

INNER RINGS

- Inner Rings for Shell Type Needle Roller Bearings
- Inner Rings for General Usage



Structure and Features

IKO Inner Rings are heat-treated and finished by grinding to a high degree of accuracy. In the case of needle roller bearings, normally, the shafts are heat-treated and finished by grinding, and used as the raceway surfaces. However, when it is impossible to make shaft surfaces according to the specified surface hardness or surface roughness, inner rings are used.

Inner rings include those for Shell Type Needle Roller Bearings and those for general use and are available in a variety of dimensions. When shafts move axially or seals are used adjacent to bearings, wide inner rings can be selected.

Inner rings can also be used economically as bushings without requiring any additional machining.

Types

For Inner Rings, the types shown in Table 1 are available.

Table 1.1 Inner Rings for Shell Type Needle Roller Bearings

| Series | | Model codes of assembled bearings |
|---------------|-----|---------------------------------------|
| Metric series | IRT | TA...Z, TLA...Z TAM, TLAM, YT, YTL |
| Inch series | IRB | BA...Z, BHA...Z BAM, BHAM, YB, YBH |

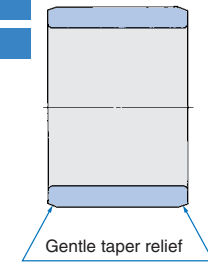
Remark For Inner Rings for Shell Type Needle Roller Bearings with Seal, please consult **IKO**.

Table 1.2 Inner Rings for General Usage

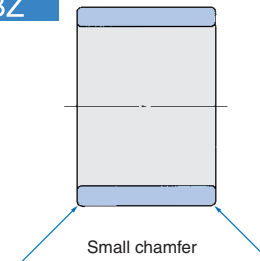
| Series | | Model codes of assembled bearings |
|---------------|----------|---|
| Metric series | LRT | RNA 49, RNA 69 RNA 48, TAF, TR RNAF, NAX, NBX |
| | LRTZ | RNA 49...UU, RNA 69...UU GTR |
| Inch series | LRB | BR |
| | LRBZ...B | BR...UU |
| | LRBZ | GBR, GBR...UU |

Shapes of Inner Rings

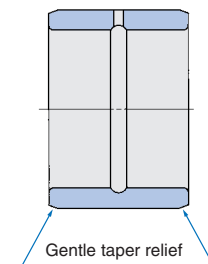
- IRT
- IRB
- LRT



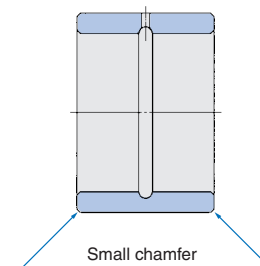
- LRTZ
- LRBZ



- LRB

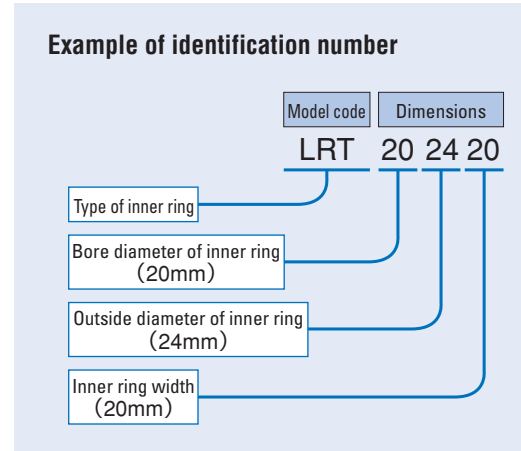


- LRBZ...B



Identification number

The identification number of Inner Rings consists of a model code and dimensions. An example is shown below.



Accuracy

Dimensional accuracy of Inner Rings is based on Table 2. Inner Rings for Shell Type Needle Roller Bearings are manufactured so that exact radial internal clearances can be obtained when assembled with Shell Type Needle Roller Bearings. Inner Rings for General Usage produce CN clearance when used in the assembled bearings shown in Table 1.2. LRB and LRBZ...B models produce the radial internal clearances shown in Table 4 on page D5. When clearances other than CN clearance or accuracy other than Class 0 are required, please consult **IKO**.

Table 2 Tolerances for inner ring

| Model code | Tolerance |
|--------------------------|---|
| IRT LRT, LRTZ LRBZ | JIS Class 0 (See the table 12, page A31) |
| IRB | Based on Table 3 |
| LRB LRBZ...B | Based on Table 4 |

Remark Tolerances of outside diameter of inner ring are based on Table 5.

Table 3 Tolerances of IRB

| Nominal inside diameter of inner ring mm | Δ _{dmp} Single plane mean bore diameter deviation | Δ _{Bs} Deviation of a single inner ring width | | K _{ia} Radial runout of assembled bearing inner ring |
|--|---|---|-----|--|
| | | High | Low | |
| Over | Incl. | High | Low | Max. |
| 2.5 | 10 | 0 | -13 | 10 |
| 10 | 18 | 0 | -13 | 10 |
| 18 | 30 | 0 | -13 | 13 |
| 30 | 50 | 0 | -13 | 15 |
| 50 | 80 | 0 | -13 | 20 |

Table 4 Tolerances of LRB,LRBZ...B

| Nominal inside diameter of inner ring mm | Δ _{dmp} Single plane mean bore diameter deviation | Δ _{Bs} Deviation of a single inner ring width | | K _{ia} Radial runout of assembled bearing inner ring |
|--|---|---|-----|--|
| | | High | Low | |
| Over | Incl. | High | Low | Max. |
| — | 19.050 | 0 | -10 | 10 |
| 19.050 | 30.162 | 0 | -13 | 13 |
| 30.162 | 50.800 | 0 | -13 | 15 |
| 50.800 | 82.550 | 0 | -15 | 20 |
| 82.550 | 120.650 | 0 | -20 | 25 |

Table 6 Tolerances of outside diameters for LRT, LRTZ and LRBZ (When the clearance is CN clearance)

| d Bore diameter of inner ring mm | F Outside diameter of inner ring mm | F Outside diameter of inner ring mm | | | | | | | | | | | | | | | | | | | | | | d Bore diameter of inner ring mm | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|--|--|-------|------|-----|------------|-----|------|-----|-------------|-----|------|-----|-------------|-----|------|-----|-------------|-----|------|-----|-------------|-----|-------------------------------------|------|--------------|------|-----|------|---------------|------|-----|------|---------------|------|-----|------|---------------|--|--|--|---------------|--|--|--|---------------|--|--|--|--|
| | | 3 < F ≤ 6 | | | | 6 < F ≤ 10 | | | | 10 < F ≤ 18 | | | | 18 < F ≤ 30 | | | | 30 < F ≤ 50 | | | | 50 < F ≤ 80 | | | | 80 < F ≤ 120 | | | | 120 < F ≤ 180 | | | | 180 < F ≤ 250 | | | | 250 < F ≤ 315 | | | | 315 < F ≤ 400 | | | | 400 < F ≤ 500 | | | | |
| | | Over | Incl. | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | | | | | | | | | | | | |
| — | 24 | -10 | -27 | -7 | -23 | -4 | -18 | 0 | -12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | — | 24 | | | | | | | | | | | | |
| 24 | 30 | | | | | | | 0 | -12 | +5 | -4 | | | | | | | | | | | | | | | | | | | | | | | | | | 24 | 30 | | | | | | | | | | | | |
| 30 | 40 | | | | | | | 0 | -12 | 0 | -9 | | | | | | | | | | | | | | | | | | | | | | | | | | 30 | 40 | | | | | | | | | | | | |
| 40 | 50 | | | | | | | | | -5 | -19 | | | | | | | | | | | | | | | | | | | | | | | | | | 40 | 50 | | | | | | | | | | | | |
| 50 | 65 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 50 | 65 | | | | | | | | | | | | |
| 65 | 80 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 65 | 80 | | | | | | | | | | | | |
| 80 | 100 | | | | | | | | | | | | | 0 | -11 | | | | | | | | | | | | | | | | | | | | | | 80 | 100 | | | | | | | | | | | | |
| 100 | 120 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 100 | 120 | | | | | | | | | | | | |
| 120 | 140 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 120 | 140 | | | | | | | | | | | | |
| 140 | 160 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 140 | 160 | | | | | | | | | | | | |
| 160 | 180 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 160 | 180 | | | | | | | | | | | | |
| 180 | 200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 180 | 200 | | | | | | | | | | | | |
| 200 | 225 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 200 | 225 | | | | | | | | | | | | |
| 225 | 250 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 225 | 250 | | | | | | | | | | | | |
| 250 | 280 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 250 | 280 | | | | | | | | | | | | |
| 280 | 315 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 280 | 315 | | | | | | | | | | | | |
| 315 | 355 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 315 | 355 | | | | | | | | | | | | |
| 355 | 400 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 355 | 400 | | | | | | | | | | | | |
| 400 | 450 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 400 | 450 | | | | | | | | | | | | |
| 450 | 500 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 450 | 500 | | | | | | | | | | | | |

Table 5 Tolerances of outside diameter of inner ring unit: μm

| Model code | Tolerance |
|-----------------|------------------|
| IRT | g5 |
| IRB | 0~-13 |
| LRT, LRTZ, LRBZ | Based on Table 6 |
| LRB, LRBZ...B | Based on Table 7 |

Table 7 Tolerances of outside diameters of LRB and LRBZ...B unit: μm

| Nominal outside diameter of inner ring mm | Tolerance | | |
|---|-----------|------|-----|
| | | High | Low |
| Over | Incl. | High | Low |
| — | 18.034 | -13 | -23 |
| 18.034 | 25.908 | -18 | -30 |
| 25.908 | 30.226 | -23 | -36 |
| 30.226 | 35.052 | -23 | -38 |
| 35.052 | 50.038 | -25 | -41 |
| 50.038 | 80.010 | -28 | -46 |
| 80.010 | 100.076 | -32 | -56 |
| 100.076 | 102.108 | -37 | -66 |

Fit

The recommended fits between Inner Rings and shafts are shown in Table 22 on page A42.

Oil Hole

The number of oil holes is shown in Table 8. When Inner Rings with an oil hole are especially required for a model without an oil hole, attach an "OH" to the end of the identification number when ordering.

Example: LRT 202420 OH
For Inner Rings with multiple oil holes, please consult **IKO**.

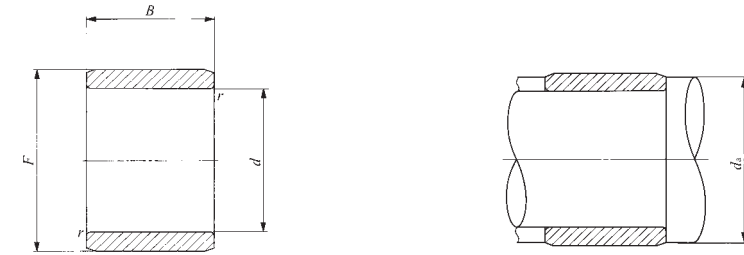
Table 8 Number of oil holes

| Bearing type | Metric series | Bore diameter of inner ring d mm | Number of oil holes | |
|--------------|---------------|----------------------------------|---------------------|---------------------------------------|
| | | | | For Shell Type Needle Roller Bearings |
| | Inch series | IRT | 0 | |
| | Inch series | IRB | 0 | |
| | Metric series | LRT | 0 | |
| | Metric series | LRTZ | 0 | |
| | Inch series | LRB | d ≤ 76.200 | 1 |
| 76.200 < d | | | 2 | |
| LRBZ...B | | 1 | | |
| LRBZ | | 0 | | |

Remark Inner rings with an oil hole are provided with an oil groove.

INNER RINGS

Inner Rings for Shell Type Needle Roller Bearings



IRT

Shaft dia. 7 – 17mm

| Shaft dia. mm | Identification number | Mass (Ref.) g | Boundary dimensions mm | | | | Standard mounting dimension mm | | Assembled bearings | | |
|------------------|-----------------------|---------------------|---------------------------|----|------|-----------------------------------|-----------------------------------|------|--------------------|-------------------|-----------|
| | | | d | F | B | r _{s min} ⁽¹⁾ | Min. | Max. | TA···Z (TAM) | TLA···Z (TLAM) | YT YTL |
| 7 | IRT 710 | 3.2 | 7 | 10 | 10.5 | 0.3 | 9 | 9.7 | TA 1010Z | TLA 1010Z | — |
| | IRT 712 | 3.9 | 7 | 10 | 12.5 | 0.3 | 9 | 9.7 | TA 1012Z | TLA 1012Z | — |
| | IRT 715 | 4.8 | 7 | 10 | 15.5 | 0.3 | 9 | 9.7 | TA 1015Z | TLA 1015Z | — |
| 8 | IRT 810 | 5.1 | 8 | 12 | 10.5 | 0.3 | 10 | 11 | — | TLA 1210Z | YTL 1210 |
| | IRT 812 | 6 | 8 | 12 | 12.5 | 0.3 | 10 | 11 | TA 1212Z | TLA 1212Z | YT 1212 |
| | IRT 815 | 7.5 | 8 | 12 | 15.5 | 0.3 | 10 | 11 | TA 1215Z | — | — |
| 10 | IRT 1012 | 5.2 | 10 | 13 | 12.5 | 0.3 | 12 | 12.7 | — | TLA 1312Z | — |
| | IRT 1012-2 | 7.2 | 10 | 14 | 12.5 | 0.3 | 12 | 13 | — | TLA 1412Z | — |
| | IRT 1016-2 | 9.6 | 10 | 14 | 16.5 | 0.3 | 12 | 13 | TA 1416Z | TLA 1416Z | — |
| | IRT 1020-2 | 11.9 | 10 | 14 | 20.5 | 0.3 | 12 | 13 | TA 1420Z | — | — |
| | IRT 1010-1 | 7.9 | 10 | 15 | 10.5 | 0.3 | 12 | 14 | TA 1510Z | — | — |
| | IRT 1012-1 | 9.4 | 10 | 15 | 12.5 | 0.3 | 12 | 14 | TA 1512Z | TLA 1512Z | — |
| | IRT 1015-1 | 11.7 | 10 | 15 | 15.5 | 0.3 | 12 | 14 | TA 1515Z | — | — |
| | IRT 1020-1 | 15.5 | 10 | 15 | 20.5 | 0.3 | 12 | 14 | TA 1520Z | — | — |
| | IRT 1025-1 | 19.3 | 10 | 15 | 25.5 | 0.3 | 12 | 14 | TA 1525Z | — | — |
| 12 | IRT 1212 | 6.1 | 12 | 15 | 12.5 | 0.3 | 14 | 14.5 | TA 1512Z | TLA 1512Z | — |
| | IRT 1216 | 8.1 | 12 | 15 | 16.5 | 0.3 | 14 | 14.5 | — | TLA 1516Z | — |
| | IRT 1222 | 11 | 12 | 15 | 22.5 | 0.3 | 14 | 14.5 | — | TLA 1522Z | — |
| | IRT 1212-1 | 8.5 | 12 | 16 | 12.5 | 0.3 | 14 | 15 | — | TLA 1612Z | — |
| | IRT 1216-1 | 11.2 | 12 | 16 | 16.5 | 0.3 | 14 | 15 | TA 1616Z | TLA 1616Z | — |
| | IRT 1220-1 | 13.9 | 12 | 16 | 20.5 | 0.3 | 14 | 15 | TA 1620Z | — | — |
| | IRT 1222-1 | 15.2 | 12 | 16 | 22.5 | 0.3 | 14 | 15 | — | TLA 1622Z | — |
| | IRT 1215-2 | 13.6 | 12 | 17 | 15.5 | 0.3 | 14 | 16 | TA 1715Z | — | YT 1715 |
| | IRT 1220-2 | 18 | 12 | 17 | 20.5 | 0.3 | 14 | 16 | TA 1720Z | — | — |
| | IRT 1225-2 | 22.5 | 12 | 17 | 25.5 | 0.3 | 14 | 16 | TA 1725Z | — | YT 1725 |
| 15 | IRT 1512 | 7.5 | 15 | 18 | 12.5 | 0.3 | 17 | 17.5 | — | TLA 1812Z | — |
| | IRT 1513 | 8.1 | 15 | 18 | 13.5 | 0.3 | 17 | 17.5 | TA 1813Z | — | — |

