



**Single Drum Soil Compactor**





**When it comes to high-performance  
precision compaction, it has to be JCB Compaction**

SMOOTHLY DOES IT



In recent years, JCB has proudly taken Compaction to new levels, thanks to our world-class manufacturing, engineering excellence and reputation for providing the best back-up in the business.

Our latest generation of outstanding single-drum soil compactors has been carefully developed with intensive market research and leads its class in terms of quality, reliability, comfort and – most importantly – productivity. Discover how this outstanding range will make smooth work of even the toughest challenges.

# Powerful, productive and incredibly reliable

The smart money's  
on JCB Compaction

## Affordable

We want everyone to benefit from JCB's superior machine quality, which is why we've made each one more affordable than ever. So, as well as ensuring stringently lean manufacturing processes that keep our costs down, we are able to offer affordable finance to businesses large and small. With flexible payment options, competitive interest rates, value-for-money insurance and impressive warranty and service packages, you'll be hard pressed to find better deals with anyone else.

## Productive

JCB Compaction rollers roll quickly, powerfully and accurately, giving you complete control and maintaining unbeatable productivity levels. And because they're built to last, you'll find them more reliable, which means lower maintenance costs and reduced downtime.

## Economical

Each sophisticated component within your single-drum roller is built to perform and ultimately cost you less. Take the single-piece eccentric shaft. It's cleverly designed to produce optimum performance while reducing maintenance to a minimum. This keeps the lifetime costs of your machine incredibly low while guaranteeing maximum durability.





## Best-in-class performance

For more compacted material in less time



JCB Compaction rollers are sophisticated and versatile, ready for any challenge that lies ahead. With best-in-class compaction, all models feature two frequencies and amplitudes to match a wide range of soil conditions and meeting natural soil frequencies.

Whether you're working on a motorway, runway or other construction project, the single-drum compactor provides a superior compaction output. A key component here is the unique single-piece eccentric shaft with overturning weights. It's coupled with our Automatic Vibration Control system, which avoids stationary vibration to eliminate over-compaction when changing direction.

Where other machines fail, the single-drum roller keeps going. All models produce superb gradability thanks to precise weight distribution between front and rear, a built-in switchable anti-slip system (SASS), heavy-duty no-spin axles and our renowned DIESELMAX engines with high-torque hydraulic components.





## Thoughtful design, quality components

Where engineering expertise  
meets impressive reliability

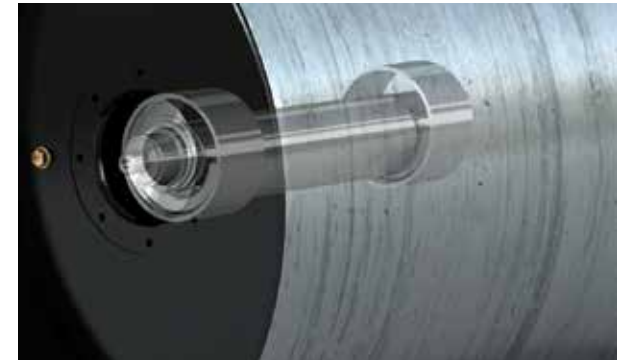


Manufactured with extensive customer input, everything about our single-drum soil compactors has been designed for quality, durability and reliability, with each world-class part rigorously tested.

