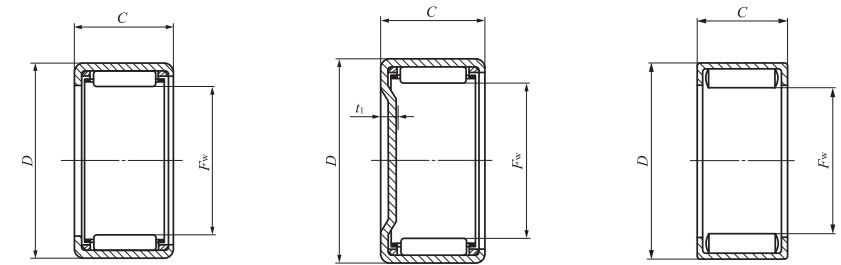


SHELL TYPE NEEDLE ROLLER BEARINGS

B

TA  
TLA  
BA  
BHA



TA...Z TLA...Z

TAM TLAM

YT

Shaft dia. 37 – 45mm

| 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 |
| 37            | TA 3720 Z             | 64.5          | TAM 3720   | 73            | —          | —             | —          | —             | —               | —             |
|               | TA 3730 Z             | 101           | TAM 3730   | 110           | —          | —             | —          | —             | —               | —             |
|               | —                     | —             | —          | —             | —          | —             | —          | —             | YT 3720         | 81            |
| 38            | TA 3815 Z             | 51            | TAM 3815   | 60            | —          | —             | —          | —             | —               | —             |
|               | TA 3820 Z             | 65.5          | TAM 3820   | 74.5          | —          | —             | —          | —             | —               | —             |
|               | TA 3825 Z             | 82.5          | TAM 3825   | 96            | —          | —             | —          | —             | —               | —             |
|               | TA 3830 Z             | 104           | TAM 3830   | 114           | —          | —             | —          | —             | —               | —             |
|               | TAW 3845 Z            | 149           | TAMW 3845  | 159           | —          | —             | —          | —             | —               | —             |
| 40            | —                     | —             | —          | —             | TLA 4012 Z | 30            | TLAM 4012  | 40            | —               | —             |
|               | —                     | —             | —          | —             | TLA 4016 Z | 39            | TLAM 4016  | 49            | —               | —             |
|               | —                     | —             | —          | —             | TLA 4020 Z | 49            | TLAM 4020  | 58.5          | —               | —             |
|               | TA 4015 Z             | 54            | TAM 4015   | 63.5          | —          | —             | —          | —             | —               | —             |
|               | TA 4020 Z             | 69.5          | TAM 4020   | 79            | —          | —             | —          | —             | —               | —             |
|               | TA 4025 Z             | 86.5          | TAM 4025   | 102           | —          | —             | —          | —             | —               | —             |
|               | TA 4030 Z             | 110           | TAM 4030   | 120           | —          | —             | —          | —             | —               | —             |
|               | TA 4040 Z             | 144           | TAM 4040   | 154           | —          | —             | —          | —             | —               | —             |
|               | —                     | —             | —          | —             | —          | —             | —          | —             | YT 4015         | 63.5          |
|               | —                     | —             | —          | —             | —          | —             | —          | —             | YT 4025         | 109           |
| 45            | —                     | —             | —          | —             | TLA 4516 Z | 43.5          | TLAM 4516  | 56            | —               | —             |
|               | —                     | —             | —          | —             | TLA 4520 Z | 54.5          | TLAM 4520  | 67            | —               | —             |
|               | TA 4520 Z             | 77            | TAM 4520   | 90            | —          | —             | —          | —             | —               | —             |
|               | TA 4525 Z             | 102           | TAM 4525   | 115           | —          | —             | —          | —             | —               | —             |
|               | TA 4530 Z             | 122           | TAM 4530   | 135           | —          | —             | —          | —             | —               | —             |
|               | TA 4540 Z             | 161           | TAM 4540   | 174           | —          | —             | —          | —             | —               | —             |
|               | —                     | —             | —          | —             | —          | —             | —          | —             | —               | —             |
|               | —                     | —             | —          | —             | —          | —             | —          | —             | YT 4520         | 96            |
|               | —                     | —             | —          | —             | —          | —             | —          | —             | YT 4525         | 122           |

