

# SAMUK Rough Terrain Forklift Introduction

**2WD**

Strong flexibility  
in rough terrain

100% differential lock.



**Compact  
4WD**

SAMUK original  
product replenished  
rough terrain fields



**4WD**

Superior performance  
in extreme conditions

Traditional technology while  
imported key components:  
DANA integrated trans-axle,  
Sauer Danfoss hydrostatic  
system, tilting cabin.



Patented self-designed axle &  
transmission, compact size meet  
with European standard.

# SAMUK Rough Terrain Forklift Introduction

## Engine

World renowned brands engine for superior performance.

### MITSUBISHI S4S

Rated output 35.3kw/2250rpm >

Rated torque 182N.m/1800rpm >



### YANMAR 4TNE98

Rated output 42.1kw/2300rpm >

Rated torque 196.3N.m/1700rpm >



### PERKINS 1104C-44TA

Rated output 74.5kw/2300rpm >

Rated torque 415N.m/1350rpm >



## Floating System

A superior full floating overhead guard is installed with rubber damping instead of the traditional rigid design. This greatly reduces machine vibration and offers a smoother ride over rough terrain and reduces operator fatigue.



## Wide-view Mast

Wide-view mast provides excellent through-the-mast visibility improving the work efficiency and allowing safe operation of the forklift.



## High Quality Tyres

Industrial tyres with a wide footprint giving it greater stability and lift capacity in rough work environments.



## High Ground Clearance

Offer greater maneuverability and keep the machine moving in the roughest of applications.

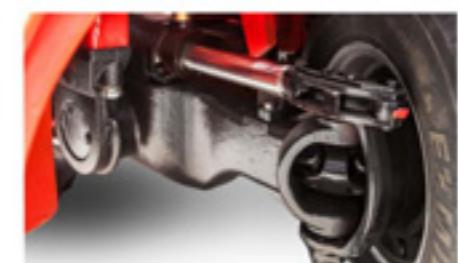


## Tilting Overhead Guard (4WD)

Equipped as standard with a tilting overhead guard, to ensure easy access to major components for inspection and service.

## Upward Steering Cylinder (Compact 4WD)

Lay the steering cylinder upward to make the turning radius smaller and rear wheel steering angle bigger.



## 100% Differential Lock (2WD)

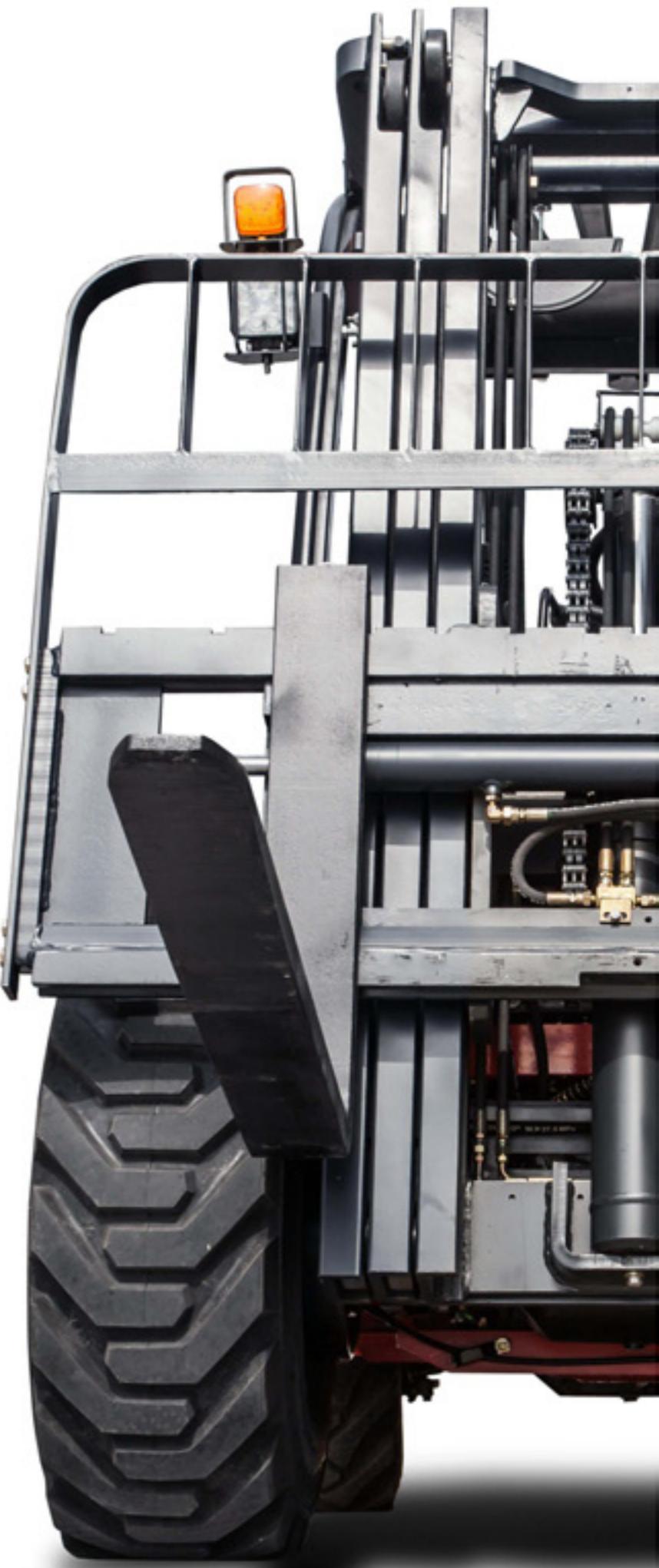
Power shift transmission with jaw type 100% differential lock provides ultimate traction during inclement weather conditions and rough operating surfaces.