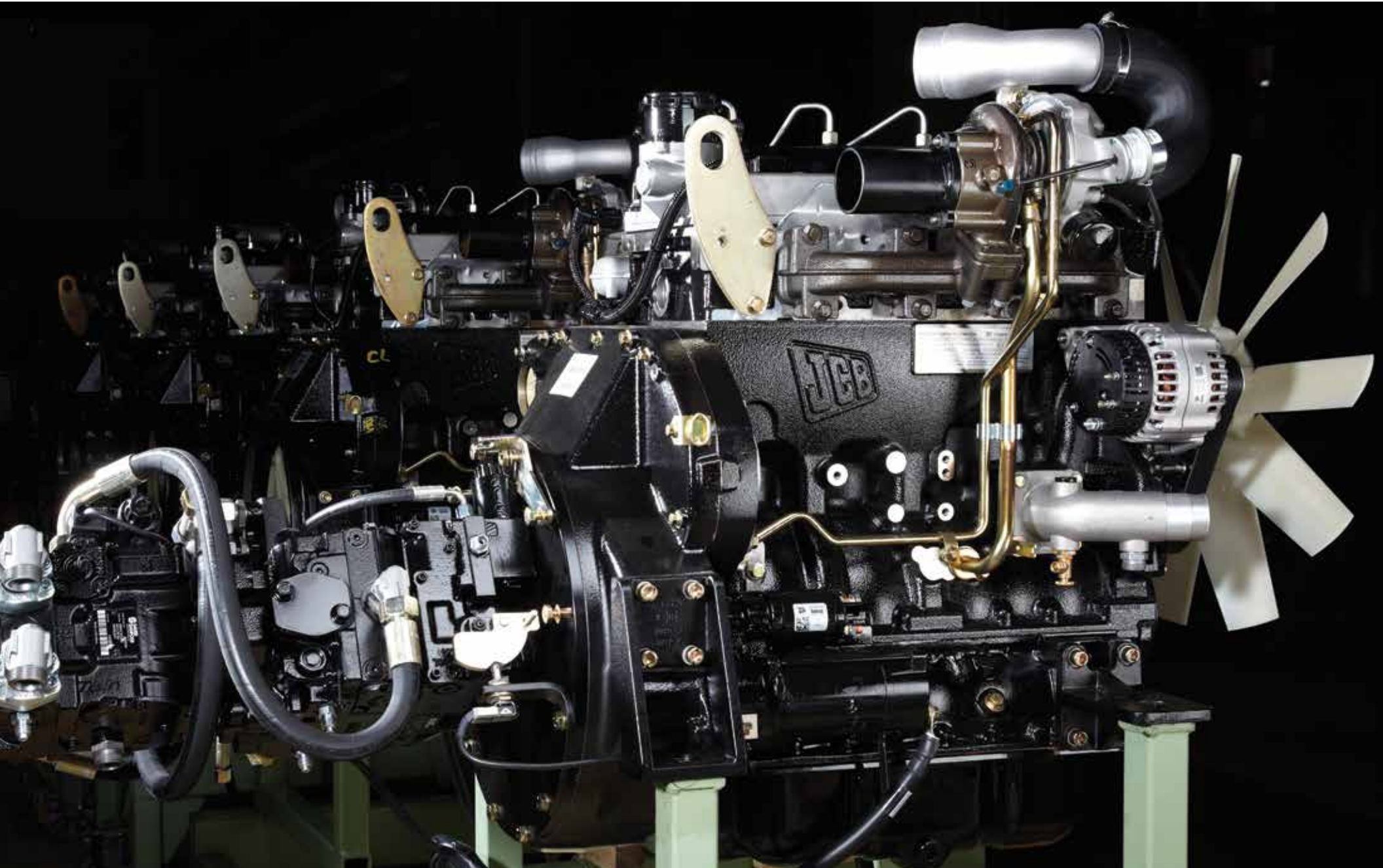
Our record-breaking, water-cooled DIESELMAX engine sits at the heart of most models machine (not on VM166 and VM200), offering tremendous power with minimum emissions. Meanwhile, the superior chassis balances weight and, along with the super strong axels, is specially built for heavy-duty construction projects. In fact, the entire frame is intelligently designed with front-to-back oscillation for extra stability, a flush finish for confined environments and over-dimensioned components for extra durability and reduced repair costs.

From the maintenance-free, lifetime-lubricated articulation joint to the sophisticated traction control system with its excellent gradability, you'll find expert engineering and superb attention to detail throughout our entire range of single-drum soil compactors.

