

Spindle ball bearing HY S 6204 C TA P4+

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Components

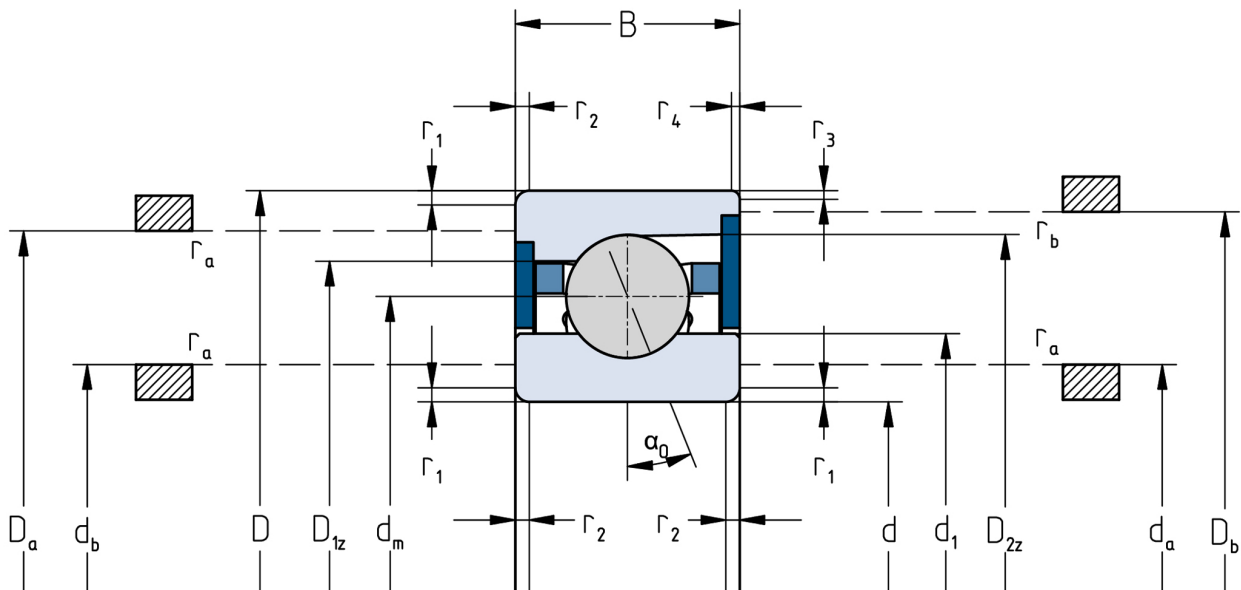
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|------------------------------|------------------------|
| Bearing designation: | HY S 6204 C TA |
| Bearing design: | S |
| Series / size: | 6204 |
| Ball material: | Ceramic |
| Cage: | TA |
| Seal: | 2RZ upon request |
| Precision: | P4+ (UP+ Upon request) |
| Main dimensions [d x D x B]: | 20 x 47 x 14 mm |

Load data

| | |
|-----------------------|----------------------------|
| Static load capacity | C_{0r} : 9700 N |
| Dynamic load capacity | C_r : 16900 N |
| Fatigue load limit | C_U : 367 N |
| Speed limit | n_{grease} : 47250 1/min |
| Speed limit | n_{oil} : 63000 1/min |
| Light preload | L: 85 N |
| Axial rigidity | C_{ax} : 42 N/ μ m |
| Medium preload | M: 260 N |
| Axial rigidity | C_{ax} : 71 N/ μ m |
| Heavy preload | S: 500 N |
| Axial rigidity | C_{ax} : 100 N/ μ m |
| Spring preload | Ff: 400 N (for n_{max}) |

Geometrical Data

| | | | |
|--|-------------------------|--|--------------------------|
| Bore diameter | d: 20 mm | Oiling nozzle position | d_f : 31.4 mm |
| Outer diameter | D: 47 mm | Pitch circle diameter | d_m : 33.5 mm |
| Width of single bearing | B: 14 mm | Inner diameter of outer ring | D_1 : 38.6 mm |
| Ball diameter | D_w : 7.938 mm | Undercut of associated component | $r_{a \max}$: 1 mm |
| Number of balls | Z: 11 | Undercut of associated component (open side) | $r_{b \max}$: 0.6 mm |
| Chamfer (min) | $r_{1,2 \min}$: 1 mm | Abutment diameter inner ring | $d_{a,b \min}$: 25.1 mm |
| Chamfer (min), open side | $r_{3,4 \min}$: 0.6 mm | Abutment diameter outer ring | $D_{a,b \max}$: 43.1 mm |
| Outer diameter of inner ring | d_1 : 28.5 mm | Inner diameter of outer ring (open side) | D_2 : 41.6 mm |
| Outer diameter of inner ring (open side) | d_2 : - | Bearing weight | m: 0.089 kg |
| | | Contact angle | Alpha 0: 15° |



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