nMinnich

CONCRETE VIBRATORS & DOWEL PIN DRILLS

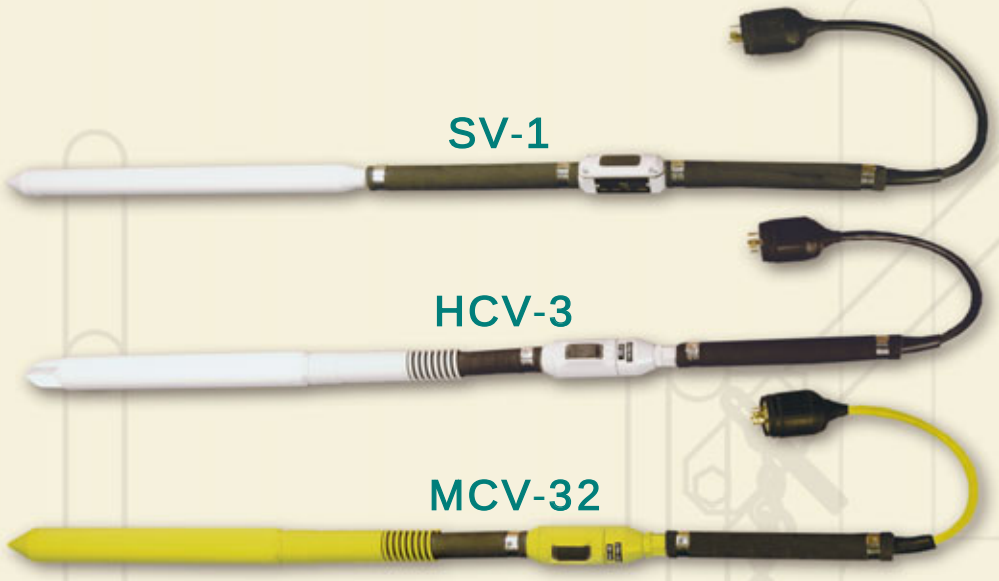
High Cycle Vibrators

Generators & Vibrators

High Cycle Vibrators and Generators

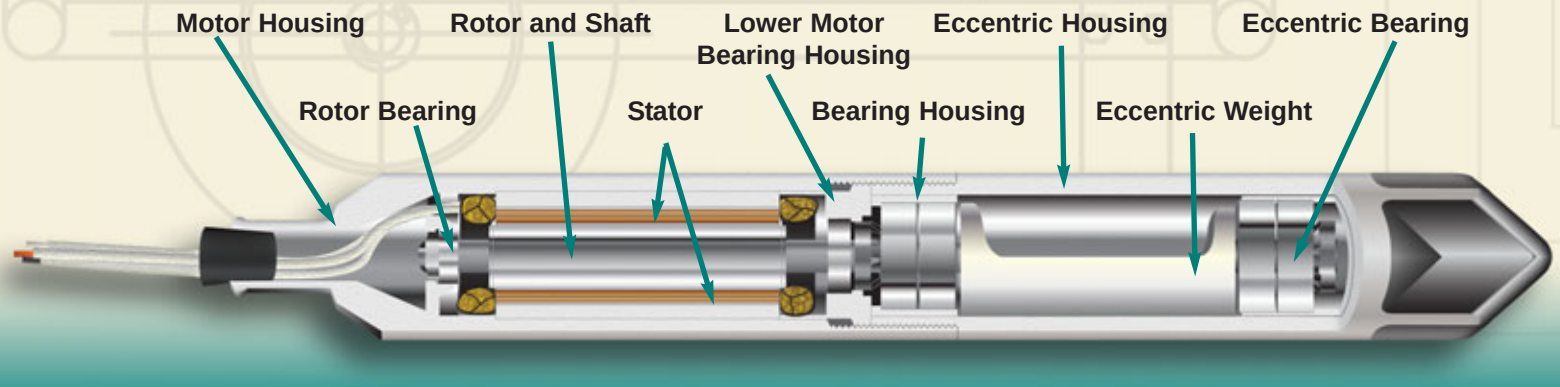
SV-1
1 7/8" diameter head size for light, medium and low slump concrete where wires or reinforcing steel are closely spaced. Also recommended for encased beams, thin walls and hard to reach places on monolithic pours, such as under lintels, offset walls, etc. Especially suited for architectural applications using liners.

HCV-3 / MCV-32
2 3/8" diameter head size for heavy work with medium and low slump concrete. develops 1402 lbs of centrifugal force. Places low slump (0"-3") concrete with ease. Ideal for use on dams, bridges, general construction, highways, airport runways, nuclear and conventional power plant construction.



