



**STRONG PARTNERS. TOUGH TRUCKS.**



## **Three-Wheel Electric Counterbalanced Lift Trucks**

A1.3-1.5XNT  
1 250-1 500 kg

# A1.3XNT, A1.5XNT

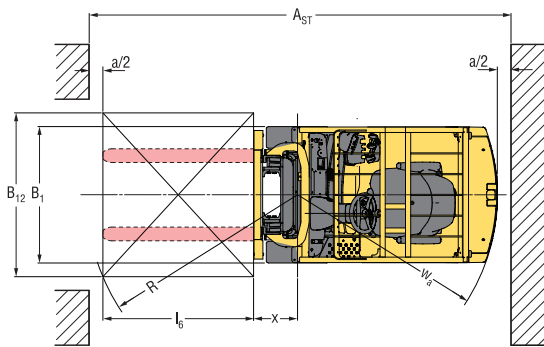
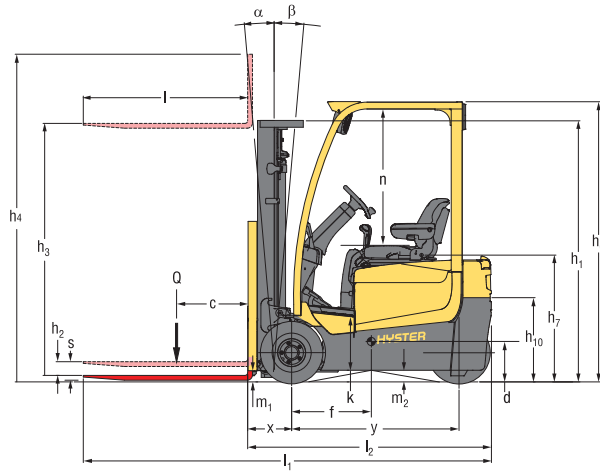
CHARACTERISTICS	1.1	Manufacturer	<b>HYSTER</b>				<b>HYSTER</b>			
	1.2	Model designation	A1.3XNT				A1.5XNT			
	1.3	Drive: electric (battery or mains) diesel, petrol, LPG	Battery				Battery			
	1.4	Operation: Hand, pedestrian, stand, seat, orderpicker	Seat				Seat			
	1.5	Load capacity	1250				1500			
	1.6	Load centre	500				500			
	1.8	Load distance	326				326			
	1.9	Wheelbase	1168				1222			
WEIGHTS	2.1	Weight without (max. battery)	2700				2905			
	2.2	Axle loading with load, front/rear (max. battery) ‡	3319		631		3755		649	
	2.3	Axle loading without load, front/rear (max. battery) ‡	1184		1516		1240		1665	
WHEELS & TYRES	3.1	Tyres: L=pneumatic, V=solid, SE=pneumatic-shaped solid	SE				SE			
	3.2	Tyre size, front	18x7-8				18x7-8			
	3.3	Tyre size, rear	18x7-8				18x7-8			
	3.5	Number of wheels, front/rear (X = driven)	2/1X				2/1X			
	3.6	Track width, front, standard/wide tread	836		896		836		896	
	3.7	Track width, rear	-				-			
DIMENSIONS	4.1	Mast tilt, forward a /back b	5/5				5/5			
	4.2	Height of mast, lowered	2230				2230			
	4.3	Free lift, ¶	100				100			
	4.4	Lift height, ¶	3320				3320			
	4.5	Height of mast, extended ■	3868				3868			
	4.7	Height to top of overhead guard +	2060				2060			
	4.8	Seat height ●	926				926			
	4.12	Towing coupling height	540				540			
	4.19	Overall length ‡	2724				2778			
	4.20	Length to face of forks ‡	1724				1778			
	4.21	Overall width, standard/wide tread	996		1056		996		1056	
	4.22	Fork dimensions	40	80	1000	40	80	1000		
	4.23	Fork carriage DIN 15173. Class, A/B	IIA				IIA			
	4.24	Fork carriage width ●	907				907			
	4.31	Ground clearance under mast, laden	88				88			
	4.32	Ground clearance at centre of wheelbase	85				85			
	4.33	Aisle width with pallets 1 000 x 1 200 wide ★ ◆	3053				3107			
	4.34	Aisle width with pallets 800 x 1 200 long ✚ ◆	3176				3230			
	4.35	Outer turning radius	1398				1452			
4.36	Inner turning radius	0				0				
PERFORMANCE	5.1	Travel speed with/without load ▽	12.0		12.5		12.0		12.5	
	5.2	Lifting speed with/without load	0.32		0.51		0.30		0.51	
	5.3	Lowering speed with/without load	0.50		0.46		0.50		0.46	
	5.5	Drawbar pull with/without load, 60 minute rating	951		975		942		970	
	5.6	Maximum drawbar pull with/without load, 5 minute rating	6246		6221		6212		6242	
	5.7	Gradeability with/without load, 30 minute rating †	8.2		12.1		7.3		11.2	
	5.8	Maximum gradeability with/without load, 5 minute rating †	16.3		24.3		14.5		22.4	
	5.9	Acceleration time with/without load 10m ▽	5.6		4.7		5.7		4.9	
	5.10	Service brake	Hydraulic				Hydraulic			
	POWER UNIT	6.1	Drive motor output, (S2 60 minute rating)	4.7				4.7		
6.2		Lifting motor, (S3 15% rating)	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	24		735/875		24		840/1000	
6.5		Battery weight (min/max)	570		630		642		710	
6.6		Power consumption in accordance with VDI cycle △ ✚	3.9				4.0			
OTHER	8.1	Drive control	AC				AC			
	8.2	Working pressure for attachments	155				155			
	8.3	Oil flow for attachments ✦	20				20			
	8.4	Average noise level at operator's ear ●	59				59			
	8.5	Towing coupling type	Pin				Pin			

