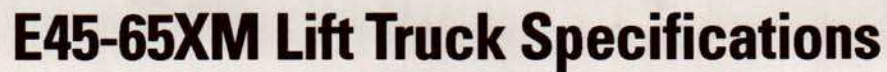


E45-65XM Lift Truck Technical Guide





Equal Intersecting Right Angle Aisle with 42 (1 065) wide load and 32 (815) long forks:

- E45XM 65.2 (1 656) y
- E50XM 65.9 (1 674) z
- E55XM 67.1 (1 704) z
- E60XM 69.1 (1 755) z
- E65XM 72.2 (1 835) z

Over tires

42.1 (1 070)

36

36

20

19

A

For 90° Stacking Aisle, add outside turning radius 19 plus dimension 20 plus load length.

y - Add 2.6 (65) with 33.1 (847) battery compartment.
z - Add 1.5 (40) with 33.1 (847) battery compartment.

Model/Tread		Tread Width	Over Tires†
E45-55XM	Standard	35.1 (891)	42.1 (1 070)
E60-65XM	Standard	35.5 (905)	43.5 (1 105)
E45-55XM	Wide	41.9 (1 065)	48.9 (1 240)
E60-65XM	Wide	40.9 (1 040)	48.9 (1 240)

est
(70)
(05)
(40)
(40)

10

14

14

17

12

4

3

11

18.0
(458)

3.6 (91)

A

35

38

15

42.3*
(1 065)

88.4
(2 245)

Optional
86.0
(2 184)

45.1
(1 070)

Tow pin
11.4
(290)

B

HYSTER

E45-50XM 23%
E55XM 21%
E60-65XM 18%

HYSTER

*When seat is in depressed position.

Dimensions are in inches (millimeters).



Hyster E45XM Lift Truck Specifications

GENERAL	1	Manufacturer		Hyster Company	Hyster Company
	2	Model		E45XM (36 V)	E45XM (48 V)
	3	Capacity, rated	lb. (kg)	4,500 (2 250)	4,500 (2 250)
	4	Load center	in. (mm)	24 (500)	24 (500)
	5	Power type		Electric	Electric
	6	Operator type		Sit	Sit
	7	Tire type, front/rear		Cushion/Cushion	Cushion/Cushion
	8	Wheels, front/rear (X=driven)		2X / 2	2X / 2
DIMENSIONS	10	2-stg. LFL (TOF)	in. (mm)	131.0 (3 330)	131.0 (3 330)
	11	Limited free-lift (TOF)	in. (mm)	5.5 (140)	5.5 (140)
	12	Opt. full free-lift (TOF) with/w/o LBE	in. (mm)	35.8 (910) / 62.0 (1 570)	35.8 (909) / 62.0 (1 570)
	13	Forks, width/thickness	in. (mm)	4.0 (100)/1.5 (40)	4.0 (100)/1.5 (40)
	14	Tilt angle, forward/backward	°	5/8	5/8
	15	Length to face of forks	in. (mm)	77.0 (1 955)	77.0 (1 965)
	16	Width, standard tires	in. (mm)	42.1 (1 070)	42.1 (1 070)
	17	Height, std. mast lowered	in. (mm)	84.0 (2 135)	84.0 (2 135)
	18	Height, std. mast ext. with/w/o LBE	in. (mm)	179.4 (4 555) / 148.1 (3 760)	179.4 (4 555) / 148.1 (3 760)
	19	Turning radius, minimum outside	in. (mm)	66.7 (1 695)	66.7 (1 695)
	20	Center of wheel to face of forks	in. (mm)	14.8 (375)	14.8 (375)
	22	Aisle width (Add 1d. lgth. for 90° stack)	in. (mm)	81.5 (2 070)	81.5 (2 070)
	23	Stability (Comply with ANSI?)		Yes	Yes
	24	Travel speed, n/r/l	02 mph (km/h)	6.7 (10.8) / 6.0 (9.7)	9.0 (14.5) / 8.1 (13.0)
PERFORMANCE	25	Travel speed, n/r/l	E & 01 mph (km/h)	8.6 (13.8) / 7.8 (12.7)	9.9 (15.9) / 9.1 (14.6)
	26	Lift speed, n/r/l	E, 01 & 02 ft/min (m/s)	88.0 (0.45) / 58.0 (0.30)	117.0 (0.60) / 76.0 (0.39)
	27	Opt. 2-stg. FFL n/r/l	E, 01 & 02 ft/min (m/s)	93.0 (0.48) / 60.0 (0.31)	123.0 (0.63) / 80.0 (0.41)
	28	Opt. 3-stg. FFL n/r/l	E, 01 & 02 ft/min (m/s)	91.0 (0.46) / 61.0 (0.31)	120.0 (0.61) / 78.0 (0.39)
	29	Opt. 4-stg. FFL n/r/l	E, 01 & 02 ft/min (m/s)	89.0 (0.45) / 57.0 (0.29)	112.0 (0.57) / 79.0 (0.40)
	30	Lowering, n/r/l	E, 01 & 02 ft/min (m/s)	100.0 (0.51) / 112.0 (0.57)	100.0 (0.51) / 112.0 (0.57)
	31	Opt. 2-stg. FFL n/r/l	E, 01 & 02 ft/min (m/s)	90.0 (0.46) / 103.0 (0.52)	90.0 (0.46) / 103.0 (0.52)
	32	Opt. 3-stg. FFL n/r/l	E, 01 & 02 ft/min (m/s)	92.0 (0.47) / 106.0 (0.54)	92.0 (0.47) / 106.0 (0.54)
WEIGHTS	33	Opt. 4-stg. FFL n/r/l	E, 01 & 02 ft/min (m/s)	81.0 (0.41) / 88.0 (0.45)	81.0 (0.41) / 88.0 (0.45)
	34	Total approximate weight w/o battery	lb. (kg)	6,765 (3 048)	6,765 (3 048)
	35	Axle loading, static, rated load frt / rear	lb. (kg)	12,255 (5 560) / 2,490 (1 130)	12,255 (5 560) / 2,490 (1 130)
	36	Number tires front / rear		2 / 2	2 / 2
	37	Size of tires, front		21 x 7 x 15	21 x 7 x 15
	38	Size of tires, rear		16 x 5 x 10.5	16 x 5 x 10.5
	39	Wheelbase **	in. (mm)	47.6 (1 210)	47.6 (1 210)
	40	Tread, center of tires front / rear	in. (mm)	35.1 (890) / 36.9 (935)	35.1 (890) / 36.9 (935)
WHEELS & TIRES	41	Ground clearance, no load lowest pt.	in. (mm)	3.6 (91)	3.6 (91)
	42	Ground clearance, no load ctr. whlbs.	in. (mm)	4.4 (110)	4.4 (110)
	43	Brakes, method of control, service / parking		Hydraulic / Mechanical	Hydraulic / Mechanical
	44	Brakes, method of operation, service / parking		Foot / Foot	Foot / Foot
	45	Battery, type		Lead acid	Lead acid
	46	Battery, volts / ampere hours		36 / 1,100	48 / 800
	47	Battery, minimum weight	lb. (kg)	2,300 (1 045)	2,300 (1 045)
	48	Traction motor, 60 min. rating	02 hp (kw)	9.7 (7.3)	12.8 (9.6)
ELECTRICS	49	Traction motor, 60 min. rating	E & 01 hp (kw)	16.1 (12.0)	18.8 (14.0)
	50	Pump motor, 15 min. rating	E, 01 & 02 hp (kw)	12.6 (9.4)	16.8 (12.5)
	51	Traction motor control method		SCR	SCR
	52	Pump motor control method		Contactactor	Contactactor
	53	Number of speeds		Infinitely variable	Infinitely variable
	54	Relief pressure for attachments ▲	psi (kPa)	2,250 (15 500)	2,250 (15 500)

