



# 6FBRE12.14 6FBRE16.20

6FBRE16

## MAIN VEHICLE SPECIFICATIONS

			TOYOTA	TOYOTA	TOYOTA	TOYOTA		
1	Manufacturer		TOYOTA	TOYOTA	TOYOTA	TOYOTA		
2	Model		<b>6FBRE12</b>	<b>6FBRE14</b>	<b>6FBRE16</b>	<b>6FBRE20</b>		
3	Load Capacity		kg (lb)	1200 (2650)	1350 (2980)	1600 (3530)	2000 (4410)	
4	Load Center		mm (in)	600 (24)	600 (24)	600 (24)	600 (24)	
5	Power Type			Battery	Battery	Battery	Battery	
6	Operator Position			Rider Seated	Rider Seated	Rider Seated	Rider Seated	
7	Tire Type		Front/Rear	Cushion	Cushion	Cushion	Cushion	
8	Wheels (x = driven)		Front/Rear	2/1x	2/1x	2/1x	2/1x	
9	Maximum Fork Height (MFH)		mm (in)	3000 (118)	3000 (118)	3000 (118)	3000 (118)	
10	Free Lift		mm (in)	415 (16.3)	415 (16.3)	415 (16.3)	445 (17.5)	
13	Fork Size		T x W x L	35x100x850 (1.4x4x33.5)	35x100x920 (1.4x4x36)	35x100x920 (1.4x4x36)	38x122x1070 (1.5x5x42)	
14	Tilt Range		Up/Down	deg	5/3	5/3	5/3	
15	Length to Fork Face		mm (in)	1145 (45.1)	1145 (45.1)	1145 (45.1)	1250 (49.2)	
	Width Between Reach Legs		mm (in)	910 (35.8) [1110 (43.7)]	910 (35.8) [1110 (43.7)]	910 (35.8) [1110 (43.7)]	874 (34.4)	
16	Overall Width		mm (in)	1250 (49.2) [1435 (56.5)]	1250 (49.2) [1435 (56.5)]	1250 (49.2) [1435 (56.5)]	1250 (49.2)	
17	Mast Lowered Height		mm (in)	1995 (78.5)	1995 (78.5)	1995 (78.5)	2040 (80.3)	
18	Mast Extended Height		mm (in)	3850 (151.6)	3850 (151.6)	3850 (151.6)	3950 (155.5)	
19	Overhead Guard Height		mm (in)	2085 (82)	2085 (82)	2085 (82)	2225 (87.5)	
21	Turning Radius (Outside)		mm (in)	1530 (60)	1570 (62)	1670 (65.5)	1750 (69)	
22	Load Distance (Centerline of front axle to front face of forks)		mm (in)	350 (13.8)	400 (15.7)	500 (19.7)	475 (18.5)	
	Right Angle Stacking Aisle Width * (With pallets 1200x800/1000x1200 [LxW])		mm (in)	2380/2180 (93.5/86)	2370/2170 (93.5/85.5)	2370/2170 (93.5/85.5)	2475/2275 (97.5/89.5)	
	Intersecting Aisle Width		mm (in)	1690 (66.5)	1715 (67.5)	1765 (69.5)	1790 (70.5)	
24	Speeds	Travel, Max. (FWD/RVS)	Full Load	km/h (mph)	9 (5.6)	9 (5.6)	8.5 (5.3)	8.5 (5.3)
No Load			km/h (mph)	10 (6.2)	10 (6.2)	10 (6.2)	10 (6.2)	
Lifting		Full Load	mm/sec (fpm)	310 (61)	300 (59)	290 (57)	200 (39)	
		No Load	mm/sec (fpm)	500 (98)	500 (98)	500 (98)	330 (65)	
Lowering	Full Load	mm/sec (fpm)	470 (93)	470 (93)	470 (93)	480 (94)		
	No Load	mm/sec (fpm)	550 (108)	550 (108)	550 (108)	350 (69)		
27	Traction	Full Load/ No Load	3-Minute Ratings	kg (lb)	410/430 (900/950)	590/610 (1300/1340)	590/610 (1300/1340)	510/510 (1120/1120)
5-Minute Ratings			kg (lb)	320/340 (710/750)	490/500 (1080/1100)	480/500 (1060/1100)	395/395 (870/870)	
60-Minute Ratings			kg (lb)	120/130 (260/290)	190/210 (420/460)	190/210 (420/460)	170/180 (370/400)	
29	Gradeability **	Full Load/ No Load	3-Minute Ratings	% (tanθ)	11/17	15/24	13/23	9/15
			5-Minute Ratings	% (tanθ)	8/13	12/20	11/19	7/12
			30-Minute Ratings	% (tanθ)	3/6	6/10	5/9	5/8
32	Total Weight		Without Battery and Case	kg (lb)	1850 (4080)	1870 (4120)	2010 (4430)	2370 (5230)
33	Weight Distribution (With STD Battery)	Full Load (Full Reach)	Front	kg (lb)	3170 (6990)	3330 (7340)	3670 (8090)	4480 (9880)
			Rear	kg (lb)	620 (1370)	630 (1390)	680 (1500)	820 (1810)
34		No Load (No Reach)	Front	kg (lb)	880 (1940)	910 (2000)	890 (1960)	1070 (2360)
			Rear	kg (lb)	1710 (3770)	1700 (3750)	1860 (4100)	2230 (4920)
35	Number		Front/Rear		2/1	2/1	2/1	2/1
36	Tires	Size	Front, Load		254x120 (10.2x4.7)	254x120 (10.2x4.7)	254x120 (10x4.7)	267x127 (10.5x5)
			Rear, Drive		330x145 (13x5.7)	330x145 (13x5.7)	330x145 (13x5.7)	384x152 (15.1x6)
			Rear, Caster		—	—	—	—
38	Wheelbase		mm (in)	1300 (51.2)	1350 (53.1)	1450 (57)	1500 (59)	
39	Tread	Front	mm (in)	1130 (44.5)	1130 (44.5)	1130 (44.5)	1125 (44.3)	
		Rear	mm (in)	—	—	—	—	
40	Underclearance		Min. <Rear Frame>	mm (in)	80 (3.1)	80 (3.1)	80 (3.1)	80 (3.1)
41	(No Load)		Center of Wheelbase	mm (in)	90 (3.5)	90 (3.5)	90 (3.5)	90 (3.5)
42	Brake	Service (Foot)			Hydraulic	Hydraulic	Hydraulic	Hydraulic
		Parking			Hand	Hand	Hand	Hand
45	Battery	Voltage/Capacity (5-hour ratings)	STD High	V/AH	48/360	48/360	48/360	48/420
		Weight with Case (STD Capacity Type)		kg (lb)	48/420, 48/600	48/420, 48/600	48/420, 48/600	48/600
46	Drive			kW	3.4	4.3	4.3	4.6
48	Electric Motors	Load Handling		kW	5.9	7.5	7.5	7.5
		Power Steering		kW	0.29	0.29	0.29	0.34
54	Control Type	Drive			Transistor chopper (Micro computer)	Transistor chopper (Micro computer)	Transistor chopper (Micro computer)	Transistor chopper (Micro computer)
		Load Handling			Transistor chopper (Micro computer)	Transistor chopper (Micro computer)	Transistor chopper (Micro computer)	Transistor chopper (Micro computer)
		Power Steering			Transistor chopper (Micro computer)	Transistor chopper (Micro computer)	Transistor chopper (Micro computer)	Transistor chopper (Micro computer)
57	Operating Pressure		For Attachments	kg/cm <sup>2</sup> (psi)	125 (1750)	170 (2400)	170 (2400)	185 (2650)

