



Bearing No. S7010 ACD/P4A

a	23.2 mm
d	50 mm
D	80 mm
B	16 mm
Noun	Bearing
Bore	1.969 Inch 50 Millimeter
Width	0.63 Inch 16 Millimeter
UNSPSC	31171531
Preload	None
Ball - z	18
Category	Precision Ball Bearings
Enclosure	2 Seals
Size (mm)	80x50x16
Inventory	0.0
Width (mm)	16
Weight / LBS	0.55115
Flush Ground	No
Mass bearing	0.26 kg
d_1	59.2 mm
d_2	59.2 mm
Inch - Metric	Metric
Cage Material	Phenolic
D_2	73.3 mm
Contact Angle	25 Degree
Product Group	B04270
Raceway Style	1 Rib Outer Ring
D_2	73.3 mm
d_1	59.2 mm
d_2	59.2 mm

Bearing number	S7010 ACD/P4A
Other Features	Single Row Angular Contact High Capacity Basic Design
Keyword String	Ball Angular Contact
Enclosure Type	Non Contact Seal
Material - Ball	Steel
Precision Class	ABEC 7 ISO P4
Preload class D	331 N/micron
Preload class C	244 N/micron
Preload class B	184 N/micron
Preload class A	141 N/micron
Rolling Element	Ball Bearing
Outside Diameter	3.15 Inch 80 Millimeter
Long Description	50MM Bore; 80MM Outside Diameter; 16MM Width; 2 Seals Enclosure; ABEC 7 ISO P4 Precision; Steel Ball Material; 1 (Single) Bearing; 25 Degree Contact Angle; Phenolic Cage Material; 1 Rib Outer Ring R
Manufacturer URL	http://www.skf.com
Number of balls z	18
Weight / Kilogram	0
Manufacturer Name	SKF
Number of Bearings	1 (Single)
r _b max.	0.3 mm
r _a max.	1 mm
D _b max.	78 mm
D _a max.	75.4 mm
d _b max.	58.7 mm
d _b min.	54.6 mm
	58.7 mm

da max.	
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d_a min.	54.6 mm
Bore Diameter (mm)	80
Outer Diameter (mm)	50
$r_{1,2}$ min.	1 mm
Calculation factor f	1.11
d_a - min.	54.6 mm
Calculation factor e	0.68
d_a - max.	58.7 mm
$r_{3,4}$ min.	0.3 mm
Ball - D_w	9.525 mm
d_b - min.	54.6 mm
Minimum Buy Quantity	N/A
D_a - max.	75.4 mm
D_b - max.	78 mm
r_a - max.	1 mm
d_b - max.	58.7 mm
r_b - max.	0.3 mm
Calculation factor - e	0.68
Calculation factor - f	1.11
$r_{1,2}$ - min.	1 mm
$r_{3,4}$ - min.	0.3 mm
Harmonized Tariff Code	8482.10.50.28
Basic dynamic load rating C	28.1 kN
Ball diameter D_w	9.525 mm
Preload class A G_A	180 N
Preload class D G_D	1440 N
Preload class C G_C	720 N
Preload class B G_B	360 N
Basic dynamic load rating - C	28.1 kN
Preload class D - G_D	1440 N

Preload class C - G_C	720 N
Preload class B - G_B	360 N
Preload class A - G_A	180 N
Calculation factor f_1	0.99
Fatigue load limit P_u	0.98 kN
Calculation factor f_{2D}	1.08
Calculation factor f_{2C}	1.05
Calculation factor f_{2B}	1.02
Calculation factor f_{2A}	1
Calculation factor f_{HC}	1
Calculation factor - X_2	0.67
Calculation factor - Y_0	0.76
Calculation factor - Y_1	0.92
Calculation factor - f_1	0.99
Fatigue load limit - P_u	0.98 kN
Calculation factor - Y_2	1.41
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
Limiting speed for grease lubrication	15000 r/min
Basic static load rating C_0	23.2 kN
Static axial stiffness, preload class D	331 N/ μ m
Static axial stiffness, preload class C	244 N/ μ m
Static axial stiffness, preload class B	184 N/ μ m

Attainable speed for grease lubrication	15000 r/min
Static axial stiffness, preload class A	141 N/ μ m
Basic static load rating - C_0	23.2 kN
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