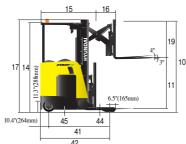
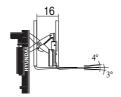
#### Technical Data for 15/18/20/23BRP-9

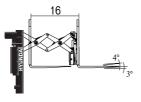
Gene	eral Information						
1	Manufacturer			HYUNDAI	HYUNDAI	HYUNDAI	HYUNDAI
2	Model	Manufacturer's Designation		15BRP-9	18BRP-9	20BRP-9	23BRP-9
3	Load Capacity * (1)	Max.	lb(kg)	1,361(3,000)	1,588(3,500)	1,814(4,000)	2,041(4,500)
4	Load Center	Fork Face to Load CG	in(mm)	24(610)	24(610)	24(610)	24(610)
5	Power Unit	Туре	Volt	36	36	36	36
9	Operator Type	Stand, Double/Single Reach			Stand.[	)/ Reach	
7	Tire Type	Load/Drive / Caster				oly. / Poly.	
8	Wheels (x=driven)	Number, Load/Drive / Caster		4/1×/2	4/1×/2	4/1×/2	4/1×/2
	Dimensions	Tumber, Eddar Britte / Caster		.,,2	.,,2	.,,	.,,2
10	Lift Height	See Chart	in(mm)	210(5,335)	210(5,335)	210(5,335)	210(5,335)
11	Free Lift Height	See Chart	in(mm)	47(1,196)	47(1,196)	47(1,196)	47(1,196)
12	Overall Fork Width	Min. ~ Max.	in(mm)	13~30(330~760)	13~30(330~760)	13~30(330~760)	13~30(330~760
-	Fork Dimensions	TxWxL	in(mm)		(100x1050)		(100x1050)
13		in standard					
14	Carriage Width		in(mm)	33.7(856)	94.5(2,400)	94.5(2,400)	94.5(2,400)
_	Overhead Guard Height	Length	in(mm)	94.5(2,400)	1,050	1,050	1,050
15	Length to Fork Face * (3)	Battery Compartment " Type A"	in(mm)	59.2(1,504)	51.9(1,318) *(4)	N/A	N/A
		Battery Compartment " Type B"	in(mm)	61.2(1,555)	53.9(1,369)	53.9(1,369) *(4)	53.9(1,369)
_		Battery Compartment " Type C"	in(mm)	63.0(1,599)*(4)	N/A	55.6(1,413)	55.6(1,413) *(4
		Battery Compartment " Type D"	in(mm)	65.7(1,669)	N/A	N/A	58.4(1,483)
6	Reach (Pantograph)	Stroke	in(mm)	42.8(1,087)	23.3(592)	23.3(592)	23.3(592)
7	Overall Height * (2)	Lowered, See Chart	in(mm)	95.1(2,415)	95.1(2,415)	95.1(2,415)	95.1(2,415)
		Lifted, See Chart	in(mm)	258(6,554)	258(6,554)	258(6,554)	258(6,554)
19	Load Backrest Height		in(mm)	48(1,219)	48(1,219)	48(1,219)	48(1,219)
20	Outrigger ID	in 2" increments(34"~50")	in(mm)	42(1,067)	42(1,067)	42(1,067)	42(1,067)
21	Turning Radius	Battery Compartment " Type A"	in(mm)	70.8(1,799)	66.5(1,690) *(4)	N/A	N/A
		Battery Compartment " Type B"	in(mm)	72.8(1,849)	68.5(1,740)	68.5(1,740)*(4)	71.3(1,810)
		Battery Compartment " Type C"	in(mm)	74.5(1,892)*(4)	N/A	70.2(1,783)	73.0(1,853) *(4
