

# 8FBE10

# 8FBE13

## MAIN VEHICLE SPECIFICATIONS

(April 2022)

1	Manufacturer			TOYOTA	TOYOTA
2	Model			<b>8FBE10</b>	<b>8FBE13</b>
3	Load Capacity	kg		1000	1250
4	Load Center	mm		500	500
5	Power Type			Battery	Battery
6	Operator Position			Rider Seated	Rider Seated
7	Tire Type	Front/Rear		Pneumatic	Pneumatic
8	Wheels (x = driven)	Front/Rear		2x/2	2x/2
9	Maximum Fork Height (MFH)		mm	3000	3000
10	Free Lift		mm	140	145
13	Fork Size	T x W x L	mm	30x100x770	35x100x850
	Fork Spread (Outside)	MAX./MIN.	mm	920/200	920/200
14	Tilt Range	FWD/BWD	deg	5/6.5	5/6.5
15	Length to Fork Face		mm	1750	1755
16	Overall Width		mm	1075	1075
17	Mast Lowered Height		mm	1970	1970
18	Mast Extended Height		mm	3920	3920
19	Overhead Guard Height		mm	1980	1980
21	Turning Radius (Outside)		mm	1385	1400
22	Load Distance (Centerline of front axle to front face of forks)		mm	345	350
	Rear Overhang		mm	175	190
23	Basic Right Angle Stacking Aisle Width (Add load length and clearance)		mm	1730	1750
	Intersecting Aisle Width		mm	1580	1600
24	Travel, Max. (FWD/RVS)	Full Load	km/h	15/15	15/15
		No Load	km/h	16.5/16.5	16.5/16.5
25	Speeds *	Lifting	Full Load	mm/sec	490
		No Load	mm/sec	610	610
26	Lowering	Full Load	mm/sec	530	530
		No Load	mm/sec	550	550
27	Drawbar Pull *	Full Load/ No Load	3-Minute Ratings	N (kg)	9600/9100 (980/930)
			5-Minute Ratings	N (kg)	9600/9100 (980/930)
			60-Minute Ratings	N (kg)	5300/5100 (540/520)
29	Gradeability *	Full Load/ No Load	3-Minute Ratings	% (tanθ)	32/24
			5-Minute Ratings	% (tanθ)	32/24
			30-Minute Ratings	% (tanθ)	24/24
32	Total Weight	Without Battery	kg	1725	1930
33	Weight Distribution (With STD Battery)	Full Load	Front	kg	2875
			Rear	kg	400
34		No Load	Front	kg	1175
			Rear	kg	1100
35	Number	Front/Rear		2/2	2/2
36	Tires	Front		18x7-8-10PR	18x7-8-14PR
37		Size	Rear	15x4.1/2-8-12PR	15x4.1/2-8-12PR
38	Wheelbase		mm	1210	1210
39	Tread	Front	mm	895	895
		Rear	mm	175	175
	Backrest Height		mm	920	920
	Overhead Guard Clearance		mm	1025	1025
	Counterweight Height		mm	955	955
	Step Height/Floor Height		mm	430/545	430/545
40	Underclearance	Mast (Full Load)		mm	75
41		Center of Wheelbase (Full Load)		mm	80
		Drive Axle (Full Load)		mm	90
		Counterweight (No Load)		mm	85
		Minimum Under Clearance (No Load)		mm	60 (Frame)
	Grade Clearance	Frame	% (tanθ)	28	28
42	Brake	Service (Foot)		Dry Disc	Dry Disc
43		Parking		Foot	Foot
	Control System	System Voltage		V	48
45	Battery (Lead-acid battery)	Voltage/Capacity (5-hour rating)	STD	V/AH	48/280
46			Max.	V/AH	48/370
	Weight (STD Capacity Type)		kg	550	550
47	Electric Motors	Drive		kW	4.9x2
48		Load Handling		kW	9.2
54	Control Type	Drive		Transistor inverter	Transistor inverter
		Load Handling		Transistor inverter	Transistor inverter
57	Operating Pressure	For Attachments	Mpa (psi)	13.7 (2000)	13.7 (2000)
	Sound Level at the Driver's Ear According to EN12053 Uncertainty 4dB(A)		dB(A)	71.4	71.4

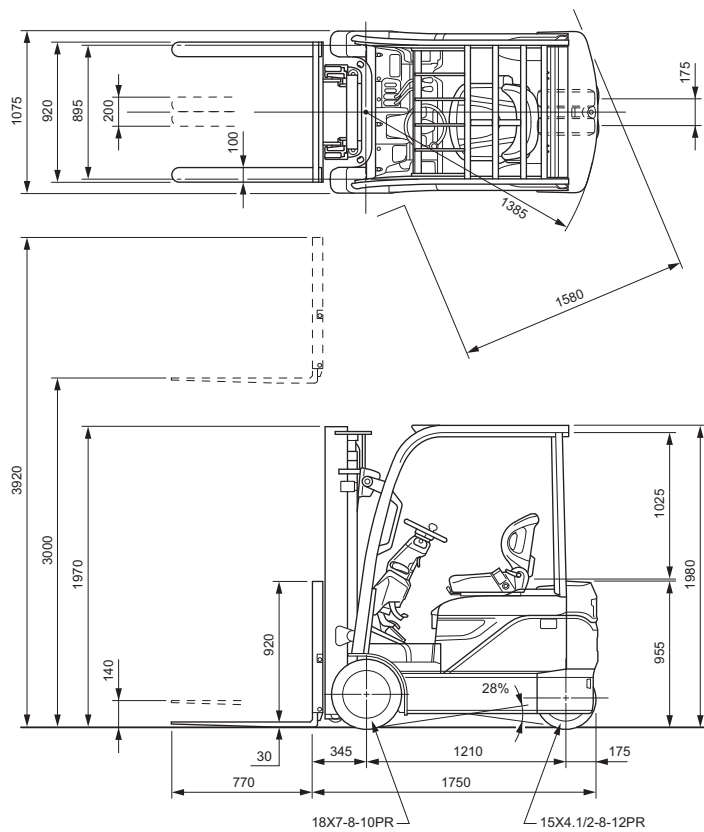
NOTE: \* Computed values.

# DIMENSIONAL DRAWINGS

(April 2022)

Unit: mm

## 8FBE10



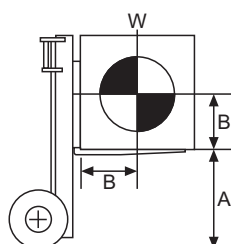
### UNDERCLEARANCE

Mast (Full Load)-----	75
Center of Wheelbase (Full Load)-----	80
Drive Axle (Full Load)-----	90
Counterweight (No Load)-----	85
Minimum Under Clearance (No Load)---	60 (Frame)

# RATED CAPACITIES

(November 2023)

## 8FBE10



**A:** Max. Fork Height  
**B:** Load Center  
**W:** Capacity

### V, FV Mast (PSC)

Unit: kg (W)

A (mm)	2500	2700	3000	3300	3500	3700	4000	4500	5000	
	(2520)	(2720)	(3020)	(3320)	(3520)	(3720)	(4020)	(4520)	(5020)	
B (mm)	500	1000	1000	1000	1000	1000	1000	970	870	820
	600	890	890	890	890	890	890	870	780	730
	700	810	810	810	810	810	810	780	700	660
	800	740	740	740	740	740	740	720	640	610
	900	680	680	680	680	680	680	660	590	560
	1000	630	630	630	630	630	630	610	550	520
	1100	590	590	590	590	590	590	570	510	480
	1200	550	550	550	550	550	550	530	480	450

( ) with [A10R] China Certification Spec.

The height with China Certification Spec. includes the fork thickness with tolerance. This height is listed on the nameplate.

### V, FV Mast (PN)

Unit: kg (W)

A (mm)	2500	2700	3000	3300	3500	3700	4000	4500	5000	
	(2520)	(2720)	(3020)	(3320)	(3520)	(3720)	(4020)	(4520)	(5020)	
B (mm)	500	1000	1000	1000	1000	1000	1000	950	850	800
	600	890	890	890	890	890	890	850	760	720
	700	810	810	810	810	810	810	770	690	650
	800	740	740	740	740	740	740	700	630	590
	900	680	680	680	680	680	680	650	580	540
	1000	630	630	630	630	630	630	600	530	500
	1100	590	590	590	590	590	590	560	500	470
	1200	550	550	550	550	550	550	520	470	440

( ) with [A10R] China Certification Spec.

The height with China Certification Spec. includes the fork thickness with tolerance. This height is listed on the nameplate.

### FSV Mast (PSC)

Unit: kg (W)

A (mm)	3700	4000	4300	4500	4700	5000	5500	6000	
	(3720)	(4020)	(4320)	(4520)	(4720)	(5020)	(5520)	(6020)	
B (mm)	500	950	950	900	850	850	770	720	520
	600	850	850	810	760	760	690	650	470
	700	770	770	730	690	690	630	590	420
	800	710	710	670	630	630	570	540	390
	900	650	650	620	590	590	530	500	360
	1000	610	610	570	540	540	490	460	330
	1100	570	570	540	510	510	460	430	310
	1200	530	530	500	470	470	430	400	290

( ) with [A10R] China Certification Spec.

The height with China Certification Spec. includes the fork thickness with tolerance. This height is listed on the nameplate.

### FSV Mast (PN)

Unit: kg (W)

A (mm)	3700	4000	4300	4500	4700	5000	5500	6000	
	(3720)	(4020)	(4320)	(4520)	(4720)	(5020)	(5520)	(6020)	
B (mm)	500	950	950	900	850	850	750	700	500
	600	850	850	810	760	760	670	630	450
	700	770	770	730	690	690	610	570	410
	800	710	710	670	630	630	560	520	370
	900	650	650	620	590	590	520	480	340
	1000	610	610	570	540	540	480	450	320
	1100	570	570	540	510	510	450	420	300
	1200	530	530	500	470	470	420	390	280

( ) with [A10R] China Certification Spec.

The height with China Certification Spec. includes the fork thickness with tolerance. This height is listed on the nameplate.

**SPECIAL MAST**

(June 2015)

Wide Visible Mast (V), Wide Visible Full-Free Lift Two-Stage Mast (FV), Wide Visible Full-Free Lift Three-Stage Mast (FSV)

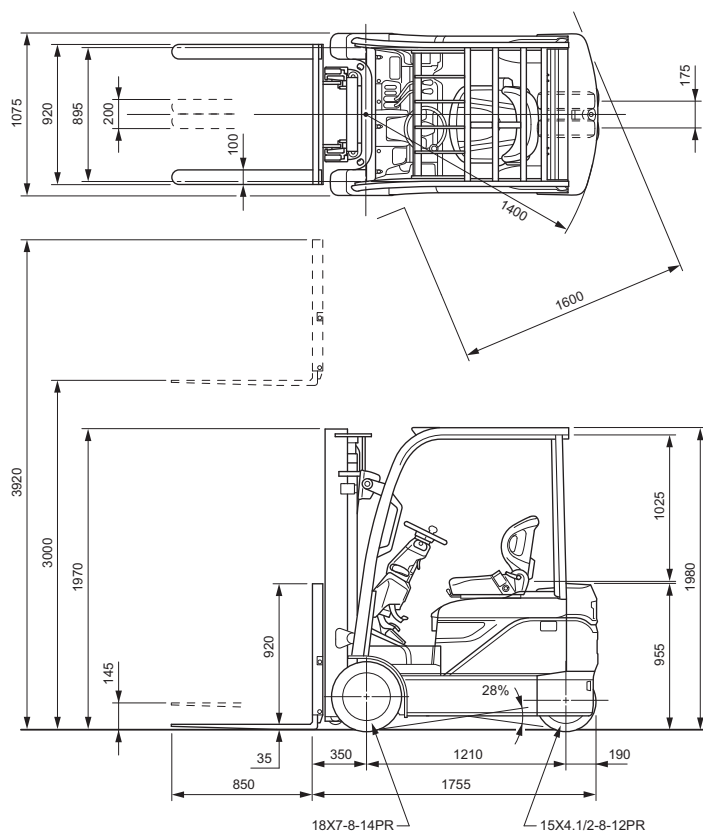
Model				8FBE10												
Type of Mast				V				FV				FSV				
<b>PERFORMANCE</b>																
Power Mode				H	P	S	E	H	P	S	E	H	P	S	E	
Speeds	Lifting	Full Load	mm/sec	490	410	340	340	460	390	320	320	480	410	340	340	
		No Load	mm/sec	610	540	480	480	550	490	440	440	560	500	450	450	
	Lowering	Full Load	mm/sec	530	530	530	530	470	470	470	470	490	490	490	490	
		No Load	mm/sec	550	550	550	550	460	460	460	460	470	470	470	470	
<b>DIMENSIONS</b>																
Load Distance (Centerline of front axle to front face of forks)				mm	345				345				385			

NOTE: H High power mode / P Power mode / S Standard mode / E Eco mode

**DIMENSIONAL DRAWINGS**

(April 2022)

Unit: mm

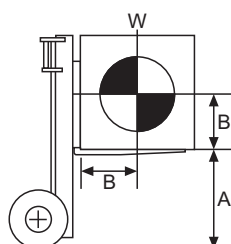
**8FBE13****UNDERCLEARANCE**

Mast (Full Load)-----	75
Center of Wheelbase (Full Load)-----	80
Drive Axle (Full Load)-----	90
Counterweight (No Load)-----	85
Minimum Under Clearance (No Load)---	60 (Frame)

# RATED CAPACITIES

(November 2023)

## 8FBE13



**A:** Max. Fork Height  
**B:** Load Center  
**W:** Capacity

### V, FV Mast (PSC)

Unit: kg (W)

A (mm)	2500	2700	3000	3300	3500	3700	4000	4500	5000
	(2520)	(2720)	(3020)	(3320)	(3520)	(3720)	(4020)	(4520)	(5020)
500	1250	1250	1250	1250	1250	1250	1220	1120	970
600	1120	1120	1120	1120	1120	1120	1090	1000	870
700	1010	1010	1010	1010	1010	1010	990	910	790
800	920	920	920	920	920	920	900	830	720
900	850	850	850	850	850	850	830	760	660
1000	790	790	790	790	790	790	770	710	610
1100	730	730	730	730	730	730	720	660	570
1200	690	690	690	690	690	690	670	610	530

( ) with [A10R] China Certification Spec.