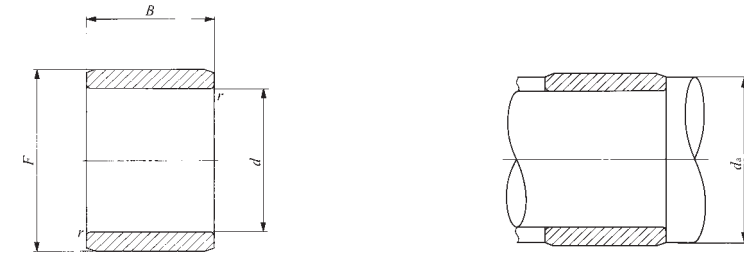
Note⁽¹⁾ Minimum allowable value of chamfer dimension r
Remark No oil hole is provided.

| Shaft dia. mm | Identification number | Mass (Ref.) g | Boundary dimensions mm | | | | Standard mounting dimension mm | | Assembled bearings | | |
|------------------|-----------------------|---------------------|---------------------------|------|------|-----------------------------------|-----------------------------------|----------|--------------------|-------------------|-----------|
| | | | d | F | B | r _{s min} ⁽¹⁾ | Min. | Max. | TA···Z (TAM) | TLA···Z (TLAM) | YT YTL |
| 15 | IRT 1515 | 9.3 | 15 | 18 | 15.5 | 0.3 | 17 | 17.5 | TA 1815Z | — | — |
| | IRT 1516 | 9.9 | 15 | 18 | 16.5 | 0.3 | 17 | 17.5 | — | TLA 1816Z | — |
| | IRT 1517 | 10.5 | 15 | 18 | 17.5 | 0.3 | 17 | 17.5 | TA 1817Z | — | — |
| | IRT 1519 | 11.7 | 15 | 18 | 19.5 | 0.3 | 17 | 17.5 | TA 1819Z | — | — |
| | IRT 1520 | 12.3 | 15 | 18 | 20.5 | 0.3 | 17 | 17.5 | TA 1820Z | — | — |
| | IRT 1525 | 15.2 | 15 | 18 | 25.5 | 0.3 | 17 | 17.5 | TA 1825Z | — | — |
| | IRT 1516-1 | 13.6 | 15 | 19 | 16.5 | 0.3 | 17 | 18 | TA 1916Z | — | — |
| | IRT 1520-1 | 16.8 | 15 | 19 | 20.5 | 0.3 | 17 | 18 | TA 1920Z | — | — |
| | IRT 1515-2 | 16.4 | 15 | 20 | 15.5 | 0.3 | 17 | 19 | TA 2015Z | — | YT 2015 |
| | IRT 1520-2 | 21.5 | 15 | 20 | 20.5 | 0.3 | 17 | 19 | TA 2020Z | TLA 2020Z | YT 202820 |
| | IRT 1525-2 | 27 | 15 | 20 | 25.5 | 0.3 | 17 | 19 | TA 202820Z | — | — |
| IRT 1530-2 | 32 | 15 | 20 | 30.5 | 0.3 | 17 | 19 | TA 2025Z | — | YT 2025 | |
| IRT 1530Z | — | — | — | — | — | — | — | TA 2030Z | TLA 2030Z | — | |
| 17 | IRT 1716 | 11.1 | 17 | 20 | 16.5 | 0.3 | 19 | 19.5 | — | TLA 2016Z | — |
| | IRT 1720 | 13.7 | 17 | 20 | 20.5 | 0.3 | 19 | 19.5 | TA 2020Z | TLA 2020Z | YT 202820 |
| | IRT 1730 | 20.5 | 17 | 20 | 30.5 | 0.3 | 19 | 19.5 | TA 202820Z | — | — |
| | IRT 1716-1 | 15.1 | 17 | 21 | 16.5 | 0.3 | 19 | 20 | TA 2030Z | TLA 2030Z | — |
| | IRT 1720-1 | 18.8 | 17 | 21 | 20.5 | 0.3 | 19 | 20 | TA 2116Z | — | YT 2116 |
| | IRT 1710-2 | 12.4 | 17 | 22 | 10.5 | 0.3 | 19 | 21 | TA 2120Z | — | YT 2120 |
| | IRT 1715-2 | 18.3 | 17 | 22 | 15.5 | 0.3 | 19 | 21 | TA 2210Z | — | — |
| | IRT 1716-2 | 19.4 | 17 | 22 | 16.5 | 0.3 | 19 | 21 | TA 2215Z | — | — |
| | IRT 1720-2 | 24 | 17 | 22 | 20.5 | 0.3 | 19 | 21 | TA 223016Z | TLA 2216Z | YT 223016 |
| | IRT 1725-2 | 30 | 17 | 22 | 25.5 | 0.3 | 19 | 21 | TA 2220Z | TLA 2220Z | YT 223020 |
| | IRT 1730-2 | 36 | 17 | 22 | 30.5 | 0.3 | 19 | 21 | TA 223020Z | — | — |
| | IRT 1725Z | — | — | — | — | — | — | — | TA 2225Z | — | — |
| | IRT 1730Z | — | — | — | — | — | — | — | TA 2230Z | — | — |

Note⁽¹⁾ Minimum allowable value of chamfer dimension r
Remark No oil hole is provided.

INNER RINGS

Inner Rings for Shell Type Needle Roller Bearings



IRT

Shaft dia. 20 – 45mm

| Shaft dia. mm | Identification number | Mass (Ref.) g | Boundary dimensions mm | | | | Standard mounting dimension mm | | Assembled bearings | | |
|------------------|-----------------------|---------------------|---------------------------|------|------|-----------------------------------|-----------------------------------|------|--------------------|-------------------|-----------|
| | | | d | F | B | r _{s min} ⁽¹⁾ | Min. | Max. | TA···Z (TAM) | TLA···Z (TLAM) | YT YTL |
| 20 | IRT 2016 | 17.5 | 20 | 24 | 16.5 | 0.3 | 22 | 23 | TA 243216Z | — | YT 243216 |
| | IRT 2020 | 22 | 20 | 24 | 20.5 | 0.3 | 22 | 23 | TA 2420Z | — | YT 243220 |
| | | | | | | | | | TA 243220Z | — | |
| | IRT 2028 | 30.5 | 20 | 24 | 28.5 | 0.3 | 22 | 23 | TA 2428Z | — | YT 2428 |
| | IRT 2010-1 | 14.3 | 20 | 25 | 10.5 | 0.3 | 22 | 24 | TA 2510Z | — | YT 2510 |
| | IRT 2015-1 | 21 | 20 | 25 | 15.5 | 0.3 | 22 | 24 | TA 2515Z | — | YT 2515 |
| | IRT 2020-1 | 28 | 20 | 25 | 20.5 | 0.3 | 22 | 24 | TA 2520Z | TLA 2520Z | YT 2520 |
| | IRT 2025-1 | 34.5 | 20 | 25 | 25.5 | 0.3 | 22 | 24 | TA 2525Z | — | YT 2525 |
| | IRT 2026-1 | 36 | 20 | 25 | 26.5 | 0.3 | 22 | 24 | — | TLA 2526Z | YTL 2526 |
| | IRT 2030-1 | 41.5 | 20 | 25 | 30.5 | 0.3 | 22 | 24 | TA 2530Z | — | — |
| IRT 2038-1 | 52.5 | 20 | 25 | 38.5 | 0.3 | 22 | 24 | — | TLAW 2538Z | — | |
| 22 | IRT 2216 | 19.1 | 22 | 26 | 16.5 | 0.3 | 24 | 25 | TA 2616Z | — | YT 2616 |
| | IRT 2220 | 24 | 22 | 26 | 20.5 | 0.3 | 24 | 25 | TA 2620Z | — | YT 2620 |
| | IRT 2220-1 | 37 | 22 | 28 | 20.5 | 0.3 | 24 | 27 | TA 2820Z | TLA 2820Z | YT 2820 |
| | IRT 2230-1 | 55.5 | 22 | 28 | 30.5 | 0.3 | 24 | 27 | TA 2830Z | — | — |
| 25 | IRT 2520 | 26.5 | 25 | 29 | 20.5 | 0.3 | 27 | 28 | TA 2920Z | — | YT 2920 |
| | IRT 2530 | 40 | 25 | 29 | 30.5 | 0.3 | 27 | 28 | TA 2930Z | — | — |
| | IRT 2515-1 | 25.5 | 25 | 30 | 15.5 | 0.3 | 27 | 29 | TA 3015Z | — | — |
| | IRT 2520-1 | 34 | 25 | 30 | 20.5 | 0.3 | 27 | 29 | TA 3020Z | TLA 3020Z | — |
| | IRT 2525-1 | 42.5 | 25 | 30 | 25.5 | 0.3 | 27 | 29 | TA 3025Z | — | — |
| | IRT 2526-1 | 44 | 25 | 30 | 26.5 | 0.3 | 27 | 29 | — | TLA 3026Z | — |
| | IRT 2530-1 | 50.5 | 25 | 30 | 30.5 | 0.3 | 27 | 29 | TA 3030Z | — | — |
| IRT 2538-1 | 64 | 25 | 30 | 38.5 | 0.3 | 27 | 29 | — | TLAW 3038Z | — | |
| 28 | IRT 2820 | 29.5 | 28 | 32 | 20.5 | 0.3 | 30 | 31 | TA 3220Z | — | YT 3220 |
| | IRT 2830 | 44 | 28 | 32 | 30.5 | 0.3 | 30 | 31 | TA 3230Z | — | — |
| 30 | IRT 3012 | 24.5 | 30 | 35 | 12.5 | 0.6 | 34 | 34.5 | TA 3512Z | TLA 3512Z | — |
| | IRT 3015 | 30.5 | 30 | 35 | 15.5 | 0.6 | 34 | 34.5 | TA 3515Z | — | — |

Note⁽¹⁾ Minimum allowable value of chamfer dimension r
Remark No oil hole is provided.

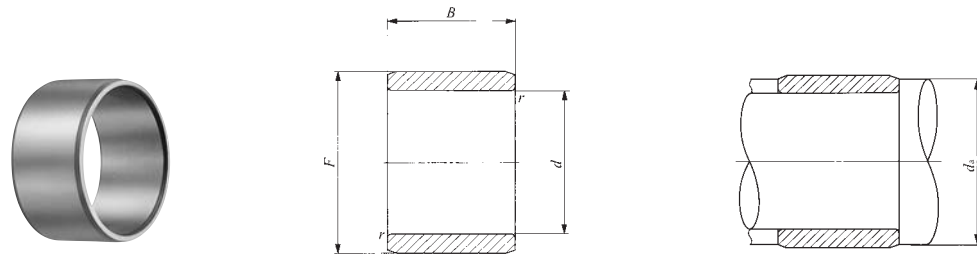
| Shaft dia. mm | Identification number | Mass (Ref.) g | Boundary dimensions mm | | | | Standard mounting dimension mm | | Assembled bearings | | |
|------------------|-----------------------|---------------------|---------------------------|------|------|-----------------------------------|-----------------------------------|-----------|--------------------|-------------------|-----------|
| | | | d | F | B | r _{s min} ⁽¹⁾ | Min. | Max. | TA···Z (TAM) | TLA···Z (TLAM) | YT YTL |
| 30 | IRT 3020 | 40 | 30 | 35 | 20.5 | 0.6 | 34 | 34.5 | TA 3520Z | TLA 3520Z | — |
| | IRT 3025 | 50 | 30 | 35 | 25.5 | 0.6 | 34 | 34.5 | TA 3525Z | — | — |
| | IRT 3030 | 60 | 30 | 35 | 30.5 | 0.6 | 34 | 34.5 | TA 3530Z | — | — |
| 32 | IRT 3220 | 42.5 | 32 | 37 | 20.5 | 0.6 | 36 | 36.5 | TA 3720Z | — | YT 3720 |
| | IRT 3230 | 63.5 | 32 | 37 | 30.5 | 0.6 | 36 | 36.5 | TA 3730Z | — | — |
| | IRT 3215-1 | 39.5 | 32 | 38 | 15.5 | 0.6 | 36 | 37 | TA 3815Z | — | — |
| | IRT 3220-1 | 52 | 32 | 38 | 20.5 | 0.6 | 36 | 37 | TA 3820Z | — | — |
| | IRT 3225-1 | 64.5 | 32 | 38 | 25.5 | 0.6 | 36 | 37 | TA 3825Z | — | — |
| | IRT 3230-1 | 77.5 | 32 | 38 | 30.5 | 0.6 | 36 | 37 | TA 3830Z | — | — |
| | IRT 3245-1 | 115 | 32 | 38 | 45.5 | 0.6 | 36 | 37 | TAW 3845Z | — | — |
| 35 | IRT 3515 | 35 | 35 | 40 | 15.5 | 0.6 | 39 | 39.5 | TA 4015Z | — | YT 4015 |
| | IRT 3520 | 46.5 | 35 | 40 | 20.5 | 0.6 | 39 | 39.5 | TA 4020Z | TLA 4020Z | — |
| | IRT 3525 | 58 | 35 | 40 | 25.5 | 0.6 | 39 | 39.5 | TA 4025Z | — | YT 4025 |
| | IRT 3530 | 69 | 35 | 40 | 30.5 | 0.6 | 39 | 39.5 | TA 4030Z | — | — |
| | IRT 3540 | 91.5 | 35 | 40 | 40.5 | 0.6 | 39 | 39.5 | TA 4040Z | — | — |
| 40 | IRT 4020 | 52.5 | 40 | 45 | 20.5 | 0.6 | 44 | 45.5 | TA 4520Z | TLA 4520Z | YT 4520 |
| | IRT 4025 | 65.5 | 40 | 45 | 25.5 | 0.6 | 44 | 45.5 | TA 4525Z | — | YT 4525 |
| | IRT 4030 | 78.5 | 40 | 45 | 30.5 | 0.6 | 44 | 45.5 | TA 4530Z | — | — |
| | IRT 4040 | 104 | 40 | 45 | 40.5 | 0.6 | 44 | 45.5 | TA 4540Z | — | — |
| 45 | IRT 4512 | 36 | 45 | 50 | 12.5 | 0.6 | 49 | 49.5 | TA 5012Z | — | — |
| | IRT 4515 | 44.5 | 45 | 50 | 15.5 | 0.6 | 49 | 49.5 | TA 5015Z | — | — |
| | IRT 4520 | 59 | 45 | 50 | 20.5 | 0.6 | 49 | 49.5 | TA 5020Z | TLA 5020Z | — |
| | IRT 4525 | 73 | 45 | 50 | 25.5 | 0.6 | 49 | 49.5 | TA 5025Z | TLA 5025Z | — |
| | IRT 4530 | 87.5 | 45 | 50 | 30.5 | 0.6 | 49 | 49.5 | TA 5030Z | — | — |
| | IRT 4540 | 116 | 45 | 50 | 40.5 | 0.6 | 49 | 49.5 | TA 5040Z | — | — |
| IRT 4545 | 131 | 45 | 50 | 45.5 | 0.6 | 49 | 49.5 | TAW 5045Z | — | — | |

Note⁽¹⁾ Minimum allowable value of chamfer dimension r
Remark No oil hole is provided.

