



MOVING YOU FURTHER

**25·30·32
35B-9U**

Some of the photos may include optional equipment.



Your satisfaction is our priority.

Proven AC technology! Hyundai 9 Series battery forklift

An upgrade of the Hyundai 9 Series counterbalance electric forklift,

a new model of B-9U Series is ready for the customers.

This new model will bring customer added value to the next level

by dramatically improving energy costs and enhancing powertrain durability.

Work efficiency & productivity

- 32% increase in energy efficiency with EHPS (Electro Hydraulic Power Steering) system application
- Powerful and precise driving performance of a dual drive motor
- Vehicle performance optimized for working conditions
- Directional & horn switch on lever (OPT)

Durability & reliability

- Stiffer drive unit input shaft
- Dual micom with improved data processing reliability : ZAPI Controller
- Semipermanent Oil Cooled Disc Brake
- IP43 Motor & IP65 Controller

Safety

- Automatic deceleration in travel speed when turning (at curve)
- Prevention of rear roll back when restarting after ramp stop
- Maximum driving speed setting
- Operator presence sensing system (OPSS)

Easy management

- Self-diagnosis of electric system failure
- Durable Continental solid tire
- Brake fluid level sensing system





Power & Performance

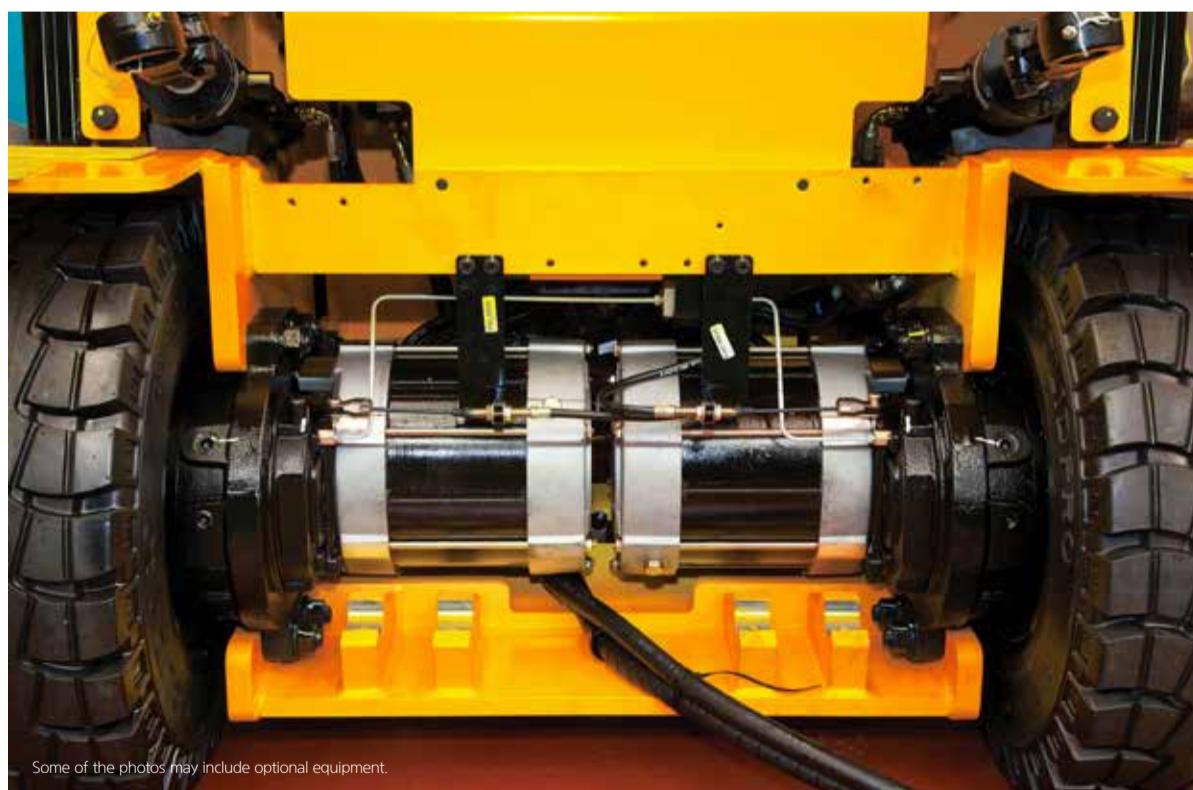
High Efficiency & Optimal Performance

An efficient, smooth running and compact design provides enhanced performance and outstanding productivity.



