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29.06.2026, 17:05:28 UTC

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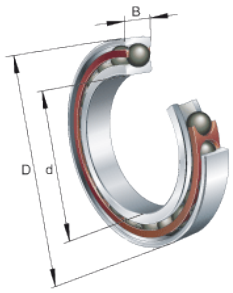


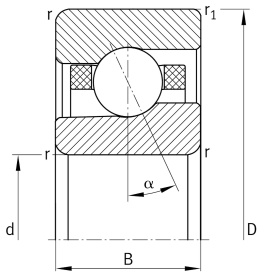
FAG

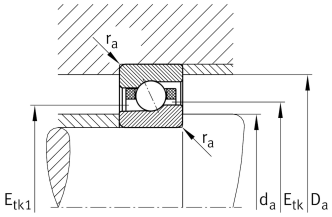
VCM7020-C-T-P4S-UL-XL

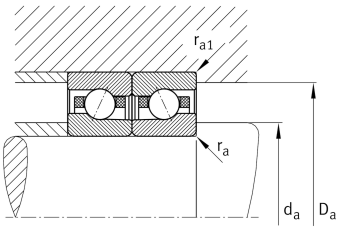
High speed spindle bearing

High speed spindle bearing VCM70..-C, adjusted, in pairs or sets, contact angle α = 17°, with ceramic balls, rings made from Vacrodur, restricted tolerances

Technical information







Your current product variant

Preload	L	Preload light
Contact angle	Contact angle 17°	Contact angle 17°
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	100 mm	Bore diameter
D	150 mm	Outside diameter
B	24 mm	Width
C_r	103.000 N	Basic dynamic load rating, radial
C_{0r}	43.000 N	Basic static load rating, radial
C_{ur}	1.970 N	Fatigue load limit, radial
n_G Grease	17.000 1/min	Limiting speed for grease lubrication
n_G Oil	24.000 1/min	Limiting speed for oil lubrication
≈m	1,23 kg	Weight

Mounting dimensions

d_a	110 mm	Diameter shaft shoulder
d_a	h12	Diameter shaft shoulder clearance
D_a	141 mm	Shoulder diameter outer ring
D_a	H12	Shoulder diameter outer ring clearance
$r_{a\ max}$	1,5 mm	Maximum recess radius
$r_{a1\ max}$	0,6 mm	Maximum recess radius
$E_{tk\ min}$	118,3 mm	Minimum diameter injection pitch
$E_{tk\ max}$	121,7 mm	Maximum diameter injection pitch
$E_{tk1\ min}$	114,1 mm	Minimum diameter injection pitch
$E_{tk1\ max}$	121,7 mm	Maximum diameter injection pitch
a	31,1 mm	Distance between the apexes of the pressure cones

Dimensions

r_{min}	1,5 mm	Minimum chamfer dimension
$r_{1\ min}$	1 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

$F_{V\,L}$	215 N	Preload force light
$F_{V\,M}$	569 N	Preload force medium
$F_{V\,H}$	1.196 N	Preload force heavy
$K_{aE\,L}$	629 N	Lift-off force light
$K_{aE\,M}$	1.706 N	Lift-off force medium
$K_{aE\,H}$	3.702 N	Lift-off force heavy
$c_{a\,L}$	105 N/µm	Axial rigidity light
$c_{a\,M}$	152 N/µm	Axial rigidity medium
$c_{a\,H}$	206 N/µm	Axial rigidity heavy

Characteristics

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