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 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.

* Add 6.0" (150 mm) if optional 33.11" (847 mm) battery compartment is used.

** Add 5.8" (145 mm) if optional 33.11" (847 mm) battery compartment is used.

▲ Relief pressure is 2,250 (15 515 kPa) for 3-function valve with relief cartridge and 4-function valve.

For more information on the Control Package Options - E, 01, 02 see Page 10 of this Technical Guide.



Hyster E50XM Lift Truck Specifications

GENERAL	1	Manufacturer		Hyster Company	Hyster Company	
	2	Model		E50XM (36 V)	E50XM (48 V)	
	3	Capacity, rated	lb. (kg)	5,000 (2 500)	5,000 (2 500)	
	4	Load center	in. (mm)	24 (500)	24 (500)	
	5	Power type		Electric	Electric	
	6	Operator type		Sit	Sit	
	7	Tire type, front/rear		Cushion / Cushion	Cushion / Cushion	
	8	Wheels, front/rear (X=driven)		2X / 2	2X / 2	
DIMENSIONS	10	2-stg. LFL (TOF)	in. (mm)	131.0 (3 330)	131.0 (3 330)	
	11	Limited free-lift (TOF)	in. (mm)	5.5 (140)	5.5 (140)	
	12	Opt. full free-lift (TOF) with/w/o LBE	in. (mm)	35.8 (909) / 62.1 (1 577)	35.8 (909) / 62.1 (1 577)	
	13	Forks, width/thickness	in. (mm)	4.0 (100) / 1.5 (40)	4.0 (100) / 1.5 (40)	
	14	Tilt angle, forward/backward	°	5 / 8	5 / 8	
	15	Length to face of forks ☆	in. (mm)	78.6 (1 995)	78.6 (1 995)	
	16	Width, standard tires	in. (mm)	42.1 (1 070)	42.1 (1 070)	
	17	Height, std. mast lowered	in. (mm)	84.0 (2 135)	84.0 (2 135)	
	18	Height, std. mast ext. with/w/o LBE	in. (mm)	179.4 (4 555) / 148.1 (3 760)	179.4 (4 555) / 148.1 (3 760)	
	19	Turning radius, minimum outside ☆	in. (mm)	68.1 (1 730)	68.1 (1 730)	
	20	Center of wheel to face of forks	in. (mm)	14.8 (375)	14.8 (375)	
	22	Aisle width(Add 1d. lgth. for 90° stack) ☆	in. (mm)	82.9 (2 105)	82.9 (2 105)	
	23	Stability (Comply with ANSI?)		Yes	Yes	
	24	Travel speed, n/l/r	02 mph (km/h)	6.6 (9.7) / 5.9 (8.7)	8.8 (13.5) / 7.9 (11.7)	
PERFORMANCE	25	Travel speed, n/l/r	E & 01 mph (km/h)	8.5 (13.5) / 7.8 (12.6)	9.8 (15.8) / 9.0 (14.5)	
	26	Lift speed, n/l/r	E, 01 & 02 ft/min (m/s)	88.0 (0.45) / 56.0 (0.28)	117.0 (0.60) / 74.0 (0.38)	
		Opt. 2-stg. FFL n/l/r	E, 01 & 02 ft/min (m/s)	93.0 (0.47) / 58.0 (0.30)	123.0 (0.63) / 77.0 (0.39)	
		Opt. 3-stg. FFL n/l/r	E, 01 & 02 ft/min (m/s)	91.0 (0.46) / 57.0 (0.29)	120.0 (0.61) / 75.0 (0.38)	
		Opt. 4-stg. FFL n/l/r	E, 01 & 02 ft/min (m/s)	89.0 (0.45) / 55.0 (0.28)	112.0 (0.57) / 77.0 (0.39)	
		Lowering, n/l/r	E, 01 & 02 ft/min (m/s)	100.0 (0.51) / 113.0 (0.56)	100.0 (0.51) / 113.0 (0.56)	
		Opt. 2-stg. FFL n/l/r	E, 01 & 02 ft/min (m/s)	90.0 (0.46) / 106.0 (0.52)	90.0 (0.46) / 106.0 (0.52)	
		Opt. 3-stg. FFL n/l/r	E, 01 & 02 ft/min (m/s)	92.0 (0.47) / 108.0 (0.54)	92.0 (0.47) / 108.0 (0.54)	
WEIGHTS & TIRE		Opt. 4-stg. FFL n/l/r	E, 01 & 02 ft/min (m/s)	81.0 (0.41) / 88.0 (0.45)	81.0 (0.41) / 88.0 (0.45)	
	30	Total approximate weight w/o battery	lb. (kg)	7,215 (3 272)	7,215 (3 272)	
	31	Axle loading, static, rated load frt/rear	lb. (kg)	13,160 (5 970) / 2,580 (1 170)	13,160 (5 970) / 2,580 (1 170)	
	32	Number tires front/rear		2 / 2	2 / 2	
	33	Size of tires, front		21 x 7 x 15	21 x 7 x 15	
	34	Size of tires, rear		16 x 5 x 10.5	16 x 5 x 10.5	
	35	Wheelbase ☆☆	in. (mm)	47.6 (1 209)	47.6 (1 209)	
	36	Tread, center of tires front/rear	in. (mm)	35.1 (892) / 36.9 (935)	35.1 (892) / 36.9 (935)	
ELECTRICAL	37	Ground clearance, no load lowest pt.	in. (mm)	3.6 (91)	3.6 (91)	
	38	Ground clearance, no load ctr. whlbs.	in. (mm)	4.3 (109)	4.3 (109)	
	39	Brakes, method of control, service/parking		Hydraulic/Mechanical	Hydraulic/Mechanical	
	40	Brakes, method of operation, service/parking		Foot / Foot	Foot / Foot	
	41	Battery, type		Lead acid	Lead acid	
	42	Battery, volts/ampere hours		36/1,100	36/1,100	
	43	Battery, minimum weight	lb. (kg)	2,300 (1 045)	2,300 (1 045)	
	44	Traction motor, 60 min. rating	02 hp (kw)	9.8 (7.3)	16.0 (12.0)	
RELIEF		Traction motor, 60 min. rating	E & 01 hp (kw)	16.1 (12.0)	18.8 (14.0)	
	45	Pump motor, 15 min. rating	E, 01 & 02 hp (kw)	12.6 (9.4)	16.8 (12.5)	
		Traction motor control method		SCR	SCR	
		Pump motor control method		Contactor	Contactor	
		Number of speeds		Infinitely variable	Infinitely variable	
	55	Relief pressure for attachments ▲	psi (kPa)	2,250 (15 500)	2,250 (15 500)	

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 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.

