NEEDLE ROLLER BEARINGS

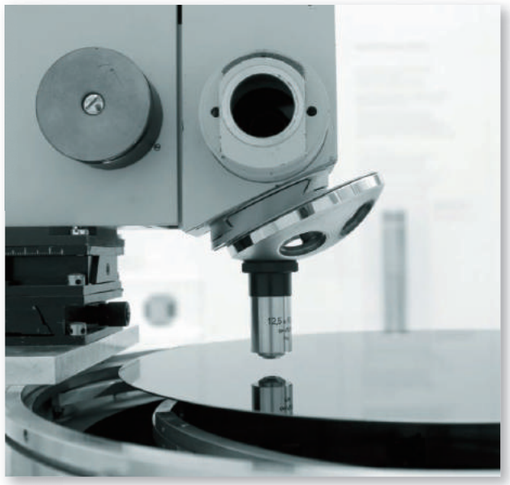
STAINLESS STEEL

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

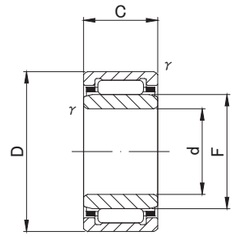
Type and Part Code

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**)

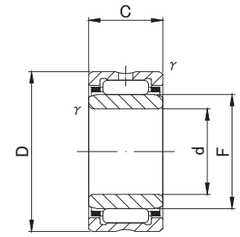
MACHINED RING NEEDLE ROLLER BEARINGS STAINLESS STEEL WITH INNER RING

SUS/INOX

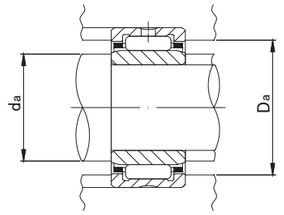
NA49..M ,NKI..M



NKI..M(d ≦ 8)



NA49..M,NKI..M



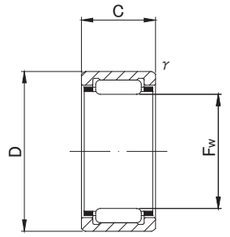
NA49..M ,NKI..M TYPE

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

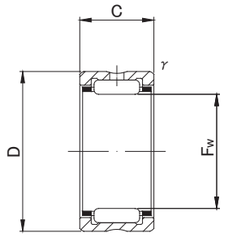
* Suitable for oil lubrication. In case of grease lubrication, down to 60% of this value.

MACHINED RING NEEDLE ROLLER BEARINGS
STAINLESS STEEL
WITHOUT INNER RING

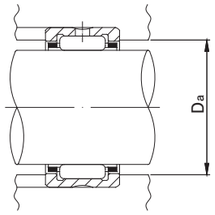
RNA49..M , NK..M



NK..M(Fw ≦ 10)



RNA49..M,NK..M



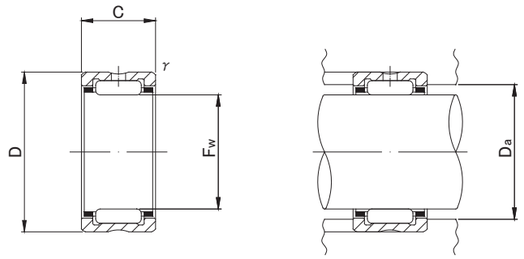
RNA49..M NK..M TYPE

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

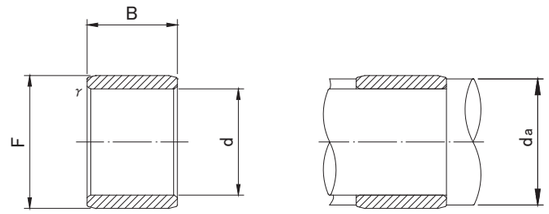
RNA49..M NK..M TYPE

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.

