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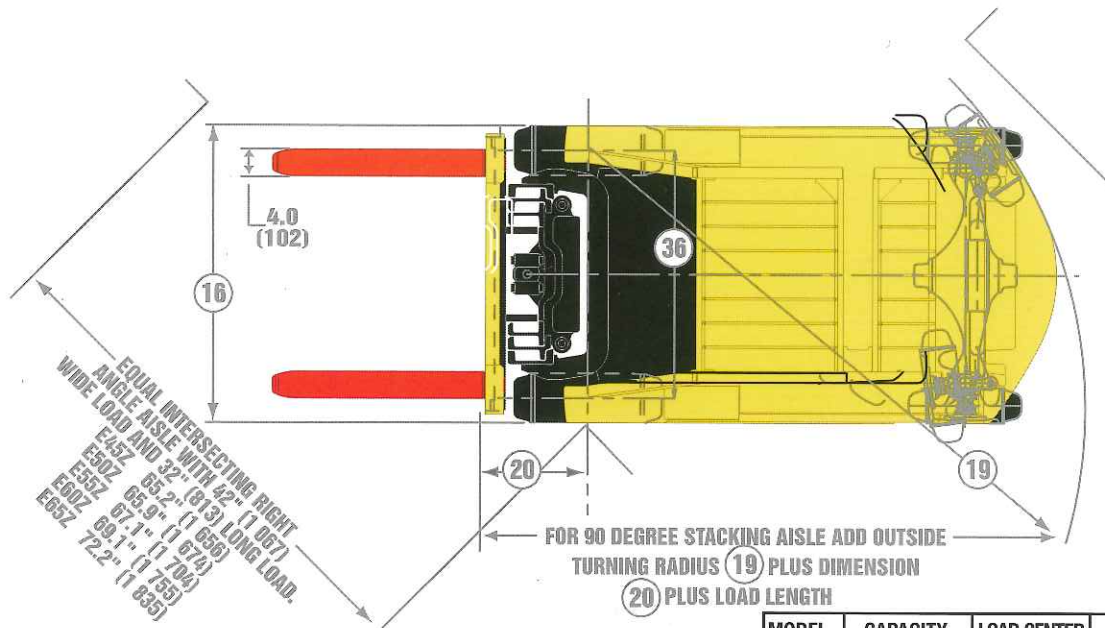
E45-65Z AC POWER

Sit-down, Counterbalance Electric, Cushion Tire Lift Truck Series

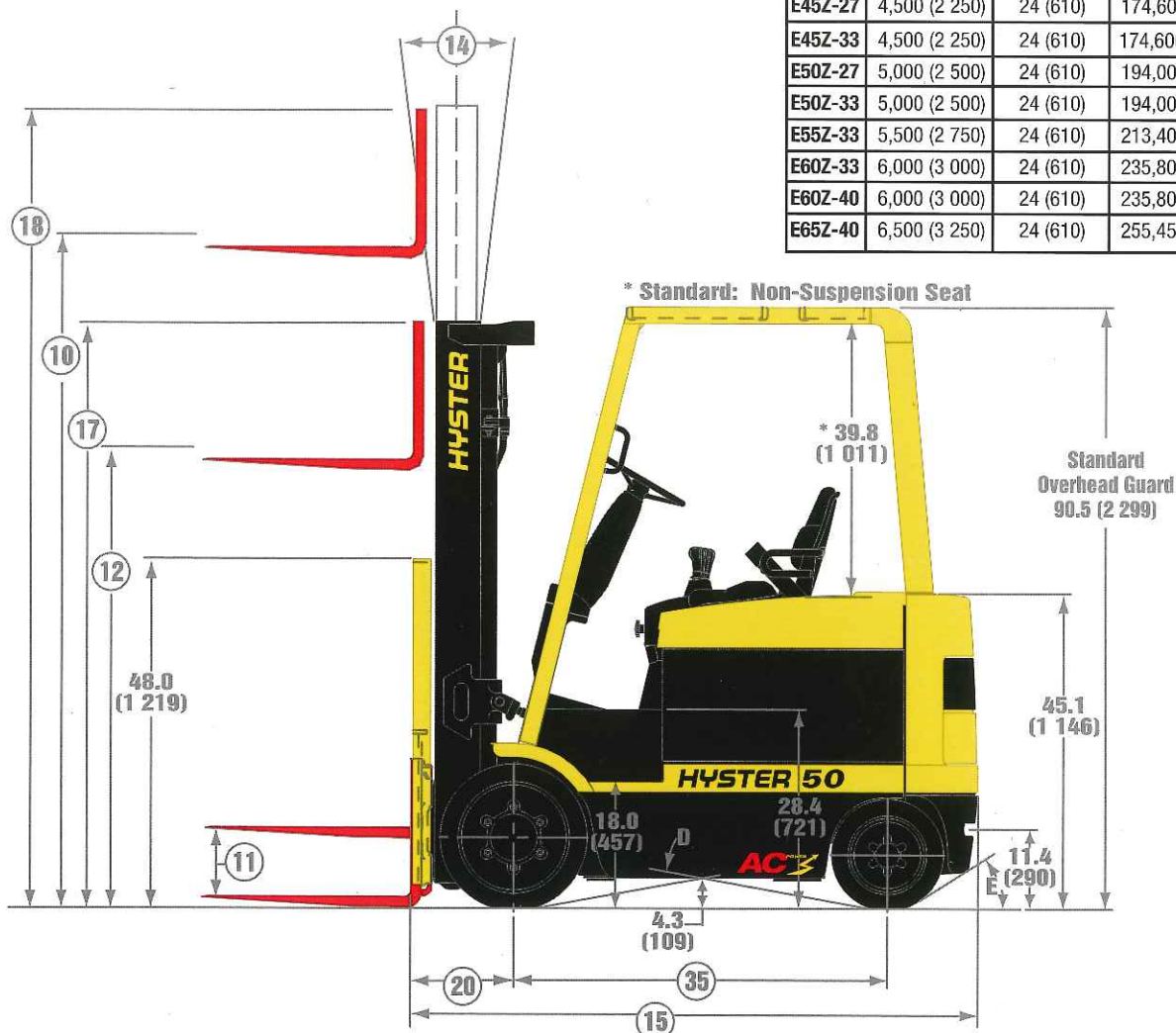


TECHNICAL GUIDE

Hyster E45-65Z Lift Truck Dimensions



MODEL	CAPACITY lb. (kg)	LOAD CENTER in. (mm)	MOMENT in-lb (cm-kg)	D	E
E45Z-27	4,500 (2 250)	24 (610)	174,600 (196 875)	23.2%	27.3%
E45Z-33	4,500 (2 250)	24 (610)	174,600 (196 875)	20.5%	32.5%
E50Z-27	5,000 (2 500)	24 (610)	194,000 (218 750)	23.2%	23.8%
E50Z-33	5,000 (2 500)	24 (610)	194,000 (218 750)	20.5%	32.5%
E55Z-33	5,500 (2 750)	24 (610)	213,400 (240 265)	20.5%	27.3%
E60Z-33	6,000 (3 000)	24 (610)	235,800 (267 000)	20.5%	23.8%
E60Z-40	6,000 (3 000)	24 (610)	235,800 (267 000)	18.2%	32.5%
E65Z-40	6,500 (3 250)	24 (610)	255,450 (289 250)	18.2%	23.8%



