

# ERP series

15,500lb - 19,000lb

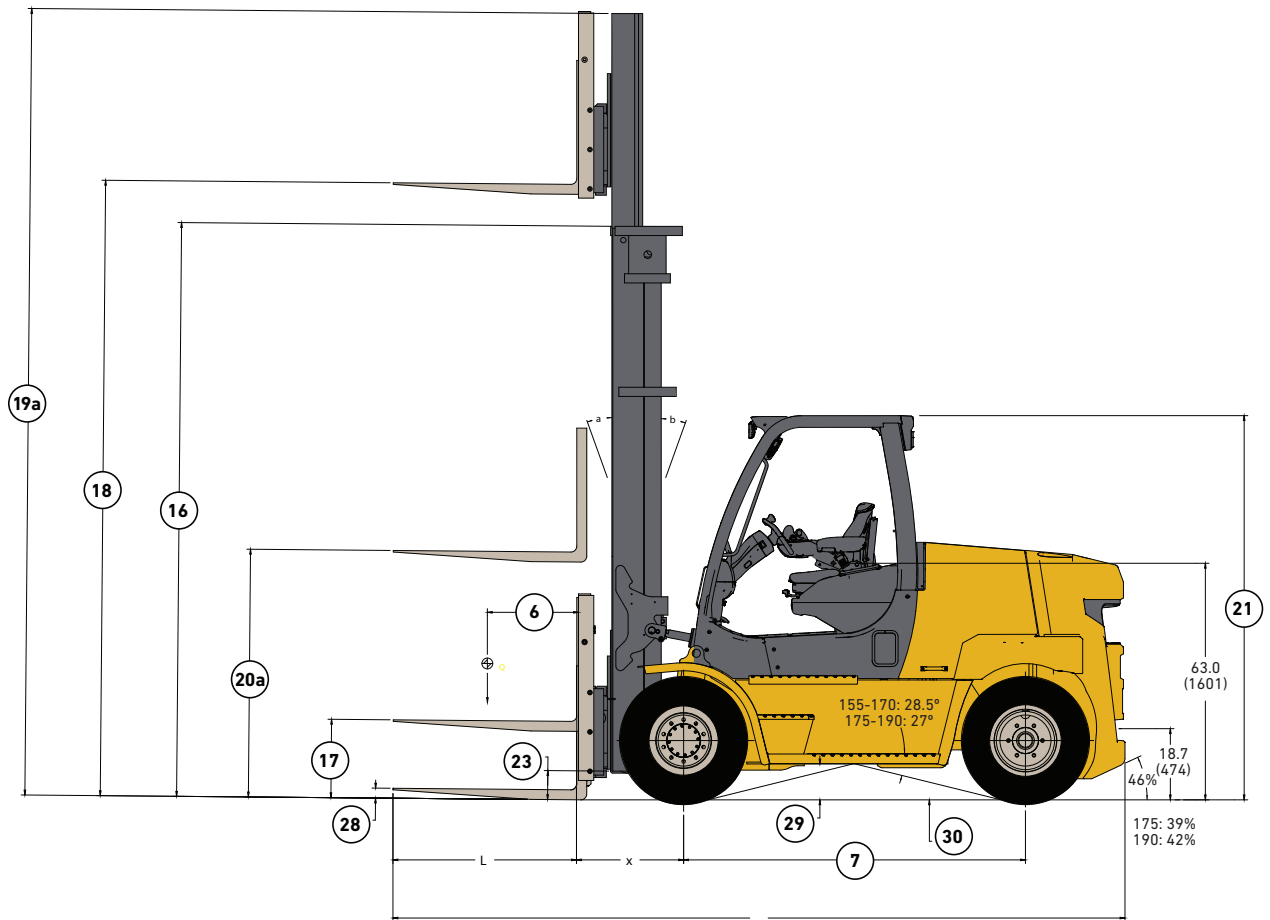
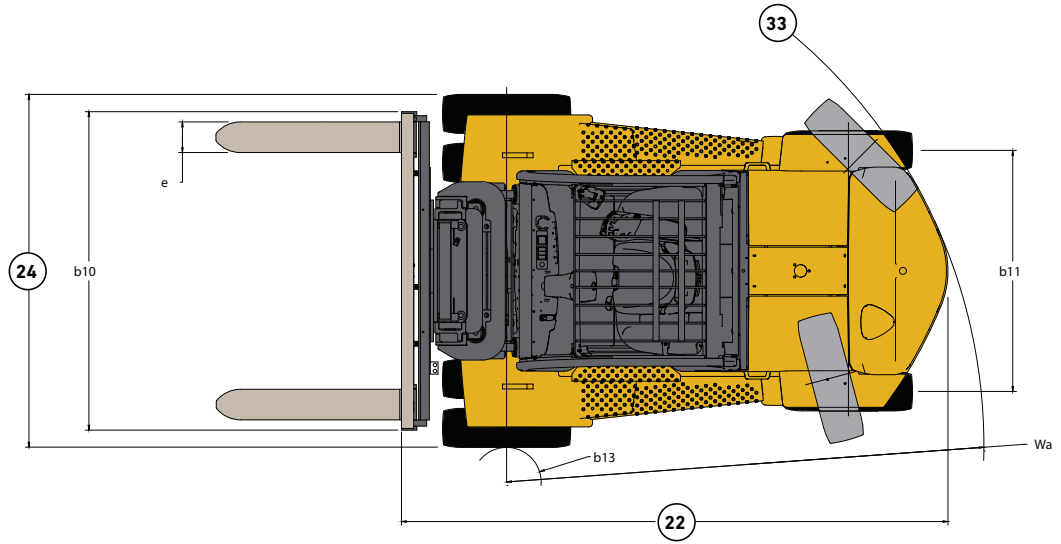
## Lithium-Ion Lift Trucks



