Portable and Railcar Vibrators



Easy to Operate in the Toughest Environments

Versatile, safe, durable and user friendly, our Portable and Railcar Vibrators are perfect for applications where a permanent installation is not possible. These vibrators are available in an array of models, sizes, forces and frequencies making them ideal for concrete forms, refractories, railcar and truck trailer hoppers, plant bins, other types of hoppers or any application that demands vibrator portability.

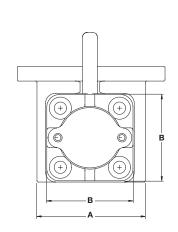
- Ductile iron or alloy steel construction built to last, even with frequent movement between brackets
- Eliminates dangers of climbing into bins and hoppers to aid material flow
- Pneumatic power to enable operation in hazardous environments
- Female brackets designed to handle multiple vibrator models for varied frequency or force
- Compact design allows easy handling by one person
- Carts available for handling larger railcar vibrators

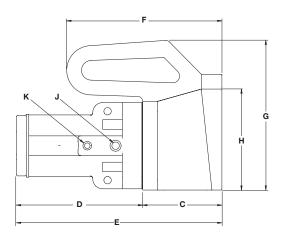
Portable and Railcar Vibrators

VMRR MODELS

Our VMRR Air-Piston Portable Vibrators are designed with wedge-style heads that fit the female brackets found on most railcar hoppers. Most frequently used for unloading compacted material in railcar hoppers, these vibrators help reduce unloading time by 30 percent. They also eliminate the hazards and time associated with climbing around railroad cars to dislodge material. Our 1300, 1350 and 1400 models fit our LSRR-FL brackets, which are the standard size found on railcars. The smaller 1200 model with LSRR-FS bracket is frequently used as a portable vibrator for plant bins and hoppers, concrete molds and refractories.







| MODEL | PISTON Diameter | A | В | С | D | E | F | G | н | J | K | WEIGHT | PISTON WEIGHT | AIR Consumption @ 60 PSIG 4.1 BAR | FREQUENCY @ 60 PSIG 4.1 BAR |
|--------------|--------------------|---------------|-----------------|---------------|----------------------------------|---------------------|---------|---------|---------------|---|--------------|---------------------|--------------------|--|-----------------------------------|
| 1200 | 2" | 5½" | 4½" | 3¾" | 6½" | 10¼" | 7" | 7½" | 5" | 3/8" | ½" | 33 lbs | 2.5 lbs | 10 cfm | 4,500 VPM |
| VMRR | 5.1 cm | 14 cm | 11.4 cm | 9.5 cm | 16.5 cm | 25.9 cm | 17.8 cm | 19.1 cm | 12.7 cm | 1 cm | .64 cm | 14.97 kg | 1.14 kg | 283 lpm | |
| 1300 | 3" | 6" | 5¾" | 5¼" | 8 ⁵ / ₁₆ " | 13% ₁₆ " | 7" | 11½" | 7" | ½" | 3/8" | 76 lbs | 10 lbs | 18.5 cfm | 3,350 VPM |
| VMRR | 7.6 cm | 15.2 cm | 14.6 cm | 13.3 cm | 21.1 cm | 34.4 cm | 17.8 cm | 29.2 cm | 17.8 cm | 1.3 cm | .95 cm | 34.47 kg | 4.55 kg | 524 lpm | |
| 1350 | 3½" | 6" | 6" | 5¼" | 10" | 15¼" | 7" | 11½" | 7" | ½" | ½" | 93 lbs | 14.5lbs | 21 cfm | 2,400 VPM |
| VMRR | 8.9 cm | 15.2 cm | 15.2 cm | 13.3 cm | 25.4 cm | 38.7 cm | 17.8 cm | 29.2 cm | 17.8 cm | 1.3 cm | 1.3 cm | 42.18 kg | 6.59 kg | 595 lpm | |
| 1400 VMRR | 4" 10.2 cm | 6" 15.2 cm | 85%" 21.9 cm | 6" 15.2 cm | 11%" 30.2 cm | 177/8" 45.4 cm | * | * | 7" 17.8 cm | ³ / ₄ " 1.9 cm | ½" 1.3 cm | 165 lbs 74.84 kg | 30 lbs 13.64 kg | 25 cfm 708 lpm | 2,100 VPM |



Portable and Railcar Vibrator Lifters



See this product in action on our YouTube Channel!

