

238/1180 CAKFA/W20



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. They can be used in a modular system, including housings, sleeves and nuts.

- Accommodate misalignment
- High load carrying capacity
- Low friction and long service life
- Extensive range available sealed for increased reliability
- Increased wear resistance

Bore type

Tapered 1:12

Dimensions

d	1 180 mm	Bore diameter
t _{Δdmp}	0.0 – 0.105 mm	Deviation limits of mid-range bore diameter
t _{ΔSL}	0.0 – 0.105 mm	Deviation limits of tapered slope
D	1 420 mm	Outside diameter
t _{ΔDmp}	-0.16 – 0.0 mm	Deviation limits of mid-range outside diameter
B	180 mm	Width
t _{ΔBs}	-1.25 – 0.0 mm	Deviation limits of ring width
d ₂	≈ 1 264 mm	Shoulder diameter of inner ring
D ₁	≈ 1 355 mm	Shoulder/recess diameter of outer ring
K	12 mm	Diameter of lubrication hole
r _{1,2}	min. 6 mm	Chamfer dimension
	Normal	ISO tolerance class for dimensions

Abutment dimensions

D_a	max. 1 397 mm	Diameter of housing abutment
r_a	max. 5 mm	Radius of fillet

Calculation data

AGA performance class		AGA Explorer
Basic dynamic load rating	C	6 778 kN
Basic static load rating	C_0	18 600 kN
Fatigue load limit	P_u	1 060 kN
Reference speed		170 r/min
Limiting speed		320 r/min
Limiting value	e	0.11
Calculation factor	Y_1	6.1
Calculation factor	Y_2	9.1
Calculation factor	Y_0	6.3

Tolerances of run-out

Range of section height at inner ring of assembled bearing	t_{Kia}	100 μ m
Range of section height at outer ring of assembled bearing	t_{Kea}	190 μ m
ISO tolerance class for geoal tolerances		Normal

Radial internal clearance

Minimum initial clearance	830 μ m
Maximum initial clearance	1 120 μ m

Tolerances of run-out

- 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