



Bearing No. 71940 ACD/HCP4A

D	280 mm
d	200 mm
B	38 mm
a	75.2 mm
Ball - z	26
Size (mm)	280x200x38
Width (mm)	38
Mass bearing	5.11 kg
d_n	231.4 mm
d_n	231.4 mm
D_1	255.3 mm
d_1	224.7 mm
d_2	224.7 mm
D_1	255.3 mm
d_2	224.7 mm
d_1	224.7 mm
Bearing number	71940 ACD/HCP4A
Preload class B	704 N/micron
Preload class A	538 N/micron
Preload class D	1274 N/micron
Preload class C	938 N/micron
G_{ref}	81 cm ³
Number of balls z	26
Bore Diameter (mm)	280
r_b max.	1 mm
r_a max.	2 mm
D_b max.	275 mm
D_a max.	271 mm
d_a min.	209 mm

d_b min.	209 mm
Outer Diameter (mm)	200
D_b - max.	275 mm
d_b - min.	209 mm
Ball - D_w	25.4 mm
$r_{1,2}$ min.	2.1 mm
$r_{3,4}$ min.	1 mm
d_a - min.	209 mm
r_a - max.	2 mm
D_a - max.	271 mm
r_b - max.	1 mm
Calculation factor f	1.23
Calculation factor e	0.68
$r_{1,2}$ - min.	2.1 mm
$r_{3,4}$ - min.	1 mm
Calculation factor - e	0.68
Calculation factor - f	1.23
Ball diameter D_w	25.4 mm
Basic dynamic load rating C	199 kN
Preload class C G_C	5000 N
Preload class B G_B	2500 N
Preload class A G_A	1250 N
Preload class D G_D	10000 N
Basic dynamic load rating - C	199 kN
Preload class B - G_B	2500 N
Preload class D - G_D	10000 N
Preload class C - G_C	5000 N
Preload class A - G_A	1250 N
Fatigue load limit P_u	6.8 kN
Calculation factor f_1	0.98

Calculation factor f_{2A}	1
Calculation factor f_{2C}	1.12
Calculation factor f_{2B}	1.07
Calculation factor f_{2D}	1.17
Calculation factor f_{HC}	1.04
Calculation factor - X_2	0.67
Calculation factor - f_1	0.98
Calculation factor - Y_1	0.92
Limiting speed for oil lubrication	7500 mm/min
Calculation factor - Y_0	0.76
Fatigue load limit - P_u	6.8 kN
Calculation factor - Y_2	1.41
Calculation factor - f_{HC}	1.04
Calculation factor - f_{2A}	1
Calculation factor - f_{2C}	1.12
Calculation factor - f_{2B}	1.07
Calculation factor - f_{2D}	1.17
Limiting speed for grease lubrication	5000 r/min
Basic static load rating C_0	250 kN
Static axial stiffness, preload class B	704 N/ μ m
Attainable speed for grease lubrication	5000 r/min
Static axial stiffness, preload class D	1274 N/ μ m
Static axial stiffness, preload class C	938 N/ μ m
Static axial stiffness, preload class A	538 N/ μ m
Basic static load rating -	250 kN

C_0	
Attainable speed for oil-air lubrication	7500 r/min
Reference grease quantity G_{ref}	81 cm ³
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