

Syntron® Electric Rotary Vibrators by Visam

Rugged construction, reliable performance to assure the efficient flow of bulk materials

Syntron® Electric Rotary Vibrators from Syntron Material Handling provide a safe, reliable, cost-effective way to maintain the flow of materials. Motor-driven to provide virtually noiseless operation (most models 76 db or less*), these vibrators help facilitate material flow from the smallest bin, hopper or chute to the largest silo, screens, feeders, grizzly feeders, conveyors, fluid beds, shake-outs, helical elevators, etc. Additionally, they are totally enclosed to eliminate concerns over environmental factors such as dust, dirt and rain. Syntron Electric Rotary Vibrators can be used to pack material in drums and bags as well as to consolidate material in pipe and precast industries, in vibrating screen applications and many other industrial environments. High stroke/low frequency models are especially suitable for hard-to-handle materials such as sawdust, cinder or clay content materials.

Syntron Electric Rotary Bin Vibrators also come with the technical expertise of Syntron Material Handling's application staff, who have been providing productive solutions for a wide variety of material handling problems for more than 80 years.

* At 3 feet (1 meter) on A scale



Electric Rotary Vibrators in Primary Feeder Application



Features and Benefits

- Motor driven for reduced noise level
- High force to weight ratio
- Adjustable eccentric weights allow easy change of force to suit varying applications
- Orbital action facilitates material flow in hopper & chute applications
- Terminal box for easy connection and change of voltage (on 3 phase models) or direction of rotation
- Units sealed to IP66 except the AMV which is IP65
- Rugged, durable construction for many years with safe, reliable performance
- Wide range of sizes to accommodate your specific application
- Class F (Inverter Duty) windings are standard
- All units are tropical duty for high humidity applications / locations
- Standard construction suitable for operation in -22 to +133 degree F ambient temperature locations
- Internal thermal detection is standard on larger units
- Each vibrator fully tested after assembly
- All units are designed for heavy and continuous duty at the maximum centrifugal force
- Wide range with centrifugal forces up to 50,000 lbs

Selecting the Proper Syntron® Electric Rotary Vibrator for Rotational and Elliptical Applications

Bins or Hoppers

In order to move material in a bin or hopper, the friction between the material and the bin wall must be broken. Once the friction is broken, the material cannot cling to the sides of the bin and it will flow out through the discharge. For most applications, the vibrator force needed to accomplish this is simply calculated as follows:

- Calculate the weight of the material in the transition or sloping part of the bin. Normally, this is the only place where the friction between the material and the bin side has to be broken. Do not calculate the total weight, only what is in the transition part of the bin.
- For conical bins, calculate as follows:
 $.261 \times \text{dia.}^2 \times \text{height} \times \text{material density in lb/ft}^3 \text{ (kg/m}^3\text{)}$
- For rectangular bins, calculate as follows:
 $\text{Length} \times \text{width} \times \text{height} \times 1/3 \times \text{material density.}$

When the weight (lb) has been calculated, divide the weight by 10 to get the force or impact needed from the vibrator (lbf). For example: The conical part of a 25-ton bin contains 7000 lb. Divide 7,000 by 10 to get the force (lbf) or impact needed from the vibrator. Find a suitable vibrator on pages 20 - 29.

Additional considerations when sizing vibrators to bins:

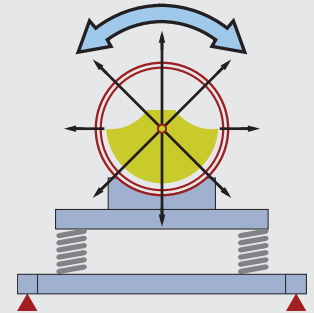
- If the bin side angle is less than 30 degrees, select a larger vibrator.
- If the bin has a vertical section, select a larger vibrator.
- If the bin wall is extra thick select a larger vibrator.
- On very sticky and hard to move materials, it is better to use two small vibrators instead of one large one (size the two smaller ones by dividing the required force in half).

Vibrating Tables for Packing Materials

Dense materials respond best to high-frequency vibration (3600 rpm or more), while light, fluffy or flaky materials respond best to low-frequency vibration (1800 rpm or less).

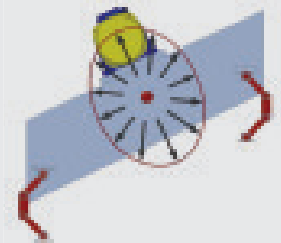
ROTATIONAL

obtained with
1 Electric Vibrator



ELLIPTICAL

obtained with
1 Electric Vibrator
(not in center of gravity)



For packing or settling materials, use a vibrator with an impact force of one-and-a-half to two times larger than the weight of the material plus container. Find a suitable vibrator in the tables on pages 20 - 29.

Vibrating Screens

For self-cleaning screen, use a vibrator with a centrifugal force (impact) four times the weight of the material plus the weight of the screen.

Note: Coarse, lumpy, sticky or wet materials respond best to high-frequency vibration; powdery and dry materials to low-frequency vibration.

Consolidating Concrete

For three-inch “slump” concrete, use a vibrator with the same force (impact) as the weight of concrete and form. For one- to two-inch slump concrete, an additional 30 to 50 percent impact is needed. For dry mixes (zero slump) increase the impact by 100 to 200 percent.

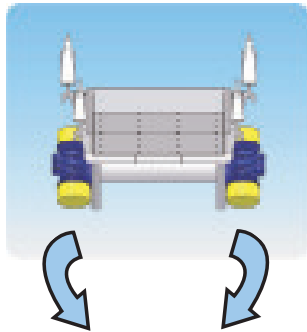
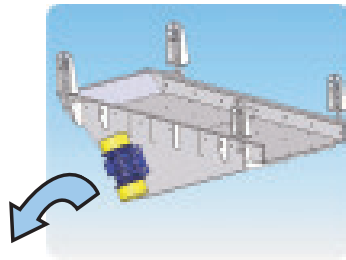
Chutes

The force required of the vibrator is equal to the weight of the chute plus the vibrator plus the maximum material in the chute. See page 30 for more information.

Selecting the Proper Electric Rotary Vibrator for Linear Applications

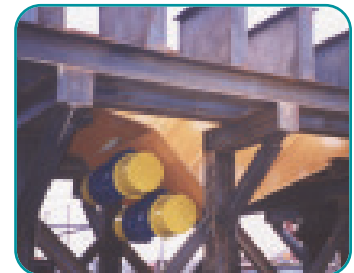
Syntron Material Handling now offers vibrators for a broader range of equipment applications by introducing the Visam product line in combination with the years of experience, service and knowledge of Syntron vibratory products. Our products have been associated with process control in conveying, feeding and screening applications for over 80 years. Markets include:

- Mining
- Steel
- Cement
- Aggregate
- Foundry
- Chemical
- Recycling
- Plastics
- Food
- Packaging



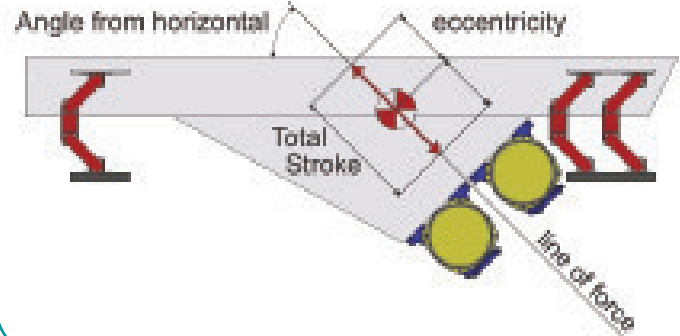
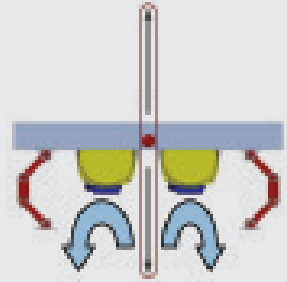
Custom equipment applications for Linear Vibration include:

- Horizontal Screens
- Feeders
- Grizzly Feeders
- Conveyors
- Hopper Feeders
- Shake Out
- Fluid Beds
- Purifiers
- Spiral Elevator
- Separators (milling)

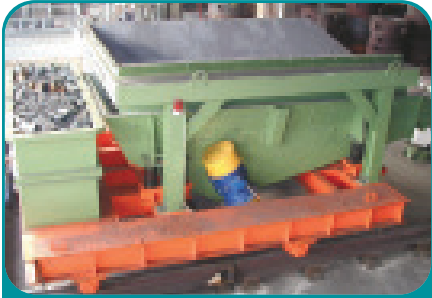


LINEAR

obtained with 2 identical Electric Vibrators (opposite rotation)



Feeder for use in Steel Foundry.



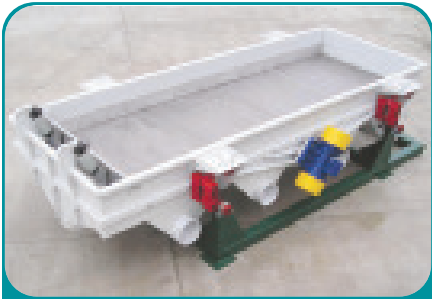
Steel Foundry



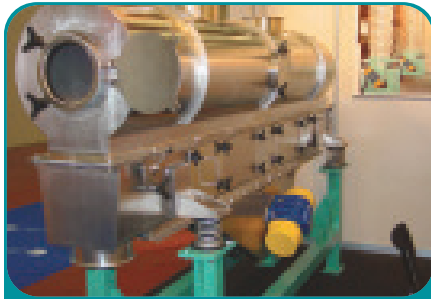
Steel Foundry



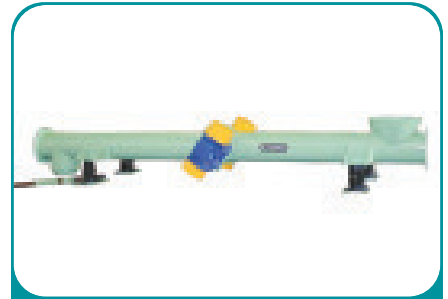
Steel Foundry



Food Industry



Food Industry



Chemical / Plastic



Mining / Aggregates



Mining / Aggregates



Mining / Aggregates



Mining / Aggregates



Cement



Ceramic

Vibrator Selection Guide

Choosing the right type of vibrator when conveying material

For maximum efficiency proper vibrator **selection** is the key. Selection requires information regarding your process considering the key requirements below:

- Process (such as conveying, screening, hopper feeding, primary feeding, or feeding)
- Particle size of the material
- Line power frequency / Hz (50 or 60)
- Weight of vibrating structure

