

VT Series

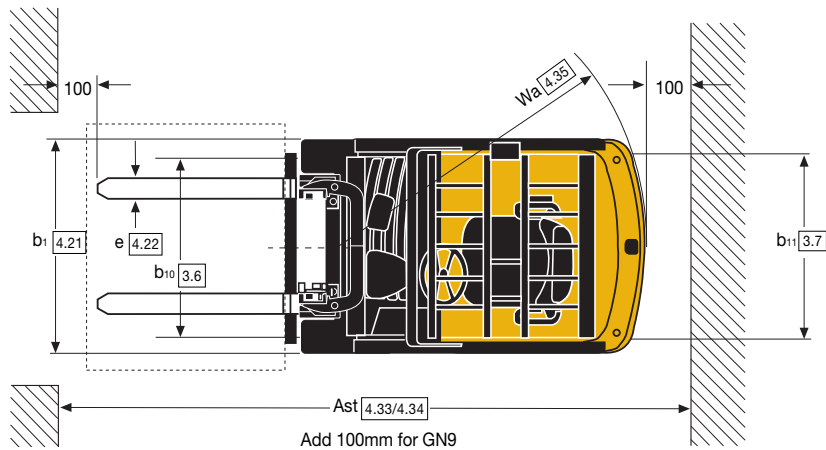
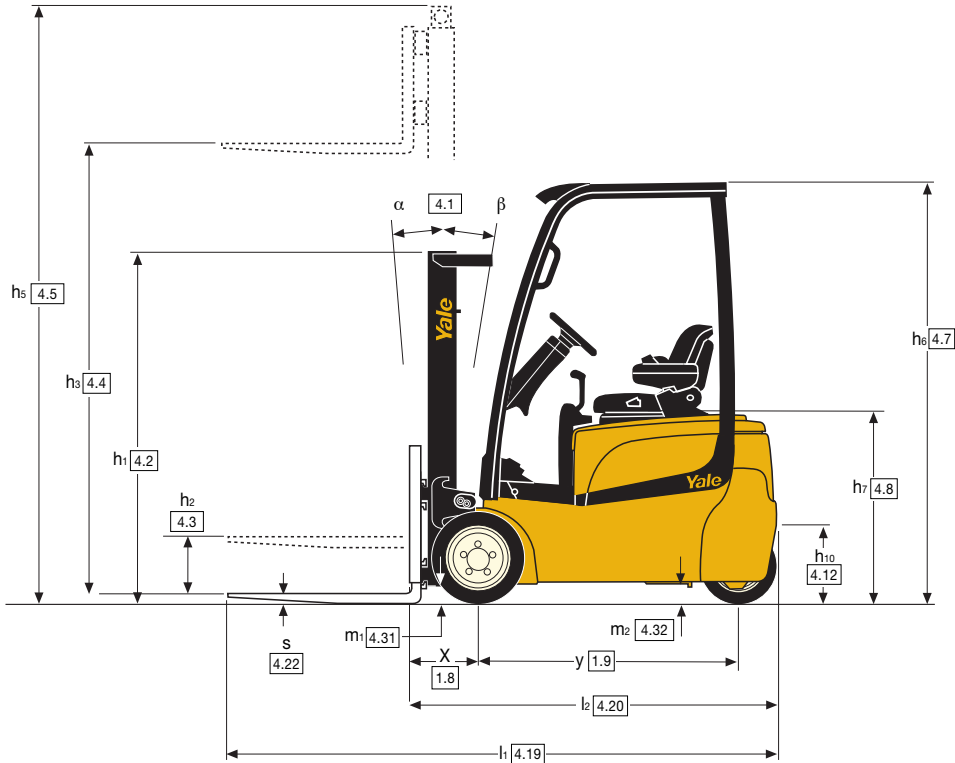
Electric Forklift Trucks with AC Technology

1,500kg, 1,600kg, 1,800kg and 2,000kg



- YaleStop automatic park brake eliminates uncontrolled roll-back on ramps
- Oil-immersed brakes
- CANbus technology
- High-performance AC motor technology
- 2 battery choices: DIN and BS

Truck Dimensions



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

Model						ERP 15 VT SWB						
Tyres						18 x 7-8						
Width across tyres						1050mm						
Masts	OAH	FFH	MFH	Tilt	Forks			Integral Sideshift				
					h1	h2+s	h3+s	h4	F	B	Load Centre	Load Centre
							500	600	700	500	600	700
2 Stage LFL Clear View	2230	140	3360	3868	5	5	1500	1300	1300	1500	1300	1240
	2580	140	3860	4368	5	5	1500	1300	1300	1500	1300	1230
	2830	140	4360	4868	5	5	1480	1280	1280	1480	1280	1220
	3180	140	4860	5368	5	5	1400	1210	1210	1400	1210	1140
3 Stage FFL Clear View	2080	1572	4600	5108	5	5	1450	1250	1250	1450	1250	1190
	2180	1672	4900	5408	5	5	1400	1210	1200	1400	1210	1140
	2330	1822	5200	5708	5	5	1340	1160	1150	1340	1160	1090
	2430	1942	5500	6008	5	5	1240	1110	1100	1210	1110	1040

