



Mobile robot automated VNA storage

EKX 5a

Lift height: 11000-13000 mm / Load capacity: 1400-1600 kg

 **JUNGHEINRICH**

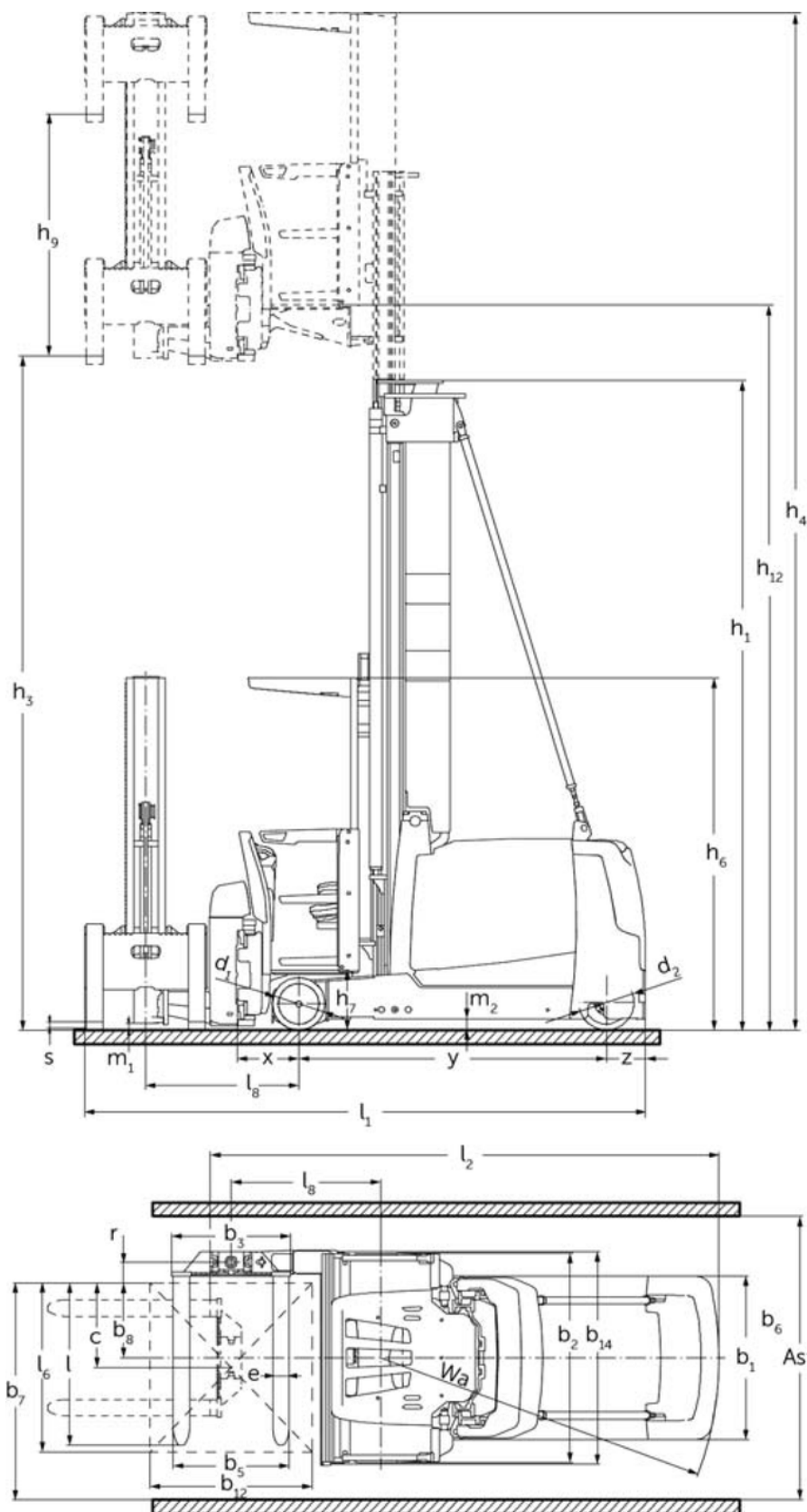
Technical drawing of a forklift truck, showing side and top views with various dimension labels.