INNER RINGS
STAINLESS STEEL

IR..M



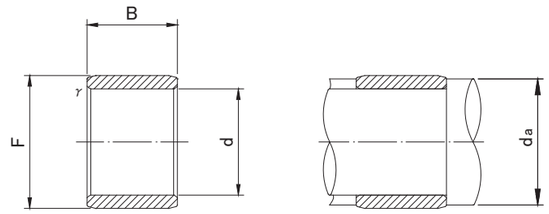
IR..M

IR..M TYPE

Shaft Diameter (mm)	Designation	Dimensions (mm)				Standard mounting dimensions (mm)		Mass	Usable bearing designation	
	IR..M	d	F	B	*r*s min	da MIN	da MAX	g (approx)	RNA49..M	NK..M
5	**IR 5710M**	5 0 -0.008	7	10	0.15	6.2	6.7	1.4	RNA495M	—
	IR 5812M	5	8	12	0.3	7	7.7	3	—	NK8/12M
	IR 5816M	5	8	16	0.3	7	7.7	4	—	NK8/16M
6	**IR 6810M**	6 0 -0.008	8	10	0.15	7.2	7.7	1.7	RNA496M	—
	IR 6912M	6	9	12	0.3	8	8.7	3.2	—	NK9/12M
	IR 6916M	6	9	16	0.3	8	8.7	4.3	—	NK9/16M
	IR 61010M	6	10	10	0.3	8	9.7	4	—	—
7	**IR 7910M**	7 0 -0.008	9	10	0.15	8.2	8.7	1.9	RNA497M	—
	IR 71012M	7	10	12	0.3	9	9.7	3.6	—	NK10/12M
	IR 71016M	7	10	16	0.3	9	9.7	5	—	NK10/16M
8	**IR 81011M**	8 0 -0.008	10	11	0.15	9.2	9.7	2.4	RNA498M	—
	IR 81210M	8	12	10	0.3	10	11	4.8	—	—
9	**IR 91211M**	9 0 -0.008	12	11	0.3	11	11.5	3.1	RNA499M	—
	IR 91212M	9	12	12	0.3	11	11.5	4.5	—	NK12/12M
	IR 91216M	9	12	16	0.3	11	11.5	6	—	NK12/16M
10	**IR 101412M**	10 0 -0.008	14	12	0.3	12	13	7	—	—
	IR 101413M	10	14	13	0.3	12	13	7.5	RNA4900M	—
	IR 101416M	10	14	16	0.3	12	13	9	—	NK14/16M
	IR 101420M	10	14	20	0.3	12	13	11.5	—	NK14/20M
12	**IR 121612M**	12 0 -0.008	16	12	0.3	14	15	8	—	—
	IR 121613M	12	16	13	0.3	14	15	8.5	RNA4901M	—
	IR 121616M	12	16	16	0.3	14	15	10.5	—	NK16/16M
	IR 121620M	12	16	20	0.3	14	15	13.5	—	NK16/20M
15	**IR 151916M**	15 0 -0.008	19	16	0.3	17	18	12.5	—	NK19/16M
	IR 151920M	15	19	20	0.3	17	18	16	—	NK19/20M
	IR 152012M	15	20	12	0.3	17	19	12	—	—
	IR 152013M	15	20	13	0.3	17	19	13.5	RNA4902M	—
17	**IR 172213M**	17 0 -0.008	22	13	0.3	19	21	15.5	RNA4903M	—
	IR 172216M	17	22	16	0.3	19	21	19	—	—

INNER RINGS
STAINLESS STEEL

IR..M



IR..M

IR..M TYPE

Shaft Diameter (mm)	Designation	Dimensions (mm)				Standard mounting dimensions (mm)		Mass	Usable bearing designation	
	IR..M	d	F	B	*r*s min	da MIN	da MAX	g (approx)	RNA49..M	NK..M
20	**IR 202516M**	20 0 -0.010	25	16	0.3	22	24	22	—	—
	IR 202517M	20 0 -0.010	25	17	0.3	22	24	23	RNA4904M	—
25	**IR 253016M**	25 0 -0.010	30	16	0.3	27	29	28	—	—
	IR253017M	25 0 -0.010	30	17	0.3	27	29	28.5	RNA4905M	—
30	**IR 303820M**	30 0 -0.010	38	20	0.6	34	37	65	—	—
35	**IR 354220M**	35 0 -0.012	42	20	0.6	39	41	65	—	—
50	**IR 506020M**	50 0 -0.012	60	20	1	55	59	135	—	—

