

VC Series

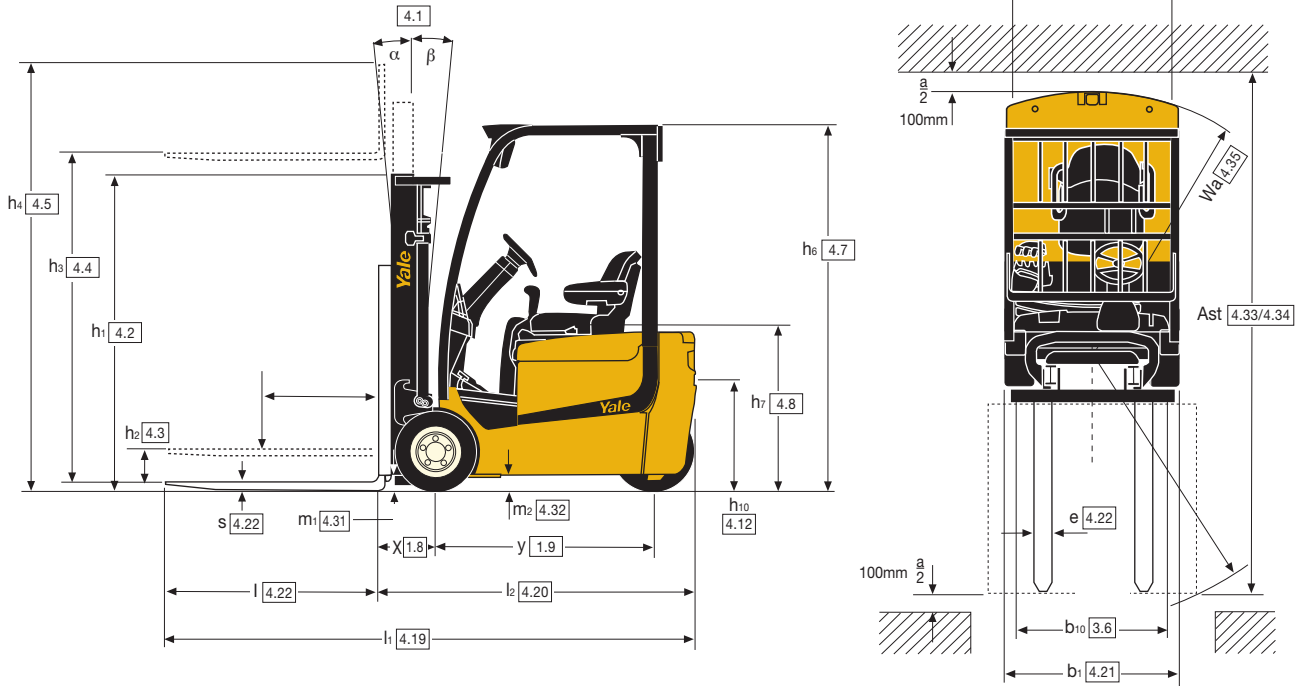
Electric Forklift Trucks

1,250kg and 1,500kg



- 24 volt rear-wheel drive with AC motors throughout
- Narrow truck width of 996mm with best in class working aisle width of 3107mm
- Clearview mast offers a combination of excellent load-handling capability and visibility
- Large footspace, low vibration seat and low noise motors for excellent operator comfort

Truck Dimensions



ERP13 VC Mast details and capacity ratings (kg) - Supercushion tyres

Model							ERP 13 VC					
Tyres							18 x 7-8					
Width across tyres							996mm Standard / 1056mm Wide					
Masts	OAH h1 (mm)	FFH h2+s (mm)	MFH h3+s (mm)	h4 (mm)	Tilt		Forks			Integral Sideshift		
							Load Centre (kg)			Load Centre (kg)		
					F	B	500	600	700	500	600	700
2 Stage LFL Clear View	2230	140	3360	3868	5	5	1250	1110	1050	1240	1110	1000
	2580	140	3860	4368	5	5	1250	1110	1040	1230	1100	1000
	2830	140	4360	4868	5	5	1250	1110	1040	1220	1100	990
	3180	140	4860	5368	5	5	1230	1090	1020	1200	1070	970
2 Stage FFL Hi-Vis	2080	1505	3218	3728	5	5	1250*	1110*	1040*	1220*	1090*	990*
	2330	1805	3718	4228	5	5	1250*	1110*	1040*	1210*	1080*	980*
	2680	2105	4338	4847	5	5	1250*	1110*	1030*	1200*	1080*	970*
3 Stage FFL Clear View	2080	1572	4600	5108	5	5	1250	1110	1030	1210	1080	980
	2180	1672	4900	5408	5	5	1220	1080	1010	1180	1060	960
	2330	1822	5200	5708	5	5	1170*	1040*	960*	1120*	1010*	910*
	2430	1942	5500	6008	5	5	1070*	990*	920*	1070*	960*	870*

