VIBCO VIBRATION PRODUCTS

Established 1962

THIS IS VIBCO
Qualified engineers, with over 40 years of experience in the vibrator field, assure you of the latest developments in vibration engineering. Well trained craftsmen put these developments into the most reliable and long lasting vibration equipment available today.

OUR MOTTO
"ANOTHER FIRST BY VIBCO – QUALITY ENGINEERED PRODUCTS"

FIRST:
First in the development of new products, first in using new techniques and materials, and first in following O.S.H.A. and ecology programs.

U.S. PATENTS:
Most of VIBCO's products are manufactured under one or more of the following U.S. patents: 3.638.914; 3.672.639; 3.790.137; 3.870.282; 3.932.057; 3.938.905; 3.945.246; 4.042.102; 4.280.616; 4.389.120; 4.407.403; 4.583.414; 4.590.814; 4.653.927; 4.425.813; 5.143.256; 5.439.314; 5.672.027; 5.580.234.

These patents also applied for in most other countries.

QUALITY ENGINEERED PRODUCTS:
The most complete and reliable line of vibration products available on the market today.

FREE TRIAL

CONVINCE YOURSELF THAT OUR VIBRATOR WILL SOLVE YOUR VIBRATION PROBLEM AT

NO RISK TO YOU

Ask for any one of our standard units for a **Free 10 Day Trial** to make sure the unit performs to **YOUR** satisfaction and does what **YOU** intended it to do. Your only obligation is to pay the Freight Charges.

To get your **FREE TRIAL UNIT** send us your purchase order marked **"FOR FREE TRIAL"** .

OUR GUARANTEE IS VERY SIMPLE:

WE GUARANTEE OUR VIBRATORS TO PERFORM TO YOUR SATISFACTION OR THEY CAN BE RETURNED FOR FULL CREDIT OR EXCHANGED. We allow a 10 day trial at NO CHARGE to give you the opportunity to test the unit and make sure it does the job you intended it to do.

ALL VIBCO's VIBRATORS ARE MADE IN THE U.S.

VIBCO®

We're The SILENT Vibrator Guys.™

and your ONE supply of SILENT Air and Electric Vibrators

NOISE – HOW TO CONTROL IT

VIBCO's SILENT TURBINE AIR VIBRATORS REPLACE NOISY BALL, ROLLER & PISTON VIBRATORS SIZE FOR SIZE

As a general rule for standard applications limit your selection of vibrators to the electric Model SCR adjustable speed and force vibrators (page 23 & 24) and the pneumatic silent turbine vibrators (page 3-12). These electric and pneumatic vibrators will give you the latest in vibration technology and design with the lowest noise, the best life, the least maintenance, and the lowest energy consumption.

TABLE OF CONTENTS

Note: For additional Vibco Products see pages 35-46. For additional selection data see pages 47-50.

Note: Dimensions & data subject to change without notice.

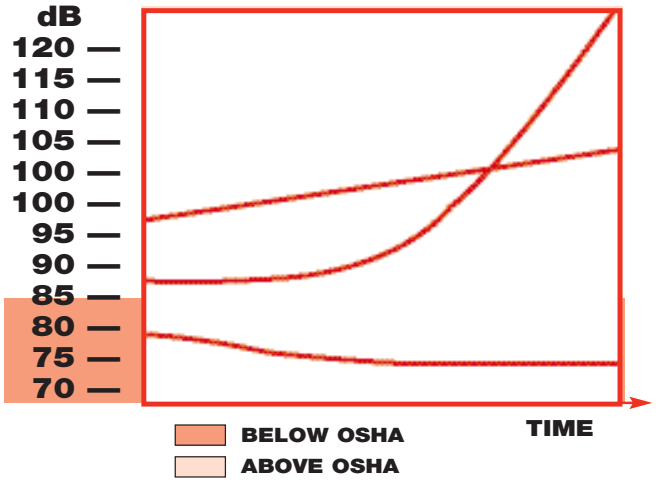
"SILENT" Pneumatic

BEST BY TEST

DBA — NOISE — LIFE CURVE

Turbine vibrators maintain 70-75 db's throughout their entire life, as compared to sharp increases in noise levels of ball roller and piston type vibrators. Turbine sound levels actually reduce after a short "break-in" period and retain a constant low sound level throughout their life. Although ball and roller vibrators start at under OSHA limits, they quickly and steadily increase noise levels to well above OSHA, to beyond bearable range. (See curve.) This is caused by ball or roller jumping and accelerating each time it passes the air inlet, causing pitting and continuing wear to the ball and races.

A turbine vibrator outlasts a ball vibrator 3 to 1.



WHY REPLACE A BALL VIBRATOR WITH A TURBINE VIBRATOR

1. NOISE — Average turbine as low as 72db.
2. ENERGY CONSUMPTION — Turbine takes less air, while air consumption steadily increases on a ball vibrator, it decreases in the turbine as the bearings are "broken in".
3. LIFE — The effective life of the turbine far exceeds the life of a ball. See above dba — NOISE — LIFE CURVE.
4. EFFICIENCY — The turbine maintains its speed during its complete life. The ball unit starts to lose its speed and efficiency from the very start due to pitting of ball and ballrace. See above dba — NOISE — LIFE CURVE.
5. NO LUBRICATION — Bearings are sealed and prelubricated for life.

WHERE TO USE

Because of their fool-proof operation and their lessening of noise in production areas, the Silent Air Turbine Vibrators have quickly become the specified and standard units for many industries and in many leading plants. Examples are: parts feeding on tracks and trays in the automotive industry; on batchers, supply hoppers and chutes of chemical and plastics production and packaging lines; and on foundry match-plates, shake-outs and sand hoppers.

Other typical uses include: screening, separating and sizing of both fine and coarse powdered materials: settling, compacting and leveling in packaging; orientation and feeding of parts. Also, unjamming caps, cans and jars; aiding or controlling flow of material thru hoppers, screens, chutes. Size for size and mount same as for ball units.

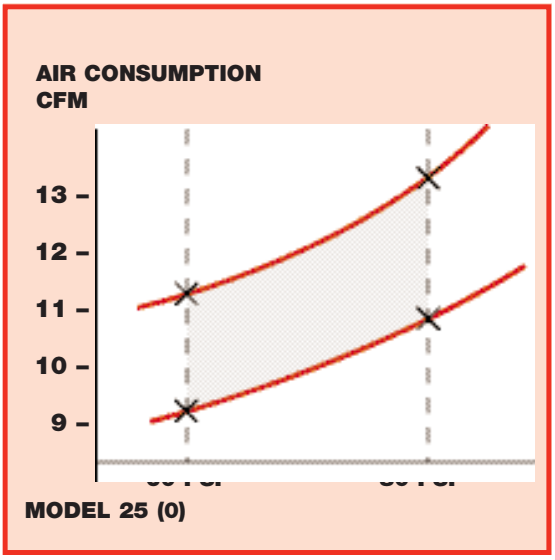
LIFETIME WARRANTY

AGAINST WORKMANSHIP & MANUFACTURING DEFECTS

PATENTED

Turbine Vibrators

A: SILENT TURBINE VIBRATORS USE 50% LESS AIR THAN COMPARABLE PNEUMATIC BALL VIBRATORS



AIR CONSUMPTION

A ball vibrator draws up to over 50% more air than a turbine vibrator. The ball in a ball vibrator takes up only 1/20 of available space in the housing and the majority of the air pushing the ball around in the ballrace is wasted and exhausted without producing any work. In a turbine vibrator, the turbine fits snugly in the housing and only a very minimal amount of air can escape without producing any work.

EFFICIENCY

The turbine vibrator has a high level of efficiency throughout it's life. Ball vibrators immediately lose speed and efficiency due to pitting of the ball and ballrace. An added plus to the turbine vibrator is that it is not subject to pitting and the turbine vibrator does not require airline lubrication like the ball vibrator.

NOISE

Turbine vibrators maintain 70-75 dB throughout their entire life as compared to sharp increases in noise levels of ball, roller and piston vibrators, which can reach up to 100 dB or more.

B: VIBCO SILENT TURBINE VIBRATORS CAN SAVE UP TO 56% OF THE AIR CONSUMPTION OF COMPETITIVE BALL VIBRATOR MODELS.

See Chart Below

VIBCO TURBINE MODEL	CFM/ 60 PSI	COMPETITIVE BALL MODELS*	SAVED CFM BY USING VIBCO TURBINE VERSUS:**		
			MARTIN	COUGAR	GLOBAL
BVS & VS 100	4	6	11%	11%	56%
BVS & VS 130	4.5	13	40%	40%	70%
BVS & VS 160	7	16	N/A	N/A	14.6%
BVS & VS 190	7.5	19	32%	32%	37.5%
BVS & VS 250	8	25	38.5%	38.5%	55.5%
BVS & VS 320	9	32	47%	47%	44%
BVS & VS 380	16	38	20%	20%	36%
BVS & VS 440	18	44	14%	14%	48.5%
BVS & VS 510	18	51	N/A	20%	33%
BVS & VS 570	21	57	***54%	N/A	N/A

*Covers ball vibrators **Values taken from published catalogs *** Roller vibrator

"SILENT" Pneumatic

VS SERIES


VS-510


VS-380


VS-320


VS-250


VS-190


VS-160


VS-130


VS-100

MODEL VS: BUILT-IN MUFFLER

Model VS Turbine Vibrators offer the feature of a BUILT-IN-MUFFLER. Ideal for rough applications or where moving machinery might damage external accessories. Eight sizes with forces up to 900 lbs. Popular for air material-conveying systems, medium size batch hoppers, etc. Available in both aluminum and malleable castings.

- Simple
- Built-In Muffler
- Totally Enclosed
- Continuous Duty
- Noiseless
- Maintenance Free
- Adjustable Speed
- Sturdy Cast Housings
- Heavy Duty Turbine Wheel

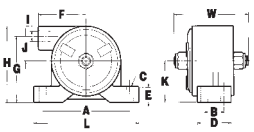
Ask for Catalog #9127

TECHNICAL DATA

Model	Weight*** lbs.	kg.	60 PSI Speed VPM	60 PSI CFM	80 PSI Speed VPM	80 PSI CFM	80 PSI Force lbs.	80 PSI Force N	80 PSI dB*	Max. Lbs.** Material In Bin
VS-100	7/13 oz.	.198/.368	12000	4			20	89	66	200
VS-130	11/21 oz.	.312/.595	8000	4.5	10500	5.5	75	334	67	750
VS-160	3	1.4	10000	7	12000	8	160	712	70	1600
VS-190	3.5	1.6	4200	7.5	7200	9	270	1201	70	5000
VS-250	5	2.3	5500	9	7200	10.5	500	2225	70	5000
VS-320	6.5	2.9	5200	9	6800	11	600	2669	69	7000
VS-380	11.5	5.2	4600	16	5200	17	725	3226	72	7250
VS-510	15	6.8	4000	18	4500	21	900	4004	77	9000

Data obtained on Laboratory test block. Frequency and force will decrease on less rigid mount. Note: Dimensions & data subject to change without notice.
* Decibel from A-scale at 1 meter and 80 PSI. N = Centrifugal force in Newton.
** Rule of thumb for sizing "One lb. Vibrator Force" to each 10 lbs. of Bin Content" at 80 PSI.
*** Fist Figure Aluminum 2nd - malleable iron.

DIMENSIONS



Model	A inch/mm	B inch/mm	C** inch/mm	L inch/mm	W inch/mm	H inch/mm	D inch/mm	E inch/mm	F inch/mm	G inch/mm	I* inch/mm	J inch/mm	K inch/mm
VS-100	3 76	- -	1/4 6	3 7/8 98	1 7/8 48	2 51	3/4 19	3/8 10	1 5/16 33	1 11/16 43	1/8 - NPT	5/8 16	1 25
VS-130	4 102	- -	3/8 10	4 7/8 124	2 51	2 5/16 59	15/16 24	3/8 10	1 1/2 38	1 15/16 49	1/8 - NPT	3/4 19	1 1/4 32
VS-160	4 102	- -	3/8 10	5 1/8 130	2 7/8 73	3 76	1 7/16 37	11/16 17	1 7/8 48	2 7/16 62	1/4 - NPT	7/8 22	1 5/8 41
VS-190	4 102	- -	3/8 10	5 7/16 138	3 1/4 83	3 1/16 78	1 5/16 33	5/8 16	2 1/8 54	2 1/2 64	1/4 - NPT	7/8 22	1 3/4 44
VS-250	4 102	- -	1/2 13	5 1/2 140	3 5/8 92	3 11/16 94	1 1/2 38	9/16 14	2 1/4 57	3 76	1/4 - NPT	1 1/8 29	1 7/8 48
VS-320	4 102	- -	1/2 13	5 1/2 140	4 102	4 3/4 121	1 3/4 44	13/16 21	2 1/4 57	4 1/8 105	3/8 - NPT	1 1/4 32	2 3/4 70
VS-380	5 1/2 140	1 1/4 32	3/8 10	6 7/8 175	4 3/4 121	4 7/8 124	2 1/4 57	1 25	2 7/8 73	4 102	3/8 - NPT	1 1/2 38	2 1/2 64
VS-510	5 1/2 140	1 3/4 44	3/8 10	6 15/16 176	4 3/4 121	5 3/8 137	2 3/4 70	1 25	3 1/4 83	4 3/4 121	1/2 - NPT	1 3/4 44	2 7/8 73

*NPT Pipe Tap Size **Bolt Size

Note: Dimensions & data subject to change without notice.

PATENTED

Turbine Vibrators

BVS SERIES

MODEL BVS: THREADED EXHAUST

VIBCO offers 10 models in the extra heavy duty BVS series. The use of non-lubricated air supply makes the BVS turbine vibrators perfect for applications in food and pharmaceutical (etc.) industries where oil exhaust would be objectionable. Exhaust port is threaded for piping off of air exhaust in closed, sanitized systems. Extra large amplitudes and wide range of sizes makes the BVS's ideal for quickly moving parts or materials.

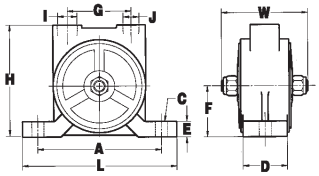
- **Quiet, Meets OSHA As Low As 68 dB at 1 Meter**
- **No Lubrication Required**
- **Easily Repaired - One Moving Part**
- **Patented Design**
- **High Force Output**
- **Outlasts Piston Vibrators 3 to 1**
- **Oversized Bearings**

TECHNICAL DATA

Model	Weight*** lbs.	kg.	60 PSI Speed VPM	60 PSI CFM	80 PSI Speed VPM	80 PSI CFM	80 PSI Force lbs.	80 PSI Force N*	80 PSI dB*	Max. Lbs.** Material In Bin
BVS-60	7/13 oz.	.198/.368	12000	4			20	89	66	200
BVS-130	10/20 oz.	.283/.567	8000	4.5	10500	5.5	75	334	67	750
BVS-160	3	1.4	9500	7	11000	8	160	712	70	1600
BVS-190	3.5	1.6	5500	7.5	7200	8.5	270	1201	71	2700
BVS-250	6	2.7	5200	8	7200	9	480	2136	72	4800
BVS-320	8.5	3.9	5500	9	6800	10	600	2669	70	5300
BVS-380	13	5.8	4500	16	5000	18	670	2981	74	6700
BVS-440	16	7.3	4300	18	4800	21	700	3114	76	7000
BVS-510	16	7.3	4000	18	4500	21	900	4004	77	9000
BVS-570	23	10.4	3600	21	4000	26	1050	4671	83	10500

Data obtained on Laboratory test block. Frequency and force will decrease on less rigid mount. Data subject to design changes.
* Decibel from A-scale at 1 meter and 80 PSI. N = Centrifugal force in Newton.
** Rule of thumb for sizing "One lb. Vibrator Force" to each 10 lbs. of Bin Content" at 80 PSI.
*** Fist Figure Aluminum 2nd - malleable iron.

DIMENSIONS



Model	A inch/mm	C** inch/mm	L inch/mm	W inch/mm	H inch/mm	D inch/mm	E inch/mm	F inch/mm	G inch/mm	I* inch/mm	J* inch/mm
BVS-60	3 76	1/4 6	3 13/16 97	1 5/8 41	2 7/16 62	3/4 19	5/8 16	1 3/16 30	1 1/4 32	1/8 - NPT	1/8 - NPT
BVS-130	4 102	3/8 10	4 7/8 124	1 7/8 48	2 5/8 67	7/8 22	5/8 16	1 1/4 32	1 7/16 37	1/8 - NPT	1/4 - NPT
BVS-160	4 102	3/8 10	5 1/2 140	2 7/8 73	3 5/8 92	1 3/8 35	9/16 14	1 11/16 43	1 7/8 48	1/4 - NPT	3/8 - NPT
BVS-190	4 102	3/8 10	5 1/4 133	3 3/16 81	3 7/16 87	1 5/16 33	7/8 22	1 9/16 40	1 7/8 48	1/4 - NPT	3/8 - NPT
BVS-250	5 127	1/2 13	6 3/4 171	3 9/16 90	3 15/16 100	1 5/8 41	7/8 22	1 7/8 48	2 5/16 59	1/4 - NPT	3/8 - NPT
BVS-320	5 127	1/2 13	6 3/4 171	4 102	4 7/8 124	1 5/8 41	1 1/8 29	2 1/4 57	2 3/4 70	3/8 - NPT	1/2 - NPT
BVS-380	6 152	5/8 16	7 15/16 202	4 3/4 121	5 13/16 148	2 51	1 1/8 29	2 11/16 68	3 76	3/8 - NPT	1/2 - NPT
BVS-440	7 178	5/8 16	8 15/16 227	4 3/4 121	5 3/4 146	2 3/16 56	1 3/16 30	2 7/16 62	3 7/16 87	1/2 - NPT	3/4 - NPT
BVS-510	7 178	5/8 16	8 15/16 227	4 3/4 121	5 3/4 146	2 1/4 57	1 1/4 32	2 9/16 65	3 7/16 87	1/2 - NPT	3/4 - NPT
BVS-570	8 203	3/4 19	10 3/16 259	5 7/16 138	7 1/4 184	2 15/16 75	1 25	3 1/8 79	4 102	3/4 - NPT	1 - NPT

*NPT Pipe Tap Size **Bolt Size
Note: Dimensions & data subject to change without notice.

"SILENT" Pneumatic

SANITARY MLT SERIES

MODEL MLT & MHI SANITARY TURBINE

- **IDEAL FOR SANITARY APPLICATIONS EVEN IN HARSH CHEMICAL ENVIRONMENTS**
- **MANY DIFFERENT SANITARY FINISHES AVAILABLE**

The NEW Millennium Line of Sanitary Pneumatic Turbine (MLT/MHI) Vibrators is your solution for all sterile/clean applications. The line consists of the MLT & MHI-130, -190, -250 and 320; all are designed for the most adverse applications. Their extruded aluminum housings, stainless steel shafts, and aircraft aluminum covers, give these vibrators additional strength, durability and long life. They are also designed with slotted mounting holes for easy installation on many bolt patterns and tapped exhaust ports that allow exhausting air to be piped off to insure a clean environment. These units can be supplied with a variety of sanitary finishes such as: high gloss dairy white industrial enamel, anodized or unpainted aluminum.

Ideal for applications in industries that require a sanitary vibrator. Such industries include: food, beverage, and pharmaceutical industries.

Model MLT-250, as part of the millennium Turbine Line of Vibrators has high speed sealed bearings that are pre-lubricated for life making them maintenance free.They have an operating range of 30-80 PSI and a maximum operating temperature of 250°F or 120°C. Decibel readings well below OSHA limits, as low as 68dB on A-scale at 1 meter with no more sound than an electric motor. The patented millennium turbine vibrator draws 50% less air than a comparable ball vibrator and lasts three times longer. Like the rest of VIBCO's products these are 100% made in the USA and competitively priced.

MODEL MLTSS & MHISS STAINLESS STEEL

- **CONSTRUCTED OF 303 STAINLESS STEEL**
- **COMPLETELY MADE IN USA WITH VIBCO's PATENTED DESIGN**

MODEL MLTSS & MHISS -130, -190, -320 – Stainless Steel Pneumatic Turbine Vibrators are constructed of 303 Stainless, specifically made for any sanitary application found in the pharmaceutical, food and beverage or other caustic chemical type environments, like the plating industry. The **MLTSS & MHI** vibrators are totally enclosed and wash down safe. No lubrication is necessary as the bearings are pre-lubricated for life, making them maintenance FREE. Exhausting air can either be muffled or ported to an outside location preserving a sanitary environment.

Advantages of the **MLTSS & MHISS** line of sanitary vibrators include:

- Non-corroding housing
- Wash down safe clean flat surface makes for easy wipe down
- Lowest noise levels in the industry, no more sound than an electric motor 68-75 dB
- Air consumption at 50% less than comparable ball vibrators
- 100% made in the USA, ships from **STOCK**

Operating pressure is 30-80 PSI with a maximum operating temperature of 250F or 120C.

The MLT & MLTSS are designed for continuous duty at up to 80 PSI and have heavy duty bearings for long life.

The MHI & MHISS Lines are designed to produce high frequency and maximum forces. Intermittent duty only. (30 seconds max. continuous running. Running time equal to or less than off time.)

PATENTED

Turbine Vibrators

STAINLESS STEEL AND MLT SERIES

TECHNICAL HIGHLIGHTS

- Pressure range 30 to 80 PSI
- Operating temp. max 250°F, 120°C
- Decibel level as low as 68 dB on A-scale at 1 meter
- Air consumption 50% less than comparable ball vibrators
- Bearings are prelubricated for life

TECHNICAL DATA

MODEL	WEIGHT lbs.	WEIGHT kg.	60 PSI*** Speed VPM*	60 PSI*** CFM	60 PSI*** Force (lbs.)	60 PSI*** Force(N)	80 PSI*** Speed VPM*	80 PSI*** CFM	80 PSI*** Force (lbs.)	80 PSI*** Force (N)	dB****
MLT-130 MLTSS-130	1 2	.45 .9	8600	4.5	50	225	10500	5.5	75	334	68
MLT-190 MLTSS-190	2 7	.91 3.2	5500	7.5	160	710	7200	8.5	270	1200	71
MLT-250	2.4	1.08	5200	8	250	1115	7200	9	480	2136	72
MLT-320 MLTSS-320	4.5 13	2.04 6.0	5500	9	390	1740	6800	10	600	2669	70
MHI-130 MHISS-130	1 2	.45 .9	17200	4.5	200	890	21000	5.5	300	1340	68
MHI-190 MHISS-190	2 7	.91 3.2	8000	7.5	335	1490	10500	8.5	575	2560	71
MHI-250	2.4	1.08	7400	8	510	2270	10200	9	965	9290	72
MHI-320 MHISS-320	4.5 13	2.04 6.0	7200	9	675	3000	10000	10	1300	5780	70

* Vibrations per minute N = Centrifugal force in Newtons

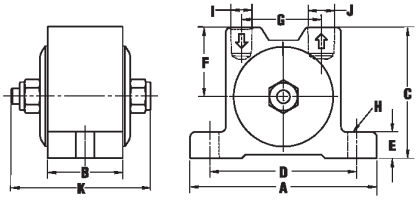
*** Test data are close to actual performance data of the unit on a typical application. The data obtained on a heavy laboratory test block cannot be duplicated on a typical application. We feel it is more important for the customer to measure the actual frequency of the unit on the application and know the unit is performing to specifications than not knowing what performance path to expect, or worse believing the test block data should be obtained.

**** Decibel from A-scale at 1 meter and 80 PSI Note: Dimensions & data subject to change without notice.

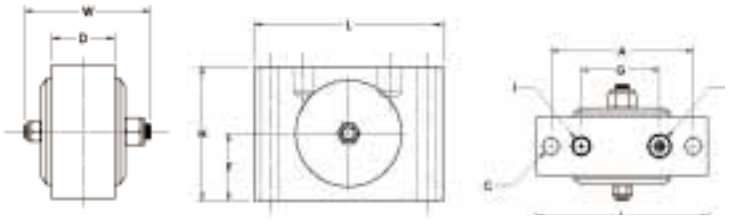
DIMENSIONS

	A inch/mm	C* inch/mm	L inch/mm	W inch/mm	H inch/mm	D inch/mm	E inch/mm	F inch/mm	G inch/mm	I Inlet	J Outlet
MLT-130 & MHI-130	2-3/4 70	1/4 6	3-1/2 89	1-7/8 48	2-1/2 64	1 25	1/2 13	1-1/8 29	1-7/16 37	1/8-NPT	1/4 NPT
MLT-190 & MHI-190	3-1/2 89	3/8 10	4-1/2 114	3-3/8 86	3-3/16 81	1-13/16 46	5/8 16	1-1/2 38	1-15/16 49	1/4-NPT	3/8-NPT
MLT-250 & MHI-250	4 102	3/8 10	5 127	3-1/2 89	3-3/8 86	2 51	5/8 16	1-11/16 43	2-1/4 57	1/4 NPT	3/8-NPT
MLT-320 & MHI-320	5 127	1/2 13	6-3/8 162	4 102	4-1/4 108	2 51	13/16 21	2-1/16 52	2-13/16 71	3/8-NPT	1/2-NPT
MLTSS-130 & MHISS-130	2-3/4 70	1/4 6	3-1/2 89	1-7/8 48	2-1/2 64	1 25	1/2 13	1-3/16 29	1-7/16 37	1/8-NPT	1/4 NPT
MLTSS-190 & MHISS-190	3-1/2 89	3/8 10	4-1/2 114	3-3/8 86	3-3/16 81	1-13/16 46	5/8 16	1-3/4 38	1-15/16 49	1/4 NPT	3/8-NPT
MLTSS-320 & MHISS-320	5 127	1/2 13	6 152	4 102	4-1/4 108	2 51	13/16 21	2-1/8 52	2-13/16 71	3/8-NPT	1/2-NPT

*Bolt Size Note: Dimensions & data subject to change without notice.



MLT/MHI



MLTSS/MHISS

"SILENT" Pneumatic

CC SERIES

CCF-2000
CCF-4000

CCF-5000
CCF-7000

CCL-2000
CCL-4000
Use LC-2
bracket

LUG BRACKET
FOR

CCL-7000
CCL-5000
Use LC-1
bracket

MODEL CC HEAVY DUTY

- **QUIET**
- **MEETS OSHA STANDARDS**
- **NO LUBRICATION REQUIRED**
- **EASILY REPAIRED IN THE FIELD**
- **PATENTED DESIGN**

The only unit on the market to offer high force and absolutely quiet operation. Six units available. They all work on the **patented turbine principle**. Compressed air drives a specially designed turbine wheel, allowing the air to be channeled through the unit, then exhausting through muffler pads, making them virtually noiseless. None of these units need lubrication, all are prelubricated for life. Oversized bearings give the units years of trouble-free service.