H
IRT
IRB
LRT
LRB

INNER RINGS

Inner Rings for Shell Type Needle Roller Bearings



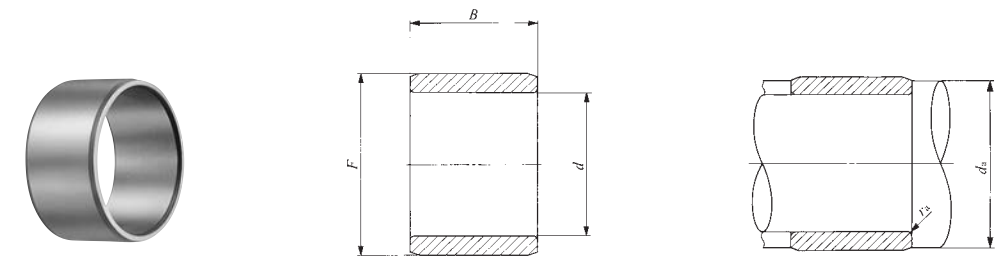
IRT

Shaft dia. 50 – 60mm

| Shaft dia. mm | Identification number | Mass (Ref.) g | Boundary dimensions mm | | | | Standard mounting dimension mm | | Assembled bearings | | |
|------------------|-----------------------|------------------|------------------------|------|------|-----------------------------------|--------------------------------|-----------|--------------------|----------------|--------|
| | | | d | F | B | r _s min ⁽¹⁾ | Min. | Max. | TA...Z (TAM) | TLA...Z (TLAM) | YT YTL |
| 50 | IRT 5020-1 | 65 | 50 | 55 | 20.5 | 0.6 | 54 | 54.5 | TA 5520Z | TLA 5520Z | — |
| | IRT 5025-1 | 81 | 50 | 55 | 25.5 | 0.6 | 54 | 54.5 | TA 5525Z | TLA 5525Z | — |
| | IRT 5030-1 | 96.5 | 50 | 55 | 30.5 | 0.6 | 54 | 54.5 | TA 5530Z | — | — |
| | IRT 5040-1 | 128 | 50 | 55 | 40.5 | 0.6 | 54 | 54.5 | TA 5540Z | — | — |
| | IRT 5045-1 | 144 | 50 | 55 | 45.5 | 0.6 | 54 | 54.5 | TAW 5545Z | — | — |
| | IRT 5050-1 | 160 | 50 | 55 | 50.5 | 0.6 | 54 | 54.5 | TAW 5550Z | — | — |
| | IRT 5025 | 169 | 50 | 60 | 25.5 | 1.5 | 58 | 59 | TA 6025Z | — | — |
| | IRT 5030 | 205 | 50 | 60 | 30.5 | 1.5 | 58 | 59 | TA 6030Z | — | — |
| | IRT 5040 | 270 | 50 | 60 | 40.5 | 1.5 | 58 | 59 | TA 6040Z | — | — |
| | IRT 5045 | 300 | 50 | 60 | 45.5 | 1.5 | 58 | 59 | TAW 6045Z | — | — |
| IRT 5050 | 335 | 50 | 60 | 50.5 | 1.5 | 58 | 59 | TAW 6050Z | — | — | |
| 52 | IRT 5212 | 86 | 52 | 62 | 12.5 | 1.5 | 60 | 60.5 | TA 6212Z | — | — |
| 55 | IRT 5525 | 185 | 55 | 65 | 25.5 | 1.5 | 63 | 63.5 | TA 6525Z | — | — |
| | IRT 5530 | 220 | 55 | 65 | 30.5 | 1.5 | 63 | 63.5 | TA 6530Z | — | — |
| | IRT 5545 | 330 | 55 | 65 | 45.5 | 1.5 | 63 | 63.5 | TAW 6545Z | — | — |
| | IRT 5550 | 365 | 55 | 65 | 50.5 | 1.5 | 63 | 63.5 | TAW 6550Z | — | — |
| 60 | IRT 6025 | 200 | 60 | 70 | 25.5 | 1.5 | 68 | 68.5 | TA 7025Z | — | — |
| | IRT 6030 | 240 | 60 | 70 | 30.5 | 1.5 | 68 | 68.5 | TA 7030Z | — | — |
| | IRT 6040 | 320 | 60 | 70 | 40.5 | 1.5 | 68 | 68.5 | TA 7040Z | — | — |
| | IRT 6050 | 395 | 60 | 70 | 50.5 | 1.5 | 68 | 68.5 | TAW 7050Z | — | — |

Note⁽¹⁾ Minimum allowable value of chamfer dimension r
Remark No oil hole is provided.

Inner Rings for Shell Type Needle Roller Bearings **Inch Series**



IRB

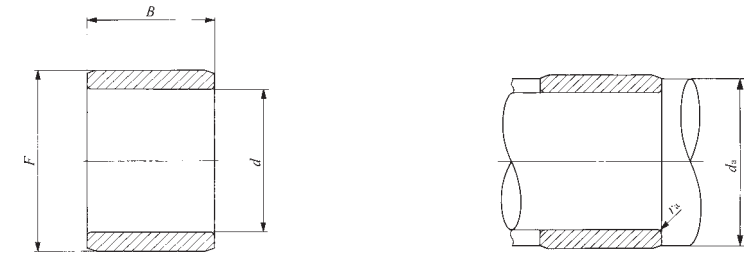
Shaft dia. 7.938 – 15.875mm

| Shaft dia. mm (inch) | Identification number | Mass (Ref.) g | Boundary dimensions mm (inch) | | | Standard mounting dimensions mm ⁽¹⁾ | | | Assembled bearings | | |
|-------------------------|-----------------------|------------------|-------------------------------|----------------|-------|--|------|----------|--------------------|----------------|---------|
| | | | d | F | B | Min. | Max. | Max. | BA...Z (BAM) | BHA...Z (BHAM) | YB YBH |
| 7.938 (5/16) | IRB 58 | 8 | 7.938 (5/16) | 12.700 (1/2) | 13.08 | 11.3 | 11.7 | 0.3 | BA 88Z | BHA 88Z | YB 88 |
| 9.525 (3/8) | IRB 68 | 8.9 | 9.525 (3/8) | 14.288 (9/16) | 13.08 | 12.8 | 13.2 | 0.3 | BA 98Z | BHA 98Z | YB 98 |
| | IRB 68-1 | 12.6 | 9.525 (3/8) | 15.875 (5/8) | 13.08 | 12.8 | 14 | 0.3 | BA 108Z | BHA 108Z | YB 108 |
| | IRB 612 | 13.2 | 9.525 (3/8) | 14.288 (9/16) | 19.43 | 12.8 | 13.2 | 0.3 | BA 912Z | — | YB 912 |
| 11.112 (7/16) | IRB 612-1 | 18.8 | 9.525 (3/8) | 15.875 (5/8) | 19.43 | 12.8 | 14 | 0.3 | BA 1012Z | BHA 1012Z | YB 1012 |
| | IRB 78 | 10.1 | 11.112 (7/16) | 15.875 (5/8) | 13.08 | 14.4 | 14.8 | 0.3 | BA 108Z | BHA 108Z | YB 108 |
| | IRB 712 | 15 | 11.112 (7/16) | 15.875 (5/8) | 19.43 | 14.4 | 14.8 | 0.3 | BA 1012Z | BHA 1012Z | YB 1012 |
| 12.700 (1/2) | IRB 714 | 17.4 | 11.112 (7/16) | 15.875 (5/8) | 22.60 | 14.4 | 14.8 | 0.3 | BA 1014Z | — | — |
| | IRB 716 | 19.9 | 11.112 (7/16) | 15.875 (5/8) | 25.78 | 14.4 | 14.8 | 0.3 | BA 1016Z | BHA 1016Z | — |
| | IRB 86 | 8.5 | 12.700 (1/2) | 17.462 (11/16) | 9.90 | 16.9 | 16.9 | 0.3 | BA 116Z | — | — |
| | IRB 88 | 11.2 | 12.700 (1/2) | 17.462 (11/16) | 13.08 | 16.9 | 16.9 | 0.3 | BA 118Z | BHA 118Z | — |
| | IRB 812 | 16.7 | 12.700 (1/2) | 17.462 (11/16) | 19.43 | 16.9 | 16.9 | 0.3 | BA 1112Z | BHA 1112Z | YB 1112 |
| | IRB 88-1 | 15.8 | 12.700 (1/2) | 19.050 (3/4) | 13.08 | 16.9 | 17.5 | 0.6 | BA 128Z | — | YB 128 |
| 14.288 (9/16) | IRB 810-1 | 19.6 | 12.700 (1/2) | 19.050 (3/4) | 16.25 | 16.9 | 17.5 | 0.6 | BA 1210Z | — | YB 1210 |
| | IRB 812-1 | 23.5 | 12.700 (1/2) | 19.050 (3/4) | 19.43 | 16.9 | 17.5 | 0.6 | BA 1212Z | BHA 1212Z | YB 1212 |
| | IRB 814-1 | 27.5 | 12.700 (1/2) | 19.050 (3/4) | 22.60 | 16.9 | 17.5 | 0.6 | BA 1214Z | — | — |
| | IRB 816-1 | 31 | 12.700 (1/2) | 19.050 (3/4) | 25.78 | 16.9 | 17.5 | 0.6 | BA 1216Z | — | — |
| 15.875 (5/8) | IRB 98 | 17.3 | 14.288 (9/16) | 20.638 (13/16) | 13.08 | 19 | 19.6 | 0.6 | BA 138Z | BHA 138Z | YB 138 |
| | IRB 910 | 21.5 | 14.288 (9/16) | 20.638 (13/16) | 16.25 | 19 | 19.6 | 0.6 | BA 1310Z | BHA 1310Z | YB 1310 |
| | IRB 912 | 26 | 14.288 (9/16) | 20.638 (13/16) | 19.43 | 19 | 19.6 | 0.6 | BA 1312Z | BHA 1312Z | YB 1312 |
| | IRB 914 | 30 | 14.288 (9/16) | 20.638 (13/16) | 22.60 | 19 | 19.6 | 0.6 | BA 1314Z | — | — |
| | IRB 916 | 34.5 | 14.288 (9/16) | 20.638 (13/16) | 25.78 | 19 | 19.6 | 0.6 | BA 1316Z | — | — |
| 15.875 (5/8) | IRB 920 | 43 | 14.288 (9/16) | 20.638 (13/16) | 32.13 | 19 | 19.6 | 0.6 | BA 1320Z | — | — |
| | IRB 106 | 14.5 | 15.875 (5/8) | 22.225 (7/8) | 9.90 | 20.7 | 21.2 | 0.6 | BA 146Z | — | — |
| | IRB 108 | 18.9 | 15.875 (5/8) | 22.225 (7/8) | 13.08 | 20.7 | 21.2 | 0.6 | BA 148Z | — | YB 148 |
| IRB 1012 | 28 | 15.875 (5/8) | 22.225 (7/8) | 19.43 | 20.7 | 21.2 | 0.6 | BA 1412Z | BHA 1412Z | YB 1412 | |

Note⁽¹⁾ Maximum allowable fillet corner radius of shaft
Remark No oil hole is provided.

INNER RINGS

Inner Rings for Shell Type Needle Roller Bearings Inch Series



IRB

Shaft dia. 15.875 – 63.500mm

| Shaft dia. mm (inch) | Identification number | Mass (Ref.) g | Boundary dimensions mm(inch) | | | Standard mounting dimensions mm ⁽¹⁾ | | | Assembled bearings | | |
|----------------------------|-----------------------|------------------|------------------------------|----------------|-------|--|------------------------|------------------------------|--------------------|----------------|---------------------|
| | | | d | F | B | d _a Min. | d _a Max. | r _{as} max. Max. | BA···Z (BAM) | BHA···Z (BHAM) | YB YBH |
| 15.875 (5/8) | IRB 1014 | 33 | 15.875 (5/8) | 22.225 (7/8) | 22.60 | 20.7 | 21.2 | 0.6 | BA 1414Z | — | — |
| | IRB 1016 | 37.5 | 15.875 (5/8) | 22.225 (7/8) | 25.78 | 20.7 | 21.2 | 0.6 | BA 1416Z | BHA 1416Z | YB 1416 |
| | IRB 1022 | 51.5 | 15.875 (5/8) | 22.225 (7/8) | 35.30 | 20.7 | 21.2 | 0.6 | BA 1422Z | — | — |
| 17.462 (11/16) | IRB 1110 | 25.5 | 17.462 (11/16) | 23.812 (15/16) | 16.25 | 22.3 | 22.8 | 0.6 | BA 1510Z | — | — |
| | IRB 1116 | 40.5 | 17.462 (11/16) | 23.812 (15/16) | 25.78 | 22.3 | 22.8 | 0.6 | BA 1516Z | — | — |
| 19.050 (3/4) | IRB 128 | 22 | 19.050 (3/4) | 25.400 (1) | 13.08 | 23.9 | 24.4 | 0.6 | BA 168Z | BHA 168Z | YB 168 YBH 168 |
| | IRB 1212 | 33 | 19.050 (3/4) | 25.400 (1) | 19.43 | 23.9 | 24.4 | 0.6 | BA 1612Z | BHA 1612Z | YB 1612 YBH 1612 |
| | IRB 1214 | 38.5 | 19.050 (3/4) | 25.400 (1) | 22.60 | 23.9 | 24.4 | 0.6 | BA 1614Z | BHA 1614Z | — |
| | IRB 1216 | 43.5 | 19.050 (3/4) | 25.400 (1) | 25.78 | 23.9 | 24.4 | 0.6 | BA 1616Z | BHA 1616Z | YB 1616 YBH 1616 |
| | IRB 1220 | 54.5 | 19.050 (3/4) | 25.400 (1) | 32.13 | 23.9 | 24.4 | 0.6 | BA 1620Z | BHA 1620Z | — |
| 20.638 (13/16) | IRB 1316 | 34 | 20.638 (13/16) | 25.400 (1) | 25.78 | 24.9 | 24.9 | 0.6 | BA 1616Z | BHA 1616Z | YB 1616 YBH 1616 |
| 22.225 (7/8) | IRB 148 | 25 | 22.225 (7/8) | 28.575 (1 1/8) | 13.08 | 27 | 27.5 | 0.6 | BA 188Z | — | YB 188 |
| | IRB 1412 | 37.5 | 22.225 (7/8) | 28.575 (1 1/8) | 19.43 | 27 | 27.5 | 0.6 | BA 1812Z | BHA 1812Z | YB 1812 |
| | IRB 1416 | 50 | 22.225 (7/8) | 28.575 (1 1/8) | 25.78 | 27 | 27.5 | 0.6 | BA 1816Z | BHA 1816Z | YB 1816 |
| | IRB 1420 | 62.5 | 22.225 (7/8) | 28.575 (1 1/8) | 32.13 | 27 | 27.5 | 0.6 | BA 1820Z | BHA 1820Z | — |
| 25.400 (1) | IRB 168 | 28.5 | 25.400 (1) | 31.750 (1 1/4) | 13.08 | 30 | 30.7 | 0.6 | BA 208Z | BHA 208Z | — |
| | IRB 1610 | 35.5 | 25.400 (1) | 31.750 (1 1/4) | 16.25 | 30 | 30.7 | 0.6 | BA 2010Z | — | YB 2010 |
| | IRB 1612 | 42.5 | 25.400 (1) | 31.750 (1 1/4) | 19.43 | 30 | 30.7 | 0.6 | BA 2012Z | BHA 2012Z | YB 2012 |
| | IRB 1616 | 56 | 25.400 (1) | 31.750 (1 1/4) | 25.78 | 30 | 30.7 | 0.6 | BA 2016Z | BHA 2016Z | YB 2016 |
| | IRB 1620 | 70 | 25.400 (1) | 31.750 (1 1/4) | 32.13 | 30 | 30.7 | 0.6 | BA 2020Z | BHA 2020Z | — |
| | IRB 168-1 | 36.5 | 25.400 (1) | 33.338 (1 3/8) | 13.08 | 30 | 32.1 | 0.6 | BA 218Z | — | — |
| | IRB 1610-1 | 45.5 | 25.400 (1) | 33.338 (1 3/8) | 16.25 | 30 | 32.1 | 0.6 | BA 2110Z | — | — |
| IRB 1612-1 | 54.5 | 25.400 (1) | 33.338 (1 3/8) | 19.43 | 30 | 32.1 | 0.6 | BA 2112Z | — | — | |

Note⁽¹⁾ Maximum allowable fillet corner radius of shaft
Remark No oil hole is provided.