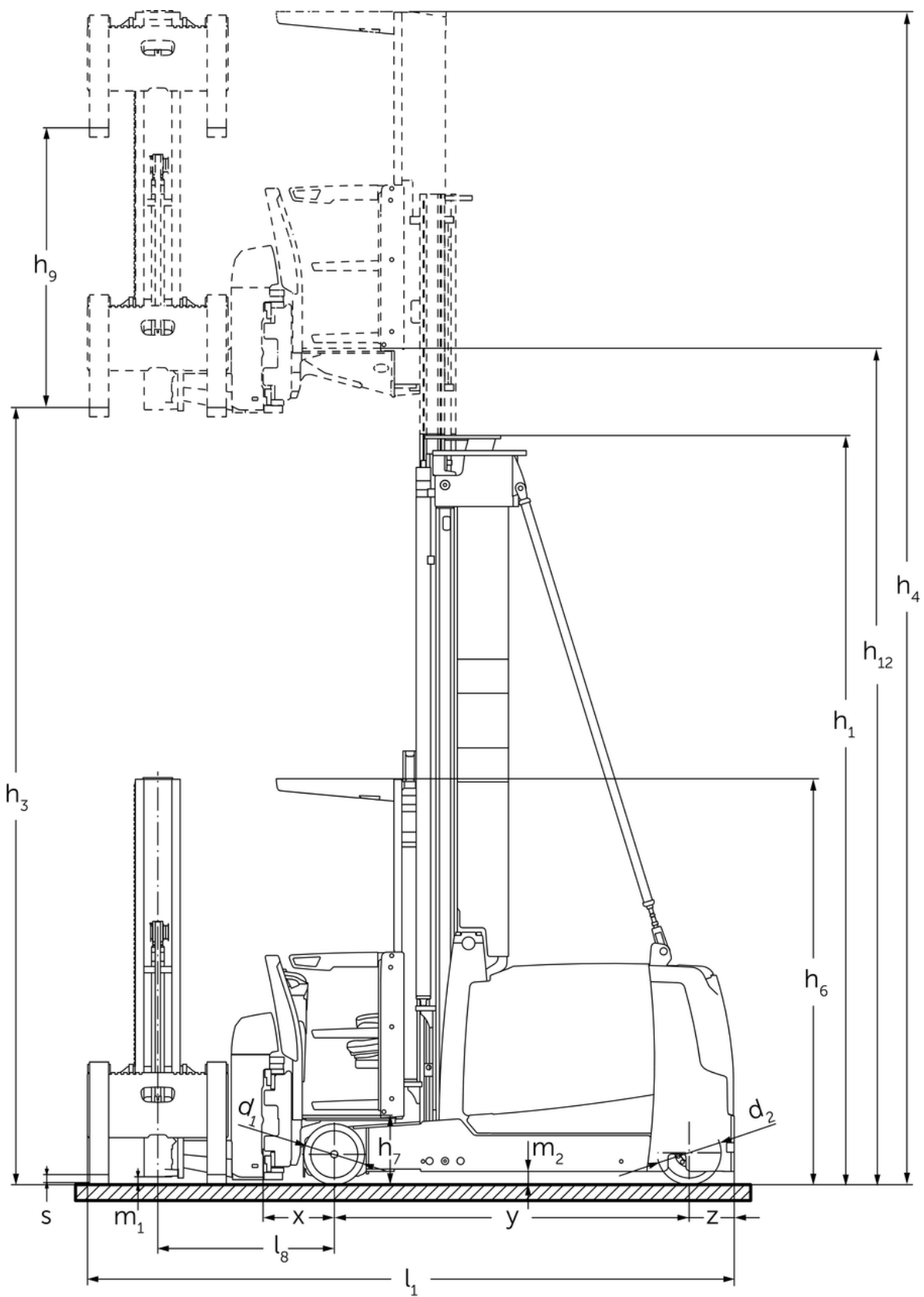
Side View Dimensions:

