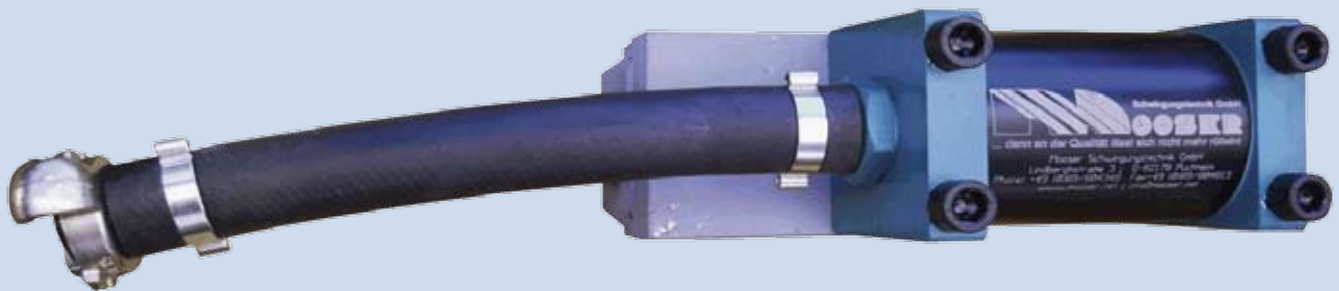


## Vibration Motors

The vibrator for all formwork systems and for tunnel, bridge, building or industry constructions



# The vibrator for all formwork systems

## Intelligent solution for the concrete compaction

### Requirement for external vibrators

- for dense reinforcement
- for extremely thick walls
- for security demands at buildings (e.g. nuclear power plants)
- for undercut constructions
- for wall inclinations and angles
- for extremely high walls
- for extraordinary architect demands



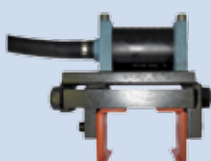
weight: vibrator + mounting clamp: 9-12 kg

## Intelligent solution for the construction of fair-faced concrete

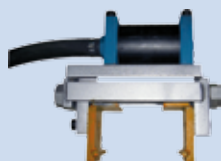
- The vibrator positions at the formwork are dependend on the formwork type, the amount of reinforcement and the wall thickness. They should be provided by the manufacturer of the vibrators.
- The construction site will need a 4-6m<sup>3</sup>/min air compressor in order to operate the vibrators. The compressor is an all-purpose energy source which is often used for other site operations.



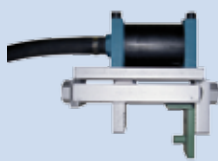
## Formwork specific mounting clamps



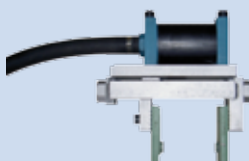
Mammut · Startec



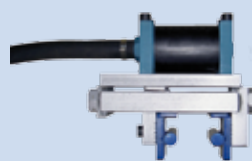
Framax Xlife



Framax Xlife ·  
Manto · Primax AT



Primax TT



Frami



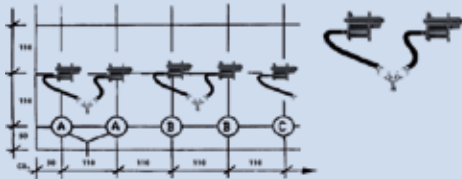
Domino / BFD

# Vibrating scheme



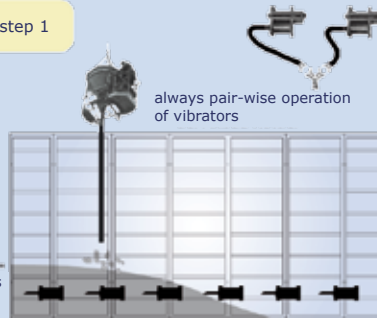
Schwingungstechnik  
Druckluftanbauvibratoren

vibrating scheme to compact concrete by use of pneumatic external vibrators  
size of compressor 4-6m<sup>3</sup>/min  
minimum slump approx. 170 mm



vibrating step 1

pour concrete up to 30-40cm above the vibrator row  
operate vibrators approx. 30 sec.



vibrating step 2

pour concrete up to 30-40cm above the vibrator row  
operate vibrators approx. 30 sec.

vibrating step 3

always pair-wise operation of vibrators

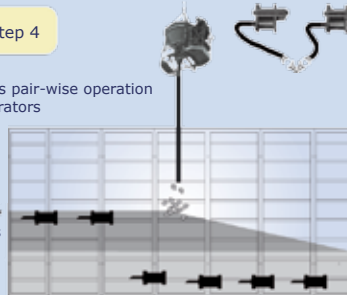


pour concrete up to 30-40cm above the vibrator row  
operate vibrators approx. 30 sec.

vibrating step 4

always pair-wise operation of vibrators

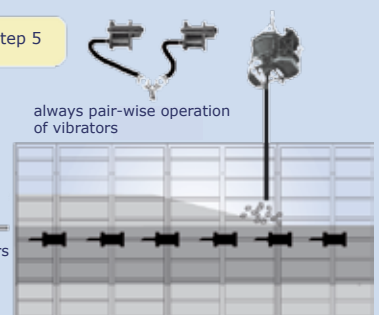
pour concrete up to 100-120cm above the vibrator row  
operate vibrators approx. 1 min.



