



Your satisfaction is our priority!

Compact forklift with proven AC technology

Hyundai introduces the B-9F series 4 wheel battery forklift.

The B-9F series features excellent performance with enhanced control technology and reduced cost.

25B-9F

- More powerful performance Dual drive
- Wet Disc Brake
- 3.5 inch LCD color monitor (including speedomete

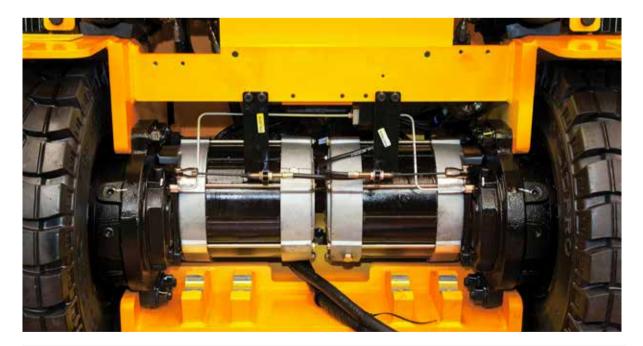
HYUNDAI

- Curve Control System
- Side Battery Extraction for easy change out (OPT)



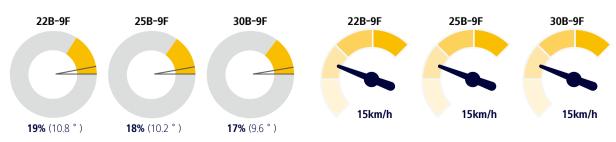
Powerful driving force - Dual drive system

The dual drive system, which consists of two independently operating drive motors on the left- and right-hand sides, ensures excellent drawbar pull and short turning radius. It provides powerful performance when turning on a contaminated road surface. Also, it enhances the efficiency of logistics in a narrow workplace.



Excellent gradeability and travel speed

It can perform stable operations and provide excellent gradeability and fast travel speed on any tough terrain or slope.



Max. Gradeability (loaded)

Max. Travel speed (unloaded)



Strong 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.



Curve control

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

Quick and efficient loading/unloading

The combination of a 17KW large-capacity pump motor whose output is controlled in proportion to the amount of operation of the lift lever and a hydraulic pump enables unloading of cargo quickly and safely.



Wet disk brake

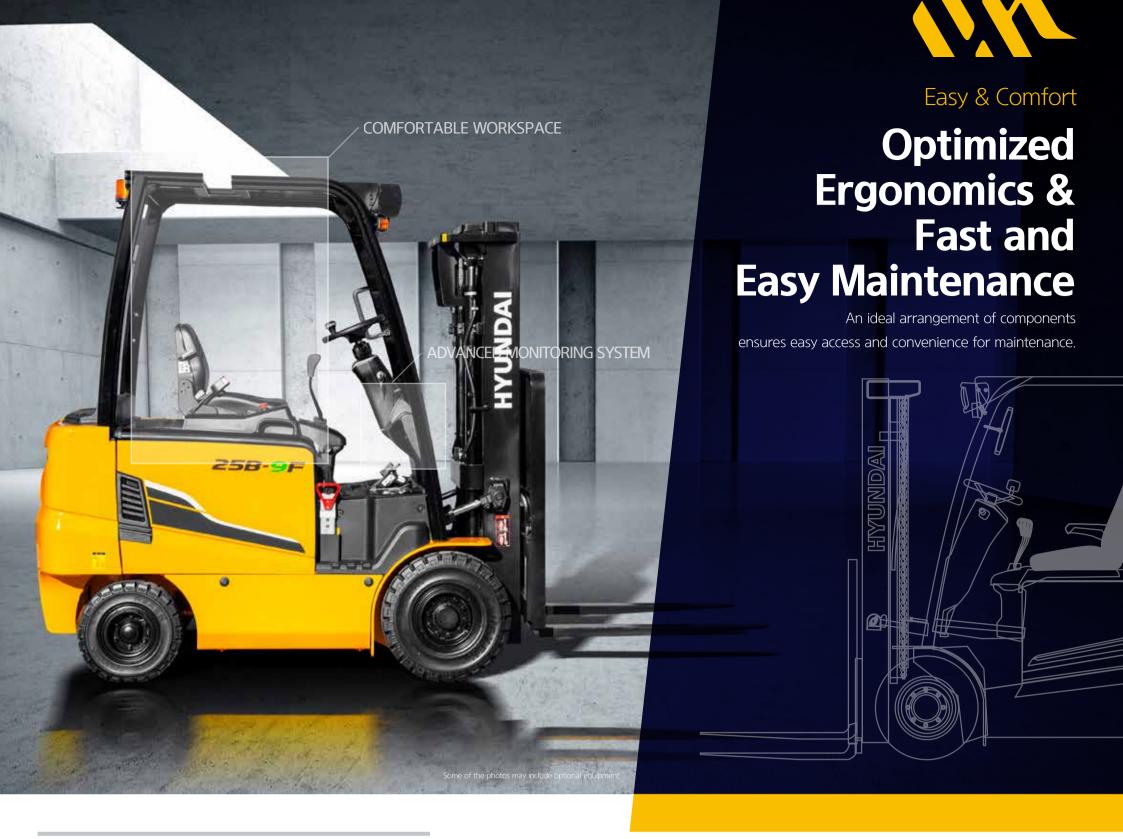
The wet disc brake with semi-permanent lifespan can improve work efficiency with homogeneous braking power without overheating even in long repeated working conditions, and maintenance cost is relatively low due to no lining for regular replacement parts.



