

DD110B, DD120B, DD140B

Volvo Double Drum Compactors 11-14 t 131.5-148 hp





Ultimate versatility

Volvo offers you a range of compactors so you can choose the machine that best matches your needs. Whether you're compacting on a highway or airport, wide or deep pavements and on Roller Compacted Concrete (RCC), Warm Mix Asphalt (WMA) or any other material – Volvo compactors boast the best compaction in the market place. Whatever your requirements, Volvo has the best compactor for the job.

Two amplitudes

For operational simplicity, high or low amplitude is selected on the control panel allowing the operator to adjust drum force when application or material depth changes. Volvo's dual amplitude and frequency compactors allow the drum energy to be easily altered for improved performance and productivity.





Eight amplitudes

For versatility, eight amplitude settings increase or decrease compaction depth by changing the drum energy. This allows the operator to optimally adjust drum performance and achieve target density over varying conditions – from tender to tough mixes. Smoothness is enhanced through auto-reversing eccentrics.



Eight amplitudes HFA

For ultimate performance and maximum versatility, the Volvo High Frequency and Amplitude (HFA) compactor provides automated features – increasing productivity. The machine features automatic smooth start-up of vibration, eccentric rotation - which matches travel direction - and smart vibration which adjusts the frequency when amplitude is changed.

Intelligent design

Volvo compactors are designed for maximum efficiency and simple operation. Smart features including an industry-leading water system deliver straightforward operation and compaction at its best. Benefit from powerful performance and high density levels with Volvo compaction equipment.



Drum performance

High centrifugal force, optimal drum weight and variable amplitude combine to achieve the target material density in fewer passes.





Frame design

Robust box frame design provides the compactor with superior frame strength, allowing for excellent drum support, all built into a low profile design.



Impact spacing meter

The operator can easily monitor drum impact spacing via the console display. This provides a visual reference for rolling speed and allows the operator to make adjustments and ensure the correct spacing needed for consistent smoothness and quality.



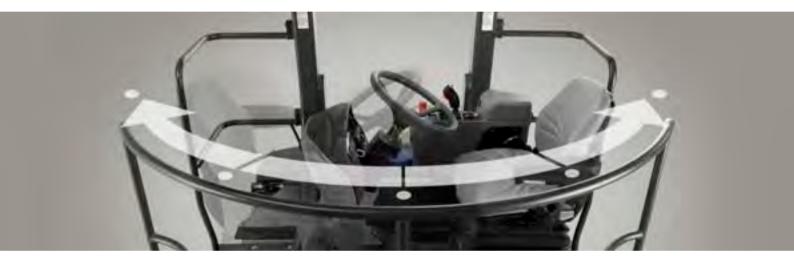


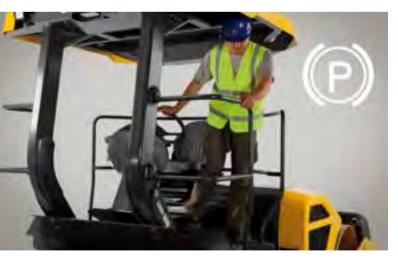
360° visibility.

For safety, comfort and all-around visibility Volvo has designed a premium ROPS/FOPS protected operator environment. The operator platform is surrounded by guard railings which provide safety when entering and exiting the machine. Adjustable seating enables easy access to the controls for increased productivity and ease of operation.

Rotating console

The operator console can be rotated to five different positions – allowing the seat to be positioned for maximum visibility and comfort. The interface of the drum, with panel edges and joints as well as curbs and guide railings, is visible from the operator seat for safe operation and increased productivity.





Presence switch

If the operator leaves the seat with the engine running and the parking brake not applied the machine will shut down. With the parking brake applied, the operator can safely exit the machine.

Seatbelt alert

Safety is improved by reminding the operator with an audible alarm and visual indicator to buckle the seatbelt during machine operation.

Superior compaction

Impact spacing meter

Easy monitoring of impact spacing permits rolling speed adjustments that help maintain pavement smoothness.



