

Lifting of the complete pump unit with the lifting device attached to the motor, should be avoided as the motor's lifting provisions may not be able to carry the combined weight of the pump and motor.

**!** Lifting a complete pump unit, using slings or hooks attached to the pump or connecting frame may be dangerous since the centre of gravity of the pump unit may be higher than the points of attachments.

### Mounting

The pump must be securely mounted on a firm stable foundation and positioned so that it is easily accessible for inspection and servicing. Provisions for collecting oil spillage when servicing the pump should be considered.

#### ATTENTION

The installation must always be designed to minimise damage. Should an operational or functional failure occur. E.g. precautions should be considered to collect oil spillage due to a broken pipe or pump housing, to stop pump operation if overheating should occur or if the oil volume is below a minimum tank level.

### Alignment and shaft couplings

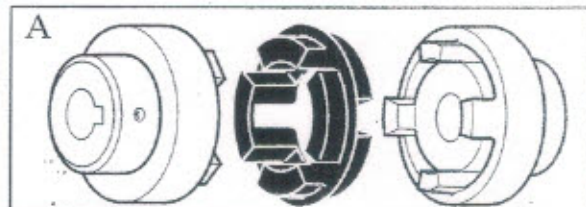
The pump shall be connected to its driver via a flexible shaft coupling. Pumps of type ACG/UCG and ACF/UCF may also be driven via gears or pulleys as specified in the Product Description, provided the radial forces are kept within the specified range.

An angular misalignment of  $0.1^\circ$  corresponds to approx. 0.2 mm deviation/100 mm. The coupling and alignment shall be selected not to transmit any axial or radial loads on the shaft ends. IMO AB standard couplings shall have a distance between the coupling halves as per table, fig 4. the coupling halves shall be secured by lock screws. For other types of couplings, please refer to respective maker's manual.

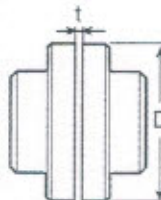
**!** When fitting the shaft coupling, do not use a hammer or similar as this may damage the ball bearing and shaft seal. Use some kind of press tool.

**!** When handling liquids that may harm skin use gloves and/or protective clothing.

**!** When handling liquids which may involve fire hazards appropriate precautions to avoid danger are to be taken.

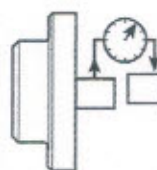


Distance between coupling halves



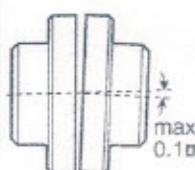
See table below

Circular run-out



D4  $\phi$  max 0.3 mm  
D6  $\phi$  max 0.4 mm  
E4  $\phi$  max 0.4 mm

Angular alignment



An angular misalignment of  $0.1^\circ$  corresponds to approx. 0.2 mm deviation/100 mm.

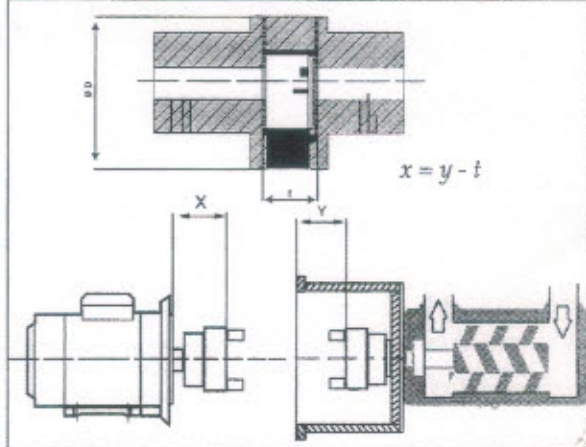
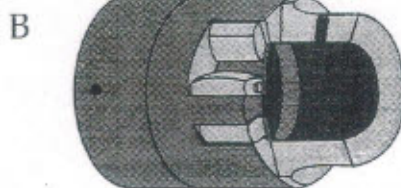


Fig. 3 Alignment of the IMO AB standard coupling

Outer diameter of coupling (D mm)		Distance between coupling halves (t mm)		Outer diameter of coupling (D mm)		Distance between coupling halves (t mm)	
A	B	A	B				
50	26	2.0	8	148		3.5	
67	40	2.5	16	168		3.5	
82	55	3.0	18	194		3.5	
97	65	3.0	20	214		4.0	
112	80	3.5	24	240		4.0	
128	95	3.5	26				

Fig 4. Distance between coupling halves. (IMO AB standard coupling)