Specifications	HCV-3 (115v)	MCV-32 (230v)	SV-1 (115v)	SV-1 (230v)
Vibrator Head Diameter	2-3/8"	2-3/8"	1-7/8"	1-7/8"
Vibrator Head Length	18"	18"	19"	19"
Vibrator Head Weight	14 lbs.	14 lbs.	11 lbs.	11 lbs.
No Load Amperage: Complete Head	6	3	2	1
No Load Amperage: Motor Only	3	1.5	1	.7
Centrifugal Force @ 10,500 RPM	1402 lbs.	1402 lbs.	800 lbs.	800 lbs.
Amplitude: Peak to Peak	.112"	.112"	.082"	.082"
Radius of Influence*	9-12"	9-12"	6-8"	6-8"
Weight of Complete Unit	44 lbs.	44 lbs.	41 lbs.	41 lbs.
Power Requirements	115v-3ph-180cy	230v-3ph-180cy	115v-3ph-180cy	230v-3ph-180cy
Recommended Power Source	HHA-4CW	MHA-2CW	HHA-4CW	MHA-2CW

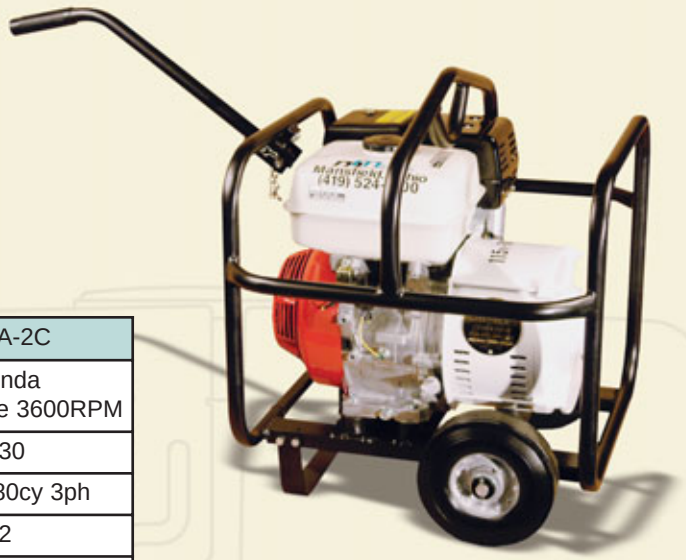
* depends on slump, power source, operating conditions and depth of insertion



High Cycle Generator Features

- **Reliable Honda Power**
- **115V or 230V models**
- **4 Kilowatt Output**
- **Will Power 2 Vibrators Continuously**
- **Can Power 3 Vibrators Intermittently**
- **Optional Wheel Kit Available**

Specifications	HHA-4C	MHA-2C
Type of Power	Honda 8HP 1cycle 3600RPM	Honda 8HP 1cycle 3600RPM
Volts @ 180 Cycle	115	230
AC Output	4KW 180cy 3ph	4KW 180cy 3ph
Number of Receptacles	2	2
Generator Weight (no mounting or accessories)	170 lbs. (77.1kg)	170 lbs. (77.1kg)



Shown With Optional Wheel Kit

Line Cables

Built to withstand jobsite abuse with tough, abrasion resistant cables and rubber covered twist-lock plugs. Cables are 4-conductor. Vibrators are grounded direct to the generator. Cables are furnished in standard lengths.
50' (15.3m) = HC-50 for 115V and 230V 100' (30.5m) = HC-100 for 115V and 230V

High Cycle Flex Shaft

Optional Quick Release

High Cycle
Weight: 14lbs. (6.4kg)
Amperage: 3(115V) 1.5(230V) 3ph 180 cycle
Shafts: 2', 5', 7', 10', 14', 21'
Heads: 3/4" thru 2-3/8"

Recommended AWG Wire Size for Extension Cords

Motor		HCFS
Rated Amps		3A
Cord Length	25' (7.6m)	18ga
	50' (15.3m)	14ga
	100' (30.5m)	12ga
	150' (45.8m)	10ga
	200' (61.0m)	8ga

