



PRODUCT DATASHEET

Datasheet creation date: 2025/06/02 10:25 (UTC)



7911A5

Standard Series High Precision Angular Contact Ball Bearings



Parts Number

7911A5TRV1VSULP3

Boundary Dimensions

d	55	mm	Bore diameter
D	80	mm	Outside diameter
B	13	mm	Width
r(min.)	1	mm	Chamfer Dimension
r1(min.)	0.6	mm	Chamfer Dimension

Basic Load Ratings

Cr	19.0	kN	Basic Dynamic Load Rating
C0r	16.8	kN	Basic Static Load Rating

Speeds

Grease	14900	min-1	Limiting Speed
Oil (Oil-air)	22300	min-1	Limiting Speed

Dimensions

	A5: 25°		Contact Angle
a	22.2	mm	Effective Load Center

Abutment and Fillet Dimensions

da(min.)	61	mm	Diameter of Shaft Abutment
Da(max.)	74	mm	Diameter of Housing Abutment
Db(max.)	75	mm	Diameter of Housing Abutment
ra(max.)	1	mm	Radius of Shaft or Housing Fillet
rb(max.)	0.5	mm	Radius of Shaft or Housing Fillet

Performance

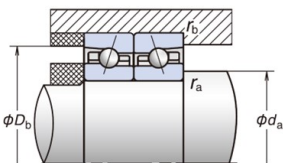
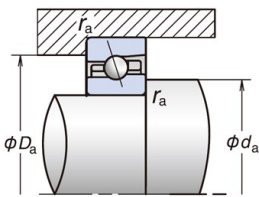
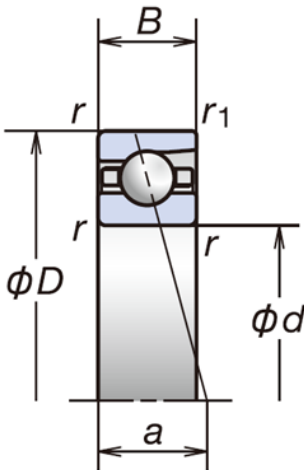
Pa	12.5	kN	Permissible Axial Load
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Preload,Rigidity(DB and DF arrangement)

	Preload	Axial Rigidity	Measured axial clearance
EL	99N	113N/μm	-2μm
L	196N	144N/μm	-5μm
M	454N	198N/μm	-11μm
H	917N	264N/μm	-19μm

Additional information

1.1	g/brg	Recommended Grease Quantities
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Mass

0.184	kg	Mass(approx.)
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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.