NEEDLE ROLLER BEARINGS

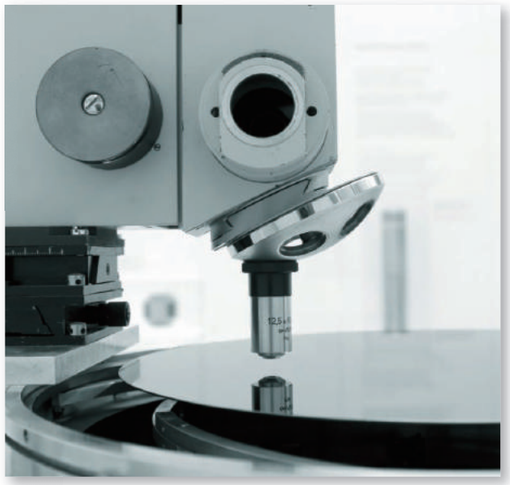
STAINLESS STEEL

Strong Point of Stainless Needle Roller Bearing

JNS manufactures stainless steel needle bearings and inner rings with excellent corrosion resistance.
These products are used in applications where a high resistance to corrosion is required such as medical devices, food machinery, packaging machinery, textile machinery and chemical machinery.
The outer ring, inner ring and rollers are made from martensite stainless steel, and after being subjected to heat treatment, receive a high accuracy grinding finish.
These products are not appropriate for use in environments with high humidity or where they could be directly exposed to water.
The mounting dimensions of JNS stainless bearings are the same as the conventional bearings. They are also compatible with the needle bearings of other manufacturers.

PHARMACEUTICALS

MEDICAL DEVICES



SEMICONDUCTORS

BOTTLING

FOODS

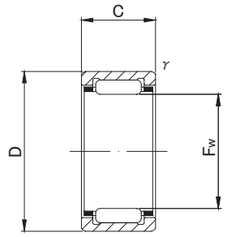
Stainless type Machined type needle roller bearings/inner ring

Type and Part Code

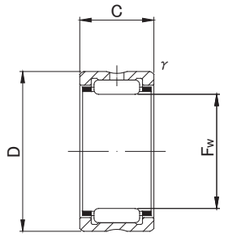
Type	Applicable axis diameter	Feature	Part Code
 RNA..M	ϕ 7 ~ ϕ 30	Stainless type Machined type needle roller bearings With collar outer ring Without inner ring Without seal	**Type** RNA → Type of bearing **Dimensions** 49 (Dimension series) 01 (Bore diameter number) M (**Stainless steel**) **Suffix code** P6 → Classification symbol (Class 6) (Standard class 0 No symbol)
 NK..M	ϕ 5 ~ ϕ 19	Stainless type Machined type needle roller bearings Light load type With collar outer ring Without inner ring Without seal (There are no oil holes or oil grooves if the roller set bore diameter (Fw) is 10 mm or less)	**Type** NK → Type of bearing **Dimensions** 18 (Inscribed circle diameter) / 20 (Outer ring width) M (**Stainless steel**) **Suffix code** P6 → Classification symbol (Class 6) (Standard class 0 No symbol)
 NA..M	ϕ 5 ~ ϕ 25	Stainless type Machined type needle roller bearings With collar outer ring With inner ring Without seal *Double rows: NA69 (shaft dia. ≧ϕ 32)	**Type** NA → Type of bearing **Dimensions** 49 (Dimension series) 01 (Bore diameter number) M (**Stainless steel**) **Suffix code** C3 → Clearance symbol (C3 clearance) (Standard: No symbol, CN clearance) P6 → Classification symbol (Class 6) (Standard class 0 No symbol)
 NKI..M	ϕ 5 ~ ϕ 15	Stainless type Machined type needle roller bearings Light load type With collar outer ring With inner ring Without seal (There are no oil holes or oil grooves if the bore diameter is 8 mm or less)	**Type** NKI → Type of bearing **Dimensions** 10 (Bore diameter) / 20 (Outer ring width) M (**Stainless steel**) **Suffix code** C3 → Clearance symbol (C3 clearance) (Standard: No symbol, CN clearance) P6 → Classification symbol (Class 6) (Standard class 0 No symbol)
 IR..M	ϕ 5 ~ ϕ 50	Stainless type Inner ring	**Type** IR → Type of bearing **Dimensions** 25 (Bore diameter) 30 (Outer diameter) 17 (Width) M (**Stainless steel**)