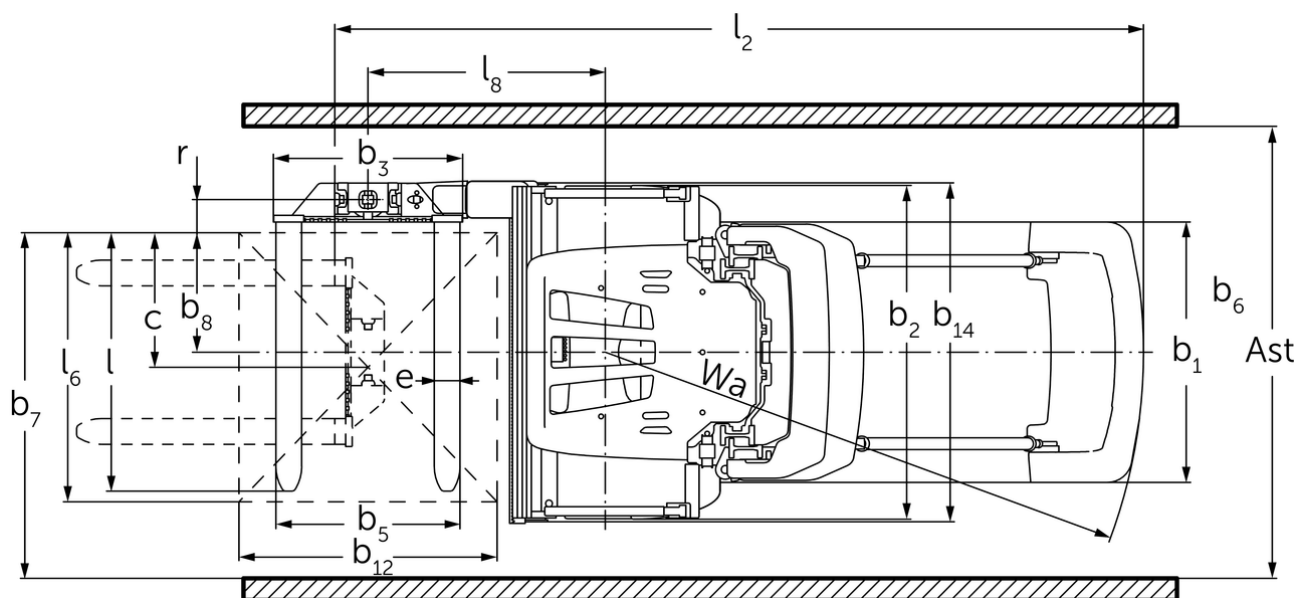
- h_9 : Height of the mast assembly.
- h_3 : Height of the counterweight.
- h_4 : Height of the mast.
- h_{12} : Height of the mast at full extension.
- h_1 : Height of the mast at a specific angle.
- h_6 : Height of the chassis.
- h_7 : Height of the wheel axle.
- s : Ground clearance at the front.
- m_1 : Horizontal distance from front wheel to counterweight.
- x : Horizontal distance from counterweight to mast base.
- y : Horizontal distance from mast base to rear wheel.
- z : Horizontal distance from rear wheel to chassis end.
- l_8 : Wheelbase.
- l_1 : Total chassis length.
- d_2 : Diameter of the rear wheel.
- m_2 : Mass of the chassis.
- q : Angle of the mast.

Top View Dimensions:

- l_2 : Overall width of the truck.
- l_8 : Wheelbase.
- b_3 : Width of the mast.
- b_5 : Width of the counterweight.
- b_6 : Width of the chassis.
- b_1 : Overall width of the chassis.
- b_2 : Width of the mast at the base.
- b_{14} : Width of the mast at the top.
- b_8 : Width of the counterweight at the base.
- b_{12} : Width of the counterweight at the top.
- c : Distance from the front of the counterweight to the mast base.
- e : Distance from the center of the counterweight to the mast base.
- r : Radius of the counterweight.
- l : Distance from the front of the counterweight to the center of the counterweight.
- l_6 : Distance from the front of the counterweight to the mast base.
- Wa : Weight of the chassis.
- As : Area of the chassis.







EKX 5a

EKX 514a, EKX 516ka, EKX 516a	Lift (h3)	Retracted mast height (h1)	Free lift (h2)	Extended mast height (h4)
Duplex mast ZT	3000 mm	2705 mm		5550 mm
	3500 mm	2955 mm		6050 mm
	4000 mm	3205 mm		6550 mm
	4500 mm	3455 mm		7050 mm
	5000 mm	3705 mm		7550 mm
	5500 mm	3955 mm		8050 mm
	6000 mm	4205 mm		8550 mm
	6500 mm	4555 mm		9050 mm
	7000 mm	4805 mm		9550 mm
	7500 mm	5055 mm		10050 mm
	8000 mm	5305 mm		10550 mm
	8500 mm	5655 mm		11050 mm
	9000 mm	5905 mm		11550 mm
	9500 mm	6155 mm		12050 mm
Triplex mast DZ	4000 mm	2550 mm		6550 mm
	4500 mm	2710 mm	160 mm	7050 mm
	5000 mm	2895 mm	345 mm	7550 mm
	5500 mm	3095 mm	545 mm	8050 mm
	6000 mm	3295 mm	745 mm	8550 mm
	6500 mm	3495 mm	945 mm	9050 mm
	7000 mm	3695 mm	1145 mm	9550 mm
	7500 mm	3895 mm	1345 mm	10050 mm
	8000 mm	4095 mm	1545 mm	10550 mm
	8500 mm	4295 mm	1745 mm	11050 mm
	9000 mm	4495 mm	1945 mm	11550 mm

