



ERP2.0-3.5 MXLG

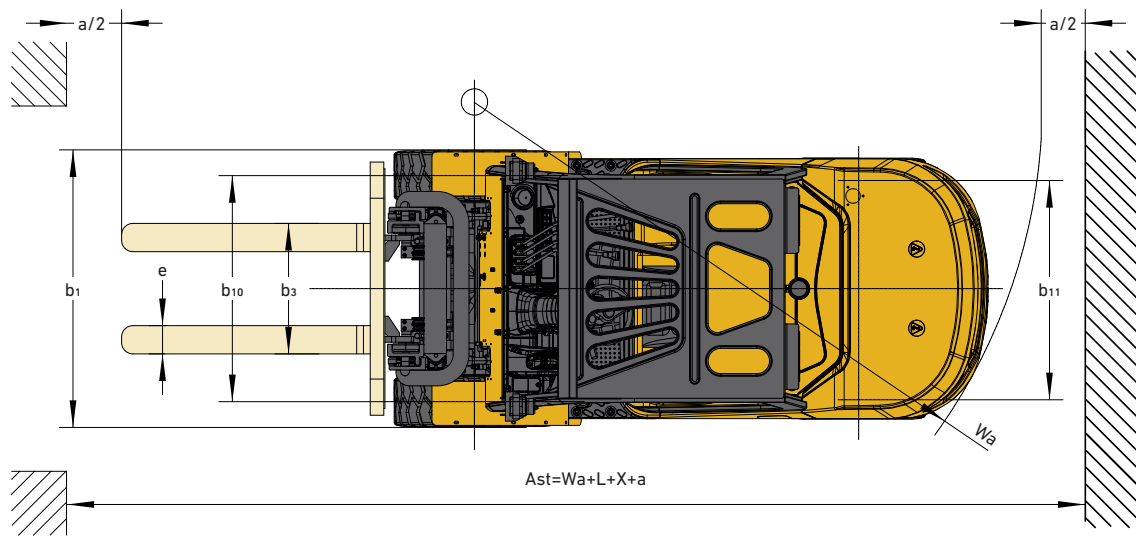
