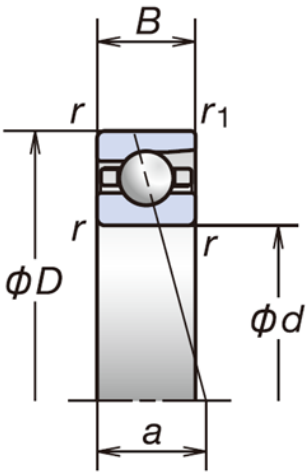
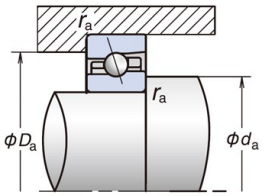
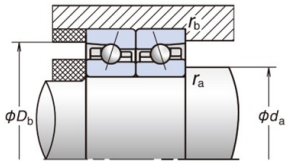
7909A5

Standard Series High Precision Angular Contact Ball Bearings







Parts Number

	7909A5TRV1VSUMP3

Boundary Dimensions

d	45	mm	Bore diameter
D	68	mm	Outside diameter
B	12	mm	Width
r(min.)	0.6	mm	Chamfer Dimension
r1(min.)	0.3	mm	Chamfer Dimension

Basic Load Ratings

Cr	15.9	kN	Basic Dynamic Load Rating
C0r	12.7	kN	Basic Static Load Rating

Speeds

Grease	17700	min-1	Limiting Speed
Oil (Oil-air)	26600	min-1	Limiting Speed

Dimensions

	A5: 25°		Contact Angle
a	19.2	mm	Effective Load Center

Abutment and Fillet Dimensions

da(min.)	50	mm	Diameter of Shaft Abutment
Da(max.)	63	mm	Diameter of Housing Abutment
Db(max.)	65.5	mm	Diameter of Housing Abutment
ra(max.)	0.6	mm	Radius of Shaft or Housing Fillet
rb(max.)	0.3	mm	Radius of Shaft or Housing Fillet

Performance

Pa	9.95	kN	Permissible Axial Load

Preload,Rigidity(DB and DF arrangement)

	Preload	Axial Rigidity	Measured axial clearance
EL	70N	88N/μm	-1μm
L	146N	115N/μm	-4μm
M	353N	160N/μm	-10μm
H	676N	208N/μm	-17μm

Additional information

	0.77	g/brg	Recommended Grease Quantities

Table A		EL	L	M	H
	15°	6.5	6.0	5.0	4.5
	25°	2			
	30°	1.4			

Table B	DBD	DBB
Preload factor	1.36	2
Axial rigidity	1.48	2
Radial rigidity	1.54	2

Calculation of radial rigidity
Multiply axial rigidity by the appropriate factor in Table A.
Calculation of preload and axial rigidity for combined bearings
Multiply by the appropriate factor in Table B. For radial rigidity, multiply the value from Table A with the appropriate factor in Table B.

Mass

0.130	kg	Mass(approx.)