



FAG

HC7009-E-T-P4S-UL

High speed spindle bearing

High speed spindle bearing HC70...-E, adjusted, in pairs or sets, contact angle $\alpha = 25^\circ$, with ceramic balls, restricted tolerances

Informacje techniczne



Twoja aktualna wersja produktu

Preload class	L	Preload light
Contact angle	E	Contact angle 25°
Type of Seal	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

Main Dimensions & Performance Data

d	45 mm	Bore diameter
D	75 mm	Outside diameter
B	16 mm	Width
C _r	11.600 N	Basic dynamic load rating, radial
C _{0r}	6.800 N	Basic static load rating, radial
C _{ur}	550 N	Fatigue load limit, radial
n _{G Grease}	30.000 1/min	Limiting speed for grease lubrication
n _{G Oil}	48.000 1/min	Limiting speed for oil lubrication
≈m	0,239 kg	Masa



Mounting dimensions

d _a	51 mm	Diameter shaft shoulder
d _a	h12	Diameter shaft shoulder clearance
D _a	69 mm	Shoulder diameter outer ring
D _a	H12	Shoulder diameter outer ring clearance
r _a max	1 mm	Maximum recess radius
r _{a1} max	0,3 mm	Maximum recess radius
E _{tk} min	56,7 mm	Minimum diameter injection pitch
E _{tk} max	58,2 mm	Maximum diameter injection pitch
E _{tk1} min	54,6 mm	Minimum diameter injection pitch
E _{tk1} max	58,2 mm	Maximum diameter injection pitch
a	22 mm	Distance between the apexes of the pressure cones

Dimensions

r _{min}	1 mm	Minimum chamfer dimension
r ₁ min	1 mm	Minimum chamfer dimension
α	25 °	Contact angle

Temperature range

T _{min}	-30 °C	Operating temperature min.
T _{max}	100 °C	Operating temperature max.



Additional information

F_{VL}	48 N	Preload force light
F_{VM}	143 N	Preload force medium
F_{VH}	286 N	Preload force heavy
K_{aEL}	137 N	Lift-off force light
K_{aEM}	417 N	Lift-off force medium
K_{aEH}	848 N	Lift-off force heavy
c_{aL}	84 N/ μ m	Axial rigidity light
c_{aM}	125 N/ μ m	Axial rigidity medium
c_{aH}	161 N/ μ m	Axial rigidity heavy

Właściwości

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Obciążenie promieniowe
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Obciążenie osiowe jednokierunkowe
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Smarowanie smarem
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Smarowanie olejem
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Bez uszczelnienia