

The SignalForce® V26 Series air cooled shakers have proven reliability and high performance. They are available in three different armature configurations: 13.4 inches (340 mm) for high acceleration testing, and 17.3 inches (440 mm) and 25.2 inches (640 mm) for production testing. Typical testing applications for the V26 include automotive, jet engines, locomotive structures, avionics and consumer electronic components.



### Standard Features

- Peak sine force: up to 6000 lbf (26.7 kN)
- Random force rms: up to 5000 lbf (22.3 kN)
- Velocity peak: 71 in/sec. (1.8 m/sec)
- Peak to peak displacement: 2.0 in (51 mm)
- Armature diameter: 13.4 in (340 mm), 17.3 in (440 mm), 25.2 in (640 mm)

### Options

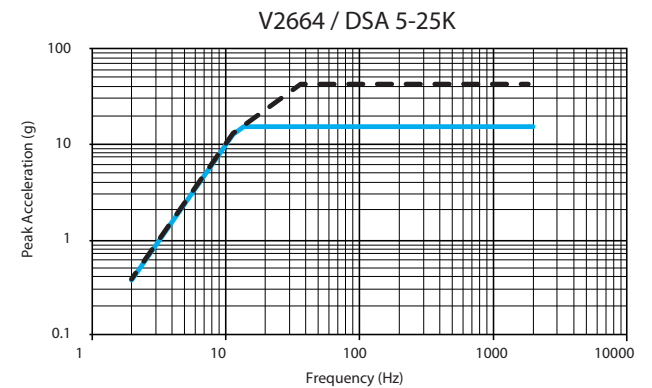
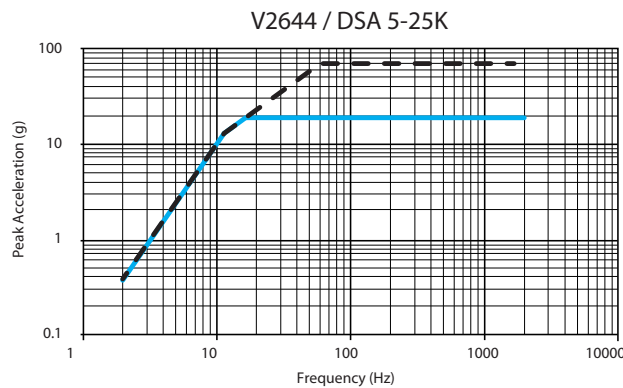
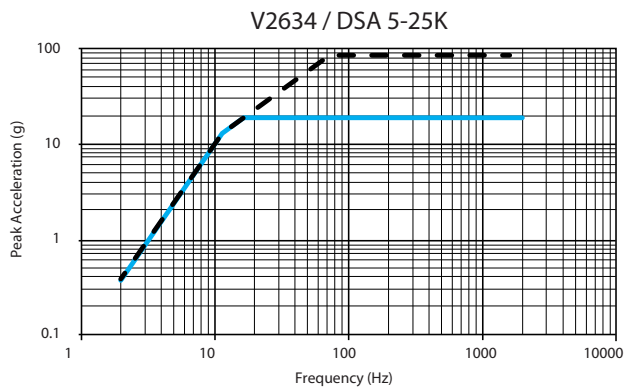
- Vertical isolation mounts
- Isolated trunnions
- Monobase with slip tables
- Air glides
- V-groove wheels and rails to provide accurate guidance below chambers
- Head expanders

### Typical Applications

- Thermal barriers
- Acoustic enclosures
- Weatherproof enclosures for cooling blowers
- Economy field supply to reduce power consumption
- Electronic components
- Avionics
- Automotive

### Sine Performance Envelopes

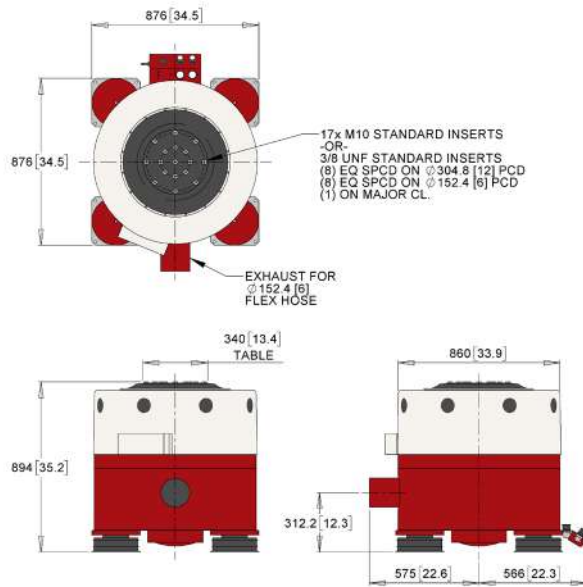
Bare table = ■ 250 lbs (113.4 kg) mass = ■