Finally, each model that rolls off our production lines is really put through its paces, with uncompromising two-hour hot test runs. This ensures whichever model you buy, it's in top working order and ready to roll.







## Keeping you up and running

Maximum reliability means  
minimum maintenance



Thanks to the way our single-drum soil compactors are intelligently designed and manufactured by world-class engineers, each model has low maintenance demands and is incredibly easy to service.

The most important part of any roller, of course, is the drum. More sophisticated than you might initially think, the drum features pre-loaded rubber buffers which ensure it always has the correct load. In turn, this significantly lengthens the rubber buffer's life and protects the hydraulic motors against axial pressures. All models also feature heavy-duty, maintenance-free center joints – again designed to reduce downtime and servicing costs.

When the time does come for a service, you'll find all the components accessible and the whole process quick and easy, so your machine can be back to business quickly. The compactors feature an easy-to-get-at centralized service station for their hydraulic systems, towing pumps and hydraulically lifted engine hoods (VM132 to VM200 models). All machines feature high volume tanks to reduce refilling time and cost, having both, fuel and hydraulic tanks – well protected – under the engine hood.





## Comfort is key

Safe, ergonomic and so  
easy to operate



For your operators to stay sharp and productive, they need to work in an environment where they feel completely comfortable and at ease.

That's why JCB has taken considerable care to get the cab and operating systems just right. Driver stands and cabins are easily accessible from both sides of the machine and once you step inside, the first thing you notice is the spacious and intuitively designed interior.

There's plenty of storage space for tools, while large windows give you 360° vision for an excellent drum-edge view and outstanding on-site safety. The controls are precise and easy to use, with an ergonomic driving lever for exact speeds and accurate changes of direction. It all adds up to a totally comfortable space that's brilliantly simple and allows an operator to feel at one with his machine.





# Introducing COMPATRONIC

For an unbeatable, smooth finish,  
time after time

One of the biggest problems with standard compaction equipment is over compaction, which leads to inconsistent compaction and uneven grounds. In the worst case scenario, the previously achieved compaction is destroyed resulting in cracks in buildings or pot holes in roads. Additionally, over compaction means more passes, a more time-consuming job, damage on the machine and more fuel wasted, costing you more money. JCB Compaction technology eliminates these issues by offering Compatronic, an advanced compaction measurement system, for all its single-drum rollers. There are four options to choose from:

### **This is how it works:**

The accelerating sensor, mounted on the drum, is the heart of all COMPATRONIC Systems. It measures the movements of the drum while compacting and transmits these data to a microprocessor which processes the data. The loss free data transfer from sensor to the processor is key to show exact data. Therefore JCB put together sensor and processor in one compact, solid housing. The calculated compaction can now easily (loss-free as well) be transmitted to the display on the operator stand of the cabin.



### **COMPATRONIC**

Our entry-level system indicates precise vibrator frequency, jump operation and relative compaction values. The system measures the density of the material and once the highest possible density for that particular material is reached, it indicates clearly that the job is done by warning the operator by visual LEDs.



### COMPATRONIC TP

This advanced version of Compatronic gives you more detailed compaction reporting and more indications such as relative compaction value, vibrator frequency, jump operation, amplitude, requested compaction value, machine speed, the current position of the roller and how each compaction compares to the previous pass. The system also gives you the option to print your records.



### COMPATRONIC Pro

Offering you complete dynamic control, Compatronic Pro has all the features of Compatronic TP, but with added in-depth reporting. Not only does it give you details for each pass, it also gives you an overview of the compaction process for the total area you need to cover. Compatronic Pro allows you to store detailed information for 99 areas, 18 tracks per area and eight passes per track. The system comes with a printer and the latest software for your office PC.



### COMPATRONIC GPS

The newest addition to our popular range of compaction measurement systems gives you all the benefits of our Pro version but with the added advantage of a refined, scratch-proof, anti-glare display system and GPS technology. The system provides georeferenced compaction data (in easy-to-understand red-yellow-green) that can be displayed simultaneously on the in-cab display and on the site manager's PC for instantaneous live reporting.

