Standard & Option

		Details	25BC-9U	30BC-9U	32BC-9U
OPERATION ROOM	OHG	Standard Over head guard (Height : 88.2 Inch)	●	●	●
		Low Over head guard (Height : 85.2 Inch)	○	○	○
	Seat	Grammer, OPSS, Orange Belt, S/S(Seat Switch), B/S(Buckle Switch), Vinyl	○	○	○
		Grammer, OPSS, Orange Belt, S/S, B/S, Arm Rest, Vinyl	●	●	●
		Grammer, OPSS, Orange Belt, S/S, B/S, Arm Rest(LH), Vinyl	○	○	○
		Non-susp., OPSS, Orange Belt, S/S, B/S, Vinyl	○	○	○
		Seatbelt Interlock	○	○	○
	Others	Rear Horn	○	○	○
		Switch Knob with Direction & Horn Switch	○	○	○
MAST & ATTACHMENTS	Mast	3 Stage Mast - Single Full Free TF - Standard : 185 Inch	●	●	●
		2 Stage Mast - Standard V - Options : 82 / 118 / 130 / 138 / 146 / 157 / 177 Inch	○	○	○
		3 Stage Mast - Single Full Free TF - Options : 169 / 177 / 197 / 217 / 236 / 256 / 276 Inch	○	○	○
		4 Stage Mast - Single Full Free QF - Options : 240 / 276 Inch	○	○	○
	Fork	Length - 41 Inch	●	●	●
		Length -2.0ton: 35 / 39 / 42 / 47 / 53 / 59 / 65 / 71 / 83 Inch -3.0 / 3.2ton: 35 / 41 / 45 / 47 / 53 / 59 / 65 / 71 / 78 / 83 / 91 Inch	○	○	○
	Carriage	Standard Hook	●	●	●
		Integral Sideshift	○	○	○
	Tilting	Front 6° / Back 8°	○	○	○
		Front 6° / Back 5°	●	●	●
		Front 3° / Back 3°	○	○	○
		Bottler's Tilt (Front 10° / Back 6°)	○	○	○
	Attachment	Side Shift	○	○	○
		Side Shift with Fork Positioner	○	○	○
	Others	Auto Tilt	○	○	○
		Manual : Clamp Interlock (3SP / 4SP) Fingertip : Clamp Interlock 4SP Only	○	○	○
		Load Sensor	●	●	●

		Details	25BC-9U	30BC-9U	32BC-9U
BATTERY	Battery & Charger	Lead Aicd	●	●	●
		Li-Ion	○	○	○
	Frame Type	Standard - Battery Removable In Only An Upward Direction	●	●	●
		Option - Battery Removable In Both Upward & Side Diretions	○	○	○
HYDARULIC	MCV & Piping	3 Spool MCV	●	●	●
		4 Spool MCV	○	○	○
		Mast Option Spool for All MCVs & Masts (V / TF / QF)	○	○	○
	Lever	Lever - General	●	●	●
		Lever - Fingertip	○	○	○
	Hyd. oil	VG 46 Oil	●	●	●
		VG 68 Oil for Tropical Area	○	○	○
		VG 15 Oil for Cold Area	○	○	○
TIRE	Tires	Cushion Tire (Lug Pattern)	●	●	●
		Cushion Tire (Smooth Pattern)	○	○	○
		Non Marking Tire (Lug Pattern)	○	○	○
		Non Marking Tire (Smooth Pattern)	○	○	○
VISIBILITY	Lamp	Front LED Lamp	●	●	●
		Front & Rear LED Lamp	○	○	○
		Turn signal / Combination lamp	○	○	○
	Safety Special Lamp	LED Beacon Lamp	○	○	○
		Redzone	○	○	○
		Blue Spot (Rear or Front Only)	○	○	○
		Redzone + Blue Spot (Rear)	○	○	○
		Redzone + Blue Spot (Front)	○	○	○
		Blue Spot (Front + Rear)	○	○	○
		Redzone + Blue Spot (Front + Rear)	○	○	○
TELEMATIC SERVICE	Telematics	Hi MATE (Basic)	○	○	○
		Hi MATE (Premium)	○	○	○

