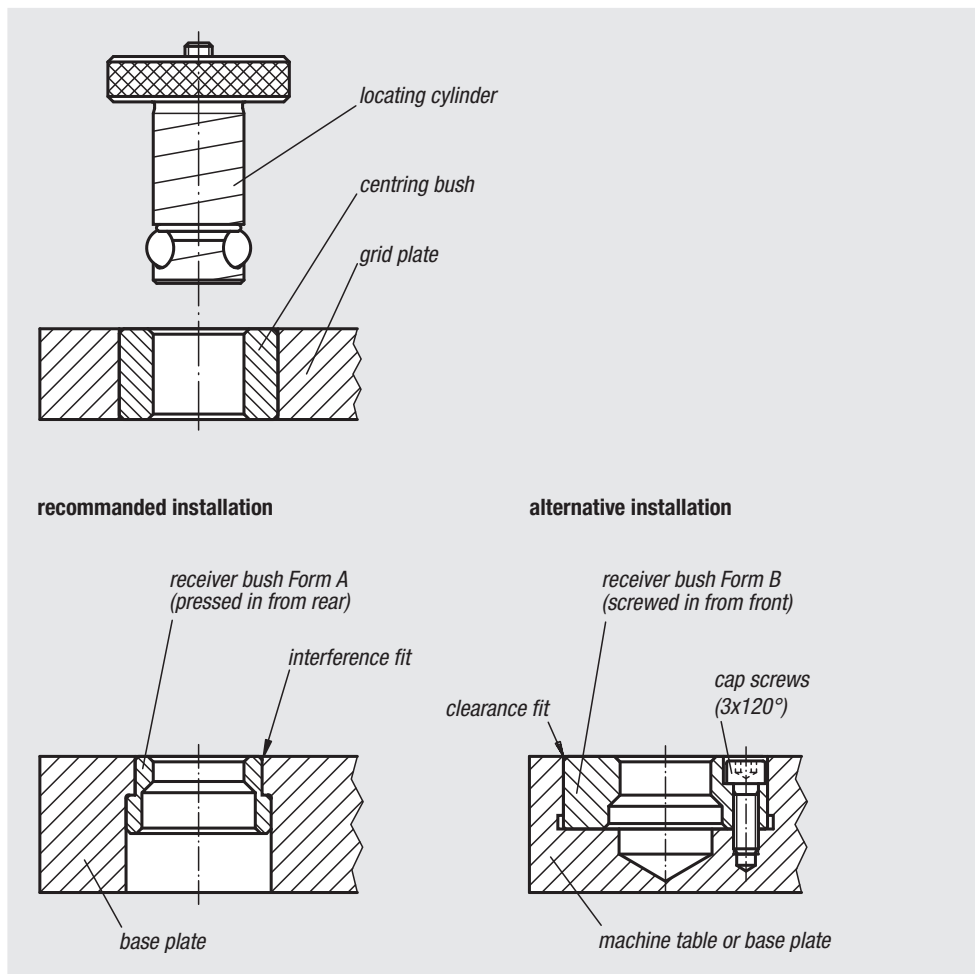
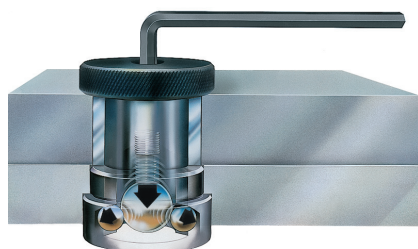
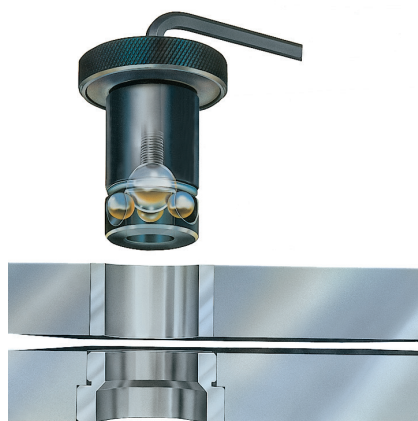


# Locating and clamping system, mechanical



## General information

1. With the mechanical locating and clamping system, base and tooling plates can be precisely positioned and fastening in a couple of seconds. The system consists of a locating cylinder, a centring bush and a receiver bush.
2. Three easy steps for using the positioning and clamping system:  
Mount two receiver bushes on the machine table or base plate, and two centring bushes in the clamping plate.  
Insert the locating cylinder through the centring bush into the receiver bush to attain precise positioning.  
Turn the set screws in each locating cylinder roughly two rotations for tight clamping.  
Eighteen different locating cylinders, two centring bush types and two receiver bush forms are available.

3. A centring bush grade I (below left) and a centring bush grade II (above right) should be installed in each fastening plate as far apart from one another as possible. More than two positioning points bring no further advantages.

When more than two locating cylinders are used for additional holding force (dependent on application), holes in the fastening plate must be 0.4 mm to 0.8 mm bigger than the selected locating cylinder diameter.

4. If the centre distance between the two positioning holes in the e.g. machine table and the clamping plate is kept within a tolerance of  $\pm 0.005$  mm and two centring bushings grade I are used, a repeat accuracy within  $\pm 0.013$  mm can be achieved.

For a somewhat lower repeat accuracy within  $\pm 0.04$  mm, one centring bushing grade I and one centring bushing grade II with a centre distance tolerance of  $\pm 0.03$  mm are used.

5. The difference between the centring bush grade I and the centring bush grade II is that the centring bush grade II has a larger internal diameter in order to correspond to the greater centre distance tolerance in the machine table or the base plate.