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

Hyster E45Z Lift Truck Specifications

GENERAL	1	Manufacturer		Hyster Company	Hyster Company
	2	Model		E45Z (36 V)	E45Z (48 V)
	3	Capacity, rated	lb. (kg)	4,500 (2 041)	4,500 (2 041)
	4	Load center	in. (mm)	24 (610)	24 (610)
	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 (3 327)	131.0 (3 327)
	11	Limited free-lift (TOF)	in. (mm)	5.5 (140)	5.5 (140)
	12	Optional full free-lift (TOF) with / without LBE	in. (mm)	35.8 (909) / 62.0 (1 575)	35.8 (909) / 62.0 (1 575)
	13	Forks, width / thickness	in. (mm)	4.0 (102) / 1.5 (38)	4.0 (102) / 1.5 (38)
	14	Tilt angle, forward / backward	Deg. °	5 / 8	5 / 8
	15	Length to face of forks †	in. (mm)	77.0 (1 956)	77.0 (1 956)
	16	Width, standard tires	in. (mm)	42.1 (1 069)	42.1 (1 069)
	17	Height, standard mast lowered	in. (mm)	84.0 (2 134)	84.0 (2 134)
	18	Height, std. mast extended with / without LBE	in. (mm)	179.4 (4 557) / 153.1 (3 889)	179.4 (4 557) / 153.1 (3 889)
	19	Turning radius, minimum outside •	in. (mm)	66.7 (1 694)	66.7 (1 694)
	20	Center of wheel to face of forks	in. (mm)	14.8 (376)	14.8 (376)
	22	Aisle width (Add load length for 90° stack) **	in. (mm)	81.5 (2 070)	81.5 (2 070)
PERFORMANCE		Right angle stacking aisle (with 48" forks) ‡	in. (mm)	130.0 (3 302)	130.0 (3 302)
	23	Stability (Comply with ANSI?) *		YES	YES
	24	Travel speed, maximum, Extended Shift disabled NL / RL	mph (km/h)	11.0 (17.7) / 9.9 (15.9)	11.3 (18.2) / 11.3 (18.2)
		Travel speed, Extended Shift enabled NL / RL	mph (km/h)	9.9 (15.9) / 9.0 (14.5)	10.7 (17.2) / 10.0 (16.1)
	25	Lift speed, standard mast NL / RL	ft/min (m/s)	101.0 (0.51) / 58.0 (0.30)	123.0 (0.63) / 78.0 (0.40)
		Opt. 2-stage FFL mast NL / RL	ft/min (m/s)	93.0 (0.48) / 60.0 (0.31)	123.0 (0.63) / 80.0 (0.41)
		Opt. 3-stage FFL mast NL / RL	ft/min (m/s)	91.0 (0.46) / 61.0 (0.31)	120.0 (0.61) / 78.0 (0.40)
		Opt. 4-stage FFL mast NL / RL	ft/min (m/s)	100.0 (0.51) / 57.0 (0.29)	126.0 (0.65) / 79.0 (0.40)
	26	Lowering, standard mast NL / RL	ft/min (m/s)	100.0 (0.51) / 112.0 (0.57)	100.0 (0.51) / 112.0 (0.57)
		Opt. 2-stage FFL mast NL / RL	ft/min (m/s)	90.0 (0.46) / 103.0 (0.52)	90.0 (0.46) / 103.0 (0.52)
		Opt. 3-stage FFL mast NL / RL	ft/min (m/s)	92.0 (0.47) / 106.0 (0.54)	92.0 (0.47) / 106.0 (0.54)
		Opt. 4-stage FFL mast NL / RL	ft/min (m/s)	77.0 (0.39) / 88.0 (0.45)	77.0 (0.39) / 88.0 (0.45)
WT.	27	Gradeability, 5 min rating NL / RL	%	38 / 23	39 / 24
		Gradeability, 30 min rating NL / RL	%	25 / 15	26 / 16
TIRES & WHEELS	30	Weight, total approximate without battery	lb. (kg)	6,765 (3 069)	6,765 (3 069)
	31	Axle loading, static, front / rear - RL	lb. (kg)	12,255 (5 559) / 2,490 (1 130)	12,255 (5 559) / 2,490 (1 130)
	33	Size of tires, drive (front)		21 x 7 x 15	21 x 7 x 15
	34	Size of tires, steer (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 (937)	35.1 (892) / 36.9 (937)
	37	Ground clearance, lowest point - NL	in. (mm)	3.6 (91)	3.6 (91)
	38	Ground clearance, center wheelbase - NL	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
ELECTRIC	41	Battery, type		Lead acid	Lead acid
	42	Battery, volts / ampere hours		36 / 1,100	48 / 800
	43	Battery, minimum	lbs. (kg)	2,300 (1 043)	2,300 (1 043)
	44	Traction motor, 60-minute rating	hp (kw)	13.0 (9.7)	13.0 (9.7)
	45	Pump motor, 15-minute rating	hp (kw)	14.0 (10.4)	14.0 (10.4)
		Traction motor control method		Transistor	Transistor
		Pump motor control method	Standard/Optional	Contactor / Transistor	Contactor / Transistor
		Number of speeds		Infinitely variable	Infinitely variable
	55	Relief pressure for attachments ¶	psi (kPa)	2,250 (15 513)	2,250 (15 513)

* **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 appear on the lift truck.

† Add 2.5" (64 mm) or add • 3.2" (81 mm) or add **1.2" (31 mm) if optional 33.11" (841 mm) battery compartment is used.

‡ Add 3.3" (84 mm) or add § 5.8" (147 mm) if optional 33.11" (841 mm) battery compartment is used.

¶ Relief pressure is 2,250 (15 513 kPa) for 3-function valve with relief cartridge and 4-function valve.

