Part Number	**HY KH 61905 C TA**
Bearing Size	61905

Bearing Series	KH
Hybrid (Si$_3$N$_4$ Balls)	Yes

Bearing Dimensions

Bore Diameter	d [mm]	25
Outer Diameter	D [mm]	42
Bearing Width	B [mm]	9
Pitch Circle	d_m [mm]	33.5
Ball Diameter	D_w [mm]	3.969
OD Inner Ring	d_1 [mm]	30.6
OD Inner Ring (Open Side)	d_2 [mm]	30.0
ID Outer Ring	D_1 [mm]	37.2
ID Outer Ring (Open Side)	D_2 [mm]	38.5
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]	4,250
Static Radial Load Rating Steel Balls	C_0 [N]	2,330
Static Radial Load Rating Si$_3$N$_4$ balls	$C_{0\,HY}$ [N]	1,640

Bearing RPM Ratings

Speed Value with Oil Lubrication	n_{oil} [1/min]	78,750
Speed Value with Grease Lubrication	n_{grease} [1/min]	58,750

Geometrical Data

Number of Balls	Z [Qty.]	19
Contact Angle	α_0 [°]	17
Bearing Weight	m [kg]	0.041

Mating Part Dimensions

Abutment Diameter Inner Ring	$d_{a,b}$ min. [mm]	28.0
Abutment Diameter Outer Ring	$D_{a,b}$ max. [mm]	38.5
Chamfer Associated Component	r_a max. [mm]	0.3
Chamfer Associated Component (Open Side)	r_b max. [mm]	0.15

Bearing Preload Data

Light Pre-Load	F_v [N]	22
Light Axial Rigidity	C_{ax} [N/µm]	25
Medium Pre-Load	F_v [N]	65
Medium Axial Rigidity	C_{ax} [N/µm]	38
Heavy Pre-Load	F_v [N]	130
Heavy Axial Rigidity	C_{ax} [N/µm]	51
Minimum Spring Pre-Load	F_f [N]	155

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.