Specification data is based on VDI 2198

## Equipment and weight:

Weights (line 2.1) are based on the following specifications: Complete truck with 3360 mm 2 stage LFL mast with standard carriage, 1000 mm forks and load backrest, manual hydraulics, pneumatic shaped solid drive and steer tyres

# A1.3-1.5XNT Truck Dimensions



= Centre of gravity of unladen truck

$$R = \sqrt{(l_6 + x)^2 + \left(\frac{b_{12} - b_{13}}{2}\right)^2}$$

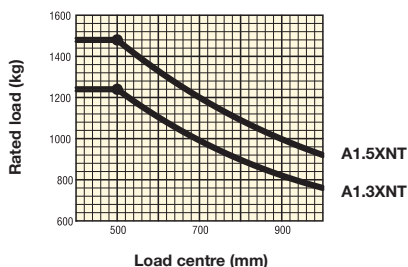
$A_{st} = W_a + x + l_6 + a$  (see lines 4.33 & 4.34)

$a$  = Minimum operating clearance  
(V.D.I. standard = 200 mm BITA recommendation = 300 mm)

$l_6$  = Load Length

Dimensions (mm)	A1.3XNT	A1.5XNT
d	525	520
f	655	700
k	485	485
n	1026	1026

## Rated Capacities



**Load centre**  
Distance from front forks to centre of gravity of load.

**Rated load**  
Based on vertical masts up to 3 800 mm to top of forks.

**NOTE:**

Specifications are affected by the condition of the vehicle and how it is equipped, as well as the nature and condition of the operating area. If these specifications are critical, the proposed application should be discussed with your dealer.

- ‡ With mast vertical
- ⌋ Bottom of forks
- Without load backrest
- Add 32 mm with load backrest
- ★ 2 Stg and 3 Stg mast, deduct 3mm for FFL mast
- ❖ 2 Stg and 3 Stg mast, deduct 4mm for FFL mast
- Full suspension seat specified
- ▣ Full suspension seat specified. Add 40mm for seat in fully compressed position
- ± h6 subject to +/- 5 mm tolerance
- ◇ Variable
- ▽ HiP performance setting
- △ eLo performance setting
- ⊕ 45 cycles
- † Gradeability figures (lines 5.7 & 5.8), are provided for comparison of tractive performance, but are not intended to endorse the operation of the vehicle on the stated inclines.
- ◆ Stacking aisle width (lines 4.33 & 4.34) are based on the V.D.I. standard calculation as shown on illustration. The British Industrial Truck Association recommends the addition of 100 mm to the total clearance (dimension a) for extra operating margin at the rear of the truck.
- ⊗  $L_{PAZ}$ , measured according to the test cycles and based on the weighting values contained in EN12053

**Tables Key:**

- ▶ Wide tread required. Standard tread possible, contact your lift truck dealer.
- ◇ Wide tread required. Standard tread not possible.
- ❖ Max fork height = h3+s  
Integral sideshift is 906mm wide or 939mm with load backrest.
- Freelift (top of forks) = h2+s
- ▲ Add 721mm with load backrest extension.
- ✕ Add 723mm with load backrest extension.
- \* Deduct 723mm with load backrest extension.

