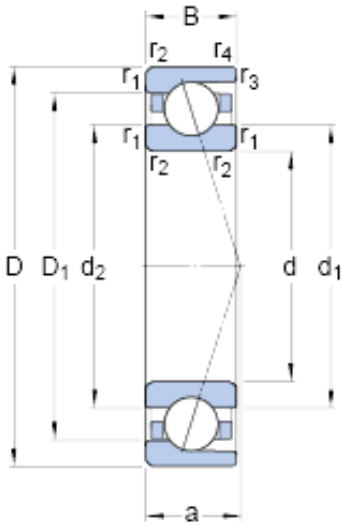




# NTN Bearing Rolamentos do Brasil Ltda.



7005 CD/P4A Bearing 2D drawings and 3D CAD models

## 25 mm x 47 mm x 12 mm skf 7005 CD/P4A Super-precision Angular contact ball bearings

Bearing No. 7005 CD/P4A

Size	47x25x12 mm
Bore Diameter	47 mm
Outer Diameter	25 mm
Width	12 mm
d	25 mm
D	47 mm
B	12 mm
d <sub>1</sub>	32.1 mm
d <sub>2</sub>	32.1 mm
D <sub>1</sub>	39.9 mm
r <sub>1,2</sub> - min.	0.6 mm
r <sub>3,4</sub> - min.	0.3 mm
a	10.9 mm
d <sub>a</sub> - min.	28.2 mm
d <sub>b</sub> - min.	28.2 mm
D <sub>a</sub> - max.	43.8 mm
D <sub>b</sub> - max.	45 mm
r <sub>a</sub> - max.	0.6 mm
r <sub>b</sub> - max.	0.3 mm
d <sub>n</sub>	33.4 mm
Basic dynamic load rating - C	9.6 kN
Basic static load rating - C <sub>0</sub>	5.2 kN
Fatigue load limit - P <sub>u</sub>	0.22 kN
Limiting speed for grease	36000 r/min



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Lubrication	
Limiting speed for oil lubrication	56000 mm/min
Ball - $D_w$	6.35 mm
Ball - $z$	14
$G_{ref}$	1.02 cm3
Calculation factor - $f_0$	9.6
Preload class A - $G_A$	35 N
Preload class B - $G_B$	70 N
Preload class C - $G_C$	140 N
Preload class D - $G_D$	280 N
Calculation factor - $f$	1.05
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
Preload class A	25 N/micron
Preload class B	33 N/micron
Preload class C	46 N/micron
Preload class D	64 N/micron
Category	Precision Ball Bearings
Inventory	0.0
Manufacturer Name	SKF
Minimum Buy Quantity	N/A
Weight / Kilogram	0.083
EAN	7316570564907
Product Group	B04270
Enclosure	Open



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Precision Class	ABEC 7   ISO P4
Material - Ball	Steel
Number of Bearings	1 (Single)
Contact Angle	15 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	25MM Bore; 47MM Outside Diameter; 12MM Width; Open Enclosure; ABEC 7   ISO P4 Precision; Steel Ball Material; 1 (Single) Bearings; 15 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	<a href="http://www.skf.com">http://www.skf.com</a>
Manufacturer Item Number	7005 CD/P4A
Weight / LBS	0.181
Width	0.472 Inch   12 Millimeter
Bore	0.984 Inch   25 Millimeter
Outside Diameter	1.85 Inch   47 Millimeter
d <sub>1</sub>	32.1 mm
d <sub>2</sub>	32.1 mm
D <sub>1</sub>	39.9 mm



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$r_{1,2}$ min.	0.6 mm
$r_{3,4}$ min.	0.3 mm
$d_a$ min.	28.2 mm
$d_b$ min.	28.2 mm
$D_a$ max.	43.8 mm
$D_b$ max.	45 mm
$r_a$ max.	0.6 mm
$r_b$ max.	0.3 mm
$d_n$	33.4 mm
Basic dynamic load rating C	9.56 kN
Basic static load rating $C_0$	5.2 kN
Fatigue load limit $P_u$	0.22 kN
Attainable speed for grease lubrication	36000 r/min
Attainable speed for oil-air lubrication	56000 r/min
Ball diameter $D_w$	6.35 mm
Number of balls z	14
Reference grease quantity $G_{ref}$	1.02 cm <sup>3</sup>
Preload class A $G_A$	35 N
Static axial stiffness, preload class A	25 N/ $\mu$ m
Preload class B $G_B$	70 N
Static axial stiffness, preload class B	33 N/ $\mu$ m
Preload class C $G_C$	140 N
Static axial stiffness, preload class C	46 N/ $\mu$ m
Preload class D $G_D$	280 N
Static axial stiffness, preload class D	64 N/ $\mu$ m
Calculation factor f	1.05
Calculation factor $f_1$	1



## NTN Bearing Rolamentos do Brasil Ltda.

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
Calculation factor $f_0$	9.6
Mass bearing	0.079 kg