



**Bearing No. 7004 ACE/HCP4A**

a	13.2 mm
d	20 mm
D	42 mm
B	12 mm
C	12 mm
dh	28,1 mm
D2	36,5 mm
d1	26,6 mm
d2	24,8 mm
D1	36,5 mm
Db max	39,6 mm
db min	22 mm
Weight	0,056 Kg
rb max.	0,3 mm
ra max.	0,6 mm
Da max.	40 mm
r4 min.	0,3 mm
da min.	22 mm
r3 min.	0,3 mm
r2 min.	0,6 mm
r1 min.	0,6 mm
Size (mm)	20x42x12
Width (mm)	12
Mass bearing	0.056 kg
d <sub>1</sub>	26.6 mm
d <sub>n</sub>	28.1 mm
D <sub>1</sub>	34.21 mm
d <sub>2</sub>	24.8 mm
Bearing number	7004 ACE/HCP4A
Number of balls z	12

$d_a$ min.	22 mm
$d_b$ min.	22 mm
$D_a$ max.	40 mm
$D_b$ max.	39.6 mm
$r_a$ max.	0.6 mm
$r_b$ max.	0.3 mm
Bore Diameter (mm)	20
Outer Diameter (mm)	42
Calculation factor e	0.68
Calculation factor f	1.04
$r_{1,2}$ min.	0.6 mm
$r_{3,4}$ min.	0.3 mm
(Oil) Lubrication Speed	88 000 r/min
Fatigue load limit (Pu)	0,137
(Grease) Lubrication Speed	58 000 r/min
Ball diameter $D_w$	6.35 mm
Basic dynamic load rating C	7.15 kN
Basic dynamic load rating (C)	7,15 kN
Preload class A $G_A$	64 N
Preload class B $G_B$	193 N
Preload class C $G_C$	390 N
Basic static load rating (C0)	3,25 kN
Calculation factor $f_1$	0.99
Fatigue load limit $P_u$	0.137 kN
Calculation factor $f_{HC}$	1.01
Calculation factor $f_{2C}$	1.06
Calculation factor $f_{2B}$	1.03
Calculation factor $f_{2A}$	1
Basic static load rating $C_0$	3.25 kN

Static axial stiffness, preload class C	113 N/ $\mu$ m
Static axial stiffness, preload class B	86 N/ $\mu$ m
Static axial stiffness, preload class A	58 N/ $\mu$ m
Attainable speed for grease lubrication	58000 r/min
Attainable speed for oil-air lubrication	88000 r/min
Reference grease quantity $G_{ref}$	1.1 cm <sup>3</sup>
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