		Battery Compartment " Type D"	in(mm)	77.2(1,961)	N/A	N/A	75.7(1,922)
22	Battery Compartment * (4)	Length	in(mm)	18.0(457)	14.3(362)	16.3(413)	18.0(457)
erfo	ormance						
24	Travel Speed	loaded/unloaded	mph(kph)	7.3(11.8)	/ 7.3(11.8)	7.3(11.8)	/ 7.3(11.8)
26	Lift Speed	loaded/unloaded	fpm(m/s)	63(0.32)/89(0.45)	61(0.31)/89(0.45)	57(0.29)/57(0.46)	53(0.27)/57(0.4
28	Lowering Speed	loaded/unloaded	fpm(m/s)	98(0.50)	/ 89(0.45)	98(0.50)	/ 89(0.45)
eig	hts						
34	Service weight	Including battery, standard	lb(kg)	8,781(3,983)	7,408(3,360)	7,727(3,505)	8,600(3,901)
35	Axle loading	loaded front	lb(kg)	7,143(3,240)	7,031(3,189)	7,762(3,521)	8,576(3,890)
		loaded rear	lb(kg)	4,639(2,104)	3,878(1,759)	3,964(1,798)	4,524(2,052)
		unloaded front	lb(kg)	3,512(1,593)	2,879(1,306)	3,045(1,381)	3,406(1,545)
		unloaded rear	lb(kg)	5,269(2,390)	4,528(2,054)	4,683(2,124)	5,194(2,356)
nas	sis						
10	Wheel Size	Front, Load Wheels	in(mm)	ø5×4(ø1	27×101)	ø5×4(ø1	27×101)
		Rear, Drive Wheel(Steer)	in(mm)		(ø345×140)		(ø345×140)
		Rear, Caster Wheel	in(mm)	<del>                                     </del>	ø178×73)		ø178×73)
41	Wheelbase	Battery Compartment " Type A"	in(mm)	59.4(1,510)	55.1(1,399)*(4)	N/A	N/A
**	VVIICEIDUSC	Battery Compartment " Type B"	in(mm)	61.5(1,561)	57.1(1,450)	57.1(1,450)*(4)	59.9(1,521)
		Battery Compartment " Type C"	in(mm)	63.2(1,605)*(4)	N/A	58.8(1,494)	61.6(1,565)*(4
12	Overall Length	Battery Compartment " Type D"	in(mm)	65.9(1,675)	N/A	N/A 95.2(2.419)	64.4(1,635)
14 14	Overall Length	in standard battery compartment	in(mm)	104.3(2,649)	93.2(2,368)	95.2(2,419)	97.0(2,463)
	Ground Clearance	With 5" diameter load wheels	in(mm)	2.0(51)	2.0(51)	2.0(51)	2.0(51)
15	Battery Roller Height	With 5" diameter load wheels		6.5(165)	6.5(165)	6.5(165)	6.5(165)
16	Service Brake	Туре				Disc Brake	
17	Parking Brake	Туре				ectric release	
	Steering	Туре			Electric	Steering	
	ric			1			
18	Battery	Туре			Lead	Acid	
		Max. Amp -standard	Ah	1,085	775	930	1,085
		Min. Weight -standard	lb(kg)	2,280(1,034)	1,598(725)	1,878(852)	2,280(1,034)
		D : 14 : CO 14: D ::					
19	Motors, Controls	Drive Motor, 60 Min Rating	kw	6.8	6.8	6.8	6.8
19	Motors, Controls	Hydraulic Motor, 15% Rating	kw	6.8 16.0	6.8 16.0	6.8 16.0	6.8 16.0







