



ELECTRIC REACH TRUCKS

BRP-X

15/18/20/23BRP-X





NEXT-GENERATION PANTOGRAPH REACH TRUCK WITH PERFORMANCE COMPARABLE TO INDUSTRY LEADERS



SUPERIOR POWER & OPTIMAL PERFORMANCE

Enhanced travel and lift speed along
with advanced mast stability.



ENHANCED DRIVER COMFORT & STABILITY

Easy entry and greater operator foot room,
with increased floorboard cushioning.



ERGONOMICALLY DESIGNED DASHBOARD

User-friendly control panel.
Knee, back, and hip padding increased
for operator comfort



ADVANCED SAFETY

New overhead guard for a clear view.
Battery Side Gate Interlock Sensor.



SUPERIOR POWER & OPTIMAL PERFORMANCE

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



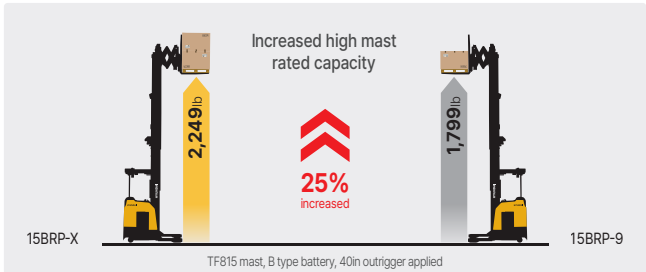
Drive Motor & Pump Motor

Upgraded motor, pump, and MCV boost material handling speed, reducing cycle times and improving warehouse efficiency.



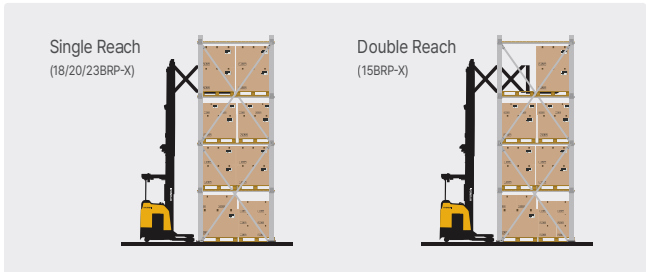
Lithium Battery Pack (Optional)

The 36V/690Ah high-capacity Lithium battery (LFP) delivers fast charging (10% → 100% in max 2.5 hours) and constant output with improved efficiency through cell heating pads.



Advanced Mast Stability

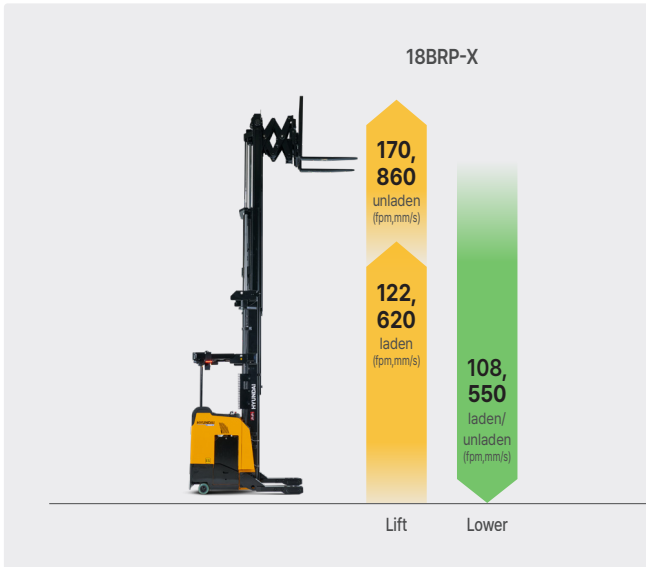
Height and position detection sensors with hydraulic cushions minimize shock during operations while enabling up to 25% increased mast capacity, allowing warehouses to store heavier loads at higher elevations for optimized vertical storage space.



Single vs. Double Reach

Double reach pantograph improves warehouse efficiency by doubling storage capacity.

