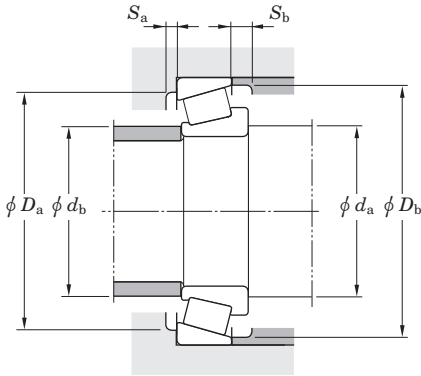
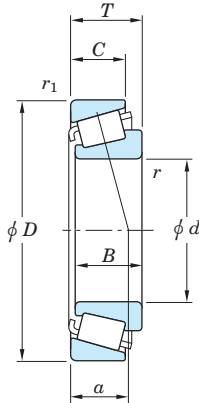


| Series No.      | Cone<br>(Inner ring) | Page  | Cup<br>(Outer ring) | Page        |
|-----------------|----------------------|-------|---------------------|-------------|
| <b>11000R</b>   | 11163R               | 59    |                     |             |
|                 | 11165XR              | 61    |                     |             |
|                 | 11165XSR             | 61    |                     |             |
| <b>11500</b>    | 11590                | 103   | 11520               | 103         |
| <b>LM11700R</b> | LM11749R             | 39    | LM11710             | 39          |
| <b>LM11900</b>  | LM11949              | 39    | LM11910             | 39          |
| <b>12000</b>    | 12168                | 61    | 12303               | 61          |
|                 | 12175                | 61    |                     |             |
| <b>12500</b>    | 12580                | 39    | 12520               | 39          |
| <b>M12600</b>   | M12648               | 41    | M12610              | 41          |
|                 | M12648A              | 41    |                     |             |
|                 | M12649               | 41    |                     |             |
| <b>LM12700</b>  | LM12749              | 41    | LM12711             | 41          |
| <b>13600</b>    | 13682                | 53    | 13620               | 53,55       |
|                 | 13685                | 55    | 13621               | 55          |
|                 | 13686                | 55    | 13624               | 55          |
|                 | 13687                | 55    |                     |             |
| <b>13800</b>    | 13889                | 55    | 13830               | 55,57       |
|                 | 13892                | 57    | 13836               | 55          |
| <b>14000</b>    | 14116                | 47    | 14274               | 45,47       |
|                 | 14117A               | 45    | 14274A              | 45,47,49,51 |
|                 | 14118                | 45    | 14276               | 45,51       |
|                 | 14118A               | 45    | 14277               | 49          |
|                 | 14120A               | 45    | 14283               | 45          |
|                 | 14123A               | 47    |                     |             |
|                 | 14125                | 47    |                     |             |
|                 | 14130                | 49    |                     |             |
|                 | 14131                | 49    |                     |             |
|                 | 14136A               | 51    |                     |             |
|                 | 14137A               | 51    |                     |             |
|                 | 14138A               | 51    |                     |             |
|                 | 14139                | 51    |                     |             |
|                 |                      |       |                     |             |
| <b>15000</b>    | 15100                | 41,43 | 15243               | 41          |
|                 | 15101                | 41,43 | 15245               | 41,43,45,47 |
|                 | 15102                | 43    | 15250               | 43          |
|                 | 15103                | 43    | 15250R              | 43          |
|                 | 15106                | 43    | 15250X              | 43          |
|                 | 15112                | 43    |                     |             |
|                 | 15113                | 43    |                     |             |
|                 | 15116                | 45    |                     |             |
|                 | 15117                | 45    |                     |             |
|                 | 15118                | 47    |                     |             |
|                 | 15119                | 47    |                     |             |
|                 | 15120                | 47    |                     |             |
|                 | 15123                | 47    |                     |             |
|                 | 15125                | 47    |                     |             |
|                 | 15126                | 47    |                     |             |
|                 |                      |       |                     |             |

| Series No.    | Cone<br>(Inner ring) | Page | Cup<br>(Outer ring) | Page        |
|---------------|----------------------|------|---------------------|-------------|
| <b>15500</b>  | 15572                | 41   | 15520               | 41,43       |
|               | 15578                | 41   | 15523               | 43          |
|               | 15579X               | 43   |                     |             |
|               | 15580                | 43   |                     |             |
|               | 15590                | 43   |                     |             |
| <b>16000</b>  | 16131                | 49   | 16282               | 53,55       |
|               | 16137                | 51   | 16283               | 55          |
|               | 16143                | 53   | 16284               | 49,51,53,55 |
|               | 16150                | 55   |                     |             |
|               | 16151                | 55   |                     |             |
| <b>17000</b>  | 17098                | 41   | 17244               | 41,45       |
|               | 17098X               | 41   |                     |             |
|               | 17118                | 45   |                     |             |
|               | 17118S               | 45   |                     |             |
