



# CONCRETE CONSOLIDATION

VIBRATORS FOR CONCRETE COMPACTION







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Worldwide leader in vibration technology

## OUR 3 DIVISIONS

PROVIDE CUSTOMERS WITH OPTIMAL SOLUTIONS FOR ALL REQUIREMENTS

### INDUSTRIAL VIBRATORS



Electric vibrators and oscillating mounts for vibrating equipment.

### FLOW AIDS



Electric and pneumatic vibrators to solve any flowability problem.

### CONCRETE CONSOLIDATION



High frequency vibrators, converters and accessories for concrete compaction.



Founded in 1960 in Milan, OLI has undergone remarkable evolution, solidifying its position as **the world's top-selling manufacturer of Industrial Vibrators**. The company has expanded its global presence with **24 Trading Subsidiaries**, over **70 local warehouses**, and **4 manufacturing plants**.

Initially focused on immersion vibrators for concrete consolidation, OLI has emerged as a global leader in vibration technology. Offering a diverse range of **electric** and **pneumatic internal and external vibrators**, OLI seamlessly integrates performance and reliability to adapt to dynamic market demands.

OLI has refined its business strategy to prioritize **rapid stock delivery** and unparalleled

**technical assistance**, ensuring customers worldwide have prompt access to **top-tier products and support**. Exceptional customer service is a cornerstone of OLI's operations, characterized by efficient order processing and universal access to high-quality products and services.

The company boasts a **team of specialized engineers** supported by globally certified management, ready to offer the expertise needed to address customer needs efficiently and safely.

OLI is not only committed to providing cutting-edge equipment but is also at the forefront of **developing innovative products**, aiming to maintain its leadership in the vibration technology industry and continuously set new standards.



# TECHNICAL FEATURES AND STANDARD APPLICATIONS

## Everything you need to know for perfect concrete compaction

### Why vibration is essential in concrete consolidation

Fresh concrete cannot self-compact due to limited fluidity; the application of vibration (internal or external) reduces internal friction, allowing proper flow and compaction.

Vibration is therefore a key step in obtaining strong, durable, and aesthetically refined concrete elements.

#### Through vibration, the material achieves:

- **Release of trapped air bubbles**, improving density and consistency.
- **Even distribution of aggregates**, reducing voids and increasing homogeneity.
- **Better adhesion** of concrete to reinforcing bars and embedded components.

#### The benefits of vibration on concrete quality:

- **Higher mechanical strength** and load-bearing capacity.
- **Lower porosity**, making the material more waterproof and resistant to aggressive agents.
- **No cracks or voids** near the reinforcement or within the structure.
- **Perfect mold filling**, ensuring precise shapes and dimensions.
- **Improved surface finish**, ideal for architectural or exposed concrete.
- **Longer lifespan** and superior durability over time.

## Types of OLI vibrators for concrete consolidation

### Internal Vibrators (Poker or Immersion Vibrators)



### Direct contact with concrete

Also known as **poker vibrators** or **immersion vibrators**, these tools are designed for **direct contact with concrete**.

They are flexible, easy to handle, and ideal for compacting: industrial floors, walls and columns,

beams and slabs.

This type of compaction is called **direct internal vibration** because the vibrator is immersed directly in the fresh concrete, ensuring deep and uniform consolidation.

### External Vibrators (Electric or Pneumatic Vibrators)



### Indirect contact with concrete

**External vibrators** are used both **on-site** and in **precast concrete production**, especially for exposed or architectural surfaces.

In this case, vibration is transmitted **indirectly through formworks or molds**, providing: exceptional surface quality, consistent density throughout the

element, resistance to weathering and aggressive environments.

These vibrators are ideal for **precast panels, pipes, blocks, and structural elements** where precision and finish are crucial.



# RANGE OVERVIEW

## OLI vibrators range designed for concrete consolidation

### Efficient, reliable, and versatile solutions for every concrete application

OLI offers a full range of high-performance vibrators specifically designed for concrete consolidation. Our products ensure optimal compaction, higher strength, and superior surface finish, whether for on-

site construction or precast concrete production. Every OLI vibrator is engineered for efficiency, reliability, and durability, combining advanced Italian design with global technical support.

## Applications

OLI vibrators for concrete consolidation are designed to meet all types of production and construction needs:



**Industrial production of precast** panels, blocks, sleepers, pipes, and architectural elements. Use in vibrating tables, formworks, and molds of any size.



**On-site** casting of foundations, columns, walls, slabs.

## Built for quality, designed for performance

With over 50 years of experience in vibration technology, OLI combines engineering excellence with global support.

Every vibrator undergoes strict quality control and is compliant with CE, ATEX, and IEC standards, ensuring reliability even in the most demanding environments.

OLI's mission is simple: **to help customers achieve perfect concrete consolidation. Every time, everywhere.**

## Trust OLI expertise for the right compaction solution





OLI designs and manufactures a **complete range of concrete vibrators** — both internal and external — ensuring the highest performance, reliability, and ease of use.

Whether working **on site** or in a **precast plant**, OLI provides the right equipment and technical guidance for every application.

# Internal vibrators

Internal vibrators (also known as poker vibrators) are used directly inside fresh concrete to remove trapped air and ensure maximum density.


OLI provides several models suitable for different site conditions and concrete mixes.

PHOTO	SERIES	FEATURES	BENEFITS
	High frequency internal vibrator with integrated convert <b>EWO</b>	High frequency (200 Hz / 12,000 vpm). Reliable induction motor, double insulation. Available with multiple hose and head sizes. Optional rubber caps for formwork protection.	Built for intensive on-site use with high efficiency. Available with integrated or separate converters. Ideal for walls, foundations, beams, and slabs. Easy to handle with consistent vibration.
	High frequency internal vibrator <b>VH</b>	Various head diameters and hose lengths available. Strong vibration amplitude for deep consolidation.	Built for intensive on-site use with high efficiency. Ideal for walls, foundations, beams, and slabs. Built for reliable performance in tough conditions.
	Pistol grip <b>VHPG</b>	VHPG version includes a protective housing and handle for improved ergonomics and operator safety.	Compact and sturdy for general site use. Great compaction for small to medium projects. Easy start and smooth operation.
	Pneumatic internal vibrators <b>VHA</b>	Simple design with minimal moving parts. Durable, low-maintenance operation. Hose lengths available up to 6 m.	Ideal for zones or sites with compressed air. Compact and lightweight for easy handling in tight spaces. No electrical parts for maximum safety.

# Converters

OLI converters provide the necessary frequency and voltage to operate high-frequency internal and



external vibrators. Designed to be connected to distribution networks or generators.

PHOTO	SERIES	FEATURES	BENEFITS
	Electric frequency converters <b>CM</b>	Output 42 V / 200 Hz for safe operation. Optional multiple socket panels for simultaneous use.	Compact, portable units for one or multiple vibrators. IP44-protected, built for continuous operation. Available in single-phase or three-phase versions.

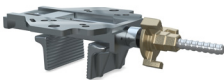




# External vibrators

External vibrators are mounted on formworks, molds, or vibrating tables to ensure uniform consolidation of precast concrete elements.

OLI offers electric and pneumatic solutions that combine power with flexibility.

PHOTO	SERIES	FEATURES	BENEFITS
	Electric external vibrators <b>MVE-HF</b>	IP66 protection rating. Continuous operation with S1 duty. Optional ATEX-certified versions for Zone 22. Adjustable centrifugal force for precision compaction.	For precast concrete elements, vibrating tables, and molds. Delivers consistent vibration for walls, panels, pipes, sleepers, and blocks. Available in centrifugal forces from 300 kg to over 2,400 kg.
	Pneumatic external vibrators <b>HFP</b>	Maintenance-free operation. Safe in explosive or wet environments. Quick installation using OLI clamp systems.	Ideal for industrial sites or areas without electricity. Robust yet lightweight, suitable for various mold shapes and materials. Delivers high-frequency vibration.

# Accessories and mounting systems

PHOTO	SERIES	FEATURES
	Clamp <b>CLW</b>	For wooden formworks.
	Clamp <b>CLS</b>	For steel formworks.
	Cradle <b>CRS</b>	For precast molds.
	<b>MSP-4</b>	Power distribution for up to 4 vibrators. In combination with three-phase frequency converters (CMT).
	<b>Rubber Caps</b>	Quick couplings, and flexible hoses available for all internal vibrator series.



# CERTIFICATIONS AND COMPLIANCE

## Guaranteed safety and quality across all OLI concrete systems

At OLI, product safety, reliability, and quality are at the heart of our concrete consolidation solutions. All our equipment is designed and manufactured in

full compliance with the most rigorous international standards and directives to ensure maximum performance, operator safety, and durability.

