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## Rolling bearings — Insert bearings and eccentric locking collars — Boundary dimensions and tolerances —

### AMENDMENT 1: Diameter series 3

*Roulements — Roulements «insert» et bagues de blocage  
excentriques — Dimensions d'encombrement et tolérances —*

*AMENDEMENT 1 Série de diamètres 3*

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## Foreword

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Amendment 1 to ISO 9628:2006 was prepared by Technical Committee ISO/TC 4, *Rolling bearings*, Subcommittee SC 6, *Insert bearings and accessories*.

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# Rolling bearings — Insert bearings and eccentric locking collars — Boundary dimensions and tolerances —

## AMENDMENT 1: Diameter series 3

### *Page 1, Normative references*

Delete the date “1998” from ISO 15.

### *Page 1, Clause 4*

In the second paragraph, replace “in Tables 1 to 8” with “in Tables 1 to 12”.

### *Page 6, 5.3*

Replace “to the diameter series 2 of ISO 15:1998” with “to either diameter series 2 or diameter series 3 of ISO 15”.

### *Page 6, 5.4*

In the first sentence of the first paragraph, replace “dimension series 02 of ISO 15:1998” with “dimension series 02 or dimension series 03 of ISO 15”.

### *Page 6, 5.5*

In the second sentence, replace “to dimension series 02 in ISO 15:1998” with “to either dimension series 02 or dimension series 03 of ISO 15”.

### *Page 6, Clause 6*

In the first sentence, replace “given in Tables 1 to 5” with “given in Tables 1 to 5, 9 and 10”.

### *Page 17, Clause 7*

In the first sentence, replace “given in Tables 6 and 7, respectively” with “given in Tables 6, 7 and 11”.

### *Page 17, Clause 8*

In the second paragraph, replace “given in Table 8” with “given in Tables 8 and 12”.

### *Tables 1 to 8*

At the end of the titles of Tables 1 to 8, add “— Diameter series 2”.

After Table 8, insert the following new Tables 9 to 12.

**Table 9 — Insert bearings — Wide overall width — Axially extending eccentric locking collar — Diameter series 3 (see Figure 1)**

| $d$                                       |                                         | $D$ | $B_1$ | $(S)$ | $S_1$ | $C^a$ |      | $C_1^b$ | $C_2^b$ |
|-------------------------------------------|-----------------------------------------|-----|-------|-------|-------|-------|------|---------|---------|
| mm                                        | in                                      | mm  | max.  | mm    | max.  | min.  | max. | mm      | mm      |
|                                           |                                         |     | mm    |       | mm    | mm    |      |         |         |
| 25                                        | —                                       | 62  | 46,8  | 16,7  | 30,1  | 17    | 24   | 5,6     | 3       |
| 30<br>30,162                              | —<br>1-3/16                             | 72  | 50,2  | 17,5  | 32,7  | 19    | 26   | 6       | 3       |
| 31,75<br>33,338<br>34,925<br>35<br>36,512 | 1-1/4<br>1-5/16<br>1-3/8<br>—<br>1-7/16 | 80  | 51,6  | 18,3  | 33,3  | 21    | 28   | 6,7     | 3,5     |
| 38,1<br>40                                | 1-1/2<br>—                              | 90  | 57,2  | 19,8  | 37,4  | 23    | 30   | 7,5     | 4       |
| 41,275<br>42,862<br>44,45<br>45           | 1-5/8<br>1-11/16<br>1-3/4<br>—          | 100 | 58,7  | 19,8  | 38,9  | 25    | 33   | 8,3     | 4       |
| 47,625<br>49,212<br>50                    | 1-7/8<br>1-15/16<br>—                   | 110 | 66,7  | 24,6  | 42,1  | 27    | 35   | 9,5     | 4,5     |
| 50,8<br>52,388<br>55                      | 2<br>2-1/16<br>—                        | 120 | 73    | 27,8  | 45,2  | 29    | 37   | 10,3    | 5       |
| 60<br>61,912                              | —<br>2-7/16                             | 130 | 79,4  | 31    | 48,4  | 31    | 39   | 11,1    | 5       |
| 63,5<br>65                                | 2-1/2<br>—                              | 140 | 85,7  | 32,5  | 53,2  | 33    | 41   | 11,9    | 5,5     |
| 68,262<br>70                              | 2-11/16<br>—                            | 150 | 92,1  | 34,1  | 58    | 35    | 43   | 12,7    | 6       |
| 74,612<br>75<br>76,2                      | 2-15/16<br>—<br>3                       | 160 | 100   | 37,3  | 62,7  | 37    | 46   | 13,5    | 6       |

