

| Part Number | S 6001 E TA |
|--------------|-------------|
| Bearing Size | 6001 |

Bearing Dimensions

| Bore Diameter | d [mm] | 12 |
|---------------------------|-----------------------|-------|
| Outer Diameter | D [mm] | 28 |
| Bearing Width | B [mm] | 8 |
| Pitch Circle | d _m [mm] | 20.0 |
| Ball Diameter | D _w [mm] | 4.762 |
| OD Inner Ring | d₁ [mm] | 16.7 |
| ID Outer Ring | D1 [mm] | 23.4 |
| ID Outer Ring (Open Side) | D ₂ [mm] | 24.7 |
| Chamfer | r _{1,2} [mm] | 0.3 |
| Chamfer (Open Side) | r _{3,4} [mm] | 0.3 |

Bearing Load Ratings

| Dynamic Radial Load Rating | C [N] | 5,650 |
|--|-----------------------|-------|
| Static Radial Load Rating Steel Balls | C ₀ [N] | 2,900 |
| Static Radial Load Rating Si ₃ N ₄ balls | С _{0 НҮ} [N] | 2,020 |

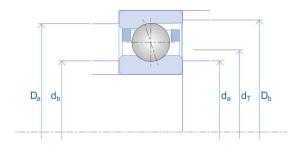
Bearing RPM Ratings

| Speed Value with Oil Lubrication | n _{oil} [1/min] | 72,500 |
|-------------------------------------|-----------------------------|--------|
| Speed Value with Grease Lubrication | n _{grease} [1/min] | 54,000 |

Notes:

1. Position of the oiling Nozzle $(d_{\rm T})$ 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.



| Bearing Series | S |
|---|----|
| Hybrid (Si ₃ N ₄ Balls) | No |

Geometrical Data

| Number of Balls | Z [Qty.] | 11 |
|-----------------|----------|-------|
| Contact Angle | α₀ [°] | 25 |
| Bearing Weight | m [kg] | 0.020 |

Mating Part Dimensions

| Abutment Diameter Inner Ring | da min. [mm] | 14.5 |
|--|--------------------------|------|
| Abutment Diameter Outer Ring | Da max. [mm] | 25.0 |
| Chamfer Associated Component | r _a max. [mm] | 0.3 |
| Chamfer Associated Component (Open Side) | r₀ max. [mm] | 0.1 |

Bearing Preload Data

| Light Pre-Load | Fv [N] | 50 |
|-------------------------|------------------------|-----|
| Light Axial Rigidity | C _{ax} [N/µm] | 47 |
| Medium Pre-Load | F _v [N] | 140 |
| Medium Axial Rigidity | C _{ax} [N/µm] | 70 |
| Heavy Pre-Load | F _v [N] | 280 |
| Heavy Axial Rigidity | C _{ax} [N/µm] | 95 |
| Minimum Spring Pre-Load | F _f [N] | 205 |