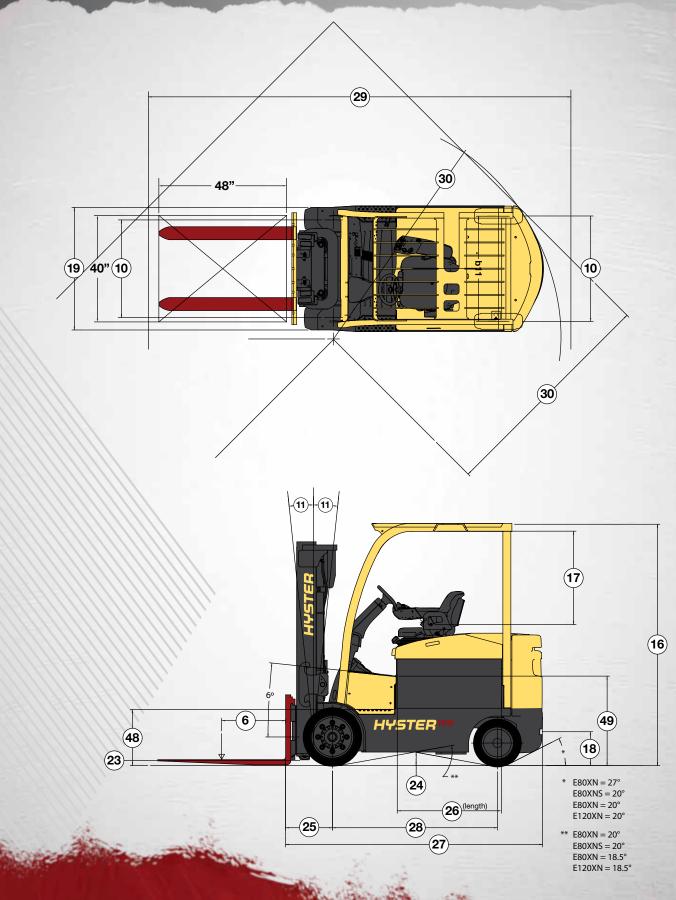
# E80-120XNS

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# **TECHNICAL GUIDE** Counterbalanced Electric, Cushion Tire

### **E80-120XN DIMENSIONS**



Circled dimensions correspond to the line numbers on the tabulated chart inside the Technical Guide. Dimensions are in inches (millimeters).

#### **E80XN SPECIFICATIONS**

								-		
	1	Manufacturer					Hyster			
7	2	Model Designation					E80XN			
	3	Power					Electric			
GENERAL	4	Operation					Sit			
5	2 3 4 5 6 7	Rated Capacity			lb. (kg)		8000 (3629)			
	6	Load Center			in. (mm)		24 (610)			
ELS	7	Tire Type - Cushion, Solid	I, Pneumatic, etc.	Drive / Steer			<b>Cushion / Cushion</b>			
H	8	Tire Size		Drive / Steer	in.		22 x 9 x 16 / 18 x 6 x 12.1			
TIRES/WHEELS	8 9 10	Wheels - Number	X=Driven	Drive / Steer			2X / 2			
IB	10	Tread	Center of Tires	Narr Dr / Wide Dr / Steer	in. (mm)		37 / 41 / 39.5 (941 / 1041 / 1003	3)		
	11	Mast Tilt		Std Opt	degrees		5F / 5B 8F / 5B			
	12	Mast - Lowered Height		Std Mast	in. (mm)		84.1 (2134)			
	13	Free Lift - Top of Fork	Std 2 Stg Limited Free Lift Mas	t	in. (mm)		5 (150)			
			Opt 2 Stg Full Free Lift Mast wi	th / without LBR	in. (mm)		35 / 53 (900 / 1352)			
	14	Lift Height - Top of Fork	Std 2 Stg Limited Free Lift Mas	t	in. (mm)		120 (3050)			
	15	Mast - Extended Height	Std Mast with / without LBR		in. (mm)		169 / 149 (4284 / 3783)			
	16	Overhead Guard Height	Std / Opt / Opt Flat Plate		in. (mm)	9	4 / 91 / 87.1 (2388 / 2311 / 221	2)		
	17	SIP to Bottom Std OHG	Seat Depressed	Std / Susp / Swivel	in. (mm)	3	8.7 / 38.9 / 38.9 (984 / 989 / 98	9)		
	18	Tow Pin Height	Vertical Center of Pin		in. (mm)		12.7 (324)			
	19	Overall Width	Standard Tread / Wide Tread		in. (mm)		47.2 / 50 (1200 / 1270)			
NS	20	Forks	Thickness x Width x Length		in. (mm)		2 x 4.9 x 42 (50 x 125 x 1067)			
DIMENSIONS	20 21 22 23 24	Standard Carriage Width		Class III	in. (mm)		42 (1067)			
SN	22	Floor to Top of Battery Ro	llers		in. (mm)		20 (509)			
H	23	Ground Clearance	Lowest Point	NL/RL	in. (mm)		3.8 / 3.5 (96 / 90)			
	24	Ground Clearance	Center of Truck	NL/RL	in. (mm)		5.3 / 5.1 (134 / 130)			
	25	Load Distance	Center of Wheel to Face of Forl	(S	in. (mm)		17.6 (447)			
	26	Battery Compartment	Height	Without / With Battery Rollers	in. (mm)		24.4 / 24 (620 / 609)			
			Width		in. (mm)		45.4 (1152)			
				Nominal	SIZE		39			
			Length	Actual	in. (mm)		39.2 (996)			
	27	Length to Face of Forks		Chassis Length	in. (mm)		96.5 (2451)			
	28	Wheelbase			in. (mm)		62 (1574)			
	29	Right Angle Stack			in. (mm)		150.8 (3831)			
	30	Equal Aisle	90° Intersecting Aisle		in. (mm)		79.4 (2017)			
	31	Outside Turning Radius			in. (mm)		85.2 (2165)			
Ŧ	32	Truck Weight Without Battery NL		NL	lb. (kg)	11070 (5021)				
WEIGHT	32 33 34	Axle Loading - Drive	Static with Max. Wt. Battery	NL/RL	lb. (kg)		6728 / 20098 (3052 / 9116)			
	34	Axle Loading - Steer	Static with Max. Wt. Battery	NL/RL	lb. (kg)		9141 / 3771 (4146 / 1710)			
							Standard Performance			
					VOLTS	36	48	80		
	36	Travel Speed	Extended Shift OFF	NL/RL	mph (km/h)	11.4 / 9.7 (18.3 / 15.6)	. ,	12.7/12.2 (20.4/19.6)		
			Extended Shift ON	NL/RL	mph (km/h)	9.8 / 8.4 (15.8 / 13.5)		12.5/10.8 (20.1/17.4)		
	37	Lift Speed	Std 2 Stg LFL Mast	NL/RL	ft/min (m/sec)	94 / 58 (0.48 / 0.296)		118/73 (0.6/0.37)		
ö			Opt 2 Stg FFL Mast	NL/RL	ft/min (m/sec)	85 / 53 (0.4336 / 0.267)		107/66 (0.542/0.334)		
A			Opt 3 Stg FFL Mast	NL/RL	ft/min (m/sec)	88 / 54 (0.448 / 0.276)		110/68 (0.56/0.345)		
RMANCE	38	Lower Speed	Std 2 Stg LFL Mast	NL / RL	ft/min (m/sec)					
PERFO			Opt 2 Stg FFL Mast	NL/RL	ft/min (m/sec)					
H			Opt 3 Stg FFL Mast	NL/RL	ft/min (m/sec)					
₽.	39	Gradability	5 Minute Rating	NL/RL	%	23 / 14.1				
			60 Minute Rating	NL/RL	%	8.4 / 5.4				
	40	Drawbar Pull	5 Minute Rating	NL/RL	lbf	3327 / 3193				
	44	Droko	60 Minute Rating	NL / RL	lbf	1246 / 1232		1541 / 1526		
	41	Brake	Method of Control	Service / Parking						
	40	Dattan	Method of Operation	Service / Parking						
	42	Battery		Туре						
0					VOLTO	26		00		
ELECTRIC	12	Traction Motor		60 Minute Rating	VOLTS hp (kW)	<b>36</b> 28.8 (21.5)				
5	45	Pump Motor		15 % Rating	hp (kW)	35.5 (26.5)				
	44	Traction Motor		Type / Control Method	inp (KW)	33.3 (20.3)	. ,	-10.0 (00)		
	45	Pump Motor		Type / Control Method						
	43 44 45 46 47	Number of Speeds		Traction / Pump		In		hle		
	47 48	Step Height			in. (mm)					
œ	10	Floor Height		Lowest Point	in. (mm)		. ,			
-	50	Attachment Relief Pressu	Ire	Lowoot i onit	psi (bar)		5 (150)         35 / 53 (900 / 1352)         120 (3050)         169 / 149 (4284 / 3783)         34 / 91 / 87.1 (2388 / 2311 / 2212)         8.7 / 38.9 / 38.9 (384 / 989 / 989)         12.7 (324)         47.2 / 50 (1200 / 1270)         2 x 4.9 x 42 (50 x 125 x 1067)         4 42 (1067)         20 (509)         3.8 / 3.5 (96 / 90)         5.3 / 5.1 (134 / 130)         17.6 (447)         24.4 / 24 (620 / 609)         45.4 (1152)         39         39.2 (996)         96.5 (2451)         62 (1574)         150.8 (3831)         79.4 (2017)         85.2 (2165)         11070 (5021)         6728 / 20098 (3052 / 9116)         9141 / 3771 (4146 / 1710)         Standard Performance         48       80         12.7 / 12.2 (20.4 / 19.6)       12.7/12.2 (20.4/1         12.5 / 10.8 (20.1 / 17.4)       12.5/10.8 (20.1/1         118 / 73 (0.6 / 0.37)       118/73 (0.6/0.33         107 / 66 (0.542 / 0.334)       107/66 (0.542/0.3			
OTHER	49 50 51	Auxiliary Oil Flow	3rd and 4th Function		gal/min (l/min)					
	52									
	52	Sound Level	Measured per ANSI B56.11.5		dB (A)		69/66			

Above specifications, unless otherwise listed, are for a standard truck without optional equipment. Right Angle Stack and Equal Intersecting Aisle dimensions provided with a 48" long and 40" wide pallet load, allowing zero clearance.

CERTIFICATION: These Hyster<sup>®</sup> lift trucks meet design specifications of Part II ANSI B56.1-1969, as required by OSHA Section 1910.178(a)(2) and also comply with Part III ANSI B56.1-revision in effect at time of manufacture. Certification of compliance with the applicable ANSI standards appears on the lift truck. Performance specifications are for a truck equipped as described under Standard Equipment on this Technical Guide. Performance specifications are affected by the condition of the vehicle and how it is equipped, as well as by the nature, condition of the operating area, proper service and maintenance of the vehicle. If these specifications are critical, the proposed application should be discussed with your dealer.