The height with China Certification Spec. includes the fork thickness with tolerance. This height is listed on the nameplate.

### V, FV Mast (PN)

Unit: kg (W)

A (mm)	2500	2700	3000	3300	3500	3700	4000	4500	5000
	(2520)	(2720)	(3020)	(3320)	(3520)	(3720)	(4020)	(4520)	(5020)
500	1250	1250	1250	1250	1250	1250	1200	1100	950
600	1120	1120	1120	1120	1120	1120	1070	980	850
700	1010	1010	1010	1010	1010	1010	970	890	770
800	920	920	920	920	920	920	890	810	700
900	850	850	850	850	850	850	820	750	650
1000	790	790	790	790	790	790	760	690	600
1100	730	730	730	730	730	730	700	650	560
1200	690	690	690	690	690	690	660	600	520

( ) with [A10R] China Certification Spec.

The height with China Certification Spec. includes the fork thickness with tolerance. This height is listed on the nameplate.

### FSV Mast (PSC)

Unit: kg (W)

A (mm)	3700	4000	4300	4500	4700	5000	5500	6000
	(3720)	(4020)	(4320)	(4520)	(4720)	(5020)	(5520)	(6020)
500	1150	1150	1100	1000	1000	920	820	620
600	1030	1030	990	900	900	830	740	560
700	940	940	900	820	820	750	670	510
800	860	860	820	750	750	690	610	460
900	790	790	760	690	690	630	570	430
1000	740	740	700	640	640	590	520	400
1100	690	690	660	600	600	550	490	370
1200	640	640	620	560	560	510	460	350

( ) with [A10R] China Certification Spec.

The height with China Certification Spec. includes the fork thickness with tolerance. This height is listed on the nameplate.

### FSV Mast (PN)

Unit: kg (W)

A (mm)	3700	4000	4300	4500	4700	5000	5500	6000
	(3720)	(4020)	(4320)	(4520)	(4720)	(5020)	(5520)	(6020)
500	1150	1150	1100	1000	1000	900	800	600
600	1030	1030	990	900	900	810	720	540
700	940	940	900	820	820	730	650	490
800	860	860	820	750	750	670	600	450
900	790	790	760	690	690	620	550	410
1000	740	740	700	640	640	580	510	380
1100	690	690	660	600	600	540	480	360
1200	640	640	620	560	560	500	450	340

( ) with [A10R] China Certification Spec.

The height with China Certification Spec. includes the fork thickness with tolerance. This height is listed on the nameplate.

**SPECIAL MAST**

(October 2015)

Wide Visible Mast (V), Wide Visible Full-Free Lift Two-Stage Mast (FV), Wide Visible Full-Free Lift Three-Stage Mast (FSV)

Model				8FBE13											
Type of Mast				V				FV				FSV			
<b>PERFORMANCE</b>															
Power Mode				H	P	S	E	H	P	S	E	H	P	S	E
Speeds	Lifting	Full Load	mm/sec	450	380	300	300	440	370	300	300	470	390	320	320
		No Load	mm/sec	610	540	480	480	550	490	440	440	560	500	450	450
	Lowering	Full Load	mm/sec	530	530	530	530	470	470	470	470	490	490	490	490
		No Load	mm/sec	550	550	550	550	460	460	460	460	470	470	470	470
<b>DIMENSIONS</b>															
Load Distance (Centerline of front axle to front face of forks)			mm	350				350				390			

NOTE: H High power mode / P Power mode / S Standard mode / E Eco mode

# MAST SPECIFICATIONS & RATED CAPACITIES

(June 2015)

Wide Visible Mast (V), Wide Visible Full-Free Lift Two-Stage Mast (FV), Wide Visible Full-Free Lift Three-Stage Mast (FSV)

## 8FBE10

Mast Type	Maximum Fork Height	Overall Height			Free Lift		Tilt Range		Load Capacity at 500 mm LC	
		Lowered	Extended		Without Load Backrest	With Standard Load Backrest	FWD	BWD	PSC	PN
			Without Load Backrest	With Standard Load Backrest						
mm	mm	mm	mm	mm	mm	deg	deg	kg	kg	
V	2500	1720	3055*	3420	140	140	5	5	1000	1000
	2700	1820	3255*	3620	140	140	5	6.5	1000	1000
	3000	1970	3555*	3920	140	140	5	6.5	1000	1000
	3300	2120	3855*	4220	140	140	5	6.5	1000	1000
	3500	2220	4055*	4420	140	140	5	6.5	1000	1000
	3700	2380	4255*	4620	140	140	5	6.5	1000	1000
	4000	2570	4555*	4920	140	140	5	6.5	970	950
	4500	2820	5055*	5420	140	140	5	6.5	870	850
	5000	3070	5555*	5920	140	140	5	6.5	820	800
FV	3000	1970	3580	3920	1420	1050	5	6.5	1000	1000
	3300	2120	3880	4220	1570	1200	5	6.5	1000	1000
	3500	2220	4080	4420	1670	1300	5	6.5	1000	1000
	3700	2380	4280	4620	1830	1460	5	6.5	1000	1000
	4000	2570	4580	4920	2020	1650	5	6.5	970	950
FSV	3700	1770	4275	4620	1225	850	5	6.5	950	950
	4000	1870	4575	4920	1325	950	5	6.5	950	950
	4300	1970	4875	5220	1425	1050	5	6.5	900	900
	4500	2040	5075	5420	1495	1120	5	6.5	850	850
	4700	2120	5275	5620	1575	1200	5	6.5	850	850
	5000	2220	5575	5920	1675	1300	5	6.5	770	750
	5500	2380	6075	6420	1835	1460	5	6.5	720	700
	6000	2570	6575	6920	2025	1650	5	6.5	520	500

NOTE: Height of standard load backrest is 920 mm.  
\* with A4 piping, plus 85 mm.

## 8FBE13

Mast Type	Maximum Fork Height	Overall Height			Free Lift		Tilt Range		Load Capacity at 500 mm LC	
		Lowered	Extended		Without Load Backrest	With Standard Load Backrest	FWD	BWD	PSC	PN
			Without Load Backrest	With Standard Load Backrest						
mm	mm	mm	mm	mm	mm	deg	deg	kg	kg	
V	2500	1720	3055*	3420	145	145	5	5	1250	1250
	2700	1820	3255*	3620	145	145	5	6.5	1250	1250
	3000	1970	3555*	3920	145	145	5	6.5	1250	1250
	3300	2120	3855*	4220	145	145	5	6.5	1250	1250
	3500	2220	4055*	4420	145	145	5	6.5	1250	1250
	3700	2380	4255*	4620	145	145	5	6.5	1250	1250
	4000	2570	4555*	4920	145	145	5	6.5	1220	1200
	4500	2820	5055*	5420	145	145	5	6.5	1120	1100
	5000	3070	5555*	5920	145	145	5	6.5	970	950
FV	3000	1970	3600	3920	1405	1055	5	6.5	1250	1250
	3300	2120	3900	4220	1555	1205	5	6.5	1250	1250
	3500	2220	4100	4420	1655	1305	5	6.5	1250	1250
	3700	2380	4300	4620	1815	1465	5	6.5	1250	1250
	4000	2570	4600	4920	2005	1655	5	6.5	1220	1200
FSV	3700	1770	4275	4620	1225	855	5	6.5	1150	1150
	4000	1870	4575	4920	1325	955	5	6.5	1150	1150
	4300	1970	4875	5220	1425	1055	5	6.5	1100	1100
	4500	2040	5075	5420	1495	1125	5	6.5	1000	1000
	4700	2120	5275	5620	1575	1205	5	6.5	1000	1000
	5000	2220	5575	5920	1675	1305	5	6.5	920	900
	5500	2380	6075	6420	1835	1465	5	6.5	820	800
	6000	2570	6575	6920	2025	1655	5	6.5	620	600

NOTE: Height of standard load backrest is 920 mm.  
\* with A4 piping, plus 85 mm.

# 8FBE15.18.20

# 60-8FBE15.18.20

## MAIN VEHICLE SPECIFICATIONS

(May 2023)

1	Manufacturer			TOYOTA	TOYOTA	TOYOTA	
2	Model			<b>8FBE15</b>	<b>8FBE18</b>	<b>8FBE20</b>	
3	Load Capacity	kg		1500	1750	2000	
4	Load Center	mm		500	500	500	
5	Power Type			Battery	Battery	Battery	
6	Operator Position			Rider Seated	Rider Seated	Rider Seated	
7	Tire Type	Front/Rear		Pneumatic	Pneumatic	Pneumatic	
8	Wheels (x = driven)	Front/Rear		2x/2	2x/2	2x/2	
9	Maximum Fork Height (MFH)	mm		3000	3000	3000	
10	Free Lift	mm		145	145	125	
13	Fork Size	T x W x L	mm	35x100x920	35x100x920	36x120x920	
	Fork Spread (Outside)	MAX./MIN.	mm	920/200	920/200	1020/240	
14	Tilt Range	FWD/BWD	deg	5/6.5	5/6.5	5/6.5	
15	Length to Fork Face		mm	1875	1905	2045	
16	Overall Width		mm	1075	1075	1075	
17	Mast Lowered Height		mm	1970	1970	1970	
18	Mast Extended Height		mm	3920	3920	3920	
19	Overhead Guard Height		mm	1980	1980	1980	
21	Turning Radius (Outside)		mm	1515	1550	1675	
22	Load Distance (Centerline of front axle to front face of forks)		mm	350	350	365	
	Rear Overhang		mm	205	240	275	
23	Basic Right Angle Stacking Aisle Width (Add load length and clearance)		mm	1865	1900	2040	
	Intersecting Aisle Width		mm	1680	1695	1790	
24	Speeds *	Travel, Max. (FWD/RVS)	Full Load	km/h	15/15	14.5/14.5	14/14
			No Load	km/h	16.5/16.5	16/16	15.5/15.5
		Lifting	Full Load	mm/sec	430	390	340
			No Load	mm/sec	610	610	500
25		Lowering	Full Load	mm/sec	530	530	500
26			No Load	mm/sec	550	550	500
27	Drawbar Pull *	Full Load/ No Load	3-Minute Ratings	N (kg)	9400/9000 (960/920)	9400/9000 (960/920)	9200/9200 (940/940)
			5-Minute Ratings	N (kg)	9400/9000 (960/920)	9400/9000 (960/920)	9200/9200 (940/940)
			60-Minute Ratings	N (kg)	5100/5000 (520/510)	5000/5000 (510/510)	4800/5100 (490/520)
29	Gradeability *	Full Load/ No Load	3-Minute Ratings	% (tanθ)	24/21	21/20	19/20
			5-Minute Ratings	% (tanθ)	24/21	21/20	19/20
			30-Minute Ratings	% (tanθ)	18/21	16/20	14/20
32	Total Weight	Without Battery		kg	2050	2220	2520
33	Weight Distribution (With STD Battery)	Full Load	Front	kg	3725	4130	4590
			Rear	kg	505	520	620
34		No Load	Front	kg	1250	1245	1350
			Rear	kg	1480	1655	1860
35	Number	Front/Rear			2/2	2/2	
36	Tires	Front			18x7-8-14PR	18x7-8-16PR	18x7-8/4.33
37		Rear			16x6-8-10PR	16x6-8-10PR	16x6-8-10PR
38	Wheelbase		mm	1310	1310	1400	
39	Tread	Front	mm	895	895	895	
		Rear	mm	205	205	205	
	Backrest Height		mm	920	920	920	
	Overhead Guard Clearance		mm	1025	1025	1025	
	Counterweight Height		mm	955	955	955	
	Step Height/Floor Height		mm	430/545	430/545	430/545	
40	Underclearance	Mast (Full Load)	mm	75	75	75	
41		Center of Wheelbase (Full Load)	mm	80	80	80	
		Drive Axle (Full Load)	mm	90	90	90	
		Counterweight (No Load)	mm	85	85	85	
		Minimum Under Clearance (No Load)	mm	60 (Frame)	60 (Frame)	60 (Frame)	
	Grade Clearance	Frame	% (tanθ)	30	30	27	
42	Brake	Service (Foot)		Dry Disc	Dry Disc	Dry Disc	
43		Parking		Foot	Foot	Foot	
	Control System	System Voltage	V	48	48	48	
45	Battery (Lead-acid battery)	Voltage/Capacity (5-hour rating)	STD V/AH	48/390	48/390	48/390	
46		Max. V/AH	48/565	48/565	48/645		
47	Electric Motors	Weight (STD Capacity Type)	kg	680	680	690	
48		Drive	kW	4.9x2	4.9x2	4.9x2	
54	Control Type	Load Handling	kW	9.2	9.2	9.2	
		Drive		Transistor inverter	Transistor inverter	Transistor inverter	
57	Operating Pressure	Load Handling		Transistor inverter	Transistor inverter	Transistor inverter	
		For Attachments	Mpa (psi)	13.7 (2000)	13.7 (2000)	13.7 (2000)	
	Sound Level at the Driver's Ear According to EN12053 Uncertainty 4dB(A)		dB(A)	71.4	71.4	71.4	

NOTE: \* Computed values.

