

Spindle ball bearing SM 61919 C TA P4+

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Components

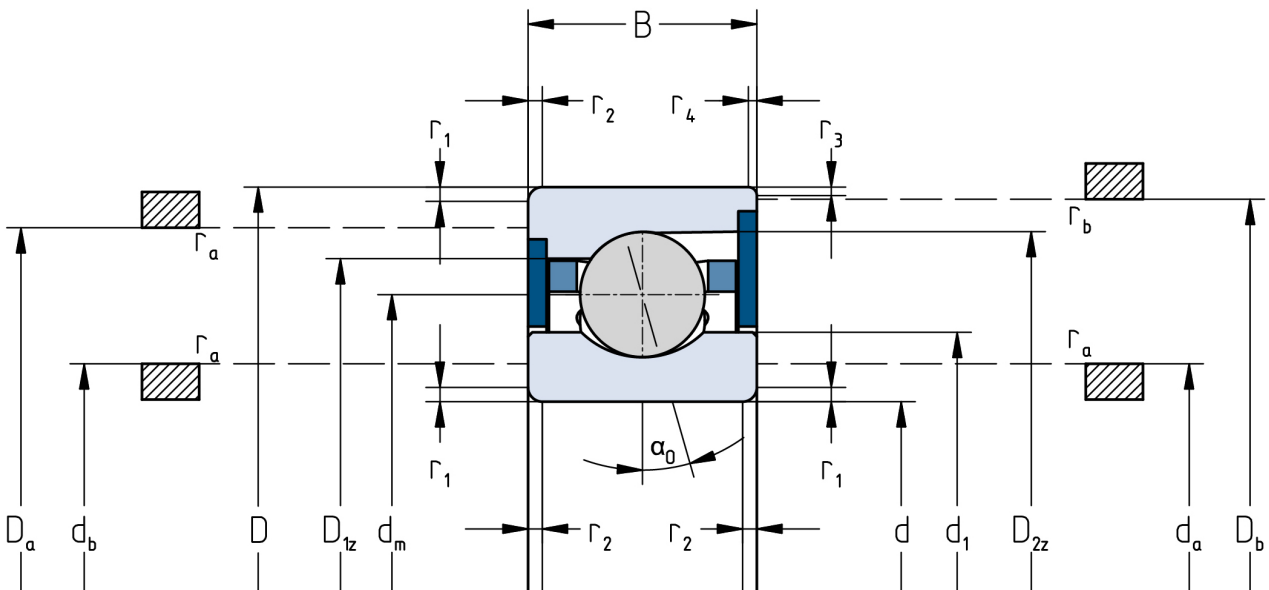
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|------------------------------|------------------|
| Bearing designation: | SM 61919 C TA |
| Bearing design: | SM |
| Series / size: | 61919 |
| Ball material: | Steel 100Cr6 |
| Cage: | TA |
| Seal: | 2RZ upon request |
| Precision: | P4+ |
| Main dimensions [d x D x B]: | 95 x 130 x 18 mm |

Load data

| | |
|-----------------------|-----------------------------|
| Static load capacity | C_{0r} : 25500 N |
| Dynamic load capacity | C_r : 30500 N |
| Fatigue load limit | C_U : 1252 N |
| Speed limit | n_{grease} : 13500 1/min |
| Speed limit | n_{oil} : 18000 1/min |
| Light preload | L: 150 N |
| Axial rigidity | C_{ax} : 98 N/ μ m |
| Medium preload | M: 460 N |
| Axial rigidity | C_{ax} : 149 N/ μ m |
| Heavy preload | S: 920 N |
| Axial rigidity | C_{ax} : 195 N/ μ m |
| Spring preload | Ff: 1750 N (for n_{max}) |

Geometrical Data

| | | | |
|--|-------------------------|--|---------------------------|
| Bore diameter | d: 95 mm | Oiling nozzle position | d_f : 109.4 mm |
| Outer diameter | D: 130 mm | Pitch circle diameter | d_m : 112.5 mm |
| Width of single bearing | B: 18 mm | Inner diameter of outer ring | D_1 : 118.8 mm |
| Ball diameter | D_w : 10.319 mm | Undercut of associated component | $r_{a \max}$: 0.6 mm |
| Number of balls | Z: 27 | Undercut of associated component (open side) | $r_{b \max}$: 0.6 mm |
| Chamfer (min) | $r_{1,2 \min}$: 0.6 mm | Abutment diameter inner ring | $d_{a,b \min}$: 100.1 mm |
| Chamfer (min), open side | $r_{3,4 \min}$: 0.6 mm | Abutment diameter outer ring | $D_{a,b \max}$: 125.6 mm |
| Outer diameter of inner ring | d_1 : 106.2 mm | Inner diameter of outer ring (open side) | D_2 : 123 mm |
| Outer diameter of inner ring (open side) | d_2 : - | Bearing weight | m: 0.58 kg |
| | | Contact angle | Alpha 0: 19° |



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