Strong driving power : Dual drive motor system

The dual drive motor system consists of two separately controlled drive motors. Unlike the single drive motor system, it prevents the wheels from spinning even when the grip force of the left and right wheels is different. In addition, it enables strong drive performance even on a contaminated road. As the pivot point is the axle of the wheels, the dual system enables relatively small turning radius compared to the single system, thus improving efficiency in small worksites.



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Improvement in energy consumption

EHPS (Electro Hydraulic Power Steering) system only functions when the driver operates the steering handle and significantly reduces the energy consumption rate because unlike the existing hydraulic power steering (HPS) system, it does not have a standby mode or a priority valve for supplying hydraulic power to the steering line. Moreover, the hydraulic pump noise generated from the steering standby mode of the HPS system has been completely eliminated.

Previous model (25B-9) : **185 minutes (100%)**

Upgraded model (25B-9U) : **246 minutes (132%)**

* The figures above are based on Hyundai's test results for a single charge cycle and may differ from actual working conditions.



EHPS (Electro Hydraulic Power Steering)

Equipped with both the energy efficiency of the electric power steering system and the stability of the hydraulic power steering system, the EHPS system is composed of a torque sensor, controller, motor, hydraulic pump, and steering cylinder, and operates efficiently with little energy.



Dual MiCOM ZAPI controller

With a dual micom on the inside, ZAPI's new AC controller safely controls the forklift by processing signals and faults via a two-way method, and is protected from moisture and other pollutants as IP65. Also, the drive controller capacity is optimized and a left and right split structure is adopted to reduce energy consumption.



Robust and economical AC motor

The enclosed drive and pump motor with AC technology combine power, high maintenance intervals and excellent durability. The brushless AC motors offer improved efficiency and reduction maintenance cost. It is certified IP43.



Wet disc brake

The semi-permanent brake improves work efficiency by providing consistent braking force without overheating despite lengthy. Maintenance costs are lower without brake linings that need regular replacement.



Optimized operation mode setting

Through the cluster and ZAPI controller function, optimal performance mode – H (High), N (Normal), E (Economic) – can be selected based on working conditions, worksite size and operator's proficiency.



Turtle mode

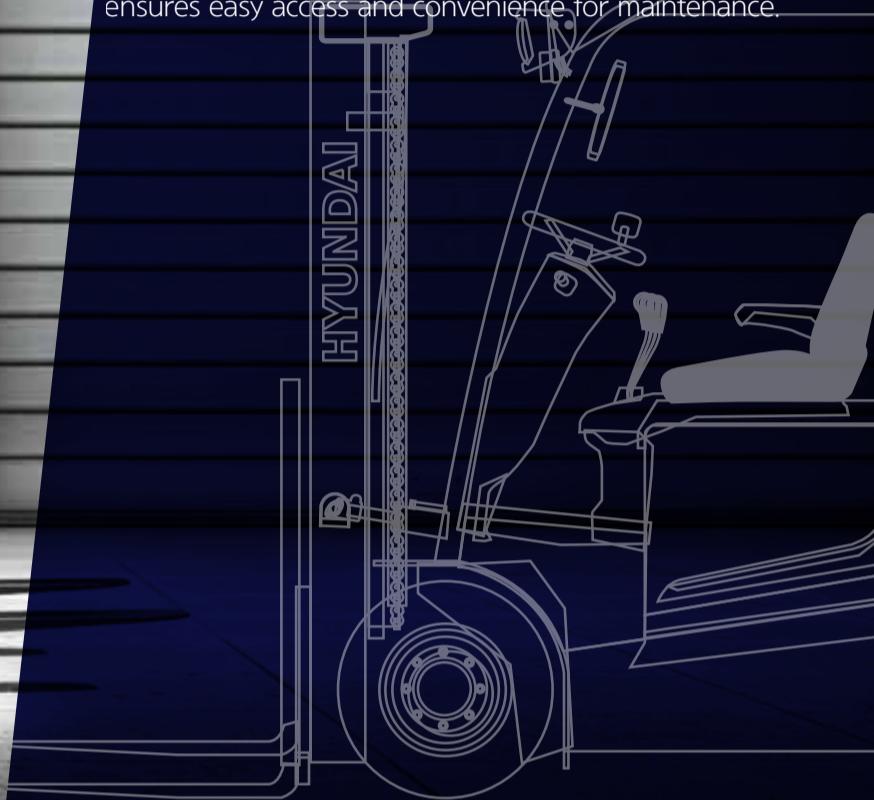
When selecting the turtle mode while working in narrow and congested workplace, the travel speed is reduced at a preset speed.



