

24164 CC/W33

Spherical roller bearings can accommodate heavy loads in both directions. They are self-aligning and accommodate misalignment and shaft deflections, with virtually no increase in friction or temperature. The design includes features to facilitate relubrication. The bearings can be used in a modular system, including housings, sleeves and nuts.



- Accommodate misalignment
- High load carrying capacity
- Relubrication features
- Low friction and long service life
- Increased wear resistance

Bore type

Cylindrical



Dimensions		
d	320 mm	Bore diameter
t _{Δdmp}	-0.04 – 0.0 mm	Deviation limits of mid-range bore diameter
D	540 mm	Outside diameter
t _{ΔDmp}	-0.05 – 0.0 mm	Deviation limits of mid-range outside diameter
B	218 mm	Width
t _{ΔBs}	-0.4 – 0.0 mm	Deviation limits of ring width
d ₂	≈ 364 mm	Shoulder diameter of inner ring
D ₁	≈ 455 mm	Shoulder/recess diameter of outer ring
b	16.7 mm	Width of lubrication groove
K	9 mm	Diameter of lubrication hole
r _{1,2}	min. 5 mm	Chamfer dimension
Normal		ISO tolerance class for dimensions



Abutment dimensions

d_a	min. 340 mm	Diameter of shaft abutment
D_a	max. 520 mm	Diameter of housing abutment
r_a	max. 4 mm	Radius of fillet

Calculation data

AGA performance class		AGA Explorer
Basic dynamic load rating	C	4 395 kN
Basic static load rating	C_0	7 100 kN
Fatigue load limit	P_u	510 kN
Reference speed		500 r/min
Limiting speed		700 r/min
Limiting value	e	0.4
Calculation factor	Y_1	1.7
Calculation factor	Y_2	2.5
Calculation factor	Y_0	1.6

Tolerances of run-out

Range of section height at inner ring of assembled bearing	t_{Kia}	60 μ m
Range of section height at outer ring of assembled bearing	t_{Kea}	100 μ m
ISO tolerance class for geol tolerances		Normal

Radial internal clearance

Minimum initial clearance	200 µm
Maximum initial clearance	310 µm

Tolerances of run-out

GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal, P6, 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

AGA BEARINGS