#### **E100XNS SPECIFICATIONS**

	1	Manufacturer					Hyster		
7	2	Model Designation					E100XNS		/
GENERAL	3	Power					Electric		1
I Z	4	Operation					Sit		
5	5	Rated Capacity			lb. (kg)		10000 (4536)		
	6	Load Center			in. (mm)		24 (610)		
2	7	Tire Type - Cushion, Solid	. Pneumatic. etc.	Drive / Steer			Cushion / Cushion		
TIRES/WHEELS	8	Tire Size		Drive / Steer	in.		22 x 12 x 16 / 18 x 7 x 12.1		
N N	9	Wheels - Number	X=Driven	Drive / Steer			2X / 2		
	10	Tread	Center of Tires	Narr Dr / Wide Dr / Steer	in. (mm)	40	) / 43.9 / 38.3 (1015 / 1115 / 97	72)	
	11	Mast Tilt		Std Opt	degrees	т	5F / 5B 8F / 5B	2)	- (
	12	Mast - Lowered Height		Std Mast	in. (mm)		84.2 (2138)		-/
	13	Free Lift - Top of Fork	Std 2 Stg Limited Free Lift Mas		in. (mm)		5 (150)		
	15	THEE LITE - TOP OFFORK	U U						-/
	14	Lift Haight Tap of Fark	Opt 2 Stg Full Free Lift Mast wi		in. (mm)		35 / 48 (897 / 1222)		
	14	Lift Height - Top of Fork	Std 2 Stg Limited Free Lift Mas	l	in. (mm)		109 (2790)		-/
	15	Mast - Extended Height	Std Mast with / without LBR		in. (mm)	0	159 / 144 (4031 / 3657)	0)	/
	16	Overhead Guard Height	Std / Opt / Opt Flat Plate		in. (mm)		<mark>4 / 91 / 87.1 (2388 / 2311 / 221</mark>		
	17	SIP to Bottom Std OHG	Seat Depressed	Std / Susp / Swivel	in. (mm)	38	5.7 / 38.9 / 38.9 (984 / 989 / 98	39)	-/
	18	Tow Pin Height	Vertical Center of Pin		in. (mm)		12.7 (324)		
	19	Overall Width	Standard Tread / Wide Tread		in. (mm)		52 / 55.9 (1320 / 1420)		- (
Ž	20	Forks	Thickness x Width x Length	Leo an	in. (mm)		2 x 5.9 x 42 (50 x 150 x 1067)		1
DIMENSIONS	21	Standard Carriage Width		Class III	in. (mm)		42 (1067)		
Ž	22	Floor to Top of Battery Ro			in. (mm)		20 (509)		-/
Ξ	23	Ground Clearance	Lowest Point	NL / RL	in. (mm)		3.6 / 3.4 (92 / 87)		
	24	Ground Clearance	Center of Truck	NL/RL	in. (mm)		5.3 / 5.1 (134 / 130)		1
	25	Load Distance	Center of Wheel to Face of Fork	s	in. (mm)		17.8 (452)		/
	26	Battery Compartment	Height	Without / With Battery Rollers	in. (mm)		24.4 / 24 (620 / 609)		
			Width		in. (mm)		45.4 (1152)		
				Nominal	SIZE		39"		
			Length	Actual	in. (mm)		39.2 (996)		
	27	Length to Face of Forks		Chassis Length	in. (mm)		100.3 (2548)		
	28	Wheelbase			in. (mm)		62 (1574)		
	29	Right Angle Stack			in. (mm)		154 (3911)		
	30	Equal Aisle	90° Intersecting Aisle		in. (mm)		83 (2107)		
	31	Outside Turning Radius			in. (mm)		88.2 (2240)		
IĘ.	32	Truck Weight	Without Battery	NL	lb. (kg)		13070 (5928)		
5	33	Axle Loading - Drive	Static with Max. Wt. Battery	NL / RL	lb. (kg)		6798 / 23542 (3084 / 10678)		
WEIGHT	34	Axle Loading - Steer	Static with Max. Wt. Battery	NL / RL	lb. (kg)		11069 / 4325 (5021 / 1962)		
		, and a second sec		-	. ( 3)		Standard Performance		-
					VOLTS	36	48	80	
	36	Travel Speed	Extended Shift OFF	NL / RL	mph (km/h)	10.3 / 8.8 (16.6 / 14.2)	11.4 / 11 (18.3 / 17.7)	11.4 / 11 (18.3 / 17.7)	
			Extended Shift ON	NL / RL	mph (km/h)	9.1 / 7.7 (14.6 / 12.4)	11.4 / 9.9 (18.3 / 15.9)	11.4 / 9.9 (18.3 / 15.9)	
	37	Lift Speed	Std 2 Stg LFL Mast	NL / RL	ft/min (m/sec)	71 / 46 (0.36 / 0.232)	89 / 57 (0.45 / 0.29)	89 / 57 (0.45 / 0.29)	
щ	01	Littopood	Opt 2 Stg FFL Mast	NL / RL	ft/min (m/sec)	67 / 43 (0.34 / 0.219)	84 / 54 (0.425 / 0.274)	84 / 54 (0.425 / 0.274)	
2			Opt 3 Stg FFL Mast	NL / RL	ft/min (m/sec)	68 / 44 (0.346 / 0.223)	85 / 55 (0.433 / 0.279)	85 / 55 (0.433 / 0.279)	
RMANCE	38	Lower Speed	Std 2 Stg LFL Mast	NL / RL	ft/min (m/sec)	007 11 (0.0107 0.220)	73 / 89 (0.37 / 0.45)	00700(0.10070.270)	
			Opt 2 Stg FFL Mast	NL / RL	ft/min (m/sec)		57 / 81 (0.29 / 0.41)		
ЕË	39		Opt 3 Stg FFL Mast	NL/RL	ft/min (m/sec)		63 / 87 (0.32 / 0.44)		
ų.	30	Gradability	5 Minute Rating	NL/RL	%	19.4 / 11.8	24.6 / 14.7	25.2 / 15.1	
	00	aradubiiity	60 Minute Rating	NL/RL	%	7.1 / 4.5	9.1 / 5.6	9.2 / 5.8	
	40	Drawbar Pull	5 Minute Rating	NL/RL	lbf	3323 / 3185	3994 / 3832	4074 / 3909	
	40	Diawbai Fuli	60 Minute Rating	NL/RL	lbf	1242 / 1224	1497 / 1479	1527 / 1509	-
	41	Brake	Method of Control	Service / Parking	ועו	1242 / 1224		1327 / 1309	
	41	DIAKE					Hydraulic / Spring Applied		-
	40	Dottory	Method of Operation	Service / Parking			Foot / Automatic Lead Acid		- 1
	42	Battery		Туре					
							Standard Performance		
	40				VOLTS	36	48	80	
5	43	Traction Motor		60 Minute Rating	hp (kW)	28.8 (21.5)	28.8 (21.5)	28.2 (21)	
ELECTRIC	44	Pump Motor		15 % Rating	hp (kW)	35.5 (26.5)	48.3 (36)	48.3 (36)	
-	45	Traction Motor		Type / Control Method			AC / Transistor		
	46	Pump Motor		Type / Control Method			AC / Transistor		
	47	Number of Speeds		Traction / Pump		Inf	initely Variable / Infinitely Varia	ble	
	48	Step Height			in. (mm)		21.1 (536)		
f	49	Floor Height		Lowest Point	in. (mm)		33.7 (855)		
OTHER	50	Attachment Relief Pressu			psi (bar)		2248 (155)		
0	51	Auxiliary Oil Flow	3rd and 4th Function		gal/min (l/min)		16 (60)		
	52	Sound Level	Measured per ANSI B56.11.5		dB (A)		69/66		
	-52	Sound Level	measureu per Aivol Bob.11.5		ud (A)		09/00		

(4)

Above specifications, unless otherwise listed, are for a standard truck without optional equipment. Right Angle Stack and Equal Intersecting Aisle dimensions provided with a 48" long and 40" wide pallet load, allowing zero clearance.