MACHINED RING NEEDLE ROLLER BEARINGS STAINLESS STEEL WITHOUT INNER RING

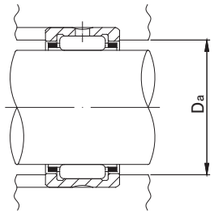
RNA49..M , NK..M



NK..M(Fw ≦ 10)



RNA49..M,NK..M



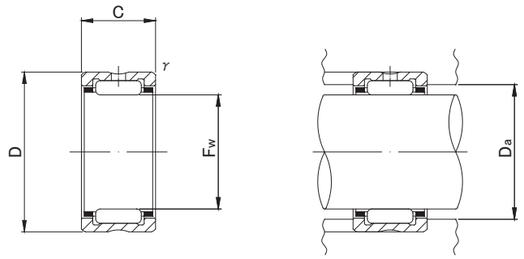
RNA49..M NK..M TYPE

Shaft Diameter (mm)	Designation		Dimensions (mm)				Standard mounting dimensions (mm)	Basic dynamic load rating	Basic static load rating	Limiting speed *	Mass	Usable bearing designation	
	RNA49..M	NK..M	Fw	D	C	*r*s min	Da MAX	Cr N	Cor N	rpm	g (approx)	INNER RING	WITH INNER RING
5	—	NK5/10M	5 +0.018 +0.010	10	10	0.15	6.5	2 200	1 700	40 000	3.4	—	—
	—	NK5/12M	5 +0.018 +0.010	10	12	0.15	6.5	2 800	2 400	40 000	4.2	—	—
6	—	NK6/10M	6 +0.018 +0.010	12	10	0.15	7.5	2 400	2 100	37 000	5.3	—	—
	—	NK6/12M	6 +0.018 +0.010	12	12	0.15	7.5	3 100	2 900	37 000	6.4	—	—
7	RNA495M	—	7 +0.022 +0.013	13	10	0.15	8.5	2 700	2 400	34 000	5.9	—	—
	—	NK7/10M	7 +0.022 +0.013	14	10	0.3	8.5	3 300	2 700	34 000	6.9	—	—
	—	NK7/12M	7 +0.022 +0.013	14	12	0.3	8.5	4 200	3 700	34 000	8.3	—	—
8	RNA496M	—	8 +0.022 +0.013	15	10	0.15	13.8	3 500	3 100	32 000	7.3	IR6810M	NA496M
	—	NK8/12M	8 +0.022 +0.013	15	12	0.3	13	4 600	4 300	32 000	9	IR5812M	NKI 5/12M
	—	NK8/16M	8 +0.022 +0.013	15	16	0.3	13	6 500	6 700	32 000	13	IR5816M	NKI 5/16M
9	—	NK9/12M	9 +0.022 +0.013	16	12	0.3	14	5 000	4 800	30 000	10	IR6912M	NKI 6/12M
	—	NK9/16M	9 +0.022 +0.013	16	16	0.3	14	6 900	7 500	30 000	13.2	IR6916M	NKI 6/16M
	RNA497M	—	9 +0.022 +0.013	17	10	0.15	15.8	4 100	3 300	30 000	9.3	IR7910M	NA497M
10	—	NK10/12M	10 +0.022 +0.013	17	12	0.3	15	5 400	5 500	28 000	10.7	IR71012M	NKI 7/12M
	—	NK10/16M	10 +0.022 +0.013	17	16	0.3	15	7 500	8 400	28 000	14.3	IR71016M	NKI 7/16M
	RNA498M	—	10 +0.022 +0.013	19	11	0.2	17.4	5 700	4 600	28 000	12.6	IR81011M	NA498M
12	—	NK12/12M	12 +0.027 +0.016	19	12	0.3	17	6 000	6 700	26 000	12.2	IR91212M	NKI 9/12M
	—	NK12/16M	12 +0.027 +0.016	19	16	0.3	17	8 400	10 300	26 000	16.3	IR91216M	NKI 9/16M
	RNA499M	—	12 +0.027 +0.016	20	11	0.3	18	6 000	5 700	26 000	13.6	IR91211M	NA499M
14	RNA4900M	—	14 +0.027 +0.016	22	13	0.3	20	8 400	9 200	24 000	16.5	IR101413M	NA4900M
	—	NK14/16M	14 +0.027 +0.016	22	16	0.3	20	10 800	12 600	24 000	21	IR101416M	NKI 10/16M
	—	NK14/20M	14 +0.027 +0.016	22	20	0.3	20	13 600	17 000	24 000	26.5	IR101420M	NKI 10/20M
15	—	NK15/16M	15 +0.027 +0.016	23	16	0.3	21	11 400	13 700	23 000	22.5	—	—
	—	NK15/20M	15 +0.027 +0.016	23	20	0.3	21	14 300	18 500	23 000	28	—	—

