

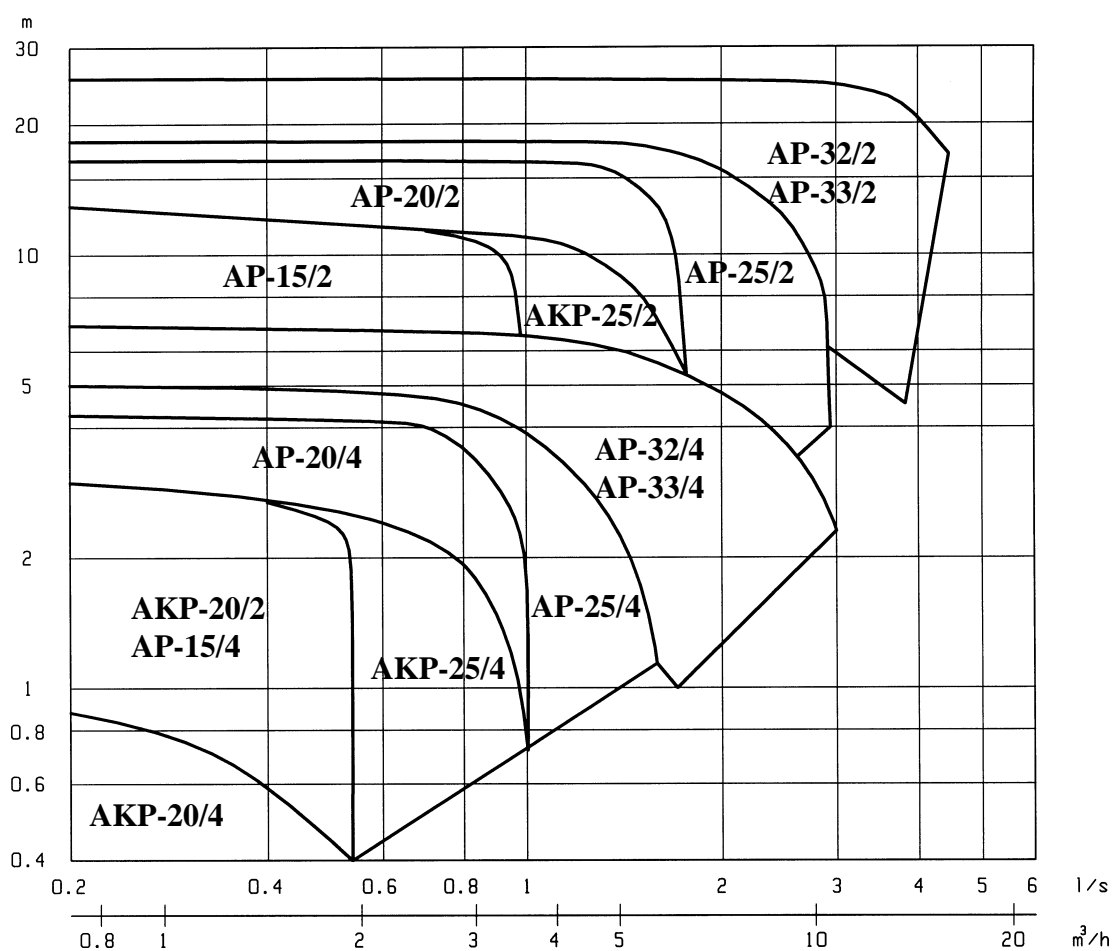
## General features

The AKP- and AP-ranges consist of small centrifugal pumps made of bronze with pipe connections (G-threads).

## Applications

The pumps of AKP- and AP-ranges are capable for pumping domestic hot water and other corrosive clean liquids in circulation systems and for liquid transfer.

## Duty chart at 50 Hz



## Design

### Pump

The AMK\_-, AHV- and AE-range pumps are single stage, monobloc design centrifugal pumps equipped with dry type electric motor. The impeller is mounted directly on the shaft of the motor (no separate couplings).

## Electric motor

The electric motors of AKP- and AP -ranges are especially dimensioned and designed for pump application. It is totally enclosed fan cooled squirrel cage motor. The motor design ensures high efficiency and silent running and it is suitable for use with frequency converter.

Voltages: 400/230 V, 50 Hz, 3-phase

Enclosure: IP 54

Insulation class: F

Type of duty: S1

Ambient temperature: + 45 °C

N.B. Other voltages (e.g. single phase) and specifications available by request!

## Connection

The AKP- and AP-range of pumps are equipped with thread connection (ISO 228/1).

## Shaft seal

The shaft seals are maintenance-free mechanical seals with rubber bellows shaft seating.

