



M SERIES

ROUGH TERRAIN VERTICAL MAST forklift



**“Purpose built
for your needs”**



The **M SERIES** Rough Terrain Forklifts are built from the ground up to exceed performance expectations in rough terrain applications.

EXCELLENT CAPACITIES

The M Series Rough Terrain Forklift line provides operating capacities from 6,000 lbs. to 10,000 lbs. providing the right model for the right application.

MAST OPTIONS

With two-stage, no free lift and three-stage with or without free lift mast configurations available, Manitou provides the choices you need to get the best machine for your operation. A wide variety of lift heights and a 45 degree lay down tilt option are also available.

ROUGH TERRAIN FRAME

The M Series frame was designed to resist the stresses seen in rough terrain applications, increasing the frame and component life. The frame comes with, or without, frame leveling.

TRANSMISSION OPTIONS

Choose either a torque converter with 4-speed forward and reverse, or a two-speed gearbox hydrostatic drive system.

OPERATOR COMFORTS

Not only are the *M Series* Vertical-Mast Forklifts built for performance on rough terrain, but also for exceptional comfort and easy maintenance.

EXCELLENT FORWARD VISIBILITY

A low dashboard provides excellent visibility to the front of the truck.

TWO 100" CAB OPTIONS

An open cab or enclosed cab with air conditioning are available. Either cab provides a wide opening for easy entrance/exit.

REDUCE OPERATOR FATIGUE

Rubber mounted shock-absorbing operator's compartment reduces vibrations felt by the operator, reducing fatigue.

EASY ACCESS FOR SERVICE AND MAINTENANCE

The operator's compartment tilts up, providing easy access to the transmission for routine maintenance. A one piece engine hood provides excellent access to the engine components.



MAST SELECTIONS AND CAPACITIES

MAST TYPE	MAXIMUM FORK HEIGHT (mm)	OVERALL LOWERED HEIGHT (mm)	FREE FORK HEIGHT (mm)	TILT*	Capacity in pounds at 24" load center		
					M 30 (kg)	M 40 (kg)	M 50 (kg)
2-Stage No Free Lift	89" (2261)	81" (2057)	8" (203)	20°/15°		8,000 lbs. (3629)	10,000 lbs. (4536)
	99" (2515)	81" (2057)	8" (203)	20°/15°	6,000 lbs. (2722)		
	127" (3226)	100" (2540)	8" (203)	20°/15°		8,000 lbs. (3629)	10,000 lbs. (4536)
	137" (3480)	100" (2540)	8" (203)	20°/15°	6,000 lbs. (2722)		
	163" (4140)	118" (2997)	8" (203)	20°/15°		8,000 lbs. (3629)	9,000 lbs. (4082)
	173" (4394)	118" (2997)	8" (203)	20°/15°	5,500 lbs. (2495)		
	171" (4343)	122" (3099)	8" (203)	20°/15°		8,000 lbs. (3629)	9,000 lbs. (4082)
3-Stage No Free Lift	181" (4597)	122" (3099)	8" (203)	20°/15°	5,500 lbs. (2495)		
	135" (3249)	77" (1956)	16" (406)	20°/15°	6,000 lbs. (2722)		
	147" (3734)	81" (2057)	16" (406)	20°/15°	6,000 lbs. (2722)		
	204" (5182)	100" (2540)	16" (406)	20°/10°	4,500 lbs. (2041)		
	258" (6553)	118" (2997)	16" (406)	20°/10°	4,000 lbs. (1814)		
3-Stage Full Free Lift	270" (6858)	122" (3099)	16" (406)	20°/10°	pending		
	137" (3480)	77" (1956)	48" (1219)	20°/10°	6,000 lbs. (2722)		
	134" (3404)	81" (2057)	47" (1194)	20°/10°		8,000 lbs. (3629)	10,000 lbs. (4536)
	149" (3785)	81" (2057)	52" (1321)	20°/10°	6,000 lbs. (2722)		
	189" (4801)	100" (2540)	66" (1676)	20°/10°		6,000 lbs. (2722)	8,500 lbs. (3856)
	206" (5232)	100" (2540)	71" (1803)	20°/10°	3,500 lbs. (1588)		
	243" (6172)	118" (2997)	84" (2134)	20°/10°		4,500 lbs. (2041)	5,500 lbs. (2495)
	258" (6553)	118" (2997)	89" (2261)	20°/10°	3,500 lbs. (1588)		
	257" (6528)	120" (3048)	88" (2235)	20°/10°		4,500 lbs. (2041)	5,500 lbs. (2495)
272" (6909)	122" (3099)	93" (2362)	20°/10°	3,500 lbs. (1588)			

* 45 degree option available

** All capacity ratings based on standard drive tires, axles, tilt angles specified with no attachments. All other capacity ratings must be reviewed by Manitou.