Rotating console

Operator console can be rotated to five positions allowing maximum comfort and visibility.

Vibration control HFA

On the HFA compactor, the automatic vibration system controls the machine's maximum speed in relationship to the machine's frequency - maintaining the correct impact spacing.



Tier 4i engine

Volvo engines provide a 'onestop-shop' approach with support, parts and warranty handled by your local Volvo dealer.

Selectable amplitudes

For two amplitude machines, high or low amplitude is selected on the control panel allowing the operator to adjust the drum force when application or material depth changes.



combined with drum

amplitude, frequency and weight delivers excellent compaction.



Water system

Industry-leading, automatic drum wetting system

provides uniform drum coverage to prevent material pick-up.

Frame design

Superior drum performance is enabled by robust box frame design. Low machine profile increases visibility.

Eccentric rotation

For eight amplitude machines, this automatic function ensures eccentric rotation in the direction that the machine is travelling for improved smoothness.

Water tanks

For quick and easy access the water tanks can be safely filled from ground level.



Your uptime is our priority

At Volvo we're not just committed to providing you with compaction equipment. Consult with Volvo experts to benefit from years of experience on your compaction and paving projects. We know that on a compacting job, time and quality mean money. And that's why Volvo has a unique, dealer support network to ensure your machine's uptime. Enjoy maintenance made easy and continuous state-of-the-art support with Volvo.

Volvo maintained

Volvo engines are built and maintained by Volvo. Because your compactor is 100% Volvo, you'll benefit from a 'one-stop-shop' approach – with support, parts and warranty dealt with in one place by your local Volvo dealer.

Road Institute

The Volvo Road Institute has been teaching customers how to operate and service compactors and pavers since its inception in 1965. Operators are educated by experienced instructors on best practice techniques and taught how to recognize and correct problems.





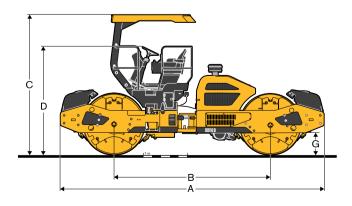
ROAD INSTITUTE

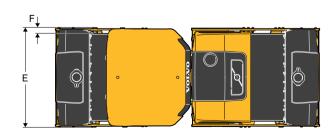
Customer Support Agreement

Volvo Customer Support Agreements (CSA) offer service and maintenance with maximum cost control and minimum downtime. The flexible system caters for a range of needs from total repair and maintenance to an inspection program covering vital parts and functions.

Specifications

						DD110B					
Model				2 amplitu	des	8 amplitud	es	HFA			
Machine Weigh	ts (w/ ROPS /	FOPS)									
Operating Weight	(CECE)	kg	lb	11 250	24,807	11 250	24,807	11 250	24,807		
Weight @ Front D	Drum	kg	lb	5 906	13,024	5 906	13,024	5 906	13,024		
Weight @ Rear D	kg	lb	5 344	11,783	5 344	11,783	5 344	11,783			
Shipping Weight			lb	10 537	23,235	10 537	23,235	10 537	23,235		
Drum											
Width		mm	in	1 700	66.9	1 700	66.9	1 700	66.9		
Diameter		mm	in	1 300	51.2	1 300	51.2	1 300	51.2		
Shell Thickness (no minal)	mm	in	20	0.79	20	0.79	20	0.79		
Finish		mm	in		Machined s	surface; chamfered	d & radiused edg	jes			
Propulsion											
Type Closed-loop hydrostatic, parallel circuit to both drums											
Drum Drive					Heavy-duty radia	l piston LSHT mo	tors; 2-speed rea	ar motor			
Travel Speed	High	km/h	mph	12.8	7.9	13	8.1	13	8.1		
	Low	km/h	mph	7.5	4.7	7.6	4.7	7.6	4.7		
Engine											
Make / Model	Make / Model Volvo Deutz D4										
Engine Type					4 Cyl, Electronic,						
Rated Power @ In	nstalled Speed	kW	hp	98.1	131.5	98.1	131.5	98.1	131.5		
Electrical					24 volts D	C, negative ground	d; 120 A alternat	tor			
Brakes											
Service						ydrostatic through					
Parking / Second	lary				SAHR on t	front-drum & rear-	drum drive moto	rs			
Water System											
Туре						rum wetting syster					
Pumps				[Diaphragm water p		•				
Spray Bars						d secondary spray					
Nozzles						able fan spray no					
Filtration				Sock st	rainer each tank; p						
Drum Wipers						rear Styrene wiper					
Water Tank Capa	city	I	gal	549	145	549	145	549	145		
Miscellaneous											
Inside Turning Ra			in	3 889	153.1	3 889	153.1	3 889	153.1		
Articulation Angle (center pivot steering) + / - 40°											
Oscillation Angle						+/-10°					
Fuel Tank Capacit		gal			193			51			
Hydraulic Oil Cap	,	I	gal	128	33.8	128	33.8	128	33.8		
Gradeability (theoretical)					31%		31%		31%		





