

TADANO CARGO CRANE

MODEL: TM-ZR823(S)

CRANE SPECIFICATIONS

MAXIMUM LIFTING CAPACITY 8,200 kg at 1.8 m (6-part line)

CRANE CAPACITY 4,810 kg at 3.1 m (4-part line)

BOOM Three-sectioned, fully hydraulic telescoping boom

Retracted length ----- 4.20 m

Extended length ----- 9.50 m

Extending speed ----- 5.3 m / 17 s

Elevation ----- Elevated by a double-acting

hydraulic cylinder

Elevating speed ----- 1° to 82° / 24 s

Boom point ----- 3 sheaves

<u>WINCH</u> Hydraulic motor driven Spur gear speed reduction, provided

with mechanical brake

Single line pull ----- 14.72 kN {1,500 kgf}

Single line speed ------64 m/min (at 4th layer)

Wire rope

Diameter x length ----- 10 mm x 63 m

Breaking strength ---- 73.5 kN {7.5 tf}

Construction ----- 7 x 7 + 6 x Fi(29)

Hook block ----- 3 sheaves

SWING Hydraulic motor driven Worm gear speed reduction

Continuous 360° full circle swing on ball bearing slew ring

Automatic swing lock

Swing speed ----- 2.5 min⁻¹{rpm}

OUTRIGGERS Hydraulically extended sliders and hydraulically extended jacks

Integral with crane frame Power up and down

Extended width ----- Min. 2.25 m

Mid. 3.10 m

Max.3.90 m

<u>HYDRAULICS</u> Hydraulic pump ----- Tandem gear pump

Hydraulic motors ----- Axial piston type for winch

Axial piston type for swing

Control valves ----- Multiple control valves with integral

safety valve

Oil tank capacity ----- approx. 90 L

SAFETY DEVICES AML(Automatic Moment Limiter)

Load indication

Load moment ratio to rated load indication

Warning alarm

Over load limiter

WHL(Working Height Limiter)

Load indicator

Over-unwinding prevention

Terminal for emergency stop switch

Over-winding alarm

Hoisting limiter

P.T.O indicator lamp

Hook safety latch

Hydraulic safety valves, check valves and holding valves

Level Gauge

<u>CRANE MASS</u> Approx. 2,473 kg (crane bare)

NOTE :Operating speeds of the crane are guaranteed under the condition that the pump delivery is 85 L/min.

RATED LIFTING CAPACITIES IN KILOGRAMS

Empty Chassis Rated Capacities

Table A

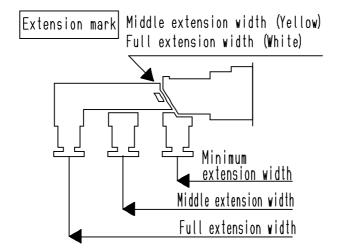
	4.2 m Boom			6.86 m Boom		Load Radius	9.5m Boom	
Load	Outriggers		Load Radius	Outriggers			Outriggers	
Radius	Extended			Extended			Extended	
	Full	Min.		Full	Min.		Full	Min.
1.8 m and below	8,200	2,910	2.4 m and below	5,970	2,910	2.4 m and below	2,910	2,910
2.4 m	5,970	2,910	3.1 m	4,810	2,510	3.1 m	2,910	2,510
3.1 m	4,810	2,510	3.5 m	4,110	2,060	3.5 m	2,910	2,060
3.5 m	4,110	2,060	4.0 m	3,610	1,710	4.0 m	2,910	1,710
3.95 m	3,660	1,710	4.5 m	2,660	1,410	4.5 m	2,660	1,410
			5.0 m	2,310	1,210	5.0 m	2,310	1,210
			6.0 m	1,760	910	6.0 m	1,760	910
			6.61 m	1,510	760	7.0 m	1,360	710
						8.0 m	1,110	560
						9.25 m	910	460

