

## VIBROMAX | VMD70 AND VMD100



A Product of Hard Work



# When you're in a tight spot...

trust the JCB VMD70 and  
VMD100 to get the job done



Introducing the super-robust VMD70 and VMD100 compact walk-behind rollers. With best-in-class manoeuvrability, safety and serviceability, these are incredibly versatile machines, even in the tightest of spaces.

Fully hydrostatic for excellent traction and reliability, both machines offer the very best kerb clearance on the market, as well as being comfortable and easy to use. The combination of static weight, manoeuvrability, amplitude and high frequency makes the VMD70 and VMD100 clear market leaders when it comes to the most important thing: productivity.

The great-looking new models are available as manual or electric start and are a direct response to customer feedback on the previous range. They now boast a complete new machine layout which moves the engine to the front and the huge water tank to the rear, creating the near perfect 50/50 weight distribution so crucial for optimum results.

A vibration-isolated, ergonomic, tiltable guide bar makes lighter work of operating each machine, while single-point lift and simple tie-down points speed things up so you're not wasting time on non value-added work.

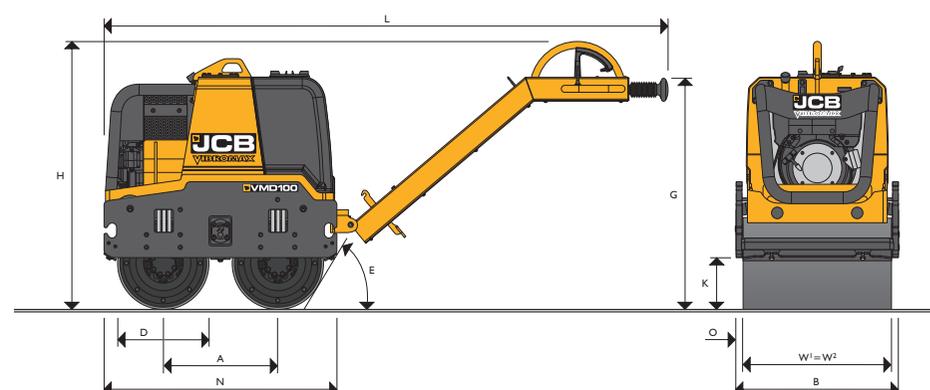
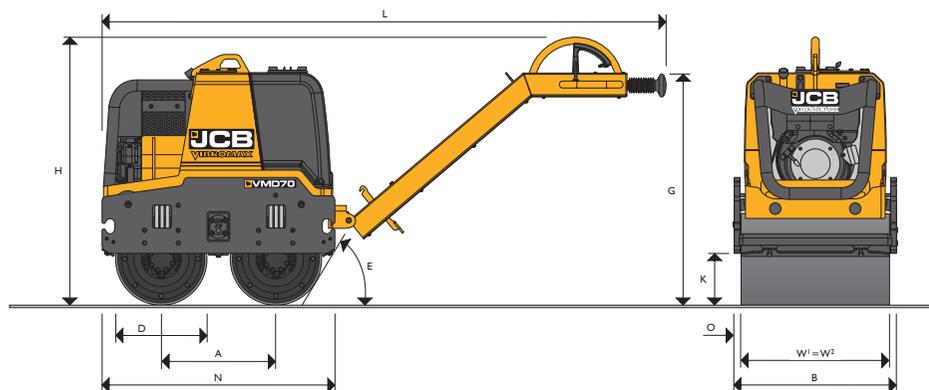
Meanwhile, safety is as paramount as ever, and the rollers' low noise levels are easier on operator and environment alike. Their improved crush-zone cut-out switch is easily accessible on the end of the control arm and needs to be manually reset if activated, making a real difference to site safety.

Finally, the VMD70 and VMD100 offer all the reliability you expect from JCB, with a simplified design that keeps maintenance costs down. We've also improved access to the components you need to check and service, making life easier and helping you stay up and running.





