



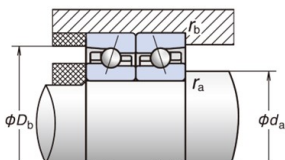
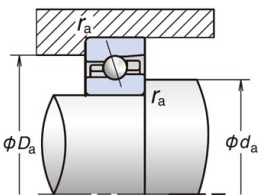
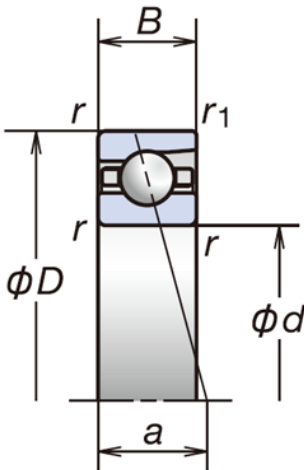
PRODUCT DATASHEET

Datasheet creation date: 2025/06/02 10:16 (UTC)



7901C

Standard Series High Precision Angular Contact Ball Bearings



Parts Number

7901CTYNSULP4

Boundary Dimensions

d	12	mm	Bore diameter
D	24	mm	Outside diameter
B	6	mm	Width
r(min.)	0.3	mm	Chamfer Dimension
r1(min.)	0.15	mm	Chamfer Dimension

Basic Load Ratings

Cr	3.55	kN	Basic Dynamic Load Rating
C0r	1.86	kN	Basic Static Load Rating

Speeds

Grease	63000	min-1	Limiting Speed
Oil (Oil-air)	80000	min-1	Limiting Speed

Dimensions

	C: 15°		Contact Angle
a	5.4	mm	Effective Load Center

Abutment and Fillet Dimensions

da(min.)	14.5	mm	Diameter of Shaft Abutment
Da(max.)	21.5	mm	Diameter of Housing Abutment
Db(max.)	22.8	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	1.45	kN	Permissible Axial Load
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Calculation factors

f0	14.7		Factor
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Preload,Rigidity(DB and DF arrangement)

	Preload	Axial Rigidity	Measured axial clearance
EL	8.6N	12N/μm	4μm
L	16N	16N/μm	2μm
M	41N	25N/μm	-3μm
H	77N	34N/μm	-8μm



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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.

Additional information

0.06	g/brg	Recommended Grease Quantities
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Mass

0.011	kg	Mass(approx.)
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