Model						DD140)B						
Model				2 amplitu	udes	8 ampliti	udes	HFA		2 amplitu	udes		
Machine Weig	hts (w/ ROPS / Fo	OPS)											
Operating Weigh	nt (CECE)	kg	lb	12 702	28,008	12 702	28,008	12 702	28,008	14 104	31,095		
Weight @ Front	Drum	kg	lb	6 683	14,737	6 683	14,737	6 683	14,737	6 818	15,034		
Weight @ Rear I	Drum	kg	lb	6 018	13,271	6 018	13,271	6 018	13,271	7 578	16,710		
Shipping Weight		kg	lb	11 981	26,420	11 981	26,420	11 981	26,420	13 681	30,168		
Drum													
Width		mm	in	2 000	78.7	2 000	78.7	2 000	78.7	2 136	84.1		
Diameter		mm	in	1 400	55.1	1 400	55.1	1 400	55.1	1 400	55.1		
Shell Thickness	(nominal)	mm	in	20	0.78	20	0.78	20	0.78	20	0.78		
Finish					l	Machined sur	face; chamfe	red & radiuse	ed edges				
Propulsion													
Туре					Clo	sed-loop hyd	Irostatic, para	llel circuit to	both drums				
Drum Drive				Closed-loop hydrostatic, parallel circuit to both drums Heavy-duty radial piston LSHT motors; 2-speed rear motor									
Travel Speed	High	km/h	mph	11.4	7.1	11.4	7.1	11.4	7.1	11.4	7.1		
	Low	km/h	mph	8.6	5.3	8.6	5.3	8.6	5.3	8.6	5.3		
Engine													
Make / Model	ake / Model Volvo Deutz D4												
Engine Type					4 Cyl, I	Electronic, Tu	rbocharged, (CAC, U.S. EP	A Tier 4 inter	im			
Rated Power @	Installed Speed	kW	hp	110.4	148	110.4	148	110.4	148	110.4	148		
Electrical						24 volts DC,	negative grou	und; 120 A a	lternator				
Brakes													
Service						Dynamic hyd							
Parking / Secon	dary					SAHR on fro	nt-drum & re	ar-drum drive	e motors				
Water System													
Туре						ıre spray drur							
Pumps						gm water pur				rum			
Spray Bars					F	Primary and s							
Nozzles							serviceable fa	n spray nozzl	les				
				C-	al. akuala au a	10 per spr			fine filter a	12 per spr	ay bar		
Filtration				50	ick strainer e	ach tank; prin	,		• •	acn nozzie			
Drum Wipers				605.6	160	605.6	ar Styrene wi _l 160	pers for each 605.6	160	605.6	100		
Water Tank Capa Miscellaneous	,	- '	gal	0.00	160	0.00	160	0.00	160	0.00	160		
		۰	in	3 772	1/05	3 772	148.5	2 770	148.5	4 562	1706		
	adius (to drum edge)		in	3112	148.5	+/-4		3 772	146.0	4 562 +/- 35	179.6		
Articulation Angle (center pivot steering)						+/-4				+/- 30			
Oscillation Angle Fuel Tank Capac		- 1	gol			226	U		60	256	68		
Hydraulic Oil Ca		- 1	gal	140	37	140	37	140	37	143.8	38		
		I	gal	140	37 35%	140	35%	140	35%	143.0	30%		
Gradeability (the	oretical)				30%		30%		30%		30%		

