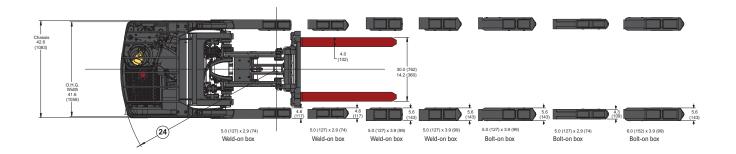
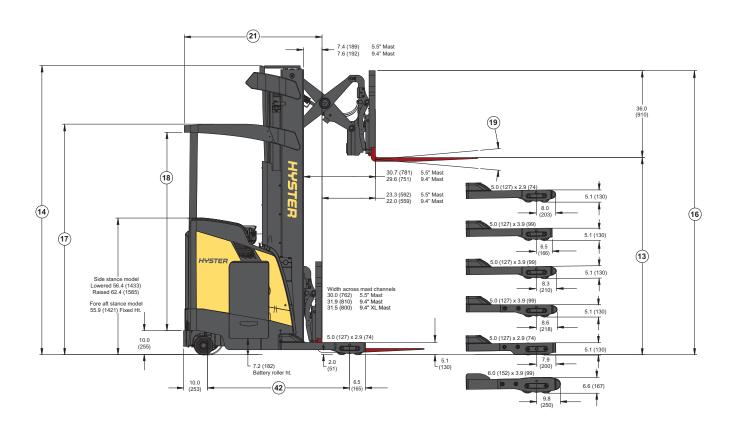
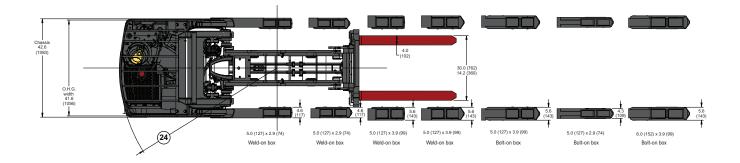


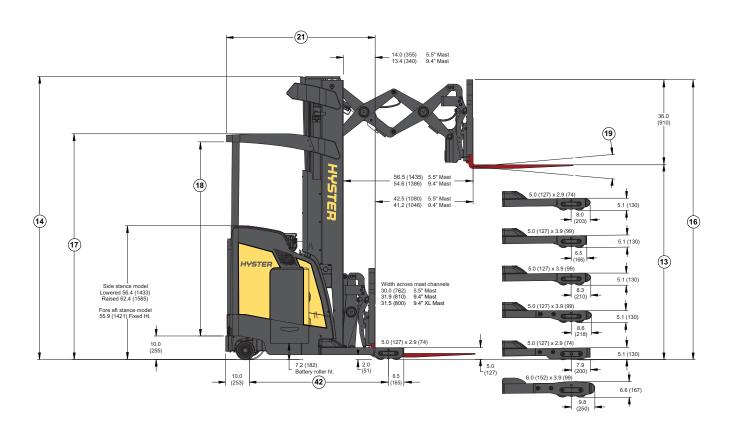
NARROW AISLE REACH TRUCK PRODUCT TECHNICAL GUIDE











