

TCM



Gas & Diesel Powered Forklift Truck

Pneumatic Tire Type

FHG36T3

8000 lbs/24 in.
3600 kg/600 mm

K25 Engine meets U.S.EPA
Tier 1 emission control
requirements.

FHD36Z2

8000 lbs/24 in.
3600 kg/600 mm

4JG2 Engine meets U.S.EPA
Tier 2 emission control
requirements.

PERFORMANCE

GREATER SPEED.

Travel speed : 15 mph (24 km/h)
Lifting speed (with load) : 80.7 fpm (400mm/s)-FHG model

POWERFUL ENGINE.

Rated horsepower : FHG36 60.9HP (45.4kW)
FHD36 66HP (49.2kW)
Rated torque : FHG36 136.4ft·lbs (185N·m)
FHD36 152.0ft·lbs (206.1N·m)

EASY OPERATION

ELECTRIC CONTROLLED
AUTOMATIC TRANSMISSION.

FULL HYDRAULIC
POWER STEERING.

COMFORT WITH SAFETY

TILT STEERING COLUMN.

LOW NOISE LEVEL.

(at the operator's ear) : FHG36 80 dBA
FHD36 84 dBA

BRAKE LEVER WITH LOCKING FUNCTION.

LARGE OPEN STYLE STEP.

HANDY FLOORBOARD OPENING.



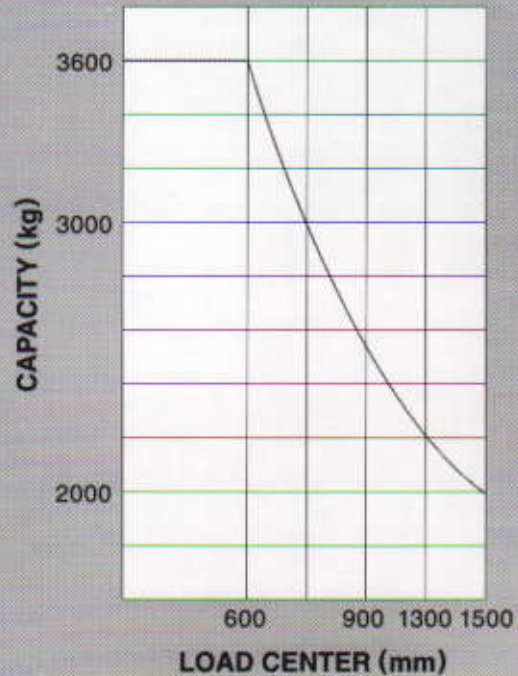
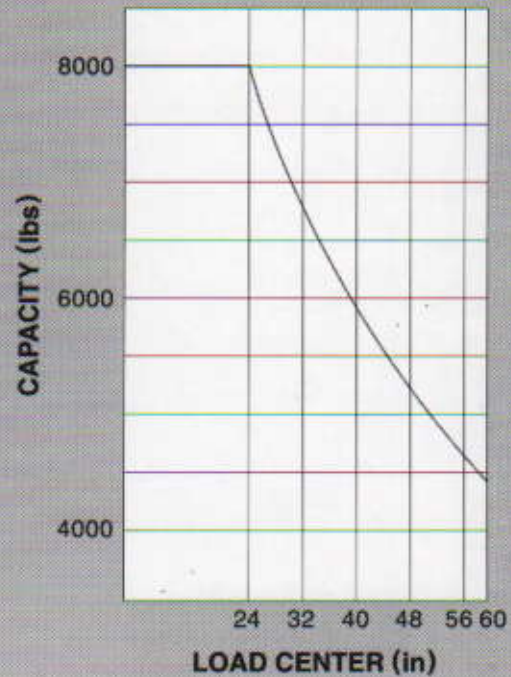
STANDARD SPECIFICATIONS