● STD / ○ OPT

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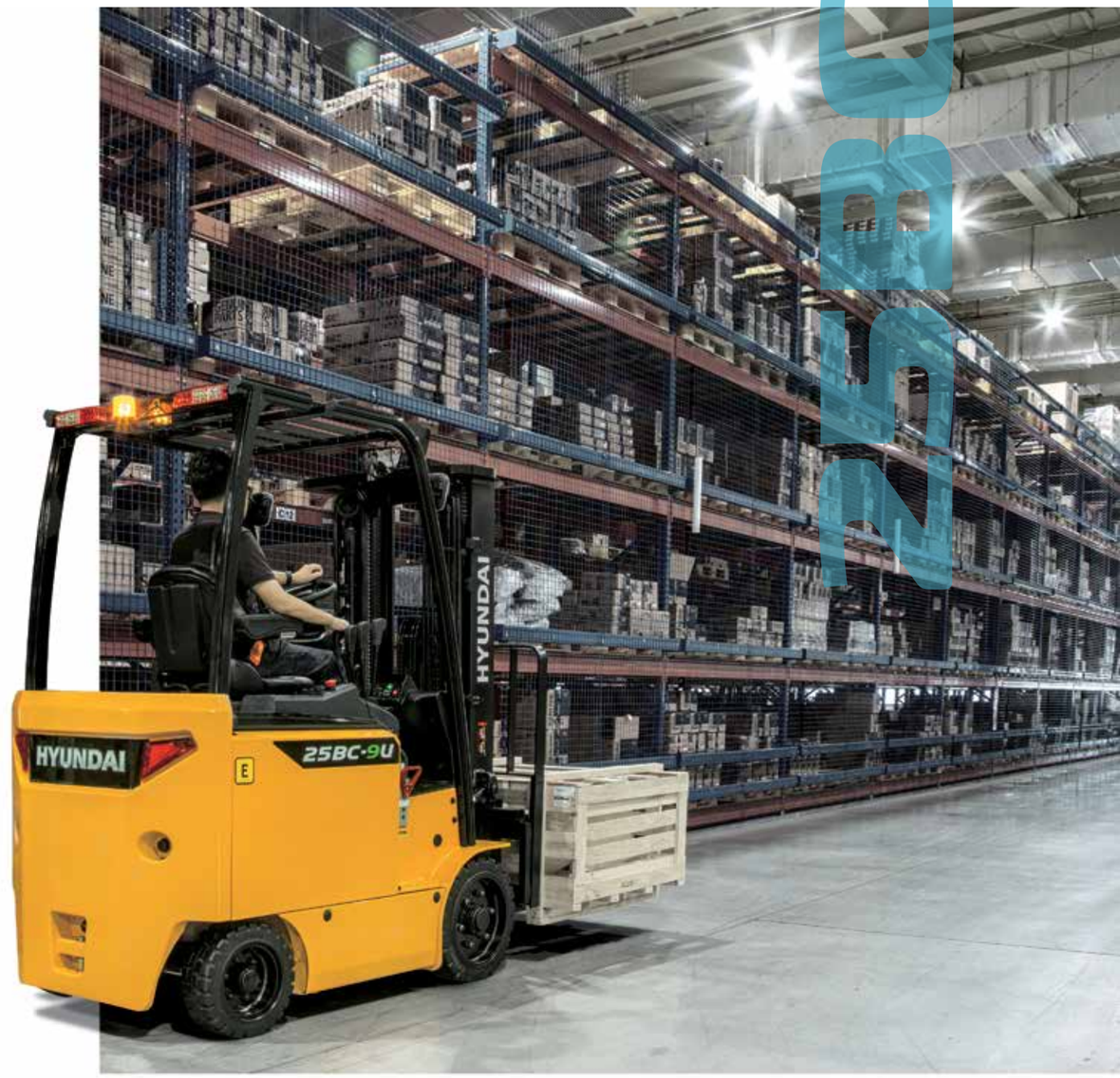
25/30 32BC-9U

9 Series Battery Forklift Truck



HYUNDAI BC-9U Series, a game changer that perfectly satisfied on-site needs in the electric vehicle market

The upgraded BC-9U series, equipped with a lithium-ion battery that reflects the VOC of the user site and market trends, continues to impress customers with its compatibility, high level of TCO implementation, reliability, and improved driving convenience.