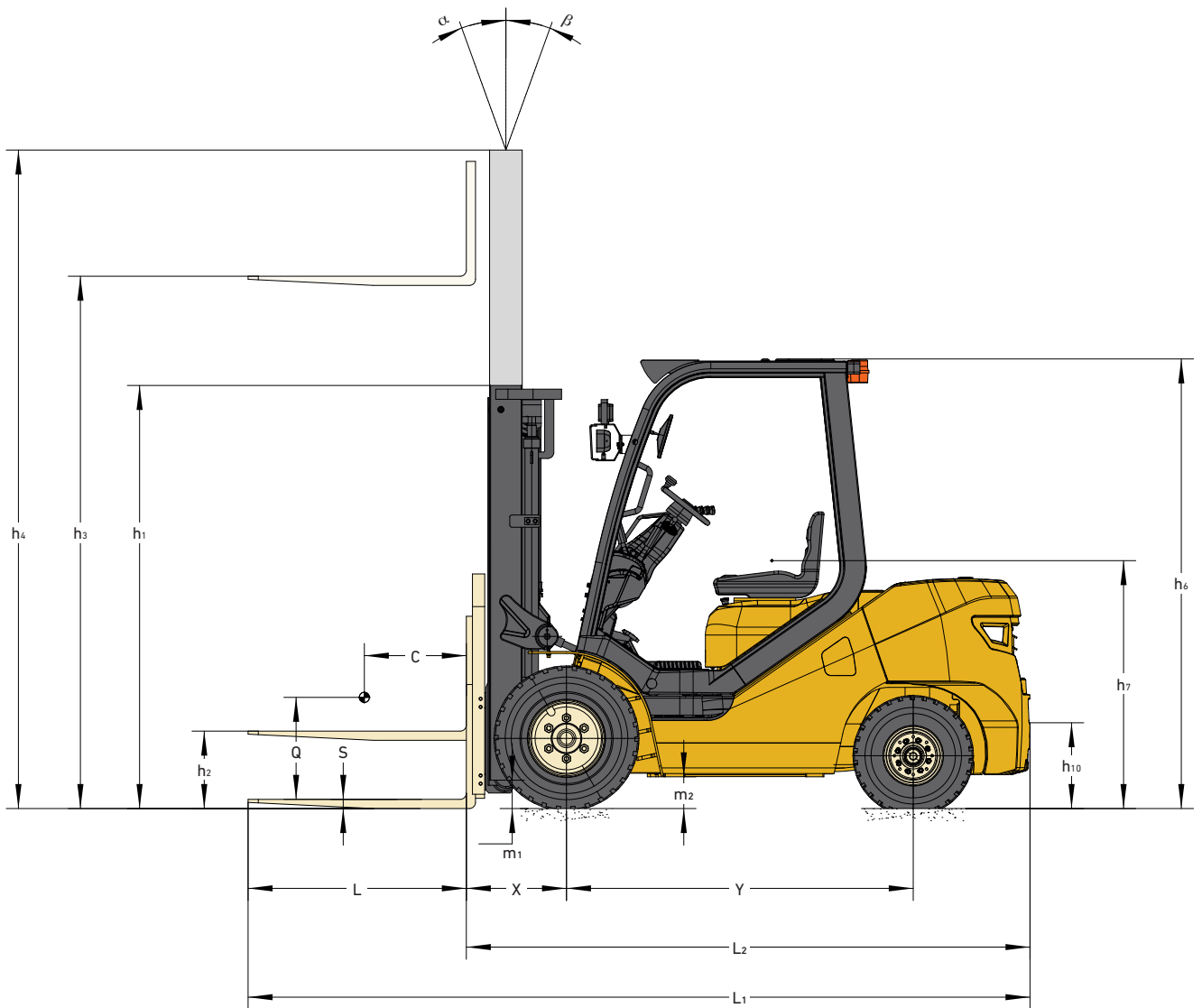
SPEC SHEET

