Concrete Vibrators







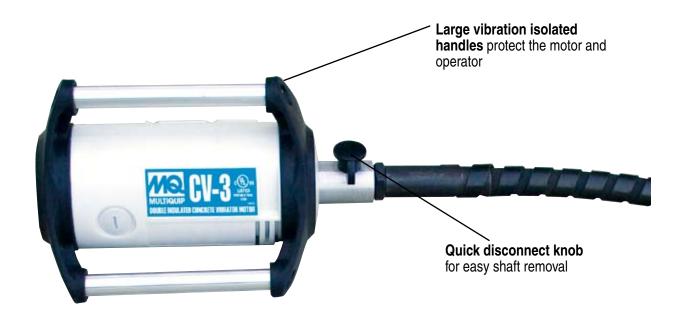
Flex-shaft concrete vibrators

Multiquip flex-shaft concrete vibrators are designed to work in medium to high-slump concrete. Typical applications include small pours, slabs driveways, stem walls and footings. Our complete product line-up enables you to build the ideal vibrator assembly for your application.

- Electric Vibrator Motors Choose from 1HP, 2HP or 3HP models. Universal motors allow operation at either 50 or 60Hz and selected models are available in 240V configurations.
- Gasoline-Powered Vibrator Motors Ergonomically designed backpack vibrator allows convenient operation of steel or rubber heads. Stationary vibrator motors are designed with swivel mounts for improved mobility around the job site.
- Flexible Shafts Eight different shaft lengths are available ranging in size from 2- to 21-feet.
- Steel Vibrator Heads Seven different models available in diameters ranging from %" to 2%".
- Rubber Vibrator Heads Four different rubber head models range in size from 1%" to 234" are ideal for high production work and epoxy coated rebar.
- **Quick-Disconnect Coupler** makes setup on the job site fast and easy.



- **Ergonomic design** with swivel shaft connection.
- Compatible with entire range of steel heads and all rubber heads except 23/4" long type rubber head.
- Quick disconnect knob for easy shaft removal
- Powered by 2.1HP Honda 4-stroke engine with gear reduction for more torque than direct-drive models.



Flow-through ventilation reduces contamination by taking in air from the rear of the motor

Cassette-style motor improves durability and performance by minimizing friction and enabling the motor to maintain optimum RPM. Models range from 1 to 3 HP.

There's a size and model for every application...

Two shaft diameters and seven power heads allow you to match the equipment to the job.



Inner core is wound from high carbon spring wire to resist unraveling and stretching

Available shaft lengths: 2', 5', 7', 10', 12', 14', 18', 21'

Coiled flat wire reinforcement keeps the shaft from kinking

Forged eccentrics mounted on high speed ball bearings

> **Double seals** on shaft end

vibrations in all directions

Case hardened tip for extra durability

Extra thick shell (up to 0.280") resists wear

Industry's strongest outer casing constructed of steel flat wire covered by alternating layers of wire mesh, fabric and rubber

Gasoline Drive Motor



G55H Vibrator Motor

- Ideal for work in remote areas
- Honda 4.8 HP engine.
- Swivel mount offers 360° rotation

Rubber Coated Heads

RHV-series rubber heads for flex shaft vibrators have superior consolidation characteristics and are available in four models.

Use rubber heads when working with epoxy coated rebar to prevent chipping the coating. Conventional length heads are ideal for masonry work in footings, columns and retaining walls. The "short" head is ideal for slabs by allowing it to be immersed completely in concrete to prevent overheating and provide optimum vibration.



1%" x 15%"

2¾" x 8"



2¾" x 17¾"



RHV250 21/2" x 153/4"



Flex-shaft concrete vibrators — Specifications

Electric Drive Motors

Model	Amps	Voltage/Frequency	HP (kW)**	RPM	Weight	Required Shaft
CV1*	10	120v 50/60 Hz	1 (1.2)	16,000	11 (5)	314V
CV2*	15	120v 50/60 Hz	120v 50/60 Hz 2 (1.8) 18,000		13 (6)	FS
CV2E*	7.5	240v 50/60 Hz	2 (1.8)	18,000	13 (6)	FS
CV3*	20	120v 50/60 Hz	3 (2.4)	19,250	14 (6)	FS
CV3E*	10	240v 50/60 Hz	3 (2.4)	19,250	14 (6)	FS

Gasoline Drive Motors

Model	Engine	Engine Type	HP (kW)**	Fuel Capacity gal. (I)	Weight lb. (kg)	Required Shaft
G55H*	Honda GX-160	4-Stroke	4.8 (3.6)	.95 (3.6)	74 (33)	FS
BP25H*‡	Honda	4-Stroke	2.1 (1.6)	.16 (0.6)	24 (11)	FS

Vibrator Heads

‡ BP25H should not be used with shafts less than 10 ft. in length.

