



Bearing No. S7209 ACD/HCP4A

D	85 mm
d	45 mm
B	19 mm
a	24.8 mm
Ball - z	14
Size (mm)	85x45x19
Width (mm)	19
Mass bearing	0.35 kg
D ₂	75.7 mm
d ₂	57.3 mm
d ₁	57.3 mm
d ₂	57.3 mm
D ₂	75.7 mm
d ₁	57.3 mm
Bearing number	S7209 ACD/HCP4A
Preload class B	211 N/micron
Preload class A	162 N/micron
Preload class D	378 N/micron
Preload class C	280 N/micron
Number of balls z	14
r _b max.	0.6 mm
r _a max.	1 mm
D _b max.	80.8 mm
D _a max.	78 mm
d _b max.	56.5 mm
d _b min.	52 mm
d _a max.	56.5 mm
Bore Diameter (mm)	85
d _a min.	52 mm
Outer Diameter (mm)	45

d_a - max.	56.5 mm
d_a - min.	52 mm
Calculation factor e	0.68
Calculation factor f	1.07
d_b - max.	56.5 mm
D_b - max.	80.8 mm
r_a - max.	1 mm
r_b - max.	0.6 mm
d_b - min.	52 mm
$r_{3,4}$ min.	0.6 mm
$r_{1,2}$ min.	1.1 mm
Ball - D_w	12.7 mm
D_a - max.	78 mm
$r_{3,4}$ - min.	0.6 mm
$r_{1,2}$ - min.	1.1 mm
Calculation factor - f	1.07
Calculation factor - e	0.68
Ball diameter D_w	12.7 mm
Basic dynamic load rating C	41 kN
Preload class A G_A	260 N
Basic dynamic load rating - C	41 kN
Preload class B G_B	520 N
Preload class C G_C	1040 N
Preload class D G_D	2080 N
Preload class B - G_B	520 N
Preload class C - G_C	1040 N
Preload class A - G_A	260 N
Preload class D - G_D	2080 N
Calculation factor f_1	0.99
Fatigue load limit P_u	1.25 kN

Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.01
Calculation factor f_{2C}	1.03
Calculation factor f_{2D}	1.06
Calculation factor f_{HC}	1.01
Calculation factor - X_2	0.67
Calculation factor - Y_1	0.92
Calculation factor - Y_2	1.41
Fatigue load limit - P_u	1.2 kN
Calculation factor - Y_0	0.76
Calculation factor - f_1	0.99
Calculation factor - f_{HC}	1.01
Calculation factor - f_{2D}	1.06
Calculation factor - f_{2C}	1.03
Calculation factor - f_{2B}	1.01
Calculation factor - f_{2A}	1
Limiting speed for grease lubrication	17000 r/min
Basic static load rating C_0	30 kN
Static axial stiffness, preload class D	378 N/ μ m
Attainable speed for grease lubrication	17000 r/min
Static axial stiffness, preload class C	280 N/ μ m
Static axial stiffness, preload class B	211 N/ μ m
Static axial stiffness, preload class A	162 N/ μ m
Basic static load rating - C_0	30 kN

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