Easy & Comfort

Optimized Ergonomics & Fast and Easy Maintenance

An ideal arrangement of components ensures easy access and convenience for maintenance.



Some of the photos may include optional equipment.

Ergonomically designed workspace

Ergonomic design focusing on operator convenience and maneuverability further enhances work efficiency. Easily operable levers and pedals, adjustable handle, suspension seat and a large multi-functional cluster dashboard allow comfortable and efficient driving. A 12V power socket is a standard feature to improve operator convenience.



Some of the photos may include optional equipment.



Grammer seat

The ergonomically designed suspension seat is adjustable to the driver's weight (50 – 160 kg), which reduces fatigue and increases comfort, and is highly stable due to the application of dual sensing (speed, angle control) ELR belts.
• Seat heater & headrest (OPT)



Steering wheel position

As a measurement of the steering angle sensor, which is installed on the kingpin of the rear axle, is displayed on the large cluster screen as an image, the operator can predict the direction of the vehicle without difficulty.



Directional & horn switch on lever (OPT)

Electronic directional control and secondary horn are mounted to the hydraulic lift lever for quick and precise maneuvering. Also, the horn enables to enhance responsiveness in emergency.



Adjustable tilting handle

The handle angle can be adjusted with the lever on the right side of the steering wheel to suit the operator's physique and driving habit.

4.3inch LCD color monitor

The LCD color monitor with 4.3 inch graphic smart display allows the operator to identify speed, travel direction, and operating hours and control the machine efficiently. The load indicator displays the load weight in the monitor. The operator can select various performance modes to meet all working conditions. Multilanguage (maximum 12) is available.



Main functions

- | | |
|--|------------------------------|
| ① Speed (Digital) | ⑦ Turtle / Scroll down |
| ② Steering wheel position and travel direction | ⑧ ESC / Back |
| ③ Battery discharge indicator | ⑨ Enter |
| ④ Scroll up | ⑩ Low brake oil warning lamp |
| ⑤ Menu / Scroll Left | ⑪ Error warning lamp |
| ⑥ Performance / Scroll right | ⑫ High temp warning lamp |



Easy maintenance of battery

The battery cover with full opened type enhances maintainability and the gas spring equipped with a cover to check the conditions easily.



Brake oil reservoir with level sensor

The enhanced brake oil reservoir, located in the upper left dash is equipped with an electronic level sensor and easily visible through the monitor.

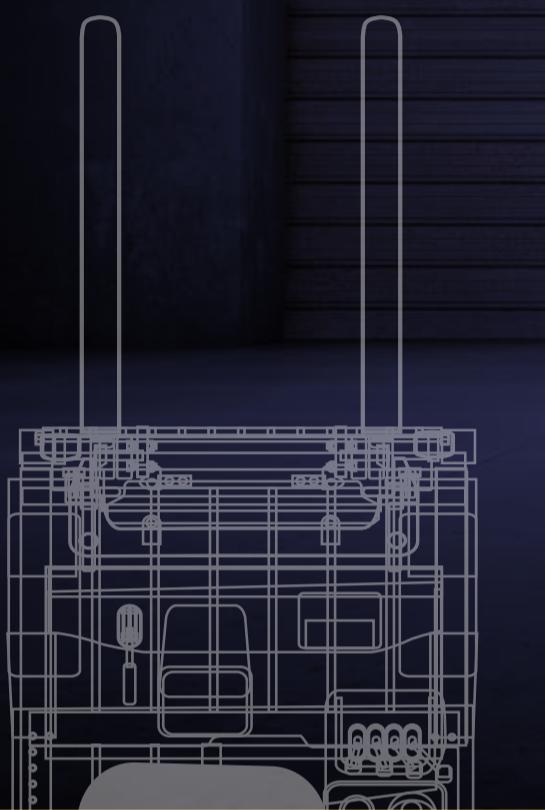


Secure & Safety

Advanced Safety

The safely designed driver's space makes your operating more comfortable.