Model	Head Type	Diameter in. (mm)	Length in. (cm)	Weight lb. (kg)	Required Shaft	Required Drive Motor	
WIOGEI	rieau rype	Diameter III. (IIIII)	Length III. (CIII)	Weight ib. (kg)	nequired Shart	nequired brive wotor	
900HD	Steel	% (22)	14½ (37)	2.1 (1)	314V	BP25H, CV1	
1000HD	Steel	11/16 (27)	13% (35)	2.8 (1.3)	314V	BP25H, CV1	
1300HD	Steel	1% (35)	15½ (39)	15½(39) 5.1 (2.3) 314V		BP25H, CV1	
1400HD	Steel	1% (35)	15¼ (39)	5.2 (2.4)	FS	BP25H, CV2, CV3, G55H	
1700HD	Steel	111/16 (43)	15 (38)	6.4 (2.9)	FS	BP25H, CV2, CV3, G55H	
2100HD	Steel	21/8 (54)	13¼ (34)	9.4 (4.3)	FS	BP25H, CV2, CV3, G55H	
2600HD	Steel	25/8 (67)	13¼ (34)	13.4 (6.1)	FS	BP25H, CV3, G55H	
RHV188	Steel/Rubber	1%(48)	15¾ (40)	5 (2.3)	FS	BP25H, CV3, G55H	
RHV250	Steel/Rubber	2½ (63)	15¾ (40)	7 (3.2)	FS	BP25H, CV3, G55H	
RVH275S	Steel/Rubber	2¾ (69)	8 (20)	4.5 (2.1)	FS	BP25H, CV3, G55H	
RHV275	Steel/Rubber	2¾ (69)	17¾ (45)	10 (4.5)	FS	CV3, G55H	

314V-Series Flexible Shafts

Requires BP25H, CV1 Drive Motors

Model	Length ft. (m)	Weight lb. (kg)	
314V2	2 (0.6)	3 (1.3)	
314V5	5 (1.5)	5 (2.4)	
314V7	7 (2.1)	6 (2.9)	
314V10	10 (3)	9 (4.0)	
314V12	12 (3.7)	10 (4.8)	
314V14	14 (4.3)	11 (5.1)	
314V18	18 (5.5)	15 (6.9)	
314V21	21 (6.4)	18 (8.3)	

Accessories

CS1	Carrying Strap
CON-SM	Adapts CV-Motors to Mikasa ESV and ESW flexible shafts
CON-MS382V	Adapts Mikasa Motors to FS flexible shafts
CON-MS314V	Adapts Mikasa Motors to 314V flexible shafts
13785-501	FS Ball bearing quick disconnect
	Shaft coupler for extending FS shafts

*Notes:

CV1 — Includes quick disconnect coupler (p/n 36249) and spindle (29957-001) for 314V flexible shafts

CV2(E), CV3(E), BP25H, G55H — Includes quick disconnect coupler (p/n 36248) and spindle (25013-001) for FS flexible shafts.

** Engine power ratings are calculated by the individual engine manufacturer and the rating method may vary among engine manufacturers. Multiquip Inc. and its subsidiary companies makes no claim, representation or warranty as to the power rating of the engine on this equipment and disclaims any responsibility or liability of any kind whatsoever with respect to the accuracy of the engine power rating. Users are advised to consult the engine manufacturer's owners manual and its website for specific information regarding the engine power rating.