2,000 - 3,500 kg

MXLG Series

Electric Forklift Trucks

TRUCK DIMENSIONS – MXLG SERIES



VDI 2198 – GENERAL SPECIFICATIONS – MXLG SERIES

		Yale						
		ERP2.0MXLG		ERP2.5MXLG				
GENERAL	1-1	Manufacturer						
	1-2	Model designation						
	1-3	Drive	Electric					
	1-4	Operator type	Seat					
	1-5	Rated capacity/rated load	Q (kg)	2000	2500			
	1-6	Load centre distance	c (mm)	500				
	1-8	Load distance, centre of drive axle to fork	x (mm)	476				
	1-9	Wheelbase (with mast vertical)	y (mm)	1600				
	WEIGHT	2-1	Service weight	kg	3515	3645	3775	3905
2-2		Axle loading, laden front/rear	kg	4865/650	4980/665	5535/740	5650/755	
2-3		Axle loading, unladen front/rear	kg	1355/2160	1400/2245	1470/2305	1520/2385	
TYRES	3-1	Tyres front/rear	Pneumatic					
	3-2	Tyre size, front	7.00-12-12PR					
	3-3	Tyre size, rear	6.00-9-10PR					
	3-5	Wheels, number front/rear	2x /2					
	3-6	Tread, front	b ₁₀ (mm)	970				
	3-7	Tread, rear	b ₁₁ (mm)	980				
	DIMENSIONS	4-1	Tilt of mast/fork carriage, forward /backward	α / β (°)	6/12			
4-2		Height, mast lowered	h ₁ (mm)	2010				
4-3		Free lift	h ₂ (mm)	160				
4-4		Lift	h ₃ (mm)	3000				
4-5		Height, mast extended ⁽¹⁾	h ₄ (mm)	3575				
4-7		Height of overhead guard (cabin) ⁽²⁾	h ₆ (mm)	2180				
4-8		Seat height/stand height ⁽³⁾	h ₇ (mm)	1190				
4-12		Towing coupling height	h ₁₀ (mm)	250				
4-19		Overall length	l ₁ (mm)	3630	3692			
4-20		Length to face of forks	l ₂ (mm)	2560	2622			
4-21		Overall width	b ₁ (mm)	1160				
4-22		Fork dimensions ISO2331	s/e/l (mm)	40/122/1070				
4-23		Fork carriage ISO 2328. Class/type, A/B		IIA				
4-24		Fork carriage width ⁽⁴⁾	b ₃ (mm)	1040				
4-31		Ground clearance, laden, below mast	m ₁ (mm)	125				
4-32		Ground clearance, centre of wheelbase	m ₂ (mm)	130				
4-33		Load dimension b ₁₂ x l ₆ crossways	b ₁₂ x l ₆ (mm)	1000*1000				
4-34	Aisle width with predetermined load dimensions	A _{st} (mm)	4042	4096				
4-34-1	Aisle width with pallets 1000mm x 1200mm crossways	A _{st} (mm)	4172	4226				
4-34-2	Aisle width with pallets 800mm x 1200mm crossways	A _{st} (mm)	4172	4226				
4-35	Turning radius	W _a (mm)	2290	2350				
4-36	Inner turning radius	b ₁₃ (mm)	745					
PERFORMANCE	5-1	Travel speed, laden/unladen	km/h	15/15	19/19	15/15	19/19	
	5-1-1	Travel speed, laden / unladen, backwards	km/h	12/12	16/16	12/12	16/16	
	5-2	Lifting speed, laden/unladen	mm/s	400/430	510/540	400/430	510/540	
	5-3	Lowering speed laden/unladen	mm/s	420/500				
	5-5	Drawbar pull laden/unladen	N	16000/13000	19000/15000	17000/15000	23000/16000	
	5-8	Maximum gradeability, laden/unladen	%	15/15	20/20	15/15	20/20	
	5-9	Acceleration time, laden/unladen 15m	sec	5.6/5.5				
	5-10	Service brake		Hydraulic				
	ELECTRIC	6-1	Drive motor rating S2 60 min	Kw	15	21.6	15	21.6
		6-2	Lift motor rating at S3 15 %	Kw	15	22.6	15	22.6
6-3		Battery according to DIN 43531/35/36 A, B, C, no		No				
6-4		Battery voltage/nominal capacity K5	(V)/(Ah)	115.2V/228Ah	153.6V/228Ah	115.2V/228Ah	153.6V/228Ah	
6-5		Battery weight	kg	235	330	235	330	
6-6		Energy consumption according to VDI cycle	kWh/h	4.75	5.4	5.1	5.78	
6-7		Turnover output	t/h	135	162	145	173	
6-8		Energy consumption at turnover output	kWh/h	5.8	5.5	6.27	5.9	
OTHER	8-1	Type of drive unit		PM AC				
	10-1	Operating pressure for attachments	bar	140				
	10-2	Oil volume for attachments ⁽⁵⁾	l/min	64				
	10-7	Sound pressure level at the driver's seat	dB (A)	66				
	10-7-1	Sound power level during the workcycle ⁽⁶⁾	dB (A)	82	81	82	81	
	10-8	Towing coupling, type DIN		PIN				

(1) Without load backrest.

(2) h₆ subject to +/- 5mm tolerance.

(3) Full suspension seat in depressed position.

(4) Add 32mm with load backrest.

(5) Variable.

(6) LPAZ, measured according to the test cycles and based on the weighting values contained in EN12053.

Specification sheet truck based on: VDI 2198, with the following configuration: Complete truck with 3000mm 2-stage limited free lift mast, standard carriage and 1070mm forks, overhead guard and standard pneumatic drive and steer tyres.

All values are nominal values and they are subject to tolerances.