EXCELLENT VISIBILITY



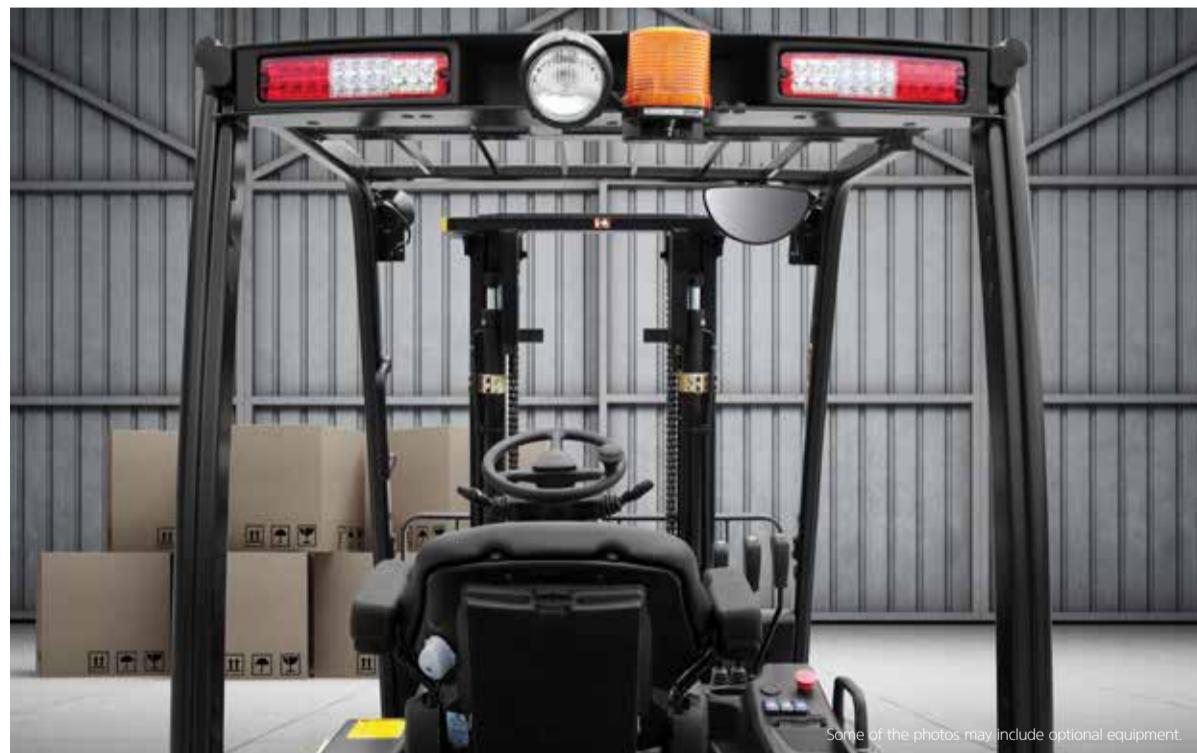
ADVANCED SAFETY



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Excellent visibility for safe operation

Optimized lift cylinder arrangement provides the operator with wider visibility. A rear camera(OPT) and panoramic mirror expands the driver's view when backing up.



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Strong overhead guard

Exceeding ISO6055 regulations, the overhead guard offers great protection combined with excellent all around visibility.



Curve control

Curve Control limits travel speed based on turning radius for a smooth, precise turning operation for the driver.

Maximum speed control

The operator can set and limit the maximum speed from 10 km/h to 1 km/h unit, given the curve & congestion of an aisle and the shape of the load.

Password starting system

The operator can set a password to prevent vehicle theft and possible safety accidents in case the vehicle is used by an unauthorized person.

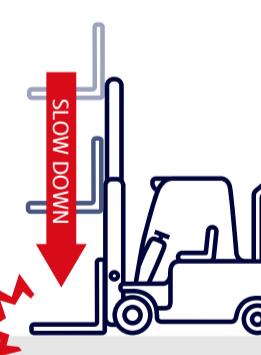
Safety features

The adoption of a high-sensitivity sensor and advanced safety system can prevent the safety accidents.



Anti roll back system

Anti Roll-back system offers protection against the machine rolling back on a ramp in combination with exceptional ramp start capabilities.



Fork safety features

When the forks are being lowered, a down-control valve maintains the controlled speed. The down-safety valve prevents forks from dropping down in case of sudden damage of hydraulic line.



Operator Presence Sensing System(OPSS)

When operator is not in seat the hydraulic lift and tilt controls and travel are locked out.



Strengthened work safety

Rear LED lights and halogen lights offer excellent visibility even during night operations. Safety has been increased by installing an additional reflector on the counterweight.

