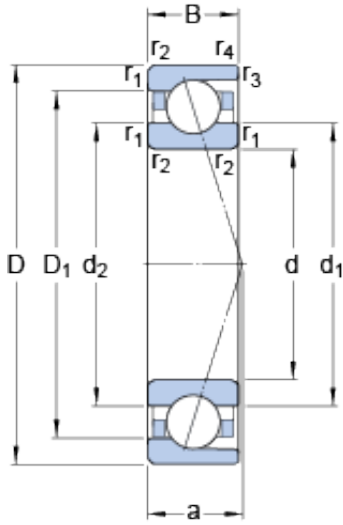




BEARING PRECISION AXLE CORP.



7012 ACD/P4A Bearing 2D drawings and 3D CAD models

7012 ACD/P4A SKF High Speed Angular Contact Ball Bearings

Bearing No. 7012 ACD/P4A

Size	95x60x18 mm
Bore Diameter	95 mm
Outer Diameter	60 mm
Width	18 mm
d	60 mm
D	95 mm
B	18 mm
d ₁	70.8 mm
d ₂	70.8 mm
D ₁	84.2 mm
r _{1,2} - min.	1.1 mm
r _{3,4} - min.	0.6 mm
a	27.2 mm
d _a - min.	66 mm
d _b - min.	66 mm
D _a - max.	89 mm
D _b - max.	91.8 mm
r _a - max.	1 mm
r _b - max.	0.6 mm
d _n	73.1 mm
Basic dynamic load rating - C	39 kN
Basic static load rating - C ₀	33.5 kN
Fatigue load limit - P _u	1.4 kN
Limiting speed for grease	13000 r/min



BEARING PRECISION AXLE CORP.

Lubrication	
Limiting speed for oil lubrication	20000 mm/min
Ball - D_w	11.112 mm
Ball - z	19
G_{ref}	5.4 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	240 N
Preload class B - G_B	480 N
Preload class C - G_C	960 N
Preload class D - G_D	1920 N
Calculation factor - f	1.12
Calculation factor - f_1	0.99
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2C}	1.05
Calculation factor - f_{2D}	1.08
Calculation factor - f_{HC}	1
Preload class A	168 N/micron
Preload class B	219 N/micron
Preload class C	291 N/micron
Preload class D	393 N/micron



BEARING PRECISION AXLE CORP.

Category	Precision Ball Bearings
Inventory	0.0
Manufacturer Name	SKF
Minimum Buy Quantity	N/A
Weight / Kilogram	0.42
Product Group	B04270
Enclosure	Open
Precision Class	ABEC 7 ISO P4
Material - Ball	Steel
Number of Bearings	1 (Single)
Contact Angle	25 Degree
Preload	None
Raceway Style	1 Rib Outer Ring
Cage Material	Phenolic
Rolling Element	Ball Bearing
Flush Ground	No
Inch - Metric	Metric
Other Features	Single Row Angular Contact High Precision
Long Description	60MM Bore; 95MM Outside Diameter; 18MM Width; Open Enclosure; ABEC 7 ISO P4 Precision; Steel Ball Material; 1 (Single) Bearings; 25 Degree Contact Angle; Phenolic Cage Material; 1 Rib Outer Ring Rac
Category	Precision Ball Bearings
UNSPSC	31171531
Harmonized Tariff Code	8482.10.50.28
Noun	Bearing
Keyword String	Angular Contact Ball
Manufacturer URL	http://www.skf.com
Manufacturer Item Number	7012 ACD/P4A



BEARING PRECISION AXLE CORP.

Weight / LBS	0.922
Outside Diameter	3.74 Inch 95 Millimeter
Width	0.709 Inch 18 Millimeter
Bore	2.362 Inch 60 Millimeter
d_1	70.8 mm
d_2	70.8 mm
D_1	84.2 mm
$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
d_a min.	66 mm
d_b min.	66 mm
D_a max.	89 mm
D_b max.	91.8 mm
r_a max.	1 mm
r_b max.	0.6 mm
d_n	73.1 mm
Basic dynamic load rating C	39 kN
Basic static load rating C_0	33.5 kN
Fatigue load limit P_u	1.4 kN
Attainable speed for grease lubrication	13000 r/min
Attainable speed for oil-air lubrication	20000 r/min
Ball diameter D_w	11.112 mm
Number of balls z	19
Reference grease quantity G_{ref}	5.4 cm ³
Preload class A G_A	240 N
Static axial stiffness, preload class A	168 N/ μ m
Preload class B G_B	480 N
Static axial stiffness, preload class B	219 N/ μ m
Preload class C G_C	960 N



BEARING PRECISION AXLE CORP.

Static axial stiffness, preload class C	291 N/ μ m
Preload class D G_D	1920 N
Static axial stiffness, preload class D	393 N/ μ m
Calculation factor f	1.12
Calculation factor f_1	0.99
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.02
Calculation factor f_{2C}	1.05
Calculation factor f_{2D}	1.08
Calculation factor f_{HC}	1
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	0.4 kg