



# FOUR-WHEEL ELECTRIC COUNTERBALANCED LIFT TRUCKS

E1.6-2.0XN

1600-2000 KG

# E1.6XN, E1.8XN, E2.0XN

1.1	Manufacturer (abbreviation)		HYSTER		HYSTER		HYSTER		
1.1 1.2 1.3 1.4 1.5 1.6	Manufacturer's type designition		E1.6XN		E1.8	BXN	E2.0XN		
1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Electric (battery)		Electric (battery)		Electric (battery)		
1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Seat		Seat		Seat		
1.5	Rated capacity/rated load Q (kg)		1600		1800		2000		
1.6	Load centre distance	c (mm)	500		500		500		
1.8	Load distance, centre of drive axle to fork	x (mm)	36	0	36	60	360		
1.9	Wheelbase	y (mm)	122	!0	12	20	1220		
		_	-	_		_			
2.1	Service weight (max. battery)	kg	341	4	35	32	371	19	
2.1	Axle loading, laden front/rear (max. battery)	kg	4233	782	4547	786	4881	838	
2.3	Axle loading, unladen front/rear (max. battery)	kg	1506	1908	1479	2053	1473	2246	
-								_	
3.1	Tyres: L = pneumatic, V = cushion, SE = Pneumatic Shape Solid		V		\	V	V	1	
3.2 3.3 3.5 3.6	Tyre size, front		18 x 6 x 12.125		18 x 6 x 12.125		18 x 7 x 12.125		
3.3	Tyre size, rear			15 x 5 x 11.25		15 x 5 x 11.25		15 x 5 x 11.25	
3.5	Wheels, number front/rear (x = driven wheels)		2X	2	2X 2		2X	2	
	Tread, front (standard/wide tread)	b <sub>10</sub> (mm)	788	939	788	939	808	906	
3.7	Tread, rear	b <sub>11</sub> (mm)	82	2	82	22	81	7	
	T				1				
4.1	Tilt of mast/fork carriage forward/backward	α/β(°)	5	5	5	5	5	5	
4.2	Height, mast lowered	h, (mm)	218		21		218		
4.3	Free lift ¶	h <sub>2</sub> (mm)	10		10		10		
4.4	Lift ¶	h <sub>3</sub> (mm)	3390		3390		3390		
4.5	Height, mast extended	h <sub>4</sub> (mm)	4006		4006		4006		
4.7	Height of overhead guard (cabin) +	h <sub>6</sub> (mm)	2250		2250		2250		
4.8	Seat height relating to SIP/stand height •	h <sub>7</sub> (mm)	1161		1161		1161 232		
4.12	Coupling height	h <sub>10</sub> (mm)	232			232		232	
4.19	Overall length	l, (mm)	2908		2929		1968		
4.19 4.20 4.21	Length to face of forks Overall width	l <sub>2</sub> (mm) b,/b, (mm)	945	1091	945 1091		986 108		
4.21	Fork dimensions ISO 2331	s/e/l (mm)	40 80		40 8		40 10		
4.22	Fork carriage ISO 2337 Fork carriage ISO 2328, class/type A, B	5/8/1 (11111)	240 20		40 0		40 10		
4.24	Fork carriage width	b, (mm)	90		90		90		
4.31	Ground clearance, laden, below mast	m, (mm)	87		8		87		
4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm)	92		92		92		
4.34.		Ast (mm)	321	6	3226		3261		
4.34.		Ast (mm)	340		3417		345		
4.35	Turning radius	Wa (mm)	164	4	1657		1692		
4.36	Internal turning radius	b <sub>13</sub> (mm)	41	7	447		447		
-		10	-					_	
5.1	Travel speed, laden / unladen $ riangle$	km/h	18.4	18.4	18.4	18.4	18.4	18.4	
5.2	Lift speed, laden / unladen	m/sec	0.53	0.72	0.49	0.72	0.47	0.72	
5.3	Lowering speed, laden / unladen	m/sec	0.51	0.47	0.51	0.47	0.51	0.47	
5.5 5.6 5.7 5.8	Drawbar pull, laden / unladen, **	N	3156	2862	3088	2804	3023	2745	
5.6	Maximum drawbar pull laden / unladen, ***	N	12964	12422	12709	12178	12459	11924	
5.7	Gradeability laden / unladen, **** †	%	5.8	7.4	5.6	7.4	5.4	7.4	
	Maximum gradeability laden / unladen †	%	24.2	34.0	23.5	33.8	23.2	33.6	
5.9	Acceleration time, laden / unladen △	sec	4.8	4.4	4.9	4.4	5.0	4.5	
5.10	Service brake		Hydra	iulic	Hydr	aulic	Hydra	aulic	
6.1	Drive motor rating S2 60 min	kW	18.4		18.4		18.4		
6.2 6.3 6.4 6.5	Lift motor rating at S3 15%	kW	15.9		15.9		15.9		
6.3	Battery according to DIN 43531/35/36 A, B, C, no	Mak	40		n 40		40		
6.4 6.5	Battery voltage / nominal capacity at 5 hr rate	V/ah	48	690	48	690	48	690	
	Battery weight (+/- 5%)	kg kWh/h	943	1132	943	1132	943	1132	
6.6	Energy consumption according to VDI cycle	KVVN/h	4.5	U	4.	33	5.3	5	
0.1	Turns of drives unit			trania	ACEL	atronia		tronio	
8.1	Type of drive unit	har	AC Electronic		AC Electronic 180		AC Electronic 180		
10.1 10.2	Operating pressure for attachments           Oil volume for attachments	bar I/min	18						
8.1 10.1 10.2 10.7	Sound pressure level at the driver's seat 📀	dB(A)	68		20-40 68		20-40 68		
10.7	Towing coupling, type DIN	uD(A)	Pi		P		Pi		

