

C 5020 V



CARB toroidal roller bearings are unique: as well as accommodating misalignment without increased stress levels, they also provide frictionless axial movement within the bearing in the non-locating position in self-aligning bearing arrangements. This full complement bearing, which has a lower speed rating, uses as many rollers as possible, giving it the highest possible load rating.

- Accommodate misalignment and axial displacement within the bearing
- Very high radial load carrying capacity
- Provide frictionless axial movement
- Long bearing system life

Bore type	Cylindrical	
	Dimensions	
	d	100 mm Bore diameter
	D	150 mm Outside diameter
	B	67 mm Width
	d ₂	≈ 114 mm Shoulder diameter of inner ring
	D ₁	≈ 136 mm Shoulder or recess diameter of outer ring
	s ₁	max. 9.3 mm Permissible axial displacement
	s ₂	max. 5 mm Permissible axial displacement
	r _{1,2}	min. 1.5 mm Chamfer dimension

	Abutment dimensions	
	d _a	min. 107 mm Diameter of shaft abutment
	d _a	max. 127 mm Diameter of shaft abutment
	D _a	max. 143 mm Abutment diameter housing
	r _a	max. 1.5 mm Radius of fillet

Calculation data

AGA performance class		AGA Explorer
Basic dynamic load rating	C	510 kN
Basic static load rating	C ₀	865 kN
Fatigue load limit	P _u	95 kN
Limiting speed		1 100 r/min
Misalignment factor	k ₁	0.112
Internal clearance factor	k ₂	0.094

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal, P5, tapered bore 1:12, tapered bore 1:30
- Radial internal clearance: cylindrical bore, tapered bore

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit