ZOOMLION PAMPA MAQUINARIAS S.A.

Flexible,efficient,eco, new-gen 40t rough terrain crane

ROUGH TERRAIN CRANE

ZRT400V432-1



Max.rated lifting capacity	Max. lifting moment with basic boom	Main boom length (fully extended)
40 t	1430 kN·m	34 m

ROUGH TERRAIN CRANE

ZRT400V432-1

Jib length	Max. driving speed	Max. gradeability
8.5m	37km/h	52%

Powerful Performance, Excellent Off-Road Capability

- 4-section U-shaped fully hydraulic telescoping main boom, 10.4-34m, featuring arbitrary telescoping modes for stable operation within permissible height and load conditions.
- With a lightweight boom design and the application of high-strength materials, the lifting performance is enhanced.
- Maximum load moment of basic boom: 1430 kN·m, maximum load moment of fully extended boom: 850 kN·m.
- Equipped with a 133 kW Cummins Euro III emission engine, it delivers strong power and excellent off-road performance.

Reliable, Durable, Aesthetic, and Convenient

- Modular design of the product series, mature components, passed rigorous reliability tests.
- Key components from mainstream industry brands, high-end, stable, and reliable.
- Full-access climbing stairs, aluminum alloy flat walkway panels, eco-friendly and stylish new appearance.

Intelligent, Safe and Worry-free use

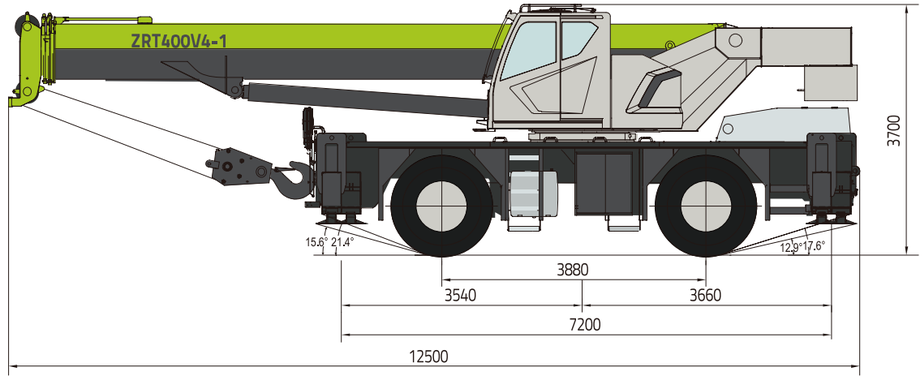
- Equipped with outrigger position detection function and outrigger remote control, realizing safer and more convenient operations.
- The crane features intelligent functions such as anti-tipping safety control, data feedback, and remote data export, ensuring safe and reliable operations.