Process	Typical Speeds (RPM)		Typical Angles Line of Force (°)
	50 Hz	60 Hz	
<i>Product of high specific weight and medium/large size (i.e. rock)</i>			
Primary Feeding	750 - 1,000	900 - 1,200	30 - 40
Primary Scalping	750 - 1,000	900 - 1,200	30 - 45
<i>Product of high specific weight and coarse particles (i.e. gravel)</i>			
Primary Screening	1,000 - 1,500	900 - 1,800	30 - 45
Hopper Feeding	1,000 - 1,500	1,200 - 1,800	25 - 30
Feeding	1,000 - 1,500	1,200 - 1,800	25 - 35
<i>Product of high specific weight and fine particles (i.e. sand)</i>			
Fine Screening	1,500	1,200 - 1,800	30 - 45
Hopper Feeding	1,000 - 1,500	1,200 - 1,800	25 - 35
Feeding	1,000 - 1,500	1,200 - 1,800	25 - 35
Dewatering	1,000 - 1,500	1,200 - 1,800	30 - 50
Fluidizing	750 - 1,000	720 - 900	50 - 80
<i>Product of low specific weight and very flexible (i.e. leaves)</i>			
Conveying	750 - 1,000	720 - 900	25 - 30
<i>Product of low specific weight and coarse particles (i.e. wheat)</i>			
Separating	1,000	900 - 1,200	30 - 45

Basic Formula

FORMULA

$e = S / 2$	$SM_t = W_t \times e$	$W_t = W_s + W_v$	$a = CF_t / W_t$
$e = SM_t / W_t$	$S = e \times 2$		$CF_t = W_t \times a$

LEGEND

e	= Eccentricity (in.)
s	= Total Stroke (Peak to Peak) (in.)
a	= Acceleration (Number of G's)
SM _t	= Total Static Moment (Static Moment of vibrator x number of vibrators) (lb*in)
CF _t	= Total Centrifugal Force (Centrifugal Force of vibrator x number of vibrators) (lb)
W _t	= Total Weight of machine (structure + vibrators) (lb)
W _s	= Weight of isolated structure (lb)
W _v	= Weight of vibrator (Weight of vibrator x number of vibrators) (lb)
SM _v	= Static Moment of vibrator (lb*in)

Speed and Stroke

Hz	POLE	SPEED	MAX STROKE at 5 G'S
50	8	750	.60 in.
60	8	900	.43 in.
50	6	1,000	.35 in.
60	6	1,200	.26 in.
50	4	1,500	.18 in.
60	4	1,800	.12 in.
50	2, AMV	3,000	.05 in.
60	2, AMV	3,600	.04 in.

* As a general rule it is advisable to limit designs for a maximum of 5 G's of acceleration. In specialized applications or designs it may be acceptable to exceed the 5 G acceleration limit. Consult factory for guidelines.

Example:

Known information:

Type of process	= quarry primary feeder	Stroke (from table)	= .26
Type of vibration	= linear (2 vibrators)	Speed (from table)	= 1,200 RPM
Weight of vibrating structure	= 3,300 lb	Power Supply	= 60 Hz
Estimated vibrator's weight:	= 825 lb (25% of vibrating structure)		

Vibrator rough selection:

- I. Considering the known information from above use the table on page 18 to determine rough Speed (RPM) needed. (In the example above the RPM range is 900 - **1,200** for a Primary Feeding process at 60Hz.)
- II. Using the Speed and Stroke table above, select the appropriate vibrator pole size based on your Hz and Speed requirements. (In the example above the pole selection is **6** based on 60Hz and 1,200 Speed (RPM).)
- III. Using the formulas below, determine **SM_v** (Static Moment) required for this application.
 - a. $e = S / 2$ = $> .26 / 2$ = **.13 in**
 - b. $SM_t = W_t \times e$ = $> (3300 + 825) \times .13$ = **536**
 - c. $SM_v = SM_t / \text{Number of Vibrators}$ = $> 536 / 2$ = **268 lb*in**
- IV. Referencing the charts on pages 20 - 29 the SMH model number selection is **SPV6-14000** based on 6 pole, 60Hz and a Static Moment of 268 or greater. (Actual Static Moment for this vibrator is **319.7**)

Checking the SMH model selection:

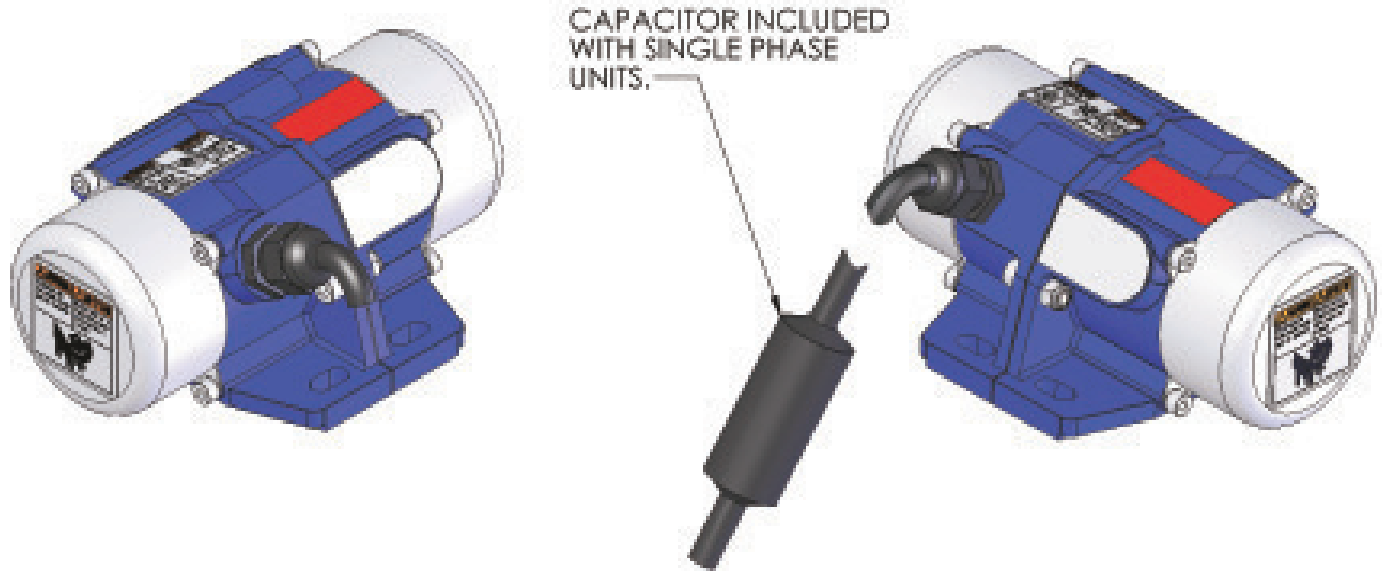
$SM_t = SM_v \times 2$	= 319 (actual SM_v from page 26) x 2	= 638 lb*in
$W_t = W_s + W_v$	= 3300 + (477 (actual wt from page 26) x 2)	= 4254.0 lb
$e = SM_t / W_t$	= 638 / 4254	= .15 in

* In the example above by using two SPV6-14000 vibrators, the desired eccentricity 0.13 can be reached with 87% setting of weights ($SM_t 638 \times 87\% = 555/4254 = .13$ in).

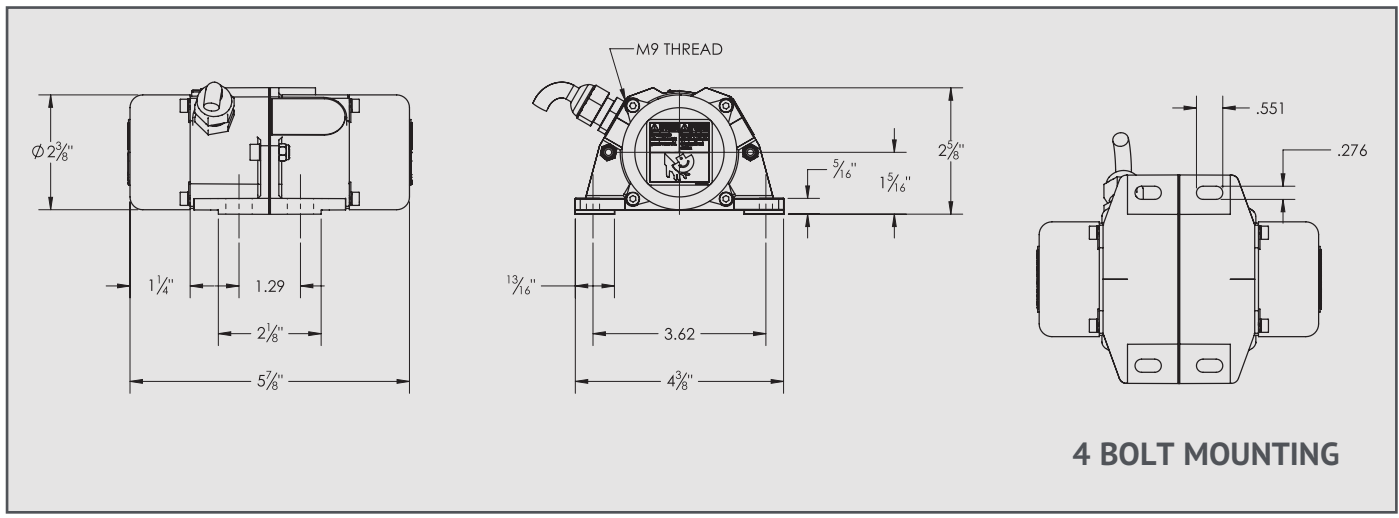
* If additional adjustments are required, the following larger model SPV6-15000 can be selected, recalculating the eccentricity formula to reach 81% of weight setting.

* When selecting a vibrator it is always advisable to use approximately 80% of the Static Moment or Centrifugal Force reported in the catalog in order to leave 20% of extra performance available in case on site adjustments are required. According to this assumption all our vibrators are set at 80% before shipment.