PRODUCT FEATURES
OVERVIEW

ALL YOU NEED IS, BC-9U

Release of the BC-9U series, an icon of innovation

- The BC-9U series has a New controller, Drive axle and optimized working performance

16%

16% Energy efficiency by compared with BC-9

- Decrease in turning radius through reduction in counter weight volume and rear overhang

4.4"

4.4" Reduced (30BC-9U)

Outstanding Productivity

- Enhanced energy efficiency by 16%
- Compatibility with local lithium-ion battery
- Outstanding reliability and durability
  –New Drive axle & Wet Disc Brake
- Minimum turning radius decreased by 4.4" (30BC-9U)
- CURTIS controller with optimized electric current control algorithm
- Optimized mast working speed : 6% increased

Improved Convenience

- Leg room space increased 30mm (floor Plate to SIP)
- Improved response time and fine-tuning control of fingertip Option
- A new cluster with superior visibility that can be manipulated
- Noise in the driver's seat is reduced by 6.7dB
- Full suspension seat – Grammer
- Steer Handle – Reduction in operating force and noise, improvement in lock-up occurrence

Maximized Safety

- Speed limit can be set
- Seat belt interlock– Forced belt wearing Option
- Operator presence sensing system(OPSS)
- Safety warning lamp – Beacon lamp, Blue spot, Red zone Option
- Over load operating warning
  – Load sensing system Option
- Clamp interlock Option
- Password setting– Startup restriction

Economical follow up management

- Controller with high reliability and self-diagnosis capability
- Battery bottom cover – Protect from battery acid
- Front & Side adjustable battery stopper
- Controller mounted on the frame's RH side
  – Improved Accessibility
- Easy rear tire change
- Hi MATE– Remote control system Option

Outstanding Productivity

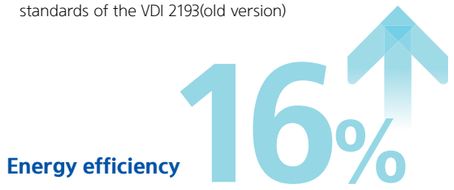
Productivity is increased with optimized vehicle performance

With enhanced lithium-ion battery mounting compatibility, significantly improved energy efficiency and mast performance function, and reduced working radius, the BC-9U has been upgraded focusing on the TCO.

Energy consumption levels that are quite revolutionary

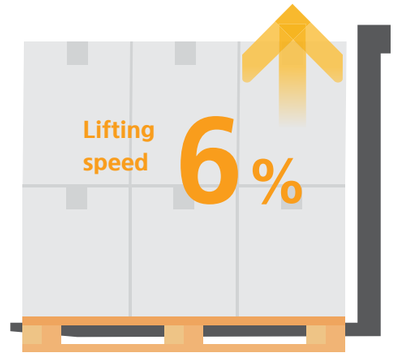
As the result of the optimized algorithm for controlling the current value input to the motor, the application of the new controller the optimization of the maximum travel speed, and the improvement of mast working speed and energy efficiency has been enhanced by 16% compared to that of the BC-9.

* Energy consumption is based on the test standards of the VDI 2193(old version)



Optimized mast working speed

The mast lifting speed has increased by 6% through the optimization of current parameter.



At loaded & unloaded

New Drive axle & Wet Disc Brake

The low-noise reducer, wheel hub bearing with axle oil lubrication method, and drive axle composed of service brake with wet disc method all offer superb operational efficiency and utilization rate.

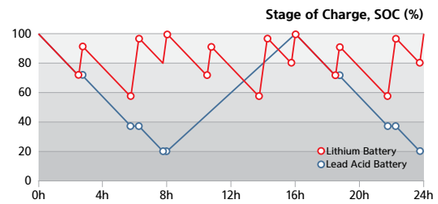
Reduced turning radius

CWT volume has been reduced through relocation of the controller to the frame RH side and redesigning of counter weight's exterior profile. As a result, the rear overhang and turning radius has decreased.