### SPEC SHEET

Models: ERP155SVNL, ERP170SVNL, ERP175VNL36, ERP190VNL

# TRUCK DIMENSIONS ERP155-170SVNL



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

## GENERAL SPECIFICATIONS ERP155-170SVNL

GENERAL	1	Manufacturer		Yale	Yale
	2	Model		ERP155VNL	ERP170VNL
	3	Power Type		Electric	Electric
	4	Operator Type		Seated Rider	Seated Rider
	5	Rated Capacity	lb (kg)	15,500 (7,000)	17,000 (8,000)
	6	Load Center, Distance	in (mm)	24 (600)	24 (600)
	7	Wheelbase	in (mm)	88 (2235)	88 (2235)
WT.	8	Weight, Standard Truck RL/NL	lb (kg)	39470 (17903) / 24035 (10902)	44048 (19980) / 26410 (11979)
	9	Axle Loading, Static Front/Rear NL	lb (kg)	33495 (15193) / 5975 (2710)	37891 (17187) / 6158 (2793)
	10	Axle Loading, Static Front/Rear RL	lb (kg)	9714 (( 4406) / 14322 (6496)	10677 (4843) / 15733 (7136)
TIRES & WHEELS	11	Tire Type - Cushion, Solid, Pneumatic		Pneumatic	Pneumatic
	12	Tire Size, Front / Rear		8.25x15 14PR / 8.25x15 14PR	8.25x15 14PR / 8.25x15 14PR
	13	Wheels, Number - Front/Rear (X = driven)		4X/2	4X/2
	14	Track Width, Front / Rear	in (mm)	72.7 (1847) / 60.5 (1536)	72.7 (1847) / 60.5 (1536)
DIMENSIONS	15	Mast Tilt, Forward/Backward	degrees	5/10 <sup>2</sup>	5/9 <sup>2</sup>
	16	Height, Standard Mast - Lowered	in (mm)	96.7 (2456)	106.8 (2712)
	17	Std Free Lift Height (TOF) (Rounded Down)	in (mm)	3.9 (100)	0 (0)
	18	Lift Height, w/LBR (TOF) (Rounded Down)	in (mm)	118 (3000)	121 (3065)
	19a	Height, Standard Mast - Extended w/o LBR (Rounded Up)	in (mm)	159.1 (4040)	166.9 (4239)
	19b	Height, Standard Mast - Extended w/ LBR (Rounded Up)	in (mm)	171.3 (4350)	171.2 (4337)
	20a	Optional Full Free Lift w/ LBR (TOF) (Rounded Down)	in (mm)	43 (1098) <sup>1</sup>	53 (1355) <sup>1</sup>
	20b	Optional Full Free Lift w/o LBR (TOF) (Rounded Down)	in (mm)	56 (1425) <sup>1</sup>	57.5 (1461) <sup>1</sup>
	21a	Height, Standard Overhead Guard (High) (Rounded Up)	in (mm)	100 (2531)	100 (2531)
	21b	Height, Standard Overhead Guard (Cab) (Rounded Up)	in (mm)	101 (2549)	101 (2549)
	22	Overall Length (to Face of Forks) <sup>3</sup>	in (mm)	137.6 (3495)	140.6 (3570)
	23	Length, Center of Wheels to Face of Forks <sup>3</sup>	in (mm)	24 (609)	24.2 (614)
	24	Overall Width	in (mm)	82.0 (2082)	82.0 (2082)
	25	Standard Forks, Thickness x Width x Length	in (mm)	2.5 x 6.0 x 47 (60 x 150 x 1200)	2.5 x 7.9 x 47 (65 x 200 x 1200)
	26a	Standard Fork Spread, Minimum Inside Dimensions	in (mm)	6.2 (160)	3 (75)
	26b	Standard Fork Spread, Maximum Outside Dimensions	in (mm)	73.8 (1876)	82.5 (2100)