| Shaft dia. mm (inch) | Identification number | Mass (Ref.) g | Boundary dimensions mm(inch) | | | Standard mounting dimensions mm ⁽¹⁾ | | | Assembled bearings | | |
|----------------------------|-----------------------|------------------|------------------------------|----------------|-------|--|------------------------|------------------------------|--------------------|----------------|---------|
| | | | d | F | B | d _a Min. | d _a Max. | r _{as} max. Max. | BA···Z (BAM) | BHA···Z (BHAM) | YB YBH |
| 28.575 (1 1/8) | IRB 188 | 31.5 | 28.575 (1 1/8) | 34.925 (1 3/8) | 13.08 | 33.2 | 33.9 | 0.6 | BA 228Z | BHA 228Z | YB 228 |
| | IRB 1812 | 47 | 28.575 (1 1/8) | 34.925 (1 3/8) | 19.43 | 33.2 | 33.9 | 0.6 | BA 2212Z | BHA 2212Z | YB 2212 |
| | IRB 1816 | 62.5 | 28.575 (1 1/8) | 34.925 (1 3/8) | 25.78 | 33.2 | 33.9 | 0.6 | BA 2216Z | BHA 2216Z | — |
| 31.750 (1 1/4) | IRB 1820 | 78 | 28.575 (1 1/8) | 34.925 (1 3/8) | 32.13 | 33.2 | 33.9 | 0.6 | BA 2220Z | BHA 2220Z | YB 2220 |
| | IRB 2010 | 43 | 31.750 (1 1/4) | 38.100 (1 1/2) | 16.25 | 37 | 37.1 | 0.6 | BA 2410Z | — | — |
| | IRB 2014 | 60 | 31.750 (1 1/4) | 38.100 (1 1/2) | 22.60 | 37 | 37.1 | 0.6 | BA 2414Z | — | YB 2414 |
| 34.925 (1 3/8) | IRB 2016 | 68.5 | 31.750 (1 1/4) | 38.100 (1 1/2) | 25.78 | 37 | 37.1 | 0.6 | BA 2416Z | — | YB 2416 |
| | IRB 2020 | 85.5 | 31.750 (1 1/4) | 38.100 (1 1/2) | 32.13 | 37 | 37.1 | 0.6 | BA 2420Z | — | YB 2420 |
| | IRB 2210 | 47 | 34.925 (1 3/8) | 41.275 (1 5/8) | 16.25 | 40.2 | 40.2 | 0.6 | BA 2610Z | — | YB 2610 |
| 36.512 (1 1/16) | IRB 2220 | 93.5 | 34.925 (1 3/8) | 41.275 (1 5/8) | 32.13 | 40.2 | 40.2 | 0.6 | BA 2620Z | — | — |
| | IRB 2316 | 99 | 36.512 (1 1/16) | 44.450 (1 3/4) | 25.78 | 42.5 | 43.2 | 0.6 | BA 2816Z | — | — |
| 38.100 (1 1/2) | IRB 2412 | 62 | 38.100 (1 1/2) | 44.450 (1 3/4) | 19.43 | 43.3 | 43.4 | 0.6 | BA 2812Z | — | — |
| | IRB 2416 | 81 | 38.100 (1 1/2) | 44.450 (1 3/4) | 25.78 | 43.3 | 43.4 | 0.6 | BA 2816Z | — | YB 2816 |
| | IRB 2424 | 121 | 38.100 (1 1/2) | 44.450 (1 3/4) | 38.48 | 43.3 | 43.4 | 0.6 | BA 2824Z | BHA 2824Z | — |
| | IRB 248-1 | 64 | 38.100 (1 1/2) | 47.625 (1 7/8) | 13.08 | 44.5 | 45.5 | 1 | BA 308Z | — | — |
| 41.275 (1 5/8) | IRB 2410-1 | 79.5 | 38.100 (1 1/2) | 47.625 (1 7/8) | 16.25 | 44.5 | 45.5 | 1 | BA 3010Z | — | — |
| | IRB 2616 | 136 | 41.275 (1 5/8) | 50.800 (2) | 25.78 | 47.5 | 48.5 | 1 | BA 3216Z | — | — |
| 42.862 (1 11/16) | IRB 2628 | 235 | 41.275 (1 5/8) | 50.800 (2) | 44.83 | 47.5 | 48.5 | 1 | BAW 3228Z | — | — |
| | IRB 2720 | 146 | 42.862 (1 11/16) | 50.800 (2) | 32.13 | 48.5 | 49.5 | 0.6 | BA 3220Z | — | — |
| 47.625 (1 7/8) | IRB 3016 | 100 | 47.625 (1 7/8) | 53.975 (2 1/8) | 25.78 | 52.9 | 52.9 | 0.6 | BA 3416Z | — | — |
| | IRB 3024 | 149 | 47.625 (1 7/8) | 53.975 (2 1/8) | 38.48 | 52.9 | 52.9 | 0.6 | BA 3424Z | — | — |
| 57.150 (2 1/4) | IRB 3616 | 183 | 57.150 (2 1/4) | 66.675 (2 5/8) | 25.78 | 63.5 | 64.5 | 1 | BA 4216Z | — | — |
| 63.500 (2 1/2) | IRB 4016 | 131 | 63.500 (2 1/2) | 69.850 (2 3/4) | 25.78 | 68.7 | 68.8 | 0.6 | BA 4416Z | — | — |
| | IRB 4020 | 164 | 63.500 (2 1/2) | 69.850 (2 3/4) | 32.13 | 68.7 | 68.8 | 0.6 | BA 4420Z | — | — |

Note⁽¹⁾ Maximum allowable fillet corner radius of shaft
Remark No oil hole is provided.

INNER RINGS

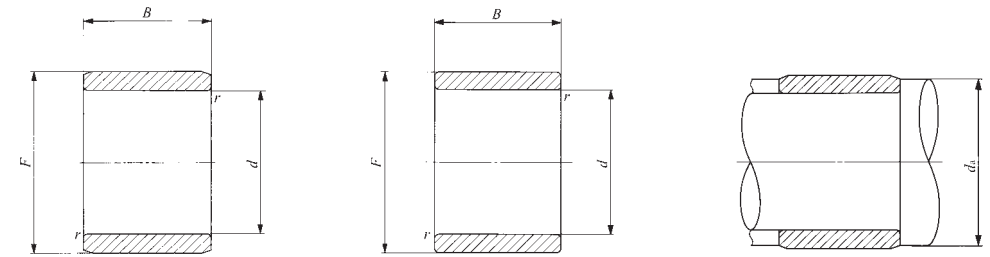
Inner Rings for General Usage



Shaft dia. 5 – 20mm

| Shaft dia. mm | Identification number | | Mass (Ref.) g | Boundary dimensions mm | | | | Standard mounting dimension mm | | Assembled bearings | |
|---------------|-----------------------|-------------|---------------|------------------------|----------|----------|--|--------------------------------|----------------------------|------------------------|--|
| | | | | <i>d</i> | <i>F</i> | <i>B</i> | <i>r</i> _{s min} ⁽¹⁾ | <i>d</i> _a Min. | <i>d</i> _a Max. | | |
| 5 | LRT 5710 | — | 1.4 | 5 | 7 | 10 | 0.15 | 6.2 | 6.7 | RNA 495 | |
| | LRT 5812 | — | 2.8 | 5 | 8 | 12 | 0.2 | 6.6 | 7.7 | TAF 81512 | |
| | LRT 5816 | — | 3.8 | 5 | 8 | 16 | 0.2 | 6.6 | 7.7 | TAF 81516 | |
| 6 | LRT 6810 | — | 1.7 | 6 | 8 | 10 | 0.15 | 7.2 | 7.7 | RNA 496 | |
| | LRT 6912 | — | 3.2 | 6 | 9 | 12 | 0.2 | 7.6 | 8.7 | TAF 91612 | |
| | LRT 6916 | — | 4.3 | 6 | 9 | 16 | 0.2 | 7.6 | 8.7 | TAF 91616 | |
| | LRT 61010 | — | 3.9 | 6 | 10 | 10 | 0.3 | 8 | 9.7 | RNAF 101710 | |
| 7 | LRT 7910 | — | 1.9 | 7 | 9 | 10 | 0.15 | 8.2 | 8.7 | RNA 497 | |
| | LRT 71012 | — | 3.6 | 7 | 10 | 12 | 0.2 | 8.6 | 9.7 | TAF 101712 | |
| | LRT 71012-1 | — | 3.6 | 7 | 10 | 12 | 0.3 | 9 | 9.7 | RNAF 102012 | |
| | LRT 71016 | — | 4.9 | 7 | 10 | 16 | 0.2 | 8.6 | 9.7 | TAF 101716 NAX 1023 | |
| 8 | LRT 81011 | — | 2.4 | 8 | 10 | 11 | 0.2 | 9.6 | 9.9 | RNA 498 | |
| 9 | LRT 91211 | — | 3.1 | 9 | 12 | 11 | 0.3 | 11 | 11.5 | RNA 499 | |
| | LRT 91212 | — | 4.5 | 9 | 12 | 12 | 0.3 | 11 | 11.5 | TAF 121912 RNAF 122212 | |
| | LRT 91216 | — | 6 | 9 | 12 | 16 | 0.3 | 11 | 11.5 | TAF 121916 NAX 1223 | |
| 10 | LRT 101412 | — | 7 | 10 | 14 | 12 | 0.3 | 12 | 13 | RNAF 142612 | |
| | LRT 101413 | — | 7.5 | 10 | 14 | 13 | 0.3 | 12 | 13 | RNA 4900 RNAF 142213 | |
| | — | LRTZ 101414 | 8.2 | 10 | 14 | 14 | 0.3 | 12 | 13 | RNA 4900 UU | |
| | LRT 101416 | — | 9 | 10 | 14 | 16 | 0.3 | 12 | 13 | TAF 142216 | |
| | LRT 101420 | — | 11.5 | 10 | 14 | 20 | 0.3 | 12 | 13 | TAF 142220 RNAFW142220 | |
| 12 | LRT 121516 | — | 8 | 12 | 15 | 16.5 | 0.3 | 14 | 14.5 | NAX 1523 NBX 1523 | |
| | LRT 121612 | — | 8.5 | 12 | 16 | 12 | 0.3 | 14 | 15 | RNAF 162812 | |
| | LRT 121613 | — | 8.5 | 12 | 16 | 13 | 0.3 | 14 | 15 | RNA 4901 RNAF 162413 | |
| | — | LRTZ 121614 | 9.6 | 12 | 16 | 14 | 0.3 | 14 | 15 | RNA 4901 UU | |
| | LRT 121616 | — | 10.5 | 12 | 16 | 16 | 0.3 | 14 | 15 | TAF 162416 | |
| | LRT 121620 | — | 13.5 | 12 | 16 | 20 | 0.3 | 14 | 15 | TAF 162420 RNAFW162420 | |

Note⁽¹⁾ Minimum allowable value of chamfer dimension *r*
 Remark No oil hole is provided.



LRT

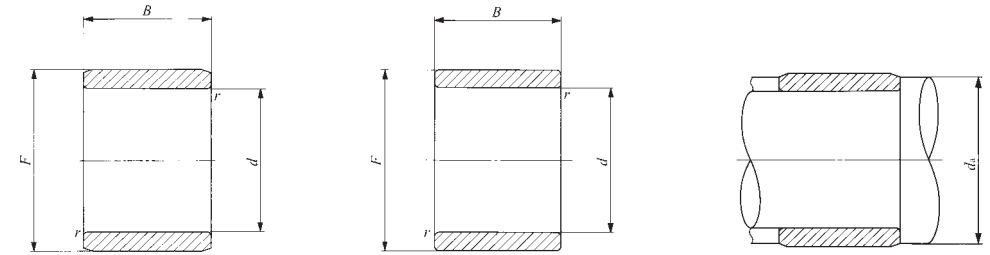
LRTZ

| Shaft dia. mm | Identification number | | Mass (Ref.) g | Boundary dimensions mm | | | | Standard mounting dimension mm | | Assembled bearings | |
|---------------|-----------------------|-------------|---------------|------------------------|----------|----------|--|--------------------------------|----------------------------|----------------------|--|
| | | | | <i>d</i> | <i>F</i> | <i>B</i> | <i>r</i> _{s min} ⁽¹⁾ | <i>d</i> _a Min. | <i>d</i> _a Max. | | |
| 12 | LRT 121622 | — | 14.5 | 12 | 16 | 22 | 0.3 | 14 | 15 | RNA 6901 | |
| | — | LRTZ 121623 | 15.5 | 12 | 16 | 23 | 0.3 | 14 | 15 | RNA 6901 UU | |
| 14 | LRT 141717 | — | 9.5 | 14 | 17 | 17 | 0.3 | 16 | 16.5 | NAX 1725 NBX 1725 | |
| 15 | LRT 151916 | — | 12.5 | 15 | 19 | 16 | 0.3 | 17 | 18 | TAF 192716 | |
| | LRT 151920 | — | 16 | 15 | 19 | 20 | 0.3 | 17 | 18 | TAF 192720 | |
| | LRT 152012 | — | 12 | 15 | 20 | 12 | 0.3 | 17 | 19 | RNAF 203212 | |
| | LRT 152013 | — | 13.5 | 15 | 20 | 13 | 0.3 | 17 | 19 | RNA 4902 RNAF 202813 | |
| | — | LRTZ 152014 | 14.5 | 15 | 20 | 14 | 0.3 | 17 | 19 | RNA 4902 UU | |
| | LRT 152020 | — | 21.5 | 15 | 20 | 20.5 | 0.3 | 17 | 19 | TR 203320 | |
| | — | LRTZ 152020 | 21.5 | 15 | 20 | 20.5 | 0.3 | 17 | 19 | GTR 203320 | |
| | LRT 152023 | — | 24 | 15 | 20 | 23 | 0.3 | 17 | 19 | RNA 6902 | |
| — | LRTZ 152024 | 25 | 15 | 20 | 24 | 0.3 | 17 | 19 | RNA 6902 UU | | |
| — | LRT 152026 | — | 28 | 15 | 20 | 26 | 0.3 | 17 | 19 | RNAFW 202826 | |
| 17 | LRT 172020 | — | 13.5 | 17 | 20 | 20.5 | 0.3 | 19 | 19.5 | NAX 2030 NBX 2030 | |
| | LRT 172116 | — | 14.5 | 17 | 21 | 16 | 0.3 | 19 | 20 | TAF 212916 | |
| | LRT 172120 | — | 18 | 17 | 21 | 20 | 0.3 | 19 | 20 | TAF 212920 | |
| | LRT 172213 | — | 15.5 | 17 | 22 | 13 | 0.3 | 19 | 21 | RNA 4903 RNAF 223013 | |
| | — | LRTZ 172214 | 16.5 | 17 | 22 | 14 | 0.3 | 19 | 21 | RNA 4903 UU | |
| | LRT 172216 | — | 19 | 17 | 22 | 16 | 0.3 | 19 | 21 | RNAF 223516 | |
| | LRT 172223 | — | 26.5 | 17 | 22 | 23 | 0.3 | 19 | 21 | RNA 6903 | |
| | — | LRTZ 172224 | 28 | 17 | 22 | 24 | 0.3 | 19 | 21 | RNA 6903 UU | |
| | LRT 172225 | — | 30 | 17 | 22 | 25.5 | 0.3 | 19 | 21 | TR 223425 | |
| | — | LRTZ 172225 | 30 | 17 | 22 | 25.5 | 0.3 | 19 | 21 | GTR 223425 | |
| LRT 172226 | — | 31 | 17 | 22 | 26 | 0.3 | 19 | 21 | RNAFW 223026 | | |
| LRT 172232 | — | 38 | 17 | 22 | 32 | 0.3 | 19 | 21 | RNAFW 223532 | | |
| 20 | LRT 202416 | — | 16.5 | 20 | 24 | 16 | 0.3 | 22 | 23 | TAF 243216 | |
| | LRT 202420 | — | 20.5 | 20 | 24 | 20 | 0.3 | 22 | 23 | TAF 243220 | |

Note⁽¹⁾ Minimum allowable value of chamfer dimension *r*
 Remark No oil hole is provided.

