

TECHNICAL SPECIFICATIONS

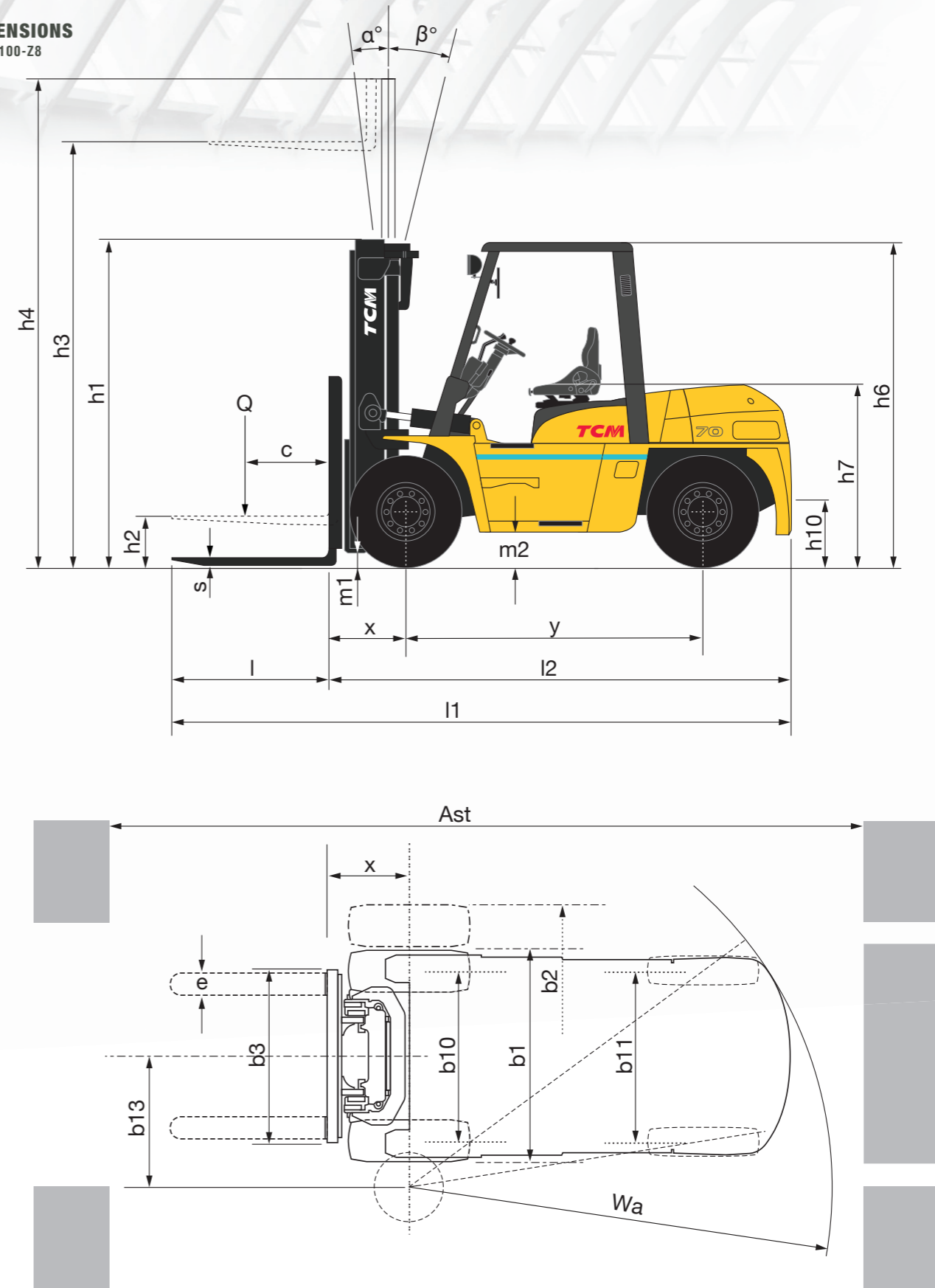
FD70-100-Z8



STANDARD SPECIFICATIONS

CHARACTERISTICS			TCM Forklifts			
			FD70-Z8	FD80-Z8	FD100-Z8	
1.01	Manufacturer					
1.02	Manufacturer's model designation					
1.03	Power source: (battery, diesel, LPG, petrol)		Diesel	Diesel	Diesel	
1.04	Operator type: pedestrian, standing, seated		Seated	Seated	Seated	
1.05	Load capacity	Q (kg)	7000	8000	10000	
1.06	Load centre distance	c (mm)	600	600	600	
1.08	Load distance, axle to fork face	x (mm)	625	720	710	
1.09	Wheelbase	y (mm)	2250	2500	2800	
WEIGHT						
2.01	Truck weight, without load / including battery (simplex mast, lowest lift height)		kg	9360	10960	12300
2.02	Axle loading with maximum load, front/rear (simplex mast, lowest lift height)		kg	14530/1830	17040 / 1940	20100 / 2200
2.03	Axle loading without load, front/rear (simplex mast, lowest lift height)		kg	3750/5610	4820/6160	5420/6880
WHEELS, DRIVE TRAIN						
3.01	Tyres: V=solid, L=pneumatic, SE=solid pneumatic - front/rear			L / L	L / L	L / L
3.02	Tyre dimensions, front			8.25x15-14PR	9.00x20-14PR	9.00x20-14PR
3.03	Tyre dimensions, rear			8.25x15-14PR	9.00x20-14PR	9.00x20-14PR
3.05	Number of wheels, front/rear (x=driven)			4x / 2	4x / 2	4x / 2
3.06	Track width (centre of tyres), front	b10 (mm)		1470	1600	1600
3.07	Track width (centre of tyres), rear	b11 (mm)		1700	1700	1700
DIMENSIONS						
4.01	Mast tilt, forwards/backwards	α/β °		6/12	6/12	6/12
4.02	Height with mast lowered (see tables)	h1 (mm)		2500	2700	2850
4.03	Free lift	h2 (mm)		215	205	205
4.04	Lift height (see tables)	h3 (mm)		3000	3000	3000
4.05	Overall height with mast raised	h4 (mm)		4420	4420	4330
4.07	Height to top of overhead guard	h6 (mm)		2450	2560	2560
4.08	Seat height	h7 (mm)		1310	1415	1415
4.12	Tow coupling height	h10 (mm)		430	515	515
4.19	Overall length	l1 (mm)		4820	5160	5475
4.20	Length to fork face (includes fork thickness)	l2 (mm)		3600	3940	4255
4.21	Overall width	b1/b2 (mm)		1995 / -	2165 / -	2245 / -