VDI 2198 - General Specifications

Characteristics	1.1	Manufacturer		Yale	Yale	Yale
	1.2	Model designation		ERP 15VT (SWB)	ERP 16VT (SWB)	ERP 16VT (MWB)
	1.3	Drive: Electric		Battery	Battery	Battery
	1.4	Operation		Seated	Seated	Seated
	1.5	Load capacity	Q (kg)	1500	1600	1600
	1.6	Load centre	c (mm)	500	500	500
	1.8	Load distance	x (mm)	326	326	326
	1.9	Wheelbase	y (mm)	1290	1290	1386
	Weights	2.1	Unladen weight (max. battery)	kg	2990	2990
2.2		Axle loading laden, front/rear (max. battery)	kg	3877 / 604	4013 / 540	4062 / 721
2.3		Axle loading unladen, front/rear (max. battery)	kg	1416 / 1566	1491 / 1563	1506 / 1676
Wheels & Tyres	3.1	Tyres: P=pneumatic, C=cushion, SC=supercushion		SC	SC	SC
	3.2	Tyre size - front		18 x 7-8	18 x 7-8	18 x 7-8
	3.3	Tyre size - rear		15 x 4.5-8	15 x 4.5-8	15 x 4.5-8
	3.5	Number of wheels, front/rear (X = driven)		2X / 2	2X / 2	2X / 2
	3.6	Track width, front	b10 (mm)	889	889	889
	3.7	Track width, rear	b11 (mm)	194	194	194
	Dimensions	4.1	Mast tilt, forward α / back β	degrees	5 / 5	5 / 5
4.2		Height of mast, lowered	h1 (mm)	2230	2230	2230
4.3		Free lift ▼	h2 (mm)	100	100	100
4.4		Lift height ▼	h3 (mm)	3320	3320	3320
4.5		Height of mast, extended +	h4 (mm)	3898	3898	3898
4.7		Height to top of overhead guard	h6 (mm)	2070	2070	2070
4.8		Seat height (raised / lowered) x	h7 (mm)	919	919	919
4.12		Towing coupling height	h10 (mm)	500	500	500
4.19		Overall length	l1 (mm)	2805	2805	2901
4.20		Length to front face of forks	l2 (mm)	1805	1805	1901
4.21		Overall width	b1 (mm)	1050	1050	1050
4.22		Fork dimensions	s/e/l (mm)	40 / 80 / 1000	40 / 80 / 1000	40 / 80 / 1000
4.23		Fork carriage DIN 15173. Class, A/B		2A	2A	2A
4.24		Fork carriage width ▶	b3 (mm)	907	907	907
4.31		Ground clearance under mast, laden	m1 (mm)	88	88	88
4.32		Ground clearance at centre of wheelbase	m2 (mm)	100	100	100
4.33		Aisle width with pallets 1000 long x 1200 wide	Ast (mm)	3131	3131	3230
4.34	Aisle width for pallets 800 wide x 1200 long	Ast (mm)	3254	3254	3353	
4.35	Outer turning radius	Wa (mm)	1476	1476	1575	
4.36	Inner turning radius	b13 (mm)	0	0	0	
Performance	5.1	Travel speed laden/unladen Ⓞ	km/h	16 / 16	16 / 16	16 / 16
	5.2	Lifting speed laden/unladen	m/sec	.43 / .59	.43 / .59	.43 / .59
	5.3	Lowering speed laden/unladen	m/sec	.50 / .47	.50 / .47	.50 / .47
	5.5	Drawbar pull laden/unladen, 60 minute rating	N	3406 / 3680	3406 / 3680	3406 / 3680
	5.6	Max. drawbar pull laden/unladen, 5 minute rating	N	11415 / 11690	11415 / 11690	11415 / 11690
	5.7	Gradeability laden/unladen, 30 minute rating	%	11 / 16	11 / 16	11 / 16
	5.8	Max. gradeability, laden/unladen, 5 minute rating	%	25 / 34	25 / 34	25 / 35
	5.9	Acceleration time laden/unladen	sec	4.6 / 4.1	4.6 / 4.1	4.6 / 4.1
	5.10	Service brake		hydraulic	Hydraulic	Hydraulic
	Motor	6.1	Drive motor output (S2 60 minute rating)	kW	2 x 5.0	2 x 5.0
6.2		Lifting motor, (S3 15% rating)	kW	12	12	12
6.3		Battery to DIN 43531/35/36 A, B, C, no		DIN 43531-A	DIN 43531-A	DIN 43531-A
6.4		Battery voltage/capacity at 5hr rate	V/ah	48 / 500	48 / 500	48 / 625
6.5		Battery weight (min/max)	kg	673 - 743	673 - 743	813 - 899
6.6		Power consumption in accordance with VDI cycle	kWh/h	4.8	4.8	5.1
Other	8.2	Working pressure for attachments	bar	180	180	180
	8.3	Oil flow for attachments, manual hydraulics ❖	l/min	20-40	20-40	20-40
	8.4	Average noise level at operator's ear	dB (A)	65	65	65
	8.5	Towing coupling type		Pin	Pin	Pin