4.4" Reduced (30BC-9U)

Li-ion Battery Option

The demand for Li-ion batteries is increasing due to their high energy conversion efficiency and fast charging capability within the 2-hour range.
(Li-ion Battery Capacity : 51.2V/690Ah)



• Graph comparing the charge and discharge

Curtis controller

The forklift uses a controller made by Curtis that has a controller cooling system with a large aluminum heat sink. This cooling system has excellent reliability and its safety and reliability have already been proven in the Korean market(applied 25B-X Series).

Improved Convenience

A working environment that meets the comfort needs of the operator

A satisfied vehicle operator translates to higher productivity. The upgraded operator room and the numerous functions developed with the operator's comforts in mind allow the operator to work more efficiently and comfortably.

Legroom space increased

The gap between the seat and the floor plate has been increased by 1.2" by lowering the height of the floor plate for the driver's leg space and operational convenience.

Improved response time of finger tip Option

The response time (within 0.1 s) and fine-tuning capability of fingertip are improved,

Multifunction digital cluster

The driver is able to check the operation conditions in real time on the multifunction digital cluster designed to ensure the visibility of major information during operation. In addition, various additional functions are embedded in the cluster for safe and convenient equipment management.

25/30 32BC-9U

Steer Handle

The diameter is reduced by 1.6" to ensure operation convenience and reduce the driver's fatigue. Furthermore, an optimal turning function prevents jamming, heavy feeling, and noise resulting from sudden handling.

Full-suspension seat– Grammer

The full suspension seat of Grammer of Germany has an adjustable cushion depending on the weight of the driver, and convenience specifications such as seat belt switch, arm rests, and heater are optional.

Knob on Switch & Horn Option

Forward/Reverse direction switching button and horn switch are mounted on the side of the lift lever to improve rapid traveling direction switching and response to emergency situation and reduce the driver's fatigue accordingly.

Maximized Safety

Minimized risks of accidents

Above all else, the likelihood of accidents on the field is fundamentally eliminated through scientific vehicle body design that thinks of safety first and diverse and active safety specifications.

Overload operation warning – Load sensing system Option

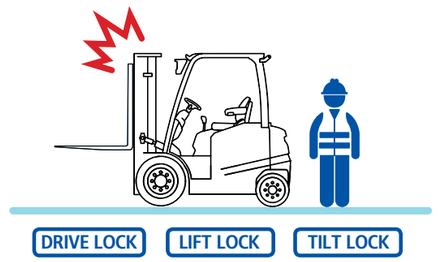
Cargo weight measurement function configured with pressure sensor of lift line and cluster program provides real-time indication of weight of lifted cargo and prompts a warning on the cluster in case of overloading to remind the operator of safety.

Speed limit

Maximum travel speed of the equipment may be set to meet the safety speed of the site through a multifunctional monitor, and safety accidents caused by overspeed may be prevented. Even when maximum speed is limited, gradeability and lifting performance are maintained at top levels.

Operator presence sensing system

The OPSS restricts driving, lifting, and tilting in when the operator leaves the driver's seat in order to prevent safety accidents.



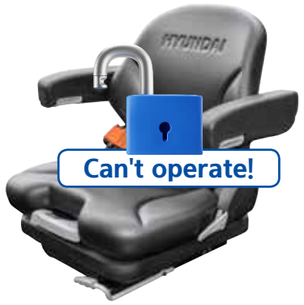
Clamp interlock Option

This feature prevents cargo from falling when the clamp is released unintentionally while transporting cargo using a clamp.

* Clamping & Releasing Method
  - Manual Lever : Use switch and lever simultaneously
  - Fingertip Lever : Use lever within two seconds of pressing the interlock enable switch

Seat belt interlock– forced belt wearing Option

The seat belt interlock system, which restricts forklift operation when the seat belt–wearing order is not observed or the operator releases the belt while driving, prevents operator injury from safety accidents that may occur when the seat belt is not fastened.safety accidents.



