

# Single Row TS Series

| Bearing Dimensions<br>[mm/in.] |         | Load Ratings |                        |      |                        | Numéro d'article: |                        | Bearing Dimensions[mm/in.] |                        |  |                                      |  |        |       |         |         |                           | Geometry Factors                     |                               |                               |         | Bearing Weight<br>(kg lbs.) |       |      |        |                |                |                |  |
|--------------------------------|---------|--------------|------------------------|------|------------------------|-------------------|------------------------|----------------------------|------------------------|--|--------------------------------------|--|--------|-------|---------|---------|---------------------------|--------------------------------------|-------------------------------|-------------------------------|---------|-----------------------------|-------|------|--------|----------------|----------------|----------------|--|
| Bore d                         | O.D. D  | Width T      | Dynamic <sup>(1)</sup> |      | Factors <sup>(2)</sup> |                   | Dynamic <sup>(3)</sup> |                            | Factors <sup>(2)</sup> |  | Static                               |  | Inner  | Outer | Width B | Width C | Eff. Cr. a <sup>(4)</sup> | Shaft                                |                               |                               | Housing |                             |       | Cage |        | C <sub>1</sub> | C <sub>2</sub> | C <sub>9</sub> |  |
|                                |         |              | C <sub>1</sub>         | e    | Y                      | C <sub>90</sub>   | C <sub>200</sub>       | K                          | C                      | Max Shaft Fillet Radius R <sup>(5)</sup> | Backing Shoulder Dia. d <sub>s</sub> | Max Housing Fillet Radius r <sup>(5)</sup> |        |       |         |         |                           | Backing Shoulder Dia. D <sub>s</sub> | A <sub>1</sub> <sup>(6)</sup> | A <sub>2</sub> <sup>(7)</sup> |         |                             |       |      |        |                |                |                |  |
|                                |         |              | N lbf                  |      |                        |                   | N lbf                  |                            |                        |  | N lbf                                |  |        |       |         |         |                           |                                      |                               |                               |         |                             |       |      |        |                |                |                |  |
| 69.85                          | 120     | 29.794       | 143000                 | 0.38 | 1.56                   | 37200             | 24500                  | 1.52                       | 1.86000                | 482                                      | 473                                  | 29.007                                     | 29     | -4.1  | 3.5     | 77      | 83                        | 2                                    | 114                           | 107                           | 1.5     | 2.2                         | 77.2  | 23   | 0.1083 | 1.36           |                |                |  |
| 2.75                           | 4.7244  | 1.173        | 32200                  | 0.38 | 1.56                   | 8360              | 5500                   | 1.52                       | 41900                  | 482                                      | 473                                  | 1.142                                      | 1.1417 | -0.16 | 0.14    | 3.03    | 3.27                      | 0.08                                 | 4.49                          | 4.21                          | 0.05    | 0.09                        | 77.2  | 23   | 0.1083 | 2.99           |                |                |  |
| 69.85                          | 120     | 29.794       | 143000                 | 0.38 | 1.56                   | 37200             | 24500                  | 1.52                       | 186000                 | 482                                      | 472                                  | 29.007                                     | 24.237 | -4.1  | 3.5     | 77      | 83                        | 2                                    | 114                           | 107                           | 1.5     | 2.2                         | 77.2  | 23   | 0.1083 | 1.31           |                |                |  |
| 2.75                           | 4.7244  | 1.173        | 32200                  | 0.38 | 1.56                   | 8360              | 5500                   | 1.52                       | 41900                  | 482                                      | 472                                  | 1.142                                      | 0.9542 | -0.16 | 0.14    | 3.03    | 3.27                      | 0.08                                 | 4.49                          | 4.21                          | 0.05    | 0.09                        | 77.2  | 23   | 0.1083 | 2.88           |                |                |  |
| 69.85                          | 120     | 29.794       | 138000                 | 0.44 | 1.38                   | 35900             | 26800                  | 1.34                       | 197000                 | 33275                                    | 33472                                | 30.162                                     | 23.444 | -2.8  | 3.5     | 79      | 85                        | 0.8                                  | 113                           | 107                           | 2.2     | 1.1                         | 84.2  | 25.9 | 0.1162 | 1.35           |                |                |  |
| 2.75                           | 4.7244  | 1.173        | 31100                  | 0.44 | 1.38                   | 8060              | 6020                   | 1.34                       | 44300                  | 33275                                    | 33472                                | 1.1875                                     | 0.923  | -0.11 | 0.14    | 3.11    | 3.35                      | 0.03                                 | 4.45                          | 4.21                          | 0.08    | 0.05                        | 84.2  | 25.9 | 0.1162 | 2.97           |                |                |  |
| 69.85                          | 120     | 32.545       | 179000                 | 0.36 | 1.67                   | 46300             | 28600                  | 1.62                       | 249000                 | 47487                                    | 47420                                | 32.545                                     | 26.195 | -6.4  | 3.5     | 78      | 84                        | 3.3                                  | 114                           | 107                           | 2.2     | 2                           | 98.4  | 26.3 | 0.1153 | 1.46           |                |                |  |
