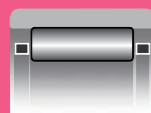


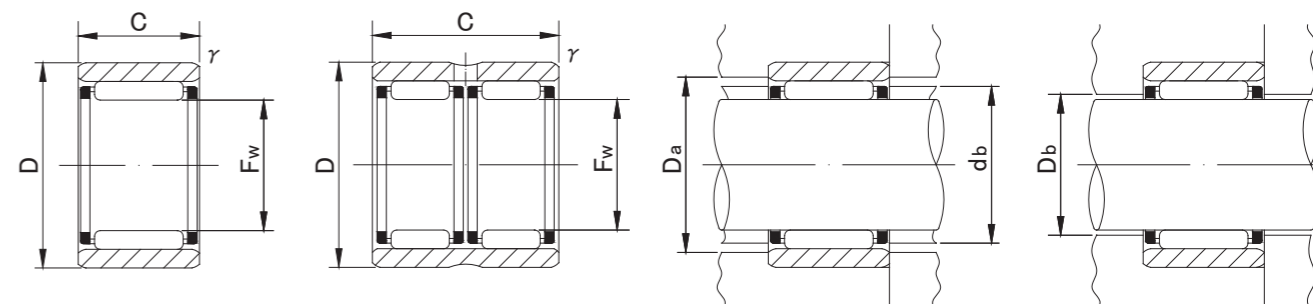
SEPARABLE NEEDLE ROLLER BEARINGS

WITHOUT INNER RING



RNAF

RNAFW



RNAF

RNAFW

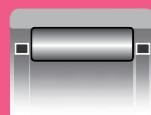
RNAF(W) TYPE

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
5	RNAF5108	5 ^{+0.018} / _{+0.010}	10	8	0.2	6.7	8.4	5.4	2 500	2 000	40 000	3	—	—
6	RNAF6138	6 ^{+0.018} / _{+0.010}	13	8	0.3	8.4	11	6.4	2 500	2 100	37 000	5.5	—	—
7	RNAF7148	7 ^{+0.022} / _{+0.013}	14	8	0.3	9.4	12	7.4	2 900	2 600	34 000	6	—	—
8	RNAF81510	8 ^{+0.022} / _{+0.013}	15	10	0.3	10.4	13	8.4	3 600	3 600	32 000	8	—	—
	RNAFW81620	8 ^{+0.022} / _{+0.013}	16	20	0.3	10.8	14	8.4	6 200	7 200	32 000	20	—	—
10	RNAF101710	10 ^{+0.022} / _{+0.013}	17	10	0.3	12.4	15	10.4	4 100	4 500	28 000	10	IR61010	NAF61710
	RNAF102012	10 ^{+0.022} / _{+0.013}	20	12	0.3	13.5	18	10.4	6 000	6 000	28 000	19	IR71012	NAF72012
12	RNAF122212	12 ^{+0.027} / _{+0.016}	22	12	0.3	17.5	20	12.4	9 000	8 400	26 000	19	IR91212	NAF92212
14	RNAF142213	14 ^{+0.027} / _{+0.016}	22	13	0.3	17.6	20	14.6	7 800	9 400	24 000	18	IR101413	NAF102213
	RNAFW142220	14 ^{+0.027} / _{+0.016}	22	20	0.3	17.6	20	14.6	10 800	14 200	24 000	28	IR101420	NAFW102220
	RNAF142612	14 ^{+0.027} / _{+0.016}	26	12	0.3	19.4	24	14.6	9 800	9 700	24 000	29	IR101412	NAF102612
15	RNAF152313	15 ^{+0.027} / _{+0.016}	23	13	0.3	18.6	21	15.6	8 200	10 200	23 000	20	—	—
	RNAFW152320	15 ^{+0.027} / _{+0.016}	23	20	0.3	18.6	21	15.6	11 400	15 400	23 000	31	—	—
16	RNAF162413	16 ^{+0.027} / _{+0.016}	24	13	0.3	19.6	22	16.6	8 600	11 000	23 000	21	IR121613	NAF122413
	RNAFW162420	16 ^{+0.027} / _{+0.016}	24	20	0.3	19.6	22	16.6	11 900	16 700	23 000	32	IR121620	NAFW122420
	RNAF162812	16 ^{+0.027} / _{+0.016}	28	12	0.3	21.4	26	16.6	10 500	10 900	23 000	32	IR121612	NAF122812
17	RNAF172513	17 ^{+0.027} / _{+0.016}	25	13	0.3	20.6	23	17.6	9 000	11 900	22 000	22	—	—
	RNAFW172520	17 ^{+0.027} / _{+0.016}	25	20	0.3	20.6	23	17.6	12 400	17 900	22 000	33	—	—
18	RNAF182613	18 ^{+0.027} / _{+0.016}	26	13	0.3	21.6	24	18.6	9 300	12 700	21 000	23	—	—
	RNAFW182620	18 ^{+0.027} / _{+0.016}	26	20	0.3	21.6	24	18.6	12 800	19 100	21 000	35	—	—
	RNAF183012	18 ^{+0.027} / _{+0.016}	30	12	0.3	23.4	28	18.6	11 800	13 000	21 000	35	—	—
	RNAFW183024	18 ^{+0.027} / _{+0.016}	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.

