

# VMOA transformer oil circulation pump

## Applications

The pumps are of centrifugal type and designed for circulating transformer oil in connection with cooling equipment.

## Performance

Three sizes VMOA 100 VMOA 125 and VMOA 150 are available. They are provided with three-phase motors for 50 or 60 Hz. Motors can be selected for different voltage between 95 and 690 V.

## Design

### Vacuum and leak proof

The motor and all moving parts in the pumps are completely enclosed with the motor and pump casing forming a sealed unit without mechanical seals. O-rings are used as static seals.

### Material

The casing and stator housing are made of cast iron and the impeller of light alloy.

### Bearing arrangement

The motor shaft which supports the rotor, as well as the impeller is suspended in ball bearings in two spiders. The ball bearings have buffer springs in order to prevent damage when the rotor is stationary and the motor housing is subjected to vibrations.

### Motors

The transformer oil is flowing through the motor windings to give excellent cooling. The winding material is specially adapted to



transformer oil and the temperature margin in the motor is high. Pumps with impeller code 060 or 082 are equipped with 6-pole motors. All other pumps are equipped with 4-pole motors.

### Painting

The pumps require no special maintenance other than touch-up painting, checking of cable connections and a check to ascertain that no oil leaks exists.

### High reliability

The pumps are designed to be maintenance-free. The bearing design has been proven to have a superior reliability to other bearing types. The motor, with continuous cooling and high thermal margin, has very low noise and vibration levels. A thorough design with balanced internal forces. The VMOA pumps are designed for many years of trouble-free operation.

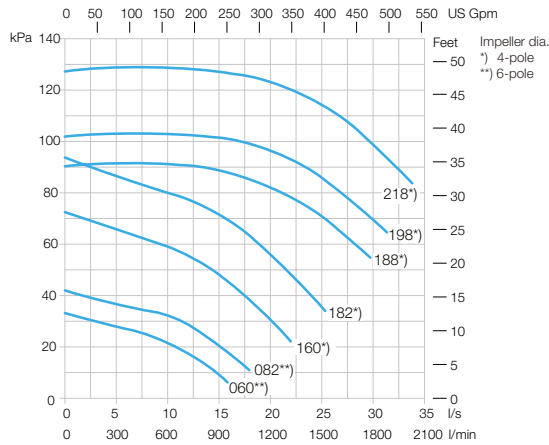


## Properties

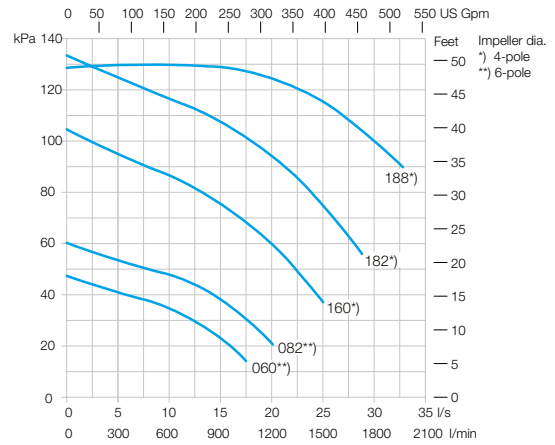
<b>Capacity</b>	5-65 l/s (79-1030 gpm)
<b>Head</b>	200 kPa
<b>Temperature</b>	-40 °C (-40 °F) to +100 °C (212 °F)
<b>Pressure rating</b>	10 bar
<b>Flanges</b>	ISO PN6 / PN10 / ANSI 125
<b>Dimensions</b>	See the dimension prints
<b>Corrosion class</b>	Corrosion class C4 (C4) and corrosion class C5 (C5).

