

3 ton / 6000 lbs. FG30N5/FD30Z5 3000 kg/500mm, 6000 lbs/24 in.



Model shown with optional equipment

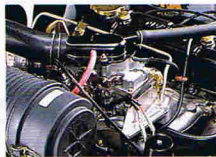
WELL BALANCED PERFORMANCE/ ECONOMY PACKAGE

Fuel efficient yet powerful specialized industrial vehicle engines.

New C240 diesel engine anticipates future emission control requirements of U.S.A. EPA* and California*. The engine also meets United Nation's emission control regulation (Reg No.24 of UN Agreement No.E/ECE/324 for motor vehicle equipment).

*: Pending draft for the off-road vehicles

New wire assembled H20II gasoline engine with F-shape cooling fan and stabilized governor performance to optimize low operating speed/high torque gasoline/LPG fuel applications.



■ C240 Diesel Engine

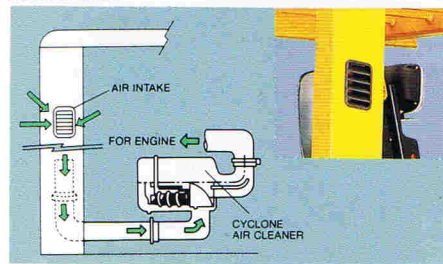
Displacement
2369cc (145cu.in.)
Rated output
36.8kW, 50PS (49.3HP SAE) at 2500r.p.m.

■ H20II Gasoline Engine

Displacement
1982cc (121cu.in.)
Rated output
32.3kW, 44PS (46HP SAE) at 2300r.p.m.

AIR INTAKE SYSTEM AND LARGE CAPACITY MUFFLER

The air intake for the air cleaner is located high up in the driver's overhead guard pillar above the normal dust level created by the fork truck's travel. The large intake area reduces the noise of the air intake. The large capacity exhaust muffler greatly lowers the exhaust noise.

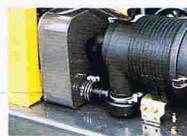


LOW VIBRATION AND NOISE

Giving the operator more comfort is the main objective of TCM forklift trucks. The engine compartment hood and the radiator cover are completely sealed. Sound and heat absorbing material is installed under the floor board and under the engine compartment hood. The shock absorbing steering column and the thick skid proof rubber floor mat further aids in noise and vibration reduction, while maintaining easy service accessibility.

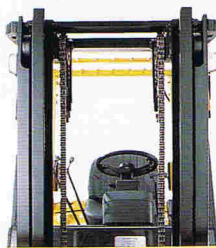
- 79dB(A) FG Series at operators ear.
- 80dB(A) FD Series (According to ISO)

THE LARGE-CAPACITY RESONATORS



New installation of large-capacity resonator for greater reduction of air-intake noise (Diesel trucks only)

THE ROBUST TCM WIDE VIEW MAST WITH GREATER VISIBILITY



TCM pioneered the wide view mast and the proven rugged construction of the TCM mast, has the strength to resist off centre loads. Its easy maintenance ensures that it remains tight and dependable in operation. Greater forward visibility and reduced blind areas

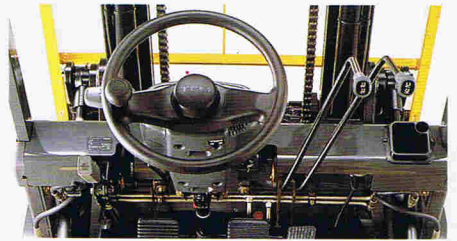
have been achieved with TCM's new finger bar design and low profile front panel, assuring safe and speedy work by allowing the operator to see the tip of the forks in operating positions.

FULL HYDROSTATIC POWER STEERING SYSTEM

A low maintenance system. Designed for positive and precise steering system.

MORE FUNCTIONAL AND MANEUVERABLE COCKPIT

Functionally-arranged panel layout for easy scanning of meters and monitors, and conveniently-placed shift levers for better control.



