

Part Number	HY SM 61900 C TA	
Bearing Size	61900	

Bearing Dimensions

Bore Diameter	d [mm]	10
Outer Diameter	D [mm]	22
Bearing Width	B [mm]	6
Pitch Circle	d _m [mm]	16.0
Ball Diameter	D _w [mm]	3.175
OD Inner Ring	d₁ [mm]	13.6
ID Outer Ring	D1 [mm]	17.8
ID Outer Ring (Open Side)	D ₂ [mm]	18.8
Chamfer	r _{1,2} [mm]	0.3
Chamfer (Open Side)	r _{3,4} [mm]	0.3

Bearing Load Ratings

Dynamic Radial Load Rating	C [N]	2,080
Static Radial Load Rating Steel Balls	C ₀ [N]	810
Static Radial Load Rating Si ₃ N ₄ balls	С _{0 НҮ} [N]	565

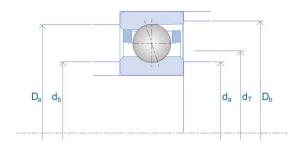
Bearing RPM Ratings

Speed Value with Oil Lubrication	n _{oil} [1/min]	156,250
Speed Value with Grease Lubrication	n _{grease} [1/min]	117,500

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.



Bearing Series	SM
Hybrid (Si₃N₄ Balls)	Yes

Geometrical Data

Number of Balls	Z [Qty.]	11
Contact Angle	α ₀ [°]	15
Bearing Weight	m [kg]	0.010

Mating Part Dimensions

Abutment Diameter Inner Ring	da min. [mm]	12.5
Abutment Diameter Outer Ring	Da max. [mm]	19.5
Chamfer Associated Component	r _a max. [mm]	0.3
Chamfer Associated Component (Open Side)	r₀ max. [mm]	0.1

Bearing Preload Data

Light Pre-Load	Fv [N]	11
Light Axial Rigidity	C _{ax} [N/µm]	11
Medium Pre-Load	F _v [N]	30
Medium Axial Rigidity	C _{ax} [N/µm]	16
Heavy Pre-Load	F _v [N]	65
Heavy Axial Rigidity	C _{ax} [N/µm]	23
Minimum Spring Pre-Load	F _f [N]	65