MODEL CCF-2000 & -4000, CCF-5000 & -7000

The quiet solution for large bins, hoppers and chutes. Ideal for the packing table and screen applications. The lightweight and high force output, CCF-2000 with 2,000 lbs. of force and CCF-5000 with 5,000 lbs. of force, replaces noisy 3 and 4" piston vibrators. The CCF-7000 with 7000 lbs. of force, 7200 VPM and 78dB is ideal for precast and prestressed concrete and replaces noisy roller vibrators with 100-110 dB.

MODEL CCW-2000 & 4000

For portable applications CCW-2000 comes with either a 2" or 3" wide wedge. The 2" wedge is used on septic tanks, man holes, columns, portable hoppers and tote bins. The 3" wedge is used for larger forms such as wall and utility vaults, etc.

MODEL CCW-5000

CCW-5000 the Quiet Railroad Carshaker, has in the last few years replaced the noisy piston railroad carshakers. Not only are they quiet, they need no lubrication and outlast the piston 3 to 1. Replaces 3" & 4" piston vibrators.

MODEL CCL-2000, -4000, -5000 & -7000

The portable CCL-2000 uses the LC-2 lug bracket. Its light weight makes it ideal for all small concrete precast forms. Model CCL-5000 with its 75dB rating is ideal for tables, casting concrete panels, window frames, etc. or replacing large piston vibrators 4" and up on large bins. CCL-7000 with its special turbine wheel for below OSHA operation, only 78dB and high force 7000 lbs. and 7200 VPM, is now replacing the noisy 100-110dB roller vibrators in the concrete pipe, prestressed and precast industries. No lubrication is necessary. The oversized prelubricated bearings assure a long and maintenance free life.

MODEL VSP-510

VSP-510 - A silent unit for concrete burial vaults, etc. as well as other applications where the vibrator is moved from form to form or bin to bin. They meet OSHA standards for being completely noiseless, never need lubrication and outlast standard pistons three to one.

Dimensions: 7"L x 4"W x 8"H

Pin Diameter: 1" - Fits into UPF female bracket.

Turbine Vibrators

CCW-5000 RAILROAD CARSHAKER

Female Brackets

UWF-1 for 2" Wedge
UWF-3 for 3" Wedge

CCW-2000
2" Wedge
CCW-4000
3" Wedge

HEAVY DUTY SERIES

VSP-510

UPF

TECHNICAL DATA

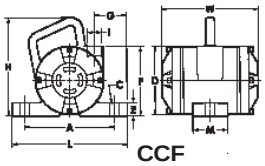
Model	Weight lbs.	Weight kg.	60 PSI Speed VPM	60 PSI CFM	80 PSI Speed VPM	80 PSI CFM	Force lbs.	Force N*	dB*	Max. Lbs.** Material in Bin
CCF, CCL & CCW-2000	23	10.5	4000	30	6000	40	2000	8998	78	20000
CCF, CCL & CCW-4000	23	10.5	4000	30	6000	40	4000	17996	78	40000
CCF & CCL-5000	48	21.8	4000	35	6000	50	5000	22245	75	50000
CCW-5000	48	21.8	5000	40	7200	50	7000	31143	78	70000
CCF & CCL-7000	48	21.8	5000	40	7200	50	7000	31143	78	70000
VSP-510	15	6.8	4000	18	4500	21	1000	4004	77	9000

Data obtained on Laboratory test block. Frequency and force will decrease on less rigid mount. Note: Dimensions & data subject to change without notice.
* Decibel from A-scale at 1 meter and 80 PSI. N = Centrifugal force in Newton.
** Rule of thumb for sizing "One lb. Vibrator Force" to each 10 lbs. of Bin Content" at 80 PSI.

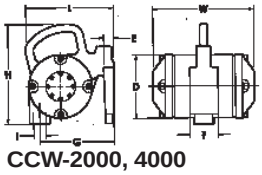
DIMENSIONS

Model	A inch/mm	C** inch/mm	L inch/mm	W inch/mm	H inch/mm	D inch/mm	E inch/mm	F inch/mm	G inch/mm	I* inch/mm	J* inch/mm	K inch/mm	M inch/mm
CCF-2000&4000	6 152	5/8 16	7 1/2 191	8 1/16 205	7 1/8 181	5 1/16 129	3/4 19	5 3/8 137	1 3/4 44	3/4 - NPT	-	- -	2 51
CCL-2000&4000	- -	- -	7 178	8 1/16 205	7 1/4 184	5 1/16 129	3/8 10	3/4 19	4 1/8 105	3/4 - NPT	-	6 152	- -
CCW-2000	- -	- -	7 178	8 1/16 205	8 203	5 1/16 129	7/8 22	2 1/4 57	5 15/16 151	3/4 - NPT	-	- -	- -
CCW-4000	- -	- -	7 178	8 1/16 205	8 203	5 1/16 129	7/8 22	3 1/8 79	5 5/16 151	3/4 - NPT	-	- -	- -
CCF-5000&7000	8 203	3/4 19	10 1/4 260	8 5/8 219	8 7/8 225	6 1/16 154	1 1/8 29	6 1/4 159	2 7/8 73	1 - NPT	-	- -	3 1/8 79
CCL-5000&7000	- -	- -	9 3/8 238	8 5/8 219	8 5/8 219	6 1/16 154	13/16 21	1 1/4 32	5 1/4 133	1 - NPT	-	8 203	- -
CCW-5000	- -	- -	9 3/4 248	8 5/8 219	8 5/8 219	6 1/16 154	1 1/8 29	5 1/2 140	4 5/8 117	1 - NPT	3/4 - NPT	- -	- -

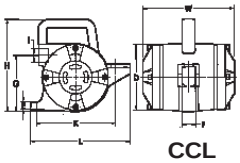
*NPT Pipe Tap Size **Bolt Size Note: Dimensions & data subject to change without notice.



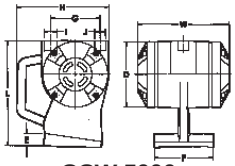
CCF



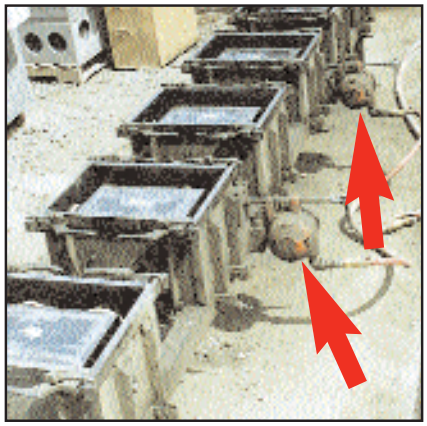
CCW-2000, 4000



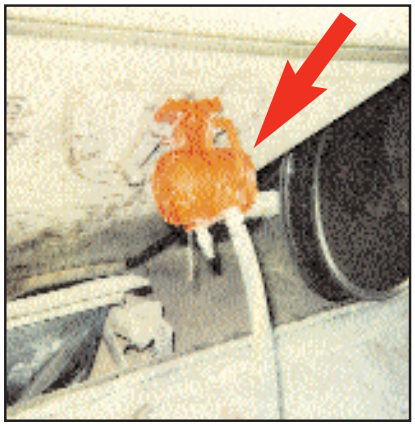
CCL



CCW-5000



CCW-2000 on distribution boxes



CCW-5000 railroad car shaker

VSP-510 on burial vault forms

"SILENT" Pneumatic Vibrators

BBS SERIES

FBS SERIES

BBS-160
BBS-190

BBS-130

BBS-100

FBS-160
FBS-190

FBS-130

FBS-100

MODEL BBS & FBS

BBS-100, 130, 160 and 190 - smallest of VIBCO turbine vibrators; with versatile mount and aluminum* housing. Never needs oil for continuous duty operation. The FBS-100, 130, 160 and 190 are designed especially as a match plate vibrator for the foundry industry.

For fast start, high RPM and force and low noise with a built-in muffler. The match plate vibrators to be used only for intermittent duty.

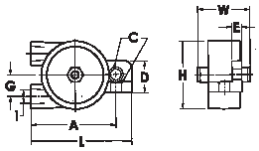
*Malleable casting available on special order.

TECHNICAL DATA

Model	Weight*** lbs.	kg.	60 PSI Speed VPM	60 PSI CFM	80 PSI Speed VPM	80 PSI CFM	Force lbs.	Force N	dB*	Max. Lbs.** Material In Bin
BBS-100	5 oz.	.142	12000	3.5			20	89	66	200
BBS-130	9 oz.	.255	8000	4.5	10500	5.5	75	334	67	750
BBS-160	12 oz.	.340	5500	5	9000	7	160	712	67	1600
BBS-190	15 oz.	.425	8500	5	10000	7	250	1112	70	2500
FBS-100	10.5 oz.	.298	15000	5			30	133	66	For Match-Plates
FBS-130	16 oz.	.454	13000	6	15000	7	150	667	68	For Match-Plates
FBS-160	24 oz.	.680	10500	6	13000	7	225	1001	68	For Match-Plates
FBS-190	26 oz.	.737	8500	6	10000	8	250	1112	70	For Match-Plates

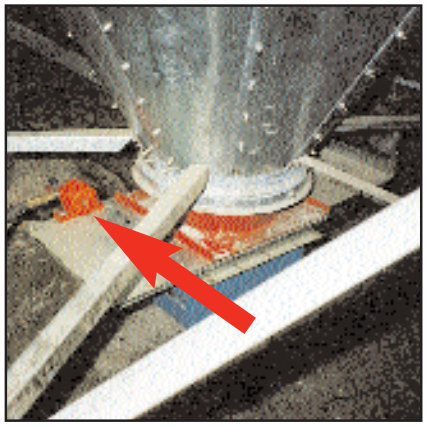
Data obtained on Laboratory test block. Frequency and force will decrease on less rigid mount.
Note: Dimensions & data subject to change without notice.
* Decibel from A-scale at 1 meter and 80 PSI. N = Centrifugal force in Newton.
** Rule of thumb for sizing "One lb. Vibrator Force" to each 10 lbs. of Bin Content" at 80 PSI.

DIMENSIONS



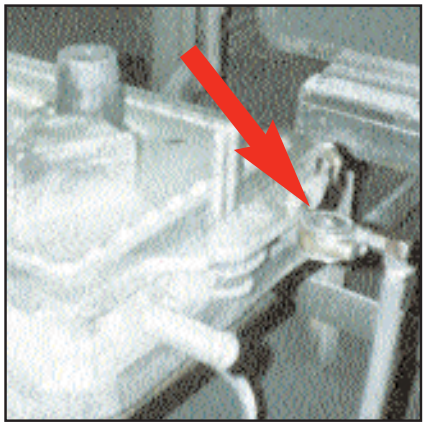
Model	A inch/mm	C** inch/mm	L inch/mm	W inch/mm	H inch/mm	D inch/mm	E inch/mm	G inch/mm	I* inch/mm
BBS-100 FBS-100	$2\frac{5}{8}$ 67	$\frac{5}{16}$ 8	$3\frac{1}{4}$ 83	$1\frac{5}{8}$ 41	2 51	1 25	$\frac{5}{16}$ 8	$\frac{9}{16}$ 14	$\frac{1}{8}$ - NPT
BBS-130 FBS-130	$3\frac{3}{16}$ 81	$\frac{3}{8}$ 10	$3\frac{3}{4}$ 95	$1\frac{7}{8}$ 48	$2\frac{1}{4}$ 57	$1\frac{3}{16}$ 30	$\frac{5}{16}$ 8	$\frac{5}{8}$ 16	$\frac{1}{4}$ - NPT
BBS-160&190 FBS-160&190	$3\frac{9}{16}$ 90	$\frac{3}{8}$ 10	$4\frac{1}{8}$ 105	2 51	$2\frac{9}{16}$ 65	$1\frac{1}{4}$ 32	$\frac{5}{16}$ 8	$\frac{3}{4}$ 19	$\frac{1}{4}$ - NPT

*NPT Pipe Tap Size **Bolt Size Note: Dimensions & data subject to change without notice.



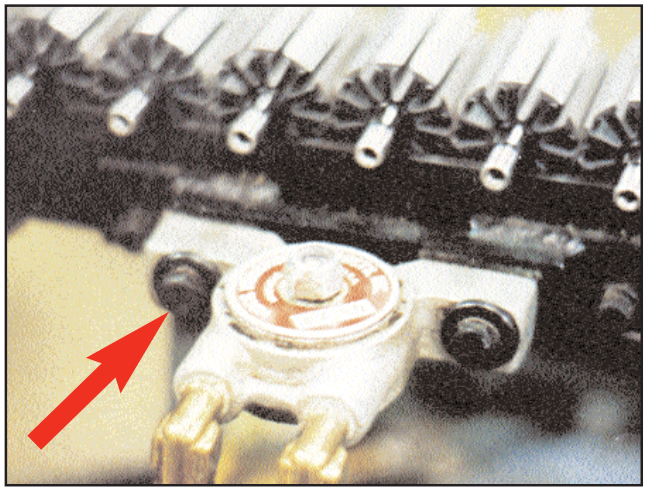
VS-250 on transfer chute

VS-190 on test table

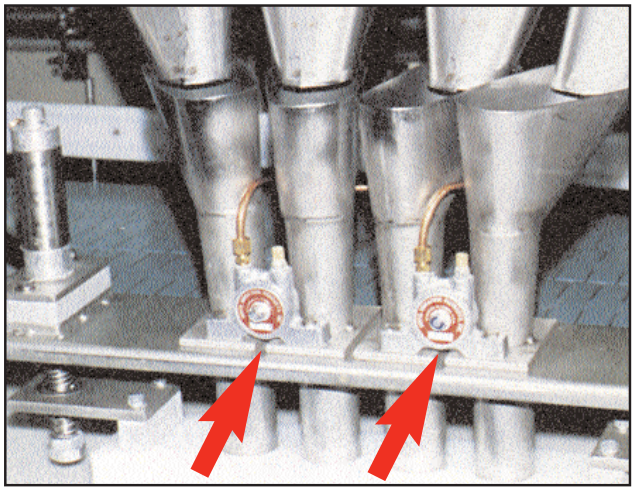


FBS-190 on molding machine

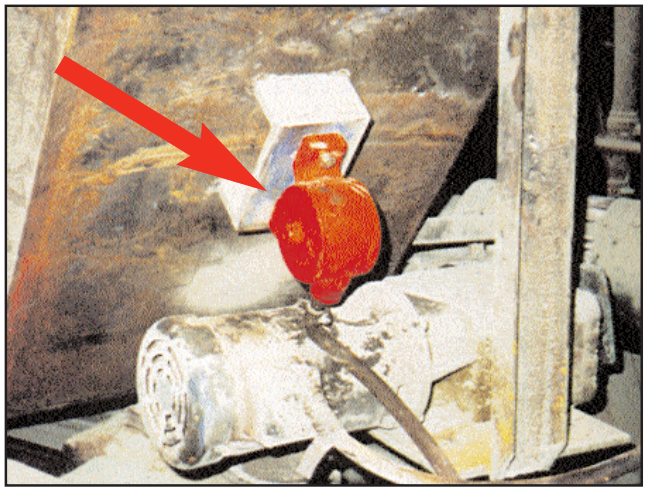
“SILENT” Turbine Vibrators In Action



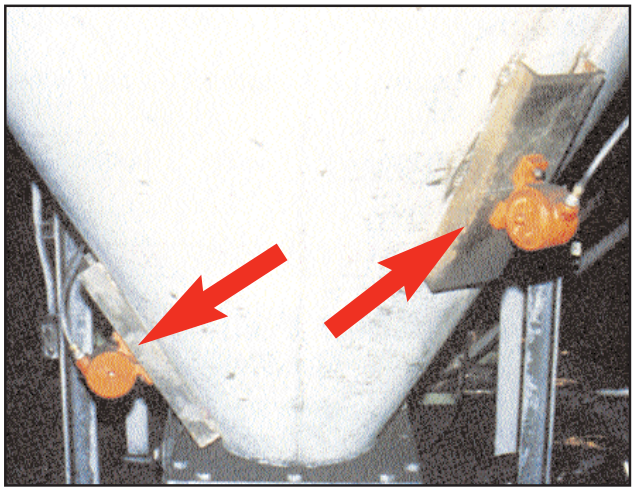
Small SILENT Turbine mounted to automated parts alignment track. Helps keep parts moving freely.



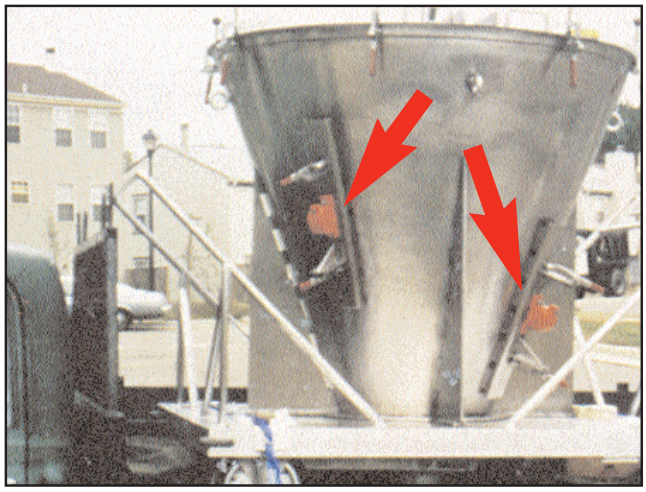
SILENT Turbines mounted on a track to consolidate pills in bottles while filling.



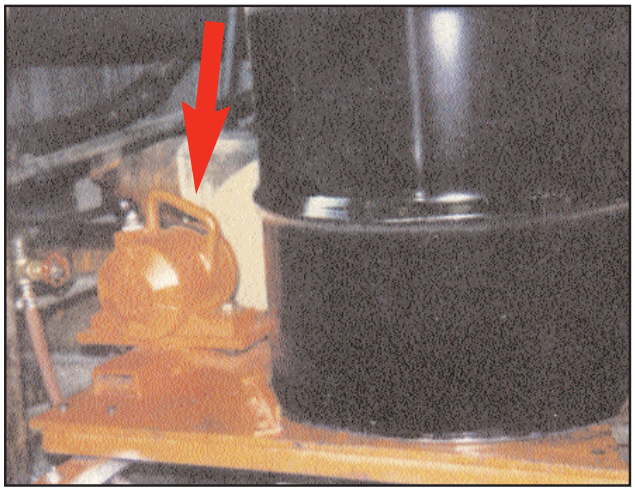
SILENT Turbine mounted to a fly ash chute to keep ash flowing.



Two SILENT Turbines on a bin with chemicals to help stop bridging.



Two small SILENT Turbines mounted to cement hopper.



Big SILENT Turbine on a table to insure full capacity packaging of 55 gallon drums.

Pneumatic Ball

MODEL BB

BB-100

BB-130

BB-160

BB-190

MODEL V

V-100

V-130

V-190

V-250

V-320

V-380

MODEL BV

BV-60

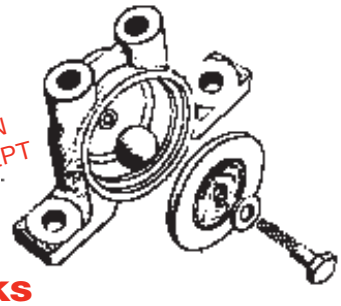
BV-130

BV-190

BV-250

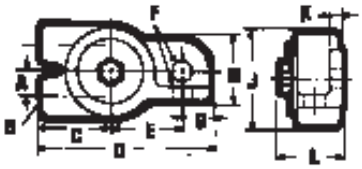
BV-320

BV-380



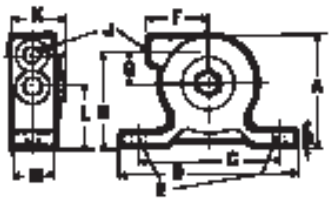
HOW IT WORKS

Compressed air drives a hardened steel ball at high speeds around a highly finished and hardened steel race creating high frequency vibration. VIBCO BALL VIBRATORS require lubrication for long maintenance-free operation, start in any position. Mount VIBCO BALL VIBRATOR either directly to structure to be vibrated, or use simple mounting plates welded or bolted to the structure for better vibration transfer to a larger surface.



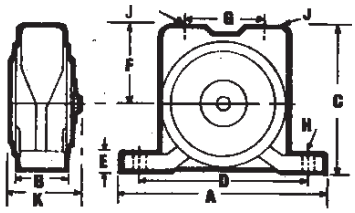
MODEL BB

The BB Series can be equipped with a muffler on the threaded exhaust port. The threaded exhaust also allows oily exhaust air to be piped away from the area of operation if absolute cleanliness is required. These dual mount vibrators are designed for applications requiring a small to medium amount of vibration such as laboratory equipment, small hoppers, part feeders, chutes and match plates.



MODEL V

The V-line ball vibrators are the most versatile units. Lowest in cost, light and sturdy, they're made to work in adverse conditions of water, heat, cold or dirt, and in any position. The most versatile and popular unit is the V-320 considered the work horse of the line producing 600 lbs. at 10,000 VPM. Models V-100 & V-130 have built-in exhaust mufflers. All other models have threaded exhaust ports. For units with built-in mufflers, order V-19SE, V-25SE, V-35SE, OR V41SE



MODEL BV

The BV Series like the others requires lubrication. Will withstand continuous operation at high temperatures up to 350° by maintaining a constant low air pressure of 5 to 10 PSI through unit when not in operation. The easily exchangeable ball races make them easy to repair for prolonged life at a small cost. The top air outlet port allows discharged air to be silenced by a muffler, or piped away from the area of operation if absolute cleanliness is required.

Vibrators

- SIMPLE
- BUILT-IN-MUFFLER
- REMOVABLE RACE FOR EASY MAINTENANCE
- HIGH TEMPERATURE OPERATION

TECHNICAL DATA

Model	Weight lbs.	Weight kg.	20 PSI Speed VPM	20 PSI CFM	40 PSI Speed VPM	40 PSI CFM	60 PSI Speed VPM	60 PSI CFM	Force lbs.	Force N	dB*/VPM	Max. Lbs.** Material In Bin
BB-100	8 oz.	.227	17000	2	20000	4	24000	6	55	245	75/20000	550
BB-130	10 oz	.283	12000	2.5	15000	5	19000	7.5	80	356	72/15000	800
BB-160	16 oz.	.454	11000	3	13000	6	15000	8	140	623	76/13000	1400
BB-190	18 oz.	.510	10000	4	12000	7	15500	11	250	1112	77/12000	2500
BV-60	8 oz.	.227	17000	2	20000	4	24000	6	55	245	75/20000	550
BV-130	11 oz	.312	12000	2	15000	5	19000	7.5	80	356	76/15000	800
			40 PSI		60 PSI		80 PSI					
BV-190	24 oz.	.689	12000	6	14000	10	16000	11	260	1157	77/12000	2600
BV-250	2.8	1.3	9200	8	10500	11	11000	13	380	1691	79/9200	3800
BV-320	4.8	2.2	6500	9	7500	14	8400	17	480	2136	80/6500	4800
BV-380	6.2	2.8	5500	10	6200	15	6500	20	600	2669	82/5500	6000
V-100	8 oz.	.227	20000	4	24000	6	_	_	55	245	75/20000	550
V-130	11 oz	.312	15000	5	19000	7.5	_	_	80	356	72/15000	800
V-190	26 oz.	.737	12000	6	14000	10	16000	11	260	1157	73/16000	2600
V-250	2.6	1.2	9200	8	10500	11	11000	13	380	1691	72/11000	3800
V-320	4.6	2.1	7500	12	8900	14	10000	17	650	2892	78/10000	6500
V-380	6.2	2.8	5500	10	6200	15	6500	20	600	2669	78/6500	6000

Data obtained on Laboratory test block. Frequency and force will decrease on less rigid mount.
* Decibel from A-scale at 1 meter. N = Centrifugal force in Newton.
** Rule of thumb for sizing "One lb. Vibrator Force" to each 10 lbs. of Bin Content" at 80 PSI.
Note: Dimensions & data subject to change without notice.