4.22	Fork dimensions (thickness, width, length)	s / e / l (mm)		70 x 150 x 1220	75 x 170 x 1220	75 x 175 x 1220
4.23	Fork carriage to DIN 15 173 A/B/no			No	No	No
4.24	Fork carriage width	b3 (mm)		1710	1810	2210
4.31	Ground clearance under mast, with load	m1 (mm)		190	245	245
4.32	Ground clearance at center of wheelbase, with load (forks lowered)	m2 (mm)		225	320	320
4.33	Working aisle width with 1000 x1200 mm pallets, crosswise	Ast (mm)		5185	5570	5810
4.34a	Working aisle width with 800 x1200 mm pallets, crosswise	Ast (mm)		5385	5770	6010
4.34b	Working aisle width with 800 x1200 mm pallets, lengthwise	Ast (mm)		5385	5770	6010
4.35	Turning circle radius	Wa (mm)		3360	3650	3900
4.36	Minimum distance between centres of rotation	b13 (mm)		1200	1280	1320
PERFORMANCE						
5.01	Travel speed, with/without load	km/h		26 / 30	25 / 30	24 / 30
5.02	Lifting speed, with/without load	m/s		0.46 / 0.55	0.45 / 0.47	0.39 / 0.41
5.03	Lowering speed, with/without load	m/s		0.45 / 0.50	0.45 / 0.45	0.47 / 0.34
5.05	Rated drawbar pull, with/without load	N		52900 / 21600	57300 / 27400	57300 / 31400
5.07	Gradeability, with/without load	%		29 / 19	27 / 19	22 / 20
5.10	Service brakes (mechanical/hydraulic/electric/pneumatic)			Hydraulic / Mechanical	Hydraulic / Mechanical	Hydraulic / Mechanical
IC ENGINE						
7.01	Manufacturer / Type			6BG1	6BG1	6BG1
7.02	Rated / Nominal output to ISO 1585**	kW		82.4	84.6	84.6
7.03	Rated speed to DIN 70 020	rpm		2000	2100	2100
7.04	Number of cylinders / cubic capacity	cm³		6 / 6494	6 / 6494	6 / 6494
7.05	Fuel consumption according to VDI 60 cycle	l/h / kg/h		7.2 / -	7.6 / -	8.4 / -
7.06	Max torque	Nm		417	417	417
7.07	Max torque at engine speed	rpm		1500	1500	1500
MISCELLANEOUS						
8.01	Type of drive control			Powershift 2/2	Powershift 2/2	Powershift 2/2
8.02	Maximum operating pressure for attachments	bar		200	200	200
8.04	Noise level, value at operator's ear (EN 12053)	dB(A)		85	85	85
8.05	Towing coupling design / DIN type, ref.			Pin	Pin	Pin