NOTE: \* Safety clearance of 200 mm (7.9 in) not included (general application).

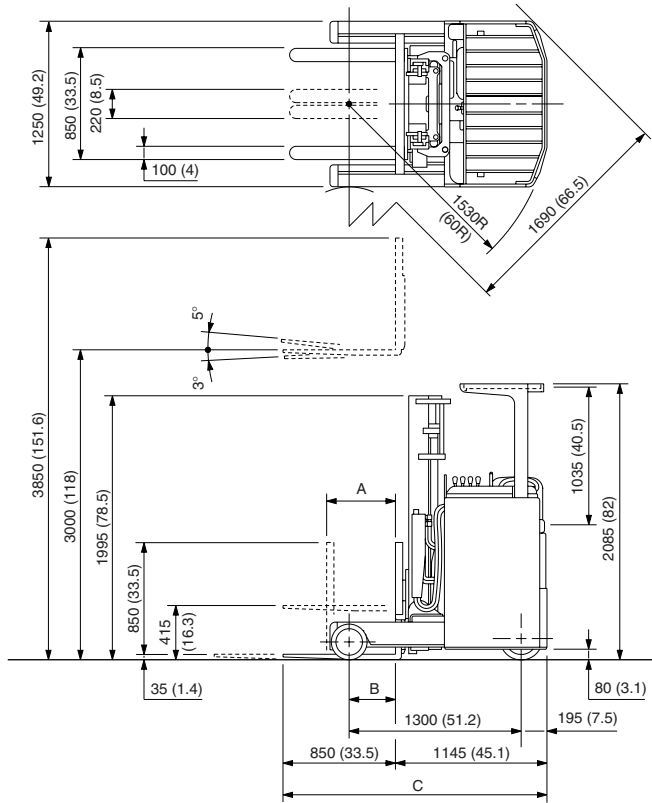
\*\* Computed values.

[ ] for Wide Flame model.

# DIMENSIONAL DRAWINGS

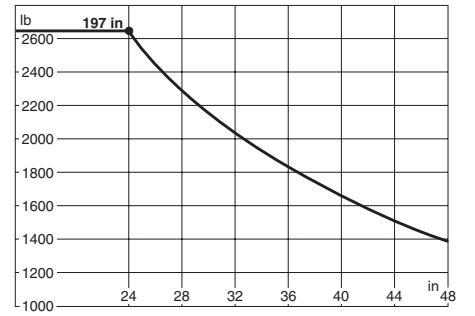
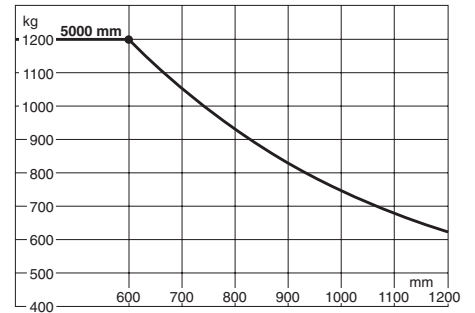
## 6FBRE12

Unit: mm (in)

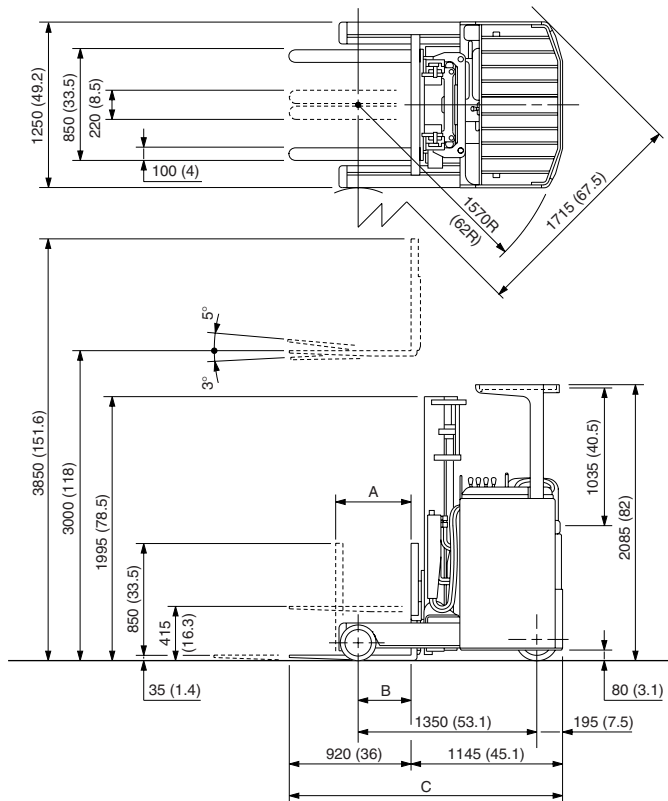


# LOAD CAPACITY CHARTS

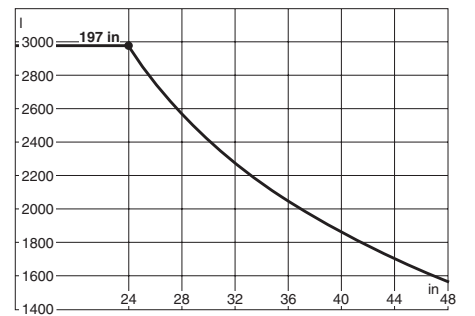
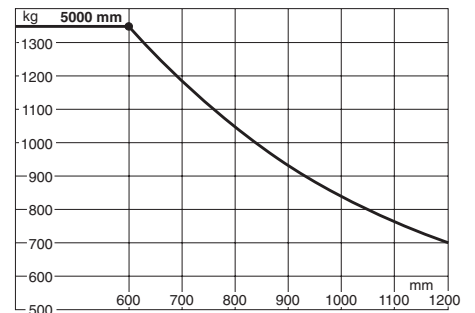
## 6FBRE12



