



**Bearing No. 7209 BECBY**

a	37 mm
d	45 mm
D	85 mm
B	19 mm
Noun	Bearing
Bore	1.772 Inch   45 Millimeter
Width	0.748 Inch   19 Millimeter
UNSPSC	31171531
series:	72
Category	Angular Contact Ball Bearing
Enclosure	Open
Snap Ring	No
Size (mm)	85x45x19
Inventory	2.0
Width (mm)	19
Weight / LBS	0.957
maximum rpm:	9000 RPM
Flush Ground	Yes
Mass bearing	0.42 kg
Contact Angle	40 Degree
Cage Material	Brass
closure type:	Open
Product Group	B00308
Inch - Metric	Metric
d <sub>2</sub>	52.68 mm
d <sub>1</sub>	60.85 mm
D <sub>1</sub>	70.15 mm

Other Features	Normal Axial Internal Clearance
fillet radius:	1 mm
contact angle:	40 °
overall width:	19 mm
cage material:	Brass
bore diameter:	45 mm
Keyword String	Angular Contact
Bearing number	7209 BECBY
Limiting speed	9000 r/min
finish/coating:	Uncoated
Rolling Element	Ball Bearing
Precision Class	ABEC 3   ISO P6
Reference speed	9000 r/min
Long Description	45MM Bore; 85MM Outside Diameter; 19MM Width; Open; Yes Flush Ground; Ball Bearing; Single Row of Balls; ABEC 3   ISO P6; No Filling Slot; No Snap Ring
Outside Diameter	3.346 Inch   85 Millimeter
Manufacturer URL	<a href="http://www.skf.com">http://www.skf.com</a>
Weight / Kilogram	0.43
precision rating:	ABEC 3 (ISO Class 6)
outside diameter:	85 mm
Manufacturer Name	SKF
outer ring width:	19 mm
d <sub>a</sub> min.	52 mm
Number of Bearings	1 (Single)
Bore Diameter (mm)	85
r <sub>b</sub> max.	0.6 mm
r <sub>a</sub> max.	1 mm

Internal Clearance	CB
$D_b$ max.	80.8 mm
$D_a$ max.	78 mm
internal clearance:	C0
Outer Diameter (mm)	45
$r_{1,2}$ min.	1.1 mm
Calculation factor A	0.0128
Calculation factor e	1.14
Calculation factor X	0.57
Mounting Arrangement	Universal
$r_{3,4}$ min.	0.6 mm
$r_b$ - max.	0.6 mm
$r_a$ - max.	1 mm
$D_b$ - max.	80.8 mm
$d_a$ - min.	52 mm
Minimum Buy Quantity	N/A
$D_a$ - max.	78 mm
$D_1$ ?	70.15 mm
$d_2$ ?	52.68 mm
$d_1$ ?	60.85 mm
row type & fill slot:	Single-Row Non-Fill Slot
Calculation factor - X	0.35
Calculation factor - e	1.14
$r_{1,2}$ - min.	1.1 mm
$r_{3,4}$ - min.	0.6 mm
Harmonized Tariff Code	8482.10.50.28
Number of Rows of Balls	Single Row
Manufacturer Item Number	7209 BECBY
Basic dynamic load rating C	40 kN
radial static load capacity:	28 kN

radial dynamic load capacity:	37.7 kN
Basic dynamic load rating - C	37.7 kN
Maximum Capacity / Filling Slot	No
Calculation factor $Y_0$	0.52
Calculation factor $Y_2$	0.93
Calculation factor $Y_1$	0.55
Calculation factor $k_r$	0.095
Fatigue load limit $P_u$	1.29 kN
Calculation factor - $k_r$	0.095
Calculation factor - $Y_0$	0.26
Fatigue load limit - $P_u$	1.2 kN
Calculation factor - $Y_1$	
Calculation factor - $Y_2$	0.57
Calculation factor - $k_a$	1.4
Basic static load rating $C_0$	30.5 kN
Basic static load rating - $C_0$	28 kN