M SERIES ROUGH TERRAIN FORKLIFT SPECIFICATIONS, FEATURES & REFERENCE DIAGRAMS

		M 30-2/M 30-4	M 40-2/M 40-4	M 50-2/M 50-4
PERFORMANCE	Lift Capacity – 24" Load Center (kg)	6,000 lbs. (2721)	8,000 lbs. (3629)	10,000 lbs. (4536)
	Max. Lift Height (m)	22'8" (6.9)	21'7" (6.6)	21'7" (6.6)
	Forks			
	Length (m)	48" (1.2)	48" (1.2)	48" (1.2)
	Width x Thickness (mm)	5" x 1.75" (127 x 44.45)	6" x 2" (152 x 51)	6" x 2" (152 x 51)
	Max. Distance between Forks (m)	42" (1.1)	42" (1.1)	42" (1.1)
BRAKES	Service (pedal)	Fully enclosed, oil immersed disc type		
	Parking Brake	Spring-applied, hydraulic-release		
ENGINE OPTIONS	Model	Caterpillar / Perkins	Caterpillar / Perkins	Caterpillar / Perkins
	Type	Diesel		
	Displacement (L)	269 cu.in. (4.4)	269 cu.in. (4.4)	269 cu.in. (4.4)
	Power @ 2200 rpm (kW)	94 hp (70.1)	94 hp (70.1)	94 hp (70.1)
	Injection	Direct	Direct	Direct
	Cooling	Water	Water	Water
TRANSMISSION	Type	Hydrostatic / Torque Converter	Hydrostatic / Torque Converter	Hydrostatic / Torque Converter
	Maximum Travel Speed (km/hr)	16 mph (25.7)	16 mph (25.7)	16 mph (25.7)
	Wheel Drive	2 / 4	2 / 4	2 / 4
HYDRAULICS	Pump Type	Gear Type	Gear Type	Gear Type
	System Capacity (cm ³)	2.26 cu.in. (37)	2.26 cu.in. (37)	2.26 cu.in. (37)
	Flow Rate (L/min)	25 gpm (94.6)	25 gpm (94.6)	25 gpm (94.6)
CAPACITIES	Cooling System (L)	5 gal. (18.9)	5 gal. (18.9)	5 gal. (18.9)
	Engine Oil (L)	2.75 gal. (10.4)	2.75 gal. (10.4)	2.75 gal. (10.4)
	Fuel Tank (L)	25 gal. (94.6)	25 gal. (94.6)	25 gal. (94.6)
	Hydraulic Fluid (L)	25 gal. (94.6)	25 gal. (94.6)	25 gal. (94.6)
SPECIFICATIONS	Nominal Weight (kg)	14,800 lbs. (6713)	17,385 lbs. (7886)	19,245 lbs. (8729)
	Turning Radius (m)	11'0" (3.6)	11'0" (3.6)	11'0" (3.6)
	Overall Height (m)	8'4" (2.54)	8'4" (2.54)	8'4" (2.54)
	Overall Width (m)	7'4" (2.2)	7'2" (2.18)	7'2" (2.18)
	Overall Length (m)	12'2" (3.7)	12'7" (3.83)	12'9" (3.88)
	Ground Clearance (mm)	11" (279)	11" (279)	11" (279)
TIRES	Drive (Front)	Titan 17.5 x 24R-4	Titan 15.5 x 25 L2	Titan 15.5 x 25 L2
	Steer (Rear)	OTR 12 x 16.5	OTR 12 x 16.5	OTR 12 x 16.5

M SERIES FEATURES	M 30	M 40	M 50
94 hp. 4-cyl. Tier III Diesel Engine	●	●	●
4-spool Hydraulic Valve Assembly	●	●	●
77" Cab Height	○		
81" Cab Height	○	○	○
100" Cab Height	○	○	○
45° Forward and 10° Back Frame Tilt	○	○	○
Back-Up Alarm	●	●	●
Differential Lock	○	○	○
Fenders	●	●	●
Frame Leveling, Standard 100" Cab	○	○	○
Front and Rear Worklights	●	●	●
Fully Enclosed Cabs	○	○	○
Heavy-Duty Steer Axle	●	●	●
Hydraulic Load Accumulator	●	●	●
Lockable Engine Compartment	●	●	●
Open Cab	●	●	●
Rubber-Mounted Tilting Operator's Compartment	●	●	●
Side-Shift Mast	●	●	●
Tow Pin	●	●	●
Two-Wheel Drive	○	○	○
Four-Wheel Drive	○	○	○

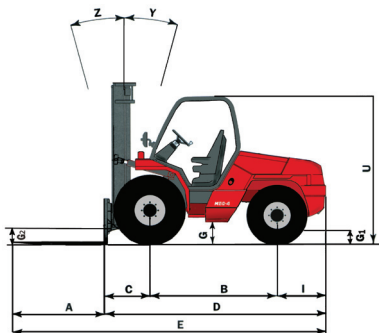
● Standard ○ Optional

	M 30	M 40	M 50
A	48" (1200)	48" (1200)	48" (1200)
B	85" (2159)	85" (2159)	85" (2159)
C	33.5" (851)	35" (889)	35" (889)
D	145.5" (3696)	151" (3835)	153" (3886)
E	193.5" (4915)	199" (5055)	201" (5105)
F	70.5" (1791)	70.5" (1791)	70.5" (1791)
F1	71.5" (1816)	71.5" (1816)	71.5" (1816)
G	17.75" (451)	17.75" (451)	17.75" (451)
G1	11" (279)	11" (279)	11" (279)
G2	12" (305)	12" (305)	12" (305)
I	29" (737)	32" (813)	34" (864)
U	100" (2540)	100" (2540)	100" (2540)
W	88.5" (2248)	86" (2184)	86" (2184)
Y	Refer to Chart on Page 3		
Z	20°	20°	20°

(mm)

FSC

DIMENSIONS REFERENCE DIAGRAMS



This publication in no way constitutes an offer and the company reserves the right to alter specification without notice.



MANITOU AMERICAS • PO Box 179 • West Bend, WI 53095
Tel: 262-334-9461 • Fax: 262-338-7517 • www.us.manitou.com