



Bearing No. 7010 CD/P4AL

b	2 mm
d	50 mm
a	16.8 mm
B	16 mm
D	80 mm
Ball - z	18
Size (mm)	80x50x16
Width (mm)	16
Mass bearing	0.25 kg
d ₂	59.2 mm
D ₁	70.8 mm
d _n	61.2 mm
C ₁	8.6 mm
C ₂	3.6 mm
C ₃	2.8 mm
C ₂	3.6 mm
C ₁	8.6 mm
d _n	61.2 mm
D ₁	70.8 mm
d ₂	59.2 mm
d ₁	59.2 mm
d ₁	59.2 mm
C ₃	2.8 mm
Bearing number	7010 CD/P4AL
Preload class B	79 N/micron
G _{ref}	3.6 cm3
Preload class C	111 N/micron
Preload class D	161 N/micron
Preload class A	58 N/micron

Number of balls z	18
d_a min.	54.6 mm
D_a max.	75.4 mm
d_b min.	54.6 mm
D_b max.	78 mm
r_a max.	1 mm
r_b max.	0.3 mm
Bore Diameter (mm)	80
Outer Diameter (mm)	50
$r_{1,2}$ min.	1 mm
d_a - min.	54.6 mm
d_b - min.	54.6 mm
D_a - max.	75.4 mm
Calculation factor f	1.11
r_b - max.	0.3 mm
$r_{3,4}$ min.	0.3 mm
D_b - max.	78 mm
Ball - D_w	9.525 mm
r_a - max.	1 mm
Calculation factor - f	1.11
$r_{3,4}$ - min.	0.3 mm
$r_{1,2}$ - min.	1 mm
Ball diameter D_w	9.525 mm
Basic dynamic load rating C	29.6 kN
Preload class B G_B	220 N
Preload class A G_A	110 N
Preload class D G_D	880 N
Preload class C G_C	440 N
Basic dynamic load rating - C	29.6 kN
Preload class B - G_B	220 N

Preload class C - G_C	440 N
Preload class D - G_D	880 N
Preload class A - G_A	110 N
Calculation factor f_1	1
Calculation factor f_0	15.4
Fatigue load limit P_u	1.02 kN
Calculation factor f_{HC}	1
Calculation factor f_{2D}	1.09
Calculation factor f_{2B}	1.02
Calculation factor f_{2A}	1
Calculation factor - f	1
Calculation factor f_{2C}	1.05
Fatigue load limit - P_u	1 kN
Limiting speed for oil lubrication	28000 mm/min
Calculation factor - f_0	15.4
Calculation factor - f_{HC}	1
Calculation factor - f_{2A}	1
Calculation factor - f_{2D}	1.09
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2C}	1.05
Limiting speed for grease lubrication	17000 r/min
Basic static load rating C_0	24 kN
Static axial stiffness, preload class B	79 N/ μ m
Static axial stiffness, preload class A	58 N/ μ m
Static axial stiffness, preload class C	111 N/ μ m
Static axial stiffness,	161 N/ μ m

preload class D	
Attainable speed for grease lubrication	17000 r/min
Basic static load rating - C_0	24 kN
Attainable speed for oil-air lubrication	28000 r/min
Reference grease quantity G_{ref}	3.6 cm ³