Right Angle Stack and Equal Intersecting Alsie animensions provided with a 40 rong and 40 wide panet road, anowing zero creatance. CERTIFICATION: These Hyster® lift trucks meet design specifications of Part II ANSI B56.1-1969, as required by OSHA Section 1910.178(a)(2) and also comply with Part III ANSI B56.1-revision in effect at time of manufacture. Certification of compliance with the applicable ANSI standards appears on the lift truck. Performance specifications are for a truck equipped as described under Standard Equipment on this Technical Guide. Performance specifications are affected by the condition of the vehicle and how it is equipped, as well as by the nature, condition of the operating area, proper service and maintenance of the vehicle. If these specifications are critical, the proposed application should be discussed with your dealer.

### **E100XN SPECIFICATIONS**

	1	Manufacturer					Hyster			
Å	2	Model Designation					E100XN			
ER/	3	Power					Electric			
GENERAL	4	Operation				Sit				
5	2 3 4 5 6 7 8 9	Rated Capacity			lb. (kg)	10000 (4536)				
	6	Load Center			in. (mm)	24 (610)				
ELS	7	Tire Type - Cushion, Solid	, Pneumatic, etc.	Drive / Steer			Cushion / Cushion			
TIRES/WHEELS	8	Tire Size		Drive / Steer	in.		22 x 12 x 16 / 18 x 7 x 12.1			
IES/	9	Wheels - Number	X=Driven	Drive / Steer			2X / 2			
≣	10	Tread	Center of Tires	Narr Dr / Wide Dr / Steer	in. (mm)	4	0 / 43.9 / 38.3 (1015 / 1115 / 97	2)		
	11	Mast Tilt		Std Opt	degrees		5F / 5B 8F / 5B			
	12	Mast - Lowered Height		Std Mast	in. (mm)		84.2 (2138)			
	13	Free Lift - Top of Fork	Std 2 Stg Limited Free Lift Mas		in. (mm)		5 (150)			
			Opt 2 Stg Full Free Lift Mast wi		in. (mm)		35 / 48 (897 / 1222)			
	14	Lift Height - Top of Fork	Std 2 Stg Limited Free Lift Mas	t	in. (mm)		109 (2790)			
	15	Mast - Extended Height	Std Mast with / without LBR		in. (mm)		159 / 144 (4031 / 3657)	<b>2</b> )		
	16	Overhead Guard Height	Std / Opt / Opt Flat Plate		in. (mm)		04 / 91 / 87.1 (2388 / 2311 / 221			
	17	SIP to Bottom Std OHG	Seat Depressed	Std / Susp / Swivel	in. (mm)	3	8.7 / 38.9 / 38.9 (984 / 989 / 98	(9)		
	18	Tow Pin Height	Vertical Center of Pin		in. (mm)		12.7 (324)			
(0	19	Overall Width	Standard Tread / Wide Tread		in. (mm)		52 / 55.9 (1320 / 1420)			
DIMENSIONS	20 21 22 23 24	Forks	Thickness x Width x Length	Olaca III	in. (mm)		2 x 5.9 x 42 (50 x 150 x 1067)			
SIG	21	Standard Carriage Width	llava	Class III	in. (mm)	42 (1067)				
E	22	Floor to Top of Battery Ro		NL / DL	in. (mm)		20 (509)			
Σ	23	Ground Clearance	Lowest Point	NL / RL	in. (mm)		3.6 / 3.4 (92 / 87)			
	24 25	Ground Clearance	Center of Truck	NL/RL	in. (mm)		5.3 / 5.1 (134 / 130)			
	25 26		Center of Wheel to Face of Fork		in. (mm)		17.8 (452)			
	20	Battery Compartment	Height	Without / With Battery Rollers	in. (mm)		24.4 / 24 (620 / 609)			
			Width	Nominal	in. (mm) SIZE		45.4 (1152) 45"			
			Length	Actual	in. (mm)		45 45.7 (1161)			
	27	Length to Face of Forks	Lengui	Chassis Length			103.1 (2621)			
	28	Wheelbase		Chassis Lengui	in. (mm) in. (mm)		68.5 (1739)			
	20 29	Right Angle Stack			in. (mm)		158 (4012)			
	30	Equal Aisle	90° Intersecting Aisle		in. (mm)		84.3 (2141)			
	31	Outside Turning Radius	So more and a solution of the		in. (mm)		92.2 (2341)			
E	32	Truck Weight	Without Battery	NL	lb. (kg)		12300 (5579)			
흐	33	Axle Loading - Drive	Static with Max. Wt. Battery	NL/RL	lb. (kg)		7708 / 23813 (3496 / 10801)			
WEIGHT	32 33 34	Axle Loading - Steer	Static with Max. Wt. Battery	NL / RL	lb. (kg)		10139 / 4035 (4599 / 1830)			
							Standard Performance			
					VOLTS	36	48	80		
	36	Travel Speed	Extended Shift OFF	NL / RL	mph (km/h)	10.3 / 8.8 (16.6 / 14.2)	11.4 / 11 (18.3 / 17.7)	11.4 / 11 (18.3 / 17.7)		
			Extended Shift ON	NL / RL	mph (km/h)	9.1 / 7.7 (14.6 / 12.4)	11.4 / 9.9 (18.3 / 15.9)	11.4 / 9.9 (18.3 / 15.9)		
	37	Lift Speed	Std 2 Stg LFL Mast	NL / RL	ft/min (m/sec)	71 / 46 (0.36 / 0.232)	89 / 57 (0.45 / 0.29)	89 / 57 (0.45 / 0.29)		
ч			Opt 2 Stg FFL Mast	NL / RL	ft/min (m/sec)	67 / 43 (0.34 / 0.219)	84 / 54 (0.425 / 0.274)	84 / 54 (0.425 / 0.274)		
RMANCE			Opt 3 Stg FFL Mast	NL / RL	ft/min (m/sec)	68 / 44 (0.346 / 0.223)	85 / 55 (0.433 / 0.279)	85 / 55 (0.433 / 0.279)		
M.	38	Lower Speed	Std 2 Stg LFL Mast	NL / RL	ft/min (m/sec)		73 / 89 (0.37 / 0.45)			
ö			Opt 2 Stg FFL Mast	NL / RL	ft/min (m/sec)		57 / 81 (0.29 / 0.41)			
PERFO			Opt 3 Stg FFL Mast	NL / RL	ft/min (m/sec)		63 / 87 (0.32 / 0.44)			
Р	39	Gradability	5 Minute Rating	NL / RL	%	19.9 / 11.9	25.2 / 15	25.8 / 15.3		
			60 Minute Rating	NL / RL	%	7.3 / 4.5	9.2 / 5.7	9.4 / 5.9		
	40	Drawbar Pull	5 Minute Rating	NL/RL	lbf	3322 / 3185	3970 / 3809	4049 / 3885		
			60 Minute Rating	NL / RL	lbf	1241 / 1224	1488 / 1470	1518 / 1500		
	41	Brake	Method of Control	Service / Parking			Hydraulic / Spring Applied			
		-	Method of Operation	Service / Parking			Foot / Automatic			
	42	Battery		Туре			Lead Acid			
~							Standard Performance			
R	40	Tool State		CONT. I. D. P.	VOLTS	36	<b>48</b>	80		
ELECTRIC	43	Traction Motor		60 Minute Rating	hp (kW)	28.8 (21.5)	28.8 (21.5)	28.2 (21)		
Ш	44	Pump Motor		15 % Rating	hp (kW)	35.5 (26.5)	48.3 (36)	48.3 (36)		
-111	45	Traction Motor		Type / Control Method			AC / Transistor			
	43 44 45 46 47	Pump Motor		Type / Control Method			AC / Transistor	bla.		
		Number of Speeds		Traction / Pump	in (new)	In	finitely Variable / Infinitely Varia	DIE		
~	48	Step Height		Lowcot Doint	in. (mm)		21.1 (536)			
μ	49 50	Floor Height	<b>7</b> 0	Lowest Point	in. (mm)		33.7 (855)			
OTHER	49 50 51	Attachment Relief Pressu			psi (bar)		2248 (155)			
	51 52	Auxiliary Oil Flow Sound Level	3rd and 4th Function Measured per ANSI B56.11.5		gal/min (I/min) dB (A)		16 (60) 69/66			
			medauleu per Anal D00.11.0		40 (A)		09/00			