LED work lamps and safety warning lamp

Bright and long-life LED lamps are applied to the front/rear work lamps and direction indicators. Moreover, beacon lamp, blue spots, and red zone lamps are optional for the notification of motion of the forklift to the surrounding workers.

Economical follow-up management

Efficient maintenance with the best price to performance ratio

Innovative energy consumption and equipment operation rate reflecting customers' need are enhanced with higher system reliability and convenient, economical follow-up management.

Management of Controller

As the core component of an electric forklift, the controller is vertically installed inside the RH side frame for convenient follow-up management. Wide inspection space is provided when opening the RH side cover of the frame.

Battery bottom cover

A battery bottom cover has been attached in order to prevent the battery acid from flowing into the hydraulic hose and cables located in the lower frame during battery maintenance.

Battery stopper

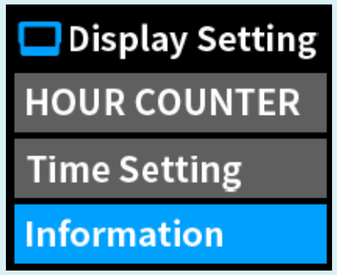
To prevent battery movement during operation after installing a local battery with different specifications from the standard battery and compartment size, an adjustable battery stopper has been applied.

Easy rear tire change

The hub and steering wheel of the steering axle are composed independently, making it very easy to replace the wheel. The steering wheel can be easily removed by unfastening the six wheel fixing nuts.

Power system failure self-diagnosis function

The Curtis controller's malfunction self-diagnosis function enables the operator to check the malfunctions of the controller and key electrical/electronic equipment that run the motor. Self-diagnosis and equipment performance modifications can be performed using the cluster without the need for separate specialized equipment.



Hi-MATE Option

Forklift operation and status, safety, and human resources can be remotely managed using the on-site management solution Hi-MATE. The accumulated data can be used for devising a forklift operation plan.

Hi-MATE, a solution for field control based on data

Data collected at the sensors and modules mounted on equipment during the operation of forklift truck at the operation control system of Hyundai Industrial Vehicle is provided to the mobile device or computer of the customer in real time through the server of Hyundai Construction Equipment. Such visual data can be used for establishing a control plan for safety control in fields, productivity improvement, and cost saving.

Equipment operation management

* Real-time monitoring and follow-up management of individual vehicles, drivers, equipment on-site, and operation information

- Key-on time, travel hours, work hours, and traveling position

Equipment status management

* Supplying information of the forklift truck linked with operation hours, establishing a follow-up management plan

- Indicating fuel remainder, failure information
- Indicating consumable exchange timing, service timing

Safe traveling control

* Checking and follow-up management of safety accident caused by collision between the field system and forklift truck during operation

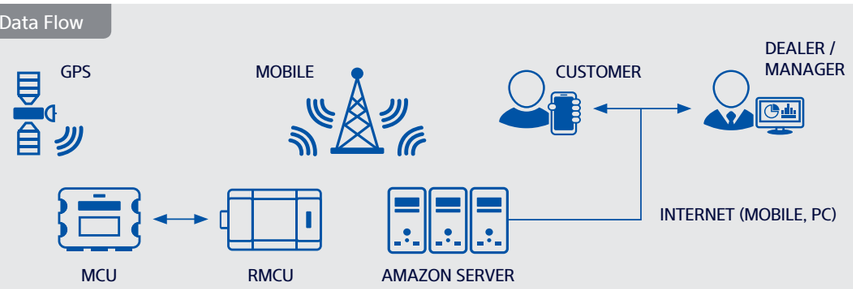
- Count of collision, size of impact

Human resource management

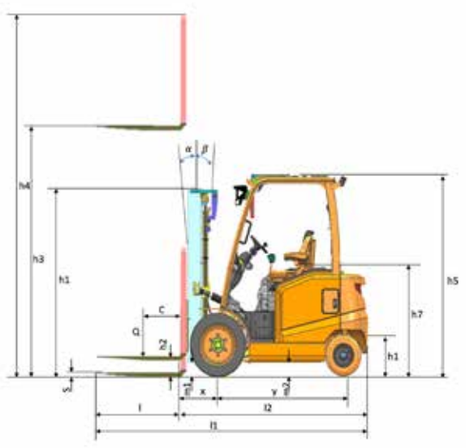
* Checking and follow-up management such as matching between self-diagnosis and equipment conditions before operation

