

TECHNICAL SPECIFICATIONS

FD/FGE15-35(C)-E2

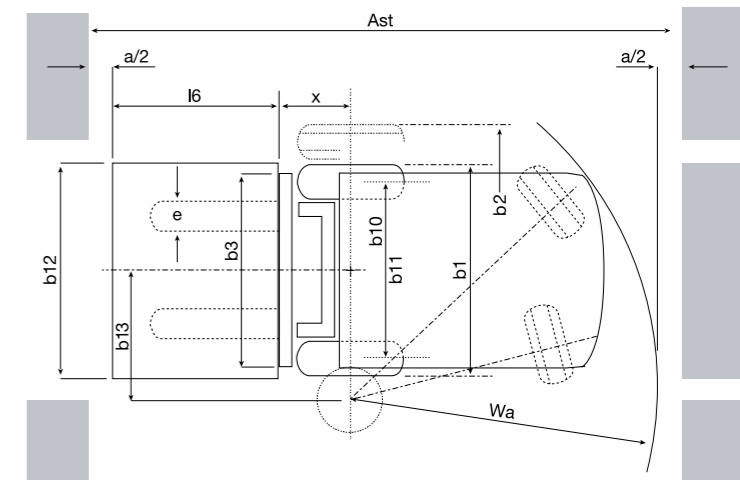
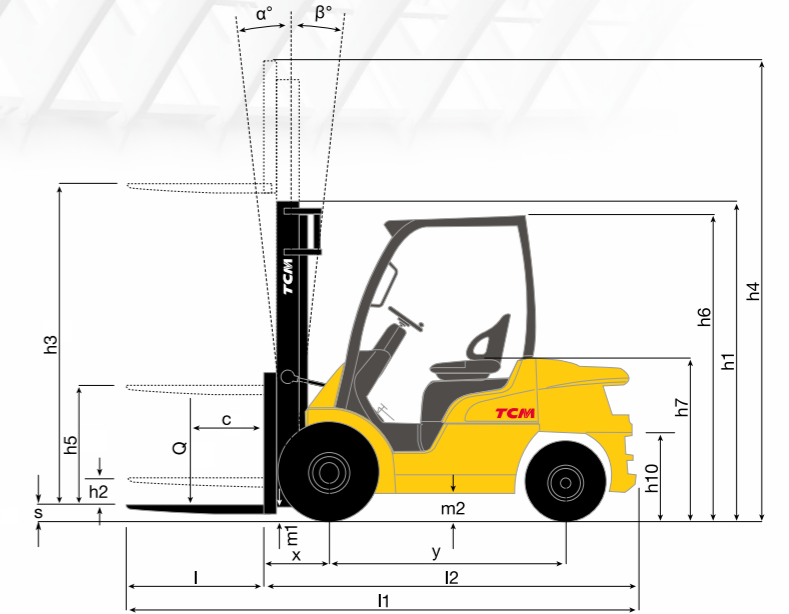