DIMENSIONS

MODEL	A inch/mm	B* inch	C inch/mm	D inch/mm	E inch/mm	F** inch/mm	G inch/mm	H inch/mm	J inch/mm	K inch/mm	L inch/mm
BB-100	9/16 14	1/8 - NPT	1 1/4 32	3 1/4 83	1 3/8 35	5/16 8	1/2 12	1 25	2 51	5/16 8	1 9/16 40
BB-130	5/8 16	1/4 - NPT	1 5/8 41	3 3/4 95	1 9/16 40	3/8 10	9/16 14	1 3/16 30	2 1/4 57	5/16 8	1 15/16 49
BB-160	3/4 19	1/4 - NPT	1 3/4 44	4 1/8 105	1 13/16 46	3/8 10	5/8 16	1 1/4 32	2 9/16 65	3/8 10	2 51

MODEL	A inch/mm	B inch/mm	C inch/mm	D inch/mm	E** inch/mm	F inch/mm	G inch/mm	H inch/mm	J* inch	K inch/mm	L inch/mm	M inch/mm
V-100	2 51	7/16 11	3 76	3 7/8 98	1/4 6	1 5/16 33	5/8 16	1 11/16 43	1/8 - NPT	1 11/16 43	1 25	3/4 19
V-130	2 5/16 59	7/16 11	4 102	4 7/8 124	3/8 10	1 1/2 38	3/4 19	1 15/16 49	1/8 - NPT	1 15/16 49	1 1/4 32	15/16 24
V-190	3 3/16 81	9/16 14	4 102	5 1/16 129	3/8 10	2 51	7/8 22	2 5/8 67	1/4 - NPT	2 3/16 56	1 3/4 44	1 5/16 33
V-250	3 1/2 89	9/16 14	4 102	5 9/16 141	1/2 12	2 1/4 57	1 1/8 29	2 15/16 87	1/4 - NPT	2 7/16 62	1 7/8 48	1 1/2 38
V-320	4 7/8 124	3/4 19	4 102	5 9/16 141	1/2 12	2 3/8 60	1 3/8 35	4 1/8 105	3/8 - NPT	2 3/4 70	2 3/4 70	1 1/2 38
V-380	4 7/8 124	7/8 22	5 1/2 x 1 1/4 140 x 32	6 7/8 175	3/8 10	2 7/8 73	1 1/2 38	3 7/8 98	3/8 - NPT	2 15/16 75	2 1/2 64	2 3/8 60

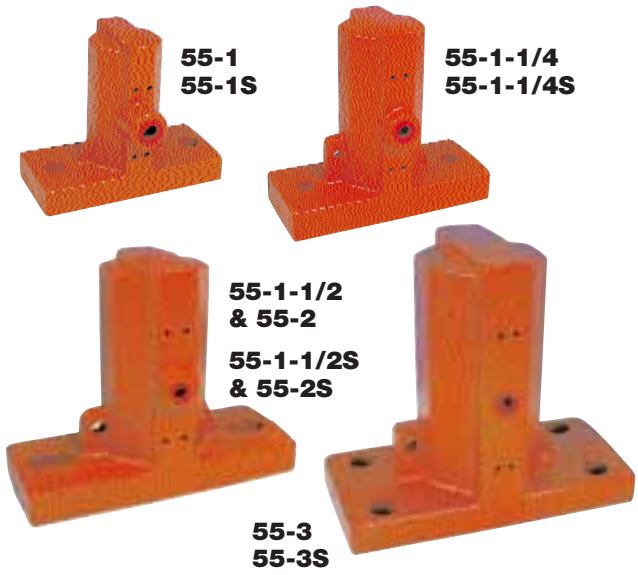
MODEL	A inch/mm	B inch/mm	C inch/mm	D inch/mm	E inch/mm	F inch/mm	G inch/mm	H** inch/mm	I* inch	J* inch/mm	K inch/mm
BV-60	3 7/8 98	3/4 19	2 1/2 64	3 76	5/8 16	1 1/4 32	1 1/4 32	1/4 6	1/8 - NPT	1/8 - NPT	1 11/16 43
BV-130	4 7/8 124	7/8 22	2 3/4 70	4 102	3/4 19	1 5/16 33	1 7/16 37	3/8 10	1/8 - NPT	1/4 - NPT	1 15/16 49
BV-190	5 1/2 140	1 1/4 32	3 9/16 90	4 102	9/16 14	2 51	1 7/8 48	3/8 10	1/4 - NPT	1/4 - NPT	2 1/4 57
BV-250	6 3/4 171	1 5/16 33	3 15/16 100	5 127	7/8 22	2 1/8 54	2 3/16 56	1/2 12	1/4 - NPT	1/4 - NPT	2 7/16 62
BV-320	6 11/16 170	1 5/8 41	4 7/8 124	5 127	1 1/8 29	2 9/16 65	2 3/4 70	1/2 12	3/8 - NPT	3/8 - NPT	2 3/4 70
BV-380	7 7/8 200	2 51	5 3/4 146	6 152	1 1/8 29	3 76	2 13/16 71	5/8 16	3/8 - NPT	3/8 - NPT	2 15/16 75

*NPT Pipe Tap Size **Bolt Size Note: Dimensions & data subject to change without notice.

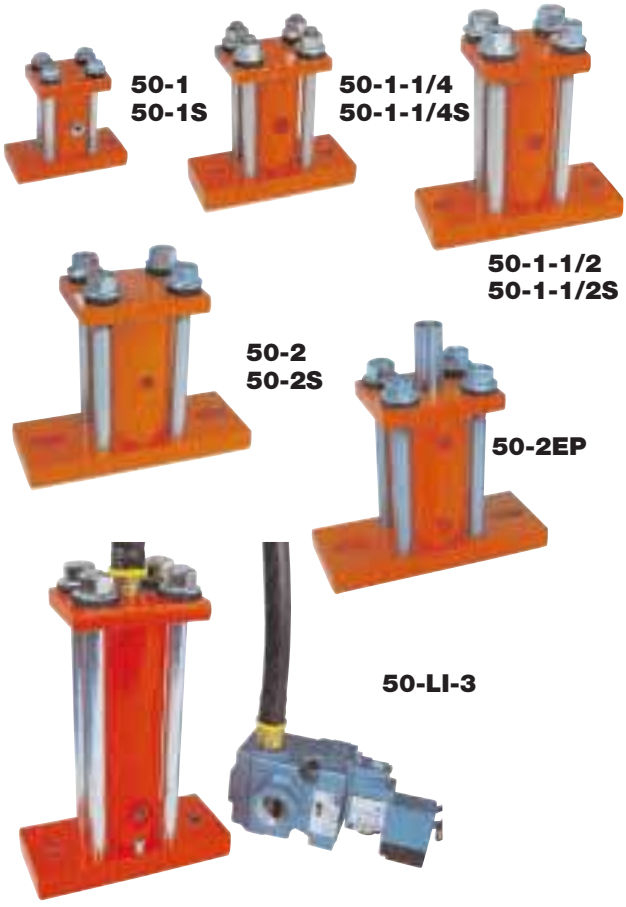
See Comparison & Replacement Chart Page 4.

Pneumatic Flange Mounted

ONE PIECE DESIGN



ALL STEEL MODELS



ONE PIECE DESIGN

- **LOW COST**
- **ONLY 3 PARTS**

VIBCO is the only company featuring both the One Piece Design and the All Steel Models. The one piece housing makes the unit low in cost but still maintaining high quality and long life. The one piece design is the choice for general applications.

ALL STEEL MODELS

- **BOLT ISOLATION DESIGN FOR LONGER LIFE**
- **IMPACTING IN BOTH UP & DOWN STROKE**

VIBCO's steel units can take more abuse, operate longer with minimal lubrication, and have a longer life expectancy than the one piece design units. The all steel units should be used in continuous duty applications and where long life and high reliability is a must.

MODEL 50 & 55 STANDARD IMPACT PISTON VIBRATORS: Most popular piston series because its high impact, linear force and efficient energy transfer assures the flow of materials through bins, chutes, weigh batchers, compacts powdered and viscous materials in containers and forms; activates screens and precipitators. Successfully used in thousands of applications in mining, chemical, plastics, concrete products, foundry, steel and paper industries.

EXHAUST SILENCER & DUSTPROOFER: For Silent & Long Stroke Silent Units. A useful accessory that both reduces exhaust noise and protects working parts of vibrator in dusty atmospheres for lower maintenance and prolonged life. Threaded exhaust is ideal for closed sanitary system.

MODEL 50-S & 55-S SILENT OPERATING PISTON VIBRATORS: In areas where noise is objectionable VIBCO Model S should be used. Quiet because piston impact is eliminated by cushion of air at both ends. High thrust oscillatory action permits operation even at low air pressures. When Silent models are used in place of Impact units use the next larger size.

MODEL 50-L LONG STROKE PISTON VIBRATORS: The problem solvers! Extra-long bodies for high amplitude, high force and lower frequency vibration. The larger shake is best for moving fluffy, low density and wet or sticky materials. Especially suited for packaging and screening. Available in 2" and 3" piston sizes. Model 50-LS - Air-Cushioned Model. Silent models also available with silencer & dustproofer.

MODEL 50-2EP EXTENDED PISTON VIBRATORS: Extended Piston has a 5/8" stroke and threaded extension for attaching rods or bumpers. The air cushioned piston operates quietly at 2400 VPM, 60 PSI & 8 CFM. Ideal for use on portable tote or hoppers.

MODEL 50-LI HIGH ENERGY IMPACTORS: All are available in 1-1/4, 2 & 3" piston sizes. The piston impact is adjustable by regulating and controlling the air pressure through a timer and solenoid. Piston impacts can be regulated. The LI-impactors are low in operating cost and used in continuous production applications to move material uninterrupted in bins, hoppers, chutes and feeders. Ask for Li-Bulletin for more technical data. Requires lubricated air.

All pneumatic piston vibrators require lubricated air for proper operation and long life. On 1-1/2" dia. and larger pistons on vertical mount, a spring is required for proper starting.

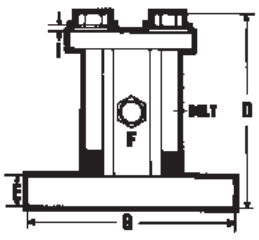
Piston Vibrators

TECHNICAL DATA — MODEL 50, 55

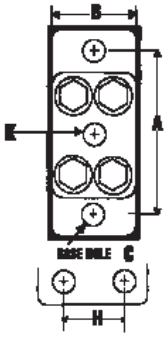
Piston Size	40 PSI CFM	40 PSI VPM	60 PSI CFM	60 PSI VPM	80 PSI CFM	80 PSI VPM	Contents in Bin
1S	3.5	3900	4	5400	5	6500	100-200
1	3.5	6500	4	9000	5	11000	200-400
1-1/4S	5	2400	7	3300	9	4200	200-400
1-1/4	5	4000	7	5500	9	7000	400-1000
1-1/2S	6.5	1700	9	2400	11	3200	400-1000
1-1/2	6.5	2800	9	4000	11	5200	1000-4000
2S	7.5	1950	12	2400	15	3000	1000-4000
2	7.5	3200	12	4000	15	5000	4000-10000
2LS	17	950	26	1200	31	1500	4000-10000
2L	17	1600	26	2000	31	2400	8000-20000
3S	18	1650	25	1950	30	2300	8000-20000
3	18	2700	25	3200	30	3800	10000-30000
3LS	31	800	42	900	51	1000	10000-30000
3L	31	1350	42	1500	51	1700	20000-70000
4S	33	1000	41	1200	50	1400	20000-70000
4	33	1400	41	1600	50	2000	Over - 70000

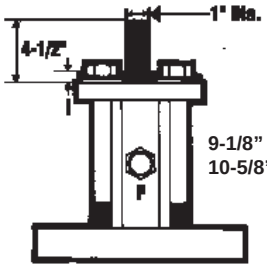
* The following data is furnished as a guide in estimating the sizes of piston vibrators for standard hopper shapes containing dry, granular materials of 50 lbs/cu. ft. minimum bulk density. For other sizes and densities, contact VIBCO.

Note: Dimensions and data subject to change without notice.
Data shown is average test data & will vary with cleanliness of the compressed air, lubrication and stiffness of application.



MODEL 50 & 55





9-1/8" AT REST
10-5/8" MAX STROKE

MODEL 50-2EP

DIMENSIONS

Model	A inch	A mm	B inch	B mm	C** inch	C** mm	D inch	D mm	E inch	E mm	F inch	F mm	G inch	G mm	H inch	H mm	I inch	I mm	K inch	K mm
50-1"	3 1/2	89	2	51	1/2	13	4 9/16	116	5/8	16	1/8 - NPT		4 1/2	114	–		3/16	5	–	
50-1 1/4"	4 1/2	114	2 1/2	64	1/2	13	6 1/2	165	7/8	22	1/4 - NPT		6	152	–		7/32	6	–	
50-1 1/2"	6*	152	3	76	3/4	19	7 15/16	202	7/8	22	1/4 - NPT		7 1/2	191	–		9/32	7	–	
50-2"	6*	152	3 1/2	89	3/4	19	7 15/16	202	7/8	22	1/4 - NPT		9	229	–		1/4	6	–	
50-2L"	6*	152	3 1/2	89	3/4	19	9 7/16	240	7/8	22	1/4 - NPT		9	229	–		1/4	6	–	
50-2EP"	6*	152	3 1/2	89	3/4	19	***	***	7/8	22	3/8 - NPT		9	229	–		1/4	6	–	
50-3"	8 7/16	214	4 1/2	114	3/4	19	10 1/2	267	1	25	1/2 - NPT		10 1/2	267	2 1/2	64	5/16	8	-	
50-3L"	8 7/16	214	4 1/2	114	3/4	19	13 1/2	343	1	25	1/2 - NPT		10 1/2	267	2 1/2	64	5/16	8	-	
50-4"	8 7/16	214	5 1/2	140	1	25	11 5/8	295	1	25	1/2 - NPT		10 1/2	267	2 1/2	64	3/4	19	-	
55-1"	3 1/2	89	2	51	1/2	13	3 7/8	98	5/8	16	1/4 - NPT		4 1/2	114	–		–		–	
55-1 1/4"	4 1/2	114	2 1/2	64	1/2	13	5 5/8	143	7/8	22	1/4 - NPT		6	152	–		–		–	
55-1 1/2"	7 1/2****	191	3 1/2	89	5/8	16	7 1/4	184	1 1/8	29	1/4 - NPT		9	229	–		–		–	
55-2"	7 1/2****	191	3 13/16	97	5/8	16	7 1/4	184	1 1/8	29	1/4 - NPT		9	229	–		–		–	
55-3"	7 3/4	197	5	127	7/8	22	9 7/16	240	1 1/8	29	3/8 - NPT		10 1/2	267	3 1/4	83	–		–	
LI-1 1/4"	4 1/2	114	2 1/2	64	1/2	13	8 9/16	217	7/8	22	3/8 - NPT		6	152	–		7/32	6	3/8 - NPT	
LI-2"	6*	152	3 1/2	89	3/4	19	8 7/8	225	7/8	22	1/2 - NPT		9	229	–		1/4	6	1/2 - NPT	
LI-3"	8 7/16	214	4 1/2	114	3/4	19	13 1/2	343	1	25	1/2 - NPT		10 1/2	267	2 1/2	64	5/16	8	1/2 - NPT	

*Also available with 7-1/2". **Bolt Size ***See 50-2EP Diagram Note: Dimensions and data subject to change without notice.
****Will also fit 6" center hole dimensions (see Dimension A)

Pneumatic End Mounted

"BIG RED"

80-1 80-1-1/4 80- 1-1/2 80-2

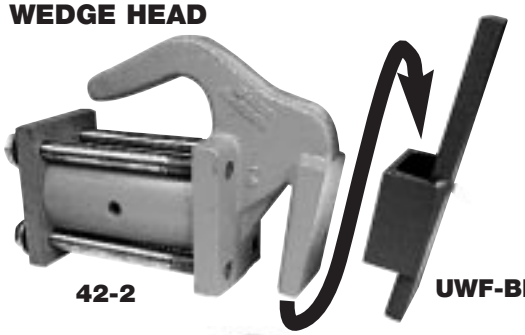
END TAPPED

70-1

END MOUNTED

10-1EM 10-1 30-1 40-1

WEDGE HEAD



42-2 UWF-BRACKET

44-3

MODEL 80 END MOUNTED PISTON VIBRATOR - "BIG RED": The new revolutionary lightweight all steel design makes it the most inexpensive unit for the big bin or hopper job, without sacrificing the quality of the more expensive flange mounted units. The single bolt attachment makes them easy and fast to install. The **"BIG RED"** is supplied either with a silent (air cushioned) piston or the more powerful impacting (piston hitting end cap) standard unit.

O-rings cover the air exhaust holes keeping dust and dirt out of the piston chamber avoiding scoring and damage to piston and cylinder walls and allowing the units to operate in the worst environments. There are four basic models with piston sizes of 1", 1-1/4", 1-1/2" and 2". For smaller sizes see Model 70. The eyebolt on top for a safety chain can be removed for other attachments.

MODEL 70 END TAPPED VIBRATOR: End tapped with inch or millimeter thread for attaching to threaded rod or stud. Model 70 can be supplied in many variations; silent (air cushioned) or impacting (piston hitting end cap) with exhaust port for attaching a muffler or air hose to lead off exhausting air. The all steel construction assures long life. Model 70 is an inexpensive solution for moving material in small bins and hoppers as well as screens and small feeders. Force and frequency will vary with air pressure. To order specify inch or millimeter thread; S - for Silent Units and EM - if Exhaust Manifold is required.

MODEL 10 END MOUNTED PISTON VIBRATOR: Single attaching head is the basic unit for foundry match plate applications. Available in 5/8, 3/4, 1, 1-1/4, & 1-1/2" piston diameter.

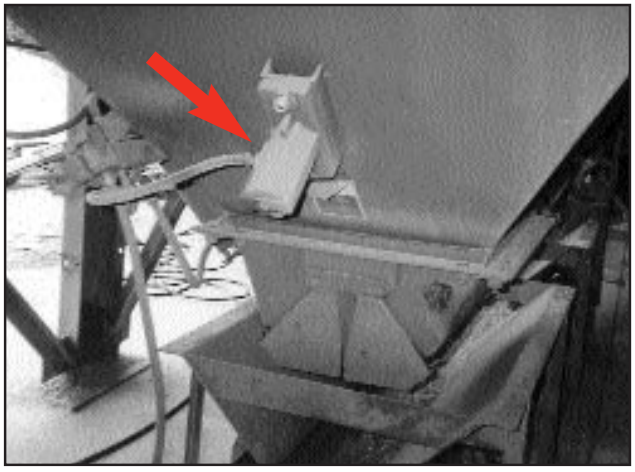
MODEL 30 END MOUNTED PISTON VIBRATOR: Double attaching head for core box machines and applications needing more vibration transfer.

MODEL 40 END MOUNTED PISTON VIBRATOR: Stud head vibrator ideal for easy movability on small concrete forms or bins.

MODEL 42 WEDGE HEAD VIBRATOR: VIBCO Wedge Head Portable Vibrators - High impact vibratory energy facilitates the placement of concrete within intricately shaped forms. Available in 2" piston size. Uses UWF-Female brackets.

MODEL 44 WEDGE HEAD VIBRATOR: Railroad carshakers have wedge bracket to fit railroad car's female "dove-tail" bracket. Available in 3". See page 41 and 42 for additional Railroad Carshakers.

All pneumatic piston vibrators require lubricated air for proper operation and long life.



Model 55-1-1/2 on Batch Hopper

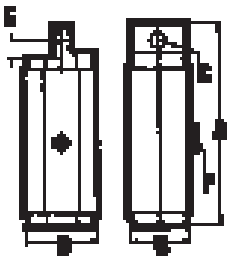
Piston Vibrators

TECHNICAL DATA — MODEL 10, 30, 40, 42, 44, 70, 80

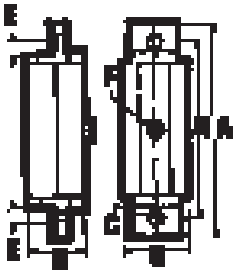
Piston Size	40 PSI (3 Bar) CFM	40 PSI (3 Bar) VPM	60 PSI (4 Bar) CFM	60 PSI (4 Bar) VPM	80 PSI (5 Bar) CFM	80 PSI (5 Bar) VPM	*Contents in Bin
5/8	2.5	9500	3	12000	4.5	14500	Up to 100 lbs.
3/4	3	7500	3.5	10500	5	13000	100-200
1S	3.5	3900	4	5400	5	6600	100-200
1	3.5	6500	4	9000	5	11000	200-400
1 1/4S	5	2400	7	3300	9	4200	200-400
1 1/4	5	4000	7	5500	9	7000	400-1000
1 1/2S	6.5	1700	9	2400	11	3200	400-1000
1 1/2	6.5	2800	9	4000	11	5200	1000-4000
2S	7.5	1950	12	2400	15	3000	1000-4000
2	7.5	3200	12	4000	15	5000	4000-10000
3S	18	1650	25	1950	30	2300	8000-20000
3	18	2700	25	3200	30	3800	10000-30000

*The following data is furnished as a guide in estimating the sizes of piston vibrators for standard hopper shapes containing dry, granular materials of 50 lbs/cu. ft. minimum bulk density. For other sizes and densities, contact VIBCO.

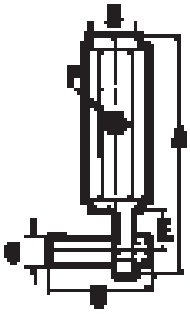
Note: Dimensions and data subject to change without notice.
Data shown is average test data & will vary with cleanliness of the compressed air, lubrication and stiffness of application.



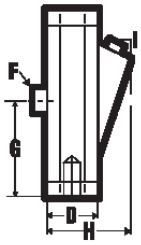
MODEL 10

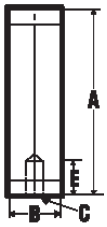


MODEL 30

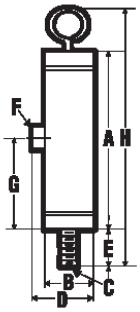


MODEL 40





MODEL 70



MODEL 80

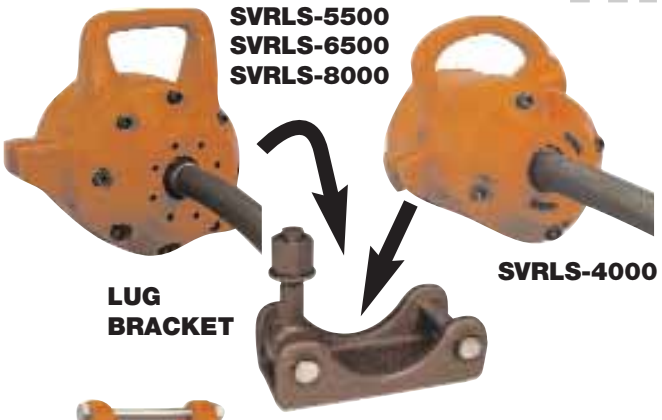
DIMENSIONS

MODEL	A Inch	A mm	B Inch	B mm	C Inch	C mm	D Inch	D mm	E Inch	E mm	F Inch/mm	G Inch	G mm	H* Inch	H* mm	I Inch/mm
80 - 1	4 1/2	114	1 1/2	38	1/2-20		2 1/8	54	1	25	1/8 - NPT	2 1/2	64	7	178	–
80 - 1-1/4	5 1/8	130	1 3/4	44	5/8-18		2 1/8	54	1 5/16	33	1/4 - NPT	2 13/16	71	9 5/16	237	–
80 - 1-1/2	6	152	2	51	5/8-18		2 1/2	64	1 5/16	33	1/4 - NPT	4 1/8	105	10 3/16	259	–
80 - 2	8	203	2 1/2	64	7/8-14		3 1/16	78	1 3/8	35	1/4 - NPT	4 1/8	105	11 1/2	292	–
70 - 5/8	4 3/4	120	1 1/4	32	5/16 - 24	M8x1.25	*1 5/16	33	5/8	16	1/8 - NPT	2 3/8	60	2 3/8	60	1/4 - NPT
70 - 3/4	4 3/4	120	1 5/8	41	3/8 - 24	M10x1.5	1 5/8	41	5/8	16	1/8 - NPT	2 3/8	60	2 5/8	67	1/4 - NPT
70 - 1	4 3/4	120	1 7/8	48	1/2 - 20	M12x1.75	1 7/8	48	5/8	16	1/8 - NPT	2 3/8	60	2 7/8	74	1/4 - NPT
70 - 1-1/4	8	203	2 5/16	59	1/2 - 20	M12x1.75	2 5/16	59	5/8	16	1/4 - NPT	4	101	3 1/2	89	1/4 - NPT
40 - 1	6 3/16	157	1 7/8	48	1/2	13	2 3/4	70	7/16	11	1/8 - NPT	1/2	12	–		–
40 - 1-1/4	9 1/2	241	2 5/16	59	1	25	4 3/4	121	3/4	19	1/4 - NPT	1	25	–		–
30 - 5/8	6 5/16	160	1 1/4	32	5/16	8	1 5/16	33	1/2	12	1/8 - NPT	5 7/16	136	5 7/16	136	–
30 - 3/4	6 5/16	160	1 5/8	41	3/8	10	1 5/16	33	1/2	12	1/8 - NPT	5 7/16	136	5 7/16	136	–
30 - 1	6 9/16	167	1 7/8	48	3/8	10	1 7/8	48	1/2	12	1/8 - NPT	5 7/16	136	6 3/8	162	–
30 - 1-1/4	10 1/2	267	2 5/16	59	1/2	12	2 5/16	59	11/16	17	1/4 - NPT	9 1/8	228	9 1/8	232	–
30 - 1-1/2	11 3/8	289	2 7/8	73	5/8	16	2 15/16	73	7/8	22	1/4 - NPT	9 1/2	241	9 1/2	241	–
10 - 5/8	5 1/2	140	1 1/4	38	5/16	8	1 5/16	33	1/2	12	1/8 - NPT	–		–		–
10 - 3/4	5 1/2	140	1 5/8	41	3/8	10	1 3/8	35	1/2	12	1/8 - NPT	–		–		–
10 - 1	5 5/8	143	1 7/8	48	3/8	10	1 7/8	48	1/2	12	1/8 - NPT	–		–		–
10 - 1-1/4	9 1/4	235	2 5/16	59	1/2	12	2 5/16	59	11/16	18	1/4 - NPT	–		–		–
10 - 1-1/2	9 11/16	246	2 1/2	64	5/8	16	2 15/16	75	7/8	22	1/4 - NPT	–		–		–

*For EM Models. Note: Dimensions and data subject to change without notice.

High Frequency

SILENT MODELS



LC-1 Lug Bracket for all larger lug mount vibrators. LC-2 Lug Bracket for SVRLS-4000 vibrator. These are ideal for fast detachment & portability.

SVRFS-5500

SVRWS-4000W with UWF3 Female Bracket

SVRFS-4000

SVRS-5500

CONVENTIONAL MODELS

SVR-8000

SVRL-5500
SVRL-6500

SVR-4000

LC-1 LUG BRACKET

MODEL SVRS "SILENT"

VIBCO's engineers have finally broken the sound barrier of high frequency vibrators and developed a "SILENT" high frequency unit producing the same speed and force as the conventional models. This is a patented design.

FEATURES:

- **HIGH FREQUENCY, HIGH FORCE**
- **STARTS EVERY TIME**
- **PATENTED SILENT DESIGN**
- **PATENTED "AIR SAVER" CHAMBER**
- **PATENTED WEAR PLATES**

HOW IT WORKS:

In VIBCO's "SILENT" units, 80-85 dB, the rotor in this bearing-less vibrator spins silently around the shaft instead of spinning and noisily hitting the shaft as in conventional units. In VIBCO's units the exhausting air is also forced through a muffler pad and back over the rotor, further dampening any noise from exhausting air.

The patented air saver design will save air because all the air is not exhausted with every cycle, making them "start every time."'

The patented "wear plate" design will prevent end plate wear and cut down on costly maintenance, loss of power, and premature failure.

MODEL SVRLS-4000, -5500, -6500 & -8000

Model SVRLS-4000, 5500, 6500 and 8000, the industry standard for pipe forms, battery molds, tilt tables, panels, etc. They will fit all lug and cradle brackets on the market.

MODEL SVRFS-5500, SVRF-5500

Model SVRFS-5500 is used for permanent installations such as vibrating tables, tunnel forms or where it is difficult to reach or get at the units.

MODEL SVRS-5500

SVRS-5500 fits the SB shoe bracket used for both permanent as well as portable applications.

