

240/950 CAK30/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

Tapered 1:30

Dimensions

Bore diameter

d

950 mm

Deviation limits of mid-range bore diameter

0.0 – 0.1 mm

Deviation limits of tapered slope

0.0 – 0.1 mm

Outside diameter

D

1 360 mm

Deviation limits of mid-range outside diameter

-0.16 – 0.0 mm

Width

B

412 mm

Deviation limits of ring width

-1.0 – 0.0 mm

Shoulder diameter of inner ring

d₂

≈ 1 077 mm

Shoulder/recess diameter of outer ring

D₁

≈ 1 214 mm

Width of lubrication groove

b

22.3 mm

Diameter of lubrication hole

K

12 mm

Chamfer dimension

r_{1,2}

min. 7.5 mm

ISO tolerance class for dimensions

Normal

Abutment dimensions

Diameter of housing abutment	D_a	max. 1 332 mm
Radius of fillet	r_a	max. 6 mm

Calculation data

AGA performance class		AGA Explorer
Basic dynamic load rating	C	17 847 kN
Basic static load rating	C_0	39 000 kN
Fatigue load limit	P_u	2 240 kN
Reference speed		170 r/min
Limiting speed		300 r/min
Limiting value	e	0.27
Calculation factor	Y_1	2.5
Calculation factor	Y_2	3.7
Calculation factor	Y_0	2.5

Tolerances of run-out

Range of section height at inner ring of assembled bearing	t_{Kia}	90 μm
Range of section height at outer ring of assembled bearing	t_{Kea}	190 μm
ISO tolerance class for geoal tolerances		Normal

Radial internal clearance

Minimum initial clearance	710 μm
Maximum initial clearance	930 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