VDI 2198 – GENERAL SPECIFICATIONS – MXLG SERIES

GENERAL				Yale	
				ERP3.0MXLG	ERP3.5MXLG
1-1	Manufacturer				
1-2	Model designation				
1-3	Drive	Electric			
1-4	Operator type	Seat			
1-5	Rated capacity/rated load	Q (kg)	3000	3500	
1-6	Load centre distance	c (mm)	500		
1-8	Load distance, centre of drive axle to fork	x (mm)	491	510	
1-9	Wheelbase (with mast vertical)	y (mm)	1700		
WEIGHT					
2-1	Service weight	kg	4275	4330	4675
2-2	Axle loading, laden front/rear	kg	6416/859	6465/865	7210/965
2-3	Axle loading, unladen front/rear	kg	1710/2565	1732/2598	1846/2829
				1868/2862	
TYRES		Pneumatic			
3-1	Tyres front/rear	28×9-15-14PR			
3-2	Tyre size, front	6.50-10-10PR			
3-3	Tyre size, rear	2x /2			
3-5	Wheels, number front/rear	1000			
3-6	Tread, front	b ₁₀ (mm)	970		
3-7	Tread, rear	b ₁₁ (mm)	970		
DIMENSIONS					
4-1	Tilt of mast/fork carriage, forward /backward	α / β (°)	6/12		
4-2	Height, mast lowered	h ₁ (mm)	2150		
4-3	Free lift	h ₂ (mm)	165	170	
4-4	Lift	h ₃ (mm)	3000		
4-5	Height, mast extended ⁽¹⁾	h ₄ (mm)	3640	3700	
4-7	Height of overhead guard (cabin) ⁽²⁾	h ₆ (mm)	2205		
4-8	Seat height/stand height ⁽³⁾	h ₇ (mm)	1215		
4-12	Towing coupling height	h ₁₀ (mm)	260		
4-19	Overall length	l ₁ (mm)	3763	3853	
4-20	Length to face of forks	l ₂ (mm)	2693		
4-21	Overall width	b ₁ (mm)	1228		
4-22	Fork dimensions ISO2331	s/e/l (mm)	45/122/1070	50/122/1070	
4-23	Fork carriage ISO 2328. Class/type, A/B		IIIA		
4-24	Fork carriage width ⁽⁴⁾	b ₃ (mm)	1100		
4-31	Ground clearance, laden, below mast	m ₁ (mm)	140		
4-32	Ground clearance, centre of wheelbase	m ₂ (mm)	155		
4-33	Load dimension b ₁₂ x l ₄ crossways	b ₁₂ x l ₄ (mm)	1000*1000		
4-34	Aisle width with predetermined load dimensions	A _{st} (mm)	4206	4295	
4-34-1	Aisle width with pallets 1000mm x 1200mm crossways	A _{st} (mm)	4336	4425	
4-34-2	Aisle width with pallets 800mm x 1200mm crossways	A _{st} (mm)	4336	4425	
4-35	Turning radius	W _a (mm)	2430		
4-35	Turning radius	W _a (mm)	2500		
4-36	Inner turning radius	b ₁₃ (mm)	823		
PERFORMANCE					
5-1	Travel speed, laden/unladen	km/h	15/15	19/19	15/15
5-1-1	Travel speed, laden / unladen, backwards	km/h	12/12	16/16	12/12
5-2	Lifting speed, laden/unladen	mm/s	350/380	430/500	350/380
5-3	Lowering speed laden/unladen	mm/s	420/500		
5-5	Drawbar pull laden/unladen	N	19000/16000	26000/17000	19000/16000
5-8	Maximum gradeability, laden/unladen	%	15/15	20/20	15/15
5-9	Acceleration time, laden/unladen 15m	sec	5.6/5.5		
5-10	Service brake		Hydraulic		
ELECTRIC					
6-1	Drive motor rating S2 60 min	Kw	15	21.6	15
6-2	Lift motor rating at S3 15 %	Kw	15	22.6	15
6-3	Battery according to DIN 43531/35/36 A, B, C, no		No		
6-4	Battery voltage/nominal capacity K5	(V)/(Ah)	115.2V/228Ah	153.6V/228Ah	115.2V/228Ah
6-5	Battery weight	kg	235	330	235
6-6	Energy consumption according to VDI cycle	kWh/h	5.78	6.4	6.32
6-7	Turnover output	t/h	165	192	180
6-8	Energy consumption at turnover output	kWh/h	7.1	6.54	7.76
6-8	Energy consumption at turnover output	kWh/h	7.1	6.54	7.76
6-8	Energy consumption at turnover output	kWh/h	7.1	6.54	7.76
6-8	Energy consumption at turnover output	kWh/h	7.1	6.54	7.76
OTHER					
8-1	Type of drive unit		PM AC		
10-1	Operating pressure for attachments	bar	140		
10-2	Oil volume for attachments ⁽⁵⁾	l/min	64		
10-7	Sound pressure level at the driver's seat	dB (A)	66		
10-7-1	Sound power level during the workcycle ⁽⁶⁾	dB (A)	82	81	82
10-8	Towing coupling, type DIN		PIN		

(1) Without load backrest.

(2) h₆ subject to +/- 5mm tolerance.

(3) Full suspension seat in depressed position.

(4) Add 32mm with load backrest.

(5) Variable.

(6) LPAZ, measured according to the test cycles and based on the weighting values contained in EN12053.

Specification sheet truck based on: VDI 2198, with the following configuration: Complete truck with 3000mm 2-stage limited free lift mast, standard carriage and 1070mm forks, overhead guard and standard pneumatic drive and steer tyres.

All values are nominal values and they are subject to tolerances.

