



Bearing No. 71808 ACD/HCP4

D	52 mm
d	40 mm
B	7 mm
a	14.3 mm
Ball - z	29
Size (mm)	52x40x7
Width (mm)	7
Mass bearing	0.029 kg
d_n	44.5 mm
d_n	44.5 mm
D_1	48.1 mm
d_1	44.1 mm
d_2	44.1 mm
D_1	48.1 mm
d_2	44.1 mm
d_1	44.1 mm
Bearing number	71808 ACD/HCP4
Preload class A	93 N/micron
G_{ref}	0.31 cm ³
Preload class C	197 N/micron
Preload class B	145 N/micron
Number of balls z	29
Bore Diameter (mm)	52
r_b max.	0.15 mm
r_a max.	0.3 mm
D_b max.	51.2 mm
D_a max.	50 mm
d_a min.	42 mm
d_b min.	42 mm

Outer Diameter (mm)	40
D_b - max.	51.2 mm
d_a - min.	42 mm
Calculation factor e	0.68
Calculation factor f	1.23
r_b - max.	0.15 mm
D_a - max.	50 mm
r_a - max.	0.3 mm
$r_{3,4}$ min.	0.15 mm
$r_{1,2}$ min.	0.3 mm
Ball - D_w	3.175 mm
d_b - min.	42 mm
$r_{1,2}$ - min.	0.3 mm
$r_{3,4}$ - min.	0.15 mm
Calculation factor - e	0.68
Calculation factor - f	1.23
Basic dynamic load rating C	4.49 kN
Ball diameter D_w	3.175 mm
Preload class B G_B	120 N
Preload class C G_C	240 N
Basic dynamic load rating - C	4.5 kN
Preload class A G_A	40 N
Preload class B - G_B	120 N
Preload class C - G_C	240 N
Preload class A - G_A	40 N
Fatigue load limit P_u	0.196 kN
Calculation factor f_1	0.97
Calculation factor f_{2C}	1.17
Calculation factor f_{2A}	1
Calculation factor f_{HC}	1.02

Calculation factor f_{2B}	1.09
Limiting speed for oil lubrication	43000 mm/min
Fatigue load limit - P_u	0.196 kN
Calculation factor - f_1	0.97
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}	1.02
Calculation factor - f_{2A}	1
Calculation factor - f_{2C}	1.17
Calculation factor - f_{2B}	1.09
Limiting speed for grease lubrication	28000 r/min
Basic static load rating C_0	4.55 kN
Static axial stiffness, preload class B	145 N/ μ m
Static axial stiffness, preload class A	93 N/ μ m
Attainable speed for grease lubrication	28000 r/min
Static axial stiffness, preload class C	197 N/ μ m
Basic static load rating - C_0	4.6 kN
Attainable speed for oil-air lubrication	43000 r/min
Reference grease quantity G_{ref}	0.31 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