1	Manufacturer			TOYOTA	TOYOTA	TOYOTA
2	Model			<b>60-8FBE15</b>	<b>60-8FBE18</b>	<b>60-8FBE20</b>
3	Load Capacity		kg	1500	1750	2000
4	Load Center		mm	500	500	500
5	Power Type			Battery	Battery	Battery
6	Operator Position			Rider Seated	Rider Seated	Rider Seated
7	Tire Type		Front/Rear	Pneumatic	Pneumatic	Pneumatic
8	Wheels (x = driven)		Front/Rear	2x/2	2x/2	2x/2
9	Maximum Fork Height (MFH)		mm	3000	3000	3000
10	Free Lift		mm	145	145	125
13	Fork Size		T x W x L	35x100x920	35x100x920	36x120x920
	Fork Spread (Outside)		MAX./MIN.	920/200	920/200	1020/240
14	Tilt Range		FWD/BWD	deg	5/6.5	5/6.5
15	Length to Fork Face			mm	1875	1905
16	Overall Width			mm	1075	1075
17	Mast Lowered Height			mm	1970	1970
18	Mast Extended Height			mm	3920	3920
19	Overhead Guard Height			mm	1980	1980
21	Turning Radius (Outside)			mm	1515	1550
22	Load Distance (Centerline of front axle to front face of forks)			mm	350	350
	Rear Overhang			mm	205	240
23	Basic Right Angle Stacking Aisle Width (Add load length and clearance)			mm	1865	1900
	Intersecting Aisle Width			mm	1680	1695
24	Travel, Max. (FWD/RVS)	Full Load	km/h	15/15	14.5/14.5	14/14
		No Load	km/h	16.5/16.5	16/16	15.5/15.5
25	Speeds *	Lifting	Full Load	mm/sec	430	390
		No Load	mm/sec	610	610	500
26	Lowering	Full Load	mm/sec	530	530	500
		No Load	mm/sec	550	550	500
27	Drawbar Pull *	3-Minute Ratings	N (kg)	9400/9000 (960/920)	9400/9000 (960/920)	9200/9200 (940/940)
		5-Minute Ratings	N (kg)	9400/9000 (960/920)	9400/9000 (960/920)	9200/9200 (940/940)
		60-Minute Ratings	N (kg)	5100/5000 (520/510)	5000/5000 (510/510)	4800/5100 (490/520)
29	Gradeability *	3-Minute Ratings	% (tanθ)	24/21	21/20	19/20
		5-Minute Ratings	% (tanθ)	24/21	21/20	19/20
		30-Minute Ratings	% (tanθ)	18/21	16/20	14/20
32	Total Weight		Without Battery	kg	2050	2220
33	Weight Distribution (With Min. Battery)	Full Load	Front	kg	3730	4135
		Rear	kg	510	525	620
34	No Load	Front	kg	1255	1250	1350
		Rear	kg	1485	1660	1860
35	Number		Front/Rear		2/2	2/2
36	Tires	Front		18x7-8-14PR	18x7-8-16PR	18x7-8/4.33
37		Rear		16x6-8-10PR	16x6-8-10PR	16x6-8-10PR
38	Wheelbase		mm	1310	1310	1400
39	Tread	Front	mm	895	895	895
		Rear	mm	205	205	205
	Backrest Height		mm	920	920	920
	Overhead Guard Clearance		mm	1025	1025	1025
	Counterweight Height		mm	955	955	955
	Step Height/Floor Height		mm	430/545	430/545	430/545
40	Underclearance	Mast (Full Load)	mm	75	75	75
41		Center of Wheelbase (Full Load)	mm	80	80	80
		Drive Axle (Full Load)	mm	90	90	90
		Counterweight (No Load)	mm	85	85	85
		Minimum Under Clearance (No Load)	mm	60 (Frame)	60 (Frame)	60 (Frame)
	Grade Clearance		Frame	% (tanθ)	30	30
42	Service (Foot)			Dry Disc	Dry Disc	Dry Disc
43	Parking			Foot	Foot	Foot
	Control System		System Voltage	V	48	48
45	Battery (Lithium-ion battery)	Voltage/Capacity	Min.	V/AH	51.52/456	51.52/456
		(5-hour rating)	Max.	V/AH	51.52/604	51.52/604
46	Weight (Min. Capacity Type)		kg	690	690	690
47	Drive		kW	4.9x2	4.9x2	4.9x2
48	Electric Motors		Load Handling	kW	9.2	9.2
54	Control Type	Drive		Transistor inverter	Transistor inverter	Transistor inverter
		Load Handling		Transistor inverter	Transistor inverter	Transistor inverter
57	Operating Pressure		For Attachments	Mpa (psi)	13.7 (2000)	13.7 (2000)
	Sound Level at the Driver's Ear According to EN12053 Uncertainty 4dB(A)			dB(A)	71.4	71.4

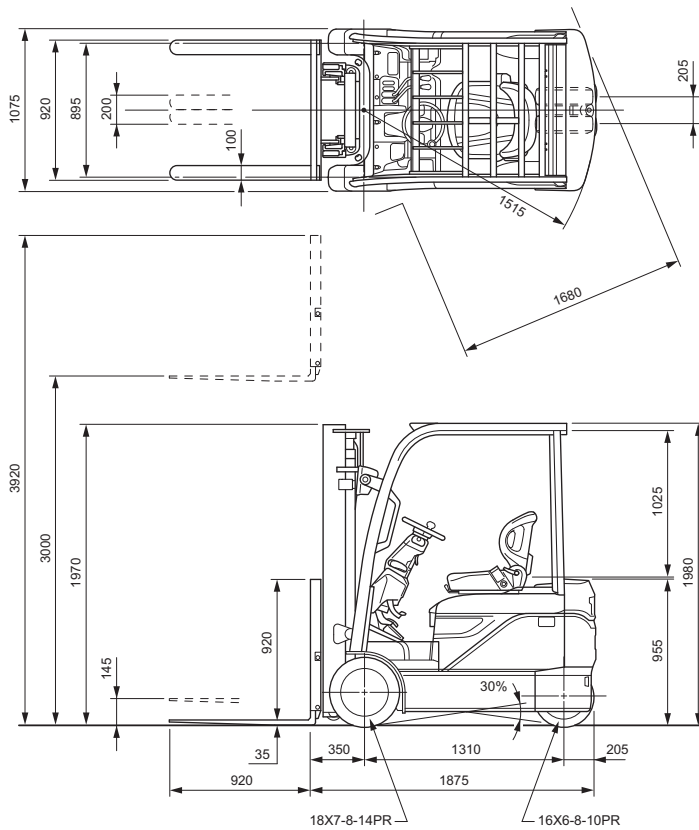
NOTE: \* Computed values.

# DIMENSIONAL DRAWINGS

(May 2023)

Unit: mm

## 8FBE15, 60-8FBE15



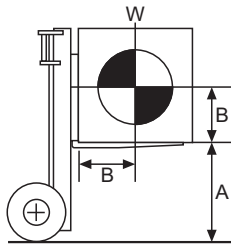
### UNDERCLEARANCE

Mast (Full Load)-----	75
Center of Wheelbase (Full Load)-----	80
Drive Axle (Full Load)-----	90
Counterweight (No Load)-----	85
Minimum Under Clearance (No Load)---	60 (Frame)

# RATED CAPACITIES

(November 2023)

## 8FBE15, 60-8FBE15



**A:** Max. Fork Height  
**B:** Load Center  
**W:** Capacity

### V, FV Mast (PSC)

Unit: kg (W)

A (mm)	2500	2700	3000	3300	3500	3700	4000	4500	5000
	(2520)	(2720)	(3020)	(3320)	(3520)	(3720)	(4020)	(4520)	(5020)
500	1500	1500	1500	1500	1500	1500	1500	1370	1270
600	1340	1340	1340	1340	1340	1340	1340	1230	1140
700	1210	1210	1210	1210	1210	1210	1210	1110	1030
800	1110	1110	1110	1110	1110	1110	1110	1010	940
900	1020	1020	1020	1020	1020	1020	1020	930	860
1000	940	940	940	940	940	940	940	860	800
1100	880	880	880	880	880	880	880	800	740
1200	820	820	820	820	820	820	820	750	700

( ) with [A10R] China Certification Spec.

The height with China Certification Spec. includes the fork thickness with tolerance. This height is listed on the nameplate.

### V, FV Mast (PN)

Unit: kg (W)

A (mm)	2500	2700	3000	3300	3500	3700	4000	4500	5000
	(2520)	(2720)	(3020)	(3320)	(3520)	(3720)	(4020)	(4520)	(5020)
500	1500	1500	1500	1500	1500	1500	1500	1350	1250
600	1340	1340	1340	1340	1340	1340	1340	1210	1120
700	1210	1210	1210	1210	1210	1210	1210	1090	1010
800	1110	1110	1110	1110	1110	1110	1110	1000	920
900	1020	1020	1020	1020	1020	1020	1020	920	850
1000	940	940	940	940	940	940	940	850	790
1100	880	880	880	880	880	880	880	790	730
1200	820	820	820	820	820	820	820	740	690

( ) with [A10R] China Certification Spec.

The height with China Certification Spec. includes the fork thickness with tolerance. This height is listed on the nameplate.

### FSV Mast (PSC)

Unit: kg (W)

A (mm)	3700	4000	4300	4500	4700	5000	5500	6000
	(3720)	(4020)	(4320)	(4520)	(4720)	(5020)	(5520)	(6020)
500	1500	1400	1400	1350	1350	1220	920	720
600	1350	1260	1260	1210	1210	1100	830	650
700	1220	1140	1140	1100	1100	1000	750	590
800	1120	1050	1050	1010	1010	910	690	540
900	1030	970	970	930	930	840	630	500
1000	960	900	900	860	860	780	590	460
1100	900	840	840	810	810	730	550	430
1200	840	780	780	760	760	680	510	400

( ) with [A10R] China Certification Spec.

The height with China Certification Spec. includes the fork thickness with tolerance. This height is listed on the nameplate.

### FSV Mast (PN)

Unit: kg (W)

A (mm)	3700	4000	4300	4500	4700	5000	5500	6000
	(3720)	(4020)	(4320)	(4520)	(4720)	(5020)	(5520)	(6020)
500	1500	1400	1400	1350	1350	1200	900	700
600	1350	1260	1260	1210	1210	1080	810	630
700	1220	1140	1140	1100	1100	980	730	570
800	1120	1050	1050	1010	1010	900	670	520
900	1030	970	970	930	930	830	620	480
1000	960	900	900	860	860	770	580	450
1100	900	840	840	810	810	720	540	420
1200	840	780	780	760	760	670	500	390

( ) with [A10R] China Certification Spec.

The height with China Certification Spec. includes the fork thickness with tolerance. This height is listed on the nameplate.