AMV Electric Rotary Vibrator Specifications and Dimensions



SMH Model	SMH Part Number	Description	Weight (lbs)		Centrifugal Force (lbs)		Static Moment (lb*in)		RPM		Amps	
			50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
4 BOLT												
AMV1-70BN	6515-040-BN	110 - 120V 60hz Single Phase	3 3/4	3 3/4	-	68	0.18	0.18	-	3,600	-	0.26
AMV1-70BM	6515-040-BM	220 - 240V 60hz Single Phase	3 3/4	3 3/4	-	68	0.18	0.18	-	3,600	-	0.13
AMV2-70BO	6515-040-BO	440 - 460V 60hz 3-Phase	3 3/4	3 3/4	-	68	0.18	0.18	-	3,600	-	0.07
AMV1-50AM	6515-040-AM	220 - 240V 50hz Single Phase	3 3/4	3 3/4	47	-	0.18	0.18	3,000	-	0.11	-
AMV2-50AQ	6515-040-AQ	380 - 415V 50hz 3-Phase	3 3/4	3 3/4	47	-	0.18	0.18	3,000	-	0.06	-



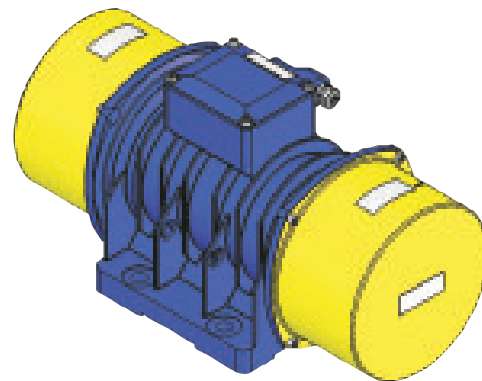
SPV Electric Rotary Vibrator Specifications and Dimensions

3,000 RPM, 50Hz
3,600 RPM, 60Hz

2-Pole

*COMPLETE THE PART NUMBERS / MODEL NUMBERS FOUND IN THE SPECIFICATIONS CHART BY ADDING A POWER INPUT SUFFIX:

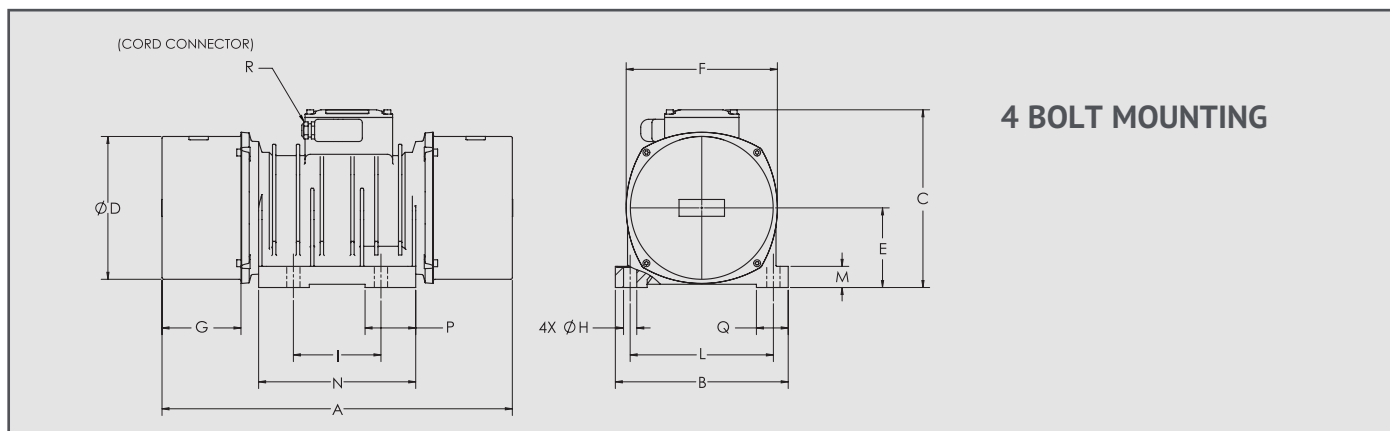
POWER INPUT - SINGLE PHASE VIBRATORS	
Suffix	Description
BN	110 - 120V 60Hz Single Phase
BM	220 - 240V 60Hz Single Phase
AM	220 - 240V 50Hz Single Phase



Specifications

SPV1 SERIES, 2-POLE SINGLE PHASE	FRAME SIZE	SMH Model	SMH Part Number	Weight (lbs)		Centrifugal Force (lbs)		Static Moment (lb*in)		Max Input Power (kw)		Max Current Amps	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
				4 BOLT									
020	SPV1-300*	6515-031-020*		11	10	276	298	1.1	0.8	0.17	0.18	0.80	1.60
021	SPV1-500*	6515-031-021*		11	11	483	496	1.9	1.3	0.18	0.19	0.80	1.70
030	SPV1-700*	6515-031-030*		19	19	741	710	2.9	1.9	0.30	0.33	1.40	3.00
040	SPV1-1300*	6515-031-040*		34	32	1,091	1,257	4.3	3.4	0.50	0.75	3.10	7.80
050	SPV1-1900*	6515-031-050*		47	45	1,746	1,887	6.8	5.1	0.65	1.00	5.70	9.60
060	SPV1-2200*	6515-031-060*		58	56	2,218	2,127	8.7	5.8	1.00	0.90	4.70	8.10
061	SPV1-2700*	6515-031-061*		62	59	2,956	2,661	11.6	7.2	1.25	1.25	5.90	11.00

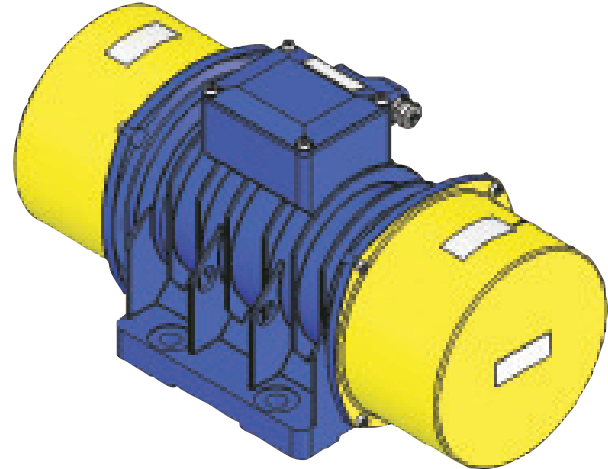
SMH Model	OVERALL REFERENCE DIMENSIONS (inches)														
	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"L"	"M"	"N"	"P"	"Q"	"R"
4 BOLT															
SPV1-300*	9 - 1/4	5 - 7/8	5 - 5/8	4 - 1/8	2 - 7/16	5 - 1/8	1 - 7/8	0.354	2.32 - 2.95	4.17	1/2	3 - 7/8	1 - 3/16	1 - 3/8	M16X1.5
SPV1-500*	9 - 1/4	5 - 7/8	5 - 5/8	4 - 1/8	2 - 7/16	5 - 1/8	1 - 7/8	0.354	2.32 - 2.95	4.17	1/2	3 - 7/8	1 - 3/16	1 - 3/8	M16X1.5
SPV1-700*	10 - 3/8	6 - 5/16	6 - 7/8	4 - 15/16	2 - 13/16	5 - 1/2	1 - 9/16	0.512	3.54	4.92	9/16	5 - 1/4	1 - 5/8	1 - 3/16	M16X1.5
SPV1-1300*	12	7 - 1/2	8 - 1/16	5 - 13/16	3 - 3/8	6 - 7/16	2	0.512	3.94	6.10	11/16	6 - 11/16	1 - 15/16	1 - 1/2	M20X1.5
SPV1-900*	13 - 11/16	8 - 3/8	8 - 7/16	6 - 5/8	3 - 3/4	7 - 1/4	2 - 3/8	0.669	4.53	6.69	13/16	7 - 1/2	2 - 5/16	1 - 3/4	M20X1.5
SPV1-2200*	14 - 13/16	9 - 3/16	9 - 1/4	7 - 3/8	4 - 1/8	7 - 7/8	2 - 11/16	0.669	4.72	7.09	13/16	7 - 9/16	2 - 5/16	1 - 11/16	M20X1.5
SPV1-2700*	14 - 13/16	9 - 3/16	9 - 1/4	7 - 3/8	4 - 1/8	7 - 7/8	2 - 11/16	0.669	4.72	7.09	13/16	7 - 9/16	2 - 5/16	1 - 11/16	M20X1.5



Sizes up to and including SPV1-1300 feature permanently lubricated bearings.
 Sizes up to and including SPV1-2200 feature an aluminum housing.
 Sizes up to and including SPV1-1900 and larger use logarithmic roller type bearings.

Electric Rotary Vibrators

SPV Electric Rotary Vibrator Specifications and Dimensions



*COMPLETE THE PART NUMBERS / MODEL NUMBERS FOUND IN THE SPECIFICATIONS CHART BY ADDING A POWER INPUT SUFFIX:

POWER INPUT - 3 - PHASE VIBRATORS

Suffix	Description
BB	220 - 240/440 - 480V 60Hz 3-Phase
AA	220 - 240/380 - 415V 50Hz 3-Phase
BY	575 - 600V 60Hz 3-Phase

3,000 RPM, 50Hz
3,600 RPM, 60Hz

2-Pole

Specifications

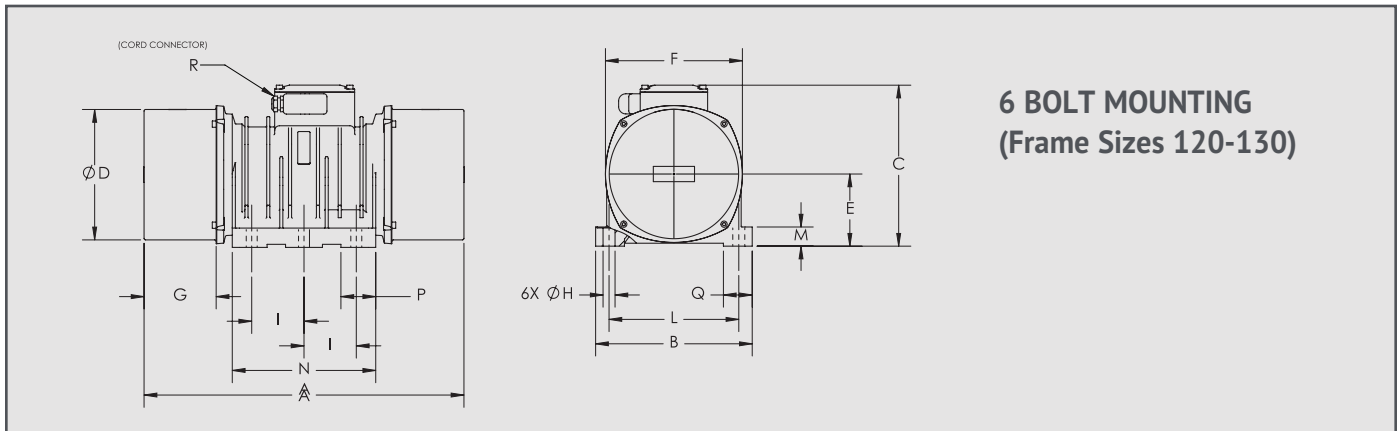
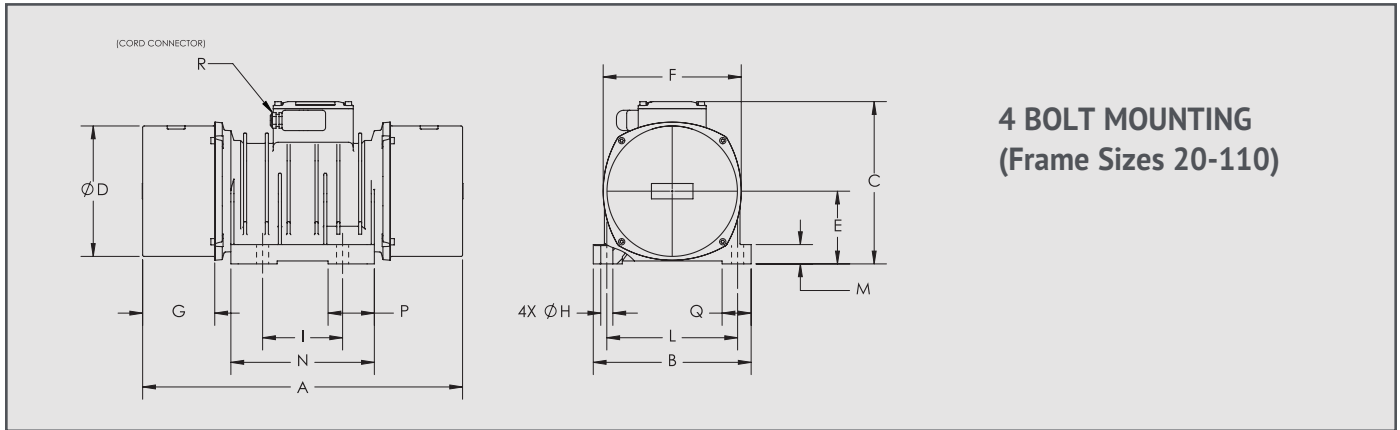
	FRAME SIZE	SMH Model	SMH Part Number	Weight (lbs)		Centrifugal Force (lbs)		Static Moment (lb*in)		Max Input Power (kw)		Max Current Amps	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
	4 BOLT											400V	460V
SPV2 SERIES, 2-POLE 3-PHASE	020	SPV2-300*	6515-032-020*	11	10	276	298	1.1	0.8	0.18	0.20	0.40	0.30
	021	SPV2-500*	6515-032-021*	11	11	483	496	1.9	1.3	0.19	0.21	0.40	0.40
	030	SPV2-700*	6515-032-030*	19	19	741	710	2.9	1.9	0.28	0.30	0.60	0.60
	040	SPV2-1300*	6515-032-040*	34	32	1,091	1,257	4.3	3.4	0.51	0.60	1.00	1.00
	050	SPV2-1900*	6515-032-050*	47	45	1,746	1,887	6.8	5.1	0.70	0.73	1.20	1.10
	060	SPV2-2200*	6515-032-060*	58	56	2,218	2,127	8.7	5.8	1.06	1.20	1.80	1.80
	061	SPV2-2700*	6515-032-061*	62	59	2,956	2,661	11.6	7.2	1.30	1.40	2.10	2.00
	070	SPV2-4300*	6515-032-070*	100	95	4,065	4,257	15.9	11.6	1.55	1.60	2.70	2.80
	080	SPX2-4900*	6515-032-080*	97	93	4,410	4,851	17.3	13.2	1.70	1.80	2.80	2.50
	090	SPX2-6400*	6515-032-090*	120	116	5,954	6,395	23.3	17.4	2.00	2.20	3.20	3.20
	100	SPV2-11000*	6515-032-100*	236	233	8,971	10,860	35.1	29.5	4.00	4.20	6.30	6.00
110	SPV2-13000*	6515-032-110*	338	333	12,432	12,527	48.6	34.0	5.50	5.80	8.60	7.90	
	FRAME SIZE	SMH Model	SMH Part Number	Weight (lbs)		Centrifugal Force (lbs)		Static Moment (lb*in)		Max Input Power (kw)		Max Current Amps	
6 BOLT											400V	460V	
	120	SPV2-15000*	6515-032-120*	395	386	15,051	14,334	58.9	39.0	7.00	7.30	11.20	10.20
	129	SPV2-18000*	6515-032-129*	497	490	17,170	17,562	67.2	47.7	7.90	8.60	13.50	12.00
	130	SPV2-21000*	6515-032-130*	545	536	21,089	20,779	82.5	56.5	8.00	9.50	13.00	13.50

