



Bearing No. 7013 ACD/HCP4A

D	100 mm
d	65 mm
B	18 mm
a	28.3 mm
Bore	2.559 Inch 65 Millimeter
Noun	Bearing
Width	0.709 Inch 18 Millimeter
UNSPSC	31171531
Preload	None
Ball - z	20
Category	Precision Ball Bearings
Size (mm)	100x65x18
Enclosure	Open
Inventory	0.0
Width (mm)	18
Flush Ground	No
Mass bearing	0.36 kg
d ₂	75.8 mm
Product Group	B04270
d _n	78.1 mm
d _n	78.1 mm
D ₁	89.2 mm
d ₂	75.8 mm
d ₁	75.8 mm
d ₁	75.8 mm
Inch - Metric	Metric
D ₁	89.2 mm
Cage Material	Phenolic

Raceway Style	1 Rib Outer Ring
Contact Angle	25 Degree
Keyword String	Ball Angular Contact
Other Features	Single Row Angular Contact High Capacity Basic Design
Bearing number	7013 ACD/HCP4A
Material - Ball	Ceramic
G _{ref}	5.7 cm3
Precision Class	ABEC 7 ISO P4
Rolling Element	Ball Bearing
Preload class D	453 N/micron
Preload class C	335 N/micron
Preload class B	253 N/micron
Preload class A	193 N/micron
Long Description	65MM Bore; 100MM Outside Diameter; 18MM Width; Open Enclosure; ABEC 7 ISO P4 Precision; Ceramic Ball Material; 1 (Single) Bearing; 25 Degree Contact Angle; Phenolic Cage Material; 1 Rib Outer Ring R
Manufacturer URL	http://www.skf.com
Outside Diameter	3.937 Inch 100 Millimeter
Number of balls z	20
Weight / Kilogram	0.355
Manufacturer Name	SKF
Bore Diameter (mm)	100
D _a max.	94 mm
d _b min.	71 mm
r _b max.	0.6 mm
r _a max.	1 mm

Number of Bearings	1 (Single)
D_b max.	96.8 mm
d_a min.	71 mm
Outer Diameter (mm)	65
D_a - max.	94 mm
Ball - D_w	11.112 mm
D_b - max.	96.8 mm
Calculation factor f	1.13
$r_{1,2}$ min.	1.1 mm
Minimum Buy Quantity	N/A
r_a - max.	1 mm
d_b - min.	71 mm
$r_{3,4}$ min.	0.6 mm
Calculation factor e	0.68
r_b - max.	0.6 mm
d_a - min.	71 mm
Calculation factor - e	0.68
Harmonized Tariff Code	8482.10.50.28
Calculation factor - f	1.13
$r_{1,2}$ - min.	1.1 mm
$r_{3,4}$ - min.	0.6 mm
Ball diameter D_w	11.112 mm
Basic dynamic load rating C	39 kN
Preload class B G_B	480 N
Preload class D G_D	1920 N
Preload class A G_A	240 N
Basic dynamic load rating - C	39 kN
Preload class C G_C	960 N
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
Fatigue load limit P_u	1.5 kN
Calculation factor f_1	0.99
Calculation factor f_{HC}	1.02
Calculation factor f_{2D}	1.08
Calculation factor f_{2C}	1.05
Calculation factor f_{2B}	1.02
Calculation factor f_{2A}	1
Calculation factor - Y_1	0.92
Fatigue load limit - P_u	1.5 kN
Calculation factor - Y_2	1.41
Calculation factor - f_1	0.99
Calculation factor - X_2	0.67
Limiting speed for oil lubrication	22000 mm/min
Calculation factor - Y_0	0.76
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}	1.02
Limiting speed for grease lubrication	15000 r/min
Basic static load rating C_0	35.5 kN
Static axial stiffness, preload class C	335 N/ μ m
Static axial stiffness, preload class A	193 N/ μ m
Static axial stiffness, preload class D	453 N/ μ m

Attainable speed for grease lubrication	15000 r/min
Static axial stiffness, preload class B	253 N/ μ m
Basic static load rating - C_0	35.5 kN
Attainable speed for oil-air lubrication	22000 r/min
Reference grease quantity G_{ref}	5.7 cm ³
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