## SPECIAL MAST

(May 2023)

Wide Visible Mast (V), Wide Visible Full-Free Lift Two-Stage Mast (FV), Wide Visible Full-Free Lift Three-Stage Mast (FSV)

Model				8FBE15, 60-8FBE15												
Type of Mast				V				FV				FSV				
<b>PERFORMANCE</b>																
Power Mode				H	P	S	E	H	P	S	E	H	P	S	E	
Speeds	Lifting	Full Load	mm/sec	430	350	280	280	420	340	270	270	440	360	280	280	
		No Load	mm/sec	610	540	480	480	550	490	440	440	560	500	450	450	
	Lowering	Full Load	mm/sec	530	530	530	530	470	470	470	470	490	490	490	490	
		No Load	mm/sec	550	550	550	550	460	460	460	460	470	470	470	470	
<b>DIMENSIONS</b>																
Load Distance (Centerline of front axle to front face of forks)				mm	350				350				390			

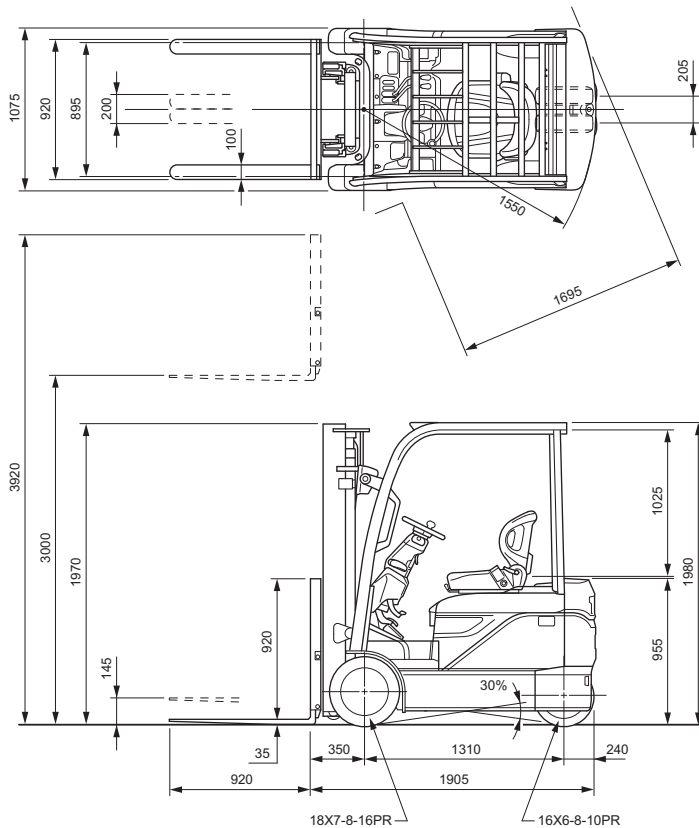
NOTE: H High power mode / P Power mode / S Standard mode / E Eco mode

## DIMENSIONAL DRAWINGS

(May 2023)

Unit: mm

### 8FBE18, 60-8FBE18



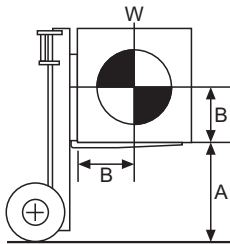
### UNDERCLEARANCE

- Mast (Full Load)----- 75
- Center of Wheelbase (Full Load)----- 80
- Drive Axle (Full Load)----- 90
- Counterweight (No Load)----- 85
- Minimum Under Clearance (No Load)--- 60 (Frame)

# RATED CAPACITIES

(November 2023)

## 8FBE18, 60-8FBE18



**A:** Max. Fork Height  
**B:** Load Center  
**W:** Capacity

### V, FV Mast (PSC)

Unit: kg (W)

A (mm)	2500	2700	3000	3300	3500	3700	4000	4500	5000
	(2520)	(2720)	(3020)	(3320)	(3520)	(3720)	(4020)	(4520)	(5020)
B (mm)	500	1750	1750	1750	1750	1750	1720	1570	1320
	600	1570	1570	1570	1570	1570	1540	1400	1180
	700	1420	1420	1420	1420	1420	1390	1270	1070
	800	1290	1290	1290	1290	1290	1270	1160	980
	900	1190	1190	1190	1190	1190	1170	1070	900
	1000	1100	1100	1100	1100	1100	1080	990	830
	1100	1030	1030	1030	1030	1030	1010	920	770
1200	960	960	960	960	960	940	860	720	

( ) with [A10R] China Certification Spec.

The height with China Certification Spec. includes the fork thickness with tolerance. This height is listed on the nameplate.

### V, FV Mast (PN)

Unit: kg (W)

A (mm)	2500	2700	3000	3300	3500	3700	4000	4500	5000
	(2520)	(2720)	(3020)	(3320)	(3520)	(3720)	(4020)	(4520)	(5020)
B (mm)	500	1750	1750	1750	1750	1750	1700	1550	1300
	600	1570	1570	1570	1570	1570	1520	1390	1160
	700	1420	1420	1420	1420	1420	1380	1260	1050
	800	1290	1290	1290	1290	1290	1260	1150	960
	900	1190	1190	1190	1190	1190	1160	1050	880
	1000	1100	1100	1100	1100	1100	1070	980	820
	1100	1030	1030	1030	1030	1030	1000	910	760
1200	960	960	960	960	960	930	850	710	

( ) with [A10R] China Certification Spec.

The height with China Certification Spec. includes the fork thickness with tolerance. This height is listed on the nameplate.

### FSV Mast (PSC)

Unit: kg (W)

A (mm)	3700	4000	4300	4500	4700	5000	5500	6000	
	(3720)	(4020)	(4320)	(4520)	(4720)	(5020)	(5520)	(6020)	
B (mm)	500	1600	1600	1550	1400	1400	1320	970	770
	600	1440	1440	1390	1260	1260	1190	870	690
	700	1310	1310	1270	1140	1140	1080	790	630
	800	1200	1200	1160	1050	1050	990	730	580
	900	1100	1100	1070	970	970	910	670	530
	1000	1020	1020	990	900	900	840	620	490
	1100	960	960	930	840	840	790	580	460
1200	900	900	870	780	780	740	540	430	

( ) with [A10R] China Certification Spec.

The height with China Certification Spec. includes the fork thickness with tolerance. This height is listed on the nameplate.

### FSV Mast (PN)

Unit: kg (W)

A (mm)	3700	4000	4300	4500	4700	5000	5500	6000	
	(3720)	(4020)	(4320)	(4520)	(4720)	(5020)	(5520)	(6020)	
B (mm)	500	1600	1600	1550	1400	1400	1300	950	750
	600	1440	1440	1390	1260	1260	1170	850	670
	700	1310	1310	1270	1140	1140	1060	780	610
	800	1200	1200	1160	1050	1050	970	710	560
	900	1100	1100	1070	970	970	900	660	520
	1000	1020	1020	990	900	900	830	610	480
	1100	960	960	930	840	840	780	570	450
1200	900	900	870	780	780	730	530	420	

( ) with [A10R] China Certification Spec.

The height with China Certification Spec. includes the fork thickness with tolerance. This height is listed on the nameplate.

## SPECIAL MAST

(May 2023)

Wide Visible Mast (V), Wide Visible Full-Free Lift Two-Stage Mast (FV), Wide Visible Full-Free Lift Three-Stage Mast (FSV)

Model				8FBE18, 60-8FBE18												
Type of Mast				V				FV				FSV				
<b>PERFORMANCE</b>																
Power Mode				H	P	S	E	H	P	S	E	H	P	S	E	
Speeds	Lifting	Full Load	mm/sec	390	320	250	250	400	320	240	240	430	360	270	270	
		No Load	mm/sec	610	540	480	480	550	490	440	440	560	500	450	450	
	Lowering	Full Load	mm/sec	530	530	530	530	470	470	470	470	490	490	490	490	
		No Load	mm/sec	550	550	550	550	460	460	460	460	470	470	470	470	
<b>DIMENSIONS</b>																
Load Distance (Centerline of front axle to front face of forks)				mm	350				350				390			

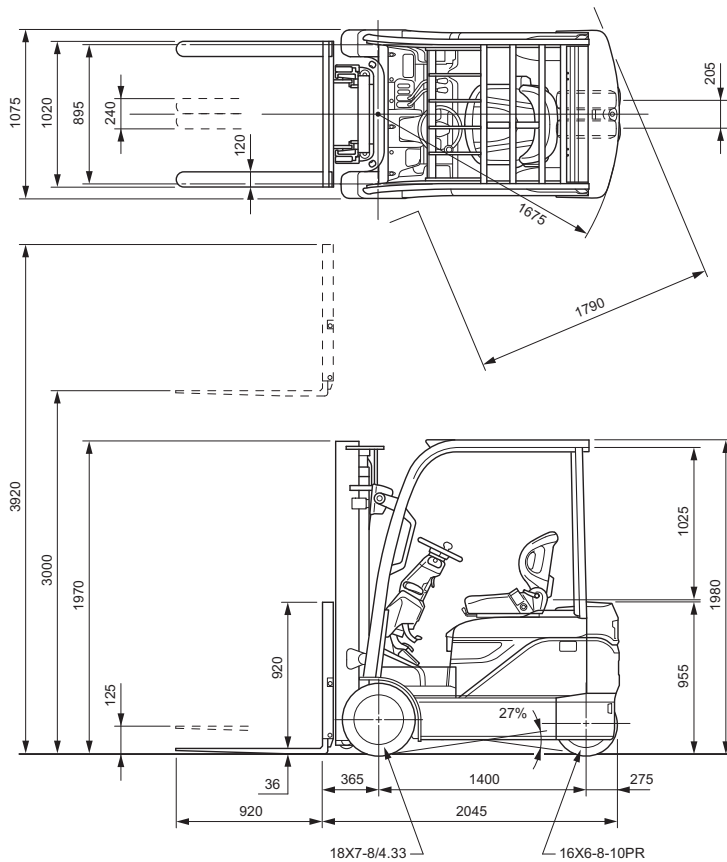
NOTE: H High power mode / P Power mode / S Standard mode / E Eco mode

## DIMENSIONAL DRAWINGS

(May 2023)

Unit: mm

### 8FBE20, 60-8FBE20



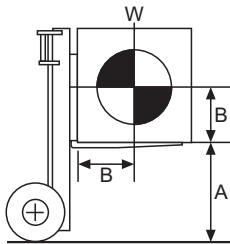
### UNDERCLEARANCE

- Mast (Full Load)----- 75
- Center of Wheelbase (Full Load)----- 80
- Drive Axle (Full Load)----- 90
- Counterweight (No Load)----- 85
- Minimum Under Clearance (No Load)--- 60 (Frame)

## RATED CAPACITIES

(November 2023)

### 8FBE20, 60-8FBE20



**A:** Max. Fork Height  
**B:** Load Center  
**W:** Capacity

#### V Mast (PSC)

Unit: kg (W)

A (mm)	2500	2700	3000	3300	3500	3700	4000	4500	5000
	(2525)	(2725)	(3025)	(3325)	(3525)	(3725)	(4025)	(4525)	(5025)
500	2000	2000	2000	2000	2000	2000	2000	1850	1600
	1790	1790	1790	1790	1790	1790	1790	1660	1430
600	1790	1790	1790	1790	1790	1790	1790	1660	1430
700	1630	1630	1630	1630	1630	1630	1630	1500	1300
800	1490	1490	1490	1490	1490	1490	1490	1370	1190
	1370	1370	1370	1370	1370	1370	1370	1270	1090
900	1370	1370	1370	1370	1370	1370	1370	1270	1090
1000	1270	1270	1270	1270	1270	1270	1270	1170	1010
1100	1180	1180	1180	1180	1180	1180	1180	1090	950
1200	1110	1110	1110	1110	1110	1110	1110	1020	890

( ) with [A10R] China Certification Spec.

The height with China Certification Spec. includes the fork thickness with tolerance. This height is listed on the nameplate.

#### FSV Mast (PSC)

Unit: kg (W)

A (mm)	3700	4000	4300	4500	4700	5000	5500	6000
	(3725)	(4025)	(4325)	(4525)	(4725)	(5025)	(5525)	(6025)
500	2000	1950	1850	1700	1700	1500	1250	900
	1800	1760	1670	1530	1530	1350	1130	810
600	1800	1760	1670	1530	1530	1350	1130	810
700	1640	1600	1520	1390	1390	1230	1020	740
800	1500	1460	1390	1280	1280	1130	940	680
	1390	1350	1280	1180	1180	1040	870	620
900	1390	1350	1280	1180	1180	1040	870	620
1000	1290	1260	1190	1100	1100	970	810	580
1100	1200	1170	1110	1020	1020	900	750	540
1200	1130	1100	1040	960	960	850	700	510

( ) with [A10R] China Certification Spec.

The height with China Certification Spec. includes the fork thickness with tolerance. This height is listed on the nameplate.

## SPECIAL MAST

(May 2023)

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

Model		8FBE20, 60-8FBE20										
Type of Mast		V					FSV					
PERFORMANCE												
Power Mode		H	P	S	E	H	P	S	E			
Speeds	Lifting	Full Load	mm/sec	340	280	220	220	360	300	220	220	
		No Load	mm/sec	500	450	400	400	480	420	380	380	
	Lowering	Full Load	mm/sec	500	500	500	500	490	490	490	490	
		No Load	mm/sec	500	500	500	500	480	480	480	480	
DIMENSIONS												
Load Distance (Centerline of front axle to front face of forks)		mm	365					415				

NOTE: H High power mode / P Power mode / S Standard mode / E Eco mode

**MAST SPECIFICATIONS & RATED CAPACITIES**

(May 2023)

Wide Visible Mast (V), Wide Visible Full-Free Lift Two-Stage Mast (FV), Wide Visible Full-Free Lift Three-Stage Mast (FSV)

**8FBE15, 60-8FBE15**

Mast Type	Maximum Fork Height	Overall Height			Free Lift		Tilt Range		Load Capacity at 500 mm LC	
		Lowered	Extended		Without Load Backrest	With Standard Load Backrest	FWD	BWD	PSC	PN
			Without Load Backrest	With Standard Load Backrest						
mm	mm	mm	mm	mm	mm	deg	deg	kg	kg	
V	2500	1720	3055*	3420	145	145	5	5	1500	1500
	2700	1820	3255*	3620	145	145	5	6.5	1500	1500
	3000	1970	3555*	3920	145	145	5	6.5	1500	1500
	3300	2120	3855*	4220	145	145	5	6.5	1500	1500
	3500	2220	4055*	4420	145	145	5	6.5	1500	1500
	3700	2380	4255*	4620	145	145	5	6.5	1500	1500
	4000	2570	4555*	4920	145	145	5	6.5	1500	1500
	4500	2820	5055*	5420	145	145	5	6.5	1370	1350
	5000	3070	5555*	5920	145	145	5	6.5	1270	1250
FV	3000	1970	3600	3920	1405	1055	5	6.5	1500	1500
	3300	2120	3900	4220	1555	1205	5	6.5	1500	1500
	3500	2220	4100	4420	1655	1305	5	6.5	1500	1500
	3700	2380	4300	4620	1815	1465	5	6.5	1500	1500
	4000	2570	4600	4920	2005	1655	5	6.5	1500	1500
FSV	3700	1770	4275	4620	1225	855	5	6.5	1500	1500
	4000	1870	4575	4920	1325	955	5	6.5	1400	1400
	4300	1970	4875	5220	1425	1055	5	6.5	1400	1400
	4500	2040	5075	5420	1495	1125	5	6.5	1350	1350
	4700	2120	5275	5620	1575	1205	5	6.5	1350	1350
	5000	2220	5575	5920	1675	1305	5	6.5	1220	1200
	5500	2380	6075	6420	1835	1465	5	6.5	920	900
	6000	2570	6575	6920	2025	1655	5	6.5	720	700

NOTE: Height of standard load backrest is 920 mm.  
\* with A4 piping, plus 85 mm.