MODEL SVRFS-4000

SVRFS-4OOO for permanent installations on tables and forms and also to be used with different brackets such as clamp-on, wood forms for portable installations.

MODEL SVRWS-4000

SVRWS 4000 has a housing with cast-on wedge to fit the UWF female bracket used as a standard bracket on septic tanks, manholes, burial vaults, steps, horizontal panels and other concrete forms. Its lightweight, ease of handling and quick clamp makes it a natural as a portable concrete vibrator.

MODEL SVRWS-5500

SVRWS-5500 with cast on wedge to fit dovetail brackets on railroad cars. See page 39 and 40. Dovetail brackets can also be mounted to pipe and other concrete forms needing more force than SVRWS-4000.

CONVENTIONAL MODELS

The conventional SVR units are simple in design and have a dB reading of 95-110. Lower cost units:
SRL-5500 & 6500 same use as SVRLS-5500
SVR-4000 same use as SVRFS-4000
SVR-8000 for big concrete tables.

PATENTED

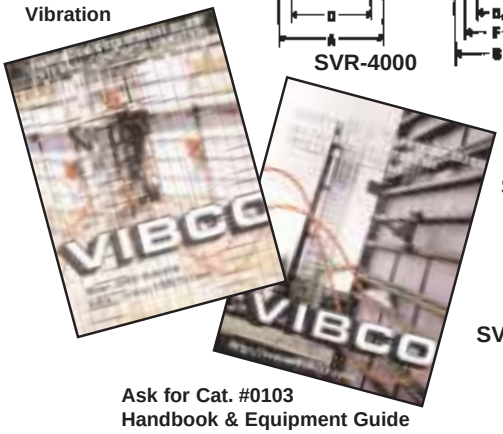
Pneumatic Vibrators

TECHNICAL DATA

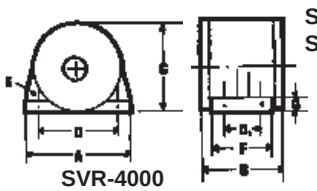
Model	Weight lbs.	Weight kg.	80 PSI VPM*	80 PSI Force lbs.	80 PSI Force N	90 PSI VPM*	90 PSI Force lbs.	90 PSI Force N	100 PSI VPM*	100 PSI Force lbs.	100 PSI Force N	CFM*	dB*
SVRFS & LS-4000	22	10	11500	3600	16000	12500	4000	17800	13500	4400	19500	40	78
SVR-4000	23	10.4											90
SVRS, FS-5500	40	18	9000	4950	22000	10000	5500	24500	10500	6100	27100	56	82
SVRLS-5500	43	19.5											
SRL-5500	33	15											
SVRLS-6500	45	20.4	8800	5575	24800	9500	6500	28900	10000	7200	3200	58	80
SRL-6500	39	17.8											98
SVRLS-8000	47	21.3	8500	7625	33900	8700	8000	35600	9500	9550	42500	62	82
SVR-8000	51	23.1											98
SVRWS-4000	23	10.4	11500	3600	16000	12500	4000	17800	13500	4400	19500	40	78
SVRWS-5500	60	27.5	9000	4950	22000	10000	5500	24500	10500	6100	27100	56	82
SVRWS-6500	61	28	8800	5545	24800	9500	6500	28900	10000	7200	32000	58	85

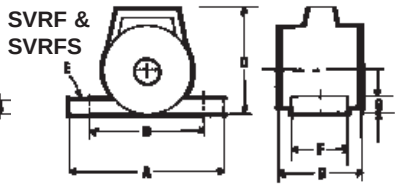
* Frequency and Air Consumption will vary with load ** dB at 3' (1 meter) on A-scale N = Centrifugal force in Newton

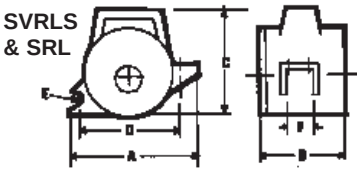
Ask for Cat. #8401
Handbook &
Equipment Guide
External Concrete
Vibration

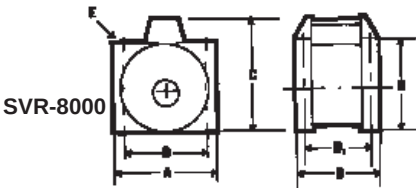


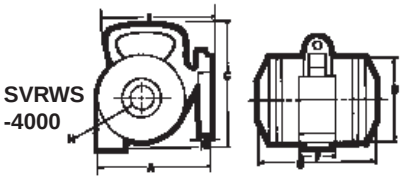
Ask for Cat. #0103
Handbook & Equipment Guide
External Walls & Columns

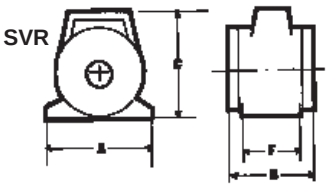

SVR-4000

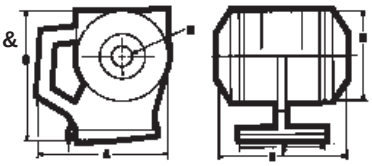

SVRF & SVRFS


SVRLS & SRL


SVR-8000


SVRWS -4000


SVR


SVRWS-5500 & SVRWS-6500

DIMENSIONS

Model	A Inch/mm	B Inch/mm	C Inch/mm	D x D1 Inch/mm	E Inch/mm	F Inch/mm	G Inch/mm	H* Inch/mm
SVR-4000	7 1/2 191	6 1/8 156	5 127	6 1/4 2 51	1/2 12	3 7/16 87	7/8 22	3/4 19
SVR-5500	7 178	6 1/16 154	7 3/8 187	—	—	3 1/2 89	—	3/4 19
SVRL-5500, 6500	9 1/2 241	6 1/8 156	9 1/4 235	8 203	1 25	1 1/4 32	—	3/4 19
SVRF-5500	10 1/4 260	6 1/8 156	8 1/8 206	8 203	3/4 19	3 1/4 83	—	3/4 19
SVR-8000	9 3/8 238	6 3/8 162	9 229	7 x 3 1/8 178 x 79	3/4 19	—	6 1/2 162	3/4 19
SVRFS-4000	7 5/8 194	8 1/16 205	7 3/8 185	6 152	5/8 16	2 51	3/4 19	3/4 19
SVRLS-4000	7 178	8 203	7 1/2 190	6 152	3/8 10	7/8 22	—	3/4 19
SVRLS-5500, 6500, 8000	9 1/2 241	8 1/16 205	9 1/4 235	7 3/4 197	1 25	1 1/4 32	—	3/4 19
SVRFS-5500	10 1/2 257	8 5/8 219	8 1/8 206	8 203	11/16 18	3 1/4 83	1 1/8 29	3/4 19
SVRS-5500	7 178	8 1/2 216	7 3/8 187	—	—	3 1/2 89	—	3/4 19
SVRWS-4000	6 7/8 175	8 1/16 205	7 1/8 181	5 1/8 130	7 178	2 3/16 56	11/16 18	3/4 19
SVRWS-5500, 6500	8 5/8 219	8 5/8 219	9 7/8 251	6 1/8 156	—	5 1/2 140	1 1/8 29	3/4 19

*Hose Diameter Note: Dimensions and data subject to change without notice.

PNEUMATIC & HYDRAULIC VIBRATORS

LH-1000
LH-2000

LHS-1800
HS-2500

LH-3500
LH-5000

B-190

B-250

B-320

HLF-1300

HLF-700

PC-3500
HC-3500

PF-3500
(HF-3500)

HL-3000

Pneumatic &

MODEL PF, HF, PC & HC "BIG-BUSTER"

PATENTED DESIGNS

VIBCO has developed a new revolutionary vibration isolation device eliminating vibration transfer from the vibrator part of the Big Buster to the drive motor.

A vibration isolating coupling is mounted between the eccentric shaft and the motor drive shaft eliminating any vibration transfer through the shaft. Another vibration isolating coupling is connected between the vibrator housing and the motor housing eliminating all vibration transfer.

GENERAL FEATURES

Big Buster vibrators provide high force at low frequency. They are designed for continuous duty. All models are available in pneumatic or hydraulic drive. Big Buster units are designed with sealed bearings. Airline lubrication is required for the air motor vanes.

ADVANTAGES

With this unique design, premature failure of the drive unit is eliminated, and the full life can be expected of the drive unit, which will drastically add to the unit life and eliminate costly shutdowns and maintenance costs.The unit can now truly be used continuously and economically which is the BIG advantage over competitive units.

WHERE TO USE?

These units are ideal for the toughest applications from unloading railroad cars to moving materials in huge bins and hoppers (capacity over 150,000 lbs.) Precise speed control allows "tuning" of the vibrator for best results in any application. Big Busters are available in clamp on base for portability and bolt-on base for permanent mounting.

Hydraulic

PATENTED DESIGNS

GENERAL FEATURES

VIBCO's hydraulic vibrators operate in any position and are not affected by dirty, muddy or wet locations. They can operate on pressures up to 3000 PSI making them ideal to use with construction and form equipment for a variety of applications.

MODEL LH

VIBCO's new patented LH-series of heavy duty hydraulic vibrators have been designed to eliminate the constant failures and short life associated with hydraulic vibrators using a hydraulic motor with needle bearings. Use of large roller & ball bearings provide these vibrators with a longer, trouble-free, service life. The LH-series offers a compact design and can handle pressures up to 3000 PSI. The LH vibrators produce a linear force that makes the unit ideal for feeders, packing tables as well as moving material in bins & hoppers, as a dump truck body vibrator, or consolidating concrete or asphalt. LHS units with space saver design and sinusodial rotary force, ideal for bins & hoppers.

MODEL HLF

The small version of the Big Buster HF-Units are equipped with an internal coupling to minimize the wear of the hydraulic motor. These small and powerful high speed 9000 RPM vibrators offer an inexpensive solution to many material handling problems. HL 3000 same design as the HF-Fit LC-1 Lug Bracket. Creates 3000 lbs. force at 7000 RPM - ideal for concrete applications.

MODEL B

Hydraulic fluid under pressure drives a specially designed and patented turbine wheel producing high frequency vibration with noise levels as low as 60-62 dB at maximum speed. A real low cost unit ideal for 0.E.M equipment.

PATENTED

Hydraulic Vibrators

- **AIR & HYDRAULIC DRIVE**
- **FORCES TO 3500 LBS.**
- **SPEEDS TO 5600 VPM**
- **ADJUSTABLE SPEED**
- **FOOT & CLAMP MOUNT**
- **QUIET**
- **CONTINUOUS DUTY**

TECHNICAL DATA

Pneumatic Models	Weight lbs.	Weight kg.	60 PSI Speed VPM	60 PSI SCFM	60 PSI Force lbs	60 PSI Force N
PF-800	60	27	4000	11	800	3559
PF-1200	60	27	3500	21	1200	5338
PF-1500	60	27	3500	31	1500	6672
PF-PC-3500	72	33	3500	39	3500	15572

*Decibels at 3' (1 meter) on A-scale
N = Centrifugal force in Newton
Frequency will vary with load.

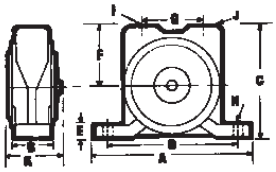
Hydraulic Models	Weight lbs.	Weight kg.	Avg. PSI	Speed VPM	GPM (max.)	Force lbs.	Force N	dB*
HF-800	60	27	600	5000	3.2	1300	5784	72
HF-1200	60	27	800	4500	2.9	1900	8452	74
HF-1500	60	27	900	4000	2.6	2000	8898	76
HF-HC-3500	72	33	1200	3500	2.4	3500	15572	80
HL-3000	39	17.7	1000	5000	3.2	3400	15124	76
HLF-700	14	6.5	900	9000	2.8	700	3114	72
HLF-1300	20	9	1000	9000	2.8	1300	5784	72

***Maximum pressure 3000 PSI.

Model	Weight lbs.	Weight kg.	600 PSI VPM	600 PSI GPM	600 PSI Force lbs	600 PSI Force N	800 PSI VPM	800 PSI GPM	800 PSI Force lbs	800 PSI Force N	1000 PSI VPM	1000 PSI GPM	1000 PSI Force lbs	1000 PSI Force N
B-190	1	.453	4600	4.5	189	891	6100	4.8	332	77	7400	6.5	488	221
B-250	2	.907	4200	4.5	280	1246	5000	4.5	397	1766	5800	6.5	534	242
B-320	3 1/2	1.6	3700	5.0	301	1339	4500	6.0	445	1980	5300	7.0	617	280

N = Centrifugal force in Newton. Maximum pressure 3000 PSI. Frequency will vary with load.

B-MODELS



Model	2.5 Gal. VPM	2.5 Gal. PSI	2.5 Gal. Force lbs.	3 Gal. VPM	3 Gal. PSI	3 Gal. Force lbs.	4 Gal. VPM	4 Gal. PSI	4 Gal. Force lbs.	Weight lbs / kg.	dB
LH-1000*	2500	350	270	3600	400	600	4700	600	1000	30 13.6	72
LH-3500*	4000	500	2100	4600	600	2800	5300	850	3500	62 28	76
LHS-1500*	3200	500	700	4500	600	1500	5300	750	1800	40 18	74

Average figures, subject to change without notice. * LH-1000, LH-3500, LHS-1500 Standard Sizes LH-2000, 2000 lbs. at 4600 VPM, LH-5000, 5000 lbs. at 5300 VPM, LHS-2500, 2500 lbs. at 5000 VPM. Frequency will vary with load.

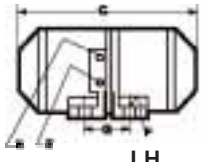
DIMENSIONS:

Model	A Inch / mm	B Inch / mm	C Inch / mm	D Inch / mm	E Inch / mm	F* Inch / mm	G Inch / mm	H Inch / mm	I Inch / mm	J Inch / mm	K Inch / mm
B-190	5 1/4 133	1 1/16 27	4 5/8 117	4 102	13/16 21	3/8 10	1 5/16 33	2 1/8 54	3/8 - NPT	3/8 - NPT	3 1/4 83
B-250	7 178	1 1/4 32	5 3/8 137	5 127	1 25	1/2 13	2 1/4 57	3 1/2 89	1/2 - NPT	1/2 - NPT	3 3/8 86
B-320	6 7/8 117	1 11/16 43	5 7/8 149	5 127	1 1/16 27	1/2 13	2 5/8 67	3 3/4 95	1/2 - NPT	1/2 - NPT	3 5/8 92
PF-HF-800, 1200, 1500	10 3/8 265	8 3/4 222	11 1/4 286	8 1/2 216	3/4 - 16SAE	3/4 19	–	3 76	–	–	–
PF-HF-3500	10 3/4 273	9 1/4 235	12 5/8 321	8 1/2 216	3/4 - 16SAE	5/8 16	2 1/2 64	4 1/4 108	–	–	–
PC-HC-3500	12 1/2 318	10 3/4 273	12 1/4 311	10 1/16 256	3/4 - 16SAE	1 1/4 12NF	–	1 3/16 30	–	–	–
HLF-700	5 127	4 1/2 114	7 178	3 1/2 89	9/16 - 18SAE	1/2 13	–	–	–	–	–
HLF-1300	5 3/4 146	5 1/8 130	7 5/8 194	4 1/2 114	9/16 - 18SAE	1/2	13 –	–	–	–	–
HL-3000	8 3/4 222	8 3/4 222	11 1/4 286	7 3/4 197	3/4 - 16SAE	1 25	–	1 1/16 27	–	–	–

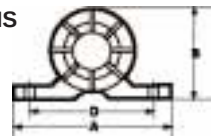
Model	G Inch / mm	D Inch / mm	F Inch / mm	A Inch / mm	C Inch / mm	B Inch / mm	E Inch / mm
LH-1000	3 76	4 1/2 114	1/2 12	5 1/2 140	8 1/2 216	4 3/4 121	3/8 - NPT
LH-2000	3 76	4 1/2 114	1/2 12	5 1/2 140	10 1/2 267	4 3/4 121	3/8 - NPT
LH-3500	3 76	8 1/2 216	3/4 19	10 1/4 260	11 3/8 289	6 1/8 156	3/8 - NPT
LH-5000	3 76	8 1/2 216	3/4 19	10 1/4 260	13 3/8 340	6 1/8 156	3/8 - NPT
LHS-1500		8 1/2 216	3/4 19	10 1/4 260	9 1/4 235	6 1/8 156	3/8 - NPT
LHS-2500		8 1/2 216	3/4 19	10 1/4 260	10 1/4 260	6 1/8 156	3/8 - NPT

*Bolt Size ** dB at 3' (1 meter) on A-scale N = Centrifugal force in Newton
Note: Dimensions and data subject to change without notice.

LH

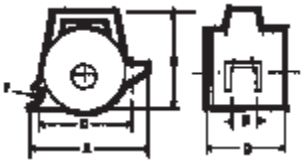


LHS

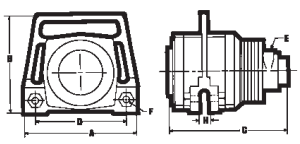


LH & LHS

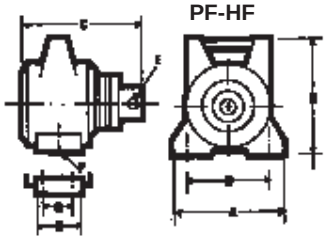
HL



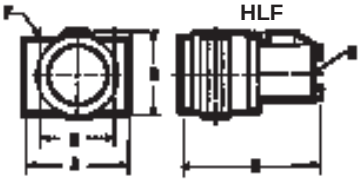
PC-HC



PF-HF



HLF



Model SCR – Adjustable

MODEL SCR

Adjustable Speed & Force

FEATURES:

- **0-4000 RPM • ADJUSTABLE FORCE**
- **TOTALLY ENCLOSED, SILENT**
- **HEAVY, CONTINUOUS DUTY**
- **115-VOLT PLUG-IN**
- **EASY SPEED DIAL CONTROL**

Another first by VIBCO – A **noiseless**, heavy duty electric vibrator that can be force and speed **adjusted** while running. Unlike old-fashioned, noisy electro-magnetic vibrators, this newly developed silent motor vibrator can meet even the most stringent anti-noise pollution requirement.

Model SCR consists of a rugged, permanent magnet DC motor, and SCR control, which is composed of a solid state, full wave rectifier and standard 115-volt AC current. No special wiring or circuitry is needed. Accurate and reliable performances throughout the full speed range. Totally enclosed, non-vented housing makes the SCR ideal for use inside or outside in dusty or wet locations. Easy to adjust eccentric settings give additional adjustability. SCR is continuous duty rated even at maximum eccentric setting.

WHERE TO USE:

BINS, CHUTES: Controlled feed. Dial control vibration gives positive flow rate from trickle to torrent, even with hard to move materials or different bin contents.

PACKAGING: Select and settle. Select ideal shake for optimum densification and settling.

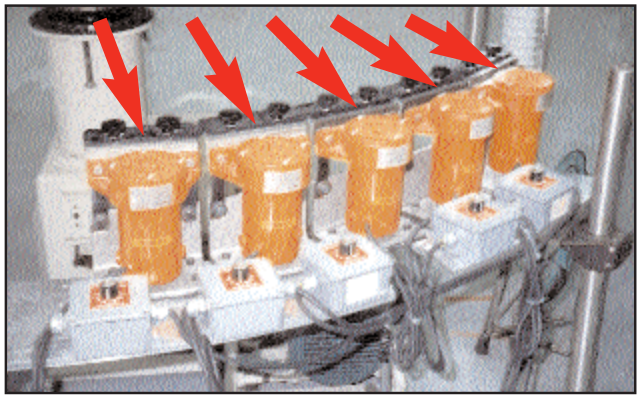
SCREENING: Fast, non-blinding. For sifting, scalping and sorting, controlled vibration gives fastest and most complete results.

TEST TABLES: Verify part integrity, simulate handling and over the road transport. Low cost, full range control gives multitude of speeds, "G" values and amplitudes necessary to meet most specs.

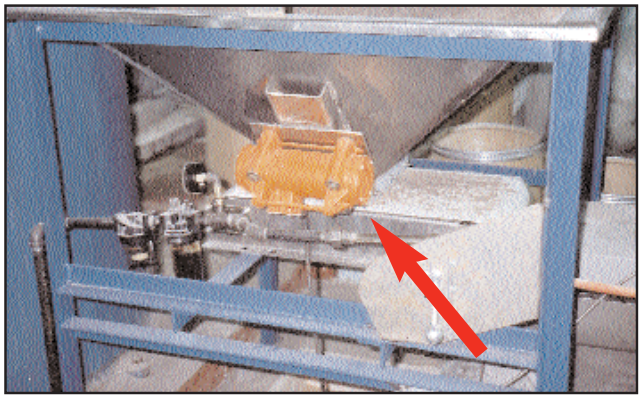
TECHNICAL DATA

Model	Force (Impact) lbs./N Adjustable lbs.	N	Amp.	***Volt	Ph.	Vibrations per Minute Cont. Duty	Int. Duty	Wt. lbs.	kg.	dB*
SCR-50	50	223	2.5	115/230	1	950-2500	2500-4000	8	3.6	71
SCR-60‡	60	267	2.5	115/230	1	950-2500	2500-4000	5 and 8**	2.3/3.6	68
SCR-100	100	445	1.3	115/230	1	950-2500	2500-4000	11	5.0	68
SCR-200	200	890	2.6	115/230	1	950-2500	2500-4000	12	5.4	70
SCR-300	300	1335	1.7	115/230	1	950-2500	2500-4000	16	7.3	70
SCR-350	350	1558	3.0	115/230	1	950-2500	2500-4000	20	9.1	71
SCRW-400‡	400	1780	1.7	115/230	1	950-2500	2500-4000	12	5.5	70
SCR-400	400	1780	2.0	115/230	1	950-2500	2500-4000	16	7.3	70
SCR-500	500	2225	3.5	115/230	1	950-2500	2500-4000	43	19.5	70
SCR-1000	1000	4449	6.5	115/230	1	950-2500	2500-4000	58	26.0	72

*Decibel at 3' (1 meter on A-Scale) N = Centrifugal force in Newton **5 lbs. Aluminum 8 lbs. Cast Iron ***50 or 60Hz ‡Watertight
Note: Dimensions and data subject to change without notice.



SCR-100 on Filling Station



SCR-200 keeps material flowing evenly to belt conveyor

Speed & Force Electric Vibrators


SCRW-400


SCR-400


SCR-500

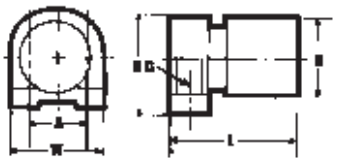

SCR-1000

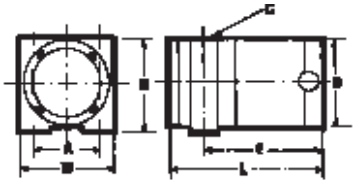
- Control standard on all units

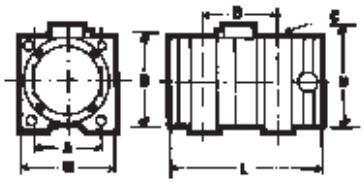
DIMENSIONS

Model	L inch	L mm	W inch	W mm	H inch	H mm	A inch	A mm	B inch	B mm	C* inch	C* mm	D inch	D mm	E inch	E mm
SCR-50	5 7/8	149	5	127	3 5/8	64	4	102	—		3/8	10	3	76	3 5/16	100
SCR-60	6 3/8	162	4 1/2	114	3 1/4	83	3 5/8	64	1 5/16	33	5/16	8	3	76	—	
SCR-100	6 3/4	187	6	152	4 1/4	108	5	127	—		3/8	10	4	102		165
SCR-200	8 3/16	208	4 7/8	124	4 1/8	105	3 1/2	89	—		1/2	12	4	102	6 1/2	165
SCR-300	8 1/2	216	4 1/8	105	5	127	3	76	5 3/4	145	5/16	8	3 9/16	90	6 1/2	
SCR-350	8 1/4	210	5 5/8	143	5 1/4	133	4 1/2	114	—		1/2	12	5 1/16	128	—	165
SCRW-400	9	229	6 1/4	159	5 3/8	137	5 1/4	133	4 1/4	114	7/16	14				
SCR-400	9	229	4 1/8	105	5	127	3	76	5 3/4	145	5/16	8	3 9/16	90	6 1/2	
SCR-500	13 3/16	335	5 3/4	146	6 1/2	165	4 1/2	114	8 15/16	227	1/2	12	5 1/16	128	—	
SCR-1000	14 1/4	362	6 1/2	165	7 1/2	190	5	127	9 3/8	238	5/8	16	6	140	—	

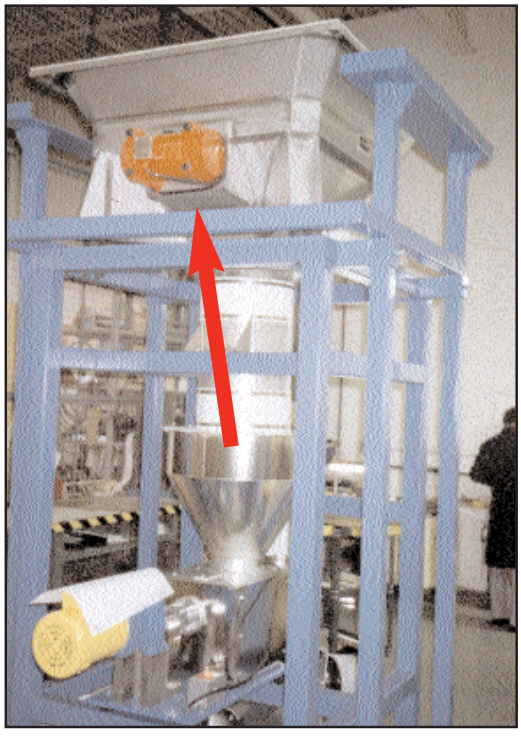
*Bolt size to be used Note: Dimensions and data subject to change without notice.