"THE RHINO" PNEUMATIC POWERED RAILCAR VIBRATOR LIFTER

"The Rhino" Railcar Vibrator Lifter from The Arnold Company, has been redesigned to accommodate Cleveland Vibrator's 1300, 1350, and 1400 VMRR Piston Railcar Vibrators.

This lifter is powered by a pneumatic motor which operates a hydraulic system designed to safely and easily maneuver heavy railcar vibrators ranging in weight from 76 lbs. to 165 lbs. and male wedge brackets into the cradle of hopper cars. It allows a secure option to relieve workers from manually handling the heavy vibrators while providing greater mobility and heavier load handling capabilities.

The VMRR Vibrator operates off of the same pneumatic line as the lifter, for ease of simultaneous operation. The user simply flips a switch to shift air power from the lifter's hydraulics to the vibrator.



MANUAL RAILCAR VIBRATOR CART

Designed specifically for use with any of our VMRR models, our railcar vibrator cart makes attachment, maneuvering and removal an easy one-person job. Efficient and affordable, our cart is manufactured in house and it allows for quick and easy vibrator install and removal from the bottom discharge under the rail car hopper.



MANUAL VACUUM MOUNT VIBRATOR CART

Ideal for use where permanent installation is not possible, Cleveland Vibrator's VMSAC Vacuum Mount Vibrator provides vibration and enables bulk material unloading without the use of a female bracket. Our largest unit weighs 70+ lbs., so we can relieve employee heavy lifting with our manual cart that is manufactured in-house and is specially designed to fit Cleveland Vibrator's VMSAC Vacuum Mount Series.

Vacuum Mounted Vibrator Series

Our Vacuum Mount Series offers a safe and portable option that eliminates dangers of climbing into bins and hoppers to aid material flow.

The VMSAC Vacuum Mounted Vibrator uses a onepiece, ductile iron housing and spring-less designed vibrator which ensures a long effective life. Clip in safety cables are provided with all Vacuum Mounted Vibrator units. Single Stage Vacuum Generator only uses 1.55 CFM air consumption.

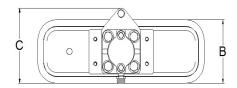
In addition to significantly reducing noise, air cushioning in our pneumatic Vibra-Might VMSAC Vibrators, prevents metal-to-metal impact—making them ideal for operation in hazardous areas. The Vacuum Mount unit provides the same vibrational force as a typical VMSAC unit without the hassle of permanently installing a mounting channel. This product can handle light to moderate material loads.

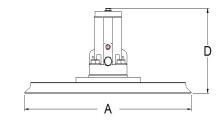


See this product in action on our YouTube Channel!

VMSAC VACUUM MOUNTED VIBRATOR RECOMMENDED APPLICATIONS

- Eliminate clogging, bridging, sticking and ratholing in bulk bins and hoppers where noise is an issue
- Excellent option to aid the flow of materials in portable bins
- Agitating dust collectors and/or filters to remove material building up and promote better operation and maintenance
- Unload hopper cars and trucks without the installation of a female bracket
- Fill and densify bulk materials in loading stations
- Bin, railcar, truck and trailer cleanout stations







