INTERNAL ELECTRIC CONCRETE VIBRATORS
VH & EWO HIGH FREQUENCY SERIES
ELECTRIC HIGH FREQUENCY INTERNAL VIBRATORS

When pouring industrial floors, walls, columns, slabs, etc., Internal Vibrators that are easy-to-use and maintain are essential.

In many cases it’s high-frequency immersion vibrators that are used. Also known as “poker” or “spud” or simply “vibrating needles”, these Vibrators come into direct contact with the concrete.

HOW THE VH VIBRATORS WORK:
An eccentric weight, housed inside the vibrating head, is fixed to a shaft which is rotated by a three-phase asynchronous AC motor. When operating, the weight rotates causing the vibrator head to pulsate.

The ability to generate consistent centrifugal force and frequency (speed) the Vibrator is essential to proper consolidation of concrete because a drop in centrifugal force significantly reduces the quality of the finished product.

The VH Series is a heavy-duty, reliable product line which is not only ideal for consolidating concrete, but is also built for continuous operation.

Important:
The VH Series is powered by electronic converters that convert the 50/60 Hz standard frequency to the 200 Hz, required to have the vibrating head reach a speed of 12,000 VPM, the ideal speed for proper consolidation.

BENEFITS
• No overheating
• Easy maintenance
• Long life of the vibration head
• 100% Water Proof

MAXIMUM DURABILITY HIGH PERFORMANCE
**VH - ELECTRIC HIGH FREQUENCY INTERNAL VIBRATORS**

### APPLICATION
Concrete Consolidation

### DESCRIPTION
High frequency internal electric vibrators for concrete consolidation characterised by high performance consistent speeds, and remarkable resistance to abrasion

### FEATURES

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duty Cycle</td>
<td>Continuous S1</td>
</tr>
<tr>
<td>Input</td>
<td>42V/3Ph/200Hz</td>
</tr>
<tr>
<td>Nominal Frequency</td>
<td>12,000 VPM</td>
</tr>
<tr>
<td>Insulation Class F</td>
<td>(max = 311°F)</td>
</tr>
<tr>
<td>Thermal Switches</td>
<td>Inside the Stator. Max T °F = 302 °F</td>
</tr>
<tr>
<td>Working Temperature</td>
<td>-4°F to 104°F</td>
</tr>
<tr>
<td>Vibrator Head</td>
<td>Equipped with ball bearings greased for life. 2 bearings (VHN 50 &amp; VHN 59); 4 bearings (VHN 38 &amp; complete VHP series) Protection class IP68 Hardening treatment for VHN Series; chrome plating for VHP</td>
</tr>
<tr>
<td>Switch Box</td>
<td>Polyamide (nylon +30% fiber glass) with gasket; cable protection; yellow color IP66 protection Designed for continuous use and resistance to wear and tear</td>
</tr>
<tr>
<td>Operating Hose</td>
<td>15ft SBR rubber hose inner textile reinforcement</td>
</tr>
<tr>
<td>Supply Cable</td>
<td>20' neoprene electric cable HO7RN-F with 3 pin plug (42V ~ 3 phase; IP44)</td>
</tr>
<tr>
<td>Finish</td>
<td>Vibrating Head: painted yellow Ral 1007 (VHN), chromed (VHP); Switch Box: color yellow Ral 1007</td>
</tr>
<tr>
<td>Certifications</td>
<td>Community Directives and subsequent modifications: 2006/42/EC - 2006/95/EC Conformity verified according to the standard documents: IEC 60745-1, IEC 60745-2-12, IEC 60034-1</td>
</tr>
<tr>
<td>Options</td>
<td>Cast aluminum switch box Rubber cap</td>
</tr>
</tbody>
</table>
ELECTRIC HIGH FREQUENCY INTERNAL VIBRATORS w/ BUILT IN CONVERTERS

When consolidating concrete, precast plants need light, flexible and easy-to-use tools which can be connected directly to the readily available, single-phase power (230 or 110 Volt, 50/60 Hz).

To meet this need, the EWO series of vibrators have been developed: High-frequency immersion vibrators equipped with an integrated electronic frequency converter capable of transforming single-phase input voltage (230V or 110V, 50/60 Hz) into the three-phase voltage (230V, 200 Hz) necessary to obtain 12,000 vpm.

Compared to the other vibrating needle type internals powered by electromechanical converters, the EWO series has several advantages:

• They are light and flexible;

• The constant output frequency maintains the maximum centrifugal force and thus a high and consistent performance;

• There is protection against short circuits, excessive temperature, voltage and current above or below the nominal values.

