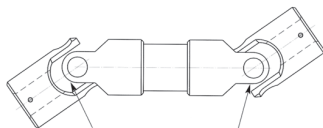


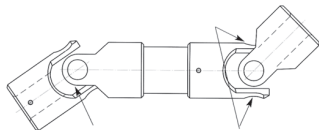
Universal joints

Use and maintenance of universal joints

The yokes should be positioned as shown in the diagram in order to obtain an uniform movement.



Correct assembly
Yokes well-positioned

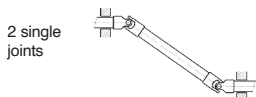


Incorrect assembly
Yokes badly-positioned

Maintenance of universal joints is limited to regular lubrication at least once a day.
In a dusty environment, the use of a grease-filled joint cover is recommended.

Several rules should be followed for a universal joint to work correctly:

- It is rare for a single joint to be used alone. They are normally only used in manually operated systems.
- Assembly of two single joints (a double joint) allows speed irregularities of a single joint to be corrected by another joint exhibiting the same irregularities in the opposite direction. This combination forms what is known as a constant velocity joint.

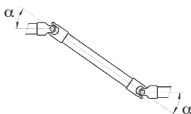


for constant velocity movement, the two angles should be equal and in the same plane

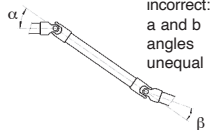


double joint

correct: α angles equal

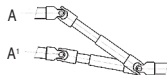
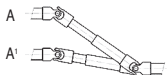


Entry and exit shafts should be parallel



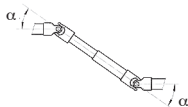
incorrect: α and β angles unequal

correct: A parallel to A'

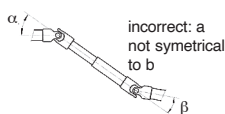


incorrect: A not parallel to A'

correct: a symmetrical to a



Shafts should be guided by bearings as close to joint as possible to reduce radial loads.



incorrect: a not symmetrical to b