MORE VALUE THAN OTHER FORKLIFT TRUCKS CAN OFFER

- MUD GUARD PLATE
- LARGE OPEN STYLE STEP
- LARGE ONE PIECE FLOOR MAT
- SOFT TOUCH LEVER KNOBS AND HAND GRIPS
- RESERVOIR FOR RADIATOR COOLANT
- BRIGHT HALOGEN HEAD LIGHT
- LAMPS, MIRRORS AND BACK-UP ALARM
- FOUR LIGHT REAR COMBINATION LIGHTS WITH ROBUST GUARDS
- SMALL DIAMETER STEERING WHEEL
- SNAP IN MOUNTED FLOOR PANEL
- FULL TRANSISTOR IGNITION AND IDLE UP DEVICE (FG MODELS)
- AUTO GLOW KEY SWITCH ENGINE STOP AND WATER SEPARATOR (FD MODELS)
- AUTOMATICALLY ADJUSTING CLUTCH SYSTEMS

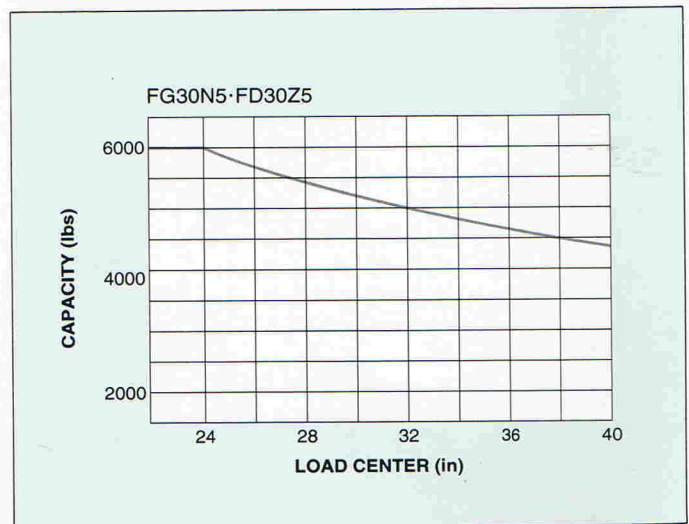
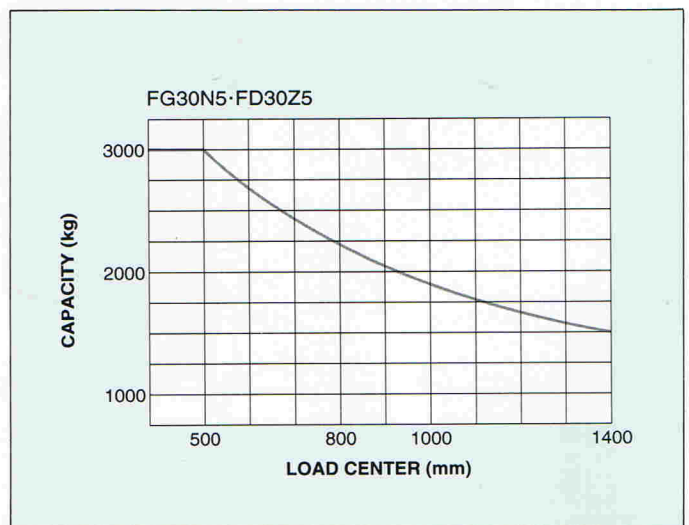