* Suitable for oil lubrication. In case of grease lubrication, down to 60% of this value.

MACHINED RING NEEDLE ROLLER BEARINGS
STAINLESS STEEL
WITHOUT INNER RING

RNA49..M , NK..M



RNA49..M,NK..M

RNA49..M NK..M TYPE

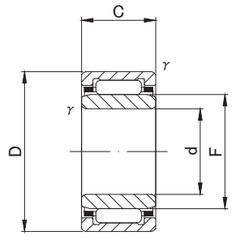
Shaft Diameter (mm)	Designation		Dimensions (mm)				Standard mounting dimensions (mm)	Basic dynamic load rating	Basic static load rating	Limiting speed *	Mass	Usable bearing designation	
	RNA49..M	NK..M	Fw	D	C	*r*s min	Da MAX	Cr N	Cor N	rpm	g (approx)	INNER RING	WITH INNER RING
16	RNA4901M	—	16	24	13	0.3	22	8 900	10 200	23 000	18.1	IR121613M	NA4901M
	—	NK16/16M	16 +0.027 +0.016	24	16	0.3	22	11 300	13 800	23 000	23	IR121616M	NKI 12/16M
	—	NK16/20M	16	24	20	0.3	22	14 300	18 700	23 000	29	IR121620M	NKI 12/20M
17	—	NK17/16M	17 +0.027 +0.016	25	16	0.3	23	11 700	14 900	22 000	24.5	—	—
	—	NK17/20M	17	25	20	0.3	23	14 900	20 300	22 000	30.5	—	—
18	—	NK18/16M	18 +0.027 +0.016	26	16	0.3	24	12 300	16 100	21 000	25.5	—	—
	—	NK18/20M	18	26	20	0.3	24	15 600	21 700	21 000	32	—	—
19	—	NK19/16M	19 +0.033 +0.020	27	16	0.3	25	12 800	17 200	21 000	27	IR151916M	NKI 15/16M
	—	NK19/20M	19	27	20	0.3	25	16 200	23 200	21 000	34	IR151920M	NKI 15/20M
20	RNA4902M	—	20 +0.033 +0.020	28	13	0.3	26	10 000	12 600	20 000	21.5	IR152013M	NA4902M
22	RNA4903M	—	22 +0.033 +0.020	30	13	0.3	28	10 800	14 300	18 000	23.5	IR172213M	NA4903M
25	RNA4904M	—	25 +0.033 +0.020	37	17	0.3	35	19 300	23 000	16 000	55.5	IR202517M	NA4904M
30	RNA4905M	—	30 +0.033 +0.020	42	17	0.3	40	21 800	28 200	13 000	64	IR253017M	NA4905M

* Suitable for oil lubrication. In case of grease lubrication, down to 60% of this value.

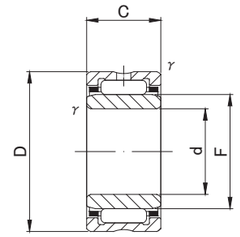
MACHINED RING NEEDLE ROLLER BEARINGS STAINLESS STEEL WITH INNER RING

SUS/INOX

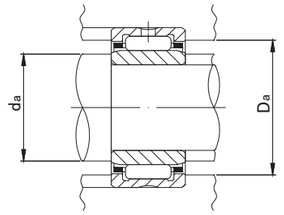
NA49..M ,NKI..M



NKI..M(d ≦ 8)