	9250 mm	4595 mm	2045 mm	11800 mm
	9500 mm	4695 mm	2145 mm	12050 mm
EKX 516a	Lift (h3)	Retracted mast height (h1)	Free lift (h2)	Extended mast height (h4)
Triplex mast DZ	11000 mm	5215 mm	2665 mm	13550 mm
	11500 mm	5395 mm	2845 mm	14050 mm
	12000 mm	5565 mm	3015 mm	14550 mm
	12500 mm	5750 mm	3200 mm	15050 mm
	13000 mm	5950 mm	3400 mm	15550 mm
	13500 mm	6250 mm	3700 mm	16050 mm
	14000 mm	6550 mm	4000 mm	16550 mm
	14500 mm	6850 mm	4300 mm	17050 mm
EKX 516ka, EKX 516a	Lift (h3)	Retracted mast height (h1)	Free lift (h2)	Extended mast height (h4)
Duplex mast ZT	10000 mm	6405 mm		12550 mm
	10500 mm	6655 mm		13050 mm
Triplex mast DZ	10000 mm	4875 mm	2325 mm	12550 mm
	10500 mm	5045 mm	2495 mm	13050 mm

VDI table

Characteristic	1.1	Manufacturer (abbreviated description)			Jungheinrich		
	1.2	Manufacturer's type designation			EKX 514a	EKX 516ka	EKX 516a
	1.3	Drive type			electric		
	1.4	Operation			Automatic		
	1.5	Load capacity/load	Q	kg	1400	1600	
	1.6	Load centre distance	c	mm	600		
	1.8	Load distance, centre of drive axle to fork	x	mm	445		
	1.9	Wheelbase	y	mm	1840	1950	2220
Weights	2.1.1	Service weight (incl. battery)		kg	6350	6750	7900
	2.2	Axle load laden front/rear		kg	5720 / 1880	6190 / 2060	6590 / 2810
	2.3	Axle load unladen front/rear		kg	3850 / 2500	3980 / 2770	4480 / 3420
Wheels/chassis	3.1	Tyres			Bestthane		
	3.2	Tyre size, front			Ø 380 x 192		
	3.3	Tyre size, rear			Ø 400 x 160		
	3.5	Wheels, number front/back (x=driven)			2 / 1x		
	3.6	Tread width, front	b10	mm	1258		
Basic dimensions	4.2	Retracted mast height (h1)	h1	mm	2955		
	4.4	Lift (h3)	h3	mm	3500		
	4.5	Extended mast height (h4)	h4	mm	6050		
	4.8	Seat height/stand height	h7	mm	430		
	4.19	Total length	l1	mm	3665	3775	4045
	4.20	Length including fork shank	l2	mm	3379	3489	3759
	4.21.1	total width	b1	mm	1210		
	4.21.2	total width	b2	mm	1450		
	4.22	Fork dimensions	s/e/ l	mm	50 x 120 x 1200		
	4.25	Width across forks	b5	mm	560		
	4.31	Ground clearance laden under mast	m1	mm	80		
	4.32	Ground clearance centre of wheelbase	m2	mm	80		
Performance data	5.1	Travel speed laden/unladen		km/h	10.5 / 10.5	12 / 12	
	5.10	Service brake			regenerative		
	5.11	Parking brake			Electric sprung-loaded		

Electric motor/electronics	6.1	Drive motor, performance S2 60 min	kW	9		
	6.2	Lift motor, performance with S3	kW	25		
	6.3	Battery according to DIN 43531/35/36		3 PzS 465	4 PzS 620	6 PzS 930
	6.4	Battery voltage/nominal capacity	V / Ah	80 / 465	80 / 620	80 / 930
	6.5	Battery weight	kg	1238	1558	2178
	6.6	Energy consumption according to VDI cycle	kWh/h	0		
	6.6.1	Energy consumption according to EN cycle	kWh/h	4.94		
	6.6.2	CO2 equivalent according to EN ISO 23308	kg/h0	2.67		
Other	8.1	Type of drive control		AC synchronous reluctance		
	10.5	Steering version		electric		
	10.7	Sound pressure level according to EN12053	dB (A)	64		

- 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.

Jungheinrich

Lift Truck Corp.

2121 West Sam Houston Pkwy. N.
Houston, TX 77043-2305

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.

The Jungheinrich logo, featuring a red upward-pointing arrow above the word 'JUNGHEINRICH' in a bold, black, sans-serif font.

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