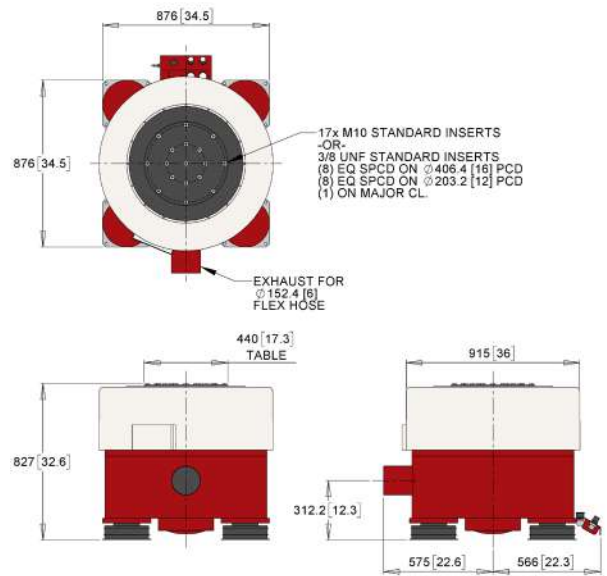
	Maximum Sine Force <sup>1</sup>		Maximum Random Force		Maximum Shock Force <sup>2</sup>		Maximum Acceleration (Sine)		Maximum Velocity		Maximum Displacement		Armature Diameter		Armature Mass <sup>3</sup>		Armature Axial Resonance ±5%	Frequency Range (Hz)	Static Load Support		Uncrated Shaker Mass		Stray Magnetic Field <sup>4</sup>		Facility Power Requirements
	lbf	kN	lbf	kN	lbf	kN	g	m/s <sup>2</sup>	in/s	m/s	in	mm	in	mm	lbs	kg	Hz	Min - Max	lbs	kg	lbs	kg	mT	gauss	kVA
V2634 / DSA 5-10K	2380	10.6	2160	9.6	7080	31.5	33.3	326.6	71	1.8	2	51	13.4	340	71.7	32.5	2000	DC - 3000	1100	500	4035	1830	<6	60	19
V2634 / DSA 5-15K	3585	16	3010	13.4	10455	46.5	50	490.3	71	1.8	2	51	13.4	340	71.7	32.5	2000	DC - 3000	1100	500	4035	1830	<6	60	21
V2634 / DSA 5-20K	4380	19.5	4125	18.4	13120	58.4	61.2	600.2	71	1.8	2	51	13.4	340	71.7	32.5	2000	DC - 3000	1100	500	4035	1830	<6	60	24
V2634 / DSA 5-25K	6000	26.7	5000	22.3	18000	80.1	83.7	820.8	71	1.8	2	51	13.4	340	71.7	32.5	2000	DC - 3000	1100	500	4035	1830	<6	60	27
V2644 / DSA 5-10K	2380	10.6	2160	9.6	7080	31.5	27	264.8	71	1.8	2	51	17.3	440	88.2	40	2300	DC - 3000	1100	500	4035	1830	<15	150	19
V2644 / DSA 5-15K	3585	16	3010	13.4	10455	46.5	40.7	399.1	71	1.8	2	51	17.3	440	88.2	40	2300	DC - 3000	1100	500	4035	1830	<15	150	21
V2644 / DSA 5-20K	4380	19.5	4125	18.4	13120	58.4	49.7	487.4	71	1.8	2	51	17.3	440	88.2	40	2300	DC - 3000	1100	500	4035	1830	<15	150	24
V2644 / DSA 5-25K	6000	26.7	5000	22.3	18000	80.1	68	666.9	71	1.8	2	51	17.3	440	88.2	40	2300	DC - 3000	1100	500	4035	1830	<15	150	27
V2664 / DSA 5-10K	2380	10.6	2160	9.6	7080	31.5	16.6	162.8	71	1.8	2	51	25.2	640	143.3	65	2500	DC - 3000	1100	500	4035	1830	<15	150	19
V2664 / DSA 5-15K	3585	16	3010	13.4	10500	46.7	25	245.2	71	1.8	2	51	25.2	640	143.3	65	2500	DC - 3000	1100	500	4035	1830	<15	150	21
V2664 / DSA 5-20K	4380	19.5	4125	18.4	15000	66.7	30.6	300.1	71	1.8	2	51	25.2	640	143.3	65	2500	DC - 3000	1100	500	4035	1830	<15	150	24
V2664 / DSA 5-25K	6000	26.7	5000	22.3	18000	80.1	41.9	410.9	71	1.8	2	51	25.2	640	143.3	65	2500	DC - 3000	1100	500	4035	1830	<15	150	27

