

**Robex** **NEW 7 SERIES**

HYUNDAI MINI EXCAVATOR

**35Z-7**

We build a better future



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■ Some of the photos may include optional equipment.

Courtesy of MachineMarket



# Unparalleled Technology of R35Z-7. It will fulfill your dreams

Hyundai *Robex* 35Z-7

This new mini excavator provides a combination of proven power and unequaled working performance.

## The Highest Engine Power in its Class Tier II

**YANMAR 3TNV88**

**26.5 HP / 2,200 rpm**

Yanmar 3TNV88 engine provides 11.1 kg-m/rpm of maximum torque with 26.5 HP at 2,200rpm of rated power.

This means the R35Z-7 runs with the most power in its class, giving you more power to get the job done.



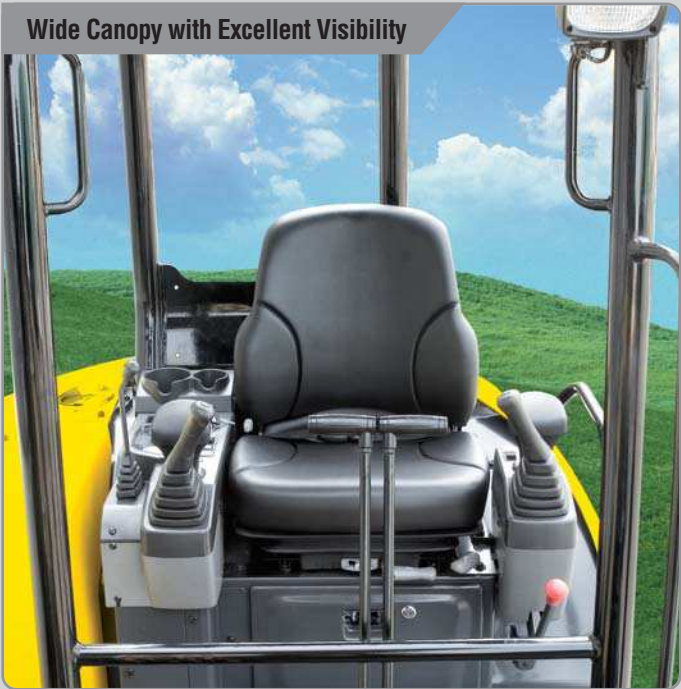
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# Technology in Cab Design

## Wide, Comfortable Operating Space

All the controls are designed and positioned according to the latest ergonomic research.  
Reinforced pillars have also been added for greater cab rigidity.



Wide Canopy with Excellent Visibility

Wide enough canopy and high quality suspension seat by absorbing digging shock prevent operator tiredness.



■ Some of the photos may include optional equipment.

## Convenient and Comfortable Space



Safety Lock System

Safety system works if safety lock lever is released upwards.



Mechanical Suspension Seat

An attractive and adjustable seat, based on a human engineering design, provides greater comfort, safety and durability.



Smooth Travel Pedals and Foot Rests

Travel pedals and levers are equipped with ergonomically designed foot rests. It enables the operator to work easily and quickly.



Storage Space

Located under the seat with locking device.



Cup Holder

The conveniently located cup holders add to the comfort of the cabin.



Easy Access to Controller & Switch

The ergonomically placed switches maximizes convenience for the operator.



Engine Control Lever

Layout of control devices is ergonomically located for higher production efficiency.



Easy to Open Front Window

Sliding fold-in front window is easily opened and safely maintained in open position to improve the working condition. (Cabin type)



# Powerful & Dynamic Work !

## Increased Higher Performance

Boom Swing

The R35Z-7 is designed for efficient work in congested residential and urban areas. The boom can be offset within a range of 125 degrees.



## Powerful and Dynamic Work!



**Reinforced Bucket**

The design includes bucket link durability and anti-wear characteristics with additional reinforcement plates on cutting edge section. Reinforced bucket is made with thicker steel and additional lateral plate.



