

32220T107/DB

Matched tapered roller bearings arranged back-to-back (O-arrangement, load lines diverge towards the bearing axis) accommodate high radial loads, axial loads in both directions, and tilting moments. The precision manufactured intermediate rings between the inner and outer rings enable a defined internal clearance or preload to be achieved when mounted. Matched tapered roller bearings are typically used in gearboxes, hoisting equipment, rolling mills, and machines in the mining industry.



- High radial load carrying capacity
- Designed for axial loads in both directions
- Accommodate tilting moments
- Relatively high stiffness
- Surface finish on the contact surfaces of the rollers and raceways that enhances operational reliability



Dimensions		
d	100 mm	Bore diameter
D	180 mm	Outside diameter
T	107 mm	Total width
d ₁	≈ 136.48 mm	Shoulder diameter of inner ring
C	87 mm	Width of outer rings
l	9 mm	Width of spacer ring
b	4 mm	Width of lubrication groove
K	3 mm	Diameter of lubrication hole
r _{1,2}	min. 3 mm	Chamfer dimension
r ₅	min. 1 mm	Chamfer dimension
a	90.962 mm	Distance between pressure points



Abutment dimensions

d_b	min. 113.5 mm	Diameter of shaft abutment
D_b	min. 171 mm	Diameter of housing abutment
C_b	min. 10 mm	Minimum width of space required in housing on small side face
r_a	max. 3 mm	Radius of fillet
r_c	max. 1 mm	Radius of fillet

Calculation data

AGA performance class		AGA Explorer
Basic dynamic load rating	C	668 kN
Basic static load rating	C_0	880 kN
Fatigue load limit	P_u	96.5 kN
Reference speed		2 400 r/min
Limiting speed		3 600 r/min
Limiting value	e	0.43
Calculation factor	Y_1	1.6
Calculation factor	Y_2	2.3
Calculation factor	Y_0	1.6

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal + CL7C, P5, total width
- Internal clearance: values

BEARING INTERFACES

- Seat tolerances for standard conditions

- Tolerances and resultant fit

AGA BEARINGS