



NUP BEARING LTD



100 mm x 140 mm x 20 mm skf 71920
ACD/P4A Super-precision Angular contact ball
bearings

Bearing No. 71920 ACD/P4A

71920 ACD/P4A Bearing 2D drawings and 3D CAD
models

Size	140x100x20 mm
Bore Diameter	140 mm
Outer Diameter	100 mm
Width	20 mm
d	100 mm
D	140 mm
B	20 mm
d ₁	112.3 mm
d ₂	112.3 mm
D ₁	127.7 mm
r _{1,2} - min.	1.1 mm
r _{3,4} - min.	0.6 mm
a	38.1 mm
d _a - min.	106 mm
d _b - min.	106 mm
D _a - max.	134 mm
D _b - max.	136 mm
r _a - max.	1 mm
r _b - max.	0.6 mm
d _n	115.6 mm
Basic dynamic load rating - C	57.2 kN
Basic static load rating - C ₀	63 kN
Fatigue load limit - P _u	2.4 kN



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Limiting speed for grease lubrication	8000 r/min
Limiting speed for oil lubrication	13000 mm/min
Ball - D_w	12.7 mm
Ball - z	26
G_{ref}	10.5 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	360 N
Preload class B - G_B	720 N
Preload class C - G_C	1440 N
Preload class D - G_D	2880 N
Calculation factor - f	1.23
Calculation factor - f_1	0.98
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.04
Calculation factor - f_{2C}	1.08
Calculation factor - f_{2D}	1.14
Calculation factor - f_{HC}	1
Preload class A	255 N/micron
Preload class B	336 N/micron
Preload class C	449 N/micron
Preload class D	613 N/micron



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Category	Precision Ball Bearings
Inventory	0.0
Manufacturer Name	SKF
Minimum Buy Quantity	N/A
Weight / Kilogram	0
EAN	7316570839128
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 Capacity Basic Design
Long Description	100MM Bore; 140MM Outside Diameter; 20MM Width; Open Enclosure; ABEC 7 ISO P4 Precision; Steel Ball Material; 1 (Single) Bearing; 25 Degree Contact Angle; Phenolic Cage Material; 1 Rib Outer Ring Ra
Category	Precision Ball Bearings
UNSPSC	31171531
Harmonized Tariff Code	8482.10.50.28
Noun	Bearing
Keyword String	Ball Angular Contact



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Manufacturer URL	http://www.skf.com
Outside Diameter	5.512 Inch 140 Millimeter
Bore	3.937 Inch 100 Millimeter
Width	0.787 Inch 20 Millimeter
d_1	112.3 mm
d_2	112.3 mm
D_1	127.7 mm
$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
d_a min.	106 mm
d_b min.	106 mm
D_a max.	134 mm
D_b max.	136 mm
r_a max.	1 mm
r_b max.	0.6 mm
d_n	115.6 mm
Basic dynamic load rating C	57.2 kN
Basic static load rating C_0	63 kN
Fatigue load limit P_u	2.4 kN
Attainable speed for grease lubrication	8000 r/min
Attainable speed for oil-air lubrication	13000 r/min
Ball diameter D_w	12.7 mm
Number of balls z	26
Reference grease quantity G_{ref}	10.5 cm ³
Preload class A G_A	360 N
Static axial stiffness, preload class A	255 N/ μ m
Preload class B G_B	720 N
Static axial stiffness, preload class B	336 N/ μ m
Preload class C G_C	1440 N



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Static axial stiffness, preload class C	449 N/ μ m
Preload class D G_D	2880 N
Static axial stiffness, preload class D	613 N/ μ m
Calculation factor f	1.23
Calculation factor f_1	0.98
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.04
Calculation factor f_{2C}	1.08
Calculation factor f_{2D}	1.14
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	0.8 kg