TADANO CARGO CRANE

MODEL : TM-ZR566(EF)

CRANE SPECIFICATIONS

CRANE CAPACITY 3,130 kg at 3.5 m (4-part lines)

BOOM 6-sectioned, fully powered partly synchronized telescoping boom of pentagonal box construction

- Retracted length -------- 4.69 m
- Extended length ---------- 18.06 m
- Extending speed ----------13.36 m / 31 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 and cable follower

- 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 103 m
  - Breaking strength ----- 43.1 kN{4.39 tf}
  - Construction ---------- 7 x 7 + 6 x WS(26)
- Hook block ---------- 2 sheaves

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

REAR OUTRIGGERS (Locally provided)
Fully extended width -- Not less than 3,400 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. 2,355kg (Standard outrigger)
Approx. 2,405kg (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	4.69m / 7.41m / 10.11m Boom Outriggers Extended		Load Radius	12.76m Boom Outriggers Extended	Load Radius	15.41m Boom Outriggers Extended	Load Radius	18.06m Boom Outriggers Extended
	Max.	Min.		Max.		Max.		Max.
3.5 m and below	3,130	1,230	4.5 m and below	2,030	5.0 m and below	1,030	6.0 m and below	530
4.0 m	2,680	880	5.0 m	1,830	6.0 m	930	7.0 m	430
5.0 m	2,030	580	6.0 m	1,430	7.0 m	800	8.0 m	380
6.0 m	1,430	380	7.0 m	1,080	8.0 m	700	9.0 m	380
7.0 m	1,080	230	8.0 m	830	9.0 m	630	10.0 m	330
8.0 m	830	130	9.0 m	630	10.0 m	500	11.0 m	330
9.0 m	630		10.0 m	500	11.0 m	430	12.0 m	280
9.89m	530		11.0 m	450	12.0 m	380	13.0 m	230
			12.0 m	400	13.0 m	300	16.0 m	180
			12.5 m	330	14.0 m	250	17.8 m	180
					15.1 m	230		

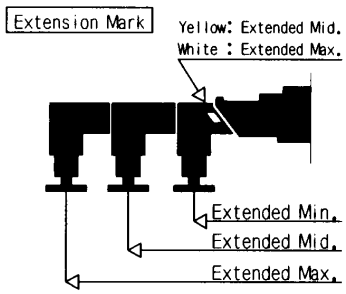
Table B

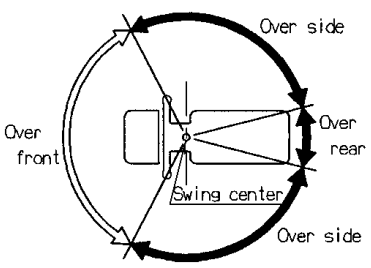
Load Radius	4.69m / 7.41m / 10.11m Boom Outriggers Extended		Load Radius	12.76m Boom Outriggers Extended	Load Radius	15.41m Boom Outriggers Extended	Load Radius	18.06m Boom Outriggers Extended
	Max.	Min.		Max.		Max.		Max.
3.5 m and below	3,130	1,630	4.5 m and below	2,030	5.0 m and below	1,030	6.0 m and below	530
4.0 m	2,680	1,280	5.0 m	1,830	6.0 m	930	7.0 m	430
5.0 m	2,030	880	6.0 m	1,480	7.0 m	800	8.0 m	380
6.0 m	1,630	630	7.0 m	1,200	8.0 m	700	9.0 m	380
7.0 m	1,300	450	8.0 m	980	9.0 m	630	10.0 m	330
8.0 m	1,030	330	9.0 m	830	10.0 m	550	11.0 m	330
9.0 m	830	250	10.0 m	700	11.0 m	480	12.0 m	280
9.89m	730	200	11.0 m	600	12.0 m	430	13.0 m	230
			12.0 m	530	13.0 m	380	16.0 m	180
			12.5 m	500	14.0 m	330	17.8 m	150
					15.1 m	300		