	27	Standard Carriage Width	in (mm)	78 (1981)	80 (2030)
	28	Ground Clearance Under Mast, RL	in (mm)	4.9 (125)	6.8 (175)
	29	Ground Clearance, Center of Wheelbase	in (mm)	9.7 (246)	9.7 (246)
	30	Step Height	in (mm)	12.6 (321)	12.6 (321)
31a	Aisle Width, Right Angle Stack (pallet w=42in, L=48in)	in (mm)	193.2 (4908)	196 (4978)	
31b	Aisle Width, Right Angle Stack (Add Length of Load)	in (mm)	145.2 (3688)	148 (3760)	
32	Equal Aisle, 90-Degree Intersecting Aisle (pallet w=42in, L=48in)	in (mm)	Need imperial pallet	Need imperial pallet	
33	Turning Radius, Minimum Outside (OTR) <sup>4</sup>	in (mm)	121.3 (3080)	123.8 (3145)	
34	Turning Radius, Minimum Inside (ITR) <sup>5</sup>	in (mm)	-3.5 (-90)	-3.5 (-90)	
PERFORMANCE	35	Travel Speed, RL/NL <sup>6</sup>	mph (km/h)	14.9 (24) / 14.9 (24)	14.9 (24) / 14.9 (24)
	36a	Lift Speed, Standard 2-Stage LFL RL/NL	ft / min (m/s)	84.6 (0.43) / 129.9 (0.66)	78.7 (0.40) / 90.5 (0.46)
	36b	Lift Speed, Optional 3-Stage FFL RL/NL	ft / min (m/s)	78.7 (0.40) / 129.9 (0.66)	76.7 (0.39) / 90.5 (0.46)
	37a	Lowering Speed, Standard 2-Stage LFL RL/NL	ft / min (m/s)	114.1 (0.58) / 104.3 (0.53)	80.7 (0.41) / 72.8 (0.37)
	37b	Lowering Speed, Optional 3-Stage FFL RL/NL	ft / min (m/s)	104.3 (0.53) / 80.7 (0.41)	76.7 (0.39) / 64.9 (0.33)
	38a	Drawbar Pull RL/NL, (60 Minute Rating) <sup>6</sup>	lb (kg)	10986 (48871) / 5824 (25907)	10986 (48871) / 6408 (28506)
	38b	Maximum Drawbar Pull RL/NL, (5 Minute Rating) <sup>6</sup>	lb (kg)	11138 (49547) / 5824 (25907)	11138 (49547) / 6408 (28506)
	39a	Gradeability RL/NL, (30 Minute Rating) <sup>6</sup>	%	30 / 24	26 / 24
	39b	Maximum Gradeability RL/NL, (5 Minute Rating) <sup>6</sup>	%	30 / 24	27 / 24
	40	Service Brake - Method of Control/Operation		Foot / Hydraulic	Foot / Hydraulic
41	Park Brake - Method of Control/Operation		Hand / Mechanical	Hand / Mechanical	
POWERTRAIN	42	Battery Type		Integrated Li-Ion	Integrated Li-Ion
	43	Battery Voltage/Capacity <sup>7</sup>	V/Ahr	350/192	350/192
	44	Traction Motor Type		Permanent Magnet	Permanent Magnet
	45	Pump Motor Type		Permanent Magnet	Permanent Magnet
	46	Traction Motor Power (S2 60 Minute Rating)	hp (kW)	53.6 hp (40kW)	53.6 hp (40kW)
	47	Pump Motor Power (S2 60 Minute Rating)	hp (kW)	80.4 hp (60kW)	80.4 hp (60kW)
OTHER	48	Auxiliary Hydraulic Pressure Relief for Attachments	PSI (Mpa)	2509 (173)	2509 (173)
	49	Auxiliary Hydraulic Flow for Attachments	gal/min (l/min)	24.4 (92.7)	24.4 (92.7)
	50	Sound Level (with/without cab)	dB(A) LPAZ	68/67	68/67