FD/FGE15-35(C)-E2

STANDARD SPECIFICATIONS

CHARACTERISTICS			TCM Forklifts						
1.01	Manufacturer								
1.02	Manufacturer's model designation		FD20-E2	FD25-E2	FD30-E2	FD35-E2	FGE15-E2	FGE18-E2	FGE20C-E2
1.03	Power source: (battery, diesel, LP gas, petrol)		Diesel	Diesel	Diesel	Diesel	LPG	LPG	LPG
1.04	Operator type: pedestrian, (operator)-standing, -seated		Seated	Seated	Seated	Seated	Seated	Seated	Seated
1.05	Load capacity	Q (kg)	2000	2500	3000	3500	1500	1750	2000
1.06	Load center distance	c (mm)	500	500	500	500	500	500	500
1.08	Load distance, axle to fork face	x (mm)	455	460	495	495	400	400	415
1.09	Wheelbase	y (mm)	1600	1600	1700	1700	1400	1400	1400
WEIGHT									
2.01	Truck weight, without load / including battery (simplex mast, lowest lift height)	kg	3460	3760	4430	4820	2490	2690	3010
2.02	Axle loading with maximum load, front/rear (simplex mast, lowest lift height)	kg	4670/790	5460/800	6530/900	7240/1080	3510/460	3870/540	4320/660
2.03	Axle loading without load, front/rear (simplex mast, lowest lift height)	kg	1470/1990	1460/2300	1780/2650	1700/3120	1040/1430	990/1670	1010/1970
WHEELS, DRIVE TRAIN									
3.01	Tyres: V=solid, L=pneumatic, SE=solid pneumatic - front/rear		SE / SE	SE / SE	SE / SE	SE / SE	SE / SE	SE / SE	SE / SE
3.02	Tyre dimensions, front		7,00-12-12PR	7,00-12-12PR	28x9-15-12PR	250-15-12PR	6,50-10-10PR	6,50-10-10PR	6,50-10 / 5,00
3.03	Tyre dimensions, rear		6,00-9-10PR	6,00-9-10PR	6,50-10-10PR	6,50-10-10PR	5,00-8-8PR	5,00-8-8PR	5,00-8/3,00
3.05	Number of wheels, front/rear (x=driven)		2x / 2	2x / 2	2x / 2	2x / 2	2x / 2	2x / 2	2x / 2
3.06	Track width (centre of tyres), front	b10 (mm)	960	960	1060	1060	890	890	890
3.07	Track width (centre of tyres), rear	b11 (mm)	980	980	980	980	900	900	900
DIMENSIONS									
4.01	Mast tilt, forwards/backwards	α/β °	6/10	6/10	6/10	6/10	6/10	6/10	6/10
4.02	Height with mast lowered (see tables)	h1 (mm)	2150	2150	2170	2300	2140	2140	2140
4.03	Free lift (see tables)	h2 (mm)	140	140	145	145	115	115	115
4.04	Lift height (see tables)	h3 (mm)	3300	3300	3300	3300	3300	3300	3300
4.05	Overall height with mast raised	h4 (mm)	4355	4355	4355	4355	4355	4355	4355
4.07	Height to top of overhead guard	h6 (mm)	2145	2145	2165	2175	2140	2140	2140
4.08	Seat height	h7 (mm)	940	940	990	990	930	930	930
4.12	Tow coupling height	h10 (mm)	310	310	330	340	290	290	290
4.19	Overall length	l1 (mm)	3555	3630	3805	3865	3330	3370	3425
4.20	Length to fork face (includes fork thickness)	l2 (mm)	2485	2560	2735	2795	2260	2300	2355
4.21	Overall width	b1/b2 (mm)	1150 / 1640	1150 / 1640	1275/1690	1290/1690	1065/-	1065/-	1065/-
4.22	Fork dimensions (thickness, width, length)	s / e / l (mm)	40x100x1070	40x100x1070	45x125x1070	45x125x1070	35x100x1070	35x100x1070	35x100x1070