IR..M

ROLLER FOLLOWERS

STAINLESS STEEL

Type and Part Code

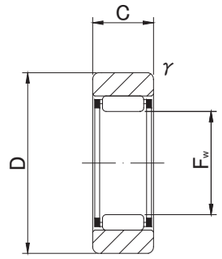
Type	Applicable axis diameter	Feature	Part Code
 RNAST..M (Separable type)	ϕ 7 ~ ϕ 60	NAST type without inner ring.	**RNAST** **15** **M** **R** Type: RNAST Bore diameter code: 15 **M**: Stainless steel **R**: Crowned outer ring **None**: Cylindrical outer rings
 NAST..M (Separable type)	ϕ 6 ~ ϕ 50	Thick wall outer ring, inner ring. Separable bearing with combined needle roller with precision cage.	**NAST** **15** **M** **R** Type: NAST Bore diameter code: 15 **M**: Stainless steel **R**: Crowned outer ring **None**: Cylindrical outer rings
 NAST..MZZ (Separable type)	ϕ 6 ~ ϕ 50	Separable bearing in which labyrinth seal is formed with combined side plate at both sides of inner ring of NAST type. (NAST-ZZUU type comes with seal)	**NAST** **15** **M** **ZZ** **UU** **R** Type: NAST Bore diameter code: 15 **M**: Stainless steel **ZZ**: With shield **UU**: With seal **None** : With shield **R**: Crowned outer ring **X**: Cylindrical outer ring
 NART..MR (Non-separable type)	ϕ 5 ~ ϕ 50	Non-separable bearing with fixed side plate at inner ring. Mitigate eccentric load with spherical shape at outer diameter of outer ring (code R). (NART-UUR type comes with seal)	**NART** **15** **M** **UU** **V** **R** Type: NART Bore diameter code: 15 **M**: Stainless steel **UU**: With seal **None** : With shield **V**: Full complement **None** : With cage **R**: Crowned outer ring **X**: Cylindrical outer ring

ROLLER FOLLOWERS STAINLESS STEEL

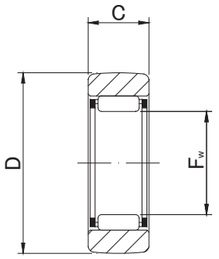
SEPARABLE WITHOUT INNER RING

SUS/INOX

RNAST..M



RNAST..M



RNAST..MR

RNAST..M TYPE

Prepacked Grease

Shaft Diameter (mm)	Designation		Dimensions (mm)				Basic dynamic load rating	Basic static load rating	Track load capacity		Limiting speed *	Mass
	Cylindrical outer ring	Crowned outer ring (R500)	Fw	D	C	r s min	Cr N	Cor N	Cylindrical outer ring N	Crowned outer ring N	rpm	g (approx)
7	**RNAST 5M**	**RNAST 5MR**	7 +0.022 +0.013	**16**	7.8	0.3	2 520	2 190	2 350	1 080	30 000	8.9
10	**RNAST 6M**	**RNAST 6MR**	10 +0.027 +0.016	**19**	9.8	0.3	3 790	4 180	3 530	1 370	20 000	13.9
12	**RNAST 8M**	**RNAST 8MR**	12 +0.027 +0.016	**24**	9.8	0.6	5 220	5 410	4 020	1 860	17 000	23.5
14	**RNAST10M**	**RNAST10MR**	14 +0.027 +0.016	**30**	11.8	1	8 920	8 890	5 590	2 450	15 000	42.5
16	**RNAST12M**	**RNAST12MR**	16 +0.027 +0.016	**32**	11.8	1	9 560	10 020	5 980	2 740	13 000	49.5
20	**RNAST15M**	**RNAST15MR**	20 +0.033 +0.020	**35**	11.8	1	11 310	13 150	6 570	3 140	10 000	50
22	**RNAST17M**	**RNAST17MR**	22 +0.033 +0.020	**40**	15.8	1	16 000	19 220	10 900	3 720	9 500	90
25	**RNAST20M**	**RNAST20MR**	25 +0.033 +0.020	**47**	15.8	1	17 660	22 540	12 700	4 610	8 500	135
30	**RNAST25M**	**RNAST25MR**	30 +0.033 +0.020	**52**	15.8	1	19 040	26 120	14 100	5 290	7 000	152
38	**RNAST30M**	**RNAST30MR**	38 +0.041 +0.025	**62**	19.8	1	27 870	41 760	22 100	6 660	5 500	255
42	**RNAST35M**	**RNAST35MR**	42 +0.041 +0.025	**72**	19.8	1	29 620	46 550	25 700	8 130	5 000	375
50	**RNAST40M**	**RNAST40MR**	50 +0.041 +0.025	**80**	19.8	1.5	32 840	56 210	26 900	9 310	4 000	420
55	**RNAST45M**	**RNAST45MR**	55 +0.049 +0.030	**85**	19.8	1.5	34 130	61 080	28 500	10 100	4 000	460
60	**RNAST50M**	**RNAST50MR**	60 +0.049 +0.030	**90**	19.8	1.5	35 600	66 050	30 200	11 000	3 500	500

* Suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible.

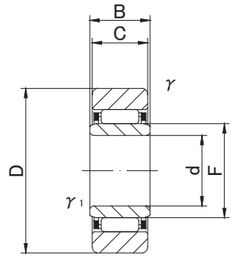
OUTER RINGS TOLERANCE

TYPE	Cylindrical outer ring	Crowned outer ring
RNAST5M	0/-8	0/-50
RNAST6M,RNAST8M,RNAST10M	0/-9	0/-50
RNAST12M,RNAST15M,RNAST17M,RNAST20M	0/-11	0/-50
RNAST25M,RNAST30M,RNAST35M,RNAST40M	0/-13	0/-50
RNAST45M,RNAST50M	0/-15	0/-50

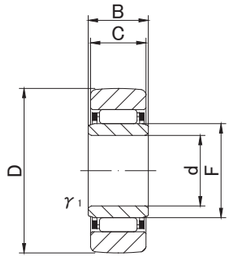
ROLLER FOLLOWERS STAINLESS STEEL

SEPARABLE WITH INNER RING

NAST..M



NAST..M



NAST..MR

NAST..M TYPE

Prepacked Grease

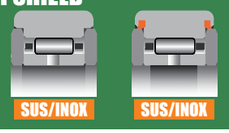
Shaft Diameter (mm)	Designation		Dimensions (mm)						Basic dynamic load rating	Basic static load rating	Track load capacity		Limiting speed *	Mass
	Cylindrical outer ring	Crowned outer ring (R500)	d	D	B	C	r_s min	r_{1s} min	F	Cr N	Cor N	Cylindrical outer ring N	Crowned outer ring N	rpm	g (approx)
6	NAST 6M	NAST 6MR	6 0 -0.008	19	10	9.8	0.3	0.3	10	3 790	4 180	3 530	1 370	20 000	17.8
8	NAST 8M	NAST 8MR	8 0 -0.008	24	10	9.8	0.6	0.3	12	5 220	5 410	4 020	1 860	17 000	28
10	NAST10M	NAST10MR	10 0 -0.008	30	12	11.8	1	0.3	14	8 920	8 890	5 590	2 450	15 000	50
12	NAST12M	NAST12MR	12 0 -0.008	32	12	11.8	1	0.3	16	9 560	10 020	5 980	2 740	13 000	58
15	NAST15M	NAST15MR	15 0 -0.008	35	12	11.8	1	0.3	20	11 310	13 150	6 570	3 140	10 000	62
17	NAST17M	NAST17MR	17 0 -0.010	40	16	15.8	1	0.3	22	16 000	19 220	10 900	3 720	9 500	110
20	NAST20M	NAST20MR	20 0 -0.010	47	16	15.8	1	0.3	25	17 660	22 540	12 700	4 610	8 500	155
25	NAST25M	NAST25MR	25 0 -0.010	52	16	15.8	1	0.3	30	19 040	26 120	14 100	5 290	7 000	180
30	NAST30M	NAST30MR	30 0 -0.010	62	20	19.8	1	0.6	38	27 870	41 760	22 100	6 660	5 500	320
35	NAST35M	NAST35MR	35 0 -0.012	72	20	19.8	1	0.6	42	29 620	46 550	25 700	8 130	5 000	440
40	NAST40M	NAST40MR	40 0 -0.012	80	20	19.8	1.5	1	50	32 840	56 210	26 900	9 310	4 000	530
45	NAST45M	NAST45MR	45 0 -0.012	85	20	19.8	1.5	1	55	34 130	61 080	28 500	10 100	4 000	580
50	NAST50M	NAST50MR	50 0 -0.012	90	20	19.8	1.5	1	60	35 600	66 050	30 200	11 000	3 500	635

* Suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible.

