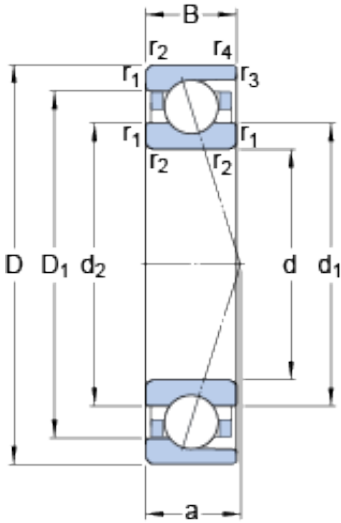




Off-the-shelf SKF shaft Co., Ltd



120 mm x 215 mm x 40 mm SKF 7224 ACD/P4A Super-precision bearings

Bearing No. 7224 ACD/P4A

7224 ACD/P4A Bearing 2D drawings and 3D CAD models

Size	215x120x40 mm
Bore Diameter	120 mm
Outer Diameter	215 mm
Width	40 mm
d	120 mm
D	215 mm
B	40 mm
d ₁	150.3 mm
d ₂	150.3 mm
D ₁	186.7 mm
r _{1,2} - min.	2.1 mm
r _{3,4} - min.	1.1 mm
a	59.6 mm
d _a - min.	132 mm
d _b - min.	132 mm
D _a - max.	203 mm
D _b - max.	208 mm
r _a - max.	2 mm
r _b - max.	1 mm
d _n	158.2 mm
Basic dynamic load rating - C	190 kN
Basic static load rating - C ₀	183 kN
Fatigue load limit - P _u	6 kN
Limiting speed for grease	6000 r/min



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Lubrication	
Limiting speed for oil lubrication	9000 mm/min
Ball - D_w	30.162 mm
Ball - z	15
G_{ref}	69.084 cm ³
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	1200 N
Preload class B - G_B	2400 N
Preload class C - G_C	4800 N
Preload class D - G_D	9600 N
Calculation factor - f	1.08
Calculation factor - f_1	0.99
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.01
Calculation factor - f_{2C}	1.02
Calculation factor - f_{2D}	1.05
Calculation factor - f_{HC}	1
Preload class A	338 N/micron
Preload class B	440 N/micron
Preload class C	579 N/micron
Preload class D	777 N/micron



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Category	Precision Ball Bearings
Inventory	0.0
Manufacturer Name	SKF
Minimum Buy Quantity	N/A
Weight / Kilogram	5.581
EAN	7316571079226
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 Super Precision High Capacity
Long Description	120MM Bore; 215MM Outside Diameter; 40MM 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 R
Category	Precision Ball Bearings
UNSPSC	31171531
Harmonized Tariff Code	8482.10.50.28
Noun	Bearing
Keyword String	Angular Contact Ball



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Manufacturer URL	http://www.skf.com
Manufacturer Item Number	7224 ACD/P4A
Weight / LBS	12.293
Outside Diameter	8.465 Inch 215 Millimeter
Width	1.575 Inch 40 Millimeter
Bore	4.724 Inch 120 Millimeter
d_1	150.3 mm
d_2	150.3 mm
D_1	186.7 mm
$r_{1,2}$ min.	2.1 mm
$r_{3,4}$ min.	1.1 mm
d_a min.	132 mm
d_b min.	132 mm
D_a max.	203 mm
D_b max.	208 mm
r_a max.	2 mm
r_b max.	1 mm
d_n	158.2 mm
Basic dynamic load rating C	190 kN
Basic static load rating C_0	183 kN
Fatigue load limit P_u	6 kN
Attainable speed for grease lubrication	6000 r/min
Attainable speed for oil-air lubrication	9000 r/min
Ball diameter D_w	30.162 mm
Number of balls z	15
Reference grease quantity G_{ref}	69.084 cm ³
Preload class A G_A	1200 N
Static axial stiffness, preload class A	338 N/ μ m
Preload class B G_B	2400 N



Off-the-shelf SKF shaft Co., Ltd

Static axial stiffness, preload class B	440 N/ μ m
Preload class C G_C	4800 N
Static axial stiffness, preload class C	579 N/ μ m
Preload class D G_D	9600 N
Static axial stiffness, preload class D	777 N/ μ m
Calculation factor f	1.08
Calculation factor f_1	0.99
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.01
Calculation factor f_{2C}	1.02
Calculation factor f_{2D}	1.05
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	5.42 kg