This function optimizes the performance of vehicle for the purpose of work, such as speed of operation, maximum working time and operator's proficiency. (High, Normal, Economy Mode)

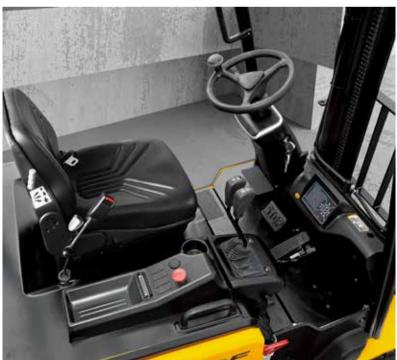
Extension of battery life - Regenerative braking

When you take your foot off the pedal while driving, the drive motor changes its function to the generator. Charge the battery with the power generated at this time and increase the usage time. The electrical resistance of the motor during power generation also reduces the work fatigue and increases the service life of the brake system by stopping the equipment without operating the brake pedal.



Spacious operating space

The ergonomically designed operating space was made for more space, a wider field of view and operator comfort. The smooth lever and pedal operation, adjustable tilting handle, suspension seat and multi-functional largesize cluster provide comfortable and efficient operation.





Grammer Seat (OPT)

Easily adjustable suspension seat, based on a human engineering design, reduces operator fatigue and provides greater

- ELR(Emergency Locking Retractor) type seat belt as a standard
- Heat wire and head rest (OPT)



The position of accelerator and brake pedal have been optimized through human engineering.



The steering angle sensor can be used to predict the traveling direction of the equipment by displaying the symbol in real time on the large screen of the cluster.



The steering column on the right can be easily adjusted by a lever.

3.5 inch LCD color monitor

The LCD color monitor allows the operator to easily and efficiently control the machine. he monitor provides information about speed & accelerator level, steer angle & travel direction, battery discharge indicator, hour meter & working mode. The monitor also displays information about operation error, system fault, battery level, hour meter plus other various functions. It enables the operator to maintain the forklift in optimum operating condition.



