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**HYUNDAI**  
MATERIAL HANDLING

MOVING YOU FURTHER

25·30·32

**35B-9U**



Some of the photos may include optional equipment.

**HYUNDAI**  
MATERIAL HANDLING

# Your satisfaction is our priority.

## Proven AC technology! Hyundai 9 Series battery forklift

Introducing the new, upgraded Hyundai 9 Series electric pneumatic tire forklift.

The new B-9U Series brings 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 dual drive motors
- Vehicle performance optimized for various working conditions
- Directional & horn switch on lever (OPT)
- 2 Door bolt on type cabin (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

- EHPS (Electro Hydraulic Power Steering)
- 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

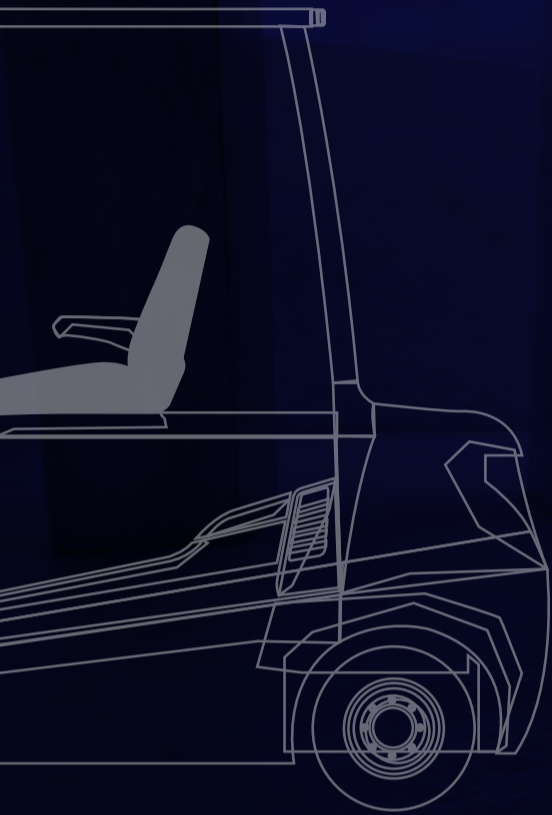




## Power & Performance

# High Efficiency & Optimal Performance

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



Some of the photos may include optional equipment.

## Strong driving power : Dual drive motor system UPGRADE

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 dirty 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.



Some of the photos may include optional equipment.

## 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 : 715Ah) : 185 minutes (100%)

Upgraded model (25B-9U : 660Ah) : 259minutes (140%)

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

UPGRADE



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 required.

UPGRADE



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, extended maintenance intervals and excellent durability. The brushless AC motors offer improved efficiency and reduction maintenance cost. It is certified IP43.



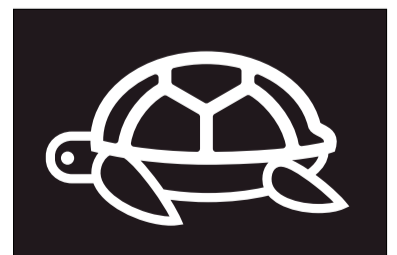
Wet disc brake

The semi-permanent brake improves work efficiency by providing consistent braking force since there are no 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

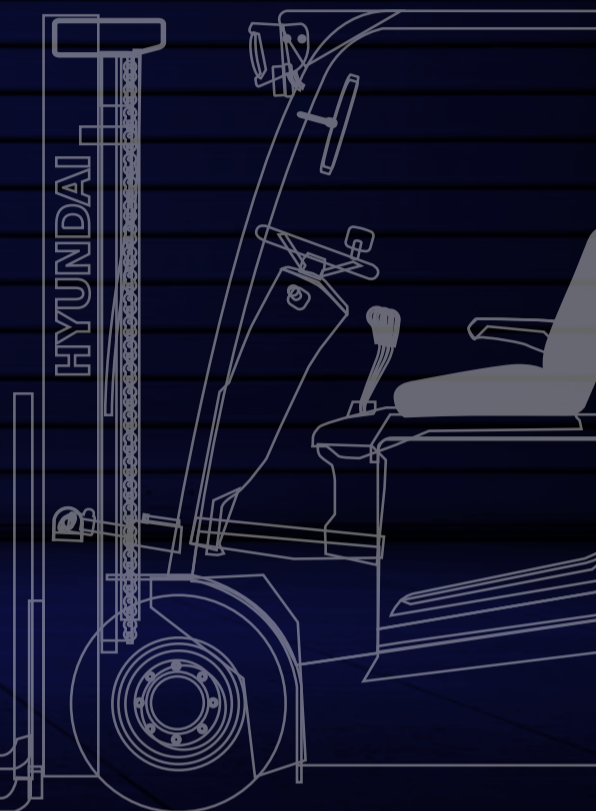
Selecting turtle mode allows the operator to reduce travel to a pre-set speed, which is ideal when working in narrow and or congested work areas.



