

The Data Physics GW-V13 Series air cooled shakers are a popular and versatile solution for an intermediate force level shaker. They are available in two different armature configurations: 9 inches (229 mm) and 13.2 inches (335 mm). Each shaker size is also available in two force ratings, depending on the power amplifier configuration.

Standard Features

- Peak sine force: up to 2455 lbf (10930 N)
- Random force rms: up to 2250 lbf (10000 N)
- Velocity peak: 86 in/sec. (2.2 m/sec)
- Peak to peak displacement: 2.0 in (51 mm)
- Chamber interfaces

Options

- Air or rubber isolated mounts for vertical testing only
- Isolated trunnions for vertical and horizontal testing
- Air glides
- Motorized guidance
- V-groove wheels and guidance rails
- Monobase systems to provide three axis testing with slip tables
- Head expanders and fixtures

- Thermal barriers
- Acoustic enclosures
- Weatherproof enclosures for cooling blowers
- Economy field supply

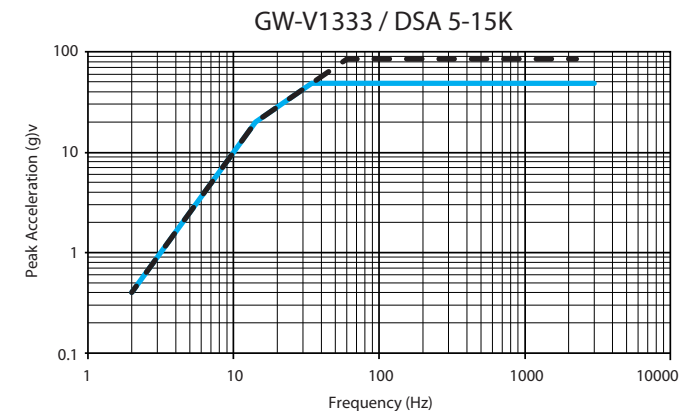
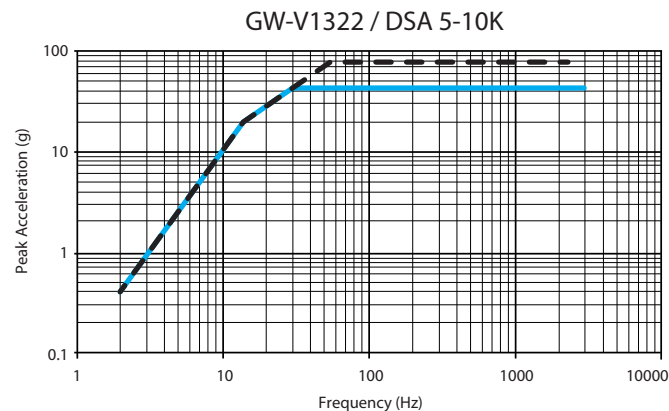
Typical Applications

