



**Bearing No. 71809 CD/P4**

D	58 mm
d	45 mm
B	7 mm
a	10.4 mm
Ball - z	31
Size (mm)	58x45x7
Width (mm)	7
Mass bearing	0.039 kg
d <sub>n</sub>	50 mm
d <sub>n</sub>	50 mm
D <sub>1</sub>	53.6 mm
d <sub>1</sub>	49.6 mm
d <sub>2</sub>	49.6 mm
D <sub>1</sub>	53.6 mm
d <sub>2</sub>	49.6 mm
d <sub>1</sub>	49.6 mm
Bearing number	71809 CD/P4
Preload class A	38 N/micron
Preload class B	65 N/micron
Preload class C	95 N/micron
G <sub>ref</sub>	0.36 cm <sup>3</sup>
Number of balls z	31
D <sub>a</sub> max.	56 mm
d <sub>a</sub> min.	47 mm
d <sub>b</sub> min.	47 mm
D <sub>b</sub> max.	57.2 mm
r <sub>a</sub> max.	0.3 mm
r <sub>b</sub> max.	0.15 mm
Bore Diameter (mm)	58

Outer Diameter (mm)	45
$d_a$ - min.	47 mm
$r_a$ - max.	0.3 mm
$r_{1,2}$ min.	0.3 mm
Calculation factor f	1.24
$D_b$ - max.	57.2 mm
$r_{3,4}$ min.	0.15 mm
$r_b$ - max.	0.15 mm
$D_a$ - max.	56 mm
Ball - $D_w$	3.175 mm
$d_b$ - min.	47 mm
Calculation factor - f	1.24
$r_{3,4}$ - min.	0.15 mm
$r_{1,2}$ - min.	0.3 mm
Basic dynamic load rating C	4.88 kN
Ball diameter $D_w$	3.175 mm
Preload class B $G_B$	80 N
Preload class A $G_A$	27 N
Basic dynamic load rating - C	4.9 kN
Preload class C $G_C$	160 N
Preload class A - $G_A$	27 N
Preload class C - $G_C$	160 N
Preload class B - $G_B$	80 N
Calculation factor $f_1$	1
Fatigue load limit $P_u$	0.224 kN
Calculation factor $f_0$	17.4
Calculation factor $f_{2C}$	1.16
Calculation factor $f_{2B}$	1.09
Calculation factor $f_{2A}$	1
Calculation factor $f_{HC}$	1

Calculation factor - $f$	1
Fatigue load limit - $P_u$	0.224 kN
Calculation factor - $f_0$	17.4
Limiting speed for oil lubrication	34000 mm/min
Calculation factor - $f_{2B}$	1.09
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2C}$	1.16
Calculation factor - $f_{HC}$	1
Limiting speed for grease lubrication	22000 r/min
Basic static load rating $C_0$	5.3 kN
Static axial stiffness, preload class A	38 N/ $\mu$ m
Static axial stiffness, preload class B	65 N/ $\mu$ m
Static axial stiffness, preload class C	95 N/ $\mu$ m
Attainable speed for grease lubrication	22000 r/min
Attainable speed for oil-air lubrication	34000 r/min
Basic static load rating - $C_0$	5.3 kN
Reference grease quantity $G_{ref}$	0.36 cm <sup>3</sup>