VMD70: DRUM WIDTH: 650mm (25.6in) OPERATING WEIGHT (CE): 740kg (1632lb) VMD100: DRUM WIDTH: 750mm (29.5in) OPERATING WEIGHT (CE): 920kg (2029lb)


**STATIC DIMENSIONS**

Dimensions in millimetres mm (in)		VMD70	VMD100
A	Wheelbase	500 (19.67)	
B	Overall width	710 (27.94)	840 (33.06)
D	Drum diameter	400 (15.74)	
G	Height of guide bar	1171 (46.1)	
H	Height to top of machine	1090 (42.9)	
K	Curb clearance	225 (8.85)	
L	Total travel length	2456 (96.7)	
N	Length of frame	1005 (39.6)	
O	Overhang	30 (1.18)	45 (1.77)
S	Drum depth	10 (0.39)	
W1=W2	Roller width	650 (25.6)	750 (29.51)
Ei	Departure angle	58°	

**FILLING QUANTITIES**

		VMD70	VMD100
Fuel (diesel)	litres (US gal)	5 (1.32)	
Engine oil (min/max) engine 10W40	litres (US gal)	0.7/1.5 (0.74/1.59)	
Engine oil (exciter)	litres (US gal)	0.15 (0.04)	0.20 (0.05)
Hydraulic oil 46 multigrade	litres (US gal)	34 (8.98)	
Sprinkler water	litres (US gal)	70 (18.48)	

**OPERATING DATA**

		VMD70	VMD100
Operating weight (CECE)	kg (lb)	740 (1632)	920 (2029)
Operating axle load front/rear	kg (lb)	370 (816)	460 (1015)
Operating linear load front/rear	kg/cm (lb/in)	5.7 (31.9)	6.1 (34.4)
Exciter frequency	Hz (vpm)	60 (3600)	
Nominal amplitude	mm (in)	0.38 (0.015)	0.32 (0.012)
Centrifugal force	kN (lbf)	21.90 (4923)	23 (5171)
Centrifugal force / drum width	N/cm (lbf/in)	168.5 (96.30)	153.3 (87.6)
Travel speed maximal forward / reverse	km/h (mph)	0 – 4.0/0 – 2.5 (0 – 2.5/0 – 1.55)	
Compaction depth up to	cm (in)	40 (15.7)	45 (17.3)
Compaction area (at 2 km/h)	m <sup>2</sup> /h (yd <sup>2</sup> /h)	1200 (1003)	1400 (1170)
Gradeability up to	degrees (%)	21.8 (40)	
Tipping angle side	degrees (%)	30 (57)	

**ENGINE**

Single-cylinder, air-cooled, four-stroke diesel engine.

Make	HATZ
Model	1B40
Piston displacement	462 (28.2) cm <sup>3</sup> (in <sup>3</sup> )
Performance – DIN 6271	6.6 (9.0) kW (hp)
Operating speed	2800 rpm
Starting device	Recoil start Option: electric starter
Air cleaner	Dry air cleaner, "air filter blocked" indicator as standard
Fuel filter	Cartridge, 2 filters

## PROPULSION

Infinitely variable direct hydrostatic drive via drum motor on both drums.

## EXCITER DRIVE

Hydrostatic drive.

## EXCITER

Single shaft circular exciter.

## BRAKING SYSTEM

**Service brake:** Hydrostatic propulsion system.

**Parking brake:** Mechanical.

## ELECTRICAL SYSTEM

Voltage	V	12
Battery capacity	Ah	45
Alternator	A	14V – 14A
Battery disconnection switch		Standard

## STANDARD EQUIPMENT

**Comfort & ease of use:** vibration absorbing and ergonomic tiltable guide bar with dead man brake & recoil damper, low noise level, optimized weight distribution, comfortable pedal to unlock guide bar, large water tank filler cap for ease of cleaning, gravity fed water sprinkler system, engine protective frame with central lifting eye, heavy duty exciter bearings, 2 steel scrapers each drum. VMD70 as well as VMD100 comply to HAV and HBV regulations by CE.

**Performance:** high exciter frequency for fast rolling speeds, optimized static weight and amplitude set-up.

**Efficiency:** high curb clearance, large water tank volume to reduce refilling cost and downtime.

## OPTIONAL EQUIPMENT

**Indicators and switches:** Electric switch; oil drain kit; hour meter; tool kit; battery charging current; ignition switch buzzer.

**Additionally:** hour meter (only on E-start version); front engine protective cover.

## ASPHALT COMPACTION OUTPUT (t/h)\*

Structure	Wearing course	Binder course	Base course
Compacted layer thickness up to (mm)	20...50	50...100	100...150
VMD70 (t/h)	10...25	21...42	36...53
VMD100 (t/h)	12...29	25...49	42...63



## ASPHALT COMPACTION OUTPUT (m³/h)\*

Structure	Wearing course	Binder course	Base course
Compacted layer thickness up to (mm)	20...50	50...100	100...150
VMD70 (m³/h)	297	248	212
VMD100 (m³/h)	351	293	251



## ASPHALT COMPACTION OUTPUT (m³/h)\*

Structure	Wearing course	Binder course	Base course
Compacted layer thickness up to (mm)	20...50	50...100	100...150
VMD70 (m³/h)	4...11	9...19	16...24
VMD100 (m³/h)	5...13	11...22	19...28