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. Easy to operate 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

An adjustable ergonomic seat provides unmatched comfort. The adjustable armrest further reduces operator fatigue.

- Accommodates operator weights from 50 to 160 kg.
- ELR (Emergency Locking Retractable) type seat belt
- Heater and headrest (OPT)

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



### Steering wheel position

A steering sensor is applied to the king pin of the rear axle, communicates to the LCD color monitor to show the direction of the vehicle as it relates to the angle of the steer wheel.



### Directional & horn switch on lever (OPT)

An optional electronic directional control and secondary horn are mounted to the hydraulic lift lever for quick and precise directional control. Also, the position of the horn button provide quick access if needed.



### Adjustable tilting handle

The handle angle can be adjusted with the assistance of a gas strut that locks when fully opened to give easy access to battery and prevent the hood from dropping.



### Easy maintenance of battery

The battery cover opens fully with the assistance of a gas strut that locks when fully opened to give easy access to battery and prevent the hood from dropping.



### Brake oil reservoir with level sensor

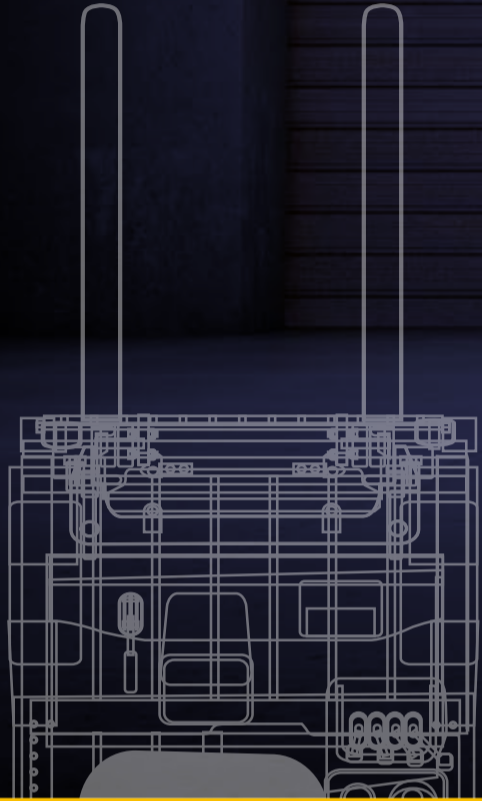
The enhanced brake oil reservoir, located in the upper left dash is equipped with an electronic level sensor that shows the level in the LCD color monitor.



Secure & Safety

# Advanced Safety

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



EXCELLENT VISIBILITY

ADVANCED SAFETY



Some of the photos may include optional equipment.



You can see the video by scanning the QR code.

## Excellent visibility for safe operation

Lift cylinders and lifting chains are positioned behind the mast rails for optimum visibility. A rear camera(OPT) and panoramic mirror expands the driver's view when backing up.



Some of the photos may include optional equipment.

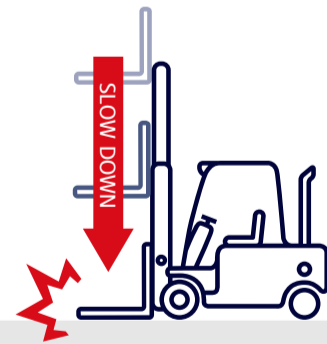
## Safety features

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

As the forks are being lowered, a down-control valve maintains a controlled descent 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.



### 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, reducing speed 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.