FS-Series Flexible Shafts

Requires BP25H, CV2, CV3, G55H Drive Motors

Model	Length ft. (m)	Weight lb. (kg)
FS3	3 (0.9)	5 (2.3)
FS5	5 (1.5)	8 (3.8)
FS7	7 (2.1)	11 (5)
FS10	10 (3)	16 (7.2)
FS12	12 (3.7)	18 (8)
FS14	14 (4.3)	20 (9)
FS18	18 (5.5)	24 (10.8)
FS21	21 (6.4)	28 (12.7)

Maximum Shaft Lengths

Model	Shaft	Head/Model	Max. Shaft Length ft.
CV1/BP25H	314V	900HD 1000HD 1300HD	21
CV2/BP25H	FS	1400HD 1700HD	28
CV2/BP25H	FS	2100HD	21
CV3/BP25H/ G55H	FS	1400HD 1700HD 2100HD 3600HD	35***
CV3/BP25H/ G55H	FS	RHV188 RHV250 RHV275 RHV275S	21

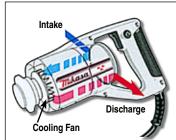
^{***} Requires shaft coupler for FS (p/n 13883-501)



MGX-Series Concrete Vibrators

Ideal for short pours, walls, footings, the MGX series handheld vibrators provide exceptional power in a lightweight, user-friendly package.

- Lightweight aluminum motor case.
- Durable, high performance 120V or 240V universal motors.
- Vibration dampening handle reduces operator fatigue.
- Four head sizes available 0.9", 1.1", 1.25" and 1.5" diameter.



Greatly reduced airborne contamination. The sealed fan acts as a suction for air taken in from the rear, passed over the motor for cooling, and discharged at the rear again.





DOUBLE INSULATED — NO GROUND NECESSARY

MGX-Series Specifications

120 Volt Models	240 Volt Models	Amps 120V (240V)	Watts	Head in. (mm)	Shaft Dia. in. (mm)	Amplitude in. (mm)	Frequency Hz (vpm)	Shaft Length ft. (m)	Overall Length ft. (m)	Motor Weight Ib. (kg)	Shaft/ Head Weight lb. (kg)	Total Weight lb. (kg)
MGX12325	MGX22325	3.8 (2.1)	280	.905 (23)	.79 (20)	.047 (1.2)	12,000 to 15,500 (200 to 258)	8.2 (2.5)	9.5 (2.9)	6.4 (2.9)	5.07 (2.3)	11.5 (5.2)
MGX12810	MGX22810	3.8 (2.1)	280	1.10 (28)	.98 (25)	.070 (1.8)	12,000 to 15,500 (200 to 258)	3.2 (1.0)	4.7 (1.4)	6.4 (2.9)	3.08 (1.4)	9.5 (4.3)
MGX12825	MGX22825	3.8 (2.1)	280	1.10 (28)	.98 (25)	.070 (1.8)	12,000 to 15,500 (200 to 258)	8.2 (2.5)	9.5 (2.9)	6.4 (2.9)	5.07 (2.3)	11.5 (5.2)
MGX13225	MGX23225	3.8 (2.1)	280	1.25 (32)	.98 (25)	.075 (1.9)	12,000 to 15,500 (200 to 258)	8.2 (2.5)	9.5 (2.9)	6.4 (2.9)	3.08 (1.4)	9.5 (4.3)
MGX13810	MGX23810	3.8 (2.1)	280	1.5 (38)	.98 (25)	.079 (2.0)	12,000 to 15,500 (200 to 258)	3.2 (1.0)	4.7 (1.4)	6.4 (2.9)	5.07 (2.3)	11.5 (5.2)
MGX13825	MGX23825	3.8 (2.1)	280	1.5 (38)	.98 (25)	.079 (2.0)	12,000 to 15,500 (200 to 258)	8.2 (2.5)	9.5 (2.9)	6.4 (2.9)	3.08 (1.4)	9.5 (4.3)

Replacement Motors

MGX1	120V / 280 Watt
MGX2	240V / 280 Watt

Replacement Heads and Shafts

MGX2325	.9 in (23mm) 8.2 ft (2.5m)	MGX2825	1.1 in (28mm) 8.2 ft (2.5m)	MGX3810	1.5 in (38mm) 3.2 ft (1m)
MGX2810	1.1 in (28mm) 3.2 ft (1m)	MGX3225	1.25 in (32mm) 8.2 ft (2.5m)	MGX3825	1.5 in (38mm) 8.2 ft (2.5m)

MGX-Series vibrators are sold as complete assemblies. Motor and head shaft assemblies available separately. It is recommended that shaft installation be performed in a shop environment.



High-cycle concrete vibrators

Multiquip's High-Cycle Vibrators are designed for use in lowslump concrete where consistent power is needed to liquefy and move a stiff mix into corners and around rebar, or for any job where extended length vibrators are required.

High-cycle vibrators (180 Hz) use a special three-phase, low-induction electric motor, located within the vibrating head.

