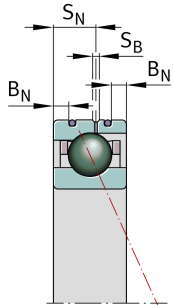


**FAG****HC7012-EDLR-T-P4S-UL**

High speed spindle bearing

High speed spindle bearing HC70..-EDLR, adjusted, in pairs or sets, contact angle $\alpha = 25^\circ$, with ceramic balls, restricted tolerances, for direct oil feed via outer ring, with inserted O rings

Technical information



Your current product variant

Preload	L	Preload light
Contact angle	E	Contact angle 25°
Sealing	Without	Not sealed
Outer shape	DLR	Direct lubrication, annular slots with O rings
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	60 mm	Bore diameter
D	95 mm	Outside diameter
B	18 mm	Width
C_r	17.600 N	Basic dynamic load rating, radial
C_{0r}	11.300 N	Basic static load rating, radial
C_{ur}	910 N	Fatigue load limit, radial
n_G Grease	24.000 1/min	Limiting speed for grease lubrication
$n_{G\text{Oil}}$	36.000 1/min	Limiting speed for oil lubrication
$\approx m$	430 g	Weight



Mounting dimensions

d_a	67 mm	Diameter shaft shoulder
d_a	h12	Diameter shaft shoulder clearance
D_a	88 mm	Shoulder diameter outer ring
D_a	H12	Shoulder diameter outer ring clearance
$r_{a \max}$	1 mm	Maximum recess radius
$r_{a1 \max}$	0,6 mm	Maximum recess radius
B_N	4,3 mm	Distance ring grooves
B_{N1}	4,3 mm	Distance ring grooves
S_N	9,7 mm	Distance to lubrication hole
S_B	1,4 mm	Width of lubricating groove
a	27,1 mm	Distance between the apexes of the pressure cones

Dimensions

r_{\min}	1,1 mm	Minimum chamfer dimension
$r_{1 \min}$	1,1 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}	73 N	Preload force light
F_{VM}	219 N	Preload force medium
F_{VH}	438 N	Preload force heavy
K_{aEL}	209 N	Lift-off force light
K_{aEM}	638 N	Lift-off force medium
K_{aEH}	1.294 N	Lift-off force heavy
c_{aL}	112 N/ μ m	Axial rigidity light
c_{aM}	165 N/ μ m	Axial rigidity medium
c_{aH}	213 N/ μ m	Axial rigidity heavy

Characteristics

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