Head Diameter	Centrifugal Force	Amplitude	Diameter of Influence
3/4" (19mm)	105lbs. (467N)	.050" (1.27mm)	4" - 6" (101mm-152mm)
1" (25mm)	151lbs. (671N)	.056" (1.42mm)	5" - 7" (127mm-177mm)
1-3/8" (35mm)	424lbs. (1886N)	.070" (1.77mm)	8" - 14" (203mm-355mm)
1-3/4" (45mm)	795lbs. (3536N)	.102" (2.59mm)	16" - 20" (406mm-508mm)
2" (50mm)	1000lbs. (4448N)	.090" (2.28mm)	20" - 24" (508mm-609mm)
2-3/8" (60mm)	1186lbs. (5275N)	.092" (2.33mm)	23" - 27" (584mm-685mm)

above specifications are at 10,500vpm

Length	2' (.6m)	5' (1.5m)	7' (2.1m)	10' (3.0m)	14' (4.3m)	21' (6.4m)
7/8" (22.2mm) OD Casing Recommended Head Sizes	3/4", 1", 1-3/8", 1-3/4"	3/4", 1", 1-3/8", 1-3/4"	3/4", 1", 1-3/8", 1-3/4"	3/4", 1", 1-3/8"	3/4", 1"	3/4", 1"
1-3/16" (30.1mm) OD Casing Recommended Head Sizes	1-3/8", 1-3/4", 2", 2-3/8"	1-3/8", 1-3/4", 2", 2-3/8"	1-3/8", 1-3/4", 2", 2-3/8"	1-3/8", 1-3/4", 2", 2-3/8"	1-3/8", 1-3/4", 2", 2-3/8"	1-3/8", 1-3/4", 2", 2-3/8"

High Cycle Information

Why High Cycle? High Cycle Vibrators get their name from the kind of electric current (180 cycle) required to operate them. A 180 cycle vibrator motor uses alternating current which reverses direction 180 times per second, compared to standard commercial current which reverses direction 60 times per second. This means that the motor in a High Cycle Vibrator runs three times faster and develops three times more power than an ordinary 60 cycle motor. The result is sufficiently high frequency and vibrating force in a small diameter head to compact low-slump concrete effectively in a relatively wide radius, so concrete placing jobs get done better and faster.

Why Minnich? Minnich High Cycle Vibrators have received worldwide acceptance and preference because of their service-proven design and engineering, perfected by an experienced engineering-manufacturing organization that is thoroughly experienced in both concrete and vibration. Minnich High Cycle Vibrators are recognized as the standard in the industry. Minnich manufactures, tests, checks and double checks each part, assembly and end product in order to ensure complete quality and satisfaction.

Advantages Over Universal. The motor in a High Cycle Vibrator is of the induction type. It maintains its speed within a few hundred rpm when under full load. This means if the vibrator has a frequency of 10,800 vpm (60sec x 180rpm/sec) when running in air, it will lose only a few hundred vpm when operated in stiff concrete.

Contrast this to the universal motor-driven vibrator, which loses frequency as the load increases. The stiffer the concrete, the more it restrains the vibrator's movement and slows down the vpm. This means that the universal motor vibrator performs in the opposite way that a vibrator should perform to be most effective, while the High Cycle Vibrator maintains its vpm in stiff concrete.

Simplicity of construction is another plus for the High Cycle design. There are no brushes and no commutator. The only wearing parts are the bearings and the shaft extension on the rotor. The design permits rapid convection of heat, so there is no problem with armature burn-out so common in universal motors.

High Cycle Vibrator Advantages

- **Power from a High Cycle motor assures you the right vpm**
- **High amplitude/frequency vibration for minimal aggregate disturbance**
- **More centrifugal force and greater placement power than others**
- **Fewer parts for quicker, easier and less costly maintenance**
- **Performance-proven on thousands of jobs worldwide**
- **Worldwide service and dealer network**

High Cycle Vibrator Features

- **5' Whip Hose and 20' Whip Cable**
  for additional handling needs
- **Leakproof Switch Pod**
  for greater safety and longer switch life
- **4-Prong Grounded Twist Lock Plug w/Sealtite Cover**
  for positive water tight connections
- **Special Hose and Electric Cable**
  raw materials built specifically for Minnich to provide high quality and long life
- **Color Coded Wire Sets**
  for ease of repair
- **10,500vpm/rpm**
  maximum operating frequency
- **10' Standard Fixed Handling Hose**
  optional lengths are available from 5' - 30' in 5' increments to suit your job requirements
- **Spring Hose Protection**
  for greater hose life on 2 3/8" head vibrators
- **Two Piece Head**
  for ease of maintenance and faster repairs should they become necessary
- **Cast Steel/Hardened Nose Tip**
  for increased life

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