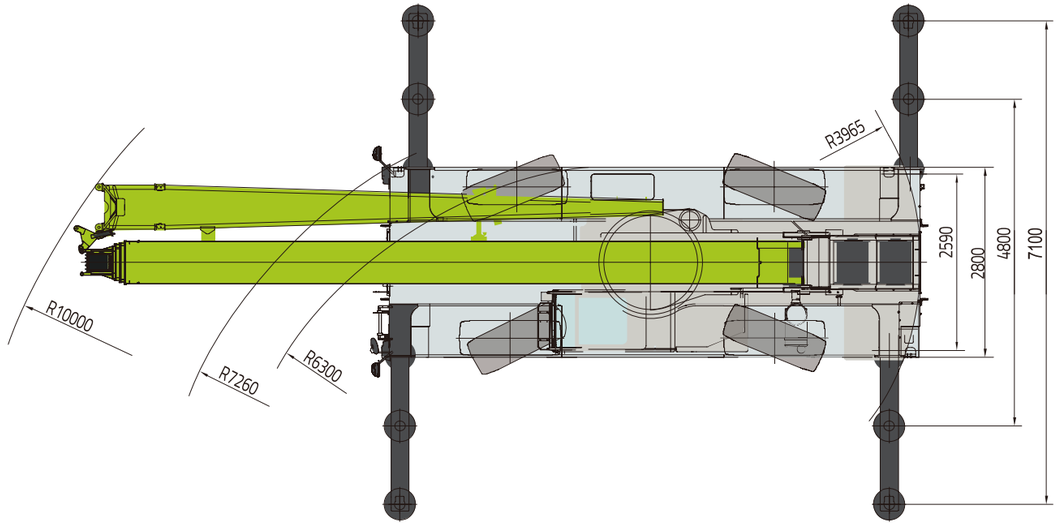
Technical Data

Category	Item		Unit	Value	Remarks
Rated capacities	Max. rated lifting capacity		t	40	
Weight	Kerb mass during travelling		t	29	
	Single axle load	Front axle load	t	14.7	
		Rear axle load	t	14.3	
Dimensions	Overall dimensions (L×W×H)		mm	12500×2800×3700	
	Outrigger spread (L)		m	7.2	
	Outrigger spread (W)	Fully extended	m	7.1	
		Intermediately extended	m	4.8	
Driving	Max. driving speed		km/h	37/24.8	
	Max. gradeability		%	52	
	Wheelbase		mm	3880	
	Treads(Front / Rear)		mm	2260	
	Transmission drive mode		-	4×4	
	Transmission brand or model		-	ZF	
	Transmission gear		-	4 forward and 3 reverse gears	
Main parameters	Slewing range		-	360° unlimited slewing	
	Max. lifting moment	Basic boom	kN·m	1430	
		Fully extended boom	kN·m	850	
	Boom length	Basic boom	m	10.4	
		Fully extended boom	m	34	
		Jib	m	8.5	
	Max. Lifting height	Fully extended boom	m	37	
		Fully extended boom+jib	m	43	
	Jib offset		°	0/15/30	
Working speeds	Max. single rope hoisting speed		m/min	125	
	Boom derricking time		s	45/95	
	Boom telescoping time		s	45/55	
	Slewing speed		r/min	0~2.5	
Engine	Engine model		-	Cummins QSB5.9	
	Max. rated power/RPM		kW/rpm	133KW/2200rpm	
	Max. output torque/RPM		N·m/rpm	800N.m/ 1500rpm	
	Emission standard		/	Euro III	
Hook	Rated load		t	40/4.5	
Others	Boom telescoping mode		/	Single-cylinder rope telescoping mechanism	
	Boom derricking mode		/	Single-cylinder derricking mechanism	

