240/950 CA/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

Bore diameter	d	950 mm
Deviation limits of mid-range bore diameter		-0.1 – 0.0 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	d_2	≈ 1 077 mm
Shoulder/recess diameter of outer ring	D_1	≈ 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 shaft abutment	d_a	min. 978 mm
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	480 µm
Maximum initial clearance	710 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