### Internal electric vibrators



EU legal act and subsequent modifications: 2023/1230 EC - 2014/35/EU

PRODUCTS	CERTIFICATION	INTERNATIONAL STANDARD
VH VHP VHN VHPG		Conformity verified according to the standard documents: IEC60745-1, IEC 60745-2-12, IEC 60034-1

### Internal pneumatic vibrators



EU legal act and subsequent modifications: 2023/1230 EC - 2014/34/EU

PRODUCTS	CERTIFICATION	INTERNATIONAL STANDARD
VHA		EU legal act and subsequent modifications: 2023/1230 EC - 2014/34/EU

### Frequency and voltage converters



EU legal act and subsequent modifications: 2023/1230 EC - 2014/35/EU

PRODUCTS	CERTIFICATION	INTERNATIONAL STANDARD
CM		Conformity verified according to the standard documents: EN ISO 12100-1, EN 12100-2, CEI EN 60745-1, CEI EN 60745-2-12

### Internal vibrators with built-in converter



EU legal act and subsequent modifications: 2023/1230 EC, 2014/30/EU, 2014/35/EU

PRODUCTS	CERTIFICATION	INTERNATIONAL STANDARD
EWO		Conformity verified according to the standard documents: IEC60745-1, IEC 60745-2-12



## External electric vibrators



Declaration of conformity "type B" according to: 2014/35/UE - 2023/1230 EC - EN 60034-1

PRODUCTS	CERTIFICATION	INTERNATIONAL STANDARD
MVE-HF		Declaration of conformity "type B" according to: 2014/35/UE - 2023/1230 EC - EN 60034-1
		II3D Ex tc IIIC Tx IP66 Equipment and protective system intended for use in potentially explosive atmospheres (Zone 22) - Directive 2014/34/UE Compliance with Essential Health and Safety Requirements EN 60079-0, EN 60079-31
		Conform to UL1446 and CSA 22.2 No 0-10

## External pneumatic vibrators



EU legal act and subsequent modifications: 2023/1230 EC - 2014/34/EU

PRODUCTS	CERTIFICATION	INTERNATIONAL STANDARD
HFP		EU legal act and subsequent modifications: 2023/1230 EC - 2014/34/EU
		I M2 Ex h I 150°C Mb II 2G Ex h IIC T6 GB, 2D Ex h IIIC T80°C Db

## Control panel



EU legal act and subsequent modifications: 2023/1230 EC, 2014/30/EU, 2014/35/EU

PRODUCTS	CERTIFICATION	INTERNATIONAL STANDARD
MOBILE or STATIONARY		Conformity verified according to the standard documents: CEI EN 61439-1 2012-02, CEI EN 61439-2 2012-02, CEI EN 60204-1 2006-09, UNI EN ISO 13849-1 2016-01, UNI EN ISO 13849-2 2013-03

## Commitment to continuous compliance

OLI continuously updates its production and testing processes to meet evolving international regulations. This commitment ensures that every OLI product,

whether designed for on-site concrete vibration or precast production, is fully compliant, safe, and ready for use in any environment.



# HOW TO CHOOSE THE VIBRATORS

## The right vibration solution for every concrete application

OLI offers a complete range of vibration systems for concrete consolidation, designed to ensure maximum compaction, strength, and surface quality in every type of project.

Whether you are pouring concrete on site or producing precast elements in a plant, OLI provides the right technology to achieve optimal results.

Two application fields, one goal: **perfect concrete**

Concrete consolidation is a key step in achieving durable and high-quality structures.

Depending on the working environment and the type of formwork, OLI offers two main vibration solutions:



**Construction sites**



**Internal vibrators**  
Frequency and voltage converters

For construction sites, OLI designs and supplies internal vibrators (poker vibrators), frequency and voltage converters, and portable vibration systems that make compaction fast, effective, and easy to handle even in demanding conditions.

**Benefits:**

- Excellent concrete density and surface finish
- Quick removal of air bubbles and voids
- Robust and reliable equipment for continuous operation



**Precast concrete vibration**



**External vibrators**  
Vibration systems

For industrial production environments, OLI provides a wide range of external vibrators for formwork and mould vibration systems developed specifically for precast concrete elements.

**Benefits:**

- Consistent product quality and dimensional accuracy
- High productivity and reduced cycle times
- Adaptable systems for any mold or formwork size

## Innovation, reliability, and global support

With decades of experience in vibration technology, OLI combines Italian engineering with a worldwide service network.

Every product is designed to deliver efficiency, durability, and easy maintenance, supported by local

experts who help customers choose the most suitable system for their specific application.

At OLI, we don't just supply vibration equipment, we provide complete concrete consolidation solutions that help you build stronger, faster, and better.

## Options & Accessories for OLI Concrete Products

OLI offers a complete range of optional features and accessories designed to enhance the performance, versatility, and durability of its concrete consolidation systems.

Whether you are working on site or in precast production, choosing the right accessories ensures safe operation, easier installation, and improved compaction results.

### TECHNICAL SUPPORT

Choosing the right accessories can make a significant difference in the quality, efficiency, and durability of your concrete consolidation process.

OLI's technical team is available to provide custom consulting and help you select the most suitable accessories for your application.

### Options for Internal Vibrators

Different hose lengths	Rubber cap	Quick connect fittings with filter
For internal vibrators, hoses are available in various lengths, allowing greater flexibility when working on complex sites or deep structures.	All internal electric vibrators (VH, EWO, VHPG) can be equipped with a rubber cap to protect the vibrating head and prevent contact damage with formworks.	Only for VHA. Quick-connect fittings with integrated filters make installation and maintenance easier, ensuring clean airflow and optimal vibrator performance.

### Accessories for External Vibrators

CLW - Clamp for wooden formworks	CLS - Clamp for steel formworks	CRS - Cradle for steel moulds
Quick mounting system with safety cable included. Galvanized steel finish. Compatible with OLI electric and pneumatic vibrators. Suitable for Doka, Peri, Meva, Paschal, Noe, Hünnebeck and similar systems.	Secure fastening with safety cable included. Galvanized steel finish. Designed for steel formworks in site applications. Suitable for Doka Framax XLife, Peri Trio, Meva Mammut, and similar systems.	Ideal for precast applications. Enables quick positioning and easy removal of external vibrators. Available in various sizes to match vibrator dimensions.

### Electrical accessories

MSP-4 multiple socket panel	Switch box
This distribution panel allows the simultaneous connection of up to 4 external vibrators (depending on the model). It ensures reliable power distribution, easy control, and simplified wiring on both mobile and stationary installations.	An optional push-button control box that improves safety and user convenience, allowing remote activation and control of the vibrators.

### Features for Electric and Pneumatic Systems

Power cable and plug with resin filled terminal box	Air distribution systems
Available for both electric and pneumatic high-frequency vibrators, this option enhances safety, protection against moisture, and mechanical stress resistance.	OLI also supplies optional air distribution networks, including main lines, ball valves, fittings, and solenoid valves — ensuring optimal airflow for consistent vibration performance.



## INTERNAL ELECTRIC VIBRATORS

**Flexible and easy-to-use vibrating systems** are required whenever there is the construction of industrial floors, walls, columns, slabs, etc. In such cases high-frequency immersion vibrators are generally used, known as “poker” or simply “vibrating needles”. They come into direct contact with the concrete; for this reason, we speak of internal direct vibration.

### HOW THE VH VIBRATORS WORK

An eccentric mass is housed inside the vibrating head (or needle) which is fixed to a rotating shaft powered by a three-phase asynchronous AC motor. During rotation, the eccentricity of the mass generates rotational movements to the vibrating head.

The **robustness** and the **constant rotation speed** are essential factors in the compaction of the concrete: a drop in the speed and centrifugal force heavily reduce the quality of the manufactured article.

**The VH is a robust and reliable product, which is suitable for compacting the concrete and it is appropriate for continuous operation.**

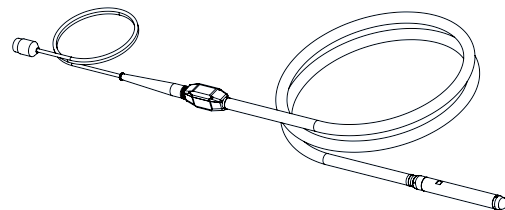
### *Important:*

The VH has to be operated by electric or electronic converters that convert the 50/60 Hz main frequencies to 200 Hz. This is necessary for the vibrating head in order to reach a vibration speed of 12,000 vpm, as it is ideal for the proper compaction.