Overall Dimensions

Unit: mm





Crane Configurations
Superstructure

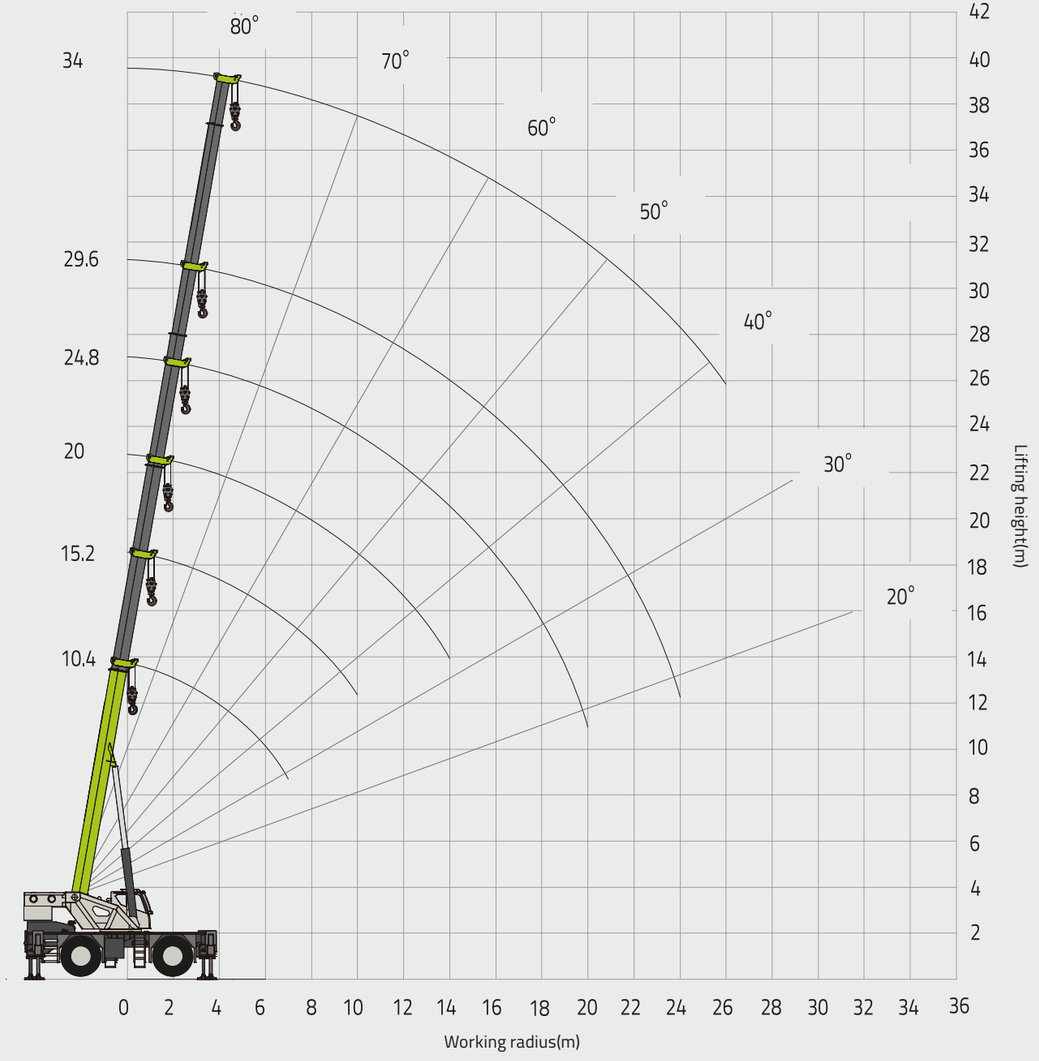
Main boom	▪ The box-shaped telescopic boom consists of 4 U-type boom sections made of high-strength steel. The telescopic boom sections are telescoped in / out via one telescopic cylinders and two sets of boom extension/retraction ropes. ▪ The boom head is equipped with 5 pulleys, which is convenient for changing wire rope reevings without removing the wedges. A rooster sheave is optional.
Jib	▪ It consists of one lattice jib sections. The whole jib is fixed at one side of the main boom during transport. A single pulley is assembled at the jib head.
Derricking mechanism	▪ A front-mounted single derricking cylinder with a two-way balance valve. ▪ Derricking angle: -1° ~ 80°
Hoisting mechanism	**Main and auxiliary winches** ▪ Main and auxiliary winches share the same fittings. Load hoisting and lowering are realized through the rotation of the drum driven by the planetary reducer, which is driven by the variable axial piston hydraulic motor. **Wire rope** ▪ High strength wire rope (anti-twisting rope is optional) ▪ Max. hoist rope tensile force: 4400kg ▪ Max. hoist rope speed: 125m/min (At the 4th layer) ▪ Rope diameter: 17mm ▪ Main winch rope length: 175m ▪ Auxiliary winch rope length:105m
Hook	▪ Main hook for 40t: with 5 pulleys, a rotable hook and a safety catch, secured at the front of the chassis frame. ▪ Auxiliary hook for 4.5t: with a safety catch, used with the rooster sheave and jib, secured at the auxiliary hook holder on the chassis frame.
Slewing mechanism	▪ It consists of such parts as hydraulic motor, planetary gear reducer, pinion gear and slewing ring, etc. Via the planetary gear reducer, the hydraulic motor drives the pinion gear to rotate and makes the slewing bearing's outer ring rotate around its inner toothed ring fixed on chassis frame, realizing 360° unlimited slewing of the superstructure. ▪ Hydraulically controlled normally-closed brake with controllable slewing function and 360° hydraulic slewing lock.
Slewing platform	▪ Wall plate structure
Counterweight	▪ Fixed counterweight of 2.8t
