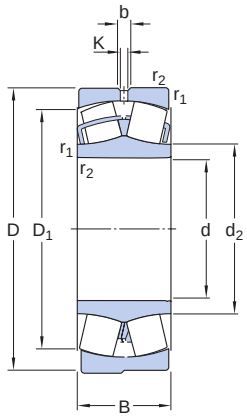
24038 CC/W33

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.

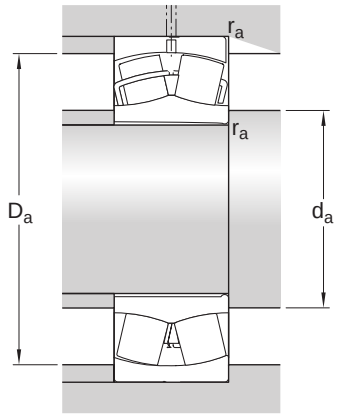
- Accommodate misalignment
- High load carrying capacity
- Relubrication features
- Low friction and long service life
- Increased wear resistance

Bore type	Cylindrical



Dimensions

d	190 mm	Bore diameter
$t_{\Delta dmp}$	-0.03 – 0.0 mm	Deviation limits of mid-range bore diameter
D	290 mm	Outside diameter
$t_{\Delta Dmp}$	-0.035 – 0.0 mm	Deviation limits of mid-range outside diameter
B	100 mm	Width
$t_{\Delta Bs}$	-0.08 – 0.0 mm	Deviation limits of ring width
d_2	≈ 210 mm	Shoulder diameter of inner ring
D_1	≈ 253 mm	Shoulder/recess diameter of outer ring
b	8.3 mm	Width of lubrication groove
K	4.5 mm	Diameter of lubrication hole
$r_{1,2}$	min. 2.1 mm	Chamfer dimension
	Normal	ISO tolerance class for dimensions



Abutment dimensions

d_a	min. 201 mm	Diameter of shaft abutment
D_a	max. 279 mm	Diameter of housing abutment
r_a	max. 2 mm	Radius of fillet

Calculation data

AGA performance class		AGA Explorer
Basic dynamic load rating	C	1 164 kN
Basic static load rating	C_0	1 800 kN
Fatigue load limit	P_u	163 kN
Reference speed		1 400 r/min
Limiting speed		2 000 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}	10 µm
Maximum run-out of inner ring side face to the bore	t_{Sd}	11 µm
Range of section height at outer ring of assembled bearing	t_{Kea}	18 µm
Perpendicularity of outer ring outside surface	t_{SD}	6.5 µm
ISO tolerance class for geoal tolerances		P5

Radial internal clearance

Minimum initial clearance	130 µm
Maximum initial clearance	200 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