## Benefits

- » No overheating
- » Easy maintenance
- » Long life of the vibrator head
- » 100% Water Proof



**MAXIMUM DURABILITY**  
**HIGH PERFORMANCE**



# VH

## Internal electric vibrators



VHP



VHN

Model	CF	Rated current *	Rated power (42V)	Action diameter *	Amplitude	Noise level	Compaction power *	DIMENSIONAL SPECIFICATIONS			
								Head Diameter	Head Length	Head Weight	Total Weight
								N	A	kW	cm
VHN 38	1,700	8	0.5	45	1.8	70	20	38	404	2.4	10.6
VHN 50	3,080	11	0.6	60	2.0	76	25	50	403	4.4	14.8
VHN 59	4,560	12	0.9	80	2.3	76	35	59	420	6.8	17.4
VHP 50	3,760	15	0.9	70	2.1	76	40	50	468	5.4	16.4
VHP 59	5,640	17	1.1	90	2.4	79	45	59	498	8.2	19.6
VHP 65	7,330	24	1.3	110	2.6	79	50	65	484	9.4	22.4

### VH - INTERNAL ELECTRIC VIBRATORS

APPLICATION Concrete compaction

DESCRIPTION Internal electric vibrators for concrete consolidation characterised by high performance, consistent speeds, and remarkable resistance to abrasion

### FEATURES

DUTY CYCLE Continuous S1

INPUT 42V - 3ph - 200Hz

NOMINAL FREQUENCY 12,000 vpm

INSULATION CLASS F (T° max = 155 °C)

THERMAL SWITCHES Inside the stator. Max T °C = 150 °C

WORKING TEMPERATURE From -20 °C to +40 °C

HEAD N.2 ball bearings VHN 38 / VHN 50 / VHN 59 - N.4 ball bearings VHP 50 / VHP 59 / VHP65  
Protection class IP68  
Hardening treatment for VHN and chrome plating for VHP

SWITCH BOX Polyamide (nylon +30% fiber glass) with gasket, cable protection, yellow colour  
IP66 protection  
Designed for continuous use and resistant to wear and tear

OPERATING HOSE 5 m SBR rubber hose with inner textile reinforcement

SUPPLY CABLE 10 m neoprene electric cable H07RN-F with 3 pin plug (42V - 3 phase, IP44)

FINISHING VIBRATING HEAD: steel (VHN), chromate (VHP)  
SWITCH BOX: colour yellow Ral 1007

CERTIFICATIONS



EU legal act and subsequent modifications: 2023/1230 EC - 2014/35/EU  
Conformity verified according to the standard documents: IEC60745-1, IEC 60745-2-12, IEC 60034-1

OPTIONS Rubber cap  
Hose length up to 10 mt



Rubber cap

INTERNAL VIBRATORS

EXTERNAL VIBRATORS

SYSTEMS DESIGN



## FREQUENCY AND VOLTAGE CONVERTERS

The internal vibrating needles need to be powered via a three-phase electric line at low voltage and high frequency, therefore it is necessary to use a voltage and frequency converter.

The electromechanical rotary converters consist of a motor and a generator, which are coupled together. The motor converts the electrical energy into mechanical energy; the generator converts the mechanical energy into electrical energy, thus generating the required voltage and frequency (42 Volt - 200 Hz).

**The converters of the CM range are designed to supply simultaneously and in a continuous cycle one or more high-frequency internal vibrators; they are reliable, durable and do not require maintenance.**

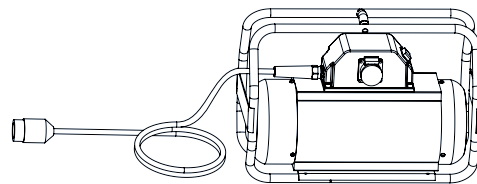
The minimal design and the materials used **facilitate the external cleaning**, while the special internal air ducting system **avoids overheating**.

The range comprises several models, which are **capable of supplying from 1 to 4 immersion vibrators**.



## Benefits

- » No overheating
- » No maintenance
- » Optimal cooling
- » Easy cleaning



**LONG LIFE**  
**OPTIMUM COOLING**



# CM

## Frequency and voltage converters – 50Hz only



CMM 11



CMM 15



CMM 25, CMT 25



CMT 55, CMT 85

Model	Frame	Outlets	Supply Electric Cable	Weight	INPUT			OUTPUT		
					Input Voltage and Frequency	Current	Power	Output Voltage and Frequency	Current	Power
					V / f	A	kW	V / f	A	kVA
CMM 11	Handle	1	3.5	17	230V, 1ph, 50Hz	2.5	0.5	42V ± 10% 3ph 200Hz	11	0.8
CMM 15	Handle	1	25	6		1.1	14		1.0	
CMM 25	Frame	2	34	10		1.8	25		1.8	
CMT 25	Frame	2	33	5		2.8	25		1.8	
CMT 35	Wheeled	3	41	6	3.3	36	2.6			
CMT 55	Wheeled	3	50	9	5.0	55	4.0			
CMT 85	Wheeled	4	56	12	6.6	85	6.2			

COMPATIBILITY TABLE						
Maximum number of vibrators that can be connected						
CMM 11	1x VHN 38	1x VHN 50	-	-	-	-
CMM 15	1x VHN 38	1x VHN 50	1x VHN 59	-	-	-
CMM 25	2x VHN 38	2x VHN 50	2x VHN 59	1x VHP 50	1x VHP 59	1x VHP 65
CMT 25	2x VHN 38	2x VHN 50	2x VHN 59	1x VHP 50	1x VHP 59	1x VHP 65
CMT 35	3x VHN 38	3x VHN 50	3x VHN 59	2x VHP 50	2x VHP 59	1x VHP 65
CMT 55	3x VHN 38	3x VHN 50	3x VHN 59	3x VHP 50	3x VHP 59	2x VHP 65
CMT 85	4x VHN 38	4x VHN 50	4x VHN 59	4x VHP 50	4x VHP 59	3x VHP 65

### CM - FREQUENCY AND VOLTAGE CONVERTERS

APPLICATION	Concrete compaction
DESCRIPTION	Frequency and voltage converters equipped with permanent magnets, specifically designed to power high frequency concrete vibrators continuously

### FEATURES

DUTY CYCLE	Continuous S1
INSULATION CLASS	F (T° Max = 155 °C)
PROTECTION	Overload protection
WORKING TEMPERATURE	From -20 °C to +40 °C
CONNECTION BOX	Polyamide (nylon + 30% fibre glass), complete with switch and sockets (42V three phase, IP44 protection)
SUPPLY CABLE	Neoprene electric cable H07RN-F with plug
FINISHING	Powder coating (body orange Ral 2009; fan covers, wheels and frame black Ral 9007)

### CERTIFICATIONS



EU legal act and subsequent modifications: 2023/1230 EC - 2014/35/EU  
 Conformity verified according to the standard documents: EN ISO 12100-1, EN 12100-2, CEI EN 60745-1, CEI EN 60745-2-12

DESIGN Smooth and robust cast aluminium body  
 Forced ventilation



## INTERNAL VIBRATORS WITH BUILT-IN CONVERTER

On construction sites, during the consolidation of the concrete, a light, flexible and easy-to-use tool is often required, which **can be connected directly to the common single-phase power lines** (230 or 110 Volt, 50/60 Hz).

The solution to fulfil this need is the **EWO** range: **high-frequency immersion vibrators equipped with an integrated electronic frequency converter** capable of transforming the single-phase input voltage (230V or 110V, 50/60 Hz) into the three-phase voltage (230 V, 200 Hz) necessary to obtain 12,000 vpm.

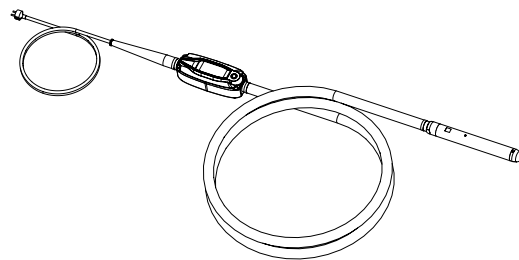
Compared to the common vibrating needles powered by electromechanical converters, the EWO vibrators have several advantages:

- They are **light and flexible**.
- The constant output frequency maintains the maximum centrifugal force and thus a **high and consistent performance**.
- There is a **protection** against short circuits, excessive temperature, overvoltage and overcurrent above or below the nominal values.