This close coupling translates into high efficiency—Mikasa High-Cycle Vibrators retain at least 95% of their power under load. Productivity is maximized due to the high centrifugal force and high frequency of the units.



Mikasa High-Cycle Concrete Vibrators

Model	Head Diameter	Head Length	Hose Length	Cord Length	Amps	Centrifugal Force	VPM	Weight
FXA50A4	2"	16½"	13.1 ft.	33 ft.	2	714 lb.	10,800	36 lb.
FXA50A6	2"	16½"	20 ft.	33 ft.	2	714 lb.	10,800	55 lb.
FXA60A4	23/8"	19¼"	13.1 ft.	33 ft.	4.5	1,600 lb.	10,800	42 lb.
FXA60A6	23/8"	19¼"	20 ft.	33 ft.	4.5	1,600 lb.	10,800	65 lb.

High-Cycle Extension Cords

180EC50 — 50 ft. 12 gauge — 13 lb. 180EC100 — 100 ft. 12 gauge — 25 lb.

High Cycle Generator

The **GPD5H** is the only generator that simultaneously produces standard 60 Hz power for standard power tools and 180 Hz power for high-cycle concrete vibrators. It will power up to three 2" FXA heads or two 2%" FXA heads. No other generator is this versatile.

60 Hz Single Phase Output					
Maximum Watts	4 kW				
Continuous Watts	3.6 kW				
Voltage	120/240				
Max./Cont. Amps @ 120V	33.3 / 16.6				
Max./Cont. Amps @ 240V	30 / 15				
180 Hz Three Pha	ase Output				
Continuous Watts	5 kVA				
Voltage	240				
Cont. Amps @ 240V	12.5				

Engine									
Engine Model	Honda GX-160								
Horsepower (kW)*	9.5 (7.1)								
Low Oil Shutdown	Standard								
Fuel Capacity gal. (Itr)	4.0 (19)								
Automatic Idle Control	Standard								
Dimensions a	nd Weight								
Dimensions in. (cm)	28.34 x 22.04 x 21.25 (720 x 560 x 540)								
Dry Weight lb. (kg)	235 (107)								

* Engine power ratings are calculated by the individual engine manufacturer and the rating method may vary among engine manufacturers. Multiquip Inc. and its subsidiary companies makes no claim, representation or warranty as to the power rating of the engine on this equipment and disclaims any responsibility or liability of any kind whatsoever with respect to the accuracy of the engine power rating. Users are advised to consult the engine manufacturer's owners manual and its website for specific information regarding the engine power rating.



Micon high-cycle vibrators

Multiquip's Computer-Controlled Micon Concrete Vibrators are perfect for "zero" slump concrete applications, providing a higher level of consistent frequency than any other vibrator on the market today.

Multiquip—the first with computer-controlled concrete vibrators. Conventional concrete vibrators have noticeably reduced motor RPM and frequency as soon as they are placed in the concrete. Multiquip's Micon controller immediately sends more power to the head when it senses resistance that could cause the vibrator to slow down, ensuring that higher RPM and frequency are maintained throughout the vibrating process.

Our patented vibrators maintain optimum frequency under virtually any slump condition; customers report from 20% to 30% greater frequency with far less operator strain.

The Micon controller constantly monitors and controls the motor to protect it from failure due to current surge, broken wires or short circuits. Burnt motors have been virtually eliminated.





VHB Series. The Micon is now available with a rigid extension on the vibrating head to facilitate easier placement in difficult job site conditions. Instead of relying on the handling hose to place the vibrator head, the VHB series allows the operator to control placement up to 6

ft. away. This is effective in situations such as seismic fortification, where increased slumps and higher concentrations of rebar are required, and also for use with sloping form faces.