Specification data is based on VDI 2198

\*\*60 minute rating \*\*\*5 minute rating \*\*\*\*30 minute rating

EQUIPMENT & WEIGHT: Weights (line 2.1) are based on the following specifications: Complete truck with 3 390 mm Vista 2-stage limited free lift mast, 910 mm hook type carriage with load

backrest and 1 000 mm forks, minilevers, overhead guard and cushion tyres.

### TRUCK DIMENSIONS



Dimensions (mm)	E1.6XN	E1.8XN	E2.0XN		
d	673	703	725		
f	616	616	618		
k	438	438	438		
n	1 046	1 046	1 046		

## **RATED CAPACITIES**



#### Load centre

Distance from front forks to centre of gravity of load.

### Rated load

Based on vertical masts up to 4 000 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.

- ¶ Bottom of forks
- Without load backrest
- h6 subject to +/- 5 mm tolerance.
- Full suspension seat specified.
- Stacking aisle width (line 4.34.1 & 4.34.2) is based on the VDI 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.
- <sup>†</sup> 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. Follow instructions in the operating manual regarding operation on inclines.
- Add 43 mm with load backrest
- riangle eLo performance setting
- Variable. Maximum flow set through dash display.
- LPAZ, measured according to the test cycles and based on the weighting values contained in EN12053

#### TABLES KEY:

- ✤ Add 649 mm with load backrest extension
- O Deduct 649 mm with load backrest extension
- □ Wide tread required

#### 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.

C€ Safety:

This truck conforms to the current EU requirements.

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# **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 MASTS E1.6-2.0XN

	Maximum Fork Height (mm) (h <sub>3</sub> + s)	Back Tilt	Overall Lowered Height (mm)	Overall Extended Height (mm)	Free lift (top of forks) (mm) (h <sub>2</sub> + s)
Vista 2-Stage limited free lift	3 430 4 830 4 330	5 5 5	2 180 2 380 2 730	4 006 ★ 4 406 ★ 5 906 ★	140 140 140
Vista 2-Stage full free lift	3 415	5	2 180	4 012 ★	1 516 〇
Vista 3-Stage full free lift	4 900 5 200 5 500	5 5 5	2 130 2 280 2 380	5 474 ★ 5 774 ★ 6 074 ★	1 466 () 1 616 () 2 716 ()

#### E1.6-2.0XN - capacity chart in kg @ 500 mm load centres

		Cushion Tyres							
	Maximum	Without sideshift			With integral sideshift				
	fork height (mm) 🛠		E1.8XN	E2.0XN	E1.6XN	E1.8XN	E2.0XN		
	3 430	1 600	1 800	2 000	1 600	1 790	2 000		
Vista Plus 2-Stage limited free lift	3 830	1 600	1 800	2 000	1 600	1 780	1 990		
2-Stage minieu nee mi	4 330	1 600	1 760	1 950	1 560	1 690	1 920		
Vista 2-Stage full free lift	3 415	1 600	1 800	2 000	1 600	1 790	1 980		
	4 900	1 520 🗆	1 670 🗆	1 800 🗆	1 520 🗆	1 650 🗆	1 810 🗆		
	5 200	1 400 🗆	1 460 🗆	1 560 🗆	1 410 🗆	1 470 🗆	1 570 🗆		
5-Stage full free fitt	5 500	1 400 🗆	1 460 🗆	1 560 🛛	1 240 🗆	1 280 🗆	1 360 🗆		
Vista Plus 3-Stage full free lift	5 200	1 400 🗆	1 460 🗆	1 560 🗆	1 410 🗆	1 470 🗆			