|               | 17119                | 45   |                     |             |
| <b>17500R</b> | 17580R               | 39   | 17520               | 39          |
| <b>17800</b>  | 17887                | 65   | 17831               | 65          |
| <b>18000</b>  | 18200                | 69   | 18337               | 69          |
| <b>18500</b>  | 18587                | 57   | 18520               | 57,59       |
|               | 18590                | 59   |                     |             |
|               | 18591                | 59   |                     |             |
| <b>18600</b>  | 18685                | 61   | 18620               | 61,65       |
|               | 18690                | 65   |                     |             |
| <b>18700</b>  | 18780                | 65   | 18720               | 65          |
|               | 18790                | 69   | 18721               | 69          |
|               |                      |      | 18723               | 69          |
|               |                      |      | 18724               | 69          |
| <b>19000R</b> | 19138R               | 51   | 19268               | 51,53       |
|               | 19143R               | 53   | 19268X              | 55          |
|               | 19150R               | 55   | 19269               | 55          |
|               |                      |      | 19281               | 53,55       |
|               |                      |      | 19282               | 55          |
|               |                      |      | 19283               | 53,55       |
| <b>21000</b>  | 21063                | 39   | 21212               | 39          |
|               | 21075                | 39   | 21213               | 39          |
|               | 21078                | 39   |                     |             |
| <b>L21500</b> | L21549               | 39   | L21511              | 39          |
| <b>23000</b>  | 23092                | 103  | 23256               | 103         |
|               | 23098                | 103  |                     |             |
|               | 23100                | 103  |                     |             |
| <b>23600</b>  | 23685                | 49   | 23620               | 49,51       |
|               | 23690                | 51   | 23621               | 53          |
|               | 23691                | 53   | 23623               | 53          |
| <b>24700R</b> | 24780R               | 59   | 24720               | 59          |
|               | 24781R               | 59   | 24721               | 59          |
|               |                      |      | 24722               | 59          |

TS type  
d 21.430 ~ (25.400) mm  
0.8437 ~ (1.0000) inch

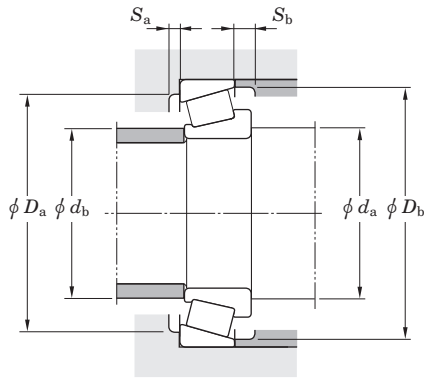
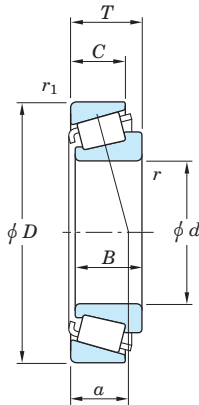


|                                                               |   |                 |       |
|---------------------------------------------------------------|---|-----------------|-------|
| $P = XF_r + YF_a$<br>$P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$ |   |                 |       |
| $F_a / F_r \leq e$                                            |   | $F_a / F_r > e$ |       |
| X                                                             | Y | X               | Y     |
| 1                                                             | 0 | 0.4             | $Y_1$ |

Note) The Values of “e” “Y<sub>1</sub>” and “Y<sub>0</sub>” are given in the table below.

| Boundary dimensions |        |          |        |          |        |          |        |          |        |                               |      | Basic load ratings<br>(kN)                 |      | Fatigue<br>load limit |                        | Bearing No.                   |  | Load<br>center       |                     | Mounting dimensions |                       |      |                       |      |                       | Con-<br>stant | Axial load<br>factors |      | Reference rating<br>(kN) |                       | Factor                |                          |      |          |      |
|---------------------|--------|----------|--------|----------|--------|----------|--------|----------|--------|-------------------------------|------|--------------------------------------------|------|-----------------------|------------------------|-------------------------------|--|----------------------|---------------------|---------------------|-----------------------|------|-----------------------|------|-----------------------|---------------|-----------------------|------|--------------------------|-----------------------|-----------------------|--------------------------|------|----------|------|
| <i>d</i>            |        | <i>D</i> |        | <i>T</i> |        | <i>B</i> |        | <i>C</i> |        | <i>r</i> <sup>1)</sup> (min.) |      | <i>r</i> <sub>1</sub> <sup>1)</sup> (min.) |      | <i>C</i> <sub>r</sub> | <i>C</i> <sub>0r</sub> | (kN)<br><i>C</i> <sub>u</sub> |  | Cone<br>(Inner ring) | Cup<br>(Outer ring) | <i>a</i>            | <i>d</i> <sub>a</sub> |      | <i>d</i> <sub>b</sub> |      | <i>D</i> <sub>a</sub> |               | <i>D</i> <sub>b</sub> |      | <i>e</i>                 | <i>Y</i> <sub>1</sub> | <i>Y</i> <sub>0</sub> | (500 rpm for 3 000 Hrs.) |      | <i>K</i> |      |
| mm                  | inch   | mm       | inch   | mm       | inch   | mm       | inch   | mm       | inch   | mm                            | inch | mm                                         | inch |                       |                        |                               |  |                      |                     |                     | mm                    | inch | mm                    | inch | mm                    | inch          | mm                    | inch |                          |                       |                       | mm                       | inch |          | mm   |