4.23	Fork carriage to DIN 15 173 A/B/no		2A	2A	3A	3A	2A	2A	2A
4.24	Fork carriage width	b3 (mm)	1000	1000	1000	1000	920	920	920
4.31	Ground clearance under mast, with load	m1 (mm)	115	115	135	150	110	110	110
4.32	Ground clearance at center of wheelbase, with load (forks lowered)	m2 (mm)	135	135	165	170	135	135	135
4.33	Working aisle width with 1000 x1200 mm pallets, crosswise	Ast (mm)	3855	3890	4075	4135	3550	3580	3635
4.34a	Working aisle width with 800 x1200 mm pallets, crosswise	Ast (mm)	3655	3690	3875	3935	3350	3380	3435
4.34b	Working aisle width with 800 x1200 mm pallets, lengthwise	Ast (mm)	4055	4090	4275	4335	3750	3780	3835
4.35	Turning circle radius	Wa (mm)	2200	2230	2380	2440	1950	1980	2020
4.36	Minimum distance between centers of rotation	b13 (mm)	715	715	780	780	555	555	555
PERFORMANCE									
5.01	Travel speed, with/without load	km/h	16,5/17,5	16,0/17,5	16,0/17,0	16,5/18,0	19,0/19,5	19,0/19,5	19,0/19,5
5.02	Lifting speed, with/without load	m/s	0,61 / 0,64	0,61 / 0,64	0,49 / 0,51	0,41 / 0,43	0,64 / 0,65	0,64 / 0,65	0,64 / 0,65
5.03	Lowering speed, with/without load	m/s	0,50 / 0,50	0,50 / 0,50	0,50 / 0,50	0,50 / 0,50	0,52 / 0,50	0,52 / 0,50	0,52 / 0,50
5.05	Rated drawbar pull, with/without load	N	16200/15900	16100/15800	15800/15800	14800/15000	17400/16900	17400/16800	17300/17100
5.06	Maximum drawbar pull, with/without load (5 min short duty)	N	-/-	-/-	-/-	-/-	-/-	-/-	-/-
5.07	Gradeability, with/without load	%	31/52	27/47	22/39	18/33	49/93	43/81	37/70
5.08	Maximum gradeability, with/without load	%	-/-	-/-	-/-	-/-	-/-	-/-	-/-
5.09	Acceleration time (10 metres) with/without load	s	-/-	-/-	-/-	-/-	-/-	-/-	-/-
5.10	Service brakes (mechanical/hydraulic/electric/pneumatic)		Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic
IC ENGINE									
7.01	Manufacturer / Type		D04EG	D04EG	D04EG	D04EG	GK21E	GK21E	GK21E
7.02	Rated / Nominal output to ISO 1585**	kW	36,0	36,0	36,0	36,0	41,0	41,0	41,0
7.03	Rated speed to DIN 70 020	rpm	2250	2250	2250	2250	2700	2700	2700
7.04	Number of cylinders / cubic capacity	cm³	4 / 3331	4 / 3331	4 / 3331	4 / 3331	4 / 2065	4 / 2065	4 / 2065
7.06	Max torque	Nm	177	177	177	177	151	151	151
7.07	Max torque at engine speed	rpm	1800	1800	1800	1800	1800	1800	1800
MISCELLANEOUS									
8.01	Type of drive control		Powershift 1/1	Powershift 1/1	Powershift 1/1	Powershift 1/1	Powershift 1/1	Powershift 1/1	Powershift 1/1
8.02	Maximum operating pressure for attachments	bar	180	180	180	180	180	180	180
8.03	Oil flow for attachments	l/min	75	75	73	73	60	60	60
8.04	Noise level, value at operator's ear (EN 12053)	dB(A)	78	78	78	78	79	79	79
8.05	Towing coupling design / DIN type, ref.		Pin	Pin	Pin	Pin	Pin	Pin	Pin

