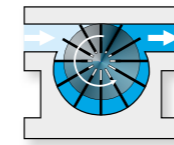


## GUNT-FEMLine Water pump training part 2 positive displacement pumps

The HM 365.10 Supply unit for water pumps from GUNT is a trainer for studying the properties of different water pumps under realistic operating conditions. Some of the pumps are powerful industrial pumps. Combined with the drive unit HM 365 and the different pump units, the supply unit HM 365.10 is an ideal pump trainer.

**HM 365.10**  
Supply unit for  
water pumps



### Vane pump

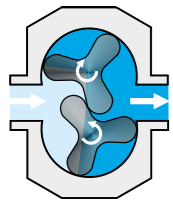
Vane pumps are also known as rotary vane pumps. They can be used for both liquid and gaseous media. There are vane pumps with constant displacement volumes and with adjustable displacement volumes. The pump consists of a housing, in which an eccentric cylindrical rotor rotates. Rotary vanes are spring-mounted to radial guides inside the rotor. During operation, the spring-force ensures that the rotary vanes run along the inner wall of the housing and an enclosed space is formed between them. The pumping medium is transported between the rotary vanes and the housing wall.



HM 365.19 Vane pump

### 2<sup>nd</sup> part

### Positive displacement pumps as water pumps:

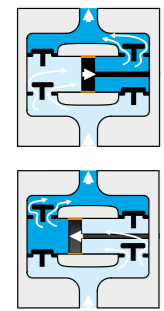


### Lobe pump

In a lobe pump two non-contact pistons rotate in two cylindrical chambers. With each revolution, they deliver the same volume. Lobe pumps are used for delivering highly viscous and highly abrasive media.



HM 365.16 Lobe pump

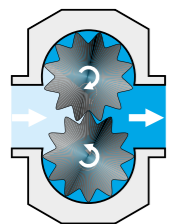


### Reciprocating piston pump

The most simple type of reciprocating piston pump consists of a piston moving in a cylinder with one inlet and one outlet valve. Depending on the internal cylinder pressure, the valves open the inlet and outlet to the stroke chamber.



HM 365.17 Reciprocating piston pump



### Gear pump

Essentially, gear pumps consist of three components: a housing with an inlet and outlet for the fluid and two gears, one of which powers the other one. Gear pumps differ depending on their internal design. The most common gear pump, the external gear pump, is used here as an example.

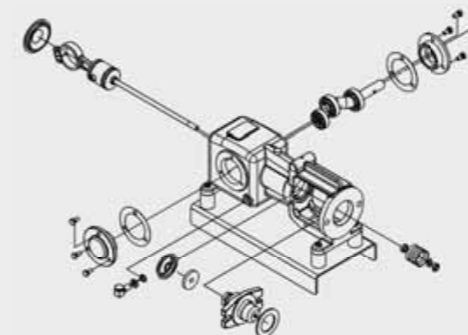


HM 365.18 Gear pump

### Sectional models and assembly training



HM 700.20 Cutaway model: piston pump



Exploded drawing of the piston pump

To complete the water pump training, GUNT offers **sectional models and assembly and maintenance training** for different positive displacement pumps: Please refer to catalogue 4 for more information on these devices.



MT 184 Assembly & maintenance exercise: piston pump