

SAKAI  
**100<sup>th</sup>**  
1918-2018



**SV520D**

## VIBRATORY SINGLE DRUM ROLLER

The innovatively designed SV520 is applicable to medium to large soil compaction jobs. The SV520 includes new roller features and optimizes job profitability through efficiency.

### Proven Compactive Performance

- Roller compactive force reaches target density in less number of roller passes.
- Provides higher centrifugal force and amplitude.
- Achieves uniform compaction throughout lift thickness.

### Low Operating Costs

- Sakai's new *Eco compaction mode (ECM)*, which reduces fuel consumption up to 20%, while maintaining compactive performance.
- Quality and durable components such as hydraulics, drum, center-pin hitch provide less maintenance.

### Operator Comfort and Safety

- Includes Sakai's durable dual rubber isolation system between the drum and operator deck.
- Extremely quiet operator station with noise levels as low as 87 dB(A).



**SV520T**



**SV520DF**



**SV520TF**

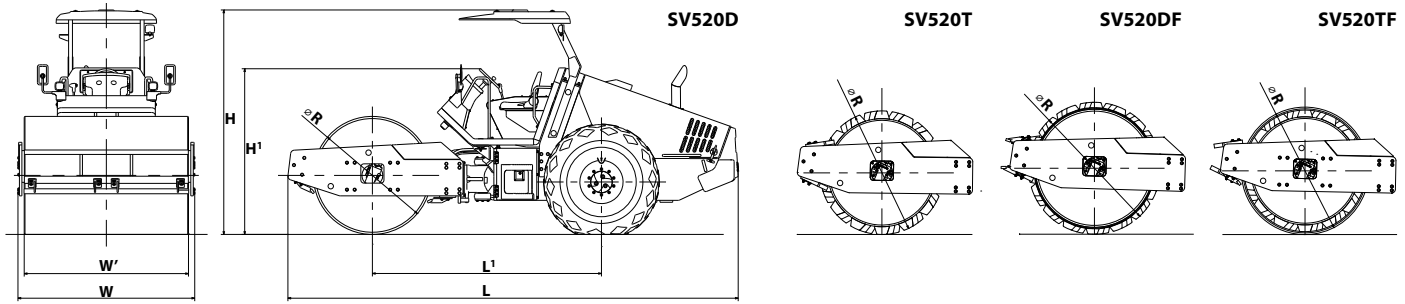
The photos may contain optional equipment and / or attachment.