| 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 <sub>w</sub>         | D  | C  | t <sub>1</sub> Max. | Shaft dia. h6                   |        | Housing bore dia. J7 N7 |        |        |        | C N                       | C <sub>0</sub> N         | min <sup>-1</sup>                         |                      |
|                        |    |    |                     | Max.                            | Min.   | Max.                    | Min.   | Max.   | Min.   |                           |                          |   |                      |
| 37                     | 47 | 20 | 3.4                 |                                 |        |                         |        |        |        | 27 800                    | 45 400                   | 9 500                                     | IRT 3220             |
| 37                     | 47 | 30 | 3.4                 | 37.000                          | 36.984 | 47.014                  | 46.989 | —      | —      | 41 800                    | 76 700                   | 9 500                                     | IRT 3230             |
| 37                     | 47 | 20 | —                   |                                 |        |                         |        |        |        | 43 300                    | 81 300                   | 4 000                                     | IRT 3220             |
| 38                     | 48 | 15 | 3.4                 |                                 |        |                         |        |        |        | 19 000                    | 28 000                   | 9 000                                     | IRT 3215-1           |
| 38                     | 48 | 20 | 3.4                 |                                 |        |                         |        |        |        | 27 700                    | 45 600                   | 9 000                                     | IRT 3220-1           |
| 38                     | 48 | 25 | 3.4                 | 38.000                          | 37.984 | 48.014                  | 47.989 | —      | —      | 35 600                    | 63 100                   | 9 000                                     | IRT 3225-1           |
| 38                     | 48 | 30 | 3.4                 |                                 |        |                         |        |        |        | 43 100                    | 80 600                   | 9 000                                     | IRT 3230-1           |
| 38                     | 48 | 45 | 3.4                 |                                 |        |                         |        |        |        | 55 700                    | 112 000                  | 9 000                                     | IRT 3245-1           |
| 40                     | 47 | 12 | 2.8                 |                                 |        |                         |        |        |        | 12 400                    | 22 800                   | 8 500                                     | —                    |
| 40                     | 47 | 16 | 2.8                 | 40.000                          | 39.984 | —                       | —      | 46.992 | 46.967 | 16 700                    | 33 700                   | 8 500                                     | —                    |
| 40                     | 47 | 20 | 2.8                 |                                 |        |                         |        |        |        | 22 100                    | 48 200                   | 8 500                                     | IRT 3520             |
| 40                     | 50 | 15 | 3.4                 |                                 |        |                         |        |        |        | 19 500                    | 29 400                   | 8 500                                     | IRT 3515             |
| 40                     | 50 | 20 | 3.4                 |                                 |        |                         |        |        |        | 28 400                    | 47 800                   | 8 500                                     | IRT 3520             |
| 40                     | 50 | 25 | 3.4                 |                                 |        |                         |        |        |        | 36 600                    | 66 200                   | 8 500                                     | IRT 3525             |
| 40                     | 50 | 30 | 3.4                 | 40.000                          | 39.984 | 50.014                  | 49.989 | —      | —      | 44 300                    | 84 600                   | 8 500                                     | IRT 3530             |
| 40                     | 50 | 40 | 3.4                 |                                 |        |                         |        |        |        | 56 700                    | 116 000                  | 8 500                                     | IRT 3540             |
| 40                     | 50 | 15 | —                   |                                 |        |                         |        |        |        | 33 400                    | 59 800                   | 4 000                                     | IRT 3515             |
| 40                     | 50 | 25 | —                   |                                 |        |                         |        |        |        | 55 300                    | 114 000                  | 4 000                                     | IRT 3525             |
| 45                     | 52 | 16 | 2.8                 |                                 |        |                         |        |        |        | 17 800                    | 37 800                   | 7 500                                     | —                    |
| 45                     | 52 | 20 | 2.8                 | 45.000                          | 44.984 | —                       | —      | 51.991 | 51.961 | 23 400                    | 54 000                   | 7 500                                     | IRT 4020             |
| 45                     | 55 | 20 | 3.4                 |                                 |        |                         |        |        |        | 30 600                    | 54 600                   | 7 500                                     | IRT 4020             |
| 45                     | 55 | 25 | 3.4                 |                                 |        |                         |        |        |        | 39 400                    | 75 600                   | 7 500                                     | IRT 4025             |
| 45                     | 55 | 30 | 3.4                 |                                 |        |                         |        |        |        | 47 700                    | 96 600                   | 7 500                                     | IRT 4030             |
| 45                     | 55 | 40 | 3.4                 | 45.000                          | 44.984 | 55.018                  | 54.988 | —      | —      | 61 300                    | 133 000                  | 7 500                                     | IRT 4040             |
| 45                     | 55 | 20 | —                   |                                 |        |                         |        |        |        | 47 800                    | 98 200                   | 3 500                                     | IRT 4020             |
| 45                     | 55 | 25 | —                   |                                 |        |                         |        |        |        | 59 100                    | 129 000                  | 3 500                                     | IRT 4025             |

Note<sup>(1)</sup> Allowable rotational speed applies to oil lubrication. For grease lubrication, a maximum of 60% of this value is allowable.  
 Remarks1. "W" in the identification number indicates that rolling elements are arranged in double rows.  
 2. 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.