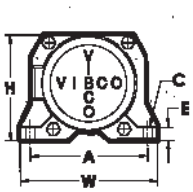

SCR-50, SCR-100


SCR-200, SCR-350

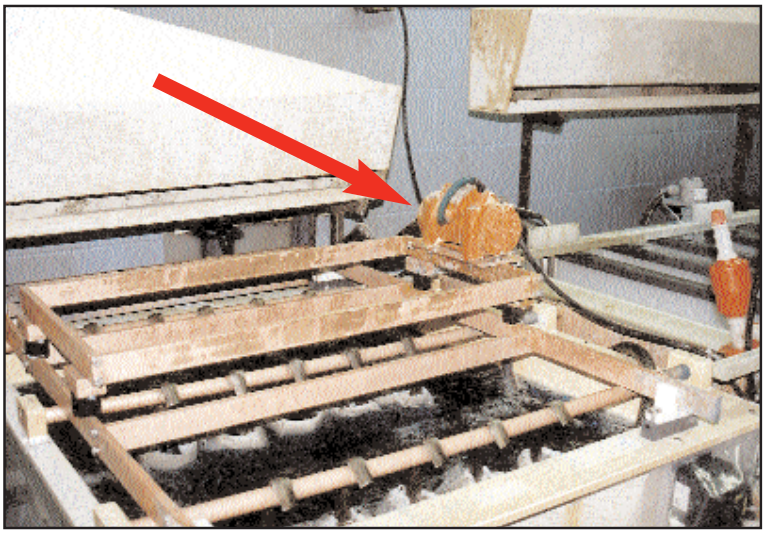

SCR-300, 400, 500 & 1000

Ask for Cat. #0104
Electric Vibrators
Adjustable Speed & Force

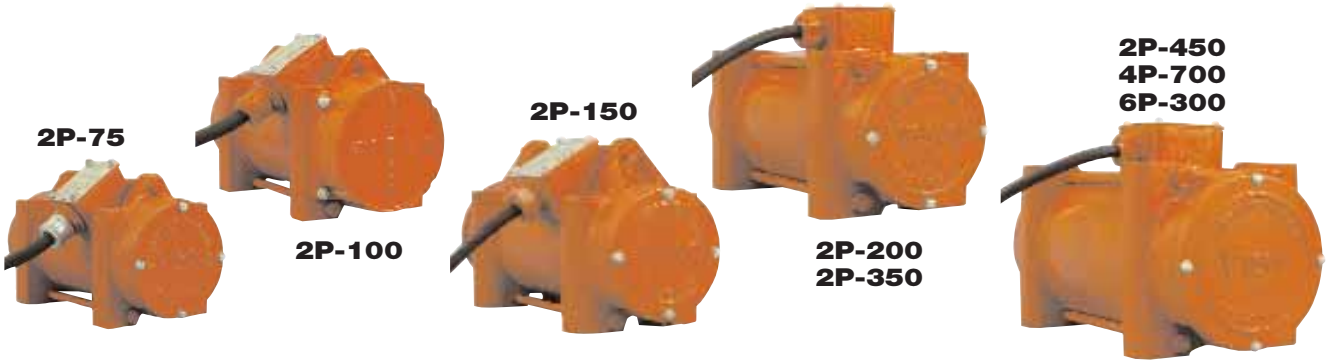

SCR-300 on Box Dumper to prevent hang-ups.



SCR-60, SCRW-400


SCR-300 on PC-Board Frame

Model 2P,4P,6P,8P



- **TOTALLY ENCLOSED**
- **FOR INDOOR OR OUTDOOR USE**
- **COMPLETELY NOISELESS**
- **ADJUSTABLE ECCENTRICS**
- **SINGLE & 3 PHASE**

VIBCO noiseless motor vibrators made in the U.S. by skilled American craftsmen follow American NEMA and ASTME standards. VIBCO Vibrators are totally enclosed, continuous duty and completely noiseless. They can be used inside or outside, in dust, dirt, rain or snow. VIBCO's lines of heavy duty vibrators will solve any vibration problem such as: speed the flow of bulk materials through the smallest bin, hopper, and chute, to the largest silo; pack materials in drums and bags; consolidate concrete in pipe, precast and prestressed industries; for screens and screeds and a variety of other industrial applications.

WHY VIBCO?? BECAUSE . . . . .

CHOICE: 31 models all made in the U.S.A. Heavy duty and completely self-contained units.

DURABILITY: Built stronger throughout; years of service in all types of applications, inside and outside, have proven the VIBCO quality.

EFFECTIVE: Multi-directional force proven safest to your equipment and most efficient.

NOISELESS: No more sound than an electric motor.

ECONOMY: Maintenance free, no costly controls, low operating cost.

GUARANTEE: Every VIBCO Vibrator is fully guaranteed both mechanically and performance-wise.

SERVICE: Over forty years of vibration know-how, and distributors throughout the U.S.A.

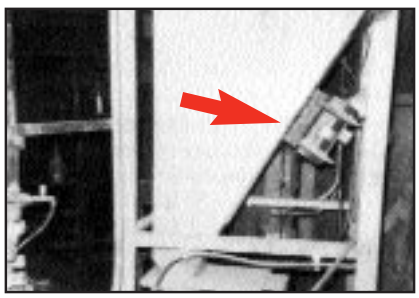
DESIGN:

- Adjustable eccentrics for easy change of force to suit application.
- Load equally distributed over bearings for additional life.
- Unloaded rotor on the larger units to prevent burnout from rotor hitting stator lamination.
- Oversized electric motor for higher safety factor - watt/lbs. impact.
- High heat resistant winding to take additional overload and heat.
- Oversized bearings for longer life.
- Mounting bolts over force center for efficient vibration transfer.
- Terminal box for easy connection and change of voltage.
- Internal vent holes for better air circulation cooling in high temperature application.

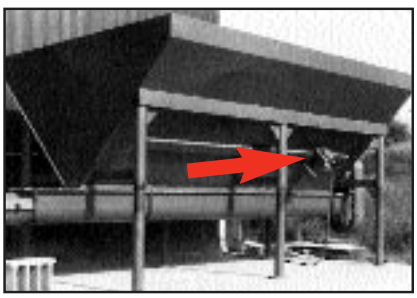
2P Models with 3600 rpm are the most versatile and popular vibrators. Centrifugal force output from 50-5600 lbs. used on all types of bins containing fine to granular materials, for packing coarse materials and casting concrete, etc.

4P Models with 1800 rpm have a force output of 100 to 15,000 lbs. Used on bins containing lumpy or sticky materials for packing light fluffy materials, also a typical screen vibrator.

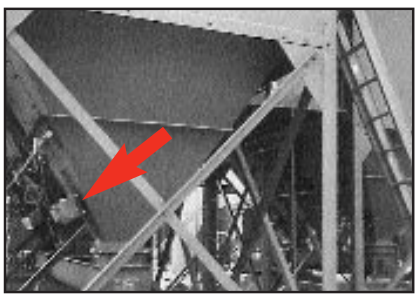
6P and 8P Models with 1200 and 900 rpm are used in applications requiring low frequency and very high amplitude vibration such as screening and packing of very light and fluffy materials.



Vertically mounted 2P-450 on Crushed Cullet Hopper.

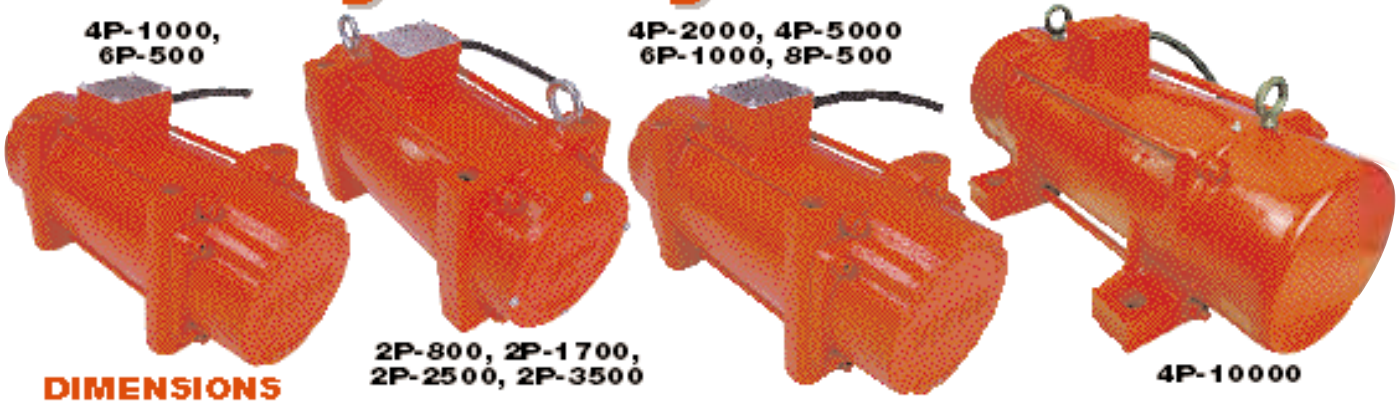


4P-700 on Woodchip Bin with Screw Feeder.



2P-200 on Dust Collector Hoppers.

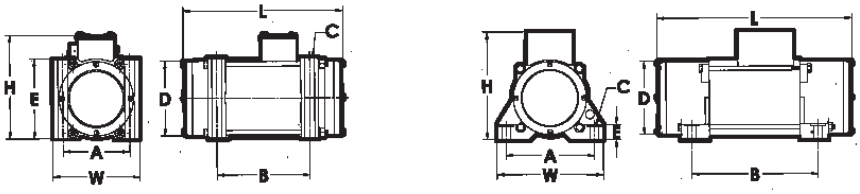
Heavy Duty Electric



DIMENSIONS

Model	Phase	A Inch/mm	B Inch/mm	C* Inch/mm	L Inch/mm	W Inch/mm	H Inch/mm	D Inch/mm	E Inch/mm
2P-75	1 & 3	3 76	4 11/16 119	5/16 8	7 7/8 200	4 1/8 105	5 127	3 9/16 90	4 1/8 105
2P-100	1 & 3	3 76	4 13/16 122	5/16 8	8 3/16 208	4 1/8 105	5 127	3 9/16 90	4 1/8 105
2P-150	1 & 3	3 1/2 89	6 3/8 162	1/2 13	10 3/4 273	4 7/8 124	6 1/4 159	4 102	4 1/4 108
2P-200 4P-350	1 & 3	4 1/2 114	7 178	1/2 13	11 1/2 292	5 3/4 146	6 3/4 171	5 127	5 127
4P-600	1 & 3	4 1/2 114	7 7/8 200	1/2 13	13 330	5 3/4 146	6 3/4 171	5 127	5 127
2P-450	1	5 127	8 3/8 213	5/8 16	13 1/2 343	6 1/2 165	7 1/2 191	6 152	6 152
	3	5 127	(7 5/8) 194	5/8 16	12 3/8 314	6 1/2 165	7 1/2 191	6 152	6 152
2PS-450	1	5 127	(7 5/8) 194	5/8 16	12 3/8 314	6 1/2 165	7 1/2 191	6 152	6 152
	3	5 127	(6 7/8) 175	5/8 16	11 1/4 286	6 1/2 165	7 1/2 191	6 152	6 152
4P-700	1 & 3	5 127	(8 3/8) 213	5/8 16	13 1/8 333	6 1/2 165	7 1/2 191	6 152	6 152
4P-1000 6P-500	1 & 3	5 127	8 3/8 213	5/8 16	15 1/2 394	6 1/2 165	7 5/8 194	6 152	6 152
2P-800	1	5 1/2 140	9 5/8 244	5/8 16	15 1/4 387	7 1/2 191	8 1/2 216	7 178	7 178
	3	5 1/2 140	8 5/8 219	5/8 16	14 3/8 365	7 1/2 191	8 1/2 216	7 178	7 178
2P-1700 4P-1400	3 1 & 3	5 1/2 140	10 13/16 259	5/8 16	16 1/2 419	7 1/2 191	8 1/2 216	7 178	7 178
2P-2500 2P-3500	3	5 1/2 140	11 5/8 295	5/8 16	17 1/2 445	7 1/2 191	8 1/2 216	7 178	7 178
2P-4500	3	5 1/2 140	11 5/8 295	5/8 16	18 1/2 470	7 1/2 191	8 1/2 216	7 178	7 178
2P-5500	3	7 7/8 200	12 13/16 325	1 25	22 1/4 565	10 1/4 260	10 1/2 267	8 7/8 225	8 7/8 225
4P-2000 6P-1000 8P-500	3	5 1/2 140	10 13/16 275	5/8 25	18 457	7 1/4 184	8 1/2 216	7 178	7 178
4P-3000 6P-1500 8P-750	3	7 7/8 200	12 3/4 324	1 25	22 1/2 572	10 1/4 260	10 1/2 267	8 7/8 225	8 7/8 225
4P-5000 6P-2500 8P-1250	3	7 7/8 200	12 13/16 325	1 25	24 610	10 1/4 260	10 1/2 267	8 7/8 225	8 7/8 225
4P-10000 + 6P-5000 + 8P-2500 +	3	12 5/8 321	15 1/2 394	1 1/4 32	29 3/4 756	15 5/8 397	13 330	10 3/4 273	2 51

*Bolt Size +Use Figure 2 for dimensions Note: Dimensions and data subject to change without notice.



Heavy Duty Electric Vibrators

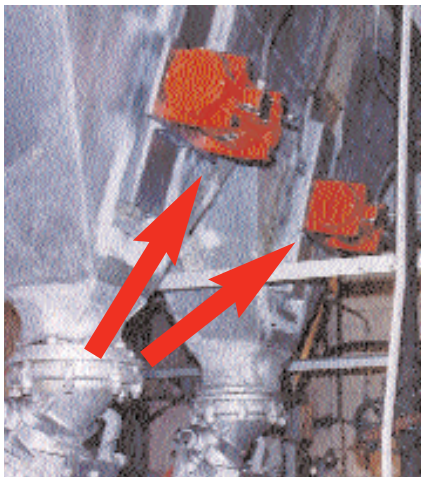
TECHNICAL DATA

Model	Phase	1 phase	3 phases		H.P.	Force (Impact) lbs./N+						**dB	Weight***	
		Amperes at Volt				Min.				Max.				
		115/230	230/460	575		lbs.	N	lbs.	N	lbs.	N		lbs.	kg.
3600 VIBRATIONS PER MINUTE — 2 POLE														
2P-75	1 & 3	.5/.25	.2/.1	—	1/5	50	222	75	334	100	445	60	12	5.4
2P-100	1 & 3	.5/.25	.2/.1	—	1/5	100	445	150	667	175	778	63	12	5.4
2P-150	1 & 3	1.8/.9	.6/.3	.12	1/4	130	578	175	778	250	1112	63	26/25	11.8/11.3
2P-200	1 & 3	3/1.5	1/.5	.45	1/3	180	801	325	1446	400	1779	62	35/33	15.9/15
2P-450, 450S	1 & 3	5/2.5	1.2/.6	.5	1/2	100	445	680	3025	1100	4893	64	55 (46)	25 (21)
2P-800	1 & 3	8/4	2/1	.8	3/4	100	445	1000	4448	1750	7784	70	85/80	38.6/36/3
2P-1700	3	—	3/1.5	1.2	1 1/2	600	2669	1500	6672	2500	11120	72	90	40.8
2P-2500	3	—	5/2.5	3.0	2	500	2224	1650	7339	3000	13344	73	105	47.6
2P-3500*	3	—	5/2.5	1.7	2	500	2224	1650	7339	3000	13344	75	105	47.6
2P-4500*	3	—	5.5/2.8	3.1	2	2200	9786	3450	15346	5000	22240	76	110	49.9
2P-5500*	3	—	8/4	3.2	3	500	2224	3300	14678	5600	24909	72	220	99.8
*Special Bearings for Concrete Applications.						**1800 VIBRATIONS PER MINUTE — 4 POLE**								
4P-350	1 & 3	4/2	1/.5	.3	1/4	50	222	100	445	200	890	60	36/34	16.3/15/14
4P-600	1 & 3	4.2/2.1	1/.5	.3	3/8	150	667	250	1112	400	1779	60	40/38	18.1/17.2
4P-700	1 & 3	6/3	1.2/.6	.6	1/2	100	445	300	1334	500	2224	63	60/55	27.2/24.9
4P-1000	1 & 3	6.2/3.1	1.2/.6	.6	1/2	250	1112	500	2224	800	3558	63	54/43	24.6/19.6
4P-1400	1* & 3	*/*	3.5/1.8	1.2	1	400	1779	700	3114	1100	4893	70	100/95	45.5/43.1
4P-2000	3	—	4/2	1.6	1 1/2	750	3336	1100	4893	1500	6672	72	98	44.5
4P-3000	3	—	6/3	2.4	2 1/2	1500	6672	2200	9786	3000	13344	74	200	90.7
4P-5000	3	—	6/3	2.4	3	1550	6894	3900	17347	4500	20016	75	225	102.1
4P-10000	3	—	10/5	4	5	4560	20283	8000	35584	10000	44480	76	460	208.7
1200 VIBRATIONS PER MINUTE — 6 POLE														
6P-300	1 & 3	4/2	1.2/.6	.5	1/4	50	222	125	556	250	1112	60	60/55	27.2/24.9
6P-500	1 & 3	4.2/2.1	1.6/.8	.5	1/4	100	445	200	890	400	1779	60	62/58	28.1/26.3
6P-1000	3	—	4/2	1.6	1	350	1557	450	2002	700	3114	72	98	44.5
6P-1500	3	—	6/3	2.4	1 1/2	700	3114	1000	4448	1500	6672	74	200	90.7
6P-2500	3	—	6/3	2.4	2	700	3114	1250	5560	2000	8896	75	225	102.1
6P-5000	3	—	10/5	4	3	2000	8896	3000	13344	4500	20016	76	460	208.7
900 VIBRATIONS PER MINUTE — 8 POLE														
8P-500	3	—	4/2	1.6	1/4	180	801	250	1112	400	1779	65	98	44.5
8P-750	3	—	6/3	2.4	1/4	400	1779	575	2558	800	3558	74	200	90.7
8P-1250	3	—	6/3	2.4	1	400	1779	700	3114	1250	5560	75	225	102.1
8P-2500	3	—	10/5	4	1 1/2	1150	5115	1800	8006	2500	11120	76	460	208.7

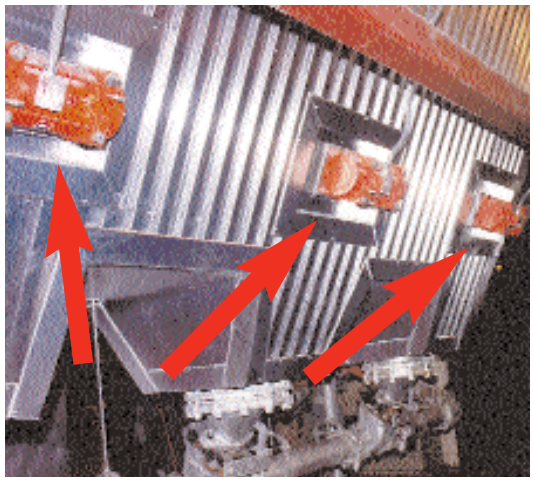
* Consult factory for availability Note: Most Vibrators available in both 50 & 60 cycles. 115 to 575 volt.
** Decibel at 3' (1 meter) on A scale
*** First figure 1 phase units, the other 3 phase units
+N = Centrifugal Force in Newton
Note: Dimensions and data subject to change without notice.

The VIBCO Engineer is at your disposal for supplying you with the recommendations, engineering data, mounting instructions and installation drawings. Our Field Engineers have a thorough knowledge built up through years of practical experience in applied vibration. All recommendations are free and without obligation.

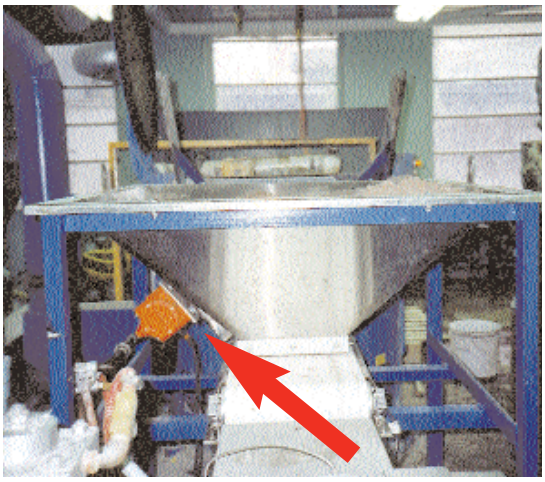
NOISELESS — AS LOW AS 60dB AT 3' ON A-SCALE



Two Model 2P-800's feeding screw conveyor

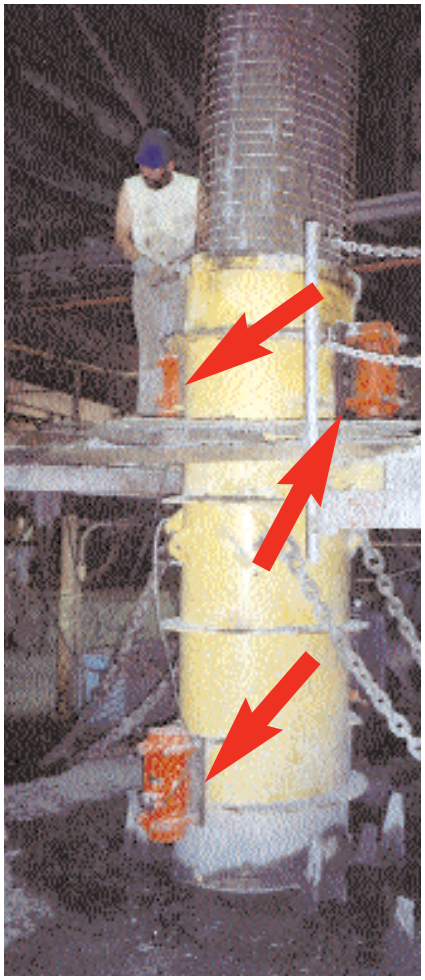


Model 2P-3500 on multiple chemical bins

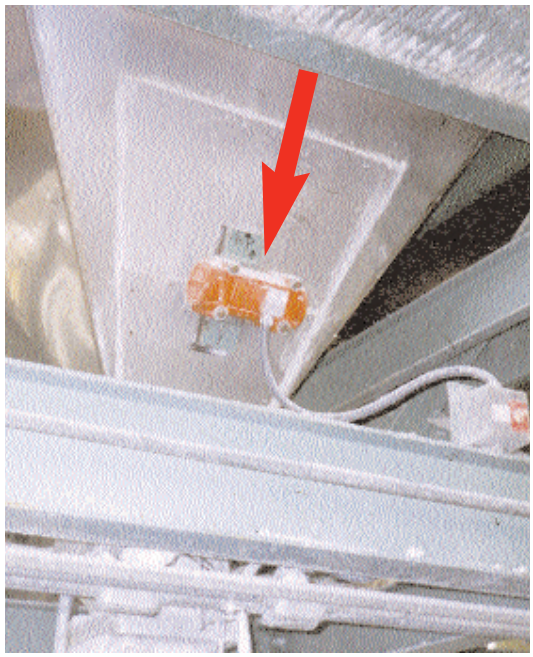


Model 2P-150 on hopper feeding conveyor belt

Vibrators In Action

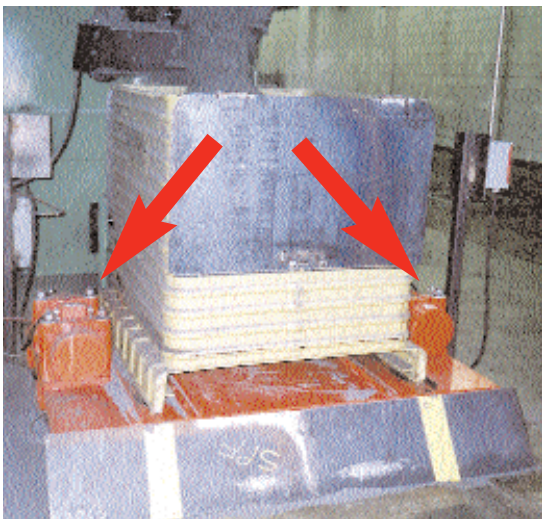


Model 2P-4500 on pipe form



Model 2P-1700 on gypsum board

Two Model 4P-5000's on feeder



Two Model 4P-3000's on gaylord packing table

Model 2P-200 on transfer bin

Call a VIBCO Application Engineer for your application today!

Model SPR, CE, Small

SPR-20 and -21

SPRT-21

SPWT-21, SPWT-60 and -80

MODEL SPR
Small Impact Line

FEATURES:

- COMPACT
- NOISELESS
- CONTINUOUS DUTY
- LIGHTWEIGHT
- STOPS & STARTS EASILY
- CONVENIENT - 115 VOLT PLUG IN

TECHNICAL DATA

Model	Force Impact lbs.	Force Impact N	‡Volt	Amps	Ph.	Speed V.P.M.	Enclosure	Adjustable Speed Option	Wt. lbs.	Wt. kg.	dB*
CE-60***	100	445	115	.3	1	3600	Watertight	Yes	8**	3.6	65
SPR-20	15	67	115	.5	1	1600	Open	Yes	3	1.4	45
SPR-21	20	89	115	.8	1	3200	Open	Yes	3	1.4	48
SPR-40	25	111	115	1.4	1	1600	Tot. Encl. & Fan Cooled	Yes	7	3.2	45
SPR-60&60HD	60	267	115	1.5	1	3200		Partly	7	3.2	48
SPR-80&80HD	80	356	115	1.7	1	3200		Partly	7	3.2	50
SPRT-21	20	89	115	1.4	1	3200	Tot. Encl.	Yes	3	1.4	45
SPRT-60&60HD	60	267	115	1.5	1	3200	Tot. Encl.	Partly	7	3.2	48
SPRT-80&80HD	80	356	115	1.7	1	3200	Tot. Encl.	Partly	7	3.2	50
SPWT-21	20	89	115	1.4	1	3200	Watertight	Yes	7	3.2	45
SPWT-60	60	267	115	1.5	1	3200	Watertight	Partly	7	3.2	48
SPWT-80	80	356	115	1.7	1	3200	Watertight	Partly	7	3.2	50

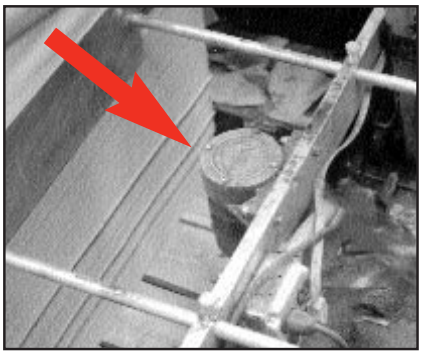
N = Centrifugal force in Newton **5 lbs. Aluminum *dB at 3' (1 meter) on A scale
***CE in aluminum or cast iron housings ‡Most units also available in 230 volt.
Note: Dimensions and data subject to change without notice.