☆ Add 3.6" (90 mm) if optional 33.11" (847 mm) battery compartment is used.

☆☆ Add 5.8" (145 mm) if optional 33.11" (847 mm) battery compartment is used.

▲ Relief pressure is 2,250 (15 515 kPa) for 3-function valve with relief cartridge and 4-function valve.

For more information on the Control Package Options - E, 01, 02 see Page 10 of this Technical Guide.



Hyster E55XM Lift Truck Specifications

GENERAL	1	Manufacturer		Hyster Company	Hyster Company
	2	Model		E55XM (36 V)	E55XM (48 V)
	3	Capacity, rated	lb. (kg)	5,500 (2 500)	5,500 (2 500)
	4	Load center	in. (mm)	24 (500)	24 (500)
	5	Power type		Electric	Electric
	6	Operator type		Sit	Sit
	7	Tire type, front/rear		Cushion / Cushion	Cushion / Cushion
	8	Wheels, front/rear (X=driven)		2X / 2	2X / 2
DIMENSIONS	10	2-stg. LFL (TOF)	in. (mm)	131.0 (3 330)	131.0 (3 330)
	11	Limited free-lift (TOF)	in. (mm)	5.5 (140)	5.5 (140)
	12	Opt. full free-lift (TOF) with/w/o LBE	in. (mm)	35.8 (909) / 62.1 (1 577)	35.8 (909) / 62.1 (1 577)
	13	Forks, width/thickness	in. (mm)	4.0 (100) / 1.5 (40)	4.0 (100) / 1.5 (40)
	14	Tilt angle, forward/backward	°	5/8	5/8
	15	Length to face of forks	in. (mm)	82.8 (2 103)	82.8 (2 103)
	16	Width, standard tires	in. (mm)	42.0 (1 070)	42.0 (1 070)
	17	Height, std. mast lowered	in. (mm)	84.0 (2 135)	84.0 (2 135)
	18	Height, std. mast ext. with/w/o LBE	in. (mm)	179.4 (4 556) / 148.1 (3 760)	179.4 (4 556) / 148.1 (3 760)
	19	Turning radius, minimum outside	in. (mm)	72.9 (1 850)	72.9 (1 850)
	20	Center of wheel to face of forks	in. (mm)	14.8 (375)	14.8 (375)
	22	Aisle width (Add ld. lgth. for 90° stack)	in. (mm)	87.7 (2 230)	87.7 (2 230)
PERFORMANCE	23	Stability (Comply with ANSI?)		Yes	Yes
	24	Travel speed, n/l/r	02 mph (km/h)	6.5 (9.8) / 5.8 (8.5)	8.7 (12.9) / 7.8 (11.4)
		Travel speed, n/l/r	E & 01 mph (km/h)	8.4 (13.5) / 7.7 (12.4)	9.7 (15.6) / 8.9 (14.3)
	25	Lift speed, n/l/r	E, 01 & 02 ft/min (m/s)	88.0 (0.45) / 54.0 (0.28)	117.0 (0.60) / 71.0 (0.36)
		Opt. 2-stg. FFL n/l/r	E, 01 & 02 ft/min (m/s)	93.0 (0.47) / 57.0 (0.29)	123.0 (0.63) / 75.0 (0.38)
		Opt. 3-stg. FFL n/l/r	E, 01 & 02 ft/min (m/s)	91.0 (0.46) / 55.0 (0.28)	120.0 (0.61) / 73.0 (0.37)
		Opt. 4-stg. FFL n/l/r	E, 01 & 02 ft/min (m/s)	N/A	N/A
	26	Lowering, n/l/r	E, 01 & 02 ft/min (m/s)	100.0 (0.51) / 115.0 (0.58)	100.0 (0.51) / 115.0 (0.58)
		Opt. 2-stg. FFL n/l/r	E, 01 & 02 ft/min (m/s)	90.0 (0.46) / 109.0 (0.55)	90.0 (0.46) / 109.0 (0.55)
		Opt. 3-stg. FFL n/l/r	E, 01 & 02 ft/min (m/s)	92.0 (0.47) / 110.0 (0.56)	92.0 (0.47) / 110.0 (0.56)
WHEELS & TIRES	30	Total approximate weight w/o battery	lb. (kg)	6,925 (3 141)	6,925 (3 141)
	31	Axle loading, static, rated load frt/rear	lb. (kg)	13,970 (6 335) / 2,405 (1 095)	13,970 (6 335) / 2,405 (1 095)
	32	Number tires front/rear		2 / 2	2 / 2
	33	Size of tires, front		21 x 7 x 15	21 x 7 x 15
	34	Size of tires, rear		16 x 5 x 10.5	16 x 5 x 10.5
	35	Wheelbase	in. (mm)	53.4 (1 355)	53.4 (1 355)
	36	Tread, center of tires front/rear	in. (mm)	35.1 (890) / 36.9 (935)	35.1 (890) / 36.9 (935)
	37	Ground clearance, no load lowest pt.	in. (mm)	3.6 (91)	3.6 (91)
ELECTRICAL	38	Ground clearance, no load ctr. whlbs.	in. (mm)	4.3 (109)	4.3 (109)
	39	Brakes, method of control, service/parking		Hydraulic/Mechanical	Hydraulic/Mechanical
	40	Brakes, method of operation, service/parking		Foot / Foot	Foot / Foot
	41	Battery, type		Lead acid	Lead acid
ELECTRICAL	42	Battery, volts/ampere hours		36/1,100	48/1,000
	43	Battery, minimum weight	lb. (kg)	2,900 (1 315)	2,900 (1 315)
	44	Traction motor, 60 min. rating	02 hp (kw)	9.8 (7.3)	12.9 (9.6)
		Traction motor, 60 min. rating	E & 01 hp (kw)	16.1 (12.0)	18.8 (14.0)
	45	Pump motor, 15 min. rating	E, 01 & 02 hp (kw)	12.6 (9.4)	16.8 (12.5)
		Traction motor control method		SCR	SCR
		Pump motor control method		Contactator	Contactator
		Number of speeds		Infinitely variable	Infinitely variable
	55	Relief pressure for attachments	psi (kPa)	2, 250 (15 500)	2, 250 (15 500)

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 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. Relief pressure is 2,250 (15 515 kPa) for 3-function valve with relief cartridge and 4-function valve.