Enhanced Speed



Improved Travel, Lifting, and Lowering Speed

New BRP-X delivers faster material handling with reduced shock, increasing efficiency while protecting valuable goods. Improved electronic controls extend equipment life and reduce operator strain.



ENHANCED DRIVER COMFORT & STABILITY



An ergonomically designed driver space reduces operator fatigue and boosts efficiency. The spacious operator compartment combined with intuitive controls and delivers superior comfort and natural operation throughout extended shifts.



Driver Comfort



Enhanced Knee and Hip Padding

The generous padding assures maximum comfort over long workdays and also provides added protection in the event of workplace accidents.



Wider Toe Space & Lower Step Height

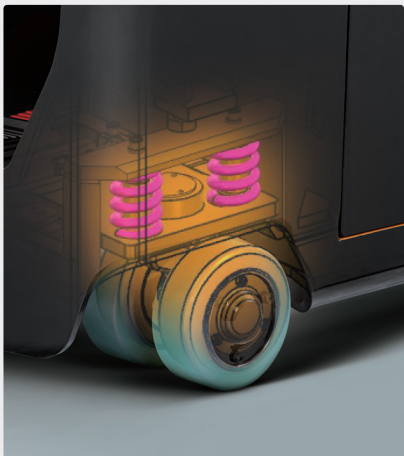
The additional toe space allows operators to naturally position their feet, reducing strain on the legs during long shifts. The step height has been lowered to just 10.6" for ease of entry.



Comfort-Designed Backrest & Storage Box

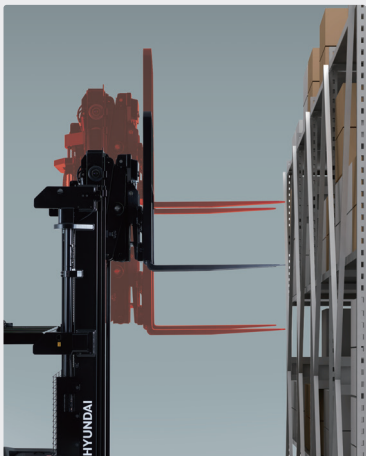
A large and soft cushion pad enhances operator safety and comfort. A storage box has been added to the bottom of the back pad, allowing for the storage of manual booklets and other items.

Convenient, Simplified Operation



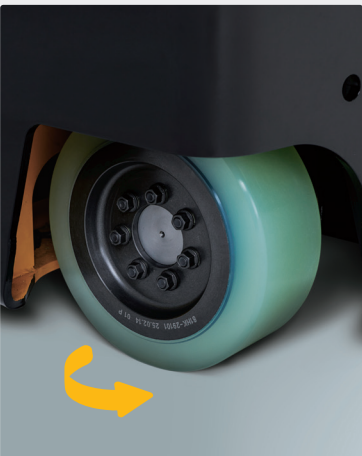
Driver Impact Reduction

By applying a spring damper to the footrest and adding a spring on the caster tire, driver impact is reduced in rough or uneven work environments, providing improved comfort.



Beam Height Select

There are 20 programmable presets with 10 load beam levels so operators can preselect the putaway and letdown fork positions. This standard feature works through the control handle not the dash.



Auto Drive Tire Centering

Upon start up, the drive tire automatically centers, ensuring the truck is not starting with the drive tire at an angle, which also contributes to a safer operating environment.

ERGONOMICALLY DESIGNED DASHBOARD

The newly designed dashboard offers a more ergonomic layout, ensuring easier access to controls and a more intuitive operation experience.



Cup Holder
The cup holder depth has been increased from 1.3 inch to 3 inch to enhance storage stability and usability.

Paper Clip
A dashboard paper clip has been applied for secure note-taking and document storage.

Emergency Switch
Cuts the main power to immediately stop the equipment in critical situations.

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

Accessory Switch
Convenience switches, including a light switch and a fan switch to provide operator comfort.

Steering Control
The friction-based steering system prevents excessive free movement, requiring less continuous correction and reducing strain on the operator's arms.