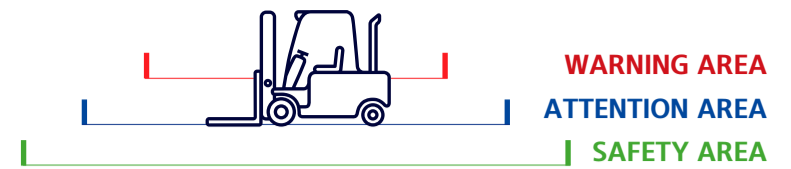


### Strengthened work safety

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.



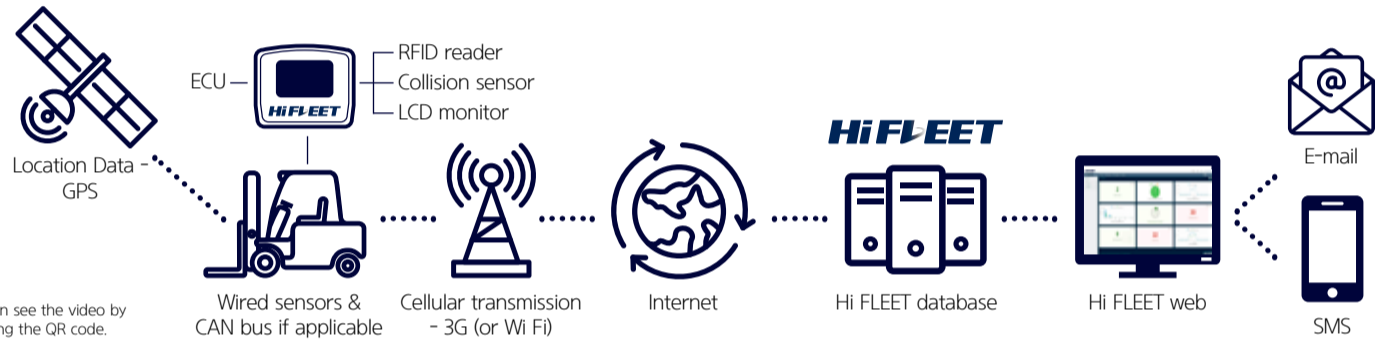
Some of the photos may include optional equipment.

# 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.



You can see the video by scanning the QR code.



# New 9 Series Mast Specification

**25/30/32/35B-9U**

Mast Type		Maximum Fork Height	Overall Height (Lowered)	Free lift height			Tilt Angle		Load capacity (500mm LC) w/o side shift	Load capacity (500mm LC) w/ side shift	Truck Weight (Unloaded)
				With Load Backrest	Without Load Backrest	Without Load Backrest (3/4-SPOOL)	Fwd	Bwd			
		mm	mm	mm	mm	mm	deg	deg	kg	kg	kg
2-STAGE LIMITED FREE LIFT	V300	3005	2012	115	115	115	6	10	2500	2500	4339
	※V330	3305	2162				6	10	2500	2500	4362
	V350	3505	2262				6	10	2500	2500	4376
	V370	3705	2412				6	10	2500	2475	4398
	V400	4005	2562				6	10	2500	2425	4419
	V450	4505	2862				6	6	2400	2325	4498
2-STAGE FULL FREE LIFT	VF325	3276	2162	982	1529	1529	6	6	2500	2500	4419
3-STAGE FULL FREE LIFT	TF430	4305	2012	832	1379	1379	6	6	2450	2375	4560
	TF450	4505	2112	932	1479	1479	6	6	2400	2325	4582
	TF470	4705	2162	982	1529	1529	6	6	2350	2275	4594
	TF500	5005	2262	1082	1629	1629	6	6	2300	2225	4618
	TF550	5505	2462	1282	1829	1829	6	6	2200	2125	4659
	TF600	6005	2662	1482	2029	2029	6	6	2150	2075	4698
	TS430	4305	2012	832	1379	1379	6	6	2450	2375	4560
	TS470	4705	2162	982	1529	1529	6	6	2350	2275	4594
	TS500	5005	2262	1082	1629	1629	6	6	2300	2225	4618
	TS550	5505	2462	1282	1829	1829	6	6	2200	2125	4659
4-STAGE FULL FREE LIFT	QF700	7015	2447	1267	1713	1762	3	3	1300	1225	5002
	QF790	7915	2747	1567	2114	1762	3	3	750	675	5148

