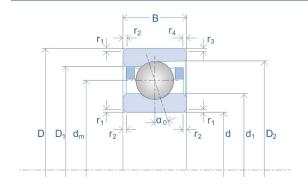


Data Sheet High Precision Ball Bearings





Part Number	S 61915 E TA
Bearing Size	61915

$egin{array}{c|c} D_a & d_b & d_a & d_T & D_b \\ \hline Bearing Series & S & \\ \hline \end{array}$

No

Bearing Dimensions

Bore Diameter	d [mm]	75
Outer Diameter	D [mm]	105
Bearing Width	B [mm]	16
Pitch Circle	d _m [mm]	90.0
Ball Diameter	D _w [mm]	8.731
OD Inner Ring	d₁ [mm]	84.7
ID Outer Ring	D ₁ [mm]	95.3
ID Outer Ring (Open Side)	D ₂ [mm]	98.8
Chamfer	r _{1,2} [mm]	0.6
Chamfer (Open Side)	r _{3,4} [mm]	0.3

Bearing Load Ratings

Dynamic Radial Load Rating	C [N]	27,500
Static Radial Load Rating Steel Balls	C ₀ [N]	29,500
Static Radial Load Rating Si ₃ N ₄ balls	C _{0 HY} [N]	20,500

Bearing RPM Ratings

Speed Value with Oil Lubrication	n _{oil} [1/min]	16,000
Speed Value with Grease Lubrication	n _{grease} [1/min]	12,000

Geometrical Data

Hybrid (Si₃N₄ Balls)

Number of Balls	Z [Qty.]	25
Contact Angle	α ₀ [°]	25
Bearing Weight	m [kg]	0.350

Mating Part Dimensions

Abutment Diameter Inner Ring	d _a min. [mm]	81.0
Abutment Diameter Outer Ring	D _a max. [mm]	99.5
Chamfer Associated Component	r _a max. [mm]	0.6
Chamfer Associated Component (Open Side)	r₀ max. [mm]	0.3

Bearing Preload Data

Light Pre-Load	Fv [N]	230
Light Axial Rigidity	C _{ax} [N/µm]	178
Medium Pre-Load	F _v [N]	700
Medium Axial Rigidity	C _{ax} [N/µm]	270
Heavy Pre-Load	F _v [N]	1,400
Heavy Axial Rigidity	C _{ax} [N/µm]	360
Minimum Spring Pre-Load	F _f [N]	1,000

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.