



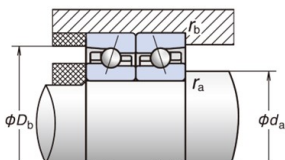
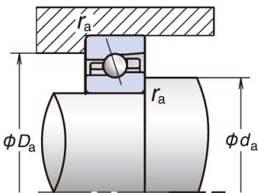
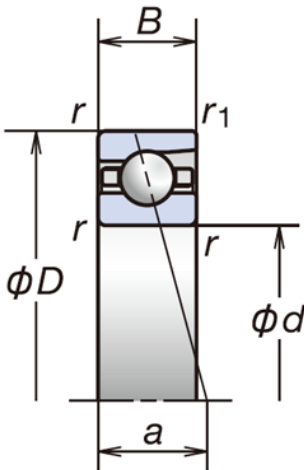
PRODUCT DATASHEET

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7903C

Standard Series High Precision Angular Contact Ball Bearings



Boundary Dimensions

d	17	mm	Bore diameter
D	30	mm	Outside diameter
B	7	mm	Width
r(min.)	0.3	mm	Chamfer Dimension
r1(min.)	0.15	mm	Chamfer Dimension

Basic Load Ratings

Cr	6.30	kN	Basic Dynamic Load Rating
C0r	2.94	kN	Basic Static Load Rating

Speeds

Grease	49000	min-1	Limiting Speed
Oil (Oil-air)	74500	min-1	Limiting Speed

Dimensions

	C: 15°		Contact Angle
a	6.6	mm	Effective Load Center

Abutment and Fillet Dimensions

da(min.)	19.5	mm	Diameter of Shaft Abutment
Da(max.)	27.5	mm	Diameter of Housing Abutment
Db(max.)	28.8	mm	Diameter of Housing Abutment
ra(max.)	0.3	mm	Radius of Shaft or Housing Fillet
rb(max.)	0.15	mm	Radius of Shaft or Housing Fillet

Performance

Pa	2.09	kN	Permissible Axial Load
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Calculation factors

f0	14.8		Factor
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Preload,Rigidity(DB and DF arrangement)

	Preload	Axial Rigidity	Measured axial clearance
EL	11N	15N/μm	3μm
L	25N	21N/μm	0μm
M	56N	30N/μm	-5μm
H	119N	43N/μm	-12μm

Additional information

	0.12	g/brg	Recommended Grease Quantities
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Mass

0.017	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.