SPECIFICATIONS

	1	Manufacturer name							Hys	ter						
	2	Model		N35	ZR3	N40	ZR3		N302	ZDR3		N4	5ZR3	N35	SZDR3	
	3	Wheel base designation ¹		SV	VB	SV	NΒ	LWB	SWB	LWB	SWB	S	WB	LWB	SWB	
甘	4	Rated capacity	lb (kg)	3500 ((1588)	4000	(1814)		3000	(1361)		4500	(2041)	3500	(1588)	
GENERAL	5	Load center, distance	in (mm)			•		•	24 (6	310)		•				
띪	6	Power type - electric, diesel, LPG							Electric	- 36V						
	7	Operator type				Stand										
	8	Tire type - load/caster/drive							Poly/po	ly/poly						
	9	Wheels, number load/drive (x=driven)							4/2 ((1x)						
WI.	10	Truck weight, without battery (approximate)	lb	54	00	54	100		56	550		5	930	6190		
>	12	Axle loading with assembly retracted (front/rear) ²	lb										7578	/ 4458		
	13	Height, standard lift (TOF)	in (mm)													
	14	Height, standard mast lowered (OALH)	in (mm)													
	15	Height, freelift (TOF)	in (mm)	n (mm)												
	16	Height, standard mast extended w/LBR	in (mm)						See ma	st table						
	17	Height, top of OHG	in (mm)													
	18	Height, operator clearance	in (mm)													
	19	Mast tilt angle, forward/back	degrees						3/	4						
	20	Forks, standard (length x width x thickness)	in	1.60 x 3	3.9 x 42	1.80 x	3.9 x 42		1.60 x	3.9 x 42		1.80 x	3.9 x 42	1.60 x	3.9 x 42	
SI	21	Head length to face of forks - all battery compartments ³	in (mm)						See ma	st table						
DIMENSIONS	22	Basearm OEC	in					34"-	49" (1"	incremer	nts)					
Ē		Battery compartment size, 14.25" - (LxWxH)			39	9.0 x 14	.25 x 31.	5	1	I/A	N/A					
	00	Battery compartment size, 16.25" - (LxWxH)	in	39.0 x 16	.25 x 31.5	39.0 x 16	.25 x 31.5	39	9.0 x 16	.25 x 31.	5	39.0 x 16	6.25 x 31.5	5 39.0 x 16.25 x 31		
	23	Battery compartment size, 18.25" - (LxWxH)	in	N.	/A	N	/A		N	/A		39.0 x 18	3.25 x 31.5	39.0 x 18	3.25 x 31.5	
		Battery compartment size, 21.25" - (LxWxH)	in	N.	/A	N	/A	N/A				39.0 x 2	1.25 x 31.5	39.0 x 2	1.25 x 31.5	
				5.5" mast	9.4" mast	5.5" mast	9.4" mast	5.5" ו	mast	9.4" ו	mast	9.4"	mast	9.4"	' mast	
		Turning radius - min. Outside, 14.25" batt. compartment	in	65.6	N/A	65.6	N/A	70.6	N/A	N/A	N/A	1	I/A	١	N/A	
	24	Turning radius - min. Outside, 16.25" batt. compartment	in	in 67.6 N/A		67.6	68.5	72.6 N/A 72.6 68.5			6	8.5	72.6	68.5		
	24	Turning radius - min. Outside, 18.25" batt. compartment	in	N.	/A	N	/A		N	/A		7	0.5	74.6	70.5	
		Turning radius - min. Outside, 21.25" batt. compartment	in	N/A N/A			/A		N	/A		7	3.5	77.6	73.5	
	25	Aisle width - zero clearance - right angle stack		See right angle stack table												
		a		YES												
	26	Stability - comply with ANSI							YE	:5						
		Travel speed		Standard	Optional	Standard	Optional	Stan		Optio	onal		Optional	Standard	Optional	
	28	Travel speed Rearward (chassis first) - empty/RL	mph	7.5/6.5 [†]	N/A	7.5/6.5 †	N/A	7.5/6	dard 6.5 †	Optio N/	Ά	7.5/6.5 [†]	8.0/6.5 †	7.5/6.5 [†]	8.0/6.5 [†]	
		Travel speed	mph mph				N/A N/A		dard 6.5 †	Optio	Ά	7.5/6.5 [†] 7.5/6.5 [†]	8.0/6.5 [†] 8.0/6.5 [†]	7.5/6.5 [†] 7.5/6.5 [†]	8.0/6.5 [†] 8.0/6.5 [†]	
	28	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL		7.5/6.5 [†] 7.5/6.5 [†]	N/A N/A	7.5/6.5 [†] 7.5/6.5 [†]	N/A N/A	7.5/6 7.5/6 Stand	dard 6.5 † 6.5 † dard	Optio N/ N/	A A onal	7.5/6.5 † 7.5/6.5 † Standard	8.0/6.5 † 8.0/6.5 † Optional	7.5/6.5 [†] 7.5/6.5 [†] Standard	8.0/6.5 † 8.0/6.5 † Optional	
NCE	28 29	Travel speed Rearward (chassis first) - empty/RL		7.5/6.5 [†]	N/A N/A	7.5/6.5 [†] 7.5/6.5 [†]	N/A N/A	7.5/6 7.5/6	dard 6.5 † 6.5 † dard	Optio N/ N/	A A onal	7.5/6.5 [†] 7.5/6.5 [†]	8.0/6.5 [†] 8.0/6.5 [†]	7.5/6.5 [†] 7.5/6.5 [†]	8.0/6.5 † 8.0/6.5 †	
MANCE	28 29 31	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL		7.5/6.5 [†] 7.5/6.5 [†]	N/A N/A	7.5/6.5 [†] 7.5/6.5 [†]	N/A N/A Optional 9.4"	7.5/6 7.5/6 Stand	dard 6.5 † 6.5 † dard mast	Optio N/ N/	A A onal mast	7.5/6.5 † 7.5/6.5 † Standard 9.4"	8.0/6.5 † 8.0/6.5 † Optional	7.5/6.5 [†] 7.5/6.5 [†] Standard 9.4"	8.0/6.5 † 8.0/6.5 † Optional	
ORMANCE	28 29 31 31a	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed ⁴	mph	7.5/6.5 † 7.5/6.5 † Standard 5.5" mast	N/A N/A Optional 9.4" mast	7.5/6.5 † 7.5/6.5 † Standard 5.5" mast	N/A N/A Optional 9.4" mast	7.5/6 7.5/6 Stand 5.5" i	dard 6.5 † 6.5 † dard mast	Optio N/ N/ Optio 9.4"	A Onal mast	7.5/6.5 † 7.5/6.5 † Standard 9.4" mast	8.0/6.5 † 8.0/6.5 † Optional 9.4" mast	7.5/6.5 † 7.5/6.5 † Standard 9.4" mast	8.0/6.5 † 8.0/6.5 † Optional 9.4" mast	
ERFORMANCE	28 29 31 31a 32	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed ⁴ Empty 1,000 lb 2,000 lb	ft/min ft/min	7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95	N/A N/A Optional 9.4" mast N/A N/A	7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95	N/A N/A Optional 9.4" mast 150 133 115	7.5/6 7.5/6 Stand 5.5" I	dard 6.5 † 6.5 † dard mast 80	Optio N/ N/ Optio 9.4"	A Onal mast 60	7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 133 115	8.0/6.5 † 8.0/6.5 † Optional 9.4" mast 175 150 130	7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 135 120	8.0/6.5 † 8.0/6.5 † Optional 9.4" mast 175 150 130	
PERFORMANCE	28 29 31 31a 32 33	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed ⁴ Empty 1,000 lb 2,000 lb 3,000 lb	ft/min ft/min ft/min ft/min	7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78	N/A N/A Optional 9.4" mast N/A N/A N/A	7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78	N/A N/A Optional 9.4" mast 150 133 115	7.5/6 7.5/6 Stan 5.5" i 13 11	dard 63.5 † 63.5 † dard mast 80 10 5	Optio N/ N/ Optio 9.4" 15 13 11	A Donal mast 60 63 5	7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 133 115 100	8.0/6.5 † 8.0/6.5 † Optional 9.4" mast 175 150 130 115	7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 135 120 103	8.0/6.5 † 8.0/6.5 † Optional 9.4" mast 175 150 130 115	
PERFORMANCE	28 29 31 31a 32 33 34	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed ⁴ Empty 1,000 lb 2,000 lb 3,000 lb 3,500 lb	ft/min ft/min ft/min ft/min ft/min	7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75	N/A N/A Optional 9.4" mast N/A N/A N/A N/A	7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75	N/A N/A Optional 9.4" mast 150 133 115 100 87	7.5/6 7.5/6 Stan 5.5" i 13 11 99	dard 63.5 † 63.5 † dard mast 80 10 5 8	Opticle N// N// N// Opticle 9.4" 15	A onal mast 50 5 50 A	7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 133 115 100 87	8.0/6.5 † 8.0/6.5 † Optional 9.4" mast 175 150 130 115 105	7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 135 120 103 95	8.0/6.5 † 8.0/6.5 † Optional 9.4" mast 175 150 130 115 95	
PERFORMANCE	28 29 31 31a 32 33 34 35	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed ⁴ Empty 1,000 lb 2,000 lb 3,000 lb 3,500 lb 4,000 lb	ft/min ft/min ft/min ft/min ft/min ft/min	7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 N/A	N/A N/A Optional 9.4" mast N/A N/A N/A N/A N/A	7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 70	N/A N/A Optional 9.4" mast 150 133 115 100 87 83	7.5/6 7.5/6 Stann 5.5" i 13 11 9: 76 N/	dard 6.5 † 6.5 † dard mast 80 10 5 8	Opticle N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/	A A Donal mast 60 63 5 60 6 A A A	7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 133 115 100 87 83	8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 105	7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 135 120 103 95 N/A	8.0/6.5 † 8.0/6.5 † Optional 9.4" mast 175 150 130 115 95 N/A	
PERFORMANCE	28 29 31 31a 32 33 34 35 36	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed ⁴ Empty 1,000 lb 2,000 lb 3,000 lb 3,500 lb 4,000 lb 4,500 lb	ft/min ft/min ft/min ft/min ft/min ft/min	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 N/A N/A	N/A N/A Optional 9.4" mast N/A N/A N/A N/A N/A	7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 70 N/A	N/A N/A Optional 9.4" mast 150 133 115 100 87 83 N/A	7.5/6 7.5/6 Stann 5.5" t 13 111 99 76 N/	dard 63.5 † dard mast 80 10 5 8 8/A //A	Optic N/ N/ Optic 9.4" 15 13 11 10 N/ N/	A A Donal mast 60 63 5 60 6 A A A A A A	7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 133 115 100 87 83 80	8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 105 100 95	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 135 120 103 95 N/A N/A	8.0/6.5 † 8.0/6.5 † Optional 9.4" mast 175 150 130 115 95 N/A N/A	