| MODEL | PISTON DIA. | PISTON WT. (lbs.) | UNIT WT. (lbs.) | A | В | С | D | AIR CNSMP SCFM/LPM (Ipm = liter per min) @ 60 psig 4.1 bar | FREQUENCY VPM (vibrations per min.) @ 60 psig 4.1 bar |
|-------------------------------------|----------------|----------------------|--------------------|--|--|-------------------------------|-------------------|---|--|
| 1125 VMSAC Vacuum Mount Vibrator | 1¼" 3.2 cm | 1.5 | 10 | 11%" 29.5 cm | 4%" 11.1 cm | N/A | 6¼" 17.1 cm | 9.55 SCFM 227 LPM | 3,050 |
| 1200 VMSAC Vacuum Mount Vibrator | 2" 5.1 cm | 2.5 | 22 | 19 ⁵ / ₁₆ " 49.2 cm | 6¾" 16.2 cm | 7% ₁₆ " 19.2 cm | 81/16" 21.7 cm | 10.55 SCFM 311 LPM | 2,600 |
| 1300 VMSAC Vacuum Mount Vibrator | 3" 7.6 cm | 10 | 64 | 20½" 51.75 cm | 11 ⁷ / ₈ " 30.16 cm | N/A | 10¾" 26.35 cm | 23.05 SCFM 609 LPM | 2,300 |
| 1350 VMSAC Vacuum Mount Vibrator | 3½" 8.9 cm | 14.5 | 70 | 20½" 51.75 cm | 11% 30.16 cm | N/A | 11¼" 28.57 cm | 24.55 SCFM 651 LPM | 1,900 |



WHAT SETS CLEVELAND VIBRATOR APART FROM THE REST?

The Cleveland Vibrator Company provides your Vacuum Mount with a Pressure Regulator which lets you "dial in" just the right force and frequency for your specific materials & application of the product. This comes standard for BOTH our VMSAC Series and Mini Vacuum Mounts.

Hand held controls are easy to use: they include an Integrated Pressure Regulator, a vibrator on/off switch via Slide Valve & the vacuum is controlled via Mini Ball Valve attached to the Vacuum Generator.

Mini Vacuum Mounted Vibrator Series



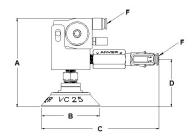


Cleveland Vibrator's **Turbine Vacuum Mount Series** is perfect for applications where a permanent installation is not possible and mounts to any smooth surface. Noise is minimal during operation. Acetal Plastic, Stainless Steel and Aluminum bodies are available, making it optimal for use in clean room and sterile environments. Its pneumatic power also enables operation in hazardous environments. A cost efficient option, our Single Stage Vacuum Generator only uses 0.74 CFM air consumption.

MINI VACUUM MOUNTED VIBRATOR RECOMMENDED APPLICATIONS

- Clean out your materials in small bins and hoppers
- Eliminate clogging and ratholing in portable bins
- Attach to small pipes, chutes or screens to promote material flow
- Settle and de-air castable refractories in small containers or molds
- Aid in unloading of Portable Stainless Steel Mixing Bins in Pharmaceutical Industry

DIAGRAM 1



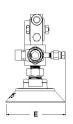
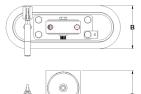
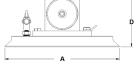


DIAGRAM 2







| MODEL | UNIT WT. (lbs.) | A | В | С | D | E | F | AIR CNSMP SCFM/LPM (Ipm = liter per min) @ 80 psig 5.4 bar | FREQUENCY VPM (vibrations per min.) @ 80 psig 5.4 bar | FORCE (LBF./N) |
|--|--------------------|--|---|---|-------------------------------|----------------|-----------------|---|--|-------------------|
| CVT-P-1 Mini Vacuum Mount (Diagram 1) | 2.15 | 3 ½" 8.71 cm | 2 ⁷ / ₁₆ " 6.17 cm | 4 ¹⁵ / ₁₆ " 12.52 cm | 2" 5.08 cm | 2½" 6.35 cm | 1/4" OD TUBE | 1.36 SCFM 38.5 LPM | 19,250 | 10.5/46.7 |
| CVT-P-10 Mini Vacuum Mount (Diagram 1) | 2.25 | 3 ¹¹ / ₁₆ " 9.34 cm | 2 ⁷ / ₁₆ " 6.17 cm | 4 ¹⁵ / ₁₆ " 12.52 cm | 2" 5.08 cm | 2½" 6.35 cm | 1/4" OD TUBE | 1.84 SCFM 52.1 LPM | 20,500 | 23.9/106.1 |
| CVT-P-20 Mini Vacuum Mount (Diagram 1) | 2.3 | 3 ¹³ / ₁₆ " 9.67 cm | 2 ⁷ / ₁₆ " 6.17 cm | 4 ¹⁵ / ₁₆ " 12.52 cm | 2" 5.08 cm | 2½" 6.35 cm | 1/4" OD TUBE | 1.44 SCFM 40.7 LPM | 8,010 | 10.9/48.5 |
| CVT-S-60 Mini Vacuum Mount (Diagram 2) | 8 | 11 " 29.5 cm | 4 ³ / ₈ " 11.1 cm | 5½" 2.85 cm | 51/ ₈ " 2.85 cm | N/A | 1/4" OD TUBE | 4.34 SCFM 122.8 LPM | 6,560 | 146.8/651.8 |
| CVT-S-80 Mini Vacuum Mount (Diagram 2) | 8 | 11 " 29.5 cm | 4 ³ / ₈ " 11.1 cm | 51/8" 2.85 cm | 51/ ₈ " 2.85 cm | N/A | 1/4" OD TUBE | 5.94 SCFM 168.2 LPM | 10,255 | 579.4/2,572 |