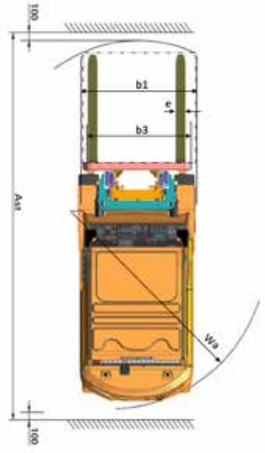
- Driver authorization, self-diagnosis of equipment conditions

Data Flow



Dimension





Specification

Identification					
1.1	Manufacturer		Hyundai		
1.2	Manufacturer's type designation		25BC-9U	30BC-9U	32BC-9U
1.3	Drive: electric (battery or mains),diesel,petrol,fuel gas,manual		Electric	Electric	Electric
1.4	Type of operation:hand,pedestrian,standing,seated,order-picker		seated	seated	seated
1.5	Load capacity / rated load	lb	5,500	6,500	7,000
1.6	Load center distance	in	24	24	24
1.8	Load distance, center of front axle to fork	in	18	18	18
1.9	Wheelbase	in	52	55	55
Weights					
2.1	Service Weight	lb	9,824	10,913	11,413
2.2	Axle Loading, Loaded Front/Rear	lb	13,457/1,878	15,424/2,110	16,096/15,600
2.3	Axle Loading, Unloaded Front/Rear	lb	3,975/5,847	4,284/6,636	4,213/7,198
Wheels, Chassis					
3.1	Tires:solid rubber(V), superelastic(SE), pneumatic(P), polyurethane(PE)		V	V	V
3.2	Tires size, front(Φ x width)		21x7x15	21x8x15	21x8x15
3.3	Tires size, rear(Φ x width)		16x6x10.5	16x6x10.5	16x6x10.5
3.5	Wheels, number front rear (x=driven wheels)		2x/2	2x/2	2x/2
3.6	Track width, front	b10 (in)	36	36	36
3.7	Track width, rear	b11 (in)	36	36	36
Basic Dimensions					
4.1	Mast/fork carriage tilt forward/backward	Degrees	6/8	6/8	6/8
4.2	Lowered mast height	H1 (in)	84	84	87
4.3	Free lift	H2 (in)	4.5	4.5	4.5
4.4	Lift height	H3 (in)	130	130	130
4.5	Extended mast height	H4 (in)	177	177	177
4.7	Overhead load guard (cab) height	H5 (in)	88	88	88
4.8	Seat height/ standing height	H7 (in)	51.2	51.2	51.2
4.12	Coupling height	H10 (in)	9	9	9
4.19	Overall length	I1 (in)	127	130	131
4.20	Length to face of forks	L2 (in)	85	89	90
4.21	Overall width	b1 (in)	44	44	44
4.22	Fork dimensions	s x e x l (in)	1.8x3.9x41.3	1.8x4.8x41.3	1.8x4.8x41.3
4.23	Fork carriage ISO 2328, class/type A,B		II/A	III/A	III/A
4.24	Fork-carriage width(with backrest)	b3 (in)	41	41	41
4.31	Ground clearance, under mast	m1 (in)	3.5	3.5	3.5
4.32	Ground clearance, centre of wheelbase	m2 (in)	4.2	4.2	4.2
4.33	Aisle width for pallets 1000x1200 crossways	Ast (in)	140	143	144
4.34	Aisle width for pallets 800x1200 lengthways	Ast (in)	147	151	152
4.35	Turning radius	Wa (in)	75	78	79
4.36	Smallest pivot point distance	b13 (in)	22.9	23.3	23.3
Performance Data					
5.1	Travel speed, loaded/ unloaded(36V)	mph	6.8/7.5	6.8/7.5	6.8/7.5
5.1	Travel speed, loaded/ unloaded(48V)	mph	9.3/10.6	9.3/10.6	9.3/10.6
5.2	Lift speed, loaded/ unloaded(36V)	ft/min	60.6/90.2	50.2/73.8	48.8/73.8
5.2	Lift speed, loaded/ unloaded(48V)	ft/min	84.6/126	70.9/104.3	70.9/104.3
5.3	Lowering speed, loaded/unloaded	ft/min	98.4/88.6	98.4/88.6	98.4/88.6
5.6	Max. drawbar pull, loaded/ unloaded S2 5min	lb	3,282/-	3,254/-	3,243/-
5.8	Max. gradient performance, loaded/ unloaded S2 5min	%	19.6/-	17.2/-	16/-
5.10	Service Brake		hydr.	hydr.	hydr.
Motor / Battery					
6.1	Drive Motor (S2-60min)	kW	14	14	14
6.2	Pump Motor (S3-15%)	kW	17	17	17
6.4	Battery Voltage, Nominal Capacity K5(Option)	V/Ah	48/740	48/845	48/845
6.5	Battery Weight	lb	2,601	3,108	3,108
	Battery compartment dimensions l/w/h	in	39.2 x 30.8 x 23.8	39.2 x 34.8 x 23.8	39.2 x 34.8 x 23.8
6.6	Energy consumption acc. to VDI cycle	KWh/h	7.3	8.2	8.6
Other Details					
8.1	Type Of Drive Control		AC	AC	AC
8.2	Operating Pressure, System / Attachments	psi	3,045/1,885	3,045/1,885	3,045/1,885
8.3	Oil Volume For Attachments	lpm(gpm)	45(12)	45(12)	45(12)