Hyster E50Z Lift Truck Specifications

GENERAL	1	Manufacturer		Hyster Company	Hyster Company
	2	Model		E50Z (36 V)	E50Z (48 V)
	3	Capacity, rated	lb. (kg)	5,000 (2 265)	5,000 (2 265)
	4	Load center	in. (mm)	24 (610)	24 (610)
	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 (3 327)	131.0 (3 327)
	11	Limited free-lift (TOF)	in. (mm)	5.5 (140)	5.5 (140)
	12	Optional full free-lift (TOF) with / without LBE	in. (mm)	35.8 (909) / 62.0 (1 575)	35.8 (909) / 62.0 (1 575)
	13	Forks, width / thickness	in. (mm)	4.0 (102) / 1.5 (38)	4.0 (102) / 1.5 (38)
	14	Tilt angle, forward / backward	Deg. °	5 / 8	5 / 8
	15	Length to face of forks †	in. (mm)	78.6 (1 996)	78.6 (1 996)
	16	Width, standard tires	in. (mm)	42.1 (1 069)	42.1 (1 069)
	17	Height, standard mast lowered	in. (mm)	84.0 (2 134)	84.0 (2 134)
	18	Height, std. mast extended with / without LBE	in. (mm)	179.4 (4 557) / 153.1 (3 889)	179.4 (4 557) / 153.1 (3 889)
	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 (376)	14.8 (376)
	22	Aisle width (Add load length for 90° stack) **	in. (mm)	82.9 (2 106)	82.9 (2 106)
PERFORMANCE		Right angle stacking aisle (with 48" forks) ¥	in. (mm)	131.3 (3 335)	131.3 (3 335)
	23	Stability (Comply with ANSI?) *		YES	YES
	24	Travel speed, maximum, Extended Shift disabled NL / RL	mph (km/h)	10.8 (17.4) / 9.6 (15.5)	11.3 (18.2) / 11.3 (18.2)
		Travel speed, Extended Shift enabled NL / RL	mph (km/h)	9.7 (15.6) / 8.7 (14.0)	10.6 (17.1) / 9.8 (15.8)
	25	Lift speed, standard mast NL / RL	ft/min (m/s)	101.0 (0.51) / 56.0 (0.28)	123.0 (0.63) / 74.0 (0.38)
		Opt. 2-stage FFL mast NL / RL	ft/min (m/s)	93.0 (0.48) / 58.0 (0.30)	123.0 (0.63) / 77.0 (0.39)
		Opt. 3-stage FFL mast NL / RL	ft/min (m/s)	91.0 (0.46) / 57.0 (0.29)	120.0 (0.61) / 75.0 (0.38)
		Opt. 4-stage FFL mast NL / RL	ft/min (m/s)	100.0 (0.51) / 55.0 (0.28)	126.0 (0.65) / 77.0 (0.39)
	26	Lowering, standard mast NL / RL	ft/min (m/s)	100.0 (0.51) / 113.0 (0.57)	100.0 (0.51) / 113.0 (0.57)
		Opt. 2-stage FFL mast NL / RL	ft/min (m/s)	90.0 (0.46) / 106.0 (0.54)	90.0 (0.46) / 106.0 (0.54)
		Opt. 3-stage FFL mast NL / RL	ft/min (m/s)	92.0 (0.47) / 108.0 (0.55)	92.0 (0.47) / 108.0 (0.55)
		Opt. 4-stage FFL mast NL / RL	ft/min (m/s)	77.0 (0.39) / 91.0 (0.46)	77.0 (0.39) / 91.0 (0.46)
WT.	27	Gradeability, 5 min rating NL / RL	%	36 / 22	37 / 22
		Gradeability, 30 min rating NL / RL	%	23 / 14	25 / 15
TIRES & WHEELS	30	Weight, total approximate without battery	lb. (kg)	7,215 (3 272)	7,215 (3 272)
	31	Axle loading, static, front / rear - RL	lb. (kg)	13,160 (5 969) / 2,580 (1 170)	13,160 (5 969) / 2,580 (1 170)
	33	Size of tires, drive (front)		21 x 7 x 15	21 x 7 x 15
	34	Size of tires, steer (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 (937)	35.1 (892) / 36.9 (937)
	37	Ground clearance, lowest point - NL	in. (mm)	3.6 (91)	3.6 (91)
	38	Ground clearance, center wheelbase - NL	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
ELECTRIC	41	Battery, type		Lead acid	Lead acid
	42	Battery, volts / ampere hours		36 / 1,100	48 / 800
	43	Battery, minimum	lbs. (kg)	2,300 (1 043)	2,300 (1 043)
	44	Traction motor, 60-minute rating	hp (kw)	13.0 (9.7)	13.0 (9.7)
	45	Pump motor, 15-minute rating	hp (kw)	14.0 (10.4)	14.0 (10.4)
		Traction motor control method		Transistor	Transistor
		Pump motor control method	Standard/Optional	Contact / Transistor	Contact / Transistor
		Number of speeds		Infinitely variable	Infinitely variable
	55	Relief pressure for attachments ¶	psi (kPa)	2,250 (15 513)	2,250 (15 513)

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† Add 2.5" (64 mm) or add • 3.2" (81 mm) or add **1.2" (31 mm) if optional 33.11" (841 mm) battery compartment is used.

¥ Add 3.3" (84 mm) or add § 5.8" (147 mm) if optional 33.11" (841 mm) battery compartment is used.

¶ Relief pressure is 2,250 (15 513 kPa) for 3-function valve with relief cartridge and 4-function valve.