## Our Solution, Your Decision

	2WD					Compact 4WD			4WD	
YES ● / NO ●	1.8T	2.5T	3.5T	4T	5T	1.8T	2.5T	3.5T	2.5T	3.5T
Body	Floated Overhead Guard		●				●		●	
Performance	4WD-2WD Rocker Switch			—			●		●	
	Industrial Tyres (F/R)	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
	Suspension Pedal			●			●		●	
	Truck Width (mm)	1450	1557.5	1600	2067	2067	1450	1450	1600	1980
	Loaded into 20GP Container	●	●	● (Deflate the tyres)	●	● (Deflate the tyres)	●	●	●	●
	External Type Steering Cylinder			●			●		●	
	With Prefilter			●			●		●	
	LED Lights		Standard				Standard		Standard	
	Safety Start System*		Standard				Standard		Standard	
	Suspension Seat		Option				Option		Standard	
Performance	OPS system		Option				Option		Option	
	Engine	YANMAR 4TNE98/MITSUBISHI S4S	YANMAR 4TNE98	Perkins 1104C-44TA/1104D-44TA	YANMAR 4TNE98/ MITSUBISHI S4S	YANMAR 4TNE98	YANMAR 4TNE98			
	Gradeability	20%	20%	16%	30%	80%/60%	50%	45%	38%	38%
	Gradient	11.3°	11.3°	9°	16.7°	38.6°/31°	26.5°	24.2°	20.8°	20.8°
	Min. Turning Radius(mm)	2840	2870	2870	3550	3120	3120	3120	4275	4295
	Transmission Model		Hydraulic				Hydraulic		Hydrostatic	
	Differential Lock Type		Jaw Type Differential Lock				Limited Slip Differential Lock		Limited Slip Differential Lock	
	Differential Ratio		100%				45%		45%	

Safety Start System\* The truck can't start if any below: 1-operator leaves the seat, 2-seatbelt unfastened, 3-hand brake released, 4-not in N position.