**8FBE18, 60-8FBE18**

Mast Type	Maximum Fork Height	Overall Height			Free Lift		Tilt Range		Load Capacity at 500 mm LC	
		Lowered	Extended		Without Load Backrest	With Standard Load Backrest	FWD	BWD	PSC	PN
			Without Load Backrest	With Standard Load Backrest						
mm	mm	mm	mm	mm	mm	deg	deg	kg	kg	
V	2500	1720	3160*	3420	145	145	5	5	1750	1750
	2700	1820	3360*	3620	145	145	5	6.5	1750	1750
	3000	1970	3660*	3920	145	145	5	6.5	1750	1750
	3300	2120	3960*	4220	145	145	5	6.5	1750	1750
	3500	2220	4160*	4420	145	145	5	6.5	1750	1750
	3700	2380	4360*	4620	145	145	5	6.5	1750	1750
	4000	2570	4660*	4920	145	145	5	6.5	1720	1700
	4500	2820	5160*	5420	145	145	5	6.5	1570	1550
	5000	3070	5660*	5920	145	145	5	6.5	1320	1300
FV	3000	1970	3600	3920	1405	1055	5	6.5	1750	1750
	3300	2120	3900	4220	1555	1205	5	6.5	1750	1750
	3500	2220	4100	4420	1655	1305	5	6.5	1750	1750
	3700	2380	4300	4620	1815	1465	5	6.5	1750	1750
	4000	2570	4600	4920	2005	1655	5	6.5	1720	1700
FSV	3700	1770	4275	4620	1225	855	5	6.5	1600	1600
	4000	1870	4575	4920	1325	955	5	6.5	1600	1600
	4300	1970	4875	5220	1425	1055	5	6.5	1550	1550
	4500	2040	5075	5420	1495	1125	5	6.5	1400	1400
	4700	2120	5275	5620	1575	1205	5	6.5	1400	1400
	5000	2220	5575	5920	1675	1305	5	6.5	1320	1300
	5500	2380	6075	6420	1835	1465	5	6.5	970	950
	6000	2570	6575	6920	2025	1655	5	6.5	770	750

NOTE: Height of standard load backrest is 920 mm.  
\* with A4 piping, plus 85 mm.

**MAST SPECIFICATIONS & RATED CAPACITIES**

(May 2023)

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

**8FBE20, 60-8FBE20**

Mast Type	Maximum Fork Height	Overall Height			Free Lift		Tilt Range		Load Capacity at 500 mm LC
		Lowered	Extended		Without Load Backrest	With Standard Load Backrest	FWD	BWD	PSC
			Without Load Backrest	With Standard Load Backrest					
mm	mm	mm	mm	mm	mm	deg	deg	kg	
V	2500	1720	3205	3420	125	125	5	5	2000
	2700	1820	3405	3620	125	125	5	6.5	2000
	3000	1970	3705	3920	125	125	5	6.5	2000
	3300	2120	4005	4220	125	125	5	6.5	2000
	3500	2220	4205	4420	125	125	5	6.5	2000
	3700	2380	4405	4620	125	125	5	6.5	2000
	4000	2570	4705	4920	125	125	5	6.5	2000
	4500	2820	5205	5420	125	125	5	6.5	1850
	5000	3070	5705	5920	125	125	5	6.5	1600
FSV	3700	1770	4385	4620	1120	860	5	6.5	2000
	4000	1870	4685	4920	1220	960	5	6.5	1950
	4300	1970	4985	5220	1320	1060	5	6.5	1850
	4500	2040	5185	5420	1390	1130	5	6.5	1700
	4700	2120	5385	5620	1470	1210	5	6.5	1700
	5000	2220	5685	5920	1570	1310	5	6.5	1500
	5500	2380	6185	6420	1730	1470	5	6.5	1250
	6000	2570	6685	6920	1920	1660	5	6.5	900

NOTE: Height of standard load backrest is 920 mm.

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# 8FBE10.13.15.18.20

## 60-8FBE15.18.20

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### STANDARD EQUIPMENT

(May 2023)

#### 8FBE10.13.15.18.20, 60-8FBE15.18.20

● Wide Visible Mast (V) [MFH: 3000 mm] ● Load backrest (V and FSV masts) [Height: 920 mm] ● SAS-ε (System of Active Stability) ● Operator Presence Sensing System (OPS) ● Easy-down system (V mast) ● Power select function ● Power keep function ● Auto power-off function ● Key-off light-off function ● Anti-rollback ● Headlights ● LED rear combination lights ● ORS seat ● Memory tilt steering column ● Foot activated parking brake (Release by lever) ● Full hydraulic power steering ● Electric horn ● Emergency power shut-down button ● Battery hood damper ● Floor mat ● Assist grip ● Document crip ● Overhead guard ● Drawbar pin ● Color multi-function display (Battery capacity indicator, Power-select function indicator, OPS indicator, Overheat warning, Low temperature warning, Parking brake warning indicator, Hour meter, Battery overdischarge warning, Battery remaining-charge warning, Parking brake on/off alarm, Return-to-neutral warning, Digital diagnosis, Maximum speed limitation setting, Auto power off time setting)

# OPTIONS AVAILABILITY CHART

(August 2023)

- : Available
- : Standard

Item	Code	Model									
		8FBE10	8FBE13	8FBE15	60-8FBE15	8FBE18	60-8FBE18	8FBE20	60-8FBE20		
<b>LOAD HANDLING</b>											
Full-Free Lift Two-Stage Mast (FV)	w. Backrest	★	M00F*	●	●	●	●	●	●		
	w/o Backrest	★	M00F*	●	●	●	●	●	●		
Full-Free Lift Three-Stage Mast (FSV)	w. Backrest	★	M00D*	●	●	●	●	●	●	●	●
	Fully Oil Charged Lift Cylinder	☆☆	M09A	●	●	●	●	●	●	●	●
Long Forks	☆☆	M20A*	●	●	●	●	●	●	●	●	
w/o Fork Set	★	M20N	●	●	●	●	●	●	●	●	
Long Forkbar	☆☆	M30A	●	●	●	●	●	●	●	●	
High Load Backrest (Flat Steel Type)	☆☆	M33A	●	●	●	●	●	●			
High Load Backrest (Angle Shape Type)	☆☆	M40A*	●	●	●	●	●	●	●	●	
w/o Backrest	★	M40N	●	●	●	●	●	●	●	●	
High Load Backrest When Ordering FV Mast	1)	M41B	●	●	●	●	●	●	●	●	
Fork Vibration Damper		M82A	●	●	●	●	●	●	●	●	
Tilt Cylinder Boots	★	K11A	●	●	●	●	●	●	●	●	
Mast Tilt Indicator		N14A	●	●	●	●	●	●	●	●	
<b>BATTERY AND CONTROLLER</b>											
Battery (Wet Cell)	2)	☆☆	D00C*	●	●	●		●		●	
Local Battery	3)	☆☆	D03C*	●	●	●		●		●	
Spare Battery (Wet Cell)	4)	★	D20A	●	●	●				●	
Lithium-ion Battery Charger (Off-Truck Type) 400V			C34B				●		●		●
Lithium-ion Battery 48V	25)		D02B				●		●		●
Battery Brand (GS Yuasa)	★		D30A	●	●	●		●		●	
Battery Brand (LIFTTOP)	★		D30B	●	●	●		●		●	
Single Overall Electrolyte Filler Ports	★		D40A	●	●	●				●	
Battery Protecting Function	5)	★	D42B	●	●	●		●		●	
Auto Water Refiller	24)		D44C	●	●	●		●		●	
Battery Carrier	6)	★	D45D			●		●		●	
Battery Case	☆☆		D80B	●	●	●		●		●	
Spare Battery Case	☆☆		D83A	●	●	●				●	
Battery Roll-Out	7)	★	D56A			●		●		●	
Battery Side-Out	26)	★	G25B			●		●		●	
Battery Charger 200V/3P (On-Truck Type)	☆☆		C30E	●	●	●		●		●	
Battery Charger 200V/3P (On-truck type/ Charger plug with insert detection device)	★		C31E	●	●	●		●		●	
Battery Charger 200V/3P (Off-Truck Type)	☆☆		C30L	●	●	●		●		●	
Battery Charger 400V/3P (Off-Truck Type)	☆☆		C30M	●	●	●		●		●	
Battery Connector Cable	★		D55A	●	●	●		●		●	
Battery Code Adapter	★		D58A	●	●	●		●		●	
<b>LIGHT AND INDICATORS</b>											
Headlights	20)	★	J24A	○	○	○	○	○	○	○	○
LED Head Lights	★		J24L	●	●	●	●	●	●	●	●
Front Combination Lights	8)	★	J20B	●	●	●	●	●	●	●	●
LED Rear Combination Lights	20)		J21D	○	○	○	○	○	○	○	○
LED Rear Working Light	★		J26A	●	●	●	●	●	●	●	●
LED Rear Working Light (Selective Lighting Condition)	★		J26C	●	●	●	●	●	●	●	●
Blue Light (Selective Lighting Condition)	★		J44C	●	●	●	●	●	●	●	●
LED Yellow Beacon On The Overhead Guard	★		J19S	●	●	●	●	●	●	●	●
LED Yellow Beacon On The Overhead Guard (Key-On Position)	★		J19U	●	●	●	●	●	●	●	●
LED Yellow Beacon (Separately Attached)	★		J19V	●	●	●	●	●	●	●	●
LED Front Combination Lamp			J20C	●	●	●	●	●	●	●	●
Forward & Back-Up Chime	★		K21A	●	●	●	●	●	●	●	●
Back-up Chime	★		K21C	●	●	●	●	●	●	●	●
Back-up Buzzer	★		K21D	●	●	●	●	●	●	●	●
Adjustable-Volume Back-Up Buzzer	★		K21H	●	●	●	●	●	●	●	●
Forward Chime	★		K22A	●	●	●	●	●	●	●	●
Armrest Horn	9)	★	K23D	●	●	●	●	●	●	●	●
Seat Belt Interlock System	11)	★	K36B	●	●	●	●	●	●	●	●
SEnS+ Operator Assist System with Pedestrian and Object Detection (with truck control)	11)	★	K81A	●	●	●	●	●	●	●	●
Key-less Ignition Switch	10)	★	D29A	●	●	●	●	●	●	●	●
Color Multi-function Display Deluxe	11)	★	L26B	●	●	●	●	●	●	●	●
PIN Code Entry System	★		L38B	●	●	●	●	●	●	●	●
Smart Entry System	27)	★	L38G	●	●	●	●	●	●	●	●
Telematics with POC	★		L39E	●	●	●	●	●	●	●	●
Telematics with Smart Entry System & POC	27)	★	L39G	●	●	●	●	●	●	●	●
Card Writer	28)	★	L40G	●	●	●	●	●	●	●	●
Card Writer for Telematics	27)	★	L40H	●	●	●	●	●	●	●	●

