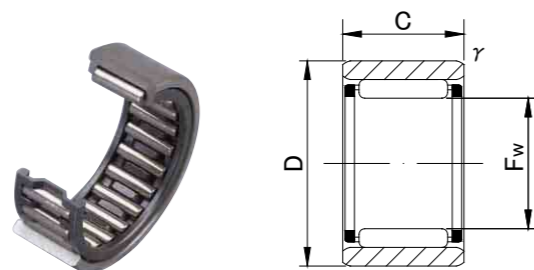
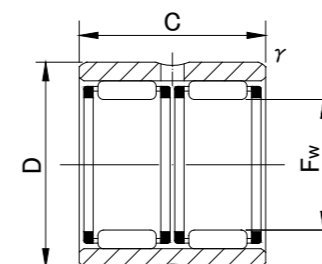


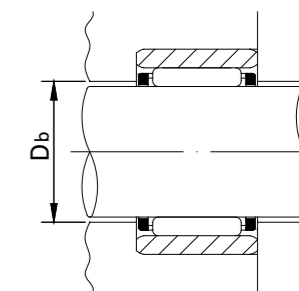
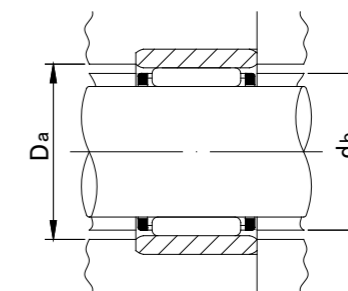
# MACHINED RING NEEDLE ROLLER BEARINGS WITHOUT INNER RING



RNAF



RNAFW

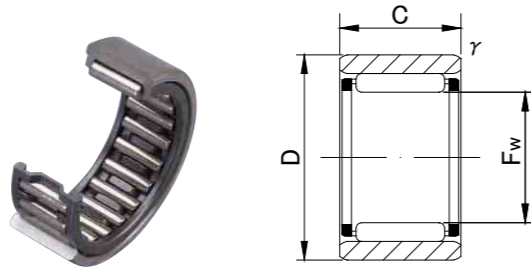
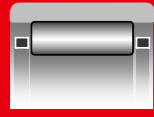