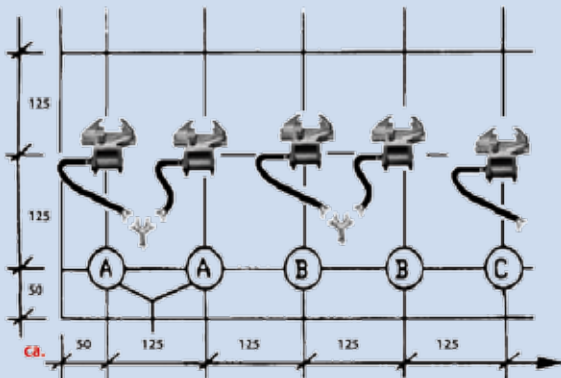
vibrating step 5

always pair-wise operation of vibrators

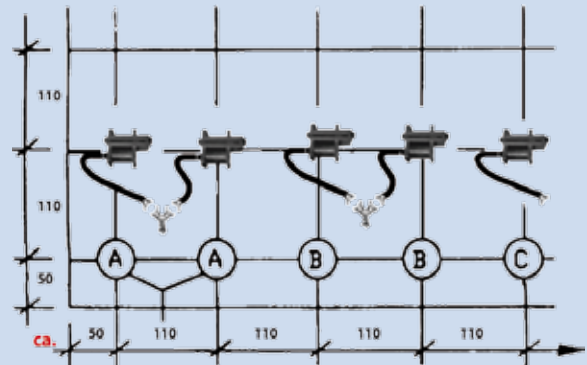
pour concrete up to 40-50 cm above the vibrator row  
operate vibrators approx. 30 sec.



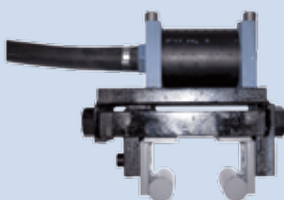
## Mounting scheme for Mooser pneumatic external vibrator VR56K



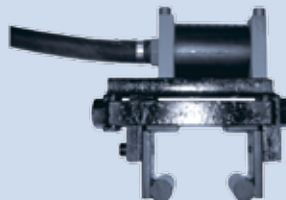
steel girder formwork



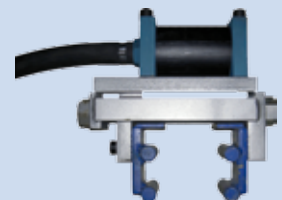
wooden girder formwork



H20 · VT20K



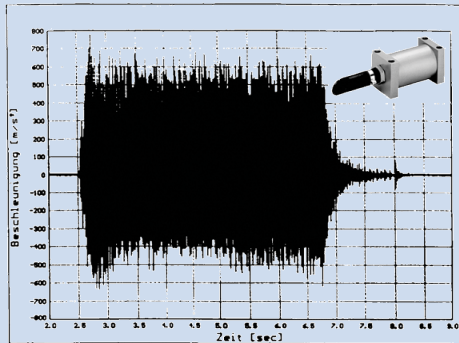
GT24 · GF24



Noetop



## Pneumatic vibrator



### Low mechanical load to the formwork.

The natural frequency range of the formwork is driven through at once.

The use of an air valve enables a **stepless and cost saving frequency regulation** of the pneumatic vibrators. The compressor is a dual-energy source for many applications at the construction site.

The weight of the pneumatic vibrator is approximately **3,5 kg** (not including the mounting clamp).

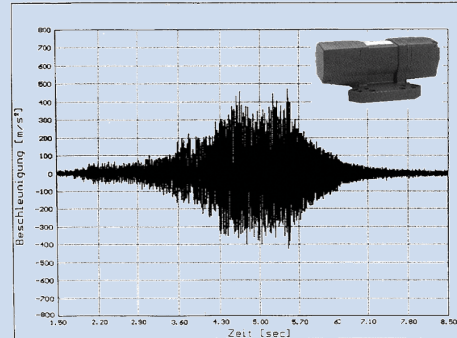
In case of prior customer advice on the slump, **compaction depths of more than 50cm** can be achieved.

The vibrators are suitable for operation during the winter season. **Icing of the vibrators can be excluded**, if they are lubricated with some hammer oil.

For the **application at the construction site** the **pros of the pneumatic vibrators** outweigh the cons.

Applications fields for electric external vibrators: precasting industry and industry

## Electric vibrator



### High mechanical load to the formwork.

The natural frequency range of the formwork cannot be driven through at once, due to the design including shaft bearings.

A stepless frequency regulation by using a **frequency converter** is **more expensive** than using an air valve.

The weight of an electric vibrator with the same power as a pneumatic vibrator is about **12 kg** (not including the mounting clamp).

In case of prior customer advice on the slump, **compaction depths of about 25cm** can be achieved.

The vibrators are suitable for operation during the winter season.

Know-how · consulting service · accessory material - all from one source

- We take over the planning of the vibration motors application with regard to the formwork system, the local conditions and the concrete technology.
- We equip all formwork types (panel and girder formwork, formwork carriages for tunnel and duct constructions) with our external vibrators.