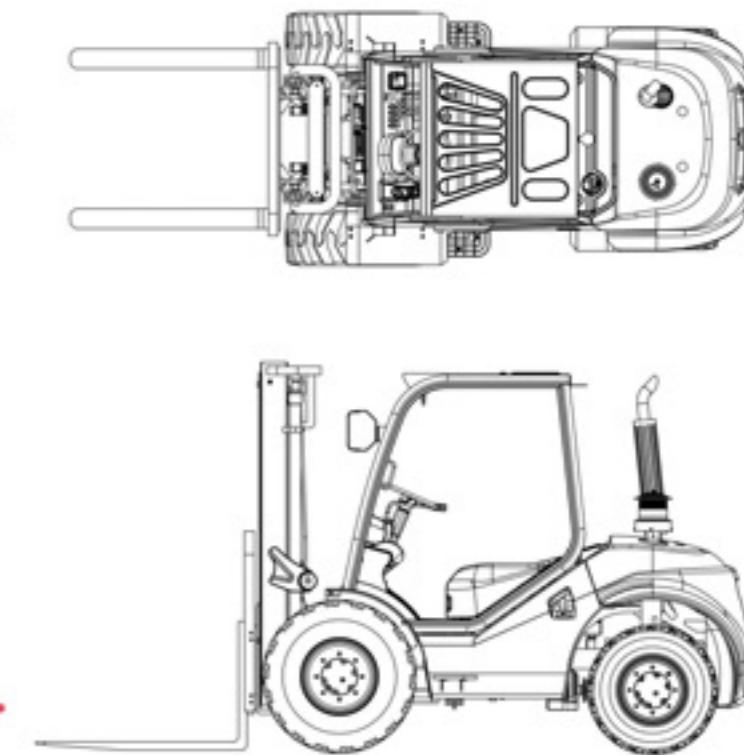
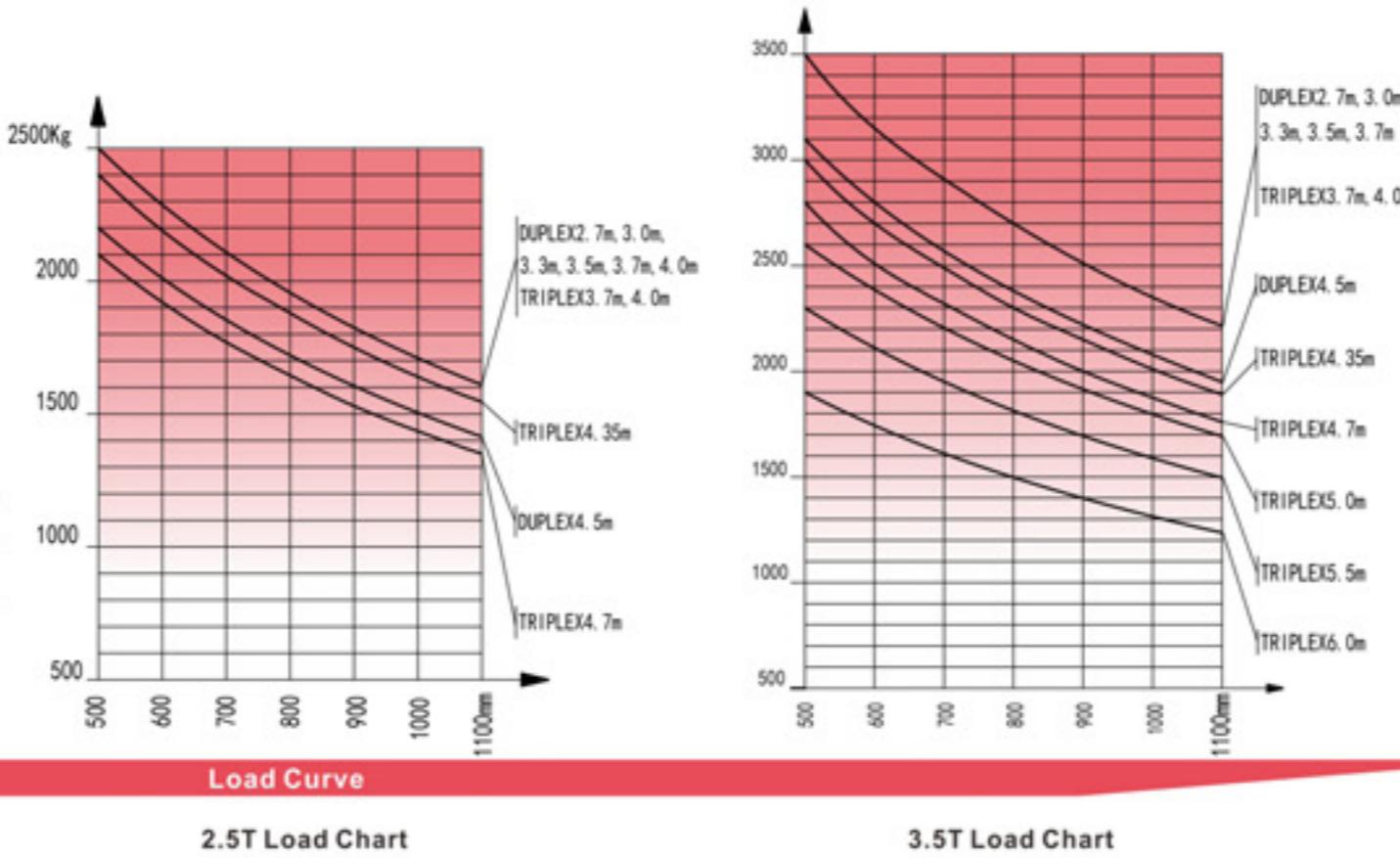
# Forklift Specification