Main functions

- Steering wheel position and travel direction
- Turtle mode
- Speed (Digital)
- High temp warning lamp
- Wrench warning light Roll up
- FSC
- Battery discharge indicator Performance / Scroll right
- Scroll up
- Menu / Scroll Left
- Enter
- Turtle / Scroll down

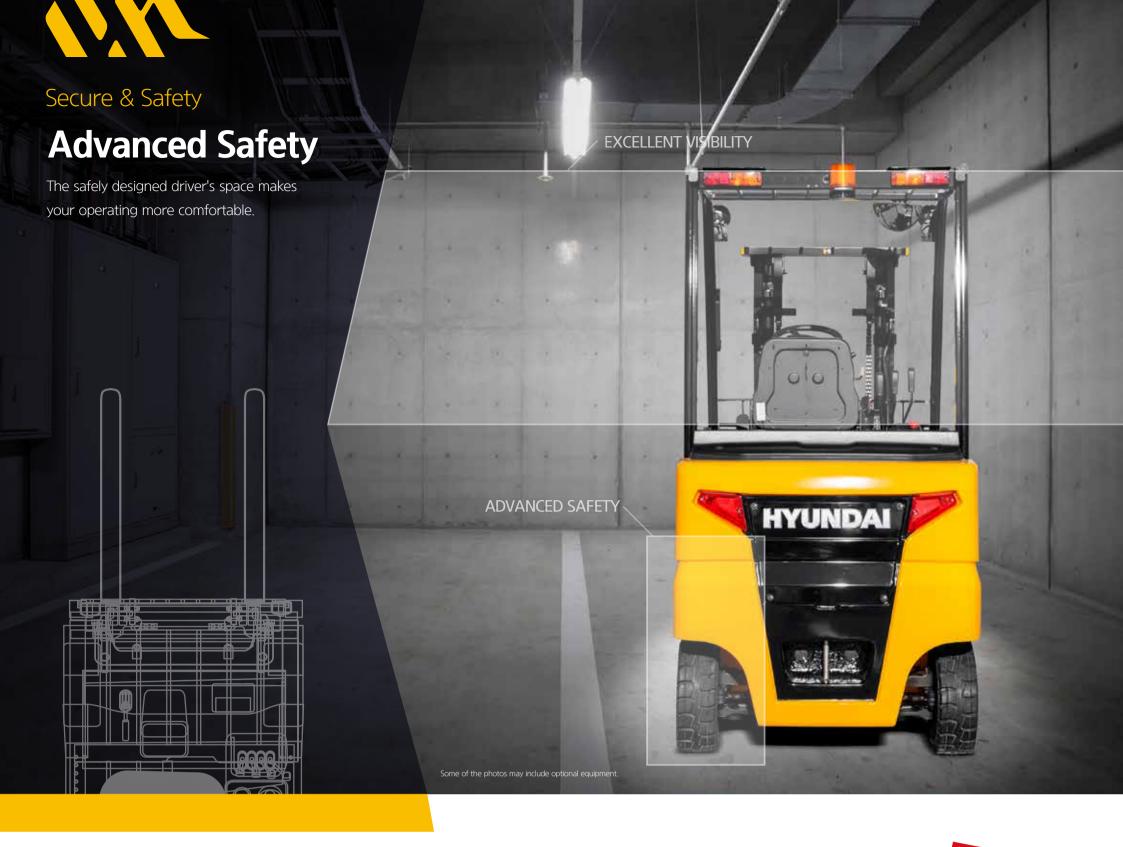


The battery cover is designed as a full

open type to improve the maintenance. Also this is equipped with a gas spring system for safe and easy maintenance.



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



Wide visibility for Safe Operation

The optimized lift cylinder array design provides a clear, wide field of vision for the operator. The adoption of a panorama mirror and rear camera(OPT) improve the rear side view, further enhancing safety.





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



The panoramic mirror expands the driver's view when backing up.

Maximum travel speed limitation

By considering the working environment, the maximum speed can be set and limited from 10 km/h to 1km/h unit through the cluster.

Turtle Mode

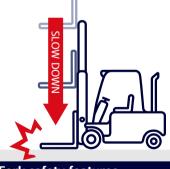
When selecting the turtle mode while working in narrow and congested workplace, the travel speed is reduced at a preset speed.

Safety features

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



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 downcontrol 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 (OPT)

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



LED combination lights and halogen headlights offer the driver visibility in all circumstances.