| 21.430              | 0.8437 | 50.005   | 1.9687 | 17.526   | 0.6900 | 18.288   | 0.7200 | 13.970   | 0.5500 | 1.2                           | 0.05 | 1.2                                        | 0.05 | 48.8                  | 40.7                   | 5.80                          |  | M12649               | M12610              | 11.1                | 0.44                  | 27.5 | 1.08                  | 25.5 | 1.00                  | 44.0          | 1.73                  | 46.0 | 1.81                     | 0.28                  | 2.16                  | 1.19                     | 11.2 | 5.35     | 2.10 |
| 21.987              | 0.8656 | 45.974   | 1.8100 | 15.494   | 0.6100 | 16.637   | 0.6550 | 12.065   | 0.4750 | 1.2                           | 0.05 | 1.2                                        | 0.05 | 37.5                  | 34.6                   | 4.85                          |  | LM12749              | LM12711             | 10.0                | 0.39                  | 27.5 | 1.08                  | 26.0 | 1.02                  | 40.0          | 1.57                  | 42.5 | 1.67                     | 0.31                  | 1.96                  | 1.08                     | 8.65 | 4.50     | 1.91 |
| 22.225              | 0.8750 | 50.005   | 1.9687 | 17.526   | 0.6900 | 18.288   | 0.7200 | 13.970   | 0.5500 | 1.2                           | 0.05 | 1.2                                        | 0.05 | 48.8                  | 40.7                   | 5.80                          |  | M12648               | M12610              | 11.1                | 0.44                  | 28.5 | 1.12                  | 26.5 | 1.04                  | 44.0          | 1.73                  | 46.0 | 1.81                     | 0.28                  | 2.16                  | 1.19                     | 11.2 | 5.35     | 2.10 |
|                     | 0.8750 | 50.005   | 1.9687 | 17.526   | 0.6900 | 18.288   | 0.7200 | 13.970   | 0.5500 | 1.2                           | 0.05 | 1.2                                        | 0.05 | 48.8                  | 40.7                   | 5.80                          |  | M12648A              | M12610              | 11.1                | 0.44                  | 28.5 | 1.12                  | 26.5 | 1.04                  | 44.0          | 1.73                  | 46.0 | 1.81                     | 0.28                  | 2.16                  | 1.19                     | 11.2 | 5.35     | 2.10 |
|                     | 0.8750 | 50.800   | 2.0000 | 15.011   | 0.5910 | 14.260   | 0.5614 | 12.700   | 0.5000 | 1.2                           | 0.05 | 1.6                                        | 0.06 | 33.3                  | 28.8                   | 4.05                          |  | 07087                | 07210X              | 12.3                | 0.48                  | 28.5 | 1.12                  | 27.0 | 1.06                  | 44.5          | 1.75                  | 47.5 | 1.87                     | 0.40                  | 1.49                  | 0.82                     | 7.65 | 5.25     | 1.46 |
|                     | 0.8750 | 52.388   | 2.0625 | 19.368   | 0.7625 | 20.168   | 0.7940 | 14.288   | 0.5625 | 1.6                           | 0.06 | 1.6                                        | 0.06 | 45.9                  | 37.9                   | 5.45                          |  | 1380                 | 1328                | 11.6                | 0.46                  | 29.5 | 1.16                  | 29.5 | 1.16                  | 45.0          | 1.77                  | 48.5 | 1.91                     | 0.29                  | 2.05                  | 1.13                     | 10.7 | 5.35     | 2.00 |
|                     | 0.8750 | 53.975   | 2.1250 | 19.368   | 0.7625 | 20.168   | 0.7940 | 14.288   | 0.5625 | 1.6                           | 0.06 | 1.6                                        | 0.06 | 45.9                  | 37.9                   | 5.45                          |  | 1380                 | 1329                | 11.6                | 0.46                  | 29.5 | 1.16                  | 29.5 | 1.16                  | 46.0          | 1.81                  | 49.0 | 1.93                     | 0.29                  | 2.05                  | 1.13                     | 10.7 | 5.35     | 2.00 |
|                     | 0.8750 | 56.896   | 2.2400 | 19.368   | 0.7625 | 19.837   | 0.7810 | 15.875   | 0.6250 | 1.2                           | 0.05 | 1.2                                        | 0.05 | 50.0                  | 43.1                   | 6.20                          |  | 1755                 | 1729                | 12.5                | 0.49                  | 29.0 | 1.14                  | 27.5 | 1.08                  | 49.0          | 1.93                  | 51.0 | 2.01                     | 0.31                  | 1.95                  | 1.07                     | 11.6 | 6.10     | 1.90 |
|                     | 0.8750 | 57.150   | 2.2500 | 17.462   | 0.6875 | 17.462   | 0.6875 | 13.495   | 0.5313 | 1.6                           | 0.06 | 1.6                                        | 0.06 | 47.2                  | 42.7                   | 6.10                          |  | 15572                | 15520               | 12.7                | 0.50                  | 32.5 | 1.28                  | 30.5 | 1.20                  | 51.0          | 2.01                  | 53.0 | 2.09                     | 0.35                  | 1.73                  | 0.95                     | 10.8 | 6.40     | 1.69 |
