



PRODUCT DATASHEET

Datasheet creation date: 2025/06/02 10:21 (UTC)



7907CSN24

Standard Series High Precision Angular Contact Ball Bearings

Boundary Dimensions

d	35	mm	Bore diameter
D	55	mm	Outside diameter
B	10	mm	Width
r(min.)	0.6	mm	Chamfer Dimension
r1(min.)	0.3	mm	Chamfer Dimension

Basic Load Ratings

Cr	15.0	kN	Basic Dynamic Load Rating
C0r	8.55	kN	Basic Static Load Rating

Speeds

Grease	33400	min-1	Limiting Speed
Oil (Oil-air)	50700	min-1	Limiting Speed

Dimensions

	C: 15°		Contact Angle
a	11.0	mm	Effective Load Center

Abutment and Fillet Dimensions

da(min.)	40	mm	Diameter of Shaft Abutment
Da(max.)	50	mm	Diameter of Housing Abutment
Db(max.)	52.5	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	7.82	kN	Permissible Axial Load
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Calculation factors

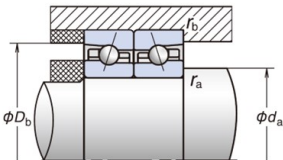
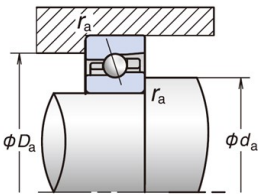
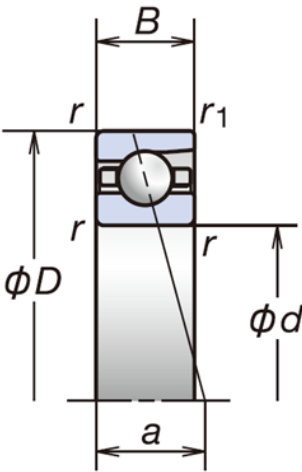
f0	15.7		Factor
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Preload,Rigidity(DB and DF arrangement)

	Preload	Axial Rigidity	Measured axial clearance
EL	32N	32N/μm	2μm
L	69N	43N/μm	-2μm
M	162N	63N/μm	-9μm
H	332N	89N/μm	-18μm

Additional information

	0.44	g/brg	Recommended Grease Quantities
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Mass

0.065	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.