



**Bearing No. 7015 ACE/HCP4AH1**

K	0.5 mm
a	32.3 mm
d	75 mm
D	115 mm
B	20 mm
Ball - z	26
Size (mm)	115x75x20
Width (mm)	20
Mass bearing	0.59 kg
$d_n$	91.5 mm
$D_1$	100.72 mm
$d_1$	89.28 mm
$C_1$	6.73 mm
$D_1$	100.72 mm
$d_2$	86.8 mm
$C_1$	6.73 mm
$d_1$	89.28 mm
$d_n$	91.5 mm
$d_2$	86.8 mm
Bearing number	7015 ACE/HCP4AH1
Preload class A	178 N/micron
Preload class B	269 N/micron
Preload class C	353 N/micron
$G_{ref}$	8.6 cm <sup>3</sup>
Number of balls z	26
Bore Diameter (mm)	115
$r_b$ max.	0.6 mm
$r_a$ max.	1 mm
$D_b$ max.	110.8 mm

$D_a$ max.	109 mm
$d_a$ min.	81 mm
$d_b$ min.	81 mm
Outer Diameter (mm)	75
$r_a$ - max.	1 mm
$r_{3,4}$ min.	0.6 mm
$D_a$ - max.	109 mm
$d_b$ - min.	81 mm
$r_{1,2}$ min.	1.1 mm
Ball - $D_w$	9.525 mm
$r_b$ - max.	0.6 mm
$D_b$ - max.	110.8 mm
Calculation factor f	1.1
Calculation factor e	0.68
$d_a$ - min.	81 mm
Calculation factor - f	1.1
$r_{3,4}$ - min.	0.6 mm
$r_{1,2}$ - min.	1.1 mm
Calculation factor - e	0.68
Ball diameter $D_w$	9.525 mm
Basic dynamic load rating C	24.7 kN
Preload class A $G_A$	220 N
Preload class B $G_B$	670 N
Preload class C $G_C$	1340 N
Basic dynamic load rating - C	24.7 kN
Preload class B - $G_B$	670 N
Preload class C - $G_C$	1340 N
Preload class A - $G_A$	220 N
Fatigue load limit $P_u$	0.865 kN
Calculation factor $f_1$	0.99

Calculation factor $f_{2C}$	1.06
Calculation factor $f_{2B}$	1.03
Calculation factor $f_{HC}$	1.01
Calculation factor $f_{2A}$	1
Calculation factor - $f_1$	0.99
Limiting speed for oil lubrication	27000 mm/min
Fatigue load limit - $P_u$	0.865 kN
Calculation factor - $Y_0$	0.76
Calculation factor - $Y_1$	0.92
Calculation factor - $X_2$	0.67
Calculation factor - $Y_2$	1.41
Calculation factor - $f_{HC}$	1.01
Calculation factor - $f_{2C}$	1.06
Calculation factor - $f_{2B}$	1.03
Calculation factor - $f_{2A}$	1
Limiting speed for grease lubrication	17000 r/min
Basic static load rating $C_0$	20.4 kN
Static axial stiffness, preload class C	353 N/ $\mu$ m
Attainable speed for grease lubrication	17000 r/min
Static axial stiffness, preload class B	269 N/ $\mu$ m
Static axial stiffness, preload class A	178 N/ $\mu$ m
Attainable speed for oil-air lubrication	27000 r/min
Basic static load rating - $C_0$	20.4 kN
Reference grease	8.6 cm <sup>3</sup>

quantity $G_{ref}$	
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