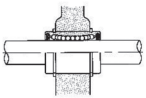
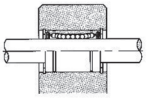
How to mount linear bearings

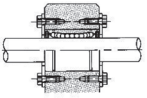
- The alternative mounting arrangements:

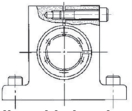


Using circlips

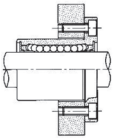


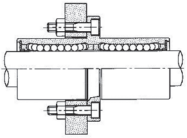
Using a mounting plate



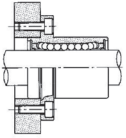


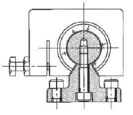
Adjustable bearings





Bearings with mounting flange





Open bearings

Adjusting the clearance

Series	Accuracy	Shaft		Bushes	
		Clearance fir	Transition fit	Clearance tolerance	Transition fit
KB	High	h6	j6	H7	j7
KB-W	High	h6	-	H7	-

The standard clearance shown in the table are those normally used for these linear bearings.

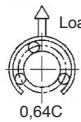
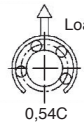
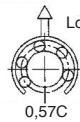
A transition fit is used to reduce the clearance and to increase accuracy. Customised modification of the clearance between the bearing and the shaft is also possible.

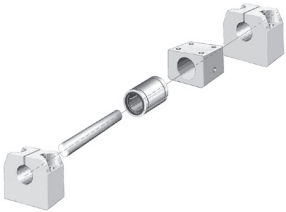
The pre-load for clearance adjustable and open type slide bearings should be adjusted carefully so as not to exceed the limits of the radial clearances given in the above table.

A flange type bush is generally inserted into an installation bore that is slighter greater than the outer cylinder. However if the outer cylinder is a pilot type, a H7 tolerance is recommended.

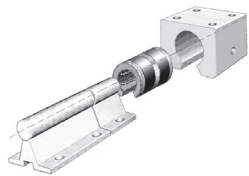
Installation instructions

Ensure that all burrs are removed from the shaft and then carefully mount the slide bush aligning it with the centre of the bore. Balls linear bearings may be released if excessive force is used.
When two or more shafts are used, the parallelism of the shafts will affect the smoothness of the movement and the life of the linear bearing.
The parallelism should be checked by moving the linear bearing along the length of the shaft to check for freedom of movement before the shaft is finally installed.

	KB12 to 16(G)-OP	KB20(G)-OP	KB25 to 80(G)-OP
Loading from above			
Loading from below			



Assembling a closed linear bearing and shaft



Assembling an open linear bearing and shaft