2WD 1.8T/2.5T/3.5T						
General	Model		2WD	2WD	2WD	
	Power type		Diesel			
	Rated capacity		Kg	1800	2500	3500
	Load centre		mm	500		
Characteristic&Dimension	Lifting height		mm	3000		
	Height		mm	105	160	165
	Fork size	L×W×T	mm	1070×100×35	1070×122×40	1220×122×45
	Fork regulating range	Min./Max.	mm	200-1000	250-1160	250-1160
	Mast tilt angle	F/R	Deg	10/12		
	Front overhang		mm	509	586	601
	Rear overhang		mm	520	520	520
	Min.ground clearance(drive steer axle)		mm	255	270	270
	Overall dimensions	Length to face of fork (without fork)		mm	2990	2946
		Overall width		mm	1450	1557.5
		Mast lowered height		mm	2148	2265
		Mast extended height (with backrest)		mm	4170	4175
		Overhead guard height		mm	2260	2256.5
	Turning radius		mm	2840	2870	2870
	Min. right angle stacking aisle width	Pallet size a <sub>12</sub> =1000,b <sub>12</sub> =1200		mm	4760	4860
		Pallet size a <sub>12</sub> =1200,b <sub>12</sub> =800		mm	4360	4460
Performance	Speed	Travel(Unladen/Laden)		Km/h	20/18	20/18
		Lifting(Laden)		mm	610	600
		Lowering(Laden)		mm	450	445
	Max. Drawbar pull(Laden)		KN	13	17	17
	Max. Gradeability(Laden)		%	20	20	16
	Tyre	Front		12-16.5-12PR	12-16.5-12PR	14-17.5-14PR
		Rear		27×10-12-12PR	27×10-12-12PR	27×10-12-12PR
Tyre	Tread	Front	mm	1123	1250.5	1250.5
		Rear	mm	1205		
	Wheelbase		mm	1880		
	Self weight		kg	3960	4465	5180
	Weight Distribution	Laden	Front axle	kg	4954	5990
			Rear axle	kg	806	975
		Unladen	Front axle	kg	1584	1785
			Rear axle	kg	2376	2680
Power&Transmission	Battery	Voltage/Capacity		V/Ah	12/90	12/90
		Model		4TNE98-BQFLC		
		Manufacture		YANMAR		
		Rated output/r.p.m.		Kw	42.1/2300	
	Engine	Rated torque/r.p.m.		N.m	196.3/1700	
		No. of cylinder			4	
		Bore×Stroke		mm	98×110	
		Displacement		L	3.318	
		Fuel tank capacity		L	55	
	Transmission	Manufacture		China		
		Type		Powershift		
		Stage	F/R	1/1	1/1	1/1
		Operating pressure		Mpa	16.5	20