Above specifications, unless otherwise listed, are for a standard truck without optional equipment. Right Angle Stack and Equal Intersecting Aisle dimensions provided with a 48" long and 40" wide pallet load, allowing zero clearance.

CERTIFICATION: These Hyster® lift trucks meet design specifications of Part II ANSI B56.1-1969, as required by OSHA Section 1910.178(a)(2) and also comply with Part III ANSI B56.1-revision in effect at time of manufacture. Certification of compliance with the applicable ANSI standards appears on the lift truck. Performance specifications are for a truck equipped as described under Standard Equipment on this Technical Guide. Performance specifications are affected by the condition of the vehicle and how it is equipped, as well as by the nature, condition of the operating area, proper service and maintenance of the vehicle. If these specifications are critical, the proposed application should be discussed with your dealer.

#### **E120XN SPECIFICATIONS**

2 M 3 P 4 0 5 R 6 L 7 T 7 T 8 T 10 T 11 M 12 M 13 F 14 L 15 M	Aanufacturer Aodel Designation Power Deration Lated Capacity .oad Center "ire Type - Cushion, Solid, "ire Size Vheels - Number Tread Aast Tilt Aast - Lowered Height iree Lift - Top of Fork	X=Driven	Drive / Steer Drive / Steer	lb. (kg) in. (mm)		Hyster E120XN Electric Sit			
VH33         P           4         0           5         R           6         L           7         T           8         T           9         W           10         T           11         M           12         M           13         F           14         L           15         M	Power Deperation Rated Capacity Joad Center Tire Type - Cushion, Solid, Tire Size Vheels - Number Tread Aast Tilt Aast - Lowered Height	X=Driven				Electric			
6 L 57 7 T 8 T 9 W 10 T 11 M 12 M 13 F 14 L 15 M	Operation Rated Capacity Joad Center Tire Type - Cushion, Solid, Tire Size Vheels - Number Tread Aast Tilt Aast - Lowered Height	X=Driven							
6 L 51377 T 8 T 9 W 10 T 11 M 12 M 13 F 14 L 15 M	tated Capacity .oad Center 'ire Type - Cushion, Solid, 'ire Size Vheels - Number 'read Aast Tilt Aast - Lowered Height	X=Driven				Sit	1		
6 L 51377 T 8 T 9 W 10 T 11 M 12 M 13 F 14 L 15 M	oad Center <mark>'ire Type - Cushion, Solid,</mark> 'ire Size Vheels - Number read Aast Tilt Aast - Lowered Height	X=Driven							
STEER TO THE STEER	<mark>'ire Type - Cushion, Solid,</mark> 'ire Size Vheels - Number 'read Aast Tilt Aast - Lowered Height	X=Driven		in. (mm)		12000 (5443)			
11 M 12 M 13 F 14 L 15 M	ire Size Vheels - Number iread Aast Tilt Aast - Lowered Height	X=Driven				24 (610)			
11 M 12 M 13 F 14 L 15 M	Vheels - Number Tread Aast Tilt Aast - Lowered Height		Drive / Steer			<b>Cushion / Cushion</b>			
11 M 12 M 13 F 14 L 15 M	read <mark>Aast Tilt</mark> Aast - Lowered Height			in.		22 x 12 x 16 / 18 x 7 x 12.1			
11 M 12 M 13 F 14 Li 15 M	<mark>Aast Tilt</mark> Aast - Lowered Height	Contor of Tiroo	Drive / Steer			2X / 2			
12 M 13 F 14 Li 15 M	Aast - Lowered Height	Center of Tires	Narr Dr / Wide Dr / Steer	in. (mm)	40	/ 43.9 / 38.3 (1015 / 1115 / 97	2)		
13 F 14 L 15 M	-		Std Opt	degrees		5F / 5B 8F / 5B			
14 Li 15 M	ree Lift - Ton of Fork		Std Mast	in. (mm)		84.2 (2138)			
<b>15</b> №		Std 2 Stg Limited Free Lift Mast		in. (mm)		5 (150)			
<b>15</b> №		Opt 2 Stg Full Free Lift Mast wit	th / without LBR	in. (mm)		35 / 48 (897 / 1222)			
	ift Height - Top of Fork	Std 2 Stg Limited Free Lift Mast	t	in. (mm)		109 (2790)			
16 0	Aast - Extended Height	Std Mast with / without LBR		in. (mm)		159 / 144 (4031 / 3657)			
16 0	Verhead Guard Height	Std / Opt / Opt Flat Plate		in. (mm)	94	/ 91 / 87.1 (2388 / 2311 / 2212	2)		