### Operator environment

- Spacious, ergonomic and comfortable
- Easy access from both sides
- Excellent 360° views right to the drum edges

### Engine compartment

- Best-in-class service access
- Centralized service station for the hydraulic system
- Towing pump as standard

### General

- Machined drum surfaces
- High grade steel for long-lasting life
- Heavy-duty NoSpin axles



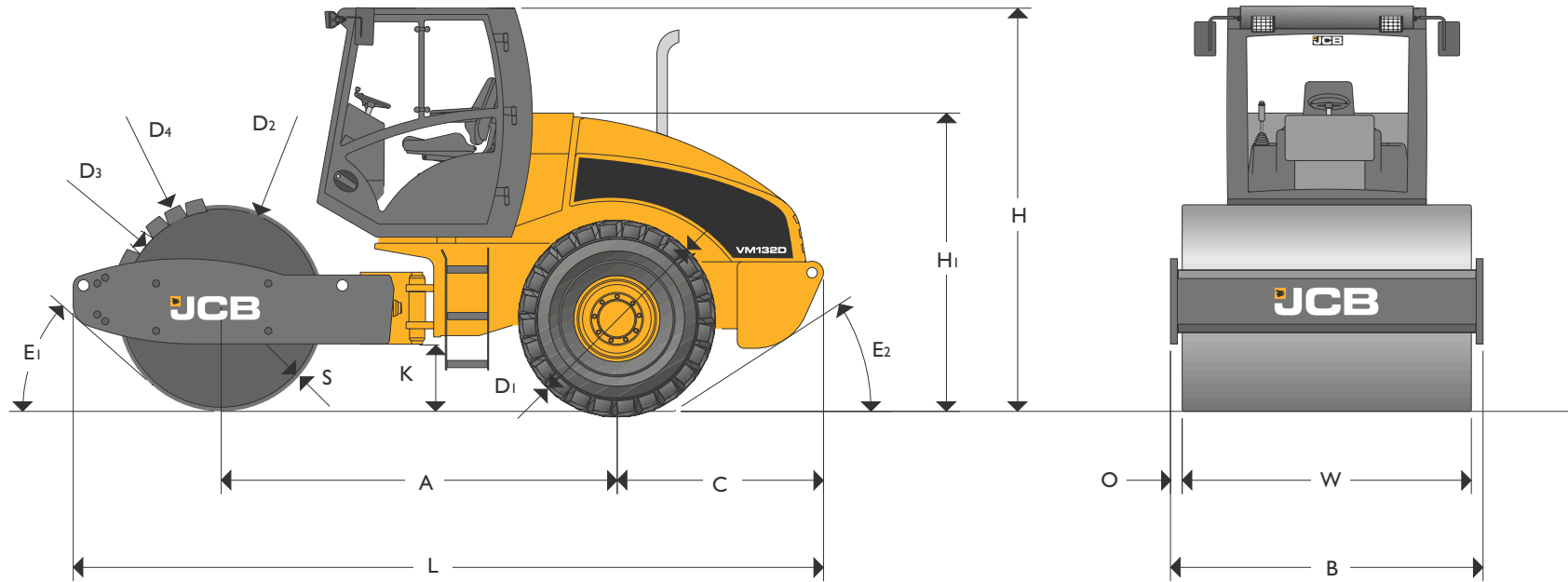
### Vibration

- Complete compaction control through AVC (Automatic Vibration Control)
- Low-maintenance, single-piece eccentric shaft for ultimate robustness and performance
- Long-life, pre-loaded rubber mountings
- 2 frequencies and 2 amplitudes with superior compaction output and meeting natural soil frequencies

### Chassis

- Hydraulic components protected by rock-solid drum frames
- Heavy-duty, maintenance-free center joint
- High-volume fuel tank integrated in the counterweight