STANDARD SPECIFICATIONS

				TCM		
Characteristics	1	Manufacturer				
	2	Model		FG30N5		
	3	Load Capacity		kg (lbs)	3000 (6000)	
	4	Load Center		mm (in)	500 (24)	
	5	Power Type		Gasoline or LPG		
	6	Control Type		Sit Down Rider Type		
	7	Tire Type	Front/Rear	Pneumatic		
	8	Wheels (X = driven)	Front/Rear	2×/2		
Dimensions	9	Maximum Fork Height		mm (in)	3000 (118)	
	10	Free Lift		mm (in)	135 (5.3)	
	13	Fork Size	L×W×T	mm (in)	1070×125×45 (42.1×4.9×1.8)	
	14	Tilt Angle	Fwd/Bwd	deg	6/12	
	15	Length to Fork Face		mm (in)	2685 (105.7)	
	16	Overall Width		mm (in)	1225 (48.2)	
	17	Mast Height Fork Lowered		mm (in)	2075 (81.7)	
	18	Overall Height Fork Raised		mm (in)	4250 (167.3)	
	19	Overhead Guard Height***		mm (in)	2090 (82.9)	
	21	Turning Radius (Outside)		mm (in)	2400 (94.5)	
	22	Fork Overhang (Centerline of front axle to front face of forks)		mm (in)	485 (19.1)	
23	Minimum Aisle—90° stack		mm (in)	2885 (113.6)		
Performance	24	Travel Max. (Fwd/Rvs)	With Load	km/h (mph)	18.0 (11.2)	
			Without Load	km/h (mph)	19.5 (12.1)	
		Lifting	With Load	mm/s (fpm)	450 (88.6)	
			Without Load	mm/s (fpm)	500 (98.4)	
	26	Lowering	With Load	mm/s (fpm)	450 (88.6)	
			Without Load	mm/s (fpm)	450 (88.6)	
	28	Max. Drawbar Pull	Power shift T/M with/without load	kN (lbs)	5.9 (2970)/4.4 (2200)	
			Manual shift T/M with/without load	kN (lbs)	4.8 (2500)/4.4 (2200)	
29	Gradeability at 1.6km/h (1mph)*	Power shift T/M with/without load	% (tan θ)	17/20		
		Manual shift T/M with/without load	% (tan θ)	14/20		
30	Max. Gradeability**	Power shift T/M with/without load	% (tan θ)	19/20		
Weight	32	Total Weight		kg (lbs)	4270 (9420)	
	33	Weight Distribution	With Load	Front	kg (lbs)	6450 (14220)
			Rear	kg (lbs)	820 (1850)	
	34	Without Load	Front	kg (lbs)	1710 (3770)	
Rear			kg (lbs)	2560 (5640)		
Chassis	35	Tires	Number	Front/Rear	2/2	
			Size	Front	28×9—15—12 PR	
				Rear	6.50—10—10 PR	
	38	Wheelbase		mm (in)	1700 (66.9)	
	39	Tread	Front	mm (in)	1000 (39.4)	
			Rear	mm (in)	970 (38.2)	
	40	Groundclearance	at lowest point (Mast)		mm (in)	140 (5.5)
	41		Frame		mm (in)	140 (5.5)
42	Brake	Service			Hydraulic—Foot pedal	
43		Parking			Mechanical—Hand lever	
	Power Steering		Full Hydrostatic Type			
Engine and Transmission	45	Battery	Voltage/Capacity	V/AH	12/45/20h	
	49	Internal Combustion Engine	Model		NISSAN H20II	
	50		Rated Horsepower		32.3kW/2300r.p.m. : 44PS/2300r.p.m. (SAE GROSS 46HP/2300r.p.m.)	
	51		Rated Torque		142N·m/1600r.p.m. : 14.5kg·m/1600r.p.m. (SAE 105ft·lbs/1600 r.p.m.)	
			Number of Cylinders		4	
	52		Displacement	lit (cu-in)	1.982 (120.9)	
		Fuel Tank Capacity	lit (US gal)	60 (15.9)		
55	Transmission	Number of Speed Fwd/Rvs-Type		1-1 Power shift T/M 2-2 Manual shift T/M		
57	Operating Pressure	For Attachment	kg/cm ² (psi)	180 (2560)		

*Power shift T/M **Computed Values ***In Scandinavian Export Units 2150mm

TCM
FD30Z5
3000 (6000)
500 (24)
Diesel
Sit Down Rider Type
Pneumatic
2×/2
3000 (118)
135 (5.3)
1070×125×45 (42.1×4.9×1.8)
6/12
2685 (105.7)
1225 (48.2)
2075 (81.7)
4250 (167.3)
2090 (82.9)
2400 (94.5)
485 (19.1)
2885 (113.6)
18.0 (11.2)
19.5 (12.1)
450 (88.6)
470 (92.5)
450 (88.6)
450 (88.6)
6.6 (3300)/4.4 (2200)
5.3 (2650)/4.4 (2200)
18/20
15/20
19/20
4380 (9660)
6510 (14350)
870 (1920)
1770 (3900)
2610 (5760)
2/2
28×9—15—12 PR
6.50—10—10 PR
1700 (66.9)
1000 (39.4)
970 (38.2)
140 (5.5)
140 (5.5)
Hydraulic— Foot pedal
Mechanical— Hand lever
Full Hydrostatic Type
12/80/20h
ISUZU C240
36.8kW/2500r.p.m. : 50PS/2500r.p.m. (SAE GROSS 49.3HP/2500r.p.m.)
154N·m/1800r.p.m. : 15.7kg·m/1800r.p.m. (SAE 114ft·lbs/1800r.p.m.)
4
2.369 (144.6)
60 (15.9)
1-1 Power shift T/M
2-2 Manual shift T/M
180 (2560)



Note:

Capacities shown are computed with upright in vertical position. Load centers are determined from front face of forks. Capacities are based on a 1000mm or 48-in cube load configuration with the center of gravity (C.G.) at the true center of the cube, and standard forks. Truck capacities with upright in forward tilt position will be less. Long forks, and unusually wide or tall loads may also reduce capacity. Contact TCM representative for capacity information on irregular loads.