Sizes up to and including SPV2-1300 feature permanently lubricated bearings.

Sizes up to and including SPV2-2200 feature an aluminum housing.

Sizes SPX2-4900 and larger feature cast iron housing.

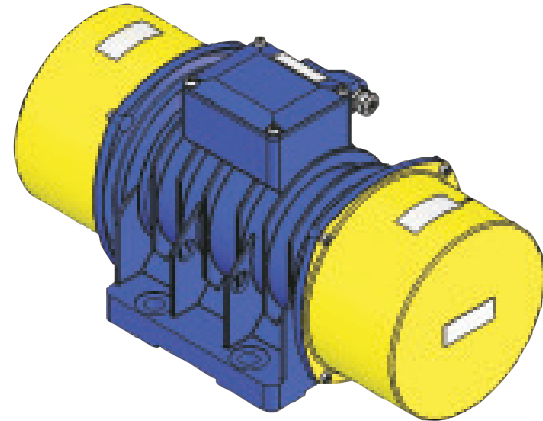
Sizes SPV2-1900 and larger feature logarithmic roller type bearings.



OVERALL REFERENCE DIMENSIONS (inches)														
"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"L"	"M"	"N"	"P"	"Q"	"R"
4 BOLT														
8 - 3/8	5 - 7/8	5 - 5/8	4 - 1/8	2 - 7/16	5 - 1/8	1 - 13/16	0.354	2.44 - 2.91	4.17	1/2	3 - 7/8	1 - 3/16	1 - 3/8	M16X1.5
9 - 1/4	5 - 7/8	5 - 5/8	4 - 1/8	2 - 7/16	5 - 1/8	1 - 13/16	0.354	2.44 - 2.91	4.17	1/2	3 - 7/8	1 - 3/16	1 - 3/8	M16X1.5
13 - 1/8	6 - 5/16	6 - 7/8	4 - 15/16	2 - 13/16	5 - 1/2	1 - 9/16	0.512	3.54	4.92	9/16	5 - 1/4	1 - 5/8	1 - 3/16	M16X1.5
12	7 - 1/2	8 - 1/16	5 - 13/16	3 - 3/8	6 - 7/16	2	0.512	3.94	6.10	11/16	6 - 11/16	1 - 15/16	1 - 1/2	M20X1.5
13 - 11/16	8 - 3/8	8 - 7/16	6 - 5/8	3 - 3/4	7 - 1/4	2 - 3/8	0.669	4.53	6.69	13/16	7 - 1/2	2 - 5/16	1 - 3/4	M20X1.5
14 - 13/16	9 - 3/16	9 - 1/4	7 - 3/8	4 - 1/8	7 - 7/8	2 - 11/16	0.669	4.72	7.09	13/16	7 - 9/16	2 - 5/16	1 - 11/16	M20X1.5
14 - 13/16	9 - 3/16	9 - 1/4	7 - 3/8	4 - 1/8	7 - 7/8	2 - 11/16	0.669	4.72	7.09	13/16	7 - 9/16	2 - 5/16	1 - 11/16	M20X1.5
16 - 5/16	9 - 5/8	9 - 3/4	7 - 7/8	4 - 7/16	8 - 7/16	3 - 1/4	0.669	5.91	7.48	1	8 - 1/4	2 - 1/16	1 - 15/16	M20X1.5
16 - 1/8	11	10 - 3/16	8 - 3/8	4 - 5/8	8 - 15/16	2 - 7/8	0.669	6.30	7.87	1 - 3/16	10	3 - 3/8	3	M20X1.5
20 - 3/16	11 - 13/16	11	9 - 5/16	5 - 3/16	10 - 1/16	4 - 1/8	0.866	6.50	9.06	1 - 3/8	11 - 11/16	4 - 5/16	2 - 13/16	M20X1.5
22 - 3/4	13 - 1/4	13 - 3/8	10 - 5/8	5 - 7/8	11 - 1/4	4 - 5/16	0.984	6.50	10.63	1 - 9/16	11 - 1/8	3 - 1/2	2 - 3/8	M25X1.5
24 - 1/2	14 - 1/4	14 - 3/8	12 - 1/8	6 - 9/16	12 - 11/16	4 - 9/16	1.142	8.27	11.61	1 - 9/16	12	3 - 7/16	2 - 1/2	M25X1.5
OVERALL REFERENCE DIMENSIONS (inches)														
"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"L"	"M"	"N"	"P"	"Q"	"R"
6 BOLT														
26 - 3/16	15 - 3/8	15 - 7/16	13 - 9/16	7 - 9/16	15 - 9/16	4 - 7/8	1.142	4.33	12.20	1 - 9/16	12 - 15/16	3 - 11/16	3 - 3/16	M25X1.5
27 - 5/16	15 - 3/8	16 - 11/16	13 - 9/16	8	15 - 9/16	4 - 7/8	1.142	4.53	12.60	1 - 3/4	13 - 11/16	3 - 7/8	2 - 5/8	M25X1.5
28 - 5/16	15 - 3/8	16 - 11/16	13 - 9/16	8	15 - 9/16	4 - 7/8	1.142	4.53	12.60	1 - 3/4	13 - 11/16	3 - 7/8	2 - 5/8	M25X1.5

Electric Rotary Vibrators

SPV Electric Rotary Vibrator Specifications and Dimensions



1,500 RPM, 50Hz
1,800 RPM, 60Hz

4-Pole

*COMPLETE THE PART NUMBERS / MODEL NUMBERS FOUND IN THE SPECIFICATIONS CHART BY ADDING A POWER INPUT SUFFIX:

POWER INPUT - 3-PHASE VIBRATORS

Suffix	Description
BB	220 - 240/440 - 480V 60Hz 3-Phase
AA	220 - 240/380 - 415V 50Hz 3-Phase
BY	575 - 600V 60Hz 3-Phase

