

| Part Number  | HY S 61901 C TA |  |
|--------------|-----------------|--|
| Bearing Size | 61901           |  |

## **Bearing Dimensions**

| Bore Diameter             | d [mm]                | 12    |
|---------------------------|-----------------------|-------|
| Outer Diameter            | D [mm]                | 24    |
| Bearing Width             | B [mm]                | 6     |
| Pitch Circle              | d <sub>m</sub> [mm]   | 18.0  |
| Ball Diameter             | D <sub>w</sub> [mm]   | 3.175 |
| OD Inner Ring             | d₁ [mm]               | 15.4  |
| ID Outer Ring             | D1 [mm]               | 19.6  |
| ID Outer Ring (Open Side) | D <sub>2</sub> [mm]   | 20.6  |
| 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]                 | 3,100 |
|--|-----------------------|-------|
| Static Radial Load Rating Steel Balls                          | C <sub>0</sub> [N]    | 1,660 |
| Static Radial Load Rating Si <sub>3</sub> N <sub>4</sub> balls | С <sub>0 НҮ</sub> [N] | 1,170 |

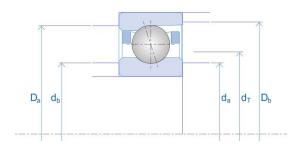
### **Bearing RPM Ratings**

| Speed Value with Oil Lubrication    | n <sub>oil</sub> [1/min]    | 121,250 |
|-------------------------------------|-----------------------------|---------|
| Speed Value with Grease Lubrication | n <sub>grease</sub> [1/min] | 91,250  |

#### Notes:

1. Position of the oiling Nozzle  $(d_T)$  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 (Si₃N₄ Balls) | Yes |

#### **Geometrical Data**

| Number of Balls | Z [Qty.] | 13    |
|-----------------|----------|-------|
| Contact Angle   | α₀ [°]   | 15    |
| Bearing Weight  | m [kg]   | 0.011 |

### Mating Part Dimensions

| Abutment Diameter Inner Ring             | da min. [mm]             | 14.5 |
|--|--------------------------|------|
| Abutment Diameter Outer Ring             | Da max. [mm]             | 21.5 |
| Chamfer Associated Component             | r <sub>a</sub> max. [mm] | 0.3  |
| Chamfer Associated Component (Open Side) | r₀ max. [mm]             | 0.1  |

## **Bearing Preload Data**

| Light Pre-Load          | Fv [N]                 | 15 |
|-------------------------|------------------------|----|
| Light Axial Rigidity    | C <sub>ax</sub> [N/µm] | 15 |
| Medium Pre-Load         | F <sub>v</sub> [N]     | 43 |
| Medium Axial Rigidity   | C <sub>ax</sub> [N/µm] | 24 |
| Heavy Pre-Load          | F <sub>v</sub> [N]     | 85 |
| Heavy Axial Rigidity    | C <sub>ax</sub> [N/µm] | 34 |
| Minimum Spring Pre-Load | F <sub>f</sub> [N]     | 80 |