
FBR Series

Electric Reach Forklift

FBR13-18SZ, FBR15-18WZ | 1250 – 1800kg



Take control

Representing the solution to today's materials handling needs

Yale[®] 
People. Products. Productivity.™

About Yale®

When it comes to reach trucks, you'll find that Yale leads the way with over 80 years of experience. In fact, with top-of-the-line components, superior ergonomics and exceptional manoeuvrability, the FBR range of electric reach trucks are ideal for a range of warehousing applications.

Yale's FBR Reach Trucks have the following benefits:

- Small turn radius control
- Low vibration suspension system
- Improved right-angle stacking aisle width
- Enhanced safety features
- Ergonomic cabin and controls
- Easy to service with removable components and quick battery access
- Backed by an extensive dealer network
- Aftermarket service and support

Support for Yale's FBR Reach Trucks can be found throughout the Asia-Pacific region – provided by a big regional footprint stretching from Australia on through Singapore, Malaysia, Indonesia, Thailand, South Korea, Taiwan, Vietnam and the Philippines.



FBR Electric Reach Forklift Features

1 Visor-integrated display

A visor has been added to the top of the display to prevent reflected glare and improve visibility.



2 Surround cockpit

A round shaped operator space which wraps flexibly around the operator has been adopted while maintaining the easy-to-operate lever type layout.



3 High Back Support

A high back support helps to support the shoulders from the sides. Support during switchbacks from reverse to forward is provided and fatigue during normal operation is reduced.



4 Lowered Floor

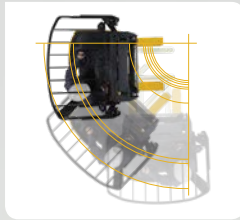
Low 250mm floor height (35mm lower than previous models) helps reduce operator fatigue in work with frequent on-off application.





5 Travel & load handling interlock

Travel and load handling operations are locked (disabled) when the operator leaves the operator compartment.



6 speed reduction on cornering

Acceleration is restricted while the forklift is turning preventing hazardous situations such as rollover. As unnecessary acceleration is prevented this also contributes to energy conservation.



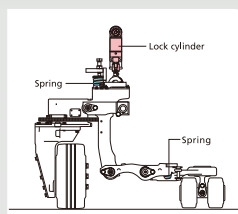
7 Anti-Rollback & Descent Control

The anti-rollback mechanism, prevents the forklift from rolling back when it starts from a stop on an upslope.



8 Front wheel brake anti-skid control

The front wheel brakes come to assist if the drive tyres slip. This control prevents the tyres from being locked and provides maximum brake force.



9 Low vibration suspension system

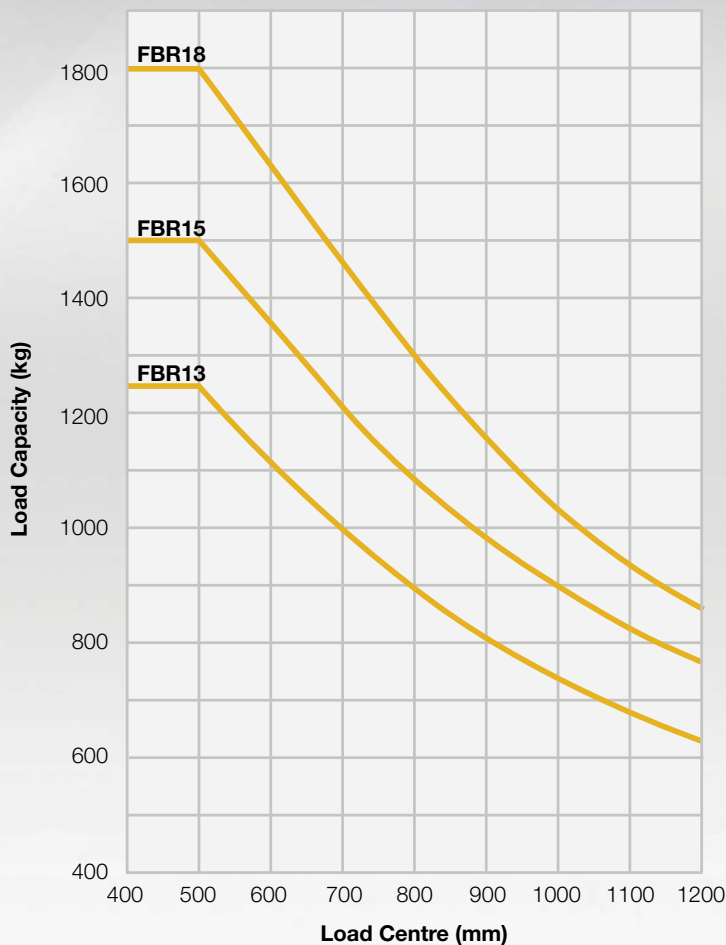
The FBR models have adopted a parallel link type structure. This structure greatly minimizes uncomfortable vibrations from the floor surface. A suspension lock mechanism has been added to improve stability during turning and load handling improving comfort and safety.

