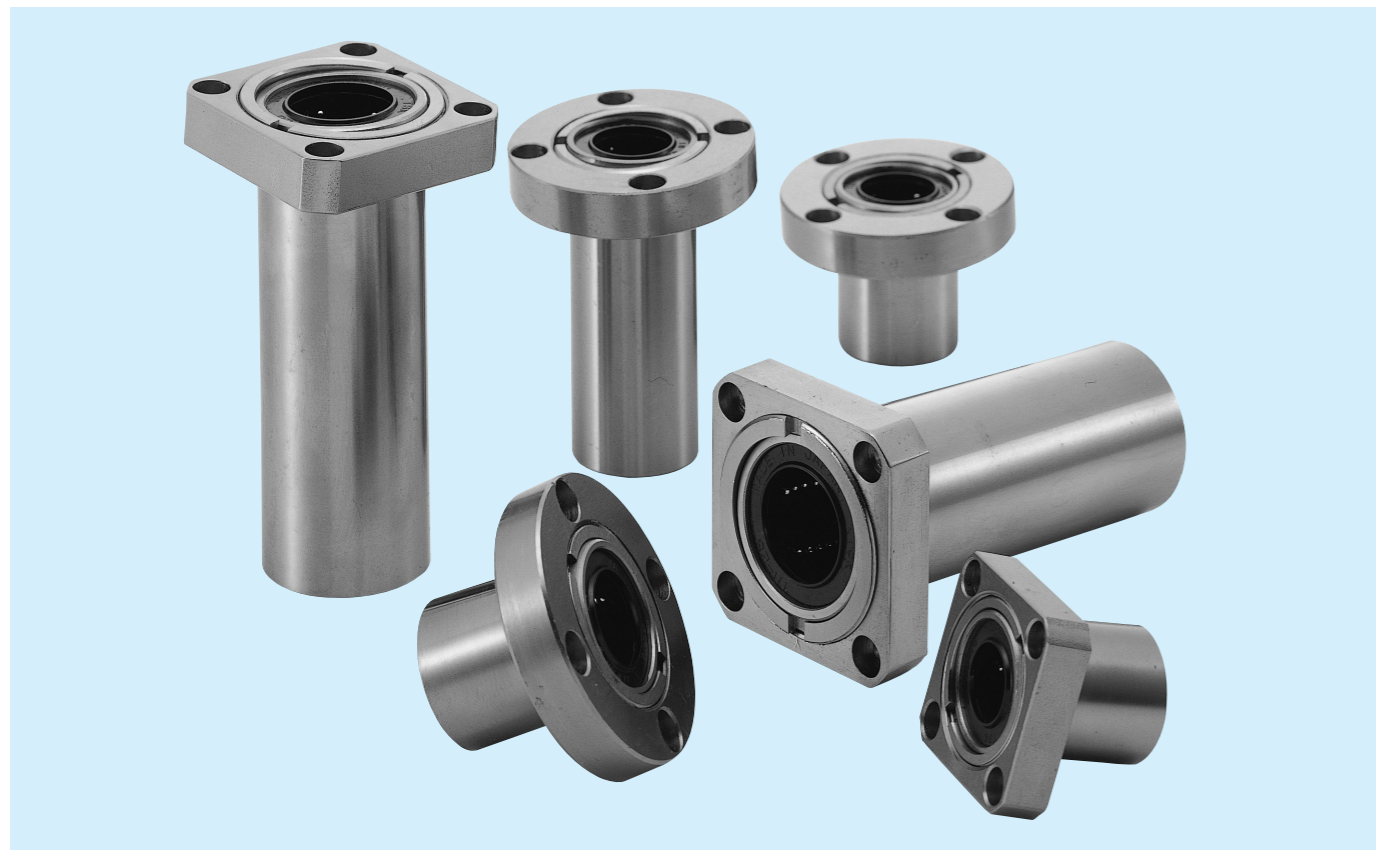


■ TSK Self-Aligning Flange type FTSB · KTSB series

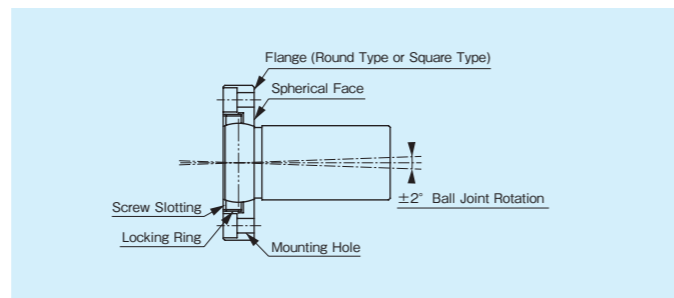


■ Eliminate the costly mounting surface machining and hole boring to achieve precise linear alignment !

Unlike standard flange type series, which require machining the right-angle mounting surface to the mounting hole, TSK's Adjustable Linear Bearing series (patent) solve the problem of costly mounting surface machining. After running a shaft, the bearing achieves precise linear alignment by the support structure of the spherical socket fixed on the outer bearing case.

■ Construction

A spherical socket is mounted to one end of the bearing outer case. The contact face between flange and locking ring is fixed by tightening the threaded locking ring. Moreover, the contact angle of $10^{\circ} \sim 13^{\circ}$ (0.18~0.23 in tangent) is smaller than the friction angle and can be firmly mounted by tightening the threaded locking ring.



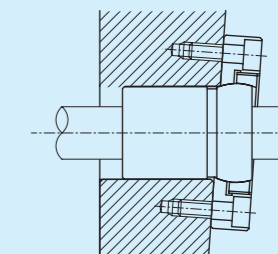
■ Features

1. Easy mounting without the need of ensuring a precise right angle of mounting flange surface and shaft reduces machining cost by eliminating precise machining of the mounting part of the bearing flange.
2. Tightening the threaded locking ring while assembling after positioning a shaft allows the bearing outer case to be fitted more precisely and solidly. Thereby, eliminating extra design and assembling time which permits cost reduction.
3. The flange can be easily removed and mounted in the opposite direction with the result of which there is no trouble in fixing the spherical face the bearing outer case can be mounted either over or under the mounting surface.
4. The spherical face and its mounting structure are compact designs so that the flange size is only a little larger than the standard flange type series. When using the self-aligning square flange type bearing, the pitch between mounting holes can be made narrower than the standard round flange bearing.

■ Examples of Self-Aligning Flange Type Bearing Advantages :

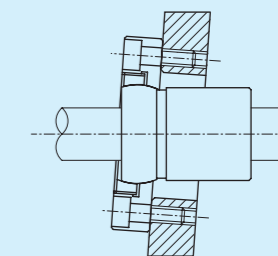
Example 1

Where fixed flange bearing requires precise machining of a mounting face, TSK's Adjustable Linear Bearing Series do not by accommodating mounting angle of up to $\pm 2^{\circ}$. The need for extra mounting surface processing to ensure a precise right angle is completely eliminated.



Example 2

Where shaft positioning requires precise assembling, the TSK adjustable series permit a mounting hole to be "just a hole". While assembling, the flange can be tentatively fixed. Afterwards, precise shaft alignment can be easily achieved by fixing a flange and tightening the threaded locking ring.



Example 3

In the case of Example 2, the flange can be mounted in the opposite direction without the outer case set in the mounting hole. Then, what is required is only to machine the hole that accommodates a shaft because the bearing outer case does not overrun that of flange bore.