INNER RINGS

Inner Rings for General Usage



LRT

LRTZ

Shaft dia. 20 – 32mm

| Shaft dia. mm | Identification number | | Mass (Ref.) g | Boundary dimensions mm | | | | Standard mounting dimension mm | | Assembled bearings | |
|------------------|-----------------------|-------------|---------------------|---------------------------|----|------|-----------------------------------|-----------------------------------|----------|--------------------|-------------|
| | | | | d | F | B | r _{s min} ⁽¹⁾ | Min. | Max. | | |
| 20 | LRT 202516 | — | 22 | 20 | 25 | 16 | 0.3 | 22 | 24 | RNAF 253716 | |
| | LRT 202517 | — | 23 | 20 | 25 | 17 | 0.3 | 22 | 24 | RNA 4904 | RNAF 253517 |
| | — | LRTZ 202518 | 24 | 20 | 25 | 18 | 0.3 | 22 | 24 | RNA 4904 UU | |
| | LRT 202520 | — | 28 | 20 | 25 | 20.5 | 0.3 | 22 | 24 | TR 253820 | NAX 2530 |
| | — | LRTZ 202520 | 28 | 20 | 25 | 20.5 | 0.3 | 22 | 24 | NBX 2530 | |
| | LRT 202525 | — | 35 | 20 | 25 | 25.5 | 0.3 | 22 | 24 | GTR 253820 | |
| | — | LRTZ 202525 | 35 | 20 | 25 | 25.5 | 0.3 | 22 | 24 | TR 253825 | |
| | LRT 202526 | — | 36 | 20 | 25 | 26 | 0.3 | 22 | 24 | GTR 253825 | |
| | LRT 202530 | — | 40.5 | 20 | 25 | 30 | 0.3 | 22 | 24 | RNAFW 253526 | |
| 22 | — | LRTZ 202531 | 41.5 | 20 | 25 | 31 | 0.3 | 22 | 24 | RNA 6904 | |
| | LRT 202532 | — | 44 | 20 | 25 | 32 | 0.3 | 22 | 24 | RNA 6904 UU | |
| | LRT 222616 | — | 17.5 | 22 | 26 | 16 | 0.3 | 24 | 25 | RNAFW 253732 | |
| | LRT 222620 | — | 24 | 22 | 26 | 20 | 0.3 | 24 | 25 | TAF 263416 | |
| | LRT 222817 | — | 30.5 | 22 | 28 | 17 | 0.3 | 24 | 27 | TAF 263420 | |
| | — | LRTZ 222818 | 32 | 22 | 28 | 18 | 0.3 | 24 | 27 | RNA 49/22 | |
| | LRT 222830 | — | 55 | 22 | 28 | 30 | 0.3 | 24 | 27 | RNA 49/22 UU | |
| | — | LRTZ 222831 | 55 | 22 | 28 | 31 | 0.3 | 24 | 27 | RNA 69/22 | |
| | — | — | 55 | 22 | 28 | 31 | 0.3 | 24 | 27 | RNA 69/22 UU | |
| 25 | LRT 252920 | — | 25 | 25 | 29 | 20 | 0.3 | 27 | 28 | TAF 293820 | |
| | LRT 252930 | — | 38 | 25 | 29 | 30 | 0.3 | 27 | 28 | TAF 293830 | |
| | LRT 253016 | — | 28 | 25 | 30 | 16 | 0.3 | 27 | 29 | RNAF 304216 | |
| | LRT 253017 | — | 28.5 | 25 | 30 | 17 | 0.3 | 27 | 29 | RNA 4905 | RNAF 304017 |
| | — | LRTZ 253018 | 29.5 | 25 | 30 | 18 | 0.3 | 27 | 29 | RNA 4905 UU | |
| | LRT 253020 | — | 34 | 25 | 30 | 20.5 | 0.3 | 27 | 29 | NAX 3030 | NBX 3030 |
| | LRT 253025 | — | 42 | 25 | 30 | 25.5 | 0.3 | 27 | 29 | TR 304425 | |
| | — | LRTZ 253025 | 42 | 25 | 30 | 25.5 | 0.3 | 27 | 29 | GTR 304425 | |
| | LRT 253026 | — | 44.5 | 25 | 30 | 26 | 0.3 | 27 | 29 | RNAFW 304026 | |
| LRT 253030 | — | 49 | 25 | 30 | 30 | 0.3 | 27 | 29 | RNA 6905 | | |

Note⁽¹⁾ Minimum allowable value of chamfer dimension r
Remark No oil hole is provided.

| Shaft dia. mm | Identification number | | Mass (Ref.) g | Boundary dimensions mm | | | | Standard mounting dimension mm | | Assembled bearings | |
|------------------|-----------------------|-------------|---------------------|---------------------------|----|------|-----------------------------------|-----------------------------------|-----------|--------------------|-------------|
| | | | | d | F | B | r _{s min} ⁽¹⁾ | Min. | Max. | | |
| 25 | — | LRTZ 253031 | 51 | 25 | 30 | 31 | 0.3 | 27 | 29 | RNA 6905 UU | |
| | LRT 253032 | — | 54 | 25 | 30 | 32 | 0.3 | 27 | 29 | RNAFW 304232 | |
| 28 | LRT 283217 | — | 24.5 | 28 | 32 | 17 | 0.3 | 30 | 31 | RNA 49/28 | |
| | — | LRTZ 283218 | 25.5 | 28 | 32 | 18 | 0.3 | 30 | 31 | RNA 49/28 UU | |
| | LRT 283220 | — | 28.5 | 28 | 32 | 20 | 0.3 | 30 | 31 | TAF 324220 | |
| | LRT 283230 | — | 43 | 28 | 32 | 30 | 0.3 | 30 | 31 | RNA 69/28 | TAF 324230 |
| | — | LRTZ 283230 | 43 | 28 | 32 | 30.5 | 0.3 | 30 | 31 | GTR 324530 | |
| 30 | — | LRTZ 283231 | 44 | 28 | 32 | 31 | 0.3 | 30 | 31 | RNA 69/28 UU | |
| | LRT 303516 | — | 31.5 | 30 | 35 | 16 | 0.3 | 32 | 34 | RNAF 354716 | |
| | LRT 303517 | — | 33.5 | 30 | 35 | 17 | 0.3 | 32 | 34 | RNA 4906 | RNAF 354517 |
| | — | LRTZ 303518 | 35 | 30 | 35 | 18 | 0.3 | 32 | 34 | RNA 4906 UU | |
| | LRT 303520 | — | 38.5 | 30 | 35 | 20 | 0.3 | 32 | 34 | TAF 354520 | NAX 3530 |
| | LRT 303526 | — | 52 | 30 | 35 | 26 | 0.3 | 32 | 34 | NBX 3530 | |
| | LRT 303530 | — | 59 | 30 | 35 | 30 | 0.3 | 32 | 34 | RNAFW 354526 | |
| | LRT 303530-1 | — | 59 | 30 | 35 | 30.5 | 0.3 | 32 | 34 | RNA 6906 | TAF 354530 |
| | — | LRTZ 303530 | 59 | 30 | 35 | 30.5 | 0.3 | 32 | 34 | TR 354830 | |
| 32 | — | LRTZ 303531 | 61 | 30 | 35 | 31 | 0.3 | 32 | 34 | GTR 354830 | |
| | LRT 303532 | — | 64 | 30 | 35 | 32 | 0.3 | 32 | 34 | RNA 6906 UU | |
| | LRT 323720 | — | 43.5 | 32 | 37 | 20 | 0.3 | 34 | 36 | RNAFW 354732 | |
| | LRT 323730 | — | 63 | 32 | 37 | 30 | 0.3 | 34 | 36 | TAF 374720 | |
| | LRT 323830 | — | 77 | 32 | 38 | 30.5 | 0.6 | 36 | 37 | TAF 374730 | |
| | — | LRTZ 323830 | 77 | 32 | 38 | 30.5 | 0.6 | 36 | 37 | TR 385230 | |
| | LRT 324020 | — | 69 | 32 | 40 | 20 | 0.6 | 36 | 39 | GTR 385230 | |
| | — | LRTZ 324021 | 72.5 | 32 | 40 | 21 | 0.6 | 36 | 39 | RNA 49/32 | |
| | LRT 324036 | — | 123 | 32 | 40 | 36 | 0.6 | 36 | 39 | RNA 49/32 UU | |
| — | LRTZ 324037 | 130 | 32 | 40 | 37 | 0.6 | 36 | 39 | RNA 69/32 | | |
| | | | | | | | | | | RNA 69/32 UU | |

Note⁽¹⁾ Minimum allowable value of chamfer dimension r
Remark No oil hole is provided.

INNER RINGS

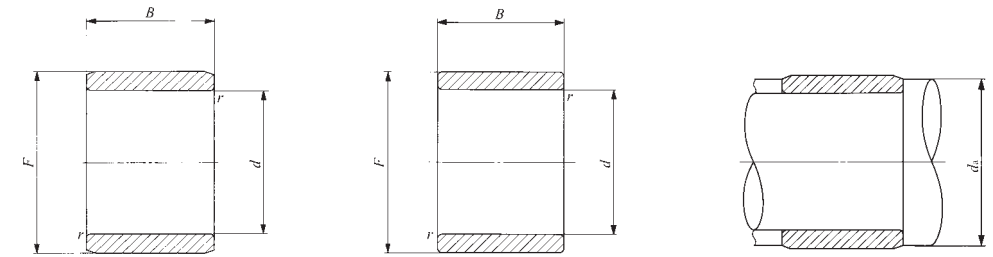
Inner Rings for General Usage



Shaft dia. 35 – 50mm

| Shaft dia. mm | Identification number | | Mass (Ref.) g | Boundary dimensions mm | | | | Standard mounting dimension mm | | Assembled bearings | |
|------------------|-----------------------|-------------|---------------------|---------------------------|----------|----------|--|-----------------------------------|------------------------------|---|--|
| | | | | <i>d</i> | <i>F</i> | <i>B</i> | <i>r_s</i> ⁽¹⁾ min | <i>d_a</i> Min. | <i>d_a</i> Max. | | |
| 35 | LRT 354017 | — | 39 | 35 | 40 | 17 | 0.3 | 37 | 39 | RNAF 405017 | |
| | LRT 354020 | — | 46 | 35 | 40 | 20 | 0.3 | 37 | 39 | TAF 405020 RNAF 405520 NAX 4032 NBX 4032 | |
| | — | LRTZ 354020 | 46 | 35 | 40 | 20.5 | 0.6 | 39 | 39.5 | GTR 405520 | |
| | LRT 354030 | — | 67 | 35 | 40 | 30 | 0.3 | 37 | 39 | TAF 405030 | |
| | LRT 354034 | — | 78 | 35 | 40 | 34 | 0.3 | 37 | 39 | RNAFW 405034 | |
| | LRT 354040 | — | 95 | 35 | 40 | 40 | 0.3 | 37 | 39 | RNAFW 405540 | |
| | LRT 354220 | — | 65 | 35 | 42 | 20 | 0.6 | 39 | 41 | RNA 4907 | |
| | — | LRTZ 354221 | 67 | 35 | 42 | 21 | 0.6 | 39 | 41 | RNA 4907 UU | |
| | LRT 354230 | — | 97 | 35 | 42 | 30.5 | 0.6 | 39 | 41 | TR 425630 | |
| | — | LRTZ 354230 | 100 | 35 | 42 | 30.5 | 0.6 | 39 | 41 | GTR 425630 | |
| LRT 354236 | — | 120 | 35 | 42 | 36 | 0.6 | 39 | 41 | RNA 6907 | | |
| — | LRTZ 354237 | 120 | 35 | 42 | 37 | 0.6 | 39 | 41 | RNA 6907 UU | | |
| 38 | LRT 384320 | — | 47.5 | 38 | 43 | 20 | 0.3 | 40 | 42 | TAF 435320 | |
| | LRT 384330 | — | 72 | 38 | 43 | 30 | 0.3 | 40 | 42 | TAF 435330 | |
| 40 | LRT 404517 | — | 44.5 | 40 | 45 | 17 | 0.3 | 42 | 44 | RNAF 455517 | |
| | LRT 404520 | — | 51 | 40 | 45 | 20 | 0.3 | 42 | 44 | TAF 455520 RNAF 456220 NAX 4532 NBX 4532 | |
| | LRT 404530 | — | 77 | 40 | 45 | 30 | 0.3 | 42 | 44 | TAF 455530 | |
| | LRT 404530-1 | — | 77 | 40 | 45 | 30.5 | 0.6 | 44 | 44.5 | TR 455930 | |
| | — | LRTZ 404530 | 77 | 40 | 45 | 30.5 | 0.6 | 44 | 44.5 | GTR 455930 | |
| | LRT 404534 | — | 88 | 40 | 45 | 34 | 0.3 | 42 | 44 | RNAFW 455534 | |
| | LRT 404540 | — | 105 | 40 | 45 | 40 | 0.3 | 42 | 44 | RNAFW 456240 | |
| | LRT 404822 | — | 93 | 40 | 48 | 22 | 0.6 | 44 | 47 | RNA 4908 | |
| | — | LRTZ 404823 | 95 | 40 | 48 | 23 | 0.6 | 44 | 47 | RNA 4908 UU | |
| | LRT 404840 | — | 165 | 40 | 48 | 40 | 0.6 | 44 | 47 | RNA 6908 | |
| — | LRTZ 404841 | 170 | 40 | 48 | 41 | 0.6 | 44 | 47 | RNA 6908 UU | | |

Note⁽¹⁾ Minimum allowable value of chamfer dimension *r*
Remark No oil hole is provided.



LRT

LRTZ

| Shaft dia. mm | Identification number | | Mass (Ref.) g | Boundary dimensions mm | | | | Standard mounting dimension mm | | Assembled bearings | |
|------------------|-----------------------|-------------|---------------------|---------------------------|----------|----------|--|-----------------------------------|------------------------------|---------------------------------|--|
| | | | | <i>d</i> | <i>F</i> | <i>B</i> | <i>r_s</i> ⁽¹⁾ min | <i>d_a</i> Min. | <i>d_a</i> Max. | | |
| 42 | LRT 424720 | — | 54 | 42 | 47 | 20 | 0.3 | 44 | 46 | TAF 475720 | |
| | LRT 424730 | — | 81 | 42 | 47 | 30 | 0.3 | 44 | 46 | TAF 475730 | |
| | LRT 424830 | — | 100 | 42 | 48 | 30.5 | 0.6 | 46 | 47 | TR 486230 | |
| | — | LRTZ 424830 | 100 | 42 | 48 | 30.5 | 0.6 | 46 | 47 | GTR 486230 | |
| 45 | LRT 455020 | — | 58 | 45 | 50 | 20 | 0.3 | 47 | 49 | RNAF 506220 | |
| | LRT 455025 | — | 71 | 45 | 50 | 25 | 0.3 | 47 | 49 | TAF 506225 NAX 5035 NBX 5035 | |
| | LRT 455030 | — | 90 | 45 | 50 | 30.5 | 0.6 | 49 | 49.5 | TR 506430 | |
| | — | LRTZ 455030 | 90 | 45 | 50 | 30.5 | 0.6 | 49 | 49.5 | GTR 506430 | |
| | LRT 455035 | — | 95 | 45 | 50 | 35 | 0.3 | 47 | 49 | TAF 506235 | |
| | LRT 455040 | — | 115 | 45 | 50 | 40 | 0.3 | 47 | 49 | RNAFW 506240 | |
| | LRT 455222 | — | 88 | 45 | 52 | 22 | 0.6 | 49 | 51 | RNA 4909 | |
| | — | LRTZ 455223 | 93 | 45 | 52 | 23 | 0.6 | 49 | 51 | RNA 4909 UU | |
| | LRT 455240 | — | 165 | 45 | 52 | 40 | 0.6 | 49 | 51 | RNA 6909 | |
| | — | LRTZ 455241 | 170 | 45 | 52 | 41 | 0.6 | 49 | 51 | RNA 6909 UU | |
| LRT 455520 | — | 120 | 45 | 55 | 20 | 1 | 50 | 54 | RNAF 557220 | | |
| LRT 455540 | — | 245 | 45 | 55 | 40 | 1 | 50 | 54 | RNAFW 557240 | | |
| 50 | LRT 505520 | — | 63 | 50 | 55 | 20 | 0.3 | 52 | 54 | RNAF 556820 | |
| | LRT 505525 | — | 77 | 50 | 55 | 25 | 0.3 | 52 | 54 | TAF 556825 | |
| | LRT 505535 | — | 110 | 50 | 55 | 35 | 0.3 | 52 | 54 | TAF 556835 | |
| | LRT 505540 | — | 130 | 50 | 55 | 40 | 0.3 | 52 | 54 | RNAFW 556840 | |
| | LRT 505822 | — | 116 | 50 | 58 | 22 | 0.6 | 54 | 57 | RNA 4910 | |
| | — | LRTZ 505823 | 118 | 50 | 58 | 23 | 0.6 | 54 | 57 | RNA 4910 UU | |
| | LRT 505840 | — | 210 | 50 | 58 | 40 | 0.6 | 54 | 57 | RNA 6910 | |
| | — | LRTZ 505841 | 215 | 50 | 58 | 41 | 0.6 | 54 | 57 | RNA 6910 UU | |
| | LRT 505845 | — | 235 | 50 | 58 | 45.5 | 1 | 55 | 57 | TR 587745 | |
| | — | LRTZ 505845 | 235 | 50 | 58 | 45.5 | 1 | 55 | 57 | GTR 587745 | |
| LRT 506020 | — | 135 | 50 | 60 | 20 | 1 | 55 | 59 | RNAF 607820 | | |

Note⁽¹⁾ Minimum allowable value of chamfer dimension *r*
Remark No oil hole is provided.