Table 9 (continued)

| $d$                     |                   | $D$ | $B_1$ | $(S)$ | $S_1$ | $C^a$ |      | $C_1^b$ | $C_2^b$ |
|-------------------------|-------------------|-----|-------|-------|-------|-------|------|---------|---------|
|                         |                   |     | max.  |       | max.  | min.  | max. |         |         |
| mm                      | in                | mm  | mm    | mm    | mm    | mm    |      | mm      | mm      |
| 80<br>80,962            | —<br>3-3/16       | 170 | 106,4 | 40,5  | 65,9  | 39    | 48   | 14,3    | 6,5     |
| 85                      | —                 | 180 | 109,5 | 42    | 67,5  | 41    | 50   | 15,1    | 7       |
| 87,312<br>90            | 3-7/16<br>—       | 190 | 115,9 | 42,1  | 73,8  | 43    | 52   | 15,9    | 7       |
| 95                      | —                 | 200 | 122,3 | 38,9  | 83,4  | 45    | 54   | 16,7    | 7,5     |
| 100<br>100,012<br>101,6 | —<br>3-15/16<br>4 | 215 | 129,6 | 50    | 79,6  | 47    | 58   | 18,3    | 8       |
| 105                     | —                 | 225 | 139,7 | 48,4  | 91,3  | 49    | 60   | 19,1    | 8       |
| 110                     | —                 | 240 | 141,3 | 49,2  | 92,1  | 50    | 62   | 20,6    | 8,5     |

<sup>a</sup> The minimum and maximum widths are not tolerances; they indicate a range within which the nominal value shall fall.

<sup>b</sup> The relubrication means in the outer ring, if used, shall be located on one or both sides of the outer ring zones defined by the dimensions  $C_1$  and  $C_2$  in such a way that lubricant satisfactorily feeds into the bearing from a housing bore groove covering the zone.

**Table 10 — Insert bearings — Intermediate overall width — Locking device not axially extending — Diameter series 3** (see Figures 2 and 3)

| $d$                                       |                                         | $D$ | $B$  | $(S)$ | $S_1$ | $C^a$ |      | $C_1^b$ | $C_2^b$ |
|-------------------------------------------|-----------------------------------------|-----|------|-------|-------|-------|------|---------|---------|
| mm                                        | in                                      | mm  | max. | mm    | max.  | min.  | max. | mm      | mm      |
|                                           |                                         |     | mm   |       | mm    | mm    |      |         |         |
| 25                                        | —                                       | 62  | 38   | 15    | 23    | 17    | 24   | 5,6     | 3       |
| 30<br>30,162                              | —<br>1-3/16                             | 72  | 43   | 17    | 26    | 19    | 26   | 6       | 3       |
| 31,75<br>33,338<br>34,925<br>35<br>36,512 | 1-1/4<br>1-5/16<br>1-3/8<br>—<br>1-7/16 | 80  | 48   | 19    | 29    | 21    | 28   | 6,7     | 3,5     |
| 38,1<br>40                                | 1-1/2<br>—                              | 90  | 52   | 19    | 33    | 23    | 30   | 7,5     | 4       |
| 41,275<br>42,862<br>44,45<br>45           | 1-5/8<br>1-11/16<br>1-3/4<br>—          | 100 | 57   | 22    | 35    | 25    | 33   | 8,3     | 4       |
| 47,625<br>49,212<br>50                    | 1-7/8<br>1-15/16<br>—                   | 110 | 61   | 22    | 39    | 27    | 35   | 9,5     | 4,5     |
| 50,8<br>52,388<br>55                      | 2<br>2-1/16<br>—                        | 120 | 66   | 25    | 41    | 29    | 37   | 10,3    | 5       |
| 60<br>61,912                              | —<br>2-7/16                             | 130 | 71   | 26    | 45    | 31    | 39   | 11,1    | 5       |
| 63,5<br>65                                | 2-1/2<br>—                              | 140 | 75   | 30    | 45    | 33    | 41   | 11,9    | 5,5     |
| 68,262<br>70                              | 2-11/16<br>—                            | 150 | 78   | 33    | 45    | 35    | 43   | 12,7    | 6       |
| 74,612<br>75<br>76,2                      | 2-15/16<br>—<br>3                       | 160 | 82   | 32    | 50    | 37    | 46   | 13,5    | 6       |
| 80<br>80,962                              | —<br>3-3/16                             | 170 | 86   | 34    | 52    | 39    | 48   | 14,3    | 6,5     |

