

**FAG****HCB7002-E-T-P4S-UL**

## Spindle bearing

Spindle bearing HCB70...-E, adjusted, in pairs or sets, contact angle  $\alpha = 25^\circ$ , with ceramic balls, restricted tolerances

## Technical information



## Your current product variant

Contact angle	E	Contact angle 25°
Sealing	Without	Not sealed
Cage	T	Laminated fabric cage
Tolerance class	P4S	Tolerance class P4S, FAG standard better than P4 to ISO 492:2023
Arrangement bearing set	U	Single bearing
Preload	L	Preload light

## Main Dimensions &amp; Performance Data

d	15 mm	Bore diameter
D	32 mm	Outside diameter
B	9 mm	Width
$C_r$	5.900 N	Basic dynamic load rating, radial
$C_{0r}$	2.210 N	Basic static load rating, radial
$C_{ur}$	178 N	Fatigue load limit, radial
$n_G$ Grease	63.000 1/min	Limiting speed for grease lubrication
$n_G$ Oil	100.000 1/min	Limiting speed for oil lubrication
$\approx m$	28,85 g	Weight





### Mounting dimensions

$d_a$	19 mm	Diameter shaft shoulder
$d_a$	h12	Diameter shaft shoulder clearance
$D_a$	29 mm	Shoulder diameter outer ring
$D_a$	H12	Shoulder diameter outer ring clearance
$r_{a \max}$	0,3 mm	Maximum recess radius
$r_{a1 \max}$	0,1 mm	Maximum recess radius
$E_{tk \min}$	21,1 mm	Minimum diameter injection pitch
$E_{tk \max}$	22,3 mm	Maximum diameter injection pitch
$E_{tk1 \min}$	21,1 mm	Minimum diameter injection pitch
$E_{tk1 \max}$	22,3 mm	Maximum diameter injection pitch
$a$	10 mm	Distance between the apexes of the pressure cones

### Dimensions

$r_{\min}$	0,3 mm	Minimum chamfer dimension
$r_{1 \min}$	0,3 mm	Minimum chamfer dimension
$\alpha$	25 °	Contact angle

### Temperature range

$T_{\min}$	-30 °C	Operating temperature min.
$T_{\max}$	100 °C	Operating temperature max.



### Additional information

$F_{VL}$	20 N	Preload force light
$F_{VM}$	88 N	Preload force medium
$F_{VH}$	199 N	Preload force heavy
$K_{aEL}$	57 N	Lift-off force light
$K_{aEM}$	260 N	Lift-off force medium
$K_{aEH}$	600 N	Lift-off force heavy
$c_{aL}$	34 N/ $\mu\text{m}$	Axial rigidity light
$c_{aM}$	59 N/ $\mu\text{m}$	Axial rigidity medium
$c_{aH}$	80 N/ $\mu\text{m}$	Axial rigidity heavy

### Characteristics

-  Radial load
-  Axial load in one direction
-  Grease Lubrication
-  Oil Lubrication
-  Not sealed