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|--------------|---------------------|
| Part Number | S 61907 E TA |
| Bearing Size | 61907 |

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

Bearing Dimensions

| | | |
|---------------------------|-----------------------|-------|
| Bore Diameter | d [mm] | 35 |
| Outer Diameter | D [mm] | 55 |
| Bearing Width | B [mm] | 10 |
| Pitch Circle | d _m [mm] | 45.0 |
| Ball Diameter | D _w [mm] | 5.556 |
| OD Inner Ring | d ₁ [mm] | 41.4 |
| ID Outer Ring | D ₁ [mm] | 48.6 |
| ID Outer Ring (Open Side) | D ₂ [mm] | 50.4 |
| Chamfer | r _{1,2} [mm] | 0.6 |
| Chamfer (Open Side) | r _{3,4} [mm] | 0.3 |

Geometrical Data

| | | |
|-----------------|--------------------|-------|
| Number of Balls | Z [Qty.] | 18 |
| Contact Angle | α ₀ [°] | 25 |
| Bearing Weight | m [kg] | 0.075 |

Mating Part Dimensions

| | | |
|--|--------------------------|------|
| Abutment Diameter Inner Ring | d _a min. [mm] | 40.0 |
| Abutment Diameter Outer Ring | D _a max. [mm] | 50.5 |
| Chamfer Associated Component | r _a max. [mm] | 0.6 |
| Chamfer Associated Component (Open Side) | r _b max. [mm] | 0.15 |

Bearing Load Ratings

| | | |
|--|----------------------|--------|
| Dynamic Radial Load Rating | C [N] | 10,300 |
| Static Radial Load Rating Steel Balls | C ₀ [N] | 8,200 |
| Static Radial Load Rating Si ₃ N ₄ balls | C _{0HY} [N] | 5,750 |

Bearing Preload Data

| | | |
|-------------------------|------------------------|-----|
| Light Pre-Load | F _v [N] | 90 |
| Light Axial Rigidity | C _{ax} [N/μm] | 91 |
| Medium Pre-Load | F _v [N] | 260 |
| Medium Axial Rigidity | C _{ax} [N/μm] | 135 |
| Heavy Pre-Load | F _v [N] | 520 |
| Heavy Axial Rigidity | C _{ax} [N/μm] | 177 |
| Minimum Spring Pre-Load | F _r [N] | 375 |

Bearing RPM Ratings

| | | |
|-------------------------------------|-----------------------------|--------|
| Speed Value with Oil Lubrication | n _{oil} [1/min] | 32,000 |
| Speed Value with Grease Lubrication | n _{grease} [1/min] | 24,000 |

Notes:

1. Position of the oiling Nozzle (d_r) 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.