

SPEC. SHEET No. TM-50Z-4-002/EX-02 [TM-ZR503]  
SPEC. SHEET No. TM-50Z-4-302/EX-02 [TM-ZR503(H)]  
DATE December, 1999

## TADANO CARGO CRANE

MODEL : ☐ TM-ZR503  
☐ TM-ZR503 (H) ----- with hook stowing device

## CRANE SPECIFICATIONS

CRANE CAPACITY 3,230 kg at 3.7 m (4-part lines)

BOOM 3-sectioned, fully hydraulic telescoping boom of  
pentagonal box construction

Retracted length ----- 3.47 m  
Extended length ----- 8.31 m  
Extending speed ----- 4.84 m / 18 s  
Elevation ----- Elevated by a double-acting  
hydraulic cylinder  
Elevating speed ----- 1° to 78° / 12 s  
Boom point ----- 2 sheaves

WINCH Hydraulic motor driven Spur gear speed reduction, provided  
with mechanical brake

Single line pull ----- 7.94 kN{810 kgf}  
Single line speed ----- 76 m/min. (at 4th layer)  
Wire rope  
diameter × length -----  
8 mm × 56 m  
breaking strength ----- 43.1 kN{4.39 tf}  
construction ----- 7 × 7 + 6 × WS(26)  
Hook block ----- 2 sheaves

HOOK STOWING DEVICE Mechanically stowed beneath boom top portion  
[TM-ZR503(H) only]

NOTE : Operating speeds of the crane are guaranteed under the condition that the pump delivery is 60 L/min.

**RATED LIFTING CAPACITIES IN KILOGRAMS**

B \ A	3.47 m
	5.91 m
	8.31 m
3.7 m and below	3,230
4.5 m	2,580
5.0 m	2,280
5.5 m	2,030
6.0 m	1,830
6.5 m	1,680
7.0 m	1,550
7.5 m	1,430
8.09m	1,280

A : Boom Length

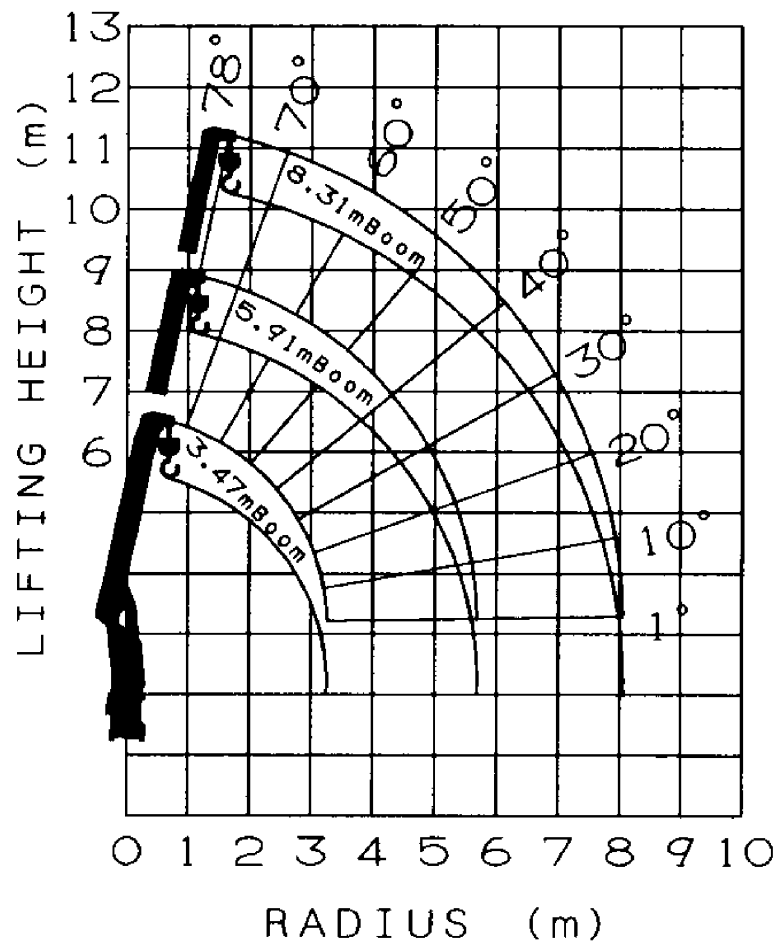
B : Load radius

**NOTES :**

1. The mass of the hook (30 kg), slings and all similarly used load handling devices must be added to the mass of the load.
2. The above numerical values of rated lifting capacities are based on crane strength only.

The rated lifting capacities based on stability may lower than those in the above table depending on the loading conditions and the types of the chassis.

# WORKING RANGE

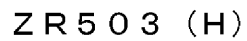


## NOTE:

The above lifting heights and boom angles are based on a straight (unladen) boom, and allowance should be made for boom deflection obtained under laden conditions.

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## GENERAL DATA FOR SUITABLE TRUCKS

Gross vehicle mass (including crane mass) -----  
 12,000 to 25,000 kg

P.T.O. torque ----- 157 N·m{16 kgf·m} min.

P.T.O. revolution ----- Approx. 270 to 2,800 min<sup>-1</sup>{rpm}

Width for crane mounting ----- Approx. 750 mm min.

Frame ----- Weight distribution and frame strength  
 should be calculated for each truck

Frame width range (inside to outside) -----  
 Approx. 610 to 960 mm

Frame height (ground to frame top) -----  
 Approx. 1,235 mm max.  
 (Height of crane mounting base can be  
 changed by combination of jack floats  
 and crane bases)