

Spindle ball bearing HY S 6008 E TXM P4+

16.07.2024



Components

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|------------------------------|----------------------------|
| Bearing designation: | HY S 6008 E TXM |
| Bearing design: | S |
| Series / size: | 6008 |
| Ball material: | Ceramic |
| Cage: | TXM |
| Seal: | 2RZ optional (with grease) |
| Precision: | P4+ (UP+ Upon request) |
| Main dimensions [d x D x B]: | 40 x 68 x 15 mm |

Load data

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|-----------------------|-----------------------------|
| Static load capacity | C_{0r} : 16500 N |
| Dynamic load capacity | C_r : 20900 N |
| Fatigue load limit | C_U : 625 N |
| Speed limit | n_{grease} : 25500 1/min |
| Speed limit | n_{oil} : 34000 1/min |
| Light preload | L: 180 N |
| Axial rigidity | C_{ax} : 144 N/ μ m |
| Medium preload | M: 530 N |
| Axial rigidity | C_{ax} : 218 N/ μ m |
| Heavy preload | S: 1100 N |
| Axial rigidity | C_{ax} : 293 N/ μ m |
| Spring preload | Ff: 1180 N (for n_{max}) |

Geometrical Data

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|--|------------------------|--|-------------------------|
| Bore diameter | d: 40 mm | Oiling nozzle position | d_f : 51.8 mm |
| Outer diameter | D: 68 mm | Pitch circle diameter | d_m : 54 mm |
| Width of single bearing | B: 15 mm | Inner diameter of outer ring | D_1 : 59 mm |
| Ball diameter | D_w : 7.938 mm | Undercut of associated component | $r_{a max}$: 1 mm |
| Number of balls | Z: 18 | Undercut of associated component (open side) | $r_{b max}$: 0.6 mm |
| Chamfer (min) | $r_{1,2 min}$: 1 mm | Abutment diameter inner ring | $d_{a,b min}$: 45.2 mm |
| Chamfer (min), open side | $r_{3,4 min}$: 0.6 mm | Abutment diameter outer ring | $D_{a,b max}$: 63.7 mm |
| Outer diameter of inner ring | d_1 : 49.2 mm | Inner diameter of outer ring (open side) | D_2 : 62.1 mm |
| Outer diameter of inner ring (open side) | d_2 : - | Bearing weight | m: 0.165 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.