22/25/30B-9F

New 9 Series Mast Specification

Mast Type		Maximum Fork Height (mm)	Overall Height (Lowered)	free lift height			Tilt Angle		Loading Capacity	Loading Capacity	Vehicle
				W/ Load Backrest (mm)	W/o Load Backrest (mm)	W/o Load Backrest (3/4-SPOOL) (mm)	Fwd	Bwd		(500mm LC) with side shift (kg)	Weight (Unloaded) (kg)
	V330	3,305	2,162	115	115	115	6	10	2,200	2,200	3,965
	V350	3,505	2,262	115	115	115	6	10	2,200	2,200	3,979
2-STAGE	V370	3,705	2,412	115	115	115	6	10	2,200	2,200	4,001
LIMITED FREE	V400	4,005	2,562	115	115	115	6	10	2,200	2,200	4,023
LIFT	V430	4,305	2,712	115	115	115	6	6	2,200	2,200	4,072
	V450	4,505	2,862	115	115	115	6	6	2,200	2,175	4,102
	V470	4,705	2,962	115	115	115	6	6	2,200	2,125	4,116
	V500	5,005	3,112	115	115	115	6	6	2,150	2,075	4,138
2-STAGE	VF/VS295	2,976	2,012	832	1,379	1,379	6	6	2,200	2,200	3,990
FULL FREE LIFT	VF/VS325	3,276	2,162	982	1,529	1,529	6	6	2,200	2,200	4,023
	VF/VS345	3,476	2,262	1,082	1,629	1,629	6	6	2,200	2,175	4,045
	TF370	3,705	1,812	632	1,122	1,081	6	6	2,200	2,200	4,120
	TF400	4,005	1,912	732	1,222	1,181	6	6	2,200	2,200	4,141
	TF430	4,305	2,012	832	1,322	1,281	6	6	2,200	2,200	4,164
	TF450	4,505	2,112	932	1,422	1,422	6	6	2,200	2,175	4,185
	TF470	4,705	2,162	982	1,472	1,431	6	6	2,200	2,125	4,197
	TF500	5,005	2,262	1,082	1,572	1,531	6	6	1,560	1,530	4,222
	TF550	5,505	2,462	1,282	1,772	1,772	6	6	1,450	1,400	4,262
	TF600	6,005	2,662	1,482	1,972	1,972	6	6	1,380	1,260	4,301
3-STAGE	TF650	6,505	2,862	1,682	2,061	1,921	3	3	1,330	1,210	4,340
FULL FREE LIFT	TF700	7,005	3,062	1,882	2,261	2,121	3	3	1,100	980	4,377
	TS370	3,705	1,812	632	1,122	1,074	6	6	2,200	2,200	4,120
	TS400	4,005	1,912	732	1,222	1,174	6	6	2,200	2,200	4,141
	TS430	4,305	2,012	832	1,322	1,274	6	6	2,200	2,200	4,164
	TS450	4,505	2,112	932	1,422	1,422	6	6	2,200	2,175	4,185
	TS470	4,705	2,162	982	1,472	1,424	6	6	2,200	2,125	4,197
	TS500	5,005	2,262	1,082	1,572	1,524	6	6	1,560	1,530	4,222
	TS550	5,505	2,462	1,282	1,772	1,772	6	6	1,450	1,400	4,262
	TS600	6,005	2,662	1,482	1,972	1,972	6	6	1,380	1,260	4,301
	TS650	6,505	2,862	1,682	2,054	1,914	3	3	1,330	1,210	4,340
	TS700	7,005	3,062	1,882	2,254	2,114	3	3	1,100	980	4,377
4-STAGE FULL FREE LIFT	QF610	6,115	2,147	967	1,514	1,514	3	3	1,500	1,380	4,515
	QF660	6,615	2,347	1,167	1,714	1,714	3	3	1,300	1,180	4,575
	QF700	7,015	2,447	1,267	1,814	1,814	3	3	1,000	880	4,605
	QF745	7,465	2,597	1,417	1,964	1,937	3	3	700	580	4,651
	QF790	7,915	2,747	1,567	2,090	1,937	3	3	500	380	4,752