SEPARABLE NEEDLE ROLLER BEARINGS

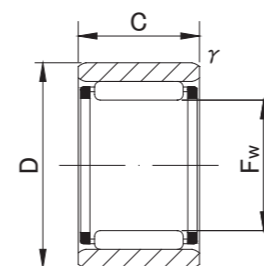
WITHOUT INNER RING



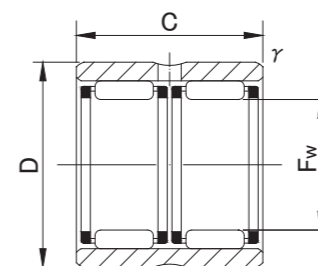
RNAF



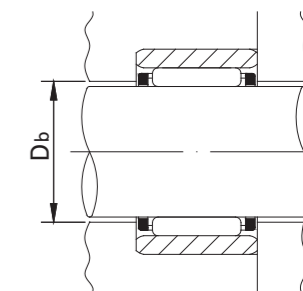
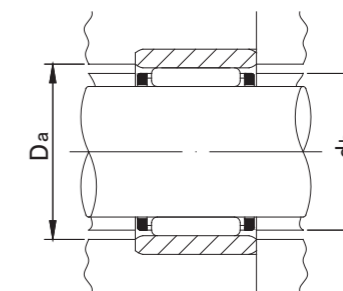
RNAFW



RNAF



RNAFW



RNAF(W)



RNAF(W)

RNAF(W)



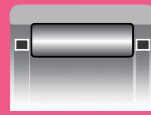
RNAF(W) TYPE

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.

SEPARABLE NEEDLE ROLLER BEARINGS

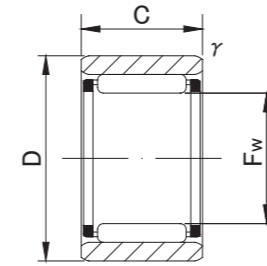
WITHOUT INNER RING



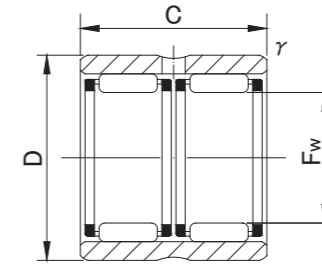
RNAF



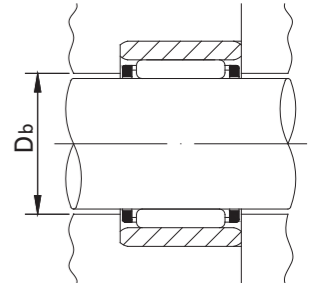
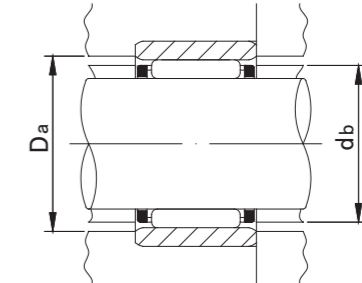
RNAFW



