



Bearing No. S7005 ACD/P4A

D	47 mm
d	25 mm
B	12 mm
a	14.5 mm
Ball - z	14
Size (mm)	47x25x12
Width (mm)	12
Mass bearing	0.079 kg
D <sub>2</sub>	42.17 mm
d <sub>2</sub>	32.1 mm
d <sub>1</sub>	32.1 mm
d <sub>2</sub>	32.1 mm
D <sub>2</sub>	42.17 mm
d <sub>1</sub>	32.1 mm
Bearing number	S7005 ACD/P4A
Preload class B	83 N/micron
Preload class A	64 N/micron
Preload class D	143 N/micron
Preload class C	108 N/micron
Number of balls z	14
r <sub>b</sub> max.	0.3 mm
r <sub>a</sub> max.	0.6 mm
D <sub>b</sub> max.	45 mm
D <sub>a</sub> max.	43.8 mm
d <sub>b</sub> max.	31.6 mm
d <sub>b</sub> min.	28.2 mm
d <sub>a</sub> max.	31.6 mm
Bore Diameter (mm)	47
d <sub>a</sub> min.	28.2 mm
Outer Diameter (mm)	25

$d_a$ - max.	31.6 mm
$d_a$ - min.	28.2 mm
Calculation factor e	0.68
Calculation factor f	1.05
$d_b$ - max.	31.6 mm
$D_b$ - max.	45 mm
$r_a$ - max.	0.6 mm
$r_b$ - max.	0.3 mm
$d_b$ - min.	28.2 mm
$r_{3,4}$ min.	0.3 mm
$r_{1,2}$ min.	0.6 mm
Ball - $D_w$	6.35 mm
$D_a$ - max.	43.8 mm
$r_{3,4}$ - min.	0.3 mm
$r_{1,2}$ - min.	0.6 mm
Calculation factor - f	1.05
Calculation factor - e	0.68
Ball diameter $D_w$	6.35 mm
Basic dynamic load rating C	9.23 kN
Preload class A $G_A$	60 N
Basic dynamic load rating - C	9.2 kN
Preload class B $G_B$	120 N
Preload class C $G_C$	240 N
Preload class D $G_D$	480 N
Preload class B - $G_B$	120 N
Preload class C - $G_C$	240 N
Preload class A - $G_A$	60 N
Preload class D - $G_D$	480 N
Calculation factor $f_1$	0.99
Fatigue load limit $P_u$	0.212 kN

Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.02
Calculation factor $f_{2C}$	1.05
Calculation factor $f_{2D}$	1.08
Calculation factor $f_{HC}$	1
Calculation factor - $X_2$	0.67
Calculation factor - $Y_1$	0.92
Calculation factor - $Y_2$	1.41
Fatigue load limit - $P_u$	0.212 kN
Calculation factor - $Y_0$	0.76
Calculation factor - $f_1$	0.99
Calculation factor - $f_{HC}$	1
Calculation factor - $f_{2D}$	1.08
Calculation factor - $f_{2C}$	1.05
Calculation factor - $f_{2B}$	1.02
Calculation factor - $f_{2A}$	1
Limiting speed for grease lubrication	34000 r/min
Basic static load rating $C_0$	5 kN
Static axial stiffness, preload class D	143 N/ $\mu$ m
Attainable speed for grease lubrication	34000 r/min
Static axial stiffness, preload class C	108 N/ $\mu$ m
Static axial stiffness, preload class B	83 N/ $\mu$ m
Static axial stiffness, preload class A	64 N/ $\mu$ m
Basic static load rating - $C_0$	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