



Part Number	HY SM 6021 C TA
Bearing Size	6021

Bearing Series	SM
Hybrid (Si ₃ N ₄ Balls)	Yes

Bearing Dimensions

Bore Diameter	d [mm]	105
Outer Diameter	D [mm]	160
Bearing Width	B [mm]	26
Pitch Circle	d _m [mm]	132.5
Ball Diameter	D _w [mm]	15.875
OD Inner Ring	d ₁ [mm]	122.8
ID Outer Ring	D ₁ [mm]	142.2
ID Outer Ring (Open Side)	D ₂ [mm]	148.4
Chamfer	r _{1,2} [mm]	2.0
Chamfer (Open Side)	r _{3,4} [mm]	1.0

Geometrical Data

Number of Balls	Z [Qty.]	22
Contact Angle	α ₀ [°]	17
Bearing Weight	m [kg]	1.590

Mating Part Dimensions

Abutment Diameter Inner Ring	d _a min. [mm]	116.0
Abutment Diameter Outer Ring	D _a max. [mm]	150.0
Chamfer Associated Component	r _a max. [mm]	2.0
Chamfer Associated Component (Open Side)	r _b max. [mm]	1.0

Bearing Load Ratings

Dynamic Radial Load Rating	C [N]	60,500
Static Radial Load Rating Steel Balls	C ₀ [N]	48,000
Static Radial Load Rating Si ₃ N ₄ balls	C _{0 HY} [N]	34,000

Bearing Preload Data

Light Pre-Load	F _v [N]	310
Light Axial Rigidity	C _{ax} [N/μm]	109
Medium Pre-Load	F _v [N]	930
Medium Axial Rigidity	C _{ax} [N/μm]	166
Heavy Pre-Load	F _v [N]	1,850
Heavy Axial Rigidity	C _{ax} [N/μm]	221
Minimum Spring Pre-Load	F _r [N]	2,060

Bearing RPM Ratings

Speed Value with Oil Lubrication	n _{oil} [1/min]	18,750
Speed Value with Grease Lubrication	n _{grease} [1/min]	13,750

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.