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|--------------|------------------------|
| Part Number | HY S 61912 E TA |
| Bearing Size | 61912 |

| | |
|---|-----|
| Bearing Series | S |
| Hybrid (Si ₃ N ₄ Balls) | Yes |

Bearing Dimensions

| | | |
|---------------------------|-----------------------|-------|
| Bore Diameter | d [mm] | 60 |
| Outer Diameter | D [mm] | 85 |
| Bearing Width | B [mm] | 13 |
| Pitch Circle | d _m [mm] | 72.5 |
| Ball Diameter | D _w [mm] | 7.144 |
| OD Inner Ring | d ₁ [mm] | 68.1 |
| ID Outer Ring | D ₁ [mm] | 76.9 |
| ID Outer Ring (Open Side) | D ₂ [mm] | 79.5 |
| Chamfer | r _{1,2} [mm] | 1.0 |
| Chamfer (Open Side) | r _{3,4} [mm] | 0.3 |

Geometrical Data

| | | |
|-----------------|--------------------|-------|
| Number of Balls | Z [Qty.] | 23 |
| Contact Angle | α ₀ [°] | 25 |
| Bearing Weight | m [kg] | 0.195 |

Mating Part Dimensions

| | | |
|--|--------------------------|------|
| Abutment Diameter Inner Ring | d _a min. [mm] | 65.0 |
| Abutment Diameter Outer Ring | D _a max. [mm] | 80.0 |
| Chamfer Associated Component | r _a max. [mm] | 0.6 |
| Chamfer Associated Component (Open Side) | r _b max. [mm] | 0.3 |

Bearing Load Ratings

| | | |
|--|-----------------------|--------|
| Dynamic Radial Load Rating | C [N] | 18,100 |
| Static Radial Load Rating Steel Balls | C ₀ [N] | 17,900 |
| Static Radial Load Rating Si ₃ N ₄ balls | C _{0 HY} [N] | 12,600 |

Bearing Preload Data

| | | |
|-------------------------|------------------------|-----|
| Light Pre-Load | F _v [N] | 150 |
| Light Axial Rigidity | C _{ax} [N/μm] | 137 |
| Medium Pre-Load | F _v [N] | 460 |
| Medium Axial Rigidity | C _{ax} [N/μm] | 208 |
| Heavy Pre-Load | F _v [N] | 920 |
| Heavy Axial Rigidity | C _{ax} [N/μm] | 276 |
| Minimum Spring Pre-Load | F _r [N] | 660 |

Bearing RPM Ratings

| | | |
|-------------------------------------|-----------------------------|--------|
| Speed Value with Oil Lubrication | n _{oil} [1/min] | 25,000 |
| Speed Value with Grease Lubrication | n _{grease} [1/min] | 18,750 |

Notes:

1. Position of the oiling Nozzle (dT) 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.