**Notice**

Care must be exercised when handling elevated loads. When the carriage and/or load is elevated, truck stability is reduced. It is important that mast tilt in either direction be kept to a minimum when loads are elevated.

Operators must be trained and adhere to the instructions contained in the Operating Manual.

Hyster products are subject to change without notice. Lift trucks illustrated may feature optional equipment.

**CE Safety:**

This truck conforms to the current EU requirements.

# Mast and Capacity Information

Values shown are for standard equipment. When using non-standard equipment these values may change. Please contact your Hyster dealer for information

## Vista/Vista Plus Masts A1.3-1.5XNT

	Maximum fork height (mm) ❖	Back Tilt mm	Overall lowered Height mm	Overall Extended Height mm	Free lift (top of forks) □ mm
Vista Plus 2-Stage limited freelif	3360	5°	2230	3868 ▲	140
	3860	5°	2580	4368 ▲	140
	4360	5°	2830	4868 ▲	140
	4860	5°	3180	5368 ▲	140
Vista 2-Stage full free lift	3218	5°	2080	3728 ✕	1505 *
	3718	5°	2330	4228 ✕	1805 *
	4338	5°	2680	4847 ✕	2105 *
Vista Plus 3-Stage full free lift	4600	5°	2080	5108 ✕	1572 *
	4900	5°	2180	5408 ✕	1672 *
	5200	5°	2330	5708 ✕	1822 *
	5500	5°	2430	6008 ✕	1942 *

## A1.3-1.5XNT - Capacity Chart in kg @ 500mm Load Centre

	Maximum fork height (mm) ❖	Pneumatic Shaped Solid Tyres			
		Without sideshift		With integral sideshift	
		A1.3XNT	A1.5XNT	A1.3XNT	A1.5XNT
Vista Plus 2-Stage limited freelif	3360	1250	1500	1240	1480
	3860	1250	1500	1230	1470
	4360	1250	1500	1220	1460
	4860	1230	1430	1200	1390
Vista 2-Stage full free lift	3218	1250 ◇	1500 ◇	1220 ◇	1450 ◇
	3718	1250 ◇	1500 ◇	1210 ◇	1450 ◇
	4338	1250 ◇	1500 ◇	1200 ◇	1440 ◇
Vista Plus 3-Stage full free lift	4600	1250	1470	1210	1420
	4800	1220	1400	1180	1360
	5200	1170 ▶	1360 ▶	1120 ▶	1300 ▶
	5500	1070 ▶	1210 ▶	1070 ▶	1210 ▶

## A1.3-1.5XNT - Capacity Chart in kg @ 600mm Load Centre

	Maximum fork height (mm) ❖	Pneumatic Shaped Solid Tyres			
		Without sideshift		With integral sideshift	
		A1.3XNT	A1.5XNT	A1.3XNT	A1.5XNT
Vista Plus 2-Stage limited freelif	3360	1110	1320	1110	1320
	3860	1110	1320	1100	1310
	4360	1110	1320	1100	1310
	4860	1090	1250	1070	1240
Vista 2-Stage full free lift	3218	1110 ◇	1320 ◇	1090 ◇	1300 ◇
	3718	1110 ◇	1320 ◇	1080 ◇	1300 ◇
	4338	1110 ◇	1320 ◇	1080 ◇	1290 ◇
Vista Plus 3-Stage full free lift	4600	1110	1290	1080	1270
	4800	1080	1250	1060	1220
	5200	1040 ▶	1200 ▶	1010 ▶	1170 ▶
	5500	990 ▶	1140 ▶	960 ▶	1110 ▶

Note: To calculate truck capacities with alternative truck specifications to the ones shown in the above tables, please use the Hy-Rater software.