Control Handle
The redesigned control handle enables one-hand control of direction and speed with minimal effort, even during lifting and reaching operations, enhancing productivity while reducing operator fatigue.



Lift / lowering



Traction Fwd / Rev

Advanced LCD Monitor
H (High) mode / N (Normal) mode / E (Economic) mode / Turtle mode
The 2-inch LCD smart display provides real-time machine data, including speed, steer angle, battery status, and working mode. Operators can monitor load weight, fork height, and overall truck condition.



* Some of the photos may include optional equipment.

ADVANCED SAFETY

Experience optimal protection with a reinforced overhead guard, ergonomic backrest, and non-slip floor mat. Improved visibility and safety features ensure precise operation in any working environment.



Strong Overhead Guard

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



Protection Screen

Protection screen installed between mast and operator room for safety.



Pedal Malfunction Prevention

This feature enhances safety by minimizing accidental movements, ensuring reliable and precise operation.



Blue Spots & Red Zone (Optional)

Blue Spot projects a blue light on the ground to alert nearby workers of the forklift's presence, enhancing safety. Red Zone marks a restricted area around the forklift to prevent accidents and protect both operators and pedestrians.



Anti Roll Back

For greater safety, this system prevents the forklift from rolling rapidly down a slope when the control handle & brake pedal are not applied while also offering improved ramp start-up abilities.