* L_{max} measured according to the test cycles and based on the weighting values contained in EN12053

▼ Bottom of forks

x Full suspension seat (FLM80) specified. Standard hood specified. 953mm with raised hood.

+ Without load backrest

▶ Add 32mm for load backrest

○ h6 subject to +/- 5mm tolerance

❖ Maximum flow through dash display

Ⓞ Extended shift off with e-hydraulics

Yale	Yale	Yale	Yale	Yale	1.1	Characteristics	
ERP 16VT (LWB)	ERP 18VT (MWB)	ERP 18VT (LWB)	ERP 20VT (MWB)	ERP 20VT (LWB)	1.2		
Battery	Battery	Battery	Battery	Battery	1.3		
Seated	Seated	Seated	Seated	Seated	1.4		
1600	1800	1800	2000	2000	1.5		
500	500	500	500	500	1.6		
326	321	321	321	321	1.8		
1494	1386	1494	1386	1494	1.9		
3210	3260	3280	3540	3290	2.1		Weights
4005 / 797	4449 / 606	4384 / 691	4895 / 635	4730 / 572	2.2		
1520 / 1682	1582 / 1673	1595 / 1680	1709 / 1822	1616 / 1674	2.3		
SC	SC	SC	SC	SC	3.1	Wheels & Tyres	
18 x 7-8	200 / 50-10	200 / 50-10	200 / 50-10	200 / 50-10	3.2		
15 x 4.5-8	15 x 4.5-8	15 x 4.5-8	15 x 4.5-8	15 x 4.5-8	3.3		
2X / 2	2X / 2	2X / 2	2X / 2	2X / 2	3.5		
889	908	908	908	908	3.6		
194	194	194	194	194	3.7		
5 / 5	5 / 5	5 / 5	5 / 5	5 / 5	4.1		Dimensions
2230	2180	2180	2180	2180	4.2		
100	100	100	100	100	4.3		
3320	3390	3390	3390	3390	4.4		
3898	4006	4006	4006	4006	4.5		
2070	2070	2070	2070	2070	4.7		
919	919	919	919	919	4.8		
500	500	500	500	500	4.12		
3004	2896	2999	2896	2999	4.19		
2004	1896	1999	1896	1999	4.20		
1050	1116	1116	1116	1116	4.21		
40 / 80 / 1000	40 / 80 / 1000	40 / 80 / 1000	40 / 100 / 1000	40 / 100 / 1000	4.22		
2A	2A	2A	2A	2A	4.23		
907	977	977	977	977	4.24		
88	88	88	88	88	4.31		
100	100	100	100	100	4.32		
3331	3226	3327	3226	3327	4.33		
3454	3348	3449	3348	3449	4.34		
1676	1575	1676	1575	1676	4.35		
0	0	0	0	0	4.36		
16 / 16	16 / 16	16 / 16	16 / 16	16 / 16	5.1	Performance	
0.43 / 0.60	0.41 / 0.58	0.41 / 0.58	0.40 / 0.58	0.40 / 0.58	5.2		
0.50 / 0.48	0.46 / 0.40	0.46 / 0.50	0.47 / 0.40	0.47 / 0.40	5.3		
3406 / 3680	3337 / 3646	3337 / 3646	3260 / 3603	3294 / 3637	5.5		
11415 / 11690	11355 / 11664	11346 / 11655	11269 / 11612	11304 / 11647	5.6		
11 / 16	10 / 15	10 / 15	9 / 14	9 / 15	5.7		
25 / 35	23 / 35	23 / 36	31 / 34	22 / 36	5.8		
4.6 / 4.1	4.6 / 4.1	4.6 / 4.1	4.6 / 4.1	4.6 / 4.1	5.9		
Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	5.10		
2x 5.0	2x 5.0	2x 5.0	2x 5.0	2x 5.0	6.1	Motor	
12	12	12	12	12	6.2		
DIN 43531-A	DIN 43531-A	DIN 43531-A	DIN 43531-A	DIN 43531-A	6.3		
48 / 750	48 / 625	48 / 750	48 / 625	48 / 750	6.4		
962 / 1064	813 / 899	962 / 1064	813 / 899	962 / 1064	6.5		
5.1	5.3	5.4	5.8	5.6	6.6		
180	180	180	180	180	8.2	Other	
20-40	20-40	20-40	20-40	20-40	8.3		
65	65	65	65	65	8.4		
Pin	Pin	Pin	Pin	Pin	8.5		