MAST DIMENSIONS – ERP 2.0-2.5MXLG

Mast Specification	Maximum Fork Lift (mm)	Overall Extended Height						Free Lift				Load Distance		Mast Tilt		Load capacity			
		Lowered Height		Lift Height				Without Load Backrest (mm)		With Load Backrest (mm)						Load center (500mm)			
				Without Load Backrest		With Load Backrest										Front Single Pneu Tyres		Front Dual Pneu Tyres	
		2t (mm)	2.5t (mm)	2t (mm)	2.5t (mm)	2t (mm)	2.5t (mm)	2t (mm)	2.5t (mm)	2t (mm)	2.5t (mm)	Forward (°)	Back (°)	2t (kg)	2.5t (kg)	2t (kg)	2.5t (kg)		
2-Stage Limited Free-Lift (LFL) Mast																			
M300	3000	2010	2010	3575	3575	3990	3990	160	160	465	465	6	12	2000	2500	2000	2500		
M330	3300	2160	2160	3875	3875	4290	4290	160	160	465	465	6	12	2000	2500	2000	2500		
M370	3700	2360	2360	4275	4275	4690	4690	160	160	465	465	6	6	2000	2500	2000	2500		
M400	4000	2560	2560	4575	4575	4990	4990	160	160	465	465	6	6	2000	2500	2000	2500		
3-Stage Full Free-Lift (FFL) Mast																			
TFM450	4500	2060	2060	5017	5017	5490	5490	1440	1070	485	485	6	6	1830	2020	1900	2340		
TFM480	4800	2160	2160	5317	5317	5790	5790	1540	1170	485	485	6	6	1710	1890	1830	2260		
TFM550	5500	2425	2425	6017	6017	6490	6490	1800	1430	485	485	3	6	1110	1280	1660	2070		
TFM600	6000	2610	2610	6517	6517	6990	6990	1990	1620	485	485	3	6	850	1010	1520	1920		
TFM650	6500	2825	2825	7017	7017	7490	7490	2215	1835	485	485	3	6	610	740	1380	1760		

MAST DIMENSIONS – ERP 3.0-3.5MXLG

Mast Specification	Maximum Fork Lift (mm)	Overall Extended Height						Free Lift				Load Distance		Mast Tilt		Load capacity			
		Lowered Height		Lift Height				Without Load Backrest (mm)		With Load Backrest (mm)						Load center (500mm)			
				Without Load Backrest		With Load Backrest										Front Single Pneu Tyres		Front Dual Pneu Tyres	
		3t (mm)	3.5t (mm)	3t (mm)	3.5t (mm)	3t (mm)	3.5t (mm)	3t (mm)	3.5t (mm)	3t (mm)	3.5t (mm)	3t (mm)	3.5t (mm)	Forward (°)	Back (°)	3t (kg)	3.5t (kg)	3t (kg)	3.5t (kg)
2-Stage Limited Free-Lift (LFL) Mast																			
M300	3000	2075	2150	3640	3700	4100	4100	165	170	165	170	490	510	6	12	3000	3500	3000	3500
M330	3300	2225	2300	3940	4000	4400	4400	165	170	165	170	490	510	6	12	3000	3500	3000	3500
M370	3700	2425	2500	4340	4400	4800	4800	165	170	165	170	490	510	6	6	3000	3500	3000	3500
M400	4000	2625	2700	4640	4700	5100	5100	165	170	165	170	490	510	6	6	3000	3310	3000	3490
3-Stage Full Free-Lift (FFL) Mast																			
TFM450	4500	2125	2200	5100	5140	5600	5600	1525	1560	1025	1100	505	520	6	6	2680	2870	2790	3260
TFM480	4800	2225	2300	5400	5440	5900	5900	1625	1660	1125	1200	505	520	6	6	2610	2630	2710	3180
TFM550	5500	2490	2565	6100	6140	6600	6600	1880	1915	1380	1455	505	520	3	6	1860	1920	2510	2950
TFM600	6000	2675	2750	6600	6640	7100	7100	2075	2110	1575	1650	505	520	3	6	1280	1450	2340	2690
TFM650	6500	2890	2965	7100	7140	7600	7600	2260	2290	1790	1830	505	520	3	6	820	920	2140	2250

All values are nominal values and they are subject to tolerances.