				TC		
CHARACTERISTICS	1	Manufacturer				
	2	Model		FHG36T3		
	3	Load Capacity		lb (kg)	8000 (3600)	
	4	Load Center		in (mm)	24 (600)	
	5	Power Type			Gasoline	
	6	Control Type			Sit Down Rider Type	
	7	Tire Type	Front / Rear			Pneumatic
	8	Wheels (x = driven)	Front / Rear			2x / 2
DIMENSIONS	9	Maximum Fork Height		in (mm)	118.1(3000)	
	10	Free Lift		in (mm)	5.9 (150)	
	13	Fork Size	LxWxT	in (mm)	42.1x5.9x2.0 (1070x150x50)	
	14	Tilt Angle	Fwd / Bwd	deg.	6 / 12	
	15	Length to Fork Face		in (mm)	114.6 (2910)	
	16	Overall Width		in (mm)	52.4 (1330)	
	17	Mast Height Fork Lowered		in (mm)	82.1 (2085)	
	18	Overall Height Fork Raised		in (mm)	167.9 (4265)	
	19	Overhead Guard Height		in (mm)	85.0 (2160)	
	21	Turning Radius (Outside)		in (mm)	102.4 (2600)	
	22	Fork Overhang (Centerline of front axle to front face of forks)		in (mm)	20.9 (530)	
23	Basic Right Angle Stacking Aisle Width (Add load length and clearance)		in (mm)	123.2 (3130)		
PERFORMANCE	24	Travel Max. (Fwd / Rvs)	Forward 1st-2nd	mph (km / h)	6.3-15.0 (10-24)	
			Reverse 1st	mph (km / h)	11.9 (19)	
	25	Speed	Lifting	With Load	fpm (mm / s)	80.7 (410)
				Without Load	fpm (mm / s)	82.7 (420)
	26		Lowering	With Load	fpm (mm / s)	88.6 (450)
				Without Load	fpm (mm / s)	108.3 (550)
	28	Max. Drawbar Pull		With Load	lb (kN)	6950 (30.4)
Without Load				lb (kN)	2850 (12.7)	
29	Gradeability at 1 mph (1.6 km/h)		With Load	% (tan θ)	27	
			Without Load	% (tan θ)	18	
WEIGHT	32	Total Weight		lb (kg)	12020 (5450)	
	33	Weight Distribution	With Load	Front	lb (kg)	17510 (7940)
				Rear	lb (kg)	2450 (1110)
	34		Without Load	Front	lb (kg)	4590 (2080)
				Rear	lb (kg)	7430 (3370)
BRAKES AND TIRES	35	Tire	Number	Front / Rear	2 / 2	
	36		Size	Front	250-15-16PR (I)	
	37		Rear	7.00-12-12PR (I)		
	38	Wheelbase		in (mm)	70.9 (1800)	
	39	Tread		Front	in (mm)	43.1 (1095)
				Rear	in (mm)	43.7 (1110)
	40	Groundclearance	at lowest point (Mast)		in (mm)	5.71 (145)
	41		Frame	in (mm)	6.1 (155)	
42	Brake	Service			Power assist hydraulic—Foot pedal	
43		Parking			Mechanical—Hand lever	
	Power Steering				Full hydrostatic Type	
ENGINE AND TRANSMISSION	45	Battery	Voltage / Capacity		1x12V 45AH / 20h	
	49		Model		NISSAN K25	
	50	Internal Combustion Engine	Rated Horsepower		45.4kW / 2800 r.p.m. : 61.7PS / 2800 r.p.m. (JIS D1001 60.9HP / 2800 r.p.m.)	
	51		Rated Torque		185N·m / 1600 r.p.m. : 18.9kg·m / 1600 r.p.m. (136.4ft·lbs / 1600 r.p.m.)	
	52		Number of Cylinders		4	
			Displacement	cu·in (lit)	152 (2.488)	
		Fuel Tank Capacity	US gal (lit)	15.9 (60)		
	55	Transmission	Number of Speed Fwd / Rvs-Type		2 / 1 Power shift transmission	
57	Operating Pressure	For Attachment	psi (kg / cm ²)	2630 (185)		

