



# Zaozhuang Yiding Bearing Co., Ltd.



7020 ACD/P4A Bearing 2D drawings and 3D CAD models

100 mm x 150 mm x 24 mm SKF 7020  
ACD/P4A angular contact ball bearings

Bearing No. 7020 ACD/P4A

Size	150x100x24 mm
Bore Diameter	150 mm
Outer Diameter	100 mm
Width	24 mm
d	100 mm
D	150 mm
B	24 mm
d <sub>1</sub>	115.4 mm
d <sub>2</sub>	115.4 mm
D <sub>1</sub>	134.6 mm
r <sub>1,2</sub> - min.	1.5 mm
r <sub>3,4</sub> - min.	1 mm
a	41.3 mm
d <sub>a</sub> - min.	107 mm
d <sub>b</sub> - min.	107 mm
D <sub>a</sub> - max.	143 mm
D <sub>b</sub> - max.	146 mm
r <sub>a</sub> - max.	1.5 mm
r <sub>b</sub> - max.	1 mm
d <sub>n</sub>	118.7 mm
Basic dynamic load rating - C	79.3 kN
Basic static load rating - C <sub>0</sub>	80 kN
Fatigue load limit - P <sub>u</sub>	3 kN
Limiting speed for grease	8000 r/min



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Lubrication	
Limiting speed for oil lubrication	12000 mm/min
Ball - $D_w$	15.875 mm
Ball - $z$	22
$G_{ref}$	16.2 cm <sup>3</sup>
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 - $G_A$	500 N
Preload class B - $G_B$	1000 N
Preload class C - $G_C$	2000 N
Preload class D - $G_D$	4000 N
Calculation factor - $f$	1.16
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	270 N/micron
Preload class B	355 N/micron
Preload class C	472 N/micron
Preload class D	640 N/micron



## Zaozhuang Yiding Bearing Co., Ltd.

Category	Precision Ball Bearings
Inventory	0.0
Manufacturer Name	SKF
Minimum Buy Quantity	N/A
Weight / Kilogram	1.3
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	100MM Bore; 150MM Outside Diameter; 24MM 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
Manufacturer URL	<a href="http://www.skf.com">http://www.skf.com</a>
Manufacturer Item Number	7020 ACD/P4A



## Zaozhuang Yiding Bearing Co., Ltd.

Weight / LBS	2.864
Width	0.945 Inch   24 Millimeter
Outside Diameter	5.906 Inch   150 Millimeter
Bore	3.937 Inch   100 Millimeter
bore diameter:	100 mm
radial static load capacity:	80 kN
outside diameter:	150 mm
maximum rpm (grease):	8000 rpm
overall width:	24 mm
maximum rpm (oil):	12000 rpm
contact angle:	25 °
bearing material:	Steel
duplex type:	Duplex Universal
cage material:	Cotton Fabric Reinforced Phenolic
closure type:	Open
fillet radius:	1.5 mm
precision rating:	P4
series:	70
operating temperature range:	300 ° F
manufacturer product page:	<a href="#">Click here</a>
radial dynamic load capacity:	79.3 kN
manufacturer upc number:	7316570604498
$d_1$	115.4 mm
$d_2$	115.4 mm
$D_1$	134.6 mm
$r_{1,2}$ min.	1.5 mm
$r_{3,4}$ min.	1 mm
$d_a$ min.	107 mm
$d_b$ min.	107 mm
$D_a$ max.	143 mm



## Zaozhuang Yiding Bearing Co., Ltd.

$D_b$ max.	146 mm
$r_a$ max.	1.5 mm
$r_b$ max.	1 mm
$d_n$	118.7 mm
Basic dynamic load rating C	79.3 kN
Basic static load rating $C_0$	80 kN
Fatigue load limit $P_u$	3.05 kN
Attainable speed for grease lubrication	8000 r/min
Attainable speed for oil-air lubrication	12000 r/min
Ball diameter $D_w$	15.875 mm
Number of balls z	22
Reference grease quantity $G_{ref}$	16.2 cm <sup>3</sup>
Preload class A $G_A$	500 N
Static axial stiffness, preload class A	270 N/ $\mu$ m
Preload class B $G_B$	1000 N
Static axial stiffness, preload class B	355 N/ $\mu$ m
Preload class C $G_C$	2000 N
Static axial stiffness, preload class C	472 N/ $\mu$ m
Preload class D $G_D$	4000 N
Static axial stiffness, preload class D	640 N/ $\mu$ m
Calculation factor f	1.16
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



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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	1.26 kg