**Powerful Dozer Blade**

Large size blade improves work efficiency and equipment durability . 1,740mm x 370mm (5'9" x 1'3")



**Boom Cylinder Cover**

Boom cylinder cover is installed as standard to prevent cylinder damage.



**Dozer Cylinder Cover**

Dozer cylinder cover is installed as standard to prevent cylinder damage.



**Lever Pattern Change Valve (Option)**

Boom and arm are change available through lever pattern change valve. Easy to access and control.



**Installation for Breaker Operation**

Overload relief value and pipes are installed as standard for customer's convenience.



**Double Acting Pipe Selector**

Lever direction  
Vertical : Breaker  
Horizontal : Double piping



Hyundai *Ralex*  
35Z-7






# Reliability and Serviceability

## Increased Higher Durability

Easy to Maintain Engine Components




The R35Z-7 was built with accessibility in mind. All doors, covers and hoods were built for complete open access. You'll find that the R35Z-7 offers plenty of space to complete your regular maintenance and service hassle-free.



■ Some of the photos may include optional equipment

## Reliability and Serviceability

							
<p><b>Easy Change Air Cleaner</b></p> <p>The R35Z-7 is fitted with durable plastic air cleaner for easy maintenance and quick service.</p>	<p><b>Oilless-Bushes and Polymer shims</b></p> <p>Adoption of Oilless-Bushes and Polymer Shims makes the maintenance easier and Greasing term gets longer. (●:50hr, ●:500hr) * Chromium-Plated PIN is applied.</p>	<p><b>Centralized Grease Fittings</b></p> <p>Grease fittings are highlighted and centralized for fast access when doing your service checks. Save time and money during routine maintenance.</p>	<p><b>Long Life Hydraulic Filter</b></p> <p>Uses high-performance filtering materials are applied for extending the filter replacement interval.</p>	<p><b>Hydraulic level</b></p> <p>Easily check the measure of oil throughout oil gauge on the hydraulic tank side</p>	<p><b>Reinforced Rubber Track</b></p> <p>Adoption of the reinforced rubber track which has outstanding endurance against the wear.</p>	<p><b>FEM(Finite Element Method)</b></p> <p>Durability of structure is proven through FEM(Finite Element Method) analysis and long term durability test.</p>	<p><b>Rectangular Tube Canopy</b></p> <p>The canopy protects the operator against falling objects, ensuring operator safety. (ROPS, FOPS, TOPS STD.)</p>





Engine

Model	Yanmar 3TNV88	
Type	4 Cycle. In line, water cooled Diesel	
Rated flywheel horse power		
SAE	J1995 (gross)	27.3 HP ( 20.3kW) at 2,200rpm
	J1349 (net)	26.5 HP ( 19.8kW) at 2,200rpm
DIN	627 1/1 (gross)	27.7 HP ( 20.3kW) at 2,200rpm
	627 1/1 (net)	26.9 HP ( 19.8kW) at 2,200rpm
Max. torque		10.8kgf-m at 1,200 rpm
Bore x stroke		ø 88mm x 90mm
Piston displacement		1,642cc
Batteries		12V - 80AH
Starting motor		12V - 2.3kW
Alternator		12V - 55A



Hydraulic System

Main pumps	
Type	Two variable displacement piston pumps
Rated flow	2 x 38.5lpm
Sub-pump for pilot circuit	Gear pump
Hydraulic motors	
Travel	Two speed axial piston motor with counter balance valve and parking brake
Swing	Axial piston motor with automatic brake
Relief valve setting	
Implement circuits	230 Kg / cm²
Travel circuit	230 Kg / cm²
Swing circuit	230 Kg / cm²
Pilot circuit	30 Kg / cm²
Service valve	Installed



Hydraulic Cylinder

No. of cylinder - bore x rod x stroke	
Boom	85 x 45 x 540 mm
Arm	80 x 45 x 585 mm
Bucket	70 x 45 x 510 mm
Boom swing	80 x 45 x 400 mm
Dozer blade	95 x 50 x 152 mm