ERP15 VC Mast details and capacity ratings (kg) - Supercushion tyres

Model							ERP 15 VC					
Tyres							18 x 7-8					
Width across tyres							996mm Standard / 1056mm Wide					
Masts	OAH h1 (mm)	FFH h2+s (mm)	MFH h3+s (mm)	h4 (mm)	Tilt		Forks			Integral Sideshift		
							Load Centre (kg)			Load Centre (kg)		
					F	B	500	600	700	500	600	700
2 Stage LFL Clear View	2230	140	3360	3868	5	5	1500	1320	1250	1480	1320	1200
	2580	140	3860	4368	5	5	1500	1320	1240	1470	1310	1190
	2830	140	4360	4868	5	5	1500	1320	1230	1460	1310	1180
	3180	140	4860	5368	5	5	1430	1250	1170	1390	1240	1120
2 Stage FFL Hi-Vis	2080	1505	3218	3728	5	5	1500*	1320*	1240*	1450*	1300*	1180*
	2330	1805	3718	4228	5	5	1500*	1320*	1240*	1450*	1300*	1170*
	2680	2105	4338	4847	5	5	1500*	1320*	1230*	1440*	1290*	1170*
3 Stage FFL Clear View	2080	1572	4600	5108	5	5	1470	1290	1210	1420	1270	1150
	2180	1672	4900	5408	5	5	1400	1250	1160	1360	1220	1100
	2330	1822	5200	5708	5	5	1360*	1200*	1110*	1300*	1170*	1060*
	2430	1942	5500	6008	5	5	1210*	1140*	1060*	1210*	1110*	1010*

* Wide Tread required.

VDI 2198 - General Specifications

Characteristics	1.1	Manufacturer		Yale		Yale	
	1.2	Model designation		ERP13 VC		ERP15 VC	
	1.3	Drive: electric		Battery		Battery	
	1.4	Operation: Hand, pedestrian, stand, seat, orderpicker		Seat		Seat	
	1.5	Load capacity	Q (kg)	1250		1500	
	1.6	Load centre	c (mm)	500		500	
	1.8	Load distance	x (mm)	326		326	
Weights	1.9	Wheelbase	y (mm)	1168		1222	
	2.1	Unladen weight (max. battery)	kg	2700		2905	
	2.2	Axle loading with load, front/rear (max. battery) ●	kg	3319	631	3755	649
Wheels and Tyres	2.3	Axle loading without load, front/rear (max. battery) ●	kg	1184	1516	1240	1665
	3.1	Tyres: L = pneumatic, V = cushion, SE = supercushion		SE		SE	
	3.2	Tyre size, front		18 x 7-8		18 x 7-8	
	3.3	Tyre size, rear		18 x 7-8		18 x 7-8	
	3.5	Number of wheels, front/rear (X = driven)		2 / 1X		2 / 1X	
	3.6	Track width, front, standard/wide tread	b10 (mm)	836	896	836	896
	3.7	Track width, rear	b11 (mm)	-		-	
Dimensions	4.1	Mast tilt, forward α /back β	degrees	5 / 5		5 / 5	
	4.2	Height of mast, lowered	h1 (mm)	2230		2230	
	4.3	Free lift ▼	h2 (mm)	100		100	
	4.4	Lift height ▼	h3 (mm)	3320		3320	
	4.5	Height of mast, extended +	h4 (mm)	3868		3868	
	4.7	Height to top of overhead guard ○	h6 (mm)	2060		2060	
	4.8	Seat height ✕	h7 (mm)	926		926	
	4.12	Towing coupling height	h10 (mm)	540		540	
	4.19	Overall length ●	l1 (mm)	2724		2778	
	4.20	Length to face of forks ●	l2 (mm)	1724		1778	
	4.21	Overall width, standard/wide tread	b1/b2 (mm)	996	1056	996	1056
	4.22	Fork dimensions	s/e/l (mm)	40 / 80 / 1000		40 / 80 / 1000	
	4.23	Fork carriage DIN 15173. Class, A/B		IIA		IIA	
	4.24	Fork carriage width ▯	b3 (mm)	907		907	
	4.31	Ground clearance under mast, with load	m1 (mm)	88		88	
	4.32	Ground clearance at centre of wheelbase	m2 (mm)	85		85	
	4.33	Aisle width with pallets 1000mm x 1200mm wide ■	Ast (mm)	3053		3107	
	4.34	Aisle width with pallets 800mm x 1200mm long □	Ast (mm)	3176		3230	
	4.35	Outer turning radius	Wa (mm)	1398		1452	
	4.36	Inner turning radius	b13 (mm)	0		0	
Performance	5.1	Travel speed with load/without load	km/h	12.0	12.5	12.0	12.5
	5.2	Lifting speed with load/without load	m/s	0.30	0.51	0.30	0.51
	5.3	Lowering speed with load/without load	m/s	0.50	0.46	0.50	0.46
	5.5	Drawbar pull with load/without load, 60 minute rating	N	951	975	942	970
	5.6	Maximum drawbar pull with load/without load, 5 minute rating	N	6296	6221	6212	6242
	5.7	Gradeability with load/without load, 30 minute rating	%	8.2	12.1	7.3	11.2
	5.8	Maximum gradeability with load/without load, 5 minute rating	%	16.3	24.3	14.5	22.4
	5.9	Acceleration time with load/without load 10m ☼	sec	5.6	4.7	5.7	4.9
	5.10	Service brake		Hydraulic		Hydraulic	
	6.1	Drive motor output, (S2 60 minute rating)	kW	4.7		4.7	
Motors	6.2	Lifting motor, (S3 15% rating)	kW	6.0		6.0	
	6.3	Battery to DIN 43531/35/36 A, B, C, no		DIN 43535A		DIN 43535A	
	6.4	Battery voltage/capacity at 5hr rate	V / ah	24	735 / 875	24	840 / 1000
	6.5	Battery weight (min/max)	kg	570	630	642	710
	6.6	Power consumption in accordance with VDI cycle * +	kwh / h	3.9		4.0	
	6.6	Power consumption in accordance with VDI cycle * +	kwh / h	3.9		4.0	
Other	8.1	Drive control		AC		AC	
	8.2	Working pressure for attachments	bar	155		155	
	8.3	Oil flow for attachments ♦	l/min	20		20	
	8.4	Average noise level at operator's ear ★	dB(A)	59		59	
	8.5	Towing coupling type		Pin		Pin	