DIMENSIONS FD70-100-Z8



MAST SPECIFICATIONS & RATED CAPACITIES

MAST TYPE	Mast name	Max fork height (mm)	Overall mast height with backrest (mm)		Free lift with backrest (mm)	Mast Tilt (Degrees Fwd/Bwd)	FD70-Z8
			Lowered	Extended			Load Capacity (kgs) @ 600mm load centre
SIMPLEX	2SP300	3000	2500	4420	215	6-12	7000
	2SP330	3300	2650	4720	215	6-12	7000
	2SP350	3500	2750	4920	215	6-12	7000
	2SP400	4000	3050	5420	215	6-12	7000
	2SP450	4500	3300	5920	215	6-12	7000
	2SP500	5000	3550	6420	215	6-6	7000
	2SP550	5500	3850	6920	215	3-6	6600
	2SP600	6000	4100	7420	215	3-6	6400
DUPLEX	2FP300	3000	2625	4420	1265	6-12	7000
	2FP330	3300	2775	4720	1415	6-12	7000
	2FP350	3500	2875	4920	1515	6-12	7000
	2FP400	4000	3175	5420	1815	6-12	7000
	2FP450	4500	3425	5920	2065	6-12	7000
TRIPLEX	3FP400	4000	2500	5400	1140	6-10	6200
	3FP435	4350	2625	5750	1265	6-10	6200
	3FP480	4800	2775	6200	1415	6-10	6200
	3FP500	5000	2875	6400	1515	6-10	6200
	3FP600	6000	3300	7400	1940	3-6	5500
	3FP700	7000	3675	8400	2315	3-6	3700
3FP800	8000	4100	9400	2740	3-6	2300	

1. For height without backrest: -325mm

2. For free lift without backrest: +325mm

MAST TYPE	Mast name	Max fork height (mm)	Overall mast height with backrest (mm)		Free lift with backrest (mm)	Mast Tilt (Degrees Fwd/Bwd)	FD80-Z8
			Lowered	Extended			Load Capacity (kgs) @ 600mm load centre
SIMPLEX	2SP300	3000	2700	4420	205	6-12	8000
	2SP330	3300	2850	4720	205	6-12	8000
	2SP350	3500	2950	4920	205	6-12	8000
	2SP400	4000	3250	5420	205	6-12	8000
	2SP450	4500	3500	5920	205	6-12	8000
	2SP500	5000	3750	6420	205	6-6	7750
	2SP550	5500	4050	6920	205	3-6	7400
	2SP600	6000	4300	7420	205	3-6	7000
DUPLEX	2FP300	3000	2700	4420	1345	6-12	8000
	2FP330	3300	2850	4720	1495	6-12	8000
	2FP350	3500	2950	4920	1595	6-12	8000
	2FP400	4000	3250	5420	1895	6-12	8000
2FP450	4500	3500	5920	2145	6-12	8000	
TRIPLEX	3FP400	4000	2575	5400	1220	6-10	7000
	3FP435	4350	2700	5750	1345	6-10	7000
	3FP480	4800	2850	6200	1495	6-10	7000
	3FP500	5000	2950	6400	1595	6-10	7000
	3FP600	6000	3375	7400	2020	3-6	6000
	3FP700	7000	3750	8400	2395	3-6	4500
3FP800	8000	4175	9400	2820	3-6	2500	

