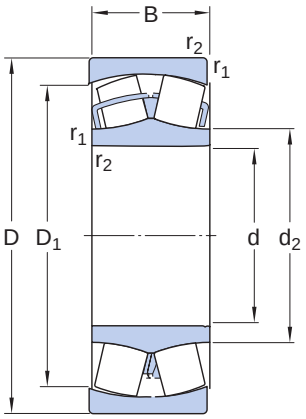
21305 CC

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.

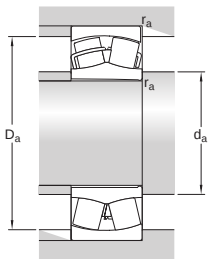
- Accommodate misalignment
- High load carrying capacity
- Low friction and long service life
- Increased wear resistance

Bore type	Cylindrical



Dimensions

d	25 mm	Bore diameter
$t_{\Delta dmp}$	-0.01 – 0.0 mm	Deviation limits of mid-range bore diameter
D	62 mm	Outside diameter
$t_{\Delta Dmp}$	-0.013 – 0.0 mm	Deviation limits of mid-range outside diameter
B	17 mm	Width
$t_{\Delta Bs}$	-0.06 – 0.0 mm	Deviation limits of ring width
d_2	≈ 35.7 mm	Shoulder diameter of inner ring
D_1	≈ 50.7 mm	Shoulder/recess diameter of outer ring
$r_{1,2}$	min. 1.1 mm	Chamfer dimension
	Normal	ISO tolerance class for dimensions



Abutment dimensions

d_a	min. 32 mm	Diameter of shaft abutment
D_a	max. 55 mm	Diameter of housing abutment
r_a	max. 1 mm	Radius of fillet

Calculation data

AGA performance class		AGA Explorer
Basic dynamic load rating	C	49.1 kN
Basic static load rating	C_0	41.5 kN
Fatigue load limit	P_u	4.55 kN
Reference speed		11 000 r/min
Limiting speed		15 000 r/min
Limiting value	e	0.3
Calculation factor	Y_1	2.3
Calculation factor	Y_2	3.4
Calculation factor	Y_0	2.2

Tolerances of run-out

Range of section height at inner ring of assembled bearing	t_{Kia}	4 µm
Maximum run-out of inner ring side face to the bore	t_{Sd}	8 µm
Range of section height at outer ring of assembled bearing	t_{Kea}	8 µm
Perpendicularity of outer ring outside surface	t_{SD}	4 µm
ISO tolerance class for geoal tolerances		P5

Radial internal clearance

Minimum initial clearance	25 µm
Maximum initial clearance	40 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