Specifications

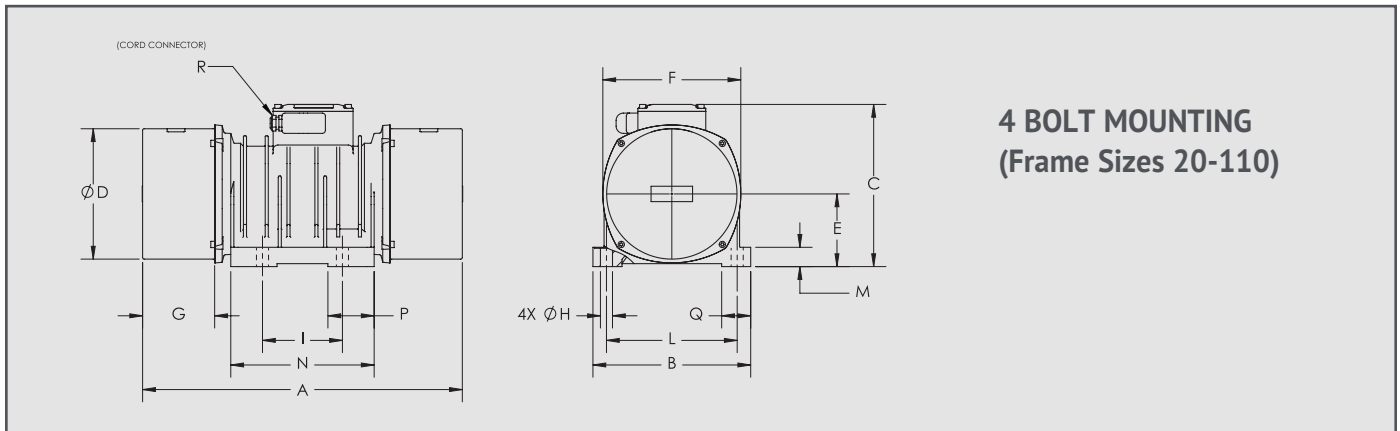
	FRAME SIZE	SMH Model	SMH Part Number	Weight (lbs)		Centrifugal Force (lbs)		Static Moment (lb*in)		Max Input Power (kw)		Max Current Amps		
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	
SPV4 SERIES, 4-POLE 3-PHASE	4 BOLT												400V	460V
	020	SPV4-150*	6515-034-020*	12	12	121	148	1.9	1.6	0.09	0.10	0.30	0.20	
	021	SPV4-200*	6515-034-021*	13	13	190	198	3.0	2.2	0.10	0.15	0.30	0.30	
	030	SPV4-600*	6515-034-030*	24	21	586	578	9.2	6.3	0.20	0.22	0.50	0.40	
	040	SPV4-1000*	6515-034-040*	45	40	963	959	15.1	10.4	0.35	0.42	0.70	0.70	
	041	SPV4-1400*	6515-034-041*	51	46	1,314	1,389	20.6	15.1	0.43	0.50	0.80	0.80	
	050	SPV4-1600*	6515-034-050*	59	52	1,653	1,587	25.9	17.2	0.55	0.63	0.90	0.90	
	060	SPV4-2500*	6515-034-060*	81	72	2,487	2,460	38.9	26.7	1.00	1.10	1.90	1.60	
	070	SPV4-4000*	6515-034-070*	125	117	3,732	3,979	58.4	43.2	1.20	1.35	2.20	1.90	
	080	SPX4-4400*	6515-034-080*	126	113	4,631	4,410	72.5	47.9	0.95	1.10	1.70	1.60	
	090	SPX4-6200*	6515-034-090*	154	149	6,064	6,174	94.9	67.0	1.40	1.65	2.80	2.80	
100	SPV4-9300*	6515-034-100*	279	262	8,706	9,281	136.3	100.9	2.40	2.60	4.90	4.90		
110	SPV4-13000*	6515-034-110*	366	355	11,658	12,427	182.5	100.4	3.50	3.80	5.80	5.60		
	FRAME SIZE	SMH Model	SMH Part Number	Weight (lbs)		Centrifugal Force (lbs)		Static Moment (lb*in)		Max Input Power (kw)		Max Current Amps		
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	
	6 BOLT												400V	460V
	120	SPV4-14000*	6515-034-120*	437	424	12,758	13,808	199.7	150.1	4.50	5.00	7.40	7.00	
	129	SPV4-16000*	6515-034-129*	534	505	15,510	15,668	242.8	170.3	6.10	6.25	10.00	9.60	
	130	SPV4-19000*	6515-034-130*	585	554	18,755	18,874	293.6	205.2	7.10	7.30	11.90	11.00	
140	SPV4-22000*	6515-034-140*	693	657	21,129	21,343	330.7	232.0	7.80	8.40	12.40	12.00		
141	SPV4-29000*	6515-034-141*	732	693	27,287	28,576	427.1	310.6	10.70	11.10	17.60	17.00		

Sizes up to and including SPV4-1000 feature permanently lubricated bearings.

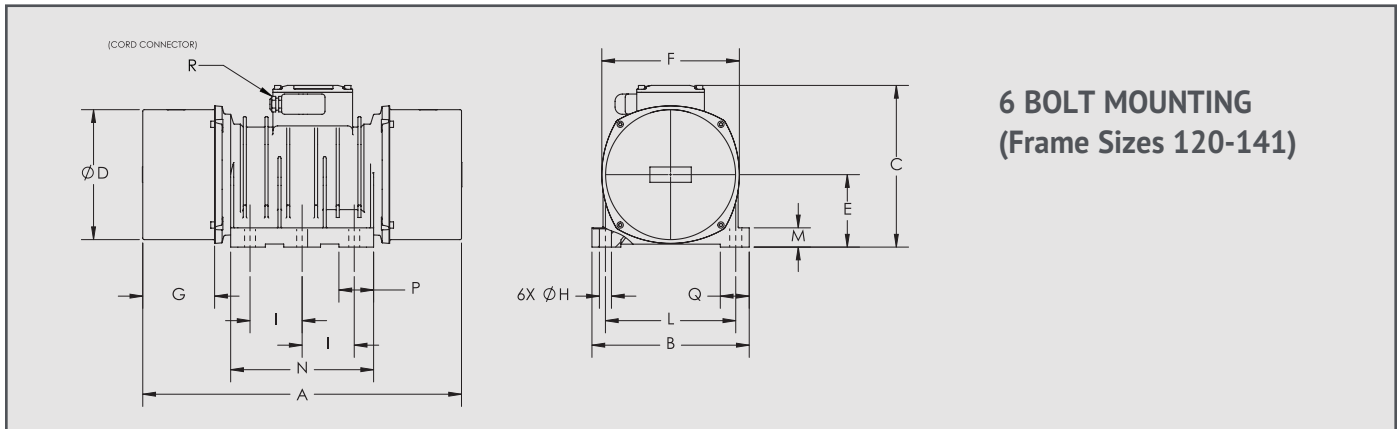
Sizes up to and including SPV4-2500 feature an aluminum housing.

Sizes SPX4-4400 and larger feature cast iron housing.

Sizes SPV4-1400 and larger feature logarithmic roller type bearings.



**4 BOLT MOUNTING
(Frame Sizes 20-110)**

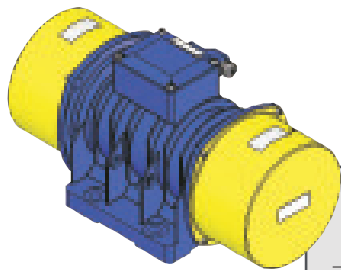


**6 BOLT MOUNTING
(Frame Sizes 120-141)**

OVERALL REFERENCE DIMENSIONS (inches)														
"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"L"	"M"	"N"	"P"	"Q"	"R"
4 BOLT														
8 - 3/8	5 - 7/8	5 - 5/8	4 - 1/8	2 - 7/16	5 - 1/8	1 - 13/16	0.354	2.44 - 2.91	4.17	1/2	3 - 7/8	1 - 3/16	1 - 3/8	M16X1.5
9 - 1/4	5 - 7/8	5 - 5/8	4 - 1/8	2 - 7/16	5 - 1/8	2 - 5/16	0.354	2.44 - 2.91	4.17	1/2	3 - 7/8	1 - 3/16	1 - 3/8	M16X1.5
13 - 1/8	6 - 5/16	6 - 7/8	4 - 15/16	2 - 13/16	5 - 1/2	2 - 11/16	0.512	3.54	4.92	9/16	5 - 1/4	1 - 5/8	1 - 3/16	M16X1.5
14 - 15/16	7 - 1/2	8 - 1/16	5 - 13/16	3 - 3/8	6 - 7/16	3 - 7/16	0.512	3.94	6.10	11/16	6 - 11/16	1 - 15/16	1 - 1/2	M20X1.5
16 - 3/8	7 - 1/2	8 - 1/16	5 - 13/16	3 - 3/8	6 - 7/16	4 - 3/16	0.512	3.94	6.10	11/16	6 - 11/16	1 - 15/16	1 - 1/2	M20X1.5
15 - 3/4	8 - 3/8	8 - 7/16	6 - 5/8	3 - 3/4	7 - 1/4	3 - 3/8	0.669	4.53	6.69	13/16	7 - 1/2	2 - 5/16	1 - 3/4	M20X1.5
17 - 5/16	9 - 3/16	9 - 1/4	7 - 3/8	4 - 1/8	7 - 7/8	3 - 15/16	0.669	4.72	7.09	13/16	7 - 9/16	2 - 5/16	1 - 11/16	M20X1.5
16 - 5/8	9 - 5/8	9 - 3/4	7 - 7/8	4 - 7/16	8 - 7/16	4 - 5/16	0.669	5.91	7.48	1	8 - 1/4	2 - 1/16	1 - 15/16	M20X1.5
19 - 1/8	11	10 - 3/16	8 - 3/8	4 - 5/8	8 - 15/16	4 - 3/8	0.669	6.30	7.87	1 - 3/16	10	3 - 3/8	3	M20X1.5
20 - 3/16	11 - 13/16	11	9 - 5/16	5 - 3/16	10 - 1/16	4 - 1/8	0.866	6.50	9.06	1 - 3/8	11 - 11/16	4 - 5/16	2 - 13/16	M20X1.5
22 - 3/4	13 - 1/4	13 - 3/8	10 - 5/8	5 - 7/8	11 - 1/4	4 - 5/16	0.984	6.50	10.63	1 - 9/16	11 - 1/8	3 - 1/2	2 - 3/8	M25X1.5
24 - 1/2	14 - 1/4	14 - 3/8	12 - 1/8	6 - 9/16	12 - 11/16	4 - 9/16	1.142	8.27	11.61	1 - 9/16	12	3 - 7/16	2 - 1/2	M25X1.5
OVERALL REFERENCE DIMENSIONS (inches)														
"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"L"	"M"	"N"	"P"	"Q"	"R"
6 BOLT														
26 - 3/16	15 - 3/8	15 - 7/16	13 - 9/16	7 - 9/16	15 - 9/16	4 - 7/8	1.142	4.33	12.20	1 - 9/16	12 - 15/16	3 - 11/16	3 - 3/16	M25X1.5
27 - 5/16	15 - 3/8	16 - 11/16	13 - 9/16	7 - 9/16	15 - 9/16	4 - 7/8	1.142	4.53	12.60	1 - 3/4	13 - 11/16	3 - 7/8	2 - 5/8	M25X1.5
28 - 5/16	15 - 3/8	16 - 11/16	13 - 9/16	7 - 9/16	15 - 9/16	4 - 7/8	1.142	4.53	12.60	1 - 3/4	13 - 11/16	3 - 7/8	2 - 5/8	M25X1.5
28 - 13/16	17 - 15/16	17 - 15/16	16 - 1/8	8 - 7/8	18 - 1/8	4 - 5/8	1.260	5.12	14.96	1 - 15/16	14 - 15/16	4 - 5/8	3 - 9/16	M25X1.5
29 - 1/16	17 - 15/16	17 - 15/16	16 - 1/8	8 - 7/8	18 - 1/8	4 - 5/8	1.260	5.12	14.96	1 - 15/16	14 - 15/16	4 - 5/8	3 - 9/16	M25X1.5