Hyster E55Z Lift Truck Specifications

GENERAL	1	Manufacturer		Hyster Company	Hyster Company
	2	Model		E55Z (36 V)	E55Z (48 V)
	3	Capacity, rated	lb. (kg)	5,500 (2 495)	5,500 (2 495)
	4	Load center	in. (mm)	24 (610)	24 (610)
	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 (3 327)	131.0 (3 327)
	11	Limited free-lift (TOF)	in. (mm)	5.5 (140)	5.5 (140)
	12	Optional full free-lift (TOF) with / without LBE	in. (mm)	35.8 (909) / 62.0 (1 575)	35.8 (909) / 62.0 (1 575)
	13	Forks, width / thickness	in. (mm)	4.0 (102) / 1.5 (38)	4.0 (102) / 1.5 (38)
	14	Tilt angle, forward / backward	Deg. °	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)	42.1 (1 069)	42.1 (1 069)
	17	Height, standard mast lowered	in. (mm)	84.0 (2 134)	84.0 (2 134)
	18	Height, std. mast extended with / without LBE	in. (mm)	179.4 (4 557) / 153.1 (3 889)	179.4 (4 557) / 153.1 (3 889)
	19	Turning radius, minimum outside	in. (mm)	72.9 (1 852)	72.9 (1 852)
	20	Center of wheel to face of forks	in. (mm)	14.8 (376)	14.8 (376)
	22	Aisle width (Add load length for 90° stack)	in. (mm)	87.7 (2 228)	87.7 (2 228)
		Right angle stacking aisle (with 48" forks)	in. (mm)	136.0 (3 454)	136.0 (3 454)
PERFORMANCE	23	Stability (Comply with ANSI?) *		YES	YES
	24	Travel speed, maximum, Extended Shift disabled NL / RL	mph (km/h)	10.8 (17.4) / 9.4 (15.1)	11.3 (18.2) / 11.3 (18.2)
		Travel speed, Extended Shift enabled NL / RL	mph (km/h)	9.7 (15.6) / 8.6 (13.8)	10.6 (17.1) / 9.6 (15.5)
	25	Lift speed, standard mast NL / RL	ft/min (m/s)	101.0 (0.51) / 54.0 (0.27)	123.0 (0.63) / 71.0 (0.36)
		Opt. 2-stage FFL mast NL / RL	ft/min (m/s)	93.0 (0.47) / 57.0 (0.29)	123.0 (0.63) / 75.0 (0.38)
		Opt. 3-stage FFL mast NL / RL	ft/min (m/s)	91.0 (0.46) / 55.0 (0.28)	120.0 (0.61) / 73.0 (0.37)
		Opt. 4-stage FFL mast NL / RL	ft/min (m/s)	100.0 (0.51) / 54.0 (0.27)	126.0 (0.64) / 74.0 (0.38)
	26	Lowering, standard mast NL / RL	ft/min (m/s)	100.0 (0.51) / 115.0 (0.58)	100.0 (0.51) / 115.0 (0.58)
		Opt. 2-stage FFL mast NL / RL	ft/min (m/s)	90.0 (0.46) / 109.0 (0.55)	90.0 (0.46) / 109.0 (0.55)
		Opt. 3-stage FFL mast NL / RL	ft/min (m/s)	92.0 (0.47) / 110.0 (0.56)	92.0 (0.47) / 110.0 (0.56)
		Opt. 4-stage FFL mast NL / RL	ft/min (m/s)	77.0 (0.39) / 95.0 (0.48)	77.0 (0.39) / 95.0 (0.48)
	27	Gradeability, 5 min rating NL / RL	%	35 / 20	36 / 21
		Gradeability, 30 min rating NL / RL	%	23 / 13	24 / 14
WT.	30	Weight, total approximate without battery	lb. (kg)	6,925 (3 141)	6,925 (3 141)
	31	Axle loading, static, front / rear - RL	lb. (kg)	13,970 (6 337) / 2,405 (1 091)	13,970 (6 337) / 2,405 (1 091)
TIRES & WHEELS	33	Size of tires, drive (front)		21 x 7 x 15	21 x 7 x 15
	34	Size of tires, (steer) rear		16 x 5 x 10.5	16 x 5 x 10.5
	35	Wheelbase	in. (mm)	53.4 (1 356)	53.4 (1 356)
	36	Tread, center of tires front / rear	in. (mm)	35.1 (892) / 36.9 (937)	35.1 (892) / 36.9 (937)
	37	Ground clearance, lowest point - NL	in. (mm)	3.6 (91)	3.6 (91)
	38	Ground clearance, center wheelbase - NL	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
ELECTRIC	41	Battery, type		Lead acid	Lead acid
	42	Battery, volts / ampere hours		36 / 1,100	48 / 800
	43	Battery, minimum	lbs. (kg)	2,300 (1 043)	2,300 (1 043)
	44	Traction motor, 60-minute rating	hp (kw)	13.0 (9.7)	13.0 (9.7)
	45	Pump motor, 15-minute rating	hp (kw)	14.0 (10.4)	14.0 (10.4)
		Traction motor control method		Transistor	Transistor
		Pump motor control method	Standard/Optional	Contact / Transistor	Contact / Transistor
		Number of speeds		Infinitely variable	Infinitely variable
	55	Relief pressure for attachments ç	psi (kPa)	2,250 (15 513)	2,250 (15 513)

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ç Relief pressure is 2,250 (15 513 kPa) for 3-function valve with relief cartridge and 4-function valve.