LI-ION BATTERY DATA – MXLG SERIES

Battery Type		115.2V228AH	153.6V228AH
Dimension	L x W x H (mm)	657 x 700 x 608	734 x 658 x 735
Weight	(kg)	280	340
Battery Color		HYG HCE-51 Black	
Nominal Voltage	(V)	115.2	153.6
Maximum Voltage	(V)	130	173.8
Minimum Voltage	(V)	100	122.4
Nominal Capacity	(Ah)	228	
Usable Capacity	(Ah)	205	
Energy	(kWh)	26.3	35
Nominal Discharge Current	(A)	220	250
Maximum Discharge Current -5s	(A)	400	
Nominal Charge Current	(A)	100	150
Maximum Charge Current -5s	(A)	150	170
Operating Temperature	(°C)	-25 – 45	
Charging Temperature	(°C)	0 – 45	
Power Connector		Cable	
Power Connector Position		Side	
Charge Connector		DIN 160A	GB 250A Socket
Charge Connector Position		Side	
Antiarc Type		N/A	
CANBUS Protocol		HYG	
CANBUS Speed		125Kbps for CH and TR	
Chemistry		LFP	

LI-ION CHARGER DATA – MXLG SERIES

Charger type		HWCD18-115V50A		HWCD18-153.6V100A	
Maximum output power	(kW)	6.9	13.8	17.5	19.2
Rated output current	(A)	50	100	150	150
Output voltage range	(V)	60-138		60-180	
Current limit adjustable range	(A)	0-50	0-100	0-150	0-150
Peak-peak murmurs	(%)	≤1			
Precision of voltage regulation	(%)	≤±0.5			
Steady current accuracy	(%)	≤±0.5			
Parallel current sharing module	(%)	≤±5			
Machine efficiency		Output 70 ~ 96 VDC, load ≥50% rated, the whole machine efficiency ≥94%	Load ≥50% rated, the whole machine efficiency ≥94%		
Output protection		Short-circuit, over-current, over-voltage, reverse connection, current backflow protection			
Rated input voltage		Three-phase four-wire system 380Vac±15%			
Input Voltage Range	(Vac)	320 ~ 450			
Input Current	(A)	11.8	23.5	30.3	31.9
Input frequency	(Hz)	45 ~ 65			
Power Factor	PF	≥0.99			
Current distortion	THD (%)	≤5			
Input Protection		Over-voltage, under-voltage, lack of phase, over-current protection			
Working environment temperature		-30°C-55°C normal operation; 57°C-75°C reduction output; over 75°C shutdown protection			
Storage temperature	(°C)	-40 ~ 75			
Relative humidity	(%)	0 ~ 95			
Altitude		≤2000m full load output, 2000-3000m according to GB/T3859.2-19935.11.2, capacity reduction			
Insulation strength		Input-output: 2800Vdc 1minute≤10mA			
		Input-shell: 2800Vdc 1minute≤10mA			
		Output-shell: 1400Vdc 1minute≤10mA			
		Input-output: DC500V>10MQ			
		Input-shell: DC500V>10MQ Output-shell: DC500V>10MQ			
External dimension (host)	L x W x H (mm)	558 × 330 × 617			
One machine net weight	(kg)	47			
Protection level		IP54			
Output plug-in model		Reema 160A mother	WOER 125A DC Charging Gun		
Output plug-in specifications		Comply with GB/T 20234-2015.3			
Heat dissipation mode		Forced wind cooling			
Auxiliary Power Supply		12V power supply 6A/75W			
Batteries		Lithium batteries			
CAN protocol		HYG			

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FEATURES LIST – MXLG SERIES

PERFORMANCE

115.2 Volt electrical system with Rema Connection
153.6 Volt electrical system with GB Connection
Standard Construction
Drum Brakes
Antistatic Strap
115.2V 228Ah (26.2kWh) Integrated Li-ion battery
115.2V/50A Three Phase Lithium Ion LFP CACTi charger with REMA160A Connector (input 320V-450V)
115.2V/100A Three Phase Lithium Ion LFP CACTi charger with REMA160A Connector (input 320V-450V)
153.6V 228Ah(35.1kWh) Integrated Li-ion battery
153.6V/100A Three Phase Lithium Ion LFP CACTi charger with GB 250A Connector (input 320V-450V)
153.6V/150A Three Phase Lithium Ion LFP CACTi charger with GB 250A Connector (input 320V-450V)
Battery Disconnect