Item		★	Code	Model								
				8FBE10	8FBE13	8FBE15	60-8FBE15	8FBE18	60-8FBE18	8FBE20	60-8FBE20	
Cardkey	28)	★	L41G	●	●	●	●	●	●	●	●	●
<b>BODY</b>												
12V Power Supply		★	D59B	●	●	●	●	●	●	●	●	●
Wire Harness for Accessories		★	D61B	●	●	●	●	●	●	●	●	●
Suspension Seat w / Damper		★	G40E	●	●	●	●	●	●	●	●	●
Orange Seat Belt		★	G43C	●	●	●	●	●	●	●	●	●
Overhead Guard Sheet		★	H01B	●	●	●	●	●	●	●	●	●
Resin Roof		★	H01E	●	●	●	●	●	●	●	●	●
Resin Roof(Gray Colored)		★	H01H	●	●	●	●	●	●	●	●	●
Front Windshield w/ Wiper & Washer	21)	★	H02D	●	●	●	●	●	●	●	●	●
Drive-In Rack Overhead Guard		★	H04C	●	●	●	●	●	●	●	●	●
Right Hand Shift Lever	11)	★	E11B	●	●	●	●	●	●	●	●	●
Mini Lever		★	E45A	●	●	●	●	●	●	●	●	●
Joystick		★	E45B	●	●	●	●	●	●	●	●	●
Slope Sensing Auto Power Mode Selector	11)		E09D	●	●	●	●	●	●	●	●	●
Synchronized Steering		★	E72A	●	●	●	●	●	●	●	●	●
Individual Key		★	L00A	●	●	●	●	●	●	●	●	●
Rear-Pillar Assist Grip		★	L37A	●	●	●	●	●	●	●	●	●
Rear-view Mirrors, Right and Left Sides		★	J10B	●	●	●	●	●	●	●	●	●
Pencil and Tape Holder		★	S03A	●	●	●	●	●	●	●	●	●
Cup Holder		★	S05B	●	●	●	●	●	●	●	●	●
Name Plate (English)	12)	★	S31A	●	●	●	●	●	●	●	●	●
Name Plate (Spanish)	12)	★	S31B	●	●	●	●	●	●	●	●	●
Name Plate (Chinese)	12)	★	S31C	●	●	●	●	●	●	●	●	●
Name Plate (French)	12)	★	S31E	●	●	●	●	●	●	●	●	●
Name Plate (Russian)	12)	★	S31F	●	●	●	●	●	●	●	●	●
Name Plate (Taiwanese)	12)	★	S31G	●	●	●	●	●	●	●	●	●
Name Plate (Portuguese)	12)	★	S31K	●	●	●	●	●	●	●	●	●
Static Strap			K64A	●	●	●	●	●	●	●	●	●
TOYOTA Symbol Mark			S02A	●	●	●	●	●	●	●	●	●
Certificated Label		★	S20C	●	●	●	●	●	●	●	●	●
S.A.S. Equipped Decal	11)	★	S28A	●	●	●	●	●	●	●	●	●
OPS Decal			S35A	●	●	●	●	●	●	●	●	●
Name Plate with Production Country	23)	★	S38A	●	●	●	●	●	●	●	●	●
Urethane Paint	13)		R05B	●	●	●	●	●	●	●	●	●
Lacquer Paint	13)		R05C	●	●	●	●	●	●	●	●	●
Body & Forks in One Color (Mast, B/R & ATT in STD Color)		★	R30A	●	●	●	●	●	●	●	●	●
Body & Forks in Two Colors (Mast, B/R & ATT in STD Color)		★	R30B	●	●	●	●	●	●	●	●	●
Body & Forks in Three Colors (Mast, B/R & ATT in STD Color)		★	R30C	●	●	●	●	●	●	●	●	●
Body & Forks in Four Colors (Mast, B/R & ATT in STD Color)		★	R30D	●	●	●	●	●	●	●	●	●
Mast, B/R & ATT in Specified Color	13)	★	R40A	●	●	●	●	●	●	●	●	●
Tool, Standard Set (A Set)		★	S00B	●	●	●	●	●	●	●	●	●
Tool, Standard Set (B Set)		★	S00C	●	●	●	●	●	●	●	●	●
W/o Window Washer Fluid	22)		T49N	●	●	●	●	●	●	●	●	●
<b>CHASSIS</b>												
Wide Brake Pedal		★	E32C	●	●	●	●	●	●	●	●	●
EZ Pedal		★	E43A	●	●	●	●	●	●	●	●	●
<b>WHEELS AND TIRES</b>												
Pneumatic Tire		☆☆		●	●	●	●	●	●	●	●	●
Pneumatic-shaped Cushion Tire		☆☆		●	●	●	●	●	●	●	●	●
Wheel in Specified Color			R08A	●	●	●	●	●	●	●	●	●
<b>SPECIAL MODELS</b>												
E.E.C. Spec.	14)	★	A10A	●	●	●		●		●		●
China Certification Spec.	15)	★	A10R	●	●	●	●	●	●	●	●	●
E Mark (for EC)	16)	★	A13A	●	●	●		●		●		●
Australian Spec.	17)	★	A20T	●	●	●	●	●	●	●	●	●
System of Active Stability -ε		★	A41A	○	○	○	○	○	○	○	○	○
Cold-storage Model (Type 45S)		★	B30E	●	●	●		●		●		●
Rust-Proof Model (Fisherman Special)		★	B30F	●	●	●		●		●		●
Rust-Proof Model		★	B30H	●	●	●		●		●		●
Mast Rust-Proof Painting		★	R50A	●	●	●	●	●	●	●	●	●
Backrest Rust-Proof Painting		★	R51A	●	●	●	●	●	●	●	●	●
<b>ATTACHMENT AND PIPING</b>												
3-Valves, 2 Hose (A410)		★	D601	●	●	●	●	●	●	●	●	●
4-Valves, 4 Hose (A450)		★	D612	●	●	●	●	●	●	●	●	●
Hydraulic Fork Shifter (Chain Type) [A331]		★	C002	●	●	●	●	●	●	●	●	●
Hydraulic Fork Shifter [A351]		★	C006	●	●	●	●	●	●	●	●	●
Side Shift Fork [E62]		★	D096	●	●	●	●	●	●	●	●	●
Clamp Release Interlock - 3rd Lever	18)	★	Q15A	●	●	●		●		●		●
Clamp Release Interlock - 4th Lever	19)	★	Q15B	●	●	●		●		●		●
Hosing Center Termination		★	Q49A	●	●	●	●	●	●	●	●	●

Item	Code	Model							
		8FBE10	8FBE13	8FBE15	60-8FBE15	8FBE18	60-8FBE18	8FBE20	60-8FBE20
<b>PACKING</b>									
Parts Catalog (Specified User) 1 set	S52G	●	●	●	●	●	●	●	●
Parts Catalog (Specified User) 2 set	S52H	●	●	●	●	●	●	●	●
Parts Catalog (Non-standard Item) 1 set	S53A	●	●	●	●	●	●	●	●
Parts Catalog (Non-standard Item) 2 set	S53B	●	●	●	●	●	●	●	●
Export Packing (Standard)	T00B	●	●	●	●	●	●	●	●
Export Packing (Wooden Box)	T01A	●	●	●	●	●	●	●	●
Forks Packing (On over head guard)	T02A	●	●	●	●	●	●	●	●
W/o Fork Packing For Container	T03N	●	●	●	●	●	●	●	●
Spare Battery Case Packing (Pallet)	T05B	●	●	●	●	●	●	●	●
Spare Battery Packing (Separate)	T06A	●	●	●	●	●	●	●	●
Charger Packing (Separate)	T07A	●	●	●	●	●	●	●	●
Mast Packing (Wooden Case)	T11B	●	●	●	●	●	●	●	●
Mast Packing (W/o case)	T11C	●	●	●	●	●	●	●	●
Mast Packing	T11E	●	●	●	●	●	●	●	●
Attachment Packing (On truck)	T18A	●	●	●	●	●	●	●	●
Battery Carrier Packing	T26A			●	●	●	●	●	●
TOYOTA Mark & Plate Packing	T30A	●	●	●	●	●	●	●	●
w/o Touch-Up Paint	T44N	●	●	●	●	●	●	●	●
Operator's Manual 1 set	T45A	●	●	●	●	●	●	●	●
Operator's Manual 2 set	T45B	●	●	●	●	●	●	●	●
Operator's Manual (Special) 1 set	T45M	●	●	●	●	●	●	●	●
Operator's Manual (Special) 2 set	T45O	●	●	●	●	●	●	●	●
Repair Manual 1 set	T46A	●	●	●	●	●	●	●	●
Repair Manual 2 set	T46B	●	●	●	●	●	●	●	●
Original Forks Packing (Separate)	T90A	●	●	●	●	●	●	●	●
Sleeved Forks Packing (Separate)	T92A	●	●	●	●	●	●	●	●
Sleeved Forks Packing (On truck)	T92B	●	●	●	●	●	●	●	●
Backrest Packing (Separate)	T93A	●	●	●	●	●	●	●	●

## NOTE:

- 1) Must specify M41B for M00F equipped with M40A.
- 2) Rear tires for 2-ton vehicles with D00C 470, D00C 565 must specify Pneumatic-shaped Cushion Tire. Rear tires for D00C 645 must specify Pneumatic-shaped Cushion Tire.
- 3) Rear tires for 2-ton vehicles with D03C 470, D03C 565 must specify Pneumatic-shaped Cushion Tire. Rear tires for D03C 645 must specify Pneumatic-shaped Cushion Tire.
- 4) Only available with the same capacity and brand of the battery chosen by D00C\*.
- 5) Must specify D00C.
- 6) Must specify D56A and T26A.
- 7) Please see the "Battery Availability".
- 8) Integrated front combination lights.
- 9) Must specify E45A or E45B.
- 10) Must specify L38B, L38G, L39E or L39G.
- 11) Must specify A41A.
- 12) Please specify S31\* for all trucks.
- 13) Must specify R30A, R30B, R30C or R30D.
- 14) Must specify A13A and S31A. Must specify for Israel.
- 15) Must specify S31C & J10B. Please see Product Guide for details.
- 16) Must specify A10A and S31A. Must specify for Israel. Unavailable for countries other than specified destinations.
- 17) Must specify A41A. Must specify G40E or E45A or E45B.
- 18) Must specify A410.
- 19) Must specify A450.
- 20) When you select H04C, this option is not mounted.
- 21) Must specify T49N for the countries to prohibit use of Methanol. Please check your country regulation.
- 22) Must specify H02D.
- 23) Must specify S31A or S31E. (Name Plate (English) [S31A] for Saudi Arabia, Name Plate (French) [S31E] for Cameroon.)
- 24) Must specify D40A, C30E or C31E.
- 25) Must specify D02B, A41A.
- 26) Please specify D00C0390, 0470, 0565 or, D03C0390, 0470, 0565. Please see the "Battery Availability".
- 27) Only available for Australia.
- 28) Only available for the specified destination. 1.Australia, 2.China.
- ★ Please see the "Matching Options".
- ☆ Please see the chart below for the item.

**FULLY OIL CHARGED LIFT CYLINDER**

(May 2023)

Model	Mast Type	
8FBE10.13.15.18 60-8FBE15.18	V	●
	FV	●
8FBE20 60-8FBE20	FSV	●
	V	●
	FSV	●

INDEX: ● Available

**MAST INTERCHANGEABILITY**

(May 2023)

Model	Mast Type		
	Wide Visible Mast (V)	Wide Visible Full-Free Lift Two-Stage Mast (FV)	Wide Visible Full-Free Lift Three-Stage Mast (FSV)
8FBE10.13.15.18 60-8FBE15.18	●	●	●
8FBE20 60-8FBE20	●		●

INDEX: ● Interchangeable

NOTE: Only interchangeable with the 8FBE series, not with the previous models.

**MAST WEIGHT**

(May 2023)

Mast Type	Maximum Fork Height	Model	
		8FBE10.13.15.18 60-8FBE15.18	8FBE20 60-8FBE20
	mm	kg	kg
V	2500	320	350
	2700	330	360
	3000	340	390
	3300	370	420
	3500	380	440
	3700	400	460
	4000	440	500
	4500	470	540
	5000	500	570
FV	3000	380	
	3300	390	
	3500	410	
	3700	430	
	4000	470	
FSV	3700	490	530
	4000	500	550
	4300	520	570
	4500	540	590
	4700	550	600
	5000	570	620
	5500	600	650
6000	660	710	

**LONG FORKS**

(May 2023)

Unit: mm

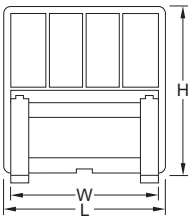
Model	Length	Width	Thickness	Long Forks
8FBE10	770	100	30	○
	850			●
	920			●
	1070			●
	1220		35	●*
8FBE13	850	100	35	○
	920			●
	1070			●
	1220			●
8FBE15.18 60-8FBE15.18	920	100	35	○
	1070			●
	1220			●
	1370			●
	1520			●
8FBE20 60-8FBE20	920	120	36	○
	1070			●
	1220			●
	1370			●
	1520			●

INDEX: ○ Standard / ● Available

NOTE: \* Free Lift and Load Distance, Plus 5 mm.

## LONG FORKBAR AND HIGH LOAD BACKREST

(May 2023)



L: Outside width of load backrest  
W: Length of forkbar  
H: Height of load backrest

Unit: mm

Model	H	L	1050	1150 (1070)	1300 (1220)	1450 (1370)	1600 (1520)
		W	920	1020	1170	1320	1470
8FBE10.13.15.18 60-8FBE15.18	920		○	●	●	●	●
	1070		●	●	●	●	●
	1220		●	●	●	●	●
	1370		●				
	1520		●				
	1670		●				
	1820		●				
8FBE20 60-8FBE20	920			○	●	●	●
	1070			●	●	●	●
	1220			●	●	●	●
	1370			●			
	1520			●			
	1670			●			
	1820			●			

INDEX: ○ Standard / ● Available

NOTE: ( ) for 8FBE20, 60-8FBE20

**BATTERY AVAILABILITY**

(May 2023)

Model	Battery			
	V	AH/HR	STD	Battery Side-Out
8FBE10.13	48	280/5	●	
		320/5	●	
		370/5	●	
8FBE15.18	48	390/5	●	●
		470/5	●	●****
		565/5	●	●***
8FBE20	48	390/5	●	●
		<470/5>	●	●****
		<565/5>	●*	●***
		<645/5>	●**	

INDEX: ● Available

NOTE: \* Not available to Battery Charger 200V/3P (On-Truck Type) [C30E] or [C31E] for Battery Roll-Out [D56A].