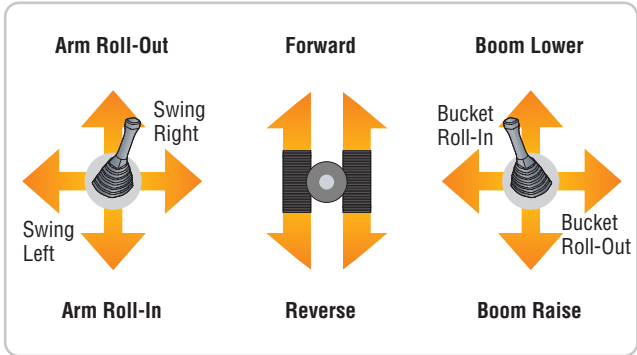


Operator's Cab

Noise Levels (dynamic value)	
LwA	94dB
LpA	75dB



Control.2 Implement Levers



Type	Two joysticks with one safety lever
Pilot control	(LH): Swing and arm, (RH): Boom and bucket with horn (ISO)
Engine throttle	Mechanical, cable type
External Lamps	- 1 work Lamp at RH side of boom - Guarded floodlight at RH side of machine



Travel Levers

Traveling and steering : Two levers with pedals.



Swing System

Swing motor	Axial piston motor
Swing reduction	Planetary gear reduction
Swing circuit lubrication	Grease - bathed
Swing brake	Multi wet disc
Swing speed	9.5rpm



Drives & Brakes

Max. travel speed(high) / (low)	4.5km / 2.5km
Maximum traction force	3.1ton
Maximum gradeability	30°
Parking brake	Multi wet disc



Weight (approximate)

Operating weight, including 2,500 mm (9' 8") boom, 1,300 mm (5'1") arm, SAE heaped 0.11 m³ (0.14 yd³) backhoe bucket, lubricant, coolant, full fuel tank, hydraulic tank and the standard equipment.

Shoe Width	Rubber shoe 300 mm (12")	
Operating Weight	Cabin	3,650 Kg (8,050lb)
	Canopy	3,500 Kg (7,720lb)
Ground Pressure	Cabin	0.34 kg / cm² (4.83psi)
	Canopy	0.32 kg / cm² (4.55psi)



Buckets

Capacity		Width		Weight	2,500mm Boom
SAE heaped	CECE heaped	Without side cutters	With side cutters		1,300mm Arm
* 0.11m³ (0.14yd³)	0.09m³ (0.11yd³)	550mm (21.7")	580mm (22.8")	80kg (176lb)	■

\*: Standard backhoe bucket   ■ : Applicable for materials with density 1600 kg/m³ (2,700 lb/yd³) or less



Undercarriage

X-leg type center frame is integrally welded with reinforced box-section track frames. The undercarriage includes lubricate rollers, track adjusters with shock absorbing springs and sprockets, and rubber shoe.

Center frame	X-leg type
Track frame	Pentagonal box type
No. of carrier roller on each side	1
No. of track roller on each side	4