## 6FBRE14



## 6FBRE14



### REACH LEGS HEIGHT

6FBRE12.14 ..... 274 (10.8)

### UNDERCLEARANCE

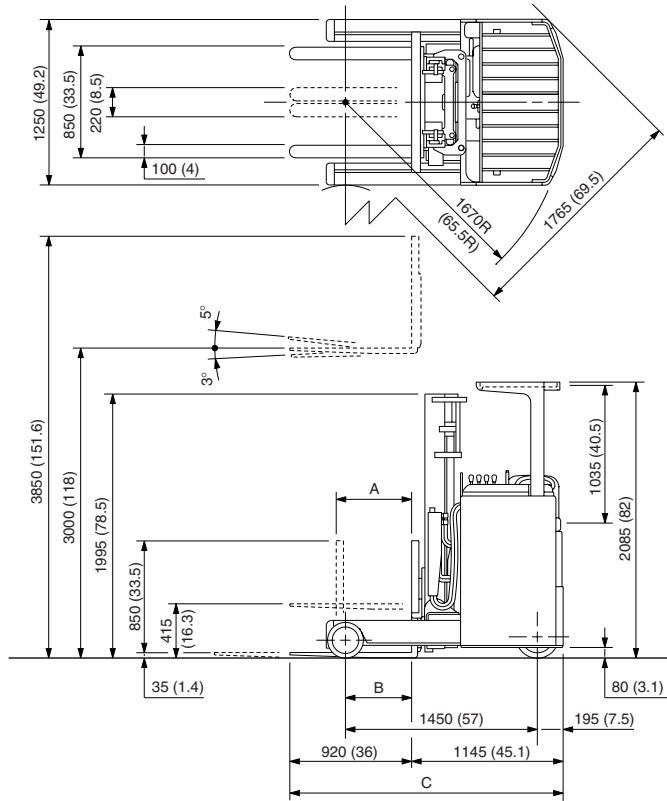
Center of Wheelbase (No Load) ..... 90 (3.5)  
 Rear Frame (No Load) ..... 80 (3.1)

Battery Capacity (AH/5HR)	6FBRE12			6FBRE14		
	A	B	C	A	B	C
360	520 (20.5)	350 (13.8)	1995 (78.5)	570 (22.5)	400 (15.7)	2065 (81.5)
420	445 (17.5)	275 (10.8)	2070 (81.5)	495 (19.5)	325 (12.8)	2140 (84.5)
600	375 (15)	205 (8.1)	2140 (84.5)	425 (16.5)	255 (10.0)	2210 (87)

# DIMENSIONAL DRAWINGS

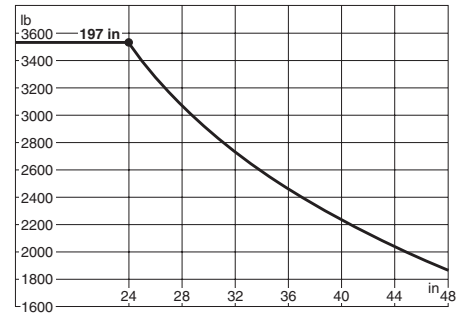
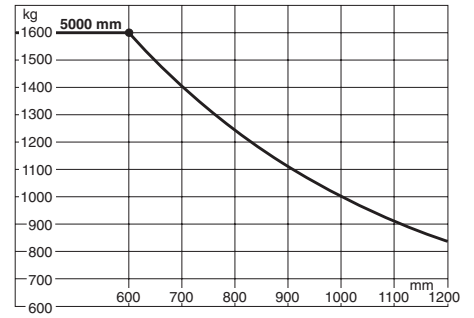
## 6FBRE16

Unit: mm (in)

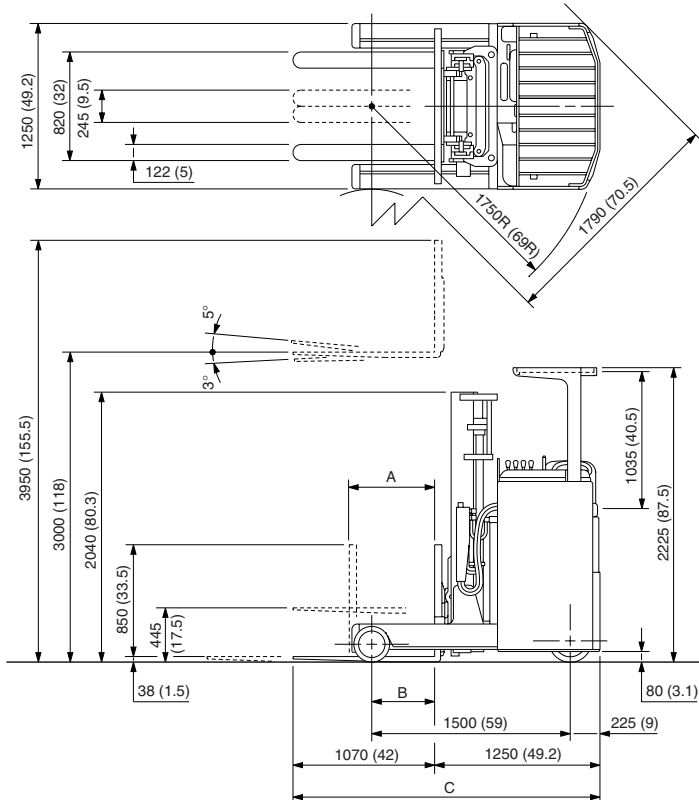


# LOAD CAPACITY CHARTS

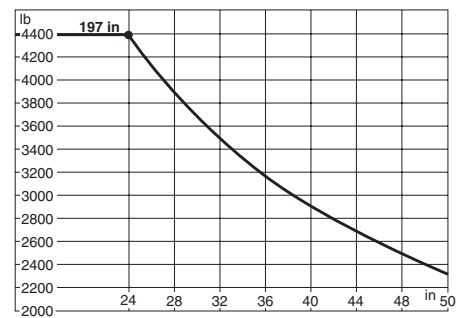
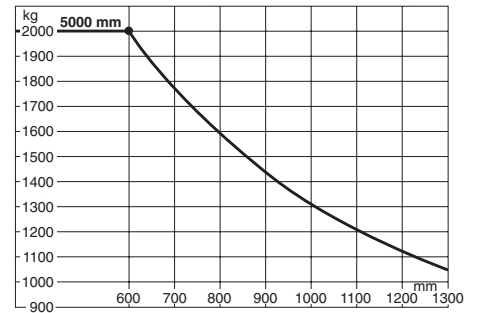
## 6FBRE16