PERFORMANCE	28 29 31 31a 32 33 34 35 36 37	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed Empty 1,000 lb 2,000 lb 3,500 lb 4,000 lb 4,500 lb Lowering speeds, empty ⁴	ft/min ft/min ft/min ft/min ft/min ft/min ft/min	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 N/A N/A 110	N/A N/A Optional 9.4" mast N/A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 70 N/A 110	N/A N/A Optional 9.4" mast 150 133 115 100 87 83 N/A	7.5/6 7.5/6 Stann 5.5" I 13 111 99 76 N/ N/ N/	dard 63.5 † dard mast 80 10 5 8 8 7/A 7/A	Optic N// N// Optic 9.4" 15 13 11 10 N// N/ N/ 14	onal mast 60 63 5 60 A A A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 8tandard 9.4" mast 150 133 115 100 87 83 80 140	8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 100 95 160 #	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 8.5 tandard 9.4" mast 150 135 120 103 95 N/A N/A 140	8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 95 N/A N/A 160 ††	
PERFORMANCE	28 29 31 31a 32 33 34 35 36 37	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed Empty 1,000 lb 2,000 lb 3,000 lb 3,500 lb 4,000 lb 4,500 lb Lowering speeds, empty ⁴ Lowering speeds, RL ⁴	ft/min ft/min ft/min ft/min ft/min ft/min	7.5/6.5 ¹ 7.5/6.5 ¹ 7.5/6.5 ¹ Standard 5.5" mast 130 110 95 78 75 N/A N/A 110 110	N/A N/A N/A Optional 9.4" mast N/A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 70 N/A 110 110	N/A N/A Optional 9.4" mast 150 133 115 100 87 83 N/A 140	7.5/6 7.5/6 Stann 5.5" t 13 111 99 76 N/	dard 6.5 † 6.5 † dard mast 80 0 0 5 5 8 8 7/A 7/A	Optic N// N// Optic 9.4" 15 13 11 10 N// N// N// 14 14	onal mast 60 63 5 60 A A A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 8tandard 9.4" mast 150 133 115 100 87 83 80 140 140	8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 100 95 160 # 160	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 135 120 103 95 N/A N/A 140 140	8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 95 N/A N/A 160 †† 160 ††	
PERFORMANCE	28 29 31 31a 32 33 34 35 36 37 38	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed Empty 1,000 lb 2,000 lb 3,000 lb 3,500 lb 4,000 lb 4,500 lb Lowering speeds, empty Lowering speeds, RL4 Size - front load wheels, standard	ft/min ft/min ft/min ft/min ft/min ft/min ft/min	7.5/6.5 ¹ 7.5/6.5 ¹ 7.5/6.5 ¹ Standard 5.5" mast 130 110 95 78 75 N/A N/A 110 110	N/A N/A Optional 9.4" mast N/A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 70 N/A 110 110	N/A N/A Optional 9.4" mast 150 133 115 100 87 83 N/A	7.5/6 7.5/6 8tann 5.5" I 13 111 99 74 N/ N/ N/	dard 6.5 † 6.5 † dard mast 80 10 5 8 8 8 8 8 8 8 8 8 8 8 8 8	Optic N// N// N// N// Optic 9.4" 155	Donal mast 60 63 65 60 64 A A A 60 60 60 60 60 60 60 60 60 60 60 60 60	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 8tandard 9.4" mast 150 133 115 100 87 83 80 140 140	8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 100 95 160 #	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 135 120 103 95 N/A N/A 140 140	8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 95 N/A N/A 160 ††	
	28 29 31 31a 32 33 34 35 36 37	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed Empty 1,000 lb 2,000 lb 3,000 lb 3,500 lb 4,000 lb 4,500 lb Lowering speeds, empty ⁴ Lowering speeds, RL ⁴	ft/min ft/min ft/min ft/min ft/min ft/min ft/min	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 N/A N/A 110 110 5 x	N/A N/A N/A Optional 9.4" mast N/A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 70 N/A 110 110 5 x	N/A N/A Optional 9.4" mast 150 133 115 100 87 83 N/A 140 140 3.9	7.5/6 7.5/6 7.5/6 Stann 5.5" i 13 111 9: 7/7 N/ N/ N/ N/ 111 13.	dard 6.5 † 6.5 † dard mast 80 10 5 8 14 14 10 5 x 5.5 5	Optic N/ N/ Optic 9.4" 15 13 111 10 N/ N/ N/ 14 2.9 /7.9 x 2.	A Donal mast 60 63 65 60 6 A A A 60 60 60 60 60 60 60 60 60 60 60 60 60	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 133 115 100 87 83 80 140 140 55	8.0/6.5 † 8.0/6.5 † 9.4" mast 175 150 130 115 100 95 160 # 160 # (3.9)	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 135 120 103 95 N/A N/A 140 140 55	8.0/6.5 † 8.0/6.5 † 9.4" mast 175 150 130 115 95 N/A N/A 160 # 160 #	
	28 29 31 31a 32 33 34 35 36 37 38	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed Empty 1,000 lb 2,000 lb 3,500 lb 4,000 lb 4,500 lb Lowering speeds, empty ⁴ Lowering speeds, RL ⁴ Size - front load wheels, standard Size, standard - drive tire/dual casters	ft/min ft/min ft/min ft/min ft/min ft/min ft/min ft/min ft/min	7.5/6.5 ¹ 7.5/6.5 ¹ 7.5/6.5 ¹ Standard 5.5" mast 130 110 95 78 75 N/A N/A 110 110 5 x 5.5" mast	N/A N/A N/A Optional 9.4" mast N/A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 70 N/A 110 110 5 x	N/A N/A Optional 9.4" mast 150 133 115 100 87 83 N/A 140 140 3.9	7.5/6 7.5/6 7.5/6 Stann 5.5" i 13 111 9: 7/i N/i N/i 11 13. 5.5"	dard 6.5 † 6.5 † dard mast 80 10 5 8 14 14 10 5 x 5 x 5.5 mast	Optic N/ N/ Optic 9.4" 15 13 111 10 N/ N/ N/ 14 2.9 /7.9 x 2. 9.4"	A Donal mast 60 63 65 60 6A 6A 60 60 60 60 60 60 60 60 60 60 60 60 60	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 133 115 100 87 83 80 140 140 5)	8.0/6.5 † 8.0/6.5 † 9.4" mast 175 150 130 115 105 100 95 160 †† 160 †† (3.9)	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 135 120 103 95 N/A N/A 140 140 5)	8.0/6.5 † 8.0/6.5 † 9.4" mast 175 150 130 115 95 N/A N/A 160 # 160 # x 2.9	
	28 29 31 31a 32 33 34 35 36 37 38 39 41	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed* Empty 1,000 lb 2,000 lb 3,000 lb 3,500 lb 4,000 lb 4,500 lb Lowering speeds, empty* Lowering speeds, RL* Size - front load wheels, standard Size, standard - drive tire/dual casters Wheelbase - 14.25" battery compartment	ft/min	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 N/A N/A 110 110 5 x 5.5" mast 55.6	N/A N/A N/A Optional 9.4" mast N/A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 70 N/A 110 110 5 x 5.5" mast 55.6	N/A N/A Optional 9.4" mast 150 133 115 100 87 83 N/A 140 140 3.9 9.4" mast	7.5/6 7.5/6 7.5/6 Stann 5.5" i 13 111 9: 7:6 N/ N/ N/ 11 13. 5.5" i 60.6	dard 6.5 † 6.5 † dard mast 80 10 5	Optic N/ N/ Optic 9.4" 15 13 111 10 N/ N/ N/ 14 2.9 /7.9 x 2 9.4" N/A	A A A A A A A A A A A A A A A A A A A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 133 115 100 87 83 80 140 140 50	8.0/6.5 † 8.0/6.5 † 9.4" mast 175 150 130 115 105 100 95 160 †† 160 †† 3.9	7.5/6.5† 7.5/6.5† 7.5/6.5† Standard 9.4" mast 150 135 120 103 95 N/A N/A 140 140 55	8.0/6.5 † 8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 95 N/A N/A 160 †† 160 †† x 2.9	
	28 29 31 31a 32 33 34 35 36 37 38	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed* Empty 1,000 lb 2,000 lb 3,500 lb 4,000 lb 4,500 lb Lowering speeds, empty* Lowering speeds, RL* Size - front load wheels, standard Size, standard - drive tire/dual casters Wheelbase - 14.25" battery compartment Wheelbase - 16.25" battery compartment	ft/min ft/min ft/min ft/min ft/min ft/min ft/min ft/min ft/min in	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 N/A N/A 110 110 5 x 5.5" mast 55.6 57.6	N/A N/A N/A Optional 9.4" mast N/A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 70 N/A 110 110 5 x 5.5" mast	N/A N/A Optional 9.4" mast 150 133 115 100 87 83 N/A 140 140 3.9 9.4" mast N/A 58.5	7.5/6 7.5/6 7.5/6 Stann 5.5" i 13 111 9: 7/i N/i N/i 11 13. 5.5"	dard 6.5 † 6.5 † 6.5 † dard mast 80 10 5	Optic N/ N/ Optic 9.4" 15 13 111 10 N/ N/ N/ 14 2.9 /7.9 x 2. 9.4" N/A 62.6	A Donal mast 60 63 65 60 6A 6A 60 60 60 60 60 60 60 60 60 60 60 60 60	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 133 115 100 87 83 80 140 140 50 9.4"	8.0/6.5 † 8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 105 100 95 160 †† 160 †† (3.9) 7 mast	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 135 120 103 95 N/A N/A 140 140 55 9.4"	8.0/6.5 † 8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 95 N/A N/A 160 †† 160 †† × 2.9 mast N/A	