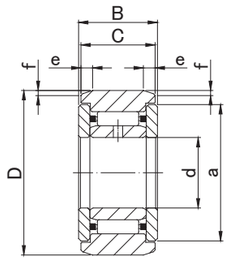
OUTER RINGS TOLERANCE (Outside diameter) (μm)

TYPE	Cylindrical outer ring	Crowned outer ring
NAST6M,NAST8M,NAST10M	0/-9	0/-50
NAST12M,NAST15M,NAST17M,NAST20M	0/-11	0/-50
NAST25M,NAST30M,NAST35M,NAST40M	0/-13	0/-50
NAST45M,NAST50M	0/-15	0/-50

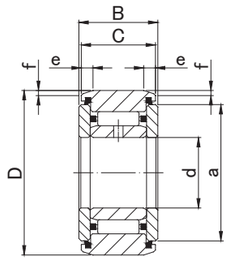
ROLLER FOLLOWERS
STAINLESS STEEL
SEPARABLE
WITH INNER RING
WITH SHIELD



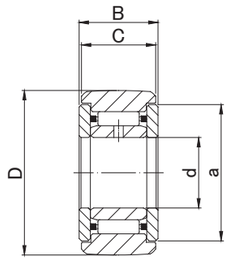
NAST..MZZ



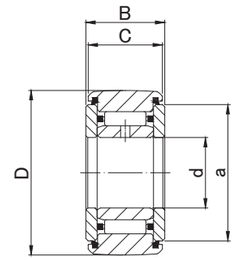
NAST..MZZ



NAST..MZZUU



NAST..MZZR



NAST..MZZUUR

NAST..MZZ TYPE

Prepacked Grease

Shaft Diameter (mm)	Designation				Dimensions (mm)							Basic dynamic load rating	Basic static load rating	Track load capacity		Limiting speed *	Mass
	Cylindrical outer ring		Crowned outer ring (R500)														
	Without seals	With seals	Without seals	With seals	d	D	B	C	a	e	f	Cr N	Cor N	Cylindrical outer ring N	Crowned outer ring N	rpm	g (approx)
6	NAST 6MZZ	NAST 6MZZUU	NAST 6MZZR	NAST 6MZZUUR	6 0 -0.008	19	14	13.8	14	2.5	0.8	3 790	4 180	3 530	1 370	20 000	24.5
8	NAST 8MZZ	NAST 8MZZUU	NAST 8MZZR	NAST 8MZZUUR	8 0 -0.008	24	14	13.8	17.5	2.5	0.8	5 220	5 410	4 510	1 860	17 000	39
10	NAST10MZZ	NAST10MZZUU	NAST10MZZR	NAST10MZZUUR	10 0 -0.008	30	16	15.8	23.5	2.5	0.8	8 920	8 890	6 860	2 450	15 000	65
12	NAST12MZZ	NAST12MZZUU	NAST12MZZR	NAST12MZZUUR	12 0 -0.008	32	16	15.8	25.5	2.5	0.8	9 560	10 020	7 350	2 740	13 000	75
15	NAST15MZZ	NAST15MZZUU	NAST15MZZR	NAST15MZZUUR	15 0 -0.008	35	16	15.8	29	2.5	0.8	11 310	13 150	8 040	3 140	10 000	83
17	NAST17MZZ	NAST17MZZUU	NAST17MZZR	NAST17MZZUUR	17 0 -0.010	40	20	19.8	32.5	3	1	16 000	19 220	11 800	3 720	9 500	135
20	NAST20MZZ	NAST20MZZUU	NAST20MZZR	NAST20MZZUUR	20 0 -0.010	47	20	19.8	38	3	1	17 660	22 540	13 800	4 610	8 500	195
25	NAST25MZZ	NAST25MZZUU	NAST25MZZR	NAST25MZZUUR	25 0 -0.010	52	20	19.8	43	3	1	19 040	26 120	15 300	5 290	7 000	225
30	NAST30MZZ	NAST30MZZUU	NAST30MZZR	NAST30MZZUUR	30 0 -0.010	62	25	24.8	50.5	4	1.2	27 870	41 760	22 100	6 660	5 500	400
35	NAST35MZZ	NAST35MZZUU	NAST35MZZR	NAST35MZZUUR	35 0 -0.012	72	25	24.8	53.5	4	1.2	29 620	46 550	25 700	8 130	5 000	550
40	NAST40MZZ	NAST40MZZUU	NAST40MZZR	NAST40MZZUUR	40 0 -0.012	80	26	25.8	61.5	4	1.2	32 840	56 210	30 300	9 310	4 000	710
45	NAST45MZZ	NAST45MZZUU	NAST45MZZR	NAST45MZZUUR	45 0 -0.012	85	26	25.8	66.5	4	1.2	34 130	61 080	31 100	10 100	4 000	760
50	NAST50MZZ	NAST50MZZUU	NAST50MZZR	NAST50MZZUUR	50 0 -0.012	90	26	25.8	76	4	1.2	35 600	66 050	34 000	11 000	3 500	830