Specific capacities are shown on truck nameplates.

TCM products and specifications are subject to improvement and change without notice. TCM Industrial Trucks are equipped with certain safety devices as standard equipment. TCM will not assume any liability for injuries or damage arising from or caused by the removal of any safety devices from any of its products.

NOTES:

- Meets following major standards and code
ISO 1074 Counter Balanced Lift Trucks, Stability & Safety Test (Int'l)
JIS D6001 Industrial Lift Trucks (Japan)
ANSI B56.1-Part II Low & High Lift Trucks, required by OSHA sec. 1910.178(a) (U.S.A.)
FEM Safety Code of Lift Trucks (Europe)
DIN Safety Code¹⁾ of Lift Trucks (Germany)
AS 2359.1-Part I Industrial Truck Code²⁾, Design & Manufacture (Australia)
(countries in parenthesis are mostly referred in the region and near by area)
- Overhead Guard meets ISO 6055, JIS 6021
- Insurance classifications
Underwriter's Laboratories³⁾ requirements as to fire hazard only for G, D, (GS, DS—Options)

1) Germany export trucks

2) Except capacity rating by full forward tilt stacking

3) North America export trucks

STANDARD EQUIPMENT

- Wide view mast
 - Load backrest
 - ITA Class III carriage
 - 1070mm forks
 - J-Lug long life tires
 - Full hydrostatic power steering
 - Retaining rollers
 - Overhead guard
 - Suspension seat*
 - Drawbar pin
 - Cyclopack air cleaner
 - Toggle type parking brake lever
 - Lift and tilt levers
 - 2-spool control valve with pressure relief valve
 - Dipstick for convertor oil
 - Dipstick for hydraulic oil
 - Return hydraulic filter
 - Convertor oil filter
 - Load check valve
 - Lift circuit cut-off valve
 - Tilt lock valve
 - Head lights
 - Rear combination lights
 - Rear view mirrors
 - Back-up lamp
 - Back-up alarm
 - Electric horn
 - Neutral safety switch
 - Deluxe floor mat
 - Headguard canvas (option: US spec.)
 - Cylinder type bonnet stay
 - Overhead air intake
 - Radiator reservoir
 - Tilt adjustable steering post
 - Asbestos free brake
 - Turn signal lights
 - Full transistorized ignition (FTI) ⊕
 - Idle-up device (IUD)
 - Water separator ⊕
 - Hourmeter
 - Water temperature meter
 - Fuel meter
 - Engine oil pressure warning indicator
 - Torque convertor oil temperature gauge
 - Charge indicator
 - Water separator indicator ⊕
 - Glow indicator ⊕
 - Engine auto glow system ⊕
 - Engine after glow system ⊕
 - Ignition key engine stop ⊕
 - Hand grip
 - Log paper clip
 - Operator tool kit
- (* Restraint seat in North American trucks)

OPTIONAL LOADING ATTACHMENTS

- Wide view 2-stage full free VFM masts
- Fine View 2-stage full free VFW masts
- Wide view 3-stage full free VFHM masts
- Wide carriage
- Long forks
- Fork extension sleeves
- Side shift
- Fork positioner
- Hinged forks, bucket
- Load grab
- Rotating load grab
- Paper roll clamp
- Rotating forks
- Load push pull
- Backed block clamp
- Crane arm
- Ram
- Hooks for crane arm
- Fork clamp
- Extension fork carriage

OPTIONAL EQUIPMENT AND ACCESSORIES

- Front dual wheels and fender extension
- Solid tires
- All weather steel cabin
- Heater for steel cabin
- Indicator for air cleaner unit
- O.K. monitor
- Color tire (white, green)
- Power clutch
- Full hydrostatic power steering
- Speedometer
- Ammeter
- Smoke reducton/spark arrester muffler ⊕
- Exhaust purify catalytic muffler
- Overhead exhaust
- Fire extinguisher
- Tilt cylinder boots
- Steering cylinder boot
- LPG exclusive or dual fuel package
- Rear working light
- Rotating warning light
- Steel net (for headguard, for loading system)
- Custom coloring paint
- Auxilliary piping
- Auxilliary hydraulic valve modules
- Radiator dust screen (fine mesh, mediam mesh)
- Fishery industry package
- Central greasing system
- Short-sticks electronic lift/tilt control valve
- Double element air cleaner
- Plate fin radiator
- Foldable backrest seat for LPG

Other on request

⊕: Diesel engine models only

⊗: Gasoline engine models only



Some items and components in photos may be optional.

