TADANO CARGO CRANE

MODEL : TM-ZR564S(HEF)

CRANE SPECIFICATIONS

CRANE CAPACITY — 3,130 kg at 3.8 m (4-part lines)

BOOM — 4-sectioned, fully powered partly synchronized telescoping boom of pentagonal box construction

- Retracted length ------- 3.55 m
- Extended length -------- 10.8 m
- Extending speed ------- 7.25 m / 21 s
- Elevation ---------- Elevated by a double-acting hydraulic cylinder
- Elevating speed --------- 1^{o} to 78^{o} / 12 s
- Boom point ---------- 2 sheaves

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

- Single line pull ---------- 7.70 kN{785 kgf}
- Single line speed ------- 76 m/min.(at 4th layer)
- Wire rope
  - Diameter x length ---- 8 mm x 68 m
  - Breaking strength ---- 43.1 kN{4.39 tf}
  - Construction ---------- 7 x 7 + 6 x WS(26)
- Hook block ----------2 sheaves

HOOK STOWING DEVICE — Mechanically stowed beneath boom top portion

SWING — Hydraulic motor driven Worm gear speed reduction Continuous 360^{o} full circle swing on ball bearing slew ring
Automatic swing lock

- Swing speed ---------- 2.5 min^{-1}{rpm}

Specifications are subject to change without notice

OUTRIGGERS

Manually extended sliders and hydraulically extended jacks (Standard outrigger)

Hydraulically extended sliders and hydraulically extended jacks (Power slide outrigger)

Integral with crane frame Power up and down

Extended width ----- Min. 2,200 mm

Mid. 3,300 mm , 4,300 mm

Max. 4,800 mm

HYDRAULICS

Hydraulic pump ---------- Single 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

RADIO CONTROLLER

Model : RCS-F (Approved by ACMA)

Control functions of boom telescoping, hoisting up and down, boom elevating, swing, acceleration, speed mode selection, Hook-in, Hook-out, vehicle horn and emergency stop

Frequency ---------- 40 frequencies in 433 MHz band

Operating power supply

Transmitter --------- 6V DC, Dry battery R6P(SUM-3) x 4

Control unit --------- 24V DC, Vehicle battery

Transmitter mass ----- Approx. 576 g (includes batteries)

SAFETY DEVICES

AML(Automatic Moment Limiter)

Load indication

Load moment ratio to rated load indication

Warning alarm

Over load limiter

WHL(Working Height Limiter)

Radius indicator

Emergency stop switch on radio controller

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

CRANE MASS

Approx. 1,895kg (Standard outrigger)

Approx. 1,945kg (Power slide outrigger)

(includes standardized mounting parts)

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

RATED LIFTING CAPACITIES IN KILOGRAMS

Empty Chassis Rated Capacities

Table A

Load Radius	3.55 m / 5.99 m / 8.39 m Boom Outriggers Extended		Load Radius	10.8 m Boom Outriggers Extended	
	Max.	Min.		Max.	Min.
2.6 m and below	3,130	2,080	4.0 m and below	2,030	1,030
3.8 m	3,130	1,180	4.5 m	2,030	830
4.5 m	2,200	880	5.0 m	1,830	730
5.0 m	1,830	730	6.0 m	1,330	530
5.5 m	1,530	600	7.0 m	1,030	430
6.0 m	1,330	530	8.0 m	830	330
6.5 m	1,180	480	9.0 m	730	300
7.0 m	1,030	430	10.0 m	630	250
7.5 m	950	400	10.58m	580	230
8.17m	900	330			

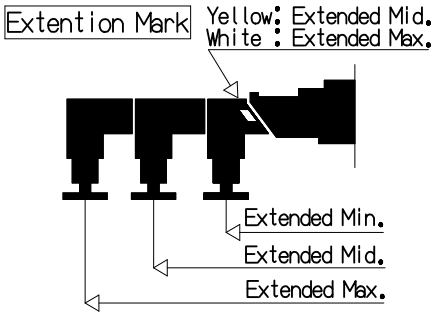
Table B

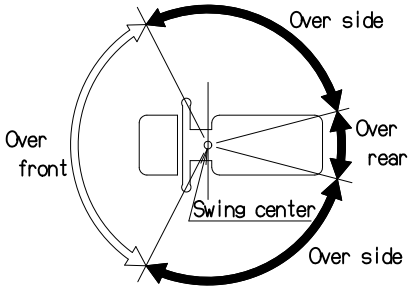
Load Radius	3.55 m / 5.99 m / 8.39 m Boom Outriggers Extended		Load Radius	10.8 m Boom Outriggers Extended	
	Max.	Min.		Max.	Min.
2.6 m and below	3,130	2,780	4.0 m and below	2,030	1,380
3.8 m	3,130	1,480	4.5 m	2,030	1,130
4.5 m	2,580	1,130	5.0 m	1,830	980
5.0 m	2,280	980	6.0 m	1,480	730
5.5 m	2,030	830	7.0 m	1,230	600
6.0 m	1,830	730	8.0 m	1,080	500
6.5 m	1,630	650	9.0 m	980	430
7.0 m	1,450	600	10.0 m	880	350
7.5 m	1,300	550	10.58m	830	330
8.17m	1,200	500			