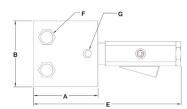
Portable Bolt-Bite Brackets

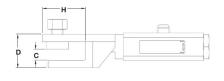
STRENGTH COUPLED WITH VERSATILITY

For a fast hold, Cleveland Vibrator Company brings you an innovative line of **Bolt-Bite Brackets**. They are engineered for quick attachment and detachment to a bin discharge, hopper rail or concrete mold frame. These brackets offer a portable vibration solution without a welded female bracket — the perfect solution in applications such as unloading feed and grain trucks.

Cleveland Vibrator Company Bolt-Bite Brackets are available for the Turbomite CVT-80, the Vibra-Ball VBB-80, the Spring Activated Piston Vibrators 11/4" SA-EP and 11/4" SAM and the Vibra-Might 1350 VMS and 1350 VMSAC*. Our SAM and VMSAC are air-cushioned models making them a more quiet option for vibration. The SA-EP and VMS are impact style vibrators.

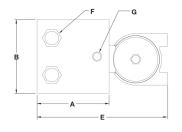


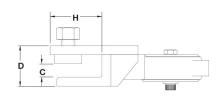




| MODEL | PISTON Diameter | A | В | С | D | E | F | G | н | 1 | WEIGHT | PISTON WEIGHT | AIR CONSUMPTION @ 60 PSIG 4.1 BAR | FREQUENCY @ 60 PSIG 4.1 BAR |
|-------------|--------------------|------------------|---------------|--|----------------|--|-----------------|----------------|-----------------|----------|---------------------|------------------|---|-----------------------------------|
| 11/4" SA-BB | 1¼" 3.2 cm | 47/8" 12.3 cm | 5" 12.6 cm | ³ / ₄ " 1.89 cm | 2¼" 5.67 cm | 11 ³ / ₁₆ " 28.2 cm | ¾ – 10 Bolt | 5%" 1.58 cm | 27/8" 7.3 cm | 1/4" NPT | 15.25 lbs 6.9 kg | 1 lbs .45 kg | 6.3 cfm 188 lpm | 7,600 VPM |
| 1¼" SAM-BB | 1¼" 3.2 cm | 47/8" 12.3 cm | 5" 12.6 cm | ³ / ₄ " 1.89 cm | 2¼" 5.67 cm | 11 ³ / ₁₆ " 28.2 cm | 34 – 10 Bolt | 5%" 1.58 cm | 27/8" 7.3 cm | 1/4" NPT | 15.5 lbs 7.1 kg | 1 lbs .45 kg | 7 cfm 198 lpm | 3,200 VPM |