25BC-9U

Mast Type		Maximum Fork Height	Overall Height (Lowered)	Free Lift Height		Mast Tilt		Load capacity without Sideshift	Load capacity with Sideshift	Truck Weight (Unloaded)
				With Load Backrest	Without Load Backrest	Fwd	Bwd	24in LC	24in LC	
		in	in	in	in	deg	deg	lb	lb	lb
2 Stage Limited Free Lift	V209	82	60	4.5	4.5	10	6	5,000	5,000	9,620
	V300	118	79	4.5	4.5	6	8	5,000	5,000	9,770
	V330	130	84	4.5	4.5	6	8	5,000	4,960	9,820
	V350	138	88	4.5	4.5	6	8	5,000	4,910	9,870
	V370	146	94	4.5	4.5	6	8	5,000	4,820	9,910
	V400	157	100	4.5	4.5	6	8	5,000	4,710	9,980
	V450	177	112	4.5	4.5	6	5	4,870	4,540	10,240
3 Stage Full Free Lift	TF430	169	78	32	54	6	5	4,890	4,560	10,280
	TF450	177	82	36	58	6	5	4,820	4,490	10,330
	TF470	185	84	38	60	6	5	4,760	4,430	10,360
	TF500	197	88	42	64	6	5	4,650	4,320	10,420
	TF550	217	96	49	72	6	5	4,490	4,180	10,530
	TF600	236	104	57	80	6	5	3,150	2,910	10,720
	TF650	256	112	65	84	3	3	2,550	2,330	10,840
	TF700	276	119	73	91	3	3	2,130	1,940	10,950
4 Stage Full Free Lift	QF610	240	83	37	60	3	3	3,320	3,080	11,230
	QF700	276	95	49	71	3	3	2,570	2,350	11,460