RNAF



RNAFW



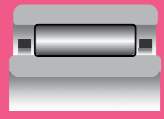
RNAF(W) TYPE

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

SEPARABLE NEEDLE ROLLER BEARINGS

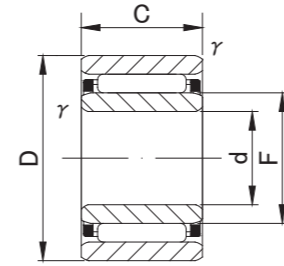
WITH INNER RING



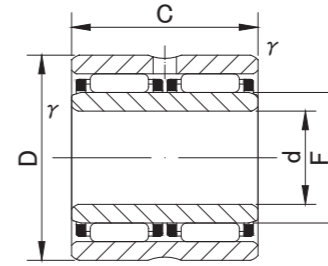
NAF



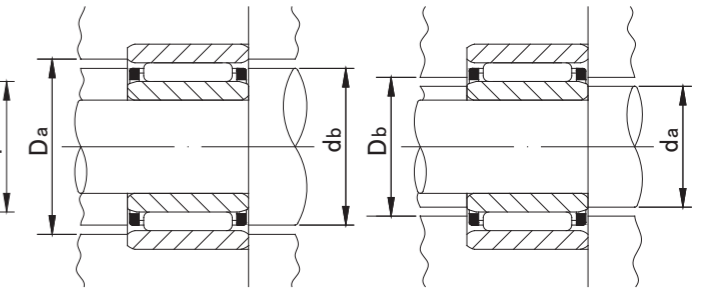
NAFW



NAF



NAFW

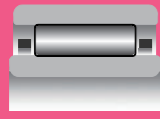


NAF(W) TYPE

Shaft Diameter (mm)	Designation	Dimensions (mm)							Standard mounting dimensions (mm)			Basic dynamic load rating	Basic static load rating	Limiting speed*	Mass	Usable bearing designation					
		d	D	C	r/s min	F	db	Da MAX	da		Db					Cr N	Cor N	rpm	g (approx)	OUTER RING	INNER RING
									MIN	MAX											
6	NAF 61710	6 ⁰ _{-0.008}	17	10	0.3	10	12.4	15	8	9.7	10.4	4 100	4 500	28 000	14	RNAF101710	IR61010				
7	NAF 72012	7 ⁰ _{-0.008}	20	12	0.3	10	13.5	18	9	9.7	10.4	6 000	6 000	28 000	23	RNAF102012	IR71012				
9	NAF 92212	9 ⁰ _{-0.008}	22	12	0.3	12	17.5	20	11	11.5	12.4	9 000	8 400	26 000	24	RNAF122212	IR91212				
10	NAF 102213	10 ⁰ _{-0.008}	22	13	0.3	14	17.6	20	12	13	14.6	7 800	9 400	24 000	26	RNAF142213	IR101413				
	NAFW 102220	10 ⁰ _{-0.008}	22	20	0.3	14	17.6	20	12	13	14.6	10 800	14 200	24 000	40	RNAFW142220	IR101420				
	NAF 102612	10 ⁰ _{-0.008}	26	12	0.3	14	19.4	24	12	13	14.6	9 800	9 700	24 000	36	RNAF142612	IR101412				
12	NAF 122413	12 ⁰ _{-0.008}	24	13	0.3	16	19.6	22	14	15	16.6	8 600	11 000	23 000	30	RNAF162413	IR121613				
	NAFW 122420	12 ⁰ _{-0.008}	24	20	0.3	16	19.6	22	14	15	16.6	11 900	16 700	23 000	45	RNAFW162420	IR121620				
	NAF 122812	12 ⁰ _{-0.008}	28	12	0.3	16	21.4	26	14	15	16.6	10 500	10 900	23 000	40	RNAF162812	IR121612				
15	NAF 152813	15 ⁰ _{-0.008}	28	13	0.3	20	23.6	26	17	19	20.6	9 600	13 500	20 000	37	RNAF202813	IR152013				
	NAFW 152826	15 ⁰ _{-0.008}	28	26	0.3	20	23.6	26	17	19	20.6	16 500	27 100	20 000	76	RNAFW202826	IR152026				
	NAF 153212	15 ⁰ _{-0.008}	32	12	0.3	20	25.4	30	17	19	20.6	12 400	14 300	20 000	51	RNAF203212	IR152012				
17	NAF 173013	17 ⁰ _{-0.008}	30	13	0.3	22	25.6	28	19	21	22.6	10 200	15 200	18 000	43	RNAF223013	IR172213				
	NAFW 173026	17 ⁰ _{-0.008}	30	26	0.3	22	25.6	28	19	21	22.6	17 600	30 300	18 000	85	RNAFW223026	IR172226				
	NAF 173516	17 ⁰ _{-0.008}	35	16	0.3	22	27.8	33	19	21	22.6	17 600	20 900	18 000	77	RNAF223516	IR172216				
	NAFW 173532	17 ⁰ _{-0.008}	35	32	0.3	22	27.8	33	19	21	22.6	30 200	41 900	18 000	155	RNAFW223532	IR172232				
20	NAF 203517	20 ⁰ _{-0.010}	35	17	0.3	25	29.5	33	22	24	25.6	17 300	26 600	16 000	75	RNAF253517	IR202517				
	NAFW 203526	20 ⁰ _{-0.010}	35	26	0.3	25	29.5	33	22	24	25.6	22 500	37 200	16 000	114	RNAFW253526	IR202526				
	NAF 203716	20 ⁰ _{-0.010}	37	16	0.3	25	30.4	35	22	24	25.6	19 400	24 500	16 000	80	RNAF253716	IR202516				
	NAFW 203732	20 ⁰ _{-0.010}	37	32	0.3	25	30.4	35	22	24	25.6	33 200	49 000	16 000	158	RNAFW253732	IR202532				
25	NAF 254017	25 ⁰ _{-0.010}	40	17	0.3	30	34.5	38	27	29	30.6	18 600	31 100	13 000	88	RNAF304017	IR253017				
	NAFW 254026	25 ⁰ _{-0.010}	40	26	0.3	30	34.5	38	27	29	30.6	24 200	43 400	13 000	136	RNAFW304026	IR253026				
	NAF 254216	25 ⁰ _{-0.010}	42	16	0.3	30	35.4	40	27	29	30.6	20 800	28 300	13 000	94	RNAF304216	IR253016				
	NAFW 254232	25 ⁰ _{-0.010}	42	32	0.3	30	35.4	40	27	29	30.6	35 700	56 800	13 000	187	RNAFW304232	IR253032				
30	NAF 304517	30 ⁰ _{-0.010}	45	17	0.3	35	39.5	43	32	34	35.6	20 500	36 900	11 000	100	RNAF354517	IR303517				
	NAFW 304526	30 ⁰ _{-0.010}	45	26	0.3	35	39.5	43	32	34	35.6	26 600	51 600	11 000	155	RNAFW354526	IR303526				
	NAF 304716	30 ⁰ _{-0.010}	47	16	0.3	35	40.4	45	32	34	35.6	23 000	33 800	11 000	108	RNAF354716	IR303516				
	NAFW 304732	30 ⁰ _{-0.010}	47	32	0.3	35	40.4	45	32	34	35.6	39 500	67 800	11 000	215	RNAFW354732	IR303532				