DIMENSIONS



MAST SPECIFICATIONS & RATED CAPACITIES

MAST TYPE	Mast Name	Max fork height (mm)	Overall mast height lowered (mm)			Free lift (mm)		Mast tilt forward/backward (degrees)	FGE15-E2	FGE18-E2	FGE20C-E2
			Lowered	Extended		With STD backrest	Without Backrest		Load Capacity (kgs) @ 500mm load centre		
				With STD backrest	Without Backrest				With STD backrest	Without Backrest	
SIMPLEX	2SP30	3000	1990	4055	3635	80	80	6-10	1500	1750	2000
	2SP33	3300	2140	4355	3935	80	80	6-10	1500	1750	2000
	2SP35	3500	2240	4555	4135	80	80	6-10	1500	1750	2000
	2SP37	3700	2340	4755	4335	80	80	6-6	1500	1750	2000
	2SP40	4000	2540	5055	4635	80	80	6-6	1500	1750	2000
	2SP45	4500	2790	5555	5135	80	80	6-6	1425	1700	1950
	2SP50	5000	3050	6055	5635	80	80	6-6	1375	1400	1400
	2SP55	5500	3300	6555	6135	80	80	6-6	850	850	
	2SP60	6000	3550	7055	6635	80	80	6-6	525	525	
DUPLEX	2FP30	3000	1995	4055	3635	940	1360	6-10	1500	1750	2000
	2FP33	3300	2140	4350	3930	1085	1505	6-10	1500	1750	2000
	2FP35	3530	2260	4570	4150	1205	1625	6-10	1500	1750	2000
	2FP40	4020	2585	5085	4665	1530	1950	6-6	1500	1750	2000
TRIPLEX	3FP37	3700	1790	4755	4335	735	1155	6-6	1500	1750	2000
	3FP40	4000	1890	5055	4635	835	1255	6-6	1475	1750	2000
	3FP43	4300	1990	5355	4935	935	1355	6-6	1425	1700	1950
	3FP47	4700	2140	5755	5335	1085	1505	6-6	1375	1625	1900
	3FP50	5000	2240	6055	5635	1185	1605	6-6	1325	1325	1325
	3FP55	5500	2430	6555	6135	1375	1795	6-6	850	850	
	3FP60	6000	2610	7055	6635	1555	1975	6-6	525	525	
	3FP65	6500	2850	7555	7135	1795	2215	6-6	350	350	
	3FP70	7000	3050	8055	7635	1995	2415	6-6	175	175	

The capacities are applicable for pneumatic shaped solid tyres (SE).

MAST TYPE	Mast Name	Max fork height (mm)	Overall mast height lowered (mm)			Free lift (mm)		Mast tilt forward/backward (degrees)	FD/FGE30-E2	
			Lowered	Extended		With STD backrest	Without Backrest		Load Capacity (kgs) @ 500mm load centre	
				With STD backrest	Without Backrest				With STD backrest	Without Backrest
SIMPLEX	2SP30	3000	2015	4055	3690	140	140	6-10	3000	
	2SP33	3300	2165	4355	3990	140	140	6-10	3000	
	2SP35	3500	2265	4555	4190	140	140	6-10	3000	
	2SP37	3700	2365	4755	4390	140	140	6-6	3000	
	2SP40	4000	2565	5055	4690	140	140	6-6	3000	
	2SP45	4500	2815	5555	5190	140	140	6-6	2950	
	2SP50	5000	3115	6055	5690	140	140	6-6	2850	
	2SP55	5500	3365	6555	6190	140	140	6-6	2750	
	2SP60	6000	3615	7055	6690	140	140	6-6	2400*	
DUPLEX	2FP30	3000	2045	4055	3705	1035	1385	6-10	3000	
	2FP33	3250	2165	4305	3955	1155	1505	6-10	3000	
	2FP35	3490	2285	4545	4195	1275	1625	6-10	3000	
	2FP40	4010	2610	5065	4715	1600	1950	6-6	3000	
TRIPLEX	3FP37	3700	1815	4755	4395	760	1165	6-6	3000	
	3FP40	4000	1915	5055	4695	860	1265	6-6	3000	
	3FP43	4300	2015	5355	4995	960	1365	6-6	3000	
	3FP47	4700	2165	5755	5395	1110	1515	6-6	2900	
	3FP50	5000	2265	6055	5695	1210	1615	6-6	2800	
	3FP55	5500	2435	6555	6195	1380	1785	6-6	2750	
	3FP60	6000	2605	7055	6695	1550	1955	6-6	2400*	
	3FP65	6500	2815	7555	7195	1760	2165	6-6	1750*	
	3FP70	7000	3115	8055	7695	2060	2465	6-6	1250*	

The capacities are applicable for pneumatic shaped solid tyres (SE).

*Capacities shown require truck equipped with dual tyres. Consult Residual capacity charts for the maximum back tilt allowed, to obtain the capacities specified.