| 2.75                           | 4.7244  | 1.2813       | 40200                  | 0.36 | 1.67                   | 10400             | 6420                   | 1.62                       | 56000                  | 47487                                    | 47420                                | 1.2813                                     | 1.0313 | -0.25 | 0.14    | 3.07    | 3.31                      | 0.13                                 | 4.49                          | 4.21                          | 0.08    | 0.08                        | 98.4  | 26.3 | 0.1153 | 3.2            |                |                |  |
| 69.85                          | 120     | 32.545       | 179000                 | 0.36 | 1.67                   | 46300             | 28600                  | 1.62                       | 249000                 | 47487                                    | 47420A                               | 32.545                                     | 26.195 | -6.4  | 3.5     | 78      | 84                        | 0.5                                  | 114                           | 109                           | 2.2     | 2                           | 98.4  | 26.3 | 0.1153 | 1.48           |                |                |  |
| 2.75                           | 4.7244  | 1.2813       | 40200                  | 0.36 | 1.67                   | 10400             | 6420                   | 1.62                       | 56000                  | 47487                                    | 47420A                               | 1.2813                                     | 1.0313 | -0.25 | 0.14    | 3.07    | 3.31                      | 0.02                                 | 4.49                          | 4.29                          | 0.08    | 0.08                        | 98.4  | 26.3 | 0.1153 | 3.24           |                |                |  |
| 69.85                          | 120.65  | 25.4         | 111000                 | 0.49 | 1.23                   | 28600             | 23900                  | 1.2                        | 166000                 | 29675                                    | 29630                                | 25.4                                       | 19.05  | 1     | 1.5     | 77      | 80                        | 3.3                                  | 113                           | 104                           | 2.3     | 1.5                         | 77.7  | 43.3 | 0.117  | 1.16           |                |                |  |
| 2.75                           | 4.75    | 1            | 24800                  | 0.49 | 1.23                   | 6440              | 5370                   | 1.2                        | 37200                  | 29675                                    | 29630                                | 1  | 0.75   | 0.04  | 0.06    | 3.03    | 3.15                      | 0.13                                 | 4.45                          | 4.09                          | 0.09    | 0.06                        | 77.7  | 43.3 | 0.117  | 2.57           |                |                |  |
| 69.85                          | 123.825 | 30.162       | 143000                 | 0.38 | 1.56                   | 37200             | 24500                  | 1.52                       | 186000                 | 482                                      | 472X                                 | 29.007                                     | 24.605 | -4.1  | 3.5     | 77      | 83                        | 3.3                                  | 115                           | 109                           | 1.5     | 2.2                         | 77.2  | 23   | 0.1083 | 1.45           |                |                |  |
| 2.75                           | 4.875   | 1.1875       | 32200                  | 0.38 | 1.56                   | 8360              | 5500                   | 1.52                       | 41900                  | 482                                      | 472X                                 | 1.142                                      | 0.9687 | -0.16 | 0.14    | 3.03    | 3.27                      | 0.13                                 | 4.53                          | 4.29                          | 0.05    | 0.09                        | 77.2  | 23   | 0.1083 | 3.19           |                |                |  |
| 69.85                          | 127     | 36.512       | 196000                 | 0.36 | 1.65                   | 50900             | 31700                  | 1.61                       | 262000                 | 566                                      | 563                                  | 36.17                                      | 28.575 | -8.1  | 3.5     | 78      | 85                        | 3.3                                  | 120                           | 112                           | 3.2     | 1.8                         | 101.3 | 24   | 0.1167 | 1.9            |                |                |  |
| 2.75                           | 5       | 1.4375       | 44100                  | 0.36 | 1.65                   | 11400             | 7130                   | 1.61                       | 58900                  | 566                                      | 563                                  | 1.424                                      | 1.125  | -0.32 | 0.14    | 3.07    | 3.35                      | 0.13                                 | 4.72                          | 4.41                          | 0.12    | 0.08                        | 101.3 | 24   | 0.1167 | 4.2            |                |                |  |
| 69.85                          | 127     | 36.512       | 196000                 | 0.36 | 1.65                   | 50900             | 31700                  | 1.61                       | 262000                 | 566-S                                    | 563                                  | 36.17                                      | 28.575 | -8.1  | 0.8     | 78      | 79                        | 3.3                                  | 120                           | 112                           | 3.2     | 1.8                         | 101.3 | 24   | 0.1167 | 1.91           |                |                |  |
| 2.75                           | 5       | 1.4375       | 44100                  | 0.36 | 1.65                   | 11400             | 7130                   | 1.61                       | 58900                  | 566-S                                    | 563                                  | 1.424                                      | 1.125  | -0.32 | 0.03    | 3.07    | 3.11                      | 0.13                                 | 4.72                          | 4.41                          | 0.12    | 0.08                        | 101.3 | 24   | 0.1167 | 4.23           |                |                |  |
| 69.85                          | 127     | 36.512       | 229000                 | 0.5  | 1.2                    | 59400             | 51100                  | 1.16                       | 256000                 | HM813846                                 | HM813811                             | 36.512                                     | 26.988 | -3.8  | 3.5     | 82      | 89                        | 1.5                                  | 121                           | 113                           | 4       | 1.3                         | 91.7  | 22.9 | 0.1252 | 1.9            |                |                |  |
