

# 8FBE15.18

# 8FBE20

## MAIN VEHICLE SPECIFICATIONS

(June 2015)

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	
	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	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	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	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	Lifting	Full Load	mm/sec	430	390	340	
		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 *	Full Load/ No Load	3-Minute Ratings	N (kg)	9400/9000 (960/920)	9400/9000 (960/920)	
			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	% (tan $\theta$ )	24/21	21/20	
			5-Minute Ratings	% (tan $\theta$ )	24/21	21/20	19/20
			30-Minute Ratings	% (tan $\theta$ )	18/21	16/20	14/20
32	Total Weight		Without Battery	kg	2005	2190	
33	Weight Distribution (With STD Battery)	Full Load	Front	kg	3680	4100	
			Rear	kg	505	520	610
34		No Load	Front	kg	1210	1215	
			Rear	kg	1475	1655	1850
35	Number		Front/Rear		2/2	2/2	
36	Tires	Size	Front		18x7-8-14PR	18x7-8-16PR	
37			Rear		16x6-8-10PR	16x6-8-10PR	16x6-8-10PR
38	Wheelbase		mm	1310	1310	1400	
39	Tread		Front	mm	895	895	
			Rear	mm	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	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	% (tan $\theta$ )	30	27	
42	Brake		Service (Foot)		Dry Disc	Dry Disc	
43			Parking		Foot	Foot	
45	Battery	Voltage/Capacity (5-hour rating)	STD	V/AH	48/390	48/390	
		High	V/AH	48/565	48/565	48/645	
46	Weight (STD Capacity Type)		kg	680	680	690	
47	Drive		kW	4.9x2	4.9x2	4.9x2	
48	Load Handling		kW	9.2	9.2	9.2	
54	Control Type		Drive		Trasistor inverter	Trasistor inverter	
			Load Handling		Trasistor inverter	Trasistor 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	

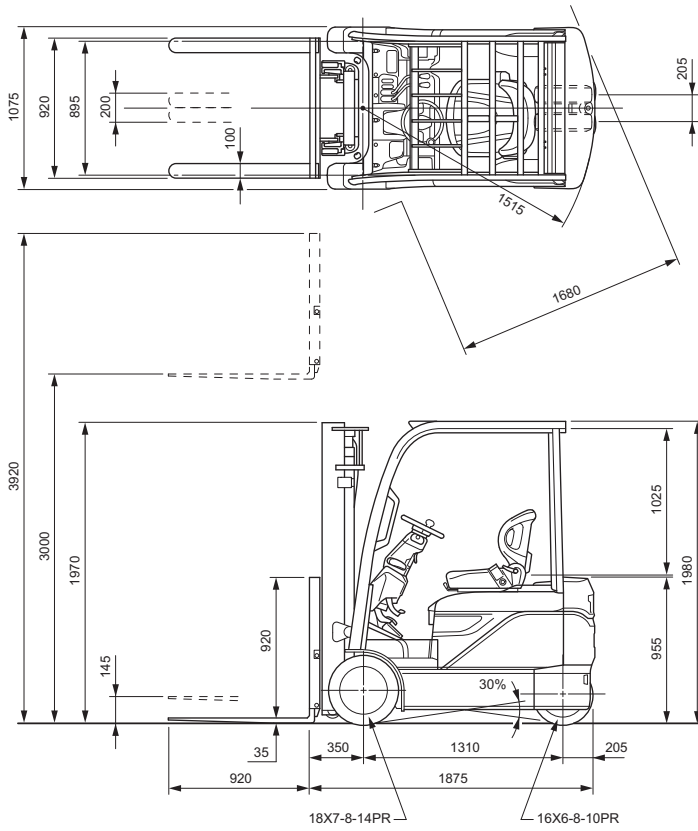
NOTE: \* Computed values.

**DIMENSIONAL DRAWINGS**

(June 2015)

Unit: mm

**8FBE15**



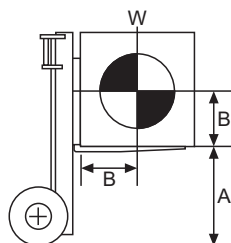
**UNDERCLEARANCE**

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

(June 2015)

## 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
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

### V, FV Mast (PN)

Unit: kg (W)

A (mm)	2500	2700	3000	3300	3500	3700	4000	4500	5000
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

### FSV Mast (PSC)

Unit: kg (W)

A (mm)	3700	4000	4300	4500	4700	5000	5500	6000
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

### FSV Mast (PN)

Unit: kg (W)

A (mm)	3700	4000	4300	4500	4700	5000	5500	6000
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

# 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				8FBE15												
Type of Mast				V				FV				FSV				
PERFORMANCE																
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	
DIMENSIONS																
Load Distance (Centerline of front axle to front face of forks)				mm	350				350				390			