## 6FBRE20



## 6FBRE20



### REACH LEGS HEIGHT

6FBRE16	274 (10.8)
6FBRE20	287 (11.3)

### UNDERCLEARANCE

Center of Wheelbase (No Load)	90 (3.5)
Rear Frame (No Load)	80 (3.1)

Battery Capacity (AH/5HR)	6FBRE16			6FBRE20		
	A	B	C	A	B	C
360	670 (26.5)	500 (19.7)	2065 (81.5)	—	—	—
420	600 (23.5)	425 (16.7)	2140 (84.5)	650 (25.5)	475 (18.5)	2320 (91)
600	525 (20.5)	355 (14.0)	2210 (87)	580 (23)	405 (15.9)	2390 (94)

**SPECIAL MAST****Wide Visible Full-Free Lift Three-Stage Mast (FSV)**

Model		6FBRE12	6FBRE14	6FBRE16	6FBRE20		
Type of Mast		FSV	FSV	FSV	FSV		
<b>PERFORMANCE</b>							
Speeds	Lifting	Full Load	mm/sec (fpm)	290 (57)	280 (55)	270 (53)	200 (39)
		No Load	mm/sec (fpm)	440 (87)	440 (87)	440 (87)	330 (65)
	Lowering	Full Load	mm/sec (fpm)	450 (89)	450 (89)	450 (89)	480 (95)
		No Load	mm/sec (fpm)	420 (83)	420 (83)	420 (83)	430 (85)
Maximum Fork Reach	Battery Capacity	360	mm (in)	470 (18.5)	520 (20.5)	620 (24.5)	—
	(AH/5HR)	420	mm (in)	395 (15.5)	445 (17.5)	550 (21.5)	590 (23) [515 (20.5)]
		600	mm (in)	325 (13)	375 (15)	475 (18.5)	515 (20.5) <445 (17.5)>
<b>DIMENSIONS</b>							
Load Distance (Centerline of front axle to front face of forks)	Battery Capacity	360	mm (in)	300 (12)	350 (13.5)	450 (17.5)	—
	(AH/5HR)	420	mm (in)	225 (8.9)	275 (10.8)	375 (14.8)	415 (16.5)
		600	mm (in)	155 (6.1)	205 (8.1)	305 (12)	345 (13.6)
Overall Length (to Top of Forks)	Battery Capacity	360	mm (in)	2045 (80.5)	2115 (83)	2115 (83)	—
	(AH/5HR)	420	mm (in)	2120 (83.5)	2190 (86)	2190 (86)	2380 (93.5) [2450 (96.5)]
		600	mm (in)	2190 (86)	2260 (89)	2265 (89)	2450 (96.5) <2525 (99.5)>
Turning Radius (Outside)			mm (in)	1530 (60)	1570 (62)	1670 (65.5)	1750 (69)
Intersecting Aisle Width			mm (in)	1690 (66.5)	1715 (67.5)	1765 (69.5)	1790 (70.5)

NOTE: [ ] is data when the maximum fork height is 6000 mm (236 in) or more.  
< > is data when the maximum fork height is 7000 mm (275.5 in) or more.

**MAST SPECIFICATIONS & RATED CAPACITIES****Wide Visible Mast (SV), Wide Visible Full-Free Lift Three-Stage Mast (FSV)****6FBRE12**

Mast Type	Maximum Fork Height	Overall Mast Height			Free Lift		Tilt Range		Load Capacity at 600 mm (24 in) LC		
		Lowered	Extended		Without Load Backrest	With Standard Load Backrest			Battery Capacity (AH)		
			Without Load Backrest	With Standard Load Backrest			Down	Up	360	420	600
		mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	deg	deg	kg (lb)	kg (lb)
SV	3000 (118)	1995 (78.5)	—	3850 (151.5)	—	415 (16.3)	3	5	1200 (2650)	1200 (2650)	1200 (2650)
	3300 (130)	2145 (84.5)	—	4150 (163.5)	—	415 (16.3)	3	5	1200 (2650)	1200 (2650)	1200 (2650)
	3500 (138)	2245 (88.5)	—	4350 (171.5)	—	415 (16.3)	3	5	1200 (2650)	1200 (2650)	1200 (2650)
	3700 (145)	2345 (92.5)	—	4550 (179)	—	415 (16.3)	3	5	1200 (2650)	1200 (2650)	1200 (2650)
	4000 (157.5)	2495 (98)	—	4850 (191)	—	415 (16.3)	3	5	1200 (2650)	1200 (2650)	1200 (2650)
	4500 (177)	2845 (112)	—	5350 (210.5)	—	415 (16.3)	3	5	1200 (2650)	1200 (2650)	1200 (2650)
5000 (197)	3095 (122)	—	5850 (230.5)	—	415 (16.3)	3	5	1200 (2650)	1200 (2650)	1200 (2650)	
FSV	4300 (169)	1995 (78.5)	—	5150 (203)	—	1145 (45)	3	5	1200 (2650)	1200 (2650)	1200 (2650)
	4700 (185)	2145 (84.5)	—	5550 (218.5)	—	1295 (51)	3	5	1200 (2650)	1200 (2650)	1200 (2650)
	5000 (197)	2245 (88.5)	—	5850 (230.5)	—	1395 (55)	3	5	1200 (2650)	1200 (2650)	1200 (2650)
	5500 (216.5)	2405 (94.5)	—	6350 (250)	—	1555 (61)	3	5	1200 (2650)	1200 (2650)	1200 (2650)
	6000 (236)	2595 (102)	—	6850 (269.5)	—	1745 (68.5)	3	5	1200 (2650)	1200 (2650)	1200 (2650)
	6500 (256)	2845 (112)	—	7350 (289.5)	—	1995 (78.5)	3	5	1050 (2310)	1200 (2650)	1200 (2650)
	7000 (275.5)	3095 (122)	—	7850 (309)	—	2245 (88.5)	3	5	900 (1980)	1050 (2310)	1200 (2650)
	7500 (295)	3345 (131.5)	—	8350 (328.5)	—	2495 (98)	3	5	700 (1540)	800 (1760)	1000 (2200)

NOTE: Height of standard load backrest is 850 mm (33.5 in).