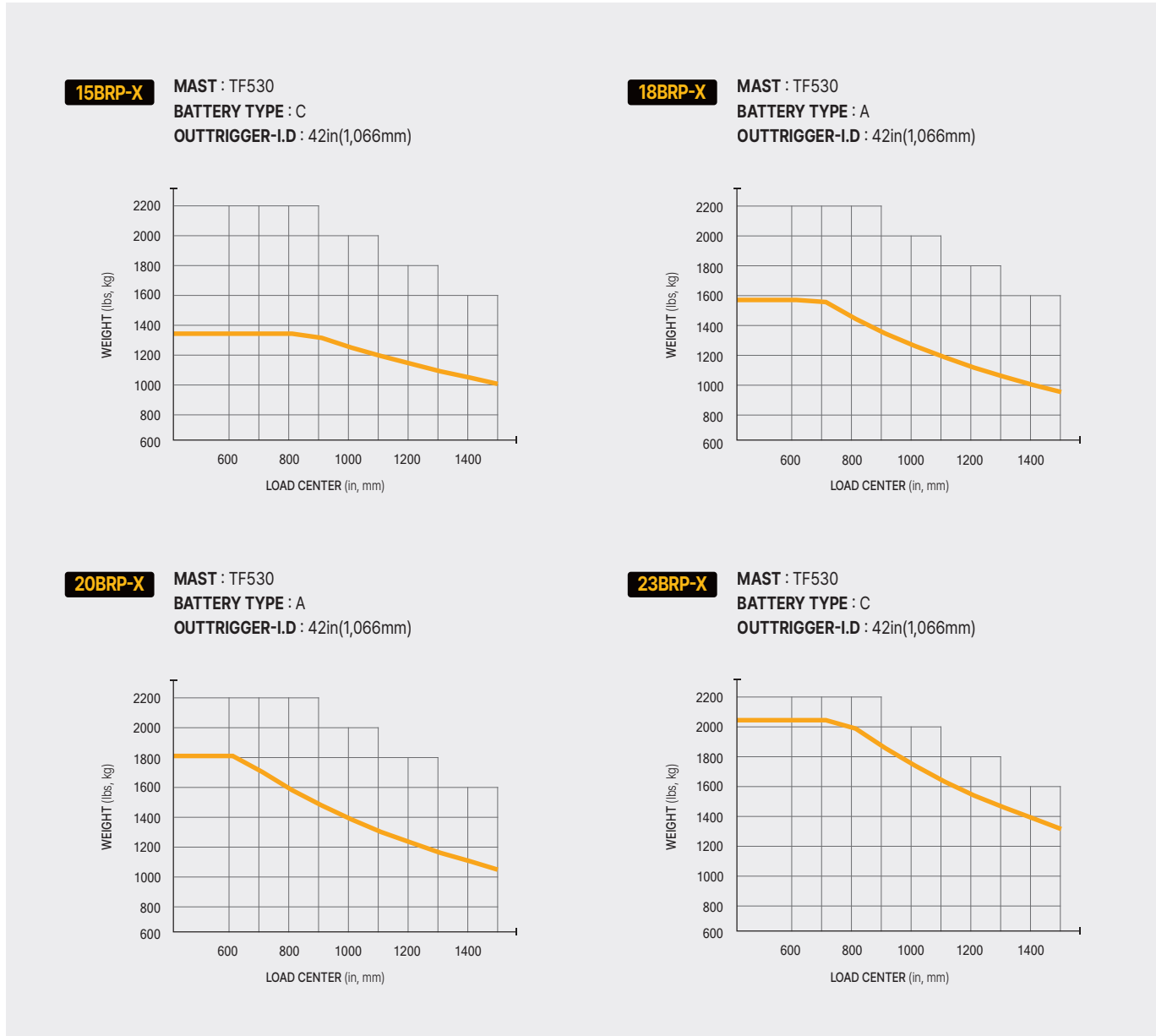


Battery Side Gate Interlock Sensor

The system prevents accidents due to an improperly installed battery side gate. The system prevents travel if the battery side gates are not properly installed.

New X Series

Load capacity



Option list

	Option Name		15BRP-X	18BRP-X	20BRP-X	23BRP-X
Battery	Lead-acid battery	Type A (36V 600Ah)	○	○	-	-
		Type B (36V 700Ah)	○	○	○	○
		Type C (36V 700Ah)	○	-	○	○
		Type D (36V 800Ah)	○	-	-	○
	Lithium battery	Type B, C, D (36V 690Ah)	○	○	○	○
Charger	Lead-acid charger (220/380V,50/60HZ)		○	○	○	○
	Lithium charger (300A)		○	○	○	○
Attachment	Fork length (in)		35"-63"	35"-63"	35"-41"	35"-82"
	Integral Side shift		○	○	○	○
Safety	LED Beacon lamp		○	○	○	○
	LED Front lamp		●	●	●	●
	LED Rear lamp		○	○	○	○
	Red zone light, Rear blue spot, Front blue spot		○	○	○	○

	Option Name	15BRP-X	18BRP-X	20BRP-X	23BRP-X
Safety	PDS (Pedestrian Detection System)	○	○	○	○
	Side gate switch	○	○	○	○
Convenience	Room lamp with operator fan	○	○	○	○
	Load sensor	○	○	○	○
	Carriage camera	○	○	○	○
	Hi-MATE (Management System)	○	○	○	○
	Authentication(AD)	○	○	○	○
Tire	Solid uretan	●	●	●	●
	Vulkollan	○	○	○	○
Certification	UL-E	●	●	●	●
	UL-ES, EE	○	○	○	○
Others	Tropical (VG68), Cold storage: -4°F (VG15)	○	○	○	○
	Part-toolkit	○	○	○	○

● STD, ○ OPT, - N/A

Mast specification (15/23BRP-X)