## Product Features

The A1.3-1.5XNT has been designed to manoeuvre in the tightest of spaces, to load and unload lorries in the most efficient manner and to move pallets in containers and warehouses, delivering a cost effective solution to meet the requirements of light/medium duty applications.

This series offers many functions and features, including eLo and HiP performance settings and a high mounted multi feature dash display, which are standard across the range of Hyster electric forklift trucks.

### Dependability

- Strong chassis construction provides excellent durability and stability, boosting driver confidence and 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.
- Durable, quality components mean long term reliability and lower maintenance costs. Virtually maintenance free components such as AC motors mean that Hyster Electrics require a full service check only after 1 000 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.

### Low Cost of Operation

- Hyster intelligent design delivers the right balance (e-Balance) of performance, manoeuvrability and battery shift life, matched to the application, providing productivity and throughput at less cost.
- The eLo (Energy-Low) performance setting reduces energy costs, delivering the lowest energy consumption of 3.9kWh/h (1.25t) and 4.0 kW/h (1.5t) on the VDI 2198 test (45 cycles).
- The Vehicle System Manager (VSM) allows adjustment of truck performance parameters as well as monitoring key functions, leading to application matched performance and low maintenance.
- The truck has been intelligently designed, focusing on the operator. Generous foot space, an intuitive pedal arrangement and a 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. This helps to provide unrivalled operator comfort and a smooth ride, delivering low vibration levels from 0.3-0.5m/s<sup>2</sup>, 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.

## Product Features

### Ergonomics (continued)

- 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, Monotrol pedal.

### Productivity

- 24 volt rear-wheel drive with AC motors throughout provides smooth acceleration and excellent travel, torque and lifting performance. This is combined with regenerative braking to deliver efficient load handling.
- The AXNT is the most compact truck in its class, with the tightest turning circle for excellent manoeuvrability in working aisles (AST with 1000 x 1200mm pallet = 3107mm with 40mm thick forks). This allows the operator to move faster with more confidence in restricted spaces or congested loading/ unloading bays. An overall truck width of 996mm facilitates block stacking wherever space is at a premium.
- The Vista Plus mast offers class leading visibility allowing the operator to work quicker when picking and depositing loads.
- 770-875Ah (1.25t) and 840-1000Ah (1.5t) batteries are available to ensure optimal shift life is achieved between charges.

- The HiP (High Productivity) performance setting delivers a competitive top speed of 12.0km/h (laden) and lifting speed of 0.3m/s (laden), easily meeting the requirements of medium duty applications.
- Available options, which enhance productivity: A choice of 11 standard masts, TouchPoint mini levers\*, Return to set tilt\*, light kits, integral sideshift.

### 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, and a programmable maintenance reminder.

## Options

- 11 standard mast offerings
- Wide tread (front) for wide load handling
- Load backrest and forks
- Integral sideshift
- Non-marking tyres
- High backrest seat with lumbar support and headrest
- Telescopic steering column with memory tilt
- Monotrol
- LED light packages with visible alarm strobe
- Audible back up alarm
- 12V power outlet \*
- Batteries and chargers
- Extended Warranty (36 months / 6000 hours)
- Dual internal and Panoramic mirror
- Load weight indicator \*
- Impact sensor \*
- Keyless start with Operator ID
- Daily Operator checklist
- System Monitoring \*
- TouchPoint 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



## Strong Partners, Tough Trucks, for Demanding Operations, Everywhere.

Hyster supplies a complete range of warehouse equipment, IC and electric counterbalanced trucks, container handlers and reach stackers. Hyster is committed to being much more than a lift truck supplier.

Our aim is to offer a complete partnership capable of responding to the full spectrum of material handling issues: Whether you need professional consultancy on your fleet management, fully qualified service support, or reliable parts supply, you can depend on Hyster.

Our network of highly trained dealers provides expert, responsive local support. They can offer cost-effective finance packages and introduce effectively managed maintenance programmes to ensure that you get the best possible value. Our business is dealing with your material handling needs so you can focus on the success of your business today and in the future.



### Hyster Europe

Flagship House, Reading Road North, Fleet, Hants GU51 4WD, England.

Tel: +44 (0) 1252 810261



[www.hyster.eu](http://www.hyster.eu)



[infoeurope@hyster.com](mailto:infoeurope@hyster.com)



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