**6FBRE14**

Mast Type	Maximum Fork Height	Overall Mast Height			Free Lift		Tilt Range		Load Capacity at 600 mm (24 in) LC		
		Lowered	Extended		Without Load Backrest	With Standard Load Backrest			Battery Capacity (AH)		
			Without Load Backrest	With Standard Load Backrest			Down	Up	360	420	600
		mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	deg	deg	kg (lb)	kg (lb)
SV	3000 (118)	1995 (78.5)	—	3850 (151.5)	—	415 (16.3)	3	5	1350 (2980)	1350 (2980)	1350 (2980)
	3300 (130)	2145 (84.5)	—	4150 (163.5)	—	415 (16.3)	3	5	1350 (2980)	1350 (2980)	1350 (2980)
	3500 (138)	2245 (88.5)	—	4350 (171.5)	—	415 (16.3)	3	5	1350 (2980)	1350 (2980)	1350 (2980)
	3700 (145)	2345 (92.5)	—	4550 (179)	—	415 (16.3)	3	5	1350 (2980)	1350 (2980)	1350 (2980)
	4000 (157.5)	2495 (98)	—	4850 (191)	—	415 (16.3)	3	5	1350 (2980)	1350 (2980)	1350 (2980)
	4500 (177)	2845 (112)	—	5350 (210.5)	—	415 (16.3)	3	5	1350 (2980)	1350 (2980)	1350 (2980)
5000 (197)	3095 (122)	—	5850 (230.5)	—	415 (16.3)	3	5	1350 (2980)	1350 (2980)	1350 (2980)	
FSV	4300 (169)	1995 (78.5)	—	5150 (203)	—	1145 (45)	3	5	1350 (2980)	1350 (2980)	1350 (2980)
	4700 (185)	2145 (84.5)	—	5550 (218.5)	—	1295 (51)	3	5	1350 (2980)	1350 (2980)	1350 (2980)
	5000 (197)	2245 (88.5)	—	5850 (230.5)	—	1395 (55)	3	5	1350 (2980)	1350 (2980)	1350 (2980)
	5500 (216.5)	2405 (94.5)	—	6350 (250)	—	1555 (61)	3	5	1350 (2980)	1350 (2980)	1350 (2980)
	6000 (236)	2595 (102)	—	6850 (269.5)	—	1745 (68.5)	3	5	1350 (2980)	1350 (2980)	1350 (2980)
	6500 (256)	2845 (112)	—	7350 (289.5)	—	1995 (78.5)	3	5	1350 (2980)	1350 (2980)	1350 (2980)
	7000 (275.5)	3095 (122)	—	7850 (309)	—	2245 (88.5)	3	5	1200 (2650)	1350 (2980)	1350 (2980)
	7500 (295)	3345 (131.5)	—	8350 (328.5)	—	2495 (98)	3	5	1050 (2310)	1250 (2760)	1350 (2980)
	8000 (315)	3595 (141.5)	—	8850 (348.4)	—	2745 (108)	3	5	—	1000 (2200)	1150 (2540)
	8500 (334)	3845 (151.5)	—	9350 (368)	—	2995 (118)	3	5	—	750 (1650)	900 (1980)

NOTE: Height of standard load backrest is 850 mm (33.5 in).

**MAST SPECIFICATIONS & RATED CAPACITIES**

Wide Visible Mast (SV), Wide Visible Full-Free Lift Three-Stage Mast (FSV)

**6FBRE16**

Mast Type	Maximum Fork Height	Overall Mast Height				Free Lift		Tilt Range		Load Capacity at 600 mm (24 in) LC		
		Lowered	Extended		Without Load Backrest	With Standard Load Backrest	Down	Up	Battery Capacity (AH)			
			Without Load Backrest	With Standard Load Backrest					360	420	600	
		mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	deg	deg	kg (lb)	kg (lb)	kg (lb)
SV	3000 (118)	1995 (78.5)	—	3850 (151.5)	—	415 (16.3)	3	5	1600 (3530)	1600 (3530)	1600 (3530)	
	3300 (130)	2145 (84.5)	—	4150 (163.5)	—	415 (16.3)	3	5	1600 (3530)	1600 (3530)	1600 (3530)	
	3500 (138)	2245 (88.5)	—	4350 (171.5)	—	415 (16.3)	3	5	1600 (3530)	1600 (3530)	1600 (3530)	
	3700 (145)	2345 (92.5)	—	4550 (179)	—	415 (16.3)	3	5	1600 (3530)	1600 (3530)	1600 (3530)	
	4000 (157.5)	2495 (98)	—	4850 (191)	—	415 (16.3)	3	5	1600 (3530)	1600 (3530)	1600 (3530)	
	4500 (177)	2845 (112)	—	5350 (210.5)	—	415 (16.3)	3	5	1600 (3530)	1600 (3530)	1600 (3530)	
	5000 (197)	3095 (122)	—	5850 (230.5)	—	415 (16.3)	3	5	1600 (3530)	1600 (3530)	1600 (3530)	
FSV	4300 (169)	1995 (78.5)	—	5150 (203)	—	1145 (45)	3	5	1600 (3530)	1600 (3530)	1600 (3530)	
	4700 (185)	2145 (84.5)	—	5550 (218.5)	—	1295 (51)	3	5	1600 (3530)	1600 (3530)	1600 (3530)	
	5000 (197)	2245 (88.5)	—	5850 (230.5)	—	1395 (55)	3	5	1600 (3530)	1600 (3530)	1600 (3530)	
	5500 (216.5)	2405 (94.5)	—	6350 (250)	—	1555 (61)	3	5	1600 (3530)	1600 (3530)	1600 (3530)	
	6000 (236)	2595 (102)	—	6850 (269.5)	—	1745 (68.5)	3	5	1500 (3310)	1600 (3530)	1600 (3530)	
	6500 (256)	2845 (112)	—	7350 (289.5)	—	1995 (78.5)	3	5	1450 (3200)	1600 (3530)	1600 (3530)	
	7000 (275.5)	3095 (122)	—	7850 (309)	—	2245 (88.5)	3	5	1300 (2870)	1450 (3200)	1600 (3530)	
	7500 (295)	3345 (131.5)	—	8350 (328.5)	—	2495 (98)	3	5	1150 (2540)	1300 (2870)	1500 (3310)	
	8000 (315)	3595 (141.5)	—	8850 (348.4)	—	2745 (108)	3	5	—	1100 (2430)	1250 (2760)	
	8500 (334)	3845 (151.5)	—	9350 (368)	—	2995 (118)	3	5	—	850 (1870)	1000 (2200)	

NOTE: Height of standard load backrest is 850 mm (33.5 in).

