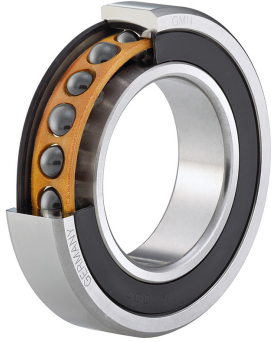


# Spindle ball bearing HY KH 6014 C TA P4+

16.07.2024



## Components

Bearing designation:	HY KH 6014 C 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	$C_{0r}$ : 16600 N
Dynamic load capacity	$C_r$ : 23700 N
Fatigue load limit	$C_U$ : 629 N
Speed limit	$n_{grease}$ : 22125 1/min
Speed limit	$n_{oil}$ : 29500 1/min
Light preload	L: 120 N
Axial rigidity	$C_{ax}$ : 75 N/ $\mu$ m
Medium preload	M: 360 N
Axial rigidity	$C_{ax}$ : 114 N/ $\mu$ m
Heavy preload	S: 720 N
Axial rigidity	$C_{ax}$ : 150 N/ $\mu$ m
Spring preload	Ff: 780 N (for $n_{max}$ )

## Geometrical Data

Bore diameter	d: 70 mm	Oiling nozzle position	$d_7$ : 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: 17°



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