



BEARINGS(UK)LTD.

120 mm x 180 mm x 28 mm SNR
7024HVQ21J94 High precision angular contact
ball bearings

Bearing No. 7024HVQ21J94

d	120 mm
D	180 mm
B	28 mm
d1	139.4 mm
D1	160.6 mm
D2	168.91 mm
a	49 mm
Contact angle	25 °
rs min	2 mm
r1s min	1 mm
f0	16.27
Precision class	P4
Mass	2.13 kg
Dynamic load, C	94.8 kN
Static load, C0	103 kN
Fatigue limit load, Cu	4.75 kN
Nlim (oil)	10,500 rpm
Nlim (grease)	7,000 rpm
Axial displacement K Factor	0.43
Preload level	7
Preload value	1.16 kN
Axial rigidity	309 N/ μ m
Radial rigidity	672 N/ μ m
Min operating temperature, Tmin	-30 ° C

7024HVQ21J94 Bearing 2D drawings and 3D CAD
models



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Max operating temperature, Tmax	120 ° C
Characteristic cage frequency, FTF	0.45 Hz
Characteristic rolling element frequency, BSF	8.49 Hz
Characteristic outer ring frequency, BPF0	10.29 Hz
Characteristic inner ring frequency, BRFI	12.71 Hz
da min	130 mm
db min	130 mm
Da max	170 mm
Db max	170 mm
r1a max	1 mm
ra max	2 mm
D6	145 mm