Hyster E60Z Lift Truck Specifications

GENERAL	1	Manufacturer		Hyster Company	Hyster Company
	2	Model		E60Z (36 V)	E60Z (48 V)
	3	Capacity, rated	lb. (kg)	6,000 (2 722)	6,000 (2 722)
	4	Load center	in. (mm)	24 (610)	24 (610)
	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 (3 213)	126.5 (3 213)
	11	Limited free-lift (TOF)	in. (mm)	6.0 (152)	6.0 (152)
	12	Optional full free-lift (TOF) with / without LBE	in. (mm)	35.8 (909) / 58.6 (1 488)	35.8 (909) / 58.6 (1 488)
	13	Forks, width / thickness	in. (mm)	5.0 (127) / 2.0 (51)	5.0 (127) / 2.0 (51)
	14	Tilt angle, forward / backward	Deg. °	5 / 8	5 / 8
	15	Length to face of forks	in. (mm)	84.5 (2 146)	84.5 (2 146)
	16	Width, standard tires	in. (mm)	43.5 (1 105)	43.5 (1 105)
	17	Height, standard mast lowered	in. (mm)	84.0 (2 134)	84.0 (2 134)
	18	Height, std. mast extended with / without LBE	in. (mm)	174.6 (4 435) / 151.8 (3 586)	174.6 (4 435) / 151.8 (3 586)
	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 (389)	15.3 (389)
	22	Aisle width (Add load length for 90° stack)	in. (mm)	89.7 (2 278)	89.7 (2 278)
		Right angle stacking aisle (with 48" forks)	in. (mm)	137.5 (3 493)	137.5 (3 493)
PERFORMANCE	23	Stability (Comply with ANSI?) *		YES	YES
	24	Travel speed, maximum, Extended Shift disabled NL / RL	mph (km/h)	10.6 (17.1) / 9.1 (14.6)	11.3 (18.2) / 11.3 (18.2)
		Travel speed, Extended Shift enabled NL / RL	mph (km/h)	9.5 (15.3) / 8.3 (13.4)	10.4 (16.7) / 9.4 (15.1)
	25	Lift speed, standard mast NL / RL	ft/min (m/s)	93.0 (0.47) / 49.0 (0.25)	116.0 (0.59) / 64.0 (0.33)
		Opt. 2-stage FFL mast NL / RL	ft/min (m/s)	82.0 (0.42) / 49.0 (0.25)	109.0 (0.55) / 65.0 (0.33)
		Opt. 3-stage FFL mast NL / RL	ft/min (m/s)	81.0 (0.41) / 49.0 (0.25)	105.0 (0.53) / 65.0 (0.33)
		Opt. 4-stage FFL mast NL / RL	ft/min (m/s)	100.0 (0.51) / 53.0 (0.27)	126.0 (0.64) / 72.0 (0.37)
	26	Lowering, standard mast NL / RL	ft/min (m/s)	90.0 (0.46) / 110.0 (0.56)	90.0 (0.46) / 110.0 (0.56)
		Opt. 2-stage FFL mast NL / RL	ft/min (m/s)	72.0 (0.37) / 103.0 (0.52)	72.0 (0.37) / 103.0 (0.52)
		Opt. 3-stage FFL mast NL / RL	ft/min (m/s)	78.0 (0.40) / 105.0 (0.53)	78.0 (0.40) / 105.0 (0.53)
		Opt. 4-stage FFL mast NL / RL	ft/min (m/s)	77.0 (0.39) / 99.0 (0.50)	77.0 (0.39) / 99.0 (0.50)
	27	Gradeability, 5 min rating NL / RL	%	32 / 19	33 / 19
		Gradeability, 30 min rating NL / RL	%	21 / 12	22 / 13
WT.	30	Weight, total approximate without battery	lb. (kg)	7,525 (3 413)	7,525 (3 413)
	31	Axle loading, static, front / rear - RL	lb. (kg)	14,935 (6 775) / 2,675 (1 213)	14,935 (6 775) / 2,675 (1 213)
TIRES & WHEELS	33	Size of tires, drive (front)		21 x 8 x 15	21 x 8 x 15
	34	Size of tires, steer (rear)		16 x 6 x 10.5	16 x 6 x 10.5
	35	Wheelbase	in. (mm)	53.4 (1 356)	53.4 (1 356)
	36	Tread, center of tires front / rear	in. (mm)	35.5 (902) / 35.9 (912)	35.5 (902) / 35.9 (912)
	37	Ground clearance, lowest point - NL	in. (mm)	3.6 (91)	3.6 (91)
	38	Ground clearance, center wheelbase - NL	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
ELECTRIC	41	Battery, type		Lead acid	Lead acid
	42	Battery, volts / ampere hours		36 / 1,300	48 / 1,000
	43	Battery, minimum	lbs. (kg)	2,900 (1 315)	2,900 (1 315)
	44	Traction motor, 60-minute rating	hp (kw)	13.0 (9.7)	13.0 (9.7)
	45	Pump motor, 15-minute rating	hp (kw)	14.0 (10.4)	14.0 (10.4)
		Traction motor control method		Transistor	Transistor
		Pump motor control method	Standard/Optional	Contact / Transistor	Contact / Transistor
		Number of speeds		Infinitely variable	Infinitely variable
	55	Relief pressure for attachments ç	psi (kPa)	2,250 (15 513)	2,250 (15 503)

* **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 appear on the lift truck.

ç Relief pressure is 2,250 (15 513 kPa) for 3-function valve with relief cartridge and 4-function valve.

