

**Vertical solids handling pump  
for normal and difficult liquids**

- **Chemical and Petrochemical industry**
- **Automotive industry**
- **Environmental technology**
- **Waste water treatment**
- **Paper and Fibre processing industry**
- **Steel industry**
- **Building industry**

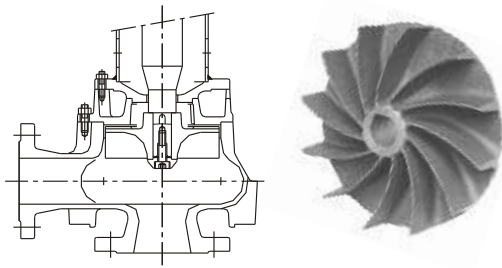


### **Advantages of design SO / SOK**

- **No bearings in pumped liquid**
- **No shaft seal in pumped liquid**
- **Dry running possible**
- **Long service life and great reliability**
- **IEC standard motors**
- **Easy maintenance and installation**

# Hydraulic characteristics

## Turo - Vortex pump

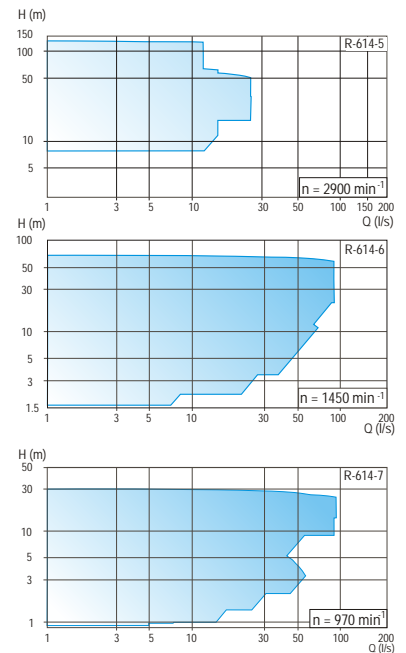


### Completely free spherical passage.

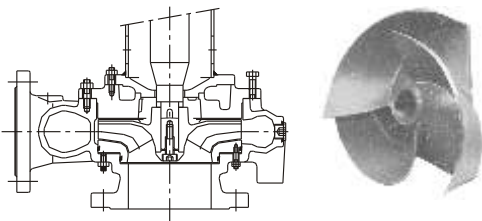
Discharge: DN 32 - 150  
 Capacity: up to 120 l/s  
 Head: up to 130 m  
 Working temperature: -20 to +80°C  
 special: up to 140°C

### Application

Handling slurries containing fine or large solids or fibres; suspensions, raw sewage, abrasive, corrosive or viscous liquids.



## EGGER centrifugal pumps

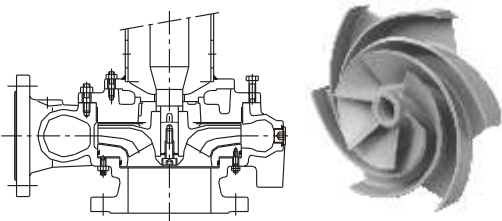
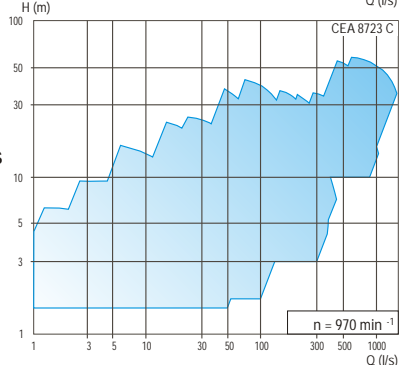
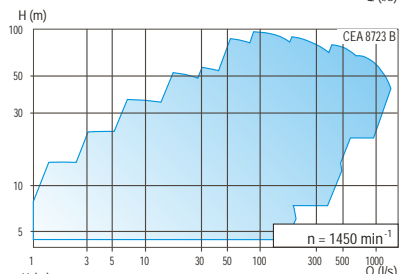
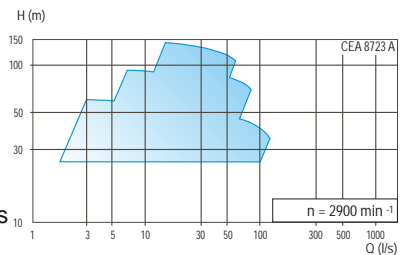


### Series EOS

Discharge: DN 50 - 500  
 Capacity: up to 1300 l/s  
 Head: up to 140 m  
 Working temperature: -20 to +80°C  
 special: up to 140°C

### Application

Open 3-vane impellers for homogeneous slurries, short fibrous suspensions, various aerated sludges as well as slurries containing larger solids.