Coolant & Lubricant Capacity

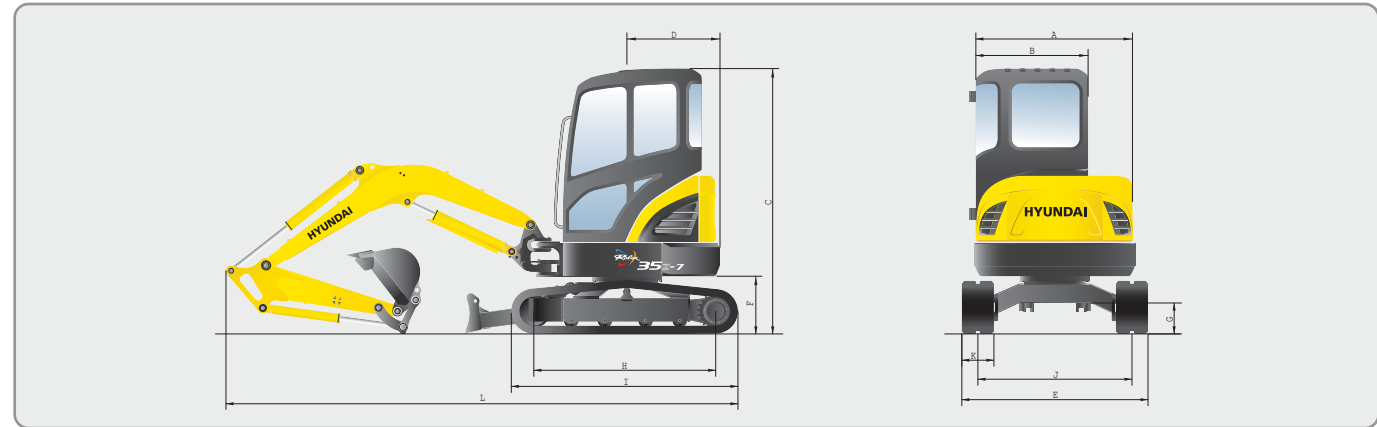
(refilling)	liter	US gal	UK gal
Fuel tank	42	11.1	9.2
Engine coolant	5	1.32	1.1
Engine oil	6.7	1.77	1.5
Hydraulic tank	46	12.2	10.1



Digging Force (ISO)

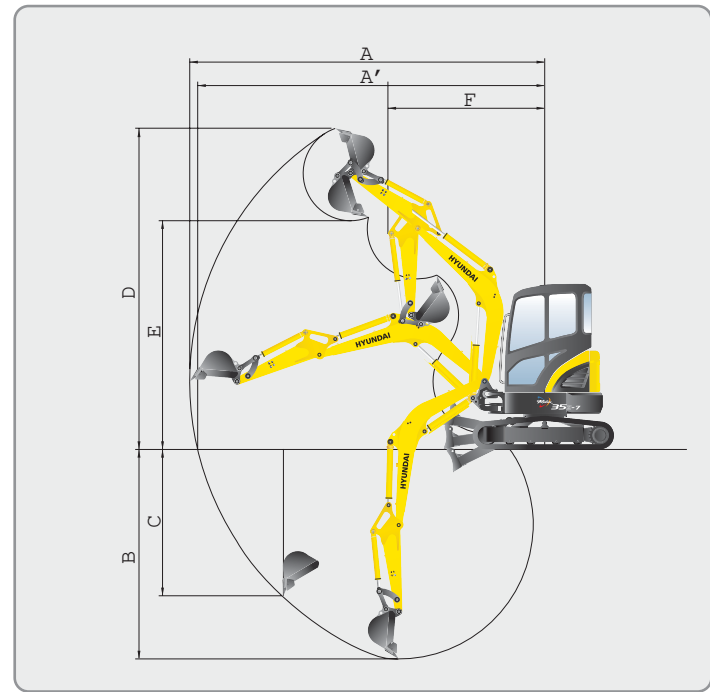
Bucket	3,200 kgf
	31,360 kN
	7,050 lbf
Arm	1,990 kgf
	19,500 kN
	4,390 lbf

Dimensions



ITEM		R35Z-7
(A)	Overall width of upper structure	1,500mm (4'11")
(B)	Overall width of cab	1,050mm (3'5")
(C)	Overall height of cab	2,500mm (8'2")
(D)	Tail swing radius	870mm (2'10")
(E)	Overall width	1,740mm (5'9")
(F)	Clearance under counterweight	540mm (1'9")
(G)	Ground Clearance	290mm (11")
(H)	Tumbler distance	1,700mm (5'7")
(I)	Track length	2,130mm (6'12")
(J)	Track gauge	1,440mm (4'9")
(K)	Track shoe width	300mm (12")
(L)	Overall length	4,790mm (15'9")