Table D

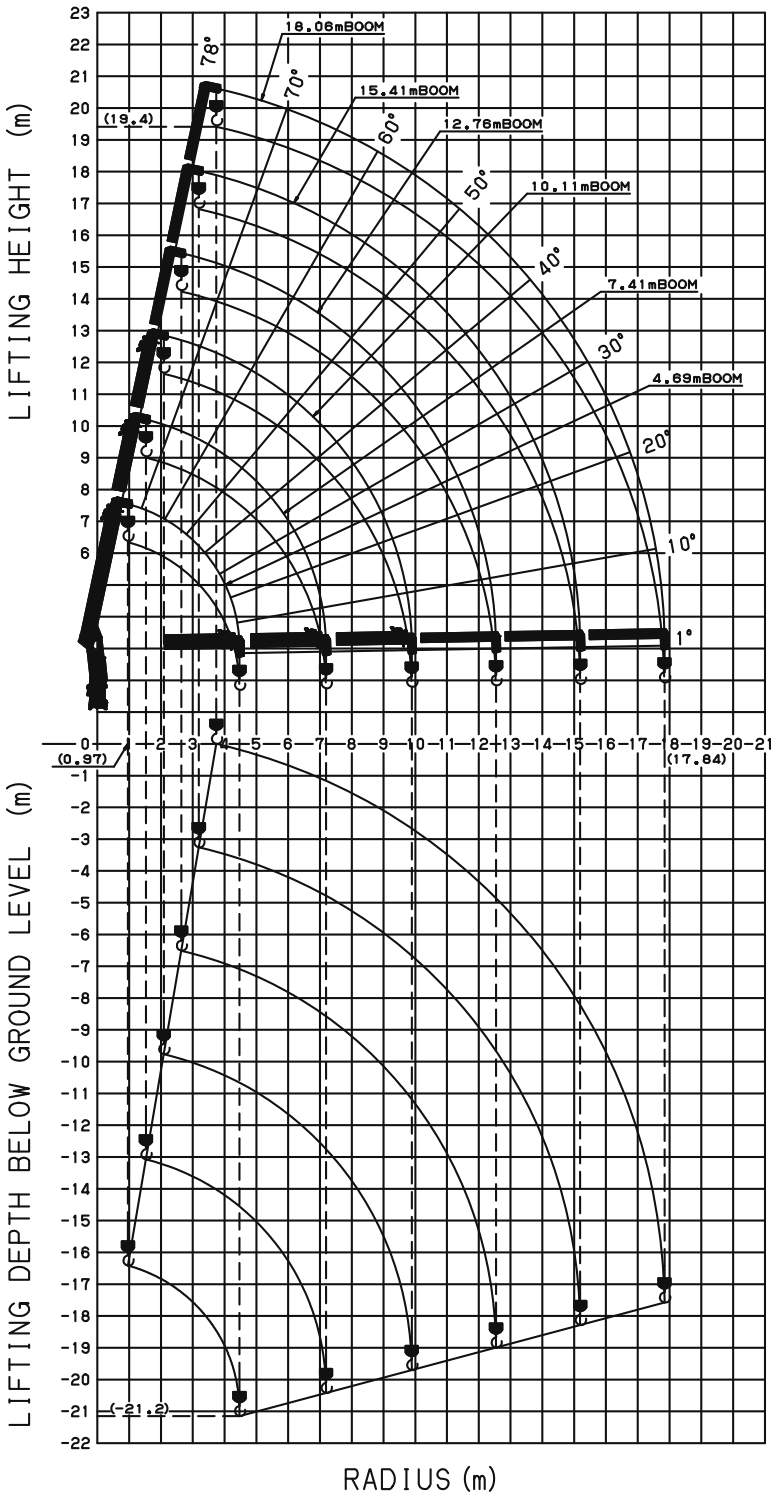
Load Radius	4.69m / 7.41m / 10.11m Boom Outriggers Extended		Load Radius	12.76m Boom Outriggers Extended	Load Radius	15.41m Boom Outriggers Extended	Load Radius	18.06m Boom Outriggers Extended
	Max.	Min.		Max.		Max.		Max.
3.5 m and below	3,130	1,930	4.5 m and below	2,030	5.0 m and below	1,030	6.0 m and below	530
4.0 m	2,680	1,600	5.0 m	1,830	6.0 m	930	7.0 m	430
5.0 m	2,030	1,100	6.0 m	1,480	7.0 m	800	8.0 m	380
6.0 m	1,630	800	7.0 m	1,200	8.0 m	700	9.0 m	380
7.0 m	1,330	600	8.0 m	980	9.0 m	630	10.0 m	330
8.0 m	1,100	500	9.0 m	830	10.0 m	550	11.0 m	330
9.0 m	900	400	10.0 m	700	11.0 m	480	12.0 m	280
9.89m	780	330	11.0 m	600	12.0 m	430	13.0 m	230
			12.0 m	530	13.0 m	380	16.0 m	180
			12.5 m	500	14.0 m	330	17.8 m	180
					15.1 m	300		

