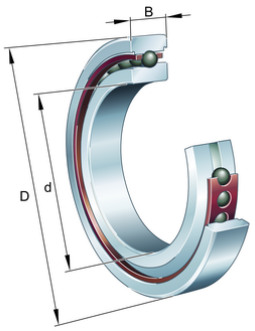
View product details on medias

23.05.2026, 11:38:06 UTC

SCHAEFFLER



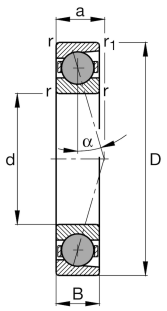
FAG

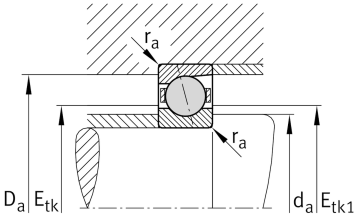
HC7021-E-T-P4S-UL

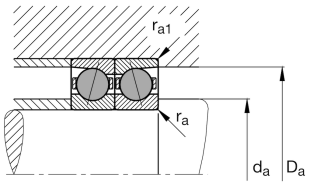
High speed spindle bearing

High speed spindle bearing HC70..-E, adjusted, in pairs or sets, contact angle α = 25°, with ceramic balls, restricted tolerances

Technical information







Your current product variant

Contact angle	E	Contact angle 25°
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	105 mm	Bore diameter
D	160 mm	Outside diameter
B	26 mm	Width
C_r	45.000 N	Basic dynamic load rating, radial
C_{0r}	33.000 N	Basic static load rating, radial
C_{ur}	2.300 N	Fatigue load limit, radial
n_G Grease	14.000 1/min	Limiting speed for grease lubrication
$n_{G\ Oil}$	22.000 1/min	Limiting speed for oil lubrication
≈m	1,52 kg	Weight

Mounting dimensions

d_a	116 mm	Diameter shaft shoulder
d_a	h12	Diameter shaft shoulder clearance
D_a	150 mm	Shoulder diameter outer ring
D_a	H12	Shoulder diameter outer ring clearance
$r_{a\ max}$	2 mm	Maximum recess radius
$r_{a1\ max}$	1 mm	Maximum recess radius
$E_{tk\ min}$	125,8 mm	Minimum diameter injection pitch
$E_{tk\ max}$	129 mm	Maximum diameter injection pitch
$E_{tk1\ min}$	121,7 mm	Minimum diameter injection pitch
$E_{tk1\ max}$	129 mm	Maximum diameter injection pitch
a	43,9 mm	Distance between the apexes of the pressure cones

Dimensions

r_{min}	2 mm	Minimum chamfer dimension
$r_{1\ min}$	2 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

$F_{V\,L}$	184 N	Preload force light
$F_{V\,M}$	552 N	Preload force medium
$F_{V\,H}$	1.104 N	Preload force heavy
$K_{aE\,L}$	527 N	Lift-off force light
$K_{aE\,M}$	1.602 N	Lift-off force medium
$K_{aE\,H}$	3.250 N	Lift-off force heavy
$c_{a\,L}$	188 N/µm	Axial rigidity light
$c_{a\,M}$	277 N/µm	Axial rigidity medium
$c_{a\,H}$	357 N/µm	Axial rigidity heavy

Characteristics

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