Hyster E60XM Lift Truck Specifications

GENERAL	1	Manufacturer		Hyster Company	Hyster Company	
	2	Model		E60XM (36 V)	E60XM (48 V)	
	3	Capacity, rated	lb. (kg)	6,000 (3 000)	6,000 (3 000)	
	4	Load center	in. (mm)	24 (500)	24 (500)	
	5	Power type		Electric	Electric	
	6	Operator type		Sit	Sit	
	7	Tire type, front/rear		Cushion / Cushion	Cushion / Cushion	
	8	Wheels, front/rear (X=driven)		2X / 2	2X / 2	
DIMENSIONS	10	2-stg. LFL (TOF)	in. (mm)	126.5 (3 215)	126.5 (3 215)	
	11	Limited free-lift (TOF)	in. (mm)	6.0 (152)	6.0 (152)	
	12	Opt. full free-lift (TOF) with/w/o LBE	in. (mm)	35.8 (909) / 62.1 (1 577)	35.8 (909) / 62.1 (1 577)	
	13	Forks, width/thickness	in. (mm)	5.0 (125) / 2.0 (50)	5.0 (125) / 2.0 (50)	
	14	Tilt angle, forward/backward	°	5 / 8	5 / 8	
	15	Length to face of forks	in. (mm)	84.9 (2 155)	84.9 (2 155)	
	16	Width, standard tires	in. (mm)	43.5 (1 105)	43.5 (1 105)	
	17	Height, std. mast lowered	in. (mm)	84.0 (2 135)	84.0 (2 135)	
	18	Height, std. mast ext. with/w/o LBE	in. (mm)	174.6 (4 435) / 146.1 (3 762)	174.6 (4 435) / 146.1 (3 762)	
	19	Turning radius, minimum outside	in. (mm)	74.4 (1 890)	74.4 (1 890)	
	20	Center of wheel to face of forks	in. (mm)	15.3 (390)	15.3 (390)	
	22	Aisle width (Add 1d. lgth. for 90° stack)	in. (mm)	89.7 (2 280)	89.7 (2 280)	
	23	Stability (Comply with ANSI?)		Yes	Yes	
	24	Travel speed, nl/r	02 mph (km/h)	6.4 (10.3) / 5.6 (9.5)	8.5 (12.7) / 7.6 (11.2)	
PERFORMANCE		Travel speed, nl/r	E & 01 mph (km/h)	8.3 (13.4) / 7.6 (12.2)	9.7 (15.6) / 8.8 (14.2)	
	25	Lift speed, nl/r	E, 01 & 02 ft/min (m/s)	79.0 (0.40) / 49.0 (0.25)	108.0 (0.55) / 64.0 (0.32)	
		Opt. 2-stg. FFL nl/r	E, 01 & 02 ft/min (m/s)	82.0 (0.42) / 49.0 (0.25)	109.0 (0.55) / 65.0 (0.33)	
		Opt. 3-stg. FFL nl/r	E, 01 & 02 ft/min (m/s)	81.0 (0.41) / 49.0 (0.25)	105.0 (0.53) / 65.0 (0.33)	
		Opt. 4-stg. FFL nl/r	E, 01 & 02 ft/min (m/s)	N/A	N/A	
	26	Lowering, nl/r	E, 01 & 02 ft/min (m/s)	90.0 (0.46) / 112.0 (0.57)	90.0 (0.46) / 112.0 (0.57)	
		Opt. 2-stg. FFL nl/r	E, 01 & 02 ft/min (m/s)	72.0 (0.37) / 106.0 (0.54)	72.0 (0.37) / 106.0 (0.54)	
		Opt. 3-stg. FFL nl/r	E, 01 & 02 ft/min (m/s)	78.0 (0.40) / 107.0 (0.54)	78.0 (0.40) / 107.0 (0.54)	
		Opt. 4-stg. FFL nl/r	E, 01 & 02 ft/min (m/s)	N/A	N/A	
WEIGHT	30	Total approximate weight w/o battery	lb. (kg)	7,525 (3 412)	7,525 (3 412)	
	31	Axle loading, static, rated load frt/rear	lb. (kg)	14,935 (6 775) / 2,675 (1 210)	14,935 (6 775) / 2,675 (1 210)	
WHEELS & TIRES	32	Number tires front/rear		2 / 2	2 / 2	
	33	Size of tires, front		21 x 8 x 15	21 x 8 x 15	
	34	Size of tires, rear		16 x 6 x 10.5	16 x 6 x 10.5	
	35	Wheelbase	in. (mm)	53.4 (1 355)	53.4 (1 355)	
	36	Tread, center of tires front/rear	in. (mm)	35.5 (891) / 36.9 (935)	35.5 (891) / 36.9 (935)	
	37	Ground clearance, no load lowest pt.	in. (mm)	3.6 (91)	3.6 (91)	
	38	Ground clearance, no load ctr. whlbs.	in. (mm)	4.3 (109)	4.3 (109)	
	39	Brakes, method of control, service/parking		Hydraulic/Mechanical	Hydraulic/Mechanical	
	40	Brakes, method of operation, service/parking		Foot / Foot	Foot / Foot	
	41	Battery, type		Lead acid	Lead acid	
ELECTRICAL	42	Battery, volts/ampere hours		36 / 1,300	48 / 1,000	
	43	Battery, minimum weight	lb. (kg)	2,900 (1 315)	2,900 (1 315)	
	44	Traction motor, 60 min. rating	02 hp (kw)	9.8 (7.3)	12.9 (9.6)	
		Traction motor, 60 min. rating	E & 01 hp (kw)	16.1 (12.0)	18.8 (14.0)	
	45	Pump motor, 15 min. rating	E, 01 & 02 hp (kw)	12.6 (9.4)	16.8 (12.5)	
		Traction motor control method		SCR	SCR	
		Pump motor control method		Contactors	Contactors	
		Number of speeds		Infinitely variable	Infinitely variable	
	55	Relief pressure for attachments	psi (kPa)	2,250 (15 500)	2,250 (15 500)	

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 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.

Relief pressure is 2,250 (15 515 kPa) for 3-function valve with relief cartridge and 4-function valve.

For complete package options - see page 12 and page 16 of this Technical Guide.