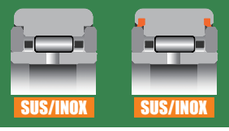
* Without seals, suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible, and 70% of this value shall apply for types with seals.

OUTER RINGS TOLERANCE (Outside diameter) (μm)

TYPE	Cylindrical outer ring	Crowned outer ring
NAST6M,NAST8M,NAST10M	0/-9	0/-50
NAST12M,NAST15M,NAST17M,NAST20M	0/-11	0/-50
NAST25M,NAST30M,NAST35M,NAST40M	0/-13	0/-50
NAST45M,NAST50M	0/-15	0/-50

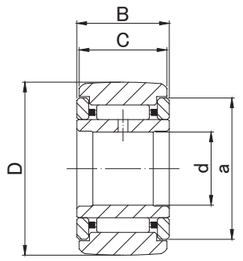
ROLLER FOLLOWERS STAINLESS STEEL

NON SEPARABLE WITH INNER RING

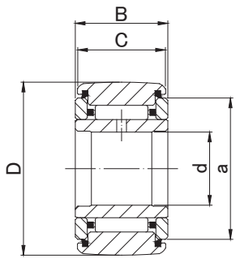


NART..MR

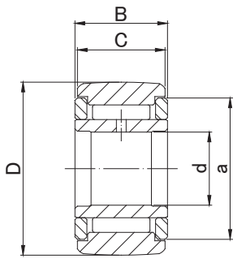
NART..VMR



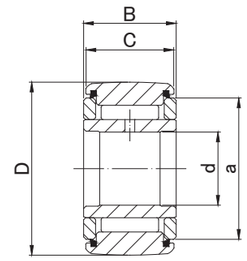
NART..MR
NART..MX



NART..MUUR
NART..MUUX



NART..MVR
NART..MVX



NART..MUUVR
NART..MUUVX

NART.. M TYPE

Prepacked Grease

Shaft Diameter (mm)	Designation				Dimensions (mm)					Basic dynamic load rating	Basic static load rating	Track load capacity		Limiting speed *	Mass
	Crowned outer ring R500(≦ NART17R) R1000(NART20R ≦)		Cylindrical outer ring												
	Without seals	With seals	Without seals	With seals	d	D	B	C	a	Cr N	Cor N	Crowned outer ring N	Cylindrical outer ring N	rpm	g (approx)
5	NART 5MR NART 5MVR	NART 5MUUR NART 5MUUVR	NART 5MX NART 5MVX	NART 5MUUX NART 5MUUVX	5 0 -0.008	16	12	11	12	3 330 6 210	3 420 7 670	1 080 1 080	3 430 3 430	25 000 8 500	14.5 15.1
6	NART 6MR NART 6MVR	NART 6MUUR NART 6MUUVR	NART 6MX NART 6MVX	NART 6MUUX NART 6MUUVX	6 0 -0.008	19	12	11	14	3 860 7 020	4 320 9 470	1 370 1 370	4 020 4 020	20 000 7 000	20.5 21.5
8	NART 8MR NART 8MVR	NART 8MUUR NART 8MUUVR	NART 8MX NART 8MVX	NART 8MUUX NART 8MUUVX	8 0 -0.008	24	15	14	17.5	6 070 10 850	6 710 14 350	1 860 1 860	5 950 5 950	17 000 5 500	41.5 42.5
10	NART10MR NART10MVR	NART10MUUR NART10MUUVR	NART10MX NART10MVX	NART10MUUX NART10MUUVX	10 0 -0.008	30	15	14	23.5	7 910 14 350	7 630 16 650	2 450 2 450	7 060 7 060	15 000 5 000	64.5 66.5
12	NART12MR NART12MVR	NART12MUUR NART12MUUVR	NART12MX NART12MVX	NART12MUUX NART12MUUVX	12 0 -0.008	32	15	14	25.5	8 370 15 450	8 460 18 860	2 740 2 740	7 450 7 450	13 000 4 500	71 73