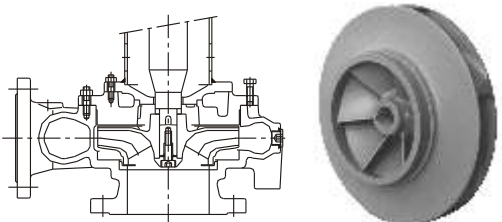


### Series EO

Discharge: DN 50 - 500  
 Capacity: up to 1300 l/s  
 Head: up to 140 m  
 Working temperature: -20 to +80°C  
 special: up to 140°C

### Application

Semi-open impellers for homogeneous slurries, short fibrous suspensions and various aerated sludges.



### Series E

Discharge: DN 100 - 250  
 Capacity: up to 300 l/s  
 Head: up to 80 m  
 Working temperature: -20 to +80°C  
 special: up to 140°C

### Application

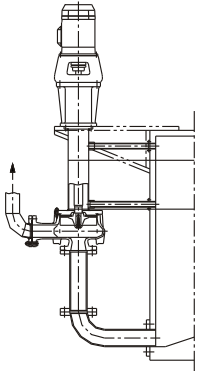
Shrouded impellers for clean and dirty liquids containing fine suspended solids.

# Installation

**SO**

## Dry (tank) installation

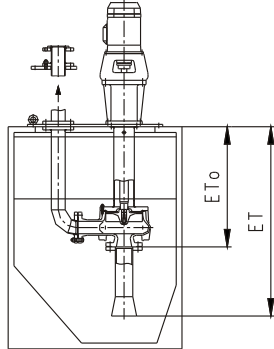
Pump fitted outside of tank. Suction and drainage pipes connected to suction tank. Bearing housing and motor arranged above max. liquid level.



**SO**

## Wet pit installation

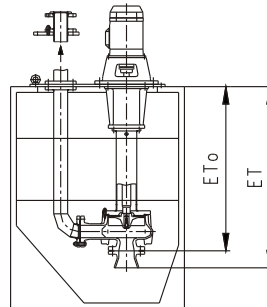
Pump end submerged in medium to be pumped. Bearing housing and motor arranged above max. liquid level.



**SO**

## Wet pit installation

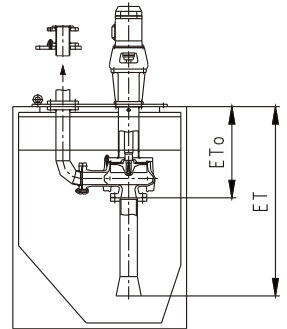
The pit-cover is above the bearing housing. This allows a deeper installation length ETo.



**SOK**

## Wet pit installation

Identical to SO, with shorter installation length.



# Technical description

## Motor

Totally enclosed, fan-cooled IEC standard motor, mounting arrangement V1, for all executions, incl. «Ex» protection.

## Coupling

Any flexible coupling, e.g. N-Eupex

## Bearing arrangement

A heavily dimensioned shaft is supported by a pair of upper angular ball bearings and a lower roller bearing. The latter is moisture protected by a special radial seal and a labyrinth deflector. No bearings and no shaft seal in the pumped liquid («Cantilever» type).

## Pit cover

The pit cover can be fitted above or below the bearing housing, thereby changing the installation depth ETo. The pump can be supplied with a large pit cover and discharge pipe, or with a small pit cover and no discharge pipe.

## Installation length ETo / ET

ETo = depends on bearing housing size, speed and hydraulic load on pump. It can vary between 0.7 - 2.0 m.  
ET = variable by means of suction pipe.

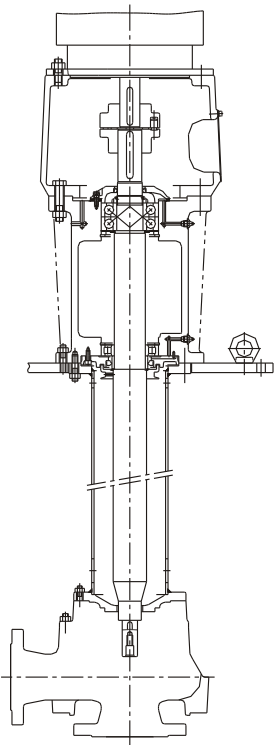
## Materials of construction

### Hydraulic part:

Cast iron (GG), chrome iron (HG 15.3), stainless steel (1.4408), or other corrosion resistant materials.

