



Bearing No. 71806 ACD/HCP4

D	42 mm
d	30 mm
B	7 mm
a	11.9 mm
Ball - z	23
Size (mm)	42x30x7
Width (mm)	7
Mass bearing	0.024 kg
$d_n$	34.5 mm
$d_n$	34.5 mm
$D_1$	38.1 mm
$d_1$	34.1 mm
$d_2$	34.1 mm
$D_1$	38.1 mm
$d_2$	34.1 mm
$d_1$	34.1 mm
Bearing number	71806 ACD/HCP4
Preload class A	76 N/micron
$G_{ref}$	0.24 cm <sup>3</sup>
Preload class C	160 N/micron
Preload class B	117 N/micron
Number of balls z	23
Bore Diameter (mm)	42
$r_b$ max.	0.15 mm
$r_a$ max.	0.3 mm
$D_b$ max.	41.2 mm
$D_a$ max.	40 mm
$d_a$ min.	32 mm
$d_b$ min.	32 mm

Outer Diameter (mm)	30
D <sub>b</sub> - max.	41.2 mm
d <sub>a</sub> - min.	32 mm
Calculation factor e	0.68
Calculation factor f	1.14
r <sub>b</sub> - max.	0.15 mm
D <sub>a</sub> - max.	40 mm
r <sub>a</sub> - max.	0.3 mm
r <sub>3,4</sub> min.	0.15 mm
r <sub>1,2</sub> min.	0.3 mm
Ball - D <sub>w</sub>	3.175 mm
d <sub>b</sub> - min.	32 mm
r <sub>1,2</sub> - min.	0.3 mm
r <sub>3,4</sub> - min.	0.15 mm
Calculation factor - e	0.68
Calculation factor - f	1.14
Basic dynamic load rating C	4.16 kN
Ball diameter D <sub>w</sub>	3.175 mm
Preload class B G <sub>B</sub>	110 N
Preload class C G <sub>C</sub>	220 N
Basic dynamic load rating - C	4.2 kN
Preload class A G <sub>A</sub>	37 N
Preload class B - G <sub>B</sub>	110 N
Preload class C - G <sub>C</sub>	220 N
Preload class A - G <sub>A</sub>	37 N
Fatigue load limit P <sub>u</sub>	0.15 kN
Calculation factor f <sub>1</sub>	0.97
Calculation factor f <sub>2C</sub>	1.17
Calculation factor f <sub>2A</sub>	1
Calculation factor f <sub>HC</sub>	1.02

Calculation factor $f_{2B}$	1.09
Limiting speed for oil lubrication	53000 mm/min
Fatigue load limit - $P_u$	0.15 kN
Calculation factor - $f_1$	0.97
Calculation factor - $Y_2$	1.41
Calculation factor - $X_2$	0.67
Calculation factor - $Y_1$	0.92
Calculation factor - $Y_0$	0.76
Calculation factor - $f_{HC}$	1.02
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2C}$	1.17
Calculation factor - $f_{2B}$	1.09
Limiting speed for grease lubrication	34000 r/min
Basic static load rating $C_0$	3.55 kN
Static axial stiffness, preload class B	117 N/ $\mu$ m
Static axial stiffness, preload class A	76 N/ $\mu$ m
Attainable speed for grease lubrication	34000 r/min
Static axial stiffness, preload class C	160 N/ $\mu$ m
Basic static load rating - $C_0$	3.6 kN
Attainable speed for oil-air lubrication	53000 r/min
Reference grease quantity $G_{ref}$	0.24 cm <sup>3</sup>
Calculation factor (single, tandem) $Y_2$	0.87
Calculation factor	0.38

(single, tandem) $Y_0$	
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