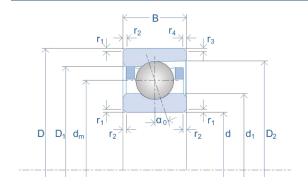


## Data Sheet High Precision Ball Bearings



 $D_{b}$ 

 $d_{\mathsf{T}}$ 



Part Number	S 6015 E TA
Bearing Size	6015

# Bearing Seri



#### **Bearing Dimensions**

Bore Diameter	d [mm]	75
Outer Diameter	D [mm]	115
Bearing Width	B [mm]	20
Pitch Circle	d <sub>m</sub> [mm]	95.0
Ball Diameter	D <sub>w</sub> [mm]	11.906
OD Inner Ring	d <sub>1</sub> [mm]	87.8
ID Outer Ring	D <sub>1</sub> [mm]	102.2
ID Outer Ring (Open Side)	D <sub>2</sub> [mm]	107.0
Chamfer	r <sub>1,2</sub> [mm]	1.1
Chamfer (Open Side)	r <sub>3,4</sub> [mm]	0.6

#### **Geometrical Data**

Da

d

Number of Balls	Z [Qty.]	22
Contact Angle	α <sub>0</sub> [°]	25
Bearing Weight	m [kg]	0.640

#### **Bearing Load Ratings**

Dynamic Radial Load Rating	C [N]	47,000
Static Radial Load Rating Steel Balls	C <sub>0</sub> [N]	46,000
Static Radial Load Rating Si <sub>3</sub> N <sub>4</sub> balls	C <sub>0 HY</sub> [N]	32,500

#### **Mating Part Dimensions**

Abutment Diameter Inner Ring	d <sub>a</sub> min. [mm]	82.0
Abutment Diameter Outer Ring	D <sub>a</sub> max. [mm]	107.0
Chamfer Associated Component	r <sub>a</sub> max. [mm]	1.1
Chamfer Associated Component (Open Side)	r₀ max. [mm]	0.6

### Bearing RPM Ratings

Speed Value with Oil Lubrication	n <sub>oil</sub> [1/min]	15,500
Speed Value with Grease Lubrication	n <sub>grease</sub> [1/min]	11,500

#### **Bearing Preload Data**

Light Pre-Load	Fv [N]	400
Light Axial Rigidity	C <sub>ax</sub> [N/µm]	219
Medium Pre-Load	F <sub>v</sub> [N]	1,190
Medium Axial Rigidity	C <sub>ax</sub> [N/µm]	330
Heavy Pre-Load	F <sub>v</sub> [N]	2,380
Heavy Axial Rigidity	C <sub>ax</sub> [N/µm]	440
Minimum Spring Pre-Load	F <sub>f</sub> [N]	1,710

#### 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.