※ 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

Mast Type		Maximum Fork Height	Overall Height (Lowered)	Free lift height			Tilt Angle		Load capacity (500mm LC) w/o side shift	Load capacity (500mm LC) w/ side shift	Truck Weight (Unloaded)
				With Load Backrest	Without Load Backrest	Without Load Backrest (3/4-SPOOL)	Fwd	Bwd			
		mm	mm	mm	mm	mm	deg	deg	kg	kg	kg
2-STAGE LIMITED FREE LIFT	V300	3005	2012	115	115	115	6	10	3000	3000	4614
	※V330	3305	2162				6	10	3000	3000	4633
	V350	3505	2262				6	10	3000	3000	4650
	V400	4005	2562				6	10	3000	3000	4694
	V450	4505	2862				6	6	3000	2950	4772
	V500	5005	3112				6	6	2900	2775	4809
2-STAGE FULL FREE LIFT	VF295	2976	2012	832	1379	1379	6	6	3000	3000	4634
3단 자유인상	TF400	4005	1912	732	1217	1181	6	6	3000	3000	4801
	TF430	4305	2012	832	1317	1281	6	6	3000	2950	4821
	TF450	4505	2112	932	1417	1417	6	6	3000	2875	4848
	TF470	4705	2162	982	1467	1431	6	6	2950	2825	4863
	TF500	5005	2262	1082	1567	1531	6	6	2900	2775	4889
	TF550	5505	2462	1282	1767	1767	6	6	2800	2675	4931
	TF600	6005	2662	1482	1967	1967	6	6	2700	2575	4971
	TS430	4305	2012	832	1317	1253	6	6	3000	2950	4821
	TS450	4505	2112	932	1417	1403	6	6	3000	2875	4848
	TS470	4705	2162	982	1467	1403	6	6	2950	2825	4863
	TS500	5005	2262	1082	1567	1503	6	6	2900	2775	4889
	TS550	5505	2462	1282	1767	1753	6	6	2800	2675	4931
	TS600	6005	2662	1482	1967	1953	6	6	2700	2575	4971
	4-STAGE FULL FREE LIFT	QF790	7915	2747	1567	1987	1834	3	3	750	625

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

※ : Standard

### 32B-9U

Mast Type	Maximum Fork Height	Overall Height (Lowered)	Free lift height			Tilt Angle		Load capacity (500mm LC) w/o side shift	Load capacity (500mm LC) w/ side shift	Truck Weight (Unloaded)	
			With Load Backrest	Without Load Backrest	Without Load Backrest (3/4-SPOOL)	Fwd	Bwd				
			mm	mm	mm	deg	deg				
2-STAGE LIMITED FREE LIFT	V300	3005	2082	115	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
	V450	4505	2932				6	6	3000	2875	4933
2-STAGE FULL FREE LIFT	VS345	3476	2332	1163	1627	1627	6	6	3200	3075	4895
3-STAGE FULL FREE LIFT	TF430	4305	2082	902	1312	1312	6	6	3060	2935	5030
	TF450	4505	2182	1002	1412	1412	6	6	3010	2885	5072
	TF470	4705	2232	1052	1462	1462	6	6	2980	2855	5087
	TF500	5005	2332	1152	1562	1562	6	6	2920	2795	5111
	TF550	5505	2532	1352	1762	1762	6	6	2820	2695	5156
	TF600	6005	2732	1552	1962	1962	6	6	2730	2605	5200
	TS450	4505	2182	1002	1412	1412	6	6	3010	2885	5072
	TS470	4705	2232	1052	1462	1462	6	6	2980	2855	5087
	TS500	5005	2332	1152	1562	1562	6	6	2920	2795	5111
	TS550	5505	2532	1352	1762	1762	6	6	2820	2695	5156
	TS600	6005	2732	1552	1962	1962	6	6	2730	2605	5200
	TS650	6505	2932	1752	2162	2033	3	3	2300	2175	5244
TS700	7005	3132	1952	2362	2233	3	3	1900	1775	5289	
4-STAGE FULL FREE LIFT	QF610	6115	2136	967	1514	1514	3	3	1810	1685	5368
	QF790	7915	2736	1567	2070	1917	3	3	500	375	5604

