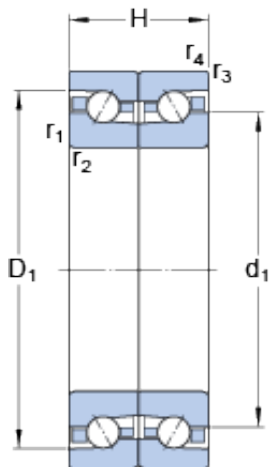




# SUPER PRECISION BEARINGS MANUFACTURER



## SKF BTM 90 BTN9/HCP4CDB Precision Miniature Bearings

Bearing No. BTM 90 BTN9/HCP4CDB

Size	90x140x45 mm
Bore Diameter	90 mm
Outer Diameter	140 mm
Width	45 mm
d	90 mm
D	140 mm
H	45 mm
d <sub>1</sub>	113 mm
D <sub>1</sub>	127.1 mm
r <sub>1,2</sub> - min.	1.5 mm
r <sub>3,4</sub> - min.	1 mm
d <sub>a</sub> - min.	97 mm
D <sub>a</sub> - max.	135 mm
r <sub>a</sub> - max.	1.5 mm
r <sub>b</sub> - max.	1 mm
d <sub>n</sub>	109.7 mm
Basic dynamic load rating - C	46.5 kN
Basic static load rating - C <sub>0</sub>	102 kN
Fatigue load limit - P <sub>u</sub>	4 kN
Limiting speed for grease lubrication	7400 r/min
Limiting speed for oil lubrication	8800 mm/min
Preload class A	550 N
Preload class B	1650 N

BTM 90 BTN9/HCP4CDB Bearing 2D drawings and 3D CAD models



## SUPER PRECISION BEARINGS MANUFACTURER

Static Axial rigidity, Preload class A	550 N/micron
Static Axial rigidity, Preload class B	829 N/micron
$G_{ref}$	22 cm
$d_1$	113 mm
$D_1$	127.1 mm
$r_{1,2}$ min.	1.5 mm
$r_{3,4}$ min.	1 mm
$d_a$ min.	97 mm
$D_a$ max.	135 mm
$r_a$ max.	1.5 mm
$r_b$ max.	1 mm
$d_n$	109.7 mm
Basic dynamic load rating C	46.5 kN
Basic static load rating $C_0$	102 kN
Fatigue load limit $P_u$	4 kN
Attainable speed for grease lubrication	7400 r/min
Attainable speed for oil-air lubrication	8800 r/min
Static axial stiffness for preload A	550 N/ $\mu$ m
Static axial stiffness for preload B	829 N/ $\mu$ m
Reference grease quantity $G_{ref}$	22 cm <sup>3</sup>
Mass bearing	2.3 kg