Hyster E65XM Lift Truck Specifications

GENERAL	1	Manufacturer		Hyster Company	Hyster Company
	2	Model		E65XM (36 V)	E65XM (48 V)
	3	Capacity, rated	lb. (kg)	6,500 (3 200)	6,500 (3 200)
	4	Load center	in. (mm)	24 (500)	24 (500)
	5	Power type		Electric	Electric
	6	Operator type		Sit	Sit
	7	Tire type, front/rear		Cushion / Cushion	Cushion / Cushion
	8	Wheels, front/rear (X=driven)		2X / 2	2X / 2
DIMENSIONS	10	2-stg. LFL (TOF)	in. (mm)	126.5 (3 215)	126.5 (3 215)
	11	Limited free-lift (TOF)	in. (mm)	6.0 (150)	6.0 (150)
	12	Opt. full free-lift (TOF) with/w/o LBE	in. (mm)	34.2 (870) / 60.1 (1 527)	34.2 (870) / 60.1 (1 527)
	13	Forks, width/thickness	in. (mm)	5.0 (125) / 2.0 (50)	5.0 (125) / 2.0 (50)
	14	Tilt angle, forward/backward	°	5 / 8	5 / 8
	15	Length to face of forks	in. (mm)	91.5 (2 325)	91.5 (2 325)
	16	Width, standard tires	in. (mm)	43.5 (1 105)	43.5 (1 105)
	17	Height, std. mast lowered	in. (mm)	84.0 (2 135)	84.0 (2 135)
	18	Height, std. mast ext. with/w/o LBE	in. (mm)	174.6 (4 435) / 146.1 (3 762)	179.4 (4 556) / 146.1 (3 762)
	19	Turning radius, minimum outside	in. (mm)	81.5 (2 070)	81.5 (2 070)
	20	Center of wheel to face of forks	in. (mm)	15.3 (390)	15.3 (390)
	22	Aisle width (Add ld. lgth. for 90° stack)	in. (mm)	96.8 (2 460)	96.8 (2 460)
PERFORMANCE	23	Stability (Comply with ANSI?)		Yes	Yes
	24	Travel speed, nl/r	02 mph (km/h)	6.4 (10.3) / 5.6 (9.5)	8.6 (12.7) / 7.5 (11.1)
		Travel speed, nl/r	E & 01 mph (km/h)	8.6 (13.2) / 7.5 (12.1)	9.6 (15.4) / 8.7 (14.0)
	25	Lift speed, nl/r	E, 01 & 02 ft/min (m/s)	79.0 (0.40) / 47.0 (0.25)	108.0 (0.55) / 62.0 (0.32)
		Opt. 2-stg. FFL nl/r	E, 01 & 02 ft/min (m/s)	82.0 (0.42) / 48.0 (0.25)	109.0 (0.55) / 63.0 (0.32)
		Opt. 3-stg. FFL nl/r	E, 01 & 02 ft/min (m/s)	81.0 (0.41) / 48.0 (0.25)	105.0 (0.53) / 63.0 (0.32)
		Opt. 4-stg. FFL nl/r	E, 01 & 02 ft/min (m/s)	N/A	N/A
	26	Lowering, nl/r	E, 01 & 02 ft/min (m/s)	90.0 (0.46) / 110.0 (0.57)	90.0 (0.46) / 110.0 (0.57)
		Opt. 2-stg. FFL nl/r	E, 01 & 02 ft/min (m/s)	72.0 (0.37) / 103.0 (0.54)	72.0 (0.37) / 103.0 (0.54)
		Opt. 3-stg. FFL nl/r	E, 01 & 02 ft/min (m/s)	78.0 (0.40) / 105.0 (0.54)	78.0 (0.40) / 105.0 (0.54)
WHEELS & TIRES	30	Total approximate weight w/o battery	lb. (kg)	7,154 (3 244)	7,154 (3 244)
	31	Axle loading, static, rated load frt/rear	lb. (kg)	15,705 (7 125) / 2,530 (1 145)	15,705 (7 125) / 2,530 (1 145)
	32	Number tires front/rear		2 / 2	2 / 2
	33	Size of tires, front		21 x 8 x 15	21 x 8 x 15
	34	Size of tires, rear		16 x 6 x 10.5	16 x 6 x 10.5
	35	Wheelbase	in. (mm)	60.0 (1 525)	60.0 (1 525)
	36	Tread, center of tires front/rear	in. (mm)	35.4 (890) / 36.9 (935)	35.4 (890) / 36.9 (935)
	37	Ground clearance, no load lowest pt.	in. (mm)	3.6 (91)	3.6 (91)
ELECTRICAL	38	Ground clearance, no load ctr. whlbs.	in. (mm)	4.3 (109)	4.3 (109)
	39	Brakes, method of control, service/parking		Hydraulic / Mechanical	Hydraulic / Mechanical
	40	Brakes, method of operation, service/parking		Foot / Foot	Foot / Foot
	41	Battery, type		Lead acid	Lead acid
	42	Battery, volts/ampere hours		36 / 1,600	48 / 1,200
	43	Battery, minimum weight	lb. (kg)	3,420 (1 550)	3,420 (1 550)
	44	Traction motor, 60 min. rating	02 hp (kw)	9.8 (7.3)	12.9 (9.6)
		Traction motor, 60 min. rating	E & 01 hp (kw)	16.1 (12.0)	18.8 (14.0)
RELIEF	45	Pump motor, 15 min. rating	E, 01 & 02 hp (kw)	12.6 (9.4)	16.8 (12.5)
		Traction motor control method		SCR	SCR
		Pump motor control method		Contactactor	Contactactor
		Number of speeds		Infinitely variable	Infinitely variable
	55	Relief pressure for attachments	psi (kPa)	2,250 (15 500)	2,250 (15 500)

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 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.

▲ Relief pressure is 2,250 (15 515 kPa) for 3-function valve with relief cartridge and 4-function valve.

For more information on the Control Package Options - E, 01, 02 see Page 10 of this Technical Guide.