Hydraulic system	▪ A 130ml/r piston pump, each in series with a 40ml/r+23ml/r gear pump. (Oil sources for telescoping, derricking, winch and slewing mechanisms are provided by the piston pump; oil sources for braking system, air conditioner and torque converter are provided by the 23m/r gear pump; oil sources for outriggers and steering system are provided by the 40m/r gear pump) ▪ Quadruple downstream-pressure compensation hydraulic-controlled multiplex directional valve. ▪ Hydraulic oil return lines are fitted with an air-cooled hydraulic oil cooler driven by an electric motor. ▪ The system pressure can be displayed on the instrument console. Hydraulic pipelines are fitted with pressure test ports. ▪ Hydraulic oil tank capacity: 710L ▪ The built-in return oil filter has a defoaming function. The filter fineness is 10 μm.
Crane control	▪ Operations of the superstructure are controlled by the two hydraulic joysticks on both sides of operator's seat. ▪ The left joystick controls the slewing mechanism and the auxiliary winch. ▪ The right joystick controls the derricking mechanism and the main winch. Hoisting, derricking and telescoping can be executed synchronously.
Load moment limiter	▪ If the actual load moment approaches the rated one, the buzzer sends out a sound-light alarm and all dangerous operations of the crane are cut off automatically if the rated load moment is reached. ▪ The load moment limiter can also limit working ranges, such as working radius, boom angle, lifting height, slewing range, etc. ▪ The following information can be displayed on the monitor: *Boom angle or moment ratio / Boom length or default hook weight / Actual working radius or slewing angle / Actual lifting capacity / Max. permissible lifting capacity / Jib angle or wire rope reeving / Indication of boom position / Outrigger position or "On Tires" indication* ▪ The following information is displayed by bar graph: *Dynamic moment percentage / Working pressure of hydraulic system.*
Outriggers	▪ H-type outriggers, hydraulically controlled, can be operated in the cab simultaneously or independently. ▪ Each vertical jack cylinder is equipped with a two-way hydraulic lock to ensure the secure lock of outriggers during working or driving. ▪ Outrigger boxes are directly welded on the chassis frame. ▪ The outriggers can be completely extended, half extended or completely retracted for different operating modes. ▪ Outrigger spread (longitudinal): 7200mm ▪ Outrigger spread (transversal): 7100mm (fully extended)/4800mm (Intermediately extended)/2590mm (fully retracted)
Driver's cab	▪ For ZRT400V4-1, both crane operation and driving are performed in the driver's cab. It is a side-mounted one-seat left-hand driving cab. Both sides of the seat are equipped with an armrest box. The left armrest box can be pulled up. ▪ Cab dimensions (L × W × H): 1810mm×910mm×1710mm (±5mm)