17 S	SIP to Bottom Std OHG	Seat Depressed	Std / Susp / Swivel	in. (mm)	38.	7 / 38.9 / 38.9 (984 / 989 / 98	9)		
18 T	ow Pin Height	Vertical Center of Pin		in. (mm)		12.7 (324)			
	)verall Width	Standard Tread / Wide Tread		in. (mm)		52 / 55.9 (1320 / 1420)			
Se 20 F	orks	Thickness x Width x Length		in. (mm)	2	.4 x 5.9 x 42 (60 x 150 x 1067)			
<b>21</b> S	Standard Carriage Width		Class III	in. (mm)		42 (1067)			
SZ 22 F	loor to Top of Battery Rol	lers		in. (mm)		20 (509)			
₩ 23 G	Ground Clearance	Lowest Point	NL / RL	in. (mm)		3.6 / 3.4 (92 / 87)			
<b>a</b> 24 G	Ground Clearance	Center of Truck	NL / RL	in. (mm)		5.3 / 5.1 (134 / 130)			
<b>25</b> L	oad Distance	Center of Wheel to Face of Fork	S	in. (mm)		18.2 (462)			
26 B	Battery Compartment	Height	Without / With Battery Rollers	in. (mm)		24.4 / 24 (620 / 609)			
		Width		in. (mm)		45.4 (1152)			
			Nominal	SIZE		45"			
		Length	Actual	in. (mm)		45.7 (1161)			
	ength to Face of Forks		Chassis Length	in. (mm)		107.2 (2724)			
	Vheelbase			in. (mm)		68.5 (1739)			
	Right Angle Stack			in. (mm)		161.5 (4101)			
	qual Aisle	90° Intersecting Aisle		in. (mm)		85.7 (2178)			
	Outside Turning Radius		•••	in. (mm)		95.3 (2420)			
LH 32 TI 33 A	ruck Weight	Without Battery	NL (D)	lb. (kg)		13860 (6287)			
	Axle Loading - Drive Axle Loading - Steer	Static with Max. Wt. Battery Static with Max. Wt. Battery	NL / RL NL / RL	lb. (kg)	7556 / 26951 (3427 / 12225) 11848 / 4453 (5374 / 2020)				
<b>5</b> 34 A	ANE LOAUING - Steel	Static With Max. Wt. Dattery		lb. (kg)		Standard Performance			
				VOLTS	36	48	80		
36 T	ravel Speed	Extended Shift OFF	NL / RL	mph (km/h)	9.4 / 8 (15.1 / 12.9)	10.4 / 10 (16.7 / 16.1)	10.4 / 10 (16.7 / 16.1)		
		Extended Shift ON	NL / RL	mph (km/h)	8.2 / 7 (13.2 / 11.3)	10.4 / 9 (16.7 / 14.5)	10.4 / 9 (16.7 / 14.5)		
37 L	.ift Speed	Std 2 Stg LFL Mast	NL / RL	ft/min (m/sec)	71 / 43 (0.36 / 0.216)	89 / 53 (0.45 / 0.27)	89 / 53 (0.45 / 0.27)		
		Opt 2 Stg FFL Mast	NL / RL	ft/min (m/sec)	67 / 40 (0.34 / 0.204)	84 / 50 (0.425 / 0.255)	84 / 50 (0.425 / 0.255)		
RMANCE 38		Opt 3 Stg FFL Mast	NL / RL	ft/min (m/sec)	68 / 41 (0.346 / 0.208)	85 / 51 (0.433 / 0.26)	85 / 51 (0.433 / 0.26)		
₹ 38 L	ower Speed	Std 2 Stg LFL Mast	NL / RL	ft/min (m/sec)		73 / 89 (0.37 / 0.45)			
B		Opt 2 Stg FFL Mast	NL / RL	ft/min (m/sec)		57 / 81 (0.29 / 0.41)			
BERFO		Opt 3 Stg FFL Mast	NL / RL	ft/min (m/sec)		63 / 87 (0.32 / 0.44)			
₩ 39 G	Gradability	5 Minute Rating	NL / RL	%	18.5 / 10.4	22.8 / 13.1	23.3 / 13.4		
		60 Minute Rating	NL / RL	%	6.6 / 4	8.3 / 5.1	8.5 / 5.1		
40 D	Drawbar Pull	5 Minute Rating	NL / RL	lbf	3320 / 3179	3918 / 3755	3996 / 3830		
		60 Minute Rating	NL / RL	lbf	1239 / 1218	1466 / 1445	1495 / 1474		
41 B	Brake	Method of Control	Service / Parking			Hydraulic / Spring Applied			
		Method of Operation	Service / Parking			Foot / Automatic			
42 B	Battery		Туре			Lead Acid			
						Standard Performance			
2				VOLTS	36	48	80		
	raction Motor		60 Minute Rating	hp (kW)	28.8 (21.5)	28.8 (21.5)	28.2 (21)		
법 44 P	Pump Motor		15 % Rating	hp (kW)	35.5 (26.5)	48.3 (36)	48.3 (36)		
	raction Motor		Type / Control Method			AC / Transistor			
	Pump Motor		Type / Control Method			AC / Transistor			
	lumber of Speeds		Traction / Pump		Infi	nitely Variable / Infinitely Varial	le		
	Step Height			in. (mm)		21.1 (536)			
<b>H</b> 49 F	loor Height		Lowest Point	in. (mm)		33.7 (855)			
	Attachment Relief Pressur			psi (bar)		2248 (155)			
	Auxiliary Oil Flow	3rd and 4th Function		gal/min (l/min)		16 (60)			
52 S	Sound Level	Measured per ANSI B56.11.5		dB (A)		69/66	and the second se		

