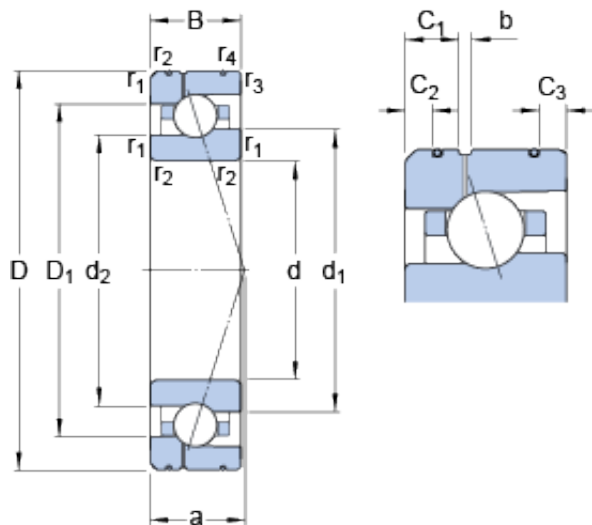




ISOSTATIC BEARING LIMITED

7005 CE/P4AL1 SKF High Speed Angular Contact Ball Bearings

Bearing No. 7005 CE/P4AL1



7005 CE/P4AL1 Bearing 2D drawings and 3D CAD models

Size	47x25x12 mm
Bore Diameter	47 mm
Outer Diameter	25 mm
Width	12 mm
d	25 mm
D	47 mm
B	12 mm
d ₁	31.6 mm
d ₂	29.8 mm
D ₁	39.21 mm
b	1.4 mm
C ₁	3.2 mm
C ₂	1.45 mm
C ₃	1.9 mm
r _{1,2} - min.	0.6 mm
r _{3,4} - min.	0.3 mm
a	10.8 mm
d _a - min.	28.2 mm
d _b - min.	28.2 mm
D _a - max.	43.8 mm
D _b - max.	44.6 mm
r _a - max.	0.6 mm
r _b - max.	0.3 mm
d _n	33.1 mm



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Basic dynamic load rating - C	8.3 kN
Basic static load rating - C ₀	4.2 kN
Fatigue load limit - P _u	0.173 kN
Limiting speed for grease lubrication	46000 r/min
Limiting speed for oil lubrication	70000 mm/min
Ball - D _w	6.35 mm
Ball - z	14
G _{ref}	1.3 cm ³
Calculation factor - f ₀	7.5
Preload class A - G _A	45 N
Preload class B - G _B	130 N
Preload class C - G _C	260 N
Calculation factor - f	1.05
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	24 N/micron
Preload class B	37 N/micron
Preload class C	50 N/micron
d ₁	31.6 mm
d ₂	29.8 mm
D ₁	39.21 mm
C ₁	3.2 mm
C ₂	1.45 mm
C ₃	1.9 mm
r _{1,2} min.	0.6 mm



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$r_{3,4}$ min.	0.3 mm
d_a min.	28.2 mm
d_b min.	28.2 mm
D_a max.	43.8 mm
D_b max.	44.6 mm
r_a max.	0.6 mm
r_b max.	0.3 mm
d_n	33.1 mm
Basic dynamic load rating C	8.32 kN
Basic static load rating C_0	4.15 kN
Fatigue load limit P_u	0.173 kN
Attainable speed for grease lubrication	46000 r/min
Attainable speed for oil-air lubrication	70000 r/min
Ball diameter D_w	6.35 mm
Number of balls z	14
Reference grease quantity G_{ref}	1.3 cm ³
Preload class A G_A	45 N
Static axial stiffness, preload class A	24 N/ μ m
Preload class B G_B	130 N
Static axial stiffness, preload class B	37 N/ μ m
Preload class C G_C	260 N
Static axial stiffness, preload class C	50 N/ μ m
Calculation factor f	1.05
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



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Calculation factor f_0	7.5
Mass bearing	0.074 kg