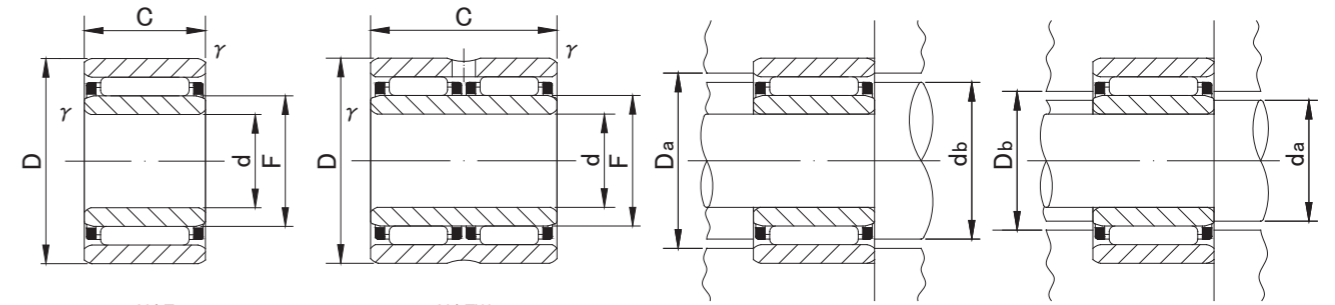
* Suitable for oil lubrication. In case of grease lubrication, down to 50% of this value.