## STATIC DIMENSIONS

Dimensions in inches	VM75	VM115	VM132	VM166	VM200
A Wheelbase	99	112	117.9	117.9	121.1
B Overall width	73.6	88.5	89.4	89.4	89.4
C Axle to rear face	57.9	60	65	65	65.3
D1 Wheel diameter	51.1	59.8	59.8	59.8	59.8
D2 Drum diameter (smooth drum)	48	59.1	59.1	59.1	63
D3 Inner diameter padfoot drum	44.8	55.1	55.1	55.1	55.1
D4 Outer diameter padfoot drum	51.2	63	63	63	63
H Total travel clearance	112	115.6	115.6	115.6	117.5
H1 Height to top of seat	81.4	86	85	85	88.3
K Ground clearance	15	17.6	17.6	17.6	19.6
L Total travel length	192.4	214.3	225.2	225.2	236.1
O Overhang	2.4	3	3.3	3.3	3.3
S Drum thickness	1	1	1	1	1
W Drum width	68.9	82.7	82.7	82.7	82.7
E1 Front departure angle	40°	41°	41°	36°	35°
E2 Rear departure angle	28°	32°	29°	29°	29°



OPERATING DATA

		VM75D		VM75PD		VM115D		VM115PD		VM115HD		VM115HPD	
Operating weight	lb	7660		7320		11090		11380		11720		11770	
Operating axle load front / rear	lb	3590 / 4070		3650 / 3670		5580 / 5510		6215 / 5165		6285 / 5435			
Operating linear load front	lb/in	20.5				26.6				29.9			
Vibration stage		1	2	1	2	1	2	1	2	1	2	1	2
Exciter frequency	vpm	1740	2160	1740	2160	1860	2160	1860	2160	1860	2160	1860	2160
Nominal amplitude	in	.08	.03	.08	.03	.08	.04	.08	.04	.08	.04	.08	.04
Centrifugal force	lbf	31024	18884	35070	21582	58675	36664	63396	39566	58675	36664	63396	39566
Centrifugal force / drum width	ft/lb	582	354	657	405	917	572	991	618	917	572	991	618
Compaction depth up to	in	24	20	30	24	35	28	39	32	35	28	39	32
Working speed (forward/reverse) max.	mph	4.29		4.29		2.8		2.8		2.8		2.8	
Travel speed (forward/reverse) max.	mph	6.84		6.84		6.52		6.52		6.52/7.77		6.52/7.77	
Steering lock angle	degrees	±28		±28		±35		±35		±35		±35	
Vertical oscillation	degrees	±15		±15		±15		±15		±15		±15	
Inner turning radius	in	117		117		134		134		134		134	
Tires		14.9 - 24 / 6PR AWT		14.9 - 24 Dyna Torque II		23.1 - 26 / 8 PRAWT		23.1 - 26 / 12 Tractor Tire Tread		23.1 - 26 / 8 PR AWT		23.1 - 26 / 8 PR Dyna Torque II	
Number of padfeet				100				132				132	
Height of padfoot	in			3.1				3.9				3.9	
Gradeability up to	degrees (%)	31 (60)		33 (65)		31 (60)		33 (65)		31 (60)		33 (65)	