★ Measured according to the test cycles and based on the weighting values contained in EN12053.

▼ Bottom of forks

✕ Full Suspension seat

▯ Add 32mm with load backrest. Integral sideshift is 906mm wide or 939mm with load backrest.

+ Without load backrest

○ h6 subject to +/- 5 mm tolerance

♦ Variable

● With mast vertical

■ 2 Stage and 3 Stage mast, deduct 3mm for FFL mast

□ 2 Stage and 3 Stage mast, deduct 4mm for FFL mast

☼ HiP performance setting

* eLo performance setting

+ 45 cycles

Spec sheet truck based on :-

3360mm 2 stage LFL mast with standard carriage, 1000mm forks and load backrest, manual hydraulics, supercushion drive and steer tyres

VC Series

Models: ERP 13VC, ERP 15VC

Product Features

The ERP13-15VC has been designed to manoeuvre in the tightest of spaces, delivering a cost effective, highly productive solution to meet the requirements of light/medium duty applications, such as loading/unloading lorries and handling pallets in containers and warehouses.

The VC includes many functions and features familiar across the Yale electrics range, including adjustable performance settings (eLo and HiP modes) and a high mounted multi feature dash display.

Productivity

- 24 volt rear-wheel drive with AC motors throughout provides smooth acceleration and excellent travel, torque and lifting performance, delivering efficient and productive load handling.
- The HiP (High Productivity) performance setting delivers a competitive top speed of 12.0km/h (laden) and lifting speed of 0.3m/s (laden), ideal for the demands of medium duty applications.
- With an overall width of 996mm to facilitate block stacking and a tight turning circle for excellent manoeuvrability in working aisles (AST with 1000 x 1200mm pallet = 3107mm with 40mm thick forks), the VC is the most compact truck in its class, allowing the operator to manoeuvre more confidently in restricted spaces or congested loading/unloading bays.
- The Clearview mast offers class leading visibility allowing the operator to work quicker when picking and depositing loads.
- A range of batteries - 770-875Ah (1.25t) and 840-1000Ah (1.5t) - is available to ensure optimal shift life is achieved between charges.
- Available options, which enhance productivity include: A choice of 11 standard masts, Accutouch mini levers*, Return to set tilt*, light kits, integral side shift