General Specifications

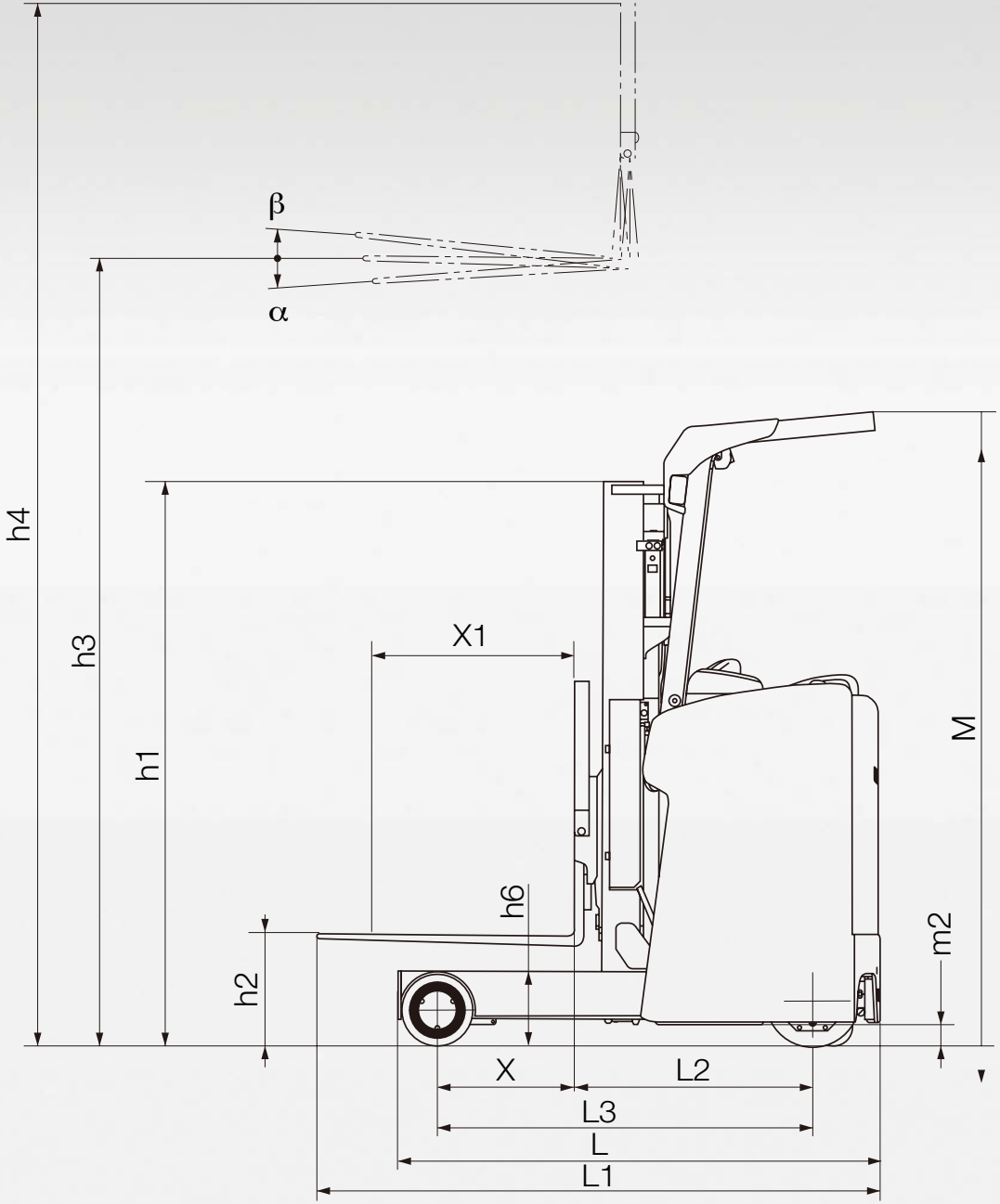
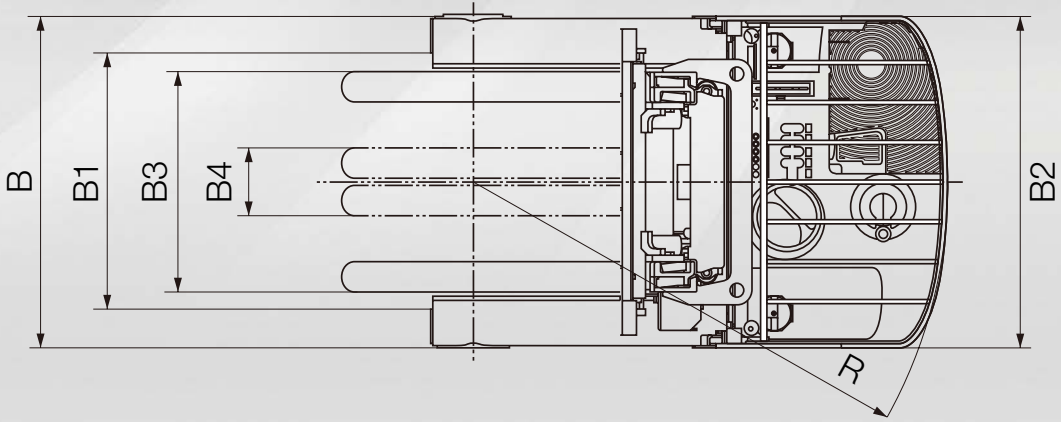
					Electric YALE			
Specification	1	Manufacturer			FBR13SZ	FBR15SZ	FBR18SZ	
		2	Model					
		3	Load Capacity	kg	1250	1500	1800	
		4	Load Centre	mm	500	500	500	
		5	Motor Type	DC/AC, Open/Enclosed	IPM/Enclosed, AC/Open	IPM/Enclosed, AC/Open	IPM/Enclosed, AC/Open	
		6	Operation	Stand/Seat	Stand	Stand	Stand	
Dimensions	7	Lift Height	h3	mm	3000	3000	3000	
	8	Free Lift	h2	mm	113	113	113	
	9	Tilting Fork Carriage (Forward/Backward Tilt)	β/α	deg	5/3	5/3	5/3	
	10	Fork Carriage			Pin Type	Pin Type	Pin Type	
	11	Fork (Length/Width/Thickness)	l/w/t	mm	850/100/35	920/100/35	920/100/35	
	12	Fork Carriage Width (Max./Min.)	B3/B4	mm	725/290	725/290	725/290	
	13	Overall Length	L1	mm	1920	2080	2080	
		Length over Load Arms	L	mm	1630	1720	1895	
	14	Length to Face of Forks	L2	mm	1070	1160	1160	
	15	Reach Stroke	X1	mm	595	595	770	
	16	Overall Width	B	mm	1090	1090	1090	
	17	Width in Outrigger	B1	mm	820	820	820	
	18	Frame Width	B2	mm	1090	1090	1090	
	19	Height Outrigger	h6	mm	260	260	260	
	20	Height of Mast - Lowered	h1	mm	1995	1995	1995	
	21	Height of Mast - Extended	h4	mm	3935	3935	3935	
	22	Overhead Guard Height	M	mm	2240	2240	2240	
	23	Load Distance	X	mm	420	420	595	
	24	Turning Radius	R	mm	1495	1580	1755	
	25	Aisle Width	L 1100 x W 1100 pallet	mm	1850	1900	2010	
26	Aisle Width with Pallet	As (L 1100 x W 1100 pallet)	mm	2520	2600	2600		
Performance	27	Travel Speed	Laden/Unladen	km/h	9.5/11.0	9.0/10.5	9.0/10.5	
	28	Lifting Speed	Laden/Unladen	mm/s	340/560	310/560	280/560	
	29	Lowering Speed	Laden/Unladen	mm/s	500/560	540/560	560/560	