OPERATING DATA

		VM132D		VM132PD		VM166D		VM166PD		VM200D		VM200PD	
Operating weight	lb	26125		28021		34216		34506		40852		40499	
Operating axle load front / rear	lb	14242/11883		16270/11751		21231/12985		22333/13073		25133/15719		24317/16182	
Operating linear load front	lb/in	172				257				304			
Vibration stage		1	2	1	2	1	2	1	2	1	2	1	2
Exciter frequency	vpm	1740	2160	1740	2160	1740	2100	1740	2100	1740	2100	1740	2100
Nominal amplitude	in	.08	.03	.08	.03	.07	.03	.07	.03	.08	.03	.08	.03
Centrifugal force	lbf	63396	39117	68567	42264	67667	43838	72164	46760	83179	46086	83179	46086
Centrifugal force / drum width	ft/lb	991	611	1071	660	1057	685	1128	730	1300	720	1300	720
Compaction depth up to	in	39	31	43	35	51	39	55	43	57	39	61	43
Working speed (forward/reverse) max.	mph	4.78		4.78		4.54		4.54		4.72		4.72	
Travel speed (forward/reverse) max.	mph	7.89		7.89		7.08		7.08		7.33		7.33	
Steering lock angle	degrees	±35		±35		±35		±35		±35		±35	
Vertical oscillation	degrees	±15		±15		±15		±15		±15		±15	
Inner turning radius	in	142		142		142		142		142		142	
Tires		23.1 - 26 / 8 PR AWT		23.1 - 26 / 12 Tractor Tire Tread		23.1 - 26 / 8 PRAWT		23.1 - 26 / 8 PR Dyna Torque II		23.1 - 26 / 8 PR AWT		23.1 - 26 / 8 PR Dyna Torque II	
Number of padfeet				132				132				132	
Height of padfoot	in			3.9				3.9				3.9	
Gradeability up to	degrees (%)	31 (60)		33 (65)		32 (62)		33 (65)		24 (45)		24 (45)	

**ENGINE**

Four/six-cylinder, water-cooled, turbo-charged diesel engine.

Model	VM75		VMI15		VMI32		VMI66		VM200		
	Tier 3		Tier 2	Tier 3	Tier 2	Tier 3	Tier 2	Tier 3	Tier 2	Tier 3	
Make	JCB		JCB	JCB	Cummins	JCB	Cummins	Cummins	Cummins	Cummins	
Model	444		444	444TCA	B 5.9 - 150C	444TCA	B 5.9 - 173C	QSB6.7	B 5.9 - 150C	QSB6.7	
Piston displacement	in <sup>3</sup>	268	268	268	359	268	359	409	359	409	
Performance – DIN 6271	kW (hp)	63 (84)	93 (125)	97 (130)	112 (150)	108 (145)	129 (173)		129 (173)		
Operating speed	min <sup>-1</sup> (rpm)	2200 (2200)		2200 (2200)		2200 (2200)		2200 (2200)		2200 (2200)	
Starting device		Electric motor		Electric motor		Electric motor		Electric motor		Electric motor	
Air cleaner		Dry cartridge with safety cartridge		Dry cartridge with safety cartridge		Dry cartridge with safety cartridge		Dry cartridge with safety cartridge		Dry cartridge with safety cartridge	
Fuel filter		Cartridge		Cartridge		Cartridge		Cartridge		Cartridge	

**SERVICE CAPACITIES**

Model		VM75	VMI15/VMI15H	VMI32	VMI66	VM200
Fuel	gallons	61	79.2	105.7	105.7	84.5
Engine oil (engine)	gallons	2.1	3.7	3.8	3.8	3.8
Gear oil (exciter)	gallons	0.79	0.92	3.2	3.2	3.2
Hydraulic oil	gallons	21.1	21.1	21.1	21.1	21.1
Coolant	gallons	3.7	3.7	5	5	5

**PROPULSION**

Infinitely variable hydrostatic direct drive by variable displacement motor on rear axle and drum, Multidisc self-locking differential (NoSPIN).

**EXCITER DRIVE**

Electrically controlled hydrostatic direct drive on drum.

**EXCITER**

Single-shaft circular exciter with overturning weights.

**STEERING SYSTEM**

Servo assisted center articulation with vertical oscillation.

**BRAKING SYSTEM**

- Service brake:** Hydrostatic propulsion system.
- Parking brake:** Hydraulically released multi-disk brake on rear axle and drum drive.
- Emergency brake:** Electrically controlled, disk brake on rear axle and drum drive.

**ELECTRICAL SYSTEM**

Voltage	V	12
Battery capacity	Ah	143
Alternator	A	max. 95

**INDICATORS AND SWITCHES**

Hour meter, fuel, engine temperature, engine oil pressure, battery charging current, hydraulic oil and air filter condition, parking brake, neutral position control lever, speed range selection, frequency, AVC (Automatic Vibration Control), acoustic back-up alarm. Optional lighting, turn signal, hazard-warning lights.