Table D

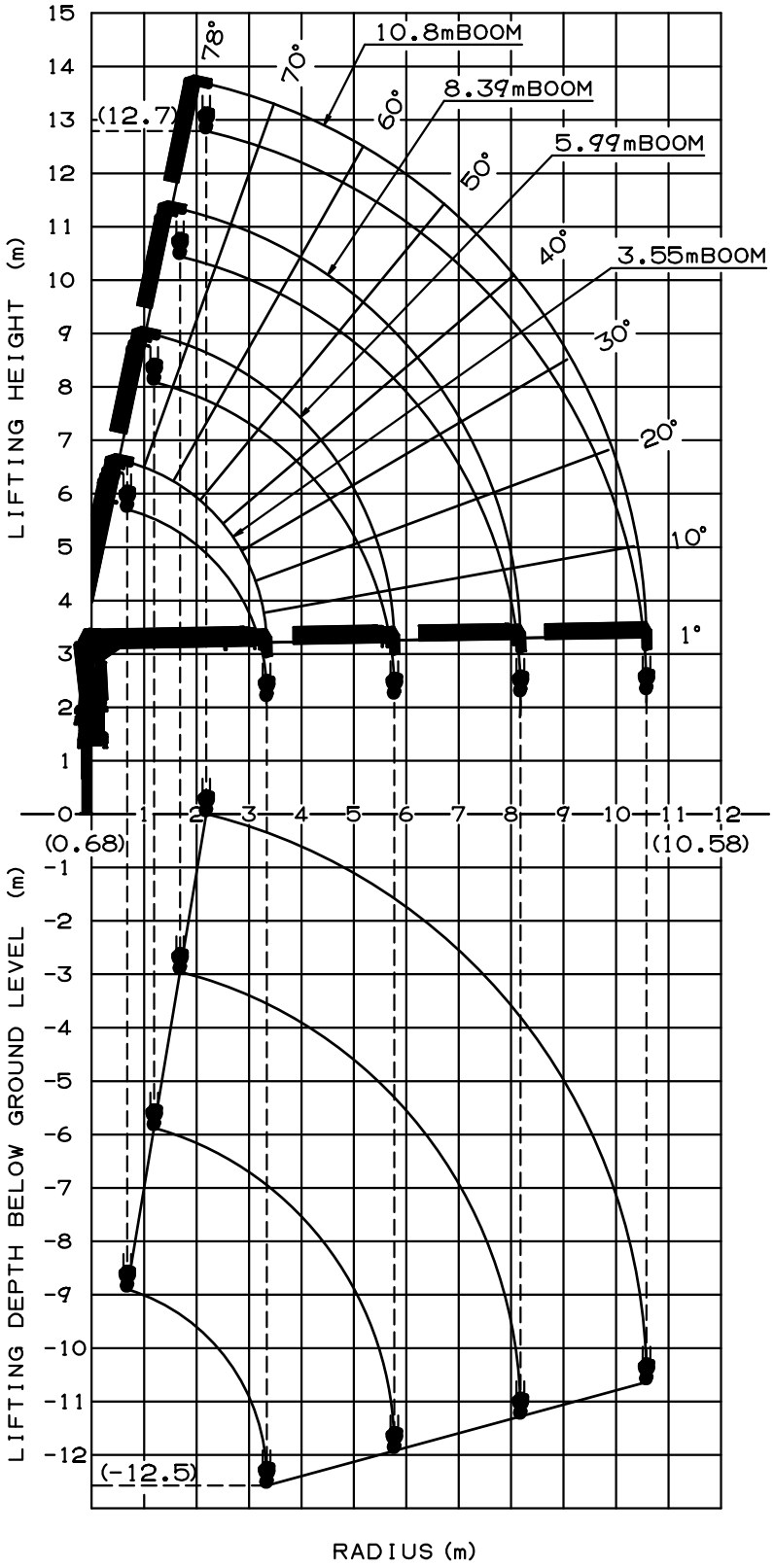
Load Radius	3.55 m / 5.99 m / 8.39 m Boom Outriggers Extended		Load Radius	10.8 m Boom Outriggers Extended	
	Max.	Min.		Max.	Min.
2.6 m and below	3,130	2,980	4.0 m and below	2,030	1,710
3.8 m	3,130	1,750	4.5 m	2,030	1,400
4.5 m	2,580	1,400	5.0 m	1,830	1,230
5.0 m	2,280	1,230	6.0 m	1,480	930
5.5 m	2,030	1,080	7.0 m	1,230	780
6.0 m	1,830	930	8.0 m	1,080	630
6.5 m	1,680	830	9.0 m	980	530
7.0 m	1,550	780	10.0 m	880	500
7.5 m	1,430	700	10.58m	830	430
8.17m	1,280	630			