All calculations in kN, imperial (lbf) figures are rounded. 1. Estimated rating based on historical results. 2. At 6 mSec. 3. Nominal mass, different insert styles may alter actual moving mass & therefore the maximum acceleration. 4. At 25 mm (1 inch) above table. Optional DG plate available

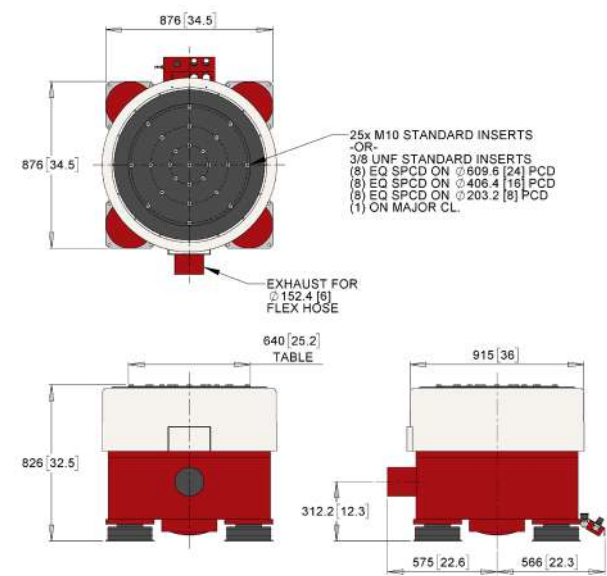
V2634



V2644



V2664



Measures are in millimeters [ inches ].

**Armature Insert Patterns**

Table Dia. (mm)	340	440	640
Center Insert	1	1	1
152.4 mm PCD	8	-	-
203.2 mm PCD	-	8	8
304.8 mm PCD	8	-	-
406.4 mm PCD	-	8	8
609.6 mm PCD	-	-	8

Alternative patterns are available.

### Environmental Characteristics

#### Ambient Working Temperature Range

(non-condensing)

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

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

#### Acoustic Noise @ 1m

Shaker	Up to 100dbA & 1m**
Amplifier	65 dbA @1m with cooling fans at low speed, 78dbA @ 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#** 4035 lbs (1830 Kg)

\*\* Dependent upon operating frequency & payload.

# Typical weight, dependent upon mounting options selected.

## Noise reduction enclosures available for the cooling blower.

### Amplifier Characteristics

<b>Rated Power*</b>	10 kVA / 15 kVA / 20 kVA / 25 kVA
<b>Switching Frequency</b>	100 kHz nominal
<b>Input Sensitivity</b>	2.3 V rms for full output
<b>Input Impedance</b>	10 K ohm input impedance
<b>Voltage Output</b>	82 V rms
<b>Current Output</b>	62 A rms per fitted power module Each power module = 5KW Example: 15Kw = 3 power modules
<b>Signal to Noise Ratio</b>	> 75 dB
<b>Weight*</b>	639 lbs (290 kg) (10K) 661 lbs (300 kg) (15K) 683 lbs (310 kg) (20K) 705 lbs (320 kg) (25K)

\* 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

<b>Height</b>	50.1" (1273 mm)
<b>Width</b>	23.6" (600 mm)
<b>Depth</b>	31.5" (800 mm)

### Shaker Dimensions

<b>Height</b>	32.3" (820 mm)
<b>Width</b>	34.5" (876 mm)
<b>Depth</b>	34.5" (876 mm)

(May vary with mounting options.)

### Blower Dimensions

<b>Height</b>	49.2" (1250 mm)
<b>Width</b>	23.4" (595 mm)
<b>Depth</b>	32.3" (821 mm)