**6FBRE20**

Mast Type	Maximum Fork Height	Overall Mast Height				Free Lift		Tilt Range		Load Capacity at 600 mm (24 in) LC	
		Lowered	Extended		Without Load Backrest	With Standard Load Backrest	Down	Up	Battery Capacity (AH)		
			Without Load Backrest	With Standard Load Backrest					420	600	
		mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	deg	deg	kg (lb)	kg (lb)
SV	3000 (118)	2040 (80.5)	—	3950 (155.5)	—	445 (17.5)	3	5	2000 (4410)	2000 (4410)	
	3300 (130)	2190 (86)	—	4250 (167.5)	—	445 (17.5)	3	5	2000 (4410)	2000 (4410)	
	3500 (138)	2290 (90)	—	4450 (175)	—	445 (17.5)	3	5	2000 (4410)	2000 (4410)	
	3700 (145)	2450 (96.5)	—	4650 (183)	—	445 (17.5)	3	5	2000 (4410)	2000 (4410)	
	4000 (157.5)	2640 (104)	—	4950 (195)	—	445 (17.5)	3	5	2000 (4410)	2000 (4410)	
	4500 (177)	2890 (113.5)	—	5450 (214.5)	—	445 (17.5)	3	5	2000 (4410)	2000 (4410)	
	5000 (197)	3140 (123.5)	—	5950 (234)	—	445 (17.5)	3	5	2000 (4410)	2000 (4410)	
FSV	4300 (169)	1965 (77.5)	4845 (190.5)	5150 (203)	1420 (56)	1115 (44)	3	5	2000 (4410)	2000 (4410)	
	4700 (185)	2115 (83)	5245 (206.5)	5550 (218.5)	1570 (62)	1265 (50)	3	5	2000 (4410)	2000 (4410)	
	5000 (197)	2215 (87)	5545 (218.5)	5850 (230.5)	1670 (65.5)	1365 (53.5)	3	5	2000 (4410)	2000 (4410)	
	5500 (216.5)	2375 (93.5)	6045 (238)	6350 (250)	1830 (72)	1525 (60)	3	5	2000 (4410)	2000 (4410)	
	6000 (236)	2565 (101)	6545 (257.5)	6850 (269.5)	2020 (79.5)	1715 (67.5)	3	5	2000 (4410)	2000 (4410)	
	6500 (256)	3065 (120.5)	7250 (285.5)	7350 (289.5)	2315 (91)	2215 (87)	3	5	1800 (3970)	2000 (4410)	
	7000 (275.5)	3315 (130.5)	7750 (305)	7850 (309)	2565 (101)	2465 (97)	3	5	1600 (3530)	1800 (3970)	
	7500 (295)	3565 (140.5)	8250 (325)	8350 (328.5)	2815 (111)	2715 (107)	3	5	1400 (3090)	1600 (3530)	
	8000 (315)	3815 (150)	8750 (344.5)	8850 (348.5)	3065 (120.5)	2965 (116.5)	3	5	1200 (2650)	1350 (2980)	
	8500 (334)	4165 (164)	9350 (368)	9350 (368)	3315 (130.5)	3315 (130.5)	3	5	950 (2090)	1100 (2430)	

NOTE: Height of standard load backrest is 850 mm (33.5 in).

# 6FBRE12.14.16.20

INDEX: ○ Standard  
● Available

## STANDARD EQUIPMENT

### 6FBRE12.14.16.20

- Wide Visible Mast (SV) [MFH: 3000 mm (118 in)] ● Bar type forks ● Load backrest [Height: 850 mm (33.5 in)] ● Easy-down system (SV mast) ● Multi-function display ● Electric horn ● Hour meter
- Overhead guard ● Emergency unplug lever ● Storage box with cup holder ● Parking brake
- Electric power steering (EPS) ● Arm pad ● Column cover ● Battery tray ● Cooling fan for controller
- Hand protector ● Pen tray

## OPTIONS AVAILABILITY CHART

Item	Model Code	6FBRE	6FBRE	6FBRE	6FBRE
		12	14	16	20
<b>LOAD HANDLING</b>					
Full-free Lift 3-stage Mast (FSV) w. Backrest	M00D*	●	●	●	●
	w/o Backrest	M00D*			●
Fully Oil Charged Lift Cylinder	1) ☆ M09A	●	●	●	●
Long Forks	☆ M20A*	●	●	●	●
w/o Fork Set	M20N	●	●	●	●
High Load Backrest	☆ M40A*	●	●	●	●
<b>BATTERY AND CONTROLLER</b>					
Battery	☆☆ D00C/Q	●	●	●	●
Spare Battery (Wet Cell)	★ D20A	●	●	●	●
Spare Battery (Dry Cell)	★ D20J	●	●	●	●
Battery Case	2) ★ D80B	●	●	●	●
Battery Hanger	D46A	●	●	●	●
Battery Charger Off Truck Type	☆☆ C30L/M	●	●	●	●
Foot Safety Switch	K57A	●	●	●	●
Single Overall Electrolyte Filler Ports	★ D40A	●	●	●	●
Battery Connector Cable	D55A	●	●	●	●
<b>LIGHT AND INDICATORS</b>					
Headlights	J24A	●	●	●	●
Turn Signal Lights	J03A	●	●	●	●
Rear Working Lights	J26A	●	●	●	●
Back-up Light	J23A	●	●	●	●
Yellow Beacon On The Overhead Guard	J19A	●	●	●	●
Forward Chime	K22A	●	●	●	●
Back-up Chime	★ K21C	●	●	●	●
Forward & Buck-up Chime	K21A	●	●	●	●
Back-up Buzzer	★ K21D	●	●	●	●
Digital Multifunction Display (All Round Type)	L09B	●	●	●	●
<b>BODY</b>					
4-Way Adjustable Seat	★ G40G	●	●	●	●
w/o Seat	★ G40N	●	●	●	●
Overhead Guard Sheet	H01B	●	●	●	●
Name Plate	3) S31*	●	●	●	●
<b>CHASSIS</b>					
Direction Reverse Steer Control	E21A	●	●	●	●
Wide Flame	4) ★ G00C	●	●	●	
<b>WHEELS AND TIRES</b>					
Load Tire Urethane w/ Peripheral Grooves Tire	1) F93D	●	●	●	●
Drive Tire Etrto Urethane Tire Size 330x127	F92I	●	●	●	
<b>SPECIAL MODELS</b>					
E.E.C. Spec.	★ A10A	●	●	●	●
E Mark (for EC)	5) ★ A13A	●	●	●	●
China Certification Spec.	6) ★ A10R	●	●	●	●
Australian Spec.	★ A20B	●	●	●	●
Canadian Spec.	7) ★ A20P	●	●	●	●
New Zealand Spec.	★ A20O	●	●	●	●
Unit Indication, Inch/lbs	★ A95A	●	●	●	●
Cold-Storage Model (Type 45S)	★ B30E	●	●	●	●
Rust-Proof Model	★ B30H	●	●	●	●

**NOTE:**

- 1) Standard on cold-storage model.
  - 2) Battery cover is provided to the battery case for 420 or 600 AH/5HR battery.
  - 3) Available for English, Spanish, Chinese, German, French, Dutch, Danish, Portuguese, Italian, Greek, Norwegian, Finnish, and Hungarian.
  - 4) Available for the FSV mast model only.
  - 5) Must specify EEC specification.
  - 6) Must specify Name Plate (Chinese).
  - 7) Must enter together with "Unit Indication, Inch/lbs"
- ★ Please see the "Matching Options".  
☆☆ Please see the chart below for the items.