### Benefits

- » Reliable
- » Safe & easy to handle
- » No overheating
- » Easy maintenance



**COMPACT SOLUTION**



## Internal vibrators with built-in converter



EWO 38C

Model	CF	Rated Current*	Rated power [230V]	Action Diameter **	Amplitude	Noise Level ***	Compaction Power **	DIMENSIONAL SPECIFICATIONS			
								Head Diameter	Head Length	Head Weight	Total Weight****
								N	A	kW	cm
EWO 38C	1,700	1.5	0.5	45	1.8	70	20	38	404	2.4	14.5
EWO 50C	3,760	2.7	0.9	70	2.1	76	40	50	468	5.2	20.0
EWO 59C	5,640	3.0	1.1	90	2.4	79	45	59	499	8.2	22.8
EWO 65C	7,330	4.5	1.3	110	2.6	79	50	65	484	9.4	24.8

\* Refer to centrifugal force for amperage assessment

\*\* Measurements vary according to concrete quality and thickness

\*\*\* Measured at 1 m distance

\*\*\*\* Packaging included.

Model	Input Voltage	Input Frequency	Input Amperage
Converter 230	230V ±10% 1ph	50/60Hz	5.5 A

### EWO - INTERNAL VIBRATORS WITH BUILT-IN CONVERTER

APPLICATION	Concrete compaction
DESCRIPTION	Equipped with compact electronic frequency converters integrated into the supply cable, characterised by high centrifugal forces, constant speeds and high wear resistance

### FEATURES

DUTY CYCLE	Continuous S1
INPUT	230V ± 10% 50/60 Hz -1 ph
NOMINAL FREQUENCY	12.000 vpm
MOTOR INSULATION CLASS	F (T° max = 155 °C)
PROTECTION CLASS	Head protection IP68 Converter protection IPX8 The inverter is protected against overcurrent, overvoltage, excess temperature and short circuit. A LED light shows the presence of a fault
WORKING TEMPERATURE	From -5 °C to +55 °C
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
PROTECTION HOSE	5 m SBR rubber hose with textile reinforcement
SUPPLY CABLE	10 m neoprene electric cable H07RN-F with CEE 7/4 (SCHUKO) 220V 2P+1G 16A plug
CONVERTER	Sturdy cast aluminium box Ergonomic and lightweight (3 Kg)
INVERTER	Tropicalised and protected against vibration, moisture and shocks with a special resin
FINISHING	Painted orange Ral 2009 and chrome plating
CERTIFICATIONS	 EU legal act and subsequent modifications: 2023/1230 EC, 2014/30/EU, 2014/35/EU Conformity verified according to the standard documents: IEC60745-1, IEC 60745-2-12
OPTIONS	Rubber cap Hose length up to 10 mt



## INTERNAL VIBRATORS WITH PISTOL GRIP

For **thin layers of concrete**, such as floors or slabs, a short, light and manoeuvrable vibrator is needed. For all these cases, the ideal solution is to use a **pistol grip poker**.

Through a switch located in the pistol, the operator is able to activate and deactivate the vibrator as needed and **move easily** on the construction site.

**The highest level of safety** is ensured through a low voltage needle (42V) as well as perfect compaction and aesthetic results are obtained thanks to the high speed (12,000 vpm).

### **Important:**

The VHPG has to be operated by electric and electronic converters that convert the 50/60 Hz mains frequency to **200 Hz**, which is necessary in order for the vibrating head to reach a vibration speed of 12,000 vpm, as it is ideal for the proper compaction.



## Benefits

- » Compact solution
- » Lightweight
- » Long life of the vibrator head



**EASY TO HANDLE**



# VHPG

## Internal vibrators with pistol grip



Model	CF	Rated current *	Rated power (42V)	Action diameter *	Amplitude	Noise level	Compaction power *	DIMENSIONAL SPECIFICATIONS			
								Head Diameter	Head Length	Head Weight	Total Weight
								mm	mm	kg	kg
VHPG 38	1,700	8	0.5	45	1.8	70	20	38	404	2.4	7.4
VHPG 50	3,080	11	0.6	60	2.0	76	25	50	403	4.4	9.4
VHPG 59	4,560	12	0.9	80	2.3	76	35	59	420	6.8	11.8


\* Measurements vary according to the quality and thickness of the concrete.

\*\* Equipped with roller bearings

### VHPG - INTERNAL VIBRATORS WITH PISTOL GRIP

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

### FEATURES

DUTY CYCLE	Continuous S1
INPUT	42V - 3ph - 200Hz
NOMINAL FREQUENCY	12,000 vpm
INSULATION CLASS	F (T° max = 155 °C)
THERMAL SWITCHES	Inside the stator. Max T °C = 150 °C
WORKING TEMPERATURE	From -20 °C to +40 °C
HEAD	Ball bearing: n.2 VHPG 50 / VHPG 59 - n.4 VHPG 38
PLASTIC PISTOL	Grip with cable protection, green colour IP54 protection
OPERATING HOSE	0.8 m SBR rubber hose with inner textile reinforcement
SUPPLY CABLE	10 m neoprene electric cable H07RN-F with 3 pin plug (42V - 3 phase, IP44)
FINISHING	VIBRATING HEAD: chrome painted
CERTIFICATIONS	 EU legal act and subsequent modifications: 2023/1230 EC - 2014/35/EU Conformity verified according to the standard documents: IEC 60745-1, IEC 60745-2-12, IEC 60034-1
OPTIONS	Rubber cap



Rubber cap



## INTERNAL PNEUMATIC VIBRATORS

VHA is a reliable vibration system designed to provide **high operating frequency** with high working efficiency under safe conditions. For this reason it is ideal for every type of compaction: from lab tests to heavy infrastructure projects.

There are **no moving parts inside the hose**, this means less vibration on the hands and arms of the operator and an extended service life.

As a pneumatic vibrator, **VHA doesn't need electricity** and can even work out of concrete without overheating. This means no work interruptions even in severe conditions.

**Ease-of-use** and **maintenance-free** make the VHA the perfect solution for compacting concrete when electricity is not available.



### Benefits

- » High working efficiency
- » No work interruptions
- » Maintenance free
- » Safe



**NO ELECTRICITY**



## Internal pneumatic vibrators



Model	CF	Vibration	Working Pressure	Air Consumption	DIMENSIONAL SPECIFICATIONS		
					Head Diameter	Head Length	Total Weight
					N	vpm	bar
VHA 40	2,712	22,000	6.5	500	40	230	4.0
VHA 50	5,627	17,000	6.5	800	50	250	5.8
VHA 60	9,321	12,000	6.5	900	60	290	7.6
VHA 80	15,829	11,000	6.5	1,300	80	330	14.2

### VHA - INTERNAL PNEUMATIC VIBRATORS

APPLICATION Concrete compaction

DESCRIPTION High frequency internal pneumatic vibrators for concrete consolidation

### FEATURES

DUTY CYCLE Continuous

WORKING PRESSURE 6.5 Bar

AIR SUPPLY QUALITY 5.4.4

WORKING TEMPERATURE -10°C / +60°C

MAX NOISE LEVEL 99 dB (A)

TECHNOLOGY Eccentric rotor

HEAD MATERIAL Steel

FINISHING Chrome

OPERATING HOSE 2 m SBR rubber hose with inner textile reinforcement

CERTIFICATIONS



EU legal act and subsequent modifications: 2023/1230 EC - 2014/34/EU

OPTIONS Different length of the hose (up to 6 m)  
Quick connect fittings with filter included



## EXTERNAL ELECTRIC VIBRATORS

High frequency electric vibrators are used in construction sites and in precast manufacturing plants to obtain high-quality products (exposed concrete), with **excellent aesthetic results and weather resistance**. The vibration is transmitted to the concrete **indirectly** through formworks or mould.

Just like the internal vibrators, the external ones are also based on the principle of the vibration produced by the rotation of an eccentric mass powered by a three phase electric motor.

Low speed vibration (3,000 rpm) is used on high-density and unreactive concretes mostly, as they allow a fast displacement of the aggregates.

High speed vibration (6,000 or 9,000 rpm) is recommended with low-density concretes and in applications where high surface quality is required.

The possibility to adjust both the frequency and the speed (from 0 up to 9,000 rpm) guarantees the achievement of the perfect operational frequency. It depends on the type of concrete to vibrate as well as the natural resonant frequency of the mould.

The OLI external electric vibrators are characterised by **high operating efficiency** and **ease of installation**. Specially designed attachment devices (quick-coupling clamps) reduce the time required for installing and repositioning.