BENEFITS

• Reliable
• Safe & easy to handle
• No overheating
• Easy to maintain

MAXIMUM DURABILITY HIGH PERFORMANCE
**EWO-HIGH FREQUENCY INTERNAL VIBRATORS WITH BUILT-IN CONVERTER**

**APPLICATION** Concrete Consolidating

**DESCRIPTION** Equipped with compact electronic frequency converters integrated into the supply cable, providing high centrifugal forces, constant speeds and high wear resistance

**FEATURES**

**DUTY CYCLE** Continuous S1

**INPUT** 230V + 10% - 15% 50/60 Hz -1 Ph

**NOMINAL FREQUENCY** 12,000-vpm

**INSULATION** Class F (Max = 311°F)

**PROTECTION CLASS**
- Head Protection IP68
- Converter protection IP66

The inverter is protected against overload, overvoltage, excess temperature and short circuit. An LED light shows the presence of a fault

**WORKING TEMPERATURE** -4°F to 104°F

**VIBRATING HEAD** Equipped with 4 ball bearings greased for life
- Hardening Treatment (EWO 38C), Chrome Plating (EWO 50C, EWO 59C, EWO 65C)

**SWITCH BUILT-IN** Complete with reinforced gasket

**HOSE PROTECTION** 15' SBR rubber hose with textile reinforcement

**SUPPLY CABLE** 30' neoprene electric cable HO7RN-F with SCHUKO 220V 2P+1T 16A plug

**CONVERTER** Sturdy cast aluminum box
- Ergonomic and lightweight (< 7lbs)

**INVERTER** Tropicalized and protected against vibration, moisture and shocks with a special resin

**FINISHING** Painted yellow RAL 1007 (EWO 38C), and chrome plating (EWO 50C - EWO 59C - EWO 65C)

**CERTIFICATIONS** Community Directives and subsequent modifications: 2006/42/EC, 2014/30/EU, 2006/95/EC
- Conformed according to the standard documents IEC 60745-1, IEC 60745-2-12, UNI EN ISO 12100

**OPTIONS** Rubber cap

---

**MODELS**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>HEAD DIA</th>
<th>HEAD LENGTH</th>
<th>HEAD WEIGHT</th>
<th>TOTAL WEIGHT</th>
<th>CF</th>
<th>RATED CURRENT</th>
<th>RATED POWER (230V)</th>
<th>ACTION DIA</th>
<th>AMPLITUDE</th>
<th>NOISE LEVEL</th>
<th>COMPACTION POWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>EWO 38C</td>
<td>1.49</td>
<td>15.90</td>
<td>5.29</td>
<td>31.96</td>
<td>382.17</td>
<td>1.5</td>
<td>0.5</td>
<td>17.71</td>
<td>0.07</td>
<td>70</td>
<td>11.77</td>
</tr>
<tr>
<td>EWO 50C</td>
<td>1.96</td>
<td>18.42</td>
<td>11.64</td>
<td>44.09</td>
<td>845.28</td>
<td>2.7</td>
<td>0.9</td>
<td>27.55</td>
<td>0.08</td>
<td>76</td>
<td>23.54</td>
</tr>
<tr>
<td>EWO 59C</td>
<td>2.32</td>
<td>19.64</td>
<td>18.07</td>
<td>50.26</td>
<td>1267.92</td>
<td>3.0</td>
<td>1.1</td>
<td>35.41</td>
<td>0.09</td>
<td>79</td>
<td>26.48</td>
</tr>
<tr>
<td>EWO 65C</td>
<td>2.55</td>
<td>19.05</td>
<td>20.72</td>
<td>54.67</td>
<td>1647.85</td>
<td>4.5</td>
<td>1.3</td>
<td>43.30</td>
<td>0.10</td>
<td>79</td>
<td>29.42</td>
</tr>
</tbody>
</table>

* Packaging included  ** Refer to centrifugal force for amperage assessment
*** Measurements vary according to concrete quality and thickness  **** Measured at 1 mt distance

---

**Input Voltage**

- **Converter** 230V +10% -15% 1ph 50/60Hz ± 5% 5.5 A
- **Converter** 115V +10% -15% 1ph 50/60Hz ± 5% 11.0 A

---

**AIRMATIC**

airmatic.com  |  215.333.5600  |  infocenter@airmatic.com
AIRMATIC founded in 1944, is a woman-owned Industrial Distributor, with installation and maintenance capabilities, offering equipment, machinery, and shop supplies to the Industrial, Construction, Utility, Government, and Commercial Markets. Our products and services are sold through three business units:

The **MATERIALS MANAGEMENT GROUP** provides products and services to industries that convey, store, transport, and process powders and bulk solids from aggregates, cement, and chemicals to foods, grains, metals, power generation, and waste water treatment applications;

The **SERVICE GROUP** provides fabrication, installation, and maintenance services to improve bulk materials handling efficiency; mechanical clean-out services for silos and hoppers to eliminate material flow problems; and shop repair/rebuilding and modifications services of products sold by the Company.

The **TOOL GROUP** provides power tools, personal protective equipment, materials-handling equipment, shop equipment and MRO supplies used for production, fabrication, assembly, metal removal, maintenance, and storage in manufacturing, construction, utility, and commercial applications.

**Our Customers tell us that by choosing AIRMATIC to solve their problems, they gain increased productivity, decreased costs, and a safer, cleaner work environment.**

**OLI** is the international leader in industrial vibration technology, providing clients around the world with industrial vibrators, electric vibrators, concrete consolidation, frequency converters and a vast range of products designed to adapt to multiple applications in the widest range of industrial sectors. OLI was acquired by WAM Group in 1997.