Above specifications, unless otherwise listed, are for a standard truck without optional equipment. Right Angle Stack and Equal Intersecting Aisle dimensions provided with a 48" long and 40" wide pallet load, allowing zero clearance.

Right Angle Stack and Equal Intersecting Alsie unnersions provided with a 4° rong and 4° wide panet road, andwing zero creatance. CERTIFICATION: These Hyster® lift trucks meet design specifications of Part II ANSI B56.1-1969, as required by OSHA Section 1910.178(a)(2) and also comply with Part III ANSI B56.1-revision in effect at time of manufacture. Certification of compliance with the applicable ANSI standards appears on the lift truck. Performance specifications are for a truck equipped as described under Standard Equipment on this Technical Guide. Performance specifications are affected by the condition of the vehicle and how it is equipped, as well as by the nature, condition of the operating area, proper service and maintenance of the vehicle. If these specifications are critical, the proposed application should be discussed with your dealer.

## **MAST DIMENSIONS AND BATTERY SPECIFICATIONS**

E80XN MAST DIMENSIONS											
Maximum Fork Height (TOF) +	Overall Lowered Ht.	all Lowered Ht. Overall Extended Height 0verall Extended Height w/Load Backrest w/o Load B		Free-Lift (TOF) w/ Load Backrest	Free-Lift (TOF) w/o Load Backrest						
in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)						
2-STAGE LIMITED FREE-LIFT (I	LFL) MAST										
120 (3050)	84 (2134)	176 (4455)	149 (3783)	5 (150)	5 (150)						
143 (3650)	96 (2434)	193 (4884)	173 (4383)	5 (150)	5 (150)						
2-STAGE FULL FREE-LIFT (FFL) MAST											
121 (3075)	84 (2134)	170 (4309)	152 (3857)	35 (900)	53 (1352)						
144 (3675)	96 (2434)	194 (4909)	176 (4457)	47 (1200)	65 (1652)						
3-STAGE FULL FREE-LIFT (FFL)	MAST										
173 (4415)	84 (2134)	223 (5649)	205 (5197)	35 (900)	53 (1352)						
185 (4715)	88 (2234)	235 (5949)	217 (5497)	39 (1000)	57 (1452)						
194 (4950)	92 (2334)	244 (6184)	226 (5732)	43 (1100)	61 (1552)						
218 (5550)	100 (2534)	268 (6784)	250 (6332)	51 (1300)	69 (1752)						

E100XNS, E100XN, E120XN MAST DIMENSIONS											
Maximum Fork Height (TOF) +	Overall Lowered Ht.	Overall Extended Height w/Load Backrest	Overall Extended Height w/o Load Backrest	Free-Lift (TOF) w/ Load Backrest	Free-Lift (TOF) w/o Load Backrest						
in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)						
2-STAGE LIMITED FREE-LIFT (LFL) MAST											
109 (2790)	85 (2138)	159 (4031)	144 (3657)	5 (150)	5 (150)						
133 (3390)	96 (2438)	183 (4631)	168 (4257)	5 (150)	5 (150)						
157 (3990)	108 (2738)	206 (5231)	192 (4857)	5 (150)	5 (150)						
2-STAGE FULL FREE-LIFT (FFL) MAST											
110 (2815)	85 (2138)	160 (4056)	147 (3731)	35 (897)	48 (1222)						
134 (3415)	96 (2438)	184 (4656)	171 (4331)	47 (1197)	59 (1522)						
3-STAGE FULL FREE-LIFT (FFL)	MAST										
162 (4137)	85 (2138)	212 (5378)	200 (5058)	35 (897)	47 (1217)						
184 (4690)	92 (2338)	234 (5931)	221 (5611)	43 (1097)	55 (1417)						
208 (5290)	100 (2538)	258 (6531)	245 (6211)	51 (1297)	63 (1617)						

	Battery Compartment Dimensions			Battery Dimensions and Specifications						Max Capacity	Weight	
Truck Model	Width	Length	Height	"X"	"Y"	"Z"	Volts	No. of Cells	Plates per Cell	6 Hour Rate	Min	Мах
	in (mm)			in (mm)			Conc		amp hr (kwh)	lb (kg)		
E80XN	45.4 (1152)	39.2 (996)	.2 (996) 24.5 (622)	22) 45 (1143)	39 (990)	23.9 (608)	36	18	33	2300 (80.3)		
E100XNS							48	24	29	1800 (83.8)	3400 (1542)	4800 (2177)
39" Compartment							80	40	15	1000 (77.6)		
E100XN							36	36	19	2300 (160.6)		
E120XN	45.4 (1152)	45.7 (1161)	24.5 (622)	45 (1143)	45.3 (1150)	23.9 (608)	48	24	33	1800 (83.8)	4000 (1814)	5500 (2517)
45" Compartment						80	40	17	1000 (77.6)			

Battery Type: "EO" (Without Cover)

Battery amp hr (kwh) capacity is max allowable per UL

Commercially available lead acid batteries may not necessarily reach these max limits

Battery Roller option reduces battery compartment height to 24.0" (609mm) & max battery height to 23.4" (595mm)

Battery Compartment Length is measured front to rear. Battery Compartment Width is measured across the truck

(7)

 Battery Notes - Conventional Charging (Opt G26201)