Crane Configurations
chassis

Engine	▪ Model: CUMMINS QSB5.9 ▪ Type: four-stroke, 6-cylinder, direct injection, water-cooled, turbocharged diesel engine. ▪ Max. output power: 133KW / 2200rpm ▪ Max. output torque:800N.m / 1500rpm ▪ Fuel tank volume: 250L
Chassis frame	▪ An Integral box-type structure welded by high-strength steel.
Drive system	▪ Electrically controlled automatic hydraulic transmission; front and rear axles driving mode. Multiple forward and reverse gears; electric-hydraulic power gear shift with an automatic locking mechanism; The working hydraulic oil pump and the steering oil pump directly take off power from the transmission.
Axle	▪ Front axle: rigidly mounted steering and driving axle with a planetary reducer, a service brake and a parking brake. ▪ Rear axle: full-floating steering and driving axle with a planetary reducer and a service brake.
Steering system	▪ Fully hydraulic power steering gear ▪ The cylinder of the steering and driving axles is controlled by steering wheel to realize crane steering. ▪ 4 steering modes: 2-wheel steering – front-wheel steering 4-wheel steering – all-wheel steering 2-wheel steering – rear-wheel steering 4-wheel steering – crab steering
Suspension system	▪ Front axle: rigidly mounted to the chassis frame. ▪ Rear axle: a swing axle, connecting to the chassis frame via a hydraulic suspension cylinder.
Braking system	▪ Service brake: hydraulically controlled disc brake acting on 4 wheels. ▪ Parking brake: hydraulically released parking brake, acted by the spring mounted on the input shaft of the front axle.
Electrical system	▪ 24V DC ▪ 2 batteries with 12V rated voltage and 120Ah rated current
Tire	▪ 20.5-25-28PR