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							
		15/23BRP-X	15/23BRP-X	15/23BRP-X	15/23BRP-X	15/23BRP-X	15/23BRP-X	"A" Type B.C 14.5" (14.3 in 362mm)	"B" Type B.C 16.5" (16.3 in 413mm)	"C" Type B.C 18.3" (18.0 in 457mm)	"D" Type B.C 21.1" (20.7 in 527mm)				
		in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)
3-Stage Full Free Lift	TF500	197 (5,000)	89 (2,263)	246 (6,239)	41 (1,040)	88 (2,240)	34 (864)	6,735 (3,055)	-	6,777 (3,074)	6,614 (3,000)	6,812 (3,090)	6,649 (3,016)	6,867 (3,115)	6,706 (3,042)
	TF530*	209 (5,300)	95 (2,418)	258 (6,563)	47 (1,195)	94 (2,395)	34 (864)	6,848 (3,106)	-	6,887 (3,124)	6,726 (3,051)	6,923 (3,140)	6,762 (3,067)	6,980 (3,166)	6,819 (3,093)
	TF610	240 (6,100)	107 (2,723)	288 (7,323)	59 (1,500)	94 (2,395)	34 (864)	7,203 (3,267)	-	7,242 (3,285)	7,081 (3,212)	7,277 (3,301)	7,117 (3,228)	7,335 (3,327)	7,172 (3,253)
	TF685	270 (6,850)	119 (3,028)	318 (8,087)	71 (1,805)	94 (2,395)	34 (864)	-	-	7,487 (3,396)	7,324 (3,322)	7,522 (3,412)	7,359 (3,338)	7,577 (3,437)	7,416 (3,364)
	TF760	299 (7,600)	131 (3,328)	348 (8,849)	83 (2,105)	94 (2,395)	34 (864)	-	-	7,694 (3,490)	7,533 (3,417)	7,729 (3,506)	7,568 (3,433)	7,787 (3,532)	7,624 (3,458)
	TF815	321 (8,150)	140 (3,558)	369 (9,383)	92 (2,335)	94 (2,395)	34 (864)	-	-	7,859 (3,565)	7,696 (3,491)	7,893 (3,580)	7,732 (3,507)	7,950 (3,606)	7,789 (3,533)
	TF865	341 (8,650)	149 (3,788)	389 (9,889)	101 (2,565)	94 (2,395)	40 (1,016)	-	-	-	-	8,095 (3,672)	7,934 (3,599)	8,153 (3,698)	7,992 (3,625)
	TF930	366 (9,300)	160 (4,068)	415 (10,529)	112 (2,845)	94 (2,395)	42 (1,067)	-	-	-	-	-	-	8,349 (3,787)	8,188 (3,714)
	TF1010	398 (10,100)	172 (4,373)	448 (11,389)	124 (3,150)	94 (2,395)	44 (1,118)	-	-	-	-	-	-	8,563 (3,884)	8,402 (3,811)

* STANDARD

Mast specification (18/20BRP-X)

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" 14.5" (362mm)		"B" Type B.C 16.5" 16.5" (413mm)		"C" Type B.C 18.3" 18.3" (457mm)	
		18BRP-X	20BRP-X	18BRP-X	20BRP-X	18BRP-X	20BRP-X	18BRP-X	20BRP-X	18BRP-X	20BRP-X	18BRP-X	20BRP-X	18BRP-X	20BRP-X	18BRP-X	20BRP-X		
		in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	lb (kg)	lb (kg)	lb (kg)	lb (kg)
3-Stage Full Free Lift	TF500	197 (5,000)	197 (5,000)	89 (2,263)	89 (2,263)	246 (6,240)	246 (6,240)	41 (1,044)	41 (1,044)	88 (2,240)	88 (2,240)	34 (864)	34 (864)	6,279 (2,848)	-	6,321 (2,867)	6,321 (2,867)	-	6,356 (2,883)
	TF530*	209 (5,300)	209 (5,300)	95 (2,418)	95 (2,418)	258 (6,564)	258 (6,564)	47 (1,199)	47 (1,199)	94 (2,395)	94 (2,395)	34 (864)	34 (864)	6,378 (2,893)	-	6,418 (2,911)	6,418 (2,911)	-	6,453 (2,927)
	TF610	240 (6,100)	240 (6,100)	107 (2,723)	107 (2,723)	288 (7,324)	288 (7,324)	59 (1,504)	59 (1,504)	94 (2,395)	94 (2,395)	34 (864)	34 (864)	6,702 (3,040)	-	6,742 (3,058)	6,742 (3,058)	-	6,777 (3,074)
	TF685	270 (6,850)	270 (6,850)	119 (3,028)	119 (3,028)	318 (8,088)	318 (8,088)	71 (1,809)	71 (1,809)	94 (2,395)	94 (2,395)	34 (864)	34 (864)	-	-	7000 (3,175)	7000 (3,175)	-	7035 (3,191)
	TF760	-	299 (7,600)	-	131 (3,328)	-	348 (8,850)	-	83 (2,109)	-	94 (2,395)	-	34 (864)	-	-	-	-	-	7,214 (3,272)
	TF815	-	321 (8,150)	-	140 (3,558)	-	369 (9,384)	-	92 (2,339)	-	94 (2,395)	-	34 (864)	-	-	-	-	-	7,355 (3,336)