NOTES :
1. Empty Chassis Rated Capacities in these tables depend on condition that crane is set level on firm level ground.
2. The mass of the hook (30 kg), slings and all similarly used load handling devices must be added to the mass of the load.
3. For boom lengths not shown, use the rated lifting capacity of next longer boom.
4. When outriggers are extended to middle position, use the rated lifting capacities for outriggers are extended to minimum position.
5. 8.39m boom means ▱ mark on 3rd boom section side plate is half seen.
6. Empty Chassis Rated Capacities table A, B and D depend on the types of chassis.
7. Empty Chassis Rated Capacities are shown for over sides and rear.
   These capacities for over front work area may lowered depending on the types of chassis.



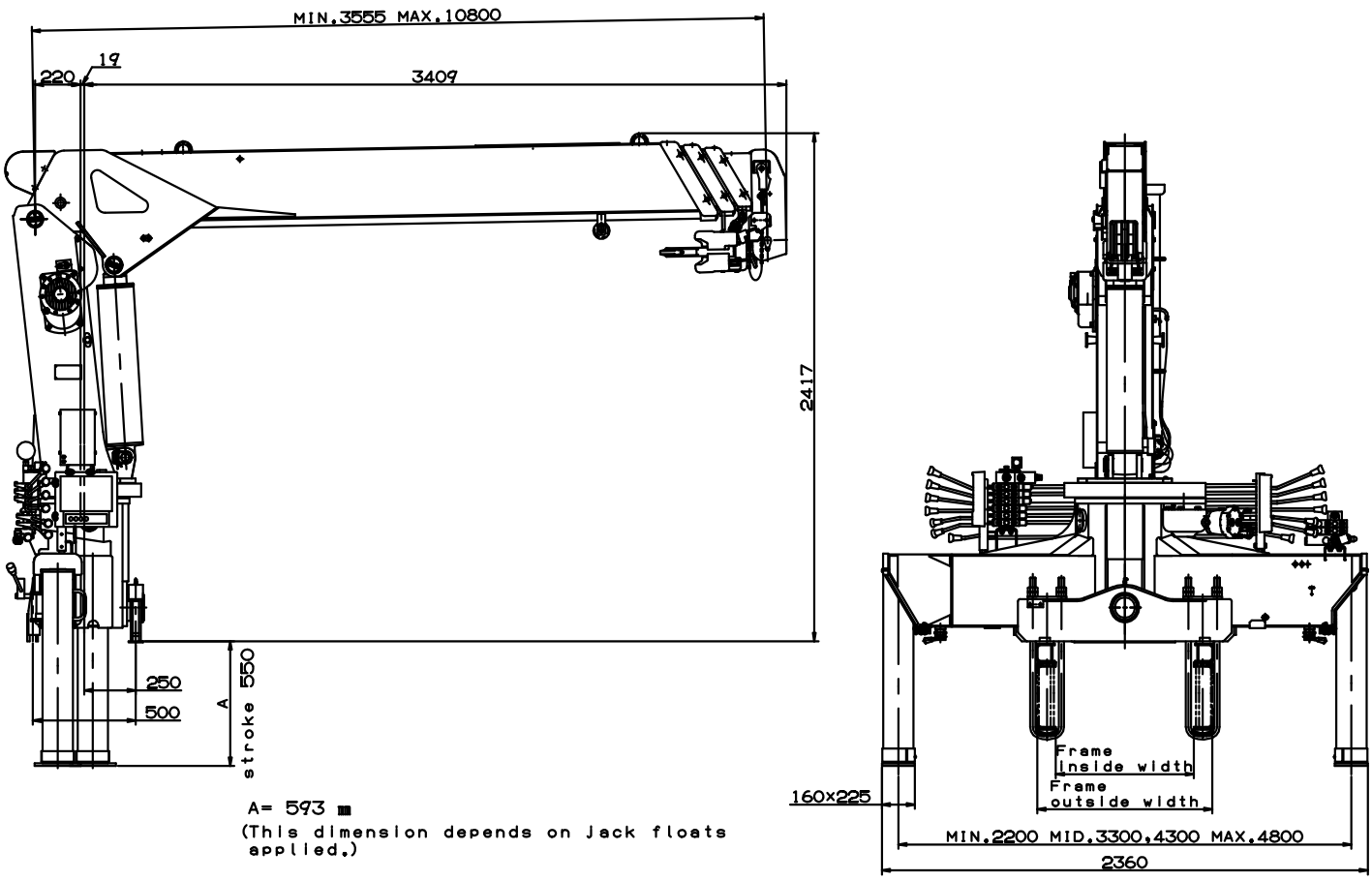


WORKING RANGE



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.

DIMENSIONS



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^{-1}{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)