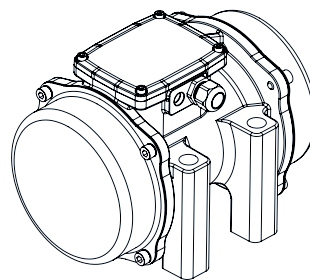
This vibration system is recommended when:

- High construction elements and narrow walls (partitions, columns, beams) have to be compacted, which are difficult to vibrate with other systems.
- The reinforcement density inside the housing is high.

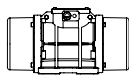


## Benefits

- » ATEX certification
- » Low noise level
- » Easy to install



**ADJUSTABLE FREQUENCY**



# MVE FOOT MOUNTED

## External high frequency vibrators



Class II Div.2: Temp. Class T4  
ExII 3D Temp. Class: 135 °C



Wm kgcm	Model	Weight kg	Centrifugal Force kg	rpm	ELECTRICAL SPECIFICATIONS						
					Input Power kW	Frequency Hz	Nominal Current A Max.		COS φ	Cable Gland Metric	
							42V	220-240V/400-460V			
1.47	MVE 290/6N-HF-10A0	5	297	0-6,000	0.27	0-200	5	0.92/0.53		0.75	M20
6.82	MVE 1530/6N-HF-38E0	12	1,384	0-6,000	1.00	0-200	15	2.80/1.62		0.89	M25
7.32	MVE 1300/6N-HF-50A0	22	1,474	0-6,000	1.30	0-100	23	4.22/2.44		0.77	M25
7.32	MVE 1300/6N-HF-53A0	30	1,474	0-6,000	1.30	0-100	23	4.22/2.44		0.77	M25
7.32	MVE 2000/6N-HF-53A0	30	2,030	0-6,000	1.30	0-100	23	4.22/2.44		0.77	M25
11.85	MVE 2400/6N-HF-53A0	30	2,383	0-6,000	1.60	0-200	24	4.38/2.53		0.91	M25
4.70	MVE 2000/9N-HF-53A0	30	2,156	0-9,000	1.50	0-150	28	5.02/2.90		0.75	M25

NOTE: All the vibrators can be used in variable frequency if connected to the electronic control panel of OLI.

Model	Drawing	Size	DIMENSIONAL SPECIFICATIONS (mm)												
			C	M	A	B	Ø G	Holes	D	E	F	H	I	L	N
MVE 290/6N-HF-10A0	A	10A0	211	45	62-74 / 33	106 / 83-105	9-7	4	130	135	11	50	96	107	85
MVE 1530/6N-HF-38E0	B	38E0	255	43	90	154	18	4	187	195	121	89	174	169	156
MVE 1300/6N-HF-50A0	C	50A0	321	62	120	170	17	4	208	210	22	96	185	192	170
MVE 1300/6N-HF-53A0	C	53A0	391	97	100	180	17	4	235	210	24	96	185	187	169
MVE 2000/6N-HF-53A0	C	53A0	391	62	100	180	17	4	235	210	24	96	185	187	169
MVE 2400/6N-HF-53A0	C	53A0	391	97	100	180	17	4	235	210	24	96	185	187	169
MVE 2000/9N-HF-53A0	C	53A0	391	97	100	180	17	4	235	210	24	96	185	187	169

### FOOT MOUNTED ELECTRIC VIBRATORS

APPLICATION Concrete compaction

DESCRIPTION High frequency electric vibrator, foot mounted, external application

### FEATURES

DUTY CYCLE Continuous S1

MULTIVOLTAGE 3ph 42V - 3ph 230/400V [\* voltage tolerance ± 10%]

VARIABLE FREQUENCY 0-100Hz - 0-150Hz - 0-200Hz

WORKING TEMPERATURE -10 °C / +40 °C

MAX NOISE LEVEL 85 dB(A) at 1 meter distance

MATERIAL Aluminium or cast iron

FINISHING Painted: orange RAL 2009

#### CERTIFICATIONS



II3D Ex tc IIIC Tx IP66  
Equipment and protective system intended for use in potentially explosive atmospheres (Zone 22) -  
Directive 2014/34/UE  
Compliance with Essential Health and Safety Requirements  
EN 60079-0, EN 60079-31



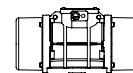
Declaration of conformity "type B" according to: 2014/35/UE - 2023/1230 EC - EN 60034-1



Conform to UL1446 and CSA 22.2 No 0-10

OPTIONS Power cable and plug terminal box fulfil of resin

ACCESSORIES Fixing brackets: CLW (Clamp for Wooden formworks); CLS (Clamp for Steel formworks) only for MVE 290/6N-HF-10A0

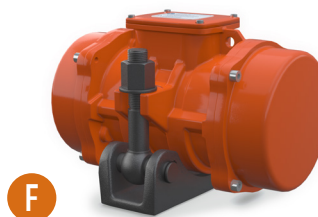


# MVE CRADLE MOUNTED

## External high frequency vibrators



MVE size 39



MVE size 50

Class II Div.2: Temp. Class T4  
ExII 3D Temp. Class: 135 °C



INTERNAL VIBRATORS

EXTERNAL VIBRATORS

SYSTEMS DESIGN

### ELECTRICAL SPECIFICATIONS

Wm kgcm	Model	Weight kg	Fixing Model	Centrifugal Force kg	rpm	Input Power kW	Frequency Hz	Nominal Current A Max.		COS φ	Cable Gland Metric
								42V	230/400V		
6.82	MVE 1530/6N-HC-39A0	18	CRS059	1,384	0-6,000	1.0	0-200	15	2.80/1.62	0.89	M25
7.32	MVE 1300/6N-HC-50A0	28	CRS080	1,474	0-6,000	1.3	0-100	23	4.22/2.44	0.77	M25
9.48	MVE 2000/6N-HC-50A0	28	CRS080	1,907	0-6,000	1.3	0-100	23	4.22/2.44	0.77	M25
9.48	MVE 2000/6N-HC-50A0	28	CRS080	1,907	0-6,000	1.6	0-200	24	4.38/2.53	0.91	M25
4.70	MVE 2000/9N-HC-50A0	28	CRS080	2,156	0-9,000	1.5	0-150	28	5.02/2.90	0.75	M25

\* MVE 1300/6N-HC-50A0 comes with eccentric weights set at 50%. Wm and centrifugal force refer to 6,000 rpm.

### DIMENSIONAL SPECIFICATIONS (mm)

Model	Drawing	Size	C	M	A	B	ØG	Holes	D	E	F	H	I	L	N
			MVE 1530/6N-HC-39A0	E	39A0	276	43	121	/	20	1	189	172	198	94.5
MVE 1300/6N-HC-50A0	F	50A0	321	62	136	/	25	1	235	180	218	102	185	84	169
MVE 2000/6N-HC-50A0	F	50A0	321	62	136	/	25	1	235	180	218	102	185	84	169
MVE 2000/6N-HC-50A0	F	50A0	321	62	136	/	24	1	235	180	218	102	185	84	169
MVE 2000/9N-HC-50A0	F	50A0	321	62	136	/	25	1	235	180	218	102	185	84	169

### CRADLE MOUNTED ELECTRIC VIBRATORS

APPLICATION Concrete formworks

DESCRIPTION High frequency electric vibrator, cradle mounted, external application

### FEATURES

DUTY CYCLE Continuous S1

MULTIVOLTAGE 3ph 42V - 3ph 230/400V (voltage tolerance ± 10%)

VARIABLE FREQUENCY 0-100Hz - 0-150Hz - 0-200Hz

WORKING TEMPERATURE -10 °C / +40 °C

MAX NOISE LEVEL 85 dB(A) at 1 meter distance

MATERIAL Cast iron

FINISHING Painted: orange RAL 2009

#### CERTIFICATIONS



II3D Ex tc IIIC Tx IP66  
Equipment and protective system intended for use in potentially explosive atmospheres (Zone 22) - Directive 2014/34/UE  
Compliance with Essential Health and Safety Requirements  
EN 60079-0, EN 60079-31



Declaration of conformity "type B" according to: 2014/35/UE - 2023/1230 EC - EN 60034-1



Conform to UL1446 and CSA 22.2 No 0-10

OPTIONS Power cable and plug terminal box fulfill of resin

ACCESSORIES Fixing bracket: CRS (Cradle for Steel concrete moulds)



INTERNAL VIBRATORS

EXTERNAL VIBRATORS

SYSTEMS DESIGN



## EXTERNAL PNEUMATIC VIBRATORS

The external pneumatic vibrators have **no electrical components**.

They are powered via **air compressor** that spins the rotors inside the vibrator at a very high speed (generally between 10,000 and 17,000 vpm). This generates a circular vibration that spreads in all directions.