Wide View Mast VM

Mast Model	Rated Capacity at Certain Load Center			Max. Fork Height		Overall Mast Height				Tilting Angle	Service Weight			
	FG/D30					Lowered		Raised with Backrest			FWD/BWD	FG30		FD30
	kg	lbs		mm	in	mm	in	mm	in	Degree		kg	lbs	kg
VM250	3000	2720	6000	2500	98.4	1825	71.9	3750	147.6	6—12	4230	9330	4340	9570
VM270	3000	2720	6000	2700	106.3	1925	75.8	3950	155.5	6—12	4245	9365	4355	9605
VM300	3000	2720	6000	3000	118.0	2075	81.7	4250	167.3	6—12	4270	9420	4380	9660
VM330	3000	2720	6000	3300	129.9	2225	87.6	4550	179.1	6—12	4295	9475	4405	9715
VM350	3000	2720	6000	3500	137.8	2325	91.5	4750	187.0	6—12	4310	9510	4420	9750
VM375	3000	2720	6000	3750	147.6	2450	96.5	5000	196.9	6—6 *6—12	4330	9550	4440	9790
VM400	3000	2720	6000	4000	157.5	2625	103.3	5250	206.7	6—6 *6—12	4390	9685	4500	9925
VM425	2850 *3000	2580 *2720	5700 *6000	4250	167.3	2750	108.3	5500	216.5	6—6 *6—12	4410	9730	4520	9970
VM450	2600 *3000	2350 *2720	5200 *6000	4500	177.2	2875	113.2	5750	226.4	6—6 *6—12	4430	9770	4540	10010
VM475	2400 *2900	2170 *2630	4800 *5800	4750	187.0	3000	118.1	6000	236.2	6—6 *6—6	4450	9815	4560	10055
VM500	2100 *2850	1900 *2580	4200 *5700	5000	196.9	3125	130.0	6250	246.1	6—6 *6—6	4475	9870	4585	10110
VM550	*2400	*2150	*4750	*5500	216.5	3425	134.8	6750	265.7	*3—6	4700	10365	4810	10605
VM600	*2000	*1790	*3950	*6000	236.2	3675	144.7	7250	285.4	*3—6	4740	10455	4850	10695

Wide View Full Free 2-Stage Mast VFM

Mast Model	Rated Capacity at Certain Load Center			Max. Fork Height		Overall Mast Height				(2) Free Lift with Backrest		Tilting Angle	Service Weight			
	FG/D30					Lowered		(1) Raised with Backrest					FWD/BWD	FG30		FD30
	kg	lbs		mm	in	mm	in	mm	in	mm	in	Degree		kg	lbs	kg
VFM250	3000	2720	6000	2500	98.4	1825	71.9	3760	148.0	600	23.6	6—12	4290	9465	4400	9705
VFM270	3000	2720	6000	2700	106.3	1925	75.8	3960	155.9	700	27.6	6—12	4310	9510	4420	9750
VFM300	3000	2720	6000	3000	118.0	2075	81.7	4260	167.7	850	33.5	6—12	4340	9575	4450	9815
VFM330	3000	2720	6000	3300	129.9	2225	87.6	4560	179.5	1000	39.4	6—12	4365	9630	4475	9870
VFM350	3000	2720	6000	3500	137.8	2325	91.5	4760	187.4	1100	43.3	6—12	4385	9675	4495	9915
VFM375	3000	2720	6000	3750	147.6	2450	96.5	5010	197.2	1225	48.2	6—6 *6—12	4405	9715	4515	9955
VFM400	3000	2720	6000	4000	157.5	2625	103.3	5260	207.1	1400	55.1	6—6 *6—12	4470	9860	4580	10100
VFM425	2850 *3000	2580 *2720	5700 *6000	4250	167.3	2750	108.3	5510	216.9	1525	60.0	6—6 *6—12	4495	9915	4605	10155
VFM450	2600 *3000	2350 *2720	5200 *6000	4500	177.2	2875	113.2	5760	226.7	1650	65.0	6—6 *6—12	4515	9960	4625	10200
VFM475	2400 *2900	2170 *2630	4800 *5800	4750	187.0	3000	118.1	6010	236.6	1775	69.9	6—6 *6—6	4540	10015	4650	10255
VFM500	2100 *2850	1900 *2580	4200 *5700	5000	196.9	3125	130.0	6260	246.4	1900	74.8	6—6 *6—6	4560	10060	4670	10300
VFM550	*2400	*2150	*4750	*5500	216.5	3425	134.8	6760	266.1	2200	86.6	*3—6	4795	10575	4905	10815
VFM600	*2000	*1790	*3950	*6000	236.2	3675	144.7	7260	285.8	2450	96.5	*3—6	4840	10675	4950	10915