Electric Rotary Vibrators

SPV Electric Rotary Vibrator Specifications and Dimensions



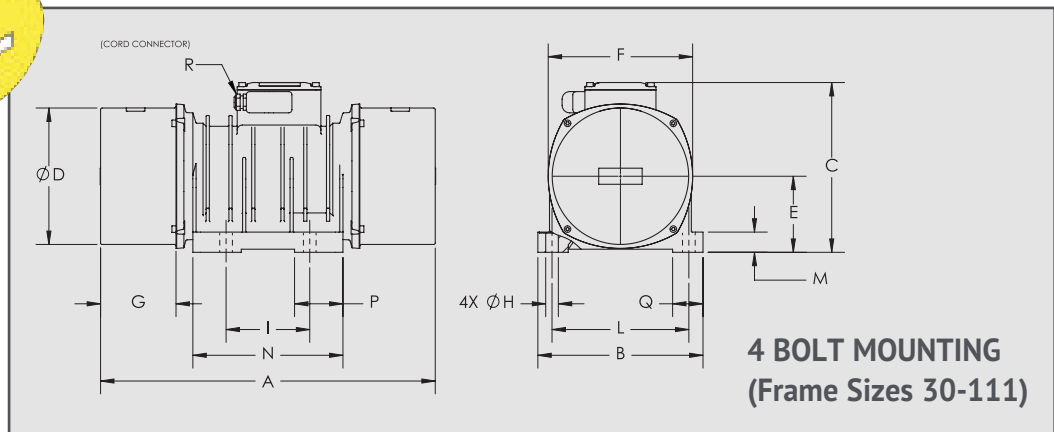
1,000 RPM, 50Hz
1,200 RPM, 60Hz

6-Pole

*COMPLETE THE PART NUMBERS / MODEL NUMBERS FOUND IN THE SPECIFICATIONS CHART BY ADDING A POWER INPUT SUFFIX:

POWER INPUT - 3-PHASE VIBRATORS

Suffix	Description
BK	220 - 240/440 - 480V 60Hz 3-Phase
AA	220 - 240/380 - 415V 50Hz 3-Phase
BY	575 - 600V 60Hz 3-Phase



Specifications

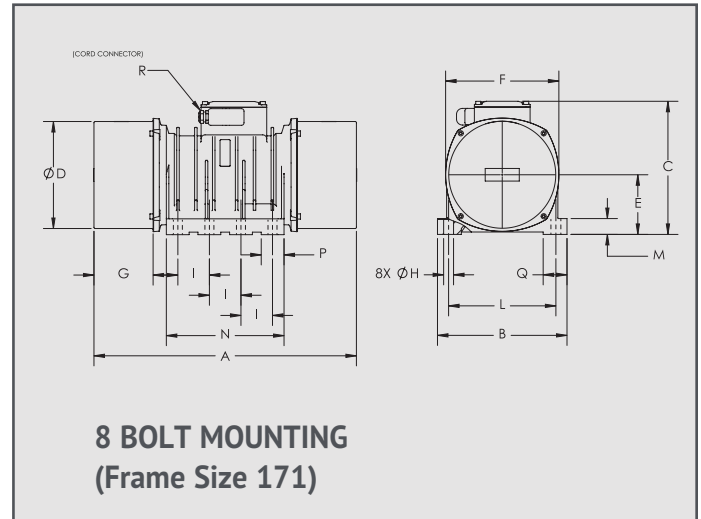
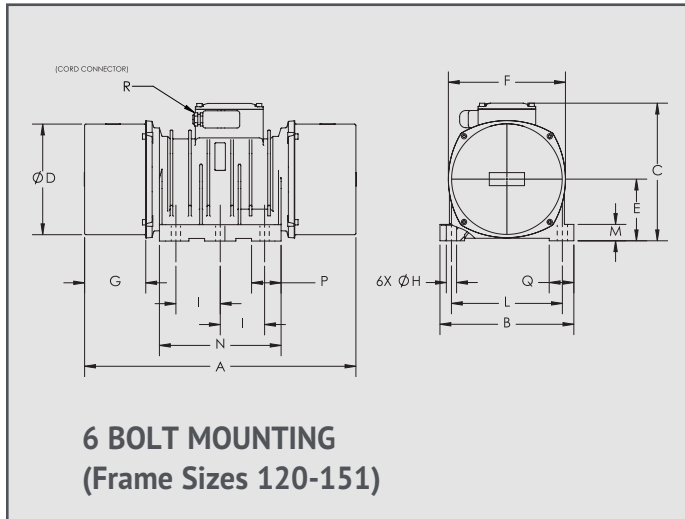
FRAME SIZE	SMH Model	SMH Part Number	Weight (lbs)		Centrifugal Force (lbs)		Static Moment (lb*in)		Max Input Power (kw)		Max Current Amps	
			50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
			4 BOLT									
030	SPV6-400*	6515-036-030*	24	24	260	375	9.2	9.2	0.15	0.17	0.40	0.40
040	SPV6-600*	6515-036-040*	45	45	428	617	15.1	15.1	0.28	0.35	0.70	0.80
041	SPV6-850*	6515-036-041*	50	50	584	842	20.6	20.6	0.30	0.38	0.70	0.80
050	SPV6-1100*	6515-036-050*	64	58	979	1,058	34.5	25.9	0.35	0.50	0.90	1.00
060	SPV6-1600*	6515-036-060*	88	83	1,270	1,592	44.8	38.9	0.80	0.90	1.50	1.50
070	SPV6-2400*	6515-036-070*	133	123	2,090	2,388	73.6	58.4	0.90	1.00	1.80	1.70
080	SPX6-3000*	6515-036-080*	138	125	2,756	2,977	97.1	72.8	0.85	0.95	2.00	1.90
090	SPX6-3900*	6515-036-090*	183	159	4,079	3,859	143.6	94.4	1.15	1.30	2.40	2.50
100	SPV6-7600*	6515-036-100*	333	305	6,753	7,546	237.8	184.6	2.27	2.35	5.00	4.50
110	SPV6-9300*	6515-036-110*	417	382	8,752	9,242	308.2	226.0	2.70	3.00	5.80	5.50
111	SPV6-11000*	6515-036-111*	455	408	10,419	10,441	366.9	255.4	3.30	3.50	6.80	6.20
FRAME SIZE	SMH Model	SMH Part Number	Weight (lbs)		Centrifugal Force (lbs)		Static Moment (lb*in)		Max Input Power (kw)		Max Current Amps	
6 BOLT												
120	SPV6-14000*	6515-036-120*	521	477	12,613	13,069	444.2	319.7	4.00	4.20	7.10	6.80
129	SPV6-15000*	6515-036-129*	649	587	14,905	14,705	525.0	359.6	5.30	6.20	9.50	10.00
130	SPV6-20000*	6515-036-130*	750	673	19,484	19,656	686.2	480.8	7.60	8.20	13.00	13.00
140	SPV6-23000*	6515-036-140*	849	768	22,511	22,207	792.8	543.1	8.00	8.60	13.40	13.80
141	SPV6-27000*	6515-036-141*	926	816	28,133	26,733	990.8	653.8	9.80	10.80	16.00	17.00
142	SPV6-30000*	6515-036-142*	953	845	30,047	29,489	1,058	721	10.20	11.00	17.00	17.50
150	SPV6-35000*	6515-036-150*	1,169	1,070	33,940	34,604	1,195	846	11.50	12.50	19.80	18.50
151	SPV6-39000*	6515-036-151*	1,279	1,151	39,009	38,283	1,374	936	13.80	15.00	24.00	23.50
FRAME SIZE	SMH Model	SMH Part Number	Weight (lbs)		Centrifugal Force (lbs)		Static Moment (lb*in)		Max Input Power (kw)		Max Current Amps	
8 BOLT												
171	SPV6-43000*	6515-036-171*	1,995	1,907	50,296	42,827	1,771	1,047	19.00	20.50	32.40	31.40

Sizes up to and including SPV6-600 feature permanently lubricated bearings.

Sizes up to and including SPV6-1600 feature an aluminum housing.

Sizes SPX6-3000 and larger feature cast iron housing.

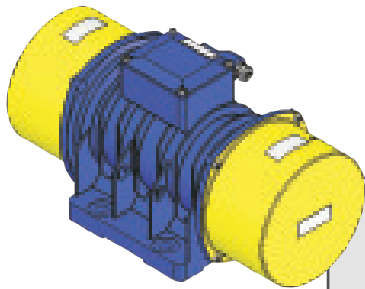
Sizes SPV6-850 and larger feature logarithmic roller type bearings.



OVERALL REFERENCE DIMENSIONS (inches)														
"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"L"	"M"	"N"	"P"	"Q"	"R"
4 BOLT														
13 - 1/8	6 - 5/16	6 - 7/8	4 - 15/16	2 - 13/16	5 - 1/2	3 - 3/8	0.512	3.54	4.92	9/16	5 - 1/4	1 - 5/8	1 - 3/16	M16X1.5
14 - 15/16	7 - 1/2	8 - 1/16	5 - 13/16	3 - 3/8	6 - 7/16	3 - 7/16	0.512	3.94	6.10	11/16	6 - 11/16	1 - 15/16	1 - 1/2	M20X1.5
16 - 3/8	7 - 1/2	8 - 1/16	5 - 13/16	3 - 3/8	6 - 7/16	4 - 3/16	0.512	3.94	6.10	11/16	6 - 11/16	1 - 15/16	1 - 1/2	M20X1.5
17 - 1/4	8 - 3/8	8 - 7/16	6 - 5/8	3 - 3/4	7 - 1/4	4 - 1/8	0.669	4.53	6.69	13/16	7 - 1/2	2 - 5/16	1 - 3/4	M20X1.5
18 - 1/4	9 - 3/16	9 - 1/4	7 - 3/8	4 - 1/8	7 - 7/8	4 - 7/16	0.669	4.72	7.09	13/16	7 - 9/16	2 - 5/16	1 - 11/16	M20X1.5
20 - 1/16	9 - 5/8	9 - 3/4	7 - 7/8	4 - 7/16	8 - 7/16	5 - 1/16	0.669	5.91	7.48	1	8 - 1/4	2 - 1/16	1 - 15/16	M20X1.5
19 - 1/8	11	10 - 3/16	8 - 3/8	4 - 5/8	8 - 15/16	4 - 3/8	0.669	6.30	7.87	1 - 3/16	10	3 - 3/8	3	M20X1.5
20 - 3/16	11 - 13/16	11	9 - 5/16	5 - 3/16	10 - 1/16	4 - 1/8	0.866	6.50	9.06	1 - 3/8	11 - 11/16	4 - 5/16	2 - 13/16	M20X1.5
26 - 9/16	13 - 1/4	13 - 3/8	10 - 5/8	5 - 7/8	11 - 1/4	6 - 1/4	0.984	6.50	10.63	1 - 9/16	11 - 1/8	3 - 1/2	2 - 3/8	M25X1.5
27 - 13/16	14 - 1/4	14 - 3/8	12 - 1/8	6 - 9/16	12 - 11/16	6 - 1/4	1.142	8.27	11.61	1 - 9/16	12	3 - 7/16	2 - 1/2	M25X1.5
27 - 13/16	14 - 1/4	14 - 3/8	12 - 1/8	6 - 9/16	12 - 11/16	6 - 1/4	1.142	8.27	11.61	1 - 9/16	12	3 - 7/16	2 - 1/2	M25X1.5
OVERALL REFERENCE DIMENSIONS (inches)														
"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"L"	"M"	"N"	"P"	"Q"	"R"
6 BOLT														
29 - 5/16	15 - 3/8	15 - 7/16	13 - 9/16	7 - 9/16	15 - 9/16	6 - 7/16	1.142	4.33	12.20	1 - 9/16	12 - 15/16	3 - 11/16	3 - 3/16	M25X1.5
30 - 1/2	15 - 3/8	16 - 11/16	13 - 9/16	7 - 9/16	15 - 9/16	6 - 7/16	1.142	4.53	12.60	1 - 3/4	13 - 11/16	3 - 7/8	2 - 5/8	M25X1.5
34 - 5/8	15 - 3/8	16 - 11/16	13 - 9/16	7 - 9/16	15 - 9/16	8 - 1/16	1.142	4.53	12.60	1 - 3/4	13 - 11/16	3 - 7/8	2 - 5/8	M25X1.5
35 - 11/16	17 - 15/16	17 - 15/16	16 - 1/8	8 - 7/8	18 - 1/8	8 - 1/16	1.260	5.12	14.96	1 - 15/16	14 - 15/16	4 - 5/8	3 - 9/16	M25X1.5
38 - 11/16	17 - 15/16	17 - 15/16	16 - 1/8	8 - 7/8	18 - 1/8	8 - 1/16	1.260	5.12	14.96	1 - 15/16	14 - 15/16	4 - 5/8	3 - 9/16	M25X1.5
38 - 11/16	17 - 15/16	17 - 15/16	16 - 1/8	8 - 7/8	18 - 1/8	8 - 1/16	1.260	5.12	14.96	1 - 15/16	14 - 15/16	4 - 5/8	3 - 9/16	M25X1.5
38 - 11/16	19 - 5/16	19 - 1/2	17 - 11/16	9 - 5/8	19 - 11/16	7 - 1/2	1.496	6.10	15.75	1 - 15/16	17 - 15/16	5 - 5/8	3 - 9/16	M32X1.5
40 - 15/16	19 - 5/16	19 - 1/2	17 - 11/16	9 - 5/8	19 - 11/16	8 - 7/16	1.496	6.10	15.75	1 - 15/16	17 - 15/16	5 - 5/8	3 - 9/16	M32X1.5
OVERALL REFERENCE DIMENSIONS (inches)														
"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"L"	"M"	"N"	"P"	"Q"	"R"
8 BOLT														
44 - 1/8	24 - 7/16	24	21 - 9/16	11 - 13/16	23 - 5/8	9 - 1/16	1.142	4.33	12.20	1 - 9/16	12 - 15/16	3 - 11/16	3 - 3/16	M25X1.5