Spec sheet truck based on:
3360mm (Clear View) and 3430mm (Hi-Vis) to top of fork, 2 stage LFL mast with standard carriage and 1000mm forks, with HiP performance setting, DIN battery configuration.

VT Series

Models: 15VT SWB, 16VT SWB/MWB/LWB, 18VT MWB/LWB, 20VT MWB/LWB

AC Technology

Yale AC technology Class H traction motors are suitable for the most arduous applications. Smooth forward and reverse directional changes providing seamless driving action. In the high-performance or 'HiP' setting, AC technology provides increased speed and acceleration, even when fully laden, and increased speed on grade. As well as improving performance, AC technology reduces maintenance and allows service intervals of 1000 hours for most components.

Brakes

The truck is equipped with automatic park brake and oil immersed brakes. Automatic YaleStop™ park brake: spring applied, electro magnetically released park brakes are mounted at the end of both motors. The park brake is automatically set by the control system, so that the brake is always set whenever the truck is not moving, and no traction has been requested. Moreover the park brake provides controllability on ramp applications.

Steering

A 12 KW AC motor drives a pump which provides oil pressure for the hydraulic pump and for steering, eliminating the need for a separate steering motor and pump. The steering column is infinitely adjustable in a range of 26°. During cornering the speed of the drive motors is continuously adjusted independently by the traction controller ensuring smooth operation. Twin steer tyres provide long tyre life, low power consumption and increased stability.

'eLo' and 'HiP' Settings

Yale VT trucks feature an 'eLo' energy saving setting (accessible via the overhead display with service password), which provides exceptional energy efficient performance for when you require continuous operation over longer periods without recharging the battery. You can choose the 'HiP' high performance setting for higher top speeds and acceleration for the most demanding applications.

Performance modes

Performance of the truck can be tailored via the enhanced overhead

display, with 4 performance modes available to suit the requirements of the application or the preferences of the driver. For maximum speed and acceleration, choose mode 4, or for more delicate maneuvering and extended battery life, mode 1 is ideal.

Your service technician can alter the top speed and acceleration of mode 4, with modes 1, 2 and 3 being automatically adjusted as percentages of setting 4.

Improved ergonomics

The VT is designed for optimum operator comfort.

The operator is seated in an ergonomically designed position for maximum safety, comfort, visibility and ease of operation. The truck features a very low step height, generous floor and storage space, standard grab handle for ease of entry and standard reverse grab handle. The full suspension seat has 80mm of adjustment. A swivel seat option for a superior reverse driving position is available. Both the mini-lever module and the manual levers have an integrated direction switch. Clear footwell allows easy access from both sides.

Masts

A full range of Yale Hi-Vis™ 2 stage LFL and 2 and 3 stage FFL masts are available. Yale Hi-Vis™ masts are designed for maximum visibility, with widely spaced channels, lift chains and main lift cylinders. The new Yale Clear View™ Mast with class-leading visibility is offered on the 1.5T and 1.6T capacities.

Battery

Choice of 2 battery sizes: DIN and BS.

Choice of 3 wheelbases: Depending on the capacity, there is a choice of Short Wheelbase (SWB), Medium Wheelbase (MWB), and Long Wheelbase (LWB). The LWB versions provide extra battery space and longer shift life. SWB versions offer improved maneuverability and reduced stacking aisle dimensions. Battery discharge indicator and lift interrupt are standard on all trucks.

Low lifetime costs

Lower maintenance costs as a result of less maintenance by oil immersed

brakes, electric park brake, and CANbus and AC technology. Transmission is sealed for life, eliminating the need for service. LED light packages are offered as an option. 1000 hours service interval for most components.

Auto Regen Braking optimises the shift life of the battery and contributes to an increase in the life of parts.

Options

- Accutouch mini-levers
- Foot directional control
- Lighting kits, including LED lights
- Reverse alarm
- Integrated sideshift
- DIN and BS battery
- Side battery extraction



NACCO Materials Handling Limited trading as Yale Europe Materials Handling
Flagship House, Reading Road North, Fleet, Hampshire GU51 4WD, United Kingdom.
Tel: + 44 (0) 1252 770700 Fax: + 44 (0) 1252 770784
www.yale-forklifts.eu

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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