INNER RINGS

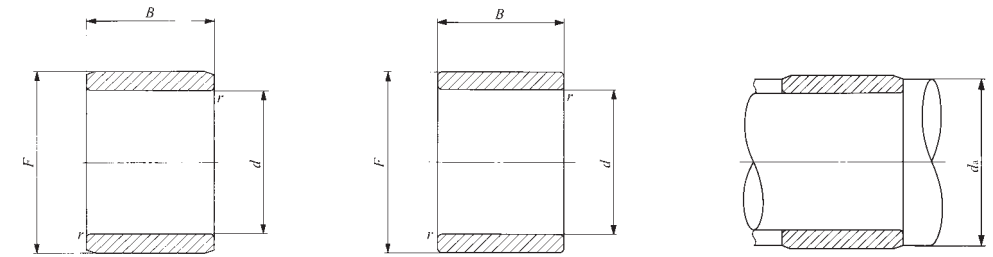
Inner Rings for General Usage



Shaft dia. 50 – 80mm

| Shaft dia. mm | Identification number | Mass (Ref.) g | Boundary dimensions mm | | | | Standard mounting dimension mm | | Assembled bearings | |
|------------------|-----------------------|---------------------|---------------------------|----------|----------|--|-----------------------------------|--------------|-----------------------------------|-------------|
| | | | <i>d</i> | <i>F</i> | <i>B</i> | <i>r_s</i> ⁽¹⁾ min | <i>d_a</i> Min. | Max. | | |
| 50 | LRT 506025 | 165 | 50 | 60 | 25.5 | 1 | 55 | 59 | NAX 6040 NBX 6040 RNAFW 607840 | |
| | LRT 506040 | 265 | 50 | 60 | 40 | 1 | 55 | 59 | | |
| 55 | LRT 556025 | 88 | 55 | 60 | 25 | 0.3 | 57 | 59 | TAF 607225 | |
| | LRT 556035 | 120 | 55 | 60 | 35 | 0.3 | 57 | 59 | TAF 607235 | |
| | LRT 556238 | 190 | 55 | 62 | 38.5 | 1 | 60 | 60.5 | TR 628138 | |
| | — | LRTZ 556238 | 190 | 55 | 62 | 38.5 | 1 | 60 | 60.5 | GTR 628138 |
| | LRT 556325 | 145 | 55 | 63 | 25 | 1 | 60 | 61 | RNA 4911 | |
| | — | LRTZ 556326 | 150 | 55 | 63 | 26 | 1 | 60 | 61 | RNA 4911 UU |
| | LRT 556345 | 255 | 55 | 63 | 45 | 1 | 60 | 61 | RNA 6911 | |
| | — | LRTZ 556346 | 260 | 55 | 63 | 46 | 1 | 60 | 61 | RNA 6911 UU |
| LRT 556530 | 220 | 55 | 65 | 30 | 1.5 | 63 | 63.5 | RNAF 658530 | | |
| LRT 556560 | 435 | 55 | 65 | 60 | 1.5 | 63 | 63.5 | RNAFW 658560 | | |
| 60 | LRT 606825 | 150 | 60 | 68 | 25 | 0.6 | 64 | 66 | TAF 688225 | |
| | LRT 606825-1 | 150 | 60 | 68 | 25 | 1 | 65 | 66 | RNA 4912 | |
| | — | LRTZ 606826 | 160 | 60 | 68 | 26 | 1 | 65 | 66 | RNA 4912 UU |
| | LRT 606835 | 210 | 60 | 68 | 35 | 0.6 | 64 | 66 | TAF 688235 | |
| | LRT 606845 | 275 | 60 | 68 | 45 | 1 | 65 | 66 | RNA 6912 | |
| | — | LRTZ 606846 | 280 | 60 | 68 | 46 | 1 | 65 | 66 | RNA 6912 UU |
| | LRT 607025 | 195 | 60 | 70 | 25.5 | 1 | 65 | 68 | NAX 7040 | |
| | LRT 607030 | 240 | 60 | 70 | 30 | 1.5 | 68 | 68.5 | RNAF 709030 | |
| | LRT 607045 | 355 | 60 | 70 | 45.5 | 1 | 65 | 68 | TR 708945 | |
| | — | LRTZ 607045 | 360 | 60 | 70 | 45.5 | 1 | 65 | 68 | GTR 708945 |
| LRT 607060 | 480 | 60 | 70 | 60 | 1.5 | 68 | 68.5 | RNAFW 709060 | | |
| 65 | LRT 657225 | 145 | 65 | 72 | 25 | 1 | 70 | 70.5 | RNA 4913 | |
| | — | LRTZ 657226 | 150 | 65 | 72 | 26 | 1 | 70 | 70.5 | RNA 4913 UU |
| | LRT 657245 | 255 | 65 | 72 | 45 | 1 | 70 | 70.5 | RNA 6913 | |
| | — | LRTZ 657246 | 265 | 65 | 72 | 46 | 1 | 70 | 70.5 | RNA 6913 UU |
| | LRT 657335 | 235 | 65 | 73 | 35 | 1 | 70 | 71 | TAF 739035 | |

Note⁽¹⁾ Minimum allowable value of chamfer dimension *r*
Remark No oil hole is provided.



LRT

LRTZ

| Shaft dia. mm | Identification number | Mass (Ref.) g | Boundary dimensions mm | | | | Standard mounting dimension mm | | Assembled bearings | |
|------------------|-----------------------|---------------------|---------------------------|----------|----------|--|-----------------------------------|---------------|-----------------------------|-------------|
| | | | <i>d</i> | <i>F</i> | <i>B</i> | <i>r_s</i> ⁽¹⁾ min | <i>d_a</i> Min. | Max. | | |
| 65 | LRT 657530 | 260 | 65 | 75 | 30 | 1.5 | 73 | 73.5 | RNAF 759530 RNAFW 759560 | |
| | LRT 657560 | 520 | 65 | 75 | 60 | 1.5 | 73 | 73.5 | | |
| 70 | LRT 708025 | 225 | 70 | 80 | 25 | 1 | 75 | 78 | TAF 809525 | |
| | LRT 708030 | 275 | 70 | 80 | 30 | 1 | 75 | 78 | RNA 4914 | |
| | LRT 708030-1 | 275 | 70 | 80 | 30 | 1.5 | 78 | 78.5 | RNAF 8010030 | |
| | — | LRTZ 708031 | 275 | 70 | 80 | 31 | 1 | 75 | 78 | RNA 4914 UU |
| | LRT 708035 | 310 | 70 | 80 | 35 | 1 | 75 | 78 | TAF 809535 | |
| | LRT 708054 | 490 | 70 | 80 | 54 | 1 | 75 | 78 | RNA 6914 | |
| | — | LRTZ 708055 | 500 | 70 | 80 | 55 | 1 | 75 | 78 | RNA 6914 UU |
| LRT 708060 | 560 | 70 | 80 | 60 | 1.5 | 78 | 78.5 | RNAFW 8010060 | | |
| 75 | LRT 758345 | 350 | 75 | 83 | 45.5 | 1 | 80 | 81 | TR 8310845 | |
| | — | LRTZ 758345 | 350 | 75 | 83 | 45.5 | 1 | 80 | 81 | GTR 8310845 |
| | LRT 758525 | 240 | 75 | 85 | 25 | 1 | 80 | 83 | TAF 8510525 | |
| | LRT 758530 | 290 | 75 | 85 | 30 | 1 | 80 | 83 | RNA 4915 | |
| | LRT 758530-1 | 290 | 75 | 85 | 30 | 1.5 | 83 | 83.5 | RNAF 8510530 | |
| | — | LRTZ 758531 | 300 | 75 | 85 | 31 | 1 | 80 | 83 | RNA 4915 UU |
| | LRT 758535 | 335 | 75 | 85 | 35 | 1 | 80 | 83 | TAF 8510535 | |
| | LRT 758554 | 520 | 75 | 85 | 54 | 1 | 80 | 83 | RNA 6915 | |
| — | LRTZ 758555 | 530 | 75 | 85 | 55 | 1 | 80 | 83 | RNA 6915 UU | |
| 80 | LRT 809025 | 255 | 80 | 90 | 25 | 1 | 85 | 88 | TAF 9011025 | |
| | LRT 809030 | 310 | 80 | 90 | 30 | 1 | 85 | 88 | RNA 4916 | |
| | LRT 809030-1 | 310 | 80 | 90 | 30 | 1.5 | 88 | 88.5 | RNAF 9011030 | |
| | — | LRTZ 809031 | 315 | 80 | 90 | 31 | 1 | 85 | 88 | RNA 4916 UU |
| | LRT 809035 | 355 | 80 | 90 | 35 | 1 | 85 | 88 | TAF 9011035 | |
| | LRT 809054 | 550 | 80 | 90 | 54 | 1 | 85 | 88 | RNA 6916 | |
| — | LRTZ 809055 | 560 | 80 | 90 | 55 | 1 | 85 | 88 | RNA 6916 UU | |

Note⁽¹⁾ Minimum allowable value of chamfer dimension *r*
Remark No oil hole is provided.

H

IRT
IRB
LRT
LRB

INNER RINGS

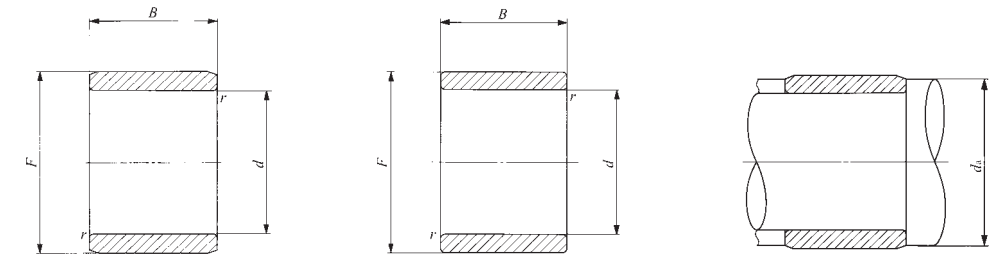
Inner Rings for General Usage



Shaft dia. 85 – 140mm

| Shaft dia. mm | Identification number | | Mass (Ref.) g | Boundary dimensions mm | | | | Standard mounting dimension mm | | Assembled bearings |
|---------------|-----------------------|--------------|---------------|------------------------|----------|----------|--|--------------------------------|-------------|--------------------|
| | | | | <i>d</i> | <i>F</i> | <i>B</i> | <i>r</i> _{s min} ⁽¹⁾ | Min. | Max. | |
| 85 | LRT 859350 | — | 440 | 85 | 93 | 50.5 | 1 | 90 | 91 | TR 9311850 |
| | — | LRTZ 859350 | 440 | 85 | 93 | 50.5 | 1 | 90 | 91 | GTR 9311850 |
| | LRT 859526 | — | 280 | 85 | 95 | 26 | 1 | 90 | 93 | TAF 9511526 |
| | LRT 859530 | — | 330 | 85 | 95 | 30 | 1.5 | 93 | 93.5 | RNAF 9511530 |
| | LRT 859536 | — | 390 | 85 | 95 | 36 | 1 | 90 | 93 | TAF 9511536 |
| | LRT 859545 | — | 490 | 85 | 95 | 45.5 | 1.5 | 93 | 93.5 | TR 9512045 |
| | — | LRTZ 859545 | 490 | 85 | 95 | 45.5 | 1.5 | 93 | 93.5 | GTR 9512045 |
| | LRT 8510035 | — | 575 | 85 | 100 | 35 | 1.1 | 91.5 | 98 | RNA 4917 |
| | — | LRTZ 8510036 | 605 | 85 | 100 | 36 | 1.1 | 91.5 | 98 | RNA 4917 UU |
| | LRT 8510063 | — | 1 040 | 85 | 100 | 63 | 1.1 | 91.5 | 98 | RNA 6917 |
| — | LRTZ 8510064 | 1 060 | 85 | 100 | 64 | 1.1 | 91.5 | 98 | RNA 6917 UU | |
| 90 | LRT 9010026 | — | 295 | 90 | 100 | 26 | 1 | 95 | 98 | TAF 10012026 |
| | LRT 9010030 | — | 355 | 90 | 100 | 30 | 1.5 | 98 | 98.5 | RNAF 10012030 |
| | LRT 9010036 | — | 415 | 90 | 100 | 36 | 1 | 95 | 98 | TAF 10012036 |
| | LRT 9010050 | — | 580 | 90 | 100 | 50.5 | 1.5 | 98 | 98.5 | TR 10012550 |
| | — | LRTZ 9010050 | 580 | 90 | 100 | 50.5 | 1.5 | 98 | 98.5 | GTR 10012550 |
| | LRT 9010535 | — | 610 | 90 | 105 | 35 | 1.1 | 96.5 | 103 | RNA 4918 |
| | — | LRTZ 9010536 | 630 | 90 | 105 | 36 | 1.1 | 96.5 | 103 | RNA 4918 UU |
| | LRT 9010563 | — | 1 100 | 90 | 105 | 63 | 1.1 | 96.5 | 103 | RNA 6918 |
| — | LRTZ 9010564 | 1 120 | 90 | 105 | 64 | 1.1 | 96.5 | 103 | RNA 6918 UU | |
| 95 | LRT 9510526 | — | 315 | 95 | 105 | 26 | 1 | 100 | 103 | TAF 10512526 |
| | LRT 9510536 | — | 430 | 95 | 105 | 36 | 1 | 100 | 103 | TAF 10512536 |
| | LRT 9511035 | — | 650 | 95 | 110 | 35 | 1.1 | 101.5 | 108 | RNA 4919 |
| | — | LRTZ 9511036 | 660 | 95 | 110 | 36 | 1.1 | 101.5 | 108 | RNA 4919 UU |
| | LRT 9511063 | — | 1 160 | 95 | 110 | 63 | 1.1 | 101.5 | 108 | RNA 6919 |
| — | LRTZ 9511064 | 1 180 | 95 | 110 | 64 | 1.1 | 101.5 | 108 | RNA 6919 UU | |

Note⁽¹⁾ Minimum allowable value of chamfer dimension *r*
 Remark No oil hole is provided.



LRT

LRTZ

| Shaft dia. mm | Identification number | | Mass (Ref.) g | Boundary dimensions mm | | | | Standard mounting dimension mm | | Assembled bearings |
|---------------|-----------------------|---------------|---------------|------------------------|----------|----------|--|--------------------------------|-------------|--------------------|
| | | | | <i>d</i> | <i>F</i> | <i>B</i> | <i>r</i> _{s min} ⁽¹⁾ | Min. | Max. | |
| 100 | LRT 10011030 | — | 380 | 100 | 110 | 30 | 1 | 105 | 108 | TAF 11013030 |
| | LRT 10011040 | — | 500 | 100 | 110 | 40 | 1 | 105 | 108 | TAF 11013040 |
| | LRT 10011050 | — | 640 | 100 | 110 | 50.5 | 1.5 | 108 | 108.5 | TR 11013550 |
| | — | LRTZ 10011050 | 640 | 100 | 110 | 50.5 | 1.5 | 108 | 108.5 | GTR 11013550 |
| | LRT 10011540 | — | 770 | 100 | 115 | 40 | 1.1 | 106.5 | 113 | RNA 4920 |
| — | LRTZ 10011541 | 780 | 100 | 115 | 41 | 1.1 | 106.5 | 113 | RNA 4920 UU | |
| 105 | LRT 10511550 | — | 670 | 105 | 115 | 50.5 | 1.5 | 113 | 113.5 | TR 11515350 |
| | — | LRTZ 10511550 | 670 | 105 | 115 | 50.5 | 1.5 | 113 | 113.5 | GTR 11515350 |
| 110 | LRT 11012030 | — | 410 | 110 | 120 | 30 | 1 | 115 | 118 | RNA 4822 |
| | LRT 11012540 | — | 840 | 110 | 125 | 40 | 1.1 | 116.5 | 123 | RNA 4922 |
| | — | LRTZ 11012541 | 870 | 110 | 125 | 41 | 1.1 | 116.5 | 123 | RNA 4922 UU |
| 120 | LRT 12013030 | — | 450 | 120 | 130 | 30 | 1 | 125 | 128 | RNA 4824 |
| | LRT 12013545 | — | 1 030 | 120 | 135 | 45 | 1.1 | 126.5 | 133 | RNA 4924 |
| | — | LRTZ 12013546 | 1 050 | 120 | 135 | 46 | 1.1 | 126.5 | 133 | RNA 4924 UU |
| 125 | LRT 12514060 | — | 1 460 | 125 | 140 | 60.5 | 1.5 | 133 | 138 | TR 14017860 |
| | — | LRTZ 12514060 | 1 460 | 125 | 140 | 60.5 | 1.5 | 133 | 138 | GTR 14017860 |
| 130 | LRT 13014535 | — | 860 | 130 | 145 | 35 | 1.1 | 136.5 | 143 | RNA 4826 |
| | LRT 13015050 | — | 1 670 | 130 | 150 | 50 | 1.5 | 138 | 148 | RNA 4926 |
| | — | LRTZ 13015051 | 1 720 | 130 | 150 | 51 | 1.5 | 138 | 148 | RNA 4926 UU |
| 135 | LRT 13515060 | — | 1 560 | 135 | 150 | 60.5 | 1.5 | 143 | 148 | TR 15018860 |
| | — | LRTZ 13515060 | 1 560 | 135 | 150 | 60.5 | 1.5 | 143 | 148 | GTR 15018860 |
| 140 | LRT 14015535 | — | 930 | 140 | 155 | 35 | 1.1 | 146.5 | 153 | RNA 4828 |
| | LRT 14016050 | — | 1 790 | 140 | 160 | 50 | 1.5 | 148 | 158 | RNA 4928 |
| | — | LRTZ 14016051 | 1 830 | 140 | 160 | 51 | 1.5 | 148 | 158 | RNA 4928 UU |

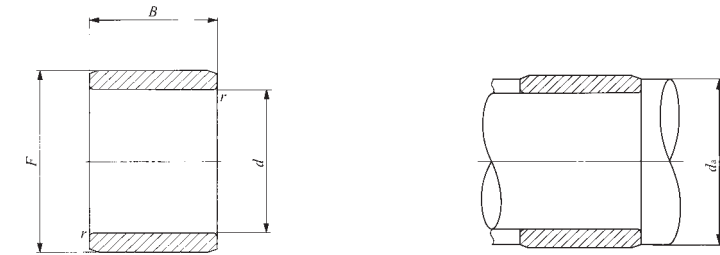
Note⁽¹⁾ Minimum allowable value of chamfer dimension *r*
 Remark No oil hole is provided.

