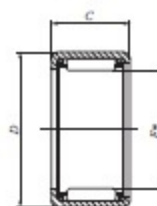


## SHELL TYPE NEEDLE ROLLER BEARINGS



TA...Z TLAM...Z

Shaft dia. 12 – 15 mm

Shaft dia. mm	Identification number									Boundary dimensions mm					Standard mounting dimensions mm						Basic dynamic load rating C N	Basic static load rating C <sub>0</sub> N	Allowable rotational speed <sup>(1)</sup> rpm	Assembled inner ring
	Standard	Mass (Ref.) g	Closed end	Mass (Ref.) g	Standard	Mass (Ref.) g	Closed end	Mass (Ref.) g	Grease retained	Mass (Ref.) g	F <sub>w</sub>	D	C	r <sub>2</sub> Max.	Shaft dia.		Housing bore dia.							
															Max.	Min.	Max.	Min.	Max.	Min.				
12	—	—	—	—	TLA 1210 Z	4.3	TLAM 1210	4.7	—	—	12	16	10	1	12.000	11.989	—	—	15.995	15.977	4 350	5 810	35 000	IRT 810
	—	—	—	—	—	—	—	—	YTL 1210	5.1	12	16	10	—	—	—	—	—	—	—	7 470	11 800	13 000	IRT 810
12	—	—	—	—	TLA 1212 Z	8.6	TLAM 1212	9.4	—	—	12	18	12	1.3	12.000	11.989	—	—	17.995	17.977	6 420	7 490	35 000	IRT 812
	TA 1212 Z	10.5	TAM 1212	11.5	—	—	—	—	—	—	12	19	12	1.3	—	—	—	—	—	—	6 000	6 310	35 000	IRT 812
	TA 1215 Z	13.1	TAM 1215	14	—	—	—	—	—	—	12	19	15	1.3	—	—	—	—	—	—	7 440	8 320	35 000	IRT 815
	TA 1220 Z	17.3	TAM 1220	18.3	—	—	—	—	—	—	12	19	20	1.3	12.000	11.989	19.012	18.991	—	—	10 700	13 300	35 000	—
	TA 1225 Z	21.5	TAM 1225	22.5	—	—	—	—	—	—	12	19	25	1.3	—	—	—	—	—	—	13 800	18 300	35 000	—
13	—	—	—	—	TLA 1312 Z	9.2	TLAM 1312	10.1	—	—	13	19	12	1.3	13.000	12.989	—	—	18.993	18.972	6 760	8 170	30 000	IRT 1012
	—	—	—	—	TLA 1412 Z	9.8	TLAM 1412	10.8	—	—	14	20	12	1.3	14.000	13.989	—	—	19.993	19.972	7 080	8 840	30 000	IRT 1012-2
14	—	—	—	—	TLA 1416 Z	13.2	TLAM 1416	14.3	—	—	14	20	16	1.3	—	—	—	—	—	—	8 950	12 000	30 000	IRT 1016-2
	TA 1416 Z	18.4	TAM 1416	19.6	—	—	—	—	—	—	14	22	16	1.3	14.000	13.989	22.012	21.991	—	—	10 500	12 000	30 000	IRT 1016-2
15	TA 1420 Z	23	TAM 1420	24	—	—	—	—	—	—	14	22	20	1.3	14.000	13.989	22.012	21.991	—	—	13 900	17 200	30 000	IRT 1016-2
	—	—	—	—	TLA 1512 Z	10.4	TLAM 1512	11.5	—	—	15	21	12	1.3	—	—	—	—	—	—	7 380	9 520	25 000	IRT 1212
	—	—	—	—	TLA 1516 Z	14	TLAM 1516	15.2	—	—	15	21	16	1.3	15.000	14.989	—	—	20.993	20.972	9 330	12 900	25 000	IRT 1216
	—	—	—	—	TLA 1522 Z	19.1	TLAM 1522	20.5	—	—	15	21	22	1.3	—	—	—	—	—	—	13 600	20 900	25 000	IRT 1222
	TA 1510 Z	10.8	TAM 1510	12.3	—	—	—	—	—	—	15	22	10	1.3	—	—	—	—	—	—	5 290	5 680	25 000	IRT 1010-1
	TA 1512 Z	12.9	TAM 1512	14.3	—	—	—	—	—	—	15	22	12	1.3	—	—	—	—	—	—	7 120	8 310	25 000	IRT 1012-1
	TA 1515 Z	15.9	TAM 1515	17.3	—	—	—	—	—	—	15	22	15	1.3	15.000	14.989	22.012	21.991	—	—	8 830	11 000	25 000	IRT 1015-1
TA 1520 Z	21	TAM 1520	22.5	—	—	—	—	—	—	15	22	20	1.3	—	—	—	—	—	—	12 700	17 600	25 000	IRT 1020-1	
TA 1525 Z	25	TAM 1525	26.5	—	—	—	—	—	—	15	22	25	1.3	—	—	—	—	—	—	16 300	24 200	25 000	IRT 1025-1	

Note<sup>(1)</sup> 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.