<sup>1</sup> Measured with lowest offered height 3 Stage FFL Mast

<sup>2</sup> Back tilt is limited to 6 degrees with some mast options

<sup>3</sup> Measured with standard mast and carriage

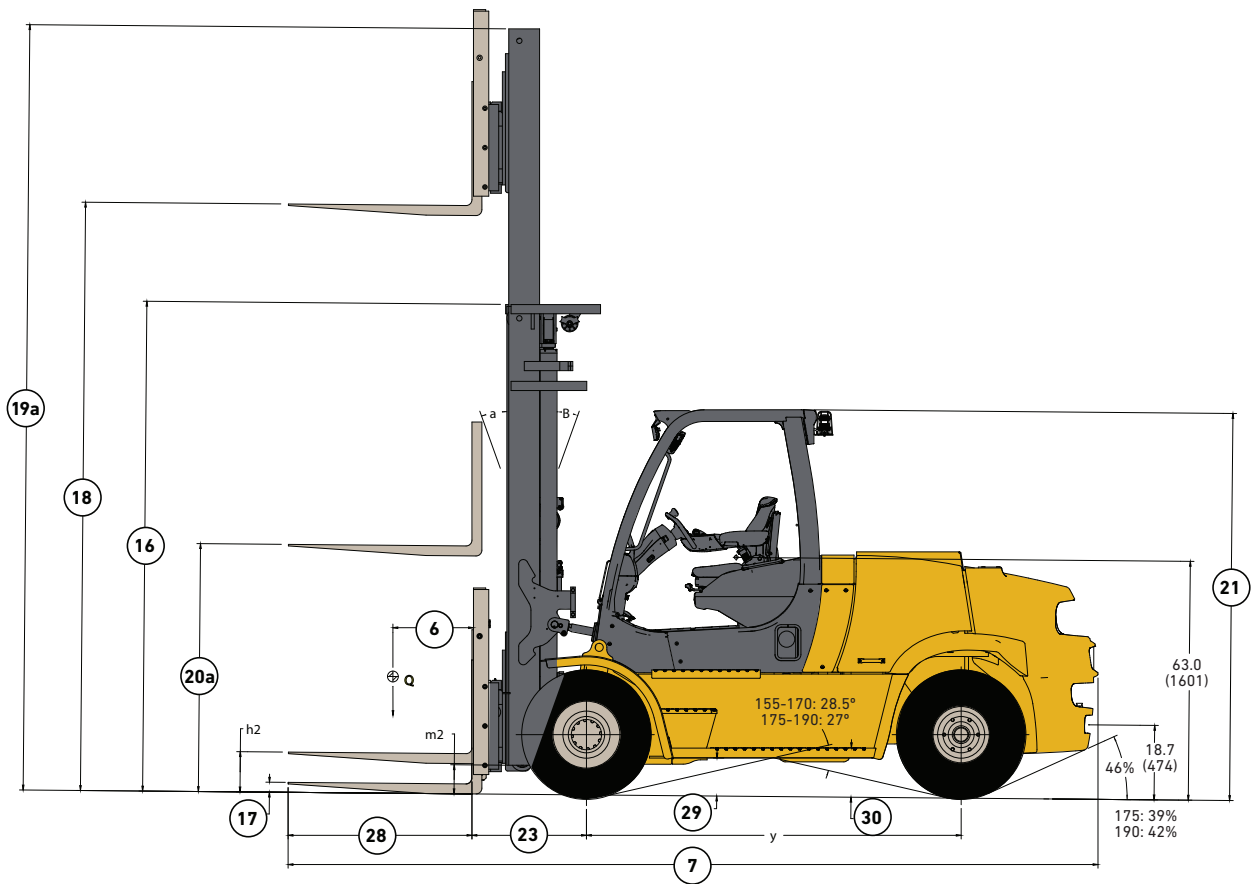
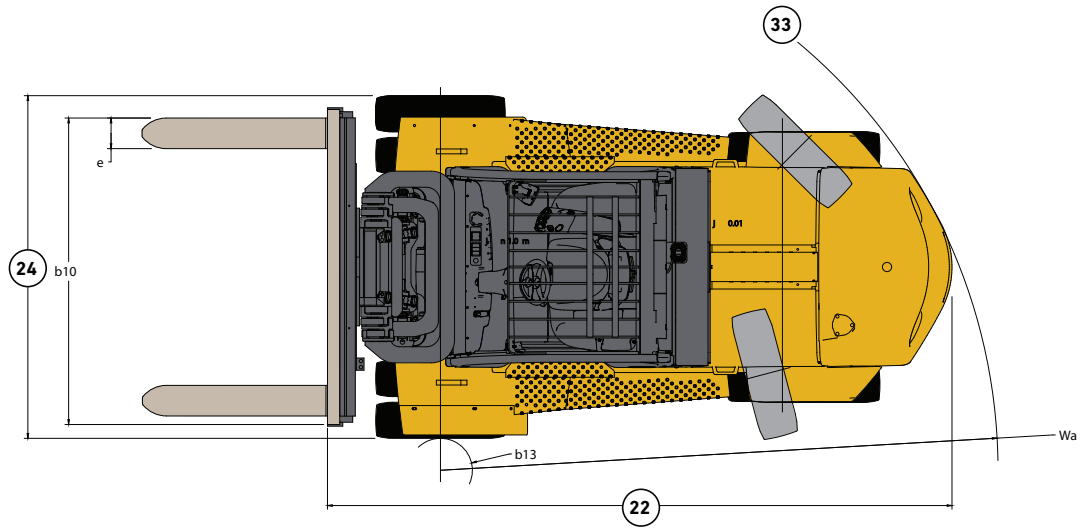
<sup>4</sup> Measured with Turn Assist System equipped. OTR without Turn Assist System is ERP155VNL: 129.3 in (3282mm); ERP170VNL: 131.8 in (3347mm)

