

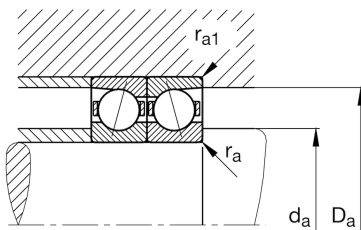
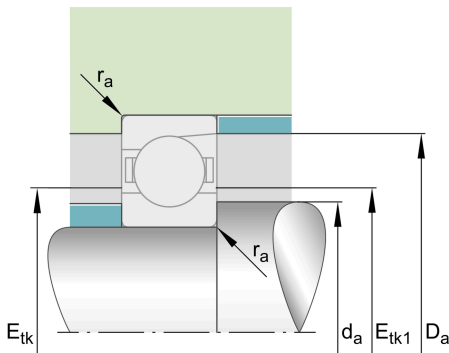
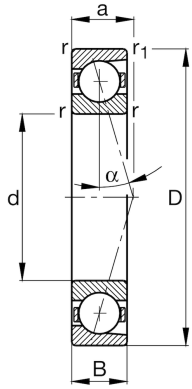
FAG

B7003-E-T-P4S-UL

Spindle bearing

Schaeffler ID:
0191500080000Spindle bearings B70...-E, adjusted, in pairs or sets, contact angle $\alpha = 25^\circ$, restricted tolerances

Technical information

**Main Dimensions & Performance Data**

d	0,669 in	Bore diameter
D	1,378 in	Outside diameter
B	0,394 in	Width
C_r	1.843,525 lbf	Basic dynamic load rating, radial
C_{0r}	753,147 lbf	Basic static load rating, radial
C_{ur}	79,811 lbf	Fatigue load limit, radial
$n_{G \text{ Grease}}$	43.000 1/min	Limiting speed for grease lubrication
$n_{G \text{ Oil}}$	63.000 1/min	Limiting speed for oil lubrication
	0,088 lbs	Weight

Mounting dimensions

d_a	0,827 in	Diameter shaft shoulder
d_a	h12	Diameter shaft shoulder clearance
D_a	1,26 in	Shoulder diameter outer ring
D_a	H12	Shoulder diameter outer ring clearance
$r_{a \text{ max}}$	0,012 in	Maximum recess radius
$r_{a1 \text{ max}}$	0,004 in	Maximum recess radius
$E_{tk \text{ min}}$	0,917 in	Minimum diameter injection pitch
$E_{tk \text{ max}}$	0,965 in	Maximum diameter injection pitch
$E_{tk1 \text{ min}}$	0,917 in	Minimum diameter injection pitch
$E_{tk1 \text{ max}}$	0,965 in	Maximum diameter injection pitch
a	0,437 in	Distance between the apices of the pressure cones

Dimensions

r_{min}	0,012 in	Minimum chamfer dimension
$r_{1 \text{ min}}$	0,012 in	Minimum chamfer dimension
α	25 °	Contact angle

Temperature range

T_{\min}	-22 °F	Operating temperature min.
T_{\max}	212 °F	Operating temperature max.

Additional information

F_{VL}	12,14 lbf	Preload force light
F_{VM}	49,46 lbf	Preload force medium
F_{VH}	108,588 lbf	Preload force heavy
K_{aEL}	35,072 lbf	Lift-off force light
K_{aEM}	149,056 lbf	Lift-off force medium
K_{aEH}	338,129 lbf	Lift-off force heavy
c_{aL}	47,6 N/μm	Axial rigidity light
c_{aM}	81 N/μm	Axial rigidity medium
c_{aH}	112 N/μm	Axial rigidity heavy