



Bearing No. S7205 ACD/HCP4A

D	52 mm
d	25 mm
B	15 mm
a	16.7 mm
Ball - z	13
Size (mm)	52x25x15
Width (mm)	15
Mass bearing	0.12 kg
D_2	45.9 mm
d_2	34.1 mm
d_1	34.1 mm
d_2	34.1 mm
D_2	45.9 mm
d_1	34.1 mm
Bearing number	S7205 ACD/HCP4A
Preload class B	102 N/micron
Preload class A	79 N/micron
Preload class D	175 N/micron
Preload class C	133 N/micron
Number of balls z	13
r_b max.	0.3 mm
r_a max.	1 mm
D_b max.	49.6 mm
D_a max.	46.4 mm
d_b max.	33.5 mm
d_b min.	30.6 mm
d_a max.	33.5 mm
Bore Diameter (mm)	52
d_a min.	30.6 mm
Outer Diameter (mm)	25

d_a - max.	33.5 mm
d_a - min.	30.6 mm
Calculation factor e	0.68
Calculation factor f	1.03
d_b - max.	33.5 mm
D_b - max.	49.6 mm
r_a - max.	1 mm
r_b - max.	0.3 mm
d_b - min.	30.6 mm
$r_{3,4}$ min.	0.3 mm
$r_{1,2}$ min.	1 mm
Ball - D_w	7.938 mm
D_a - max.	46.4 mm
$r_{3,4}$ - min.	0.3 mm
$r_{1,2}$ - min.	1 mm
Calculation factor - f	1.03
Calculation factor - e	0.68
Ball diameter D_w	7.938 mm
Basic dynamic load rating C	13 kN
Preload class A G_A	80 N
Basic dynamic load rating - C	13 kN
Preload class B G_B	160 N
Preload class C G_C	320 N
Preload class D G_D	640 N
Preload class B - G_B	160 N
Preload class C - G_C	320 N
Preload class A - G_A	80 N
Preload class D - G_D	640 N
Calculation factor f_1	0.99
Fatigue load limit P_u	0.29 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	0.29 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	32000 r/min
Basic static load rating C_0	6.95 kN
Static axial stiffness, preload class D	175 N/ μ m
Attainable speed for grease lubrication	32000 r/min
Static axial stiffness, preload class C	133 N/ μ m
Static axial stiffness, preload class B	102 N/ μ m
Static axial stiffness, preload class A	79 N/ μ m
Basic static load rating - C_0	7 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