NOTE: (1) For height without backrest: -580mm (-22.8 in).
 (2) For free lift without backrest: +580mm (+22.8 in).
 Weight without backrest: -30kg (-65 lbs).

Wide View Full Free 3-Stage Mast VFHM

Mast Model	Rated Capacity at Certain Load Center			Max. Fork Height		Overall Mast Height				(2) Free Lift with Backrest		Tilting Angle	Service Weight			
	FG/D30					Lowered		(1) Raised with Backrest					FWD/BWD	FG30		FD30
	kg	lbs		mm	in	mm	in	mm	in	mm	in	Degree		kg	lbs	kg
VFHM360	2900	2720	6000	3600	141.7	1825	71.9	4860	191.3	600	23.6	6—6 *6—10	4450	9815	4560	10055
VFHM400	2900	2720	6000	4000	157.5	1950	76.8	5260	207.1	725	28.5	6—6 *6—10	4485	9895	4595	10135
VFHM435	2800 *2900	2700 *2720	6000 *6000	4350	171.5	2075	81.7	5610	220.9	850	33.5	6—6 *6—10	4520	9970	4630	10210
VFHM480	2450 *2800	2400 *2720	5300 *6000	4800	189.0	2225	87.6	6060	238.5	1000	39.4	6—6 *6—10	4555	10050	4665	10290
VFHM500	2300 *2750	2220 *2580	4900 *5700	5000	196.9	2325	91.5	6260	246.4	1100	43.3	6—6 *6—10	4585	10115	4695	10355
VFHM540	1700 *2650	1670 *2440	3700 *5400	5400	212.6	2450	96.5	6660	262.2	1225	48.2	3—6 *6—6	4615	10180	4725	10420
VFHM600	1200 *2100	1180 *1990	2600 *4400	6000	236.2	2675	105.3	7260	285.8	1450	57.1	3—6 *6—6	4710	10390	4820	10630
VFHM650	*1700	*1630	*3600	6500	255.9	2890	113.8	7760	305.5	1665	65.6	*3—3	4925	10865	5035	11105
VFHM700	*1350	*1310	*2900	7000	275.6	3110	122.4	8260	325.2	1885	74.2	*3—3	4980	10985	5090	11225

NOTE: (1) For height without backrest: -580mm (-22.8 in).
 (2) For free lift without backrest: +580mm (+22.8 in).
 Weight without backrest: -30kg (-65 lbs).

NOTE: Rated Capacity with (*): Shows capacity with front dual tires.
 Service Weight with Dual Tires: +150kg (+330 lbs.) with special dual tires (28x9-15-12 PR "J").
 +35kg (+80 lbs.) with dual tires (6.00-15-10 PR "J").
 Service Weight of VM/VFM550-600 and of VFHM650-700 represents the weight of vehicle equipped with "special dual tires".
 Loading Speed with VFM/VFHM Mast: Lifting speed with VFM FG 400mm/s (78.8 fpm) with load.
 450mm/s (88.6 fpm) without load.
 FD 400mm/s (78.8 fpm) with load.
 420mm/s (82.7 fpm) without load.
 Lowering speed with VFM/VFHM Mast: 400mm/s (78.8 fpm) with load.
 300mm/s (59.1 fpm) without load.
 Overall Vehicle Length with VFHM Mast: +25mm (+1.0 in) longer than that of STD model with VM mast.

