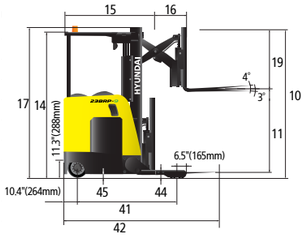
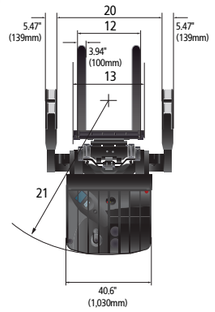
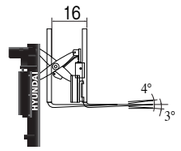
Technical Data for 15/18/20/23BRP-9

General 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)	3,000(1,361)	3,500(1,588)	4,000(1,814)	4,500(2,041)
4	Load Center	Fork Face to Load CG	in(mm)	24(610)	24(610)	24(610)	24(610)
5	Power Unit	Type	Volt	36	36	36	36
9	Operator Type	Stand, Double/Single Reach		standing			
7	Tire Type	Load/Drive / Caster		PE			
8	Wheels (x=driven)	Number, Load/Drive / Caster		4 / 1× / 2	4 / 1× / 2	4 / 1× / 2	4 / 1× / 2
Basic Dimensions							
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	T×W×L	in(mm)	1.57×4(40x100x1050)		1.75×4(45x100x1050)	
13	Carriage Width	in standard	in(mm)	33.7(856)	33.7(856)	33.7(856)	33.7(856)
14	Overhead Guard Height	Length	in(mm)	94.5(2,400)	94.5(2,400)	94.5(2,400)	94.5(2,400)
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)
16	Reach (Pantograph)	Stroke	in(mm)	42.8(1,087)	23.3(592)	23.3(592)	23.3(592)
17	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)
Performance							
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(0.46)
28	Lowering Speed	loaded/unloaded	fpm(m/s)	98(0.50) / 89(0.45)		98(0.50) / 89(0.45)	
Weights							
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)
Chassis							
40	Wheel Size	Front, Load Wheels	in(mm)	ø5×4(ø127×100)		ø5×4(ø127×100)	
		Rear, Drive Wheel(Steer)	in(mm)	ø13.5×5.5(ø345×140)		ø13.5×5.5(ø345×140)	
		Rear, Caster Wheel	in(mm)	ø7×2.87(ø178×73)		ø7×2.87(ø178×73)	
41	Wheelbase	Battery Compartment " Type A"	in(mm)	59.4(1,510)	55.1(1,399)*(4)	N/A	N/A
		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)	64.4(1,635)*(4)
		Battery Compartment " Type D"	in(mm)	65.9(1,675)	N/A	N/A	64.4(1,635)
42	Overall Length	in standard battery compartment	in(mm)	104.3(2,649)	93.2(2,368)	95.2(2,419)	97.0(2,463)
44	Ground Clearance	With 5" diameter load wheels	in(mm)	2.0(51)	2.0(51)	2.0(51)	2.0(51)
45	Battery Roller Height	With 5" diameter load wheels		6.5(165)	6.5(165)	6.5(165)	6.5(165)
46	Service Brake	Type		Electric Disc Brake			
47	Parking Brake	Type		Automatic Electric release			
	Steering	Type		Electric Steering			
Electric							
48	Battery	Type		Lead Acid			
		Max. Amp -standard	Ah	1,085	775	930	1,085
		Min. Weight -standard	lb(kg)	2,261(1,026)	1,633(741)	1,884(855)	2,261(1,026)
49	Motors, Controls	Drive Motor, 60 Min Rating	kw	6.8	6.8	6.8	6.8
		Hydraulic Motor, 15% Rating	kw	16.0	16.0	16.0	16.0
		Drive& Hydraulic Motor control Type		AC	AC	AC	AC

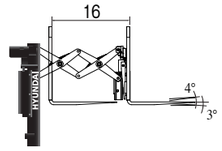
*(1) Contact factory. Capacity may be subject to derating at height.
*(2) Spec data is based on the standard mast (TF530, maximum fork height 5,335mm)
*(3) Add 65mm with option side shift
*(4) Standard battery compartment (type A : 18BRP-9, type B: 20BRP-9, type C: 15/23BRP-9)







•18/20/23BRP-9



•15BRP-9

HYUNDAI MATERIAL HANDLING

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2020. 09 Rev. 9

15/18/20/23BRP-9

Electric Reach Trucks

MOVING YOU FURTHER



HYUNDAI MATERIAL HANDLING

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)





■ Some of the photos may include optional equipment.