TYPE	MOTOR		SHAFT SEAL size, Ø material	O-RING	
	rpm	kW		size, Ø material	
AKP-20	1500/3000	0,02-0,06	12 mm, carbon/SiC EPDM	56 x 2,5	EPDM/NBR
AKP-25, AP-15	1500/3000	0,03-0,65	12 mm, carbon/SiC EPDM	100 x 2,5	EPDM/NBR
AP-20,-25	1500/3000	0,05-0,65	12 mm, carbon/SiC EPDM	123 x 2,5	EPDM/NBR
AP-32,-33	1500/3000	0,2-1,5	12mm, carbon/SiC EPDM	145 x 2,5	EPDM/NBR

## Material standards

SERIES	MATERIAL OF HOUSING		SEALING FLANGE	IMPELLER	SHAFT (pump)	DETAILS TO NOTE
	Name	Standard				
AKP- AP-	bronze (gun metal)	bronze CuPb5Sn5Zn5	bronze CuPb5Sn5Zn5	Noryl GFN2	AISI329	Bronze impeller available for every pump

## Painting

Pumps are painted in accordance with Finnish standard SFS 4962, A80/2 Fe Sa2.

The finishing colour is red, RAL 3003. Special coating available by request.

## Temperatures and pressure classes

Max. working pressure 10 bar

AKP-, AP- pumps

Max. fluid temp. -15 ... +100°C

AKP- and AP- pumps with Noryl  
impeller as standard

Max. fluid temp. -15 ... +120°C

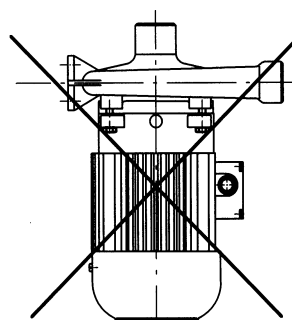
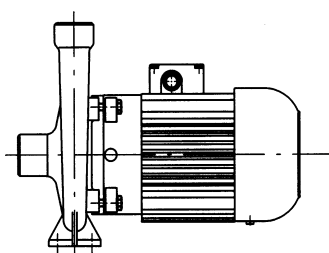
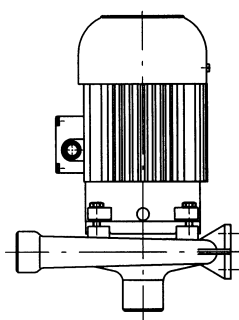
All pumps with bronze impeller

## Installation

When designing and installing the pump into the system pay attention to the following:

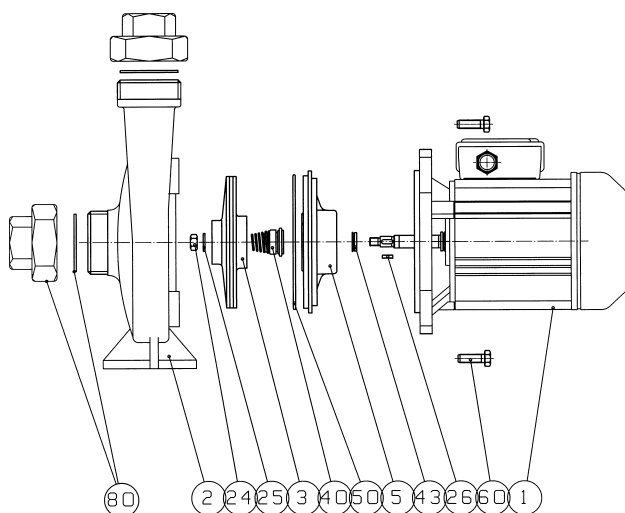
- enough space for service and control should be left around the pump
- enough clearance to remove the motor unit off the pump housing
- shut-off valves on both sides of the pump
- sufficient rigidity of the pipeworks to support the pump

The position of the motor unit and the terminal box can be changed by removing the motor unit from the pump housing and setting it in the desired position



## Spare parts and maintenance

### List of parts



- |           |                       |
|-----------|-----------------------|
| <b>1</b>  | Electric motor        |
| <b>2</b>  | Pump housing          |
| <b>3</b>  | Impeller              |
| <b>5</b>  | Sealing flange        |
| <b>24</b> | Nut                   |
| <b>25</b> | Washer                |
| <b>26</b> | Key                   |
| <b>40</b> | Mechanical shaft seal |
| <b>43</b> | V-ring (optional)     |
| <b>50</b> | O-ring                |
| <b>60</b> | Screw                 |
| <b>80</b> | Pipe connector        |
|           | ( AP-33)              |

**Detailed information for installation and maintenance of the Kolmeks pump can be found from the Instruction manual attached with the pump.**