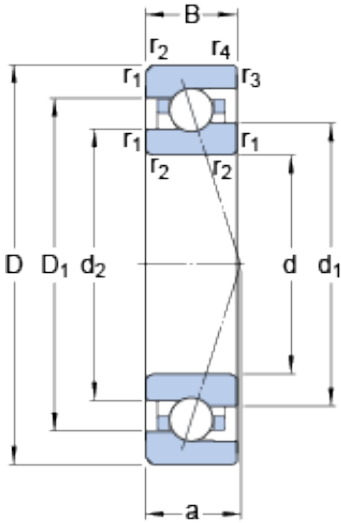




# GQ BEARING PROCESSING LTD



7011 CE/HCP4A Bearing 2D drawings and 3D CAD models

55 mm x 90 mm x 18 mm SKF 7011 CE/HCP4A  
angular contact ball bearings

Bearing No. 7011 CE/HCP4A

Size	90x55x18 mm
Bore Diameter	90 mm
Outer Diameter	55 mm
Width	18 mm
d	55 mm
D	90 mm
B	18 mm
d <sub>1</sub>	67.73 mm
d <sub>2</sub>	65.6 mm
D <sub>1</sub>	77.25 mm
r <sub>1,2</sub> - min.	1.1 mm
r <sub>3,4</sub> - min.	0.6 mm
a	18.8 mm
d <sub>a</sub> - min.	61 mm
d <sub>b</sub> - min.	61 mm
D <sub>a</sub> - max.	84 mm
D <sub>b</sub> - max.	85.8 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.6 mm
d <sub>n</sub>	69.6 mm
Basic dynamic load rating - C	16.8 kN
Basic static load rating - C <sub>0</sub>	12.2 kN
Fatigue load limit - P <sub>u</sub>	0.52 kN
Limiting speed for grease	25000 r/min



## GQ BEARING PROCESSING LTD

Lubrication	
Limiting speed for oil lubrication	39000 mm/min
Ball - $D_w$	7.938 mm
Ball - z	24
$G_{ref}$	5 cm3
Calculation factor - $f_0$	8.4
Preload class A - $G_A$	90 N
Preload class B - $G_B$	270 N
Preload class C - $G_C$	540 N
Calculation factor - f	1.07
Calculation factor - f	1
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.03
Calculation factor - $f_{2C}$	1.05
Calculation factor - $f_{HC}$	1.01
Preload class A	51 N/micron
Preload class B	80 N/micron
Preload class C	108 N/micron
Category	Precision Ball Bearings
Inventory	0.0
Manufacturer Name	SKF
Minimum Buy Quantity	N/A
Weight / Kilogram	0
Product Group	B04270
Enclosure	Open
Precision Class	ABEC 7   ISO P4
Material - Ball	Ceramic
Number of Bearings	1 (Single)
Contact Angle	15 Degree
Preload	None



## GQ BEARING PROCESSING LTD

Raceway Style	1 Rib Inner Ring and Outer Ring
Cage Material	Phenolic
Rolling Element	Ball Bearing
Flush Ground	No
Inch - Metric	Metric
Other Features	Single Row   Angular Contact   High Speed E Design
Long Description	55MM Bore; 90MM Outside Diameter; 18MM Width; Open Enclosure; ABEC 7   ISO P4 Precision; Ceramic Ball Material; 1 (Single) Bearing; 15 Degree Contact Angle; Phenolic Cage Material; 1 Rib Inner Ring an
Category	Precision Ball Bearings
UNSPSC	31171531
Harmonized Tariff Code	8482.10.50.28
Noun	Bearing
Keyword String	Ball Angular Contact
Manufacturer URL	<a href="http://www.skf.com">http://www.skf.com</a>
Outside Diameter	3.543 Inch   90 Millimeter
Bore	2.165 Inch   55 Millimeter
Width	0.709 Inch   18 Millimeter
$d_1$	67.73 mm
$d_2$	65.6 mm
$D_1$	77.25 mm
$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
$d_a$ min.	61 mm
$d_b$ min.	61 mm
$D_a$ max.	84 mm
$D_b$ max.	85.8 mm



## GQ BEARING PROCESSING LTD

$r_a$ max.	1 mm
$r_b$ max.	0.6 mm
$d_n$	69.6 mm
Basic dynamic load rating C	16.8 kN
Basic static load rating $C_0$	12.2 kN
Fatigue load limit $P_u$	0.52 kN
Attainable speed for grease lubrication	25000 r/min
Attainable speed for oil-air lubrication	39000 r/min
Ball diameter $D_w$	7.938 mm
Number of balls z	24
Reference grease quantity $G_{ref}$	5 cm <sup>3</sup>
Preload class A $G_A$	90 N
Static axial stiffness, preload class A	51 N/ $\mu$ m
Preload class B $G_B$	270 N
Static axial stiffness, preload class B	80 N/ $\mu$ m
Preload class C $G_C$	540 N
Static axial stiffness, preload class C	108 N/ $\mu$ m
Calculation factor f	1.07
Calculation factor $f_1$	1
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.03
Calculation factor $f_{2C}$	1.05
Calculation factor $f_{HC}$	1.01
Calculation factor $f_0$	8.4
Mass bearing	0.36 kg