Hyster E65Z Lift Truck Specifications

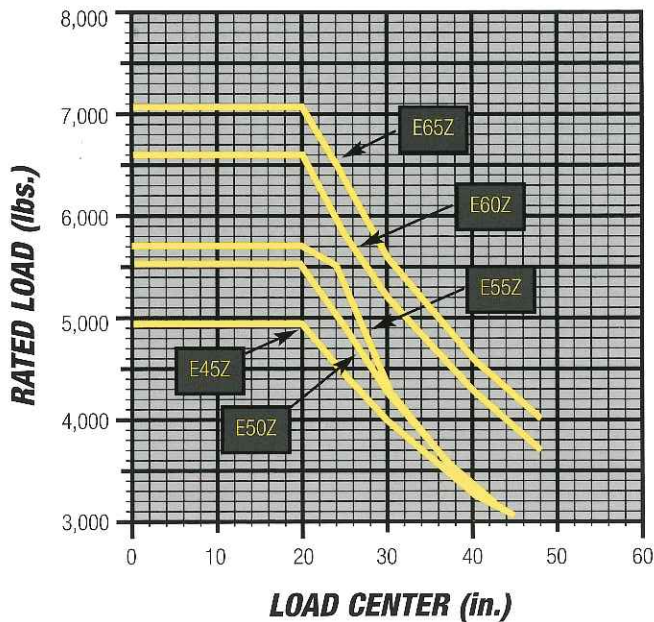
GENERAL	1	Manufacturer		Hyster Company	Hyster Company
	2	Model		E65Z (36 V)	E65Z (48 V)
	3	Capacity, rated	lb. (kg)	6,500 (2 948)	6,500 (2 948)
	4	Load center	in. (mm)	24 (610)	24 (610)
	5	Power type		Electric	Electric
	6	Operator type		Sit	Sit
	7	Tire type, front / rear		Cushion / Cushion	Cushion / Cushion
	8	Wheels, front / rear	(X=driven)	2X / 2	2X / 2
DIMENSIONS	10	2-stg. LFL (TOF)	in. (mm)	126.5 (3 213)	126.5 (3 213)
	11	Limited free-lift (TOF)	in. (mm)	6.0 (152)	6.0 (152)
	12	Optional full free-lift (TOF) with / without LBE	in. (mm)	34.2 (869) / 58.6 (1 488)	34.2 (869) / 58.6 (1 488)
	13	Forks, width / thickness	in. (mm)	5.0 (127) / 2.0 (51)	5.0 (127) / 2.0 (51)
	14	Tilt angle, forward / backward	Deg. °	5 / 8	5 / 8
	15	Length to face of forks	in. (mm)	91.2 (2 317)	91.2 (2 317)
	16	Width, standard tires	in. (mm)	43.5 (1 105)	43.5 (1 105)
	17	Height, standard mast lowered	in. (mm)	84.0 (2 134)	84.0 (2 134)
	18	Height, std. mast extended with / without LBE	in. (mm)	174.6 (4 435) / 151.8 (3 586)	174.6 (4 435) / 151.8 (3 586)
	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 (389)	15.3 (389)
	22	Aisle width (Add load length for 90° stack)	in. (mm)	96.8 (2 459)	96.8 (2 459)
PERFORMANCE		Right angle stacking aisle (with 48" forks)	in. (mm)	144.6 (3 673)	144.6 (3 673)
	23	Stability (Comply with ANSI?) *		YES	YES
	24	Travel speed, maximum, Extended Shift disabled NL / RL	mph (km/h)	10.6 (17.1) / 9.0 (14.5)	11.3 (18.2) / 11.3 (18.2)
		Travel speed, Extended Shift enabled NL / RL	mph (km/h)	9.5 (15.3) / 8.2 (13.2)	10.4 (16.7) / 9.3 (15.0)
	25	Lift speed, standard mast NL / RL	ft/min (m/s)	93.0 (0.47) / 47.0 (0.24)	116.0 (0.59) / 62.0 (0.32)
		Opt. 2-stage FFL mast NL / RL	ft/min (m/s)	82.0 (0.42) / 48.0 (0.24)	109.0 (0.55) / 63.0 (0.32)
		Opt. 3-stage FFL mast NL / RL	ft/min (m/s)	81.0 (0.41) / 48.0 (0.24)	105.0 (0.53) / 63.0 (0.32)
		Opt. 4-stage FFL mast NL / RL	ft/min (m/s)	100.0 (0.51) / 52.0 (0.26)	126.0 (0.64) / 70.0 (0.36)
	26	Lowering, standard mast NL / RL	ft/min (m/s)	90.0 (0.46) / 112.0 (0.57)	90.0 (0.46) / 112.0 (0.57)
		Opt. 2-stage FFL mast NL / RL	ft/min (m/s)	72.0 (0.37) / 105.0 (0.53)	72.0 (0.37) / 105.0 (0.53)
		Opt. 3-stage FFL mast NL / RL	ft/min (m/s)	78.0 (0.40) / 107.0 (0.54)	78.0 (0.40) / 107.0 (0.54)
		Opt. 4-stage FFL mast NL / RL	ft/min (m/s)	77.0 (0.39) / 103.0 (0.52)	77.0 (0.39) / 103.0 (0.52)
WT.	27	Gradeability, 5 min rating NL / RL	%	31 / 18	31 / 19
		Gradeability, 30 min rating NL / RL	%	21 / 12	22 / 12
TIRES & WHEELS	30	Weight, total approximate without battery	lb. (kg)	7,154 (3 245)	7,154 (3 245)
	31	Axle loading, static, front / rear - RL	lb. (kg)	15,705 (7 124) / 2,530 (1 148)	15,705 (7 124) / 2,530 (1 148)
	33	Size of tires, drive (front)		21 x 8 x 15	21 x 8 x 15
	34	Size of tires, steer (rear)		16 x 6 x 10.5	16 x 6 x 10.5
	35	Wheelbase	in. (mm)	60.0 (1 524)	60.0 (1 524)
	36	Tread, center of tires front / rear	in. (mm)	35.5 (902) / 35.9 (912)	35.5 (902) / 35.9 (912)
	37	Ground clearance, lowest point - NL	in. (mm)	3.6 (91)	3.6 (91)
	38	Ground clearance, center wheelbase - NL	in. (mm)	4.3 (109)	4.3 (109)
ELECTRIC	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	lbs. (kg)	3,420 (1 551)	3,420 (1 551)
	44	Traction motor, 60-minute rating	hp (kw)	13.0 (9.7)	13.0 (9.7)
	45	Pump motor, 15-minute rating	hp (kw)	14.0 (10.4)	14.0 (10.4)
		Traction motor control method		Transistor	Transistor
		Pump motor control method	Standard/Optional	Contactor / Transistor	Contactor / Transistor
		Number of speeds		Infinitely variable	Infinitely variable
	55	Relief pressure for attachments ϕ	psi (kPa)	2,250 (15 513)	2,250 (15 503)

* **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 appear on the lift truck.

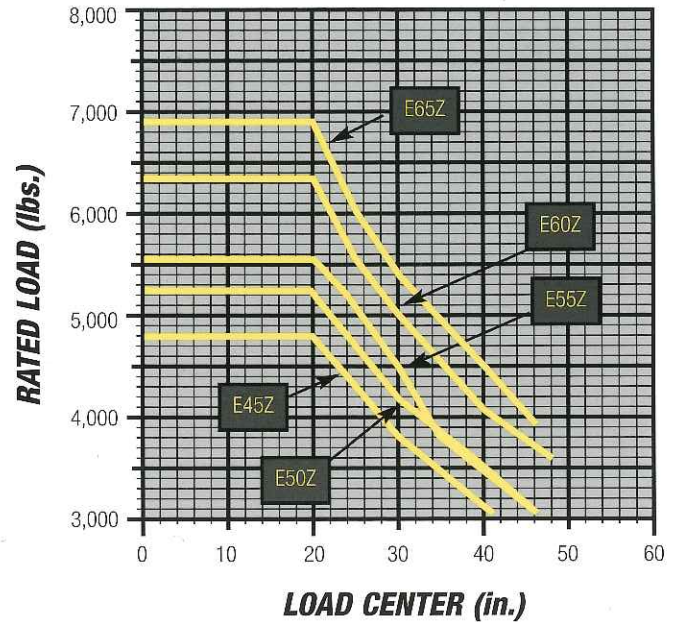
ϕ Relief pressure is 2,250 (15 513 kPa) for 3-function valve with relief cartridge and 4-function valve.

Hyster E45-65Z Lift Truck Rated Capacities

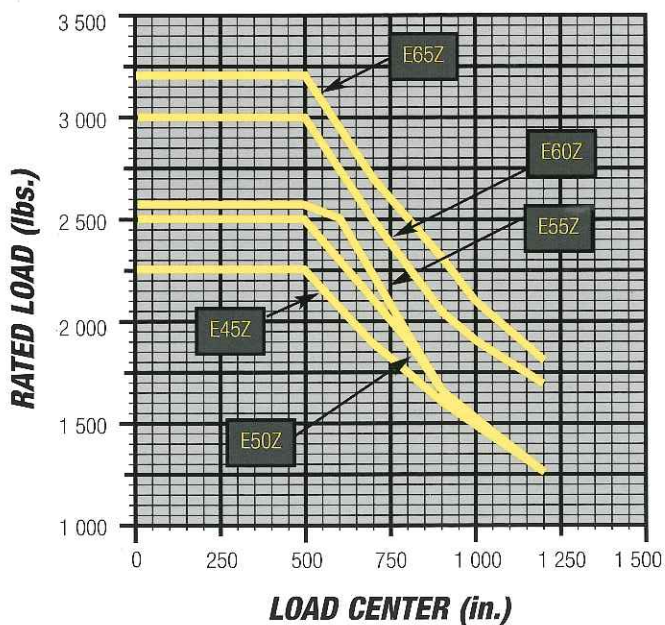
RATED LOAD vs. LOAD CENTER
STANDARD CARRIAGE
U. S. CUSTOMARY