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.



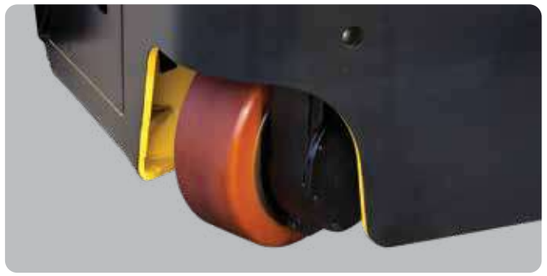
Minimum Turning Radius

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



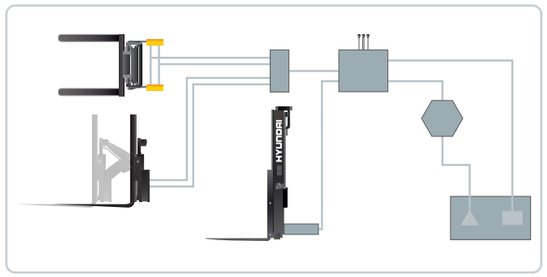
Versatile Reach Stroke

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.



Drive Motor & Pump Motor

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 (MAX)	Gradeability (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%

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.



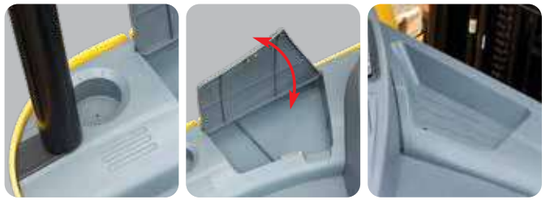
Steering Control

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 comfort.



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.





Camera & LCD monitor (optional)