•18/20/23BRP-9



•15BRP-9

\*(1) Contact factory. Capacity may be subject to derating at height. \*(2) Spec data is based on the standard mast ( TF530, maximum fork height 5,335mm)

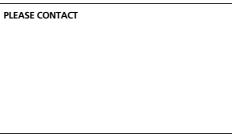
\*(4) Standard battery compartment (type A : 18BRP-9, type B: 20BRP-9, type C: 15/23BRP-9)



Head Office (Sales office)

First tower, 55, Bundang-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Korea

Drive& Hydraulic Motor control Type



www.hyundai-ce.com

2018. 08 Rev. 4

### 15/18/20/23BRP-9

Electric Reach Trucks

**MOVING YOU FURTHER** 

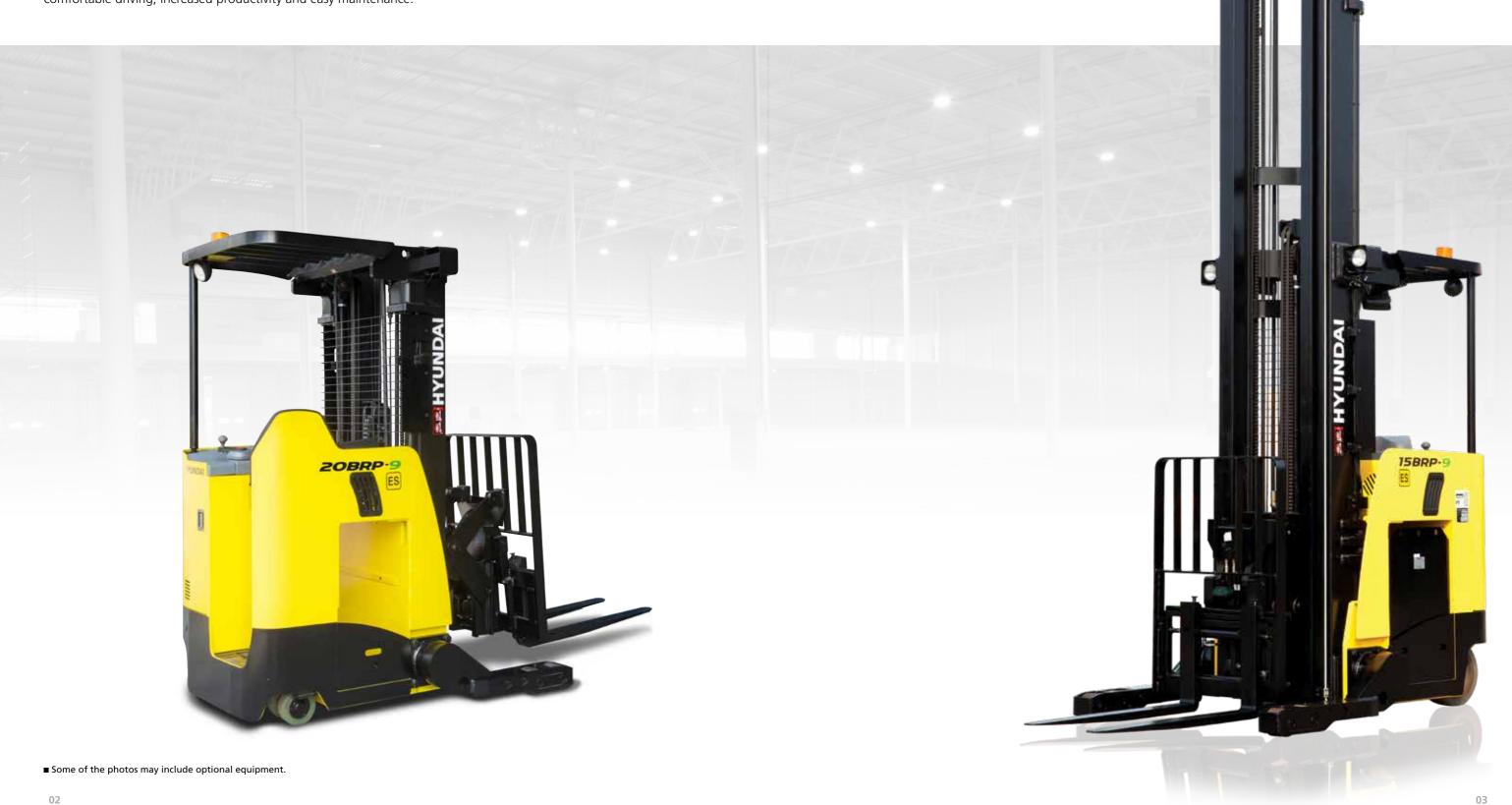


## Your satisfaction is our priority!

Hyundai introduces a new line of **9-series** battery forklift trucks. The newly designed reach trucks provide every operator comfortable driving, increased productivity and easy maintenance.

#### **Compact forklift with proven AC technology**

- Maximum performance
- Comfortable operating room
- Curve control system
- Load indicator (optional)
- Camera(optional)
- Height indicator (optional)



# Superior Power & **Optimal Performance**

Smooth running, efficient and ergonomically designed, 15/18/20/23BRP-9 series are built to meet your needs.

15/18/20/23BRP-9

■ Some of the photos may include optional equipment.



