

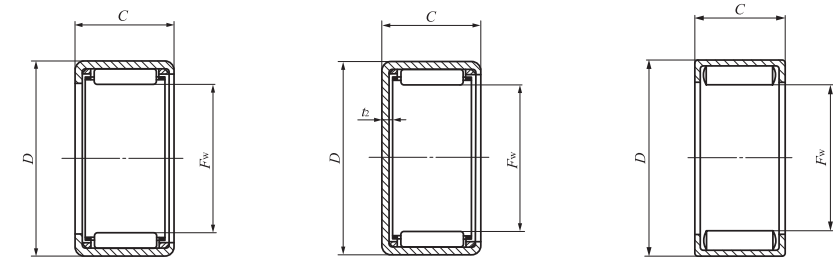
SHELL TYPE NEEDLE ROLLER BEARINGS



Shaft dia. 12 – 15 mm

Shaft dia. mm	Identification number									
	Standard	Mass (Ref.) g	Closed end	Mass (Ref.) g	Standard	Mass (Ref.) g	Closed end	Mass (Ref.) g	Grease retained	Mass (Ref.) g
12	—	—	—	—	<b>TLA 1210 Z</b>	4.3	<b>TLAM 1210</b>	4.7	—	—
	—	—	—	—	—	—	—	—	<b>YTL 1210</b>	5.1
	—	—	—	—	<b>TLA 1212 Z</b>	8.6	<b>TLAM 1212</b>	9.4	—	—
	<b>TA 1212 Z</b>	10.5	<b>TAM 1212</b>	11.5	—	—	—	—	—	—
	<b>TA 1215 Z</b>	13.1	<b>TAM 1215</b>	14	—	—	—	—	—	—
13	<b>TA 1220 Z</b>	17.3	<b>TAM 1220</b>	18.3	—	—	—	—	—	—
	<b>TA 1225 Z</b>	21.5	<b>TAM 1225</b>	22.5	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	<b>YT 1212</b>	12.8
	—	—	—	—	<b>TLA 1312 Z</b>	9.2	<b>TLAM 1312</b>	10.1	—	—
	—	—	—	—	<b>TLA 1412 Z</b>	9.8	<b>TLAM 1412</b>	10.8	—	—
14	—	—	—	—	<b>TLA 1416 Z</b>	13.2	<b>TLAM 1416</b>	14.3	—	—
	<b>TA 1416 Z</b>	18.4	<b>TAM 1416</b>	19.6	—	—	—	—	—	—
	<b>TA 1420 Z</b>	23	<b>TAM 1420</b>	24	—	—	—	—	—	—
15	—	—	—	—	<b>TLA 1512 Z</b>	10.4	<b>TLAM 1512</b>	11.5	—	—
	—	—	—	—	<b>TLA 1516 Z</b>	14	<b>TLAM 1516</b>	15.2	—	—
	—	—	—	—	<b>TLA 1522 Z</b>	19.1	<b>TLAM 1522</b>	20.5	—	—
	<b>TA 1510 Z</b>	10.8	<b>TAM 1510</b>	12.3	—	—	—	—	—	—
	<b>TA 1512 Z</b>	12.9	<b>TAM 1512</b>	14.3	—	—	—	—	—	—
	<b>TA 1515 Z</b>	15.9	<b>TAM 1515</b>	17.3	—	—	—	—	—	—
	<b>TA 1520 Z</b>	21	<b>TAM 1520</b>	22.5	—	—	—	—	—	—
	<b>TA 1525 Z</b>	25	<b>TAM 1525</b>	26.5	—	—	—	—	—	—

Note(1) Allowable rotational speed applies to oil lubrication. For grease lubrication, a maximum of 60% of this value is allowable.  
 Remark Shell Type Grease Retained Full Complement Needle Roller Bearings are provided with prepacked grease. Standard type and closed end type bearings are not provided with prepacked grease, so perform proper lubrication when using these types of bearings.



TA...Z TLA...Z

TAM TLAM

YT YTL

Boundary dimensions mm				Standard mounting dimensions mm						Basic dynamic load rating	Basic static load rating	Allowable rotational speed <sup>(1)</sup>	Assembled inner ring
$F_w$	$D$	$C$	$t_2$ Max.	Shaft dia. h6		Housing bore dia.				$C$ N	$C_0$ N	min <sup>-1</sup>	
				Max.	Min.	Max.	Min.	Max.	Min.				
12	16	10	1	12.000	11.989	—	—	15.995	15.977	4 350	5 810	35 000	IRT 810
12	16	10	—	12.000	11.989	—	—	15.995	15.977	7 470	11 800	13 000	IRT 810
12	18	12	1.3	12.000	11.989	—	—	17.995	17.977	6 420	7 490	35 000	IRT 812
12	19	12	1.3	—	—	—	—	—	—	6 000	6 310	35 000	IRT 812
12	19	15	1.3	—	—	—	—	—	—	7 440	8 320	35 000	IRT 815
12	19	20	1.3	12.000	11.989	19.012	18.991	—	—	10 700	13 300	35 000	—
12	19	25	1.3	—	—	—	—	—	—	13 800	18 300	35 000	—
12	19	12	—	—	—	—	—	—	—	11 800	15 200	13 000	IRT 812
13	19	12	1.3	13.000	12.989	—	—	18.993	18.972	6 760	8 170	30 000	IRT 1012
14	20	12	1.3	14.000	13.989	—	—	19.993	19.972	7 080	8 840	30 000	IRT 1012-2
14	20	16	1.3	14.000	13.989	—	—	19.993	19.972	8 950	12 000	30 000	IRT 1016-2
14	22	16	1.3	14.000	13.989	22.012	21.991	—	—	10 500	12 000	30 000	IRT 1016-2
14	22	20	1.3	14.000	13.989	22.012	21.991	—	—	13 900	17 200	30 000	IRT 1020-2
15	21	12	1.3	—	—	—	—	—	—	7 380	9 520	25 000	IRT 1212
15	21	16	1.3	15.000	14.989	—	—	20.993	20.972	9 330	12 900	25 000	IRT 1216
15	21	22	1.3	15.000	14.989	—	—	20.993	20.972	13 600	20 900	25 000	IRT 1222
15	22	10	1.3	—	—	—	—	—	—	5 290	5 680	25 000	IRT 1010-1
15	22	12	1.3	—	—	—	—	—	—	7 120	8 310	25 000	IRT 1012-1
15	22	15	1.3	15.000	14.989	22.012	21.991	—	—	8 830	11 000	25 000	IRT 1015-1
15	22	20	1.3	—	—	—	—	—	—	12 700	17 600	25 000	IRT 1020-1
15	22	25	1.3	—	—	—	—	—	—	16 300	24 200	25 000	IRT 1025-1