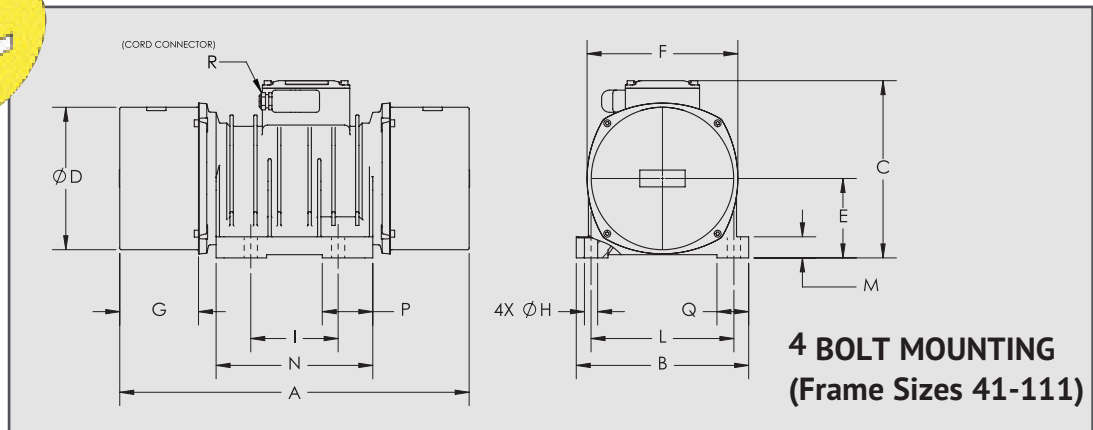
Electric Rotary Vibrators

SPV Electric Rotary Vibrator Specifications and Dimensions



750 RPM, 50Hz
900 RPM, 60Hz

8-Pole



*COMPLETE THE PART NUMBERS / MODEL NUMBERS FOUND IN THE SPECIFICATIONS CHART BY ADDING A POWER INPUT SUFFIX:

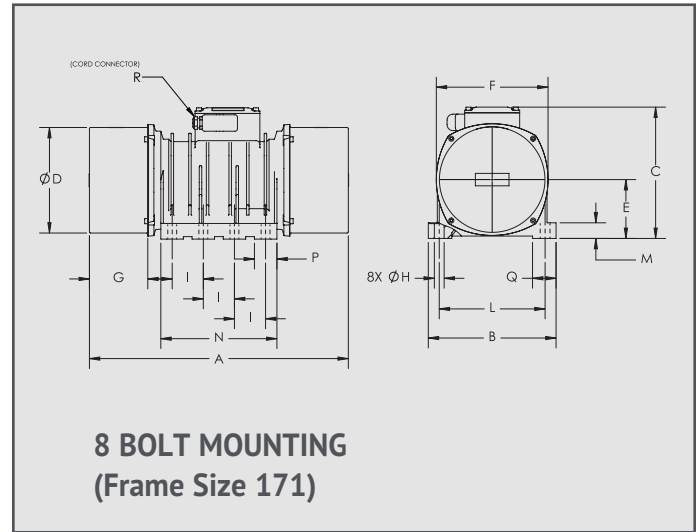
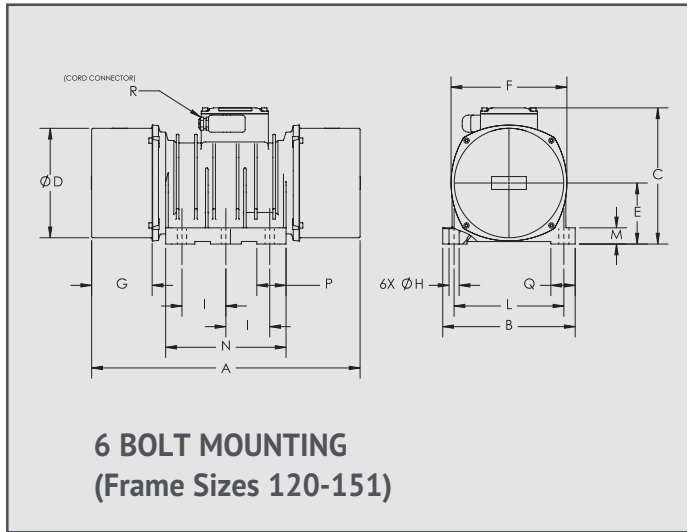
POWER INPUT - 3-PHASE VIBRATORS

Suffix	Description
BK	220 - 240/440 - 480V 60Hz 3-Phase
AA	220 - 240/380 - 415V 50Hz 3-Phase
BY	575 - 600V 60Hz 3-Phase

Specifications

SPV8 SERIES, 8-POLE 3-PHASE	FRAME SIZE	SMH Model	SMH Part Number	Weight (lbs)		Centrifugal Force (lbs)		Static Moment (lb*in)		Max Input Power (kw)		Max Current Amps	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
	4 BOLT												400V
041	SPV8-500*	6515-038-041*	6515-038-041*	50	50	328	474	20.6	20.6	0.28	0.32	0.90	0.80
050	SPV8-800*	6515-038-050*	6515-038-050*	64	64	551	794	34.5	34.5	0.45	0.44	1.20	1.10
060	SPV8-1100*	6515-038-060*	6515-038-060*	88	88	714	1,030	44.8	44.8	0.55	0.72	1.50	1.70
070	SPV8-1700*	6515-038-070*	6515-038-070*	133	133	1,175	1,693	73.6	73.6	0.60	0.65	1.70	1.60
080	SPX8-2200*	6515-038-080*	6515-038-080*	139	139	1,544	2,205	95.9	95.9	0.55	0.70	1.70	1.80
090	SPX8-3300*	6515-038-090*	6515-038-090*	183	183	2,315	3,308	143.8	143.8	0.90	1.10	2.20	2.20
100	SPV8-5500*	6515-038-100*	6515-038-100*	333	333	3,799	5,470	237.8	237.8	1.90	2.00	4.60	4.30
110	SPV8-7100*	6515-038-110*	6515-038-110*	417	417	4,923	7,088	308.2	308.2	2.20	2.75	5.00	5.90
111	SPV8-8500*	6515-038-111*	6515-038-111*	455	455	5,860	8,439	366.9	366.9	3.00	3.30	6.70	6.90
6 BOLT												400V	460V
120	SPV8-11000*	6515-038-120*	6515-038-120*	567	536	8,422	10,216	527.2	444.2	3.60	4.00	8.00	8.00
129	SPV8-13000*	6515-038-129*	6515-038-129*	662	618	10,366	12,075	649.0	525.0	5.20	5.80	10.00	10.30
130	SPV8-16000*	6515-038-130*	6515-038-130*	823	761	13,585	15,783	850.6	686.2	6.20	7.20	11.90	11.60
140	SPV8-19000*	6515-038-140*	6515-038-140*	948	865	16,651	18,234	1,043	792.8	7.00	8.00	13.10	12.60
141	SPV8-25000*	6515-038-141*	6515-038-141*	993	948	19,055	24,339	1,193	1,058	7.30	8.50	13.90	13.30
150	SPV8-28000*	6515-038-150*	6515-038-150*	1,290	1,235	24,665	27,492	1,544	1,195	10.00	10.80	20.90	19.90
151	SPV8-36000*	6515-038-151*	6515-038-151*	1,467	1,411	30,329	35,622	1,899	1,549	11.20	12.00	22.70	22.80
8 BOLT												400V	460V
171	SPV8-49000*	6515-038-171*	6515-038-171*	2,161	2,084	41,085	48,533	2,572	2,110	13.60	14.80	26.90	28.10

Sizes up to and including SPV8-1100 feature an aluminum housing.
 Sizes SPX8-2200 and larger feature cast iron housing.
 Sizes SPV8 feature logarithmic roller type bearings.