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 (50 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. For 10.11m boom work, When exceeding 8m load radius, extend front outrigger and rear outrigger to maximum.
6. For boom length longer than 10.11m, extend front outrigger and rear outrigger to maximum.
7. 12.76m boom means 1st ▱ mark on 4th boom section side plate is half seen.
8. 15.41m boom means 2nd ▱ mark on 4th boom section side plate is half seen.
9. Empty Chassis Rated Capacities table A, B and D depend on the types of chassis.
10. 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.



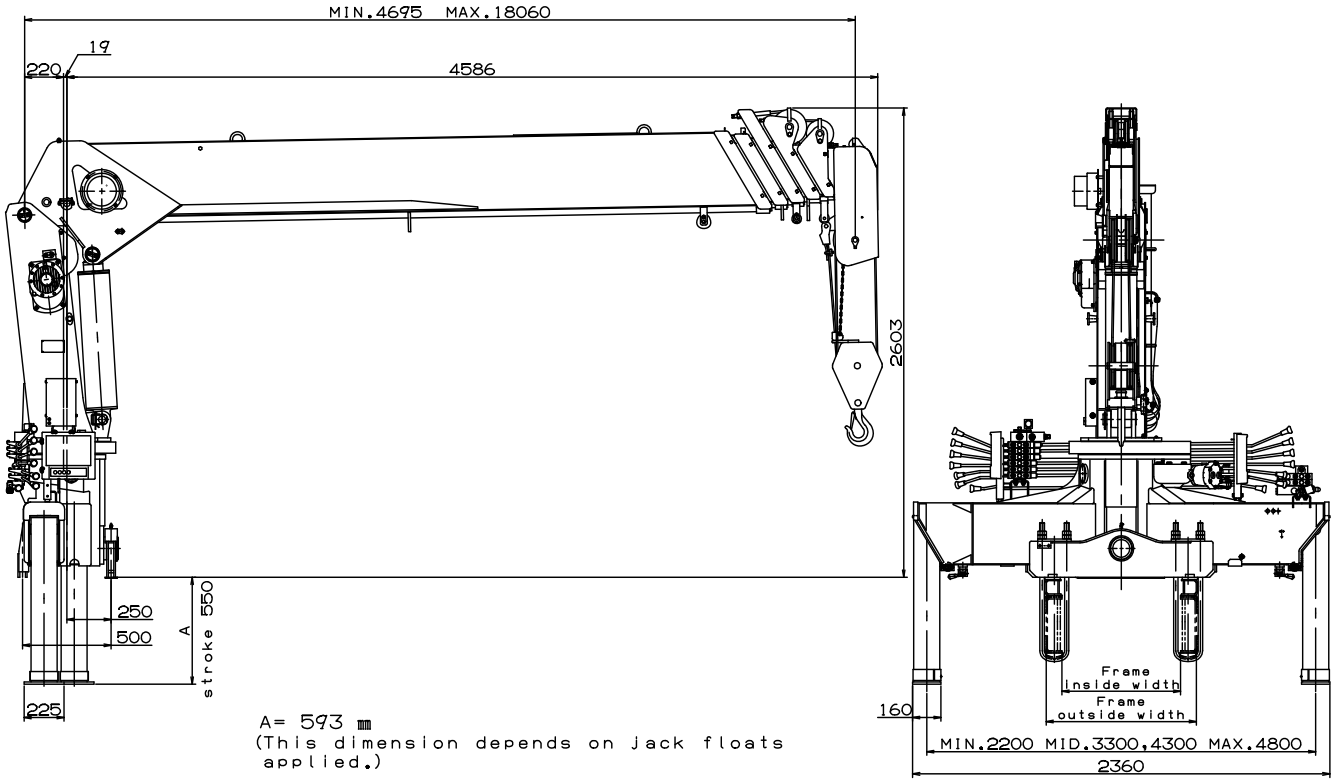


WORKING RANGE



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)