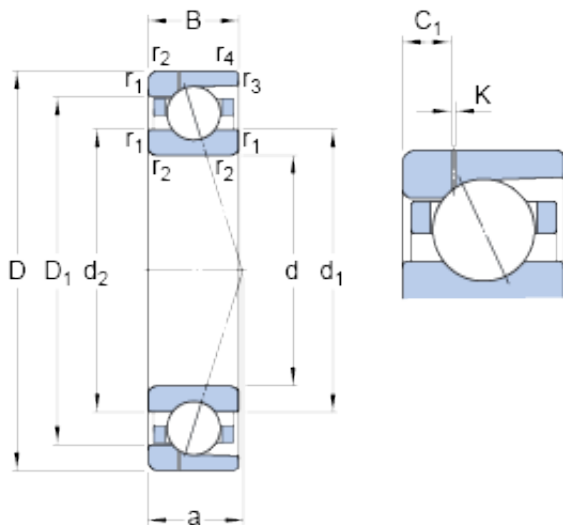




# NACHI BEARINGS TRAINING INDUSTRY



## 95 mm x 130 mm x 18 mm SKF 71919 ACD/HCP4AH1 angular contact ball bearings

Bearing No. 71919 ACD/HCP4AH1

71919 ACD/HCP4AH1 Bearing 2D drawings and 3D  
CAD models

Size	130x95x18 mm
Bore Diameter	130 mm
Outer Diameter	95 mm
Width	18 mm
d	95 mm
D	130 mm
B	18 mm
d <sub>1</sub>	105.8 mm
d <sub>2</sub>	105.8 mm
D <sub>1</sub>	119.2 mm
K	0.5 mm
C <sub>1</sub>	5.2 mm
r <sub>1,2</sub> - min.	1.1 mm
r <sub>3,4</sub> - min.	0.6 mm
a	35.3 mm
d <sub>a</sub> - min.	101 mm
d <sub>b</sub> - min.	101 mm
D <sub>a</sub> - max.	124 mm
D <sub>b</sub> - max.	126 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.6 mm
d <sub>n</sub>	108.6 mm
Basic dynamic load rating - C	46.2 kN
Basic static load rating - C <sub>0</sub>	52 kN



## NACHI BEARINGS TRAINING INDUSTRY

Fatigue load limit - $P_u$	2.1 kN
Limiting speed for grease lubrication	9500 r/min
Limiting speed for oil lubrication	16000 mm/min
Ball - $D_w$	11.112 mm
Ball - $z$	28
$G_{ref}$	7.8 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 - $G_A$	290 N
Preload class B - $G_B$	580 N
Preload class C - $G_C$	1160 N
Preload class D - $G_D$	2320 N
Calculation factor - $f$	1.26
Calculation factor - $f_1$	0.98
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.07
Calculation factor - $f_{2C}$	1.12
Calculation factor - $f_{2D}$	1.17
Calculation factor - $f_{HC}$	1.04
Preload class A	266 N/micron
Preload class B	350 N/micron
Preload class C	467 N/micron



## NACHI BEARINGS TRAINING INDUSTRY

Preload class D	639 N/micron
$d_1$	105.8 mm
$d_2$	105.8 mm
$D_1$	119.2 mm
$C_1$	5.2 mm
$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
$d_a$ min.	101 mm
$d_b$ min.	101 mm
$D_a$ max.	124 mm
$D_b$ max.	126 mm
$r_a$ max.	1 mm
$r_b$ max.	0.6 mm
$d_n$	108.6 mm
Basic dynamic load rating C	46.2 kN
Basic static load rating $C_0$	52 kN
Fatigue load limit $P_u$	2.08 kN
Attainable speed for grease lubrication	9500 r/min
Attainable speed for oil-air lubrication	16000 r/min
Ball diameter $D_w$	11.112 mm
Number of balls z	28
Reference grease quantity $G_{ref}$	7.8 cm <sup>3</sup>
Preload class A $G_A$	290 N
Static axial stiffness, preload class A	266 N/ $\mu$ m
Preload class B $G_B$	580 N
Static axial stiffness, preload class B	350 N/ $\mu$ m
Preload class C $G_C$	1160 N
Static axial stiffness, preload class C	467 N/ $\mu$ m



## NACHI BEARINGS TRAINING INDUSTRY

Preload class D $G_D$	2320 N
Static axial stiffness, preload class D	639 N/ $\mu$ m
Calculation factor f	1.26
Calculation factor $f_1$	0.98
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.07
Calculation factor $f_{2C}$	1.12
Calculation factor $f_{2D}$	1.17
Calculation factor $f_{HC}$	1.04
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	0.49 kg