*: Standard

25B-9F											
Mast Type		Maximum	Overall Height (Lowered)	free lift height			Tilt Angle		Loading Capacity	Loading Capacity	Vehicle
		Fork Height		W/ Load Backrest	W/o Load Backrest	W/o Load Backrest (3/4-SPOOL)	Fwd	Bwd	(500mm LC) w/o side shift	(500mm LC) with side shift	Weight (Unloaded)
		(mm)	(mm)	(mm)	(mm)	(mm)	(°)	(°)	(kg)	(kg)	(kg)
	*V300	3,005	2,012	115	115	115	6	10	2,500	2,500	4,138
	V330	3,305	2,162	115	115	115	6	10	2,500	2,500	4,160
2-STAGE	V350	3,505	2,262	115	115	115	6	10	2,500	2,500	4,174
LIMITED	V370	3,705	2,412	115	115	115	6	10	2,500	2,475	4,196
FREE	V400	4,005	2,562	115	115	115	6	10	2,500	2,425	4,218
LIFT	V430	4,305	2,712	115	115	115	6	6	2,450	2,375	4,267
	V450	4,505	2,862	115	115	115	6	6	2,400	2,325	4,297
	V500	5,005	3,112	115	115	115	6	6	2,350	2,275	4,333
2-STAGE FULL	VF295	2,976	2,012	832	1,379	1,379	6	6	2,500	2,500	4,185
FREE LIFT	VF/VS325	3,276	2,162	982	1,529	1,529	6	6	2,500	2,500	4,218
	TF400	4,005	1,912	732	1,279	1,279	6	6	2,500	2,425	4,336
	TF430	4,305	2,012	832	1,379	1,379	6	6	2,450	2,375	4,359
	TF450	4,505	2,112	932	1,479	1,479	6	6	2,400	2,325	4,380
	TF470	4,705	2,162	982	1,529	1,529	6	6	2,350	2,275	4,392
	TF500	5,005	2,262	1,082	1,629	1,629	6	6	1,880	1,850	4,417
	TF550	5,505	2,462	1,282	1,829	1,829	6	6	1,550	1,430	4,457
3-STAGE	TF600	6,005	2,662	1,482	2,029	2,029	6	6	1,400	1,280	4,496
FULL FREE LIFT	TF650	6,505	2,862	1,682	2,061	1,921	3	3	1,350	1,230	4,535
	TF700	7,005	3,062	1,882	2,261	2,121	3	3	1,150	930	4,572
	TS400	4,005	1,912	732	1,279	1,279	6	6	2,500	2,425	4,336
	TS430	4,305	2,012	832	1,379	1,379	6	6	2,450	2,375	4,359
	TS450	4,505	2,112	932	1,479	1,479	6	6	2,400	2,325	4,380
	TS470	4,705	2,162	982	1,529	1,529	6	6	2,350	2,275	4,392
	TS500	5,005	2,262	1,082	1,629	1,629	6	6	1,880	1,850	4,417
	TS550	5,505	2,462	1,282	1,829	1,829	6	6	1,550	1,430	4,457
	TS700	7,005	3,062	1,882	2,254	2,114	3	3	1,150	930	4,572
4-STAGE	QF610	6,115	2,147	967	1,413	1,462	3	3	1,600	1,480	4,710
FULL	QF700	7,015	2,447	1,267	1,713	1,762	3	3	1,100	980	4,800
FREE	QF745	7,465	2,597	1,417	1,964	1,762	3	3	800	680	4,846

^{*} 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.

