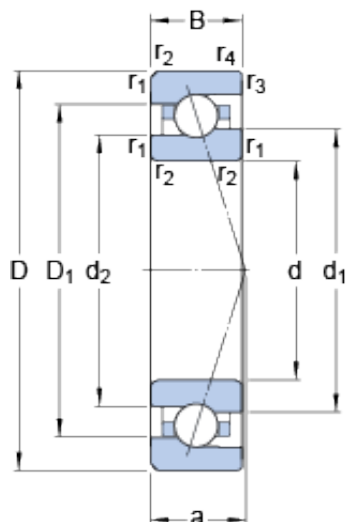




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7003 CE/P4A SKF High Speed Angular Contact Ball Bearings

Bearing No. 7003 CE/P4A



7003 CE/P4A Bearing 2D drawings and 3D CAD models

Size	35x17x10 mm
Bore Diameter	35 mm
Outer Diameter	17 mm
Width	10 mm
d	17 mm
D	35 mm
B	10 mm
d ₁	22.7 mm
d ₂	21.1 mm
D ₁	29.3 mm
r _{1,2} - min.	0.3 mm
r _{3,4} - min.	0.15 mm
a	8.6 mm
d _a - min.	19 mm
d _b - min.	19 mm
D _a - max.	33 mm
D _b - max.	33.6 mm
r _a - max.	0.3 mm
r _b - max.	0.15 mm
d _n	24.1 mm
Basic dynamic load rating - C	5.8 kN
Basic static load rating - C ₀	2.6 kN
Fatigue load limit - P _u	0.108 kN
Limiting speed for grease	63000 r/min



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Lubrication	
Limiting speed for oil lubrication	95000 mm/min
Ball - D_w	5.556 mm
Ball - z	12
G_{ref}	0.68 cm ³
Calculation factor - f_0	7.2
Preload class A - G_A	30 N
Preload class B - G_B	90 N
Preload class C - G_C	185 N
Calculation factor - f	1.04
Calculation factor - f	1
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.03
Calculation factor - f_{2C}	1.05
Calculation factor - f_{HC}	1
Preload class A	18 N/micron
Preload class B	28 N/micron
Preload class C	39 N/micron
d_1	22.7 mm
d_2	21.1 mm
D_1	29.3 mm
$r_{1,2}$ min.	0.3 mm
$r_{3,4}$ min.	0.15 mm
d_a min.	19 mm
d_b min.	19 mm
D_a max.	33 mm
D_b max.	33.6 mm
r_a max.	0.3 mm
r_b max.	0.15 mm
d_n	24.1 mm



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Basic dynamic load rating C	5.85 kN
Basic static load rating C_0	2.55 kN
Fatigue load limit P_u	0.108 kN
Attainable speed for grease lubrication	63000 r/min
Attainable speed for oil-air lubrication	95000 r/min
Ball diameter D_w	5.556 mm
Number of balls z	12
Reference grease quantity G_{ref}	0.68 cm ³
Preload class A G_A	30 N
Static axial stiffness, preload class A	18 N/ μ m
Preload class B G_B	90 N
Static axial stiffness, preload class B	28 N/ μ m
Preload class C G_C	185 N
Static axial stiffness, preload class C	39 N/ μ m
Calculation factor f	1.04
Calculation factor f_1	1
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.03
Calculation factor f_{2C}	1.05
Calculation factor f_{HC}	1
Calculation factor f_0	7.2
Mass bearing	0.035 kg