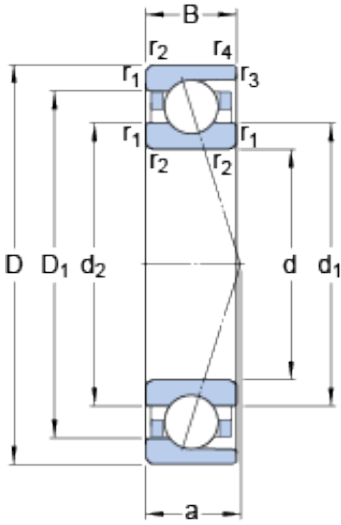




Off-the-shelf SKF shaft Co., Ltd



7019 CD/HCP4A Bearing 2D drawings and 3D CAD models

95 mm x 145 mm x 24 mm SKF 7019 CD/HCP4A TAB High Durability Ball Screw Support Bearing

Bearing No. 7019 CD/HCP4A

Size	145x95x24 mm
Bore Diameter	145 mm
Outer Diameter	95 mm
Width	24 mm
d	95 mm
D	145 mm
B	24 mm
d ₁	110.4 mm
d ₂	110.4 mm
D ₁	129.6 mm
r _{1,2} - min.	1.5 mm
r _{3,4} - min.	1 mm
a	28.2 mm
d _a - min.	102 mm
d _b - min.	102 mm
D _a - max.	138 mm
D _b - max.	141 mm
r _a - max.	1.5 mm
r _b - max.	1 mm
d _n	113.7 mm
Basic dynamic load rating - C	81.9 kN
Basic static load rating - C ₀	80 kN
Fatigue load limit - P _u	3.1 kN



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Limiting speed for grease lubrication	11000 r/min
Limiting speed for oil lubrication	17000 mm/min
Ball - D_w	15.875 mm
Ball - z	21
G_{ref}	15.6 cm ³
Calculation factor - f_0	15.7
Preload class A - G_A	310 N
Preload class B - G_B	620 N
Preload class C - G_C	1240 N
Preload class D - G_D	2480 N
Calculation factor - f	1.15
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
Preload class A	120 N/micron
Preload class B	164 N/micron
Preload class C	231 N/micron
Preload class D	335 N/micron
Category	Precision Ball Bearings
Inventory	0.0
Manufacturer Name	SKF
Minimum Buy Quantity	N/A
Weight / Kilogram	0
Product Group	B04270
Enclosure	Open
Precision Class	ABEC 7 ISO P4



Off-the-shelf SKF shaft Co., Ltd

Material - Ball	Ceramic
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 Capacity Basic Design
Long Description	95MM Bore; 145MM Outside Diameter; 24MM 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 R
Category	Precision Ball Bearings
UNSPSC	31171531
Harmonized Tariff Code	8482.10.50.28
Noun	Bearing
Keyword String	Ball Angular Contact
Manufacturer URL	http://www.skf.com
Bore	3.74 Inch 95 Millimeter
Width	0.945 Inch 24 Millimeter
Outside Diameter	5.709 Inch 145 Millimeter
d ₁	110.4 mm
d ₂	110.4 mm
D ₁	129.6 mm
r _{1,2} min.	1.5 mm
r _{3,4} min.	1 mm



Off-the-shelf SKF shaft Co., Ltd

d_a min.	102 mm
d_b min.	102 mm
D_a max.	138 mm
D_b max.	141 mm
r_a max.	1.5 mm
r_b max.	1 mm
d_n	113.7 mm
Basic dynamic load rating C	81.9 kN
Basic static load rating C_0	80 kN
Fatigue load limit P_u	3.1 kN
Attainable speed for grease lubrication	11000 r/min
Attainable speed for oil-air lubrication	17000 r/min
Ball diameter D_w	15.875 mm
Number of balls z	21
Reference grease quantity G_{ref}	15.6 cm ³
Preload class A G_A	310 N
Static axial stiffness, preload class A	120 N/ μ m
Preload class B G_B	620 N
Static axial stiffness, preload class B	164 N/ μ m
Preload class C G_C	1240 N
Static axial stiffness, preload class C	231 N/ μ m
Preload class D G_D	2480 N
Static axial stiffness, preload class D	335 N/ μ m
Calculation factor f	1.15
Calculation factor f_1	1
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.02



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Calculation factor f_{2C}	1.05
Calculation factor f_{2D}	1.09
Calculation factor f_{HC}	1.02
Calculation factor f_0	15.7
Mass bearing	1 kg