	28 29 31 31a 32 33 34 35 36 37 38 39 41	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed* Empty 1,000 lb 2,000 lb 3,000 lb 3,500 lb 4,000 lb 4,500 lb Lowering speeds, empty* Lowering speeds, RL* Size - front load wheels, standard Size, standard - drive tire/dual casters Wheelbase - 14.25" battery compartment Wheelbase - 18.25" battery compartment Wheelbase - 18.25" battery compartment	ft/min ft/min ft/min ft/min ft/min ft/min ft/min ft/min ft/min in	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 N/A N/A 110 110 5 x 5.5" mast 55.6 57.6 N	N/A N/A N/A Optional 9.4" mast N/A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 70 N/A 110 110 5 x 5.5" mast 55.6 57.6 N	N/A N/A Optional 9.4" mast 150 133 115 100 87 83 N/A 140 140 3.9 9.4" mast N/A 58.5	7.5/6 7.5/6 7.5/6 Stann 5.5" i 13 111 9: 7:6 N/ N/ N/ 11 13. 5.5" i 60.6	dard 6.5 † 6.5 † dard mast 80 10 5 8 8 1/A 1/A 10 5 x 5.5 mast N/A N/A	Optic N// N// N// Optic 9.4" 15 13 11 100 N// N// N// N// N// N// N// N// N// N	A A A A A A A A A A A A A A A A A A A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 133 115 100 87 83 80 140 140 55	8.0/6.5 † 8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 100 95 160 †† 160 †† 3.9 mast U/A 8.5 0.5	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 135 120 103 95 N/A N/A 140 140 55 9.4" 62.6 64.6	8.0/6.5 † 8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 95 N/A N/A 160 †† 160 †† 160 †† 175 150 160 †† 16	
WHEELS & TIRES PERFORMANCE	28 29 31 31a 32 33 34 35 36 37 38 39 41	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed Empty 1,000 lb 2,000 lb 3,000 lb 3,500 lb 4,000 lb 4,500 lb Lowering speeds, empty ⁴ Lowering speeds, RL ⁴ Size - front load wheels, standard Size, standard - drive tire/dual casters Wheelbase - 14.25" battery compartment Wheelbase - 18.25" battery compartment Wheelbase - 21.25" battery compartment Wheelbase - 21.25" battery compartment	ft/min ft/min ft/min ft/min ft/min ft/min ft/min ft/min ft/min in	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 N/A N/A 110 110 5 x 5.5" mast 55.6 57.6 N	N/A N/A N/A Optional 9.4" mast N/A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 70 N/A 110 110 5 x 5.5" mast 55.6 57.6 N	N/A N/A Optional 9.4" mast 150 133 115 100 87 83 N/A 140 140 3.9 9.4" mast N/A 58.5	7.5/6 7.5/6 7.5/6 Stann 5.5" i 13 111 9: 7:6 N/ N/ N/ 11 13. 5.5" i 60.6	dard 6.5 † 6.5 † 6.5 † dard mast 80 10 5	Optic N// N// N// Optic 9.4" 15 13 11 10 N//	A A A A A A A A A A A A A A A A A A A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 133 115 100 87 83 80 140 140 55	8.0/6.5 † 8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 105 100 95 160 †† 160 †† (3.9) 7 mast	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 135 120 103 95 N/A N/A 140 140 55 9.4"	8.0/6.5 † 8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 95 N/A N/A 160 †† 160 †† × 2.9 mast N/A	
	28 29 31 31a 32 33 34 35 36 37 38 39 41	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed ⁴ Empty 1,000 lb 2,000 lb 3,000 lb 3,500 lb 4,000 lb 4,500 lb Lowering speeds, empty ⁴ Lowering speeds, RL ⁴ Size - front load wheels, standard Size, standard - drive tire/dual casters Wheelbase - 14.25" battery compartment Wheelbase - 18.25" battery compartment Wheelbase - 21.25" battery compartment Wheelbase - 21.25" battery compartment Wheelbase - 21.25" battery compartment Brakes, service/parking (method of control)	ft/min ft/min ft/min ft/min ft/min ft/min ft/min ft/min ft/min in	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 N/A N/A 110 110 5 x 5.5" mast 55.6 57.6 N	N/A N/A N/A Optional 9.4" mast N/A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 70 N/A 110 110 5 x 5.5" mast 55.6 57.6 N	N/A N/A Optional 9.4" mast 150 133 115 100 87 83 N/A 140 140 3.9 9.4" mast N/A 58.5 /A	7.5/6 7.5/6 7.5/6 Stann 5.5" 13 11 99 76 N/ N/ N/ 11 11 13. 5.5" 60.6 62.6	dard 6.5 † 6.5 † 6.5 † dard mast 80 10 5	Optic N// N// N// Optic 9.4" 15 13 11 10 N// N// N// N// N// N// N// N// N// N/	A A A A A A A A A A A A A A A A A A A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 133 115 100 87 83 80 140 140 50 9.4" N 56 66	8.0/6.5 † 8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 100 95 160 †† 160 †† 3.9 mast U/A 8.5 0.5	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 135 120 103 95 N/A N/A 140 140 55 9.4" 62.6 64.6	8.0/6.5 † 8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 95 N/A N/A 160 †† 160 †† 160 †† 175 150 160 †† 16	
	28 29 31 31a 32 33 34 35 36 37 38 39 41 42	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed Empty 1,000 lb 2,000 lb 3,000 lb 3,500 lb 4,000 lb 4,500 lb Lowering speeds, empty Lowering speeds, RL Size - front load wheels, standard Size, standard - drive tire/dual casters Wheelbase - 14.25" battery compartment Wheelbase - 18.25" battery compartment Wheelbase - 21.25" battery compartment Wheelbase - 21.25" battery compartment Wheelbase - 21.25" battery compartment Brakes, service/parking (method of control) Brakes, service/parking (method of operation)	ft/min ft/min ft/min ft/min ft/min ft/min ft/min ft/min ft/min in	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 N/A N/A 110 110 5 x 5.5" mast 55.6 57.6 N	N/A N/A N/A Optional 9.4" mast N/A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 70 N/A 110 110 5 x 5.5" mast 55.6 57.6 N	N/A N/A N/A Optional 9.4" mast 150 133 115 100 87 83 N/A 140 140 3.9 9.4" mast N/A 58.5 /A	7.5/6 7.5/6 7.5/6 Stann 5.5" 13 11 99 76 N/ N/ 11 11 13. 5.5" 60.6 62.6	dard 5.5 † 6.5 † 6.5 † dard mast 80 10 5 8 4/A 4/A 10 5 x 5.5 mast N/A N/A N/A N Foot/ ng apply	Optic N/ N/ Optic 9.4" 15 13 11 10 N/ N/ N/ 14 2.9 / 7.9 x 2. 9.4" N/A 62.6 //A dauto y (electric)	A A A A A A A A A A A A A A A A A A A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 133 115 100 87 83 80 140 140 50 9.4"	8.0/6.5 † 8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 100 95 160 †† 160 †† 3.9 mast U/A 8.5 0.5	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 135 120 103 95 N/A N/A 140 140 55 9.4" 62.6 64.6	8.0/6.5 † 8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 95 N/A N/A 160 †† 160 †† x 2.9 mast N/A 58.5 60.5	
WHEELS & TIRES	28 29 31 31a 32 33 34 35 36 37 38 39 41 42 42	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed ⁴ Empty 1,000 lb 2,000 lb 3,000 lb 3,500 lb 4,000 lb 4,500 lb Lowering speeds, empty ⁴ Lowering speeds, RL ⁴ Size - front load wheels, standard Size, standard - drive tire/dual casters Wheelbase - 14.25" battery compartment Wheelbase - 18.25" battery compartment Wheelbase - 21.25" battery compartment Wheelbase - 21.25" battery compartment Brakes, service/parking (method of operation) Battery type	ft/min ft/min ft/min ft/min ft/min ft/min ft/min ft/min in in in	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 N/A N/A 110 110 5 x 5.5" mast 55.6 57.6 N	N/A N/A N/A Optional 9.4" mast N/A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 70 N/A 110 110 5 x 5.5" mast 55.6 57.6 N	N/A N/A N/A Optional 9.4" mast 150 133 115 100 87 83 N/A 140 140 3.9 9.4" mast N/A 58.5 /A	7.5/6 7.5/6 7.5/6 Stann 5.5" 13 11 99 76 N/ N/ 11 11 13. 5.5" 60.6 62.6	dard 5.5 † 6.5 † dard mast 80 0 5 8 7 / / / / / / / / / / / / / / / / / /	Optic N/ N/ Optic 9.4" 15 13 11 10 N/ N/ 14 2.9 7.9 x 2. 9.4" A A A A A A A C C C C C C C C C C C C	A A A A A A A A A A A A A A A A A A A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 133 115 100 87 83 80 140 140 50 9.4"	8.0/6.5 † 8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 100 95 160 †† 160 †† 3.9 mast U/A 8.5 0.5	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 135 120 103 95 N/A N/A 140 140 55 9.4" 62.6 64.6	8.0/6.5 † 8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 95 N/A N/A 160 †† 160 †† x 2.9 mast N/A 58.5 60.5	
