

The headstock is equipped with a drain connection, which allows to flush the Can with Nitrogen before disassembly.

A vent connection for the suction is standard.



The sense of rotation of the pump is counter clockwise (CCW), looking from the coupling to the shaft end of the pump.

### 3.2 Nomenclature

Example:

200WUC-2M-5+I

**200** Flow at BEP

**WUC** Pump type - Can  
WUJ = without Can

**2** indicates speed 2-poles  
4 = 4-poles

**M** indicates hydraulic Medium Head  
L = Low Head  
H = High Head  
R = Radial Flow

**5** Number of stages

**I** indicates Inducer as option

**D** Dummy stage as option

**DS** double suction

**P** high pressure

### 3.3 Design of major parts

#### 3.3.1 Motor stool

The motor stool supports the thrust bearing. On top the driver is mounted.

#### 3.3.2 Headstock

Headstock has inline suction and discharge nozzle, including all the necessary vent and drain connections. It is a major part of the pump unit, which supports the column pipes with the hydraulics as well as the motor stool and driver.

#### 3.3.3 Can

The Can is subjected to suction pressure and guides the fluid to the first stage impeller.

#### 3.3.4 Hydraulics

##### 3.3.4.1 Radial flow hydraulics

This are ring section type hydraulics. Suction, stage and discharge casing are hold together by strong tie bolts, which allows a very compact and short design. The radial impellers are hydraulically balanced by back wear rings and balancing holes. The diffusers

are designed with 7 to 11 vanes to minimize the radial forces at part load operation. All impellers are slipped on the shaft and axially fixed by the impeller nut. The shaft is supported in the suction casing, in every diffuser and in the discharge casing.

Optional the hydraulics can be fitted with an inducer for low NPSH requirement.

##### 3.3.4.2 Mixed flow hydraulics

The hydraulics consists of flanged bowls and a suction casing. The impellers are hydraulically balanced by back wear rings and balancing holes. The diffusers are designed with 7 to 11 vanes to minimize the radial forces at part load operation. All impellers are slipped on the shaft and axially fixed by the impeller nut. The shaft is supported in the suction casing and in each bowl.

Optional the hydraulics can be fitted with an inducer for low NPSH requirement.

##### 3.3.4.3 10WUC-2H

The hydraulic consists of bowls, which are pushed together and hold by strong tie bolts. The impellers are secured to the shaft by split rings. Due to the small size, the impellers are only equipped with front wear rings and therefore unbalanced.

Optional the hydraulics can be fitted with an inducer for low NPSH requirement.

##### 3.3.4.4 20WUC-2L, 45WUC-2L, 80WUC-2L

The hydraulics consists of flanged bowls and a suction casing. The impellers are secured to the shaft by split rings. Due to the small size, the impellers are only equipped with front wear rings and therefore unbalanced.

Optional the hydraulics can be fitted with an inducer for low NPSH requirement.

### 3.4 Performance and operating limits



In the interest of operator safety the unit must not be operated above the nameplate conditions. Such operation could result in unit failure causing injury to operating personnel. Consult instruction book for correct operation and maintenance of the pump and its supporting components.

### 4.0 INSTALLATION



Equipment operated in hazardous locations must comply with the relevant explosion protection regulations, see section 1.6.4, *Products used in potentially explosive atmospheres.*