#### **Minimum Turning Radius**

Compact design suitable for narrow aisle operation guarantees work efficiency and maximum space utilization.



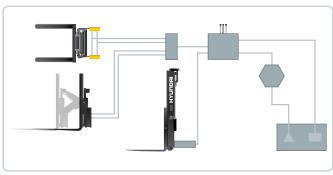
#### Versatile Reach Stroke

Multi-roller reach assembly provides a smooth, controlled and safe load handling system, and shows unsurpassed versatility during extended reach.



#### **Automatic Center Position at Starting**

When the key is turned to the on position, the steering sensor detects the position of the drive wheel and automatically returns the wheel to the center position.



#### State-of-the-art Hydraulic System

The latest large-capacity hydraulic system reacts quickly during operation and the low noise control valve increases both efficiency and durability.



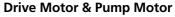
#### **Energy Efficiency**

H(High) mode : 100% N(Normal) mode : 110% E(Economic) mode : 120%



#### **High Technology ZAPI Controller**

The efficient, almost noiseless, 8kHz(high frequency) controller provides smooth quite operation and protection for low & high voltage, overheating and fault recording.



AC motors are designed for optimum reliability and efficiency while providing low noise levels. The AC motors are equipped with temperature sensors to ensure long motor life.



#### **Excellent Gradeability Operation & Anti Roll Back**

A powerful drive motor and four wheel configuration provide for exceptional stability and excellent gradeability. When restarting after stop on a slope, an anti-roll back function ensure operational safety.

	Travel Speed	Gradeability (MAX)							
	(MAX)	unloaded	loaded						
15BRP-9	11.8 Km/h	22%	13%						
18BRP-9	11.8 Km/h	15%	13%						
20BRP-9	11.8 Km/h	15%	12%						
23BRP-9	11.8 Km/h	20%	11%						

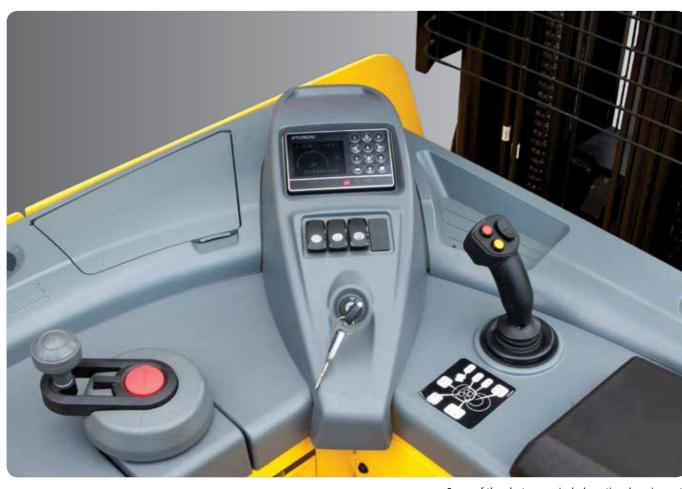
04 05

### Optimised Ergonomics &

### **Advanced Safety**

A design based on human engineering relieves fatigue and increases operator's efficiency.

#### 15/18/20/23BRP-9



■Some of the photos may include optional equipment.



#### **Steering Control**

A steering control coupled with our Electric Power Steering system gives the operator exceptionally smooth and controlled steering for tight spaces.



#### **Joystick Lever**

Minimal operator effort is required for precise, safe and productive control. The lever's contoured design and cushion armrest provide added comfort during operation.



**Cup Holder, Console Box & Storage Space** 

Additional storage compartments are located inside the operating space for operator's convenience.



#### **New High Visibility for Safe Operation**

The operator is able to work with increased safety and accuracy due to a wider mast view.



#### **Strong Overhead Guard**

The safety overhead guard meets ISO 6055 and ANSI regulations and protects the operator during hazardous work.



#### **Ergonomic Backrest**

A large and soft cushion pad is applied for operator's safety and



#### Non Slip Floor Mat

A heavy, vibration dampening, floor mat reduces operator fatigue and provides increased productivity.



#### **Protection Fence**

Protection fence installed between mast and operator room for safety.

