

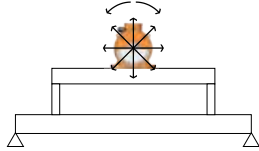


# How to choose a motovibrator

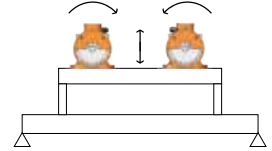
1.

Choose rpm and the amplitude "e" (0 - peak) suitable for your application:

Circular vibration



Linear vibration



Application processes	Vibration		Revolutions Per Minute						
			50Hz	750	1000	1500	3000	6000	
	Circular	Linear	60Hz	900	1200	1800	3600	-	
Conveying		✓			✓	✓			
Separation / Screening / Sizing		✓		✓	✓	✓			
Positioning / Feeding		✓		✓	✓	✓			
Filter cleaning	✓						✓		
Silo/hopper emptying	✓						✓		
Fluid beds		✓		✓	✓				
Bin activators	✓					✓	✓		
Compacting		✓					✓	✓	
Concrete consolidation	✓						✓	✓	

rpm	e (mm)	
	Min.	Max.
3,600	0.3	0.6
3,000	0.3	0.8
1,800	1.2	2.2
1,500	1.4	2.6
1,200	2.5	4.0
1,000	3.0	5.2
900	3.5	5.5
750	3.5	6.0

2.

Choose an MVE from the tables of the following pages and use its Wm into this formula:

$$e = 5 \times \frac{n \times Wm}{n \times M_{mot} + M_{vm}}$$

e = amplitude of vibration 0-peak (mm)

n = number of vibrating motors

Wm = working moment (kgcm)

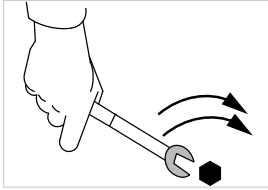
M<sub>mot</sub> = motor weight (kg)

M<sub>vm</sub> = vibrating machine weight (without material and motors)

# 3.

Check the obtained value “e”:

- If it is similar to the required one (step 1) → the MVE model is correct.
- If it is not similar to the required one (step 1) → repeat the process (step 2) with a different MVE model.



For tips on installation see section page 44



## Important

Several voltages are available to match local electric specifications worldwide both at 50Hz and 60Hz.

**All OLI motors can be operated with double voltage by simply changing the connections inside the terminal box from Star to Delta or vice-versa.**

**Three-phase MVEs with double rated voltage:**

∧ (Star) High Voltage - Factory preset

Δ (Delta) Low Voltage

**MVEs with “(Delta)”:**

Δ (Delta) Low Voltage - Factory preset

∧ (Star) High Voltage

For details about “Star” and “Delta” connections see page 45.

VOLTAGE Delta / Star	Frequency (Hz)	Country
200-230 / 345-400	50 / 60	Japan and Saudi Arabia
220-240 / 380-415	50	Europe and most of Asian Countries
230 / 460 *	60	USA
330 / 575 *	60	Canada
220-277 / 380-480	60	Brazil
290-300 / 500-525	50	South Africa
500-525 (Delta)	50	South Africa
380-480 (Delta)	60	Brazil
575 (Delta) *	60	Canada
380-415 / 660-720 (Delta)	50	Europe and most of Asian Countries
460 (Delta) *	60	USA
115 (Single-phase)	60	USA and Canada
115 (Single-phase)	50	Various
220 (Single-phase)	60	Brazil
230 (Single-phase)	50	Europe and most of Asian Countries

**\* Voltage Tolerance: ± 10%**