4,947

480

New 9 Series

30B-9F free lift height Tilt Angle Maximum Overall Vehicle Capacity Capacity Height (500mm LC) (500mm LC) Weight W/o Load Mast Type W/ Load W/o Load Height (Lowered) w/o side with side (Unloaded) Backrest shift (3/4-SPOOL shift (mm) (mm) (°) (°) (mm) (mm) (mm) (kg) (kg) (kg) *V300 3,005 2,012 115 115 115 6 10 3,000 3,000 4,585 4,604 V330 3,305 2,162 3,000 3,000 2-STAGE 3,505 115 115 115 6 4,621 V350 2,262 10 3,000 3,000 LIMITED V370 3,705 2,412 115 115 115 6 10 3,000 3,000 4.643 V400 4,005 2,562 115 115 115 6 10 3,000 3,000 4,665 V450 4,505 2,862 115 115 115 6 6 3,000 2,950 4,743 V500 5,005 3,112 115 115 115 6 6 2,900 2,775 4,780 2-STAGE FULL FREE 6 6 VF295 4,605 VF/VS325 1,529 6 4,638 TF400 4,005 1,912 1,217 1,181 6 3,000 3,000 4,772 732 6 TF430 4,305 2,012 832 1,317 1,281 6 6 3,000 2,950 4,792 TF450 TF470 4,705 2,162 982 6 2,825 4,834 1,467 1,431 6 2,950 TF500 1.567 4.860 5.005 2.262 1.082 1.531 6 6 2.250 2.180 TF550 5,505 2,462 1,282 1,767 1,767 6 1,750 4,902 6,005 1,482 1,967 1,967 1,270 4,942 TF600 2,662 6 6 1,450 3-STAGE TF650 6.505 2.862 1.682 2.061 1.921 1,400 4.983 3 3 1.220 **FULL** TF700 7,005 3,062 1,882 2,261 2,121 3 1,200 1,020 5,023 FREE LIFT TS400 4,005 1,912 1,217 1,153 4,772 732 6 6 3,000 3,000 TS430 4,305 2,012 832 1,317 1,253 3,000 2,950 4,792 6 6 TS450 4,505 2,112 932 1,417 1,403 6 6 3,000 2,875 4,819 TS470 4,705 2,162 982 1,467 1,403 6 2,950 2,825 4,834 5,005 2,262 1,082 2,180 4,860 TS500 1,567 1,503 6 2,250 6 TS550 5,505 2,462 1,282 1.767 1.753 6 6 1,750 1,570 4,902 TS600 6,005 2,662 1,482 1,967 1,953 6 6 1,450 1,270 4,942 TS700 7,005 3,062 1,882 2,233 2,093 1,200 5,023 1,020 4-STAGE 1.514 6.115 2.147 967 1.514 1.700 5.124 QF610 3 3 1.520 FULL FREE QF700 7,015 2,447 1,267 1,814 1,814 3 3 1,200 1,020 5,214 2,747 1,987 1,834 QF790 7,915 1,567 700 520 5,361

* : Standard

^{*} 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.

 $[\]ensuremath{\mathsf{X}}$ TS-Mast : Wide Visible 3-Stage Full Free Lift Mast with 2 Free Lift Cylinders.

New 9 Series Mast Specification

Optional Items



· Fork(mm)

22/ 25B-9F: 900/1,000/1,050(STD)/1,200/1,350/1,500/1,650/1,800/2,100

30B-9F: 900/1,050(STD)/1,150/1,200/1,350/1,500/1,650/1,800/1,970/2,120/2,300/2,400

 $\cdot \text{INTEGRAL SIDE SHIFT, FORK POSITIONER, INTEGRAL FORK POSITIONER SIDE SHIFT}$

 $\cdot \textbf{SEAT}$: Semi suspension seat (STD) Full suspension seat

(Armrest, Heating, Buckle S/W)

·TIRE: Solid(standard) / Non-marking/ Pneumatic

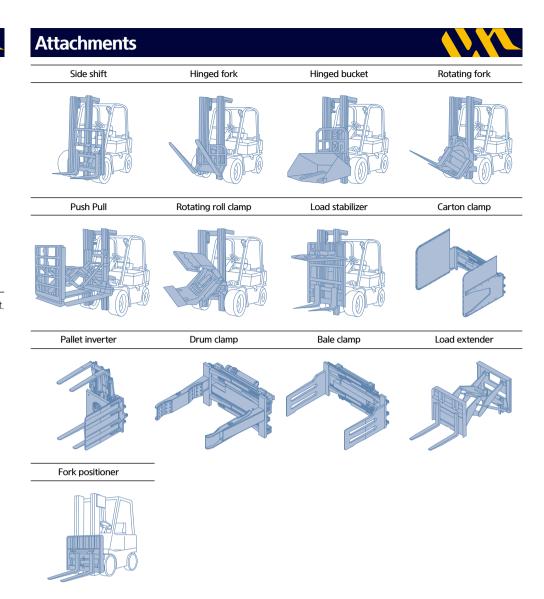
· Cold Storage: It can be applined in -30° wortking environment.

