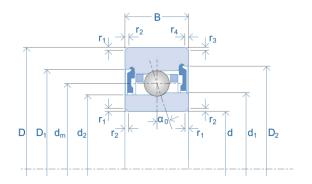


Data Sheet High Precision Ball Bearings





Part Number	KH 6014 E TA
Bearing Size	6014

D_a d_b d_a d_T D_b

Bearing Series	КН
Hybrid (Si ₃ N ₄ Balls)	No

Bearing Dimensions

Bore Diameter	d [mm]	70
Outer Diameter	D [mm]	110
Bearing Width	B [mm]	20
Pitch Circle	d _m [mm]	90.0
Ball Diameter	D _w [mm]	9.525
OD Inner Ring	d ₁ [mm]	82.6
OD Inner Ring (Open Side)	d ₂ [mm]	81.1
ID Outer Ring	D ₁ [mm]	96.7
ID Outer Ring (Open Side)	D ₂ [mm]	100.8
Chamfer	r _{1,2} [mm]	1.1
Chamfer (Open Side)	r _{3,4} [mm]	1.0

Geometrical Data

Number of Balls	Z [Qty.]	24
Contact Angle	α ₀ [°]	25
Bearing Weight	m [kg]	0.593

Bearing Load Ratings

Dynamic Radial Load Rating	C [N]	22,700
Static Radial Load Rating Steel Balls	C ₀ [N]	16,400
Static Radial Load Rating Si ₃ N ₄ balls	C _{0 HY} [N]	11,500

Mating Part Dimensions

Abutment Diameter Inner Ring	d _{a,b} min. [mm]	77.0
Abutment Diameter Outer Ring	D _{a,b} max. [mm]	102.0
Chamfer Associated Component	r _a max. [mm]	1.1
Chamfer Associated Component (Open Side)	r _b max. [mm]	0.6

Bearing RPM Ratings

Speed Value with Oil Lubrication	n _{oil} [1/min]	21,500
Speed Value with Grease Lubrication	n _{grease} [1/min]	16,000

Bearing Preload Data

Light Pre-Load	Fv [N]	190
Light Axial Rigidity	C _{ax} [N/µm]	143
Medium Pre-Load	F _v [N]	570
Medium Axial Rigidity	C _{ax} [N/µm]	211
Heavy Pre-Load	F _v [N]	1,150
Heavy Axial Rigidity	C _{ax} [N/µm]	274
Minimum Spring Pre-Load	F _f [N]	1,080

Notes:

- 1. Position of the oiling Nozzle (d_T) for bearings with TA cage/ TXM cage upon request
- 2. The stated load and speed values are given for a spring preloaded single bearing with oil/air or oil mist lubrication. If specific applications differ, please consult correction factors and/or GMN USA engineers.