

MACHINED TYPE NEEDLE ROLLER BEARINGS

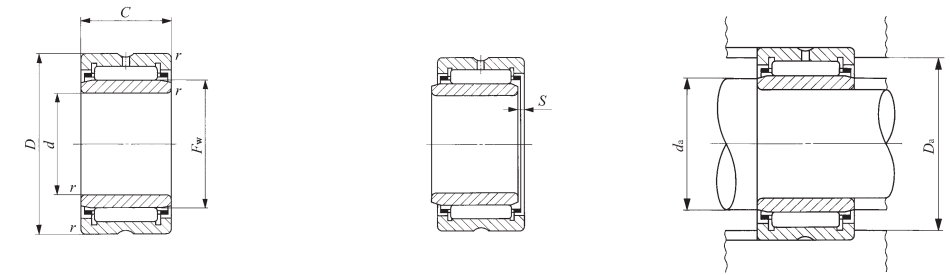
With Inner Ring



Shaft dia. 5 – 12mm

Shaft dia. mm	Identification number						Mass (Ref.) g	d
	NA 49	NA 69	NA 48	TAFI	TRI	GTRI		
5	NA 495	—	—	—	—	—	7.3	5
	—	—	—	TAFI 51512	—	—	11.9	5
	—	—	—	TAFI 51516	—	—	16.7	5
6	NA 496	—	—	—	—	—	9.1	6
	—	—	—	TAFI 61612	—	—	13	6
	—	—	—	TAFI 61616	—	—	17.5	6
7	NA 497	—	—	—	—	—	11.2	7
	—	—	—	TAFI 71712	—	—	14.3	7
	—	—	—	TAFI 71716	—	—	19.2	7
8	NA 498	—	—	—	—	—	15	8
9	—	—	—	TAFI 91912	—	—	16.7	9
	—	—	—	TAFI 91916	—	—	22.5	9
	NA 499	—	—	—	—	—	16.7	9
10	NA 4900	—	—	—	—	—	24	10
	—	—	—	TAFI 102216	—	—	30	10
	—	—	—	TAFI 102220	—	—	38	10
12	NA 4901	—	—	—	—	—	26.5	12
	—	—	—	TAFI 122416	—	—	33.5	12
	—	—	—	TAFI 122420	—	—	42.5	12
	—	NA 6901	—	—	—	—	44.5	12

Notes⁽¹⁾ Minimum allowable value of chamfer dimension *r*
⁽²⁾ Allowable axial shift amount of inner ring to outer ring
⁽³⁾ Allowable rotational speed applies to oil lubrication. For grease lubrication, a maximum of 60% of this value is allowable.
 Remarks1. TAFI series with a bore diameter *d* of 22 mm or less have no oil hole. In others, the outer ring has an oil groove and an oil hole.
 2. No grease is prepacked. Perform proper lubrication.

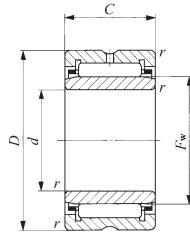


NA49 TAFI
NA69 (*d* ≤ 30)

Boundary dimensions mm						Standard mounting dimensions mm			Basic dynamic load rating <i>C</i> N	Basic static load rating <i>C</i> ₀ N	Allowable rotational speed ⁽³⁾ rpm	Assembled inner ring
<i>D</i>	<i>C</i>	<i>B</i>	<i>r</i> _{s min} ⁽¹⁾	<i>F</i> _w	<i>S</i> ⁽²⁾	Min. <i>d</i> _a	Max.	<i>D</i> _a Max.				
13	10	—	0.15	7	0.5	6.2	6.7	11.8	2 960	2 690	60 000	LRT 5710
15	12	—	0.2	8	0.5	6.6	7.7	13.4	5 060	4 690	50 000	LRT 5812
15	16	—	0.2	8	0.5	6.6	7.7	13.4	7 080	7 220	50 000	LRT 5816
15	10	—	0.15	8	0.5	7.2	7.7	13.8	3 960	3 420	50 000	LRT 6810
16	12	—	0.2	9	0.5	7.6	8.7	14.4	5 490	5 330	45 000	LRT 6912
16	16	—	0.2	9	0.5	7.6	8.7	14.4	7 680	8 210	45 000	LRT 6916
17	10	—	0.15	9	0.5	8.2	8.7	15.8	4 530	3 650	45 000	LRT 7910
17	12	—	0.2	10	0.5	8.6	9.7	15.4	5 880	5 970	40 000	LRT 71012
17	16	—	0.2	10	0.5	8.6	9.7	15.4	8 230	9 190	40 000	LRT 71016
19	11	—	0.2	10	0.5	9.6	9.9	17.4	6 180	5 030	40 000	LRT 81011
19	12	—	0.3	12	0.5	11	11.5	17	6 610	7 260	35 000	LRT 91212
19	16	—	0.3	12	0.5	11	11.5	17	9 250	11 200	35 000	LRT 91216
20	11	—	0.3	12	0.5	11	11.5	18	6 600	6 310	35 000	LRT 91211
22	13	—	0.3	14	0.5	12	13	20	9 230	10 100	30 000	LRT 101413
22	16	—	0.3	14	0.5	12	13	20	11 700	13 700	30 000	LRT 101416
22	20	—	0.3	14	0.5	12	13	20	14 800	18 600	30 000	LRT 101420
24	13	—	0.3	16	0.5	14	15	22	9 660	11 100	25 000	LRT 121613
24	16	—	0.3	16	0.5	14	15	22	12 300	15 100	25 000	LRT 121616
24	20	—	0.3	16	0.5	14	15	22	15 500	20 400	25 000	LRT 121620
24	22	—	0.3	16	0.5	14	15	22	17 100	23 000	25 000	LRT 121622