The optimum frequency varies depending on the dimensions of the aggregates: a low frequency (approximately 10,000 vpm) favours the vibration of large granules (pebbles and gravel), while a high frequency (approximately 20,000 vpm) favours the vibration of fine granules (sand, cement and others).

They are used especially in the construction of concrete segments for tunnels, viaducts and bridges.

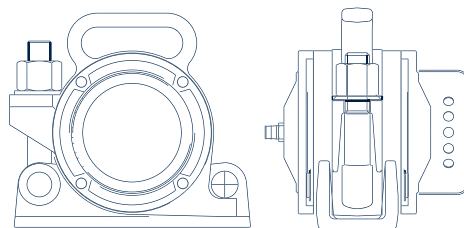
The OLI pneumatic vibrators have a **solid and durable body** made of ductile cast iron. They are characterised by **high reliability and efficiency** as well as **compact size**.

Just like the electric vibrators, they may also be bolted or attached via quick-coupling clamps to formworks or moulds for the purpose of easy movement.

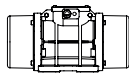


## Benefits

- » Easy to handle
- » No electric component
- » Maintenance free

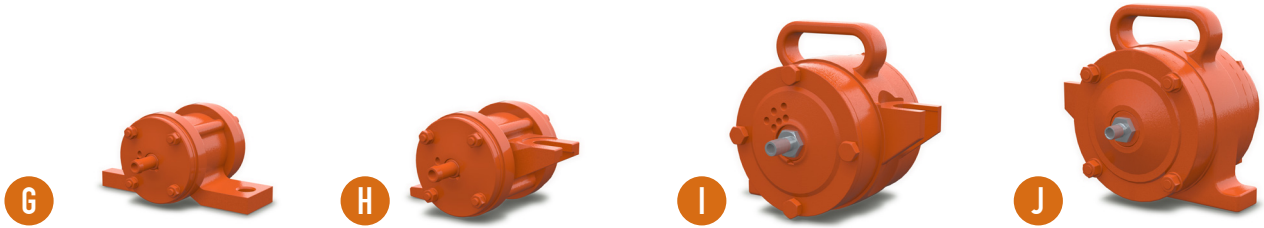


**EFFICIENT AND RELIABLE**



# HFP

## External pneumatic vibrators



MODEL	Drawing	Working Pressure bar	Fixing Model	Vibration vpm	Centr. Force kg	Air Consump. l/min	Noise Level dB [A]	DIMENSIONAL SPECIFICATIONS (mm)									
								A	B	C	D	E	F	G	H	I	Weight Kg
HFP 600P	G	6.5	Plate	17,000	720	1,000	100	111	220	180	22	134	20	-	60	15	6.3
HFP 1000P		6.5	Plate	16,500	1,122	1,100	100	111	220	180	22	134	20	-	60	15	7.2
HFP 1400P		6.5	Plate	16,000	1,453	1,200	100	111	220	180	22	134	20	-	60	15	7.3
HFP 600C	H	6.5	CRS055	17,000	720	1,000	100	120	180	-	-	134	-	18	94	15	6.3
HFP 1000C		6.5	CRS055	16,500	1,122	1,100	100	120	180	-	-	134	-	18	94	15	7.2
HFP 1400C		6.5	CRS055	16,000	1,453	1,200	100	120	180	-	-	134	-	18	94	15	7.3
HFP 2721C	I	6.5	CRS080	16,000	2,753	1,600	103	224	235	-	-	145	-	24	84	15	14.0
HFP 4021C		6.5	CRS080	15,200	4,079	1,800	103	224	235	-	-	145	-	24	84	15	14.5
HFP 6021C		6.5	CRS080	14,500	5,673	1,800	103	224	235	-	-	145	-	24	84	15	16.6
HFP 4001C*	J	6.5	CRS080	10,200	4,079	1,800	90	215	235	-	-	180	-	24	84	15	16.0

\* Silent model; measured at 1 mt distance

### HFP - EXTERNAL PNEUMATIC VIBRATORS

**APPLICATION** Concrete formworks on site  
Concrete moulds in precast industry

### FEATURES

**WORKING PRESSURE** 6.5 bar

**AIR SUPPLY QUALITY** Class 5.4.4

**WORKING TEMPERATURE** -10 °C / +60 °C

**MAX NOISE LEVEL** 103 dB(A)  
Silent version HFC 4001C: 90 dB(A) at 1 meter distance

**TECHNOLOGY** Eccentric rotor

**MATERIALS** Steel and cast iron

**FINISHING** Painted: orange RAL 2009

### CERTIFICATIONS



I M2 Ex h I 150°C Mb  
II 2G Ex h IIC T6 GB, 2D Ex h IIIC T80°C Db

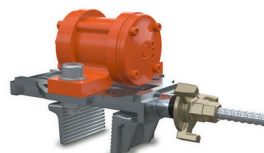


EU legal act and subsequent modifications: 2023/1230 EC - 2014/34/EU

### ACCESSORIES

Fastening systems:  
CLW (Clamp for Wooden formworks);  
CLS (Clamp for Steel formworks);  
CRS (Cradle for Steel concrete moulds).

HFP model G  
on CLW



HFP model I  
on CRS



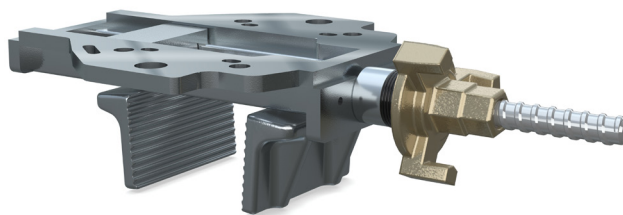


# FASTENING SYSTEMS FOR EXTERNAL VIBRATORS

## CLW

### CLAMP FOR WOODEN FORMWORKS

APPLICATION	Quick mounting of vibrators on wooden formworks
SAFETY BELT	Included
FINISHING	Galvanized
COMPATIBLE VIBRATORS	Electric: up to size 30 Pneumatic: plate type



### SUITABLE FOR (most common)

DOKA	H20, Top50, FF20
PERI	VT20K, GT24, VARIO GT24
MEVA	H20
PASCHAL	H20
NOE	H20
HÜNNEBECK	H20, R24, GF24, ES24

### DIMENSIONAL SPECIFICATIONS

Model	Length	Width	Height	Weight	Multiple Footprint (mm)			
	mm	mm	mm	kg	Electric		Pneumatic	
CLW 002	389	291	122	7.4	65x106	135x115	90x125	180

## CLS

### CLAMP FOR STEEL FORMWORKS

APPLICATION	Quick mounting of vibrators on steel formworks
SAFETY CABLE	Included
FINISHING	Galvanized
COMPATIBLE VIBRATORS	Electric: up to size 30 Pneumatic: plate type



### SUITABLE FOR (most common)

DOKA	Framax XLife, Alu Framax XLife
PERI	Trio
MEVA	StarTec, Mammut
NOE	NOEtop

### DIMENSIONAL SPECIFICATIONS

Model	Length	Width	Height	Weight	Multiple Footprint (mm)			
	mm	mm	mm	kg	Electric		Pneumatic	
CLS 002	389	291	122	8.2	68x106	135x115	90x125	180

## CRS

### CRADLE FOR STEEL CONCRETE MOULDS

APPLICATION	Quick mounting of vibrators on steel concrete moulds
-------------	--

### SUITABLE FOR

#### STEEL CONCRETE MOULDS

All OLI fastening systems are designed to be used with electric and pneumatic vibrators



CRS 055 - CRS 080



CRS 059

### DIMENSIONAL SPECIFICATIONS

Model	Length	Width	Height	Weight	Radius
	mm	mm	mm	kg	mm
CRS 055	180	105	140	3.5	55
CRS 059	200	160	174	5.5	59
CRS 080	230	85	184	5.8	80