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

※ : Standard

### 35B-9U

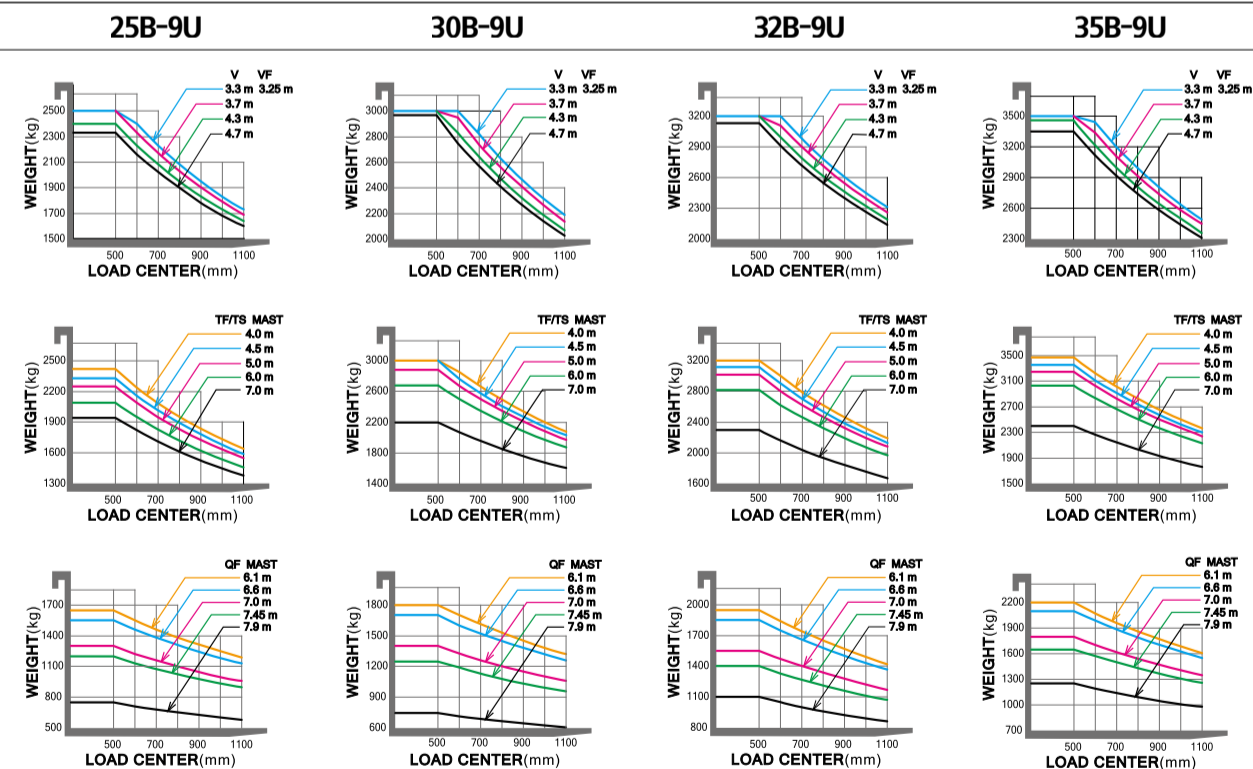
Mast Type	Maximum Fork Height	Overall Height (Lowered)	Free lift height			Tilt Angle		Load capacity (500mm LC) w/o side shift	Load capacity (500mm LC) w/ side shift	Truck Weight (Unloaded)	
			With Load Backrest	Without Load Backrest	Without Load Backrest (3/4-SPOOL)	Fwd	Bwd				
			mm	mm	mm	deg	deg				
2-STAGE LIMITED FREE LIFT	V300	3005	2093	115	115	115	6	10	3500	3500	4999
	※V330	3305	2243				6	10	3500	3500	5020
	V350	3505	2343				6	10	3500	3500	5028
	V370	3705	2493				6	10	3500	3500	5046
	V400	4005	2643				6	10	3500	3430	5063
	V450	4505	2943				6	6	3450	3300	5133
2-STAGE FULL FREE LIFT	VS345	3476	2343	1163	1627	1627	6	6	3500	3350	5095
3-STAGE FULL FREE LIFT	TF430	4305	2093	913	1377	1377	6	6	3450	3300	5230
	TF450	4505	2193	1013	1477	1477	6	6	3400	3250	5272
	TF470	4705	2243	1063	1527	1527	6	6	3350	3200	5287
	TF500	5005	2343	1163	1627	1627	6	6	3300	3150	5311
	TF550	5505	2543	1363	1827	1827	6	6	3150	3000	5356
	TF600	6005	2743	1563	2027	2027	6	6	3100	2950	5400
	TS450	4505	2193	1013	1477	1477	6	6	3400	3250	5272
	TS470	4705	2243	1063	1527	1527	6	6	3350	3200	5287
	TS500	5005	2343	1163	1627	1627	6	6	3300	3150	5311
	TS550	5505	2543	1363	1827	1827	6	6	3150	3000	5356
	TS600	6005	2743	1563	2027	2027	6	6	3100	2950	5400
	TS650	6505	2943	1763	2173	2033	3	3	2600	2450	5444
TS700	7005	3143	1963	2373	2233	3	3	2200	2050	5489	
4-STAGE FULL FREE LIFT	QF610	6115	2147	967	1514	1514	3	3	1930	1805	5568
	QF790	7915	2747	1567	2070	1917	3	3	600	475	5804