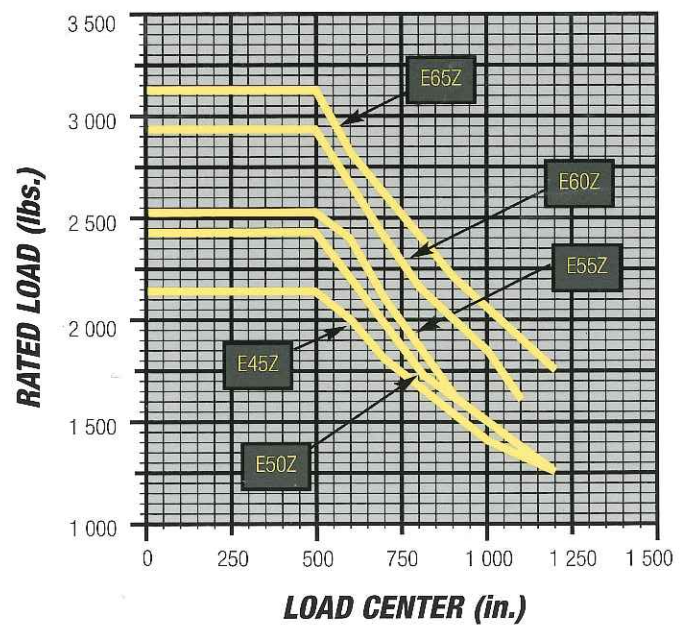
RATED LOAD vs. LOAD CENTER
INTEGRAL SIDESHIFT ATTACHMENT
U. S. CUSTOMARY



RATED LOAD vs. LOAD CENTER
STANDARD CARRIAGE
METRIC



RATED LOAD vs. LOAD CENTER
INTEGRAL SIDESHIFT ATTACHMENT
METRIC



Hyster E45-65Z Mast Specifications

E45-55Z MAST DIMENSIONS

Maximum Fork Height † (Top of Forks) in. (mm)	Overall Lowered Height in. (mm)	Overall Extended Height With Load Backrest Ext. in. (mm)	Overall Extended Height w/o Load Backrest Ext. in. (mm)	* Free-Lift (TOF) w/o Load Backrest Ext. †† in. (mm)
2-STAGE LIMITED FREE-LIFT (LFL) VISTA				
84.5 (2 146)	60.5 (1 537)	132.0 (3 353)	106.0 (2 692)	5.5 (140)
119.5 (3 035)	78.0 (1 981)	167.5 (4 255)	141.5 (3 594)	5.5 (140)
131.0 (3 327)	84.0 (2 134)	179.5 (4 559)	153.0 (3 886)	5.5 (140)
151.0 (3 835)	94.0 (2 388)	199.0 (5 055)	173.0 (4 394)	5.5 (140)
2-STAGE FULL FREE-LIFT (FFL) VISTA				
118.0 (2 997)	78.0 (1 981)	167.0 (4 242)	141.0 (3 581)	56.0 (1 422)
130.0 (3 302)	84.0 (2 134)	179.0 (4 547)	153.0 (3 886)	62.0 (1 575)
3-STAGE FULL FREE-LIFT (FFL) VISTA (Requires Restricted Back Tilt)				
171.5 (4 356)	76.0 (1 930)	219.5 (5 575)	192.5 (4 890)	55.0 (1 397)
189.0 (4 801)	82.0 (2 083)	237.0 (6 020)	210.0 (5 334)	61.0 (1 549)
218.5 (5 550)	94.0 (2 388)	267.0 (6 782)	240.0 (6 096)	72.5 (1 842)
4-STAGE FULL FREE-LIFT (FFL) VISTA (Requires 4 degrees Restricted Back Tilt)				
240.0 (6 096)	84.0 (2 134)	288.0 (7 315)	261.5 (6 642)	61.0 (1 549)
† Lift heights over 171.5" (4 355 mm) maximum fork height may require reduced capacity, restricted back tilt and may require wide tread.				
* If load backrest extension is used on 2-stage FFL, subtract 26.3" (665 mm), 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 and header hoses.				

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E60-65Z MAST DIMENSIONS

Maximum Fork Height † (Top of Forks) in. (mm)	Overall Lowered Height in. (mm)	Overall Extended Height With Load Backrest Ext. in. (mm)	Overall Extended Height w/o Load Backrest Ext. in. (mm)	* Free-Lift (TOF) w/o Load Backrest Ext. †† in. (mm)
2-STAGE LIMITED FREE-LIFT (LFL) VISTA				
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)
2-STAGE FULL FREE-LIFT (FFL) VISTA				
126.5 (3 215)	84.0 (2 135)	174.5 (4 435)	152.0 (3 860)	58.5 (1 485)
3-STAGE FULL FREE-LIFT (FFL) VISTA (Requires Restricted Back Tilt)				
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 (2 083)	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)
4-STAGE FULL FREE-LIFT (FFL) VISTA (Requires 4 degrees Restricted Back Tilt)				
240.0 (6 096)	84.0 (2 134)	288.0 (7 315)	261.5 (6 642)	61.0 (1 549)
† Lift heights over 164.0" (4 166 mm) maximum fork height may require reduced capacity, restricted back tilt and may require wide tread.				
* If load backrest extension is used on 2-stage FFL, subtract 26.3" (665 mm), or 3-stage FFL, subtract 27.0" (685 mm).				
†† Subtract 7.9" (200 mm) with 2-stage FFL, and 24.5" (620 mm) with 3-stage FFL when truck has 3- or 4-function valve and header hoses.				

Hyster E45-65Z Battery Specifications

BATTERY SPECIFICATIONS		E45-50Z-27"	E45-60Z-33"	E65Z-40"
Compartment size, L x W x H *	in	38.9 x 27.4 x 24.4	38.9 x 33.2 x 24.4	38.9 x 39.8 x 24.4
	(mm)	(987 x 695 x 620)	(987 x 842 x 620)	(987 x 1 010 x 620)
Maximum battery size, L x W x H *	in	38.7 x 27.2 x 24.3	38.7 x 33.0 x 24.3	38.7 x 39.6 x 24.3
	(mm)	(983 x 691 x 617)	(983 x 838 x 617)	(983 x 1 006 x 617)
Voltage, standard / optional		36 / 48	36 / 48	36 / 48
Plates, standard / optional		23 / 17	27 / 21	33 / 25
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
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, width is measured front to back of truck.
 Trucks use 36 volt gray, 48 volt blue battery connector - 30" (760 mm) 2/0 gauge leads, B position. Requires disconnect handle.
 If optional battery rollers are used, subtract 1.25" (32 mm) from the maximum battery height dimension.
 If raised hood option is used, add 1.25" (32 mm) to maximum battery height dimension.