	30	Reach Speed	With/Without Load	mm/s	245/245	245/245	245/245	
	31	Gradeability - 3 min rating or 1.5km/h	Laden/Unladen	%	14/22	13/22	12/21	
Weight	32	Weight	Standard Battery	kg	2095	2230	2315	
	33	Axle Loads - Reach In	Laden (Front/Rear)	kg	2010/1330	2330/1400	2375/1740	
		Axle Loads - Reach In	Unladen (Front/Rear)	kg	680/1415	735/1490	680/1635	
		Axle Loads - Reach Out	Laden (Front/Rear)	kg	2860/480	3240/485	3570/545	
		Axle Loads - Reach	Unladen (Front/Rear)	kg	935/1160	980/1245	960/1355	
Wheels and Tyres	34	Tyres	Front/Drive/Caster		2/1/2	2/1/2	2/1/2	
	35	Tyre/Sizes	Front		\varnothing 255 x 114 Rubber	\varnothing 254 x 102 Urethane	\varnothing 254 x 102 Urethane	
			Drive		\varnothing 330 x 145 Rubber	\varnothing 330 x 145 Rubber	\varnothing 330 x 145 Rubber	
			Caster		\varnothing 150 x 80 Rubber	\varnothing 150 x 80 Rubber	\varnothing 150 x 80 Rubber	
	36	Wheelbase	L3	mm	1250	1340	1515	
	37	Tread	Front	mm	980	990	990	
Rear			mm	640	640	640		
38	Ground Clearance	At Lowest Point (m2)	mm	70	70	70		
		Mechanical/Hydraulic/Electric/Pneumatic		Mechanical	Mechanical	Mechanical		
Motor	39	Battery	Volt/Amp.h. (cap. at 5h rating)	V/Ah	48/201	48/280	48/280	
		Weight	kg	355	465	465		
	40	Drive Motor	Rated output (60 min rating)	kW	4.5	4.5	4.5	
			Control Method		FET inverter	FET inverter	FET inverter	
	41	Hoist Motor	Rated output (5 min rating)	kW	9.6	9.6	9.6	
			Control Method		FET inverter	FET inverter	FET inverter	
42	Steering Motor	Rated output (60 min rating)	kW	0.3	0.3	0.3		
		Control Method		FET Chopper	FET Chopper	FET Chopper		
Other	43	Working Pressure	For Attachments	Mpa	17.2-17.7	17.2-17.7	17.2-17.7	