## RNAF(W) TYPE

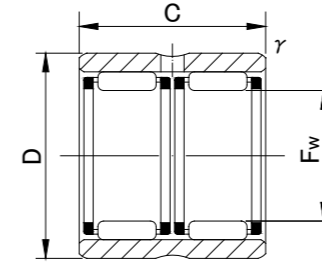
Shaft Diameter (mm)	Designation	Dimensions (mm)				Standard mounting dimensions (mm)			Basic dynamic load rating	Basic static load rating	Limiting speed*	Mass	Usable bearing designation	
		Fw	D	C	r/s min	db	Da MAX	Db					INNER RING	WITH INNER RING
<b>5</b>	<b>RNAF5108</b>	5 <sup>+0.018</sup> / <sub>+0.010</sub>	10	8	0.2	6.7	8.4	5.4	2 500	2 000	40 000	3	—	—
<b>6</b>	<b>RNAF6138</b>	6 <sup>+0.018</sup> / <sub>+0.010</sub>	13	8	0.3	8.4	11	6.4	2 500	2 100	37 000	5.5	—	—
<b>7</b>	<b>RNAF7148</b>	7 <sup>+0.022</sup> / <sub>+0.013</sub>	14	8	0.3	9.4	12	7.4	2 900	2 600	34 000	6	—	—
<b>8</b>	<b>RNAF81510</b>	8 <sup>+0.022</sup> / <sub>+0.013</sub>	15	10	0.3	10.4	13	8.4	3 600	3 600	32 000	8	—	—
	<b>RNAFW81620</b>	8 <sup>+0.022</sup> / <sub>+0.013</sub>	16	20	0.3	10.8	14	8.4	6 200	7 200	32 000	20	—	—
<b>10</b>	<b>RNAF101710</b>	10 <sup>+0.022</sup> / <sub>+0.013</sub>	17	10	0.3	12.4	15	10.4	4 100	4 500	28 000	10	IR61010	NAF61710
	<b>RNAF102012</b>	10 <sup>+0.022</sup> / <sub>+0.013</sub>	20	12	0.3	13.5	18	10.4	6 000	6 000	28 000	19	IR71012	NAF72012
<b>12</b>	<b>RNAF122212</b>	12 <sup>+0.027</sup> / <sub>+0.016</sub>	22	12	0.3	17.5	20	12.4	9 000	8 400	26 000	19	IR91212	NAF92212
<b>14</b>	<b>RNAF142213</b>	14 <sup>+0.027</sup> / <sub>+0.016</sub>	22	13	0.3	17.6	20	14.6	7 800	9 400	24 000	18	IR101413	NAF102213
	<b>RNAFW142220</b>	14 <sup>+0.027</sup> / <sub>+0.016</sub>	22	20	0.3	17.6	20	14.6	10 800	14 200	24 000	28	IR101420	NAFW102220
	<b>RNAF142612</b>	14 <sup>+0.027</sup> / <sub>+0.016</sub>	26	12	0.3	19.4	24	14.6	9 800	9 700	24 000	29	IR101412	NAF102612
<b>15</b>	<b>RNAF152313</b>	15 <sup>+0.027</sup> / <sub>+0.016</sub>	23	13	0.3	18.6	21	15.6	8 200	10 200	23 000	20	—	—
	<b>RNAFW152320</b>	15 <sup>+0.027</sup> / <sub>+0.016</sub>	23	20	0.3	18.6	21	15.6	11 400	15 400	23 000	31	—	—
<b>16</b>	<b>RNAF162413</b>	16 <sup>+0.027</sup> / <sub>+0.016</sub>	24	13	0.3	19.6	22	16.6	8 600	11 000	23 000	21	IR121613	NAF122413
	<b>RNAFW162420</b>	16 <sup>+0.027</sup> / <sub>+0.016</sub>	24	20	0.3	19.6	22	16.6	11 900	16 700	23 000	32	IR121620	NAFW122420
	<b>RNAF162812</b>	16 <sup>+0.027</sup> / <sub>+0.016</sub>	28	12	0.3	21.4	26	16.6	10 500	10 900	23 000	32	IR121612	NAF122812
<b>17</b>	<b>RNAF172513</b>	17 <sup>+0.027</sup> / <sub>+0.016</sub>	25	13	0.3	20.6	23	17.6	9 000	11 900	22 000	22	—	—
	<b>RNAFW172520</b>	17 <sup>+0.027</sup> / <sub>+0.016</sub>	25	20	0.3	20.6	23	17.6	12 400	17 900	22 000	33	—	—
<b>18</b>	<b>RNAF182613</b>	18 <sup>+0.027</sup> / <sub>+0.016</sub>	26	13	0.3	21.6	24	18.6	9 300	12 700	21 000	23	—	—
	<b>RNAFW182620</b>	18 <sup>+0.027</sup> / <sub>+0.016</sub>	26	20	0.3	21.6	24	18.6	12 800	19 100	21 000	35	—	—
	<b>RNAF183012</b>	18 <sup>+0.027</sup> / <sub>+0.016</sub>	30	12	0.3	23.4	28	18.6	11 800	13 000	21 000	35	—	—
	<b>RNAFW183024</b>	18 <sup>+0.027</sup> / <sub>+0.016</sub>	30	24	0.3	23.4	28	18.6	20 200	26 200	21 000	70	—	—

\* Suitable for oil lubrication. In case of grease lubrication, down to 50% of this value.

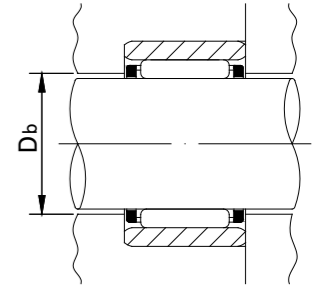
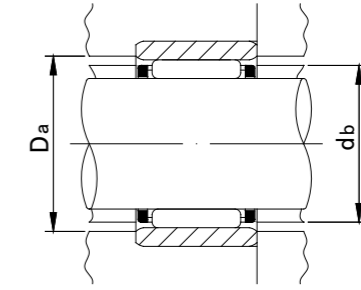
# MACHINED RING NEEDLE ROLLER BEARINGS WITHOUT INNER RING