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※ : Standard

# New 9 Series

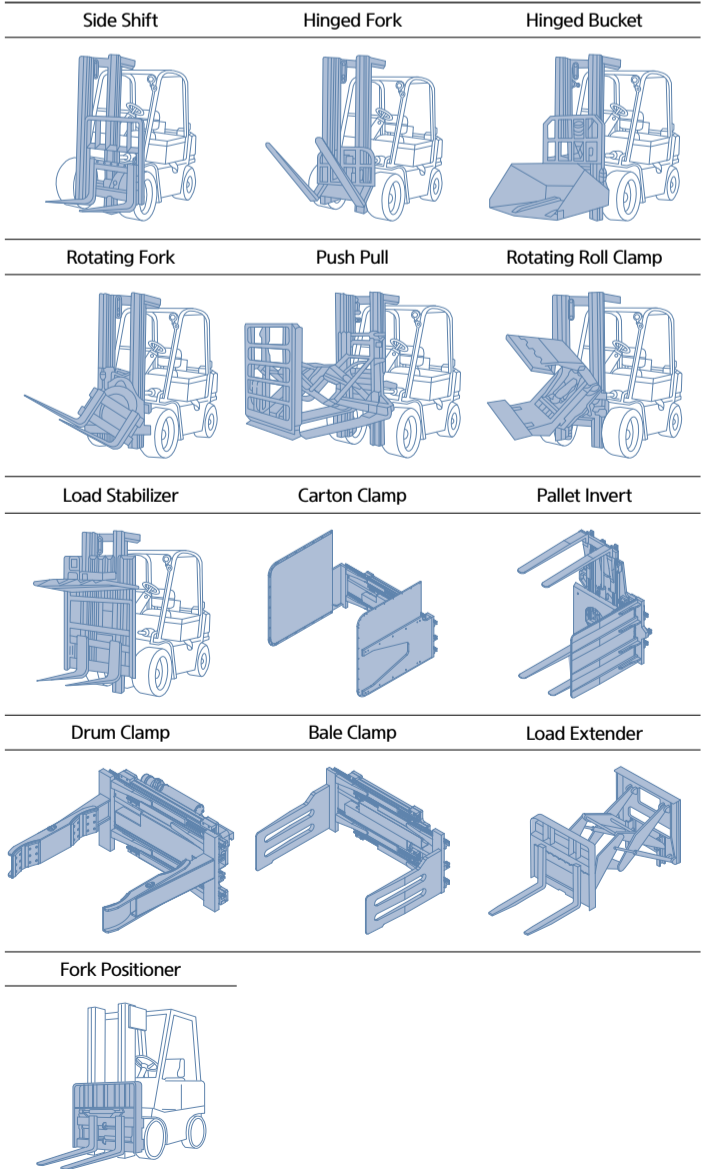
### Load Capacity



### Optional Items

- Fork(mm)  
 25B-9U : 900, 1000, 1050(STD), 1200, 1350, 1500, 1650, 1800, 2100  
 30/32/35B-9U : 900, 1050(STD), 1150, 1200, 1350, 1500, 1650, 1800, 1970, 2120, 2300, 2400
- Integral side shift
- Tire : Solid (STD) / pneumatic / non-marking
- Wide [25/30/32B-9U : Front(23X10-12)]
- Finger Tip Control
- Cold Strage : Applicable to working conditions of up to -30°C
- MCV : 2-Spool(STD), 3-Spool, 4-Spool
- Auto fork leveling
- Load weight indicator
- Detachable / attachable battery side items
- Cabin (one-door)  
 ① FRONT + ROOF + REAR  
 ② FRONT + ROOF + REAR + DOOR  
 ③ FRONT + ROOF + REAR + DOOR + HEATER