WHEELS & TIRES	28 29 31 31a 32 33 34 35 36 37 38 39 41 42 42 43 44 45 46	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed ⁴ Empty 1,000 lb 2,000 lb 3,000 lb 3,500 lb 4,000 lb 4,500 lb Lowering speeds, empty ⁴ Lowering speeds, RL ⁴ Size - front load wheels, standard Size, standard - drive tire/dual casters Wheelbase - 14.25" battery compartment Wheelbase - 18.25" battery compartment Wheelbase - 21.25" battery compartment Wheelbase - 21.25" battery compartment Brakes, service/parking (method of control) Brakes, service/parking (method of operation) Battery type Traction motor rating (60 minute rating)	ft/min ft/min ft/min ft/min ft/min ft/min ft/min ft/min ft/min in in in hp (kw)	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 8tandard 5.5" mast 130 110 95 78 75 N/A N/A 110 110 5 x 5.5" mast 55.6 57.6 N	N/A N/A N/A Optional 9.4" mast N/A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 70 N/A 110 110 5 x 5.5" mast 55.6 57.6 N	N/A N/A N/A Optional 9.4" mast 150 133 115 100 87 83 N/A 140 140 3.9 9.4" mast N/A 58.5 /A	7.5/6 7.5/6 7.5/6 Stann 5.5" 13 11 99 76 N/ N/ 11 11 13. 5.5" 60.6 62.6	dard 5.5 † 6.5 † 6.5 † dard mast 80 10 5 8 7/A 7/A 10 5 x 5.5 mast N/A N/A N/A N/A Plate Pt 8.9 (Optic N/N/N/N/N/Optic 9.4" 15 13 11 10 N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/	A A A A A A A A A A A A A A A A A A A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 133 115 100 87 83 80 140 140 50 9.4"	8.0/6.5 † 8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 100 95 160 †† 160 †† 3.9 mast U/A 8.5 0.5	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 135 120 103 95 N/A N/A 140 140 55 9.4" 62.6 64.6	8.0/6.5 † 8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 95 N/A N/A 160 †† 160 †† x 2.9 mast N/A 58.5 60.5	
WHEELS & TIRES	28 29 31 31a 32 33 34 35 36 37 38 39 41 42 42 43 44 45 46 47	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed Empty 1,000 lb 2,000 lb 3,000 lb 3,500 lb 4,000 lb 4,500 lb Lowering speeds, empty Lowering speeds, empty Lowering speeds, Rt Size - front load wheels, standard Size, standard - drive tire/dual casters Wheelbase - 14.25" battery compartment Wheelbase - 18.25" battery compartment Wheelbase - 18.25" battery compartment Wheelbase - 21.25" battery compartment Wheelbase - 18.25" battery compartment Wheelbase - 18.26" method of control) Brakes, service/parking (method of operation) Battery type Traction motor rating (60 minute rating) Hoist motor rating (5 minute rating)	ft/min ft/min ft/min ft/min ft/min ft/min ft/min ft/min in in in	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 8tandard 5.5" mast 130 110 95 78 75 N/A N/A 110 110 5 x 5.5" mast 55.6 57.6 N	N/A N/A N/A Optional 9.4" mast N/A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 70 N/A 110 110 5 x 5.5" mast 55.6 57.6 N	N/A N/A N/A Optional 9.4" mast 150 133 115 100 87 83 N/A 140 140 3.9 9.4" mast N/A 58.5 /A	7.5/6 7.5/6 7.5/6 Stann 5.5" 13 11 99 76 N/ N/ 11 11 13. 5.5" 60.6 62.6	dard 6.5 † 6.5 † 6.5 † dard mast 80 10 5 8 7/A 7/A 10 5 x 5.5 mast N/A N/A N/A Plate Pt 8.9 (29.2 (Optic N/N/N/N/N/Optic 9.4" 15 13 11 10 N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/	A A A A A A A A A A A A A A A A A A A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 133 115 100 87 83 80 140 140 50 9.4"	8.0/6.5 † 8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 100 95 160 †† 160 †† 3.9 mast U/A 8.5 0.5	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 135 120 103 95 N/A N/A 140 140 55 9.4" 62.6 64.6	8.0/6.5 † 8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 95 N/A N/A 160 †† 160 †† 160 †† 175 150 160 †† 16	
	28 29 31 31a 32 33 34 35 36 37 38 39 41 42 42 43 44 45 46 47 48	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed Empty 1,000 lb 2,000 lb 3,000 lb 3,500 lb 4,000 lb 4,500 lb Lowering speeds, empty Lowering speeds, empty Lowering speeds, empty Lowering speeds, Rt Size - front load wheels, standard Size, standard - drive tire/dual casters Wheelbase - 14.25" battery compartment Wheelbase - 18.25" battery compartment Wheelbase - 18.25" battery compartment Wheelbase - 21.25" battery compartment Brakes, service/parking (method of control) Brakes, service/parking (method of operation) Battery type Traction motor rating (60 minute rating) Hoist motor rating (5 minute rating) Traction motor control method	ft/min ft/min ft/min ft/min ft/min ft/min ft/min ft/min ft/min in in in hp (kw)	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 8tandard 5.5" mast 130 110 95 78 75 N/A N/A 110 110 5 x 5.5" mast 55.6 57.6 N	N/A N/A N/A Optional 9.4" mast N/A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 70 N/A 110 110 5 x 5.5" mast 55.6 57.6 N	N/A N/A N/A Optional 9.4" mast 150 133 115 100 87 83 N/A 140 140 3.9 9.4" mast N/A 58.5 /A	7.5/6 7.5/6 7.5/6 Stann 5.5" 13 11 99 76 N/ N/ 11 11 13. 5.5" 60.6 62.6	dard 5.5 † 6.5 † 6.5 † dard mast 60 10 5 8 7A 7A 10 5 x 5.5 mast N/A N/A N/A N/A N/A N/A N/A N/	Optic N/N/N/N/N/Optic 9.4" 15 13 11 10 N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/	A A A A A A A A A A A A A A A A A A A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 133 115 100 87 83 80 140 140 50 9.4"	8.0/6.5 † 8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 100 95 160 †† 160 †† 3.9 mast U/A 8.5 0.5	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 135 120 103 95 N/A N/A 140 140 55 9.4" 62.6 64.6	8.0/6.5 † 8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 95 N/A N/A 160 †† 160 †† 160 †† 175 150 160 †† 16	
ECTRIC WHEELS & TIRES	28 29 31 31a 32 33 34 35 36 37 38 39 41 42 42 43 44 45 46 47	Travel speed Rearward (chassis first) - empty/RL Forward (forks first) - empty/RL Lift speed Empty 1,000 lb 2,000 lb 3,000 lb 3,500 lb 4,000 lb 4,500 lb Lowering speeds, empty Lowering speeds, empty Lowering speeds, Rt Size - front load wheels, standard Size, standard - drive tire/dual casters Wheelbase - 14.25" battery compartment Wheelbase - 18.25" battery compartment Wheelbase - 18.25" battery compartment Wheelbase - 21.25" battery compartment Wheelbase - 18.25" battery compartment Wheelbase - 18.26" method of control) Brakes, service/parking (method of operation) Battery type Traction motor rating (60 minute rating) Hoist motor rating (5 minute rating)	ft/min ft/min ft/min ft/min ft/min ft/min ft/min ft/min ft/min in in in hp (kw)	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 8tandard 5.5" mast 130 110 95 78 75 N/A N/A 110 110 5 x 5.5" mast 55.6 57.6 N	N/A N/A N/A Optional 9.4" mast N/A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 5.5" mast 130 110 95 78 75 70 N/A 110 110 5 x 5.5" mast 55.6 57.6 N	N/A N/A N/A Optional 9.4" mast 150 133 115 100 87 83 N/A 140 140 3.9 9.4" mast N/A 58.5 /A	7.5/6 7.5/6 7.5/6 7.5/6 Stann 5.5" 13 11 99 78 N/ N/ 11 11 13 5.5" 60.6 62.6	dard 5.5 † 6.5 † 6.5 † dard mast 60 10 5 8 7A 7A 10 5 x 5.5 mast N/A N/A N/A N/A N/A N/A N/A N/	Optic N/N/N/N/N/Optic 9.4" 15 13 11 10 N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/	A A A A A A A A A A A A A A A A A A A	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 133 115 100 87 83 80 140 140 50 9.4"	8.0/6.5 † 8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 100 95 160 †† 160 †† 3.9 mast U/A 8.5 0.5	7.5/6.5 † 7.5/6.5 † 7.5/6.5 † 7.5/6.5 † Standard 9.4" mast 150 135 120 103 95 N/A N/A 140 140 55 9.4" 62.6 64.6	8.0/6.5 † 8.0/6.5 † 8.0/6.5 † 0ptional 9.4" mast 175 150 130 115 95 N/A N/A 160 †† 160 †† 160 †† 175 150 160 †† 16	