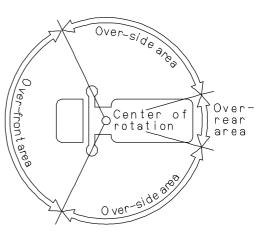
Table D

able D							
4.2 m Boom			6.86 m Boom			9.5m Boom	
Outriggers		Load Radius	Outriggers		Load Radius	Outriggers	
Extended			Extended			Extended	
Full	Min.		Full	Min.		Full	Min.
8,200	2,910	2.4 m and below	5,970	2,910	2.4 m and below	2,910	2,910
5,970	2,910	3.1 m	4,810	2,510	3.1 m	2,910	2,510
4,810	2,510	3.5 m	4,110	2,060	3.5 m	2,910	2,060
4,110	2,060	4.0 m	3,610	1,710	4.0 m	2,910	1,710
3,660	1,710	4.5 m	3,210	1,410	4.5 m	2,910	1,410
		5.0 m	2,810	1,210	5.0 m	2,810	1,210
		6.0 m	2,160	910	6.0 m	2,160	910
		6.61 m	1,910	760	7.0 m	1,760	710
					8.0 m	1,460	560
					9.25 m	1,210	460
	Outrice External Full 8,200 5,970 4,810 4,110	Outriggers Extended Full Min. 8,200 2,910 5,970 2,910 4,810 2,510 4,110 2,060	Outriggers Extended Load Radius Full Min. 2.4 m and below 5,970 2,910 3.1 m 4,810 2,510 3.5 m 4,110 2,060 4.0 m 3,660 1,710 4.5 m 5.0 m 6.0 m	Outriggers Extended Load Outriggers Full Min. Full 8,200 2,910 2.4 m and below 5,970 5,970 2,910 3.1 m 4,810 4,810 2,510 3.5 m 4,110 4,110 2,060 4.0 m 3,610 3,660 1,710 4.5 m 3,210 5.0 m 2,810 6.0 m 2,160	Outriggers Extended Load Radius Outriggers Extended Full Min. Full Min. 8,200 2,910 2.4 m and below 5,970 2,910 5,970 2,910 3.1 m 4,810 2,510 4,810 2,510 3.5 m 4,110 2,060 4,110 2,060 4.0 m 3,610 1,710 3,660 1,710 4.5 m 3,210 1,410 5.0 m 2,810 1,210 6.0 m 2,160 910	Outriggers Extended Load Radius Outriggers Extended Load Radius Full Min. Full Min. 8,200 2,910 2.4 m and below 5,970 2,910 2.4 m and below 5,970 2,910 3.1 m 4,810 2,510 3.1 m 4,810 2,510 3.5 m 4,110 2,060 3.5 m 4,110 2,060 4.0 m 3,610 1,710 4.0 m 3,660 1,710 4.5 m 3,210 1,410 4.5 m 5.0 m 2,810 1,210 5.0 m 6.0 m 2,160 910 6.0 m 6.61 m 1,910 760 7.0 m 8.0 m	Outriggers Extended Load Radius Outriggers Extended Load Radius Outriggers Extended Full Min. Full Min. Full 8,200 2,910 2.4 m and below 2,910 2.4 m and below 2,910 5,970 2,910 3.1 m and below 2,910 3.1 m and below 2,910 4,810 2,510 3.5 m 4,110 2,060 3.5 m 2,910 2,910 4,110 2,060 4.0 m 3,610 1,710 4.0 m 2,910 2,910 3,660 1,710 4.5 m 3,210 1,410 4.5 m 2,910 2,910 5.0 m 2,810 1,210 5.0 m 2,810 2,810 6.0 m 2,160 910 6.0 m 2,160 7.0 m 1,760 6.61 m 1,910 760 7.0 m 1,460

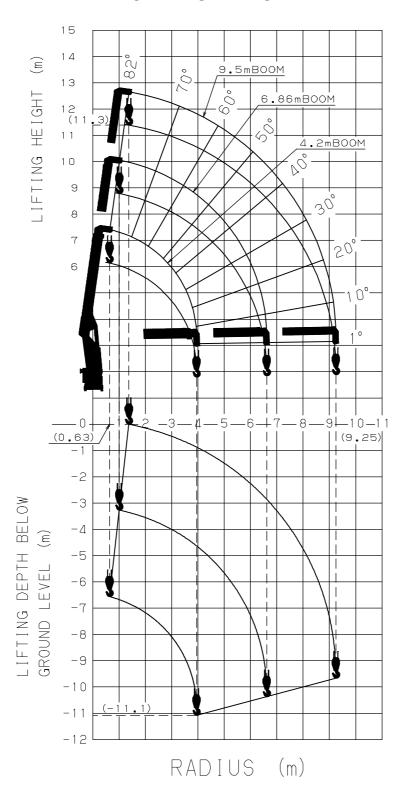
- NOTES: 1. Empty Chassis Rated Capacities in these tables depend on condition that crane is set level on firm level ground.
 - 2. Capacities in these tables include slings and similarly used load handling devices, and they must be added to the mass of the load. They don't, however, include the mass of hook block (90kg).
 - 3. For boom lengths not shown, use the rated lifting capacity of next longer boom.
 - 4. When outriggers are extended to middle extension width, use the rated lifting capacities for outriggers are extended to minimum extension width.
 - 5. Empty Chassis Rated Capacities table A and D depend on the types of chassis.
 - 6. Empty Chassis Rated Capacities are shown for over-side areas and over-rear area. These capacities for over-front area may lowered depending on the types of chassis.
 - 7. Standard number of part lines for Max lifting load is as shown below. Load per line must not surpass 14.7kN{1,500kgf}.

Max. lifting load	8,200kg	5,970kg or less
No. of part lines	6	4



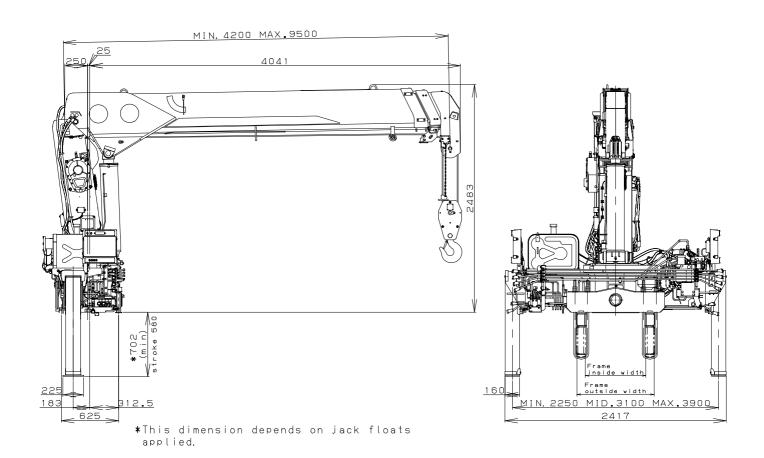


WORKING RANGE



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.

DIMENSIONS



GENERAL DATA FOR SUITABLE TRUCKS

Gross vehicle mass (including crane mass)	20,000 to 25,000 kg
P.T.O. torque	255 N-m{26 kgf-m} min.
P.T.O. revolution	Approx. 270 to 1,350 min ⁻¹ {rpm}
Width for crane mounting	Approx. 1,000 mm min.
Frame	Weight distribution and frame strength
	should be calculated for each truck
Frame width range (inside to outside)	Approx. 576 to 953 mm
Frame height (ground to frame top)	Approx. 1,055 mm max.
	(Height of crane mounting base can be
	changed by combination of jack floats
	and crane bases)