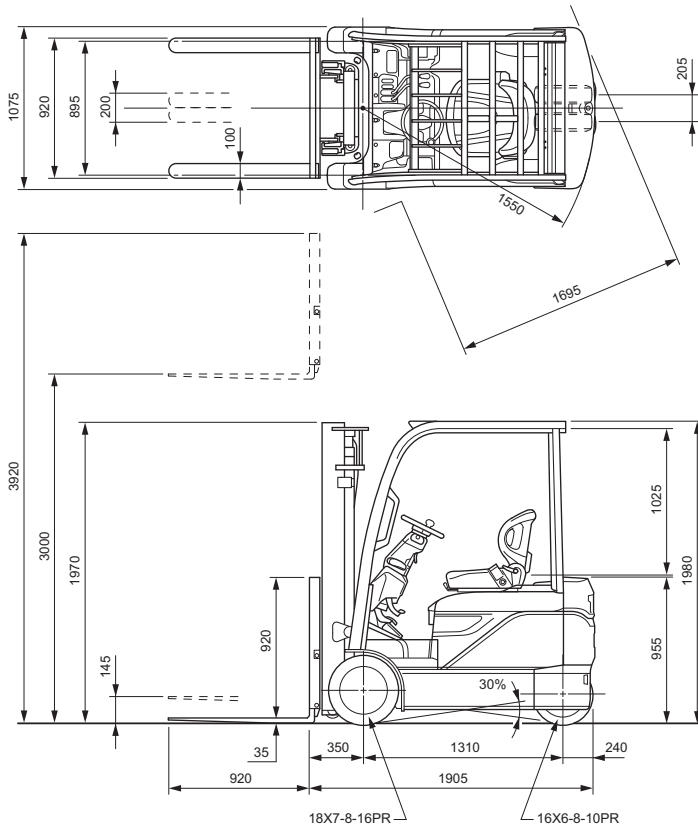
NOTE: H High power mode / P Power mode / S Standard mode / E Eco mode

**DIMENSIONAL DRAWINGS**

(June 2015)

Unit: mm

**8FBE18**



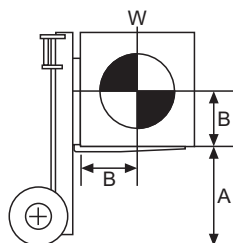
**UNDERCLEARANCE**

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

(June 2015)

## 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	
B (mm)	500	1750	1750	1750	1750	1750	1750	1720	1570	1320
	600	1570	1570	1570	1570	1570	1570	1540	1400	1180
	700	1420	1420	1420	1420	1420	1420	1390	1270	1070
B (mm)	800	1290	1290	1290	1290	1290	1290	1270	1160	980
	900	1190	1190	1190	1190	1190	1190	1170	1070	900
	1000	1100	1100	1100	1100	1100	1100	1080	990	830
	1100	1030	1030	1030	1030	1030	1030	1010	920	770
	1200	960	960	960	960	960	960	940	860	720

### V, FV Mast (PN)

Unit: kg (W)

A (mm)	2500	2700	3000	3300	3500	3700	4000	4500	5000
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
B (mm)	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

### FSV Mast (PSC)

Unit: kg (W)

A (mm)	3700	4000	4300	4500	4700	5000	5500	6000	
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
B (mm)	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

### FSV Mast (PN)

Unit: kg (W)

A (mm)	3700	4000	4300	4500	4700	5000	5500	6000	
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
B (mm)	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

## 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		8FBE18													
Type of Mast		V				FV				FSV					
PERFORMANCE															
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
DIMENSIONS															
Load Distance (Centerline of front axle to front face of forks)		mm	350				350				390				

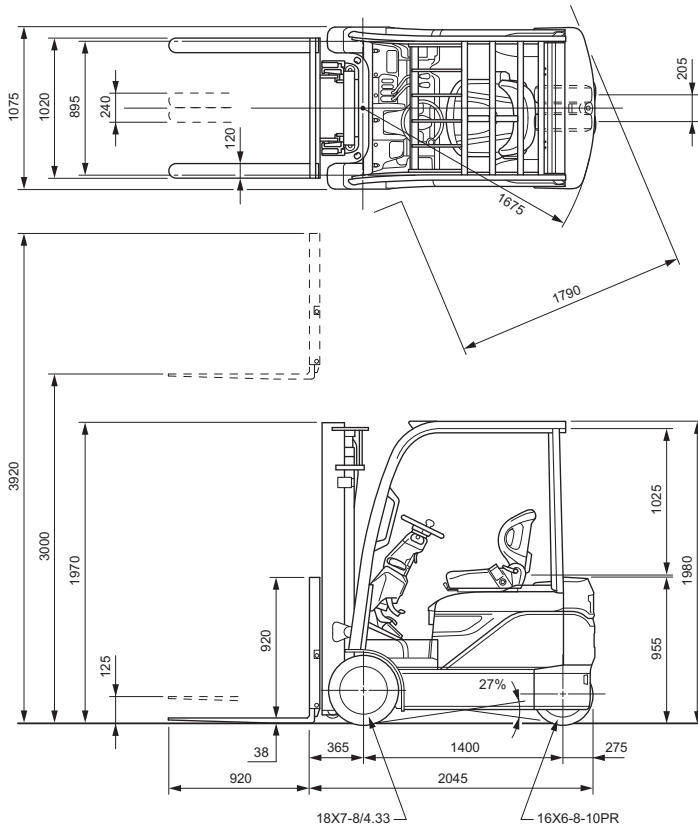
NOTE: H High power mode / P Power mode / S Standard mode / E Eco mode

**DIMENSIONAL DRAWINGS**

(June 2015)

Unit: mm

**8FBE20**



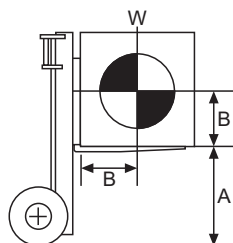
**UNDERCLEARANCE**

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

(June 2015)

## 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
500	2000	2000	2000	2000	2000	2000	2000	1850	1600
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
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

### FSV Mast (PSC)

Unit: kg (W)

A (mm)	3700	4000	4300	4500	4700	5000	5500	6000
500	2000	1950	1850	1700	1700	1500	1250	900
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
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

## SPECIAL MAST

(June 2015)

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

Model		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**

(June 2015)

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

**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**

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**

(June 2015)

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

**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.