

Product Configuration/Specifications: 12,000 RPM Random Orbital Sander

Model Number	Vacuum Type	Orbit mm (in.)	Pad Size mm (in.)	Product Net WT. kg (lb.)	Height mm (in.)	Length mm (in.)	*Noise Level dBA Pressure (Power)	**Uncertainty K dBA Pressure (Power)	***Vibration Level m/s ² (ft/s ²)	**Uncertainty K m/s ²
28494	Non Vacuum	5 (3/16)	77 (3)	0.692 (1.52)	92.5 (3.64)	147 (5.78)	74 (85)	0.692	2.04 (6.69)	0.70
28496	Non Vacuum	2.5 (3/32)	77 (3)	0.596 (1.31)	86 (3.38)	147 (5.78)	74 (85)	0.596	1.87 (6.13)	0.68
28503	Central Vacuum	5 (3/16)	77 (3)	0.742 (1.63)	92.5 (3.64)	203 (7.99)	73 (84)	0.742	1.51 (4.95)	0.64
28505	Central Vacuum	2.5 (3/32)	77 (3)	0.644 (1.41)	87.5 (3.44)	201 (7.91)	72 (83)	0.644	1.62 (5.31)	0.65
28511	Self-Generating Vacuum	5 (3/16)	77 (3)	0.752 (1.65)	92.5 (3.64)	209 (8.22)	85 (96)	0.752	2.13 (6.99)	0.71
28513	Self-Generating Vacuum	2.5 (3/32)	77 (3)	0.651 (1.43)	87.5 (3.44)	207 (8.14)	87 (98)	0.651	1.81 (5.94)	0.67

* Declared noise levels; measurements carried out in accordance with standard EN ISO 15744 and EN ISO 11203.

** Declared vibration levels in accordance with EN ISO12096; measurements carried out in accordance with standard EN ISO 28927-3.

IMPORTANT NOTE: The noise and vibration values stated in the table are from laboratory testing in conformity with stated codes and standards and are not sufficient risk evaluation for all exposure scenarios. Values measured in a particular work place may be higher than the declared values. The actual exposure values and amount of risk or harm experienced to an individual is unique to each situation and depends upon the surrounding environment, the way in which the individual works, the particular material being worked, work station design, as well as upon the exposure time and the physical condition of the user. 3M™ cannot be held responsible for the consequences of using declared values instead of actual exposure values for any individual risk assessment.

Operating Instructions

PRIOR TO THE OPERATION

The tool is intended to be operated as a hand held tool. It is always recommended that while using the tool operators stand on a solid floor in a secure position with a firm grip and footing. Be aware that the sander can develop a torque reaction. See the section "SAFETY PRECAUTIONS".

Use a clean lubricated air supply that will give a measured air pressure at the tool of 6.2 bar (90 psig) when the tool is running with the lever fully depressed. It is recommended to use an approved 10 mm (3/8 in) x 8 m (25 ft) maximum length airline. Connect the tool to the air supply as shown in Figure 1. Do not connect the tool to the airline system without an easily accessible air shut off valve. It is strongly recommended that an air filter regulator and lubricator (FRL) be used as shown in Figure 1 as this will supply clean lubricated air at the correct pressure to the tool. In any case appropriate air pressure regulators shall be used at all times while operating this tool where the supply pressure exceeds the marked maximum of the tool. Details of such equipment can be obtained for your tool distributor. If such equipment is not used the tool should be manually lubricated. To manually lubricate the tool disconnect the airline and put 2 to 3 drops of suitable pneumatic motor lubricating oil such as 3M™ Air Tool Lubricant PN 20451Fuji Kosan FK-20 Mobil ALMO 525 or Shell TORCULA® 32 into the hose end (inlet) of the tool. Reconnect tool to the air supply and run tool slowly for a few seconds to allow air to circulate the oil. If the tool is used frequently lubricate it on a daily basis or lubricate it if the tool starts to slow or lose power. It is recommended that the air pressure at the tool be 6.2 bar (90 psig) while the tool is running so the maximum RPM is not exceeded. The tool can be run at lower pressures but should never be run higher than 6.2 bar (90 psig). If run at lower pressure the performance of the tool is reduced.

Recommended Airline Size - Minimum		Recommended Maximum Hose Length		Air Pressure	
10 mm	3/8 in	8 meters	25 feet	Maximum Working Pressure	6.2 bar 90 psig
				Recommended Minimum	NA NA