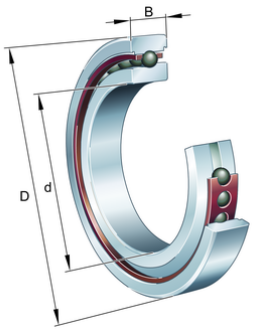


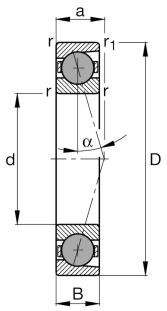
FAG

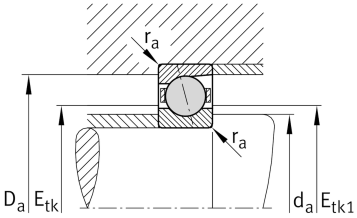
HC71905-E-T-P4S-UL

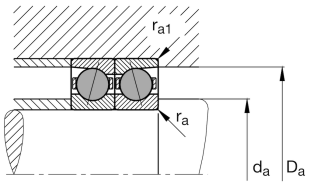
High speed spindle bearing

High speed spindle bearing HC719..-E, adjusted, in pairs or sets, contact angle α = 25°, with ceramic balls, restricted tolerances

Technical information







Your current product variant

Preload class	L	Preload light
Contact angle	E	Contact angle 25°
Sealing	Without	Not sealed
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	25 mm	Bore diameter
D	42 mm	Outside diameter
B	9 mm	Width
C_r	3.650 N	Basic dynamic load rating, radial
C_{0r}	1.870 N	Basic static load rating, radial
C_{ur}	150 N	Fatigue load limit, radial
n_G Grease	56.000 1/min	Limiting speed for grease lubrication
$n_{G\ Oil}$	85.000 1/min	Limiting speed for oil lubrication
≈m	41,98 g	Weight

Mounting dimensions

d_a	29 mm	Diameter shaft shoulder
d_a	h12	Diameter shaft shoulder clearance
D_a	38,5 mm	Shoulder diameter outer ring
D_a	H12	Shoulder diameter outer ring clearance
$r_{a\ max}$	0,3 mm	Maximum recess radius
$r_{a1\ max}$	0,15 mm	Maximum recess radius
$E_{tk\ min}$	31,6 mm	Minimum diameter injection pitch
$E_{tk\ max}$	32,2 mm	Maximum diameter injection pitch
$E_{tk1\ min}$	30,4 mm	Minimum diameter injection pitch
$E_{tk1\ max}$	32,2 mm	Maximum diameter injection pitch
a	12,3 mm	Distance between the apexes of the pressure cones

Dimensions

r_{min}	0,3 mm	Minimum chamfer dimension
$r_{1\ min}$	0,3 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

$F_{V\,L}$	16 N	Preload force light
$F_{V\,M}$	47 N	Preload force medium
$F_{V\,H}$	95 N	Preload force heavy
$K_{aE\,L}$	45 N	Lift-off force light
$K_{aE\,M}$	138 N	Lift-off force medium
$K_{aE\,H}$	281 N	Lift-off force heavy
$c_{a\,L}$	42 N/µm	Axial rigidity light
$c_{a\,M}$	62 N/µm	Axial rigidity medium
$c_{a\,H}$	80 N/µm	Axial rigidity heavy

Characteristics

Radial load

Axial load in one direction


Grease Lubrication


Oil Lubrication


Not sealed