



Bearing No. 7204 ACD/HCP4A

D	47 mm
d	20 mm
B	14 mm
a	15 mm
Bore	0.787 Inch 20 Millimeter
Noun	Bearing
Width	0.551 Inch 14 Millimeter
UNSPSC	31171531
Preload	None
Ball - z	11
Category	Precision Ball Bearings
Size (mm)	47x20x14
Enclosure	Open
Inventory	0.0
Width (mm)	14
Flush Ground	No
Mass bearing	0.09 kg
d ₂	29.1 mm
Product Group	B04270
d _n	31.1 mm
d _n	31.1 mm
D ₁	38.7 mm
d ₂	29.1 mm
d ₁	29.1 mm
d ₁	29.1 mm
Inch - Metric	Metric
D ₁	38.7 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	7204 ACD/HCP4A
Material - Ball	Ceramic
G_{ref}	1.539 cm ³
Precision Class	ABEC 7 ISO P4
Rolling Element	Ball Bearing
Preload class D	149 N/micron
Preload class C	113 N/micron
Preload class B	87 N/micron
Preload class A	68 N/micron
Long Description	20MM Bore; 47MM Outside Diameter; 14MM 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 Ra
Manufacturer URL	http://www.skf.com
Outside Diameter	1.85 Inch 47 Millimeter
Number of balls z	11
Weight / Kilogram	0
Manufacturer Name	SKF
Bore Diameter (mm)	47
D_a max.	41.4 mm
d_b min.	25.6 mm
r_b max.	0.3 mm
r_a max.	1 mm

Number of Bearings	1 (Single)
D_b max.	44.6 mm
d_a min.	25.6 mm
Outer Diameter (mm)	20
D_a - max.	41.4 mm
Ball - D_w	7.938 mm
D_b - max.	44.6 mm
Calculation factor f	1.03
$r_{1,2}$ min.	1 mm
Minimum Buy Quantity	N/A
r_a - max.	1 mm
d_b - min.	25.6 mm
$r_{3,4}$ min.	0.3 mm
Calculation factor e	0.68
r_b - max.	0.3 mm
d_a - min.	25.6 mm
Calculation factor - e	0.68
Harmonized Tariff Code	8482.10.50.28
Calculation factor - f	1.03
$r_{1,2}$ - min.	1 mm
$r_{3,4}$ - min.	0.3 mm
Ball diameter D_w	7.938 mm
Basic dynamic load rating C	11.4 kN
Preload class B G_B	140 N
Preload class D G_D	560 N
Preload class A G_A	70 N
Basic dynamic load rating - C	11.4 kN
Preload class C G_C	280 N
Preload class A - G_A	70 N
Preload class B - G_B	140 N

Preload class C - G_C	280 N
Preload class D - G_D	560 N
Fatigue load limit P_u	0.236 kN
Calculation factor f_1	0.99
Calculation factor f_{HC}	1.01
Calculation factor f_{2D}	1.06
Calculation factor f_{2C}	1.03
Calculation factor f_{2B}	1.01
Calculation factor f_{2A}	1
Calculation factor - Y_1	0.92
Fatigue load limit - P_u	0.236 kN
Calculation factor - Y_2	1.41
Calculation factor - f_1	0.99
Calculation factor - X_2	0.67
Limiting speed for oil lubrication	56000 mm/min
Calculation factor - Y_0	0.76
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.01
Calculation factor - f_{2C}	1.03
Calculation factor - f_{2D}	1.06
Calculation factor - f_{HC}	1.01
Limiting speed for grease lubrication	38000 r/min
Basic static load rating C_0	5.6 kN
Static axial stiffness, preload class C	113 N/ μ m
Static axial stiffness, preload class A	68 N/ μ m
Static axial stiffness, preload class D	149 N/ μ m

Attainable speed for grease lubrication	38000 r/min
Static axial stiffness, preload class B	87 N/ μ m
Basic static load rating - C_0	5.6 kN
Attainable speed for oil-air lubrication	56000 r/min
Reference grease quantity G_{ref}	1.539 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