MAST TYPE	Mast Name	Max fork height (mm)	Overall mast height lowered (mm)			Free lift (mm)		Mast tilt forward/backward (degrees)	FGE20-E2	FGE25-E2
			Lowered	Extended		With STD backrest	Without Backrest		Load Capacity (kgs) @ 500mm load centre	
				With STD backrest	Without Backrest				With STD backrest	Without Backrest
SIMPLEX	2SP30	3000	1995	4055	3635	120	120	6°/10°	2000	2500
	2SP33	3300	2145	4355	3935	120	120	6°/10°	2000	2500
	2SP35	3500	2245	4555	4135	120	120	6°/10°	2000	2500
	2SP37	3700	2345	4755	4335	120	120	6°/6°	2000	2500
	2SP40	4000	2545	5055	4635	120	120	6°/6°	2000	2500
	2SP45	4500	2795	5555	5135	120	120	6°/6°	1950	2450*
	2SP50	5000	3065	6055	5635	120	120	6°/6°	1900*	2350*
	2SP55	5500	3315	6555	6135	120	120	6°/6°	1850*	2250*
	2SP60	6000	3565	7055	6635	120	120	6°/6°	1800*	2150*
DUPLEX	2FP30	3000	1995	4055	3660	980	1375	6°/10°	2000	2500
	2FP33	3300	2145	4350	3960	1130	1525	6°/10°	2000	2500
	2FP35	3530	2265	4585	4190	1250	1645	6°/10°	2000	2500
	2FP40	4020	2590	5075	4680	1575	1970	6°/6°	2000	2500
TRIPLEX	3FP37	3700	1795	4755	4360	780	1180	6°/6°	2000	2500
	3FP40	4000	1895	5055	4660	880	1280	6°/6°	2000	2500
	3FP43	4300	1995	5355	4960	980	1380	6°/6°	1950	2450
	3FP47	4700	2145	5755	5360	1130	1530	6°/6°	1900	2350*
	3FP50	5000	2245	6055	5660	1230	1630	6°/6°	1850*	2300*
	3FP55	5500	2415	6555	6160	1400	1800	6°/6°	1800*	2200*
	3FP60	6000	2585	7055	6660	1570	1970	6°/6°	1750*	2100*
	3FP65	6500	2795	7555	7160	1780	2180	6°/6°	1650*	1750*
	3FP70	7000	3065	8055	7660	2050	2450	6°/6°	1250*	1250*

The capacities are applicable for pneumatic shaped solid tyres (SE).

*Capacities shown require truck equipped with dual tyres. Consult Residual capacity charts for the maximum back tilt allowed, to obtain the capacities specified.

MAST TYPE	Mast Name	Max fork height (mm)	Overall mast height lowered (mm)			Free lift (mm)		Mast tilt forward/backward (degrees)	FD/FGE35-E2	
			Lowered	Extended		With STD backrest	Without Backrest		Load Capacity (kgs) @ 500mm load centre	
				With STD backrest	Without Backrest				With STD backrest	Without Backrest
SIMPLEX	2SP30	3000	2130	4055	3755	140	140	6-10	3500	
	2SP33	3300	2280	4355	4055	140	140	6-10	3500	
	2SP35	3500	2380	4555	4255	140	140	6-10	3500	
	2SP37	3700	2480	4755	4455	140	140	6-6	3500	
	2SP40	4000	2680	5055	4755	140	140	6-6	3500	
	2SP45	4500	2930	5555	5255	140	140	6-6	3500	
	2SP50	5000	3230	6055	5755	140	140	6-6	3400*	
	2SP55	5500	3480	6555	6255	140	140	6-6	3200*	
	2SP60	6000	3730	7055	6755	140	140	6-6	2400*	
DUPLEX	2FP30	3010	2180	4065	3825	1170	1410	6-10	3500	
	2FP33	3300	2300	4355	4115	1290	1530	6-10	3500	
	2FP35	3500	2445	4555	4315	1435	1675	6-10	3500	
	2FP40	4000	2765	5055	4815	1755	1995	6-6	3500	
TRIPLEX	3FP37	3700	1930	4755	4500	920	1170	6-6	3500	
	3FP40	4000	2030	5055	4800	1020	1270	6-6	3500	
	3FP43	4300	2130	5355	5100	1120	1370	6-6	3500	
	3FP47	4700	2280	5755	5500	1270	1520	6-6	3450	
	3FP50	5000	2380	6055	5800	1370	1620	6-6	3350	
	3FP55	5500	2550	6555	6300	1540	1790	6-6	3200*	
	3FP60	6000	2720	7055	6800	1710	1960	6-6	2400*	
	3FP65	6500	2930	7555	7300	1920	2170	6-6	1750*	
	3FP70	7000	3230	8055	7800	2220	2470	6-6	1250*	