RNAF



RNAFW

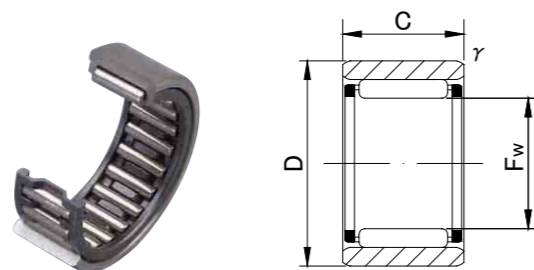


## RNAF(W) TYPE

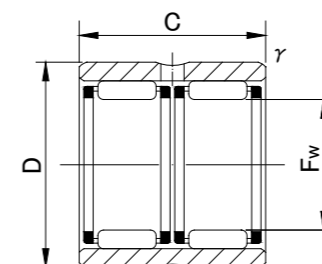
Shaft Diameter (mm)	Designation	Dimensions (mm)				Standard mounting dimensions (mm)			Basic dynamic load rating	Basic static load rating	Limiting speed*	Mass	Usable bearing designation	
		Fw	D	C	r/s min	db	Da MAX	Db					INNER RING	WITH INNER RING
20	RNAF202813	20	28	13	0.3	23.6	26	20.6	9 600	13 500	20 000	25	IR152013	NAF152813
	RNAFW202826	20 +0.033	28	26	0.3	23.6	26	20.6	16 500	27 100	20 000	50	IR152026	NAFW152826
	RNAF203212	20 +0.020	32	12	0.3	25.4	30	20.6	12 400	14 300	20 000	37	IR152012	NAF153212
	RNAFW203224	20	32	24	0.3	25.4	30	20.6	21 200	28 600	20 000	75	—	—
22	RNAF223013	22	30	13	0.3	25.6	28	22.6	10 200	15 200	18 000	27	IR172213	NAF173013
	RNAFW223026	22 +0.033	30	26	0.3	25.6	28	22.6	17 600	30 300	18 000	54	IR172226	NAFW173026
	RNAF223516	22 +0.020	35	16	0.3	27.8	33	22.6	17 600	20 900	18 000	59	IR172216	NAF173516
	RNAFW223532	22	35	32	0.3	27.8	33	22.6	30 200	41 900	18 000	117	IR172232	NAFW173532
25	RNAF253517	25	35	17	0.3	29.5	33	25.6	17 300	26 600	16 000	51	IR202517	NAF203517
	RNAFW253526	25 +0.033	35	26	0.3	29.5	33	25.6	22 500	37 200	16 000	78	IR202526	NAFW203526
	RNAF253716	25 +0.020	37	16	0.3	30.4	35	25.6	19 400	24 500	16 000	57	IR202516	NAF203716
	RNAFW253732	25	37	32	0.3	30.4	35	25.6	33 200	49 000	16 000	114	IR202532	NAFW203732
28	RNAF284016	28 +0.033	40	16	0.3	33.4	38	28.6	20 100	26 500	14 000	63	—	—
	RNAFW284032	28 +0.020	40	32	0.3	33.4	38	28.6	34 400	53 000	14 000	125	—	—
30	RNAF304017	30	40	17	0.3	34.5	38	30.6	18 600	31 100	13 000	59	IR253017	NAF254017
	RNAFW304026	30 +0.033	40	26	0.3	34.5	38	30.6	24 200	43 400	13 000	91	IR253026	NAFW254026
	RNAF304216	30 +0.020	42	16	0.3	35.4	40	30.6	20 800	28 300	13 000	66	IR253016	NAF254216
	RNAFW304232	30	42	32	0.3	35.4	40	30.6	35 700	56 800	13 000	132	IR253032	NAFW254232
35	RNAF354517	35	45	17	0.3	39.5	43	35.6	20 500	36 900	11 000	68	IR303517	NAF304517
	RNAFW354526	35 +0.041	45	26	0.3	39.5	43	35.6	26 600	51 600	11 000	103	IR303526	NAFW304526
	RNAF354716	35 +0.025	47	16	0.3	40.4	45	35.6	23 000	33 800	11 000	76	IR303516	NAF304716
	RNAFW354732	35	47	32	0.3	40.4	45	35.6	39 500	67 800	11 000	151	IR303532	NAFW304732
40	RNAF405017	40	50	17	0.3	43.5	48	40.8	22 200	42 700	10 000	75	IR354017	NAF355017
	RNAFW405034	40 +0.041	50	34	0.3	43.5	48	40.8	38 000	85 300	10 000	152	IR354034	NAFW355034
	RNAF405520	40 +0.025	55	20	0.3	45.2	53	40.8	31 500	48 000	10 000	142	IR354020	NAF355520
	RNAFW405540	40	55	40	0.3	45.2	53	40.8	53 900	96 000	10 000	280	IR354040	NAFW355540
45	RNAF455517	45	55	17	0.3	48.5	53	45.8	23 200	47 200	10 000	84	IR404517	NAF405517
	RNAFW455534	45 +0.041	55	34	0.3	48.5	53	45.8	39 900	94 200	10 000	167	IR404534	NAFW405534
	RNAF456220	45 +0.025	62	20	0.3	50.9	60	45.8	33 200	53 300	9 000	185	IR404520	NAF406220
	RNAFW456240	45	62	40	0.3	50.9	60	45.8	57 000	106 900	9 000	370	IR404540	NAFW406240
50	RNAF506220	50	62	20	0.3	54.2	60	50.8	27 100	59 300	8 000	139	IR455020	NAF456220
	RNAFW506240	50 +0.041	62	40	0.3	54.2	60	50.8	46 400	118 700	8 000	276	IR455040	NAFW456240
	RNAF506520	50 +0.025	65	20	0.3	55.2	63	50.8	35 900	61 100	8 000	170	—	—
	RNAFW506540	50	65	40	0.6	55.2	61	50.8	61 500	122 600	8 000	345	—	—