## FULLY OIL CHARGED LIFT CYLINDER

Model	Mast Type	
6FBRE 12.14.16.20	SV	●
	FSV	●

## MAST INTERCHANGEABILITY

Mast Type	Wide Visible Mast (SV)	Wide Visible Full-Free Lift Three-Stage Mast (FSV)
6FBRE12.14.16	●	●
6FBRE20	●	●

NOTE: ● Mast may be interchanged with models within the same group.

**MAST WEIGHT**

Mast Type	Maximum Fork Height mm (in)	Model	
		6FBRE12.14.16	6FBRE20
		kg (lb)	kg (lb)
SV	3000 (118)	580 (1275)	730 (1605)
	3300 (130)	600 (1320)	760 (1670)
	3500 (138)	610 (1340)	780 (1715)
	3700 (145)	640 (1410)	800 (1760)
	4000 (157.5)	650 (1430)	830 (1825)
	4500 (177)	710 (1560)	880 (1935)
FSV	5000 (197)	740 (1630)	930 (2045)
	4300 (169)	870 (1915)	900 (1980)
	4700 (185)	890 (1960)	950 (2090)
	5000 (197)	910 (2000)	980 (2155)
	5500 (216.5)	940 (2070)	1040 (2290)
	6000 (236)	1000 (2200)	1150 (2530)
	6500 (256)	1190 (2620)	1360 (2990)
	7000 (275.5)	1250 (2750)	1420 (3125)
	7500 (295)	1310 (2880)	1540 (3390)
	8000 (315)	1370 (3015)	1600 (3520)
8500 (334.6)	1430 (3145)	1670 (3675)	

**CAUTION:**

The figures are without load backrest and forks.

The figures presented in this chart have been rounded off to the nearest number.

Use caution when applying them to specific products.

**LONG FORKS**

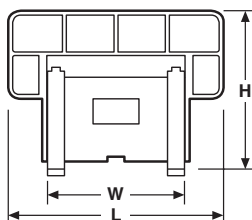
Unit: mm (in)

Model	Length	Width	Thickness	Long Forks
6FBRE12	850 (33.5)	100 (4)	35 (1.4)	○
	920 (36)			●
	1070 (42)			●
	1220 (48)			●
6FBRE14.16	920 (36)	100 (4)	35 (1.4)	○
	1070 (42)			●
	1220 (48)			●
6FBRE20	1070 (42)	122 (5)	38 (1.5)	○
	1220 (48)			●
	1370 (54)			●
	1520 (60)			●

**LONG FORKBAR AND HIGH LOAD BACKREST**

Unit: mm (in)

Model	6FBRE 12.14.16	6FBRE 20 1)
L	1170 (46)	1250 (49.3)
H	850 (33.5)	820 (32)
850 (33.5)	○	○
1000 (39.3)		●
1070 (42)	●	
1100 (43.3)		●
1200 (47.2)		●
1220 (48)	●	
1300 (51.2)		●
1400 (55.1)		● 2)
1500 (59.1)		● 2)



L: Outside width of load backrest

W: Length of forkbar

H: Height of load backrest

**NOTE:**

- The backrests for the standard-specification model and the Cold-Storage Model are different.
- The upward fork angle is set at 4°.

**AVAILABILITY OF BATTERY CHARGER****Off-Truck Type (GS YUASA)**

Battery Voltage V	Battery Capacity AH/5HR	AC Input Voltage V	AC Power Supply Capacity A		kVA of Charger		6FBRE 12.14.16	6FBRE20
			50Hz	60Hz	50Hz	60Hz		
48	360-420	200	30	20	7.3	6.5	●	●
	600	200	40	40	12.0	11.0	●	●
	360-420	400	15	10	7.3	6.5	●	●
	600	400	20	20	12.0	11.0	●	●

- NOTE: 1. The indicated input voltage means the available range of three-phase AC input voltages applied to the battery charger: 200V denotes the range of 200 to 230V and 400V the range of 340 to 460V, respectively.
2. In AC power sources where there is appreciable variance between the rated and the measured line voltage values, be sure to measure actual input voltage to a battery charger and then order it with correct power requirements for operation. Usually re-charging is done at night when incoming voltage is relatively high without line voltage drops, and it is a good practice, therefore, to measure the line voltage at night.

**BATTERY AVAILABILITY**

Model	Battery		
	V	AH/HR	
6FBRE 12.14.16	48	360/5*	●
		420/5*	●
		600/5*	●
6FBRE20	48	420/5*	●
		600/5*	●

NOTE: \* Dry battery available.

## TIRE AVAILABILITY

Model	Tire Arrangement	Tire Size	Solid Cushion Tire		
			Urethane	Urethane with Peripheral Grooves	Etrto Urethane
6FBRE 12.14.16	Load	254x120	○	●	
	Drive	330x127			●
		330x145	○		
6FBRE20	Load	267x127	○	●	
	Drive	384x152	○		

## MATCHING OPTIONS

(Column figures refer to matching with to the items listed at left)

Item	Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
E.E.C. Spec.	A10A	1																										
E Mark (for EC)	A13A	2																										
China Certification Spec.	A10R	3	X	X																								
Australian Spec.	A20B	4	X	X	X																							
New Zealand Spec.	A20O	5	X	X	X	X																						
Canadian Spec.	A20P	6	X	X	X	X	X																					
Unit Indication, Inch/lbs	A95A	7	X	X	X																							
Cold-storage Model (Type 45S)	B30E	8																										
Rust-proof Model	B30H	9							X																			
Battery Charger 200V/3P (Off-truck Type)	C30L	10	X	X																								
Battery Charger 400V/3P (Off-truck Type)	C30M	11	X	X							X																	
Battery (Wet Cell)	D00C	12	X	X																								
Battery (Dry Cell)	D00Q	13	X	X									X															
Local Battery	D03C	14									X	X	X	X														
Spare Battery (Wet Cell)	D20A	15	X	X									X															
Spare Battery (Dry Cell)	D20J	16	X	X												X												
Battery Brand (GS Yuasa)	D30A	17	X	X											X		X											
Battery Brand (Kobe)	D30B	18	X	X											X			X										
Single Overall Electrolyte Filler Ports	D40A	19	X	X					X					X	X	X												
Battery Case	D80B	20										X	X			X	X	X	X									
Wide Flame	G00C	21																										
4-Way Adjustable Seat	G40G	22																										
w/o Seat	G40N	23																				X						
Back-up Chime	K21C	24																										
Back-up Buzzer	K21D	25																								X		
Wide Visible Mast (SV)	M00C	26																			X							
Full-free Lift 3-stage Mast (FSV)	M00D	27																										X

INDEX: × Not available.