The capacities are applicable for pneumatic shaped solid tyres (SE).

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FD/FGE15-35(C)-E2

STANDARD AND OPTIONS LIST

	DIESEL		LPG	
	FD20-35-E2	FGE15-20C-E2	FGE20-35-E2	
GENERAL				
Dust proof kit	●	●	●	
Line filter for torque converter	●	●	●	
Powertrain universal joint cover	●	●	●	
LPG bracket removed	-	●	●	
LPG swing down bracket	-	●	●	
Tilt cylinder boot kit	-	●	●	
Under chassis protection (belly plate)	●	●	●	
Large capacity starter battery	-	●	●	
Fire extinguisher	●	●	●	
HYDRAULIC				
3-Way control valve, mechanical controls	●	●	●	
3-Way control valve, fingertip controls	●	●	●	
4-Way control valve, mechanical controls	●	●	●	
4-Way control valve, fingertip controls	●	●	●	
Tilt horizontal control (*only for fingertip control)	●	●	●	
F2 Double action button for clamp release (*cannot be combined with tilt horizontal control)	●	●	●	
MAST FORKS AND CARRIAGE				
Loose mast	●	●	●	
Heavy load side roller (*cannot be combined with an integral side shift carriage)	●	●	●	
Side shift carriage 920 mm	-	●	-	
Side shift carriage 1000 mm	●	-	●	
Integral side shift carriage 920 mm	-	●	-	
Integral side shift carriage 1000 mm	●	-	●	
No fork supply	●	●	●	

KEY ● Standard ● Optional - Not available

	DIESEL		LPG	
	FD20-35-E2	FGE15-20C-E2	FGE20-35-E2	
ELECTRICAL				
Reverse handle with horn button	●	●	●	
Electric diesel control (diesel)	●	-	-	
Speed control system (LPG)	-	●	●	
Indicator kit	●	●	●	
LED light set	●	●	●	
LED rear work light	●	●	●	
Load weight indicator (for simplex & triplex masts)	●	●	●	
Strobe light (orange)	●	●	●	
Direction switch on adjustable armrest (*STD on fingertip control models)	●	●	●	
'Blue point' rear light	●	●	●	
OHG AND CABIN				
Grammer MSG 65 vinyl seat	●	●	●	
Grammer MSG 65 cloth seat	●	●	●	
Grammer MSG65 with heater	●	●	●	
Rear view mirrors (not available with delux cabin)	●	●	●	
Tilt steering column with memory position	●	●	●	
Convenience tray (*not available for fingertip control models)	●	●	●	
Delux cabin	●	-	●	
Panel cabin front screen with wiper + roof	●	-	●	
Panel cabin rear screen	●	-	●	
Panel cabin PVC doors, LH & RH	●	-	●	
Panel cabin steel doors	●	-	●	
TYRES				
Solid pneumatic profile tyres	●	●	●	
Pneumatic tyres	●	-	●	
Solid pneumatic profile dual drive tyres	●	-	●	
Non-marking solid tyres	●	●	●	
ENVIRONMENT				
Single element air cleaner	●	-	-	
Double element air cleaner	●	●	●	
High-level exhaust	●	●	●	



TCM
Always Evolving

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