



BEARING PRECISION AXLE CORP.



90 mm x 160 mm x 30 mm SKF 7218 ACD/HCP4A Angular contact ball bearings

Bearing No. 7218 ACD/HCP4A

7218 ACD/HCP4A Bearing 2D drawings and 3D CAD models

Size	160x90x30 mm
Bore Diameter	160 mm
Outer Diameter	90 mm
Width	30 mm
d	90 mm
D	160 mm
B	30 mm
d ₁	111.6 mm
d ₂	111.6 mm
D ₁	138.4 mm
r _{1,2} - min.	2 mm
r _{3,4} - min.	1 mm
a	44.3 mm
d _a - min.	101 mm
d _b - min.	101 mm
D _a - max.	149 mm
D _b - max.	154.4 mm
r _a - max.	2 mm
r _b - max.	1 mm
d _n	117.5 mm
Basic dynamic load rating - C	121 kN
Basic static load rating - C ₀	106 kN
Fatigue load limit - P _u	4 kN
Limiting speed for grease	9000 r/min



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Lubrication	
Limiting speed for oil lubrication	15000 mm/min
Ball - D_w	22.225 mm
Ball - z	16
G_{ref}	27.765 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	750 N
Preload class B - G_B	1500 N
Preload class C - G_C	3000 N
Preload class D - G_D	6000 N
Calculation factor - f	1.09
Calculation factor - f_1	0.99
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.01
Calculation factor - f_{2C}	1.03
Calculation factor - f_{2D}	1.06
Calculation factor - f_{HC}	1.01
Preload class A	303 N/micron
Preload class B	395 N/micron
Preload class C	521 N/micron
Preload class D	702 N/micron



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Category	Precision Ball Bearings
Inventory	0.0
Manufacturer Name	SKF
Minimum Buy Quantity	N/A
Weight / Kilogram	1.902
EAN	7316571502366
Product Group	B04270
Enclosure	Open
Precision Class	ABEC 7 ISO P4
Material - Ball	Ceramic
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 Hybrid Corrosion Resistant Ball
Long Description	90MM Bore; 160MM Outside Diameter; 30MM Width; Open Enclosure; ABEC 7 ISO P4 Precision; Ceramic Ball Material; 1 (Single) Bearings; 25 Degree Contact Angle; Phenolic Cage Material; 1 Rib Outer Ring
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	7218 ACD/HCP4A
Weight / LBS	4.189
Bore	3.543 Inch 90 Millimeter
Width	1.181 Inch 30 Millimeter
Outside Diameter	6.299 Inch 160 Millimeter
d_1	111.6 mm
d_2	111.6 mm
D_1	138.4 mm
$r_{1,2}$ min.	2 mm
$r_{3,4}$ min.	1 mm
d_a min.	101 mm
d_b min.	101 mm
D_a max.	149 mm
D_b max.	154.4 mm
r_a max.	2 mm
r_b max.	1 mm
d_n	117.5 mm
Basic dynamic load rating C	121 kN
Basic static load rating C_0	106 kN
Fatigue load limit P_u	4.05 kN
Attainable speed for grease lubrication	9000 r/min
Attainable speed for oil-air lubrication	15000 r/min
Ball diameter D_w	22.225 mm
Number of balls z	16
Reference grease quantity G_{ref}	27.765 cm ³
Preload class A G_A	750 N
Static axial stiffness, preload class A	303 N/ μ m
Preload class B G_B	1500 N



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Static axial stiffness, preload class B	395 N/ μ m
Preload class C G_C	3000 N
Static axial stiffness, preload class C	521 N/ μ m
Preload class D G_D	6000 N
Static axial stiffness, preload class D	702 N/ μ m
Calculation factor f	1.09
Calculation factor f_1	0.99
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.01
Calculation factor f_{2C}	1.03
Calculation factor f_{2D}	1.06
Calculation factor f_{HC}	1.01
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	1.83 kg