Mast Dimensions & Battery Specifications

E45-55XM MAST DIMENSIONS									
in (mm)									
Maximum Fork Height (Top of Forks)		Overall Lowered Height		Overall Extended Height				Free-Lift (TOF) W/out Load Backrest Ext.	
				With Load Backrest Ext.		Without Load Backrest Ext.			
STAGE 1 MAST EXTENSION									
84.5	(2 134)	60.5	(1 524)	133.0	(3 377)	107.0	(2 717)	5.5	(140)
119.5	(3 035)	78.0	(1 980)	167.5	(4 255)	141.5	(3 595)	5.5	(140)
131.0	(3 330)	84.0	(2 135)	179.5	(4 560)	153.0	(3 885)	5.5	(140)
151.0	(3 835)	94.0	(2 390)	199.0	(5 055)	173.0	(4 395)	5.5	(140)
STAGE 2 MAST EXTENSION									
119.0	(3 025)	78.0	(1 980)	167.0	(4 240)	141.0	(3 580)	56.0	(1 420)
131.0	(3 330)	84.0	(2 135)	179.0	(4 545)	153.0	(3 890)	62.0	(1 575)
STAGE 3 MAST EXTENSION									
171.5	(4 355)	76.0	(1 930)	219.5	(5 575)	192.5	(4 890)	55.0	(1 395)
189.0	(4 800)	82.0	(2 085)	237.0	(6 020)	210.0	(5 335)	61.0	(1 550)
218.5	(5 550)	94.0	(2 390)	267.0	(6 780)	240.0	(6 095)	72.5	(1 840)
STAGE 4 MAST EXTENSION									
240.0	(6 100)	83.5	(2 120)	288.0	(7 320)	262.5	(6 670)	61.0	(1 550)
Lift heights over 171.5" (4 355 mm) max. fork height may require reduced capacity, restricted back tilt, and may require wide tread. If load backrest extension is used on 2-stage FFL or 3-stage FFL, subtract 27.0" (685 mm). Subtract 10.8" (275 mm) with 2-stage FFL, and 12.8" (325 mm) with 3-stage FFL when truck has 3 or 4-function valve & header hoses.									

in (mm)									
Maximum Fork Height (Top of Forks)		Overall Lowered Height		Overall Extended Height				Free-Lift (TOF) W/out Load Backrest Ext.	
				With Load Backrest Ext.		Without Load Backrest Ext.			
126.5	(3 215)	84.0	(2 135)	174.5	(4 435)	152.0	(3 860)	6.0	(150)
146.0	(3 710)	94.0	(2 390)	194.5	(4 940)	171.5	(4 355)	6.0	(150)
126.5	(3 215)	84.0	(2 135)	174.5	(4 435)	152.0	(3 860)	58.5	(1 485)
164.0	(4 165)	76.0	(1 930)	212.5	(5 400)	189.0	(4 800)	51.5	(1 310)
182.0	(4 625)	82.0	(2 085)	230.0	(5 840)	206.5	(5 245)	57.5	(1 460)
193.5	(4 915)	88.0	(2 235)	242.0	(6 145)	218.5	(5 550)	63.5	(1 615)
211.5	(5 370)	94.0	(2 390)	259.5	(6 590)	236.0	(5 995)	69.0	(1 755)
240.0	(6 100)	83.5	(2 120)	288.0	(7 320)	262.5	(6 670)	61.0	(1 550)
Lift heights over 164.0" (4 165 mm) max. fork height may require reduced capacity, restricted back tilt, and may require wide tread. Subtract 7.9" (200 mm) with 2-stage FFL and 12.8" (326 mm) with 3-stage FFL when truck has 3 or 4-function valve and header hoses. If load backrest extension is used on 2-stage FFL and 3-stage FFL, subtract 24.5" (620 mm).									

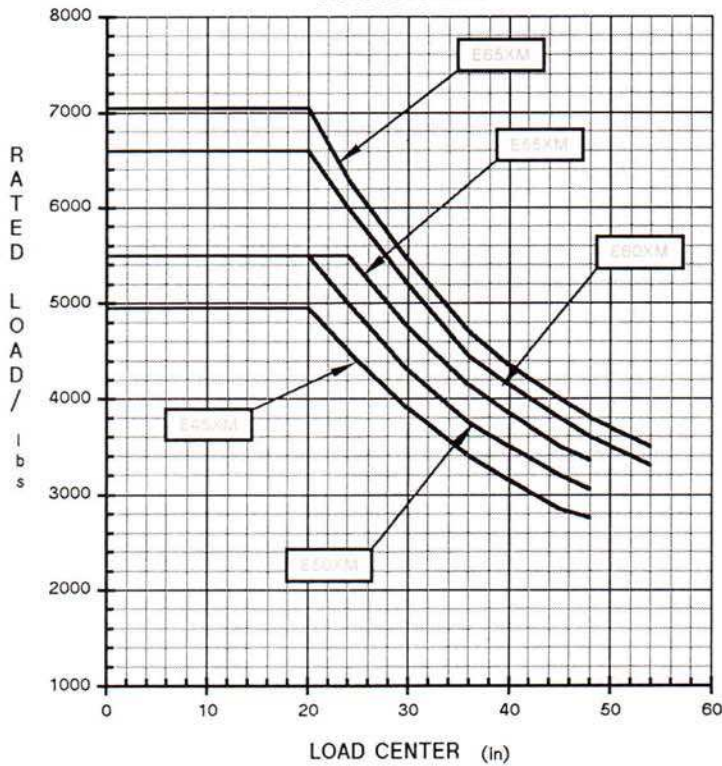
		E45-50XM-27"	E45-60XM-33"	E65XM-40"
11 Compartment size, L x W x H *	in (mm)	38.86 x 27.36 x 24.41 (987 x 695 x 620)	38.86 x 33.15 x 24.41 (987 x 842 x 620)	38.86 x 39.76 x 24.41 (987 x 1010 x 620)
2 Maximum battery size, L x W x H *	in (mm)	38.7 x 27.2 x 24.29 (983 x 691 x 617)	38.7 x 33.0 x 24.29 (983 x 838 x 617)	38.70 x 39.61 x 24.29 (983 x 1006 x 617)
3 Voltage, standard/optional		36 / 48	36 / 48	36 / 48
4 Plates, standard/optional		23 / 17	27 / 21	33 / 33
5 Capacity, 6-hr rate/max AH†, 36V kWh (AH)		38.2 / 1,100	45.2 / 1,300	55.4 / 1,600
Capacity, 6-hr rate/max AH†, 48V kWh (AH)		37.0 / 800	46.3 / 1,000	55.7 / 1,200
6 Weight, minimum	lb. (kg)	2,300 (1 045)	2,900 (1 315)	3,420 (1 550)
Weight, maximum	lb. (kg)	3,300 (1 495)	3,900 (1 770)	4,400 (1 995)

Length is measured side to side of truck.
Trucks use SB350 connector - 30" (760 mm) 2/0 gauge leads, B position, 36-volt-gray, 48-volt-blue. Requires disconnect handle.