IPAS : Intelligent Proximity Alert System (OPT)

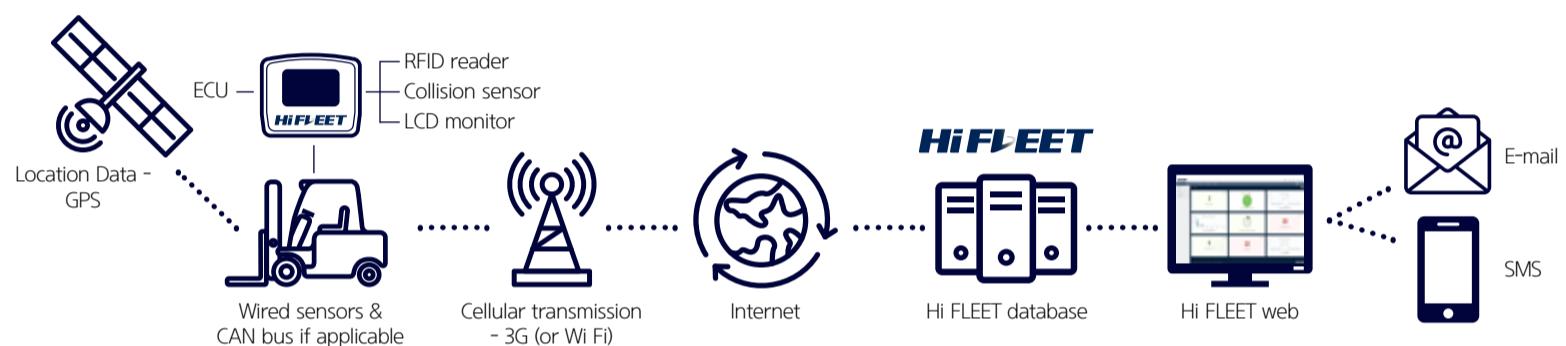
Emits a warning (vibration, warning noise) in each area by measuring the distance between the forklift and a nearby pedestrian in real time via wireless communication.



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Fleet Management System(Hi FLEET) (OPT)

Hi FLEET, Hyundai material handling's fleet management system, is the optimal operation solution for a fleet of forklifts. It connects driver and vehicle in real time.



New 9 Series Mast Specification

25/30/32/35B-9U

		25B-9U		30B-9U				
Mast Type	Maximum Fork Height	Overall Height (Lowered)	Free lift height		Tilt Angle	Load capacity (500mm LC) w/ side shift	Load capacity (500mm LC) w/o side shift	Truck Weight (Unloaded)
			With Load Backrest	Without Load Backrest				
2-STAGE LIMITED FREE LIFT	V300	3005	2012	115	115	6 10	2500	4339
	*V330	3305	2162			6 10	2500	4362
	V350	3505	2262			6 10	2500	4376
	V370	3705	2412			6 10	2500	4398
	V400	4005	2562			6 10	2500	4419
	V430	4305	2712			6 6	2450	4468
	V450	4505	2862			6 6	2400	4498
	V470	4705	2962			6 6	2360	4513
	V500	5005	3112			6 6	2350	4535
2-STAGE FULL FREE LIFT	VFVS295	2976	2012	832	1379	6 6	2500	4386
	VFVS325	3276	2162	982	1529	6 6	2500	4419
	VFVS345	3476	2262	1082	1629	6 6	2500	4441
3-STAGE FULL FREE LIFT	TF370	3705	1812	632	1179	1179	6 6	2500
	TF400	4005	1912	732	1279	1279	6 6	2500
	TF430	4305	2012	832	1379	1379	6 6	2450
	TF450	4505	2112	932	1479	1479	6 6	2400
	TF470	4705	2162	982	1529	1529	6 6	2350
	TF500	5005	2262	1082	1629	1629	6 6	2300
	TF550	5505	2462	1282	1829	1829	6 6	2200
	TF600	6005	2662	1482	2029	2029	6 6	2150
	TF650	6505	2862	1682	2061	1921	3 3	1800
	TF700	7005	3062	1882	2261	2121	3 3	1400
	TS370	3705	1812	632	1179	1179	6 6	2500
	TS400	4005	1912	732	1279	1279	6 6	2500
	TS430	4305	2012	832	1379	1379	6 6	2450
	TS450	4505	2112	932	1479	1479	6 6	2400
	TS470	4705	2162	982	1529	1529	6 6	2350
4-STAGE FULL FREE LIFT	TS500	5005	2262	1082	1629	1629	6 6	2300
	TS550	5505	2462	1282	1829	1829	6 6	2200
	TS600	6005	2662	1482	2029	2029	6 6	2150
	TS650	6505	2862	1682	2054	1914	3 3	1800
	TS700	7005	3062	1882	2254	2114	3 3	1400
	QF610	6115	2147	967	1413	1462	3 3	1650
	QF660	6615	2347	1167	1613	1662	3 3	1550
	QF700	7015	2447	1267	1713	1762	3 3	1300
	QF745	7465	2597	1417	1964	1762	3 3	1200
	QF790	7915	2747	1567	2114	1762	3 3	750