Capacity Chart

FBR15WZ	FBR18WZ
1500	1800
500	500
IPM/Enclosed, AC/Open	IPM/Enclosed, AC/Open
Stand	Stand
4000	4000
995	995
5/3	5/3
Pin Type	Pin Type
920/100/35	920/100/35
825/290	825/290
2145	2145
1895	1895
1225	1225
705	705
1190	1190
920	920
1190	1190
260	260
1895	1895
4925	4925
2240	2240
530	530
1755	1755
2040	2060
2670	2670
9.0/10.5	9.0/10.5
280/470	250/450
540/560	560/560
245/245	245/245
13/22	12/21
2335	2435
2225/1615	2545/1690
750/1590	770/1665
3240/600	3695/535
1065/1275	1085/1350
2/1/2	2/1/2
φ 254 x 102 Urethane	φ 254 x 102 Urethane
φ 330 x 145 Rubber	φ 330 x 145 Rubber
φ 150 x 80 Rubber	φ 150 x 80 Rubber
1515	1515
1090	1090
640	640
70	70
Mechanical	Mechanical
Deadman	Deadman
48/280	48/280
465	465
4.5	4.5
FET inverter	FET inverter
9.6	9.6
FET inverter	FET inverter
0.3	0.3
FET Chopper	FET Chopper
17.2-17.7	17.2-17.7



