



Bearing No. S7210 ACD/HCP4A

D	90 mm
d	50 mm
B	20 mm
a	26.4 mm
Ball - z	15
Size (mm)	90x50x20
Width (mm)	20
Mass bearing	0.39 kg
D ₂	80.7 mm
d ₂	62.3 mm
d ₁	62.3 mm
d ₂	62.3 mm
D ₂	80.7 mm
d ₁	62.3 mm
Bearing number	S7210 ACD/HCP4A
Preload class B	223 N/micron
Preload class A	171 N/micron
Preload class D	398 N/micron
Preload class C	295 N/micron
Number of balls z	15
r _b max.	0.6 mm
r _a max.	1 mm
D _b max.	85.8 mm
D _a max.	83 mm
d _b max.	61.5 mm
d _b min.	57 mm
d _a max.	61.5 mm
Bore Diameter (mm)	90
d _a min.	57 mm
Outer Diameter (mm)	50

d _a - max.	61.5 mm
d _a - min.	57 mm
Calculation factor e	0.68
Calculation factor f	1.08
d _b - max.	61.5 mm
D _b - max.	85.8 mm
r _a - max.	1 mm
r _b - max.	0.6 mm
d _b - min.	57 mm
r _{3,4} min.	0.6 mm
r _{1,2} min.	1.1 mm
Ball - D _w	12.7 mm
D _a - max.	83 mm
r _{3,4} - min.	0.6 mm
r _{1,2} - min.	1.1 mm
Calculation factor - f	1.08
Calculation factor - e	0.68
Ball diameter D _w	12.7 mm
Basic dynamic load rating C	42.3 kN
Preload class A G _A	265 N
Basic dynamic load rating - C	42.3 kN
Preload class B G _B	530 N
Preload class C G _C	1060 N
Preload class D G _D	2120 N
Preload class B - G _B	530 N
Preload class C - G _C	1060 N
Preload class A - G _A	265 N
Preload class D - G _D	2120 N
Calculation factor f ₁	0.99
Fatigue load limit P _u	1.37 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	1.4 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	16000 r/min
Basic static load rating C_0	32.5 kN
Static axial stiffness, preload class D	398 N/ μ m
Attainable speed for grease lubrication	16000 r/min
Static axial stiffness, preload class C	295 N/ μ m
Static axial stiffness, preload class B	223 N/ μ m
Static axial stiffness, preload class A	171 N/ μ m
Basic static load rating - C_0	32.5 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