Working Range



ITEM	
Boom length	2,500mm (8'2")
Arm length	1,300mm (4'3")
(A)	Max. digging reach
(A')	Max. digging reach at ground
(B)	Max. digging depth
(C)	Max. vertical wall digging depth
(D)	Max. digging height
(E)	Max. dumping height
(F)	Min. swing radius

Lifting capacities R35Z-7

Rating over-front Rating over-side or 360 degree

• Boom : 2.50m (8' 2") • Arm : 1.30 m (4' 3") • Bucket : 0.11 m³ SAE heaped • Shoe : 300mm(12") rubber track and 420kg (925 lb) counterweight

Load point height m(ft)		Load radius								At max. reach		
		1.0 m(3.3 ft)		2.0 m(6.6 ft)		3.0 m(9.8 ft)		4.0 m(13.1 ft)		Capacity		Reach
												m (ft)
4.0 m	kg									600	510	3.94
13.1 ft	lb									1320	1120	(12.9)
3.0 m	kg							560	470	420	360	4.74
9.8 ft	lb							1230	1040	930	790	(15.6)
2.0 m	kg					890	750	540	460	360	300	5.11
6.6 ft	lb					1960	1650	1190	1010	790	660	(16.8)
1.0 m	kg					830	690	520	440	340	290	5.18
3.3 ft	lb					1830	1520	1150	970	750	640	(17.0)
Ground	kg			1570	1260	790	650	500	420	360	300	4.98
Line	lb			3460	2780	1740	1430	1100	930	790	660	(16.3)
-1.0 m	kg	*2100	*2100	1590	1270	780	650	500	420	440	370	4.45
-3.3 ft	lb	*4630	*4630	3510	2800	1720	1430	1100	930	970	820	(14.6)
-2.0 m	kg			1630	1310	810	670					
-6.6 ft	lb			3590	2890	1790	1480					

NOTES 1. Lifting capacity is based on SAE J1097, ISO 10567. 2. Lifting capacity of the Robex Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity. 3. The load point is a hook (standard equipment) located on the back of the bucket. 4. (\*) indicates load limited by hydraulic capacity.

Standard Equipment

- ISO standard canopy
  - Canopy ROPS(ISO 3471)
  - FOPS(ISO 3449)
  - TOPS(ISO 12117)
- Centralized monitoring
  - Gauges
    - Fuel level gauge
    - Engine coolant temperature gauge
  - Warning
    - Quick clamp
    - Engine oil pressure
    - Engine coolant temperature
    - Preheat
    - Low battery
    - Air cleaner closing
    - Fuel empty
- Door and locks, one key
- AM/FM radio and cassette
- Mechanical suspension seat with seat belt
- Console box tilting system(LH.)
- Two front working lights
- Electric horn
- Battery (1 x 12 V x 80 AH)
- Battery master switch
- Automatic swing brake
- Removable reservoir tank
- Water separator, fuel line
- Counterweight (420 kg, 925 lb)
- Mono boom (2.5 m, 8'2")
- Arm (1.3 m, 4' 3")
- Rubber crawler (300mm, 12")
- Single acting piping (Breaker, etc)
- Double acting piping (Clamshell, etc)

Optional Equipment

- ISO standard cabin
  - Cabin ROPS(ISO 3471)
  - FOPS(ISO 3449)
  - TOPS(ISO 12117)
- All-weather steel cab with all-around visibility
- Safety glass windows
- Sliding fold-in front window
- Sliding side window
- Lockable door
- Accessory box & Ash-tray
- Air-conditioner
- Beacon lamp
- Accumulator, work equipment lowering
- Travel alarm
- Quick coupler
- Steel shoe (300mm, 12")
- Tool kit
- Operator suit
- Heater & Defroster
- Lever Pattern Change Valve