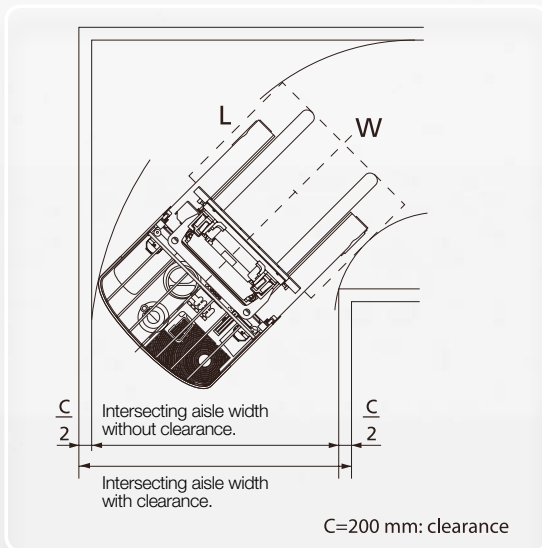
Dimension Charts



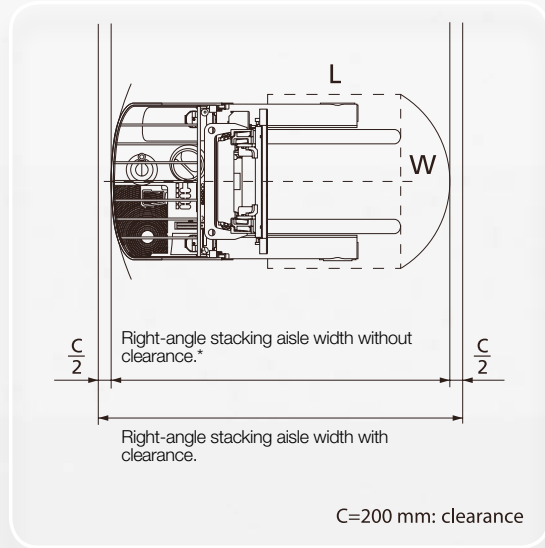
Dimension Charts

MODEL	Mast	Battery (Ah)	Minimum Right Angle Aisle Width (mm)*					Right Angle Stacking Aisle Width (mm)*					
			L	1000	1000	1100	1200	1200	1000	1000	1100	1200	1200
			W	1000	1200	1100	1000	1200	1000	1200	1100	1000	1200
FBR13SZ 1.25 ton	2-stage LFL	201	1630	1690	1650	1650	1700	2010	2260	2320	2400	2430	
		260	1630	1690	1650	1650	1700	2020	2270	2330	2410	2450	
		280-370	1640	1690	1650	1650	1700	2290	2330	2400	2480	2520	
	3-stage FFL	201, 260	1640	1690	1650	1650	1700	2250	2290	2360	2440	2470	
		280-370	1640	1690	1660	1660	1710	2320	2360	2430	2510	2540	
FBR15SZ 1.5 ton	2-stage LFL	260	1690	1740	1700	1700	1750	2230	2280	2340	2420	2460	
		280-370	1690	1740	1700	1700	1750	2290	2330	2400	2480	2520	
	3-stage FFL	260	1690	1740	1700	1700	1750	2250	2300	2360	2440	2470	
		280-370	1690	1740	1710	1700	1760	2320	2360	2430	2510	2540	
	FBR18SZ 1.8 ton	2-stage LFL	280-370	1790	1840	1810	1800	1850	2290	2340	2400	2490	2520
3-stage FFL		280-370	1790	1850	1810	1810	1860	2360	2390	2470	2550	2580	
FBR15WZ 1.5 ton	3-stage FFL	280-370	1850	1870	1860	1860	1880	2360	2390	2470	2550	2580	
FBR18WZ 1.8 ton	3-stage FFL	280-370	1850	1870	1860	1860	1880	2360	2390	2470	2550	2580	