DIMENSIONS

			DD11	0B	DD12	20B	DD14	10B
A Overall Length	mm	in	5 795	228.1	5 995	236.0	5 995	236.0
B Drum Base	mm	in	3 450	135.8	3 550	139.8	3 550	139.8
C Overall Height (top of ROPS / FOPS)	mm	in	3 140	123.6	3 187	125.5	3 200	126.0
D Overall Height (top of steering wheel)	mm	in	2 386	93.9	2 463	97.0	2 470	97.2
E Overall Width	mm	in	1 920	75.6	2 249	88.5	2 375	93.5
F Side Clearance	mm	in	110	4.3	125	4.9	120	4.7
G Curb Clearance	mm	in	460	18.1	510	20.1	510	20.1

Specifications

DD110B																		
2 amplitudes																		
				Hig	gh Freq	uency	- Low a	amplitu	de			Lo	w Freq	uency -	High a	amplitu	de	
Nominal amplitude	mm	in				0.42				0.0165				0.89				0.035
Vibration frequency	Hz	vpm				70				4,200				50				3,000
Eccentric Force	kN	lb				146				32,810				158				35,510
8 amplitudes																		
Handwheel Settin	ıg		1	l	2	2		3		4		5		6		7	ε	3
Nominal amplitude	mm	in	0.25	0.01	0.29	0.0113	0.36	0.0142	0.45	0.0176	0.53	0.0207	0.59	0.0232	0.63	0.0248	0.64	0.0253
Vibration frequency	Hz	vpm				63	.3							3,8	00			
Eccentric Force	kN	lb	72.4	16,270	81.5	18,320	102.8	23,110	127.4	28,650	150.1	33,750	168.0	37,760	179.3	40,300	183.1	41,170
							8	amplitu	udes H	FA								
Handwheel Settin	ıg		1	l	2	2		3		4		5		6		7	8	3
Nominal amplitude	mm	in	0.42	0.0165	0.45	0.0179	0.54	0.0212	0.64	0.0253	0.74	0.0292	0.82	0.0323	0.87	0.0343	0.89	0.035
Vibration frequency	Hz	vpm	70	4,200	67.5	4,050	63.3	3,800	60	3,600	55	3,300	53.3	3,200	50	3,000	50	3,000
Eccentric Force	kN	lb	145.8	32,810	146.9	33,050	153.7	34,590	164.6	37,040	159.5	35,890	165.9	37,330	154.8	34,820	157.8	35,510

	DD120B																	
2 amplitudes																		
High Frequency - Low amplitude								Lov	w Freq	uency -	High a	amplitu	de					
Nominal amplitude	mm	in				0.36				0.014				0.89				0.035
Vibration frequency	Hz	vpm	70						4,200				50				3,000	
Eccentric Force	kN	lb	147			147				33,090				187			42,070	
8 amplitudes																		
Handwheel Settin	ıg		1		2	2	;	3		4		5		6	,	7	8	
Nominal amplitude	mm	in	0.38	0.0149	0.40	0.0157	0.46	0.018	0.53	0.0208	0.60	0.0235	0.65	0.0257	0.69	0.0271	0.70	0.0276
Vibration frequency	Hz	vpm	56.6	3,400	56.6	3,400	56.6	3,400	56.6	3,400	56.6	3,400	56.6	3,400	56.6	3,400	56.6	3,400
Eccentric Force	kN	lb	102.2	22,980	108.2	24,328	123.6	27,780	142.8	32,110	161.5	36,310	176.7	39,720	186.5	41,920	189.8	42,680
							8	amplitu	ıdes H	FA								
Handwheel Settin	ıg		1		2	2	;	3		4	;	5		6	,	7	ε	3
Nominal amplitude	mm	in	0.36	0.014	0.40	0.0157	0.50	0.0197	0.62	0.0244	0.73	0.0287	0.82	0.0321	0.87	0.0342	0.89	0.0349
Vibration frequency	Hz	vpm	70	4,200	66.7	4,000	60	3,600	56.7	3,400	53.3	3,200	51.7	3,100	50	3,000	50	3,000
Eccentric Force	kN	lb	147.2	33,090	149.8	33,670	152.2	34,220	167.8	37,720	174.8	39,300	183.3	41,220	183.2	41,190	187.1	42,070

