



Bearing No. 7010 CE/P4A

a	16.8 mm
d	50 mm
D	80 mm
B	16 mm
Bore	1.969 Inch 50 Millimeter
Noun	Bearing
Width	0.63 Inch 16 Millimeter
UNSPSC	31171531
Preload	None
Ball - z	21
Category	Precision Ball Bearings
Size (mm)	80x50x16
Enclosure	Open
Inventory	0.0
Width (mm)	16
Weight / LBS	0.611
Flush Ground	No
Mass bearing	0.25 kg
d ₁	60.25 mm
d ₂	57.9 mm
D ₁	69.75 mm
Inch - Metric	Metric
Cage Material	Phenolic
Raceway Style	1 Rib Inner Ring and Outer Ring
d _n	62.3 mm
Product Group	B04270
Contact Angle	15 Degree
d ₁	60.25 mm
d	62.3 mm

n	
D ₁	69.75 mm
d ₂	57.9 mm
Bearing number	7010 CE/P4A
Keyword String	Angular Contact Ball
Other Features	Single Row Angular Contact High Precision
Material - Ball	Steel
Rolling Element	Ball Bearing
G _{ref}	4.1 cm ³
Preload class A	42 N/micron
Preload class B	65 N/micron
Preload class C	88 N/micron
Precision Class	ABEC 7 ISO P4
Manufacturer URL	http://www.skf.com
Long Description	50MM Bore; 80MM Outside Diameter; 16MM Width; Open Enclosure; ABEC 7 ISO P4 Precision; Steel Ball Material; 1 (Single) Bearings; 15 Degree Contact Angle; Phenolic Cage Material; 1 Rib Inner Ring and
Outside Diameter	3.15 Inch 80 Millimeter
Number of balls z	21
Manufacturer Name	SKF
Weight / Kilogram	0.277
D _b max.	75.8 mm
Bore Diameter (mm)	80
Number of Bearings	1 (Single)
r _b max.	0.6 mm
D _a max.	75.4 mm
r _a max.	1 mm

d_a min.	54.6 mm
d_b min.	54.6 mm
Outer Diameter (mm)	50
$r_{1,2}$ min.	1 mm
$r_{3,4}$ min.	0.6 mm
Calculation factor f	1.08
d_a - min.	54.6 mm
Ball - D_w	7.938 mm
d_b - min.	54.6 mm
Minimum Buy Quantity	N/A
D_a - max.	75.4 mm
D_b - max.	75.8 mm
r_a - max.	1 mm
r_b - max.	0.6 mm
$r_{3,4}$ - min.	0.6 mm
$r_{1,2}$ - min.	1 mm
Harmonized Tariff Code	8482.10.50.28
Calculation factor - f	1.08
Manufacturer Item Number	7010 CE/P4A
Basic dynamic load rating C	15.6 kN
Ball diameter D_w	7.938 mm
Preload class A G_A	85 N
Basic dynamic load rating - C	15.6 kN
Preload class C G_C	500 N
Preload class B G_B	250 N
Preload class A - G_A	85 N
Preload class C - G_C	500 N
Preload class B - G_B	250 N
Calculation factor f_0	8.2

Fatigue load limit P_u	0.45 kN
Calculation factor f_1	1
Calculation factor f_{HC}	1
Calculation factor f_{2C}	1.05
Calculation factor - f	1
Calculation factor f_{2B}	1.03
Calculation factor f_{2A}	1
Calculation factor - f_0	8.2
Limiting speed for oil lubrication	38000 mm/min
Fatigue load limit - P_u	0.45 kN
Calculation factor - f_{2A}	1
Calculation factor - f_{HC}	1
Calculation factor - f_{2B}	1.03
Calculation factor - f_{2C}	1.05
Limiting speed for grease lubrication	25000 r/min
Basic static load rating C_0	10.6 kN
Static axial stiffness, preload class A	42 N/ μ m
Static axial stiffness, preload class B	65 N/ μ m
Static axial stiffness, preload class C	88 N/ μ m
Attainable speed for grease lubrication	25000 r/min
Attainable speed for oil-air lubrication	38000 r/min
Basic static load rating - C_0	10.6 kN
Reference grease quantity G_{ref}	4.1 cm ³