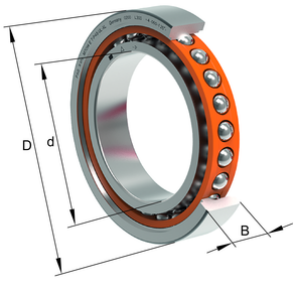


FAG

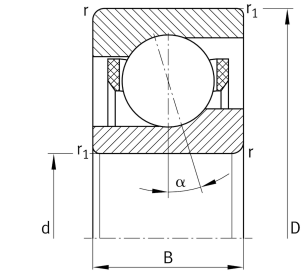
X-life

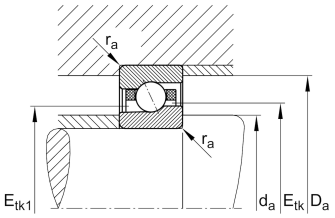
HCM71914-C-T-P4S-UL-XL

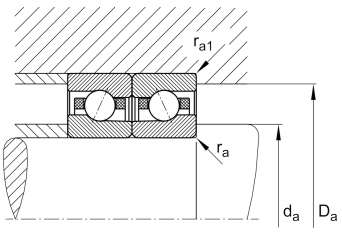
High speed spindle bearing

High speed spindle bearing HCM719..-C, adjusted, in pairs or sets, contact angle α = 17°, with ceramic balls, restricted tolerances

Technical information







Your current product variant

Contact angle	Contact angle 17°	Contact angle 17°
Type of Seal	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 & Performance Data

d	70 mm	Bore diameter
D	100 mm	Outside diameter
B	16 mm	Width
C_r	27.000 N	Basic dynamic load rating, radial
C_{0r}	15.000 N	Basic static load rating, radial
C_{ur}	1.210 N	Fatigue load limit, radial
n_G Grease	24.000 1/min	Limiting speed for grease lubrication
n_G Oil	36.000 1/min	Limiting speed for oil lubrication
≈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
$r_{a\ max}$	0,6 mm	Maximum recess radius
$r_{a1\ max}$	0,3 mm	Maximum recess radius
$E_{tk\ min}$	79,3 mm	Minimum diameter injection pitch
$E_{tk\ max}$	82,1 mm	Maximum diameter injection pitch
$E_{tk1\ min}$	75,7 mm	Minimum diameter injection pitch
$E_{tk1\ max}$	82,1 mm	Maximum diameter injection pitch
a	21 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
α	17 °	Contact angle

Temperature range

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

Additional information

$F_{V\,L}$	116 N	Preload force light
$F_{V\,M}$	306 N	Preload force medium
$F_{V\,H}$	641 N	Preload force heavy
$K_{aE\,L}$	337 N	Lift-off force light
$K_{aE\,M}$	910 N	Lift-off force medium
$K_{aE\,H}$	1.965 N	Lift-off force heavy
$c_{a\,L}$	65 N/µm	Axial rigidity light
$c_{a\,M}$	93 N/µm	Axial rigidity medium
$c_{a\,H}$	125 N/µm	Axial rigidity heavy

Characteristics

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