**OPTIONS**

High comfort ROPS/FOPS certified cabin, ROPS frame, working lights, road traffic lights, yellow rotating beacon, adapter for turning seat, several homologation kits, padfoot shell kits (3 segments) with scraper, plyurethane scrapers, levelling blades, tachograph, tractor and diamond pattern tread spare wheels, tool bags, COMPATRONIC, COMPATRONIC TP, COMPATRONIC PRO, COMPATRONIC PRO, COMPATRONIC GPS, anti-vandalism cover for dashboard, heating, aircondition, FOPS roof for ROPS frame, canopy, air precleaner.

COMPACTED LAYER THICKNESS UP TO... (in)

Machine	Weight (lbs)	Rock	Sand / Gravel	Mixed soil	Clay / Loam
VM75D	16887*	–	20	16	5.9
VM115D	24449*	35	23	20	7.9
VM132D	26125*	39	28	23	9.8
VM166D	34216*	51	39	28	13.8
VM200D	40852*	57	47	31	15.7

COMPACTED OUTPUT... (in<sup>3</sup>/min)

Machine	Weight (lbs)	Rock	Sand / Gravel	Mixed soil	Clay / Loam
VM75D	16887*	–	.21 - .47	.16 - .32	.06 - .12
VM115D	24449*	.45 - .90	.29 - .59	.25 - .49	.10 - .20
VM132D	26125*	.50 - 1	.34 - .69	.29 - .59	.13 - .25
VM166D	34216*	.65 - 1.3	.50 - 1	.35 - .71	.18 - .35
VM200D	40852*	.73 - 1.5	.60 - 1.2	.40 - .80	.20 - .40



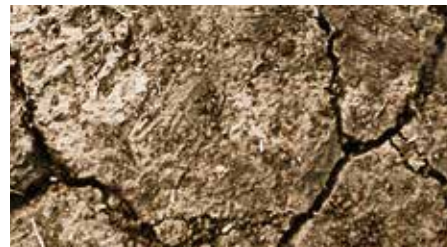
Rock



Sand / Gravel



Mixed Soil



Clay / Loam

**Assumption and Notes:**

The achieved compaction and productivity values will vary with exact material composition and moisture content. In critical applications these values should always be verified by physical measurement. Laboratory soil test should always be carried out to assess the soil structure & strength for compaction.

Weights- CECE with ROPS<sup>†</sup> or Cab<sup>\*</sup>

Working Width: 82.7 in with 7.9 in overlap of paths

Working speed: 2362 in/min (= 1.9 mph)

Compaction Output speed: 75 % of working speed = 1.4 mph

Compaction Output: assumes 80% of maximum layer thickness stated in upper table

Compaction Output: Number of passes are 4...8



COMPACTED LAYER THICKNESS UP TO... (in)

Machine	Weight (lbs)	Rock	Sand / Gravel	Mixed soil	Clay / Loam
VM75PD	16138*	–	20	16	7.9
VM115PD	25089*	35	23	20	9.8
VM132PD	28021*	39	28	23	11.8
VM166PD	35406*	51	39	28	15.7
VM200PD	40499*	57	47	31	17.7

COMPACTED OUTPUT... (in<sup>3</sup>/min)

Machine	Weight (lbs)	Rock	Sand / Gravel	Mixed soil	Clay / Loam
VM75PD	16138*	–	.21 - .47	.16 - .32	.08 - .16
VM115PD	25089*	.45 - .90	.29 - .59	.25 - .49	.13 - .25
VM132PD	28021*	.50 - 1	.34 - .69	.29 - .59	.15 - .30
VM166PD	35406*	.65 - 1.3	.50 - 1	.35 - .71	.20 - .40
VM200PD	40499*	.73 - 1.5	.60 - 1.2	.40 - .80	.23 - .45



