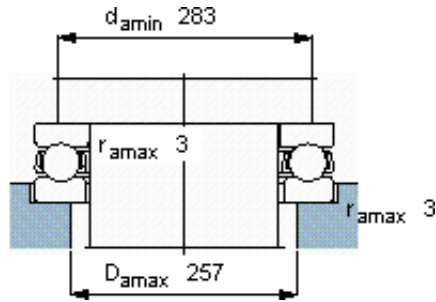
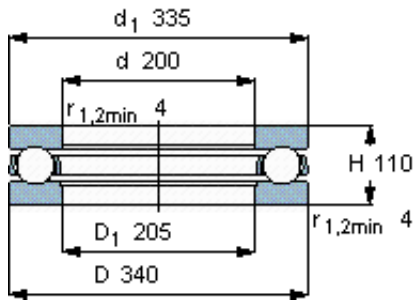




31307-A FAG bearing quotation size please contact sales personnel

d(mm)	35	da(min)	44
B(mm)	21	Db(min)	76
D(mm)	80	Da(max)	71
C0r	64000	Cur	7500
Cr	60000	nG	9000 1/min
ra	2	nB	6900 1/min
New Model	FAG 31307-A	m	0.582kg



Laser surface treatment processes including phase transformation hardening, cladding, coating, alloying, amorphization and crystallization, shock etc..

1 laser transformation hardening

Laser transformation hardening is also known as laser quenching, it is based on the laser beam with high energy, fast scanning the workpiece, the workpiece surface rapid heating to 31307-A FAG bearing austenitizing temperature, internal material to keep the cold, followed by heat conduction to the deep base, make the heating surface at the very fast speed of cooling, get martensite organization very fine, the hardness depends mainly on the substrate and the carbon content in austenite grain size, to achieve its purpose of quenching.



a	26 mm
B	21 mm
C	15 mm
C_a min	4 mm
C_b min	7,5 mm
D_a max	71 mm
D_a min	62 mm
D_b min	76 mm
d₁	59,9 mm
d_a max	44 mm
d_b min	44 mm
r_{1, 2} min	2 mm
r_{3, 4} min	1,5 mm
r_a max	2 mm
r_b max	1,5 mm

The main purpose of laser transformation hardening is the hardening belt to reduce wear of locally produced selectively on the surface of the workpiece, and through the production of compressive stress to 31307-A FAG bearing improve the fatigue strength in the surface.

The main advantage of laser transformation hardening is as follows.

- 1) can get good quality of hardened, the refinement of microstructure and the hardness increased 15%~20% than conventional quenching.
- 2) heating speed, short process period, high production efficiency, no need of quenching medium, the process is easy to control.
- 3) for the special parts and the inner wall of the cylinder hole shaped cavity, as long as the laser beam to irradiate can processing. Such as the deep hole wall, deep groove bottom and side parts.
- 4) the local surface shape can be large and complex parts hardening parts.
- 5) the depth of hardened layer can be controlled accurately.
- 6) small distortion of heat treatment.