DD140B											
2 amplitudes											
			High Frequency	- Low amplitude	Low Frequency	· High amplitude					
Nominal amplitude	mm	in	0.35	0.014	0.88	0.035					
Vibration frequency	Hz	vpm	66.7	4,000	45	2,700					
Eccentric Force	kN	lb	163	36,680	185	41,720					

Equipment

STANDARD EQUIPMENT

STANDARD EQUIPMENT			
	DD110B	DD120B	DD140B
Volvo engine	•	•	•
Engine fan guard	•	•	•
Engine grid heater	•	•	•
Diesel Particulate Filter (DPF)	•	•	•
Fuel/water separator	•	•	•
Air filter restriction	•	•	•
Engine shock mounts	•	•	•
Five-position rotating console	•	•	•
Seat belt alarm	•	•	•
Operator platform isolation	•	•	•
Fully adjustable seat	•	•	•
Anti-slip steps and operator platform	•	•	•
Tilt steering wheel	•	•	•
Control panel cover	•	•	•
Retracting seat belt	•	•	•
High centrifugal force	•	•	•
Automatic eccentric rotation	•	•	•
Smart start	•	•	•
Vibration isolation	•	•	•
Machine finished drums	•	•	•
Pressurized water system with variable flow and triple filtration	•	•	•
Water tank level indicator	•	•	•
Quick removal water nozzles and screens	•	•	•
Automatic tensioning wipers	•	•	•
Service chart with detailed check points	•	•	•
Tow feature	•	•	•
ROPS / FOPS	•	•	•
Impact spacing meter	•	•	•
Selectable auto vibration	•	•	•
Smart vibration	•	•	•
Smart water	•	•	•
Smart propulsion	•	•	•
Power port	•	•	•
On board processor diagnosis	•	•	•
24 volt system	•	•	•

OPTIONAL EQUIPMENT

	DD110B	DD120B	DD140B
2 Amplitude HF Feature	•	•	•
8 Amplitude HF Feature	•	•	
8 Amplitude HFA Feature	•	•	
Drum Wiper - Styrene	•	•	•
Drum Wiper - Urethane	•	•	•
Cocoa Mat Drum Wiper	•	•	•
Back-up Alarm	•	•	•
Infrared Temperature Option	•	•	•
Pre-Cleaner Air filter feature	•	•	•
Fuel Strainer Option	•	•	•
Bio-degradable Oil	•	•	•
Work Lights	•	•	•
HID 1 Light Package	•	•	•
HID 2 Light Package	•	•	•
Strobe Light	•	•	•
Winterization Feature	•	•	•
Maintenance Package	•	•	•
Metric Tool Kit	•	•	•
ROPS Ship Loose	•	•	•
Special Paint	•	•	•

Not all products are available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.

SELECTION OF VOLVO OPTIONAL EQUIPMENT

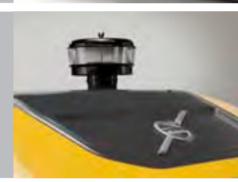




Drum Wiper



Air pre-cleaner



Maintenance Package



HID lights and strobe