* STANDARD

Battery table

Battery Type	Battery Compartment Size (Length)		Battery Voltage	Max. Capacity (5Hour 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	600	38.4	975	14.0	355	31.0	787	1,609	730
Type B	16.3	413	36	700	38.4	975	16.0	406	31.0	787	1,874	850
Type C	18.0	457	36	700	38.4	975	17.7	450	31.0	787	2,271	1,030
Type D	20.7	525	36	800	38.4	975	20.5	520	31.0	787	2,646	1,200

Right angle aisle stacking - Zero clearance

15BRP-X							18BRP-X							20BRP-X							23BRP-X						
14.3" (362mm) Battery Compartment and 42" Outtrigger I.D							14.3" (362mm) Battery Compartment and 42" Outtrigger I.D							16.3" (413mm) Battery Compartment and 42" Outtrigger I.D							16.3" (413mm) Battery Compartment and 42" Outtrigger I.D						
Pallet Length (inches)	Pallet Width, inch (mm)						Pallet Length (inches)	Pallet Width, inch (mm)						Pallet Length (inches)	Pallet Width, inch (mm)						Pallet Length (inches)	Pallet Width, inch (mm)					
	33" (838)	36" (914)	40" (1016)	44" (1118)	48" (1219)		33" (838)	36" (914)	40" (1016)	44" (1118)	48" (1219)		33" (838)	36" (914)	40" (1016)	44" (1118)	48" (1219)		33" (838)	36" (914)	40" (1016)	44" (1118)	48" (1219)				
36" (914)	93(2,366)	93(2,368)	93(2,349)	93(2,339)	93(2,330)		36" (914)	85(2,168)	85(2,160)	85(2,148)	84(2,137)	84(2,125)		36" (914)	87(2,218)	87(2,210)	87(2,198)	86(2,187)	86(2,175)		36" (914)	87(2,202)	86(2,192)	86(2,178)	85(2,163)	85(2,148)	
40" (1016)	93(2,358)	93(2,473)	93(2,465)	93(2,458)	93(2,450)		40" (1016)	93(2,286)	93(2,278)	93(2,270)	93(2,261)	93(2,252)		40" (1016)	93(2,336)	93(2,328)	93(2,320)	93(2,311)	93(2,302)		40" (1016)	93(2,325)	93(2,318)	93(2,307)	93(2,297)	93(2,286)	
44" (1118)	93(2,349)	102(2,578)	102(2,578)	102(2,571)	102(2,565)		44" (1118)	94(2,389)	94(2,383)	94(2,386)	94(2,378)	93(2,371)		44" (1118)	96(2,449)	96(2,443)	96(2,436)	96(2,428)	95(2,421)		44" (1118)	96(2,441)	96(2,435)	96(2,427)	95(2,418)	95(2,410)	
48" (1219)	93(2,338)	106(2,693)	106(2,687)	106(2,681)	105(2,675)		48" (1219)	99(2,508)	99(2,503)	98(2,498)	98(2,490)	98(2,484)		48" (1219)	102(2,568)	102(2,553)	100(2,548)	100(2,540)	100(2,534)		48" (1219)	100(2,552)	100(2,547)	100(2,540)	100(2,533)	99(2,528)	

· Add 2" for 16.3" (413mm) Battery Compartment
· Add 3.5" for 18.0" (457mm) Battery Compartment
· Add 6" for 20.7" (527mm) Battery Compartment

· Add 2" for 16.3" Battery Compartment

· Add 2" for 18.0" Battery Compartment

· Add 1.5" for 18.0" Battery Compartment
· Add 4.5" for 20.7" Battery Compartment