\*Tempered Glass Fence(Optional)

07





Camera & LCD monitor (optional)

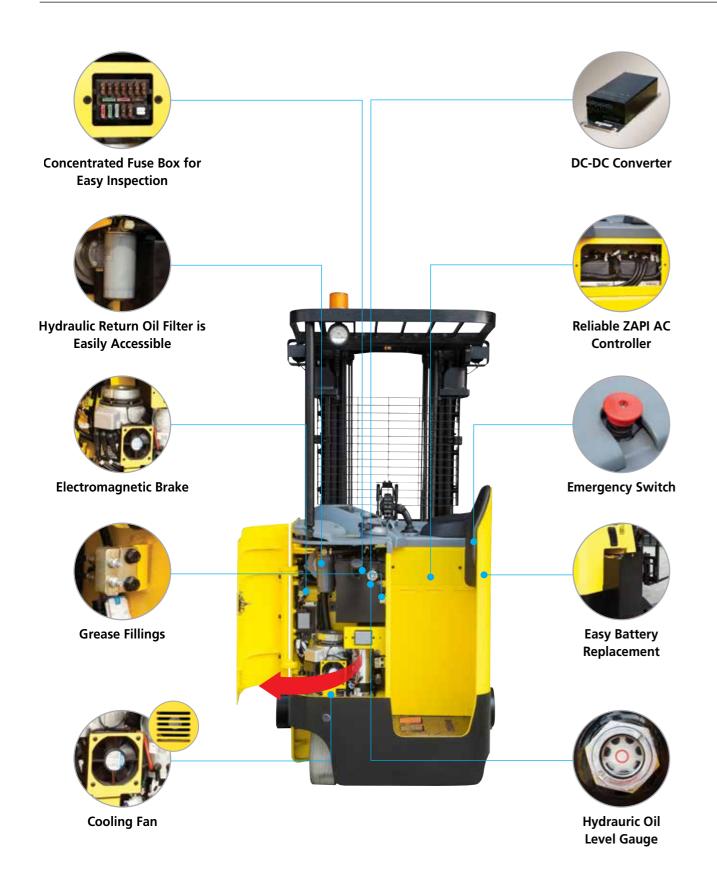
A camera installed on fork side provides the operator with another excellent visibility. (apply to mast over TF700)

06

#### *15/18/20/23BRP-9*

### Durability, **Easy Maintenance**

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



#### **Advanced LCD Monitor**



H (High) mode N (Normal) mode E (Economic) mode Turtle mode

The LCD color monitor with 3.5 inch graphic smart display allows the operator to easily and efficiently control the machine. The monitor provides information about speed & accelerator level, steer angle & travel direction, battery discharge indicator, hour meter & working mode. The optional load indicator displays the load weight and the height of fork in the monitor. The operator can select various performance modes to meet all working conditions. It is available multi-languages (maximum 11) for operator.

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.



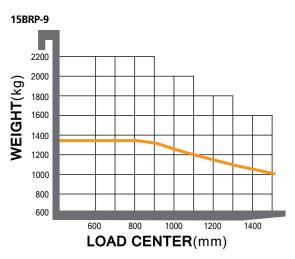
#### Monitor for load& height indicator (optional)

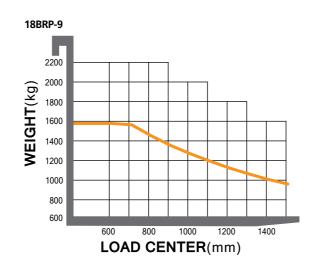
The optional load indicator displays the load weight in the monitor. The load sensor reduces the time to check loaded weight and the alarm alerts the driver when overloaded. The optional indicator displays the height of fork in the monitor.

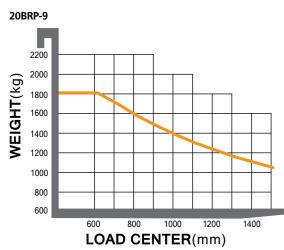
### New 9 Series

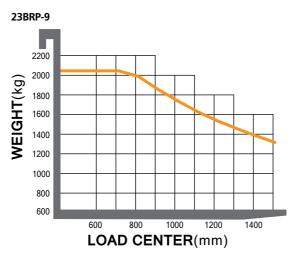
#### **Load Capacity**

MODEL	MAST	BATTERY TYPE	OUTTRIGGER-I.D
15BRP-9	TF530	С	1066mm (42in)
18BRP-9	TF530	A	1066mm (42in)
20BRP-9	TF530	В	1066mm (42in)
23BRP-9	TF530	С	1066mm (42in)