1. For height without backrest: -325mm

2. For free lift without backrest: +325mm

MAST TYPE	Mast name	Max fork height (mm)	Overall mast height with backrest (mm)		Free lift with backrest (mm)	Mast Tilt (Degrees Fwd/Bwd)	FD100-Z8
			Lowered	Extended			Load Capacity (kgs) @ 600mm load centre
SIMPLEX	2SP300	3000	2850	4330	205	6-12	10000
	2SP330	3300	3000	4630	205	6-12	10000
	2SP350	3500	3100	4830	205	6-12	10000
	2SP400	4000	3400	5330	205	6-12	10000
	2SP450	4500	3650	5830	205	6-12	10000
	2SP500	5000	3900	6330	205	6-6	10000
	2SP550	5500	4200	6830	205	3-6	9000
	2SP600	6000	4450	7330	205	3-6	8000

STANDARD AND OPTIONS LIST

	FD70-Z8	FD80-Z8	FD100-Z8
GENERAL			
Full hydrostatic power steering	●	●	●
Integrated presence system	●	●	●
Suspension seat	●	●	●
Tilt steering column	●	●	●
2 rear view mirrors (overhead guard mounted)	●	●	●
Rubber floor mat	●	●	●
High volume reversing alarm & light	●	●	●
LED head, turn rear combination lights	●	●	●
Double action parking brake with alarm and indicator	●	●	●
Hour meter	●	●	●
Fuel gauge with low level warning light	●	●	●
Seat belt indicator	●	●	●
Low battery warning light	●	●	●
Battery electrolyte level warning light	●	●	●
Head light protection guards	●	●	●
Rear under mirrors	●	●	●
Tilt cylinder boots	●	●	●
MAST, FORKS AND CARRIAGE			
Mast tilt gauge	●	●	-
Load backrest	●	●	-
Wide load backrest	●	●	-
Carriage - hook type - for simplex	●	●	-
Carriage - shaft type - for simplex	●	●	●
Sideshifter - for simplex	●	●	●
Hydraulic independently controlled fork positioner	●	●	●
HYDRAULIC			
2 section valve with cowl mounted levers	●	●	●
3 and 4 section valve with cowl mounted levers	●	●	●
TYRES			
Air-filled pneumatic dual drive / single steer tyre	●	●	●
Solid pneumatic dual drive / single steer tyres (Super elastic type)	●	●	●
ENGINE AND TRANSMISSION			
6.5L In-line 6 cylinder tier 2 compliant engine	●	●	●
Elevated air intake	●	●	●
Elevated air intake pre-cleaner	●	●	●
Catalytic exhaust purifying muffler	●	●	●
Spark arresting & smoke reducing muffler	●	●	●
Elevated exhaust	●	●	●
Vertical spark arresting & smoke reducing muffler	●	●	●
Vertical catalytic exhaust purifying muffler	●	●	●
Double element air cleaner	●	●	●
Engine coolant gauge (option)	●	●	●
Engine oil pressure warning light	●	●	●
Glow plug indicator	●	●	●
Air cleaner clogging warning light	●	●	●
Water separator	●	●	●
2-speed powershift transmission for all models	●	●	●
Transmission oil cooler	●	●	●
Cyclopak air filter with dust indicator	●	●	●
ELECTRICAL			
Torque converter oil temperature gauge	●	●	●
Torque converter oil pressure gauge	●	●	●
Speedometer	●	●	●
High volume back-up buzzer	●	●	●
Head lights on mast (halogen)	●	●	●
Led rotating beacon	●	●	●
Rear work lights (halogen)	●	●	●
Sequential seatbelt interlock system	●	●	●
OPERATOR COMPARTMENT			
Canvas roof for OHG	●	●	●
Front window with wiper	●	●	●
Enclosed cabin	●	●	●
AIRCO unit for enclosed cabin	●	●	●
Heater for panel cabin	●	●	●

KEY ● Standard ● Option - Not available