



**Bearing No. 71805 CD/HCP4**

D	37 mm
d	25 mm
B	7 mm
a	7.7 mm
Ball - z	20
Size (mm)	37x25x7
Width (mm)	7
Mass bearing	0.019 kg
d <sub>n</sub>	29.5 mm
d <sub>n</sub>	29.5 mm
D <sub>1</sub>	33.1 mm
d <sub>1</sub>	29.1 mm
d <sub>2</sub>	29.1 mm
D <sub>1</sub>	33.1 mm
d <sub>2</sub>	29.1 mm
d <sub>1</sub>	29.1 mm
Bearing number	71805 CD/HCP4
Preload class A	29 N/micron
Preload class B	49 N/micron
Preload class C	71 N/micron
G <sub>ref</sub>	0.21 cm <sup>3</sup>
Number of balls z	20
D <sub>a</sub> max.	35 mm
d <sub>a</sub> min.	27 mm
d <sub>b</sub> min.	27 mm
D <sub>b</sub> max.	36.2 mm
r <sub>a</sub> max.	0.3 mm
r <sub>b</sub> max.	0.15 mm
Bore Diameter (mm)	37

Outer Diameter (mm)	25
$d_a$ - min.	27 mm
$r_a$ - max.	0.3 mm
$r_{1,2}$ min.	0.3 mm
Calculation factor f	1.11
$D_b$ - max.	36.2 mm
$r_{3,4}$ min.	0.15 mm
$r_b$ - max.	0.15 mm
$D_a$ - max.	35 mm
Ball - $D_w$	3.175 mm
$d_b$ - min.	27 mm
Calculation factor - f	1.11
$r_{3,4}$ - min.	0.15 mm
$r_{1,2}$ - min.	0.3 mm
Basic dynamic load rating C	4.16 kN
Ball diameter $D_w$	3.175 mm
Preload class B $G_B$	66 N
Preload class A $G_A$	22 N
Basic dynamic load rating - C	4.2 kN
Preload class C $G_C$	132 N
Preload class A - $G_A$	22 N
Preload class C - $G_C$	132 N
Preload class B - $G_B$	66 N
Calculation factor $f_1$	1
Fatigue load limit $P_u$	0.137 kN
Calculation factor $f_0$	16.4
Calculation factor $f_{2C}$	1.18
Calculation factor $f_{2B}$	1.1
Calculation factor $f_{2A}$	1
Calculation factor $f_{HC}$	1.02

Calculation factor - $f$	1
Fatigue load limit - $P_u$	0.137 kN
Calculation factor - $f_0$	16.4
Limiting speed for oil lubrication	70000 mm/min
Calculation factor - $f_{2B}$	1.1
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2C}$	1.18
Calculation factor - $f_{HC}$	1.02
Limiting speed for grease lubrication	45000 r/min
Basic static load rating $C_0$	3.2 kN
Static axial stiffness, preload class A	29 N/ $\mu$ m
Static axial stiffness, preload class B	49 N/ $\mu$ m
Static axial stiffness, preload class C	71 N/ $\mu$ m
Attainable speed for grease lubrication	45000 r/min
Attainable speed for oil-air lubrication	70000 r/min
Basic static load rating - $C_0$	3.2 kN
Reference grease quantity $G_{ref}$	0.21 cm <sup>3</sup>