Compact 4WD 1.8T/2.5T/3.5T							
General	1	Model		FD18T-C4WV3	FD25T-C4WV3	FD18T-C4WE3	
	2	Power type		Diesel			
	3	Rated capacity	Kg	1800	2500	1800	
	4	Load centre	mm	500	500	500	
	5	Lifting height	mm	3000	3000	3000	
	6	Free lift	mm	105	160	105	
	7	Fork size	L×W×T	1070×100×35	1070×122×40	1070×100×35	
	8	Fork regulating range	Min./Max.	200-1315	250-1310	200-1315	
	9	Mast tilt angle	F/R	Deg	10/12		
	10	Front overhang	mm	520	586	520	
	11	Rear overhang	mm	600			
	12	Min.ground clearance(drive steering axle)	mm	219			
	13	Min.ground clearance(chassis) (Unladen/Laden)	mm	230/215	230/215	230/215	
	14	Min.ground clearance(mast) (Unladen/Laden)	mm	275/250	270/255	270/255	
	15	Ground clearance (drawbar pin)	mm	354.5	354.5	354.5	
	16	Height from seat surface to overhead guard inner side	mm	990	990	990	
	17	Length to face of fork (without fork)	mm	3000	3066	3000	
	18	Overall width	mm	1450	1450	1450	
	19	Overall dimensions	Mast lowered height	mm	2145	2235	2235
	20	Mast extended height (with backrest)	mm	4140	4175	4175	
	21	Overhead guard height	mm	2256	2256	2256	
	22	Turning radius	mm	3120	3120	3120	
	23	Min. right angle stacking aisle width	Pallet size a <sub>12</sub> =1000,b <sub>12</sub> =1200	4629	4706	4629	
	24		Pallet size a <sub>12</sub> =1200,b <sub>12</sub> =800	4829	4906	4829	
	25	Min. right angle stacking aisle width(pallet size a <sub>12</sub> =1200,b <sub>12</sub> =1200)	mm	2670	2670	2725	
	26	Speed	Travel(Unladen/Laden)	Km/h	18/17	18/17	
	27		Lifting(Unladen/Laden)	mm	620/590	620/570	
	28		Lowering(Unladen/Laden)	mm	420/450	510/450	
	29	Max. Drawbar pull		KN	31	38	
	30	Max. Gradeability		%	60	50	
	31	Braking distance		m	s6	s6	
	32	Tyre	Front		12-16.5-12PR	12-16.5-14PR	
	33		Rear		10.0/75-15.3	10.0/75-15.3	
	34	Tyre pressure(Front/Rear)		Mpa	0.62/0.55	0.62/0.55	
	35	Tread	Front	mm	1123	1123	
	36		Rear	mm	1190	1190	
	37	Ground clearance (Front tyre centre) (Unladen/Laden)		mm	405.5/385	405.5/385	
	38	Ground clearance (Rear tyre centre) (Unladen/Laden)		mm	370/350	370/350	
	39	Wheelbase		mm	1880		
	40	Self weight		kg	4255	4830	
	41	Weight Distribution	Front axle	kg	4602	6597	
	42		Rear axle	kg	1453	733	
	43	Unladen	Front axle	kg	1702	2173	
	44		Rear axle	kg	2553	2657	
	45	Battery	Voltage/Capacity		V/Ah	12/90	
	46	Engine	Model		S45	4TNE98-BQFLC	
	47		Manufacture		MITSUBISHI	YANMAR	
	48		Rated output/r.p.m.	Kw	35.3/2250	42.1/2300	
	49		Rated torque/r.p.m.	N.m	182/1800	196.3/1700	
	50		No. of cylinder		4	4	
	51	Bore×Stroke		mm	94×1		

# Mast Specification

Type	Model	Max. fork height	Overall height			Free lift						Front Overhang			Tilt range		Capacity at max. height						
			Lowered			With backrest			Without backrest						FWD	BWD	Loand Center 500mm						
			1.8T	2.5T	3.5T	1.8T	2.5T	3.5T	1.8T	2.5T	3.5T	1.8T	2.5T	3.5T	Deg	Deg	1.8T	2.5T	3.5T	1.8T	2.5T	3.5T	
			mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Deg	Deg	kg	kg	kg	kg	kg	kg	
wide view 2-stage mast	M270	2700	1998	2085	2180	105	160	165	105	160	165	509	585	600	10°	12°	1800	2500	3500	1800	2500	3200	
	M300	3000	2148	2235	2330	105	160	165	105	160	165	509	585	600	10°	12°	1800	2500	3500	1800	2500	3200	
	M330	3300	2298	2385	2480	105	160	165	105	160	165	509	585	600	10°	12°	1800	2500	3500	1800	2500	3200	
	M350	3500	2398	2485	2580	105	160	165	105	160	165	509	585	600	10°	12°	1800	2500	3500	1800	2500	3200	
	M370	3700	2498	2585	2680	105	160	165	105	160	165	509	585	600	10°	12°	1800	2500	3500	1800	2500	3200	
	M400	4000	2698	2785	2880	105	160	165	105	160	165	509	585	600	10°	12°	1800	2500	3400	1800	2500	3100	
	M450	4500	2948	3035	3130	105	160	165	105	160	165	509	585	600	10°	12°	1500	2200	3100	1400	2100	2900	
	M500	5000	3198	—	—	105	—	—	105	—	—	509	—	—	6°	6°	1300	—	—	1200	—	—	
	M550	5500	3498	—	—	105	—	—	105	—	—	509	—	—	6°	6°	1000	—	—	900	—	—	
	M600	6000	3748	—	—	105	—	—	105	—	—	509	—	—	6°	6°	800	—	—	400	—	—	
Full free 3-stage mast	TFM360	3600	1908	—	—	725	—	—	1105	—	—	509	—	—	10°	12°	1800	—	—	1800	—	—	
	TFM370	3700	—	1990	2115	—	798	790	—	1243	1246	—	590	620	—	—	—	2500	3500	—	2400	3100	—
	TFM400	4000	2033	2080	2205	850	888	890	1230	1333	1336	509	590	620	10°	12°	1800	2500	3400	1800	2400	3100	—
	TFM435	4350	2158	2205	2330	980	1013	1015	1360	1458	1461	509	590	620	10°	12°	1800	2400	3000	1600	2200	2900	—
	TFM450	4500	2208	—	—	1030	—	—	1410	—	—	509	—	—	10°	12°	1500	—	—	1400	—	—	—
	TFM470	4700	—	2320	2445	—	1128	1130	—	1573	1576	—	590	620	—	—	—	2100	2800	—	1900	2500	—
	TFM480	4800	2308	—	—	1130	—	—	1510	—	—	509	—	—	10°	12°	1400	—	—	1300	—	—	—
	TFM500	5000	2408	2455	2580	1230	1263	1265	1610	1708	1710	509	590	620	6°	6°	1300	1900	2600	1200	1600	2300	—
	TFM550	5500	2573	2620	2745	1390	1428	1430	1770	1873	1875	509	590	620	6°	6°	1000	1500	2300	900	1200	2100	—
	TFM600	6000	2758	2805	2930	1580	1613	1615	1960	2058	2060	509	590	620	6°	6°	800	1200	1900	400	800	1600	—
	TFM650	6500	2973	3020	3145	1790	1828	1830	2180	2273	2275	509	590	620	6°	6°	350	700	1300	200	400	1100	—