<sup>5</sup> Measured with Turn Assist System equipped. ITR without Turn Assist System is ERP155VNL: 9.1 in (230mm); ERP170VNL: 9.1 in (230mm)

<sup>6</sup> Extended Shift Off (Max Performance)

<sup>7</sup> Nominal values

# TRUCK DIMENSIONS ERP175VNL36-190VNL



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



## GENERAL SPECIFICATIONS ERP175VNL36-190VNL

<b>GENERAL</b>	1	Manufacturer	Yale	Yale	
	2	Model	ERP175VNL	ERP190VNL	
	3	Power Type	Electric	Electric	
	4	Operator Type	Seated Rider	Seated Rider	
	5	Rated Capacity	lb (kg)	17,500 (8,000)	19,000 (9,000)
	6	Load Center, Distance	in (mm)	36 (900)	24 (600)
	7	Wheelbase	in (mm)	96.5 (2450)	96.5 (2450)
<b>WT.</b>	8	Weight, Standard Truck RL/NL	lb (kg)	44677 (20265) / 27040 (12265)	45245 (20523) / 25407 (11524)
	9	Axle Loading, Static Front/Rear NL	lb (kg)	40627 (18428) / 4048 (1836)	40654 (18440) / 4593 (2083)
	10	Axle Loading, Static Front/Rear RL	lb (kg)	11736 (5323) / 15305 (6942)	10986 (4983) / 14421 (6541)
<b>TIRES &amp; WHEELS</b>	11	Tire Type - Cushion, Solid, Pneumatic		Pneumatic	Pneumatic
	12	Tire Size, Front / Rear		8.25x15 14PR / 8.25x15 14PR	8.25x15 14PR / 8.25x15 14PR
	13	Wheels, Number - Front/Rear (X = driven)		4X/2	4X/2
	14	Track Width, Front / Rear	in (mm)	78.9 (2003) / 60.4 (1535)	78.9 (2003) / 60.4 (1535)
<b>DIMENSIONS</b>	15	Mast Tilt, Forward/Backward	degrees	5/9 <sup>2</sup>	5/9 <sup>2</sup>
	16	Height, Standard Mast - Lowered	in (mm)	106.8 (2712)	106.8 (2712)
	17	Std Free Lift Height (TOF) (Rounded Down)	in (mm)	0 (0)	0 (0)
	18	Lift Height, w/LBR (TOF) (Rounded Down)	in (mm)	121 (3065)	121 (3065)
	19a	Height, Standard Mast - Extended w/o LBR (Rounded Up)	in (mm)	166.9 (4239)	166.9 (4239)
	19b	Height, Standard Mast - Extended w/ LBR (Rounded Up)	in (mm)	171.2 (4337)	171.2 (4337)
	20a	Optional Full Free Lift w/ LBR (TOF) (Rounded Down)	in (mm)	53 (1355) <sup>1</sup>	53 (1355) <sup>1</sup>
	20b	Optional Full Free Lift w/o LBR (TOF) (Rounded Down)	in (mm)	57.5 (1461) <sup>1</sup>	57.5 (1461) <sup>1</sup>
	21a	Height, Standard Overhead Guard (High) (Rounded Up)	in (mm)	100 (2531)	100 (2531)
	21b	Height, Standard Overhead Guard (Cab) (Rounded Up)	in (mm)	101 (2549)	101 (2549)
	22	Overall Length (to Face of Forks) <sup>3</sup>	in (mm)	159 (4038)	156 (3958)
	23	Length, Center of Wheels to Face of Forks <sup>3</sup>	in (mm)	24.2 (614)	24.2 (614)
	24	Overall Width	in (mm)	88 (2239)	88 (2239)
	25	Standard Forks, Thickness x Width x Length	in (mm)	2.5 x 7.9 x 47 (65 x 200 x 1200)	2.5 x 7.9 x 47 (65 x 200 x 1200)
	26a	Standard Fork Spread, Minimum Inside Dimensions	in (mm)	3 (75)	3 (75)
