

Spindle ball bearing KH 61911 C TA P4+

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Components

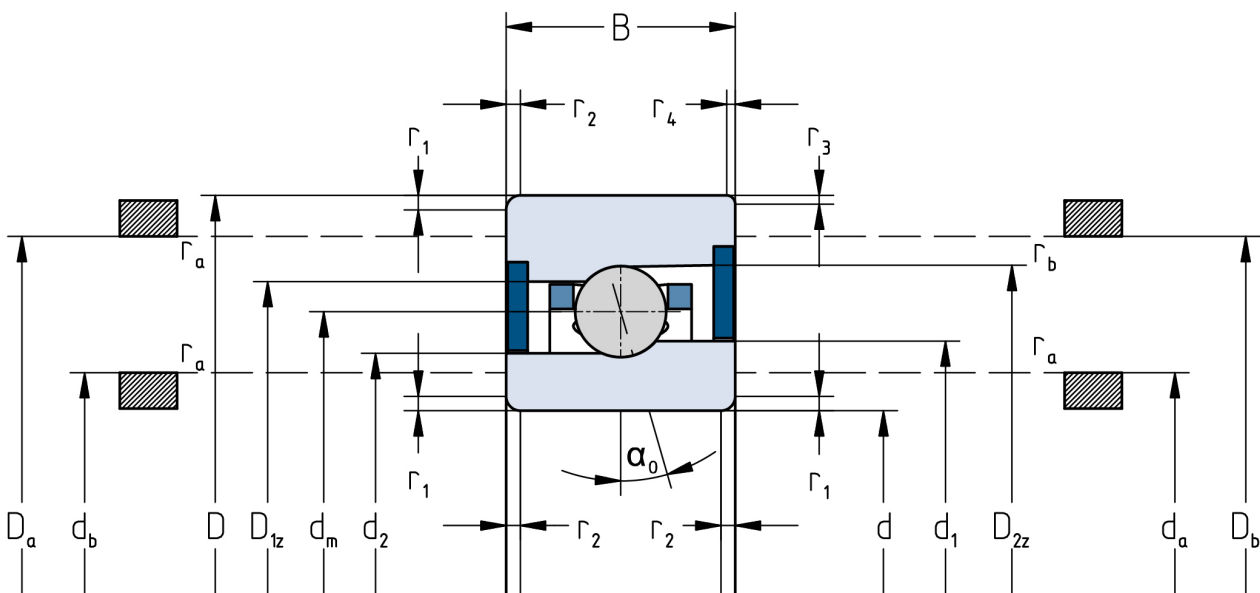
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|------------------------------|----------------------------|
| Bearing designation: | KH 61911 C TA |
| Bearing design: | KH |
| Series / size: | 61911 |
| Ball material: | Steel 100Cr6 |
| Cage: | TA |
| Seal: | 2RZ optional (with grease) |
| Precision: | P4+ |
| Main dimensions [d x D x B]: | 55 x 80 x 13 mm |

Load data

| | |
|-----------------------|----------------------------|
| Static load capacity | C_{0r} : 7600 N |
| Dynamic load capacity | C_r : 10000 N |
| Fatigue load limit | C_U : 393 N |
| Speed limit | n_{grease} : 23250 1/min |
| Speed limit | n_{oil} : 31000 1/min |
| Light preload | L: 50 N |
| Axial rigidity | C_{ax} : 49 N/ μ m |
| Medium preload | M: 150 N |
| Axial rigidity | C_{ax} : 75 N/ μ m |
| Heavy preload | S: 300 N |
| Axial rigidity | C_{ax} : 99 N/ μ m |
| Spring preload | Ff: 490 N (for n_{max}) |

Geometrical Data

| | | | |
|--|------------------------|--|-------------------------|
| Bore diameter | d: 55 mm | Oiling nozzle position | d_7 : 65 mm |
| Outer diameter | D: 80 mm | Pitch circle diameter | d_m : 66.7 mm |
| Width of single bearing | B: 13 mm | Inner diameter of outer ring | D_1 : 70.8 mm |
| Ball diameter | D_w : 5.556 mm | Undercut of associated component | $r_{a max}$: 1 mm |
| Number of balls | Z: 30 | Undercut of associated component (open side) | $r_{b max}$: 0.3 mm |
| Chamfer (min) | $r_{1,2 min}$: 1 mm | Abutment diameter inner ring | $d_{a,b min}$: 59.6 mm |
| Chamfer (min), open side | $r_{3,4 min}$: 0.3 mm | Abutment diameter outer ring | $D_{a,b max}$: 75.8 mm |
| Outer diameter of inner ring | d_1 : 63.1 mm | Inner diameter of outer ring (open side) | D_2 : 72.4 mm |
| Outer diameter of inner ring (open side) | d_2 : 61.8 mm | Bearing weight | m: 0.185 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.