|                     | 0.8750 | 57.150   | 2.2500 | 19.845   | 0.7813 | 19.355   | 0.7620 | 15.875   | 0.6250 | 0.8                           | 0.03 | 1.6                                        | 0.06 | 60.8                  | 57.1                   | 8.25                          |  | 1975R                | 1922                | 13.9                | 0.55                  | 29.0 | 1.14                  | 28.0 | 1.10                  | 51.0          | 2.01                  | 53.5 | 2.11                     | 0.33                  | 1.82                  | 1.00                     | 14.0 | 7.90     | 1.77 |
|                     | 0.8750 | 57.150   | 2.2500 | 22.225   | 0.8750 | 22.225   | 0.8750 | 17.462   | 0.6875 | 0.8                           | 0.03 | 1.6                                        | 0.06 | 65.8                  | 55.7                   | 8.05                          |  | 1280                 | 1220                | 15.3                | 0.60                  | 29.5 | 1.16                  | 29.0 | 1.14                  | 49.0          | 1.93                  | 52.0 | 2.05                     | 0.35                  | 1.73                  | 0.95                     | 15.2 | 9.00     | 1.69 |
|                     | 0.8750 | 66.421   | 2.6150 | 23.812   | 0.9375 | 25.433   | 1.0013 | 19.050   | 0.7500 | 1.6                           | 0.06 | 1.2                                        | 0.05 | 83.8                  | 75.2                   | 11.2                          |  | 2684                 | 2631                | 13.9                | 0.55                  | 31.5 | 1.24                  | 29.0 | 1.14                  | 58.0          | 2.28                  | 60.0 | 2.36                     | 0.25                  | 2.36                  | 1.30                     | 19.5 | 8.45     | 2.30 |
|                     | 0.8750 | 80.000   | 3.1496 | 20.996   | 0.8266 | 22.403   | 0.8820 | 17.826   | 0.7018 | 0.8                           | 0.03 | 1.2                                        | 0.05 | 85.0                  | 74.8                   | 11.4                          |  | 341                  | 332                 | 15.1                | 0.59                  | 33.5 | 1.32                  | 32.0 | 1.26                  | 73.0          | 2.87                  | 75.0 | 2.95                     | 0.27                  | 2.20                  | 1.21                     | 19.6 | 9.15     | 2.14 |
| 22.606              | 0.8900 | 47.000   | 1.8504 | 15.500   | 0.6102 | 15.500   | 0.6102 | 12.000   | 0.4724 | 1.6                           | 0.06 | 1.0                                        | 0.04 | 35.0                  | 32.8                   | 4.45                          |  | LM72849              | LM72810             | 12.3                | 0.48                  | 30.0 | 1.18                  | 28.0 | 1.10                  | 40.5          | 1.59                  | 44.0 | 1.73                     | 0.47                  | 1.27                  | 0.70                     | 8.05 | 6.50     | 1.24 |
| 23.812              | 0.9375 | 50.292   | 1.9800 | 14.224   | 0.5600 | 14.732   | 0.5800 | 10.668   | 0.4200 | 1.6                           | 0.06 | 1.2                                        | 0.05 | 39.1                  | 37.0                   | 5.15                          |  | L44640R              | L44610              | 10.8                | 0.43                  | 30.5 | 1.20                  | 28.5 | 1.12                  | 44.5          | 1.75                  | 47.0 | 1.85                     | 0.37                  | 1.60                  | 0.88                     | 8.95 | 5.70     | 1.56 |
|                     | 0.9375 | 52.000   | 2.0472 | 15.011   | 0.5910 | 14.260   | 0.5614 | 12.700   | 0.5000 | 1.6                           | 0.06 | 2.0                                        | 0.08 | 33.3                  | 28.8                   | 4.05                          |  | 07093                | 07205               | 12.3                | 0.48                  | 30.5 | 1.20                  | 28.5 | 1.12                  | 44.5          | 1.75                  | 48.0 | 1.89                     | 0.40                  | 1.49                  | 0.82                     | 7.65 | 5.25     | 1.46 |
|                     | 0.9375 | 56.896   | 2.2400 | 19.368   | 0.7625 | 19.837   | 0.7810 | 15.875   | 0.6250 | 0.8                           | 0.03 | 1.2                                        | 0.05 | 50.0                  | 43.1                   | 6.20                          |  | 1779                 | 1729                | 12.5                | 0.49                  | 29.5 | 1.16                  | 28.5 | 1.12                  | 49.0          | 1.93                  | 51.0 | 2.01                     | 0.31                  | 1.95                  | 1.07                     | 11.6 | 6.10     | 1.90 |
|                     | 0.9375 | 56.896   | 2.2400 | 19.368   | 0.7625 | 19.837   | 0.7810 | 15.875   | 0.6250 | 0.8                           | 0.03 | 1.6                                        | 0.06 | 50.0                  | 43.1                   | 6.20                          |  | 1779                 | 1729X               | 12.5                | 0.49                  | 29.5 | 1.16                  | 28.5 | 1.12                  | 49.0          | 1.93                  | 52.0 | 2.05                     | 0.31                  | 1.95                  | 1.07                     | 11.6 | 6.10     | 1.90 |
|                     | 0.9375 | 66.421   | 2.6150 | 23.812   | 0.9375 | 25.433   | 1.0013 | 19.050   | 0.7500 | 0.8                           | 0.03 | 1.2                                        | 0.05 | 83.8                  | 75.2                   | 11.2                          |  | 2685                 | 2631                | 13.9                | 0.55                  | 30.5 | 1.20                  | 30.0 | 1.18                  | 58.0          | 2.28                  | 60.0 | 2.36                     | 0.25                  | 2.36                  | 1.30                     | 19.5 | 8.45     | 2.30 |