TCM
FHD36Z2
8000 (3600)
24 (600)
Diesel
Sit Down Rider Type
Pneumatic
2x / 2
118.1(3000)
5.9 (150)
42.1x5.9x2.0 (1070x150x50)
6 / 12
114.6 (2910)
52.4 (1330)
82.1 (2085)
167.9 (4265)
85.0 (2160)
102.4 (2600)
20.9 (530)
123.2 (3130)
6.3-15.0 (10-24)
11:9 (19)
78.8 (400)
86.6 (440)
88.6 (450)
108.3 (550)
7500 (33.3)
2850 (12.7)
29
18
12220 (5540)
17600 (7980)
2560 (1160)
4680 (2120)
7540 (3420)
2 / 2
250-15-16PR (I)
7.00-12-12PR (I)
70.9 (1800)
43.1 (1095)
43.7 (1110)
5.71 (145)
6.1 (155)
Power assist hydraulic — Foot pedal
Mechanical — Hand lever
Full hydrostatic Type
1x12 V 80 AH / 20 h
ISUZU 4JG2
49.2kW / 2450 r.p.m. : 66.9PS / 2450 r.p.m. (SAE GROSS 66HP / 2450 r.p.m.)
206.1N·m / 1600~1800r.p.m. : 21kg·m / 1600~1800r.p.m. (152ft·lbs / 1600~1800r.p.m.)
4
187 (3.059)
15.9 (60)
2 / 1 Power shift transmission
2630 (185)

LOAD CHART

FHG36T3/FHD36Z2



Note:

Capacities shown are computed with upright in vertical position. Load centers are determined from front face of forks. Capacities are based on a 1000 mm 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 nameplate.

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.

STANDARD EQUIPMENT

- Asbestos free brake
- Back-up alarm
- Back-up lamps
- Charge indicator
- Converter oil filter
- Cyclopack air cleaner
- Cylinder type bonnet stay
- Deluxe floor mat
- Dipstick for converter oil
- Dipstick for hydraulic oil
- Drawbar pin
- Electric controlled automatic transmission
- Electric horn
- Electric shifting lever
- Engine after glow system (G)
- Engine auto glow system (D)
- Engine check indicator (G)
- Engine oil pressure warning indicator
- Fuel meter
- Full hydrostatic power steering
- Full transistorized ignition (FTI) (G)
- Glow indicator (D)
- Hand grip
- Head lights
- Hourmeter
- Ignition key engine stop (G)
- J-Lug long life tires
- Lift and tilt levers
- Lift circuit cut-off valve
- Load backrest
- Load flow regulator valve
- Log paper clip
- Neutral safety switch
- Operator restrain seat with seat belt
- Overhead air intake
- Overhead guard
- Power brake
- Radiator reservoir
- Rear combination lights
- Rear view mirrors
- Retaining rollers
- Return hydraulic filter
- Tilt adjustable steering post
- Tilt lock valve
- Toggle type parking brake lever with locking function
- Turn signal lights
- Water separator (G)
- Water separator indicator (D)
- Water temperature meter
- Wide view mast
- 1070 mm forks
- 2-spool control valve with pressure relief valve
- 3-way catalytic muffler (G)

(*Restrain seat in North American, European and Oceanian truck)

(G: FHG, D: FHD)

OPTIONAL LOADING ATTACHMENTS

- Alternative fork lengths
- Crane arm
- Fork extension sleeves
- Fork positioner
- Hinged forks, bucket
- Hooks for crane arm
- Load grab
- Paper roll clamp
- Ram
- Rotating forks
- Side shift
- Wide carriage
- Wide view 2-stage full free VFM masts
- Wide view 3-stage full free VFHM masts

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 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