	26b	Standard Fork Spread, Maximum Outside Dimensions	in (mm)	82.5 (2100)	82.5 (2100)
	27	Standard Carriage Width	in (mm)	80 (2030)	80 (2030)
	28	Ground Clearance Under Mast, RL	in (mm)	6.4 (163)	6.4 (163)
	29	Ground Clearance, Center of Wheelbase	in (mm)	10.0 (253)	10.0 (253)
	30	Step Height	in (mm)	12.6 (321)	12.6 (321)
31a	Aisle Width, Right Angle Stack (pallet w=42in, L=48in)	in (mm)	221 (5613)	218.2 (5542)	
31b	Aisle Width, Right Angle Stack (Add Length of Load)	in (mm)	173 (4394)	170.2 (4323)	
32	Equal Aisle, 90-Degree Intersecting Aisle (pallet w=42in, L=48in)	in (mm)	122.9 (3122)	121.3 (3081)	
33	Turning Radius, Minimum Outside (OTR) <sup>4</sup>	in (mm)	149 (3794)	147 (3723)	
34	Turning Radius, Minimum Inside (ITR) <sup>5</sup>	in (mm)	14.3 (362)	14.3 (362)	
<b>PERFORMANCE</b>	35	Travel Speed, RL/NL <sup>6</sup>	mph (km/h)	13 (21) / 13 (21)	13 (21) / 13 (21)
	36a	Lift Speed, Standard 2-Stage LFL RL/NL	ft / min (m/s)	62.9 (0.32) / 80.7 (0.41)	70.8 (0.36) / 90.5 (0.46)
	36b	Lift Speed, Optional 3-Stage FFL RL/NL	ft / min (m/s)	62.9 (0.32) / 80.7 (0.41)	68.8 (0.35) / 90.5 (0.46)
	37a	Lowering Speed, Standard 2-Stage LFL RL/NL	ft / min (m/s)	74.8 (0.38) / 64.9 (0.33)	64.9 (0.33) / 64.9 (0.33)
	37b	Lowering Speed, Optional 3-Stage FFL RL/NL	ft / min (m/s)	74.8 (0.38) / 64.9 (0.33)	74.8 (0.38) / 64.9 (0.33)
	38a	Drawbar Pull RL/NL, (60 Minute Rating) <sup>6</sup>	lb (kg)	11000 (48933) / 7043 (31331)	11000 (48933) / 6593 (29330)
	38b	Maximum Drawbar Pull RL/NL, (5 Minute Rating) <sup>6</sup>	lb (kg)	11112 (49430) / 7043 (31331)	(49430) / 6593 (29330)
	39a	Gradeability RL/NL, (30 Minute Rating) <sup>6</sup>	%	26 / 26	26 / 26
	39b	Maximum Gradeability RL/NL, (5 Minute Rating) <sup>6</sup>	%	26 / 26	26 / 26
	40	Service Brake - Method of Control/Operation		Foot / Hydraulic	Foot / Hydraulic
41	Park Brake - Method of Control/Operation		Hand / Mechanical	Hand / Mechanical	
<b>POWERTRAIN</b>	42	Battery Type		Integrated Li-Ion	Integrated Li-Ion
	43	Battery Voltage/Capacity <sup>7</sup>	V/Ahr	350/192	350/192
	44	Traction Motor Type		Permanent Magnet	Permanent Magnet
	45	Pump Motor Type		Permanent Magnet	Permanent Magnet
	46	Traction Motor Power (S2 60 Minute Rating)	hp (kW)	53.6 hp (40kW)	53.6 hp (40kW)
	47	Pump Motor Power (S2 60 Minute Rating)	hp (kW)	80.4 hp (60kW)	80.4 hp (60kW)
<b>OTHER</b>	48	Auxiliary Hydraulic Pressure Relief for Attachments	PSI (Mpa)	2509 (173)	2509 (173)
	49	Auxiliary Hydraulic Flow for Attachments	gal/min (l/min)	24.4 (92.7)	24.4 (92.7)
	50	Sound Level (with/without cab)	dB(A) LPAZ	68/67	68/67