|                     | 0.9375 | 71.996   | 2.8345 | 19.000   | 0.7480 | 18.923   | 0.7450 | 15.875   | 0.6250 | 2.4                           | 0.09 | 1.6                                        | 0.06 | 69.8                  | 60.0                   | 8.85                          |  | 26093                | 26283               | 14.3                | 0.56                  | 35.0 | 1.38                  | 32.0 | 1.26                  | 62.0          | 2.44                  | 65.0 | 2.56                     | 0.36                  | 1.67                  | 0.92                     | 16.1 | 9.90     | 1.62 |
| 24.981              | 0.9835 | 50.005   | 1.9687 | 13.495   | 0.5313 | 14.260   | 0.5614 | 9.525    | 0.3750 | 1.6                           | 0.06 | 1.0                                        | 0.04 | 33.3                  | 28.8                   | 4.05                          |  | 07098                | 07196               | 10.8                | 0.43                  | 31.0 | 1.22                  | 29.0 | 1.14                  | 44.5          | 1.75                  | 47.0 | 1.85                     | 0.40                  | 1.49                  | 0.82                     | 7.65 | 5.25     | 1.46 |
|                     | 0.9835 | 62.000   | 2.4409 | 16.002   | 0.6300 | 16.566   | 0.6522 | 14.288   | 0.5625 | 1.6                           | 0.06 | 1.6                                        | 0.06 | 47.4                  | 40.6                   | 5.80                          |  | 17098                | 17244               | 12.7                | 0.50                  | 33.0 | 1.30                  | 30.5 | 1.20                  | 54.0          | 2.13                  | 57.0 | 2.24                     | 0.38                  | 1.57                  | 0.86                     | 10.9 | 7.15     | 1.53 |
| 25.000              | 0.9842 | 50.005   | 1.9687 | 13.495   | 0.5313 | 14.260   | 0.5614 | 9.525    | 0.3750 | 1.6                           | 0.06 | 1.0                                        | 0.04 | 33.3                  | 28.8                   | 4.05                          |  | 07097                | 07196               | 10.8                | 0.43                  | 31.0 | 1.22                  | 29.0 | 1.14                  | 44.5          | 1.75                  | 47.0 | 1.85                     | 0.40                  | 1.49                  | 0.82                     | 7.65 | 5.25     | 1.46 |
|                     | 0.9842 | 62.000   | 2.4409 | 16.002   | 0.6300 | 16.566   | 0.6522 | 14.288   | 0.5625 | 1.6                           | 0.06 | 1.6                                        | 0.06 | 47.4                  | 40.6                   | 5.80                          |  | 17098X               | 17244               | 12.7                | 0.50                  | 33.0 | 1.30                  | 30.5 | 1.20                  | 54.0          | 2.13                  | 57.0 | 2.24                     | 0.38                  | 1.57                  | 0.86                     | 10.9 | 7.15     | 1.53 |
|                     | 0.9842 | 66.421   | 2.6150 | 23.812   | 0.9375 | 25.433   | 1.0013 | 19.050   | 0.7500 | 2.0                           | 0.08 | 1.2                                        | 0.05 | 83.8                  | 75.2                   | 11.2                          |  | 2694X                | 2631                | 13.9                | 0.55                  | 33.0 | 1.30                  | 31.0 | 1.22                  | 58.0          | 2.28                  | 60.0 | 2.36                     | 0.25                  | 2.36                  | 1.30                     | 19.5 | 8.45     | 2.30 |
|                     | 0.9842 | 72.626   | 2.8593 | 30.162   | 1.1875 | 29.997   | 1.1810 | 23.812   | 0.9375 | 3.6                           | 0.14 | 3.2                                        | 0.13 | 98.6                  | 89.3                   | 13.3                          |  | 3188X                | 3120                | 20.3                | 0.80                  | 40.0 | 1.57                  | 35.0 | 1.38                  | 61.0          | 2.40                  | 67.0 | 2.64                     | 0.33                  | 1.80                  | 0.99                     | 23.0 | 13.1     | 1.76 |
| 25.400              | 1.0000 | 50.005   | 1.9687 | 13.495   | 0.5313 | 14.260   | 0.5614 | 9.525    | 0.3750 | 1.0                           | 0.04 | 1.0                                        | 0.04 | 33.3                  | 28.8                   | 4.05                          |  | 07100                | 07196               | 10.8                | 0.43                  | 30.5 | 1.20                  | 29.5 | 1.16                  | 44.5          | 1.75                  | 47.0 | 1.85                     | 0.40                  | 1.49                  | 0.82                     | 7.65 |          |      |

TS type  
d (25.400) ~ (28.575) mm  
(1.0000) ~ (1.1250) inch



|                                                               |   |                 |       |
|---------------------------------------------------------------|---|-----------------|-------|
| $P = XF_r + YF_a$<br>$P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$ |   |                 |       |
| $F_a / F_r \leq e$                                            |   | $F_a / F_r > e$ |       |
| X                                                             | Y | X               | Y     |
| 1                                                             | 0 | 0.4             | $Y_1$ |

Note) The Values of “e” “Y<sub>1</sub>” and “Y<sub>0</sub>” are given in the table below.