#### **Optional Items**

#### Outrigger I.D (mm)

- 864, 914, 965, 1016, 1118, 1168, 1219, 1270 **Integral Sideshift** 

- Max. 120mm

UL - UL" EE"

**Beacon Lamp** 

- Amber, Blue, Red

**Rear Work Lamp** 

#### Fork Length (mm)

- 15/18BRP: 900, 950, 1000, 1150, 1200, 1350,1500, 1600
- 20/23BRP: 900, 1000, 1200, 1350, 1500, 1650, 1800

#### Fence

- Wire net type (STD)

- Tempered glass type (OPT)

Tire

- Vulkollan

**Height Indicator** 

Cold Storage Battery

- 600AH, 700AH, 800AH

Charger 3P

- 220/380V, 410V, 440V

#### 15/18/20/23BRP-9

#### Mast Specification (15/23BRP-9)

				Overall	Free Lift				Т	ruck V	Veight	- w/o	Batter	у	
Mast Type		Maximum Fork Height	Overall Height (Lowered)	Height (Lifted) (With Backrest)	Height (With Backrest)	Over Headguard Height	Min. Outtrigger -I.D	"A" Type B.C 14.5" (362mm)		"B" Type B.C 16.5" (413mm)		"C" Type B.C 18.3" (457mm)		B.C 2	Type 21.1" mm)
		15/23BRP-9	15/23BRP-9	15/23BRP-9	15/23BRP-9	15/23BRP-9	15/23BRP-9	15BRP-9	23BRP-9	15BRP-9	23BRP-9	*15BRP-9	*23BRP-9	15BRP-9	23BRP-9
		mm	mm	mm	mm	mm	mm	kg	kg	kg	kg	kg	kg	kg	kg
	TF500	5,011	2,260	6,230	1,041	2,240	864	2,870	-	2,888	2,805	2,902	2,820	2,925	2,843
	*TF530	5,335	2,415	6,554	1,196	2,395	864	2,918	-	2,935	2,853	2,949	2,867	2,972	2,890
2 (+>==	TF610	6,095	6,095 2,720		1,501	2,395	864	3,077 -		3,095	3,012	3,109	3,027	3,132	3,050
3-Stage	TF685	6,859	3,025	8,078	1,806	2,395	864	-	-	3,186	3,104	3,201	3,119	3,224	3,142
Full	TF760	7,621	3,325	8,840	2,106	2,395	864	-	-	3,278	3,196	3,293	3,210	3,316	3,233
Free	TF815	8,155	3,555	9,374	2,336	2,395	864	-	-	3,350	3,267	3,364	3,282	3,387	3,305
Lift	TF865	8,661	3,785	9,880	2,566	2,395	1,016	-	-	-	-	3,443	3,360	3,466	3,383
	TF930	9,301	4,065	10,520	2,846	2,395	1,067	-	-	-	-	-	-	3,551	3,469
	TF1010	10,161	4,370	11,380	3,151	2,395	1,118	-	-	-	-	-	-	3,662	3,580

\* STANDARD

#### Mast Specification (18/20BRP-9)

	ast pe	Maximum Fork Height		Overall Height (Lowered)		Overall Height (Lifted) (With Backrest)		Free Lift Height (With Backrest)		Over Headguard Height		Min. Outtrigger -I.D		Truck "A" Type B.C 14.5" (362mm)		Weight - w/o "B" Type B.C 16.5" (413mm)		"C" Type B.C 18.3" (457mm)	
			20BRP-9	18BRP-9	20BRP-9	18BRP-9	20BRP-9	18BRP-9	20BRP-9	18BRP-9	20BRP-9	18BRP-9	20BRP-9	*18BRP-9	20BRP-9	18BRP-9	*20BRP-9	18BRP-9	20BRP-9
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	kg	kg	kg	kg	kg
	*TF500	5,011	5,011	2,260	2,260	6,230	6,230	1,041	1,041	2,240	2,240	864	864	2,597	-	2,615	2,615	-	2,629
3-Stage	TF530	5,335	5,335	2,415	2,415	6,554	6,554	1,196	1,196	2,395	2,395	864	864	2,635	-	2,653	2,653	-	2,667
Full	TF610	6,095	6,095	2,720	2,720	7,314	7,314	1,501	1,501	2,395	2,395	864	864	2,776	-	2,793	2,793	-	2,807
Free	TF685	6,859	6,859	3,025	3,025	8,078	8,078	1,806	1,806	2,395	2,395	864	864	-	-	2,882	2,882	-	2,896
Lift	TF760	-	7,621	-	3,325	-	8,840	-	2,106	-	2,395	-	864	-	-	-	-	-	2,970
	TF815	-	8,155	-	3,555	-	9,374	-	2,336	-	2,395	-	864	-	-	-	-	-	3,027