\*\* Not available to Battery Roll-Out [D56A].

\*\*\* You must enter together with one of [F41A], [F41I], [F41K] or [F41R].

You can't combine with [C30E] or [C31E].

When you select [G25B], [D00C0565] and FSV mast, you must enter together with one of M00D4300, 4500, 4700, 5000, 5500 or 6000.

\*\*\*\* You can't combine with [M00D3700].

&lt; &gt; Rear tires must specify Pneumatic-shaped Cushion Tire.

**For Lithium-ion battery**

Model	Battery		
	V	AH/HR	Availability
60-8FBE15.18.20	51.52	456/5	●
		604/5	●

INDEX: ● Available

# AVAILABILITY OF BATTERY CHARGER (May 2023)

## Off-Truck Type (Kyoto Denkiki)

Battery Voltage V	Battery Capacity AH/5HR	AC input voltage V	AC Power Supply Capacity A		kVA of Charger		8FBE10	8FBE13	8FBE15	8FBE18	8FBE20
			50Hz	60Hz	50Hz	60Hz					
48	280-320	200	20	20	5.4	4.7	●	●			
	370-390	200	30	20	7.3	6.5	●	●	●	●	●
	470-565	200	30	30	9.2	8.1			●	●	●
	645	200	40	40	12.0	11.0					●
	280-320	400	10	10	5.4	4.7	●	●			
	370-390	400	15	10	7.3	6.5	●	●	●	●	●
	470-565	400	15	15	9.2	8.1			●	●	●
645	400	20	20	12.0	11.0					●	

INDEX: ● Available

## On-Truck Type

Battery Voltage V	Battery Capacity AH/5HR	AC Input Voltage V	AC Power Supply Capacity A		kVA of Charger		8FBE10	8FBE13	8FBE15	8FBE18	8FBE20
			50Hz	60Hz	50Hz	60Hz					
48	280-390	200	15	15	3.7	3.7	●	●	●	●	●
	470-645	200	20	20	5.5	5.4			●	●	●*

INDEX: ● Available

NOTE: \* Not available to Battery Charger 200V/3P (On-Truck Type) [C30E] or [C31E] for Battery Roll-Out [D56A] 565AH battery.

## On-Truck Type (Battery Charger 200V/3P Charger plug with insert detection device)

Battery Voltage V	Battery Capacity AH/5HR	AC Input Voltage V	AC Power Supply Capacity A		kVA of Charger		8FBE10	8FBE13	8FBE15	8FBE18	8FBE20
			50Hz	60Hz	50Hz	60Hz					
48	280-390	200	15	15	3.7	3.7	●	●	●	●	●
	470-645	200	20	20	5.5	5.4			●	●	●*

INDEX: ● Available

NOTE: \* Not available to Battery Charger 200V/3P (On-Truck Type) [C30E] or [C31E] for Battery Roll-Out [D56A] 565AH battery.

## For Lithium-ion battery

### Off-Truck Type

Max Charge Current A	AC Input Voltage V	Weight kg	Battery Voltage V	Battery Capacity AH/5HR	AC Power Supply Capacity A	Charging Current A	60-8FBE15	60-8FBE18	60-8FBE20
195	400	68	51.52	456	20	150	●	●	●
				604	30	195	●	●	●

INDEX: ● Available

**TIRE AVAILABILITY**

(May 2023)

Model	Tire Arrangement	Pneumatic Tire				Pneumatic-Shaped Cushion Tire				
		Tire Size	Rim Size (Type)	J-Lug [Code]	Rib-Lug	Tire Size	Rim Size (Type)	U-Lug* [Code]	J-Lug [Code]	Non-marking** [Code]
8FBE10	Front	18x7-8-10PR	8x4.25DT (Divided)	● [F01J]	○	18x7-8/4.33	8x4.25DT (Divided)	● [F01I]	● [F01B]	● [F09D]
	Rear	15x4.1/2-8-12PR	8x3.00D DT (Divided)	● [F41J]	○	15x4.1/2-8/3.00	8x3.00D DT (Divided)	● [F41I]	● [F41A]	● [F49D]
8FBE13	Front	18x7-8-14PR	8x4.25DT (Divided)	● [F01J]	○	18x7-8/4.33	8x4.25DT (Divided)	● [F01I]	● [F01B]	● [F09D]
	Rear	15x4.1/2-8-12PR	8x3.00D DT (Divided)	● [F41J]	○	15x4.1/2-8/3.00	8x3.00D DT (Divided)	● [F41I]	● [F41A]	● [F49D]
8FBE15 60-8FBE15	Front	18x7-8-14PR	8x4.25DT (Divided)	● [F01J]	○	18x7-8/4.33	8x4.25DT (Divided)	● [F01I]	● [F01B]	● [F09D]
	Rear	16x6-8-10PR	8x4.25DT (Divided)	● [F41J]	○	16x6-8/4.33	8x4.25DT (Divided)	● [F41I]	● [F41A]	● [F49D]
8FBE18 60-8FBE18	Front	18x7-8-16PR	8x4.33R TB (Side-Ring)	● [F01J]	○	18x7-8/4.33	8x4.33R TB (Side-Ring)	● [F01I]	● [F01B]	● [F09D]
	Rear	16x6-8-10PR	8x4.25DT (Divided)	● [F41J]	○	16x6-8/4.33	8x4.25DT (Divided)	● [F41I]	● [F41A]	● [F49D]
8FBE20 60-8FBE20	Front					18x7-8/4.33	8x4.33R TB (Side-Ring)	○	● [F01B]	● [F09D]
	Rear	16x6-8-10PR	8x4.25DT (Divided)	● [F41J]	○	16x6-8/4.33	8x4.25DT (Divided)	● [F41I]	● [F41A]	● [F49D]

INDEX: ○ Standard / ● Available

NOTE: \* Color tire (Green) is available. Must specify Static Strap [K64A] when selecting color tires.

\*\* Must specify Static Strap [K64A].





## SPECIFICATIONS OF BATTERY AND BATTERY CASE \_\_\_\_\_ (September 2020)

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			8FBE10			8FBE13					
Vehicle Weight without Battery and Case			kg			1675					
Minimum Weight of Battery with Case			kg			520					
Battery Connector Type			SB350			SB350					
Minimum Connector Length *			mm			250					
Truck Voltage			V			48					
Number of Cells			pcs			24					
Ampere-Hour Capacity			AH/HR			280/5 320/5 370/5					
Specs. of Cell	Overall Dimensions	Total Height	mm	521	521	550	521	521	550		
		Container Height	mm	490	490	519	490	490	519		
		Length	mm	90	90	90	90	90	90		
		Width	mm	158	158	158	158	158	158		
	Weight of Filled Cell		Approx. kg	17.0	19.5	21.0	17.0	19.5	21.0		
	Quantity of Electrolyte		Approx. liter	3.9	3.7	4.1	3.9	3.7	4.1		
Weight			Total (Battery and Case)			kg			560 560 596 560 560 596		
Operating Time **						3h30m 4h00m 5h00m 3h25m 3h55m 4h50m					

NOTE: \* The distance from case to the tip of the connector.

\*\* The Applied Operating Cycle: Toyota standard 30 m Operating Cycle (S mode).

### Specifications (LIFTTOP)

Model			8FBE10			8FBE13					
Vehicle Weight without Battery and Case			kg			1675					
Minimum Weight of Battery with Case			kg			520					
Battery Connector Type			SB350			SB350					
Minimum Connector Length *			mm			250					
Truck Voltage			V			48					
Number of Cells			pcs			24					
Ampere-Hour Capacity			AH/HR			280/5 320/5 370/5					
Specs. of Cell	Overall Dimensions	Total Height	mm	522	522	552	522	522	552		
		Container Height	mm	490	490	520	490	490	520		
		Length	mm	90	90	90	90	90	90		
		Width	mm	158	158	158	158	158	158		
	Weight of Filled Cell		Approx. kg	17.6	19.7	21.3	17.6	19.7	21.3		
	Quantity of Electrolyte		Approx. liter	4.2	3.8	4.0	4.2	3.8	4.0		
Weight			Total (Battery and Case)			kg			548 572 625 548 572 625		
Operating Time **						3h30m 4h00m 5h00m 3h25m 3h55m 4h50m					

NOTE: \* The distance from case to the tip of the connector.

\*\* The Applied Operating Cycle: Toyota standard 30 m Operating Cycle (S mode).

# Dimensions of Battery Case

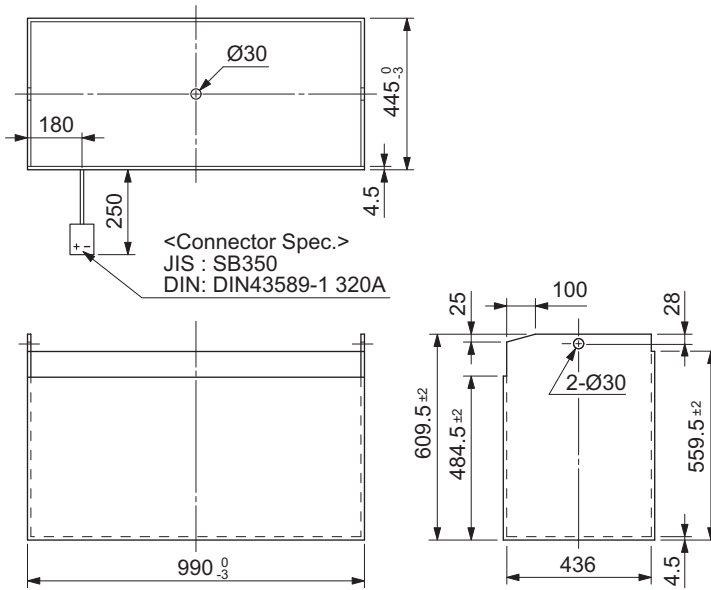
(July 2015)

Unit: mm

## 8FBE10.13

BATTERY CAPACITY :

280AH/5HR, 48V  
 320AH/5HR, 48V  
 370AH/5HR, 48V



Minimum Battery Weight (with Case)	kg	520
Maximum Battery Weight (with Case)	kg	660

### Dimensions of Battery Compartment

Model	8FBE10.13	
Width	mm	998
Length	mm	451
Height	mm	623

# SPECIFICATIONS OF BATTERY AND BATTERY CASE (May 2023)

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			8FBE15			8FBE18			
Vehicle Weight without Battery and Case			kg	2005			2190		
Minimum Weight of Battery with Case			kg	655			655		
Battery Connector Type				SB350			SB350		
Minimum Connector Length *			mm	250			250		
Truck Voltage			V	48			48		
Number of Cells			pcs	24			24		
Ampere-Hour Capacity			AH/HR	390/5	470/5	565/5	390/5	470/5	565/5
Specs. of Cell	Overall Dimensions	Total Height	mm	521 [522]	550	550	521 [522]	550	550
		Container Height	mm	490	519	519	490	519	519
		Length	mm	109	109	128	109	109	128
		Width	mm	158	158	158	158	158	158
	Weight of Filled Cell	Approx. kg	23.0 [23.5]	27.5	32.0	23.0 [23.5]	27.5	32.0	
	Quantity of Electrolyte	Approx. liter	4.5 [4.8]	5.0	5.7	4.5 [4.8]	5.0	5.7	
Weight	Total (Battery and Case)	kg	705 [685]	761 [772]	869 [880]	705 [685]	761 [772]	869 [880]	
Operating Time **				4h50m	6h00m	7h25m	4h25m	5h35m	6h50m

NOTE: \* The distance from case to the tip of the connector.

\*\* The Applied Operating Cycle: Toyota standard 30 m Operating Cycle (S mode).

[ ] for Battery Side-Out [G25B].

When you select [G25B] and [D00C](565AH),

you must enter together with one of [F41A], [F41I], [F41K] or [F41R] and you can't combine with [C30E] or [C31E].

When you select [G25B], [D00C](565AH) and FSV mast, you must enter together with one of M00D4300, 4500, 4700, 5000, 5500 or 6000.

When you select [G25B] and [D00C](470AH), you can't combine with [M00D3700].

## Specifications (LIFTTOP)

Model			8FBE15			8FBE18			
Vehicle Weight without Battery and Case			kg	2005			2190		
Minimum Weight of Battery with Case			kg	655			655		
Battery Connector Type				SB350			SB350		
Minimum Connector Length *			mm	250			250		
Truck Voltage			V	48			48		
Number of Cells			pcs	24			24		
Ampere-Hour Capacity			AH/HR	390/5	470/5	565/5	390/5	470/5	565/5
Specs. of Cell	Overall Dimensions	Total Height	mm	522	552	552 [522]	522	552	552 [522]
		Container Height	mm	490	520	520	490	520	520
		Length	mm	109	109	128	109	109	128
		Width	mm	158	158	158	158	158	158
	Weight of Filled Cell	Approx. kg	23.5	25.8	30.1	23.5	25.8	30.1	
	Quantity of Electrolyte	Approx. liter	4.8	4.7	5.8	4.8	4.7	5.8	
Weight	Total (Battery and Case)	kg	680 [696]	746 [750]	823 [834]	680 [696]	746 [750]	823 [834]	
Operating Time **				4h50m	6h00m	7h25m	4h25m	5h35m	6h50m

NOTE: \* The distance from case to the tip of the connector.