※ TF-Mast : Wide Visible 3-Stage Full Free Lift Mast with 1 Free Lift Cylinders

※ TS-Mast : Wide Visible 3-Stage Full Free Lift Mast with 2 Free Lift Cylinders

※ : Standard

※ TF-Mast : Wide Visible 3-Stage Full Free Lift Mast with 1 Free Lift Cylinders

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WARNING AREA

ATTENTION AREA

SAFETY AREA

New 9 Series Mast Specification

25/30/32/35B-9U

32B-9U



Mast Type	Maximum Fork Height	Overall Height (Lowered)	Free lift height			Tilt Angle		Load capacity (500mm LC w/ side shift)	Load capacity (500mm LC w/o side shift)	Truck Weight (Unloaded)	
			With Load Backrest	Without Load Backrest	Without Load Backrest (3/4-SPPOOL)	Fwd	Bwd				
	mm	mm	mm	mm	mm	deg	deg	kg	kg	kg	
2-STAGE LIMITED FREE LIFT	V300	3005	2082	115	115	6	10	3200	3200	4799	
	※V330	3305	2232			6	10	3200	3200	4820	
	V350	3505	2332			6	10	3200	3075	4828	
	V370	3705	2482			6	10	3190	3065	4846	
	V400	4005	2632			6	10	3120	2995	4863	
	V430	4305	2782			6	6	3050	2925	4908	
	V450	4505	2932			6	6	3000	2875	4933	
	V470	4705	3032			6	6	2960	2835	4945	
2-STAGE FULL FREE LIFT	V500	5005	3182			6	6	2900	2775	4962	
	VF/VS295	2976	2082	913	1377	6	6	3200	3200	4846	
	VF/VS325	3276	2232	1063	1527	6	6	3200	3200	4869	
2-STAGE FULL FREE LIFT	VF/VS345	3476	2332	1163	1627	6	6	3200	3075	4895	
	TF370/TS370	3705	1882	702	1112	1112	6	6	3190	3065	4999
	TF400/TS400	4005	1982	802	1212	1212	6	6	3120	2995	5021
3-STAGE FULL FREE LIFT	TF430/TS430	4305	2082	902	1312	1312	6	6	3060	2935	5030
	TF450/TS450	4505	2182	1002	1412	1412	6	6	3010	2885	5072
	TF470/TS470	4705	2232	1052	1462	1462	6	6	2980	2855	5087
	TF500/TS500	5005	2332	1152	1562	1562	6	6	2920	2795	5111
	TF550/TS550	5505	2532	1352	1762	1762	6	6	2820	2695	5156
	TF600/TS600	6005	2732	1552	1962	1962	6	6	2730	2605	5200
	TF650/TS650	6505	2932	1752	2162	2061	3	3	2300	2175	5244
	TF700/TS700	7005	3132	1952	2362	2261	3	3	1900	1775	5289
	TF370/TS370	3705	1882	702	1112	1112	6	6	3190	3065	4999
	TF400/TS400	4005	1982	802	1212	1212	6	6	3120	2995	5021
	TF430/TS430	4305	2082	902	1312	1312	6	6	3060	2935	5030
	TF450/TS450	4505	2182	1002	1412	1412	6	6	3010	2885	5072
	TF470/TS470	4705	2232	1052	1462	1462	6	6	2980	2855	5087
	TF500/TS500	5005	2332	1152	1562	1562	6	6	2920	2795	5111
4-STAGE FULL FREE LIFT	TF550/TS550	5505	2532	1352	1762	1762	6	6	2820	2695	5156
	TF600/TS600	6005	2732	1552	1962	1962	6	6	2730	2605	5200
	TF650/TS650	6505	2932	1752	2162	2033	3	3	2300	2175	5244
	TF700/TS700	7005	3132	1952	2362	2233	3	3	1900	1775	5289
	QF610	6115	2136	967	1514	1514	3	3	1810	1685	5368
	QF660	6615	2336	1167	1714	1714	3	3	1710	1585	5428
	QF700	7015	2436	1267	1814	1814	3	3	1420	1295	5458
	QF745	7465	2586	1417	1964	1917	3	3	890	765	5501
	QF790	7915	2736	1567	2070	1917	3	3	500	375	5604