¹ Short or long wheelbase is for double reach only. LWB for double reach masts 332" and below

SWB = Short Wheel Base; LWB = Long Wheel Base

leading direction. Rated load (RL) travel speeds start at 1,500 lb and greater

CERTIFICATION: Hyster lift trucks meet the design and construction requirements of B56.1-1969, per OSHA Section 1910.178(a)(2), and also comply with the B56.1 revision in effect at time of manufacture. NOTE: Performance specifications/ratings are for truck equipped as described under standard equipment in this technical guide. Performance specifications are affected by the condition of the vehicle and how it is equipped, as well as by the nature and condition of the operating area. Specifications are subject to change and the proposed application should be discussed with your authorized Hyster Company Dealer.

² Static with rated load and max. wt. battery

 $[\]ensuremath{^3}$ Includes integral sideshift, subtract 1" for without sideshift

[†] Travel speed will be reduced to 7.5 / 6.5 mph (empty/rated load) with MFHs above 341" in the forks trailing direction. Travel speed will be reduced to 7.0 / 6.0 mph (empty/rated load) with MFHs above 341" in the forks

 $^{^{\}dagger\dagger}$ High speed lowering and high speed lift are separate options

N35-40ZR3	& N30ZDR	3 MAST DI	MENSIONS (5.	5" STANDARI	0)					
Overall lowered	Max. fork	Free-lift	Overall height (mast extended)	Overhead guard	Operator	Head length (length to face of forks)				
height	height (TOF)	(TOF)	highest point w/36" LBR	height to top	Clearance	14.	25"	16.	25"	
in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	Single reach	Double reach	Single reach	Double reach	
			3-STAGE	FULL FREE-LIFT	(FFL) VISTA™	MAST				
87 (2,210)	191 (4,851)	48 (1,219)	230 (5,842)	87 (2,212)	74.3 (1,887)	52.16	57.83	54.21	59.88	
91 (2,311)	203 (5,156)	52 (1,321)	242 (6,147)	91 (2,314)	78.3 (1,989)	52.16	57.83	54.21	59.88	
95 (2,413)	212 (5,385)	56 (1,422)	251 (6,375)	95 (2,416)	82.3 (2,090)	52.16	57.83	54.21	59.88	
101 (2,565)	227 (5,766)	62 (1,575)	266 (6,756)	95 (2,416)	82.3 (2,090)	52.16	57.83	54.21	59.88	
107 (2,718)	242 (6,147)	68 (1,727)	281 (7,137)	95 (2,416)	82.3 (2,090)	52.16	57.83	54.21	59.88	
110 (2,794)	251 (6,375)	71 (1,803)	290 (7,366)	95 (2,416)	82.3 (2,090)	52.16	57.83	54.21	59.88	
119 (3,023)	272 (6,909)	80 (2,032)	311 (7,899)	95 (2,416)	82.3 (2,090)	52.16	52.16 57.83		59.88	
125 (3,175)	287 (7,290)	86 (2,184)	325 (8,255)	95 (2,416)	82.3 (2,090)	52.16	57.83	54.21	59.88	
131 (3,327)	302 (7,671)	92 (2,337)	340 (8,636)	95 (2,416)	82.3 (2,090)	52.16	52.16 57.83 54.21		59.88	