- Electronic components
- Avionics
- Automotive



Sine Performance Envelopes

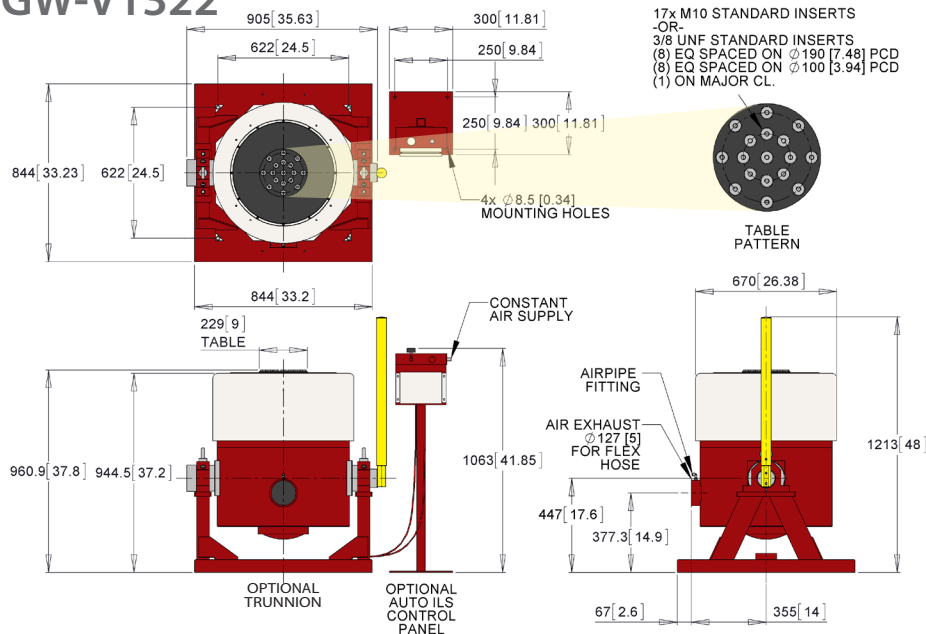
Bare table = ■ 22 lbs (10 kg) mass = ■



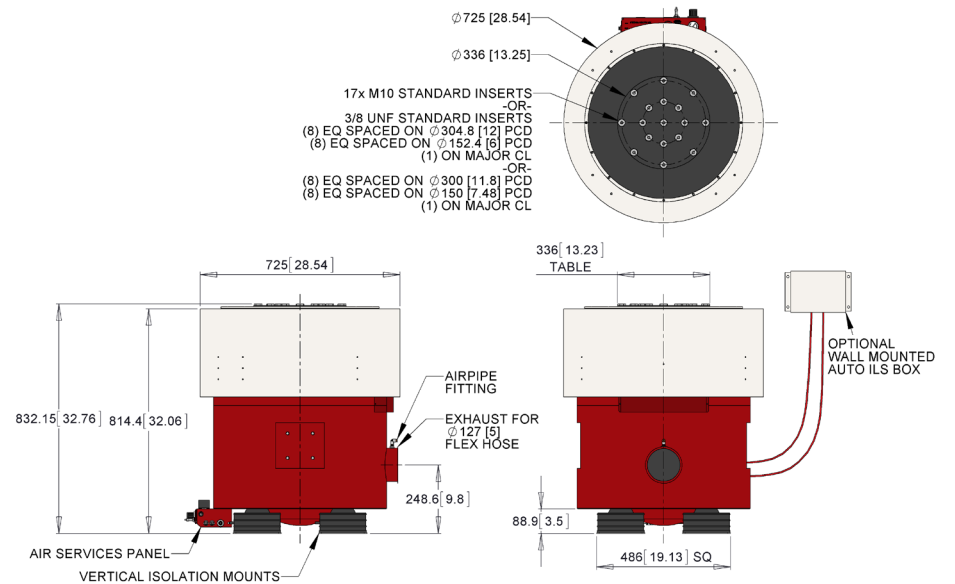
	Maximum Sine Force (pk)		Maximum Random Force (rms)		Maximum Shock Force*		Maximum Acceleration (Sine)		Maximum Velocity		Displacement Peak to Peak		Armature Diameter		Armature Mass		Insert Threads		Armature Resonance ±5%	Frequency Range Hz		Static Payload Support		Electrical Power Consumed		Shaker Body Mass		Stray Magnetic Field**	
	lbf	N	lbf	N	lbf	N	g	m/s ²	ips	m/s	in	mm	in	mm	lbs	kg	SAE	Metric	Hz	Min.	Max.	lbs	kg	kVA	lbs	kg	mT	Gauss	
GW-V1322/DSA5-10K	2050	9100	1640	7300	4337	19292	76	745	86	2.20	2.0	51	9.0	229	26.9	12.2	3/8-24	M10	2400	5	3000	350	160	18.0	2270	1029	<1	10	
GW-V1322/DSA5-15K	2455	10930	2250	10000	5209	23171	91	895	86	2.20	2.0	51	9.0	229	26.9	12.2	3/8-24	M10	2400	5	3000	350	160	19.7	2270	1029	<1	10	
GW-V1333/DSA5-10K	2050	9100	1640	7300	4337	19292	72	705	86	2.20	2.0	51	13.2	335	28.5	12.9	3/8-24	M10	2700	5	3000	350	160	18.0	2270	1029	<1	10	
GW-V1333/DSA5-15K	2455	10930	2250	10000	5209	23171	86	845	86	2.20	2.0	51	13.2	335	28.5	12.9	3/8-24	M10	2700	5	3000	350	160	19.7	2270	1029	<1	10	

* Half sine at 6 mSec ** 1 in. (25 mm) above table with installed degaussing coil.

GW-V1322



GW-V1333



Measures are in millimeters [inches].

Environmental Characteristics

Ambient Working Temperature Range (non-condensing)

Shaker	50F to 77F (10C to 25C)
Amplifier	32F to 104F (0C to 40C)

Anti-condensation blower option available for the shaker when used in conjunction with a thermal chamber.

Acoustic Noise @ 1m

Shaker	Up to 72 dbA @ 1m**
Amplifier	63 dbA @ 1m with cooling fans at low speed, 78 dbA @ 1m with cooling fans at high speed. High speed fan engaged at <60% output current.
Blower	72 dbA @ 1m##

Humidity

Shaker	<95% non-condensing
Amplifier	<95% non-condensing

Facility Requirements

Power supply range	380/400/415/440/480 Vac 50/60 Hz 3 phase AC
Total electrical requirements	See table

Weight# 2270 lbs (1029 Kg)

** Dependent upon operating frequency & payload.

Typical weight, dependent upon mounting options selected.

Noise reduction enclosures available for the cooling blower.

Amplifier Characteristics

Rated Power*	10 kVA / 15 kVA
Switching Frequency	100 kHz nominal
Input Sensitivity	3 V rms for full output
Input Impedance	10 K ohm input impedance
Voltage Output	82 V rms
Current Output*	62 A rms / 186 A rms per fitted power module Each power module = 5KW Example: 15Kw = 3 power modules
Signal to Noise Ratio	> 75 dB
Weight*	638 lbs (290 kg) (10K) 661 lbs (300 kg) (15K)

* Multiple listing reflects amplifier models – small to large.

Performance Notes

1. Random force based upon a flat spectrum 20Hz-2KHz @3 sigma with a non-resonant payload equal to or greater than twice the moving system mass.
2. System utility includes the cooling blower.
3. Specifications are subject to change without notice.

Amplifier Dimensions

Height	50" (1273 mm)
Width	24" (600 mm)
Depth	32" (800 mm)

Shaker Dimensions

Height	32.5" (826 mm)
Width	28.5" (725 mm)
Depth	29.2" (743 mm)

(May vary with mounting options.)

Blower Dimensions

Height	22.3" (567 mm)
Width	20" (498 mm)
Depth	19.5" (495 mm)