### Various Attachments



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

# New 9 Series

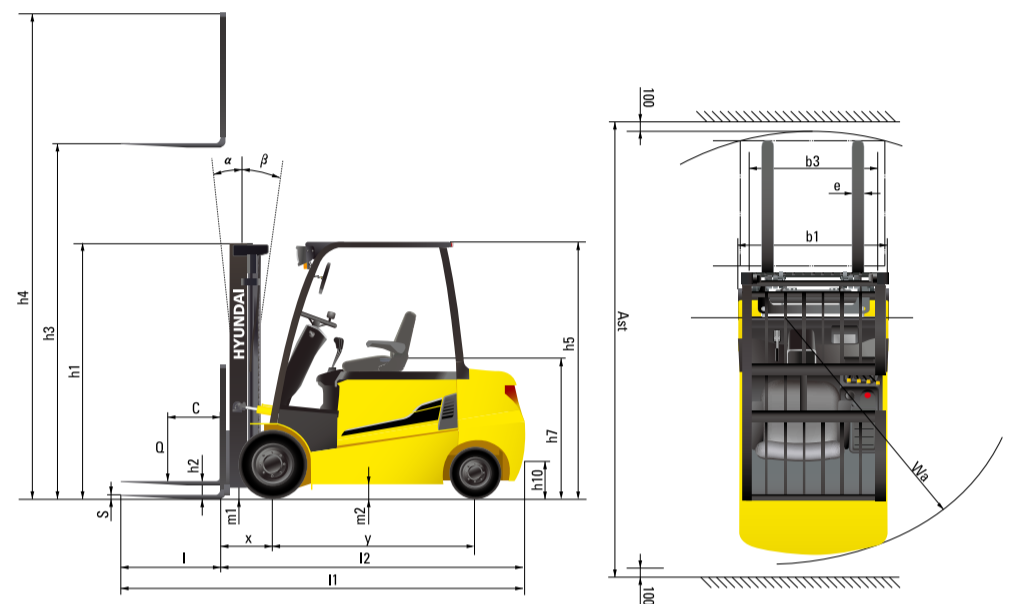
25/30/32/35B-9U

## Specification

DISTINGUISHING MARK		HYUNDAI				
1.1	Manufacturer (Abbreviation)	HYUNDAI				
1.2	Manufacturer's Type Designation	25B-9U	30B-9U	32B-9U	35B-9U	
1.3	Drive : Electric (Battery Or Mains), Diesel, Petrol, Fuel Gas	Electric	Electric	Electric	Electric	
1.4	Type Of Operation: Hand, Pedestrian, Standing, Seated, Order-Picker	seated	seated	seated	seated	
1.5	Load Capacity / Rated Load	kg	2,500	3,000	3,200	3,500
1.6	Load Center Distance	c mm	500	500	500	500
1.8	Load Distance, Center Of Drive Axle To Fork	x mm	458	458	458	470
1.9	Wheelbase	y mm	1,400	1,600	1,600	1,600
WEIGHT						
2.1	Service Weight	kg	4,360	4,633	4,820	5,020
2.2	Axle Loading, Loaded Front / Rear	kg	6,016 / 844	6,812 / 820	7,095 / 925	7,537 / 983
2.3	Axle Loading, Unloaded Front / Rear	kg	1,805 / 2,555	2,016 / 2,617	1,980 / 2,840	1,915 / 3,105
TIRES, CHASSIS						
3.1	Tires : Solid Rubber, Superelastic, Pneumatic, Polyurethane	SE, P	SE, P	SE, P	SE, P	SE, P
3.2	Tire Size, Front	23X9-10	23X9-10	23X9-10	23X10-12	23X10-12
3.3	Tire Size, Rear	18X7-8	18X7-8	18X7-8	18X7-8	18X7-8
3.5	Wheels, Number Front / Rear (X = Driven Wheels)	2x/2	2x/2	2x/2	2x/2	2x/2
3.6	Tread, Front	mm	993	993	993	1005
3.7	Tread, Rear	mm	980	980	980	980
DIMENSIONS						
4.1	Tilt Of Mast / Fork Carriage Forward / Backward	degrees	6 / 10	6 / 10	6 / 10	6 / 10
4.2	Height, Mast Lowered	h1 (mm)	2,162	2,162	2,232	2,243
4.3	Free Lift	h2 (mm)	115	115	115	115
4.4	Lift Height	h3 (mm)	3,300	3,300	3,300	3,300
4.5	Height, Mast Extended	h4 (mm)	4,485	4,485	4,485	4,485
4.7	Height Of Overhead Guard (Cabin)	h5 (mm)	2,230	2,230	2,230	2,230
4.8	Seat Height / Stand Height Rel. To Sip	h7 (mm)	1,180	1,180	1,180	1,180
