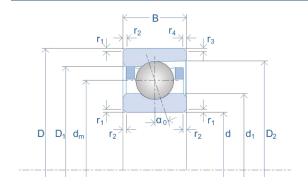


Data Sheet High Precision Ball Bearings





Part Number	SM 61921 C TA
Bearing Size	61921

d [mm]

D [mm]

B [mm]

d_m [mm]

D_w [mm]

d₁ [mm]

 D_1 [mm]

D₂ [mm]

r_{1,2} [mm]

r_{3,4} [mm]

105

145

20

125.0

11.906

117.8

132.2

0.6

0.6

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

No

Geometrical Data

Hybrid (Si₃N₄ Balls)

Number of Balls	Z [Qty.]	26
Contact Angle	α ₀ [°]	19
Bearing Weight	m [kg]	0.830

Mating Part Dimensions

Abutment Diameter Inner Ring	d _a min. [mm]	112.0
Abutment Diameter Outer Ring	D _a max. [mm]	138.0
Chamfer Associated Component	r _a max. [mm]	0.6
Chamfer Associated Component (Open Side)	r₀ max. [mm]	0.6

Bearing Load Ratings

ID Outer Ring (Open Side)

Chamfer (Open Side)

Bearing Dimensions

Bore Diameter

Outer Diameter

Bearing Width

Pitch Circle

Ball Diameter

OD Inner Ring

ID Outer Ring

Chamfer

Dynamic Radial Load Rating	C [N]	38,500
Static Radial Load Rating Steel Balls	C ₀ [N]	32,500
Static Radial Load Rating Si ₃ N ₄ balls	C _{0 HY} [N]	22,700

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

Bearing Preload Data

Light Pre-Load	Fv [N]	200
Light Axial Rigidity	C _{ax} [N/µm]	112
Medium Pre-Load	F _v [N]	590
Medium Axial Rigidity	C _{ax} [N/µm]	166
Heavy Pre-Load	F _v [N]	1,170
Heavy Axial Rigidity	C _{ax} [N/µm]	218
Minimum Spring Pre-Load	F _f [N]	1,470

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.