\* STANDARD

#### **Battery Table**

Battery Type	Compa Si	tery rtment ze gth)	Battery Voltage	Max. Capacity (6 Hour Rate)		dth	ery Di Len (I	gth	Height (H)		Battery Weight Min. Weight	
	in	mm	Volt	Ah	in	mm	in	mm	in	mm	lb	kg
Type A	14.3	362	36	775	38.4	975	14.0	355	31.0	787	1598	725
Type B	16.3	413	36	930	38.4	975	16.0	406	31.0	787	1878	852
Type C	18.0 457 20.7 527		36	1085	38.4	975	17.7	450	31.0	787	2280	1034
Type D			36	1240	38.4	975	20.5	520	31.0	787	2601	1180

#### **Load Tire Option Table**

	15B	RP-9	18B	RP-9	20B	RP-9	23B	RP-9
Type	(ø127x	ø10.5x4" (ø267x 101mm)	ø5x4" (ø127x 101mm)	ø10.5x4" (ø267x 101mm)	ø5x4" (ø127x 101mm)	ø10.5x4" (ø267x 101mm)	ø5x4" (ø127x 101mm)	ø10.5x4 (ø267x 101mm
TF500	•	-	•	•	•	•	•	•
	•	-	•	•	•	•	•	•
TF610	•	-	•	•	•	•	•	•
TF685	•	-	•	•	•	•	•	•
TF760	•	-	-	-	•	-	•	•
TF815	•	-	-	-	•	-	•	•
TF865	•	-	-	-	-	-	•	-
TF930	•	-	-	-	-	-	•	-
TF1010	•	-	-	-	-	-	•	-

#### **Right Angle Aisle Stacking - Zero Clearance**

362 Ba	362 Battery Compartment and 1,067 Outrigger I.D								362 Battery Compartment and 1,067 Outrigger I.D						413 Battery Compartment and 1,067 Outrigger I.D						
15BRP-9							18/20BRP-9					23BRP-9									
	Pallet Width (mm)								Pa	llet Wi	dth (m	m)			Pallet Width (mm)						
Pallet		838	914	1,016	1,118	1,219	Pallet		838	914	1,016	1,118	1,219	Pallet		838	914	1,016	1,118	1,219	
Length	914	2,333	2,326	2,317	2,307	2,298	Length	914	2,137	2,129	2,117	2,106	2,094		914	2,217	2,208	2,196	2,196	2,171	
. •	1,016	2,447	2,441	2,434	2,426	2,418		1,016	2,255	2,248	2,239	2,230	2,221	Length	1,016	2,337	2,330	2,321	2,321	2,302	
(mm)	1,118	2,558	2,553	2,546	2,539	2,533	(mm)	1,118	2,368	2,363	2,355	2,348	2,340	(mm)	1,118	2,452	2,446	2,438	2,438	2,422	
	1,219	2,665	2,661	2,655	2,649	2,643	]	1,219	2,477	2,472	2,466	2,460	2,453		1,219	2,561	2,556	2,550	2,550	2,536	

<sup>·</sup> Add 51mm for 413mm Battery Compartment · Add 89mm for 457mm Battery Compartment

· Add 51mm for 457mm Battery Compartment · Add 102mm for 527mm Battery Compartment

<sup>·</sup> Add152mm for 527mm Battery Compartment

<sup>-</sup> Add 51mm for 413mm Battery Compartment · Add 89mm for 457mm Battery Compartment