Hyster E45-65Z Standard Features and Options

CAPACITY:

Model E45Z: 4,500 lbs. at 24" (2 041 kg at 610 mm) load center.
 Model E50Z: 5,000 lbs. at 24" (2 268 kg at 610 mm) load center.
 Model E55Z: 5,500 lbs. at 24" (2 495 kg at 610 mm) load center.
 Model E60Z: 6,000 lbs. at 24" (2 722 kg at 610 mm) load center.
 Model E65Z: 6,500 lbs. at 24" (2 948 kg at 610 mm) load center.

Rated capacities are for trucks equipped with:

- Three-stage full free-lift VISTA® mast to 171.5" (4 356 mm) (E45-55Z) maximum fork height for E45-55Z or 164.0" (4 166 mm) for E60-65Z.
- 38.5" (978 mm) hook-type carriage with 36.0" to 60.0" (914 to 1 524 mm) long forks as required for E45-55Z or 36.0" to 72.0" (914 mm to 1 829 mm) for E60-65Z
- Load backrest extension (LBE)
- 90.5" (2 299 mm) overhead guard
- Minimum weight battery and standard battery compartment.

STANDARD EQUIPMENT

Complete truck equipped with:

- 2-stage limited free-lift VISTA mast with maximum fork height of 131.0" (3 327 mm) (E45-55Z) or 126.5" (3 213 mm) (E60-65Z)
- 38.5" (978 mm) carriage with load backrest extension
- 42.0" (1 067 mm) long forks
- 36 volt electrical system includes battery connector - 350 amp, gray
- AC traction system with brushless AC motor
- AC Transistor traction control includes: Auto Deceleration System, advanced thermal management system, and seamless direction change
- Standard dash display which includes: battery discharge indicator with lift interrupt, hour meter, indicator lights, on-board truck setup and diagnostics (via technician password), numeric input keypad, programmable service reminder, truck status codes, alphanumeric display readout.
- DC contactor hydraulics
- A/C traction controller cooling system
- CANBus communication system
- Manual parking brake - foot actuated
- On demand power steering with brushless steer motor
- Vinyl non-suspension seat
- Operator restraint system
- Seven position tilt steering column
- Amenities tray and clip board storage
- MONOTROL directional control - foot actuated
- 90.5" grid style overhead guard
- VISTA® mast with cantled load rollers
- Self energizing / self-adjusting non-asbestos service brakes
- Sealed motor controller compartment
- Operator's manual
- UL Classification E.

OPTIONAL EQUIPMENT

The following equipment is available for the E45-65Z model series:

- AC transistor hydraulics with brushless AC motor
- Premium instrumentation includes all of the features of the standard plus: operator selectable performance modes, operator checklists, operator passwords
- 48 volt electrical system includes blue battery connector
- Battery compartment rollers
- Battery side covers
- Lever directional control - hand actuated
- Semi-suspension and full-suspension seats (vinyl or cloth)
- Electric parking brake - seat actuated
- Wide tread
- Polyurethane and lug tread tires (drive and steer)
- Tilt options: 5° forward / 5° back or 10° forward / 5° back
- 2 LED brake/back-up and tail lights
- 2 drive, 1 rear drive, 2 LED brake/tail with back-up lights
- Various fork lengths
- Light: Amber Strobe (continuous activation)
- 4-function hydraulic control valve
- Integral shifter
- Alarm back-up (87 dba)
- 2-stage Limited Free Lift
- 2-stage Full Free Lift mast
- 3-stage Full Free Lift mast
- 4-stage Full Free Lift mast
- Corrosion and freezer construction packages
- UL Classification EE, ES
- Parts manual - printed or CD.

Battery not included.

Hyster E45-65Z Standard Features and Options

MASTS

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 full-face contact load rollers resist forward, backward and lateral forces.

CARRIAGE

Carriages are hook-type, ITA Class II mounting (E45-55Z), ITA Class III (E60-65Z). 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 with 5" (127 mm) wide forks is 0". Maximum outside-to-outside spacing is 35.5" (900 mm) for Class II and for Class III type.

FORKS

E45-55Z lift trucks use:

1.5" x 4.0" x 36.0" to 60.0" long
(40 x 100 x 915 to 1 525 mm)

E60-65Z lift trucks use:

2.0" x 5.0" x 36.0" to 72.0" long
(50 x 125 x 915 to 1 830 mm)

ELECTRONIC CONTROLS

The lift trucks feature an AC Controlled Transistor traction control system which offers:

- Smooth acceleration and deceleration motor in both forward and reverse directions without pause.
- Auto Deceleration System, which automatically slows the truck through regenerative braking when the accelerator pedal is released.
- Regenerative braking down to zero speed
- Advanced thermal management system, which gradually adjusts truck performance in the event of issues to prevent damage to critical components
- Excellent speed control utilizing closed loop speed regulation
- Connection point for PC access

Standard dash display includes:

- Indicator lights
- Numerical keypad
- On board adjustable performance parameters
- Extensive on board diagnostics
- Truck status codes and error messages

- Alphanumeric display readout
- Programmable service reminder

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

HYDRAULIC SYSTEM

- 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.

STEERING SYSTEM

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 features tapered roller bearings and non-adjustable tie rods for precise steering control and a durable low maintenance system.

DRIVE TRAIN

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.

BRAKES

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.

BATTERY

Steel battery compartment provides secure storage and servicing ease. Color impregnated polymer hood pivots forward exposing battery fully. **(Battery not included.)**

OPERATOR AREA

- Large-sized open steps.
- Contoured hand grip, rounded hood, and clutter-free floor-plate allow easy access in and out of compartment.
- Soft touch hydraulic levers for fingertip control.
- The optional supportive full-suspension seat has three adjustable backrest angle positions and adjustments for operator weight.
- Seven position tilt steering column.
- Amenities tray and clipboard storage in dash provide ample storage for pens, tags and tape.
- Excellent visibility through VISTA® mast and lattice style overhead guard.
- Exclusive Hyster MONOTROL pedal provides direction and acceleration control.



Special attachments, equipment or accessories not listed above may be available through Applications Engineering for specific application requirements.



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27835-7006

Part No.: E45-65Z/TG
1/2004 Litho in U.S.A.

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