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With Inner Ring

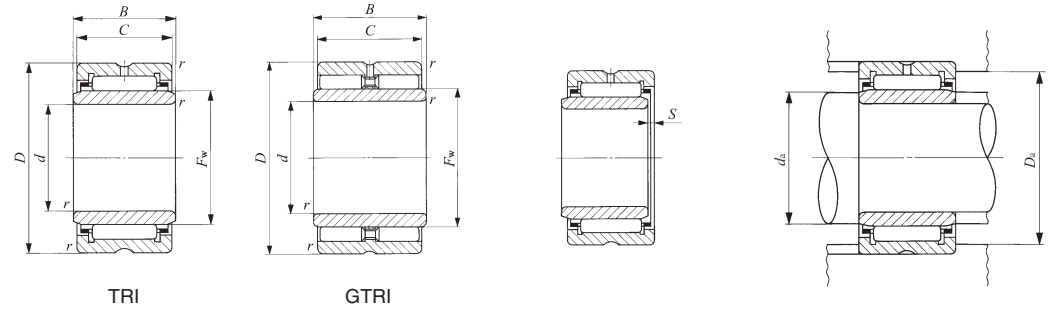


NA49 TAFI
NA69 ($d \leq 30$)

Shaft dia. 15 – 22mm

Shaft dia. mm	Identification number						Mass (Ref.) g	d
	NA 49	NA 69	NA 48	TAFI	TRI	GTRI		
15	—	—	—	TAFI 152716	—	—	39.5	15
	—	—	—	TAFI 152720	—	—	50	15
	NA 4902	—	—	—	—	—	35	15
	—	NA 6902	—	—	—	—	61	15
17	—	—	—	—	TRI 153320	—	81	15
	—	—	—	—	—	GTRI 153320	90.5	15
	NA 4903	—	—	TAFI 172916	—	—	43.5	17
	—	NA 6903	—	TAFI 172920	—	—	54	17
20	—	—	—	—	—	—	39	17
	—	—	—	—	—	—	67	17
	—	—	—	—	TRI 173425	—	104	17
	—	—	—	—	—	GTRI 173425	117	17
22	—	—	—	TAFI 203216	—	—	48.5	20
	—	—	—	TAFI 203220	—	—	61	20
	NA 4904	—	—	—	—	—	78.5	20
	—	NA 6904	—	—	—	—	136	20
22	—	—	—	—	—	—	99	20
	—	—	—	—	TRI 203820	—	124	20
	—	—	—	—	—	GTRI 203820	110	20
	—	—	—	—	—	GTRI 203825	138	20
22	—	—	—	TAFI 223416	—	—	52	22
	—	—	—	TAFI 223420	—	—	67.5	22
	NA 49/22	—	—	—	—	—	87	22
	—	NA 69/22	—	—	—	—	152	22

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Boundary dimensions mm						Standard mounting dimensions mm			Basic dynamic load rating C N	Basic static load rating C_0 N	Allowable rotational speed ⁽³⁾ rpm	Assembled inner ring
D	C	B	$r_{s \min}^{(1)}$	F_w	$S^{(2)}$	Min. d_a	Max.	D_a Max.				
27	16	—	0.3	19	0.5	17	18	25	14 000	18 700	20 000	LRT 151916
27	20	—	0.3	19	0.5	17	18	25	17 700	25 300	20 000	LRT 151920
28	13	—	0.3	20	0.3	17	19	26	10 900	13 800	20 000	LRT 152013
28	23	—	0.3	20	0.3	17	19	26	19 300	28 800	20 000	LRT 152023
33	20	20.5	0.3	20	0.3	17	19	31	24 300	26 500	20 000	LRT 152020
33	20	20.5	0.3	20	—	17	19	31	29 200	37 200	7 500	LRTZ 152020
29	16	—	0.3	21	0.5	19	20	27	14 400	20 000	19 000	LRT 172116
29	20	—	0.3	21	0.5	19	20	27	18 200	27 100	19 000	LRT 172120
30	13	—	0.3	22	0.3	19	21	28	11 700	15 600	18 000	LRT 172213
30	23	—	0.3	22	0.3	19	21	28	20 800	32 500	18 000	LRT 172223
34	25	25.5	0.3	22	0.5	19	21	32	29 100	36 800	18 000	LRT 172225
34	25	25.5	0.3	22	—	19	21	32	37 900	57 800	7 000	LRTZ 172225
32	16	—	0.3	24	0.5	22	23	30	15 300	22 500	17 000	LRT 202416
32	20	—	0.3	24	0.5	22	23	30	19 400	30 500	17 000	LRT 202420
37	17	—	0.3	25	0.5	22	24	35	21 000	25 000	16 000	LRT 202517
37	30	—	0.3	25	0.5	22	24	35	35 400	48 900	16 000	LRT 202530
38	20	20.5	0.3	25	0.3	22	24	36	28 900	35 000	16 000	LRT 202520
38	25	25.5	0.3	25	0.5	22	24	36	34 800	44 400	16 000	LRT 202525
38	20	20.5	0.3	25	—	22	24	36	33 300	46 500	6 000	LRTZ 202520
38	25	25.5	0.3	25	—	22	24	36	42 400	63 700	6 000	LRTZ 202525
34	16	—	0.3	26	0.5	24	25	32	16 300	24 900	15 000	LRT 222616
34	20	—	0.3	26	0.5	24	25	32	20 600	33 800	15 000	LRT 222620
39	17	—	0.3	28	1	24	27	37	21 400	28 900	14 000	LRT 222817
39	30	—	0.3	28	0.5	24	27	37	36 300	56 900	14 000	LRT 222830