VIBCO's Model SPR, SPRT, SPWT and CE electric motor vibrators are specially developed for the thousands of applications where only a small shake is necessary, but big vibrator reliability is a must. For activating small hoppers, screens, chutes, tables, filling machines, etc. Controlled flow is obtained on all types of materials, including fine powders, flakes, pills, bottle caps and jars, etc. Speed and force can be adjusted on most models with simple rheostats or speed adjusters.

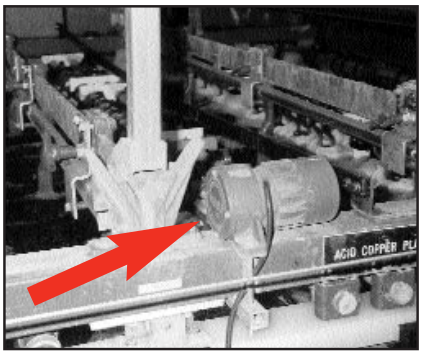
Completely noiseless operation (no more sound than a fan motor) makes these vibrators desirable in applications where noise is irritating or fatiguing for the employee. Most units available in 230 volt 50 or 60 cycles.

Rugged construction permits continuous or repeated start and stop operation in any position.

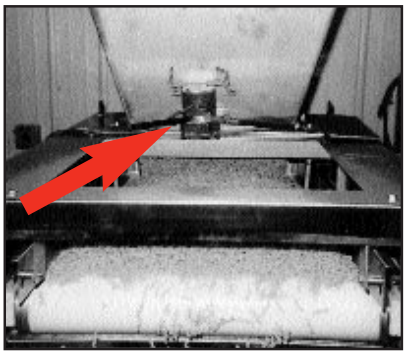
SPR-60HD, 80HD and SPRT-60HD, 80HD and CE are heavy duty units with oversized bearing and cast iron end bell instead of aluminum for extra long life.



SPR-60HD lining sheet paper in print shop.



SPR-80 on circuit board plating tank.



SPR-60 preventing hangups in hopper with pasta feeding weigh belt feeder.

Impact Electric Vibrators

SPR-40, -60, -80
SPR-60HD and 80HD

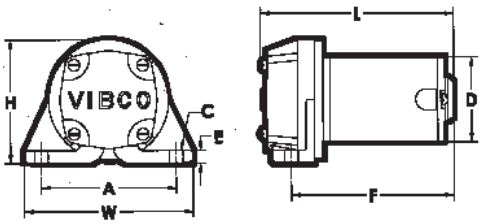
SPRT-60 and -80

CE-60

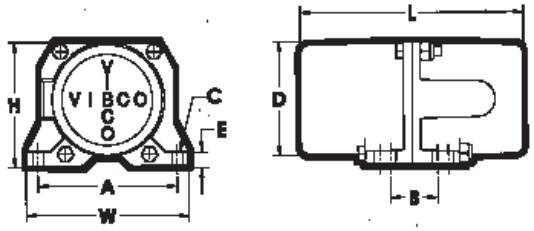
DIMENSIONS

Model	A inch / mm	B inch / mm	C* inch / mm	L inch / mm	W inch / mm	H inch / mm	D inch / mm	E inch / mm	F inch / mm
CE-60	3 5/8 92	1 5/16 33	1/4 6	6 1/16 154	4 3/8 111	3 1/4 83	3 76	7/16 11	—
SPR-20, 21, SPRT-21	4 102	—	3/8 10	5 127	5 127	3 1/2 89	3 1/2 89	7/16 11	4 102
SPR-40, 60, 80 & HD	5 127	—	3/8 10	7 178	6 152	4 1/4 108	4 102	1/2 13	5 7/8 149
SPRT-60, 80 & HD	5 127	—	3/8 10	5 1/2 140	6 152	4 1/4 108	4 3/16 106	1/2 13	4 1/2 114
SPWT-21, 60, 80	4 3/4 121	2 3/4 70	3/8 10	5 3/8 137	5 1/2 140	6 1/2 165	4 1/2 114	5/8 16	—

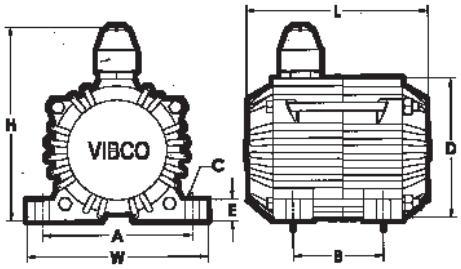
*Bolt Size Note: Dimensions & data subject to change without notice.



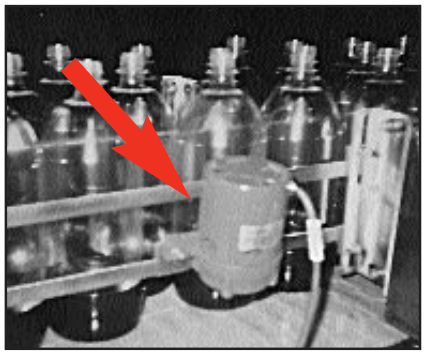
SPR & SPRT



CE

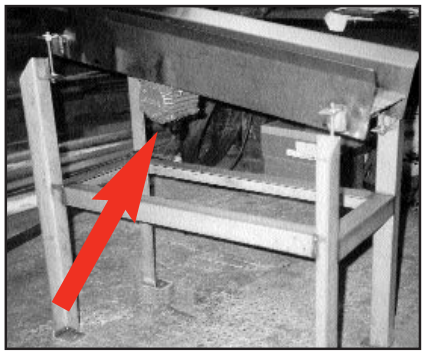


SPWT



SPR-20 prevents plastic bottles from accumulating and sticking on conveyor belt.

SPR-60 on filling machine.



SPWT-80 on screen feeder.

Model US 115/230 Volt High Frequency Electric

Ask for Cat. #8401 or 0103

MODEL US

FEATURES: • HIGH SPEED • RUGGED • SPEED ADJUSTABLE • 115 VOLT PLUG IN

VIBCO's Model US High Frequency line are 115 volt single phase motors with low amperage draw. They can be plugged into any light outlet or operated from field generators. All units are speed adjustable with rheostat or electronic speed controls. US-900 and 1600 have adjustable eccentrics. The US line is, due to the high frequency, rated for intermittent operation. 230 volt available on most models. Consult factory.

HIGH FREQUENCY VIBRATORS IDEAL FOR ALL CONCRETE WORK

FOR CONCRETE PRODUCT
- Faster pouring
- Less cement needed
- Greater density
- Smoother finish
- Faster form removal

FOR VIBRATOR
- Totally enclosed
- High impact
- Light weight
- Assortment of brackets available See page 35 & 36.

Casting Concrete. Model US is ideal both at the precast plant on tables, vaults, septic tanks, patio blocks, steps, etc., and at the construction site giving "architectural" finishes and fireproofing to poured-in-place walls and columns. Ask for Catalog 0103. Model US-900, the most popular unit for septic tanks, burial vaults, step forms, for architectural surface finish and fire proofing columns, casting tables for up to 300 lbs. of product. US-1600 the problem solver - for similar applications as the US-900. See page 35 and 36 for different brackets. Ask for Catalog 8401.

Bins & Weigh-Batchers. The US-450 has become the standard unit throughout the industry for weigh-batchers. The US-700, US-900 and US-1600 for moving powdery and sticky materials in bins and chutes.

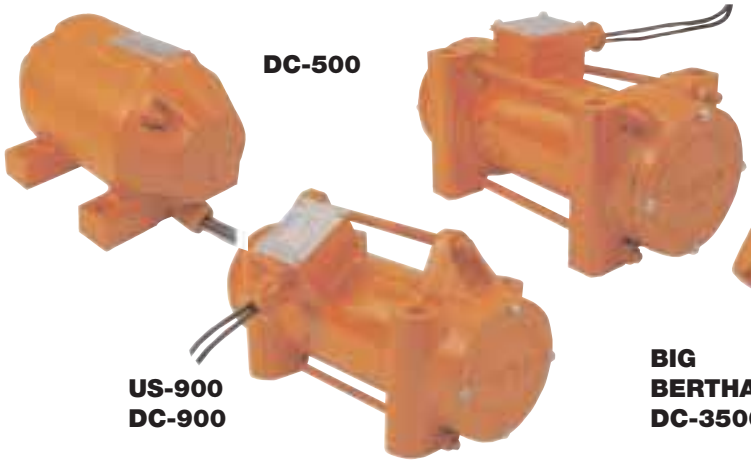
Fatigue and Test Tables. For verifying integrity of electric circuits, removing dangerous residues, detect marginal connections.

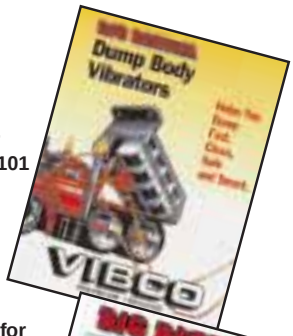
TECHNICAL DATA

Model	Force lbs.	Force N	Amps.**	Volts	Ph.	Max. Speed	dB*	Weight lbs.	Weight kg.	Duty Cycle
US-100	100	445	.65	115 AC-DC	1	10000	78	4	1.8	Int.
US-450	450	2002	3.0	115 AC-DC	1	9000	80	13	5.9	Int.
US-700	700	3115	3.5	115 AC-DC	1	9000	80	20	9.1	Int.
US-900	900	4004	4.5	115 AC-DC	1	10000	85	18	8.2	Int.
US-1600	1600	7118	5.0	115 AC-DC	1	9000	85	20	9.1	Int.
DC-20	20	89	3.7	6 & 12 DC	1	3500	68	3	1.4	Cont.
DC-50	50	223	8	12 & 24 DC	1	3500	71	6	2.72	Cont.
DC-60	60	267	9	12 & 24 DC	1	3500	68	8	3.6	Cont.
DC-100	100	445	12	12 & 24 DC	1	4000	72	4	1.8	Cont.
DC-200	300	1334	14	12 & 24 DC	1	4000	73	8	3.6	Cont.
DC-300	350	1557	16	12 & 24 DC	1	4000	74	9	4	Cont.
DC-450	400	1780	22	12 & 24 DC	1	7000	75	17	7.7	Cont.
DC-600	450	2005	16	12 & 24 DC	1	4000	75	12	5.5	Cont.
DC-700	700	3115	25	12 & 24 DC	1	6000	75	20	9.1	Int.
DC-800	600	2669	30	12 & 24 DC	1	6000	78	20	9.1	Special
DC-1600	1000	4450	32	12 & 24 DC	1	5000	82	30	13.6	Special
DC-3500	3500	15572	60	12 & 24 DC	1	4000	70	36	16.3	Special

Note: The frequency will vary with the load. *Decibel on A-scale at 3' (1 meter) N=Centrifugal force in Newton.
**Amps shown for 12 volt DC (24 volt amps 1/2 of 12 volts) ***230 Volt available on most US-Models Note: Dimensions and data subject to change without notice.

Model DC 12 Volt Battery Operated





Ask for Cat. #0101

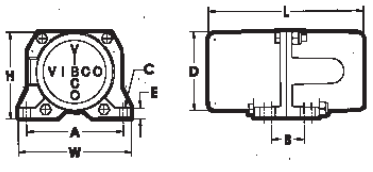
Ask for Cat. #9511

Ask for Cat. #9112

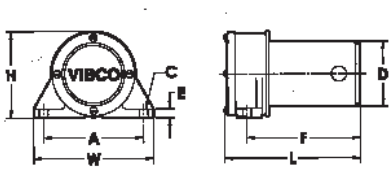
MODEL DC - 12 Volt DC Battery Operated

VIBCO's 12 Volt DC Vibrators are ideal for field or mobile applications. Cleans and aids flow of material from bins and chutes. Insures fast dump of trucks, highway equipment, fertilizer trailers, ready mix trucks, spreaders and concrete pumps.
DC-20 small spreaders & hoppers.
DC-100 hoppers etc. up to 1-1/2 yards.
DC-200 and DC-300 small work horse for landscape equipment & trailer mounted concrete pumps.
DC-500 the choice for truck mounted concrete pumps. Watertight & O-ring sealed for power washdown. DC-60 for trailer mounted pumps.
DC-450 popular on tailgate spreaders, small hoppers, fertilizer and bulk feed trucks, mobile bins and hoppers.
DC-700 has more power per pound than any other vibrator, excellent for use on screening plants, chutes, etc.
DC-900 and DC-1600 for hopper spreaders, large mobile bins, concrete spreaders.
DC-3500 on dump trucks, moving loam and other sticky materials, highway spreaders and concrete placers and pavers, screens and larger storage bins.

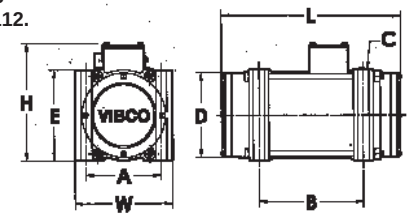
ASK FOR CATALOGS #0101, #9511 and #9112.



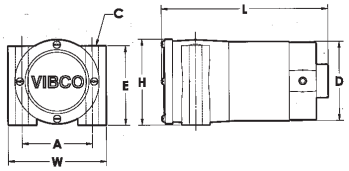
DC-60



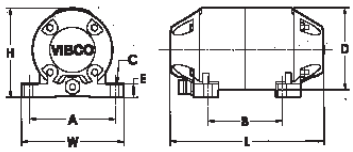
DC-20, DC-50, US & DC-100



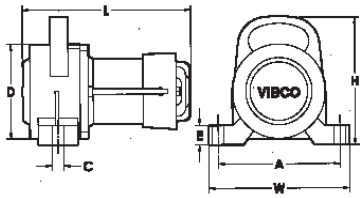
DC-200, DC-300, US & DC-900, 1600



US & DC-450 & 700



DC-500



DC-3500

DIMENSIONS

Model	L	W	H	A	B	C*	D	E
DC-60	5 127	5 127	3½ 89	4 102	—	½ 13	3 76	¾ — 19
DC-20	5¾ 146	5 127	3¾ 94	4 102	—	½ 13	3½ 84	¾ 19
DC-50	5⅝ 162	4½ 114	3½ 83	3⅜ 84	1⅛ 33	⅜ 8	3 76	¾ 19
US-100, DC-100	6¾ 171	5 132	4¾ 120	5 127	—	½ 13	3⅝ 92	—
DC-200	8½ 216	4¾ 120	5 127	3 76	5¾ 146	⅜ 9	3⅝ 92	—
DC-300	9 229	4¾ 120	5 127	3 76	5¾ 146	⅜ 9	3⅝ 92	—
US-450, DC-450	8¾ 219	4¾ 121	4¾ 105	3½ 89	—	½ 13	4 102	6½ 165
US-700, DC-700	7¾ 197	5¾ 143	5½ 133	4½ 114	—	½ 13	5½ 128	6½ 165
DC-500	9 229	6½ 159	5½ 140	5½ 133	4½ 114	⅜ 11	—	—
US-900, DC-900	11½ 293	5½ 140	4½ 108	3½ 89	4½ 108	½ 13	4 102	—
US-1600, DC-1600	11½ 293	5¾ 143	5½ 133	4½ 114	7 178	½ 13	4½ 184	—
DC-3500	12 305	10 254	8 203	6½ 216	—	½ 13	3 76	—

*Bolt Size Note: Dimensions and data subject to change without notice.

Model PX Explosion Proof Electric Vibrators

2PX-450
4PX-700

4PX-5000

2PX-200
4PX-350

4PX-2000

MODEL PX - Explosion Proof

FEATURES:

VIBCO now offers the first American made explosion proof motor vibrator in NEMA 42, 48, 56 and 182 frame sizes.

Model 2PX-200 and 4PX-350 in 42 frame and 2PX-450 and 4PX-700 in 48 frame, are supplied in 3 phase and single phase in Class 1 Group D, Div. 1 & 2.

Model 4PX-2000 in 56 frame and 4PX-5000 in182 frame, are supplied in 3 phase, Class 2 Group F & G. Div. 1 & 2.

The eccentrics have 6 adjustable force settings for easy adjustment to match impact force to applications.

Oversized roller bearings in Models 4PX-2000 & 4PX-5000 assure extra long life. Accessible lubricator nipples make them easy to lubricate. The other models have ball bearings which are pre-lubricated for life.

VIBCO's Heavy Duty Line is classified as Class II Div. 2.

TECHNICAL DATA

Model	Ph.	Amp.	Volt**	V.P.M.	Force (Impact) lbs./N Adjustable Min. lbs.	Min. N	Norm. lbs.	Norm. N	Max. lbs.	Max. N	dB***	Wt. lbs.	Wt. kg.
2PX-200	*1 3	3.4/1.7 1/.5	*115/230* 230/460	3600	150	667	300	335	450	2002	60	20	9.1
2PX-450	1 3	5/2.5 1.6/.8	115/230 230/460	3600	110	489	450	2002	900	4004	62	56	25.5
4PX-350	*3 *3	3.4/1.7 1/.5	*115/230* *230/460	1800	100	445	200	390	300	1335	62	20	9.1
4PX-700	1 3	6/3 1.4/.7	115/230 230/460	1800	300	1335	500	2225	700	3114	64	58	26.4
4PX-2000	3	3.6/1.8	230/460	1800	625	2781	1200	5340	2000	8900	72	130	59
4PX-5000	3	5.2/2.6	230/460	1800	1700	7565	4800	21360	6500	29250	75	240	109

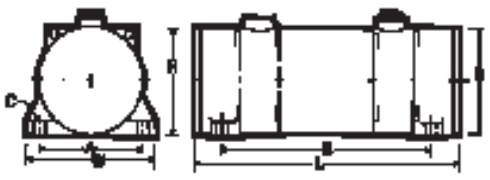
*Consult factory for availability. ** 575 Volt also available on most models. ***dB at 3' (1 meter) on A-scale.

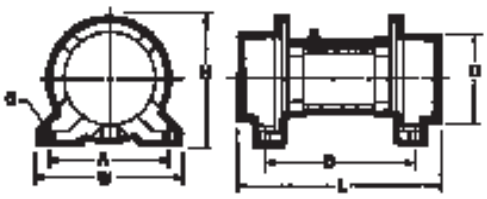
DIMENSIONS

Model	L inch	L mm	W inch	W mm	H inch	H mm	A inch	A mm	B inch	B mm	C* inch	C* mm	D inch	D mm
2PX-200	14 7/8	378	10 1/8	257	5 1/4	133	5 1/2	140	11 3/4	298	1/2	13	4 1/2	114
2PX-450	14 1/2	368	11 1/4	286	6 1/8	156	6 5/8	168	9 5/8	244	5/8	16	5 1/2	140
4PX-350	16 7/8	429	10 1/8	257	5 1/4	133	5 1/2	140	11 3/4	298	1/2	13	4 1/2	114
4PX-700	14 1/2	368	11 1/4	286	6 1/8	156	6 5/8	168	9 5/8	244	5/8	16	5 1/2	140
4PX-2000	18	457	13 7/8	352	11 1/8	283	10	254	13 11/16	348	1	25.4	7 7/8	200
4PX-5000	20 1/42	521	15 7/8	403	14 1/2	368	13	330	17	432	1	25.4	10 3/4	273

*Bolt size to be used Note: Dimensions and data subject to change without notice.

2PX-200 & 450
4PX-350 & 700





4PX-2000
4PX-5000

Model SFC - End Mount
Model FC - Fan Cooled
Electric Vibrators

FEATURES:

- TOTALLY ENCLOSED
- CONTINUOUS DUTY
- ADJUSTABLE ECCENTRICS
- OUTSIDE FAN-COOLED FOR HIGH HEAT APPLICATIONS
- CAN TAKE ANY NUMBER OF STARTS & STOPS
- SINGLE & 3 PHASE MODELS

SFC-100

FC-400

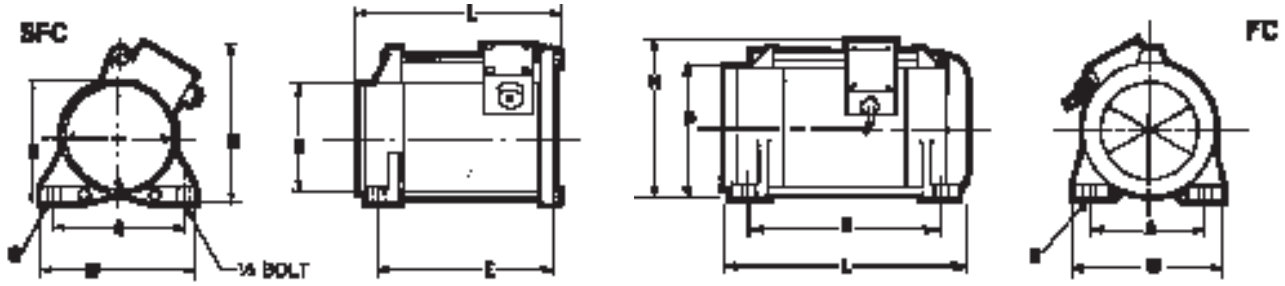
VIBCO'S POPULAR SFC VIBRATORS ARE:
Favorite for use indoors and outdoors where a lightweight, totally enclosed vibrator is required to keep materials moving to automatic productions machines, in small to medium size bins, chutes, screens, etc. Ease of mounting, low amperage draw, makes these units popular for O.E.M. applications.

MODEL FC with high capacity external fan and heat resistant winding makes the FC units ideal for applications where ambient temperature is high or heat is transferred through bin skin. Consult VIBCO for application limits.

TECHNICAL DATA

Model	Ph.	Amp.	Volt***	V.P.M.**	Force (Impact) lbs./N Adjustable Min. lbs.	Min. N	Norm. lbs.	Norm. N	Max. lbs.	Max. N	dB*	Wt. lbs.	Wt. kg.
SFC-100	1 3	4.2/2.1 1.6/.8	115/230 230/460	3600	60	267	100	445	150	667	60	25 21	11.3 9.5
SFC-300	1 3	4.2/2.1 1.6/.8	115/230 230/460	3600	100	445	220	979	300	1335	62	27 23	12.2 10.4
FC-100	3 3	4.2/2.0 1.6/.8	115/230 230/460	3600	100	445	220	979	300	1335	62	34 31	15.4 14.1
FC-400	1 3	4.2/2.1 1.6/.8	115/230 230/460	3600	150	667	300	1335	450	2002	64	35 32	15.9 14.5

* dB at 3' (1 meter) on A-scale N = Centrifugal force in Newton
** 1800 V.P.M. (Vibrations Per Minute) available
*** 575 Volt available
Note: Dimensions and data subject to change without notice.



DIMENSIONS

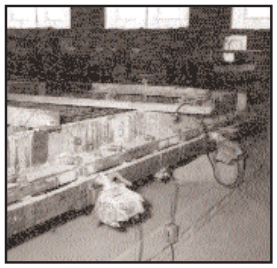
Model	L inch / mm	W inch / mm	H inch / mm	A inch / mm	B inch / mm	C* inch / mm	D inch / mm	E inch / mm
SFC	8¼ 210	6½ 165	6¾ 171	5¼ 133	—	½ 12	4½ 114	7 178
FC	10 254	7½ 191	6¾ 171	5¼ 133	7½ 190	½ 12	5⅛ 130	—

*Bolt size to be used Note: Dimensions & data subject to change without notice.

