



Bearing No. 7002 ACE/P4A

D	32 mm
d	15 mm
B	9 mm
a	10.1 mm
Ball - z	12
Size (mm)	32x15x9
Width (mm)	9
Mass bearing	0.028 kg
d_n	21.9 mm
d_n	21.9 mm
D_1	26.9 mm
d_1	20.65 mm
d_2	19.5 mm
D_1	26.9 mm
d_2	19.5 mm
d_1	20.65 mm
Bearing number	7002 ACE/P4A
Preload class A	40 N/micron
G_{ref}	0.5 cm ³
Preload class C	66 N/micron
Preload class B	59 N/micron
Number of balls z	12
Bore Diameter (mm)	32
r_b max.	0.15 mm
r_a max.	0.3 mm
D_b max.	30.6 mm
D_a max.	30 mm
d_a min.	17 mm
d_b min.	17 mm

Outer Diameter (mm)	15
D_b - max.	30.6 mm
d_a - min.	17 mm
Calculation factor e	0.68
Calculation factor f	1.03
r_b - max.	0.15 mm
D_a - max.	30 mm
r_a - max.	0.3 mm
$r_{3,4}$ min.	0.15 mm
$r_{1,2}$ min.	0.3 mm
Ball - D_w	4.762 mm
d_b - min.	17 mm
$r_{1,2}$ - min.	0.3 mm
$r_{3,4}$ - min.	0.15 mm
Calculation factor - e	0.68
Calculation factor - f	1.03
Basic dynamic load rating C	4.23 kN
Ball diameter D_w	4.762 mm
Preload class B G_B	115 N
Preload class C G_C	230 N
Basic dynamic load rating - C	4.2 kN
Preload class A G_A	38 N
Preload class B - G_B	115 N
Preload class C - G_C	230 N
Preload class A - G_A	38 N
Fatigue load limit P_u	0.078 kN
Calculation factor f_1	0.99
Calculation factor f_{2C}	1.06
Calculation factor f_{2A}	1
Calculation factor f_{HC}	1

Calculation factor f_{2B}	1.03
Limiting speed for oil lubrication	95000 mm/min
Fatigue load limit - P_u	0.078 kN
Calculation factor - f_1	0.99
Calculation factor - Y_2	1.41
Calculation factor - X_2	0.67
Calculation factor - Y_1	0.92
Calculation factor - Y_0	0.76
Calculation factor - f_{HC}	1
Calculation factor - f_{2A}	1
Calculation factor - f_{2C}	1.06
Calculation factor - f_{2B}	1.03
Limiting speed for grease lubrication	63000 r/min
Basic static load rating C_0	1.83 kN
Static axial stiffness, preload class B	59 N/ μ m
Static axial stiffness, preload class A	40 N/ μ m
Attainable speed for grease lubrication	63000 r/min
Static axial stiffness, preload class C	66 N/ μ m
Basic static load rating - C_0	1.8 kN
Attainable speed for oil-air lubrication	95000 r/min
Reference grease quantity G_{ref}	0.5 cm ³
Calculation factor (single, tandem) Y_2	0.87
Calculation factor	0.38

(single, tandem) Y_0	
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