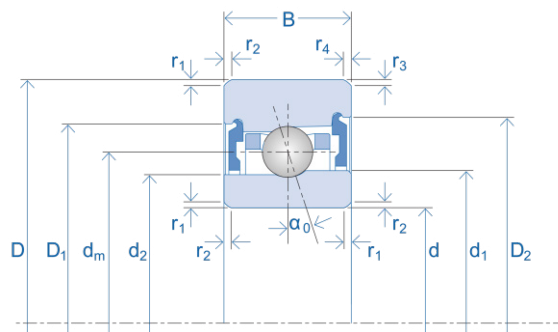


|              |                        |
|--------------|------------------------|
| Part Number  | <b>HY KH 6001 C TA</b> |
| Bearing Size | 6001                   |

|                                               |     |
|-----------------------------------------------|-----|
| Bearing Series                                | KH  |
| Hybrid (Si <sub>3</sub> N <sub>4</sub> Balls) | Yes |

### Bearing Dimensions

|                           |                       |       |
|---------------------------|-----------------------|-------|
| Bore Diameter             | d [mm]                | 12    |
| Outer Diameter            | D [mm]                | 28    |
| Bearing Width             | B [mm]                | 8     |
| Pitch Circle              | d <sub>m</sub> [mm]   | 19.0  |
| Ball Diameter             | D <sub>w</sub> [mm]   | 3.175 |
| OD Inner Ring             | d <sub>1</sub> [mm]   | 16.7  |
| OD Inner Ring (Open Side) | d <sub>2</sub> [mm]   | 16.2  |
| ID Outer Ring             | D <sub>1</sub> [mm]   | 22.5  |
| ID Outer Ring (Open Side) | D <sub>2</sub> [mm]   | 23.3  |
| Chamfer                   | r <sub>1,2</sub> [mm] | 0.3   |
| Chamfer (Open Side)       | r <sub>3,4</sub> [mm] | 0.3   |

### Bearing Load Ratings

|                                                                |                       |       |
|----------------------------------------------------------------|-----------------------|-------|
| Dynamic Radial Load Rating                                     | C [N]                 | 2,260 |
| Static Radial Load Rating Steel Balls                          | C <sub>0</sub> [N]    | 950   |
| Static Radial Load Rating Si <sub>3</sub> N <sub>4</sub> balls | C <sub>0 HY</sub> [N] | 670   |

### Bearing RPM Ratings

|                                     |                             |         |
|-------------------------------------|-----------------------------|---------|
| Speed Value with Oil Lubrication    | n <sub>oil</sub> [1/min]    | 137,500 |
| Speed Value with Grease Lubrication | n <sub>grease</sub> [1/min] | 102,500 |

### Notes:

1. Position of the oiling Nozzle (d<sub>T</sub>) for bearings with TA cage/ TXM cage upon request
2. The stated load and speed values are given for a spring preloaded single bearing with oil/air or oil mist lubrication. If specific applications differ, please consult correction factors and/or GMN USA engineers.

### Geometrical Data

|                 |                    |       |
|-----------------|--------------------|-------|
| Number of Balls | Z [Qty.]           | 13    |
| Contact Angle   | α <sub>0</sub> [°] | 17    |
| Bearing Weight  | m [kg]             | 0.020 |

### Mating Part Dimensions

|                                          |                            |      |
|------------------------------------------|----------------------------|------|
| Abutment Diameter Inner Ring             | d <sub>a,b</sub> min. [mm] | 14.5 |
| Abutment Diameter Outer Ring             | D <sub>a,b</sub> max. [mm] | 25.0 |
| Chamfer Associated Component             | r <sub>a</sub> max. [mm]   | 0.3  |
| Chamfer Associated Component (Open Side) | r <sub>b</sub> max. [mm]   | 0.1  |

### Bearing Preload Data

|                         |                        |    |
|-------------------------|------------------------|----|
| Light Pre-Load          | F <sub>v</sub> [N]     | 11 |
| Light Axial Rigidity    | C <sub>ax</sub> [N/μm] | 15 |
| Medium Pre-Load         | F <sub>v</sub> [N]     | 35 |
| Medium Axial Rigidity   | C <sub>ax</sub> [N/μm] | 22 |
| Heavy Pre-Load          | F <sub>v</sub> [N]     | 70 |
| Heavy Axial Rigidity    | C <sub>ax</sub> [N/μm] | 30 |
| Minimum Spring Pre-Load | F <sub>f</sub> [N]     | 85 |