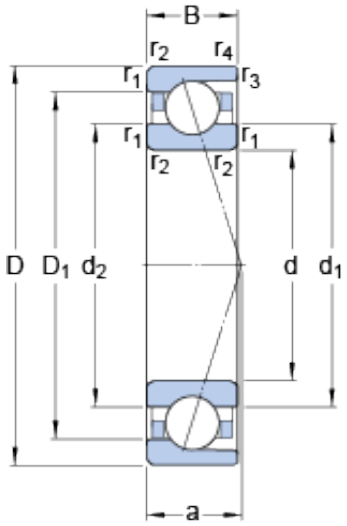

7004 ACD/P4A Bearing 2D drawings and 3D CAD models

20 mm x 42 mm x 12 mm SKF 7004 ACD/P4A Face-to-face duplex arrangement Bearings

Bearing No. 7004 ACD/P4A

Size	42x20x12 mm
Bore Diameter	42 mm
Outer Diameter	20 mm
Width	12 mm
d	20 mm
D	42 mm
B	12 mm
d_1	27.1 mm
d_2	27.1 mm
D_1	34.8 mm
$r_{1,2}$ - min.	0.6 mm
$r_{3,4}$ - min.	0.3 mm
a	13.3 mm
d_a - min.	23.2 mm
d_b - min.	23.2 mm
D_a - max.	38.8 mm
D_b - max.	40 mm
r_a - max.	0.6 mm
r_b - max.	0.3 mm
d_n	28.4 mm
Basic dynamic load rating - C	8.3 kN
Basic static load rating - C_0	4.2 kN
Fatigue load limit - P_u	0.173 kN
Limiting speed for grease	38000 r/min

lubrication	
Limiting speed for oil lubrication	60000 mm/min
Ball - D_w	6.35 mm
Ball - z	12
G_{ref}	0.9 cm3
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	50 N
Preload class B - G_B	100 N
Preload class C - G_C	200 N
Preload class D - G_D	400 N
Calculation factor - f	1.03
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	54 N/micron
Preload class B	69 N/micron
Preload class C	90 N/micron
Preload class D	120 N/micron

Category	Precision Ball Bearings
Inventory	0.0
Manufacturer Name	SKF
Minimum Buy Quantity	N/A
Weight / Kilogram	0.072
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	20MM Bore; 42MM Outside Diameter; 12MM 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	7004 ACD/P4A

Weight / LBS	0.157
Width	0.472 Inch | 12 Millimeter
Bore	0.787 Inch | 20 Millimeter
Outside Diameter	1.654 Inch | 42 Millimeter
bore diameter:	20 mm
radial dynamic load capacity:	8.32 kN
outside diameter:	42 mm
radial static load capacity:	4.15 kN
overall width:	12 mm
outer ring width:	12 mm
contact angle:	25 °
maximum rpm:	50000 RPM
row type & fill slot:	Single-Row Non-Fill Slot
finish/coating:	Uncoated
internal clearance:	C0
precision rating:	ABEC 7 (ISO Class 4)
closure type:	Open
fillet radius:	0.6 mm
bearing material:	Steel
series:	70
d_1	27.1 mm
d_2	27.1 mm
D_1	34.8 mm
$r_{1,2}$ min.	0.6 mm
$r_{3,4}$ min.	0.3 mm
d_a min.	23.2 mm
d_b min.	23.2 mm
D_a max.	38.8 mm
D_b max.	40 mm
r_a max.	0.6 mm
r_b max.	0.3 mm
d_n	28.4 mm

Basic dynamic load rating C	8.32 kN
Basic static load rating C_0	4.15 kN
Fatigue load limit P_u	0.173 kN
Attainable speed for grease lubrication	38000 r/min
Attainable speed for oil-air lubrication	60000 r/min
Ball diameter D_w	6.35 mm
Number of balls z	12
Reference grease quantity G_{ref}	0.9 cm^3
Preload class A G_A	50 N
Static axial stiffness, preload class A	54 N/ µ m
Preload class B G_B	100 N
Static axial stiffness, preload class B	69 N/ µ m
Preload class C G_C	200 N
Static axial stiffness, preload class C	90 N/ µ m
Preload class D G_D	400 N
Static axial stiffness, preload class D	120 N/ µ m
Calculation factor f	1.03
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	0.068 kg