

■ SMALL VIBRATION GENERATOR SPECIFICATION SUMMARY

Category	Modal Analysis	Standard	High Force:64N	High Frequency:30kHz	High Frequency:30kHz High Force:64N
Model	511-A	512-A	512-A/A	512-D	512-D/A
Max. Exciting Force	15N <sub>0-p</sub> (1.52kgf <sub>0-p</sub> )	49N <sub>0-p</sub> (4.9kgf <sub>0-p</sub> )	64N <sub>0-p</sub> (6.5kgf <sub>0-p</sub> )	49N <sub>0-p</sub> (4.9.kgf <sub>0-p</sub> )	64N <sub>0-p</sub> (6.5kgf <sub>0-p</sub> )
Frequency Range	2 to 5kHz	2 to 20kHz	2 to 20kHz	2 to 30kHz	2 to 30kHz
Max. Acceleration	230.7m/s <sup>2</sup> (23.5G)	376.9m/s <sup>2</sup> (38.4G)	492.3m/s <sup>2</sup> (50.2G)	272.2m/s <sup>2</sup> (27.7G)	355.5m/s <sup>2</sup> (36.2G)
Max. Velocity	1.26m/s	1.14m/s	1.31m/s	1.00m/s	1.14m/s
Max. Displacement	5.0mm <sub>p-p</sub>	7.0mm <sub>p-p</sub>	7.0mm <sub>p-p</sub>	7.0mm <sub>p-p</sub>	7.0mm <sub>p-p</sub>

Category	Standard	High Force:147N, 196N		High Frequency:24kHz	High Frequency:24kHz High Force:147N
Model	513-B	513-B/A		513-D	513-D/A
Max. Exciting Force	98N <sub>0-p</sub> (9.9kgf <sub>0-p</sub> )	147N <sub>0-p</sub> (14.9kgf <sub>0-p</sub> )	196N <sub>0-p</sub> (19.9kgf <sub>0-p</sub> )	98N <sub>0-p</sub> (9.9kgf <sub>0-p</sub> )	147N <sub>0-p</sub> (14.9kgf <sub>0-p</sub> )
Frequency Range	3 to 13kHz	3 to 13kHz		3 to 24kHz	3 to 24kHz
Max. Acceleration	264.8m/s <sup>2</sup> (27.0G)	397.2m/s <sup>2</sup> (40.5G)	529.7m/s <sup>2</sup> (54.0G)	175m/s <sup>2</sup> (17.8G)	262.5m/s <sup>2</sup> (26.7G)
Max. Velocity	1.17m/s	1.43m/s	1.67m/s	0.92m/s	1.14m/s
Max. Displacement	10mm <sub>p-p</sub>	10mm <sub>p-p</sub>		10mm <sub>p-p</sub>	10mm <sub>p-p</sub>

Category	Standard 300N	High Force :500N	Integrated Pneumatic Support Large Displacement:30mp-p	High Force:500N Large Displacement:30mp-p	High Frequency
Model	9514-AN/SD	9514-AB/SD	9514-AN/AS	9514-AB/AS	9514-AB/WF
Max. Exciting Force	300 N <sub>0-p</sub> (30.5kgf <sub>0-p</sub> )	500 N <sub>0-p</sub> (50.9kgf <sub>0-p</sub> )	300 N <sub>0-p</sub> (30.5kgf <sub>0-p</sub> )	500 N <sub>0-p</sub> (50.9kgf <sub>0-p</sub> )	500N <sub>0-p</sub> (50.9kgf <sub>0-p</sub> )
Frequency Range	5 to 5 kHz	5 to 5 kHz	5 to 5 kHz	5 to 3 kHz	5 to 10kHz
Max. Acceleration	250.0 m/s <sup>2</sup> (25.4G)	416.7 m/s <sup>2</sup> (42.4G)	230.8 m/s <sup>2</sup> (23.5G)	384.6 m/s <sup>2</sup> (39.2G)	277.7m/s <sup>2</sup> (28.3G)
Max. Velocity	1.2 m/s	1.2 m/s	1.2 m/s	1.2 m/s	1.2m/s
Max. Displacement	15 mm <sub>p-p</sub>	25 mm <sub>p-p</sub>	30 mm <sub>p-p</sub>	30 mm <sub>p-p</sub>	20mm <sub>p-p</sub>

Category	Modal Excitation	All-weather Type used in Workspace of Environmental Chamber	
Model	9514-AN/MD	9514-AB/AW	
Max. Exciting Force	300N <sub>0-p</sub> (30.5kgf <sub>0-p</sub> )	300N <sub>0-p</sub> (30.5kgf <sub>0-p</sub> )	500N <sub>0-p</sub> (51.0kgf <sub>0-p</sub> )
Frequency Range	5 to 2.5kHz	5 to 3.0kHz	
Max. Acceleration	300m/s <sup>2</sup> (30.5G)	250m/s <sup>2</sup> (25.4G)	416.7m/s <sup>2</sup> (42.9G)
Max. Velocity	1.2m/s	1.2m/s	
Max. Displacement	15mm <sub>p-p</sub>	10mm <sub>p-p</sub>	

Category	Standard 0.6kN	Standard 2kN	High Force w/ Pneumatic Support
Model	Σ 9515-AN/SD	Σ 9515-AB/SD	Σ 9515-AB/AS
Max. Exciting Force	0.6kN <sub>0-p</sub> (61.1kgf <sub>0-p</sub> )	2kN <sub>0-p</sub> (203kgf <sub>0-p</sub> )	2kN <sub>0-p</sub> (203kgf <sub>0-p</sub> )
Frequency Range	2 to 3000kHz	2 to 3000kHz	2 to 2500kHz
Max. Acceleration	240m/s <sup>2</sup> (24.4G)	800m/s <sup>2</sup> (81.5G)	444.4m/s <sup>2</sup> (45.3G)
Max. Velocity	0.6m/s	1.5m/s	1.5m/s
Max. Displacement	15mm <sub>p-p</sub>	25mm <sub>p-p</sub>	30mm <sub>p-p</sub>