 Battery Connector:
 36 volt - Grey SB\*350 (Anderson Power Products® P/N 6320G2 or equivalent) 48 volt - Blue SB\*350 (Anderson Power Products® P/N 6321G2 or equivalent) 80 volt - Blue SBE\*320 (Anderson Power Products® P/N 66359G3 or equivalent)

 Handle (not required):
 SB\*350 and SBE\*320 (Anderson Power Products® : "A" TYPE (Grey) P/N 995G2 or equivalent)

 Battery Lead:
 Length 20" (508 mm), Position "B", 4/0 AWG

Battery Notes - Rapid/Fast Charging (Opt G26202)

Battery Connector: Requires Dual Positive / Negative Cabling terminating in (2) Female EBC-320 DIN Connectors (Anderson Power Products\* P/N E32504-00X9 or equivalent) Each individual DIN connector to include 1 Red Conductor to (+) and 1 black conductor to (-) Battery Lead: Length 25" (635 mm), Position "B", Minimum Cable Size 4/0 AWG

#### STANDARD EQUIPMENT

- 2-Stage Limited Free Lift (LFL) mast with Maximum Fork Height of 120" (3050mm) (E80XN) or 109" (2790mm) (E100-120XN)
- 5° Forward and 5° Back Mast Tilt
- 42" (1067mm) Wide Class III (E80XN) or Class IV (E100-120XN) Hook-type Carriage with 48" (1219mm) High Load Backrest Extension
- 42" (1067mm) Long Forks
- Smooth Tread Rubber Drive Tire and Steer Tire
- Battery Compartment Size (Length)
  - 39" for the E80XN-100XNS
  - 45.5" for the E100-120XN
- Lift Out Battery Extraction
- 36 Volt Electrical System
- Standard Construction
- UL Classification Type "E"
- 12" Steering Wheel with Integral Spinner Knob
- On-Demand Hydrostatic Power Assist Steer System
- Non-Suspension Vinyl Seat
- Black ELR Non-Cinch Seat Belt
- Auto Park Brake
- Key Switch Start
- 94" Grid Style Overhead Guard
- MONOTROL<sup>™</sup> Foot Direction Control
- 3 Function Hydraulic Control Valve w/Seat Side Mechanical Levers
- AC Traction and Pump Motors (Completely Brushless)
- Transistor Drive and Pump Control
- Advanced VSM (Vehicle System Manager)
- Progressive Thermal Management System
- Fully Integrated CANbus Communication
- Hyster Stability System<sup>™</sup>
- Power Assist Braking
- ADS (Auto Deceleration System) with Regenerative Braking
- Multifunction Display
  - Battery State of Charge Indicator with Lift Interrupt
  - Hour Meters Traction Motor, Lift Pump Motor and Truck
  - Performance Mode Indicator
  - Direction Indicator
  - Fault Indicator (Audible & Visible)
- 4 Operator Selectable, Programmable Performance Modes
- Easy Ingress/Egress w/Low Step Height and Contoured Handhold
- Operator Convenience Station Storage Areas, Beverage & Clipboard Holders
- Adjustable Tilt Steering Column with Low Profile Cowl for Excellent Visibility
- Anti Cinch Operator Restraint System
- Operator Presence System
- Cushioned Floormat
- Static Strap
- Tow Pin
- Seatside Power Disconnect Button
- On-Board Software
  - Program, Test & Diagnose
  - Password Protected
- Electronic Horn with Integral Relay (Long Life / No Adjustments)

Hyster Company

Greenville, North Carolina

27835-7006 Part No. E80-120XN/TG

11/2012 Litho in U.S.A.

P.O. Box 7006

- 12 Month / 2,000 Hour Full Truck Warranty
- 24 Month / 4,000 Hour Powertrain Warranty
- Operating Manual

HYSTER

#### OPTIONAL EQUIPMENT:

- Side Extraction Battery Removal with Rollers
- 48 or 80 Volt Electrical System
- Rapid/Fast Charging Configuration
- Cooler/Freezer Package
- UL Classification Type "EE"
- Available with 2-stage Limited Free Lift (LFL) and 2- or 3-stage Full Free Lift (FFL) masts
- Carriage with Integral Sideshift
- Attachment Carriages (E100XN/XNS)
- Mast Tilt Option 8° Forward / 5° Back
- Return to Set Tilt
- Accumulator
- TouchPoint<sup>™</sup> Hydraulic Mini-levers with Fully Adjustable Armrest
- 4 Function Hydraulic Control Valve
- Non-Marking, Rubber, or Lug Tread Tires
- Wide Tread Tires
- Non-Suspension Seat (Cloth)
- Full Suspension Seat (Vinyl or Cloth)
- Swivel Seat, Full Suspension (Vinyl or Cloth)
- Red (HI-VIS) ELR Non-Cinch Seat Belt
- 91" Grid Style Overhead Guard
- 87" Flat Plate Overhead Guard
- Keyless Start (with Auxiliary Key Switch)
- Seat Side Directional Control
- Telescopic Steering Column with Tilt Memory
- Various Light Packages:
  - Halogen Glass Lens Work Lights
    - a. Full Light Package 2) Front & 1) Rear Work Lights with 2) LED Brake / Tail / Back-Up
    - b. 2) Front & 1) Rear Work Lights
  - LED Plastic Lens Work Lights
    - a. Full LED Light Package 2) Front & 1) Rear LED Wk Lights with 2) LED Brake / Tail / Back-Up
    - b. 2) Front & 1) Rear LED Work Lights
  - Brake and Tail Lights
    - a. 2) LED Brake / Tail / Back-up
- LED Dome / Reading Light
- Audible Reverse Activated Alarm
- Visible Amber Strobe Light Continuous Activated, Overhead Guard Mounted
- Rear Drive Handle with Integrated Horn Button
- Mirrors Dual Rear View or Single Panoramic
- Load Weight Indicator
- Impact Monitor
- Operator Password
- Operator Daily Checklist
- System Monitor Hydraulic Low Fluid Level Indicator and Hydraulic Filter Service Indicator
- Hydraulic Attachment Extension Tubes with and without Quick
   Disconnect Fittings
- Maintenance Reminder

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Hyster products are subject to change without notice.

• Fire Extinguisher – 2.5 lb. Dry Chemical

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