1) Germany export trucks

2) Except capacity rating by full forward tilt stacking

3) North America export trucks

OPTIONAL EQUIPMENT AND ACCESSORIES

- Ammeter
- Auxiliary hydraulic valve modules
- Auxiliary piping
- Custom finish color paint
- Double element air cleaner
- Exhaust purify catalytic muffler (D)
- Overhead exhaust
- Fire extinguisher
- Foldable backrest seat for LPG (G)
- Front dual wheels and fender extension
- Indicator for air cleaner unit
- LPG exclusive or dual fuel package (G)
- O.K. monitor
- Plate fin radiator
- Radiator dust screen (fine mesh, medium mesh)
- Rear working light
- Rotating warning light
- Smoke reduction/spark arrester muffler (D)
- Solid tires
- Speedometer
- Steel net (for headguard, for loading system)
- Tilt cylinder boots

Others on request

(G: FHG, D: FHD)



Wide View Mast VM

MAST Model	Rated Capacity		Max. Fork Height		Overall Mast Height				Tilting Angle		Service Weight			
	Load Center				Lowered		(1) Raised with Backrest		FWD/BWD	Degree	FHG36		FHD36	
	24 in	600mm	in	mm	in	mm	in	mm			lbs	kg	lbs	kg
VM250	8000	3600	98.4	2500	72.0	1830	148.2	3765	6-12	11900	5395	12100	5485	
VM270	8000	3600	106.3	2700	76.0	1930	156.1	3965	6-12	11945	5415	12145	5505	
VM300	8000	3600	118.1	3000	81.9	2080	167.9	4265	6-12	12020	5450	12220	5540	
VM330	8000	3600	130.0	3300	87.8	2230	179.7	4565	6-12	12085	5480	12285	5570	
VM350	8000	3600	137.8	3500	91.7	2330	187.6	4765	6-12	12130	5500	12330	5590	
VM375	8000	3600	147.6	3750	96.7	2455	197.4	5015	6-6 *6-12	12195	5530	12395	5620	
VM400	8000	3600	157.5	4000	103.5	2630	207.3	5265	6-6 *6-12	12380	5615	12580	5705	
VM425	7600	3450	167.3	4250	108.5	2755	217.1	5515	6-6 *6-12	12440	5640	12640	5730	
VM450	7400	3350	177.2	4500	113.4	2880	227.0	5765	6-6 *6-12	12490	5665	12690	5775	
VM475	7150 *7800	3250 *3450	187.0	4750	118.3	3005	236.8	6015	6-6 *6-6	12560	5695	12760	5785	
VM500	6900 *7400	3150 *3350	196.9	5000	123.2	3130	246.7	6265	6-6 *6-6	12615	5720	12815	5810	
VM550	*6900	*3150	216.5	5500	135.0	3430	266.3	6765	*3-6	13020	5905	13220	5995	
VM600	*6500	*2950	236.2	6000	144.9	3680	286.0	7265	*3-6	13140	5960	13340	6050	

