

Spindle ball bearing S 61906 E TXM P4+

16.07.2024



Components

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|------------------------------|----------------|
| Bearing designation: | S 61906 E TXM |
| Bearing design: | S |
| Series / size: | 61906 |
| Ball material: | Steel 100Cr6 |
| Cage: | TXM |
| Precision: | P4+ |
| Main dimensions [d x D x B]: | 30 x 47 x 9 mm |

Load data

| | |
|-----------------------|----------------------------|
| Static load capacity | C_{0r} : 5600 N |
| Dynamic load capacity | C_r : 7400 N |
| Fatigue load limit | C_U : 290 N |
| Speed limit | n_{grease} : 28500 1/min |
| Speed limit | n_{oil} : 38000 1/min |
| Light preload | L: 60 N |
| Axial rigidity | C_{ax} : 71 N/ μ m |
| Medium preload | M: 190 N |
| Axial rigidity | C_{ax} : 110 N/ μ m |
| Heavy preload | S: 380 N |
| Axial rigidity | C_{ax} : 146 N/ μ m |
| Spring preload | Ff: 550 N (for n_{max}) |

Geometrical Data

| | | | |
|--|-------------------------|--|--------------------------|
| Bore diameter | d: 30 mm | Oiling nozzle position | d_T : 36.8 mm |
| Outer diameter | D: 47 mm | Pitch circle diameter | d_m : 38.5 mm |
| Width of single bearing | B: 9 mm | Inner diameter of outer ring | D_1 : 41.9 mm |
| Ball diameter | D_w : 4.762 mm | Undercut of associated component | $r_{a \max}$: 0.3 mm |
| Number of balls | Z: 18 | Undercut of associated component (open side) | $r_{b \max}$: 0.3 mm |
| Chamfer (min) | $r_{1,2 \min}$: 0.3 mm | Abutment diameter inner ring | $d_{a,b \min}$: 32.3 mm |
| Chamfer (min), open side | $r_{3,4 \min}$: 0.3 mm | Abutment diameter outer ring | $D_{a,b \max}$: 45.1 mm |
| Outer diameter of inner ring | d_1 : 35.1 mm | Inner diameter of outer ring (open side) | D_2 : 43.3 mm |
| Outer diameter of inner ring (open side) | d_2 : - | Bearing weight | m: 0.046 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.