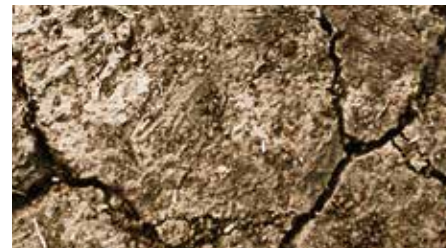
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Sand / Gravel



Mixed Soil



Clay / Loam

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Compaction Output: Number of passes are 4....8





ROPS plus FOPS roof.



Quick and easy fitting of padfoot shell segments (3 segments). Kit comes with scrapers.



Anti-vandalism cover for dashboard.



Leveling blade.



COMPATRONIC, COMPATRONIC TP, COMPATRONIC PRO,



## VALUE ADDED

JCB'S WORLDWIDE CUSTOMER SUPPORT IS FIRST CLASS. WHATEVER YOU NEED AND WHEREVER YOU ARE, WE'LL BE AVAILABLE QUICKLY AND EFFICIENTLY TO HELP MAKE SURE YOUR MACHINERY IS PERFORMING TO ITS FULL POTENTIAL.



1

1 Our Technical Support Service provides instant access to factory expertise, day or night, while our Finance and Insurance teams are always on hand to provide fast, flexible, competitive quotes.



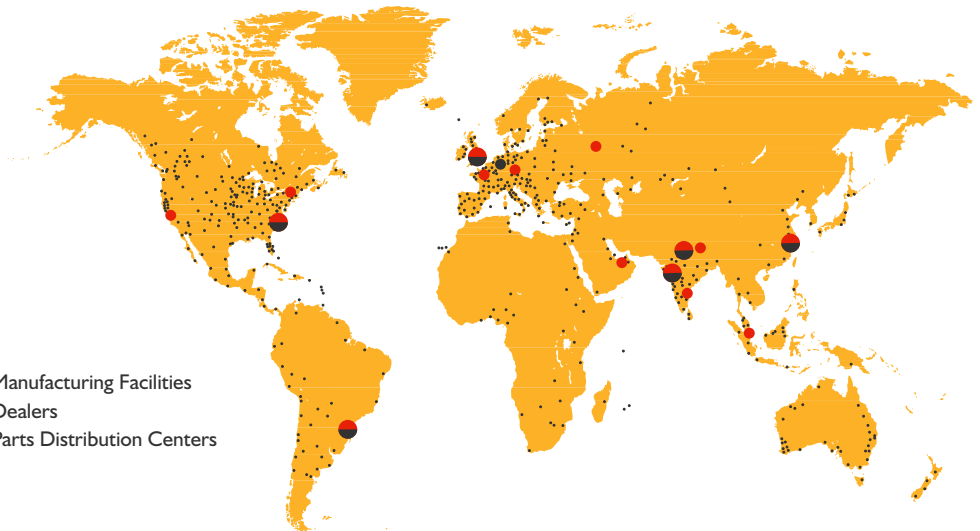
2

2 The global network of JCB Parts Centers is another model of efficiency; with 15 regional bases, we can deliver around 95% of all parts anywhere in the world within 24 hours. Our genuine JCB parts are designed to work in perfect harmony with your machine for optimum performance and productivity.



3

3 JCB Assetcare offers comprehensive extended warranties and service agreements, as well as service-only or repair and maintenance contracts. Irrespective of what you opt for, our maintenance teams around the world charge competitive labor rates, and offer non-obligation quotations as well as fast, efficient insurance repair work.





**ONE COMPANY, OVER 300 MACHINES.**

### Single Drum Soil Compactor

Your nearest JCB Dealer

#### JCB North American – Headquarters

Savannah, 2000 Bamford Blvd., Savannah, Georgia, 31322 Tel: (912) 447-2000

Download the very latest information on this product range at [www.jcb.com](http://www.jcb.com)

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