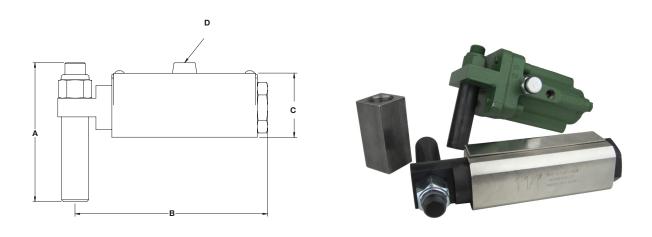
| MODEL | A | В | С | D | E | F | G | н | ı | WEIGHT | UNBALANCE | AIR CONSUMPTION @ 80 PSIG 4.1 BAR | FREQUENCY @ 80 PSIG 4.1 BAR | FORCE @ 80 PSIG 4.1 BAR |
|-----------|------------------|-----------------|--|----------------|--|-----------------|----------------|-----------------|----------|---------------------|-----------------------------|---|-----------------------------------|-------------------------------|
| CVT-80-BB | 47/8" 12.3 cm | 5" 12.6 cm | ³ / ₄ " 1.89 cm | 2¼" 5.67 cm | 8 ¹³ / ₁₆ " 22.2 cm | ¾ – 10 Bolt | %" 1.58 cm | 27/8" 7.3 cm | 1/4" NPT | 10.5 lbs 4.78 kg | .194 in-lbs (.229 cm-kg) | 5.2 cfm; 147.9 lpm | 10,255 VPM | 579.4 lbf (2,572.5N) |
| VBB-80-BB | 47/8" 12.3 cm | 5" " 12.6 cm | ³ / ₄ " 1.89 cm | 2¼" 5.67 cm | 8 ¹³ / ₁₆ " 22.2 cm | 34 – 10 Bolt | 5%" 1.58 cm | 27/8" 7.3 cm | 1/4" NPT | 10.5 lbs 4.78 kg | .114 in-lbs (19 cm-kg) | 18 cfm; 510 lpm | 9,000 VPM | 262 lbf (1,163.3N) |

^{*}The 1350 VMS and VMSAC Bolt-Bite style (1350 BB) are not represented above. Please consult Sales for details.

Portable and Railcar Vibrators

UH AND UHVM MODELS

Just one of our UH and UHVM air-piston portable vibrators can be utilized in multiple locations along your production line. This includes small bins, hoppers and chutes. These models are also ideal for use on precast concrete forms where complete portability and high-frequency vibration for quick consolidation is desired. UH female brackets are available in mild steel or stainless steel.



| MODEL | PISTON Diameter | A | В | С | D | WEIGHT | PISTON WEIGHT | AIR Consumption @ 60 PSIG 4.1 BAR | FREQUENCY @ 60 PSIG 4.1 BAR |
|----------|--------------------|--|--------------------------------|----------------|----------|--------------------|--------------------|--|-----------------------------------|
| 11/4" UH | 1¼" 3.2 cm | 51/4" 13.3 cm | 81/4" 21 cm | 2¾" 7 cm | 1/4" NPT | 8 lbs 3.62 kg | 1 lbs .45 kg | 6.3 cfm 188 lpm | 7,600 VPM |
| 1¼" UHVM | 11/4" 3.2 cm | 5" 12.7 cm | 67/ ₁₆ " 16.4 cm | 3" 7.6 cm | 1/4" NPT | 8 lbs 3.62 kg | 1.5 lbs .68 kg | 7.4 cfm 210 lpm | 4,640 VPM |
| 2" UHVM | 2" 5.1 cm | 5 ¹³ / ₁₆ " 14.8 cm | 8½" 21.6 cm | 4%" 11.1 cm | 1/4" NPT | 23 lbs 10.43 kg | 2.5 lbs 1.14 kg | 10 cfm 283 lpm | 4,500 VPM |



FOR MORE INFORMATION

Call: Sales at 800-221-3298
Email: sales@clevelandvibrator.com
Buy Online: www.clevelandvibrator.com















The Cleveland Vibrator Company has been driving innovations in materials handling since 1923. From our corporate headquarters in Cleveland, Ohio, and in partnership with HK Technologies located in Salem, Ohio, we've met the challenges of more

than 15,000 customers all around the globe in a vast array of industries. Our comprehensive product line includes air-piston, rotary electric, electromagnetic, turbine and ball vibrators, as well as a wide variety of fabricated feeders, vibratory screeners,

ultrasonic screeners, vibratory conveyers and vibratory tables used for light, medium and heavy-duty industrial applications.

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