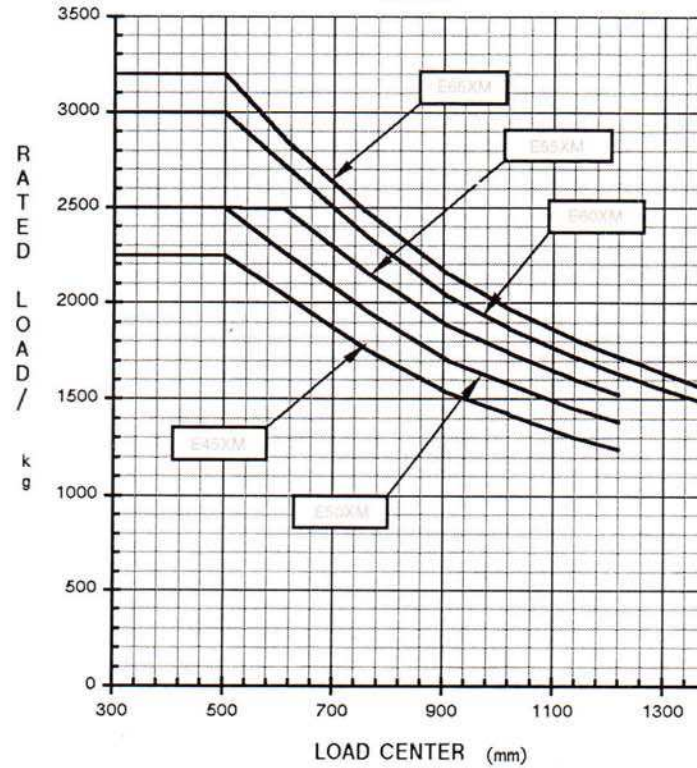


E45-65XM Lift Truck Capacity Charts

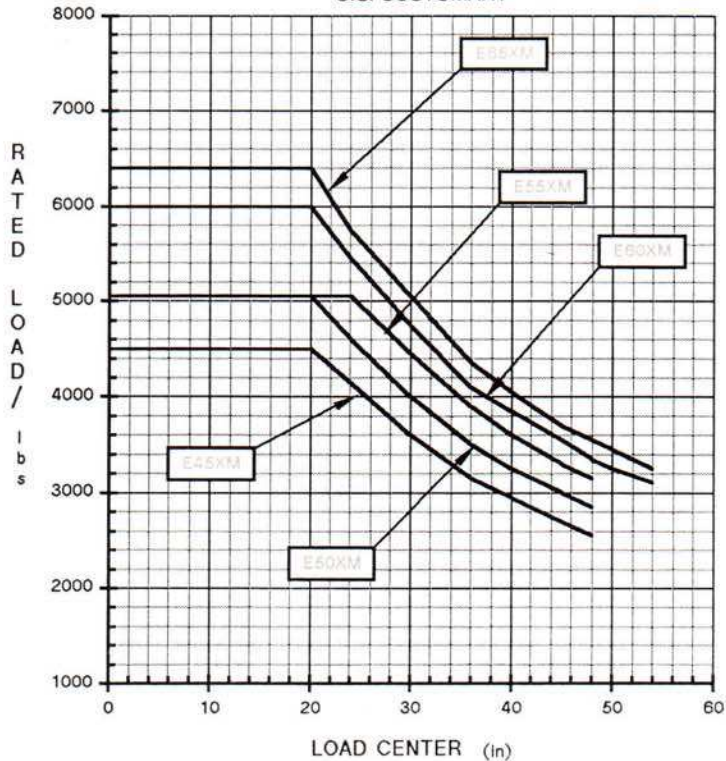
RATED LOAD vs LOAD CENTER
STANDARD CARRIAGE
U.S. CUSTOMARY



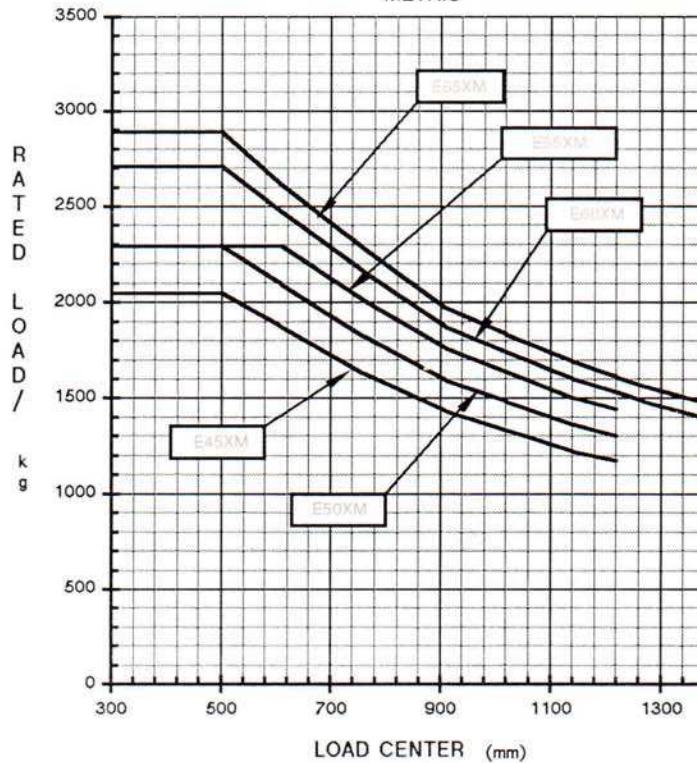
RATED LOAD vs LOAD CENTER
STANDARD CARRIAGE
METRIC



RATED LOAD vs LOAD CENTER
CARRIAGE-MOUNTED SIDESHIFT ATTACHMENT
U.S. CUSTOMARY



RATED LOAD vs LOAD CENTER
CARRIAGE-MOUNTED SIDESHIFT ATTACHMENT
METRIC





E45-65XM Lift Truck Control Package Options

Enhanced Package

36 Volt, 11" Traction Motor, EV-100ZX SCR Traction Control, ★Enhanced Dash Display, Performance Mode Selector, Battery Discharge Indicator With Lift Interrupt, Hour Meter, Field Weakening, Regenerative Braking, Brush Wear Indicators, Over-temperature Indicator, MONOTROL® Pedal, Power Steering, Tilt Steering Column, Manual Park Brake, Brake/Back-up/Tail Lights, Cloth Semi-Suspension Seat, Operator Restraint System, Grid Style Overhead Guard, SB350 Connector, U.L. Classification E.

A summary of the features of each of the control packages:

ADD-ON FEATURES	Enhanced Package	Std. Pkg. No. 01	Std. Pkg. No. 02
9" Traction Motor	----	----	Std.
11" Traction Motor	Std.	Std.	----
Standard Display ♦♦	----	Std.	Std.
Enhanced Display ★	Std.	----	----
EV-100ZX SCR Traction Control	Std.	Std.	Std.
Contactor Hydraulic Control	Std.	Std.	Std.
SCR Hydraulic Control	Opt.	Opt.	Opt.
BDI	----	Std.	Std.
BDI with Lift Interrupt	Std.	Opt. ■	Opt. ■
Manual Park Brake	Std.	Std.	Std.
Seat and Manual Park Brake	Opt.	Opt.	Opt.
Direction Control Lever	Opt.	Opt.	Opt.
MONOTROL Pedal	Std.	Std.	Std.
Enclosed Motors	Opt.	Opt.	----
U.L. Classification EE/ES	Opt.	Opt.	----
Freezer or Corrosion	Opt.	Opt.	----
Brush Wear Indicators	Std.	----	----
Over-temperature Indicator	Std.	----	----
Regenerative Braking	Std.	Std.	----
Field Weakening	Std.	Std.	----

■ BDI with Lift Interrupt includes: Performance Mode Selector and Status/Diagnostic Indicator.