## SOIL COMPACTION OUTPUT (m³/h)\*

Structure	Sand/gravel	Mixed soil	Clay/loam
Compacted layer thickness up to (mm)	200	180	100
VMD70 (m³/h)	26...51	23...47	13...26
VMD100 (m³/h)	31...61	28...55	15...31



**\*Assumption and notes:** Overlap of paths: 100mm. Working speed: 42 m/min (= 2.52 km/h). Compaction output speed: 75% of working speed (= 1.89 km). Compaction output: assumes 80% of maximum layer thickness stated in upper table. Number of passes are 3...6 (soil) and 3...7 (asphalt).

## A few words about JCB

A groundbreaking, world class family business with a commitment to supporting our customers and protecting the environment



**A family company on a global scale.** JCB is no ordinary company. From the dreams of one man, Joseph Cyril Bamford, we have grown into the world's largest privately owned construction equipment company. Since 1945, the same attention to detail, passion for progress and family spirit has taken us from strength to strength. Nowadays JCB operates across six continents, manufacturing at 20 factories in the UK, Brazil, Germany, China, North America and India. With 2,000 dealer depots selling and supporting our products in over 150 countries, we are the global market leader for backhoe loaders and telescopic handlers.

**A history of world-class innovation.** Our business has always been driven by innovation, using only the most advanced technology, meticulous design, precision engineering and rigorous testing. Evidence of this commitment to innovation is illustrated in our revolutionary JCB DIESELMAX engine. Having grabbed the headlines when it smashed the world diesel land speed record at 350.092mph, it is now providing our customers with tomorrow's performance today.



**Doing things more efficiently, more sustainably.** Since 2007 we have reduced our carbon emissions by 20%. We are continually working to further reduce the carbon footprint of our operations and, in partnership with our suppliers, our whole supply chain. We are also committed to designing our products to be sustainable during manufacturing, over the life of the machine and through end-of-life recycling. Our new ECO machines, for example, offer significant fuel and carbon savings; an average of 16% on the ECOs, ECO skid steers and ECO compact track loaders, and 22% on the 8085 ECO.



## The best back-up in the business

Whether we're providing you with support, parts or finance, we aim for 100% satisfaction. It's all part of our promise to put you, the customer, first



**Wherever you are, we are.** Our mission to provide world-class support and deliver 100% satisfaction reaches into more than 2,000 dealer depots, spanning 150 countries across six continents. The aim? To bring you global expertise at a local level. We truly believe no other manufacturer does more to understand the subtle differences between one region of the world and another. It's a degree of attention that we maintain at every level of the company and an assurance to our customers that wherever they are in the world, JCB will fulfil their needs.

**Trust the genuine article.** At the heart of the support network is our impressive World Parts Centre, a state-of-the-art facility operating 24/7 to dispatch more than a million genuine parts and attachments every week to our dealers and international distribution centres. Because we understand the need to minimise downtime, we utilise the latest logistics and warehouse management systems and have committed to an 'Anywhere in 24 hours' strategy.

**Keeping you up and running.** Just as important as genuine JCB parts are the people who fit and maintain them. Our JCB-trained technicians in all of those 2,000-plus dealer depots provide excellent, expert customer care, whether it's routine servicing or something more urgent. If there is an emergency breakdown situation, we need to act fast. This is why all our dealers operate their own fleets of support vehicles, enabling parts to be delivered quickly and fitted expertly, and fulfilling our promise to keep our customers working.

**Maximising earning potential.** We grow as our customers grow. That's why, at JCB, we are committed to offering expert financial advice and support to help customers maximise their earning potential.

Finance options\* are available for new and used machinery, all part of our dedication to helping customers preserve their working capital while spreading costs in the most effective and tax-efficient way.

And as well as financial help, we are also happy to offer JCB Insurance.\* We specialise in construction and industrial insurance and in offering Insurance Premium Finance facilities.

*\* Please check individual countries for available services.*





JCB Sales Limited, Rocester, Staffordshire, United Kingdom ST14 5JP. Tel: +44 (0)1889 590312 Email: [salesinfo@jcb.com](mailto:salesinfo@jcb.com)  
Download the very latest information on this product range at: [www.jcb.com](http://www.jcb.com)

©2009 JCB Sales. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any other means, electronic, mechanical, photocopying or otherwise, without prior permission from JCB Sales.  
JCB reserves the right to change specifications without notice. Illustrations and specifications shown may include optional equipment and accessories. The JCB logo is a registered trademark of J C Bamford Excavators Ltd.

