

FAG

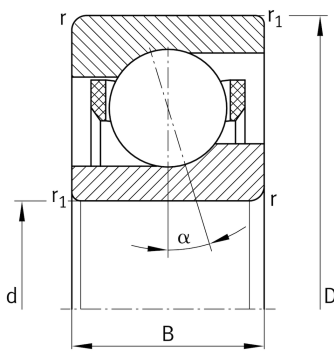
**HCM71914-E-T-P4S-UL-XL**

Angular contact ball bearing

High speed spindle bearing HCM719...-E, adjusted, in pairs or sets, contact angle  $\alpha = 25^\circ$ , with ceramic balls, restricted tolerances

X-life

## Technical information



## Main Dimensions &amp; Performance Data

d	70 mm	Bore diameter
D	100 mm	Outside diameter
B	16 mm	Width
$C_r$	26.000 N	Basic dynamic load rating, radial
$C_{0r}$	14.300 N	Basic static load rating, radial
$C_{ur}$	1.150 N	Fatigue load limit, radial
$n_{G \text{ Grease}}$	22.000 1/min	Limiting speed for grease lubrication
$n_{G \text{ Oil}}$	32.000 1/min	Limiting speed for oil lubrication
$\approx m$	255,05 g	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
$E_{tk \text{ min}}$	79,3 mm	Minimum diameter injection pitch
$E_{tk \text{ max}}$	82,1 mm	Maximum diameter injection pitch
$E_{tk1 \text{ min}}$	75,7 mm	Minimum diameter injection pitch
$E_{tk1 \text{ max}}$	82,1 mm	Maximum diameter injection pitch
a	27,8 mm	Distance between the apices of the pressure cones

## Dimensions

$r_{\text{min}}$	1 mm	Minimum chamfer dimension
$r_{1 \text{ min}}$	0,6 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

$F_{VL}$	167 N	Preload force light
$F_{VM}$	437 N	Preload force medium
$F_{VH}$	909 N	Preload force heavy
$K_{aEL}$	478 N	Lift-off force light
$K_{aEM}$	1.265 N	Lift-off force medium
$K_{aEH}$	2.665 N	Lift-off force heavy
$c_{aL}$	132 N/μm	Axial rigidity light
$c_{aM}$	184 N/μm	Axial rigidity medium
$c_{aH}$	241 N/μm	Axial rigidity heavy