

**YZ12 Full Hydraulic (Double Driving) Single Vibrating  
Vibratory Roller**

**YZ12 单钢轮振动压路机**

**Specification Booklet**

**主要技术参数**



# YZ12 Full Hydraulic (Double Driving) Single Vibrating Vibratory Roller

## 1. Main Technical Specification

Item	Value	Unit	
Working Weight	12000	Kg	
Distribution Load of Vibratory Wheel	7200	Kg	
Vibratory Wheel Static Linear Load	328	N/cm	
Diameter×Width of Vibratory Wheel	φ1560×2150	mm	
Vibration Frequency	29/32	Hz	
Exciting Force	260/160	kN	
Nominal Amplitude	1.7/0.85	mm	
Travel Speed	0~6.5 ;0~9	Km/h	
Engine	Model	QSB4.5-C110	
	Type	Water Cooling	
	Rated Power	82	kW
	Rated Speed	2500	r/min
Climbing Capability	50	%	
Min. turning radius	6250	mm	
Turning Angle	±32	°	
Swing Angle	±10	°	
Length	5780	mm	
Width	2300	mm	
Height	3200	mm	

## 2. Reference Standard

YZ12 Full Hydraulic (Double Driving) Single Vibrating Vibratory Roller design, manufacture and operation are all based on the following standards:

1. National Standard of the People's Republic of China  
《Road roller》  
standard code: GB/T8511.1-1995
2. Industry Standard of the People's Republic of China  
《Road roller damping vibration system design》  
standard code: GB/T5076.1
3. Industry Standard of the People's Republic of China  
《Road roller damping vibration system inspection》  
standard code: GB/T5076.2
4. Industry Standard of the People's Republic of China  
《Technical qualification for damping rubber》  
standard code: GB10680
5. Company standard of Changsha Zoomlion Heavy Industry Science and  
Technology Development Co., Ltd.  
《Vibrating road roller》  
standard code: Q/QKAM 103007-2002

### **3. Advantage and Feature of Performance**

#### **Performance features**

- ◆ High exciting force, high amplitude, great vibratory weight and superior matching of the vibrating parameters ensure high compacting capability
- ◆ Dual frequency, dual amplitude and dual exciting force make the serviceable range expanding and ensure high productivity
- ◆ Full hydraulic and double driving and two-level stepless speed change ensure better climbing capability
- ◆ Driving axle with differential lock and self anti-slip technology ensure good cross country performance

#### **Configuration features**

- ◆ Internationally recognized brand engine
- ◆ Internationally recognized brand hydraulic components
- ◆ Internationally recognized brand vibration bearings
- ◆ Internationally recognized brand driving axle
- ◆ Internationally recognized brand electric components
- ◆ Internationally recognized brand meters and sealing elements

#### **High reliability**

- ◆ High reliable and excellent design
- ◆ Drum with two shafts, four bearings, special sealing design, some special structures such as self lubricating and so on
- ◆ Vibratory wheel has been tested for continuous running
- ◆ Excellent configuration with famous brand components in the world improves the reliability greatly

#### **Comfortable operation environment**

- ◆ Excellent three-grade shock absorbing system
- ◆ Ergonomical operating system
- ◆ Whole sealing and car decorative cab equipped with air condition
- ◆ Thoroughly new streamline structure ensures widen front and rear views
- ◆ Electro hydraulic control and auto braking and shifting, only one steering rod ensures easiest, safe and comfortable operation

#### **Lower costs for operation**

- ◆ High reliability reduces the failure rate and maintenance costs to the lowest
- ◆ The failure acousto-optic automatic alarming device in Engine and hydraulic system avoids the damage of important components
- ◆ Special layout of the engine and side-open engine cover make maintenance very easy and reduce the maintenance costs

## 4. Main Components Configuration

### 4.1 Main assembly components of YZ12

SN	Name	Manufacturer	Remark
1	engine	CUMINS	
2	Traveling system	REXROTH	
3	Vibrating system	REXROTH	
4	Gear box	REXROTH	
5	Steering system	Chian Eaton	
6	Vibrating bearing	Germany FAG	
7	Sealing	Germany	
8	Air condition system	China	

### 4.2 Main assemblies of hydraulic system of YZ12

SN	Name	Manufacturer	Remark
1	Traveling pump	REXROTH	
2	Rear motor	REXROTH	
3	Front motor	REXROTH	
4	Gear box	REXROTH	
5	Vibrating pump	REXROTH	
6	Vibrating motor	REXROTH	
7	Steering pump	China	
8	Steer cylinder	China	