★ Enhanced Dash Display includes: BDI with Lift Interrupt LED Indicator; Digital Hourmeter; Fasten Seat Belt Indicator; Low Brake Fluid Indicator; Parking Brake Indicator; Steering Pump Indicator; Brush Wear Indicator; Traction Motor Indicator; Lift Pump Motor Indicator; Steering Pump Indicator; Brush Wear Indicator; Motor Temperature Indicator; Status Code/Diagnostic Indicator; Hourmeter Function Indicator; Status Codes Push Button; and Performance Mode Selector.

♦♦ Standard Dash Display includes: Hourmeter; BDI (voltmeter); Parking Brake Indicator; Low Brake Fluid Indicator; and Fasten Seat Belt Indicator.



Standard Features and Options

Capacity

Model E45XM: 4,500 lbs. at 24" (2 250 kg at 600 mm)

Model E50XM: 5,000 lbs. at 24" (2 500 kg at 600 mm)

Model E55XM: 5,500 lbs. at 24" (2 750 kg at 600 mm)

Model E60XM: 6,000 lbs. at 24" (3 000 kg at 600 mm)

Model E65XM: 6,500 lbs. at 24" (3 250 kg at 600 mm)

Rated capacities are for trucks equipped with:

Three-Stage full free-lift VISTA® mast to 171.5" (4 355 mm) (E45-55XM) or 164.0" (4 165 mm) (E60-65XM) maximum fork height; 38.5" (975 mm) wide standard carriage; 36" to 60" (915 - 1 525 mm) (E45-55XM) or 36" to 72" (915 - 1 830 mm) (E60-65XM) long forks as required; Operator's overhead guard; and minimum weight battery.

Standard Equipment

Complete E45-65XM truck is equipped with: 2-stage limited free-lift VISTA mast; 38.5" carriage; load backrest extension; 42" long forks; 36-volt; EV-100ZX SCR control; field weakening; regenerative braking; brush wear indicators; over-temperature indicator; MONOTROL® pedal; tilt steering column; manual park brake; 3-function hydraulic control valve; tail/brake/back-up lights; contactor hydraulics; power steering; operating manual; cloth semi-suspension seat; operator restraint system; operating manual; grid style overhead guard; SB battery connector; UL Classification E.

Optional equipment includes 3- and 4-Stage full free-lift masts; 48 Volt electrical system and components; directional control levers; SCR hydraulics; vinyl semi-suspension and non-suspension seats; seat actuated park brake; freezer/corrosion construction; battery rollers; mast tilt; sideshift carriage; third and fourth-function hydraulics with hose groups; direct-action 3rd-function hand lever; E, 01, 02 control packages; raised hood; polished and tapered forks; 2-drive, 1 rear drive, 2 brake/tail/back-up lights; dome light; battery compartments; polyurethane tires; and UL Classification EE and ES.

Carriages are hook-type, ITA Class II mounting (E45-55XM), ITA Class III (E60-65XM). Overall width without load backrest extension (LBE) is 38.5" (975 mm); with LBE is 39.7" (1 010 mm). Minimum inside-to-inside fork spacing is 0". Maximum outside-to-outside spacing is 34.4" (875 mm) for Class II type and 35.5" (900 mm) for Class III type.

E45-55 lift trucks use:
1.5" x 4" x 36" to 60" long
(40 x 100 x 915 to 1 525 mm)
E60-65XM lift trucks use
2.0" x 5.0" x 36 to 72" long
(50 x 125 x 915 to 1 830 mm)

Steel battery compartment provides secure storage and

servicing ease. Fiberglass hood pivots forward exposing battery fully. (Battery not included.)

Large-sized open steps.

Contoured hand grip, rounded hood, and clutter-free floor-plate allow easy access in and out of compartment.

Hydrostatic power steering. Soft touch hydraulic levers for fingertip control.

Supportive semi-suspension seat has three adjustable backrest angle positions and adjustments for operator weight.

Five position tilt steering column.

Enhanced instrument dash display provides vital truck operation and diagnostic information.

Amenities tray and clipboard storage relief in dash provide ample storage for pens, tags and tape.

Excellent visibility through VISTA mast and lattice style overhead guard.

High performance, low effort braking.

Exclusive Hyster MONOTROL pedal provides direction and acceleration control.

Standard 36-volt and optional 48-volt traction motors are:

Long stack construction for best efficiency in stop-start applications.

Series wound and Class H insulated.

Drive end bearing and drive shaft spline are lubricated by transmission oil for long service life.

Internal cooling fan increases motor life.

Hydrostatic power steering makes tight maneuvering easy. Responsive steering rate of 3.9 turns lock-to-lock. Steering pump and motor are mounted on rubber isolators for quiet operation. Fixed clearance pump conserves battery power. Permanent magnet motor operates at maximum efficiency with low maintenance requirements.

Cast ductile iron steer axle features transverse, double acting hydraulic cylinder. This axle design, with its tapered roller bearings, precision machined parts and non-adjustable tie rods, provides a durable low maintenance system with precise steering control.

The lift trucks feature the G.E. EV100ZX SCR control system:

Enhanced package provides permanent memory of:

- Last 16 status codes for quick diagnosis.
- Service hours on traction logic card and battery state of charge.
- Records hour meter reading at time fault occurred.

SCR protected by pulse monitor trip circuit, current limit, and thermal limit.

Acceleration adjustable for smooth starts.

Control settings programmable to match performance characteristics.

Provides up to 95 percent of available battery voltage for smooth, stepless acceleration.

The SCR system is mounted in counterweight for heat dissipation and protection from damaging impacts and contaminants.

Masts are available in 2-Stage, 3-Stage and 4-Stage configurations.

Hot rolled steel mast channel sections with cross-members resist flaring at flanges.

Pre-lubed and sealed, full-radius, angled load rollers resist forward, backward and lateral forces. Hydraulic system components matched to flow requirements for smooth system operation.

Non-asbestos service brakes with self-adjusting, self-energizing shoes are located at each end of drive axle housing.

Wheel hubs are sealed to prevent leakage of oil and grease onto brake shoes. Large diameter brakes for low pedal effort.

High pressure hydraulic system is 3,100 psi (21.4 MPa). In-line, return full flow filtration protects hydraulic circuit.

Gear-type pump and motor pivots upward for better brush access.

Manually operated main control valve provides precise operator control of hydraulic functions.

Self lubricating chromed rods and single urethane seals offer long service life.