

# KS PERMAGLIDE® plain bearings

## Calibrating the bearing bore after mounting

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(Only applies to P1 plain bearings)

#### Calibration

KS PERMAGLIDE® plain bearings are ready to install on delivery, and should only be calibrated if a bearing clearance with a narrower tolerance cannot otherwise be reached.

#### Attention:

Calibration considerably shortens the service life of KS PERMAGLIDE® P1 bushes (see Tab. 1).

Figure 1 shows calibration using a mandrel.

Table 1 contains standard values for the diameter of the calibrating mandrel  $d_K$ . Precise values can only be ascertained through tests.

#### Better possibilities

The bearing clearance tolerance can be reduced through the following measures, which do not adversely affect service life:

- Narrower tolerances for housing bore
- Narrower shaft tolerances

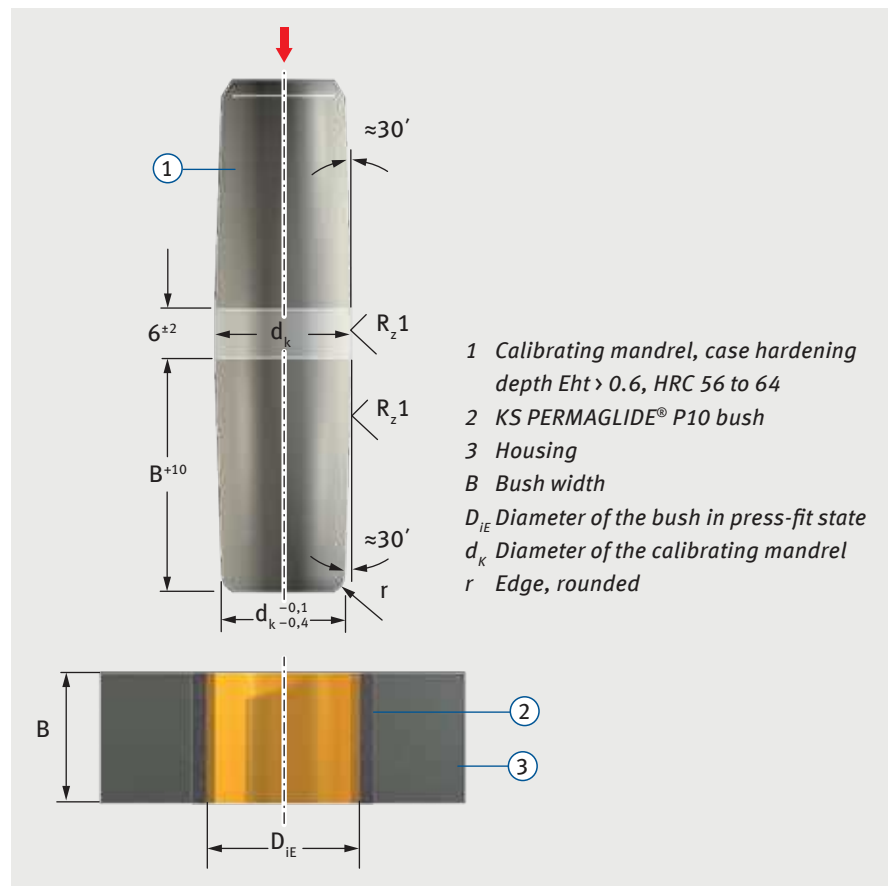


Fig. 1: Calibration

Desired inside diameter of bush	Diameter of calibrating mandrel <sup>1)</sup> $d_K$	Service life <sup>2)</sup>
$D_{IE}$	—	100% $L_N$
$D_{IE} + 0.02$	$D_{IE} + 0.06$	80% $L_N$
$D_{IE} + 0.03$	$D_{IE} + 0.08$	60% $L_N$
$D_{IE} + 0.04$	$D_{IE} + 0.10$	30% $L_N$

Tab. 1: Standard values for the calibration mandrel diameter and the reduction in service life

$D_{IE}$  Inside diameter of the bush in press-fit state.

<sup>1)</sup> Standard value, based on steel housing.

<sup>2)</sup> Standard value for dry running.