

**FAG****B7003-C-T-P4S-UL**

Spindle bearing

Spindle bearing B70...-C, adjusted, in pairs or sets, contact angle $\alpha = 15^\circ$, restricted tolerances

Technical information



Your current product variant

Preload	L	Preload light
Contact angle	C	Contact angle 15°
Tolerance class	P4S	Tolerance class P4S, FAG standard better than P4 to ISO 492:2023
Sealing	Without	Not sealed
Cage	T	Laminated fabric cage
Arrangement bearing set	U	Single bearing

Main Dimensions & Performance Data

d	17 mm	Bore diameter
D	35 mm	Outside diameter
B	10 mm	Width
C_r	8.600 N	Basic dynamic load rating, radial
C_{0r}	3.500 N	Basic static load rating, radial
C_{ur}	370 N	Fatigue load limit, radial
n_G Grease	45.000 1/min	Limiting speed for grease lubrication
$n_{G\text{ Oil}}$	70.000 1/min	Limiting speed for oil lubrication
$\approx m$	0,04 kg	Weight





Mounting dimensions

d_a	21 mm	Diameter shaft shoulder
d_a	h12	Diameter shaft shoulder clearance
D_a	32 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
$E_{tk \min}$	23,3 mm	Minimum diameter injection pitch
$E_{tk \max}$	24,5 mm	Maximum diameter injection pitch
$E_{tk1 \min}$	23,3 mm	Minimum diameter injection pitch
$E_{tk1 \max}$	24,5 mm	Maximum diameter injection pitch
a	8,5 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
α	15 °	Contact angle

Temperature range

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



Additional information

F_{VL}	40 N	Preload force light
F_{VM}	142 N	Preload force medium
F_{VH}	291 N	Preload force heavy
K_{aEL}	124 N	Lift-off force light
K_{aEM}	474 N	Lift-off force medium
K_{aEH}	1.042 N	Lift-off force heavy
c_{aL}	21 N/μm	Axial rigidity light
c_{aM}	37 N/μm	Axial rigidity medium
c_{aH}	54 N/μm	Axial rigidity heavy

Characteristics

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