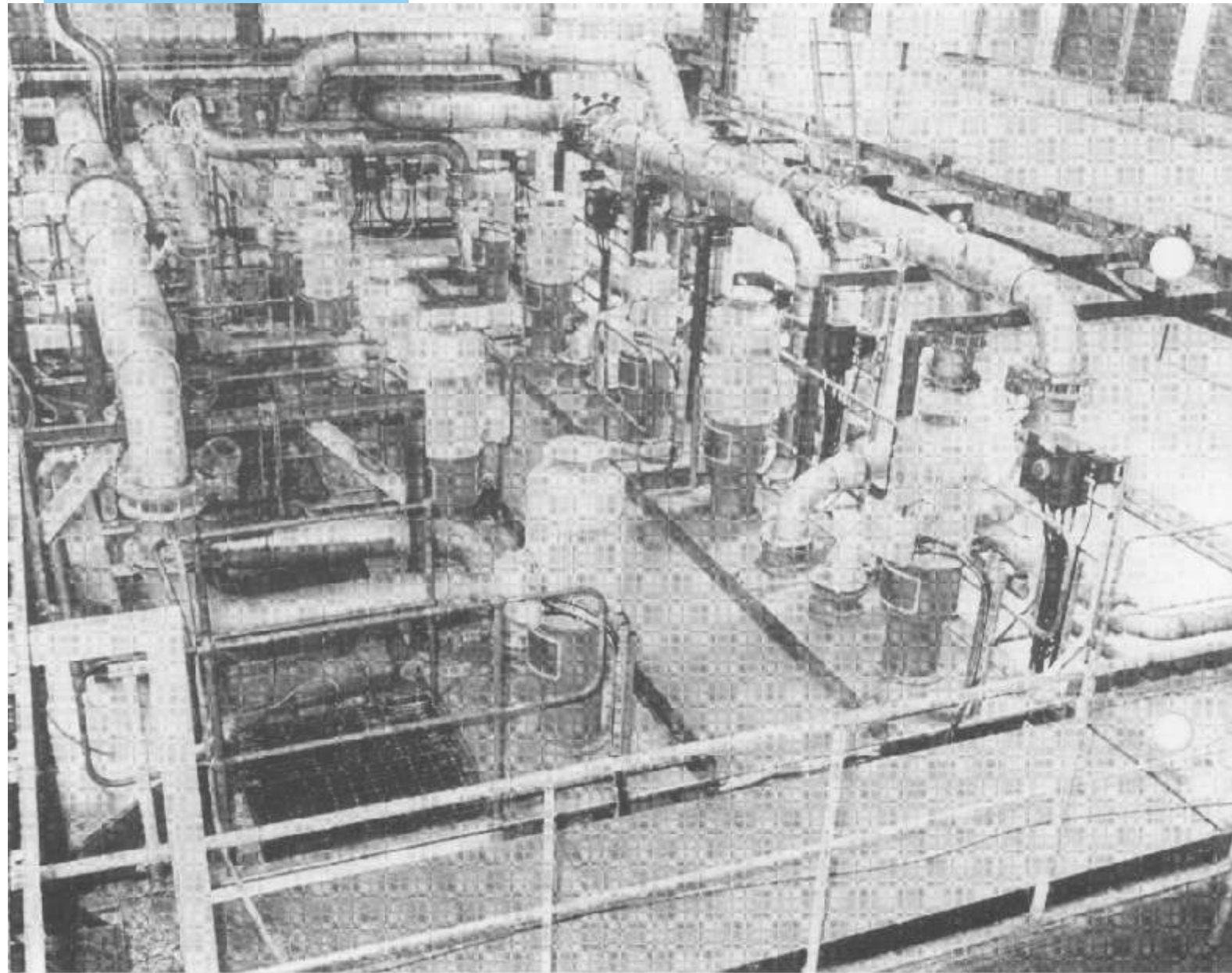
### Shafting / Support column:

Carbon steel (CK45), St37, cast iron or corrosion resistant materials.



# EGGER

## Cantilever Pumps Design SO - Series EO in the automotive industry



# EGGER

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