OPERATION

Key Switch Start
Traction Speed Limiter
Operator Presence System (OPS)
Manual Park Brake

DRIVE

Directional Lever
Foot Direction Control
Standard Tread
Dual Tread
Tyres - Super Elastic
Tyres - Super Elastic Non-Marking
Tyres - PR Pneumatic

LIFT

2 Stage Limited Free Lift - Class II
3 Stage Full Free Lift - Class II
2 Stage Limited Free Lift - Class III
3 Stage Full Free Lift - Class III
Mast tilt - 6° Forward / 6° Back
Mast tilt - 6° Forward / 12° Back
With Tilt Cylinder Boots

HANDLING

Hook Type Carriage - 1038mm Class II
Hook Type Carriage - 1100mm Class III
Hook Type Carriage - 1200mm Class II
Hook Type Integral Sideshift Carriage - 1040mm Class II
Hook Type Integral Side Shift Carriage - 1100mm Class III
Without Carriage
Without Load Backrest
940mm Load Backrest - Class II
1080mm Load Backrest - Jclass III
2 Function (0 Auxiliary) Hydraulic Valve
3 Function (1 Auxiliary) Hydraulic Valve
4 Function (2 Auxiliary) Hydraulic Valve
3 Function Hose Group (1 Auxiliary)
4 Function Hose Group (2 Auxiliary)
Manual lever hydraulic controls
Clamping Function
Hook Type Standard Forks - 1070mm
Hook Type Standard Forks - 1220mm
Hook Type Standard Forks - 1370mm
Hook Type Standard Forks - 1520mm
Hook Type Standard Forks - 1820mm
Hook Type Standard Forks - 1970mm
Hook Type Standard Forks - 2120mm
Hook Type Standard Forks - 2220mm
Hook Type Standard Forks - 2300mm
Hook Type Standard Forks - 2440mm

CAB

Full Steel Cab with Heater
Cab without Heater
Front and Top Cab Panels
Front, Top and Rear Cab Panels
Dual Mirrors Side View
Rear Drive Handle with Horn Button

ERGONOMICS

2180mm Overhead Guard ERP2.0-2.5MXLG
2205mm Overhead Guard ERP3.0-3.5MXLG
Non Suspension Vinyl Seat
Full Suspension Vinyl Seat (SC29) with Switch for OPS
Standard Seat Belt with Interlock
Steering wheel with spinner knob

VISIBILITY

LED work lights
2 Front LED Work Lights with Stop, Tail, Indicator and Reverse Lights
2 Front and 1 Rear LED Work Lights with Stop, Tail, Indicator and Reverse Lights
Amber Strobe Light - Ignition and Switch Activated
Audible Reverse Alarm
Parking Alarm

APPEARANCE

Yale Gold paint base truck
Special paint base truck

SUPPLEMENTAL

Literature package
Parts Manual
Warranty: 12 Months / 2,000 Hours Manufacturers Warranty (parts only)
60 months / 7,500 hours Integrated Li-ion Battery Warranty
12 months Li-ion CACTi Charger Warranty

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About Yale®

Yale Materials Handling Corporation is one of the oldest manufacturers of lift trucks in the world. We've been in the business of lifting since 1875 and we apply that experience to help customers solve materials handling challenges. Our full line of lift trucks range in capacity from 1 to 16 tonne and are powered by internal combustion engines or electric options. Yale also offers robotic solutions, telemetry, fleet management, parts, financing and training. From traditional lift truck equipment to emerging technologies, our goal, every day, is to work with our nationwide dealer network to continually improve and provide the solutions you need, when and how you need them.

MATERIALS HANDLING FOR:

- 3PL
- Auto Parts
- Beverage
- Cold and Frozen Foods
- Food Distribution
- Food Processing
- Furniture and Furnishings
- Health and Pharma
- Home Centres
- Retail
- E-Commerce

Yale Lift Truck Technologies


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Safety: All Yale products sold into EU countries, UK, and Turkey conform to the EU requirements of Machinery Directive 2006/42/EC and contain **CE** marking. Yale trucks sold into other countries may be ordered for production in conformance with Machinery Directive requirements, and when so ordered will contain **CE** marking.

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Notice: Care must be exercised when handling elevated loads. Operators must be trained and must read, understand and follow the instructions contained in the Operating Manual. Consult your Yale® Dealer if any of the information shown is critical to your application.

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