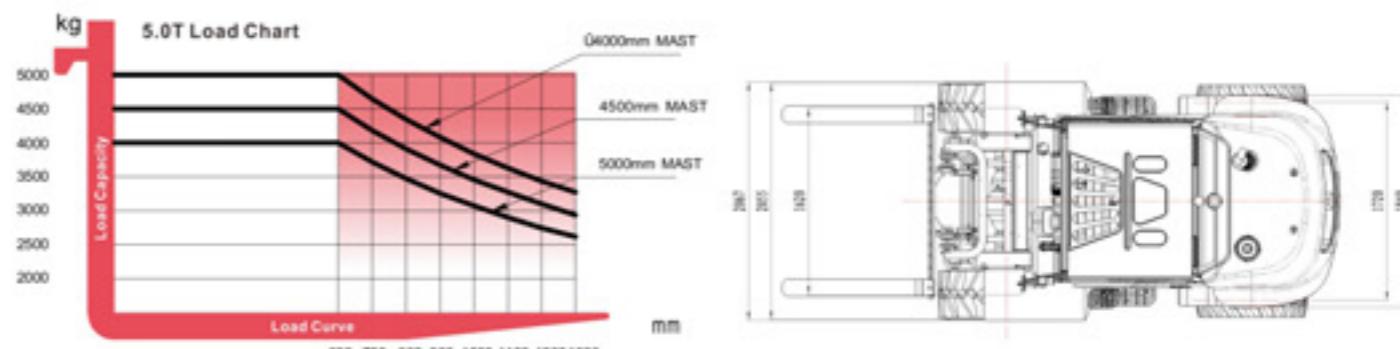
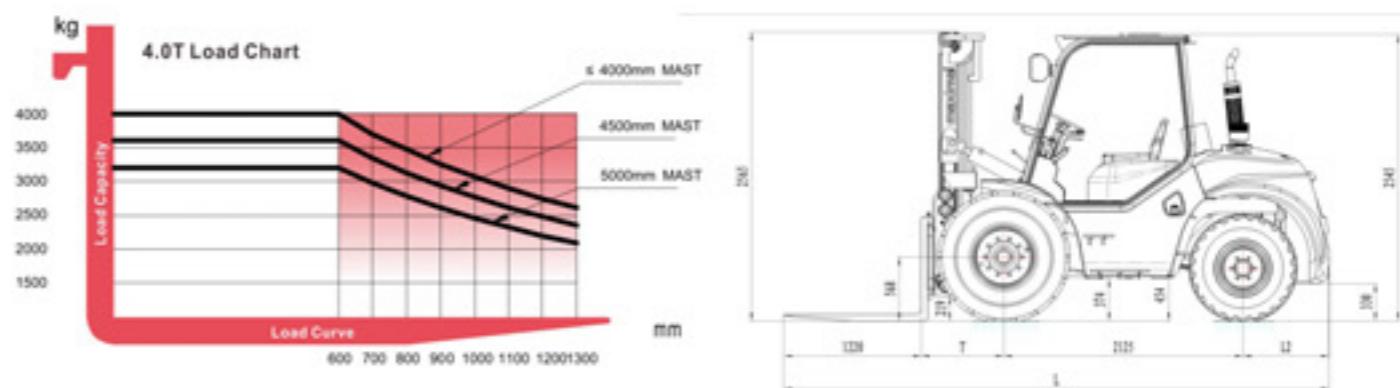


