



Bearing No. 7019 ACD/HCP4A

D	145 mm
d	95 mm
B	24 mm
a	40.1 mm
Ball - z	21
Size (mm)	145x95x24
Width (mm)	24
Mass bearing	1 kg
d <sub>n</sub>	113.7 mm
d <sub>n</sub>	113.7 mm
D <sub>1</sub>	129.6 mm
d <sub>1</sub>	110.4 mm
d <sub>2</sub>	110.4 mm
D <sub>1</sub>	129.6 mm
d <sub>2</sub>	110.4 mm
d <sub>1</sub>	110.4 mm
Bearing number	7019 ACD/HCP4A
Preload class B	374 N/micron
Preload class A	286 N/micron
Preload class D	673 N/micron
Preload class C	497 N/micron
G <sub>ref</sub>	15.6 cm <sup>3</sup>
Number of balls z	21
Bore Diameter (mm)	145
r <sub>b</sub> max.	1 mm
r <sub>a</sub> max.	1.5 mm
D <sub>b</sub> max.	141 mm
D <sub>a</sub> max.	138 mm
d <sub>a</sub> min.	102 mm

$d_b$ min.	102 mm
Outer Diameter (mm)	95
$D_b$ - max.	141 mm
$d_b$ - min.	102 mm
Ball - $D_w$	15.875 mm
$r_{1,2}$ min.	1.5 mm
$r_{3,4}$ min.	1 mm
$d_a$ - min.	102 mm
$r_a$ - max.	1.5 mm
$D_a$ - max.	138 mm
$r_b$ - max.	1 mm
Calculation factor f	1.15
Calculation factor e	0.68
$r_{1,2}$ - min.	1.5 mm
$r_{3,4}$ - min.	1 mm
Calculation factor - e	0.68
Calculation factor - f	1.15
Ball diameter $D_w$	15.875 mm
Basic dynamic load rating C	76.1 kN
Preload class C $G_C$	1920 N
Preload class B $G_B$	960 N
Preload class A $G_A$	480 N
Preload class D $G_D$	3840 N
Basic dynamic load rating - C	76.1 kN
Preload class B - $G_B$	960 N
Preload class D - $G_D$	3840 N
Preload class C - $G_C$	1920 N
Preload class A - $G_A$	480 N
Fatigue load limit $P_u$	2.9 kN
Calculation factor $f_1$	0.99

Calculation factor $f_{2A}$	1
Calculation factor $f_{2C}$	1.05
Calculation factor $f_{2B}$	1.02
Calculation factor $f_{2D}$	1.08
Calculation factor $f_{HC}$	1.02
Calculation factor - $X_2$	0.67
Calculation factor - $f_1$	0.99
Calculation factor - $Y_1$	0.92
Limiting speed for oil lubrication	16000 mm/min
Calculation factor - $Y_0$	0.76
Fatigue load limit - $P_u$	2.9 kN
Calculation factor - $Y_2$	1.41
Calculation factor - $f_{HC}$	1.02
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2C}$	1.05
Calculation factor - $f_{2B}$	1.02
Calculation factor - $f_{2D}$	1.08
Limiting speed for grease lubrication	10000 r/min
Basic static load rating $C_0$	76.5 kN
Static axial stiffness, preload class B	374 N/ $\mu$ m
Attainable speed for grease lubrication	10000 r/min
Static axial stiffness, preload class D	673 N/ $\mu$ m
Static axial stiffness, preload class C	497 N/ $\mu$ m
Static axial stiffness, preload class A	286 N/ $\mu$ m
Basic static load rating -	76.5 kN

$C_0$	
Attainable speed for oil-air lubrication	16000 r/min
Reference grease quantity $G_{ref}$	15.6 cm <sup>3</sup>
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