| Boundary dimensions |        |          |        |          |        |          |        |          |        |                               |      | Basic load ratings<br>(kN)                 |      | Fatigue<br>load limit |                        | Bearing No.                   |  | Load<br>center       |                     | Mounting dimensions |      |                       |      |                       |      | Con-<br>stant         | Axial load<br>factors |                       | Reference rating<br>(kN) |          | Factor                |                       |                          |      |          |
|---------------------|--------|----------|--------|----------|--------|----------|--------|----------|--------|-------------------------------|------|--------------------------------------------|------|-----------------------|------------------------|-------------------------------|--|----------------------|---------------------|---------------------|------|-----------------------|------|-----------------------|------|-----------------------|-----------------------|-----------------------|--------------------------|----------|-----------------------|-----------------------|--------------------------|------|----------|
| <i>d</i>            |        | <i>D</i> |        | <i>T</i> |        | <i>B</i> |        | <i>C</i> |        | <i>r</i> <sup>1)</sup> (min.) |      | <i>r</i> <sub>1</sub> <sup>1)</sup> (min.) |      | <i>C</i> <sub>r</sub> | <i>C</i> <sub>0r</sub> | (kN)<br><i>C</i> <sub>u</sub> |  | Cone<br>(Inner ring) | Cup<br>(Outer ring) | <i>a</i>            |      | <i>d</i> <sub>a</sub> |      | <i>d</i> <sub>b</sub> |      | <i>D</i> <sub>a</sub> |                       | <i>D</i> <sub>b</sub> |                          | <i>e</i> | <i>Y</i> <sub>1</sub> | <i>Y</i> <sub>0</sub> | (500 rpm for 3 000 Hrs.) |      | <i>K</i> |
| mm                  | inch   | mm       | inch   | mm       | inch   | mm       | inch   | mm       | inch   | mm                            | inch | mm                                         | inch |                       |                        |                               |  |                      |                     | mm                  | inch | mm                    | inch | mm                    | inch | mm                    | inch                  | mm                    | inch                     |          |                       |                       | mm                       | inch |          |
| 25.400              | 1.0000 | 63.500   | 2.5000 | 19.050   | 0.7500 | 20.638   | 0.8125 | 14.288   | 0.5625 | 0.8                           | 0.03 | 1.2                                        | 0.05 | 55.7                  | 50.7                   | 7.30                          |  | 15101                | 15250R              | 13.2                | 0.52 | 32.5                  | 1.28 | 31.5                  | 1.24 | 55.0                  | 2.17                  | 59.0                  | 2.32                     | 0.35     | 1.71                  | 0.94                  | 12.9                     | 7.75 | 1.67     |
|                     | 1.0000 | 63.500   | 2.5000 | 20.638   | 0.8125 | 20.638   | 0.8125 | 15.875   | 0.6250 | 3.6                           | 0.14 | 1.2                                        | 0.05 | 55.7                  | 50.7                   | 7.30                          |  | 15100                | 15250               | 15.0                | 0.59 | 38.0                  | 1.50 | 31.5                  | 1.24 | 55.0                  | 2.17                  | 59.0                  | 2.32                     | 0.35     | 1.71                  | 0.94                  | 12.9                     | 7.75 | 1.67     |
|                     | 1.0000 | 63.500   | 2.5000 | 20.638   | 0.8125 | 20.638   | 0.8125 | 15.875   | 0.6250 | 3.6                           | 0.14 | 1.6                                        | 0.06 | 55.7                  | 50.7                   | 7.30                          |  | 15100                | 15250X              | 15.0                | 0.59 | 38.0                  | 1.50 | 31.5                  | 1.24 | 55.0                  | 2.17                  | 59.0                  | 2.32                     | 0.35     | 1.71                  | 0.94                  | 12.9                     | 7.75 | 1.67     |
|                     | 1.0000 | 63.500   | 2.5000 | 20.638   | 0.8125 | 20.638   | 0.8125 | 15.875   | 0.6250 | 1.6                           | 0.06 | 1.6                                        | 0.06 | 55.7                  | 50.7                   | 7.30                          |  | 15102                | 15250X              | 15.0                | 0.59 | 34.0                  | 1.34 | 31.5                  | 1.24 | 55.0                  | 2.17                  | 59.0                  | 2.32                     | 0.35     | 1.71                  | 0.94                  | 12.9                     | 7.75 | 1.67     |
|                     | 1.0000 | 64.292   | 2.5312 | 21.432   | 0.8438 | 21.432   | 0.8438 | 16.670   | 0.6563 | 1.6                           | 0.06 | 1.6                                        | 0.06 | 69.1                  | 70.7                   | 9.90                          |  | M86643R              | M86610              | 18.0                | 0.71 | 38.0                  | 1.50 | 36.5                  | 1.44 | 54.0                  | 2.13                  | 61.0                  | 2.40                     | 0.55     | 1.10                  | 0.60                  | 16.0                     | 14.9 | 1.07     |
|                     | 1.0000 | 66.421   | 2.6150 | 23.812   | 0.9375 | 25.433   | 1.0013 | 19.050   | 0.7500 | 1.2                           | 0.05 | 1.2                                        | 0.05 | 83.8                  | 75.2                   | 11.2                          |  | 2687                 | 2631                | 13.9                | 0.55 | 33.5                  | 1.32 | 31.5                  | 1.24 | 58.0                  | 2.28                  | 60.0                  | 2.36                     | 0.25     | 2.36                  | 1.30                  | 19.5                     | 8.45 | 2.30     |