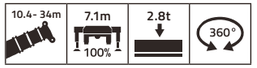
Lifting Height Chart

Main boom



Rated Capacity Chart

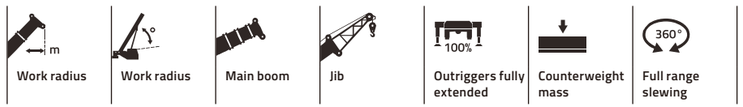
Main boom



Unit: t

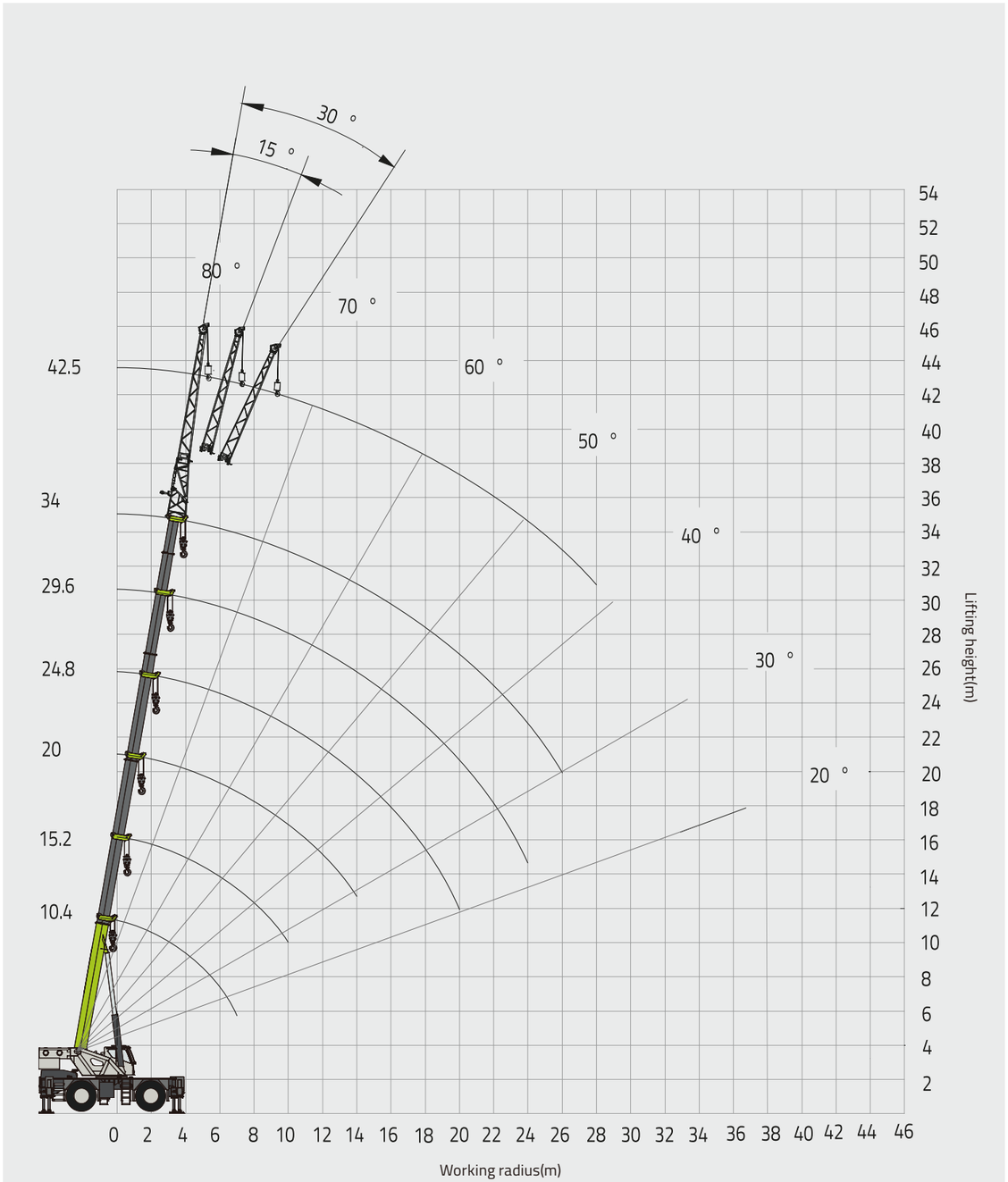
m	10.4	15.2	20.0	24.8	29.6	34.0	m
3.0	40.0						**3.0**
3.5	37.0	23.0	22.0				**3.5**
4.0	34.0	23.0	22.0				**4.0**
4.5	31.8	23.0	22.0	19.0			**4.5**
5.0	29.2	23.0	21.0	18.0	14.0		**5.0**
5.5	26.5	23.0	20.5	17.3	13.8		**5.5**
6.0	23.9	22.5	20.0	16.6	13.5	10.0	**6.0**
7.0	20.2	19.5	18.5	15.3	12.5	9.8	**7.0**
8.0		16.5	17.0	14.0	11.5	9.6	**8.0**
9.0		13.0	13.5	12.8	10.5	9.4	**9.0**
10.0		10.6	11.0	11.2	9.7	8.6	**10.0**
12.0			7.9	8.0	8.1	7.4	**12.0**
14.0			5.9	6.0	6.1	6.2	**14.0**
16.0				4.7	4.8	4.9	**16.0**
18.0				3.7	3.8	4.0	**18.0**
20.0				3.0	3.1	3.2	**20.0**
22.0					2.5	2.6	**22.0**
24.0					2.1	2.2	**24.0**
26.0						1.8	**26.0**
28.0							**28.0**
30.0							**30.0**
32.0							**32.0**
34.0							**34.0**
36.0							**36.0**
38.0							**38.0**
I	0	4.8	9.6	14.4	19.2	23.6	**I**
Reeving	10	8	8	6	5	4	**Reeving**
Hook	40t						**Hook**

Symbols



Lifting Height Chart

Main boom + jib



Rated Capacity Chart

Main boom + jib



Unit: t

	34+8.5			
	0°	15°	30°	
80	3.0	2.8	2.2	80
78	3.0	2.8	2.1	78
76	3.0	2.7	2.0	76
74	2.9	2.5	1.9	74
72	2.8	2.3	1.8	72
70	2.7	2.2	1.7	70
68	2.5	2.1	1.6	68
66	2.3	2.0	1.5	66
64	2.1	1.9	1.4	64
62	2.0	1.8	1.4	62
60	1.9	1.7	1.3	60
58	1.8	1.6	1.3	58
56	1.7	1.5	1.2	56
54	1.6	1.4	1.2	54
52	1.5	1.3	1.1	52
50	1.4	1.2	1.0	50
48	1.3	1.1	0.9	48
46	1.2	1.0	0.8	46
44	1.1	0.9	0.7	44
42	1.0	0.8	0.6	42
Reeving	1			Reeving
Hook	4.5t			Hook

VISIÓN QUE CREA FUTURO

www.zoomliongroup.com.ar
ventas@zoomliongroup.com.ar
Juana Manso 555, Oficina 4F | Tel.: 011 4778-0830