 $\cdot \, \textbf{M.C.V} : \text{2-Spool (STD)}, \, \text{3-Spool}, \, \text{4-Spool}$

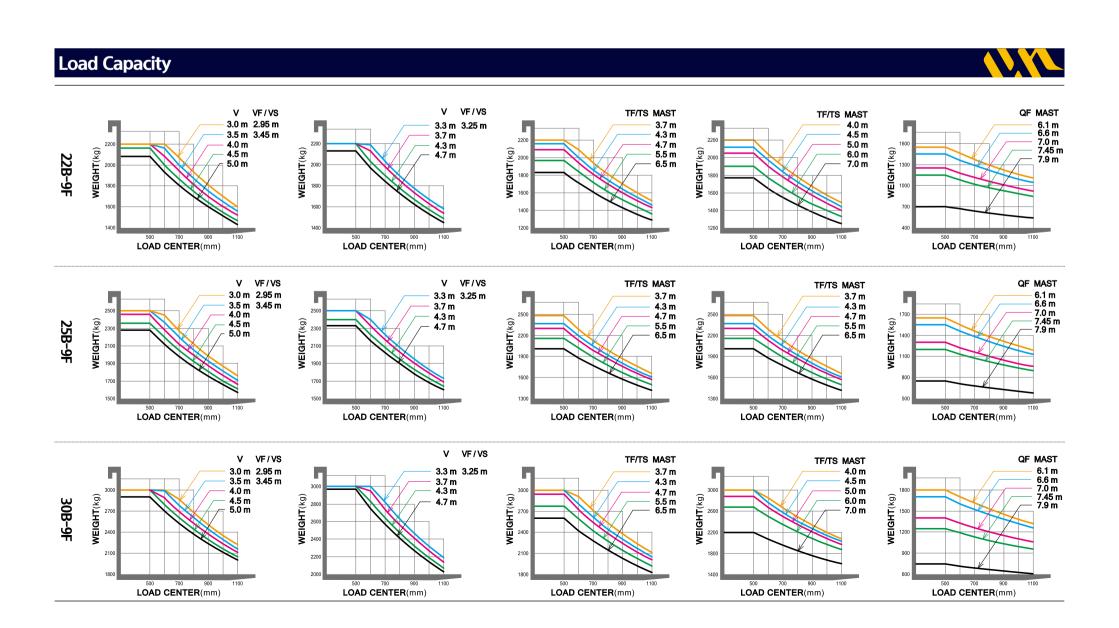
 $\cdot\,\mbox{\sc Any}$ and all lamps are optional

· Side Mirror · OPSS: Mast

st All specifications and photos in this catalog are subject to change for quality improvement.