|                     | 1.0000 | 68.262   | 2.6875 | 22.225   | 0.8750 | 22.225   | 0.8750 | 17.462   | 0.6875 | 0.8                           | 0.03 | 1.6                                        | 0.06 | 63.7                  | 61.1                   | 8.80                          |  | 02473                | 02420               | 17.1                | 0.67 | 34.5                  | 1.36 | 33.5                  | 1.32 | 59.0                  | 2.32                  | 63.0                  | 2.48                     | 0.42     | 1.44                  | 0.79                  | 14.8                     | 10.5 | 1.41     |
|                     | 1.0000 | 68.262   | 2.6875 | 22.225   | 0.8750 | 22.225   | 0.8750 | 17.462   | 0.6875 | 0.8                           | 0.03 | 0.8                                        | 0.03 | 63.7                  | 61.1                   | 8.80                          |  | 02473                | 02421               | 17.1                | 0.67 | 34.5                  | 1.36 | 33.5                  | 1.32 | 59.0                  | 2.32                  | 63.0                  | 2.48                     | 0.42     | 1.44                  | 0.79                  | 14.8                     | 10.5 | 1.41     |
|                     | 1.0000 | 72.000   | 2.8346 | 19.000   | 0.7480 | 18.923   | 0.7450 | 15.875   | 0.6250 | 1.6                           | 0.06 | 1.6                                        | 0.06 | 69.8                  | 60.0                   | 8.85                          |  | 26100                | 26283               | 14.3                | 0.56 | 34.5                  | 1.36 | 32.5                  | 1.28 | 62.0                  | 2.44                  | 65.0                  | 2.56                     | 0.36     | 1.67                  | 0.92                  | 16.1                     | 9.90 | 1.62     |
|                     | 1.0000 | 72.233   | 2.8438 | 25.400   | 1.0000 | 25.400   | 1.0000 | 19.842   | 0.7812 | 0.8                           | 0.03 | 2.4                                        | 0.09 | 83.8                  | 87.4                   | 12.4                          |  | HM88630              | HM88610             | 20.7                | 0.81 | 39.5                  | 1.56 | 39.5                  | 1.56 | 60.0                  | 2.36                  | 69.0                  | 2.72                     | 0.55     | 1.10                  | 0.60                  | 19.6                     | 18.3 | 1.07     |
|                     | 1.0000 | 72.626   | 2.8593 | 24.608   | 0.9688 | 24.257   | 0.9550 | 17.462   | 0.6875 | 2.4                           | 0.09 | 1.6                                        | 0.06 | 77.3                  | 60.5                   | 8.75                          |  | 41100                | 41286               | 20.7                | 0.81 | 41.0                  | 1.61 | 36.5                  | 1.44 | 61.0                  | 2.40                  | 68.0                  | 2.68                     | 0.60     | 1.00                  | 0.55                  | 17.9                     | 18.4 | 0.97     |
|                     | 1.0000 | 72.626   | 2.8593 | 30.162   | 1.1875 | 29.997   | 1.1810 | 23.812   | 0.9375 | 0.8                           | 0.03 | 0.8                                        | 0.03 | 98.6                  | 89.3                   | 13.3                          |  | 3189                 | 3130                | 20.3                | 0.80 | 35.5                  | 1.40 | 35.0                  | 1.38 | 63.0                  | 2.48                  | 67.0                  | 2.64                     | 0.33     | 1.80                  | 0.99                  | 23.0                     | 13.1 | 1.76     |
|                     | 1.0000 | 72.626   | 2.8593 | 30.162   | 1.1875 | 29.997   | 1.1810 | 23.812   | 0.9375 | 2.0                           | 0.08 | 3.2                                        | 0.13 | 98.6                  | 89.3                   | 13.3                          |  | 3189X                | 3120                | 20.3                | 0.80 | 37.5                  | 1.48 | 35.0                  | 1.38 | 61.0                  | 2.40                  | 67.0                  | 2.64                     | 0.33     | 1.80                  | 0.99                  | 23.0                     | 13.1 | 1.76     |
|                     | 1.0000 | 80.000   | 3.1496 | 21.000   | 0.8268 | 22.403   | 0.8820 | 17.826   | 0.7018 | 0.8                           | 0.03 | 1.2                                        | 0.05 | 85.0                  | 74.8                   | 11.4                          |  | 338                  | 332                 | 15.1                | 0.59 | 36.5                  | 1.44 | 35.0                  | 1.38 | 73.0                  | 2.87                  | 75.0                  | 2.95                     | 0.27     | 2.20                  | 1.21                  | 19.6                     | 9.15 | 2.14     |
|                     | 1.0000 | 80.000   | 3.1496 | 24.176   | 0.9518 | 22.403   | 0.8820 | 21.000   | 0.8268 | 0.8                           | 0.03 | 2.4                                        | 0.09 | 85.0                  | 74.8                   | 11.4                          |  | 338                  | 332A                | 18.3                | 0.72 | 36.5                  | 1.44 | 35.0                  | 1.38 | 71.0                  | 2.80                  | 75.0                  | 2.95                     | 0.27     | 2.20                  | 1.21                  | 19.6                     | 9.15 | 2.14     |
| 25.987              | 1.0231 | 50.292   | 1.9800 | 14.224   | 0.5600 | 14.732   | 0.5800 | 10.668   | 0.4200 | 3.6                           | 0.14 | 1.2                                        | 0.05 | 39.1                  | 37.0                   | 5.15                          |  | L44645R              | L44610              | 10.8                | 0.43 | 36.5                  | 1.44 | 31.0                  | 1.22 | 44.5                  | 1.75                  | 47.0                  | 1.85                     | 0.37     | 1.60                  | 0.88                  | 8.95                     | 5.70 | 1.56     |
|                     | 1.0231 | 57.150   | 2.2500 | 17.462   | 0.6875 | 17.462   | 0.6875 | 13.495   | 0.5313 | 3.6                           | 0.14 | 1.6                                        | 0.06 | 47.2                  | 42.7                   | 6.10                          |  | 15579X               | 15520               | 12.7                | 0.50 | 38.5                  | 1.52 | 32.0                  | 1.26 | 51.0                  | 2.01                  | 53.0                  | 2.09                     | 0.35     | 1.73                  | 0.95                  | 10.8                     | 6.40 | 1.69     |