NOTE: For other matching please consult us.



## SPECIFICATIONS OF BATTERY AND BATTERY CASE

The "minimum weight of battery with case" indicated in the table is the lightest weight of the battery required to satisfy stability requirements of the vehicle in which it is installed.

### Specifications (GS YUASA)

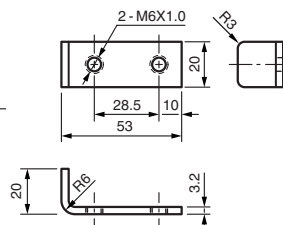
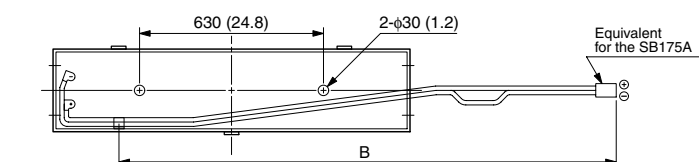
Model		6FBRE12			6FBRE14			6FBRE16			6FBRE20		
Vehicle Weight without Battery and Case	kg (lb)	1850 (4080)			1870 (4120)			2010 (4430)			2370 (5230)		
Minimum Weight of Battery with Case	kg (lb)	740 (1631.7)			740 (1631.7)			740 (1631.7)			930 (2050.7)		
Dimensions of Battery Compartment	Width	mm (in)	285 (11.2)	357 (14.1)	429 (16.9)	285 (11.2)	357 (14.1)	429 (16.9)	285 (11.2)	357 (14.1)	429 (16.9)	357 (14.1)	429 (16.9)
	Length	mm (in)	1225 (48.2)			1225 (48.2)			1225 (48.2)			1225 (48.2)	
	Height	mm (in)	740 (29.1)			740 (29.1)			740 (29.1)			863 (35.5)	
Battery Connector Type		Anderson SB175A (2 Prong)			Anderson SB175A (2 Prong)			Anderson SB175A (2 Prong)			Anderson SB175A (2 Prong)		
Truck Voltage	V	48			48			48			48		
Number of Cells	pcs	24			24			24			24		
Ampere-Hour Capacity	AH/HR	360/5	420/5	600/5	360/5	420/5	600/5	360/5	420/5	600/5	420/5	600/5	
Specs. of Cell	Overall Dimensions	Total Height	mm (in)	732 (28.82)	732 (28.82)	732 (28.82)	732 (28.82)	732 (28.82)	732 (28.82)	732 (28.82)	732 (28.82)	732 (28.82)	732 (28.82)
		Container Height	mm (in)	700 (27.56)	700 (27.56)	700 (27.56)	700 (27.56)	700 (27.56)	700 (27.56)	700 (27.56)	700 (27.56)	700 (27.56)	700 (27.56)
	Length	mm (in)	70 (2.76)	78 (3.07)	110 (4.33)	70 (2.76)	78 (3.07)	110 (4.33)	70 (2.76)	78 (3.07)	110 (4.33)	78 (3.07)	110 (4.33)
		Width	mm (in)	157 (6.18)	157 (6.18)	157 (6.18)	157 (6.18)	157 (6.18)	157 (6.18)	157 (6.18)	157 (6.18)	157 (6.18)	157 (6.18)
	Weight of Filled Cell	Approx. kg (lb)	22.5 (49.6)	26.0 (57.0)	37.0 (81.6)	22.5 (49.6)	26.0 (57.0)	37.0 (81.6)	22.5 (49.6)	26.0 (57.0)	37.0 (81.6)	26.0 (57.0)	37.0 (81.6)
Quantity of Electrolyte	Approx. liter	3.8	4.2	6.1	3.8	4.2	6.1	3.8	4.2	6.1	4.2	6.1	
Weight	Case	kg (lb)	121 (266.7)	132 (290)	141 (310)	121 (266.7)	132 (290)	141 (310)	121 (266.7)	132 (290)	141 (310)	132 (290)	141 (310)
	Total (Battery and Case)	kg (lb)	765 (1690)	960 (2120)	1145 (2520)	765 (1690)	960 (2120)	1145 (2520)	765 (1690)	960 (2120)	1145 (2520)	960 (2120)	1145 (2520)
Operating Time		5h50m	7h05m	10h30m	5h50m	7h05m	10h30m	5h50m	7h05m	10h30m	7h05m	10h30m	

## Dimensions of Battery Case

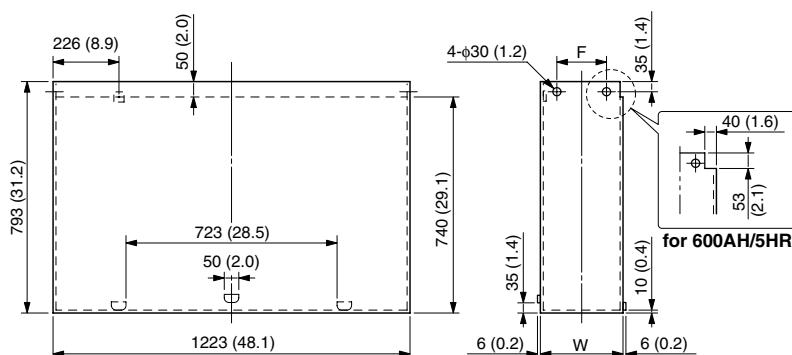
### 6FBRE12.14.16.20

BATTERY CAPACITY : 360AH/5HR, 48V  
420AH/5HR, 48V  
600AH/5HR, 48V

Unit: mm (in)



	B
Positive Cable	1150 (45.3)
Negative Cable	1220 (48.0)



AH/5HR	W	F
360	283 (11.1)	170 (6.7)
420	355 (14.0)	240 (9.4)
600	427 (16.8)	240 (9.4)