Wide View Full Free 2-Stage Mast VFM

MAST Model	Rated Capacity		Max. Fork Height		Overall Mast Height				(2) Free Lift with Backrest		Tilting Angle		Service Weight			
	Load Center				Lowered		(1) Raised with Backrest		(2) Free Lift with Backrest		FWD/BWD	Degree	FHG36		FHD36	
	24 in	600mm	in	mm	in	mm	in	mm	lbs	kg			lbs	kg		
VFM250	7900	3600	98.4	2500	72.0	1830	148.0	3760	24.0	610	6-12	12055	5465	12255	5555	
VFM270	7900	3600	106.3	2700	76.0	1930	155.9	3960	28.0	710	6-12	12110	5490	12310	5580	
VFM300	7900	3600	118.1	3000	81.9	2080	167.7	4260	33.9	860	6-12	12185	5525	12385	5615	
VFM330	7900	3600	130.0	3300	87.8	2230	179.5	4560	39.8	1010	6-12	12265	5560	12465	5650	
VFM350	7900	3600	137.8	3500	91.7	2330	187.4	4760	43.7	1110	6-12	12305	5580	12505	5670	
VFM375	7900	3600	147.6	3750	96.7	2455	197.2	5010	48.6	1235	6-6 *6-12	12385	5615	12585	5705	
VFM400	7900	3600	157.5	4000	103.5	2630	207.1	5260	55.5	1410	6-6 *6-12	12560	5695	12760	5785	
VFM425	7600 *7900	3450 *3600	167.3	4250	108.5	2755	216.9	5510	60.4	1535	6-6 *6-12	12625	5725	12825	5815	
VFM450	7350 *7900	3350 *3600	177.2	4500	113.4	2880	226.8	5760	65.4	1660	6-6 *6-12	12695	5755	12895	5845	
VFM475	7150 *7600	3250 *3450	187.0	4750	118.3	3005	236.6	6010	70.3	1785	6-6 *6-12	12760	5785	12960	5875	
VFM500	6900 *7350	3150 *3350	196.9	5000	123.2	3130	246.5	6260	75.2	1910	6-6 *6-12	12825	5815	13025	5905	
VFM550	*6900	*3150	216.5	5500	135.0	3430	266.1	6760	87.0	2210	*3-6	13245	6005	13445	6095	
VFM600	*6500	*2950	236.2	6000	144.9	3680	285.8	7260	96.9	2460	*3-6	13345	6050	13545	6140	

NOTE: (1) For height without backrest - 21.5 in (- 545mm) (2) For free lift without backrest + 21.5 in (+ 545mm)

Wide View Full Free 3-Stage Mast VFHM

MAST Model	Rated Capacity		Max. Fork Height		Overall Mast Height				(2) Free Lift with Backrest		Tilting Angle		Service Weight			
	Load Center				Lowered		(1) Raised with Backrest		(2) Free Lift with Backrest		FWD/BWD	Degree	FHG36		FHD36	
	24 in	600mm	in	mm	in	mm	in	mm	lbs	kg			lbs	kg		
VFHM360	7700	3500	141.7	3600	72.0	1830	191.3	4860	24.0	610	6-6 *6-10	12485	5660	12685	5750	
VFHM400	7700	3500	157.5	4000	77.0	1955	207.1	5260	28.9	735	6-6 *6-10	12580	5705	12780	5795	
VFHM435	7500 *7700	3400 *3500	171.3	4350	81.9	2080	220.9	5610	33.9	860	6-6 *6-10	12660	5740	12860	5830	
VFHM480	7300 *7500	3300 *3400	189.0	4800	87.8	2230	238.6	6060	39.8	1010	6-6 *6-10	12760	5785	12960	5875	
VFHM500	6900 *7300	3200 *3300	196.9	5000	91.7	2330	246.5	6260	43.7	1110	6-6 *6-10	12835	5820	13035	5910	
VFHM540	6600 *7100	3000 *3200	212.6	5400	96.7	2455	262.2	6660	48.6	1235	3-6 *3-6	12915	5855	13115	5945	
VFHM600	4900 *6700	2200 *3000	236.2	6000	105.5	2680	285.8	7260	57.5	1460	3-6 *3-6	13210	5990	13410	6080	
VFHM650	*5900	*2700	255.9	6500	114.0	2895	305.5	7760	65.9	1675	*3-3	13495	6120	13695	6210	
VFHM700	*5500	*2500	275.6	7000	122.6	3115	325.2	8260	74.6	1895	*3-3	13650	6190	13850	6280	

NOTE: (1) For height without backrest - 21.5 in (- 545mm) (2) For free lift without backrest + 21.5 in (+ 545mm)

NOTE: Rated capacity with (*): Shows capacity with dual drive wheels.