# MSP-4 MULTIPLE SOCKETS PANEL

## For simultaneously connection of formwork's vibrators

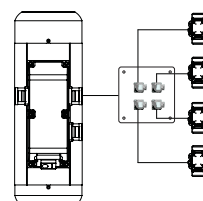


### MSP-4 - CONNECTED TO THE OLI CONVERTER CMT35

Suitable to power up to 4 electric vibrators MVE 290/6

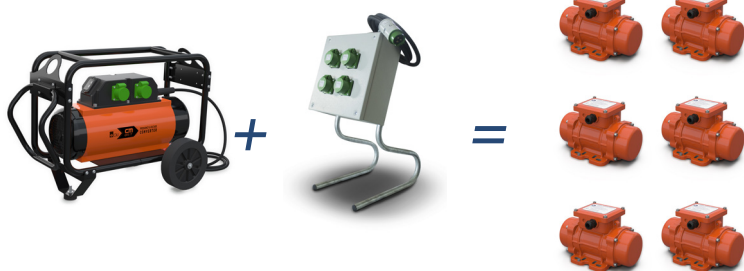


MOUNTING SCHEME

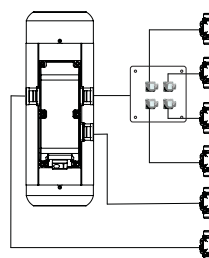


### MSP-4 - CONNECTED TO THE OLI CONVERTER CMT55

Suitable to power up to 6 electric vibrators MVE 290/6

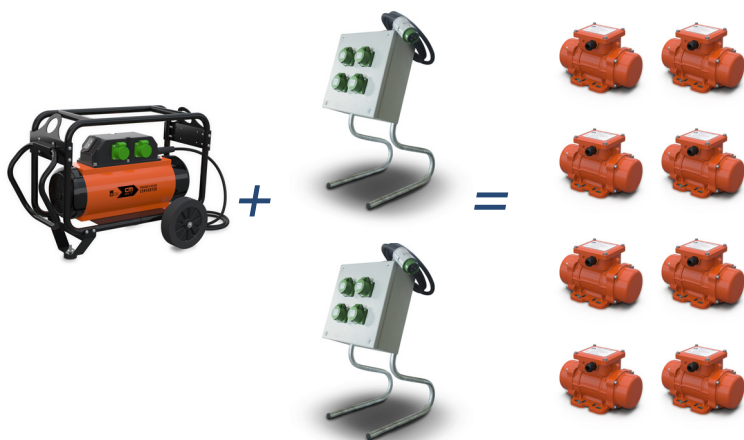


MOUNTING SCHEME

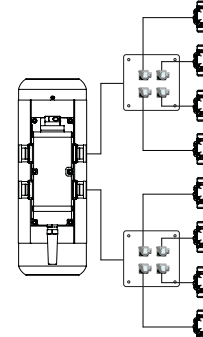


### MSP-4 - CONNECTED TO THE OLI CONVERTER CMT85

Suitable to power up to 8 electric vibrators MVE 290/6



MOUNTING SCHEME



#### IMPORTANT

Never connect more vibrators than what suggested in the mounting schemes, even if there are unused output sockets.

**SWITCH BOX KRV00095**  
For a better functioning of the vibrator it is advisable to use the special push-button panel (to use the switch box), which can be purchased separately.





## EXTERNAL VIBRATION SYSTEMS

In the construction sector, effective vibration is essential to ensure compact, air-free concrete with high mechanical performance. OLI offers a **comprehensive range of high-frequency external vibration systems**, designed to optimize the consolidation process and enhance the quality of concrete structures.

Choosing OLI for the construction of concrete consolidation plants means **relying on a dedicated technical team with extensive and long-standing expertise in the field.**

From the very first stages of design, OLI supports customers by providing **guidance** on the correct positioning and fixation of vibrators, ensuring optimal results in terms of durability and aesthetics of the finished product.

OLI is also able to supply **custom-designed systems**, both **electrical** and **pneumatic**, guaranteeing maximum operational efficiency.



## Benefits

- » A single interface for consulting and product supply
- » Improved management and operational efficiency

**TURNKEY  
PROJECT**



# CONTROL SYSTEMS WITH ELECTRIC POWER SUPPLY

## High-Frequency Vibration with Electric Power Supply



MOBILE



REMOTE CONTROL



STATIONARY

Each construction site or precast plant has its own specificities and needs. After a **detailed analysis of the production process**, OLI supports customers by providing tailor-made solutions that optimize site productivity.

### OLI OFFERS A RANGE OF ELECTRIC VIBRATION SYSTEMS, INCLUDING:

- **Mobile control panels** with various output voltages and frequencies, from 2 to 10 outputs;
- **Mobile control panels** with distribution boxes for better cable management;
- Stationary panels with **remote control, PLC and dedicated software** designed for the specific application.

Additionally, OLI designs and supplies **fully automated solutions** for precast plants, complying with Industry 4.0 legislation, ensuring **greater efficiency and integration** into modern production processes.

OLI's high-frequency electric vibrators provide **intense and uniform action**, making them ideal for application on formworks and precast structures. Thanks to their energy efficiency and reliability, these systems ensure optimal concrete consolidation, reducing the risk of defects and **improving the durability of constructions**.

INTERNAL VIBRATORS

EXTERNAL VIBRATORS

SYSTEMS DESIGN

### PLANT REALIZATION STAGES:



1. Customer request analysis
2. Sizing
3. Project development
  - ↳ Supply of electrical system
  - ↳ Supply of pneumatic system
4. Installation





# Mobile Control Panel Range



INTERNAL VIBRATORS

EXTERNAL VIBRATORS

MODEL	Power kW	Sockets q.ty	INPUT					OUTPUT				
			Voltage & Frequency V/F	Current A	Power kW	Power Plug Type CEE	Power Cable Length m	Voltage & Frequency *		Current A	Power kW	Sockets Type CEE
			380/480V 50/60Hz 3 PHASE			63A 3P+PE	5	V/F	A	kW	Type CEE	
EC42/4M	7.5/11	4	380/480V 50/60Hz 3 PHASE	26/33	7.5/11	32A 3P+PE	5	42V 3ph	0-100 Hz 0-150 Hz 0-200 Hz	103A/151A	7.5/11	3P 32A 4H 50V 100-200Hz
EC42/6M	11/15	6		33/41	11/15	63A 3P+PE				151A/206A	11/15	
EC42/8M	15/18	8		41/48	15/18.5	63A 3P+PE				206A/254A	15/18.5	
EC42/10M	18/22	10		48/52	18.5/22	63A 3P+PE				254A/302A	18.5/22	
EC400/4M	7.5/11	4		26/33	7.5/11	32A 3P+PE		400V 3ph	0-100 Hz 0-150 Hz 0-200 Hz	18.5A/25A	7.5/11	4P 16A 10H 50-500V 100-300Hz
EC400/6M	11/15	6		33/41	11/15	63A 3P+PE				25A/32A	11/15	
EC400/8M	15/18	8		41/48	15/18.5	63A 3P+PE				32A/38A	15/18.5	
EC400/10M	18/22	10		48/52	18.5/22	63A 3P+PE				38A/45A	18.5/22	

\* Also available at 230V  
Made-to-measure extensions cords available

## Selection Chart

Maximum number of vibrators that can be connected simultaneously

MODEL	Size mm	Power kW	Sockets q.ty	OUTPUT				
				Vibrators with Power from 0-1kW q.ty	Vibrators with Power from <1-1.6kW q.ty	Voltage & Frequency *		
						V/F		
EC42/4M	600 x 1000 x 500	7.5	4	4	2	42V 3ph 0-100 Hz 0-150 Hz 0-200 Hz		
EC42/4M		11	4	4	4			
EC42/6M		11	6	6	4			
EC42/6M		15	6	6	6			
EC42/8M		15	8	8	6			
EC42/8M		18	8	8	8			
EC42/10M		18	10	10	8			
EC42/10M		22	10	10	10			
EC400/4M		600 x 1000 x 500	7.5	4	4		2	400V 3ph 0-100 Hz 0-150 Hz 0-200 Hz
EC400/4M			11	4	4		4	
EC400/6M	11		6	6	4			
EC400/6M	15		6	6	6			
EC400/8M	15		8	8	6			
EC400/8M	18		8	8	8			
EC400/10M	18		10	10	8			
EC400/10M	22		10	10	10			

SYSTEMS DESIGN



SYSTEMS DESIGN

EXTERNAL VIBRATORS

INTERNAL VIBRATORS



# VIBRATION SYSTEMS WITH PNEUMATIC POWER SUPPLY



Solenoid valve



Main distribution line with ball valves and fittings

**Pneumatic vibrators** are the ideal solution for industrial environments and construction sites where compressed air is the preferred or required power source. These devices, free from electrical components, **ensure safety in challenging conditions** while delivering **constant** and **effective** vibration for perfect concrete compaction.

OLI is also able to study and **supply air distribution systems** (excluding the compressor) that ensure the **optimal air flow rate** needed to maximize efficiency, both for construction sites and precast plants that use pneumatic vibrators.

## SOME EXAMPLES OF SOLUTIONS OFFERED BY OLI INCLUDE:

### Main distribution lines

Flexible pipes for connecting the vibrators.