<sup>1</sup> Measured with lowest offered height 3 Stage FFL Mast

<sup>2</sup> Back tilt is limited to 6 degrees with some mast options

<sup>3</sup> Measured with standard mast and carriage

<sup>4</sup> Measured with Turn Assist System equipped. OTR without Turn Assist System is ERP155VNL: 129.3 in (3282mm); ERP170VNL: 131.8 in (3347mm)

<sup>5</sup> Measured with Turn Assist System equipped. ITR without Turn Assist System is ERP155VNL: 9.1 in (230mm); ERP170VNL: 9.1 in (230mm)

<sup>6</sup> Extended Shift OFF (Max Performance)

<sup>7</sup> Nominal values

## ERP155SVNL STANDARD LIFT SPECIFICATIONS

Maximum Fork Height (TOF)	Overall Lowered Height	Overall Extended Highest w/ Load Backrest	Overall Extended Highest w/o Load Backrest	Free-Lift (TOF) w/ Load Backrest	Free-Lift (TOF) w/o Load Backrest
in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)
<b>2-STAGE LFL MAST</b>					
118 (3000)	100 (2540)	172 (4354)	166 (4195)	6 (160)	6 (160)
133 (3400)	108 (2740)	188 (4754)	181 (4595)	6 (160)	6 (160)
173 (4400)	128 (3240)	227 (5754)	221 (5595)	6 (160)	6 (160)
212 (5400)	148 (3740)	266 (6754)	260 (6595)	6 (160)	6 (160)
236 (6000)	164 (4165)	292 (7417)	277 (7040)	6 (160)	6 (160)
<b>3-STAGE LFL MAST</b>					
185 (4700)	102 (2570)	239 (6054)	230 (5830)	47 (1216)	56 (1440)
220 (5600)	113 (2870)	274 (6954)	265 (6730)	59 (1516)	68 (1740)
244 (6200)	123 (3120)	298 (7554)	289 (7330)	69 (1766)	78 (1990)

