



7920A5

Standard Series High Precision Angular Contact Ball Bearings



Boundary Dimensions

d	100	mm	Bore diameter
D	140	mm	Outside diameter
B	20	mm	Width
r(min.)	1.1	mm	Chamfer Dimension
r1(min.)	0.6	mm	Chamfer Dimension

Basic Load Ratings

Cr	59.5	kN	Basic Dynamic Load Rating
C0r	51.5	kN	Basic Static Load Rating

Speeds

Grease	8400	min-1	Limiting Speed
Oil (Oil-air)	12500	min-1	Limiting Speed

Dimensions

	A5: 25°		Contact Angle
a	38.0	mm	Effective Load Center

Abutment and Fillet Dimensions

da(min.)	107	mm	Diameter of Shaft Abutment
Da(max.)	133	mm	Diameter of Housing Abutment
Db(max.)	135	mm	Diameter of Housing Abutment
ra(max.)	1	mm	Radius of Shaft or Housing Fillet
rb(max.)	0.6	mm	Radius of Shaft or Housing Fillet

Performance

Pa	39.5	kN	Permissible Axial Load
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Preload,Rigidity(DB and DF arrangement)

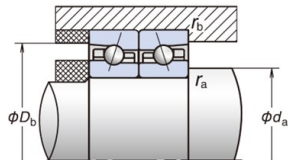
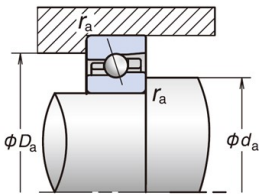
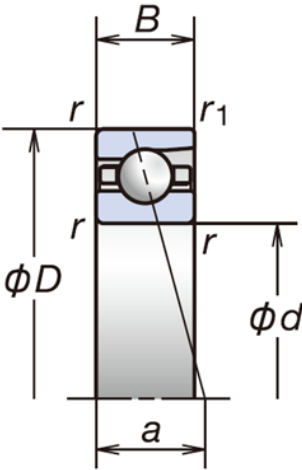
	Preload	Axial Rigidity	Measured axial clearance
EL	318N	209N/μm	-5μm
L	615N	266N/μm	-10μm
M	1229N	346N/μm	-18μm
H	2546N	463N/μm	-31μm

Additional information

	4.6	g/brg	Recommended Grease Quantities
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Mass

	0.808	kg	Mass(approx.)
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PRODUCT DATASHEET

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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.