Service Weight with Dual Drive Wheel: + 165 lbs (+ 75 kg) with dual tires (28 x 9-15-12 PR "J")

Service Weight of VM/VFM550-600 and of VFHM650-700 represents the weight of vehicle equipped with "dual tires"

Loading Speed with VFM/VFHM: Lifting speed with VFM 66.9 fpm (340 mm/s) with load, 70.9 fpm (360 mm/s) without load,

with VFHM 74.8 fpm (380 mm/s) with load, 80.7 fpm (410 mm/s) without load,

Lowering speed with VFM 76.8 fpm (390 mm/s) with load, 65.0 fpm (330 mm/s) without load,

with VFHM 86.6 fpm (440 mm/s) with load, 74.8 fpm (380 mm/s) without load.

Overall Vehicle Length with VFHM Mast: + 1.2 in (+ 30 mm) than STD model.

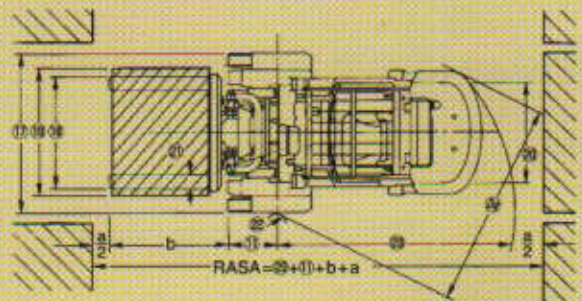
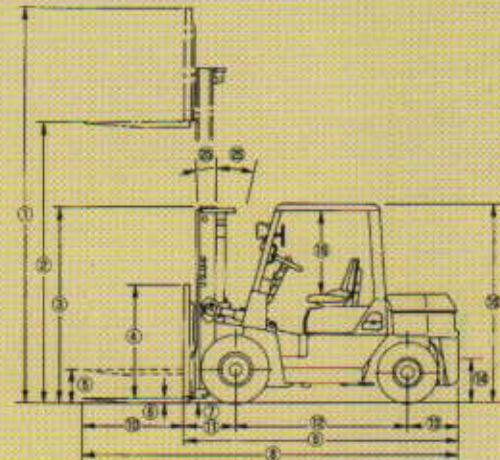
STANDARD DIMENSIONS (Front Single Tire)

Model	FHG/D36	
	in	mm
① Overall height, Fork raised (with backrest)	167.9	4265
② Max. fork height	118.1	3000
③ Overall height, Fork lowered (upright)	82.1	2085
④ Backrest height (from upper face of forks)	48.0	1220
⑤ Free lift	5.9	150
⑥ Fork thickness	2.0	50
⑦ Min. under-clearance (bottom of mast)	5.71	145
⑧ Overall length (with forks)	156.6	3980
⑨ Overall length (without forks)	114.5	2910
⑩ Fork length	42.1	1070
⑪ Fork overhang	20.9	530
⑫ Wheelbase	70.9	1800
⑬ Rear overhang	22.8	580
⑭ Coupler height	15.6	395
⑮ Overhead guard clearance (from face of seat)	39.4	1000
⑯ Overall height (overhead guard)	85.0	2160
⑰ Overall width	52.4	1330
⑱ Lateral fork adjustment (outside of fork)	11.8~47.2	300~1200
⑲ Tread (front)	43.1	1095
⑳ Tread (rear)	43.7	1110
㉑ Fork width	5.9	150
㉒ Inside turning radius	5.1	130
㉓ Outside turning radius	102.4	2600
㉔ Min. intersecting aisle	89.4	2270
㉕ Tilting angles (forward-backward)	6°~12°	

DUAL DRIVE TIRE DIMENSIONS

Model	FHG/D36	
	in	mm
Tire Size	28×9-15-12PR	
① Overall width	72.6	1845
② Tread (front)	53.3	1355
③ Inside turning radius	3.9	100
④ Outside turning radius	107.1	2720
⑤ Min. intersecting aisle	96.9	2460

FHG36T3/FHD36Z2



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

GROUND CLEARANCE	FHG/D36	
	in	mm
Drive Axle	6.3	160
Steer Axle	8.3	210
Counter Weight	6.9	175
Frame	6.1	155

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Manufactured by

TCM

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