H

IRT
IRB
LRT
LRB

INNER RINGS

Inner Rings for General Usage



LRT

Shaft dia. 150 – 440mm

| Shaft dia. mm | Identification number | | Mass (Ref.) g | Boundary dimensions mm | | | | Standard mounting dimension mm | | Assembled bearings |
|------------------|-----------------------|---|---------------------|---------------------------|-----|-----|-----------------------------------|-----------------------------------|------|--------------------|
| | | | | d | F | B | r _{s min} ⁽¹⁾ | Min. | Max. | |
| 150 | LRT 15016540 | — | 1 130 | 150 | 165 | 40 | 1.1 | 156.5 | 163 | RNA 4830 |
| | LRT 15017060 | — | 2 290 | 150 | 170 | 60 | 2 | 159 | 168 | RNA 4930 |
| 160 | LRT 16017540 | — | 1 200 | 160 | 175 | 40 | 1.1 | 166.5 | 173 | RNA 4832 |
| | LRT 16018060 | — | 2 440 | 160 | 180 | 60 | 2 | 169 | 178 | RNA 4932 |
| 170 | LRT 17018545 | — | 1 420 | 170 | 185 | 45 | 1.1 | 176.5 | 183 | RNA 4834 |
| | LRT 17019060 | — | 2 580 | 170 | 190 | 60 | 2 | 179 | 188 | RNA 4934 |
| 180 | LRT 18019545 | — | 1 500 | 180 | 195 | 45 | 1.1 | 186.5 | 193 | RNA 4836 |
| | LRT 18020569 | — | 3 950 | 180 | 205 | 69 | 2 | 189 | 203 | RNA 4936 |
| 190 | LRT 19021050 | — | 2 380 | 190 | 210 | 50 | 1.5 | 198 | 208 | RNA 4838 |
| | LRT 19021569 | — | 4 200 | 190 | 215 | 69 | 2 | 199 | 213 | RNA 4938 |
| 200 | LRT 20022050 | — | 2 520 | 200 | 220 | 50 | 1.5 | 208 | 218 | RNA 4840 |
| | LRT 20022580 | — | 5 000 | 200 | 225 | 80 | 2.1 | 211 | 223 | RNA 4940 |
| 220 | LRT 22024050 | — | 2 750 | 220 | 240 | 50 | 1.5 | 228 | 238 | RNA 4844 |
| | LRT 22024580 | — | 5 500 | 220 | 245 | 80 | 2.1 | 231 | 243 | RNA 4944 |
| 240 | LRT 24026560 | — | 4 530 | 240 | 265 | 60 | 2 | 249 | 262 | RNA 4848 |
| | LRT 24026580 | — | 6 000 | 240 | 265 | 80 | 2.1 | 251 | 262 | RNA 4948 |
| 260 | LRT 26028560 | — | 4 930 | 260 | 285 | 60 | 2 | 269 | 282 | RNA 4852 |
| | LRT 260290100 | — | 9 900 | 260 | 290 | 100 | 2.1 | 271 | 287 | RNA 4952 |
| 280 | LRT 28030569 | — | 6 050 | 280 | 305 | 69 | 2 | 289 | 302 | RNA 4856 |
| | LRT 280310100 | — | 10 600 | 280 | 310 | 100 | 2.1 | 291 | 307 | RNA 4956 |
| 300 | LRT 30033080 | — | 9 100 | 300 | 330 | 80 | 2.1 | 311 | 327 | RNA 4860 |
| | LRT 300340118 | — | 18 000 | 300 | 340 | 118 | 3 | 313 | 337 | RNA 4960 |
| 320 | LRT 32035080 | — | 9 600 | 320 | 350 | 80 | 2.1 | 331 | 347 | RNA 4864 |
| | LRT 320360118 | — | 19 200 | 320 | 360 | 118 | 3 | 333 | 357 | RNA 4964 |

Note⁽¹⁾ Minimum allowable value of chamfer dimension r
 Remark No oil hole is provided.

| Shaft dia. mm | Identification number | | Mass (Ref.) g | Boundary dimensions mm | | | | Standard mounting dimension mm | | Assembled bearings |
|------------------|-----------------------|---|---------------------|---------------------------|-----|-----|-----------------------------------|-----------------------------------|------|--------------------|
| | | | | d | F | B | r _{s min} ⁽¹⁾ | Min. | Max. | |
| 340 | LRT 34037080 | — | 10 200 | 340 | 370 | 80 | 2.1 | 351 | 367 | RNA 4868 |
| | LRT 340380118 | — | 20 300 | 340 | 380 | 118 | 3 | 353 | 377 | RNA 4968 |
| 360 | LRT 36039080 | — | 10 800 | 360 | 390 | 80 | 2.1 | 371 | 387 | RNA 4872 |
| | LRT 360400118 | — | 21 500 | 360 | 400 | 118 | 3 | 373 | 397 | RNA 4972 |
| 380 | LRT 380415100 | — | 16 700 | 380 | 415 | 100 | 2.1 | 391 | 412 | RNA 4876 |
| | LRT 380430140 | — | 33 900 | 380 | 430 | 140 | 4 | 396 | 427 | RNA 4976 |
| 400 | LRT 400450140 | — | 35 600 | 400 | 450 | 140 | 4 | 416 | 447 | RNA 4980 |
| 420 | LRT 420470140 | — | 37 300 | 420 | 470 | 140 | 4 | 436 | 467 | RNA 4984 |
| 440 | LRT 440490160 | — | 44 100 | 440 | 490 | 160 | 4 | 456 | 487 | RNA 4988 |

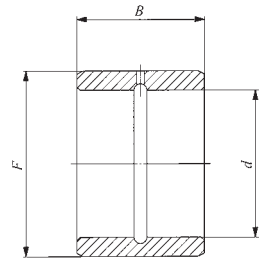
Note⁽¹⁾ Minimum allowable value of chamfer dimension r
 Remark No oil hole is provided.

H

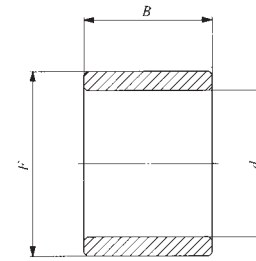
IRT
IRB
LRT
LRB

INNER RINGS

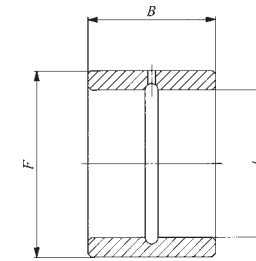
Inner Rings for General Usage **Inch Series**



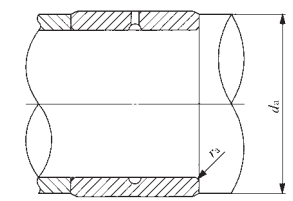
LRB



LRBZ



LRBZ...B



Shaft dia. 9.525 – 22.225mm

| Shaft dia. mm (inch) | Identification number | | Mass (Ref.) g | Boundary dimensions mm(inch) | | | Standard mounting dimensions mm ⁽¹⁾ | | |
|---|-----------------------|--------------|--|---|---|----------|--|------|---------------------------|
| | | | | <i>d</i> | <i>F</i> | <i>B</i> | <i>d_a</i> | | <i>r_{as}</i> max |
| | | | | | | | Min. | Max. | Max. |
| 9.525 (³ / ₈) | LRB 61012 | — | 18.5 | 9.525 (³ / ₈) | 15.875 (⁵ / ₈) | 19.300 | 14 | 14.5 | 0.6 |
| | — | LRBZ 61012 | 18.5 | 9.525 (³ / ₈) | 15.875 (⁵ / ₈) | 19.300 | 14 | 14.5 | 0.6 |
| | — | LRBZ 61016 | 25 | 9.525 (³ / ₈) | 15.875 (⁵ / ₈) | 25.650 | 14 | 14.5 | 0.6 |
| | — | LRBZ 61016 B | 25 | 9.525 (³ / ₈) | 15.875 (⁵ / ₈) | 25.650 | 14 | 14.5 | 0.6 |
| 12.700 (¹ / ₂) | LRB 81212 | — | 23.5 | 12.700 (¹ / ₂) | 19.050 (³ / ₄) | 19.300 | 17.5 | 18 | 1 |
| | LRB 81216 | — | 31 | 12.700 (¹ / ₂) | 19.050 (³ / ₄) | 25.650 | 17.5 | 18 | 1 |
| | — | LRBZ 81212 | 23.5 | 12.700 (¹ / ₂) | 19.050 (³ / ₄) | 19.300 | 17.5 | 18 | 0.6 |
| | — | LRBZ 81216 | 31 | 12.700 (¹ / ₂) | 19.050 (³ / ₄) | 25.650 | 17.5 | 18 | 0.6 |
| — | LRBZ 81216 B | 31 | 12.700 (¹ / ₂) | 19.050 (³ / ₄) | 25.650 | 17.5 | 18 | 0.6 | |
| 15.875 (⁵ / ₈) | LRB 101412 | — | 28 | 15.875 (⁵ / ₈) | 22.225 (⁷ / ₈) | 19.300 | 21 | 21.2 | 1 |
| | LRB 101416 | — | 37.5 | 15.875 (⁵ / ₈) | 22.225 (⁷ / ₈) | 25.650 | 21 | 21.2 | 1 |
| | — | LRBZ 101412 | 28 | 15.875 (⁵ / ₈) | 22.225 (⁷ / ₈) | 19.300 | 21 | 21.2 | 0.6 |
| | — | LRBZ 101416 | 37.5 | 15.875 (⁵ / ₈) | 22.225 (⁷ / ₈) | 25.650 | 21 | 21.2 | 0.6 |
| — | LRBZ 101416 B | 37.5 | 15.875 (⁵ / ₈) | 22.225 (⁷ / ₈) | 25.650 | 21 | 21.2 | 0.6 | |
| 19.050 (³ / ₄) | LRB 121612 | — | 33 | 19.050 (³ / ₄) | 25.400 (1) | 19.300 | 24 | 24.4 | 1 |
| | LRB 121616 | — | 44 | 19.050 (³ / ₄) | 25.400 (1) | 25.650 | 24 | 24.4 | 1 |
| | — | LRBZ 121612 | 33 | 19.050 (³ / ₄) | 25.400 (1) | 19.300 | 24 | 24.4 | 0.6 |
| | — | LRBZ 121616 | 44 | 19.050 (³ / ₄) | 25.400 (1) | 25.650 | 24 | 24.4 | 0.6 |
| — | LRBZ 121616 B | 44 | 19.050 (³ / ₄) | 25.400 (1) | 25.650 | 24 | 24.4 | 0.6 | |
| 22.225 (⁷ / ₈) | LRB 141816 | — | 50 | 22.225 (⁷ / ₈) | 28.575 (1 ¹ / ₂) | 25.650 | 27 | 27.5 | 1 |
| | LRB 141820 | — | 62 | 22.225 (⁷ / ₈) | 28.575 (1 ¹ / ₂) | 32.000 | 27 | 27.5 | 1 |
| | — | LRBZ 141816 | 50 | 22.225 (⁷ / ₈) | 28.575 (1 ¹ / ₂) | 25.650 | 27 | 27.5 | 0.6 |
| | — | LRBZ 141820 | 62 | 22.225 (⁷ / ₈) | 28.575 (1 ¹ / ₂) | 32.000 | 27 | 27.5 | 0.6 |
| — | LRBZ 141820 B | 62 | 22.225 (⁷ / ₈) | 28.575 (1 ¹ / ₂) | 32.000 | 27 | 27.5 | 0.6 | |

Note⁽¹⁾ Maximum allowable fillet corner radius of shaft
 Remark LRBZ has no oil hole. LRB and LRBZ...B are provided with an oil groove and an oil hole.

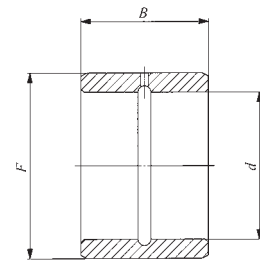
| Assembled bearings | |
|--------------------|--------------|
| BR 101812 | GBR 101812 |
| GBR 101816UU | BR 101816UU |
| BR 122012 | BR 122016 |
| GBR 122012 | GBR 122016UU |
| BR 122016UU | |
| BR 142212 | BR 142216 |
| GBR 142212 | GBR 142216 |
| GBR 142216 | GBR 142216UU |
| BR 142216UU | |
| BR 162412 | BR 162416 |
| GBR 162412 | GBR 162416 |
| GBR 162416 | GBR 162416UU |
| BR 162416UU | |
| BR 182616 | BR 182620 |
| GBR 182616 | GBR 182620UU |
| BR 182620UU | |

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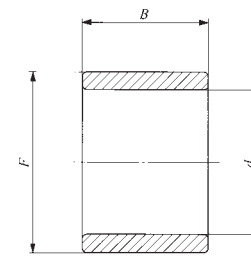
IRT
IRB
LRT
LRB

INNER RINGS

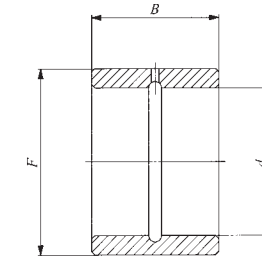
Inner Rings for General Usage **Inch Series**



