



FAG

**HCM71912-C-T-P4S-UL-XL**

## High speed spindle bearing

High speed spindle bearing HCM719...-C, adjusted, in pairs or sets, contact angle  $\alpha = 17^\circ$ , with ceramic balls, restricted tolerances

X-life

## Technical information



## Your current product variant

Contact angle	Contact angle 17°	Contact angle 17°
Type of Sealing	Without	Not sealed
Cage	T	Laminated fabric cage
Tolerance class	P4S	Tolerance class P4S, FAG standard better than P4 to DIN 620
Arrangement bearing set	U	Single bearing
Preload	L	Preload light



## Main Dimensions &amp; Performance Data

d	60 mm	Bore diameter
D	85 mm	Outside diameter
B	13 mm	Width
C <sub>r</sub>	19.500 N	Basic dynamic load rating, radial
C <sub>0r</sub>	10.500 N	Basic static load rating, radial
C <sub>ur</sub>	850 N	Fatigue load limit, radial
n <sub>G</sub> Grease	28.000 1/min	Limiting speed for grease lubrication
n <sub>G</sub> Oil	40.000 1/min	Limiting speed for oil lubrication
≈m	146,01 g	Weight





### Mounting dimensions

$d_a$	65 mm	Diameter shaft shoulder
$d_a$	h12	Diameter shaft shoulder clearance
$D_a$	80,5 mm	Shoulder diameter outer ring
$D_a$	H12	Shoulder diameter outer ring clearance
$r_{a \max}$	0,6 mm	Maximum recess radius
$r_{a1 \max}$	0,3 mm	Maximum recess radius
$E_{tk \min}$	67,7 mm	Minimum diameter injection pitch
$E_{tk \max}$	70 mm	Maximum diameter injection pitch
$E_{tk1 \min}$	64,7 mm	Minimum diameter injection pitch
$E_{tk1 \max}$	70 mm	Maximum diameter injection pitch
$a$	17,6 mm	Distance between the apexes of the pressure cones

### Dimensions

$r_{\min}$	1 mm	Minimum chamfer dimension
$r_{1 \min}$	0,6 mm	Minimum chamfer dimension
$\alpha$	17 °	Contact angle

### Temperature range

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



### Additional information

$F_{VL}$	81 N	Preload force light
$F_{VM}$	214 N	Preload force medium
$F_{VH}$	450 N	Preload force heavy
$K_{aEL}$	236 N	Lift-off force light
$K_{aEM}$	638 N	Lift-off force medium
$K_{aEH}$	1.378 N	Lift-off force heavy
$c_{aL}$	54 N/ $\mu\text{m}$	Axial rigidity light
$c_{aM}$	78 N/ $\mu\text{m}$	Axial rigidity medium
$c_{aH}$	105 N/ $\mu\text{m}$	Axial rigidity heavy

### Characteristics

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