SEPARABLE NEEDLE ROLLER BEARINGS WITH INNER RING



NAF

NAFW



NAF

NAFW

NAF(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					
		d	D	C	r/s min	F	db	Da MAX	da		Db					Cr N	Cor N	rpm	g (approx)	OUTER RING	INNER RING
									MIN	MAX											
35	NAF 355017	35	50	17	0.3	40	43.5	48	37	39	40.8	22 200	42 700	10 000	115	RNAF405017	IR354017				
	NAFW 355034	35 ₀	50	34	0.3	40	43.5	48	37	39	40.8	38 000	85 300	10 000	230	RNAFW405034	IR354034				
	NAF 355520	35 _{-0.012}	55	20	0.3	40	45.2	53	37	39	40.8	31 500	48 000	10 000	188	RNAF405520	IR354020				
	NAFW 355540	35	55	40	0.3	40	45.2	53	37	39	40.8	53 900	96 000	10 000	375	RNAFW405540	IR354040				
40	NAF 405517	40	55	17	0.3	45	48.5	53	42	44	45.8	23 200	47 200	10 000	129	RNAF455517	IR404517				
	NAFW 405534	40 ₀	55	34	0.3	45	48.5	53	42	44	45.8	39 900	94 200	10 000	255	RNAFW455534	IR404534				
	NAF 406220	40 _{-0.012}	62	20	0.3	45	50.9	60	42	44	45.8	33 200	53 300	9 000	236	RNAF456220	IR404520				
	NAFW 406240	40	62	40	0.3	45	50.9	60	42	44	45.8	57 000	106 900	9 000	475	RNAFW456240	IR404540				
45	NAF 456220	45	62	20	0.3	50	54.2	60	47	49	50.8	27 100	59 300	8 000	197	RNAF506220	IR455020				
	NAFW 456240	45 ₀	62	40	0.3	50	54.2	60	49	49.5	50.8	46 400	118 700	8 000	389	RNAFW506240	IR455040				
	NAF 457220	45 _{-0.012}	72	20	0.6	55	60.9	68	49	54	55.8	37 400	66 400	7 500	340	RNAF557220	IR455520				
	NAFW 457240	45	72	40	0.6	55	60.9	68	49	54	55.8	64 100	132 400	7 500	685	RNAFW557240	IR455540				
50	NAF 506820	50	68	20	0.6	55	59.5	64	54	54.5	55.8	28 500	66 000	7 500	230	RNAF556820	IR505520				
	NAFW 506840	50 ₀	68	40	0.6	55	59.5	64	54	54.5	55.8	48 900	132 400	7 500	465	RNAFW556840	IR505540				
	NAF 507820	50 _{-0.012}	78	20	1	60	66.3	73	55	59	60.8	38 900	71 700	6 500	390	RNAF607820	IR506020				
	NAFW 507840	50	78	40	1	60	66.3	73	55	59	60.8	66 700	143 200	6 500	775	RNAFW607840	IR506040				
55	NAF 558530	55 ₀	85	30	1	65	72	80	60	63	66	59 300	127 500	6 000	680	RNAF658530	IR556530				
	NAFW 558560	55 _{-0.015}	85	60	1	65	72	80	60	63	66	102 000	254 000	6 000	1 380	RNAFW658560	IR556560				
60	NAF 609030	60 ₀	90	30	1	70	77	85	65	68	71	61 200	135 300	5 500	740	RNAF709030	IR607030				
	NAFW 609060	60 _{-0.015}	90	60	1	70	77	85	65	68	71	104 900	271 600	5 500	1 470	RNAFW709060	IR607060				
65	NAF 659530	65 ₀	95	30	1	75	82	90	70	73	76	63 200	144 200	5 500	800	RNAF759530	IR657530				
	NAFW 659560	65 _{-0.015}	95	60	1	75	82	90	70	73	76	108 900	289 300	5 500	1 570	RNAFW759560	IR657560				
70	NAF 7010030	70 ₀	100	30	1	80	87	95	75	78	81	64 900	153 000	5 000	840	RNAF8010030	IR708030				
	NAFW 7010060	70 _{-0.015}	100	60	1	80	87	95	75	78	81	111 800	306 000	5 000	1 670	RNAFW8010060	IR708060				
75	NAF 7510530	75 ₀ -0.015	105	30	1	85	92	100	80	83	86	66 600	160 800	4 800	890	RNAF8510530	IR758530				
80	NAF 8011030	80 ₀ -0.015	110	30	1	90	97	105	85	88	91	69 500	173 600	4 500	930	RNAF9011030	IR809030				
85	NAF 8511530	85 ₀ -0.020	115	30	1	95	102	110	90	93	96	70 900	182 400	4 200	970	RNAF9511530	IR859530				
90	NAF 9012030	90 ₀ -0.020	120	30	1	100	107	115	95	98	101	72 600	191 200	4 000	1 040	RNAF10012030	IR9010030				

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