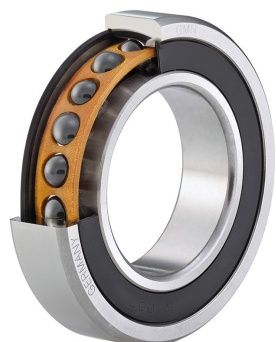


Spindle ball bearing HY KH 6014 E TA P4+

08.05.2024



Components

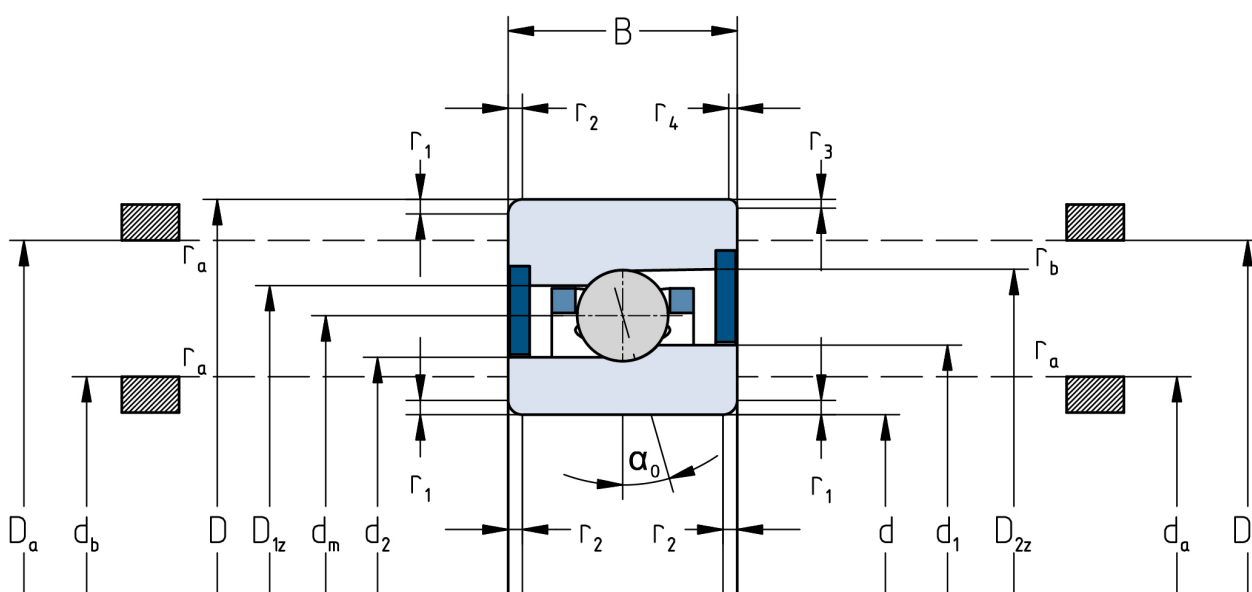
Bearing designation:	HY KH 6014 E TA
Bearing design:	KH
Series / size:	6014
Ball material:	Ceramic
Cage:	TA
Seal:	2RZ optional (with grease)
Precision:	P4+
Main dimensions [d x D x B]:	70 x 110 x 20 mm

Load data

Static load capacity	C_{0r} : 15900 N
Dynamic load capacity	C_r : 22700 N
Fatigue load limit	C_U : 600 N
Speed limit	n_{grease} : 20250 1/min
Speed limit	n_{oil} : 27000 1/min
Light preload	L: 190 N
Axial rigidity	C_{ax} : 159 N/μm
Medium preload	M: 570 N
Axial rigidity	C_{ax} : 234 N/μm
Heavy preload	S: 1150 N
Axial rigidity	C_{ax} : 303 N/μm
Spring preload	Ff: 1140 N (for n_{max})

Geometrical Data

Bore diameter	d: 70 mm	Oiling nozzle position	d_T : 85.7 mm
Outer diameter	D: 110 mm	Pitch circle diameter	d_m : 88.3 mm
Width of single bearing	B: 20 mm	Inner diameter of outer ring	D_1 : 94 mm
Ball diameter	D_w : 9.525 mm	Undercut of associated component	$r_{a \max}$: 1 mm
Number of balls	Z: 24	Undercut of associated component (open side)	$r_{b \max}$: 1 mm
Chamfer (min)	$r_{1,2 \min}$: 1.1 mm	Abutment diameter inner ring	$d_{a,b \min}$: 76.3 mm
Chamfer (min), open side	$r_{3,4 \min}$: 1 mm	Abutment diameter outer ring	$D_{a,b \max}$: 104.6 mm
Outer diameter of inner ring	d_1 : 82.6 mm	Inner diameter of outer ring (open side)	D_2 : 98 mm
Outer diameter of inner ring (open side)	d_2 : 81.1 mm	Bearing weight	m: 0.58 kg
		Contact angle	Alpha 0: 25°



The given speed limits apply to individual bearings with spring preload. Correction factors must be considered for all properties which deviate from this.