30BC-9U

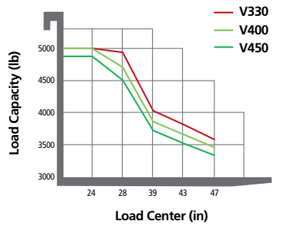
Mast Type		Maximum Fork Height	Overall Height (Lowered)	Free Lift Height		Mast Tilt		Load capacity without Sideshift	Load capacity with Sideshift	Truck Weight (Unloaded)
				With Load Backrest	Without Load Backrest	Fwd	Bwd	24in LC	24in LC	
		in	in	in	in	deg	deg	lb	lb	lb
2 Stage Limited Free Lift	V209	82	60	4.5	4.5	10	6	6,000	6,000	10,710
	V300	118	79	4.5	4.5	6	8	6,000	6,000	10,860
	V330	130	84	4.5	4.5	6	8	6,000	5,970	10,910
	V350	138	88	4.5	4.5	6	8	6,000	5,880	10,960
	V370	146	94	4.5	4.5	6	8	6,000	5,820	11,010
	V400	157	100	4.5	4.5	6	8	6,000	5,680	11,080
	V450	177	112	4.5	4.5	6	5	5,900	5,460	11,350
3 Stage Full Free Lift	TF430	169	78	32	52	6	5	5,930	5,480	11,350
	TF450	177	82	36	56	6	5	5,840	5,400	11,410
	TF470	185	84	38	58	6	5	5,770	5,330	11,440
	TF500	197	88	42	62	6	5	5,660	5,240	11,490
	TF550	217	96	49	69	6	5	5,460	5,040	11,600
	TF600	236	104	57	77	6	5	3,940	3,610	11,790
	TF650	256	112	65	81	3	3	3,210	2,930	11,910
	TF700	276	119	73	89	3	3	2,840	2,570	12,030
4 Stage Full Free Lift	QF610	240	83	37	57	3	3	3,460	3,150	12,290
	QF700	276	95	49	69	3	3	2,680	2,420	12,520

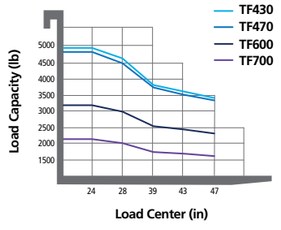
32BC-9U

Mast Type		Maximum Fork Height	Overall Height (Lowered)	Free Lift Height		Mast Tilt		Load capacity without Sideshift	Load capacity with Sideshift	Truck Weight (Unloaded)
				With Load Backrest	Without Load Backrest	Fwd	Bwd	24in LC	24in LC	
		in	in	in	in	deg	deg	lb	lb	lb
2 Stage Limited Free Lift	V300	118	79	4.5	4.5	6	8	6,500	6,500	11,350
	V330	130	87	4.5	4.5	6	8	6,500	6,450	11,410
	V350	138	91	4.5	4.5	6	8	6,500	6,410	11,450
	V370	146	97	4.5	4.5	6	8	6,500	6,340	11,500
	V400	157	103	4.5	4.5	6	8	6,500	6,230	11,570
	V450	177	114	4.5	4.5	6	5	6,450	5,970	11,820
3 Stage Full Free Lift	TF430	169	81	34	52	6	5	6,410	5,950	11,920
	TF450	177	85	38	56	6	5	6,300	5,840	11,970
	TF470	185	87	40	58	6	5	6,230	5,770	12,010
	TF500	197	91	44	62	6	5	6,100	5,660	12,060
	TF550	217	99	52	70	6	5	5,900	5,460	12,080
	TF600	236	106	60	78	6	5	4,270	3,920	12,390
	TF650	256	114	68	86	3	3	3,500	3,190	12,510
	TF700	276	122	76	94	3	3	3,060	2,770	12,630
4 Stage Full Free Lift	QF610	240	85	39	57	3	3	3,790	3,460	12,810
	QF700	276	97	51	69	3	3	2,950	2,680	13,040

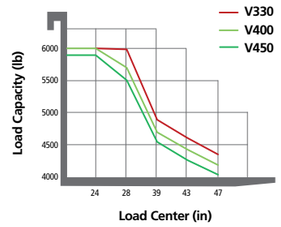
Load Capacity

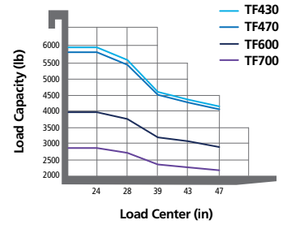
25BC-9U





30BC-9U





32BC-9U