## ERP170SVNL, ERP175VNL36 & ERP190VNL STANDARD LIFT SPECIFICATIONS

Maximum Fork Height (TOF)	Overall Lowered Height	Overall Extended Highest w/ Load Backrest	Overall Extended Highest w/o Load Backrest	Free-Lift (TOF) w/ Load Backrest	Free-Lift (TOF) w/o Load Backrest
in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)
<b>2-STAGE LFL MAST</b>					
121 (3065)	107 (2715)	171 (4347)	167 (4239)	0 (0)	0 (0)
140 (3565)	117 (2965)	191 (4847)	187 (4739)	0 (0)	0 (0)
179 (4565)	137 (3465)	230.2 (5847)	226 (5739)	0 (0)	0 (0)
219 (5565)	156 (3965)	267 (6847)	265 (6739)	0 (0)	0 (0)
238 (6065)	166 (4215)	289 (7347)	285 (7239)	0 (0)	0 (0)
<b>3-STAGE LFL MAST</b>					
181 (4615)	107 (2705)	232 (5897)	228 (5791)	56 (1420)	60 (1526)
217 (5515)	118 (3005)	268 (6797)	263 (6691)	68 (1720)	72 (1826)
234 (5965)	125 (3115)	285 (7247)	281 (7141)	74 (1870)	78 (1976)
258 (6565)	132 (3355)	309 (7847)	305 (7741)	82 (2070)	86 (2176)

## OPTIONS LIST

### STANDARD EQUIPMENT

350 Volt integrated lithium-ion battery with battery management system

Permanent Magnet AC traction and pump motors

High voltage traction and pump motor controllers

Liquid cooling system for motors and controllers

Oil-cooled wet disc brakes

Turn Assist System (155 and 170 models only)

Seat side directional control

#### Mast:

2-Stage mast with maximum fork height of 118" (3000 mm) – (155 Only)

2-Stage mast with maximum fork height of 121" (3065 mm) – (170, 175, 190)

#### Carriage:

78" (1981 mm) wide hook-type carriage with 48" (1219 mm) tall load backrest extension – (155 Only)

80" (2030 mm) wide hook-type carriage with 48" (1219 mm) tall load backrest extension – (170, 175, 190)

47" (1200 mm) long hook type standard taper forks

#### Tilt:

5° forward / 10° backward mast tilt – (155 Only)

5° forward / 9° backward mast tilt – (170, 175, 190)

3 Function (1 Aux.) hydraulic valve for non-clamping attachments

#### Multifunction display:

LCD backlit screen

Battery state of charge indicator with lift interrupt

Four operator selectable, programmable performance modes

System status indicator icons & digital clock

Fault indicator (audible & visible)

Hour meters – traction motor, hydraulic pump motor, and truck

Single brake pedal

Air suspension vinyl seat w/ black seat belt

Electronic horn

Adjustable steer column

12" Steering Wheel with Wheel Spinner Knob

Rubber floor mat

Accutouch mini-levers with fully adjustable armrest

Seat side power disconnect button

100" (2531mm) Tall Overhead Guard

Dual Drive Tires, Pneumatic 8.25 X 15-14PR

Steer Tires, Pneumatic 8.25 X 15-14PR

Auto deceleration system with regenerative motor braking

Traction speed limiting

Operator Presence System (OPS)

Keyswitch Start

Mechanical park brake

Fully integrated CANbus communication

Operating Manual

### OPTIONAL EQUIPMENT

#### Full steel cab, including the following:

Front and rear wiper

Full light package

Integral heater

Removable doors

Operator dome light

Fan

Hydraulic accumulator

Keyless start (with auxiliary key switch)

Foot Direction Control pedal

Return to set tilt

Rear drive handle with horn button

Air suspension cloth seat

Hi-visibility seat belt with or without interlock

Impact monitoring with shutdown

Load weight display

Operator pre-shift check list

Operator password protection

Audible reverse alarm

Overhead guard mounted amber LED strobe light

LED work light package

Brake / tail / backup light package

Multiple mast height options

5° forward / 6° backward mast tilt

4 Function (2 Aux.) hydraulic valve

Multiple drive and steer tire options

Hydraulic clamping function

Attachment extension tubes

Hang-on side shift – (155 Only)

Hang-on side shift fork positioner – (155 Only)

Integral side shift

Integral side shift fork positioner – (170, 175, 190)

Multiple fork types and lengths

Dual side view mirrors

Fire extinguisher

Steering wheel without spinner knob

Telemetry system (3 levels)

Rear View Display (155 and 170 Only)

# About Yale®



Yale Materials Handling Corporation is one of the oldest manufacturers of lift trucks in the world. We've been in the business of lifting since 1875 and we apply that experience to help customers solve materials handling challenges. Our full line of lift trucks range in capacity from 2,000 to 36,000 pounds and are powered by internal combustion engines or electric options. Yale also offers robotic solutions, telemetry, fleet management, parts, financing and training. From traditional lift truck equipment to emerging technologies, our goal, every day, is to work with our nationwide dealer network to continually improve and provide the solutions you need, when and how you need them.

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