



71915 ACE/HCP4A Bearing 2D drawings and 3D CAD models

## 75 mm x 105 mm x 16 mm SKF 71915 ACE/HCP4A angular contact ball bearings

Bearing No. 71915 ACE/HCP4A

Size	105x75x16 mm
Bore Diameter	105 mm
Outer Diameter	75 mm
Width	16 mm
d	75 mm
D	105 mm
B	16 mm
d <sub>1</sub>	84.3 mm
d <sub>2</sub>	81.8 mm
D <sub>1</sub>	95.52 mm
r <sub>1,2</sub> - min.	1 mm
r <sub>3,4</sub> - min.	0.3 mm
a	30.2 mm
d <sub>a</sub> - min.	79.6 mm
d <sub>b</sub> - min.	77 mm
D <sub>a</sub> - max.	100.4 mm
D <sub>b</sub> - max.	103 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.3 mm
d <sub>n</sub>	86.5 mm
Basic dynamic load rating - C	21.2 kN
Basic static load rating - C <sub>0</sub>	16.3 kN
Fatigue load limit - P <sub>u</sub>	0.68 kN
Limiting speed for grease	18500 r/min



## NTN BEARING USA CORP.

Lubrication	
Limiting speed for oil lubrication	29000 mm/min
Ball - $D_w$	9.525 mm
Ball - $z$	23
$G_{ref}$	4.5 cm <sup>3</sup>
Calculation factor - $e$	0.68
Calculation factor - $Y_2$	0.87
Calculation factor - $Y_0$	0.38
Calculation factor - $X_2$	0.41
Calculation factor - $Y_1$	0.92
Calculation factor - $Y_2$	1.41
Calculation factor - $Y_0$	0.76
Calculation factor - $X_2$	0.67
Preload class A - $G_A$	192 N
Preload class B - $G_B$	577 N
Preload class C - $G_C$	1150 N
Calculation factor - $f$	1.16
Calculation factor - $f_1$	0.98
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.04
Calculation factor - $f_{2C}$	1.08
Calculation factor - $f_{HC}$	1.01
Preload class A	152 N/micron
Preload class B	228 N/micron
Preload class C	299 N/micron
$d_1$	84.3 mm
$d_2$	81.8 mm
$D_1$	95.52 mm
$r_{1,2}$ min.	1 mm



## NTN BEARING USA CORP.

$r_{3,4}$ min.	0.3 mm
$d_a$ min.	79.6 mm
$d_b$ min.	77 mm
$D_a$ max.	100.4 mm
$D_b$ max.	103 mm
$r_a$ max.	1 mm
$r_b$ max.	0.3 mm
$d_n$	86.5 mm
Basic dynamic load rating C	21.2 kN
Basic static load rating $C_0$	16.3 kN
Fatigue load limit $P_u$	0.68 kN
Attainable speed for grease lubrication	18500 r/min
Attainable speed for oil-air lubrication	29000 r/min
Ball diameter $D_w$	9.525 mm
Number of balls z	23
Reference grease quantity $G_{ref}$	4.5 cm <sup>3</sup>
Preload class A $G_A$	192 N
Static axial stiffness, preload class A	152 N/ $\mu$ m
Preload class B $G_B$	577 N
Static axial stiffness, preload class B	228 N/ $\mu$ m
Preload class C $G_C$	1150 N
Static axial stiffness, preload class C	299 N/ $\mu$ m
Calculation factor f	1.16
Calculation factor $f_1$	0.98
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.04
Calculation factor $f_{2C}$	1.08
Calculation factor $f_{HC}$	1.01



## NTN BEARING USA CORP.

Calculation factor e	0.68
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
Mass bearing	0.29 kg