NA49..M,NKI..M



NA49..M ,NKI..M TYPE

Shaft Diameter (mm)	Designation		Dimensions (mm)					Standard mounting dimensions (mm)			Basic dynamic load rating	Basic static load rating	Limiting speed *	Mass	Usable bearing designation	
	NA49..M	NKI..M	d	D	C	*r*s min	F	da MIN	da MAX	Da MAX	Cr N	Cor N	rpm	g (approx)	OUTER RING	INNER RING
5	NA495M	—	5 0 -0.008	13	10	0.15	7	6.2	6.7	11.8	2 700	2 400	34 000	7.3	RNA495M	IR5710M
	—	NKI 5/12M	5	15	12	0.3	8	7	7.7	13	4 600	4 300	32 000	11.9	NK8/12M	IR5812M
	—	NKI 5/16M	5	15	16	0.3	8	7	7.7	13	6 500	6 700	32 000	16.7	NK8/16M	IR5816M
6	NA496M	—	6 0 -0.008	15	10	0.15	8	7.2	7.7	13.8	3 500	3 100	32 000	9.1	RNA496M	IR6810M
	—	NKI 6/12M	6	16	12	0.3	9	8	8.7	14	5 000	4 800	30 000	13	NK9/12M	IR6912M
	—	NKI 6/16M	6	16	16	0.3	9	8	8.7	14	6 900	7 500	30 000	17.5	NK9/16M	IR6916M
7	NA497M	—	7 0 -0.008	17	10	0.15	9	8.2	8.7	15.8	4 100	3 300	30 000	11.2	RNA497M	IR7910M
	—	NKI 7/12M	7	17	12	0.3	10	9	9.7	15	5 400	5 500	28 000	14.3	NK10/12M	IR71012M
	—	NKI 7/16M	7	17	16	0.3	10	9	9.7	15	7 500	8 400	28 000	19.2	NK10/16M	IR71016M
8	NA498M	—	8 0 -0.008	19	11	0.2	10	9.2	9.7	17.4	5 700	4 600	28 000	15	RNA498M	IR81011M
9	—	NKI 9/12M	9 0 -0.008	19	12	0.3	12	11	11.5	17	6 000	6 700	26 000	16.7	NK12/12M	IR91212M
	—	NKI 9/16M	9	19	16	0.3	12	11	11.5	17	8 400	10 300	26 000	22.5	NK12/16M	IR91216M
	NA499M	—	9	20	11	0.3	12	11	11.5	18	6 000	5 700	26 000	16.7	RNA499M	IR91211M
10	NA4900M	—	10 0 -0.008	22	13	0.3	14	12	13	20	8 400	9 200	24 000	24	RNA4900M	IR101413M
	—	NKI 10/16M	10	22	16	0.3	14	12	13	20	10 800	12 600	24 000	30	NK14/16M	IR101416M
	—	NKI 10/20M	10	22	20	0.3	14	12	13	20	13 600	17 000	24 000	38	NK14/20M	IR101420M
12	NA4901M	—	12 0 -0.008	24	13	0.3	16	14	15	22	8 900	10 200	23 000	26.5	RNA4901M	IR121613M
	—	NKI 12/16M	12	24	16	0.3	16	14	15	22	11 300	13 800	23 000	33.5	NK16/16M	IR121616M
	—	NKI 12/20M	12	24	20	0.3	16	14	15	22	14 300	18 700	23 000	42.5	NK16/20M	IR121620M
15	—	NKI 15/16M	15 0 -0.008	27	16	0.3	19	17	18	25	12 800	17 200	21 000	39.5	NK19/16M	IR151916M
	—	NKI 15/20M	15	27	20	0.3	19	17	18	25	16 200	23 200	21 000	50	NK19/20M	IR151920M
	NA4902M	—	15	28	13	0.3	20	17	19	26	10 000	12 600	20 000	35	RNA4902M	IR152013M
17	NA4903M	—	17 0 -0.008	30	13	0.3	22	19	21	28	10 800	14 300	18 000	39	RNA4903M	IR172213M
20	NA4904M	—	20 0 -0.010	37	17	0.3	25	22	24	35	19 300	23 000	16 000	78.5	RNA4904M	IR202517M
25	NA4905M	—	25 0 -0.010	42	17	0.3	30	27	29	40	21 800	28 200	13 000	92.5	RNA4905M	IR253017M

* Suitable for oil lubrication. In case of grease lubrication, down to 60% of this value.