



# PRODUCT DATASHEET

Datasheet creation date: 2025/06/02 9:36 (UTC)

MOTION & CONTROL  
**NSK**

## 20TAC47C

For High-Rigidity Applications (NSKTAC C Series)



### Parts Number

20TAC47CSUHPN7C

### Boundary Dimensions

d	20	mm	Bore diameter
D	47	mm	Outside diameter
B	15	mm	Width
r(min.)	1	mm	Chamfer Dimension
r1(min.)	0.6	mm	Chamfer Dimension

### Basic Load Ratings

Ca(1row)	27.6	kN	Basic Dynamic Load Rating Ca by Number of Rows Sustaining Fa
Ca(2row)	45.0	kN	Basic Dynamic Load Rating Ca by Number of Rows Sustaining Fa
Ca(3row)	59.5	kN	Basic Dynamic Load Rating Ca by Number of Rows Sustaining Fa

### Speeds

Grease	6900	min-1	Limiting Speed (H-Preload)
Oil (Oil-air)	9200	min-1	Limiting Speed (H-Preload)

### Dimensions

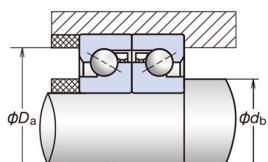
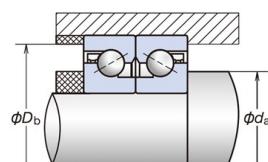
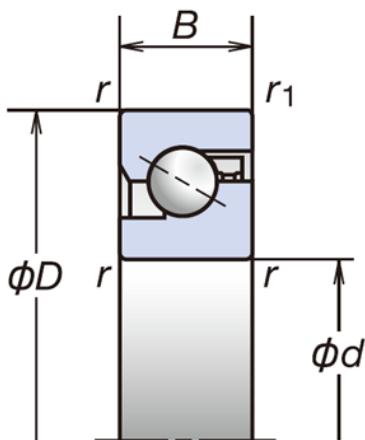
	60°		Contact Angle
db(min.)	25	mm	Diameter of Shaft Abutment

### Abutment and Fillet Dimensions

da(min.)	25	mm	Diameter of Shaft Abutment
Da(max.)	41	mm	Diameter of Housing Abutment
Db(max.)	42	mm	Diameter of Housing Abutment

### Performance

1row	26.6	kN	Limiting Static Axial Load by Number of Rows Sustaining Fa
2row	53.0	kN	Limiting Static Axial Load by Number of Rows Sustaining Fa
3row	79.5	kN	Limiting Static Axial Load by Number of Rows Sustaining Fa





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## Preload, Rigidity(DB and DF arrangement)

	Preload	Axial Rigidity
H	1450N	630N/ $\mu$ m

Calculation of preload, axial rigidity and starting torque for bearing arrangements.

Multiply by factors in table B.

Table <b>B</b>	DFD	DFF	DFT
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	DBD	DBB	DBT
Preload factor	1.36	2.00	1.57
Axial rigidity	1.49	2.00	1.89
Starting torque	1.35	2.00	1.55

## Additional information

H	-13	$\mu$ m	Measured Axial Clearance(DB and DF arrangement)
H	0.09	N $\cdot$ m	Starting Torque(DB and DF arrangement)
	2.0	g/brg	Recommended Grease Quantities

## Mass

	0.135	kg	Mass(approx.)
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