

238/850 CAKMA/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	850 mm	Bore diameter
t _{Δdmp}	0.0 – 0.09 mm	Deviation limits of mid-range bore diameter
t _{ΔSL}	0.0 – 0.09 mm	Deviation limits of tapered slope
D	1 030 mm	Outside diameter
t _{ΔDmp}	-0.125 – 0.0 mm	Deviation limits of mid-range outside diameter
B	136 mm	Width
t _{ΔBs}	-1.0 – 0.0 mm	Deviation limits of ring width
d ₂	≈ 912 mm	Shoulder diameter of inner ring
D ₁	≈ 981 mm	Shoulder/recess diameter of outer ring
K	12 mm	Diameter of lubrication hole
r _{1,2}	min. 5 mm	Chamfer dimension
	Normal	ISO tolerance class for dimensions

Abutment dimensions

D_a	max. 1 012 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	3 882 kN
Basic static load rating	C_0	10 000 kN
Fatigue load limit	P_u	630 kN
Reference speed		260 r/min
Limiting speed		530 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}	90 μ m
Range of section height at outer ring of assembled bearing	t_{Kea}	160 μ m
ISO tolerance class for geoal tolerances		Normal

Radial internal clearance

Minimum initial clearance	640 μ m
Maximum initial clearance	840 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