Minimum right angle aisle width



Right angle stacking aisle width



* Figure does not include the recommended 200mm clearance.

Mast Specifications

Maximum Lifting Height (Nominal) mm	FBR13-18SZ	FBR15-18WZ
2500	2-stage LFL	-
2700	2-stage LFL	-
3000	Standard 2-stage LFL	-
3300	2-stage LFL	-
3500	2-stage LFL	-
3700	2-stage LFL	3-stage FFL
4000	2-stage LFL	3-stage FFL
4300	-	3-stage FFL
4500	2-stage LFL	3-stage FFL
4800	-	3-stage FFL
5000	2-stage LFL	3-stage FFL
5500	-	3-stage FFL
6000	-	3-stage FFL

Battery Specifications

	1.25 TON	1.5 TON		1.8 TON	
	FBR13SZ	FBR15SZ	FBR15WZ	FBR18SZ	FBR18WZ
Battery Capacity	FRONT	FRONT	FRONT	FRONT	FRONT
201Ah/5h (48V)	•	-	-	-	-
280Ah/5h (48V)	△	•	•	•	•
340Ah/5h (48V)	△	△	△	△	△
370Ah/5h (48V)	△	△	△	△	△

- Standard
- △ Optional



Standard & optional features

Standard

WORKABILITY

Hoist Related:

- Hoist AC motor
- Soft landing
- High-visibility

Steering Related:

- Suspension lock control
- AWC (small radius turning control)
- Small diameter steering wheel

Travel Related:

- Travel IPM motor
- Neutral brakes switchback regeneration
- Travel speed/power adjustment/speed limiter

Lamp Related:

- Headlights
- Turning indicators

Display:

- Full function dash display (Full-dot LCD)

ERGONOMICS

- Low vibration suspension system
- Shock-less steering
- Low floor
- Manifest clip

BATTERY

- BDI with lift interrupt function
- Auto power off

MISCELLANEOUS

- Turning speed control
- Travel and load handling interlock
- Neutral start
- Slope speed limiter
- Anti-rollback
- Volume adjustable type reversing buzzer

Options

WORKABILITY

Hoist Related:

- Integral side-shift carriage
- Load weight indicator

Steering Related:

- Large diameter steering wheel

Travel Related:

- Lowered overhead guard 2055mm
- Non-marking tyres
- Urethane tyres

Lamp Related:

- LED headlights
- LED auto lights (light sensitive type)
- Safety laser
- Carriage light
- LED turning light
- LED work light
- LED room light

ERGONOMICS

- Back support
- High back support
- Acrylic top cover

BATTERY

- Spare battery
- Battery carrier

MISCELLANEOUS

- Anti-skid traction control with front wheel brakes
- Front protector
- Elbow guard
- Rear rubber bumper
- Rear bumper (floor elongation shape)
- Forward/back movement chimer
- Forward/back melodic chimer
- Rearview mirror
- Room mirror
- Password entry
- Fire extinguisher

ENVIRONMENTAL SPECS

- Fishery spec. (-10°C or more)
- Cold storage spec. (-35°C or more/-45°C or more)
- Fishery cold storage spec. (-35°C or more/-45°C or more)
- Anti-rust spec.
- Anti-dust spec.


* Performs shock-less start to finish loading/unloading, auto-stop at maximum height and horizontal auto-stop.

Yale® Dealers

Contact your nearest
Yale Dealership by visiting
www.yale.com



Contact your local Yale Dealer

 Safety. This truck conforms to the current EU requirements. Specification is subject to change without notice.




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