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

Durability,
Easy Maintenance

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

15/18/20/23BRP-9



Concentrated Fuse Box for Easy Inspection



DC-DC Converter



Hydraulic Return Oil Filter is Easily Accessible



Reliable ZAPI AC Controller



Electromagnetic Brake

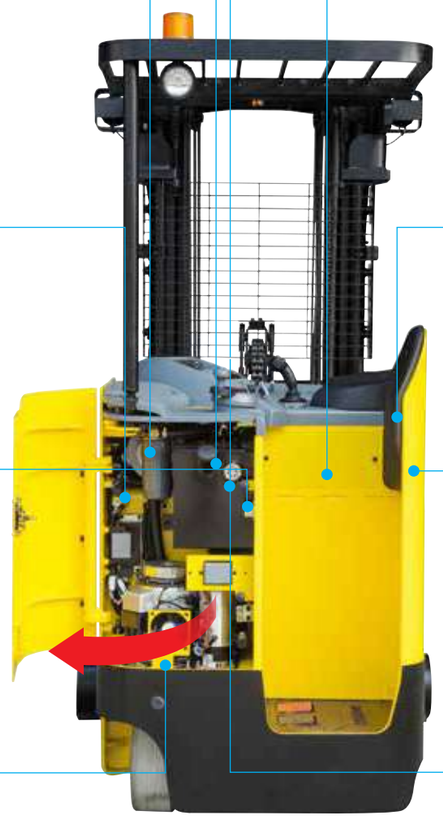
Emergency Switch

Grease Fillings

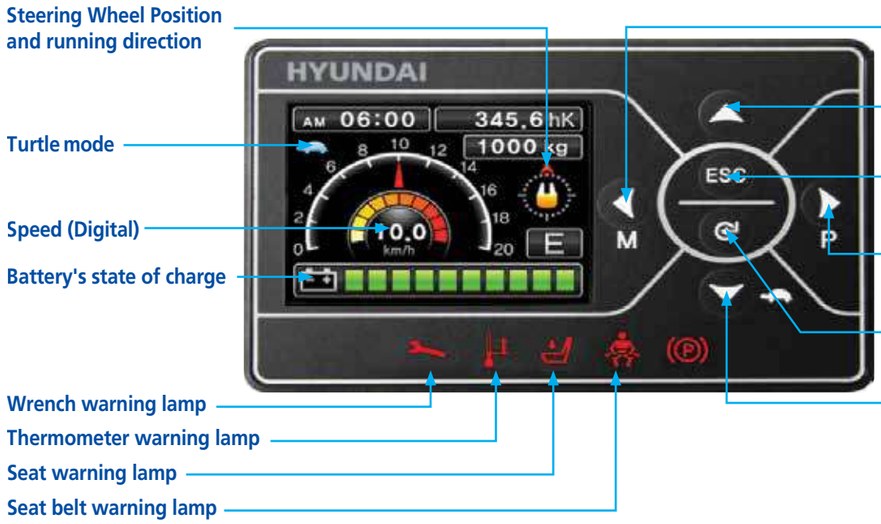
Easy Battery Replacement

Cooling Fan

Hydrauric Oil Level Gauge



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)

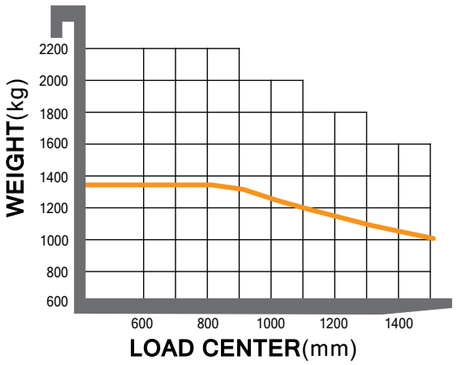
The optional load indicator displays the load weight in the monitor. The load sensor reduces the time to check loaded weight and the alarm alerts the driver when overloaded. The optional indicator displays the height of fork in the monitor.

New 9 Series

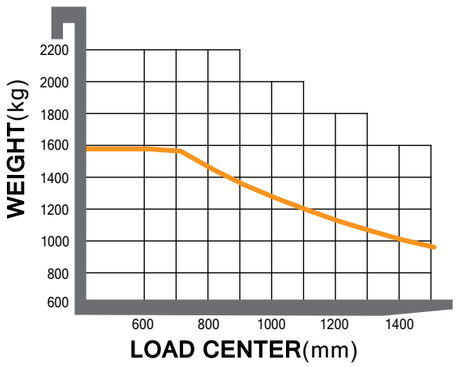
Load Capacity

MODEL	MAST	BATTERY TYPE	OUTTRIGGER-I.D
15BRP-9	TF530	C	1,066mm (42in)
18BRP-9	TF530	A	1,066mm (42in)
20BRP-9	TF530	B	1,066mm (42in)
23BRP-9	TF530	C	1,066mm (42in)

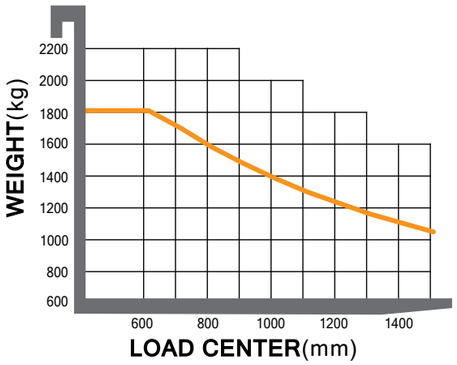
15BRP-9



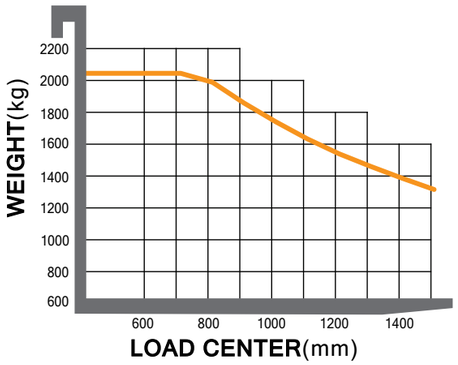
18BRP-9



20BRP-9



23BRP-9



Optional Items

Outrigger I.D (mm)
- 864/914/965/1,016/1,118/1,168/1,219/1,270

Integral Sideshift
- Max. 120mm

UL
- UL" EE"

Beacon Lamp (Amber)

Rear Work Lamp

Fork Length (mm)
- 15/18BRP: 900/950/1,000/1,150/1,200/1,350/1,500/1,600
- 20/23BRP: 900/1,000/1,200/1,350/1,500/1,650/1,800

Fence
- Wire net type (STD)

Tire
- Vulkollan

Height Indicator

Cold Storage

Battery
- 600AH, 700AH, 800AH

Charger 3P
- 220/380V, 410V, 440V

Mast Specification (15/23BRP-9)

