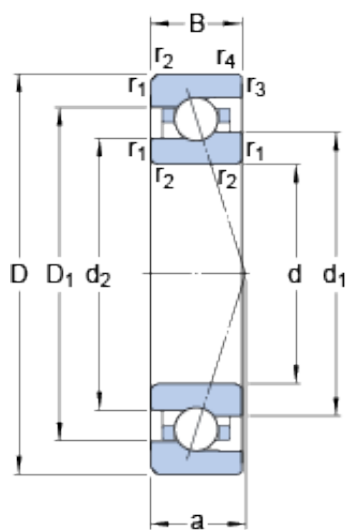




Bearing No. 7011 ACE/P4A

D	90 mm
d	55 mm
B	18 mm
a	26.1 mm
Bore	2.165 Inch 55 Millimeter
Noun	Bearing
Width	0.709 Inch 18 Millimeter
UNSPSC	31171531
Preload	None
Ball - z	24
Category	Precision Ball Bearings
Size (mm)	90x55x18
Enclosure	Open
Inventory	0.0
Width (mm)	18
Flush Ground	No
Mass bearing	0.39 kg
d ₂	65.6 mm
Product Group	B04270
d _n	69.6 mm
d _n	69.6 mm
D ₁	77.25 mm
d ₂	65.6 mm
d ₁	67.73 mm
d ₁	67.73 mm
Inch - Metric	Metric
D ₁	77.25 mm
Cage Material	Phenolic

Raceway Style	1 Rib Inner Ring and Outer Ring
Contact Angle	25 Degree
Keyword String	Ball Angular Contact
Other Features	Single Row Angular Contact High Speed E Design
Bearing number	7011 ACE/P4A
Rolling Element	Ball Bearing
Preload class C	226 N/micron
Material - Ball	Steel
Precision Class	ABEC 7 ISO P4
G _{ref}	5 cm3
Preload class A	116 N/micron
Preload class B	174 N/micron
Long Description	55MM Bore; 90MM Outside Diameter; 18MM Width; Open Enclosure; ABEC 7 ISO P4 Precision; Steel Ball Material; 1 (Single) Bearing; 25 Degree Contact Angle; Phenolic Cage Material; 1 Rib Inner Ring and
Manufacturer URL	http://www.skf.com
Outside Diameter	3.543 Inch 90 Millimeter
Weight / Kilogram	0
Manufacturer Name	SKF
Number of balls z	24
d _a min.	61 mm
d _b min.	61 mm
D _a max.	84 mm
Bore Diameter (mm)	90
D _b max.	85.8 mm

r_a max.	1 mm
Number of Bearings	1 (Single)
r_b max.	0.6 mm
Outer Diameter (mm)	55
$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
r_a - max.	1 mm
r_b - max.	0.6 mm
Ball - D_w	7.938 mm
D_a - max.	84 mm
D_b - max.	85.8 mm
Calculation factor e	0.68
d_a - min.	61 mm
Calculation factor f	1.07
d_b - min.	61 mm
Minimum Buy Quantity	N/A
Calculation factor - e	0.68
$r_{1,2}$ - min.	1.1 mm
Harmonized Tariff Code	8482.10.50.28
Calculation factor - f	1.07
$r_{3,4}$ - min.	0.6 mm
Basic dynamic load rating C	15.9 kN
Ball diameter D_w	7.938 mm
Basic dynamic load rating - C	15.9 kN
Preload class A G_A	140 N
Preload class B G_B	430 N
Preload class C G_C	860 N
Preload class A - G_A	140 N
Preload class C - G_C	860 N
Preload class B - G_B	430 N

Calculation factor f_1	0.99
Fatigue load limit P_u	0.49 kN
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.03
Calculation factor f_{2C}	1.06
Calculation factor f_{HC}	1
Calculation factor - Y_1	0.92
Fatigue load limit - P_u	0.49 kN
Calculation factor - Y_2	1.41
Calculation factor - f_1	0.99
Calculation factor - X_2	0.67
Limiting speed for oil lubrication	30000 mm/min
Calculation factor - Y_0	0.76
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.03
Calculation factor - f_{2C}	1.06
Calculation factor - f_{HC}	1
Limiting speed for grease lubrication	19000 r/min
Basic static load rating C_0	11.6 kN
Static axial stiffness, preload class C	226 N/ μ m
Static axial stiffness, preload class B	174 N/ μ m
Static axial stiffness, preload class A	116 N/ μ m
Attainable speed for grease lubrication	19000 r/min
Attainable speed for oil-air lubrication	30000 r/min
Basic static load rating -	11.6 kN

C_0	
Reference grease quantity G_{ref}	5 cm ³
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