N40-45ZR3	& N30-35Z	DR3 MAST	DIMENSIONS	(9.4" PREMI	JM)						
Overall	Max. fork	Free-lift	Overall height (mast extended)	Overhead guard	Operator		Head I	ength (leng	th to face o	f forks)	
lowered ht.	height (TOF)	(TOF)	highest point w/36" LBR	height to top	clearance	16.	16.25" Single Double reach		25"	21.	25"
in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	_			Double reach	Single reach	Double reach
		;	3-STAGE FULL FR	EE-LIFT (FFL) VI	STA™ MAST						
95 (2,413)	210 (5,334)	59 (1,509)	246 (6,248)	95 (2,416)	82.3 (2,090)	57.20	62.91	59.17	64.92	62.12	67.91
107 (2,718)	241 (6,121)	71 (1,814)	277 (7,036)	95 (2,416)	82.3 (2,090)	57.20	62.91	59.17	64.92	62.12	67.91
110 (2,794)	250 (6,350)	74 (1,890)	286 (7,264)	95 (2,416)	82.3 (2,090)	57.20	62.91	59.17	64.92	62.12	67.91
119 (3,023)	272 (6,909)	83 (2,118)	308 (7,823)	95 (2,416)	82.3 (2,090)	57.20	62.91	59.17	64.92	62.12	67.91
125 (3,175)	287 (7,290)	89 (2,271)	323 (8,204)	95 (2,416)	82.3 (2,090)	57.20	62.91	59.17	64.92	62.12	67.91
131 (3,327)	302 (7,671)	95 (2,423)	338 (8,585)	95 (2,416)	82.3 (2,090)	57.20	62.91	59.17	64.92	62.12	67.91
140 (3,556)	321 (8,153)	104 (2,652)	357 (9,068)	95 (2,416)	82.3 (2,090)	57.20 62.91 59.17 64.92		64.92	62.12	67.91	
143 (3,632)	332 (8,433)	107 (2,728)	368 (9,347)	95 (2,416)	82.3 (2,090)	57.20	62.91	59.17	64.92	62.12	67.91
149 (3,785)	341 (8,661)	113 (2,880)	377 (9,576)	95 (2,416)	82.3 (2,090)	57.20 62.91 59.17 64.92		62.12	67.91		

N40-45ZR3 & N30-35ZDR3 MAST DIMENSIONS (9.4" XL PREMIUM)*													
			Overall height (mast	Overhead			Head len	gth (length	to face of fo	orks)			
Overall lowered ht.	Max. fork height (TOF)	Free-lift (TOF)	extended) highest point w/36" LBR	guard height to top	Operator clearance	16.25"		18.	25"	21.	25"		
in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	Single reach	Double reach	Single reach	Double reach	Single reach	Double reach		
			3-STA	GE FULL FRE	E-LIFT (FFL) \	/ISTA™ MA	ST						
157 (3,988)	368 (9,347)	121 (3,084)	404 (10,262)	95 (2,416)	82.3 (2,090)	57.20	62.91	59.17	64.92	62.12	67.91		
170 (4,318)	401 (10,185)	134 (3,414)	437 (11,100)	95 (2,416)	82.3 (2,090)	-	-	59.17	64.92	62.12	67.91		
179 (4,547)	422 (10,719)	143 (3,642)	458 (11,633)	95 (2,416)	82.3 (2,090)	-	-	59.17	64.92	62.12	67.91		
188 (4,775)	444 (11,278)	152 (3,871)	480 (12,192)	95 (2,416)	82.3 (2,090)	-	-	59.17	64.92	62.12	67.91		

^{*} N40ZR3 and N30ZDR3 only available in 16.25" battery compartment N45ZR3 and N35ZDR3 available in 16.25", 18.25" and 21.25" battery compartments

SPECIFICATIONS

N	135/40	ZR3 (5	5.5" M	IAST)							
14.2	14.25" battery compartment and 42" ID										
3-stage - 4" between loads											
		Pallet	width (i	idth (inches)							
		36"	40"	44"	48"						
Pallet	36"	85	85	85	85						
length (inches)	40"	87	87	86	86						
	44"	92	91	91	90						
	48"	96	96	95	95						

Subtract 1" for without sideshift Add 2" for 16.25" battery compartment

N30ZDR3 (5.5" MAST)											
14.25" Battery compartment and 42" ID											
	3-stage - 6" between loads										
		Pallet	width (iı	nches)							
		36"	44"	48"							
Pallet	36"	87	86	86	86						
length (inches)	40"	91	90	90	89						
	44"	96	95	95	94						
	48"	100	100	99	99						

Sideshift is standard on double reach Add 2" for 16.25" battery compartment

ZEBO CLEABANCE ASLE WIDTH	SPACING LOAD LENGTH RIGHT ANGLE STACKING ASSLE LAYOUT
	ASLE LAYOUT

	N40ZR3 (9.4" MAST)											
16.25" battery compartment and 42" ID												
3-stage - 4" between loads												
		Pallet	width (i	nches)								
		36"	44"	48"								
Pallet	36"	88	88	88	88							
length (inches)	40"	92	92	91	91							
	44"	97	96	96	96							
	48"	101	101	100	100							

Subtract 1" for without sideshift

N30ZDR3 (9.4" MAST)											
16.25" Battery compartment and 42" ID											
	3-stag	e - 6" be	tween lo	ads							
		Pallet width (inches)									
		36"	44"	48"							
Pallet	36"	92	91	91	90						
length (inches)	40"	96	96	95	95						
	44"	101	100	100	99						
	48"	105	105	104	104						

Sideshift is standard on double reach

N45ZR3 (9.4" MAST)											
16.25" battery compartment and 42" ID											
	3-stag	e - 4" be	tween lo	ads							
		Pallet	width (iı	nches)							
		44"	48"								
Pallet	36"	88	88	88	88						
length (Inches)	40"	92	92	91	91						
	44"	97	96	96	96						
	48"	101	101	100	100						

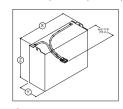
Subtract 1" for without sideshift Add 2" for 18.25" battery compartment Add 5" for 21.25" battery compartment

	N35ZE)R3 (9	.4" M <i>A</i>	AST)							
16.25" Battery compartment and 42" ID											
3-stage - 6" between loads											
	Pallet width (inches)										
		36"	40"	44"	48"						
Pallet	36"	92	91	91	90						
length (inches)	40"	96	96	95	95						
	44"	101	100	100	99						
	48"	105	105	104	104						

Sideshift is standard on double reach Add 2" for 18.25" battery compartment Add 5" for 21.25" battery compartment

Note: These are "Zero Clearance" aisles and require an additional 6" to 12" to be added to provide for easier maneuvering.