Mast Type		Maximum Fork Height	Overall Height (Lowered)	Overall Height (Lifted) (With Backrest)	Free Lift Height (With Backrest)	Over Headguard Height	Min. Outtrigger -I.D	Truck Weight - w/o Battery							
								"A" Type B.C 14.5" (362mm)		"B" Type B.C 16.5" (413mm)		"C" Type B.C 18.3" (457mm)		"D" Type B.C 21.1" (527mm)	
		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
3-Stage Full Free Lift	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
	TF610	6,095	2,720	7,314	1,501	2,395	864	3,077	-	3,095	3,012	3,109	3,027	3,132	3,050
	TF685	6,859	3,025	8,078	1,806	2,395	864	-	-	3,186	3,104	3,201	3,119	3,224	3,142
	TF760	7,621	3,325	8,840	2,106	2,395	864	-	-	3,278	3,196	3,293	3,210	3,316	3,233
	TF815	8,155	3,555	9,374	2,336	2,395	864	-	-	3,350	3,267	3,364	3,282	3,387	3,305
	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)

Mast Type		Maximum Fork Height		Overall Height (Lowered)		Overall Height (Lifted) (With Backrest)		Free Lift Height (With Backrest)		Over Headguard Height		Min. Outtrigger -I.D		Truck Weight - w/o Battery					
														"A" Type B.C 14.5" (362mm)		"B" Type B.C 16.5" (413mm)		"C" Type B.C 18.3" (457mm)	
		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	18BRP-9	20BRP-9
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	kg	kg	kg	kg	kg
3-Stage Full Free Lift	*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
	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
	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
	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
	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	Battery Compartment Size (Length)		Battery Voltage	Max. Capacity (6 Hour Rate)	Battery Dimensions						Battery Weight	
					Width (W)		Length (L)		Height (H)		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	1,598	725
Type B	16.3	413	36	930	38.4	975	16.0	406	31.0	787	1,878	852
Type C	18.0	457	36	1085	38.4	975	17.7	450	31.0	787	2,280	1,034
Type D	20.7	527	36	1240	38.4	975	20.5	520	31.0	787	2,601	1,180

Load Tire Option Table

Mast Type	15BRP-9		18BRP-9		20BRP-9		23BRP-9	
	ø5x4" (ø127x 101mm)	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	●	-	●	●	●	●	●	●
TF530	●	-	●	●	●	●	●	●
TF610	●	-	●	●	●	●	●	●
TF685	●	-	●	●	●	●	●	●
TF760	●	-	-	-	●	-	●	●
TF815	●	-	-	-	●	-	●	●
TF865	●	-	-	-	-	-	●	-
TF930	●	-	-	-	-	-	●	-
TF1010	●	-	-	-	-	-	●	-

Right Angle Aisle Stacking - Zero Clearance

362 Battery Compartment and 1,067 Outrigger I.D — 15BRP-9

Pallet Length (mm)	Pallet Width (mm)					
	838	914	1,016	1,118	1,219
914	2,333	2,326	2,317	2,307	2,298
1,016	2,447	2,441	2,434	2,426	2,418
1,118	2,558	2,553	2,546	2,539	2,533
1,219	2,665	2,661	2,655	2,649	2,643

· Add 51mm for 413mm Battery Compartment
· Add 89mm for 457mm Battery Compartment
· Add152mm for 527mm Battery Compartment

362 Battery Compartment and 1,067 Outrigger I.D — 18/20BRP-9

Pallet Length (mm)	Pallet Width (mm)					
	838	914	1,016	1,118	1,219
914	2,137	2,129	2,117	2,106	2,094
1,016	2,255	2,248	2,239	2,230	2,221
1,118	2,368	2,363	2,355	2,348	2,340
1,219	2,477	2,472	2,466	2,460	2,453

· Add 51mm for 413mm Battery Compartment
· Add 89mm for 457mm Battery Compartment

413 Battery Compartment and 1,067 Outrigger I.D — 23BRP-9

Pallet Length (mm)	Pallet Width (mm)					
	838	914	1,016	1,118	1,219
914	2,217	2,208	2,196	2,196	2,171
1,016	2,337	2,330	2,321	2,321	2,302
1,118	2,452	2,446	2,438	2,438	2,422
1,219	2,561	2,556	2,550	2,550	2,536

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