

241/1180 ECAK30/C3HW33



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

d	1 180 mm	Bore diameter
t _{Δdmp}	0.0 – 0.125 mm	Deviation limits of mid-range bore diameter
t _{ΔSL}	0.0 – 0.115 mm	Deviation limits of tapered slope
D	1 850 mm	Outside diameter
t _{ΔDmp}	-0.2 – 0.0 mm	Deviation limits of mid-range outside diameter
B	670 mm	Width
t _{ΔBs}	-1.25 – 0.0 mm	Deviation limits of ring width
d ₂	≈ 1 307 mm	Shoulder diameter of inner ring
D ₁	≈ 1 706 mm	Shoulder/recess diameter of outer ring
b	22.3 mm	Width of lubrication groove
K	12 mm	Diameter of lubrication hole
r _{1,2}	min. 15 mm	Chamfer dimension
	Normal	ISO tolerance class for dimensions

Abutment dimensions

D_a	max. 1 792 mm	Diameter of housing abutment
r_a	max. 12 mm	Radius of fillet

Calculation data

AGA performance class		AGA Explorer
Basic dynamic load rating	C	38 266 kN
Basic static load rating	C_0	78 000 kN
Fatigue load limit	P_u	3 900 kN
Reference speed		75 r/min
Limiting speed		110 r/min
Limiting value	e	0.31
Calculation factor	Y_1	2.2
Calculation factor	Y_2	3.3
Calculation factor	Y_0	2.2

Tolerances of run-out

Range of section height at inner ring of assembled bearing	t_{Kia}	100 μm
Range of section height at outer ring of assembled bearing	t_{Kea}	220 μm
ISO tolerance class for geoal tolerances		Normal

Radial internal clearance

Minimum initial clearance	1 270 μm
Maximum initial clearance	1 420 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