



# Timken MANUFACTURING (THAILAND)CO.,LTD.



71820 ACD/P4 Bearing 2D drawings and 3D CAD models

100 mm x 125 mm x 13 mm SKF 71820  
ACD/P4 angular contact ball bearings

Bearing No. 71820 ACD/P4

Size	125x100x13 mm
Bore Diameter	125 mm
Outer Diameter	100 mm
Width	13 mm
d	100 mm
D	125 mm
B	13 mm
d <sub>1</sub>	108.2 mm
d <sub>2</sub>	108.2 mm
D <sub>1</sub>	117 mm
r <sub>1,2</sub> - min.	1 mm
r <sub>3,4</sub> - min.	0.3 mm
a	32.8 mm
d <sub>a</sub> - min.	104.6 mm
d <sub>b</sub> - min.	104.6 mm
D <sub>a</sub> - max.	120.4 mm
D <sub>b</sub> - max.	123 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.3 mm
d <sub>n</sub>	109.1 mm
Basic dynamic load rating - C	21.2 kN
Basic static load rating - C <sub>0</sub>	27.5 kN
Fatigue load limit - P <sub>u</sub>	1.1 kN
Limiting speed for grease	8500 r/min



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Lubrication	
Limiting speed for oil lubrication	13000 mm/min
Ball - $D_w$	7.144 mm
Ball - $z$	34
$G_{ref}$	3.2 cm <sup>3</sup>
Calculation factor - $e$	0.68
Calculation factor - $Y_2$	0.87
Calculation factor - $Y_0$	0.38
Calculation factor - $X_2$	0.41
Calculation factor - $Y_1$	0.92
Calculation factor - $Y_2$	1.41
Calculation factor - $Y_0$	0.76
Calculation factor - $X_2$	0.67
Preload class A - $G_A$	190 N
Preload class B - $G_B$	570 N
Preload class C - $G_C$	1140 N
Calculation factor - $f$	1.4
Calculation factor - $f_1$	0.97
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.08
Calculation factor - $f_{2C}$	1.15
Calculation factor - $f_{HC}$	1
Preload class A	211 N/micron
Preload class B	335 N/micron
Preload class C	462 N/micron
$d_1$	108.2 mm
$d_2$	108.2 mm
$D_1$	117 mm
$r_{1,2}$ min.	1 mm



# Timken MANUFACTURING (THAILAND)CO.,LTD.

$r_{3,4}$ min.	0.3 mm
$d_a$ min.	104.6 mm
$d_b$ min.	104.6 mm
$D_a$ max.	120.4 mm
$D_b$ max.	123 mm
$r_a$ max.	1 mm
$r_b$ max.	0.3 mm
$d_n$	109.1 mm
Basic dynamic load rating C	21.2 kN
Basic static load rating $C_0$	27.5 kN
Fatigue load limit $P_u$	1.1 kN
Attainable speed for grease lubrication	8500 r/min
Attainable speed for oil-air lubrication	13000 r/min
Ball diameter $D_w$	7.144 mm
Number of balls z	34
Reference grease quantity $G_{ref}$	3.2 cm <sup>3</sup>
Preload class A $G_A$	190 N
Static axial stiffness, preload class A	211 N/ $\mu$ m
Preload class B $G_B$	570 N
Static axial stiffness, preload class B	335 N/ $\mu$ m
Preload class C $G_C$	1140 N
Static axial stiffness, preload class C	462 N/ $\mu$ m
Calculation factor f	1.4
Calculation factor $f_1$	0.97
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.08
Calculation factor $f_{2C}$	1.15
Calculation factor $f_{HC}$	1



## Timken MANUFACTURING (THAILAND)CO.,LTD.

Calculation factor e	0.68
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
Mass bearing	0.31 kg