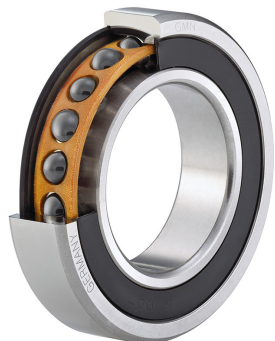


Spindle ball bearing HY KH 61914 E TA P4+

08.05.2024



Components

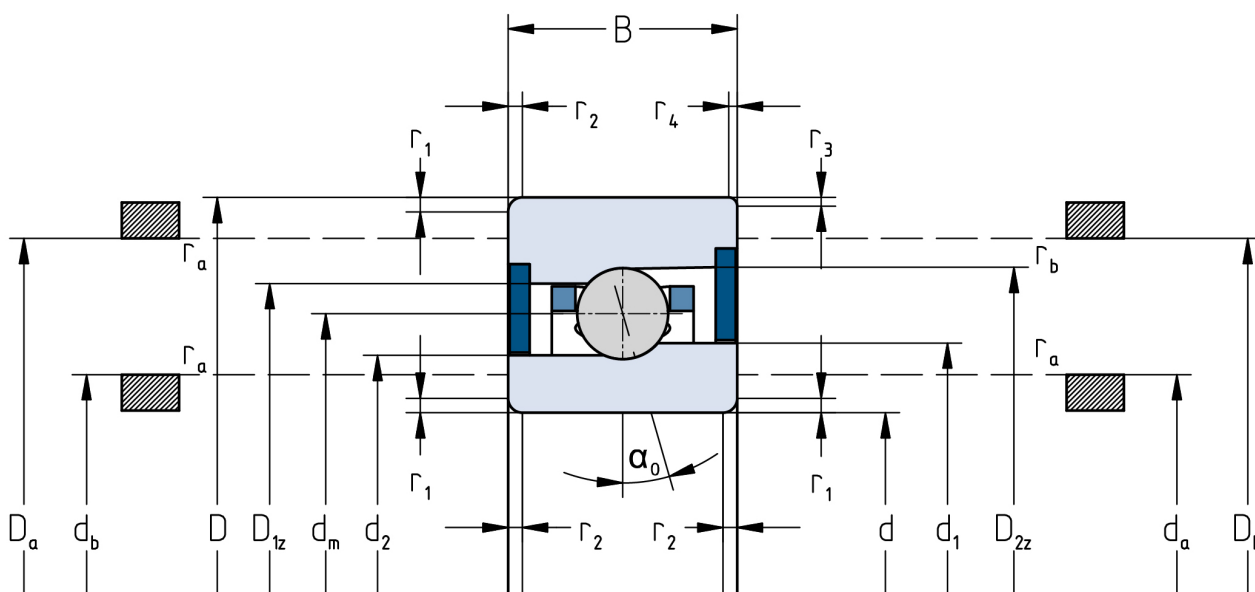
Bearing designation:	HY KH 61914 E TA
Bearing design:	KH
Series / size:	61914
Ball material:	Ceramic
Cage:	TA
Seal:	2RZ optional (with grease)
Precision:	P4+
Main dimensions [d x D x B]:	70 x 100 x 16 mm

Load data

Static load capacity	C_{0r} : 9700 N
Dynamic load capacity	C_r : 12400 N
Fatigue load limit	C_U : 368 N
Speed limit	n_{grease} : 21000 1/min
Speed limit	n_{oil} : 28000 1/min
Light preload	L : 100 N
Axial rigidity	C_{ax} : 135 N/ μ m
Medium preload	M : 310 N
Axial rigidity	C_{ax} : 201 N/ μ m
Heavy preload	S : 620 N
Axial rigidity	C_{ax} : 259 N/ μ m
Spring preload	F_f : 700 N (for n_{max})

Geometrical Data

Bore diameter	d: 70 mm	Oiling nozzle position	d _r : 82.3 mm
Outer diameter	D: 100 mm	Pitch circle diameter	d _m : 84.3 mm
Width of single bearing	B: 16 mm	Inner diameter of outer ring	D ₁ : 88.5 mm
Ball diameter	D _w : 6.35 mm	Undercut of associated component	r _{a max} : 1 mm
Number of balls	Z: 32	Undercut of associated component (open side)	r _{b max} : 0.3 mm
Chamfer (min)	r _{1,2 min} : 1 mm	Abutment diameter inner ring	d _{a,b min} : 74.8 mm
Chamfer (min), open side	r _{3,4 min} : 0.3 mm	Abutment diameter outer ring	D _{a,b max} : 95.6 mm
Outer diameter of inner ring	d ₁ : 80.1 mm	Inner diameter of outer ring (open side)	D ₂ : 90.8 mm
Outer diameter of inner ring (open side)	d ₂ : 78.5 mm	Bearing weight	m: 0.33 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.