4.12	Coupling Height	h10 (mm)	325	325	325	325
4.19	Overall Length	l1 (mm)	3,345	3,535	3,553	3,640
4.20	Length To Face Of Forks	l2 (mm)	2,295	2,485	2,503	2,590
4.21	Overall Width	b1 (mm)	1,200	1,200	1,200	1,250
4.22	Fork Dimensions	l x e x s (mm)	1,050 x 100 x 45	1,050 x 122 x 45	1,050 x 122 x 45	1,050 x 122 x 45
4.23	Fork Carriage Iso 2328, Class / Type A, B	II/A	III/A	III/A	III/A	III/A
4.24	Fork-Carriage Width	b3 (mm)	1,102	1,102	1,102	1,102
4.31	Ground Clearance, Below Mast, Loaded	m1 (mm)	117	117	117	128
4.32	Ground Clearance, Center Of Wheelbase	m2 (mm)	130	130	130	130
4.33	Aisle Width For Pallets 1000 x 1200 Crossways (L x W)	Ast (mm)	3,637	3,829	3,843	3,896
4.34	Aisle Width Of Pallets 800 x 1200 Crossways (W L)	Ast (mm)	3,803	4,009	4,023	4,076
4.35	Turning Radius	Wa (mm)	1,940	2,150	2,165	2,205

PERFORMANCE DATA						
5.1	Travel Speed, Loaded / Unloaded	km/h	17 / 18	17 / 18	17 / 18	
5.2	Lift Speed, Loaded / Unloaded	mm/s	420 / 600	340 / 500	330 / 500	300 / 460
5.3	Lowering Speed, Loaded / Unloaded	mm/s	500 / 450	500 / 450	500 / 450	500 / 450
5.6	Max. Drawbar Pull, Loaded / Unloaded	N	14,710 / 14,690	14,640 / 14,700	14,580 / 14,660	14,580 / 14,410
5.8	Max. Gradeability, Loaded	% (°)	22 (12.4)	19 (10.8)	18 (10.2)	17 (9.6)
5.10	Service Brake		Hydraulic	Hydraulic	Hydraulic	Hydraulic
ELECTRIC-MOTOR						
6.1	Drive Motor Rating S2 60 Min	kw	7.0 x 2	7.0 x 2	7.0 x 2	7.0 x 2
6.2	Lift Motor Rating At S3 15%	kw	17	17	17	17
6.4	Battery Voltage, Nominal Capacity K5	V/Ah	48 / 660	48 / 715	48 / 715	48 / 715
6.5	Battery Weight (Min.)	kg	1,090	1,150	1,150	1,150
6.5	Battery Compartment Dimensions L/W/H	mm	1,035 / 800 / 540	1,035 / 1,000 / 540	1,035 / 1,000 / 540	1,035 / 1,000 / 540
ADDITION DATA						
8.1	Type Of Drive Control		AC	AC	AC	AC

## Dimension



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

# MEMO