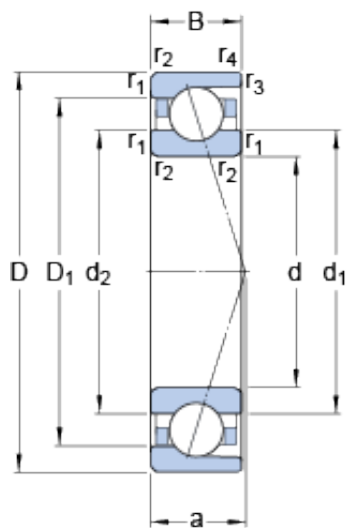




Bearing No. 7005 CD/HCP4A

a	10.9 mm
d	25 mm
D	47 mm
B	12 mm
Noun	Bearing
Bore	0.984 Inch 25 Millimeter
Width	0.472 Inch 12 Millimeter
UNSPSC	31171531
Preload	None
Ball - z	14
Category	Precision Ball Bearings
Size (mm)	47x25x12
Enclosure	Open
Inventory	0.0
Width (mm)	12
Weight / LBS	0.163
Flush Ground	No
Mass bearing	0.07 kg
d ₁	32.1 mm
d ₂	32.1 mm
D ₁	39.9 mm
Inch - Metric	Metric
Cage Material	Phenolic
Raceway Style	1 Rib Outer Ring
d _n	33.4 mm
Product Group	B04270
Contact Angle	15 Degree
D ₁	39.9 mm
d	33.4 mm

n	
d ₂	32.1 mm
d ₁	32.1 mm
Bearing number	7005 CD/HCP4A
Keyword String	Ball Angular Contact
Other Features	Single Row Angular Contact High Capacity Basic Design
Preload class B	37 N/micron
Rolling Element	Ball Bearing
Material - Ball	Ceramic
Precision Class	ABEC 7 ISO P4
G _{ref}	1.02 cm3
Preload class C	51 N/micron
Preload class D	71 N/micron
Preload class A	28 N/micron
Outside Diameter	1.85 Inch 47 Millimeter
Manufacturer URL	http://www.skf.com
Long Description	25MM Bore; 47MM Outside Diameter; 12MM Width; Open Enclosure; ABEC 7 ISO P4 Precision; Ceramic Ball Material; 1 (Single) Bearing; 15 Degree Contact Angle; Phenolic Cage Material; 1 Rib Outer Ring Ra
Manufacturer Name	SKF
Number of balls z	14
Weight / Kilogram	0
d _a min.	28.2 mm
d _b min.	28.2 mm
Bore Diameter (mm)	47
Number of Bearings	1 (Single)

r_b max.	0.3 mm
r_a max.	0.6 mm
D_a max.	43.8 mm
D_b max.	45 mm
Outer Diameter (mm)	25
$r_{1,2}$ min.	0.6 mm
$r_{3,4}$ min.	0.3 mm
d_a - min.	28.2 mm
Calculation factor f	1.05
d_b - min.	28.2 mm
Ball - D_w	6.35 mm
D_a - max.	43.8 mm
Minimum Buy Quantity	N/A
r_a - max.	0.6 mm
r_b - max.	0.3 mm
D_b - max.	45 mm
Harmonized Tariff Code	8482.10.50.28
Calculation factor - f	1.05
$r_{3,4}$ - min.	0.3 mm
$r_{1,2}$ - min.	0.6 mm
Manufacturer Item Number	7005 CD/HCP4A
Basic dynamic load rating C	9.56 kN
Ball diameter D_w	6.35 mm
Preload class B G_B	70 N
Preload class A G_A	35 N
Preload class C G_C	140 N
Preload class D G_D	280 N
Basic dynamic load rating - C	9.6 kN
Preload class B - G_B	70 N
Preload class C - G_C	140 N

Preload class A - G_A	35 N
Preload class D - G_D	280 N
Calculation factor f_1	1
Fatigue load limit P_u	0.22 kN
Calculation factor f_0	9.6
Calculation factor - f	1
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.02
Calculation factor f_{2C}	1.05
Calculation factor f_{2D}	1.09
Calculation factor f_{HC}	1.02
Calculation factor - f_0	9.6
Fatigue load limit - P_u	0.22 kN
Limiting speed for oil lubrication	67000 mm/min
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2A}	1
Calculation factor - f_{2C}	1.05
Calculation factor - f_{2D}	1.09
Calculation factor - f_{HC}	1.02
Limiting speed for grease lubrication	43000 r/min
Basic static load rating C_0	5.2 kN
Static axial stiffness, preload class A	28 N/ μ m
Static axial stiffness, preload class B	37 N/ μ m
Static axial stiffness, preload class C	51 N/ μ m
Static axial stiffness, preload class D	71 N/ μ m

Attainable speed for grease lubrication	43000 r/min
Attainable speed for oil-air lubrication	67000 r/min
Basic static load rating - C_0	5.2 kN
Reference grease quantity G_{ref}	1.02 cm ³