# Forklift Specification

# Mast Specification

2WD 4T/5T				
General	1	Model	FD40T-C2WP3	FD50T-C2WP3
	2	Power type	Diesel	Diesel
	3	Rated capacity	Kg	4000
	4	Load centre	mm	600
Characteristic&Dimension	5	Lifting height	mm	3000
	6	Free lift height	mm	145
	7	Fork size	LxWxT	1220*150*50
	8	Fork regulating range	Min./Max.	300/1954
	9	Mast tilt angle	F/R	15°/15°
	10	Front overhang	mm	732
	11	Rear overhang	mm	764
	12	Ground clearance	Middle of frame(Unladen/Laden)	374/354
	13		Bottom of mast(Unladen/Laden)	320/320
	14		Length to face of fork(without fork)	3622
	15		Overall length(with fork)	4837
	16		Wheel width	2055
	17	Overall dimensions	Frame width	2067
	18		Mast lowered height	2565
	19		Mast extended height(with backrest)	4170
	20		Overhead guard height	2545
	21		Min. turning radius	3550
Performance	22	Speed	Travel(Unladen/Laden)	Km/h
	23		Lifting(Unladen/Laden)	mm/s
	24		Laden lifting(normal/max)	Mpa
	25		Unladen lifting(normal/max)	Mpa
	26		Laden tilting(normal/max)	Mpa
	27		Max. Drawbar pull(Laden/unladen)	KN
	28		Max. Gradeability(Loaded/unladen)	%
	29	Tyre	Front	445-65-22.5PR/1175
Tyre	30		Rear	12.5/80-18/958
	31	Tread	Front	1620
	32		Rear	1720
	33		Wheelbase	2125
Weight	34		Self weight	kg
	35		Braking distance	m
	36	Engine	Model	1104C-44T
	37		Manufacture	PERKINS
	38		Rated output/r.p.m.	Kw
	39		Rated torque/r.p.m.	N.m
	40		No. of cylinder	4
	41	Transmission	Bore×Stroke	105×127
	42		Displacement	L
	43		Manufacture	China
	Stage	Type	Powershift	Powershift
	F/R		2/1	2/1

Type	Model	Max. fork height	Overall height Lowered	Free lift		Front Overhang		Tilt range		Capacity			
				With backrest	Without backrest	4.0T	5.0T	FWD	BWD	capacity at max. height			
										4.0T	5.0T	4.0T	5.0T
wide view 2-stage mast	M300	3000	2565	145	145	727	732	15	15	4000	5000	3600	4700
	M330	3300	2715	145	145	727	732	15	15	4000	5000	3600	4700
	M350	3500	2815	145	145	727	732	15	15	4000	5000	3600	4700
	M370	3700	2915	145	145	727	732	15	15	4000	5000	3600	4700
	M400	4000	3115	145	145	727	732	15	15	4000	5000	3600	4700
	M450	4500	3365	145	145	727	732	15	15	3600	4500	3240	4050
	M500	5000	3615	145	145	727	732	15	15	3200	4000	2800	3600
Full free 3-stage mast	TFM400	4000	2560	1000	1350	760	765	15	15	4000	5000	3600	4500
	TFM435	4350	2685	1125	1475	760	765	15	15	3600	4500	3240	4050
	TFM450	4500	2736	1176	1526	760	765	15	15	3200	4000	2880	3600
	TFM470	4700	2802	1242	1592	760	765	15	15	2950	3700	2680	3350
	TFM500	5000	2935	1375	1725	760	765	10	15	2640	3300	2360	2950
	TFM540	5400	3060	1500	1850	760	765	10	15	1920	2400	1720	2150
	TFM600	6000	3300	1740	2090	760	765	10	15	1600	2000	1400	1800