Ergonomics

- The truck has been designed with the operator at the forefront, ensuring that they are as productive in the last hour as in the first hour of the shift.
- Generous foot space, intuitive pedal arrangement and low step height offer a comfortable working space for the driver. This means on/off access and driving in reverse cause less fatigue over long shifts.
- The operator compartment features a standard full suspension seat with 80mm suspension travel to help reduce truck vibrations, and provides unrivalled operator comfort and a smooth ride with low vibration levels from 0.3-0.5m/s², reducing the chance of back problems.
- A class leading low noise level of 59dB(A) reduces the stress on operators making them more productive for longer by ensuring that they are comfortable at all times.
- The optional adjustable mini-lever module

armrest with built-in hydraulic controls, integrated directional control, emergency off switch and horn offers the ultimate in comfort and control.

- A 'Heads-up' display keeps the driver's field of vision clear but provides him with 'at a glance' information on truck operating conditions or performance settings and also allows for maximum storage space in the dash.
- Available options, which enhance ergonomics include; high backrest seat with lumbar support and headrest, telescopic steering column with memory tilt, FDC pedal.

Dependability

- Strong chassis construction provides excellent durability and stability, ensuring the operator can manoeuvre and carry out handling operations with confidence, enhancing productivity.
- The use of proven components, such as O-ring face seal fittings and sealed electrical connectors, as well as a CANbus communications network ensure long term reliability.
- Hall-Effect sensors on the transmission replace internal encoder bearings, making the truck more reliable and decreasing downtime.
- AC motor technology on traction and hoist allows the truck to work more reliably and for longer, reducing downtime significantly.
- A steel hood and durable side covers provide increased resistance to impact damage and general wear and tear.

Low Cost of Ownership

- The e-Balance of performance, manoeuvrability and battery shift life, which can be matched to the application needs, increases productivity and throughput, significantly reducing the cost per pallet moved.
- The eLo (Energy-Low) reduces energy costs, delivering the lowest energy consumption of 3.9kWh/h (1.25t) and 4.0 kW/h (1.5t) on the VDI2198 test (45 cycles).
- The Vehicle System Manager (VSM) allows the adjustment of truck performance parameters as well as monitoring key functions, leading to application matched performance and low maintenance.
- Durable, quality components mean long-term reliability and lower maintenance costs. Virtually maintenance free components such as AC motors mean that the VC requires a full service check only after 1000 hours.
- In-built thermal protection on the traction motor protects truck components, leading to reduced maintenance costs.
- Fast delivery of diagnostic information allows precise troubleshooting, easy maintenance planning and lower costs.
- Available options, which help to reduce operating costs, include; Return to set tilt*, light kits, integral side shift, non-marking

tyres, load backrest, extended warranty.

Serviceability

- Access to diagnostic information via the display or plug-in point on the steering column allows engineers to monitor truck conditions and plan maintenance requirements.
- Easily removable two-piece floor plate provides easy access to power contactor, fuses and relays.
- The truck is fully serviceable without having to remove the battery – the motor, pump, controller and oil tank are easily accessible.
- Downtime for service requirements is minimised, thanks to features such as maintenance free AC motors, DIN wheel nuts, self-adjusting service brakes and gear driven steering (no chain - no lubrication required), as well as extended service intervals:
 - Standard service interval is 1000 hours / 6 months, the drive axle / transmission oil change is 4000 hours and the hydraulic oil change is 4000 hours. The standard warranty is 2000 hours or one year and the powertrain warranty is 4000 hours or two years.
- Available options, which enhance serviceability include; extended warranty = 6000 hours, a programmable maintenance reminder.

Options

- 11 standard mast offerings
- Load backrest and forks
- Integral sideshift
- Wide tread (front) for wide load handling
- Non-marking tyres
- High Backrest seat with lumbar support and headrest
- Telescopic steering column with memory tilt
- Dual internal and Panoramic mirror
- Keyless start with Operator ID
- Daily Operator checklist
- FDC Pedal
- LED light packages with visible alarm strobe
- Audible back up alarm
- Batteries and chargers
- Extended Warranty (36 Months / 6000 hours)
- 12V power outlet *
- Load weight indicator *
- Impact sensor *
- System Monitoring *
- Accutouch mini levers *
- Return to Set Tilt (RTST) *
- Front screen (with wiper) and top screen *
- Sub-zero cold store construction *
- Automatic speed reduction when cornering *

*Available July 2012



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Safety. This truck conforms to the current EU requirements. Specification is subject to change without notice.

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Truck shown with optional equipment