15	NART15MR NART15MVR	NART15MUUR NART15MUUVR	NART15MX NART15MVX	NART15MUUX NART15MUUVX	15 0 -0.008	35	19	18	29	13 240 23 090	16 190 33 480	3 140 3 140	11 200 11 200	10 000 3 500	102 106
17	NART17MR NART17MVR	NART17MUUR NART17MUUVR	NART17MX NART17MVX	NART17MUUX NART17MUUVX	17 0 -0.008	40	21	20	32.5	17 110 29 440	20 700 42 500	3 720 3 720	14 400 14 400	9 500 3 000	149 155
20	NART20MR NART20MVR	NART20MUUR NART20MUUVR	NART20MX NART20MVX	NART20MUUX NART20MUUVX	20 0 -0.010	47	25	24	38	22 170 38 360	30 080 61 910	7 150 7 150	21 000 21 000	8 000 2 500	250 255
25	NART25MR NART25MVR	NART25MUUR NART25MUUVR	NART25MX NART25MVX	NART25MUUX NART25MUUVX	25 0 -0.010	52	25	24	43	23 730 41 860	34 500 72 680	8 230 8 230	23 200 23 200	7 000 2 500	285 295
30	NART30MR NART30MVR	NART30MUUR NART30MUUVR	NART30MX NART30MVX	NART30MUUX NART30MUUVX	30 0 -0.010	62	29	28	50.5	33 300 55 010	52 340 101 560	10 500 10 500	33 000 33 000	5 500 1 800	470 485
35	NART35MR NART35MVR	NART35MUUR NART35MUUVR	NART35MX NART35MVX	NART35MUUX NART35MUUVX	35 0 -0.012	72	29	28	53.5	35 140 57 960	57 770 111 780	12 900 12 900	38 000 38 000	5 000 1 700	640 655
40	NART40MR NART40MVR	NART40MUUR NART40MUUVR	NART40MX NART40MVX	NART40MUUX NART40MUUVX	40 0 -0.012	80	32	30	61.5	42 500 70 100	77 920 151 060	14 900 14 900	44 400 44 000	4 000 1 400	845 865
45	NART45MR NART45MVR	NART45MUUR NART45MUUVR	NART45MX NART45MVX	NART45MUUX NART45MUUVX	45 0 -0.012	85	32	30	66.5	45 350 73 780	87 580 166 610	16 100 16 100	47 000 47 000	4 000 1 300	915 935
50	NART50MR NART50MVR	NART50MUUR NART50MUUVR	NART50MX NART50MVX	NART50MUUX NART50MUUVX	50 0 -0.012	90	32	30	76	47 010 77 370	94 110 182 160	17 300 17 300	50 000 50 000	3 500 1 200	980 1 010

* Without seals, suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible, and 70% of this value shall apply for types with seals.

OUTER RINGS TOLERANCE (Outside diameter) (μm)

TYPE	Crowned outer ring	Cylindrical outer ring
NART5M	0/-50	0/-8
NART6M,NART8M,NART10M	0/-50	0/-9
NART12M,NART15M,NART17M,NART20M	0/-50	0/-11
NART25M,NART30M,NART35M,NART40M	0/-50	0/-13
NART45M,NART50M	0/-50	0/-15