| 2.75                           | 5       | 1.4375       | 51500                  | 0.5  | 1.2                    | 13400             | 11500                  | 1.16                       | 57600                  | HM813846                                 | HM813811                             | 1.4375                                     | 1.0625 | -0.15 | 0.14    | 3.23    | 3.5                       | 0.06                                 | 4.76                          | 4.45                          | 0.15    | 0.06                        | 91.7  | 22.9 | 0.1252 | 4.19           |                |                |  |
| 69.85                          | 127     | 36.512       | 229000                 | 0.5  | 1.2                    | 59400             | 51100                  | 1.16                       | 256000                 | HM813846                                 | HM813810                             | 36.512                                     | 26.988 | -3.8  | 3.5     | 82      | 89                        | 3.3                                  | 121                           | 111                           | 4       | 1.3                         | 91.7  | 22.9 | 0.1252 | 1.9            |                |                |  |
| 2.75                           | 5       | 1.4375       | 51500                  | 0.5  | 1.2                    | 13400             | 11500                  | 1.16                       | 57600                  | HM813846                                 | HM813810                             | 1.4375                                     | 1.0625 | -0.15 | 0.14    | 3.23    | 3.5                       | 0.13                                 | 4.76                          | 4.37                          | 0.15    | 0.06                        | 91.7  | 22.9 | 0.1252 | 4.19           |                |                |  |
| 69.85                          | 130.175 | 41.275       | 276000                 | 0.36 | 1.66                   | 71600             | 44400                  | 1.61                       | 298000                 | 643                                      | 633                                  | 41.275                                     | 31.75  | -11.2 | 3.5     | 80      | 86                        | 3.3                                  | 124                           | 116                           | 4.1     | 2                           | 106.4 | 21   | 0.0814 | 2.27           |                |                |  |
| 2.75                           | 5.125   | 1.625        | 62100                  | 0.36 | 1.66                   | 16100             | 9980                   | 1.61                       | 67000                  | 643                                      | 633                                  | 1.625                                      | 1.25   | -0.44 | 0.14    | 3.15    | 3.39                      | 0.13                                 | 4.88                          | 4.57                          | 0.16    | 0.08                        | 106.4 | 21   | 0.0814 | 5              |                |                |  |
| 69.85                          | 136.525 | 41.275       | 276000                 | 0.36 | 1.66                   | 71600             | 44400                  | 1.61                       | 298000                 | 643                                      | 632                                  | 41.275                                     | 31.75  | -11.2 | 3.5     | 80      | 86                        | 3.3                                  | 125                           | 118                           | 4.1     | 2                           | 106.4 | 21   | 0.0814 | 2.61           |                |                |  |
| 2.75                           | 5.375   | 1.625        | 62100                  | 0.36 | 1.66                   | 16100             | 9980                   | 1.61                       | 67000                  | 643                                      | 632                                  | 1.625                                      | 1.25   | -0.44 | 0.14    | 3.15    | 3.39                      | 0.13                                 | 4.92                          | 4.65                          | 0.16    | 0.08                        | 106.4 | 21   | 0.0814 | 5.75           |                |                |  |
| 69.85                          | 139.7   | 46.038       | 319000                 | 0.47 | 1.27                   | 82700             | 67000                  | 1.24                       | 405000                 | H715344                                  | H715310                              | 46.038                                     | 36.512 | -8.6  | 3.5     | 87      | 93                        | 3.3                                  | 133                           | 120                           | 4.1     | 2                           | 147.1 | 33.5 | 0.0993 | 3.35           |                |                |  |
| 2.75                           | 5.5     | 1.8125       | 71700                  | 0.47 | 1.27                   | 18600             | 15100                  | 1.24                       | 91000                  | H715344                                  | H715310                              | 1.8125                                     | 1.4375 | -0.34 | 0.14    | 3.43    | 3.66                      | 0.13                                 | 5.24                          | 4.72                          | 0.16    | 0.08                        | 147.1 | 33.5 | 0.0993 | 7.4            |                |                |  |
| 69.85                          | 146.05  | 36.512       | 174000                 | 0.94 | 0.64                   | 45000             | 72300                  | 0.62                       | 202000                 | HM914545                                 | HM914510                             | 33.338                                     | 23.812 | 12.4  | 4       | 86.1    | 95                        | 3.3                                  | 139                           | 122                           | 7.1     | 4.6                         | 71.5  | 21.8 | 0.0943 | 2.57           |                |                |  |
| 2.75                           | 5.75    | 1.4375       | 39100                  | 0.94 | 0.64                   | 10100             | 16200                  | 0.62                       | 45400                  | HM914545                                 | HM914510                             | 1.3125                                     | 0.9375 | 0.49  | 0.16    | 3.38    | 3.74                      | 0.13                                 | 5.47                          | 4.8                           | 0.28    | 0.18                        | 71.5  | 21.8 | 0.0943 | 5.66           |                |                |  |