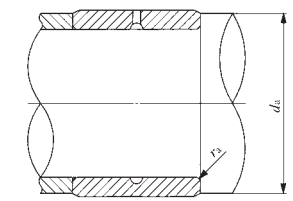
LRB



LRBZ



LRBZ...B



Shaft dia. 25.400 – 38.100mm

| Shaft dia. mm (inch) | Identification number | | Mass (Ref.) g | Boundary dimensions mm(inch) | | | Standard mounting dimensions mm ⁽¹⁾ | | |
|----------------------------|-----------------------|---------------|---------------------|---------------------------------|----------------|----------|---|------|---------------------------|
| | | | | <i>d</i> | <i>F</i> | <i>B</i> | <i>d_a</i> | | <i>r_{as max}</i> |
| | | | | | | Min. | Max. | Max. | |
| 25.400 (1) | LRB 162016 | — | 56 | 25.400 (1) | 31.750 (1 1/4) | 25.650 | 30.5 | 30.7 | 1 |
| | LRB 162020 | — | 72 | 25.400 (1) | 31.750 (1 1/4) | 32.000 | 30.5 | 30.7 | 1 |
| | — | LRBZ 162016 | 56 | 25.400 (1) | 31.750 (1 1/4) | 25.650 | 30.5 | 30.7 | 0.6 |
| | — | LRBZ 162020 | 72 | 25.400 (1) | 31.750 (1 1/4) | 32.000 | 30.5 | 30.7 | 0.6 |
| | — | LRBZ 162020 B | 72 | 25.400 (1) | 31.750 (1 1/4) | 32.000 | 30.5 | 30.7 | 0.6 |
| 28.575 (1 1/8) | LRB 182216 | — | 63 | 28.575 (1 1/8) | 34.925 (1 3/8) | 25.650 | 33.5 | 33.9 | 1 |
| | LRB 182220 | — | 77 | 28.575 (1 1/8) | 34.925 (1 3/8) | 32.000 | 33.5 | 33.9 | 1 |
| | — | LRBZ 182216 | 63 | 28.575 (1 1/8) | 34.925 (1 3/8) | 25.650 | 33.5 | 33.9 | 0.6 |
| | — | LRBZ 182220 | 77 | 28.575 (1 1/8) | 34.925 (1 3/8) | 32.000 | 33.5 | 33.9 | 0.6 |
| | — | LRBZ 182220 B | 77 | 28.575 (1 1/8) | 34.925 (1 3/8) | 32.000 | 33.5 | 33.9 | 0.6 |
| 31.750 (1 1/4) | LRB 202416 | — | 71 | 31.750 (1 1/4) | 38.100 (1 1/2) | 25.650 | 37 | 37.1 | 1.5 |
| | LRB 202420 | — | 86 | 31.750 (1 1/4) | 38.100 (1 1/2) | 32.000 | 37 | 37.1 | 1.5 |
| | — | LRBZ 202416 | 71 | 31.750 (1 1/4) | 38.100 (1 1/2) | 25.650 | 37 | 37.1 | 0.6 |
| | — | LRBZ 202420 | 86 | 31.750 (1 1/4) | 38.100 (1 1/2) | 32.000 | 37 | 37.1 | 0.6 |
| | — | LRBZ 202420 B | 86 | 31.750 (1 1/4) | 38.100 (1 1/2) | 32.000 | 37 | 37.1 | 0.6 |
| 34.925 (1 3/8) | LRB 222616 | — | 77 | 34.925 (1 3/8) | 41.275 (1 5/8) | 25.650 | 40.2 | 40.2 | 1.5 |
| | LRB 222620 | — | 96 | 34.925 (1 3/8) | 41.275 (1 5/8) | 32.000 | 40.2 | 40.2 | 1.5 |
| | — | LRBZ 222616 | 77 | 34.925 (1 3/8) | 41.275 (1 5/8) | 25.650 | 40.2 | 40.2 | 0.6 |
| | — | LRBZ 222620 | 96 | 34.925 (1 3/8) | 41.275 (1 5/8) | 32.000 | 40.2 | 40.2 | 0.6 |
| | — | LRBZ 222620 B | 96 | 34.925 (1 3/8) | 41.275 (1 5/8) | 32.000 | 40.2 | 40.2 | 0.6 |
| 38.100 (1 1/2) | LRB 242816 | — | 80 | 38.100 (1 1/2) | 44.450 (1 3/4) | 25.650 | 43.3 | 43.4 | 1.5 |
| | LRB 242820 | — | 100 | 38.100 (1 1/2) | 44.450 (1 3/4) | 32.000 | 43.3 | 43.4 | 1.5 |
| | LRB 243020 | — | 155 | 38.100 (1 1/2) | 47.625 (1 7/8) | 32.000 | 43.3 | 45 | 1.5 |
| | — | LRBZ 242820 | 100 | 38.100 (1 1/2) | 44.450 (1 3/4) | 32.000 | 43.3 | 43.4 | 0.6 |
| | — | LRBZ 242820 B | 100 | 38.100 (1 1/2) | 44.450 (1 3/4) | 32.000 | 43.3 | 43.4 | 0.6 |
| | — | LRBZ 243020 | 160 | 38.100 (1 1/2) | 47.625 (1 7/8) | 32.000 | 43.3 | 45 | 1 |
| | — | LRBZ 243020 B | 160 | 38.100 (1 1/2) | 47.625 (1 7/8) | 32.000 | 43.3 | 45 | 1 |

Note⁽¹⁾ Maximum allowable fillet corner radius of shaft
 Remark LRBZ has no oil hole. LRB and LRBZ...B are provided with an oil groove and an oil hole.

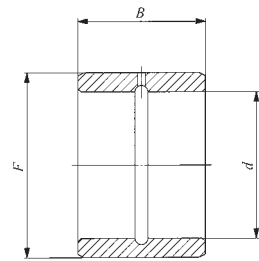
| Assembled bearings | |
|--------------------|-------------------------|
| BR 202816 | |
| BR 202820 | |
| GBR 202816 | |
| GBR 202820UU | |
| BR 202820UU | |
| BR 223016 | |
| BR 223020 | |
| GBR 223016 | |
| GBR 223020UU | |
| BR 223020UU | |
| BR 243316 | |
| BR 243320 | |
| GBR 243316 | |
| GBR 243320 | GBR 243320UU |
| BR 243320UU | |
| BR 263516 | |
| BR 263520 | |
| GBR 263516 | |
| GBR 263520 | GBR 263520UU |
| BR 263520UU | |
| BR 283716 | |
| BR 283720 | BR 283820 |
| BR 303920 | |
| GBR 283720 | GBR 283820 GBR 283720UU |
| BR 283720UU | |
| GBR 303920 | GBR 303920UU |
| BR 303920UU | |

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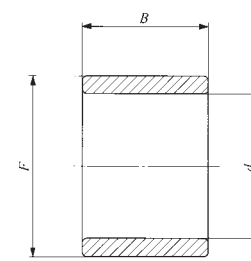
IRT
IRB
LRT
LRB

INNER RINGS

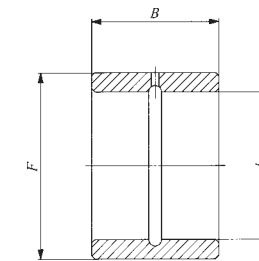
Inner Rings for General Usage **Inch Series**



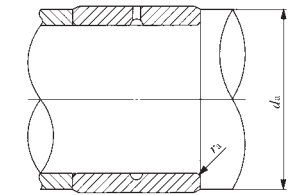
LRB



LRBZ



LRBZ...B



Shaft dia. 41.275 – 63.500mm

| Shaft dia. mm (inch) | Identification number | | Mass (Ref.) g | Boundary dimensions mm(inch) | | | Standard mounting dimensions mm ⁽¹⁾ | | |
|----------------------------|-----------------------|---------------|---------------------|---------------------------------|----------------|----------|---|------------------------------|-----------------------------------|
| | | | | <i>d</i> | <i>F</i> | <i>B</i> | <i>d_a</i> Min. | <i>d_a</i> Max. | <i>r_{as}</i> max Max. |
| 41.275 (1 5/8) | LRB 263216 | — | 135 | 41.275 (1 5/8) | 50.800 (2) | 25.650 | 48 | 49 | 1.5 |
| | LRB 263220 | — | 170 | 41.275 (1 5/8) | 50.800 (2) | 32.000 | 48 | 49 | 1.5 |
| | — | LRBZ 263216 | 135 | 41.275 (1 5/8) | 50.800 (2) | 25.650 | 48 | 49 | 1 |
| | — | LRBZ 263220 | 170 | 41.275 (1 5/8) | 50.800 (2) | 32.000 | 48 | 49 | 1 |
| | — | LRBZ 263220 B | 170 | 41.275 (1 5/8) | 50.800 (2) | 32.000 | 48 | 49 | 1 |
| 44.450 (1 3/4) | LRB 283624 | — | 300 | 44.450 (1 3/4) | 57.150 (2 1/4) | 38.350 | 52.5 | 55 | 1.5 |
| | LRB 283628 | — | 345 | 44.450 (1 3/4) | 57.150 (2 1/4) | 44.700 | 52.5 | 55 | 1.5 |
| | — | LRBZ 283624 | 300 | 44.450 (1 3/4) | 57.150 (2 1/4) | 38.350 | 52.5 | 55 | 1.5 |
| | — | LRBZ 283628 | 345 | 44.450 (1 3/4) | 57.150 (2 1/4) | 44.700 | 52.5 | 55 | 1.5 |
| | — | LRBZ 283628 B | 345 | 44.450 (1 3/4) | 57.150 (2 1/4) | 44.700 | 52.5 | 55 | 1.5 |
| 50.800 (2) | LRB 324024 | — | 335 | 50.800 (2) | 63.500 (2 1/2) | 38.350 | 58 | 61 | 2 |
| | LRB 324028 | — | 390 | 50.800 (2) | 63.500 (2 1/2) | 44.700 | 58 | 61 | 2 |
| | — | LRBZ 324024 | 335 | 50.800 (2) | 63.500 (2 1/2) | 38.350 | 58 | 61 | 1.5 |
| | — | LRBZ 324028 | 390 | 50.800 (2) | 63.500 (2 1/2) | 44.700 | 58 | 61 | 1.5 |
| | — | LRBZ 324028 B | 390 | 50.800 (2) | 63.500 (2 1/2) | 44.700 | 58 | 61 | 1.5 |
| 57.150 (2 1/4) | LRB 364424 | — | 375 | 57.150 (2 1/4) | 69.850 (2 3/4) | 38.350 | 65 | 67 | 2 |
| | LRB 364428 | — | 440 | 57.150 (2 1/4) | 69.850 (2 3/4) | 44.700 | 65 | 67 | 2 |
| | — | LRBZ 364424 | 375 | 57.150 (2 1/4) | 69.850 (2 3/4) | 38.350 | 65 | 67 | 1.5 |
| | — | LRBZ 364428 | 440 | 57.150 (2 1/4) | 69.850 (2 3/4) | 44.700 | 65 | 67 | 1.5 |
| | — | LRBZ 364428 B | 440 | 57.150 (2 1/4) | 69.850 (2 3/4) | 44.700 | 65 | 67 | 1.5 |
| 63.500 (2 1/2) | LRB 404824 | — | 410 | 63.500 (2 1/2) | 76.200 (3) | 38.350 | 71 | 73 | 2 |
| | LRB 404828 | — | 480 | 63.500 (2 1/2) | 76.200 (3) | 44.700 | 71 | 73 | 2 |
| | — | LRBZ 404824 | 410 | 63.500 (2 1/2) | 76.200 (3) | 38.350 | 71 | 73 | 1.5 |
| | — | LRBZ 404828 | 480 | 63.500 (2 1/2) | 76.200 (3) | 44.700 | 71 | 73 | 1.5 |
| | — | LRBZ 404828 B | 480 | 63.500 (2 1/2) | 76.200 (3) | 44.700 | 71 | 73 | 1.5 |

Note⁽¹⁾ Maximum allowable fillet corner radius of shaft

Remark LRBZ has no oil hole. LRB and LRBZ...B are provided with an oil groove and an oil hole.

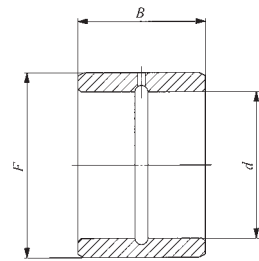
| Assembled bearings | |
|--------------------|--------------|
| BR 324116 | |
| BR 324120 | |
| GBR 324116 | |
| GBR 324120 | GBR 324120UU |
| BR 324120UU | |
| BR 364824 | |
| BR 364828 | |
| GBR 364824 | |
| GBR 364828 | GBR 364828UU |
| BR 364828UU | |
| BR 405224 | |
| BR 405228 | |
| GBR 405224 | |
| GBR 405228 | GBR 405228UU |
| BR 405228UU | |
| BR 445624 | |
| BR 445628 | |
| GBR 445624 | |
| GBR 445628 | GBR 445628UU |
| BR 445628UU | |
| BR 486024 | |
| BR 486028 | |
| GBR 486024 | |
| GBR 486028 | GBR 486028UU |
| BR 486028UU | |

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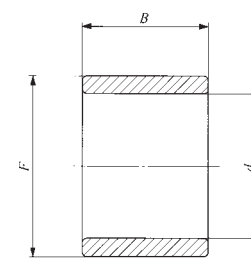
IRT
IRB
LRT
LRB

INNER RINGS

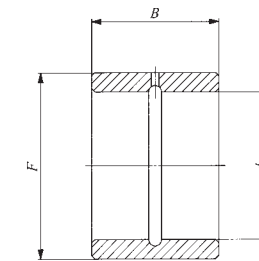
Inner Rings for General Usage **Inch Series**



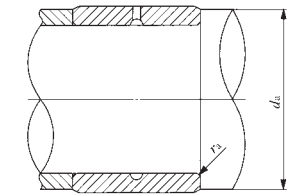
LRB



LRBZ



LRBZ...B



Shaft dia. 69.850 – 95.250mm

| Shaft dia. mm (inch) | Identification number | | Mass (Ref.) g | Boundary dimensions mm(inch) | | | Standard mounting dimensions mm ⁽¹⁾ | | |
|----------------------------|-----------------------|---------------|---------------------|---------------------------------|-----------------|----------|---|------|---------------------------|
| | | | | <i>d</i> | <i>F</i> | <i>B</i> | <i>d_a</i> | | <i>r_{as max}</i> |
| | | | | | | Min. | Max. | Max. | |
| 69.850 (2 3/4) | LRB 445228 | — | 530 | 69.850 (2 3/4) | 82.550 (3 1/4) | 44.700 | 77 | 79 | 2 |
| | LRB 445232 | — | 600 | 69.850 (2 3/4) | 82.550 (3 1/4) | 51.050 | 77 | 79 | 2 |
| | — | LRBZ 445228 | 530 | 69.850 (2 3/4) | 82.550 (3 1/4) | 44.700 | 77 | 79 | 1.5 |
| | — | LRBZ 445228 B | 530 | 69.850 (2 3/4) | 82.550 (3 1/4) | 44.700 | 77 | 79 | 1.5 |
| | — | LRBZ 445232 | 600 | 69.850 (2 3/4) | 82.550 (3 1/4) | 51.050 | 77 | 79 | 1.5 |
| 76.200 (3) | LRB 485632 | — | 640 | 76.200 (3) | 88.900 (3 1/2) | 51.050 | 83.5 | 86 | 2 |
| | — | LRBZ 485632 | 640 | 76.200 (3) | 88.900 (3 1/2) | 51.050 | 83.5 | 86 | 1.5 |
| | — | LRBZ 485632 B | 640 | 76.200 (3) | 88.900 (3 1/2) | 51.050 | 83.5 | 86 | 1.5 |
| 82.550 (3 1/4) | LRB 526032 | — | 690 | 82.550 (3 1/4) | 95.250 (3 3/4) | 51.050 | 91 | 93 | 2.5 |
| | — | LRBZ 526032 | 690 | 82.550 (3 1/4) | 95.250 (3 3/4) | 51.050 | 91 | 93 | 1.5 |
| | — | LRBZ 526032 B | 690 | 82.550 (3 1/4) | 95.250 (3 3/4) | 51.050 | 91 | 93 | 1.5 |
| 88.900 (3 1/2) | LRB 566432 | — | 750 | 88.900 (3 1/2) | 101.600 (4) | 51.050 | 97 | 99 | 2.5 |
| | — | LRBZ 566432 | 750 | 88.900 (3 1/2) | 101.600 (4) | 51.050 | 97 | 99 | 1.5 |
| 95.250 (3 3/4) | — | LRBZ 606832 | 800 | 95.250 (3 3/4) | 107.950 (4 1/4) | 51.050 | 103 | 105 | 1.5 |

Note⁽¹⁾ Maximum allowable fillet corner radius of shaft
 Remark LRBZ has no oil hole. LRB with inner ring bore diameter *d* of 76.200 mm or less and LRBZ...B are provided with an oil groove and an oil hole.
 Other models are provided with an oil groove and two oil holes.

| Assembled bearings | |
|--------------------|--------------|
| BR 526828 | |
| BR 526832 | |
| GBR 526828 | GBR 526828UU |
| BR 526828UU | |
| GBR 526832 | |
| BR 567232 | |
| GBR 567232 | GBR 567232UU |
| BR 567232UU | |
| BR 607632 | |
| GBR 607632 | GBR 607632UU |
| BR 607632UU | |
| BR 648032 | |
| GBR 648032 | GBR 648032UU |
| GBR 688432 | GBR 688432UU |

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IRT
IRB
LRT
LRB