\*\* The Applied Operating Cycle: Toyota standard 30 m Operating Cycle (S mode).

[ ] for Battery Side-Out [G25B].

When you select [G25B] and [D00C](565AH),

you must enter together with one of [F41A], [F41I], [F41K] or [F41R] and you can't combine with [C30E] or [C31E].

When you select [G25B], [D00C](565AH) and FSV mast, you must enter together with one of M00D4300, 4500, 4700, 5000, 5500 or 6000.

When you select [G25B] and [D00C](470AH), you can't combine with [M00D3700].

## Specifications (Lithium-ion battery)

Model			60-8FBE15		60-8FBE18		
Vehicle Weight without Battery			kg	2050		2220	
Battery Connector Type				Europlug		Europlug	
Truck Voltage			V	48		48	
Battery Voltage			V	51.52		51.52	
Ampere-Hour Capacity			AH/HR	456/5	604/5	456/5	604/5
Overall Dimensions of Battery Case	Total Height	mm	610		610		
	Length	mm	545		545		
	Width	mm	990		990		
Operating Time				5h25m	7h10m	5h00m	6h40m

# Dimensions of Battery Case

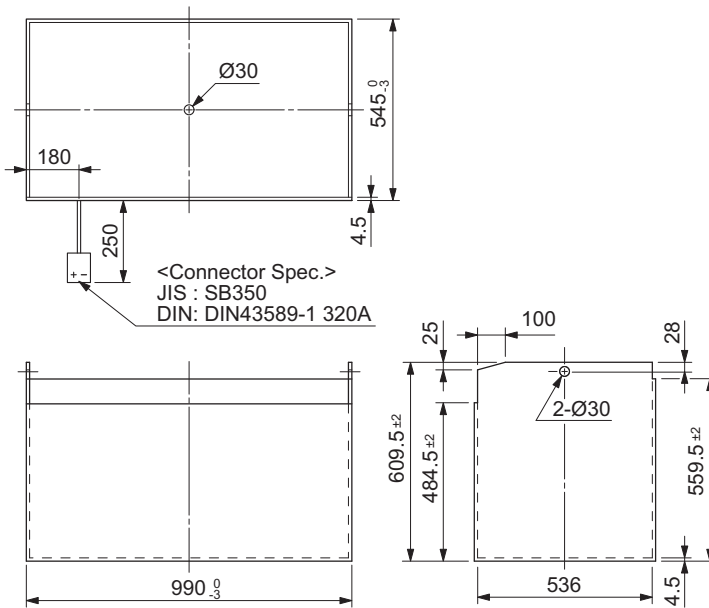
(May 2023)

Unit: mm

## 8FBE15.18

BATTERY CAPACITY :

390AH/5HR, 48V  
470AH/5HR, 48V  
565AH/5HR, 48V



Minimum Battery Weight (with Case)	kg	655
Maximum Battery Weight (with Case)	kg	915

### Dimensions of Battery Compartment

Model	8FBE15.18	
Width	mm	998 (994)
Length	mm	551
Height	mm	623 (592)

NOTE: ( ) for Battery Roll-Out [D56A].

## SPECIFICATIONS OF BATTERY AND BATTERY CASE \_\_\_\_\_ (May 2023)

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			8FBE20				
Vehicle Weight without Battery and Case		kg	2485				
Minimum Weight of Battery with Case		kg	655				
Battery Connector Type			SB350				
Minimum Connector Length *		mm	250				
Truck Voltage		V	48				
Number of Cells		pcs	24				
Ampere-Hour Capacity		AH/HR	390/5	470/5	565/5	645/5	
Specs. of Cell	Overall Dimensions	Total Height	mm	521 [522]	550	550	550
		Container Height	mm	490	519	519	519
		Length	mm	109	109	128	148
		Width	mm	158	158	158	158
	Weight of Filled Cell	Approx. kg	23.0 [23.5]	27.5	32.0	36.5	
	Quantity of Electrolyte	Approx. liter	4.5 [4.8]	5.0	5.7	6.8	
Weight	Total (Battery and Case)	kg	700 [685]	769 [784]	877 [892]	985	
Operating Time **			4h20m	5h25m	6h40m	7h50m	

NOTE: \* The distance from case to the tip of the connector.

\*\* The Applied Operating Cycle: Toyota standard 30 m Operating Cycle (S mode).

[ ] for Battery Side-Out [G25B].

When you select [G25B] and [D00C](565AH),

you must enter together with one of [F41A], [F41I], [F41K] or [F41R] and you can't combine with [C30E] or [C31E].

When you select [G25B], [D00C](565AH) and FSV mast, you must enter together with one of M00D4300, 4500, 4700, 5000, 5500 or 6000.

When you select [G25B] and [D00C](470AH), you can't combine with [M00D3700].

### Specifications (LIFTOP)

Model			8FBE20				
Vehicle Weight without Battery and Case		kg	2485				
Minimum Weight of Battery with Case		kg	655				
Battery Connector Type			SB350				
Minimum Connector Length *		mm	250				
Truck Voltage		V	48				
Number of Cells		pcs	24				
Ampere-Hour Capacity		AH/HR	390/5	470/5	565/5	645/5	
Specs. of Cell	Overall Dimensions	Total Height	mm	522	552	552 [522]	552
		Container Height	mm	490	520	520	520
		Length	mm	109	109	128	148
		Width	mm	158	158	158	158
	Weight of Filled Cell	Approx. kg	23.5	25.8	30.1	34.2	
	Quantity of Electrolyte	Approx. liter	4.8	4.7	5.8	6.6	
Weight	Total (Battery and Case)	kg	690 [696]	772 [763]	846 [866]	930	
Operating Time **			4h20m	5h25m	6h40m	7h50m	

NOTE: \* The distance from case to the tip of the connector.

\*\* The Applied Operating Cycle: Toyota standard 30 m Operating Cycle (S mode).

[ ] for Battery Side-Out [G25B].

When you select [G25B] and [D00C](565AH),

you must enter together with one of [F41A], [F41I], [F41K] or [F41R] and you can't combine with [C30E] or [C31E].

When you select [G25B], [D00C](565AH) and FSV mast, you must enter together with one of M00D4300, 4500, 4700, 5000, 5500 or 6000.

When you select [G25B] and [D00C](470AH), you can't combine with [M00D3700].

### Specifications (Lithium-ion battery)

Model			60-8FBE20	
Vehicle Weight without Battery		kg	2520	
Battery Connector Type			Europlug	
Truck Voltage		V	48	
Battery Voltage		V	51.52	
Ampere-Hour Capacity		AH/HR	456/5	604/5
Overall Dimensions of Battery Case	Total Height	mm	610	
	Length	mm	545	
	Width	mm	990	
Operating Time			4h55m	6h30m

# Dimensions of Battery Case

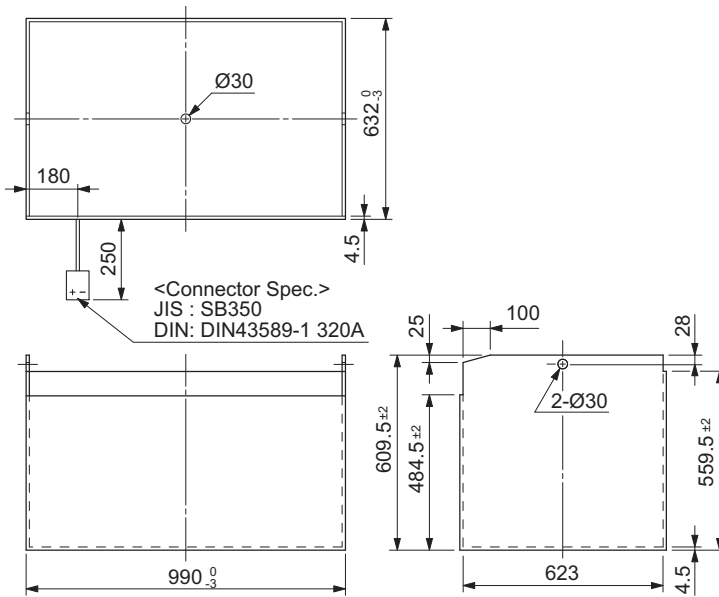
(May 2023)

Unit: mm

## 8FBE20

BATTERY CAPACITY :

390AH/5HR, 48V  
 470AH/5HR, 48V  
 565AH/5HR, 48V  
 645AH/5HR, 48V



		STD	R/O
Minimum Battery Weight (with Case)	kg	655	655
Maximum Battery Weight (with Case)	kg	1050	915

R/O: Battery Roll-Out [D56A].

## Dimensions of Battery Compartment

Model		8FBE20
Width	mm	998 (994)
Length	mm	638
Height	mm	623 (592)

NOTE: ( ) for Battery Roll-Out [D56A].

# Dimensions of Battery Case

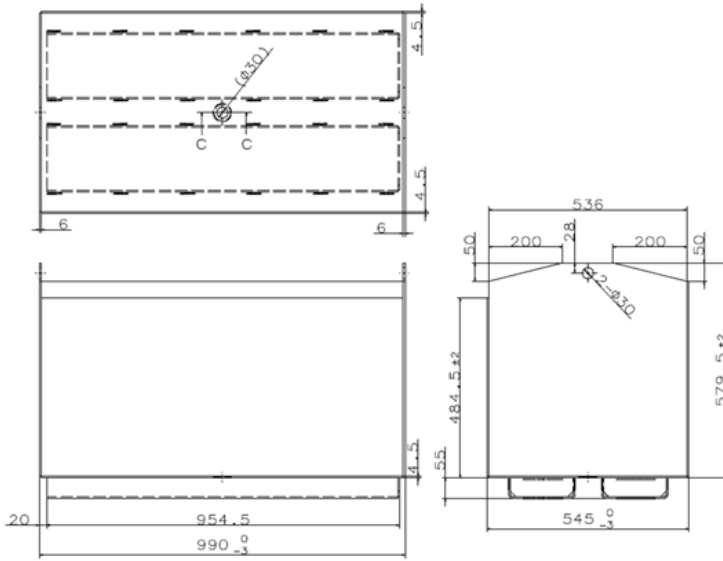
(May 2018)

Unit: mm

## 8FBE15.18.20 <Battery Side-Out [G25B]>

BATTERY CAPACITY :

390AH/5HR, 48V  
470AH/5HR, 48V  
565AH/5HR, 48V



		8FBE15.18	8FBE20
Minimum Battery Weight (with Case)	kg	655	655
Maximum Battery Weight (with Case)	kg	915	915

## Dimensions of Battery Compartment

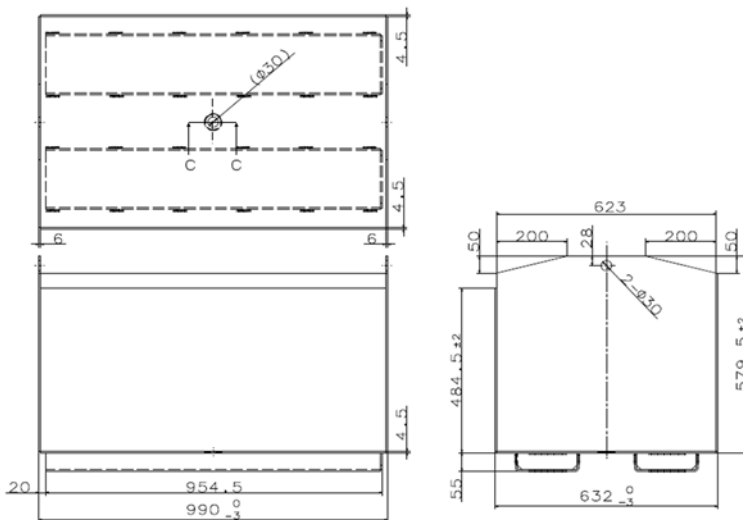
Model		8FBE15.18	8FBE20
Width	mm	994	994
Length	mm	551	638
Height	mm	592	592

Unit: mm

## 8FBE20 <Battery Side-Out [G25B]>

BATTERY CAPACITY :

470AH/5HR, 48V  
565AH/5HR, 48V



		8FBE20
Minimum Battery Weight (with Case)	kg	655
Maximum Battery Weight (with Case)	kg	915

## Dimensions of Battery Compartment

Model		8FBE20
Width	mm	994
Length	mm	638
Height	mm	592

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## ENERGY CONSUMPTION (June 2016)

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### Energy Consumption (VDI Cycle)

Model	Tested Load	Energy Consumption
	kg	kWh/h
8FBE10	1000	3.4
8FBE13	1250	3.5
8FBE15	1500	3.8
8FBE18	1750	4.1
8FBE20	2000	4.3

NOTE: The energy consumption is measured by VDI Operating Cycle (60 sec.), and may include tolerances of  $\pm 10\%$ .