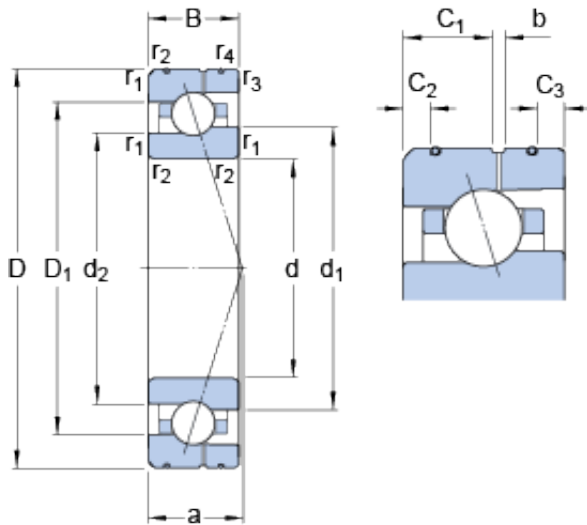




PIE Bearing Technology Co., Ltd



SKF 7020 ACE/HCP4AL angular contact ball bearings

Bearing No. 7020 ACE/HCP4AL

7020 ACE/HCP4AL Bearing 2D drawings and 3D CAD models

Size	150x100x24 mm
Bore Diameter	150 mm
Outer Diameter	100 mm
Width	24 mm
d	100 mm
D	150 mm
B	24 mm
d ₁	117.38 mm
d ₂	114.2 mm
D ₁	132.61 mm
b	2.2 mm
C ₁	13.4 mm
C ₂	4 mm
C ₃	4 mm
r _{1,2} - min.	1.5 mm
r _{3,4} - min.	1 mm
a	41.4 mm
d _a - min.	107 mm
d _b - min.	107 mm
D _a - max.	143 mm
D _b - max.	144.4 mm
r _a - max.	1.5 mm
r _b - max.	1 mm
d _n	120.4 mm



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Basic dynamic load rating - C	42.3 kN
Basic static load rating - C_0	38 kN
Fatigue load limit - P_u	1.4 kN
Limiting speed for grease lubrication	12700 r/min
Limiting speed for oil lubrication	20000 mm/min
Ball - D_w	12.7 mm
Ball - z	27
G_{ref}	17 cm ³
Calculation factor - e	0.68
Calculation factor - Y_2	0.87
Calculation factor - Y_0	0.38
Calculation factor - X_2	0.41
Calculation factor - Y_1	0.92
Calculation factor - Y_2	1.41
Calculation factor - Y_0	0.76
Calculation factor - X_2	0.67
Preload class A - G_A	390 N
Preload class B - G_B	1150 N
Preload class C - G_C	2310 N
Calculation factor - f	1.12
Calculation factor - f_1	0.99
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.03
Calculation factor - f_{2C}	1.06
Calculation factor - f_{HC}	1.01
Preload class A	245 N/micron
Preload class B	366 N/micron



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Preload class C	483 N/micron
d_1	117.38 mm
d_2	114.2 mm
D_1	132.61 mm
C_1	13.4 mm
C_2	4 mm
C_3	4 mm
$r_{1,2}$ min.	1.5 mm
$r_{3,4}$ min.	1 mm
d_a min.	107 mm
d_b min.	107 mm
D_a max.	143 mm
D_b max.	144.4 mm
r_a max.	1.5 mm
r_b max.	1 mm
d_n	120.4 mm
Basic dynamic load rating C	42.3 kN
Basic static load rating C_0	38 kN
Fatigue load limit P_u	1.43 kN
Attainable speed for grease lubrication	12700 r/min
Attainable speed for oil-air lubrication	20000 r/min
Ball diameter D_w	12.7 mm
Number of balls z	27
Reference grease quantity G_{ref}	17 cm ³
Preload class A G_A	390 N
Static axial stiffness, preload class A	245 N/ μ m
Preload class B G_B	1150 N
Static axial stiffness, preload class B	366 N/ μ m
Preload class C G_C	2310 N



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Static axial stiffness, preload class C	483 N/ μ m
Calculation factor f	1.12
Calculation factor f_1	0.99
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.03
Calculation factor f_{2C}	1.06
Calculation factor f_{HC}	1.01
Calculation factor e	0.68
Calculation factor (single, tandem) Y_2	0.87
Calculation factor (single, tandem) Y_0	0.38
Calculation factor (single, tandem) X_2	0.41
Calculation factor (back-to-back, face-to-face) Y_1	0.92
Calculation factor (back-to-back, face-to-face) Y_2	1.41
Calculation factor (back-to-back, face-to-face) Y_0	0.76
Calculation factor (back-to-back, face-to-face) X_2	0.67
Mass bearing	1.12 kg