.3	Drive type			electric					
	1.4	Operation			Sideways-seated					
	1.5	Load capacity/load	Q	kg	1400	1600	1800	2000	2500	
	1.6	Load centre distance	c	mm	600					
	1.8	Load distance, centre of drive axle to fork	x	mm	304	354	363	401	556	
	1.8.1	Load distance, centre of drive axle to fork, mast extended			mm	205			230	
	1.9	Wheelbase	y	mm	1400	1450	1460	1508	1663	
Weights	2.1.1	Service weight (incl. battery)			kg	3270	3370	3560	3580	3880
	2.3	Axle load unladen front/rear			kg	2020 / 1250	2150 / 1220	2260 / 1300	2240 / 1340	2520 / 1360
	2.4	Axle load fork forward laden front/rear			kg	750 / 3920	750 / 4220	700 / 4660	530 / 5050	560 / 5820
	2.5	Axle load fork back laden front/rear			kg	1710 / 2960	1860 / 3110	1960 / 3400	1960 / 3620	2370 / 4010
Wheels/chassis	3.1	Tyres			Polyurethane (PU)					
	3.2	Tyre size, front			Ø 343 x 114			Ø 343 x 114	Ø 343 x 140	
	3.3	Tyre size, rear			Ø 285 x 100			Ø 355 x 106	Ø 355 x 135	
	3.5	Wheels, number front/back (x=driven)			1x / 2					
	3.7	Tread width, rear	b11	mm	1148		1172	1155	1184	
Basic dimensions	4.1	Forward/backward tilt of mast	a/β	°	1 / 5					
	4.2	Retracted mast height (h1)	h1	mm	2300		2400			
	4.3	Free lift (h2)	h2	mm	1656		1670			
	4.4	Lift (h3)	h3	mm	5300					
	4.5	Extended mast height (h4)	h4	mm	5944		6030			
	4.7	Height of overhead guard (cab)	h6	mm	2190					
	4.8	Seat height/stand height	h7	mm	987					
	4.10	Height of support arms	h8	mm	282		283		284	
	4.19	Total length	l1	mm	2466		2467	2477		
	4.20	Length including fork shank	l2	mm	1316		1317	1327		
	4.21.1	total width	b1	mm	1270		1294	1290	1348	
	4.21.2	total width	b2	mm	1270					
	4.22	Fork dimensions	s/ e/l	mm	40 x 120 x 1150			50 x 140 x 1150		
	4.23	Fork carriage connection class	2B							
	4.24	Fork carriage width	b3	mm	830					
	4.25	Width across forks	b5	mm	335			356		
	4.25.1	Width across forks (min./max.)	b5	mm	335 / 730			356 / 750		
	4.26	Width between support arms/loading areas	b4	mm	940					
	4.28	Reach distance			mm	506	586	565	629	784
	4.32	Ground clearance centre of wheelbase	m2	mm	80					
	4.34.1	Aisle width (pallet 1000×1200 sideways)	Ast	mm	2739	2752	2755	2776	2829	
	4.34.2	Aisle width (pallet 800x1200 length)	Ast	mm	2801	2806	2808	2822	2841	
	4.35	Turning radius	Wa	mm	1620	1670	1680	1728	1883	
	4.37	Length over the support arms	L7	mm	1780	1830	1840	1920	2075	

Performance data	5.1	Travel speed laden/unladen (Efficiency drivePLUS)	km/h	- / - 14 / 14				
	5.2	Lift speed laden/unladen (Efficiency liftPLUS)	m/s	- / - 0.59 / 0.81		- / - 0.38 / 0.64		- / - 0.35 / 0.64
	5.3	Lowering speed laden/unladen (Efficiency liftPLUS)	m/s	- / - 0.55 / 0.55				
	5.4	Reach speed laden/unladen (Efficiency liftPLUS)	m/s	- / - 0.2 / 0.2				
	5.7	Gradeability laden/unladen (Efficiency drivePLUS)	%	- 9 / 13	- 8 / 12	- 7 / 11		
	5.8	Max. gradeability laden/unladen (Efficiency drivePLUS)	%	- / - 10 / 15		- / - 9 / 13	- / - 10 / 15	
	5.9	Acceleration time laden/unladen (Efficiency drivePLUS)	s	- / - 4.6 / 4.3		- / - 5.2 / 4.7	- / - 5.3 / 4.7	- / - 5.4 / 4.7
5.10	Service brake		electric					
Electric motor/electronics	6.1	Drive motor, performance S2 60 min (Efficiency drivePLUS)	kW	- 9.5				
	6.2	Lift motor, performance with S3 (Efficiency liftPLUS)	kW	- 15.5				
	6.3	Battery according to DIN 43531/35/36		Jungheinrich Li-ion				
	6.4	Battery voltage/nominal capacity	V	51.2				
	6.5	Battery weight	kg	200		300		
	6.6.1	Energy consumption according to EN cycle (Efficiency PLUS)	kWh/h	- 3.39	- 3.42	- 3.9	- 4.05	- 4.1
	6.6.2	CO2 equivalent according to EN ISO 23308 (Efficiency PLUS)	kg/h0	- 1.8		- 2.1	- 2.2	
	6.7	Throughput (Efficiency PLUS)	t/h	- 57.4	- 65.5	- 71.2	- 74	- 91.9
	6.8	Turnover efficiency according to VDI 2198 (Efficiency PLUS)	t/kWh	- 15.5	- 17.2		- 18	- 22.7
6.8.1	Energy consumption with max. throughput (Efficiency PLUS)	kWh/h	- 3.7	- 3.8	- 4.15	- 4.11	- 4.05	
Other	8.1	Type of drive control		3-phase AC				
	10.1	Operating pressure for attachment	bar	150				
	10.2	Oil flow for attachments	l/min	20				
	10.7	Sound pressure level according to EN12053	dB (A)	70				

- This data sheet according to VDI guideline 2198 only states the technical values of the standard truck. Different tyres, other masts, additional equipment etc. may result in different values.

The German production facilities in
Norderstedt, Moosburg and Landsberg are
certified as well as our Genuine Parts
Center in Kaltenkirchen.

ISO 9001
ISO 14001

Jungheinrich fork lift trucks meet European
safety requirements.



 **JUNGHEINRICH**