Mounting Brackets

Weigh Batcher with
Model 55-1-1/2 Piston

Septic Tank with US-900 &
Wedge Bracket



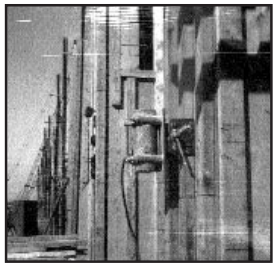
US-900 with Wedge Bracket
on precast mold

Mounting Plates & Channels

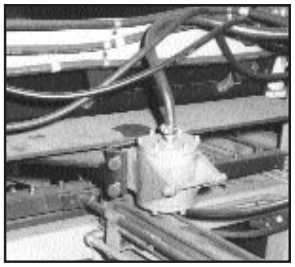
UWF-3 Heavy Duty
Wedge Bracket

UWF-1 - Female Bracket for
Wedge Form Bracket

Burial Vault — US 450T
with Pin Bracket

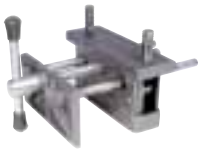


US-900 with wooden
form clamp on column



SVR-5500 with Shoe
Bracket casting panels

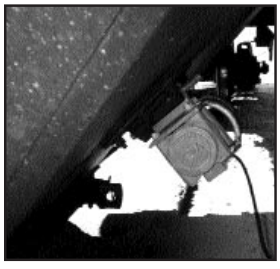
Pin-Bracket with
UPF-Female



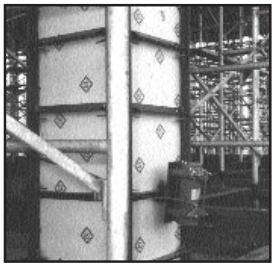
Wood-Form Bracket

Adapter Bracket-For-SB Shoe Bracket

SVRLS-5500
on precast form



Electrical 2P-450 on
Railroad Car Wedge



US-1600 with “Clamp-On” bracket on
wooden form with steel reinforcing

Lug-Bracket - LC-1 Lug-Bracket - LC-2

Rail-Road Car Wedge Bracket

Clamp-On Bracket

Mounting Brackets

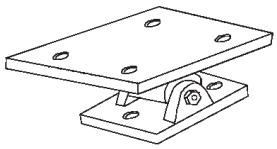
STANDARD

Model	Mounting Bracket	Clamp Block	Car Shaker & Form Bracket Clamp-On Bracket	Car Shaker Wedge Bracket Wedge Type Bracket	Adapter Plate Form & Bin SB-Shoe Bracket	Wedge Type Form Bracket UWF-Female	Pin Form Bracket UPF-Female	Wooden Form Bracket
2P-75	VMM-11 (2)		VMC-81 (8)					
2P-100	VMM-111 (2)		VMC-82 (8)					
2P-150	VMM-12 (2)		VMC-83 (8)					
2P-200, 4P-350,	VMM-2 (7)		VMC-2 (18)	VMW-2 (16)	VMH-2 (7)			VMF-2 (18)
2P-450, 4P-700*								
4P-1000*, 1 ph	VMM-4 (8)		VMC-4 (20)	VMW-4 (18)	VMH-4 (10)			VMF-4 (20)
6P-300*, 6P-500* 3 ph	VMM-3 (8)		VMC-3 (20)	VMW-3 (18)	VMH-3 (10)			VMF-3 (20)
2P-800 1 ph	VMM-61 (10)		VMC-61 (22)	VMW-61 (20)	VMH-61 (10)			
3 ph	VMM-5 (9)		VMC-4 (22)	VMW-5 (20)	VMH-5 (10)			
2P-1700 3 ph	VMM-6 (10)		VMC-6 (22)					
4P-1400 3 ph	VMM-6 (10)		VMC-6 (22)					
2P-2500, 2P-3500 3 ph	VMM-7 (11)		VMC-7 (24)					
2P-4500, 4P-2000 3 ph	VMM-7 (10)		VMC-7 (22)					
6P-1000 3 ph	VMM-6 (10)		VMC-6 (22)					
8P-500 3 ph	VMM-6 (10)		VMC-6 (22)					
2P-5500, 4P-3000 & 5000	VMM-8 (16)							
6P-1500 & 2500	VMM-8 (16)							
8P-750 & 1200	VMM-8 (16)							
SPR, SPRT-20, 21,	SPM-1 (2)	C-2 (3)						
40, 60 & 80	SPM-2 (3)	C-2 (3)						
SPWT	SPWM (3)		SPWC (8)					
SCR-100, US-100 & DC-100	UM-1 (2)	C-2 (3)						
SCR-200, US-450 DC-450 & DC-700	UM-2 (4)	C-4 (4)			UA-1 (5)	UW-4* (8)	UW-1 (5)	
SCR-500	SCRM-2 (8)		SCRC-2 (20)	SCRW-2 (18)	SCRA-2 (10)			SCRF-2 (20)
SCR-1000	SCRM-1 (8)		SCRC-1 (20)	SCRW-1 (18)	SCRA-1 (10)			SCRF-1 (20)
SFC	SFCM (4)	C-4 (4)			SFCH (5)			
FC	FCM-1 (5)		FBB-1 (15)		FCH-1 (7)			USF-2 (15)
US-900, DC-900	UM-3 (6)		UC-1 (15)		UA-2 (7)	UW-2* (8)		USF-3 (15)
US-1600, DC-1600	UC-4 (6)		UC-2 (16)		UA-3 (7)	UW-3* (8)		
BB, BBS, FBS		C-1						
B, BV, BVS-130	BVM-1	C-2						
B, BV, BVS-190	BVM-2	C-2						
B, BV, BVS-250	BVM-3	C-2					BVP-5	
B, BV, BVS-320	BVM-4	C-3			BVH-4	BVT-4	BVP-4	BVF-4
B, BV, BVS-380	BVM-5	C-4			BVH-3	BVT-3	BVP-3	BVF-3
BVS-440/510	BVM-6	C-4	BVC-3		BVH-2	BVT-2	BVP-2	BVF-2
BVS-510F	BCM-61		BVC-2		BVH-21	BVT-21	BVP-21	BVF-21
BVS-570	BVM-7	C-4	BVC-1	BVW-1	BVH-1	BVT-1	BVP-1	BVF-1
V, VS-130	VSM-1	C-2						
VS-190	VSM-2	C-2				VST-3	VSP-3	
VS-250	VSM-3	C-2				VST-2	VSP-2	VSF-2
VS-320, V-320	VSM-3	C-3			VH-1	VST-2	VSP-1	VSF-1
VS-380, V-380	VSM-4	C-4			VH-2	VST-1		VSF-3
VS-510	VSM-5		VC-1		VH-3	VST-4		
CCF-2000	CCM-3		CCFC-3	CCFW-3	CCFH-3	CCW-2		
CCF-5000	CCM-1		CCFC-1	CCFW-1	CCFH-1	CCW-3		
CCL-5000			CCFC-2	CCFW-2	CCFH-2			
SVR-4000	SVM-1		SVC-1		SVA-1	SVH-1	SVP-1	SVF-1
SVR-5500			SVC-2	SVW-2		SVH-2		
SVRF-5500	SVM-2		SVC-4	SVW-4				
SVRL, SVRLS-5500, 6500, 8000			CCFC-2	SVW-2	CCFH-1			
SVR-8000	SVM-2		SVC-3	SVW-3				
PF, HF-800. 1200, 1500	PFM-1		PFC-1	PFW-1	SVA-6 PFA-1			
PF, HF-3000	PFM-2		PFC-2	PFW-2	PFA-2			

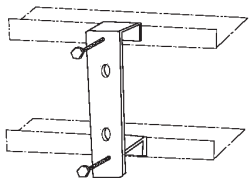
( ) INDICATES WEIGHT IN LBS. *USE 1 PHASE BRACKETS FOR BOTH 1 & 3 PHASE UNITS.

SPECIAL BRACKETS

Pipe-Brackets Available For Most Pipe Sizes



Linear Force Bracket for Feeders & Tables



Special Clamp-On Bracket

VIBCO ENGINEERS will design special brackets for your applications

Portable Lug-Type Vibrators

ELECTRIC HYDRAULIC PNEUMATIC

USL-900 & -1600

2PL-900 & -1600

HL-3000

LC-1

SVRL & SVRLS -5500, -6500 & -8000

SVRLS -4000

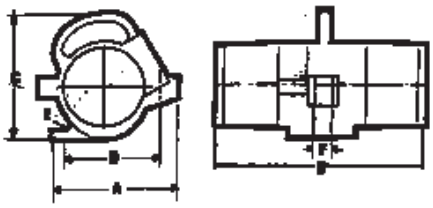
CCL-5000

LC-2

VIBCO's lug-type portable vibrator fits either the LC-1 or LC-2 lug bracket. They assure you of 100% vibration transfer and are an easy and inexpensive way to utilize one vibrator for many applications, from bin to bin, tote box to tote box, or concrete form to concrete form. Vibco offers a choice of electric, pneumatic, or hydraulic operation.

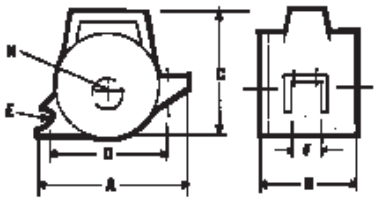
TECHNICAL DATA

Electric Models	Phase	1 phase Amperes at Volt 115/230	3 phase Amperes at Volt 230/460	3 phase Amperes at Volt 575	H.P.	Force (Impact) lbs./N Adjustable Min. lbs.	Min. N	Norm. lbs.	Norm. N	Max. lbs.	Max. N	dB**	Weight lbs.	Weight kg.	RPM
2PL-900	1 & 3	3/1.5	1/.5	—	1/3	15	667	300	1335	450	2002	62	30	13.6	3600
2PL-1600	1 & 3	5/2.5	1.2/.6	—	1/2	110	489	450	2002	900	4004	64	48	21.8	3600
USL-900	1	4.5/–	—	—	—	600	2669	900	4004	1100	4894	85	18	8.2	10000
USL-1600	1	5.0/–	—	—	—	1100	4894	1600	7118	1800	8008	85	20	9.1	9000



2PL USL

Pneumatic Models	Weight lbs.	Weight kg.	80 PSI VPM*	80 PSI Force lbs.	80 PSI Force N	90 PSI VPM*	90 PSI Force lbs.	90 PSI Force N	100 PSI VPM*	100 PSI Force lbs.	100 PSI Force N	CFM*	dB**
SVRLS-4000	23	10.4	11500	3600	16000	12500	4000	17800	13500	4400	19500	40	78
SVRLS-5500	43	19.5	9000	4950	22000	10000	5500	24500	10500	6100	27100	54	78
SVRLS-6500	45	20.4	8800	5575	24800	9500	6500	28900	10000	7200	32000	58	80
SVRLS-8000	47	21.3	8500	7625	33900	8700	8000	35600	9500	9550	42500	62	82
SVRL-5500	37	16.8	9000	4950	22000	10800	5500	24500	10500	6100	27100	56	98
SVRL-6500	39	17.8	8800	5575	24800	9500	6500	28900	10000	7200	32000	60	98
SVRL-8000	41	18.6	8500	7625	33900	8700	8000	35600	9500	9550	42500	63	98
			60 PSI VPM*	60 PSI Force lbs.	60 PSI Force N	80 PSI VPM*	80 PSI Force lbs.	80 PSI Force N					
CCL-2000	23	10.5	880	880	3914	6000	2000	8900				35	78
CCL-5000	48	21.8	2200	2200	9785	6000	5000	22245				40	75



SVRLS HL

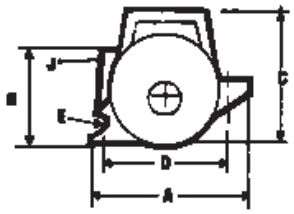
Hydraulic Models	Weight lbs.	Weight kg.	Avg. PSI (max. 3000 PSI)	VPM*	GPM (max.)	Force lbs.	Force N	dB**
HL-3000	39	17.7	1000	5000	3.2	3400	15124	76

*Frequency and air consumption will vary with load. **dB a 3' (1 meter) on A scale N = Centrifugal force in Newton.

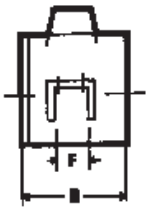
DIMENSIONS

Model	A inch/model	B inch/model	C inch/model	D inch/model	E inch/model	F inch/model	H inch/model	J inch/model	K inch/model	Brackets
2PL-900	7 178	12 305	7 178	5 1/2 140	1 25	–	–	–	1 1/16 27	LC-2
2PL-1600	9 1/2 241	11 5/8 279	8 7/8 225	6 5/8 168	1 25	1 1/16 27	–	–	–	LC-1
USL-900	7 1/2 191	11 279	7 1/4 184	4 3/4 121	3/4 19	7/8 22	–	–	–	LC-2
USL-1600	7 7/8 200	11 279	7 1/4 164	4 3/4 121	3/4 19	7/8 22	–	–	–	LC-2
SVRLS-4000	7 178	7 3/8 187	7 1/2 191	6 152	3/8 10	7/8 22	3/4 19	–	–	LC-2
SVRLS-5500, 6500 & 8000	9 1/2 241	8 1/16 205	9 1/4 235	7 3/4 197	1 25	1 1/4 32	3/4 19	–	–	LC-1
SVRL-5500, 6500 & 8000	9 1/2 241	6 1/8 156	9 1/4 235	7 3/4 197	1 25	1 1/4 32	3/4 19	–	–	LC-1
CCL-2000	7 178	8 1/16 205	7 1/4 164	5 15/16 151	3/4 19	3/4 19	4 1/8 105	3/4-NPT	7 3/4 197	LC-2
CCL-5000	9 3/8 238	8 5/8 219	8 5/8 219	8 203	1 25	1 1/4 32	5 1/4 133	1-NPT	8 1/2 216	LC-1
HL-3000	9 1/2 241	11 1/4 286	9 1/4 235	7 3/4 197	1 25	1 1/4 32	–	–	–	LC-1

Note: Dimensions and data subject to change without notice.

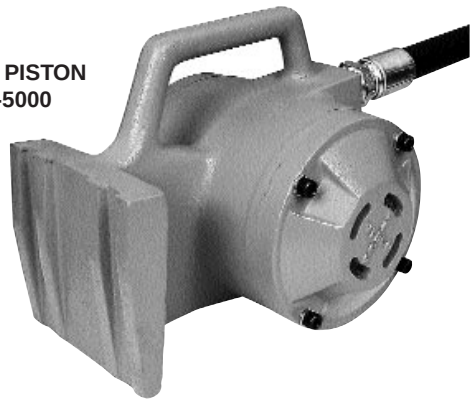


CC



Railroad Carshakers

ROTARY PISTON
CCW-5000



ROTARY ROLLER
SVRWS-5500,
SVRWS-6500

Ask for Catalog #9126

FEATURES:

- **PORTABLE • POWERFUL • QUIET • RUGGED • RELIABLE**
- **QUICK MOUNT! Clamp-on or Wedge • SAFE • LOW COST**
- **LOW MAINTENANCE**

YOUR BEST CHOICE . . .

ROTARY PISTON - CCW-5000

Your best choice of all pneumatic railroad carshakers. This patented unit developed by VIBCO accomplishes 3 vital functions:

1. It will empty the most stubborn materials.
2. It is silent, no more sound than an electric motor. (72-75 dB)
3. Low air consumption compared to other pneumatic units.

Other features are: No lubrication needed: Can easily be repaired by maintenance department.

HIGH FREQUENCY AIR - SVRWS

Your second best choice for railroad carshakers, these units will move the most stubborn materials. The silent SVRWS (80-85 dB) with wedge head comes in 2 sizes, SVRWS-5500 and 6500.

Virtually no material can stand up to the high force and 10000 VPM (vibrations per minute) these units create.

The high frequency units can also be supplied with clamp-on brackets, SVRC-5500, 6500 & 8000.

For more information see Catalog #9126.

PISTON AIR

Model 44 carshaker has wedge bracket to fit car's female Dove-tail receptacle. Available in powerful 3" bore sizes to help evacuate hopper cars quickly.

The lightweight, ease of portability, low cost and high forces of Model 44 carshaker has proven highly desirable for the small to medium consumer. See page 18 for technical data under 3" piston vibrators.

BIG BUSTER

Big Buster carshakers provide high force at low frequency. The smaller units are supplied with wedge bracket PFW-1500, and with built-in clamp-on bracket as PC-3500 and PC-8000. For more information, see page 21 & 22.

ELECTRIC

The VIBCO electric carshakers use the heavy duty line electric - 2P vibrators with their heavy duty reliability and performance. Single phase operation offered up to model 2P-800, three phase in all models. Wedge bracket to fit female receptacle on railroad car offered up to model 2P-800; clamp-on bracket available for all models. all models have overload protection and adjustable eccentrics providing flexibility to meet changes brought about by changes brought about by changes in density of car contents. See page 25-28 for technical data.

MODEL VMW ON
WEDGE BRACKET

MODEL VMC ON
CLAMP BRACKET

MODEL PC-3500

MODEL 44-3

Unload Railroad Hopper Cars Faster & Cleaner with Less Labor . . .

SIMPLE RULES FOR SELECTING YOUR CARSHAKER

	MATERIAL IN R.R. CAR
GROUP 1	Cement, flour, carbon black, bone black, aluminum shot.
GROUP 2	"After" Vibration (for cleaning car) Cement, sugar, flour, chemical salts (no moisture), corn grits, arsenic, barley hops, carbon black, borax, fluoride, gypsum, sodic sulphate, peanuts, sodium nitrate, semolina, tri-sodium phosphate and the like materials.
GROUP 3	Salts, molasses, iron ore, malt (if sticky) potash, bauxite, calcium carbide, crushed marble, and the like materials.
GROUP 4	Sand, stone, asphalt, stone dust, fly-ash, salt, coal, clay-lime-lumps, and the like materials.

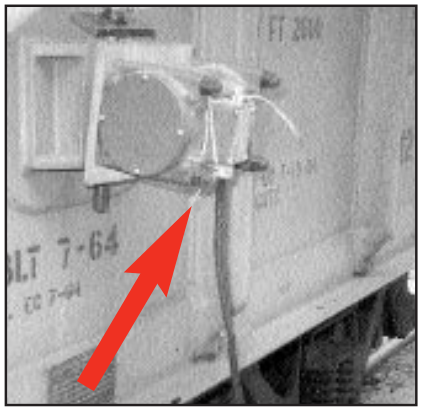
ELECTRICALLY OPERATED

Model	Consisting of Vibrator	Bracket*****	Electric* Power	Weight Lbs.	Used For Group	dB**
VMC-450	2P-450***	Clamp-On	1 & 3 Phase	50	1	70
VMC-1000	4P-1000****	Clamp-On	1 & 3 Phase	52	1	70
VMW-450	2P-450	Wedge	1 & 3 Phase	48	1	70
VMW-700, 1000	4P-700, 4P-1000	Wedge	1 & 3 Phase	50	1	70
VMC-800	2P-800	Clamp-On	1 & 3 Phase	85	2	75
VMW-800	2P-800	Wedge	1 & 3 Phase	75	2	75
VMC-1700	2P-1700	Clamp-On	3 Phase	90	3	78
VMC-2500	2P-2500	Clamp-On	3 Phase	98	4	80

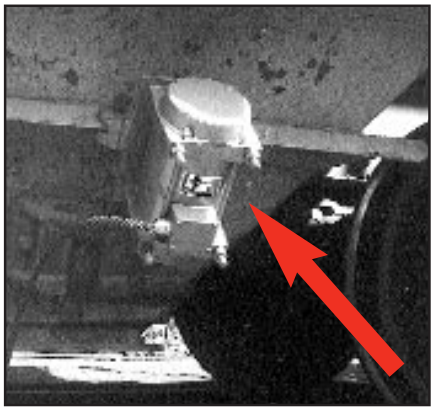
AIR OPERATED

Model	Vibrator	Bracket	CFM/80 PSI	Lbs.	Group	dB**
CCW-5000	Rotary Piston	Wedge	35	48	1-2	72-75
44-3	3" Piston	Wedge	30	50	1-2	93-95
CCW-5000	Rotary Piston	Wedge	35	48	2-3	72-75
PFW-1500	PF-1500	Wedge	21	55	1-2	80-85
PFC-1500	PF-1500	Clamp-On	21	63	1-2	80-85
CCW-5000	Rotary Piston	Wedge	35	48	2-3	72-75
SVRWS-5500, 6500	High-Frequency	Wedge	50	48	2-3	78-85
44-4	3" L-Piston	Wedge	50	60	2-3	90-95
PC-3500	PC-3500	Clamp-On	39	70	2-3	80-85
SVRWS-5500 and 6500	SVRS-Silent High Frequency	Wedge	50	48	3-4	78-85
PC-3500	PC-3500	Clamp-On	39	51	3-4	80-85
SVRC-5500, 6500 and 8000	SVR-High Frequency	Clamp-On	55	58	3-4	93-95

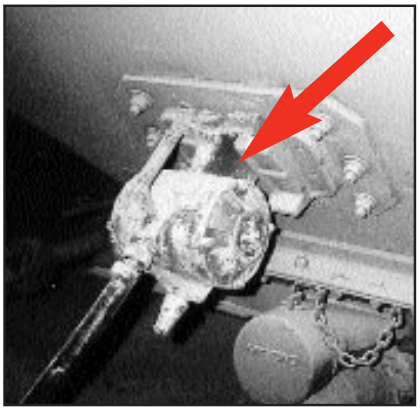
*115 or 230 volt 1 phase; 230, 460, 575 volt 3 phase.
**Decibel at 1 meter on A-scale.
***2P-450 for fine to granular materials
****4P-1000 for lumpy or stringy materials
*****When possible use wedge bracket over clamp-on for better vibration transfer



VMW 450 in flour car wedge.

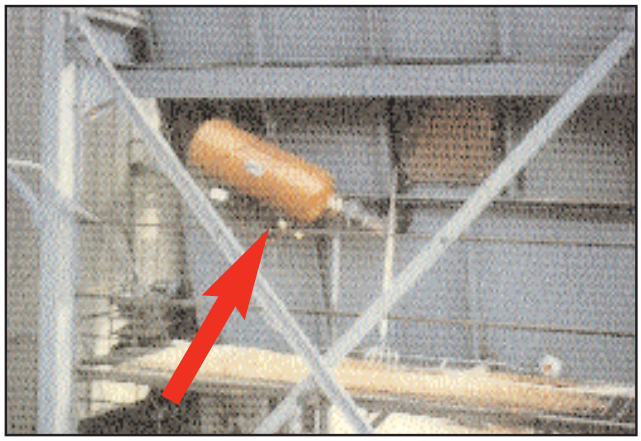


VMC-800 on hopper pocket.

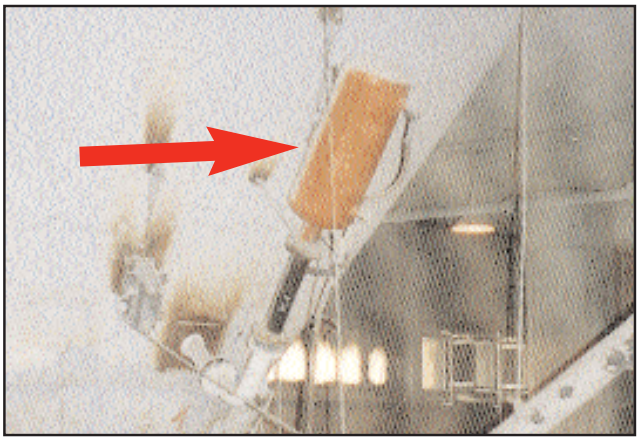


CCW-5000 on railroad hopper car.

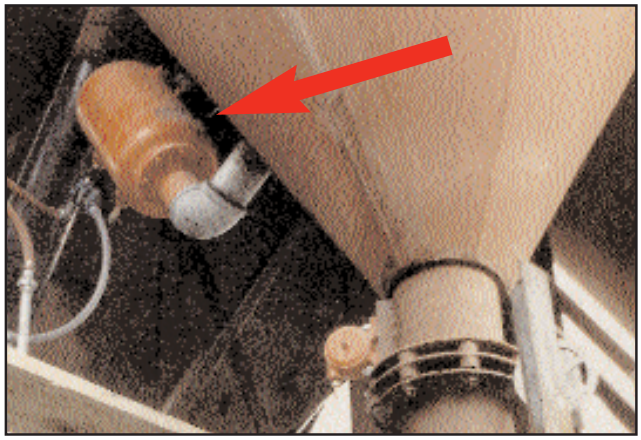
VIBCO'S AIR CANNONS ON THE JOB



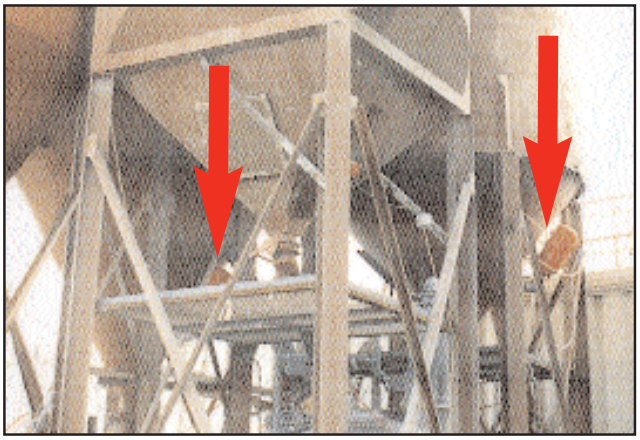
TWO ABS-4-5 AIR CANNONS ON FEED BIN: Company used cannons to maintain a continuous feed of bark and wood chips to fire boiler. No bridging or packing over screw conveyors occurred.



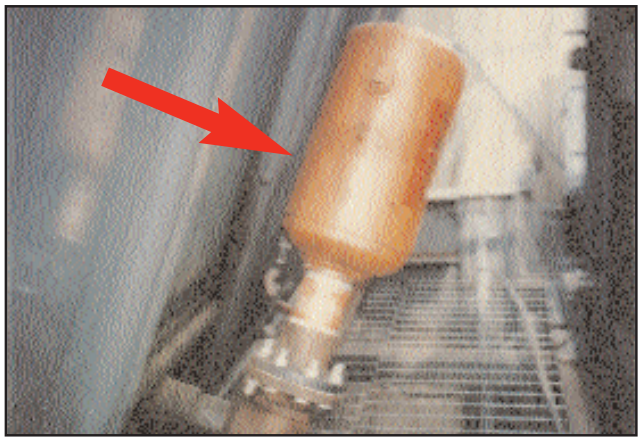
ABS-4-5 AIR CANNON ON CEMENT SILO: Long pipe was used to eliminate aerated cement from backing up in discharge pipe.



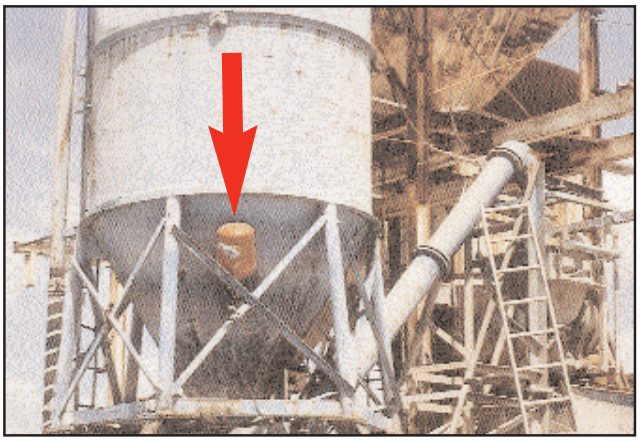
AIR CANNON & AIR VIBRATOR COMBO: Air Cannon moves material to feed chute where VS-320 air turbine keeps material moving.



ABS-4-2 ON WHEAT GLUTEN BIN: Material would cake up making discharge impossible. Continuous aeration eliminated this problem.

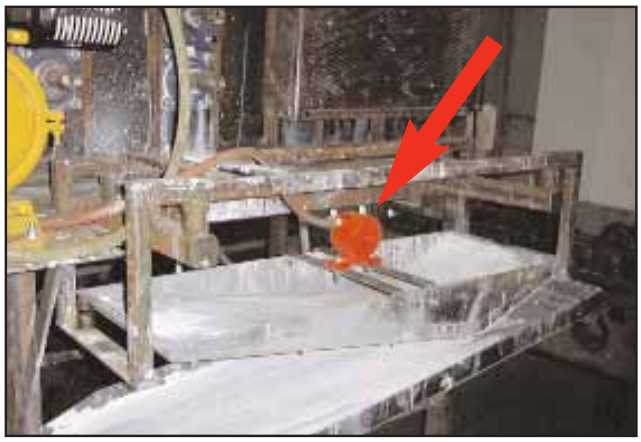


HOGGED FUEL BIN HAS 4 ABS-4-5: Lumber company installed air cannons to move the hogged fuel to the internal agitators reducing boiler down time.



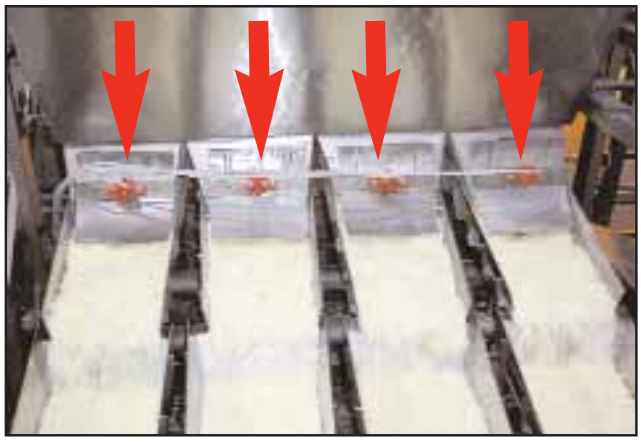
ABS-2 ON CEMENT HOPPER: Continuous blasting kept cement aerated and free flowing.