Micon high-cycle vibrators — Specifications

MICON HIGH-CYCLE VIBRATORS

Model	Head diameter in. (mm)	Head length in. (mm)	Hose length ft. (m)	Cord length ft. (m)	Voltage	Amps	Cycle Hz	Amplitude in. (mm)	Vibration VPM	Shipping weight lb. (kg)
VH-32A-4M	1.25(32)	14.6(375)	13.1(4)	65(20)	58	3	400	.066(1.7)	12,000	28(12.7)
VH-42A-4M	1.67(43)	13.5(347)	13.1(4)	65(20)	58	5	400	.078(2.0)	12,000	31(14.0)
VH-52A-4M	2(52)	14.3(366)	13.1(4)	65(20)	58	7	400	.090(2.3)	12,000	34(15.4)
VHW-62A-4M	2.4(61)	16.9(433)	13.1(4)	65(20)	58	10	360	.098(2.5)	10,800	44(19.9)
VHW-72A-4M	2.8(72)	15.6(400)	13.1(4)	65(20)	58	11	360	.082(2.1)	10,800	50(22.6)
VH-32A-6M	1.25(32)	14.6(375)	19.6(6)	65(20)	58	3	400	.066(1.7)	12,000	33(15)
VH-42A-6M	1.67(43)	13.5(347)	19.6(6)	65(20)	58	5	400	.078(2.0)	12,000	36(16)
VH-52A-6M	2(52)	14.3(366)	19.6(6)	65(20)	58	7	400	.090(2.3)	12,000	39(18)
VHW-62A-6M	2.4(61)	16.9(433)	19.6(6)	65(20)	58	10	360	.098(2.5)	10,800	49((22)
VHW-72A-6M	2.8(72)	15.6(400)	19.6(6)	65(20)	58	11	360	.082(2.1)	10,800	54(25)

MICON EXTENSION CORDS AND PLUG SETS

Model	Description	Length ft. (m)	Weight Ibs (kg)
VHEC100	MICON Extension Cord for the VH Vibrator Models (32A, 42A & 52A)	100(30.5)	13(6)
VHWEC100	MICON Extension Cord for the VH Vibrator Models (62A & 72A)	100(30.5)	25(11.3)
VH-PS	Male/Female Plug Set for the VHEC100 Extension Cord	n/a	1(.45)
VHW-PS	Male/Female Plug Set for the VHEWC100 Extension Cord	n/a	1(.45)

MICON HIGH-CYCLE VIBRATORS

Model	Head diameter in. (mm)	Head length in. (mm)	Head ext. length ft. (m)	Hose length* ft. (m)	Cord length ft. (m)	Voltage	Amps	Cycle Hz	Centrifugal force	Vibration VPM	Shipping weight lb. (kg)
VHB-32A-4M	1.25(32)	14.6(375)	5.6(1.7)	13.1(4)	65(20)	58	3	400	221	12,000	16(7.2)
VHB-42A-4M	1.67(43)	13.5(347)	5.7(1.7)	13.1(4)	65(20)	58	5	400	595	12,000	20(8.9)
VHB-52A-4M	2(52)	14.3(366)	5.7(1.7)	13.1(4)	65(20)	58	7	400	794	12,000	21(9.7)
VHB-62A-4M	2.4(61)	2.4(61)	5.7(1.7)	13.1(4)	65(20)	58	10	360	1103	10,800	28(12.7)
VHB-72A-4M	2.8(72)	15.6(400)	5.7(1.7)	13.1(4)	65(20)	58	11	360	1345	10,800	29(13)

MICON CONTROLLERS **Electrical Requirements**

Model	No. of receptacles	Voltage	Phase	Amps	Cycle (Hz)	Voltage	Phase	Amps	Cycle (Hz)	LxWxH in. (mm)	Weight lbs. (kg)
VC-1A	1	120 VAC	1	10	60	58	3	7.0	400	10 x 13 x 10(25 x 33 x 25)	13(5.8)
VCW-1A	1	120 VAC	1	20	60	58	3	11	360	17 x 13 x 11(43 x 33 x 28)	21(9.5)
VC-2B	2	120 VAC	1	20	60	58	3	14	400	17 x 13 x 11(43 x 33 x 28)	22(9.9)



VC-1A CONTROLLER powers any **ONE** of these vibrators:



VCW-1A CONTROLLER powers any **ONE** of these vibrators:



VC2B CONTROLLER powers any **TWO** of these vibrators:

VH-32 (1.25")

VH-42 (1.67")

VH-52 (2")

VHW-62 (2.4")

VHW-72 (2.8")

Electrical Output

(1.25")

VH-42 (1.67")

VH-52 (2")

120V **INPUT** 60 HZ 1Ø







MOTOR 58V 400 HZ 3Ø **IN HEAD**

The Micon controller uses standard 120 volt, 60 cycle current; it converts this to 58 volt, 400 cycle current for use by the vibrator motor. The controller receives constant feedback information from the motor, allowing it to supply the exact amount of power required to maintain the optimum head RPM in relation to the slump of the concrete.

