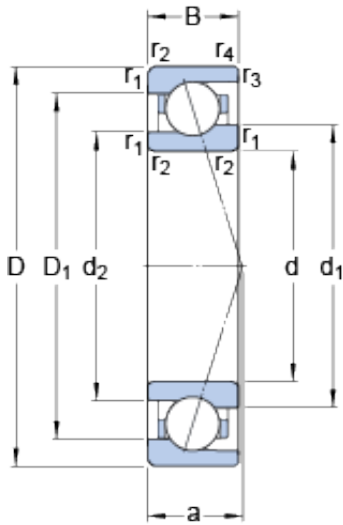




# GARLOCK BEARINGS LTD



71906 ACE/HCP4A Bearing 2D drawings and 3D CAD models

## 71906 ACE/HCP4A SKF High Speed Angular Contact Ball Bearings

Bearing No. 71906 ACE/HCP4A

Size	47x30x9 mm
Bore Diameter	47 mm
Outer Diameter	30 mm
Width	9 mm
$d$	30 mm
$D$	47 mm
$B$	9 mm
$d_1$	35.8 mm
$d_2$	34.4 mm
$D_1$	41.39 mm
$r_{1,2}$ - min.	0.3 mm
$r_{3,4}$ - min.	0.15 mm
$a$	14.3 mm
$d_a$ - min.	32 mm
$d_b$ - min.	32 mm
$D_a$ - max.	45 mm
$D_b$ - max.	46.2 mm
$r_a$ - max.	0.3 mm
$r_b$ - max.	0.15 mm
$d_n$	36.8 mm
Basic dynamic load rating - C	5.3 kN
Basic static load rating - $C_0$	3.1 kN
Fatigue load limit - $P_u$	0.132 kN
Limiting speed for grease	44000 r/min



## GARLOCK BEARINGS LTD

Lubrication	
Limiting speed for oil lubrication	70000 mm/min
Ball - $D_w$	4.762 mm
Ball - $z$	18
$G_{ref}$	0.6 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 - $G_A$	48 N
Preload class B - $G_B$	145 N
Preload class C - $G_C$	290 N
Calculation factor - $f$	1.08
Calculation factor - $f_1$	0.98
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.04
Calculation factor - $f_{2C}$	1.08
Calculation factor - $f_{HC}$	1.01
Preload class A	61 N/micron
Preload class B	94 N/micron
Preload class C	123 N/micron
$d_1$	35.8 mm
$d_2$	34.4 mm
$D_1$	41.39 mm
$r_{1,2}$ min.	0.3 mm



## GARLOCK BEARINGS LTD

$r_{3,4}$ min.	0.15 mm
$d_a$ min.	32 mm
$d_b$ min.	32 mm
$D_a$ max.	45 mm
$D_b$ max.	46.2 mm
$r_a$ max.	0.3 mm
$r_b$ max.	0.15 mm
$d_n$	36.8 mm
Basic dynamic load rating C	5.27 kN
Basic static load rating $C_0$	3.1 kN
Fatigue load limit $P_u$	0.132 kN
Attainable speed for grease lubrication	44000 r/min
Attainable speed for oil-air lubrication	70000 r/min
Ball diameter $D_w$	4.762 mm
Number of balls z	18
Reference grease quantity $G_{ref}$	0.6 cm <sup>3</sup>
Preload class A $G_A$	48 N
Static axial stiffness, preload class A	61 N/ $\mu$ m
Preload class B $G_B$	145 N
Static axial stiffness, preload class B	94 N/ $\mu$ m
Preload class C $G_C$	290 N
Static axial stiffness, preload class C	123 N/ $\mu$ m
Calculation factor f	1.08
Calculation factor $f_1$	0.98
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.04
Calculation factor $f_{2C}$	1.08
Calculation factor $f_{HC}$	1.01



## GARLOCK BEARINGS 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	0.045 kg