Technical data for 15/18/20/23BRP-X

Distinguishing marks						
1.1	Manufacturer		HYUNDAI	HYUNDAI	HYUNDAI	HYUNDAI
1.2	Manufacturer's model designation		15BRP-X	18BRP-X	20BRP-X	23BRP-X
1.3	Drive : electric (battery or mains), diesel, petrol, fuel gas, manual		Electric	Electric	Electric	Electric
1.4	Type of operation : hand, pedestrian, standing, seated, order-picker		Standing	Standing	Standing	Standing
1.5	Load capacity	lbs(kg)	3,000(1,361)	3,500(1,588)	4,000(1,814)	4,500(2,041)
1.6	Load centre Distance	in(mm)	24(610)	24(610)	24(610)	24(610)
1.8	Load distance (Centre of drive axle to fork)	in(mm)	10.6(270)	13.5(345)	13.5(345)	14.8(377.5)
1.9	Wheelbase	in(mm)	63.7(1,619)	55.6(1,413)	57.6(1,464)	62.2(1,579)
Weights						
2.1	Service weight	lb(kg)	8,446(3,831)	7,976(3,618)	8,296(3,763)	8,605(3,903)
2.3	Axle loading, unloaded front/rear	lb(kg)	3,273/5,173 (1,485/2,346)	3,108/4,867 (1,410/2,208)	3,207/5,089 (1,454/2,308)	3,288/5,316 (1,492/2,411)
2.5	Axle loading, fork retracted, loaded front/rear	lb(kg)	6,943/4,503 (3,149/2,043)	7,253/4,223 (3,290/1,915)	7,916/4,379 (3,591/1,986)	8,471/4,633 (3,842/2,102)
Tires/Chassis						
3.1	Tires:solid rubber(V), superelastic(SE), pneumatic(P), polyurethane(PE)		PE	PE	PE	PE
3.2	Tires size, front(Φ x width)		5×4(127×100)	5×4(127×100)	5×4(127×100)	5×4(127×100)
3.3	Tires size, rear(Φ x width)		13.5×5.5(345×140)	13.5×5.5(345×140)	13.5×5.5(345×140)	13.5×5.5(345×140)
3.4	Tire size, Caster		7×2.87(178×73)	7×2.87(178×73)	7×2.87(178×73)	7×2.87(178×73)
3.5	Wheels, number front rear (x=driven wheels)		4/2 (1x)(4/2 (1x))	4/2 (1x)(4/2 (1x))	4/2 (1x)(4/2 (1x))	4/2 (1x)(4/2 (1x))
3.6	Track width, front	in(mm)	47.4(1205)	47.4(1205)	47.4(1205)	47.4(1205)
3.7	Track width, rear	in(mm)	30.8(782)	30.8(782)	30.8(782)	30.8(782)
Dimensions						
4.1	Tilt of mast/fork carriage forward/backward	degree	4/3(4/3)	4/3(4/3)	4/3(4/3)	4/3(4/3)
4.2	Height, Mast lowered	in(mm)	95(2,418)	95(2,418)	95(2,418)	95(2,418)
4.3	Free lift	in(mm)	47(1,195)	47(1,195)	47(1,195)	47(1,195)
4.4	Lift height	in(mm)	209(5,300)	209(5,300)	209(5,300)	209(5,300)
4.5	Height, mast extended	in(mm)	258(6,563)	258(6,564)	258(6,564)	258(6,563)
4.7	Height of overhead guard (Cabin)	in(mm)	94.49(2,400)	94.49(2,400)	94.49(2,400)	94.49(2,400)
4.8	Seat Height / Stand height Rel. to SIP	in(mm)	10.59(269)	10.59(269)	10.59(269)	10.59(269)
4.10	Height of wheel arms	in(mm)	5.2(131)	5.2(131)	5.2(131)	5.2(131)
4.19	Overall length	in(mm)	104.3(2,649)	93.2(2,368)	95.2(2,419)	96.9(2,463)
4.20	Length to face of forks	in(mm)	63(1,599)	51.9(1,318)	53.9(1,369)	55.6(1,413)
4.21	Overall width	in(mm)	42.5(1,080)	40.6(1,030)	40.6(1,030)	40.6(1,030)
4.22	Fork dimensions	in(mm)	1.6×3.9×41.3(40×100×1,050)		1.8×3.9×41.3(45×100×1,050)	
4.23	Fork carriage ISO 2328, Class/Type A, B		2A	2A	2A	2A
4.24	Fork - carriage width	in(mm)	33.7(856)	33.7(856)	33.7(856)	33.7(856)
4.25	Distance between fork-arms	in(mm)	29.9(760)	29.9(760)	29.9(760)	29.9(760)
4.26	Distance between wheel arms / loading surfaces	in(mm)	42(1,066)	42(1,066)	42(1,066)	42(1,066)
4.28	Reach distance	in(mm)	42.8(1,087)	23.3(592)	23.3(592)	23.3(592)
4.32	Ground clearance, center of wheelbase	in(mm)	2(51)	2(51)	2(51)	2(51)

