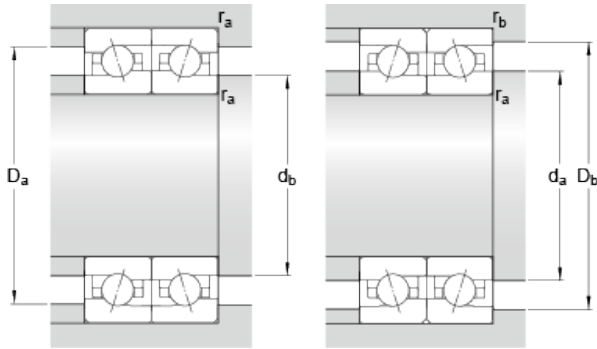




# SKF DRIVESHAFT CORP



50 mm x 80 mm x 16 mm skf 7010  
ACE/HCP4BVG275 Super-precision Angular  
contact ball bearings

Bearing No. 7010 ACE/HCP4BVG275

7010 ACE/HCP4BVG275 Bearing 2D drawings and 3D  
CAD models

d	50 mm
D	80 mm
B	16 mm
d <sub>1</sub>	60.25 mm
d <sub>2</sub>	57.9 mm
D <sub>1</sub>	69.75 mm
r <sub>1,2</sub> min.	1 mm
r <sub>3,4</sub> min.	0.6 mm
a	23.3 mm
d <sub>a</sub> min.	54.6 mm
d <sub>b</sub> min.	54.6 mm
D <sub>a</sub> max.	75.4 mm
D <sub>b</sub> max.	75.8 mm
r <sub>a</sub> max.	1 mm
r <sub>b</sub> max.	0.6 mm
Basic dynamic load rating C	14.8 kN
Basic static load rating C <sub>0</sub>	10 kN
Fatigue load limit P <sub>u</sub>	0.425 kN
Attainable speed for grease lubrication	27000 r/min
Ball diameter D <sub>w</sub>	7.938 mm
Number of balls z	21
Reference grease quantity G <sub>ref</sub>	4.1 cm <sup>3</sup>
Preload class A G <sub>A</sub>	130 N



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Static axial stiffness, preload class A	115 N/ $\mu$ m
Preload class B $G_B$	400 N
Static axial stiffness, preload class B	173 N/ $\mu$ m
Preload class C $G_C$	800 N
Static axial stiffness, preload class C	227 N/ $\mu$ m
Calculation factor $f$	1.08
Calculation factor $f_1$	0.99
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.03
Calculation factor $f_{2C}$	1.06
Calculation factor $f_{HC}$	1.01
Calculation factor $e$	0.68
Calculation factor (single, tandem) $Y_2$	0.87
Calculation factor (back-to-back, face-to-face) $Y_1$	0.92
Calculation factor (back-to-back, face-to-face) $Y_2$	1.41
Mass bearing	0.23 kg