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35B-9U



Mast Type	Maximum Fork Height	Overall Height (Lowered)	Free lift height			Tilt Angle		Load capacity (500mm LC w/ side shift)	Load capacity (500mm LC w/o side shift)	Truck Weight (Unloaded)	
			With Load Backrest	Without Load Backrest	Without Load Backrest (3/4-SPPOOL)	Fwd	Bwd				
	mm	mm	mm	mm	mm	deg	deg	kg	kg	kg	
2-STAGE LIMITED FREE LIFT	V300	3005	2093	115	115	6	10	3200	3200	4799	
	※V330	3305	2243			6	10	3200	3200	4820	
	V350	3505	2343			6	10	3200	3075	4828	
	V370	3705	2493			6	10	3190	3065	4846	
	V400	4005	2643			6	10	3120	2995	4863	
	V430	4305	2793			6	6	3050	2925	4908	
	V450	4505	2943			6	6	3000	2875	4933	
	V470	4705	3043			6	6	2960	2835	4945	
2-STAGE FULL FREE LIFT	V500	5005	3193			6	6	2900	2775	4962	
	VF/VS295	2976	2093	913	1377	6	6	3200	3200	4846	
	VF/VS325	3276	2243	1063	1527	6	6	3200	3200	4869	
2-STAGE FULL FREE LIFT	VF/VS345	3476	2343	1163	1627	6	6	3200	3075	4895	
	TF370	3705	1893	713	1177	1177	6	6	3190	3065	4999
3-STAGE FULL FREE LIFT	TF400	4005	1993	813	1277	1277	6	6	3120	3000	5021
	TF430	4305	2093	913	1377	1377	6	6	3060	2930	5030
	TF450	4505	2193	1013	1477	1477	6	6	3010	2885	5072
	TF470	4705	2243	1063	1527	1527	6	6	2980	2855	5087
	TF500	5005	2343	1163	1627	16					