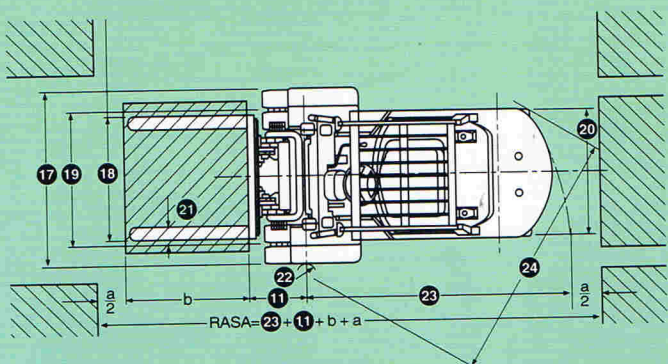
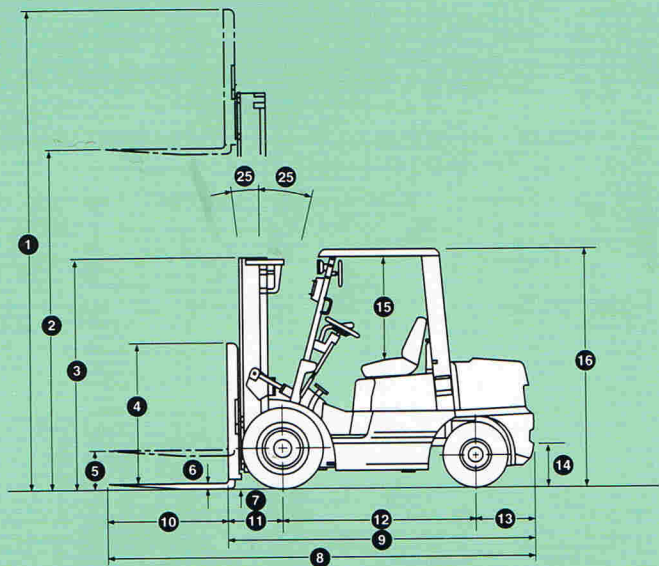
STANDARD DIMENSIONS (Front Single Tire)

Model	FG / D30	
	mm	in
① Overall height, Fork raised (with backrest)	4250	167.3
② Max. fork height	3000	118.1
③ Overall height, Fork lowered (upright)	2075	81.7
④ Backrest height (from upper face of forks)	1220	48.0
⑤ Free lift	135	5.3
⑥ Fork thickness	45	1.8
⑦ Min. under-clearance (bottom of mast)	140	5.5
⑧ Overall length (with fork)	3755	147.8
⑨ Overall length (without forks)	2685	105.7
⑩ Fork length	1070	42.1
⑪ Fork overhang	485	19.1
⑫ Wheel base	1700	66.9
⑬ Rear overhang	500	19.7
⑭ Drawbar height	265	10.4
⑮ Overhead guard clearance (from face of seat)*	1005	39.6
⑯ Overall height (overhead guard)*	2090	82.3
⑰ Overall width	1225	48.2
⑱ Lateral fork adjustment (outside of fork)	250~1090	9.8~42.9
⑲ Tread (front)	1000	39.4
⑳ Tread (rear)	970	38.2
㉑ Fork width	125	4.9
㉒ Inside turning radius	200	7.9
㉓ Outside turning radius	2400	94.5
㉔ Min. intersecting aisle	2110	83.1
㉕ Tilt angles (forward-backward)	6°~12°	

*: In Scandinavian Export Trucks ⑮ 1065mm, ⑯ 2150mm

DUAL DRIVE TIRE DIMENSIONS

Model	FG / D30			
	6.00—15—10 PR		28×9—15—12 PR	
Tire Size	mm	in	mm	in
⑰ Overall width	1520	59.8	1750	68.9
⑲ Tread (front)	1170	46.1	1260	49.6
㉒ Inside turning radius	100	3.9	100	3.9
㉓ Outside turning radius	2430	95.7	2500	98.4
㉔ Min. intersecting aisle	2210	87.0	2290	90.1



RASA = Right Angle Stacking Aisle
 b = Load Length
 a = Clearance

GROUND-CLEARANCE	FG / D30	
	mm	in
Drive Axle	145	5.7
Steer Axle	175	6.9
Counter Weight	170	6.7
Frame	140	5.5

TCM products and specifications are subject to change without notice.

Manufactured by

TCM

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