Table 10 (continued)

| $d$     |         | $D$ | $B$  | $(S)$ | $S_1$ | $C^a$ |      | $C_1^b$ | $C_2^b$ |
|---------|---------|-----|------|-------|-------|-------|------|---------|---------|
| mm      | in      | mm  | max. | mm    | max.  | min.  | max. | mm      | mm      |
|         |         |     | mm   |       | mm    | mm    |      |         |         |
| 85      | —       | 180 | 96   | 40    | 56    | 41    | 50   | 15,1    | 7       |
| 87,312  | 3-7/16  | 190 | 96   | 40    | 56    | 43    | 52   | 15,9    | 7       |
| 90      | —       |     |      |       |       |       |      |         |         |
| 95      | —       | 200 | 103  | 41    | 62    | 45    | 54   | 16,7    | 7,5     |
| 100     | —       | 215 | 108  | 42    | 66    | 47    | 58   | 18,3    | 8       |
| 100,012 | 3-15/16 |     |      |       |       |       |      |         |         |
| 101,6   | 4       |     |      |       |       |       |      |         |         |
| 105     | —       | 225 | 112  | 44    | 68    | 49    | 60   | 19,1    | 8       |
| 110     | —       | 240 | 117  | 46    | 71    | 50    | 62   | 20,6    | 8,5     |
| 120     | —       | 260 | 126  | 51    | 75    | 55    | 66   | 20,6    | 9       |
| 130     | —       | 280 | 135  | 54    | 81    | 58    | 72   | 22,2    | 9,5     |
| 140     | —       | 300 | 145  | 59    | 86    | 62    | 76   | 23,8    | 10,5    |

<sup>a</sup> The minimum and maximum widths are not tolerances; they indicate a range within which the nominal value shall fall.

<sup>b</sup> The relubrication means in the outer ring, if used, shall be located on one or both sides of the outer ring zones defined by the dimensions  $C_1$  and  $C_2$  in such a way that lubricant satisfactorily feeds into the bearing from a housing bore groove covering the zone.

Table 11 — Tolerances for bearings — Diameter series 3

| $d$    |        | $\Delta_{dmp}$ |     | $V_{dsp}$ |
|--------|--------|----------------|-----|-----------|
| $>$    | $\leq$ | high           | low | max.      |
| mm     |        | $\mu m$        |     | $\mu m$   |
| 24     | 30,162 | +18            | 0   | 12        |
| 30,162 | 50     | +21            | 0   | 14        |
| 50     | 80,962 | +24            | 0   | 16        |
| 80,962 | 120    | +28            | 0   | 19        |
| 120    | 140    | +33            | 0   | 22        |

NOTE Tolerance values are applicable to finished bores, whether or not the bore is plated or treated.