BATTE	RY AND	COMP	ARTME	NT SPE	CIFICA	TIONS																
Battery		63	63	æ	63	æ	Maxi	mum	Bat	tery co	mpartı	ment d	imensi	ons		Bat	tery di	mensi	ons		Min.	Max.
compt	Battery voltage	N35ZR3	N40ZR3	N30ZDR3	N45ZR3	N35ZDR3	6 hr	rate	"X" Max. "Y" Max.		"Z" Max.		"X" Max.		"Y" Max.		"Z"	Max.	batt. wt.	batt. wt.		
size		Z	Z	Σ S	Z	ž	ah	kwh	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	lb (kg)	lb (kg)
14.25"	36	Х	х	х	N/A	N/A	775	27.2	39.0	990	14.25	362	31.5	800	38.8	985	14	356	31	788	1600 (726)	2100 (953)
16.25"	36	Х	Х	Х	Х	Х	930	32.6	39.0	990	16.25	413	31.5	800	38.8	985	16	406	31	788	1850 (839)	2350(1066)
18.25"	36	N/A	N/A	N/A	Х	Χ	1085	38.1	39.0	990	18.25	464	31.5	800	38.8	985	18	457	31	788	2200 (998)	2800 (1270)
21.25"	36	N/A	N/A	N/A	Х	Х	1240	43.5	39.0	990	21.25	540	31.5	800	38.8	985	21	533	31	788	2500 (1134)	3100 (1406)



Battery connector: 36v - gray; position "B", lead length 16"

Manufacturers standard cable size not to exceed 4/0 AWG

Battery compartment is designed to accommodate standard wet cell batteries with fixed lifting eyes and no cover.

Contact Applications Engineering to verify compatibility/fit when using maintenance free, covered or non-standard batteries.

FEATURES AND OPTIONS

PERFORMANCE	STD	OPT
36-volt battery (includes 350 amp gray battery connector)	х	
AC traction, lift/lower and steering	х	
Transistor controller with regenerative braking	х	
Electric power steering	х	
4 independent fully programmable performance modes - programmable traction speed and acceleration	х	
Load transport position		х
Fork camera (requires 9.4" mast)		х
Laser level line		х
High speed lift (N40ZR3, N30ZDR3)		х
High speed lift/travel (N45ZR3, N35ZDR3)		х
High speed lower (requires high speed lift/travel)		х
Shelf height selector		х
Return to set tilt		х
Return to center sideshifting		х
Load weight display		х
Fork height display		х
Speed sensitive steering		х
DRIVE	STD	ОРТ
5"x 3.9" poly articulating tandem load wheels - high load compound (std on N35-45ZR3)	х	
5"x 2.9" poly articulating tandem load wheels - high load compound (std on N30-35ZDR3)	х	
Dual articulating polyurethane caster wheels	Х	
XL-AC™ drive tire – 13.5" x 5.5"	Х	
Steered caster		х
Various sizes of load wheels		х
Various drive tire compounds		х
Tapered load wheel boxes		х
Bolt-on load wheel boxes		Х
LIFT	STD	OPT
91"/203"/52"-(5.5") 3-stage FFL mast (N35-40ZR3, N30ZDR3)	Х	
95"/210"/59"– (9.4") 3-stage FFL mast (N45ZR3, N35ZDR3)	Х	
Tilting carriage (3° fwd, 4° back)	Х	
Single reach mast with 33.5" wide Class II with integral sideshift (hook type carriage) (std on N35-45ZR3)	х	
Double reach mast with 33.5" wide Class II with integral sideshift (hook type carriage) (std on N30-35ZDR3)	х	
36" high load backrest extension	Х	
Lift limit		Х
48" high load backrest extension		х
Single reach mast without integral sideshift for standard 33.5" wide carriage		Х
(9.4") 3-stage full free lift mast (N40ZR3, N30ZDR3)		Х
Various mast heights for 5.5" and 9.4" masts		Х
HANDLING	STD	OPT
Forks: 1.8" x 3.9" (45 mm x 100 mm) 42"(1067 mm) – Class II, hook type (std on N40-45ZR3)	х	
Forks: 1.6" x 3.9" (40 mm x 100 mm) 42" (1067 mm) – Class II, hook type (std on N30-35ZDR3 and N35ZR3)	х	
Fully proportional lift/lower control	х	
Control handle with simultaneous hydraulic functions	х	
Slack chain detection	х	
Reduced travel speed with carriage extended		х
Various fork lengths		Х
ERGONOMICS	STD	OPT
Operator sensing system	Х	
	X	l
Cushion ride floor Low profile anti-fatigue floormat	X	

ERGONOMICS (continued)	STD	OPT
Adjustable armrest and backrest (sidestance operator controls only)	х	
Steer tiller position adjustment	х	
Low step height	х	
Padded operator compartment	x	
5" smart display: color touchscreen	х	
Intelligent Ride™ floor (full suspension floor)		х
7" smart display: color touchscreen		Х
Operator overhead fan		Х
Dual LED headlights		х
Rear LED worklight		х
Operator LED desktop light		х
OPERATION	STD	OPT
Standard construction	х	
UL Classification E	х	
Sidestance operator controls	х	
Key switch start	х	
Wire mesh mast guard	х	
Automotive steering	х	
2 USB ports	х	
Static strap	х	
Electronic horn	x	
Sealed battery rollers	х	
Operator's overhead guard	X	
Rear post operator protection	x	
Power disconnect button	X	
Forward stance with aft operator control handle		х
Reverse steering		X
Clear mast guard		X
Keyless start		X
Rotary joystick (standard for cooler/freezer)		X
Battery gate interlock		×
Cooler/freezer construction (0°F to 120°F) with rubber floormat		X
SubZero freezer construction (operating temperatures -40°F to 120°F)		^
with rubber floormat		Х
SubZero freezer with heated floor and control handle (operating temperatures -40°F to 120°F) with anti-slip floorplate covering		х
UL Classification EE		Х
Open End Clearance (OEC) - 34" to 49" in 1" Increments		Х
Audible back-up and motion alarms		Х
Visible amber strobe light - continuous activated		Х
Impact monitor		Х
Blue LED spotlights		Х
RF terminal bracket		Х
RF handheld scanner holder		Х
12-volt DC auxiliary power supply		Х
Wire mesh on top overhead guard		х
Rear operator compartment door (SPED)		х
Hyster Tracker™		х
Hyster Reaction™		х
SUPPLEMENTAL	STD	OPT
12 month/unlimited hours full truck warranty	х	
36 month/6,000 hour powertrain warranty	х	
Lifetime frame warranty	х	
Operating manual	х	
ENERGY SYSTEM	STD	OPT
Lead acid	х	
Hyster Power Cellect™	1	х

^{5.5&}quot; mast sideshift includes 7" travel (3.5" each side). Sideshift travel will be reduced to 3" total (1.5" each side) when Outrigger ID is less than 39". 9.4" mast sideshift includes 8" travel (4" each side). Sideshift travel will be reduced to 4" total (2" each side) when Outrigger ID is less than 39".

Doors are intended to protect the operator from objects that may enter the operator's compartment but they may also slow the operator's egress in emergency situations. A review of the forklift's intended environment should be conducted before selecting a door as optional equipment. Available only through Hyster® SPED Engineering.





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Hyster products are subject to change without notice. Trucks may be shown with optional equipment.