## Forklift Specification

## Mast Specification

4WD 2.5T/3.5T							
General	1	Model			FD25J-C4WE	FD35J-C4WE	
	2	Power type			diesel	diesel	
Characteristic&Dimension	3	Rated capacity		Kg	2500	3500	
	4	Load centre		mm	500	500	
	5	Lift height		mm	3000	3000	
	6	Free lift height		mm	160	165	
	7	Fork size	L×W×T	mm	1070×125×40	1220×125×45	
	8	Fork regulating range	Min./Max.	mm	250-1560	250-1560	
	9	Mast tilt angle	F/R	Deg	10/12	10/12	
	10	Front overhang		mm	680	680	
	11	Rear overhang		mm	590	597	
	12	Min. ground clearance		mm	394.5	410	
	13	Overall dimensions	Length to face of fork (without fork)	mm	3182	3227	
	14		Overall width	mm	1980	1980	
	15		Mast lowered height	mm	2454	2470	
	16		Mast extended height (with backrest)	mm	4270	4400	
	17		Overhead guard height	mm	2250	2250	
	18	Min. turning radius		mm	4275	4295	
	19	Min. right angle stacking aisle width(add load length and clearance)		mm	8375	8395	
Performance	20	Speed	Travel(Uniladen)	Km/h	20	20	
	21		Lifting(Laden)	mm/s	540	450	
	22		Lowering(Laden)	mm/s	630	540	
	23	Max. Drawbar pull(Laden/unladen)		KN	34.3	34.3	
	24	Max. Gradeability(Loaded)		%	38	38	
Tyre	25	Tyre	Front		405/70-20-14PR	405/70-20TL	
	26		Rear		10.0/75-15.3-14PR	10.0/75-15.3	
	27	Tread	Front	mm	1570	1570	
	28		Rear	mm	1440	1440	
Weight	29	Wheelbase		mm	1950	1950	
	30	Self weight		kg	4900	5750	
	31	Weight Distribution	Laden	Front axle	kg	6290	7990
	32		Laden	Rear axle	kg	1110	1260
	33		Unladen	Front axle	kg	2265	2450
	34		Unladen	Rear axle	kg	2635	3300
	35	Battery	Voltage/Capacity		V/Ah	12/90	
	36	Engine	Model			4TNE98-BQFLC	
	37		Manufacture			YANMAR	
	38		Rated output/r.p.m.		Kw	42.1/2300	
	39		Rated torque/r.p.m.		N.m	196.3/1700	
	40		No. of cylinder			4	
	41		Bore×Stroke		mm	98×110	
	42		Displacement		L	3.319	
	43		Fuel tank capacity		L	3.319	
Power&Transmission	44	Transmission	Manufacture			DANA	
	45		Type	Front axle		112	
	46		Rear axle			211	
	47		Transfer case			311	
	48		Stage	F/R		1/1	
	49	Static system pressure		Mpa		40	
	50	Operating pressure(For attachments)		Mpa		20	
	51	Min. right angle stacking aisle width		mm	2980	3000	

Type	Model	Overall height		Free lift				Front Overhang		Tilt range		Capacity			
		Lowered		With backrest		Without backrest		2.5T	3.5T	FWD	BWD	capacity at max. height			
		2.5T	3.5T	2.5T	3.5T	2.5T	3.5T					Without side shift carriage	With side shift carriage	2.5T	3.5T
		mm	mm	mm	mm	mm	mm	mm	mm	Deg	Deg	kg	kg	kg	kg
wide view 2-stage mast	M270	2320	2320	165	165	165	165	700	700	10	12	3500	3500	3200	3200
	M300	2470	2470	165	165	165	165	700	700	10	12	3500	3500	3200	3200
	M330	2620	2620	165	165	165	165	700	700	10	12	3500	3500	3200	3200
	M350	2720	2720	165	165	165	165	700	700	10	12	3500	3500	3200	3200
	M370	2820	2820	165	165	165	165	700	700	10	12	3500	3500	3200	3200
	M400	3020	3020	165	165	165	165	700	700	10	12	3400	3400	3100	3100
	M450	3270	3270	165	165	165	165	700	700	10	12	3100	3100	2900	2900
Full free 3-stage mast	TFM370	2255	2255	798	798	1243	1243	700	700	10	12	3500	3500	3100	3100
	TFM400	2345	2345	888	888	1333	1333	700	700	10	12	3500	3500	3100	3100
	TFM435	2470	2470	1013	1013	1458	1458	700	700	10	12	3000	3000	2900	2900
	TFM470	2605	2605	1128	1128	1573	1573	700	700	10	12	2800	2800	2500	2500
	TFM500	2720	2720	1263	1263	1708	1708	700	700	6	6	2800	2800	2500	2500
	TFM550	2885	2885	1428	1428	1873	1873	700	700	6	6	2500	2500	2300	2300
	TFM600	3070	3070	1613	1613	2058	2058	700	700	6	6	2100	2100	1800	1800

