

**FAG****HC71914-EDLR-T-P4S-UL**

## High speed spindle bearing

High speed spindle bearing HC719...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 $25^\circ$
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 &amp; Performance Data

d	70 mm	Bore diameter
D	100 mm	Outside diameter
B	16 mm	Width
$C_r$	16.800 N	Basic dynamic load rating, radial
$C_{0r}$	11.700 N	Basic static load rating, radial
$C_{ur}$	940 N	Fatigue load limit, radial
$n_G$ Grease	22.000 1/min	Limiting speed for grease lubrication
$n_G$ Oil	34.000 1/min	Limiting speed for oil lubrication
$\approx m$	0,305 kg	Weight



### Mounting dimensions

$d_a$	76 mm	Diameter shaft shoulder
$d_a$	h12	Diameter shaft shoulder clearance
$D_a$	94,5 mm	Shoulder diameter outer ring
$D_a$	H12	Shoulder diameter outer ring clearance
$r_a \text{ max}$	0,6 mm	Maximum recess radius
$r_{a1} \text{ max}$	0,3 mm	Maximum recess radius
$B_N$	3,1 mm	Distance ring grooves
$B_{N1}$	3,1 mm	Distance ring grooves
$S_N$	9,3 mm	Distance to lubrication hole
$S_B$	1,4 mm	Width of lubricating groove
$a$	27,8 mm	Distance between the apexes of the pressure cones

### Dimensions

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

### Temperature range





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



### Additional information

$F_{VL}$	69 N	Preload force light
$F_{VM}$	207 N	Preload force medium
$F_{VH}$	414 N	Preload force heavy
$K_{aEL}$	198 N	Lift-off force light
$K_{aEM}$	602 N	Lift-off force medium
$K_{aEH}$	1.221 N	Lift-off force heavy
$c_{aL}$	117 N/ $\mu$ m	Axial rigidity light
$c_{aM}$	173 N/ $\mu$ m	Axial rigidity medium
$c_{aH}$	223 N/ $\mu$ m	Axial rigidity heavy

### Characteristics

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