#### E1.6-2.0XN - capacity chart in kg @ 600 mm load centres

		Cushion Tyres						
	Maximum	Without sideshift			With integral sideshift			
	fork height (mm) 🛠	E1.6XN	E1.8XN	E2.0XN	E1.6XN	E1.8XN	E2.0XN	
N	3 430	1 530	1 900	1 900	1 450	1 610	1 800	
Vista Plus 2-Stage limited free lift	3 830	1 520	1 890	1 890	1 440	1 600	1 790	
2-Stage minited free mit	4 330	1 510	1 760	1 840	1 430	1 560	1 750	
Vista 2-Stage full free lift	3 415	1 530	1 880	1 880	1 450	1 610	1 790	
Vista Plus	4 900	1 440 🗆	1 570 🗆	1 780 🗆	1 360 🗆	1 480 🗆	1 680 🗆	
3-Stage full free lift	5 200	1 400 🗆	1 460 🗆	1 560 🗆	1 320 🗆	1 440 🗆	1 570 🗆	
	5 500	1 240 🗆	1 280 🗆	1 360 🛛	1 240 🗆	1 280 🗆	1 360 🗆	

NOTE: The rated capacities shown are for masts in a vertical position on trucks equipped with standard or sideshift carriage and nominal length forks. Masts above the maximum fork heights shown in the mast table are classified as high lift and, depending on the tyre/tread configuration may require reduced capacity, restricted back tilt or wide tread.







**PRODUCT FEATURES** 

#### DEPENDABILITY

- New robust mast design provides excellent visibility and reliable, high performance lifting.
- Strong chassis construction and reliable, long-lasting components deliver excellent durability and stability, increasing driver confidence and enhancing productivity.
- AC motor technology on traction and hoist, with built in thermal management system, allows the truck to work reliably over long runs and in demanding work cycles, reducing downtime significantly.
- The electrical system features a CANbus communications network and Hall Effect sensors for increased reliability.
- IP65 protection of controls prevents ingress of water and dust particles, reducing the probability of truck downtime.

#### PRODUCTIVITY

- AC traction motor delivers smooth acceleration, fast travel speeds and rapid direction changes with excellent torque performance. This is combined with regenerative braking to deliver efficient load handling in the toughest of applications.
- Compact dimensions deliver tight turning circles and class leading manoeuvrability when space is restricted, such as when working in aisles or congested loading/ unloading bays or for application such as block stacking 1000mm loads.
- Powerful 48 V battery, offering extended battery shift
   life and optional side battery removal, delivers superb
   traction and hoist performance, for fast, efficient,
   uninterrupted load handling and simple fast recharging
   keeps trucks on the move.
- Selectable performance settings (HiP High
  Performance & eLo Energy Efficient) enable the
  truck to be configured to the varying needs of the
  application, delivering the right balance of performance
  and energy efficiency.

#### ERGONOMICS

- The ergonomically designed operator compartment provides a comfortable and highly productive environment for the operator, offering generous foot space and easy on/off access.
- Low noise and whole body vibration combined with a full suspension seat - with 80 mm suspension travel and a range of adjustments - ensures the operator remains comfortable over long shifts.
- The fully adjustable tilt steering column with telescopic and memory tilt options - allows the operator to get on and off the truck quickly and easily throughout the shift, ensuring maximum comfort and increased productivity.
- The mini-lever module armrest with built in hydraulic controls, integrated directional control, emergency off switch and horn, offers the ultimate in comfort and control. Alternatively, seat-side manual levers also deliver easy load handling.
- 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.
- A rear grab handle with integrated horn for frequent reverse travel and an automatic park brake also contribute to ease of operation and excellent driver comfort.

#### **LOW COST OF OWNERSHIP**

- Extended shift life reduces the need for battery recharging, saving time and money and increasing uptime.
- The Vehicle System Manager (VSM) allows adjustment of truck performance parameters and monitors key functions, leading to application matched performance and minimum downtime.
- Fast delivery of diagnostic information enables precise troubleshooting and easy maintenance planning and leads to lower operating costs.

#### **SERVICEABILILTY**

- Standard 1 000 hour service interval.
- Service access is fast and unrestricted, with an easily removable two-piece floor plate providing access to brake fluid, hydraulic filter and valves, VSM, tilt cylinders and automatic park brake release.
- Battery is easily accessible thanks to the well designed hood, which opens to a wide angle with minimum effort.
- Access to diagnostic information via the display or plug-in point on the steering column allows service technicians to monitor truck operations and plan maintenance requirements.
- LED lights are designed to last the lifetime of the truck.

#### **OPTIONS INCLUDE:**

- Mini-levers with travel and hydraulic functions integrated into the armrest
- Steering column with telescopic adjustment and memory tilt.
- Return to Set Tilt
- Integral sideshift
- Interlock function for clamping attachments.
- Load weight indicator
- Impact sensor
- Mirrors
- Back up alarm
- Side battery removal
- Monotrol pedal
- Light kits
- Keyless start & operator password
- Programmable maintenance reminder
- Daily operator checklist
- System monitoring
- Drive-in racking overhead guard

# STRONG PARTNERS. TOUGH TRUCKS."

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.





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