OVERALL REFERENCE DIMENSIONS (inches)														
"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"L"	"M"	"N"	"P"	"Q"	"R"
4 BOLT														
16 - 3/8	7 - 1/2	8 - 1/16	5 - 13/16	3 - 3/8	6 - 7/16	4 - 3/16	0.512	3.94	6.10	11/16	6 - 11/16	1 - 15/16	1 - 1/2	M20X1.5
17 - 1/4	8 - 3/8	8 - 7/16	6 - 5/8	3 - 3/4	7 - 1/4	4 - 1/8	0.669	4.53	6.69	13/16	7 - 1/2	2 - 5/16	1 - 3/4	M20X1.5
18 - 1/4	9 - 3/16	9 - 1/4	7 - 3/8	4 - 1/8	7 - 7/8	4 - 7/16	0.669	4.72	7.09	13/16	7 - 9/16	2 - 5/16	1 - 11/16	M20X1.5
20 - 1/16	9 - 5/8	9 - 3/4	7 - 7/8	4 - 7/16	8 - 7/16	5 - 1/16	0.669	5.91	7.48	1	8 - 1/4	2 - 1/16	1 - 15/16	M20X1.5
20 - 9/16	11	10 - 3/16	8 - 3/8	4 - 5/8	8 - 15/16	5 - 9/16	0.669	6.30	7.87	1 - 3/16	10	3 - 3/8	3	M20X1.5
23	11 - 13/16	11	9 - 5/16	5 - 3/16	10 - 1/16	5 - 1/2	0.866	6.50	9.06	1 - 3/8	11 - 11/16	4 - 5/16	2 - 13/16	M20X1.5
26 - 9/16	13 - 1/4	13 - 3/8	10 - 5/8	5 - 7/8	11 - 1/4	6 - 1/4	0.984	6.50	10.63	1 - 9/16	11 - 1/8	3 - 1/2	2 - 3/8	M25X1.5
27 - 13/16	14 - 1/4	14 - 3/8	12 - 1/8	6 - 9/16	12 - 11/16	6 - 1/4	1.142	8.27	11.61	1 - 9/16	12	3 - 7/16	2 - 1/2	M25X1.5
27 - 13/16	14 - 1/4	14 - 3/8	12 - 1/8	6 - 9/16	12 - 11/16	6 - 1/4	1.142	8.27	11.61	1 - 9/16	12	3 - 7/16	2 - 1/2	M25X1.5
OVERALL REFERENCE DIMENSIONS (inches)														
"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"L"	"M"	"N"	"P"	"Q"	"R"
6 BOLT														
32 - 7/16	15 - 3/8	15 - 7/16	13 - 9/16	7 - 9/16	15 - 9/16	8	1.142	8.27	11.61	1 - 9/16	12	3 - 7/16	2 - 1/2	M25X1.5
33 - 5/8	15 - 3/8	16 - 11/16	13 - 9/16	7 - 9/16	15 - 9/16	8 - 1/16	1.142	4.53	12.60	1 - 3/4	13 - 11/16	3 - 7/8	2 - 5/8	M25X1.5
37 - 3/4	15 - 3/8	16 - 11/16	13 - 9/16	7 - 9/16	15 - 9/16	9 - 5/8	1.142	4.53	12.60	1 - 3/4	13 - 11/16	3 - 7/8	2 - 5/8	M25X1.5
38 - 7/16	17 - 15/16	17 - 15/16	16 - 1/8	8 - 7/8	18 - 1/8	9 - 7/16	1.260	5.12	14.96	1 - 15/16	14 - 15/16	4 - 5/8	3 - 9/16	M25X1.5
38 - 11/16	17 - 15/16	17 - 15/16	16 - 1/8	8 - 7/8	18 - 1/8	9 - 7/16	1.260	5.12	14.96	1 - 15/16	14 - 15/16	4 - 5/8	3 - 9/16	M25X1.5
39 - 3/4	19 - 5/16	19 - 1/2	17 - 11/16	9 - 5/8	19 - 11/16	9 - 1/4	1.496	6.10	15.75	1 - 15/16	17 - 15/16	5 - 5/8	3 - 9/16	M32X1.5
44 - 7/8	19 - 5/16	19 - 1/2	17 - 11/16	9 - 5/8	19 - 11/16	10 - 7/16	1.496	6.10	15.75	1 - 15/16	17 - 15/16	5 - 5/8	3 - 9/16	M32X1.5
OVERALL REFERENCE DIMENSIONS (inches)														
"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"L"	"M"	"N"	"P"	"Q"	"R"
8 BOLT														
44 - 1/8	24 - 7/16	24	21 - 9/16	11 - 13/16	23 - 5/8	9 - 1/16	1.142	8.27	11.61	1 - 9/16	12	3 - 7/16	2 - 1/2	M25X1.5

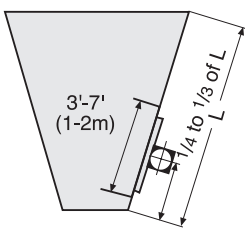
Mounting Syntron® Electric Rotary Vibrators

Vibrator selection and installation is based upon individual application requirements. For vibration distribution, each electric rotary bin vibrator should be mounted midway, on a length of channel, welded with its legs against the side of the bin. All electric rotary bin vibrator models can be mounted with the shaft in any position from horizontal to near vertical. For maximum effectiveness, chutes requiring vibrators

should be independently isolated. In addition, the vibrator should be mounted midway on a channel located underneath the length of the chute.

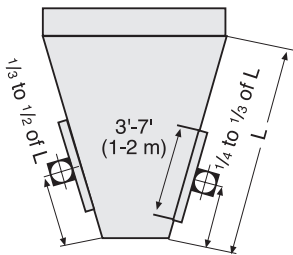
Note: For free-flowing bulk material installations, vibrators on hoppers should operate only when the hopper is open to flow. Otherwise, packing of material can result.

Conical Hoppers



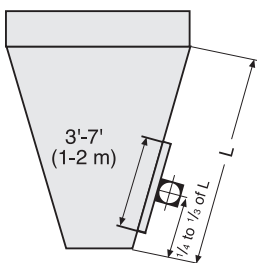
Mount vibrator by channel-iron stiffener 3 to 7 feet long (1-2 m) to hopper wall, one-fourth to one-third the distance from the discharge to the top. A second vibrator (if necessary) should be mounted diametrically opposite and approximately halfway up the bin wall.

Rectangular Hoppers



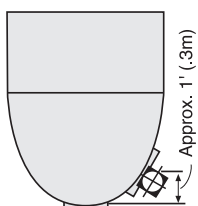
Mount as for conical hoppers on the centerline of one side. A second vibrator may be required if complete cleaning of all corners and sides is desired. To mount, follow instructions for conical hoppers.

Rectangular Bins with Hopper Bottoms



Usually requires larger force vibrators than conical or rectangular hoppers because of additional head load. Locate vibrator one-fourth to one-third the distance up sloping section of bin wall, and follow mounting instructions for conical hoppers.

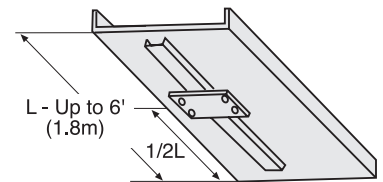
Parabolic Bins or Hoppers



Mount vibrator within one foot of each discharge opening and in line with center of opening.

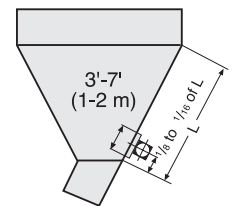
Chutes

To move the material in a chute, the chute should be inclined to no less than half the "angle of repose" of the material (at least 10 degrees). On chutes from six to 10 feet (1.8 - 3 m) long, two vibrators are needed; one should be placed 18 - 24 inches (457 - 610 mm) from the discharge and the other approximately in the middle. Since chutes are very sensitive to vibration, a provision should be made to move the lower vibrator six inches (152 mm) in either direction. This could mean the difference between moving the material or not moving it. Vibrator shaft (eccentric weight) should be rotating in the direction of material flow.



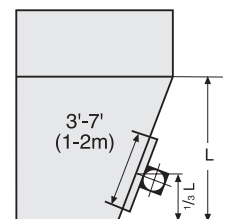
Bins with Sloping Discharge

Mount the vibrator one-sixteenth to one-eighth the distance up bin wall that is contiguous with the underside of chute. This lower mounting position puts vibrator close to bin discharge throat and assures vibration transference into chute.



Bin or Hopper with Vertical Side

Mount vibrator on wall with the least slope. Follow mounting instructions for rectangular bins with hopper bottoms.

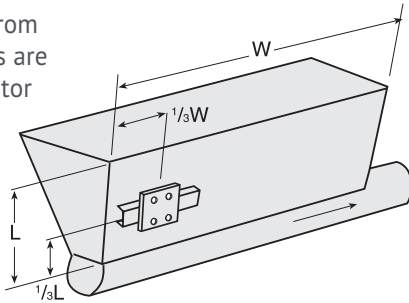


Note: Drawings illustrate typical installations. Specific installations may require slight variations. For other applications not covered here, please consult factory for recommendations.

Mounting Syntron® Electric Rotary Vibrators, cont'd.

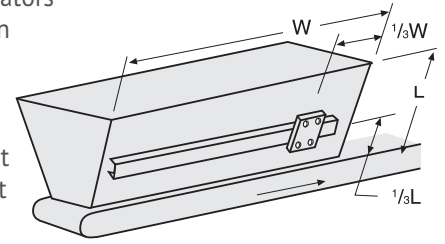
Screw Feeder

Feeds from the back. Vibrator should be $\frac{1}{3}$ from the inlet. If two vibrators are used, place second vibrator on opposite side, $\frac{1}{3}$ from the discharge. Do not run the vibrator at the discharge until the back of the bin is empty and the vibrator at the inlet is shut off.



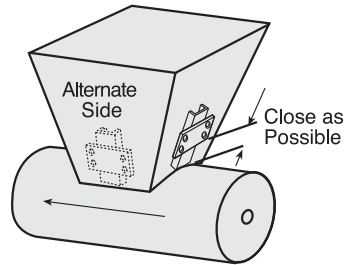
Long Bin

Belt conveyor feeds from front. Vibrator should be $\frac{1}{3}$ from front. If two vibrators are used, place one on opposite side and $\frac{1}{3}$ from back. Do not operate the back vibrator until the front is empty and the front vibrator is shut off.



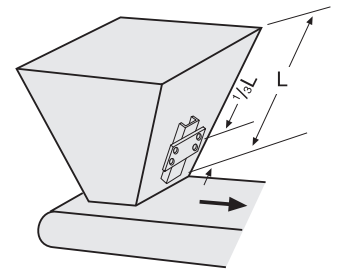
Short Screw Feeder

Place vibrator as close as possible to feeder.



Belt Conveyor and Standard Bin

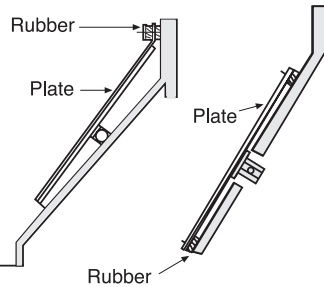
Mount vibrator on the belt discharge side of the hopper. Follow mounting instructions for the appropriate bin type on page 30.



Concrete Hopper or Lined Wooden Hopper

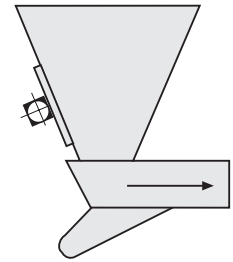
For wooden hoppers lined with thin sheet metal, attach vibrator mounting bolts to the hopper lining.

For concrete hoppers, secure a steel plate across the top inside of the hopper to the discharge opening along the side to which the vibrator will be mounted. At about $\frac{1}{4}$ or less of the distance from the discharge to the vertical side, cut an opening to allow the vibrator to be bolted to the steel plate.



Vibrating Feeder and Standard Bin

Mount vibrator on the feeder infeed side of the hopper. Follow mounting instructions for the appropriate bin type on page 30.



Note: Drawings illustrate typical installations. Specific installations may require slight variations. For other applications not covered here, please consult factory for recommendations.

Wood Bin

Use steel plate on inside and bolt to outside mounting plate.

