



SD-100 B Series Vibratory Compactor



SD-100 B Series features

Drive Train

The Ingersoll-Rand SD-100 B is powered by a Cummins four cylinder, 3.9 liter displacement, turbocharged diesel engine. The SD-100, with axle drive only, is suited for the majority of applications. For more demanding projects or where superior gradeability is required, the SD-100D and SD-100F, with drum drive as well as axle drive, are powered by a turbocharged and after cooled four cylinder Cummins engine. Both engines are fuel-conservative, easy to service and provide long life.

Serviceability

The SD-100 B series compactors are easily serviced. Components that require regular attention, like filters,



are reachable from ground level. Maintenance intervals are optimized; fluid capacities are sized for durability and protection. Coolant level checks are easily performed.

Vibration System

A patented dual amplitude eccentric design is standard equipment for all SD-100 B models. A positive oil-splash eccentric bearing lubrication system permits operation on slopes without the risk of bearing lubrication loss. Vibration frequency is infinitely variable in either amplitude setting to 30 Hertz. This permits the operator to match frequency of the compactor to soil type, moisture content and job site conditions.



Operator Station

The easily accessible ergonomically designed operator station provides comfort, convenience, ease of control, excellent 360 degree visibility and a safe environment for the operator.



Gradeability

The SD-100 B has drive of its rear axle tires only. The drum is unpowered. This propulsion system works adequately on the majority of applications where slight grades or slopes are encountered and where material rolling resistance is not excessive. For more extreme applications, Ingersoll-Rand recommends using drum drive for enhanced traction and gradeability. Heavy duty drum drive is standard on the SD100-F pad foot model.

Versatility

An optional, patented, two-piece clamp-on pad foot drum shell kit is available for the SD-100D. This kit is easily installed by a service technician.

The kit also includes a pad foot drum scraper bar and heavy-duty torque hub drum drive. The shell kit permits a smooth drum unit to be modified for cohesive soil compaction applications for added versatility.



Standard Features

- Back-up alarm
- Hydrostatic drive of axle and drum (except SD-100 B) with two speed transmission
- Oil splash eccentric bearing lubrication
- Patented, dual amplitude eccentric mechanism
- Planetary axle with No-Spin® differential
- ROPS/FOPS w/seat belt
- Torque-balanced hydraulic components
- Variable vibration frequency

Specifications for B Series		SD-100		SD-100D		SD-100F	
Machine weights (with ROPS)							
Operating weight (CECE)		22,765 lbs.	(10325 kg)	23,290 lbs.	(10560 kg)	24,435 lbs.	(11080 kg)
Static weight at drum		13,225 lbs.	(6000 kg)	13,580 lbs.	(6160 kg)	15,285 lbs.	(6930 kg)
Static weight at tires		9,540 lbs.	(4325 kg)	9,710 lbs.	(4405 kg)	9,150 lbs.	(4150 kg)
Shipping weight		22,475 lbs.	(10190 kg)	23,000 lbs.	(10430 kg)	24,145 lbs.	(10950 kg)
Dimensions							
Overall length		218 in.	(5547 mm)	218 in.	(5547 mm)	218 in.	(5547 mm)
Overall width		91 in.	(2312 mm)	91 in.	(2312 mm)	91 in.	(2312 mm)
Overall height (top of ROPS)		123 in.	(3121 mm)	123 in.	(3121 mm)	125 in.	(3163 mm)
Overall height (top of steering wheel)		94 in.	(2376 mm)	94 in.	(2376 mm)	95 in.	(2414 mm)
Wheelbase		131 in.	(3325 mm)	131 in.	(3325 mm)	131 in.	(3325 mm)
Curb clearance		20 in.	(514 mm)	20 in.	(514 mm)	22 in.	(556 mm)
Outside turning radius (measured to drum edge)		226 in.	(5755 mm)	220 in.	(5755 mm)	226 in.	(5755 mm)
Drum diameter		59 in.	(1500 mm)	59 in.	(1500 mm)	59 in.	(1500 mm)
Drum diameter over pads			–		–	67 in.	(1702 mm)
Drum width		84 in.	(2134 mm)	84 in.	(2134 mm)	84 in.	(2134 mm)
Drum shell thickness		1 in.	(25 mm)	1 in.	(25 mm)	1 in.	(25 mm)
Pad tip area			–		–	21 sq in.	(135 sq cm)
Pad height			–		–	4 in.	(102 mm)
Number of pads			–		–		120
Vibration							
Frequency		0-1800 VPM	(0-30 Hz)	0-1800 VPM	(0-30 Hz)	0-1800 VPM	(0-30 Hz)
Centrifugal force	high	50,000 lbs.	(222.4 kN)	50,000 lbs.	(222.4 kN)	50,000 lbs.	(222.4 kN)
	low	25,000 lbs.	(111.2 kN)	25,000 lbs.	(111.2 kN)	25,000 lbs.	(111.2 kN)
Nominal amplitude	high	.067 in.	(1.70 mm)	.067 in.	(1.70 mm)	.055 in.	(1.41 mm)
	low	.033 in.	(0.85 mm)	.033 in.	(.85 mm)	.028 in.	(0.70 mm)
Engine							
Make and model		Cummins B3.9-C Turbo		Cummins B3.9-C Turbo and aftercooled			
Rated power		96HP (71.6 kW) @2300 rpm		125HP (93.2 kW) @2200 rpm			
Electrical system		12 volt DC, negative ground;105 A alternator; one 900cca battery					
Propulsion							
Type system		2-speed Hydrostatic		2-speed Hydrostatic		2-speed Hydrostatic	
Tire size 23.1 x 26, 8 PR		R-3 diamond tread		R-3 diamond tread		R-1 lug tread	
Drum drive		–		standard		standard	
Speed	low gear	0-3.9 mph (0-6.3 km/hr)		0-4.5 mph (0-7.2 km/hr)		0-4.2 mph (0-6.8 km/hr)	
	high gear	0-8.5 mph (0-13.6 km/hr)		0-7.6 mph (0-12.3 km/hr)		0-6.8 mph (0-10.9 km/hr)	
Brakes							
Service brake		Dynamic hydrostatic through propulsion system					
Parking/secondary brake		Spring-Applied, Hydraulically-Released SAHR					
Miscellaneous							
Articulation angle		± 40°		± 40°		± 40°	
Oscillation angle		± 17°		± 17°		± 17°	
Fuel capacity		72 gal.	(272 l)	72 gal.	(272 l)	72 gal.	(272 l)
Hydraulic oil capacity		54 gal.	(204 l)	54 gal.	(204 l)	54 gal.	(204 l)
Gradeability (theoretical)		37%		53%		65%	

Selected Options

- Air pre-cleaner for engine
- Biodegradable fluids
- Cab, cab with heat or cab with AC and heat
- Clamp-on pad foot drum shell kit (except SD-100 B)
- Cold weather starting aid
- EPA certified engine installation (SD-100D and SD-100F)
- Heavy duty drum drive
- Lights with turning signals
- Optional 18.4 x 26, 6 PR tires
- Strike-off blade installation (for SD-100F B)
- Sun canopy
- Vandal cover for instrument panel
- Work lights
- Contact factory for additional options.

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