### Ball valves and fittings

Fully automated electro-pneumatic control panels with solenoid valves and PLC, featuring dedicated control software specifically designed for the application.

### Control Panels and Remote Activation

To ensure seamless integration and precise control

of the vibration process, OLI designs and supplies customized control panels, tailored to meet customer needs.

These systems allow for centralized management of vibrators, enhancing efficiency and reliability in concrete consolidation.

Additionally, the vibration system can be activated via remote control, providing greater convenience and safety in construction and production operations.

## TECHNICAL CONSULTING FOR PLANT DESIGN

Beyond providing high-quality products, OLI offers a **highly specialized consulting service** for the design of vibration systems. Our experts assist customers in

selecting the most suitable solutions **for their specific needs**, ensuring seamless integration of vibration technology into production processes.





# INNOVATION AND RESEARCH

## OLI'S PATENTED AUTOMATIC ARM FOR CAROUSEL SYSTEMS

OLI continuously invests in R&D to deliver cutting-edge solutions in industrial vibration.

Among its most significant innovations, OLI holds the patent for **the connector of the automatic arm** designed for **carousel systems**, a technology that optimizes vibration application in production processes,

**increasing the operator's safety and reducing processing times.**

With OLI, **innovation meets reliability**, delivering high-performance, efficient vibration systems that can be tailored to any concrete consolidation requirement.



INTERNAL VIBRATORS

EXTERNAL VIBRATORS

SYSTEMS DESIGN

**Note:**

A large rectangular box with a thin black border, containing 30 horizontal dotted lines for writing. The lines are evenly spaced and extend across the width of the box.

**Note:**

A large rectangular box containing 30 horizontal dotted lines for writing notes.



# Tips and recommendations for use

## TIPS FOR CHOOSING THE INTERNAL VIBRATOR

### Selection of the needle diameter

Factors to be taken into consideration:

- composition of the concrete
- quantity of reinforcements (percentage of reinforcement inside the concrete element)
- size of the spaces between the various reinforcements (mesh sizes)
- thickness of the concrete layer

The diameter to be used must allow the maneuver of the vibrator inside the reinforcement, without getting stuck in the mesh.

### Definition of the operating tube length

It must be longer than the depth of the manufactured article in order to allow the vibration of the deeper layers.

## TIPS FOR CHOOSING THE EXTERNAL VIBRATOR

### Pneumatic or electric?

The choice depends on the type of power available (electricity or compressed air).

### What type of fastening?

It depends on the construction material and on the shape of the profiles to which the vibrators have to be fastened.

### Definition of the positioning

It depends on the size and the shape of the formwork or mold.\*

### Definition of the operating cycle

The number of vibrators to run simultaneously depends on the size of the formwork or mold and on the pour rate of the plant.

It is important to run the vibrators only when the concrete is inside the formwork or mold in order to avoid resonance or vibration out of control.\*

### Definition of the power supply

Standard frequency electric vibrators (3000RPM) can be connected DOL (Direct On Line). High frequency electric vibrators (6000RPM) is mandatory to connect to control panels according to the input voltage and frequency of the chosen vibrators. Pneumatic vibrators for concrete consolidation must be connected to air supply as indicated in the catalogue.

\* For the right positioning and operating cycle please refer to OLI Technical support.

## MAIN RECOMMENDATIONS FOR USE

### Repeated vibration

It means vibrating the already compacted concrete again. This technique is used to mix successive layers of concrete in order to improve the surface finish quality of columns and walls and to increase their strength and wear resistance.

### Vibration inside the formwork

Make sure that the vibrating head does not touch the interior walls because, besides damaging them, it could generate depressions in the manufactured article, thus deteriorating the quality of the surfaces. Vibrators with rubber tips may be used to reduce this problem.

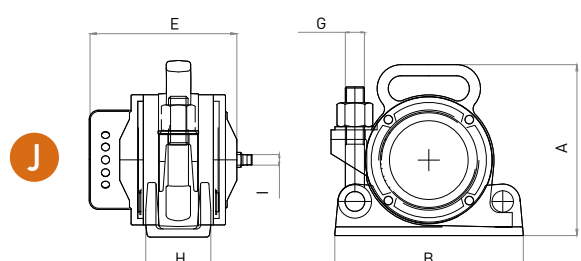
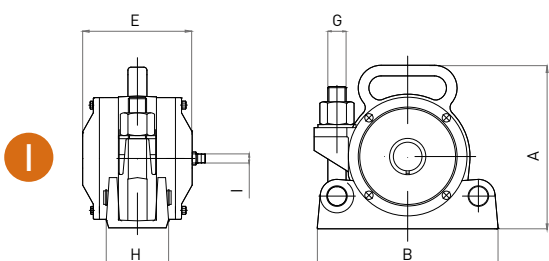
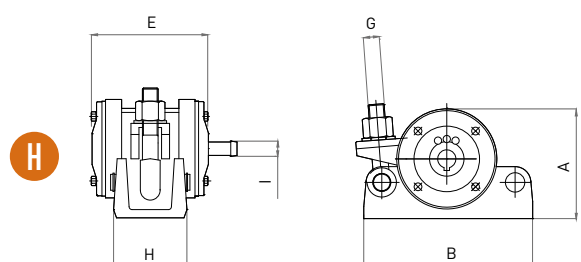
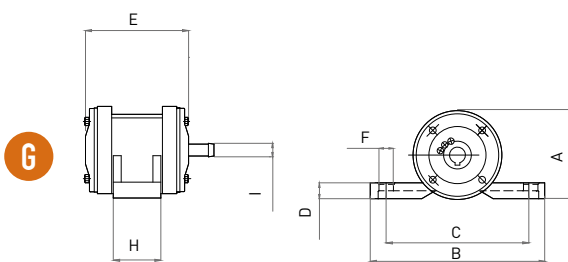
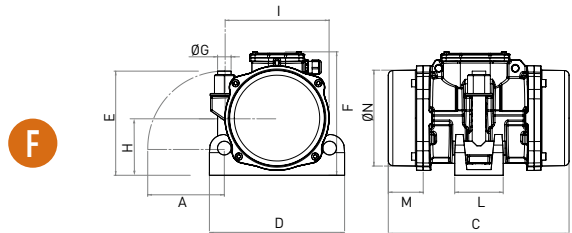
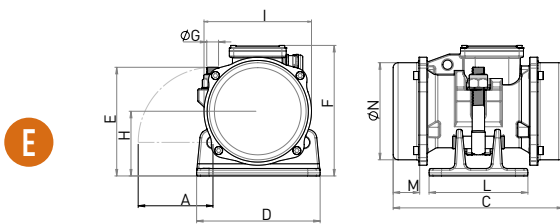
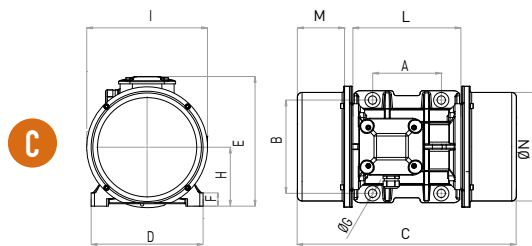
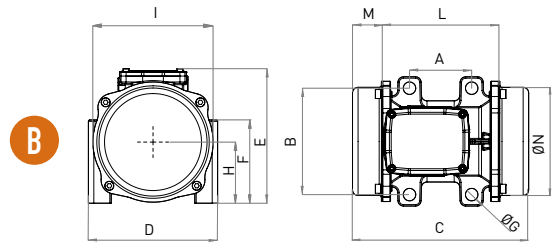
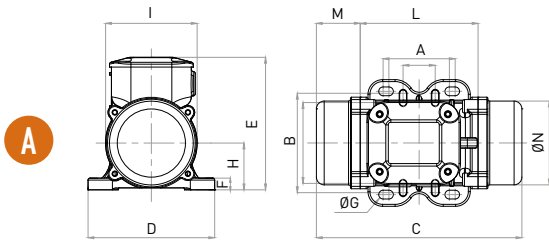
### Insufficient vibration

It is the most common problem. Insufficient vibration can alter the structural properties, causing problems such as: lower resistance, higher abrasion, higher permeability, and consequently shorter duration and poor surface quality.

### Excessive vibration

The use of oversized equipment generates the segregation of the aggregates, in addition to the damage incurred to the formwork and moulds.

# Technical drawings



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# WHEN YOU NEED IT, WHERE YOU NEED IT.

## THE WORLDWIDE LEADER IN VIBRATION TECHNOLOGY


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