New 9 Series

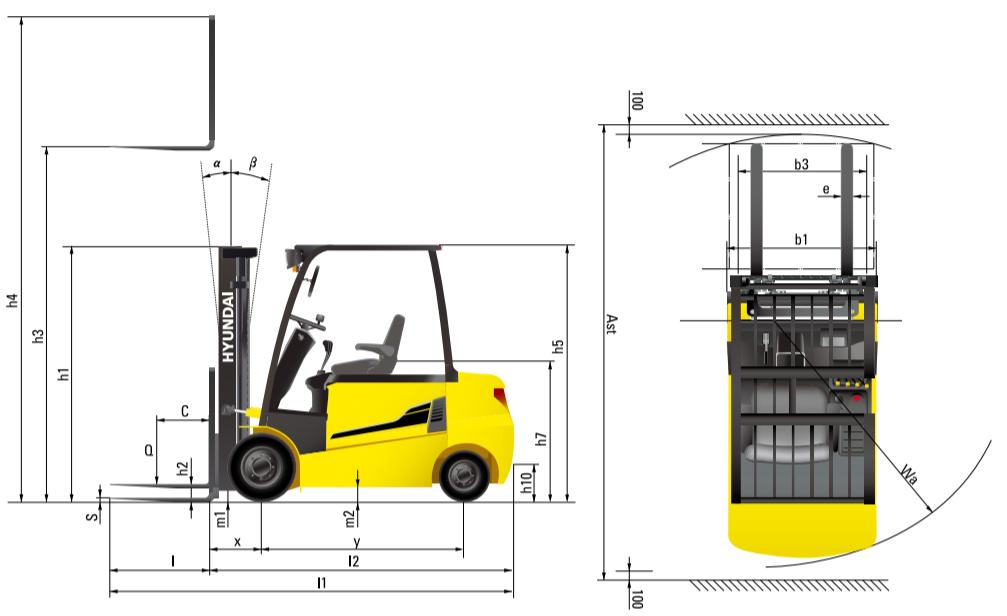
25/30/32/35B-9U

Specification



DISTINGUISHING MARK					PERFORMANCE DATA						
1.1	Manufacturer (Abbreviation)				5.1	Travel Speed, Loaded / Unloaded	km/h	17 / 18	17 / 18	17 / 18	
1.2	Manufacturer's Type Designation	25B-9U	30B-9U	32B-9U	35B-9U	5.2	Lift Speed, Loaded / Unloaded	mm/s	420 / 600	340 / 500	330 / 500
1.3	Drive : Electric (Battery Or Mains), Diesel, Petrol, Fuel Gas	Electric	Electric	Electric	5.3	Lowering Speed, Loaded / Unloaded	mm/s	500 / 450	500 / 450	500 / 450	
1.4	Type Of Operation: Hand, Pedestrian, Standing, Seated, Order-Picker	seated	seated	seated	5.6	Max. Drawbar Pull, Loaded / Unloaded	N	14,710 / 14,690	14,640 / 14,700	14,580 / 14,660	
1.5	Load Capacity / Rated Load	kg	2,500	3,000	3,200	5.8	Max. Gradeability, Loaded / Unloaded	% (°)	22 (12.4)	19 (10.8)	18 (10.2)
1.6	Load Center Distance	c mm	500	500	500	5.10	Service Brake		Hydraulic	Hydraulic	Hydraulic
1.8	Load Distance, Center Of Drive Axle To Fork	x mm	458	458	458				Hydraulic	Hydraulic	Hydraulic
1.9	Wheelbase	y mm	1,400	1,600	1,600						
WEIGHT					ELECTRIC-MOTOR						
2.1	Service Weight	kg	4,360	4,633	4,820	6.1	Drive Motor Rating S2 60 Min	kw	7.0×2	7.0×2	7.0×2
2.2	Axle Loading, Loaded Front / Rear	kg	6,016 / 844	6,812 / 820	7,095 / 925	6.2	Lift Motor Rating At S3 15%	kw	17	17	17
2.3	Axle Loading, Unloaded Front / Rear	kg	1,805 / 2,555	2,016 / 2,617	1,980 / 2,840	6.4	Battery Voltage, Nominal Capacity K5	V/Ah	48 / 660	48 / 715	48 / 715
TIRES, CHASSIS					6.5	Battery Weight (Min.)	kg	1,090	1,150	1,150	1,150
3.1	Tires : Solid Rubber, Superelastic, Pneumatic, Polyurethane	SE, P	SE, P	SE, P	6.7	Battery Compartment Dimensions L/W/H	mm	1,066 / 796 / 537	1,066 / 990 / 537	1,066 / 990 / 537	1,066 / 990 / 537
3.2	Tire Size, Front	23X9-10	23X9-10	23X9-10							
3.3	Tire Size, Rear	18X7-8	18X7-8	18X7-8							
3.5	Wheels, Number Front / Rear (X = Driven Wheels)	2x2	2x2	2x2							
3.6	Tread, Front	mm	993	993	993						
3.7	Tread, Rear	mm	980	980	980						
DIMENSIONS					ADDITION DATA						
4.1	Tilt Of Mast / Fork Carriage Forward / Backward	degrees	6/10	6/10	6/10	8.1	Type Of Drive Control	AC	AC	AC	AC
4.2	Height, Mast Lowered	h1 (mm)	2,162	2,162	2,232						
4.3	Free Lift	h2 (mm)	115	115	115						
4.4	Lift Height	h3 (mm)	3,300	3,300	3,300						
4.5	Height, Mast Extended	h4 (mm)	4,485	4,485	4,485						
4.7	Height Of Overhead Guard (Cabin)	h5 (mm)	2,230	2,230	2,230						
4.8	Seat Height / Stand Height Rel. To Sip	h7 (mm)	1,180	1,180	1,180						
4.12	Coupling Height	h10 (mm)	325	325	325						
4.19	Overall Length	l1 (mm)	3,345	3,538	3,553						
4.20	Length To Face Of Forks	l2 (mm)	2,295	2,488	2,503						
4.21	Overall Width	b1 (mm)	1,200	1,200	1,200						
4.22	Fork Dimensions	l × e × s (mm)	1,050×100×45	1,050×122×45	1,050×122×45						
4.23	Fork Carriage Iso 2328, Class / Type A, B		II/A	III/A	III/A						
4.24	Fork-Carriage Width	b3 (mm)	1,102	1,102	1,102						
4.31	Ground Clearance, Below Mast, Loaded	m1 (mm)	117	117	117						
4.32	Ground Clearance, Center Of Wheelbase	m2 (mm)	130	130	130						
4.33	Aisle Width For Pallets 1000 × 1200 Crossways (L×W)	Ast (mm)	3,637	3,829	3,843						
4.34	Aisle Width Of Pallets 800 × 1200 Crossways (W L)	Ast (mm)	3,803	4,009	4,023						
4.35	Turning Radius	Wa (mm)	1,940	2,150	2,165						

Dimension



* Exterior designs and forklift options in this catalog may change for improvement

MEMO