# Performance curves

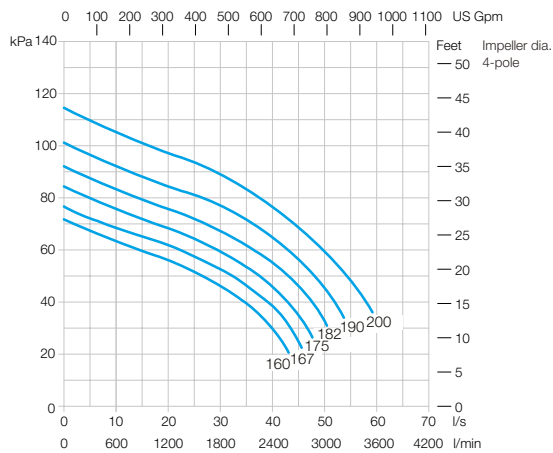
## VMOA 100 50 Hz



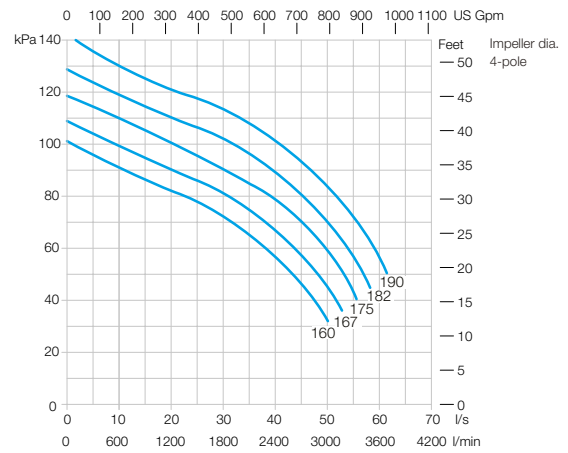
## VMOA 100 60 Hz



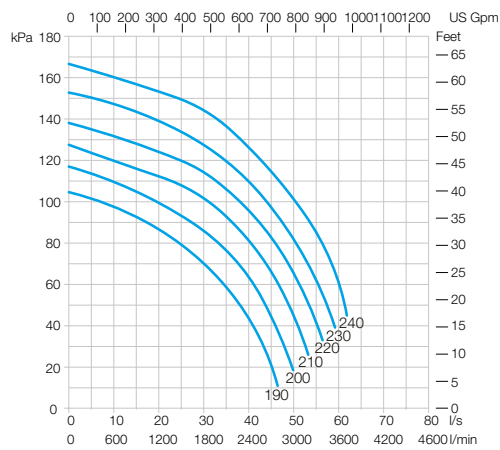
## VMOA 150 50 Hz



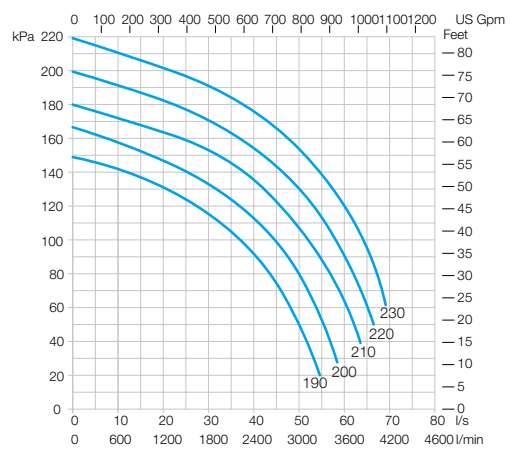
## VMOA 150 60 Hz



## VMOA 125 50 Hz

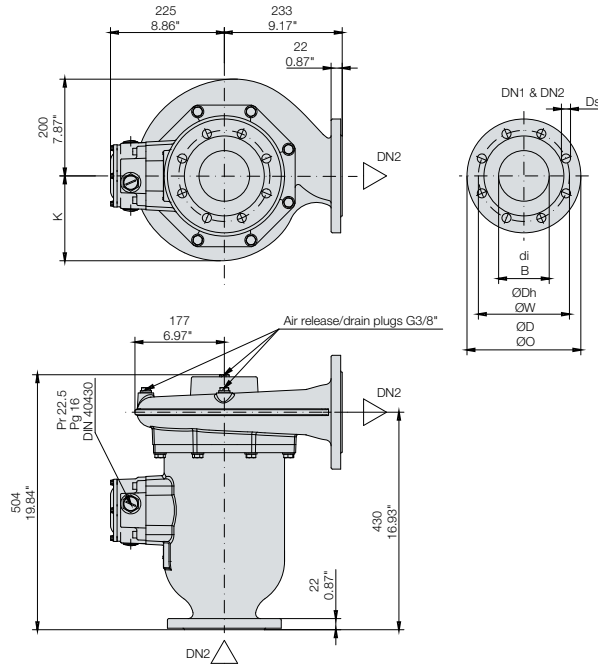


## VMOA 125 60 Hz

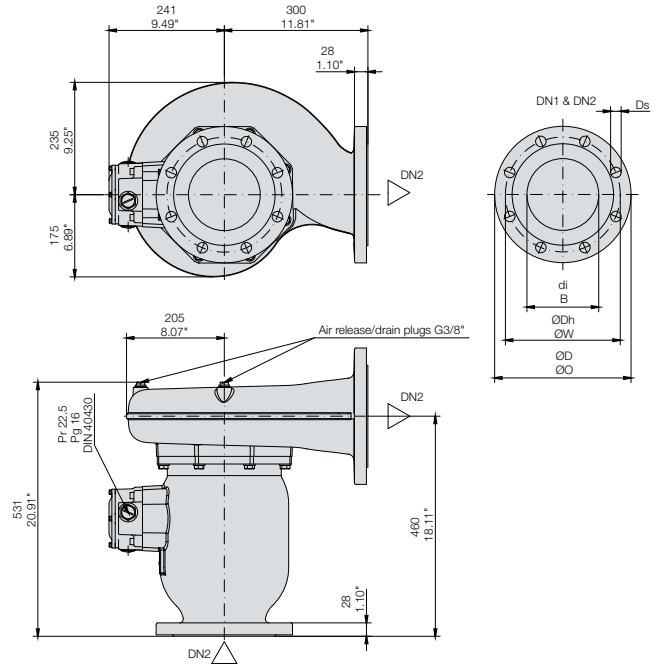


## Dimension prints

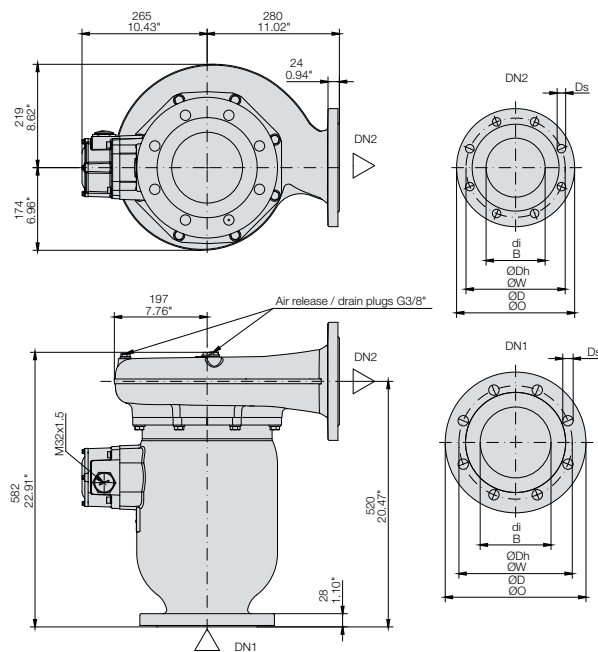
### VMOA 100



### VMOA 150



### VMOA 125



### Advantages of VMOA

- High efficiency
- Cooled and lubricated by the transformer oil
- Low sound level
- Low vibration level
- Maintenance-free
- Reliable ball bearing design superior to other bearing types
- No need of bearing surveillance equipment
- Integrated motor with high thermal margin
- Extreme long life time

[sulzer.com](http://sulzer.com)

A10571 en 1.2023, Copyright © Sulzer Ltd 2023

This data sheet is a general product presentation. It does not provide a warranty or guarantee of any kind. Please contact us for a description of the warranties and guarantees offered with our products. Directions for use and safety will be given separately. All information herein is subject to change without notice.