Dimensions						
4.34.1	Aisle width for pallets 1,000 X 1,200 crossways	in(mm)	107.3(2,725)	95.9(2,435)	97.8(2,485)	98.8(2,510)
4.34.2	Aisle width for pallets 800 X 1,200 lengthways	in(mm)	117.0(2,971)	105.9(2,690)	107.9(2,740)	109.3(2,776)
4.35	Turning radius	in(mm)	74.5(1,892)	66.5(1,690)	68.5(1,740)	72.9(1,853)
4.37	Length across wheel arms	in(mm)	80.1(2,034)	72.0(1,828)	75.7(1,923)	78.5(1,994)
Performance data						
5.1	Travel speed, loaded/ unloaded	mph(km/h)	7.3/7.3(11.8/11.8)	7.3/7.3(11.8/11.8)	7.3/7.3(11.8/11.8)	7.3/7.3(11.8/11.8)
5.2	Lift speed, loaded/ unloaded	ft/min(mm/s)	133/170(675/860)	122/170(620/860)	105/170(533/860)	105/170(533/860)
5.3	Lowering speed, loaded/unloaded	ft/min(mm/s)	108/108(550/550)	108/108(550/550)	108/108(550/550)	108/108(550/550)
5.8	Max. gradient performance, loaded/ unloaded S2 5min	%	13/22(13/22)	13/15(13/15)	12/15(12/15)	11/20(11/20)
5.10	Service brake		Electric Disc	Electric Disc	Electric Disc	Electric Disc
Electric/Battery						
6.1	Drive motor rating S2 60min	hp(kW)	9.1(6.8)	9.1(6.8)	9.1(6.8)	9.1(6.8)
6.2	Lift motor rating at S3 20%(S2 10min)	hp(kW)	26.8(20)	26.8(20)	26.8(20)	26.8(20)
6.3	Battery acc. to DIN 43531/ 35/ 36 A, B, C,no		Lead Acid	Lead Acid	Lead Acid	Lead Acid
6.4	Battery voltage, nominal capacity K5(Option)	V/Ah	36/700	36/600	36/700	36/700
6.5	Battery weight	lb(kg)	2,381(1,080)	1,720(780)	1,984(900)	2,381(1,080)
6.7	Battery compartment dimensions l/w/h	in(mm)	38.5/18/32 (979/457/813)	38.5/14.3/32 (979/362/813)	38.5/16.3/32 (979/413/813)	38.5/18/32 (979/457/813)
Additional data						
8.1	Type of drive control		AC	AC	AC	AC
8.2	Operating pressure for attachments	psi(bar)	2,900/2,030 (200/140)	2,900/2,030 (200/140)	2,900/2,030 (200/140)	2,900/2,030 (200/140)
8.3	Oil volume for attachments	GPM-US(LPM)	7(25)	7(25)	7(25)	7(25)

Dimension

