



Bearing No. 7015 ACD/HCP4AL

b	1.8 mm
d	75 mm
a	32.3 mm
B	20 mm
D	115 mm
Ball - z	20
Size (mm)	115x75x20
Width (mm)	20
Mass bearing	0.53 kg
d <sub>2</sub>	87.3 mm
D <sub>1</sub>	102.7 mm
d <sub>n</sub>	90 mm
C <sub>1</sub>	10.9 mm
C <sub>2</sub>	3.9 mm
C <sub>3</sub>	3.4 mm
C <sub>2</sub>	3.9 mm
C <sub>1</sub>	10.9 mm
d <sub>n</sub>	90 mm
D <sub>1</sub>	102.7 mm
d <sub>2</sub>	87.3 mm
d <sub>1</sub>	87.3 mm
d <sub>1</sub>	87.3 mm
C <sub>3</sub>	3.4 mm
Bearing number	7015 ACD/HCP4AL
Preload class B	290 N/micron
Preload class A	222 N/micron
G <sub>ref</sub>	8.4 cm <sup>3</sup>
Preload class D	522 N/micron
Preload class C	386 N/micron

Number of balls z	20
Bore Diameter (mm)	115
$r_b$ max.	0.6 mm
$r_a$ max.	1 mm
$D_b$ max.	111 mm
$D_a$ max.	109 mm
$d_a$ min.	81 mm
$d_b$ min.	81 mm
Outer Diameter (mm)	75
$r_b$ - max.	0.6 mm
$d_b$ - min.	81 mm
$d_a$ - min.	81 mm
$D_b$ - max.	111 mm
$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
$D_a$ - max.	109 mm
$r_a$ - max.	1 mm
Ball - $D_w$	12.7 mm
Calculation factor f	1.14
Calculation factor e	0.68
Calculation factor - f	1.14
$r_{1,2}$ - min.	1.1 mm
$r_{3,4}$ - min.	0.6 mm
Calculation factor - e	0.68
Ball diameter $D_w$	12.7 mm
Basic dynamic load rating C	49.4 kN
Preload class A $G_A$	310 N
Preload class B $G_B$	620 N
Preload class C $G_C$	1240 N
Basic dynamic load rating - C	49.4 kN
Preload class D $G_D$	2480 N

Preload class C - $G_C$	1240 N
Preload class B - $G_B$	620 N
Preload class A - $G_A$	310 N
Preload class D - $G_D$	2480 N
Fatigue load limit $P_u$	1.96 kN
Calculation factor $f_1$	0.99
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.02
Calculation factor $f_{2C}$	1.05
Calculation factor $f_{2D}$	1.08
Calculation factor $f_{HC}$	1.02
Calculation factor - $Y_0$	0.76
Calculation factor - $Y_2$	1.41
Calculation factor - $Y_1$	0.92
Calculation factor - $f_1$	0.99
Calculation factor - $X_2$	0.67
Fatigue load limit - $P_u$	2 kN
Limiting speed for oil lubrication	20000 mm/min
Calculation factor - $f_{2B}$	1.02
Calculation factor - $f_{HC}$	1.02
Calculation factor - $f_{2D}$	1.08
Calculation factor - $f_{2C}$	1.05
Calculation factor - $f_{2A}$	1
Limiting speed for grease lubrication	13000 r/min
Basic static load rating $C_0$	46.5 kN
Static axial stiffness, preload class A	222 N/ $\mu$ m
Static axial stiffness,	522 N/ $\mu$ m

preload class D	
Static axial stiffness, preload class C	386 N/ $\mu$ m
Static axial stiffness, preload class B	290 N/ $\mu$ m
Attainable speed for grease lubrication	13000 r/min
Attainable speed for oil-air lubrication	20000 r/min
Basic static load rating - $C_0$	46.5 kN
Reference grease quantity $G_{ref}$	8.4 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