\* Suitable for oil lubrication. In case of grease lubrication, down to 50% of this value.

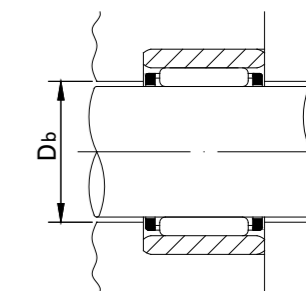
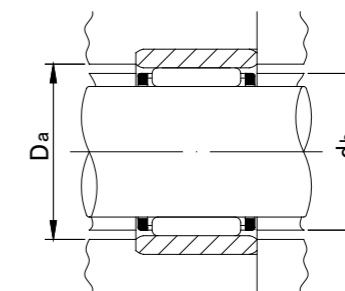
# MACHINED RING NEEDLE ROLLER BEARINGS WITHOUT INNER RING



RNAF



RNAFW



## RNAF(W) 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	
		Fw	D	C	r/s min	db	Da MAX	Db					INNER RING	WITH INNER RING
55	<b>RNAF556820</b>	55	68	20	0.6	59.5	64	55.8	28 500	66 000	7 500	167	IR505520	NAF506820
	<b>RNAFW556840</b>	55 +0.049	68	40	0.6	59.5	64	55.8	48 900	132 400	7 500	330	IR505540	NAFW506840
	<b>RNAF557220</b>	55 +0.030	72	20	0.6	60.9	68	55.8	37 400	66 400	7 500	215	IR455520	NAF457220
	<b>RNAFW557240</b>	55	72	40	0.6	60.9	68	55.8	64 100	132 400	7 500	435	IR455540	NAFW457240
60	<b>RNAF607820</b>	60 +0.049	78	20	1	66.3	73	60.8	38 900	71 700	6 500	255	IR506020	NAF507820
	<b>RNAFW607840</b>	60 +0.030	78	40	1	66.3	73	60.8	66 700	143 200	6 500	510	IR506040	NAFW507840
65	<b>RNAF658530</b>	65 +0.049	85	30	1	72	80	66	59 300	127 500	6 000	465	IR556530	NAF558530
	<b>RNAFW658560</b>	65 +0.030	85	60	1	72	80	66	102 000	254 000	6 000	950	IR556560	NAFW558560
70	<b>RNAF709030</b>	70 +0.049	90	30	1	77	85	71	61 200	135 300	5 500	500	IR607030	NAF609030
	<b>RNAFW709060</b>	70 +0.030	90	60	1	77	85	71	104 900	271 600	5 500	1 000	IR607060	NAFW609060
75	<b>RNAF759530</b>	75 +0.049	95	30	1	82	90	76	63 200	144 200	5 500	530	IR657530	NAF659530
	<b>RNAFW759560</b>	75 +0.030	95	60	1	82	90	76	108 900	289 300	5 500	1 050	IR657560	NAFW659560
80	<b>RNAF8010030</b>	80 +0.049	100	30	1	87	95	81	64 900	153 000	5 000	560	IR708030	NAF7010030
	<b>RNAFW8010060</b>	80 +0.030	100	60	1	87	95	81	111 800	306 000	5 000	1 120	IR708060	NAFW7010060
85	<b>RNAF8510530</b>	85 +0.058 +0.036	105	30	1	92	100	86	66 600	160 800	4 800	590	IR758530	NAF7510530
90	<b>RNAF9011030</b>	90 +0.058 +0.036	110	30	1	97	105	91	69 500	173 600	4 500	620	IR809030	NAF8011030
95	<b>RNAF9511530</b>	95 +0.058 +0.036	115	30	1	102	110	96	70 900	182 400	4 200	650	IR859530	NAF8511530
100	<b>RNAF10012030</b>	100 +0.058 +0.036	120	30	1	107	115	101	72 600	191 200	4 000	690	IR9010030	NAF9012030

\* Suitable for oil lubrication. In case of grease lubrication, down to 50% of this value.