| 26.157              | 1.0298 | 63.500   | 2.5000 | 20.638   | 0.8125 | 20.638   | 0.8125 | 15.875   | 0.6250 | 0.8                           | 0.03 | 1.2                                        | 0.05 | 55.7                  | 50.7                   | 7.30                          |  | 15103                | 15250               | 15.0                | 0.59 | 33.5                  | 1.32 | 33.0                  | 1.30 | 55.0                  | 2.17                  | 59.0                  | 2.32                     | 0.35     | 1.71                  | 0.94                  | 12.9                     | 7.75 | 1.67     |
| 26.162              | 1.0300 | 66.421   | 2.6150 | 23.812   | 0.9375 | 25.433   | 1.0013 | 19.050   | 0.7500 | 1.6                           | 0.06 | 1.2                                        | 0.05 | 83.8                  | 75.2                   | 11.2                          |  | 2682                 | 2631                | 13.9                | 0.55 | 34.5                  | 1.36 | 32.0                  | 1.26 | 58.0                  | 2.28                  | 60.0                  | 2.36                     | 0.25     | 2.36                  | 1.30                  | 19.5                     | 8.45 | 2.30     |
| 26.975              | 1.0620 | 57.150   | 2.2500 | 19.845   | 0.7813 | 19.355   | 0.7620 | 15.875   | 0.6250 | 0.8                           | 0.03 | 1.6                                        | 0.06 | 60.8                  | 57.1                   | 8.25                          |  | 1987R                | 1922                | 13.9                | 0.55 | 32.5                  | 1.28 | 31.5                  | 1.24 | 51.0                  | 2.01                  | 53.5                  | 2.11                     | 0.33     | 1.82                  | 1.00                  | 14.0                     | 7.90 | 1.77     |
| 26.987              | 1.0625 | 72.626   | 2.8593 | 24.608   | 0.9688 | 24.257   | 0.9550 | 17.462   | 0.6875 | 2.4                           | 0.09 | 1.6                                        | 0.06 | 77.3                  | 60.5                   | 8.75                          |  | 41106                | 41286               | 20.7                | 0.81 | 42.0                  | 1.65 | 36.5                  | 1.44 | 61.0                  | 2.40                  | 68.0                  | 2.68                     | 0.60     | 1.00                  | 0.55                  | 17.9                     | 18.4 | 0.97     |
| 26.988              | 1.0625 | 50.292   | 1.9800 | 14.224   | 0.5600 | 14.732   | 0.5800 | 10.668   | 0.4200 | 3.6                           | 0.14 | 1.2                                        | 0.05 | 39.1                  | 37.0                   | 5.15                          |  | L44649R              | L44610              | 10.8                | 0.43 | 37.5                  | 1.48 | 31.0                  | 1.22 | 44.5                  | 1.75                  | 47.0                  | 1.85                     | 0.37     | 1.60                  | 0.88                  | 8.95                     | 5.70 | 1.56     |
|                     | 1.0625 | 57.150   | 2.2500 | 19.845   | 0.7813 | 19.355   | 0.7620 | 15.875   | 0.6250 | 3.2                           | 0.13 | 1.6                                        | 0.06 | 60.8                  | 57.1                   | 8.25                          |  | 1997XR               | 1922                | 13.9                | 0.55 | 37.5                  | 1.48 | 31.5                  | 1.24 | 51.0                  | 2.01                  | 53.5                  | 2.11                     | 0.33     | 1.82                  | 1.00                  | 14.0                     | 7.90 | 1.77     |
|                     | 1.0625 | 60.325   | 2.3750 | 19.842   | 0.7812 | 17.462   | 0.6875 | 15.875   | 0.6250 | 3.6                           | 0.14 | 1.6                                        | 0.06 | 47.2                  | 42.7                   | 6.10                          |  | 15580                | 15523               | 15.1                | 0.59 | 38.5                  | 1.52 | 32.0                  | 1.26 | 51.0                  | 2.01                  | 54.0                  | 2.13                     | 0.35     | 1.73                  | 0.95                  | 10.8                     | 6.40 | 1.69     |
|                     | 1.0625 | 62.000   | 2.4409 | 19.050   | 0.7500 | 20.638   | 0.8125 | 14.288   | 0.5625 | 0.8                           | 0.03 | 1.2                                        | 0.05 | 55.7                  | 50.7                   | 7.30                          |  | 15106                | 15245               | 13.2                | 0.52 | 33.5                  | 1.32 | 33.0                  | 1.30 | 55.0                  | 2.17                  | 58.0                  | 2.28                     | 0.35     | 1.71                  | 0.94                  | 12.9                     | 7.75 | 1.67     |
|                     | 1.0625 | 66.421   | 2.6150 | 23.812   | 0.9375 | 25.433   | 1.0013 | 19.050   | 0.7500 | 1.6                           | 0.06 | 1.2                                        | 0.05 | 83.8                  | 75.2                   | 11.2                          |  | 2688                 | 2631                | 13.9                | 0.55 | 35.0                  | 1.38 | 33.0                  | 1.30 | 58.0                  | 2.28                  | 60.0                  | 2.36                     | 0.25     | 2.36                  | 1.30                  | 19.5                     | 8.45 | 2.30     |
| 28.575              | 1.1250 | 57.150   | 2.2500 | 17.462   | 0.6875 | 17.462   | 0.6875 | 13.495   | 0.5313 | 3.6                           | 0.14 | 1.6                                        | 0.06 | 47.2                  | 42.7                   | 6.10                          |  | 15590                | 15520               | 12.7                | 0.50 | 39.0                  | 1.54 | 33.5                  | 1.32 | 51.0                  | 2.01                  | 53.0                  | 2.0                      |          |                       |                       |                          |      |          |