New 9 Series



New 9 Series Mast Specification

Specification Distinguishing mark 1.1 Manufacturer (abbreviation) Hyundai 1.2 Manufacturer's type designation 22B-9F 25B-9F 30B-9F 1.3 Drive Electric (battery or mains) | Electric (battery or mains) | Electric (battery or mains) 1.4 Type of operation Seat type Seat type Seat type 1.5 Load capacity / rated load 3,000 500 500 500 1.6 Load center distance c mm 1.8 Load center distance x mm 458 458 458 1.9 Wheelbase 1,400 1,400 1,600 y mm Weight 2.1 Service weight 4,573 3,935 4,199 kg 2.2 Axle loading, loaded front/rear 5,368 / 797 5,836 / 824 6,630 / 974 Axle loading, unloaded front/rear 1,663 / 2,302 1,625 / 2,535 1,834 / 2,770 2.3 Tires, chassis Tires: Solid rubbe(V), Superelastic(SE), SE, P SE, P SE, P Pneumatic(P), Polyurethane (PE), Non marking (N) 3.2 Tire size, front 23x9-10 23x9-10 23x9-10 3.3 18x7-8 18x7-8 18x7-8 Tire size, rear 3.5 Wheels, number front / rear (x = driven wheels) 2x/2 2x / 2 2x / 2 3.6 Tread, front 993 993 993 3.7 980 980 980 Dimensions Tilt of mast/fork carriage 4.1 6/10 6 / 10 6 / 10 degrees forward/backrward 4.2 Height, mast lowered h1 (mm) 2,012 2,012 2,012 4.3 115 115 Free lift h2 (mm) 115 4.4 Lift height h3 (mm) 3,005 3,005 3,005 4,185 4,185 4,185 4.5 Height, mast extended h4 (mm) 4.7 Height of overhead guard (cabin) h5 (mm) 2,230 2,230 2,230 1,275 4.8 Seat height / stand height rel. to sip h7 (mm) 1,275 1,275 4.12 Coupling height h10 (mm) 325 325 325 3,345 3,345 3,553 4.19 Overall length 11 (mm) 4.20 Length to face of forks 12 (mm) 2,295 2,295 2,503 4.21 Overall width 1,200 1,200 1,200 b1 (mm) 4.22 Fork dimensions (Ixwxt) lxexs (mm) 45×100×1,050 45×100×1,050 45×122×1,050 4.23 Fork carriage iso 2328 II/A II/A III/A 4.24 Fork-carriage width b3 (mm) 1,102 1,102 1,102 4.31 Ground clearance, below mast, loaded 117 117 117 m1 (mm) 4.32 Ground clearance, center of wheelbase m2 (mm) 130 130 130 4.34.1 Aisle width for pallets (1,000x1,200) Ast (mm) 3,637 3,637 3,829 4.34.2 Aisle width for pallets (800x1,200) Ast (mm) 3,803 3,803 4,009

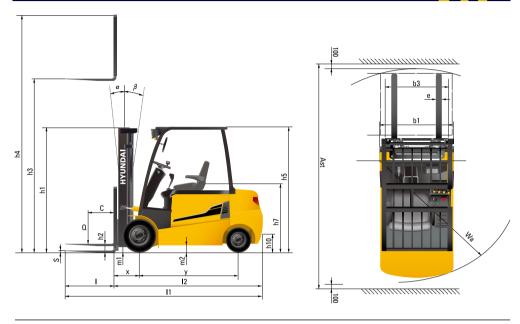
Wa (mm)

1,939

2,150

Performance data								
5.1	Travel speed, unloaded	km/h	15	15	15			
5.2	Lift speed, loaded / unloaded	mm/s	350 / 500	340 / 500	290 / 400			
5.3	Lowering speed, loaded / unloaded	mm/s	500 / 270	500 / 270	500 / 270			
5.6	Max. drawbar pull, loaded / unloaded	N	12,640 / 12,530	12,640 / 12,460	12,490 / 12,430			
5.8	Gradeability, loaded / unloaded	% (°)	19 (10.8)	18 (10.2)	17 (9.6)			
5.10	Service brake		Hydraulic	Hydraulic	Hydraulic			
Motors								
6.1	Drive Motor, 60 Min Rating	kW	4.7x2	4.7x2	4.7x2			
6.2	Hydraulic Motor, 15% Rating	kW	17	17	17			
6.4	Battery voltage / Rating capacity	V/Ah	48 / 600	48 / 600	48 / 660			
6.5	Battery weight	kg	1,020	1,020	1,150			
6.7	Battery compartment dimension (L/W/H)	mm	1,035 / 806 / 535	1,035 / 806 / 535	1,035 / 1,000 / 535			
Addition data								
8.1	Type of drive control		AC	AC	AC			

Dimension



^{*} All specifications in this catalog are subject to change according to the optional items.

MEMO

4.35 Turning radius