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# SV520 Series



TYPE		Vibratory Single Drum Roller				
MODEL		SV520D	SV520T	SV520DF	SV520TF	
CHASSIS MODEL		2SV31				
<b>WEIGHTS</b>	Max. operating weight with AWNING	kg (lbs)	10,450 (23,040)	10,790 (23,790)	12,090 (26,655)	13,060 (28,795)
	Operating weight with AWNING	kg (lbs)	10,360 (22,840)	10,700 (23,590)	12,000 (26,460)	12,970 (28,595)
	Load on front axle - operating weight with AWNING	kg (lbs)	5,440 (11,995)	5,820 (12,835)	7,140 (15,745)	8,090 (17,840)
	Load on rear axle - operating weight with AWNING	kg (lbs)	4,920 (10,850)	4,880 (10,760)	4,860 (10,715)	4,880 (10,760)
<b>PERFORMANCE</b>	Centrifugal force (L / H)	kN (lbs) [kgf]	172 / 255 (38,665 / 57,325) [17,540 / 26,000]			
	Frequency (L / H)	Hz (vpm)	33.3 / 28.3 (2,000 / 1,700)			
	Amplitude (L / H)	mm (in)	1.02 / 2.09 (0.040 / 0.082)	0.95 / 1.94 (0.037 / 0.076)	0.73 / 1.50 (0.029 / 0.059)	0.62 / 1.27 (0.024 / 0.050)
	Dynamic linear pressure for front drum - operating weight with AWNING (L / H)	N/cm (lbs/in)	1,058 / 1,447 (600 / 825)	—		1,180 / 1,569 (670 / 895)
	Number of speed shifts		2			
	Speed range (L / H)	km/h (mph)	0-6 / 0-10 (0-3.7 / 0-6.2)			
	Gradeability	% (°)	62 (32)		54 (28)	49 (26)
	Turning radius compacted surface (inside / outside)	m (in)	3.5 (138) / 5.6 (221)			
	Overall length <b>L</b>	mm (in)	5,840 (230)			
	Overall width <b>W</b>	mm (in)	2,295 (90)			
<b>DIMENSIONS</b>	Overall height (without AWNING) <b>H<sup>1</sup></b>	mm (in)	2,190 (86)	2,175 (86)	2,195 (86)	2,180 (86)
	Overall height (with AWNING) <b>H</b>	mm (in)	2,910 (115)	2,925 (115)	2,945 (116)	2,935 (116)
	Wheelbase <b>L<sup>1</sup></b>	mm (in)	2,970 (117)			
	Compaction width <b>W'</b>	mm (in)	2,130 (84)			
	Drum width <b>W'</b> / Drum diameter <b>R</b>	mm (in)	2,130 / 1,530 (84 / 60)	2,130 / 1,600 (84 / 63)	2,130 / 1,708 (84 / 67)	2,130 / 1,650 (84 / 65)
	Pad height	mm (in)	—	100 (4)	75 (3)	100 (4)
	Number of pads	pcs.	—	140	160	140
	Shell thickness	mm (in)	25 (1.0)	22 (0.9)	25 (1.0)	22 (0.9)
	Tire size x Number of tires		23.1 - 26 - 8 PR (OR) x 2			
	Inflation (each wheels)	kPa (psi)	137 (19.9)			
	Ground clearance	mm (in)	405 (16)		390 (15)	400 (16)
	Curb clearance	mm (in)	500 (20)	520 (20)	555 (22)	535 (21)
	Side clearance	mm (in)	82.5 (3)			
	<b>ENGINE</b>	Make		ISUZU		
Model			4BG1T (EPA Tier2 : equivalent)			
Type			Diesel, water-cooled, 4-cycle, 4-cylinder inline, with turbo charger			
Displacement		L (cu.in)	4.329 (264.2)			
Rated output		kW (HP)/min <sup>-1</sup>	83.3 (112) / 2,100			
Electric system battery		V (V / Ah x Qty)	24V (12V / 100 x 2)			
Electric system alternator		V / A	24V / 50A			
<b>DRIVE SYSTEM</b>		Power transmission type		Hydrostatic		
	Drive wheel		All wheel (drum & tires)			
<b>VIBRATION SYSTEM</b>	Power transmission type		Hydraulic			
	Number of amplitude		2			
	Vibrator type		Single eccentric shaft			
<b>BRAKE SYSTEM</b>	Service brake		Dynamic braking through hydrostatic drive system / FNR lever			
	Secondary brake (Emergency brake)		Hydrostatic + Spring applied hydraulically released type (SAHR) / Brake pedal			
	Parking brake		SAHR / Panel button			
<b>STEERING SYSTEM</b>	Power transmission type		Hydraulic			
	Articulation / Oscillation angle	± (°)	37 / 9			
<b>FLUID CAPACITY</b>	Fuel tank	L (gal)	210 (55.5)			
	Hydraulic oil tank	L (gal)	50 (13.2)			

- Specified figures have a tolerance of ±5%.
- All specifications may be changed without notice.
- Specified figures are in SI Units, followed by their equivalent in English units of measurement in parentheses.
- Max. operating weight : Fuel=100%, Water=100%, Operator=75 kg
- Operating weight : Fuel=50%, water=50%, operator=75 kg
- The photos may contain optional equipment and/or attachment.

\* Using low quality fuel may cause engine failure.



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