More VIBCO VIBRATORS IN ACTION



VS-320 SILENT TURBINE VIBRATOR ON PAINT SLURRY reduced surface tension and increased product flow significantly so paint no longer built up on slurry.

MLTSS-130 STAINLESS STEEL TURBINE VIBRATOR ON TRANSITION CONE FEEDER keeps baby carrots from clogging feeder cone and meets sanitary requirements for food processing application.



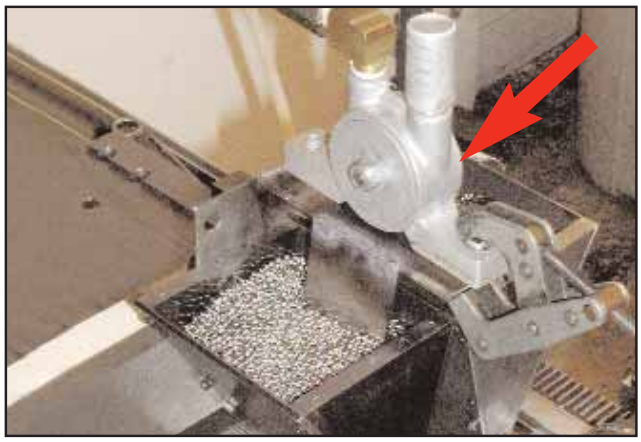
BVS-190 SILENT TURBINE VIBRATORS ON CHEESE HOPPERS helped with material flow and increased daily production levels.

BVS-320 SILENT TURBINE VIBRATOR ON MOBILE BIN reduced batch contamination issues and clean up time. daily production increased significantly.

VS-510 SILENT TURBINE VIBRATOR ON CONCRETE SCREED eliminated blemishes from ball vibrator lubricant leaks and reduced noise levels significantly.

BBS-130 SILENT TURBINE VIBRATOR ON BOWL FEEDER reduced noise to acceptable level and kept product contaminant-free because no lubrication needed.

More VIBCO VIBRATORS IN ACTION



BVS-130 SILENT TURBINE VIBRATOR ON CHUTE produces a smooth flow of ball bearings to the feeder tray below.

BVS-570 SILENT TURBINE VIBRATOR ON REACTOR WITH HEAT MOUNT keeps lead oxide from building up on the cover. Three tier special mount keeps vibrators from the heat and operating in critical application.

BVS-250 SILENT TURBINE VIBRATOR ON FILLING STATION increased fill rates and daily production by eliminating clogging of chutes.

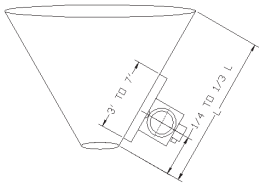
FBS-160 SILENT TURBINE VIBRATOR ON LOADING SPOUT reduced noise levels and increased employee productivity. More installations planned!

VS-100 SILENT TURBINE VIBRATOR ON BELT FEEDER keeps vaccine bottles in line so they feed through the lane reduction without getting stuck or breaking.

CCF-2000 SILENT TURBINE VIBRATOR ON FEEDER TUBE increased material flow and keeps it consistent. No more lost man hours to manual unclogging.

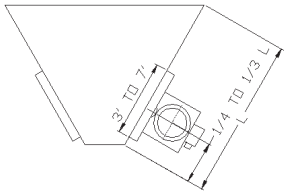
Engineering Data & Applications

TYPICAL VIBRATOR MOUNTING



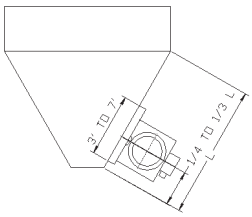
1. CONICAL HOPPERS:

Mount vibrator (by channel-iron stiffener 3'-7' long*) to hopper wall from 1/4 to 1/3 the distance from the discharge to the top. Should a second vibrator be necessary, it should be mounted diametrically opposite and approximately 1/2 up the wall.



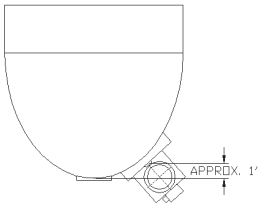
2. RECTANGULAR HOPPERS:

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. Mount as per paragraph 1.



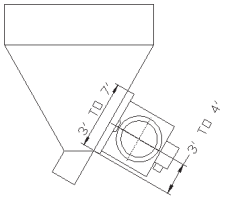
3. RECTANGULAR BINS WITH HOPPER BOTTOMS:

Usually requires larger force vibrators (than above) because of additional "head" load of material. Locate vibrator 1/4 to 1/3 distance up sloping section and mount as in paragraphs 1 & 2.



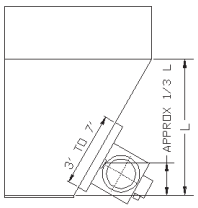
4. PARABOLIC BINS OR HOPPERS:

Mount vibrator within 1-foot of each discharge opening and in line with center of opening.



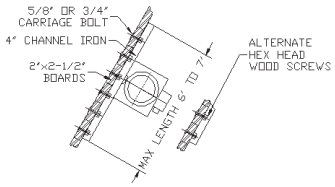
5. BINS WITH SLOPING CHUTE DISCHARGE:

Vibrator is mounted 1/8 to 1/6 distance up bin wall that is contiguous with under side of chute. This lower mounting position puts vibrator close to bin discharge throat and assures vibration transference into chute.



6. BIN OR HOPPER WITH VERTICAL SIDE:

Mount vibrator on wall with least slope in similar manner as in paragraph 3.



*For instruction on stiffening of bins and mounting procedures ask for Vibrator Mounting Instructions.

NOTE: for other applications not covered here please consult factory for recommendations. This is a free service and without obligation to you.

How to Select the Proper Vibrator in Three Easy Steps

1. **DETERMINE NEEDED VIBRATOR FORCE FOR YOUR APPLICATION**
2. **FIND AVAILABLE VIBRATOR MODELS**
3. **SELECT ELECTRIC, PNEUMATIC OR HYDRAULIC OPERATION.**

1. DETERMINE NEEDED VIBRATOR CENTRIFUGAL FORCE (IMPACT) FOR YOUR APPLICATION

A. BINS, HOPPERS

To move the material in a bin or hopper, the friction between the material and the bin skin has to be broken. Once this is done the material cannot cling to the bin sides and it will flow out through the discharge. The vibrator force needed to accomplish this, is for 80% of all applications, very 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 sides has to be broken. DO NOT CALCULATE THE TOTAL WEIGHT, ONLY WHAT IS IN THE TRANSITION PART.
For CONICAL BINS, calculate as follows: .261 x dia.^{2} x height x material density in lbs/cu. ft.
For RECTANGULAR BINS, length x width x height x 1/3 x material density.

When the weight has been calculated, divide by 10. The figure you get is the force or impact needed on your vibrator _____ lbs. Continue with paragraph B.
For example: The conical part of a 25 ton bin contains 7000 lbs. Divide 7000 by 10, you need a vibrator with 700 lbs. of centrifugal force or impact. Find suitable vibrator under Paragraph B.

NOTE: Additional considerations when sizing vibrator to bins.

1. If bin side angle is below 30º, select next larger vibrator.
2. If bin thickness is extra heavy (see table under section B), select next larger vibrator.
3. On real sticky and hard to move materials, it is better to use two (2) small vibrators instead of a large one (find the smaller one by figuring half the material weight.)

B. VIBRATING TABLES

1. PACKING MATERIAL

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).

For packing or settling materials, use a vibrator with an impact force of (1.5) to 2 times larger than the weight of the material plus container. Find suitable vibrator under Paragraph 2.

C. VIBRATING SCREENS

Rule of Thumb: for self-cleaning screen use a vibrator with a centrifugal force (impact) four (4) times the weight of the material plus the weight of the screen.

NOTE: Coarse and lumpy materials respond best to 3600 VPM (vibrations per minute), powdery and dry materials, 1800 VPM, sticky and wet materials, over 3600 VPM.

D. CONSOLIDATING CONCRETE

Rule of Thumb: For 3" "slump" concrete use a vibrator with the same force (impact) as the weight of concrete and form. For 1-2" slump concrete, an additional 30-50% impact is needed. For dry mixes (0-slump) add 100-200%.

NOTE: FOR ADDITIONAL SIZING INFORMATION, SEE PAGES 35 & 36 for suitable bracketry. Find suitable vibrator under paragraph B. Ask for Bulletin 0103 and 8401.

E. RAILROAD CARSHAKERS: SIZING, SEE PAGE 41 & 42.

F. MATCH PLATE - FOUNDRY: SIZING, SEE PAGE 11, 13 & 17.

G. FOR SPECIAL APPLICATIONS AND QUESTIONS CONTACT VIBCO FOR FREE RECOMMENDATION.

VIBRATOR SELECTION CONT.

2. FIND AVAILABLE VIBRATOR MODELS

From the table below, draw a line across from the force calculated in paragraph A. You will find you have a choice of several vibrators, both electric, pneumatic and hydraulic models. List them below and continue with Paragraph C.

MODEL:____

To continue with the example - 700 lbs. of vibrator force is needed. Draw a line straight across from 700 lbs. The line will cross the force ranges of suitable vibrators: Electric Models 2P-450; 2P-800; 4P-700; 4P-1000; US-900; SCR-1000; and Pneumatic Models BVS & VS-380; BV & V-380; 50-2L; 50-2LS; PF-800. Now continue with Paragraph C to make final selection.

	ELECTRIC MODELS (PAGE NO.)									PNEUMATIC MODELS					HYDRAULIC MODELS		
Vibrator Force or Impact Lbs.	2P Page 24-28	4P Page 24-28	6P Page 24-28	8P Page 24-28	SPR Page 29-30	US Page 31-32	SFC Page 34	FC Page 34	SCR Page 23-24	TURBINE Page 3-12	BALL Page 13-14	PISTON Page 15-18	SVR Page 19-20	BIG BUSTER Pge 21-22	TURBINE Page 21-22	BIG BUSTER Page 21-22	BIN SKIN Thickness Max.
10									SCR-50/60; SCR-100	BVS-60 VS, BVS-100	BV-60 BB, V-100	5/8, 3/4					20 Ga.
20					SPR 20 & 21				SCR-50/60; SCR-100	BVS-60 VS, BVS-100; BVS-130 VS, BBS-130	BV-60 BB, V-100; BV-130, BB, V-130	5/8, 3/4; 1 & 1-1/4					20 Ga.
40	2P-75				SPR 40				SCR-50/60; SCR-100	BVS-60 VS, BVS-100; BVS-130 VS, BBS-130	BV-60 BB, V-100; BV-130, BB, V-130	5/8, 3/4; 1 & 1-1/4			B-130		1/16
60	2P-75				SPR 60	US-100	SFC-100	FC-100	SCR-50/60; SCR-100	BVS-130 VS, BBS-130	BV-130, BB, V-130	5/8, 3/4; 1-1/4 - 1-1/2S; 1 & 1-1/4			B-130		1/8
80	2P-75; 2P-100				SPR 80	US-100	SFC-100	FC-100	SCR-100	BBS-160; BVS-130 VS, BBS-130; BVS-190, VS-190	BB-160; BV-130, BB, V-130	1-1/4 - 1-1/2S; 1 & 1-1/4			B-130		3/16
100	2P-75; 2P-100					US-100	SFC-100	FC-100; FC-200	SCR-100	BBS-160; BVS-190, VS-190	BB-160; BV-190, V-190	1-1/4 - 1-1/2S; 1-1/2			B-130; B-190		1/4
150	2P-150; 2P-200	4P-350	6P-300; 6P-500	8P-500		US-450; US-300	SFC-100; SFC-300	FC-300; FC-200	SCR-1000; SCR-200/300	BBS-160; BVS-190, VS-190	BB-160; BV-190, V-190	1-1/4 - 1-1/2S; 1-1/2L or LS, 2S; 1-1/2			B-190		5/16
200	2P-150; 2P-200	4P-350	6P-300; 6P-500	8P-500		US-450; US-300	SFC-300	FC-300; FC-200	SCR-1000; SCR-200/300	BVS-250, VS-250; BVS-190, VS-190	BV-250, V-250; BV-190, V-190	1-1/2L or LS, 2S; 1-1/2			B-250; B-190		5/16
300	2P-450; 2P-200	4P-350	6P-300; 6P-500	8P-500		US-450; US-300	SFC-300	FC-300; FC-400	SCR-1000; SCR-200/300	BVS-250, VS-250; BVS-190, VS-190	BV-250, V-250; BV-190, V-190	1-1/2L or LS, 2S; 1-1/2			B-250; B-190		3/8
400	2P-450; 2P-200	4P-700	6P-500	8P-500		US-450		FC-300; FC-400	SCR-1000; SCR-400/500	BVS-250, VS-250; BVS-320, VS-320	BV-250, V-250; BV-320, V-320	1-1/2L or LS, 2S; 2, 2LS			B-250; B-190		3/8
500	2P-450	4P-700	6P-500	8P-500; 6P-1000		US-450; US-900		FC-400	SCR-1000; SCR-400/500	BVS-250, VS-250; BVS-320, VS-320	BV-380, V-380; BV-320, V-320	1-1/2L or LS, 2S; 2, 2LS			B-250; B-190		7/16
600	2P-450; 2P-800	4P-700; 4P-1000		6P-1000		US-900			SCR-1000; SCR-400/500	BVS-380 VS-380; BVS-320, VS-320	BV-380, V-380; BV-320, V-320	2L, 3S; 2, 2LS		PF-800	B-250; B-320	LF-1000	7/16
700	2P-450; 2P-800	4P-700; 4P-1000		6P-1000		US-900			SCR-1000	BVS-380 VS-380; BVS-320, VS-320	BV-380, V-380; BV-320, V-320	2L, 3S; 2, 2LS		PF-800	B-320	LF-1000	1/2
800	2P-450; 2P-800	4P-1400; 4P-1000		6P-1000		US-1600; US-900			SCR-1000	BVS-380 VS-380; BVS-570; BVS-510 VS-510	BV-380, V-380	2L, 3S; 2, 2LS; 3, 3LS		PF-800; PF-1200		LF-1000	1/2
900	2P-450; 2P-800	4P-1400; 4P-1000		6P-1000		US-1600			SCR-1000	BVS-570; BVS-510 VS-510		2L, 3S; 3, 3LS		PF-1500; PF-1200		LF-1000	1/2
1000	2P-800	4P-1400; 4P-1000		6P-1000		US-1600			SCR-1000	BVS-570		4, 3L; 3, 3LS		PF-1500; PF-1200		HF-800; LF-1000	1/2
1200	2P-1700; 2P-800	4P-1400; 4P-2000				US-1600				BVS-570; CCF-2000		4, 3L; 3, 3LS		PF-1500; PF-1200		HF-800; LHS-1500/HF-1200	1/2
1400	2P-1700; 2P-800	4P-1400; 4P-2000				US-1600				CCF-2000		4, 3L	SVRS-SVR-3000, SVR-4000	PF-1500; PC-PF-3000		HF-800; LHS-1500/HF-1200	3/4
1600	2P-1700; 2P-800	4P-3000; 4P-2000				US-1600				CCF-2000			SVRS-SVR-3000, SVR-4000	PC-PF-3500; PC-PF-3000		HF-800; HF-1500; LHS-1500/HF-1200	3/4
2000	2P-1700; 2P-2500	4P-3000; 4P-2000								CCF-2000			SVRS-SVR-3000, SVR-4000	PC-PF-3500; PC-PF-3000		HF-1500; LHS-1500/HF-1200	3/4
2500	2P-1700; 2P-2500	4P-3000								CCF-5000			SVRS-SVR-3000, SVR-4000; SVRS-SVR-5500	PC-PF-3500; PC-PF-3000		HF-1500; HC/HF-3000, LH-3500	3/4
3000	2P-2500	4P-3000; 4P-5000								CCF-5000			SVRS-SVR-3000, SVR-4000; SVRS-SVR-5500	PC-PF-3500; PC-PF-3000		HF-1500; HC/HF-3000, LH-3500	1
3500	2P-2500	4P-10000; 4P-5000								CCF-5000			SVRS-SVR-3000, SVR-4000; SVRS-SVR-5500	PC-PF-3500		HC/HF-3000, LH-3500	1
4000		4P-10000; 4P-5000								CCF-5000			SVRS-SVR-3000, SVR-4000; SVRS-SVR-5500				1-1/4
4500		4P-10000; 4P-5000								CCF-5000			SVR-8000; SVRS-SVR-5500				1-1/4
5000		4P-10000; 4P-5000								CCF-5000			SVR-8000; SVRS-SVR-5500				1-1/4
6000		4P-10000											SVR-8000				1-1/4
7000		4P-10000											SVR-8000				1-1/4
8000		4P-10000											SVR-8000				1-1/4

VIBRATOR SELECTION CONT.

3. SELECT ELECTRIC, PNEUMATIC or HYDRAULIC OPERATION

ELECTRIC VIBRATOR MODEL SELECTOR

ELECTRICAL DATA	MODEL 2P	4P	6P	8P	SPR	US	SFC	FC	SCR
115 volt 1 phase	x	x	x	x	x	x	x	x	x
230 volt 1 phase	x	x	x	x	x		x	x	x
Any voltage 3 phase	x	x	x	x			x	x	
50 cycles	x	x	x	x	x	x	x	x	x
Continuous duty	x	x	x	x	x		x	x	x
Intermittent duty						x			
More than 20 stops & starts per hr. 3 phase	x	x	x	x			x	x	
More than 20 stops & starts per hr. 1 phase	z	z	z	z	x	x	z	z	
Totally enclosed	x	x	x	x	z	z	x	x	x
Outside Fan Cooled							z	x	
Open construction					z	z			
Built in overload protection 1 phase	x	x	x	x	x	x	x	x	x
Adjustable speed					z	x			x
Adjustable eccentric	x	x	x	x	z	x	x	x	x
Decibel at 3' on A scale	60	60	60	60	48	90	62	62	65
APPLICATION									
Outside	x	x	x	x	x	x	x	x	x
Water splash	x	x	x	x	z	z	x	x	x
Powder in air dry	x	x	x	x	z	z	z	z	x
Powder in air sticky	x	x	x	x		z			z
Powder in air metallic	x	x	x	x		z			z
High temperature	z	z	z	z			z	x	
Bins with coarse mtr.	x				x	x	x	x	x
Bins with tine mtr.	x				x	x	x	x	x
Bins lumpy or sticky mtr.		x	x						
Bins with stringy mtr.		x	x	x					
Bins powdery & sticky mtr.						x			
Packing coarse mtr.	x						x	x	x
Packing fine mtr.		x	x	x					x
Stringy-fluffy mtr.			x	x					
Concrete	x					x			
Screens		x	x	x					x
Feeder - chutes	x	x	x	x			x	x	x

Z - SEE BULLETIN COVERING THE MODEL LINE (or consult VIBCO)

PNEUMATIC VIBRATOR MODEL SELECTION

	PNEUMATIC Turbine	Ball	Piston	SVR	SVRS	Big Buster
Decibel at 3' on A scale*	72.78	85-95	90-95	95-105	80-85	80-90
Air consumption**	2	3	1	6	5	4
Repair Cost**	1	3	2	4	5	6
Maintenance Cost*	1	3	2	4	5	6
Purchasing Cost	2	3	1	4	5	6
Patented Design	x			x	x	x
Lubrication Required		x	x	x	x	x
No lubrication required	x					
Requires clean air			x	x	x	x
Tapped exhaust for leading away exhaust air	x	x	x		z	x
High temp.		x				
Steam -pressure cleaning	x	x		x		
Concrete application	x			x	x	

*AVERAGE READING **LOWEST NUMBER BEST
Example: Piston lowest in air consumption, then Turbine, Ball, Big Buster, SCRS & SVR

GENERAL COMMENTS:

In general, electric vibrators are initially higher in cost than pneumatic vibrators; however, the operation cost is considerably less and the difference in price and installation cost is recaptured in a few months of operation. The electric units have the lowest noise readings, 60-70 dB, no more sound than an electric motor. The life expectancy is 2-3 times that of an air operated unit. The life of an air operated unit is, to a great extent, determined by the cleanness of the compressed air and the operating pressure. Maximum operating pressure is 80 PSI, above 80 PSI, the life of the pneumatic vibrator diminishes rapidly. The dBa reading on piston vibrators is 80-110, on ball vibrators, 80-115. The ONLY pneumatic units with a dBa reading of 60-80 are the TURBINE VIBRATORS. The least air consuming are the piston vibrators, then the turbine, ball and SVR high frequency vibrators. As a general rule: for standard applications, limit your selection of vibrators to the SCR Electric Vibrator Line and the Turbine Pneumatic Vibrators. They will give you the latest in vibration technology and design with the lowest noise, the best life, the least maintenance, and the lowest energy consumption.

The hydraulic vibrators are fast gaining acceptance but still primarily used on OEM equipment for food and related products.

For additional selection considerations, see table for electric vibrators and pneumatic vibrators located on this page. Also look up the pages for each specific vibrator for additional information.

To continue with our example: Choose electric model 2P-450 or 2P-800 if bin contains fine granular material (see also page 25-28): 4P-700 or 4P-1000 if bin contains lumpy or stringy material (page 25-28): US-900 if bin contains light powdery or real sticky material (cement, concrete, molasses, etc., page 31-32; SCR-1000 (page 23-24) when different materials are used in the bin and different frequencies or forces are needed. For additional considerations, also see "Electric Vibrator Model Selection" table on this page.

When choosing a pneumatic vibrator, see table on this page "Pneumatic Vibrator Model Selection". The turbine BVS and VS-380 (page 3-12) is noiseless, meets OSHA, has low maintenance cost, and needs no lubrication, (all other pneumatic vibrators need lubrication).

Difference between BVS and VS: In BVS, the air exhaust is threaded allowing connection of a hose or pipe; permitting the exhaust air to be exhausted outside work area; or used with different mufflers. The VS has a built-in muffler and exhausts the air into the atmosphere where the vibrator is mounted.

Ball vibrators BV-380 or V-380 (page 13-14): Noise level increases rapidly as ball and race wears. Use in high temperature applications. Difference between BV and V is the same as with BVS and VS.

Piston models 50-2L and 50-2LS are used for low cost and low air consumption, must be lubricated. Pistons are preferable on feeders and packing tables. Comes in silent and non-silent models, (page 15-18).

Big Buster, PF-800 is primarily used for railroad car shakers where a high intermittent force is needed (pages 21-22).

VIBCO OFFERS A WIDE SELECTION OF ELECTRIC,

VIBRATOR FORCE OR IMPACT IN LBS. SEE PAGE 47-50*

20 40 60 80 100 150 200 300 400 500

ELECTRIC SMALL IMPACT LINE PAGE 29-30

SPR, SPRT, SPRWT

20 | 40 | 60 | 80

CE-60

SPR

SPRT

SPWT

100

SCR ADJUSTABLE SPEED & FORCE PAGE 23-24

SCR-100 | SCR-200 | SCR-300 | 350 | 400 | SCR-500

2P, 4P HEAVY DUTY LINE PAGE 25-28

2P-75 | 2P-100 | 2P-150 | 2P-200 | 2P-450

4P-350 | 4P-600/700 | 4P-1000

SFC & FC PAGE 34

SFC-100 | SFC-300, FC-100 | FC-300

SFC-100

US-HIGH FREQUENCY LINE DC - 12 VOLT DC BATTERY OPERATED

PAGE 31-32

US-100 | US-450

DC-100 | DC-450, DC-200, DC-300 | DC-500

PNEUMATIC

SILENT TURBINE VIBRATORS PAGE 5-12

BBS-160

VS-320

BBS, FBS, VS-100, BVS-60 | BBS,FBS,VS, BVS-130 | VS-BVS-160 | VS-BVS-190 | VS-BVS-250 | VS-BVS-320

BBS-160 | BBS-190

BALL VIBRATORS PAGE 13-14

V-130

V-190

BV-320

BB-100, V-100 BV-60 | BB,V, BV-130 | BB-160 | BB, BV, V-190 | BV, V-250 | BV-320

10 & 20-1

PISTON VIBRATORS PAGE 15-18

10-5/8 | 10-3/4 | 10-1 | 50, 55-1,1-1/4S | 10-1-1/4 | 50, 55-1-1/4 | 50, 55-1-1/2S | 50, 55 - 1-1/2 | 50 - 1-1/2L, LS | 50, 55 - 2S | 50, 55 - 2

HIGH FREQUENCY PAGE 19-20

BIG BUSTER PNEUMATIC PAGE 21-22

HYDRAULIC

PAGE 22

B-190

B-250

***Follow selected vibrator force line vertically to find vibrators to select from with same force output.**

FOR EXAMPLE: I need 560 lbs. of force – draw a vertical line from the 560 Force Output Value. Your choice of vibrators are: Electric Model SCR-1000 with adjustable speed & force; Model 2P-450 heavy duty; Model 4P-1000 - 1800 RPM heavy duty; Model US-700 high frequency; DC-700 12 Volt DC;

PNEUMATIC, HYDRAULIC VIBRATORS*

560 600 700 800 900 1000 2000 3000 4000 5000

NOTE: For additional information on vibrator selection see page 48.

SCR-1000

SCR-1000

2P-100

2P-450

2P-800 | 1700 | 2P-2500 | 2P-4500 | 2P-5500

4P-1400 | 4P-3000 | 4P-5000

US-450

US-1600

US-700 | US-900 | US-1600

DC-700 | DC-900 | DC-1600 | DC-3500

BVS-570

CCF-5000

VS-BVS-380 | VS-BVS-510 | BVS-570 | CC 2000 | CCF, CCL, CCW-5000

V-320 | BV, V-380

55-2

50-3

50-2L | 50,55-3S | 50-3L, 50-4

50,55-3 | 50-3LS

SVRLS-5500

SVRFS-5500

PC-3500

SVR, SVRS | 4000 | SVR,S-5500 | SVR,S-6500

PF-800 | PF-1200 | PF-1500 | PF, PC-3500

LH-1000 | LH-1800 | HL-3000

B-320 | HLF-1300 | HF-1500 | HC,HF-3500

HLF-700 | HF-800 | HF-1200 | LH-3500

LF-700

Pneumatic VS or BVS-320 Silent Turbine; V-320 Ball Vibrator; Model 55-2 or 50-2 Piston Vibrator; Model HLF-700 Hydraulic. Which vibrator to choose: First select Electric, Pneumatic or Hydraulic; then see page 50 for further selection data or call an application engineer at VIBCO for advice.