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**Rolling bearings — Tapered roller  
bearings — Boundary dimensions  
and series designations**

*Roulements — Roulements à rouleaux coniques — Dimensions  
d'encombrement et désignation des séries*

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Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 355 was prepared by Technical Committee ISO/TC 4, *Rolling bearings*, Subcommittee SC 9, *Tapered roller bearings*.

This second edition cancels and replaces the first edition (ISO 355:1977), which has been technically revised. ISO 355:1977/Add. 1:1980 and ISO 355:1977/Add. 2:1980 have been incorporated.

# Rolling bearings — Tapered roller bearings — Boundary dimensions and series designations

## 1 Scope

This International Standard specifies bearing and subunit boundary dimensions for complete single-row and double-row tapered roller bearings. It also specifies the flange dimensions of flanged outer rings for a selection of these bearings. A series designation for each bearing is also specified.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 492:2002, *Rolling bearings — Radial bearings — Tolerances*

ISO 582:1995, *Rolling bearings — Chamfer dimensions — Maximum values*

ISO 1132-1:2000, *Rolling bearings — Tolerances — Part 1: Terms and definitions*

ISO 5593:1997, *Rolling bearings — Vocabulary*

ISO 15241:2001, *Rolling bearings — Symbols for quantities*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 1132-1 and ISO 5593 apply.

## 4 Symbols

For the purposes of this document, the symbols given in ISO 15241 and the following apply.

The symbols shown in Figures 1 to 4 and the values given in Tables 4 to 16 denote nominal dimensions unless specified otherwise.

$B$  inner ring width, single-row bearing

$B_1$  bearing width, double-row bearing

$C$  outer ring width, single-row bearing

$C_1$  width of double outer ring, or width over two single outer rings and spacer

$C_2$  width of outer ring flange

|               |                                                           |
|---------------|-----------------------------------------------------------|
| $D$           | outside diameter of outer ring                            |
| $D_1$         | outside diameter of outer ring flange                     |
| $d$           | bore diameter of inner ring                               |
| $E$           | inside diameter of outer ring back face                   |
| $h_1$         | height of outer ring flange                               |
| $r$           | chamfer dimension of inner ring back face                 |
| $r_{s \min}$  | smallest single chamfer dimension of inner ring back face |
| $r_1$         | chamfer dimension of outer ring back face                 |
| $r_{1s \min}$ | smallest single chamfer dimension of outer ring back face |
| $r_2$         | chamfer dimension of inner ring and outer ring front face |
| $T$           | bearing width, single-row bearing                         |
| $\alpha$      | contact angle                                             |

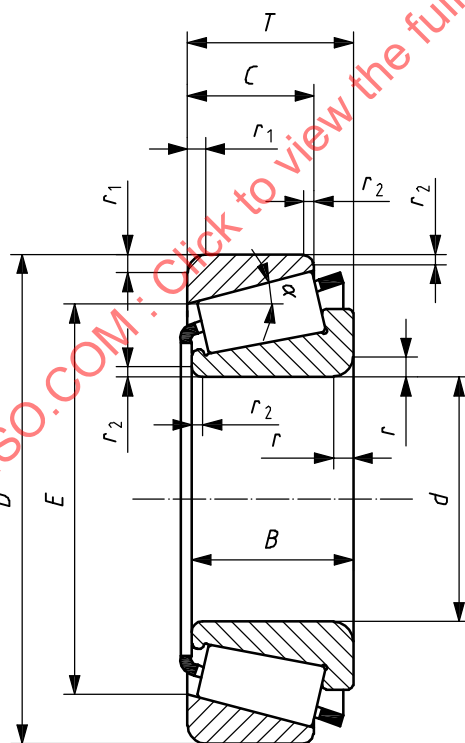
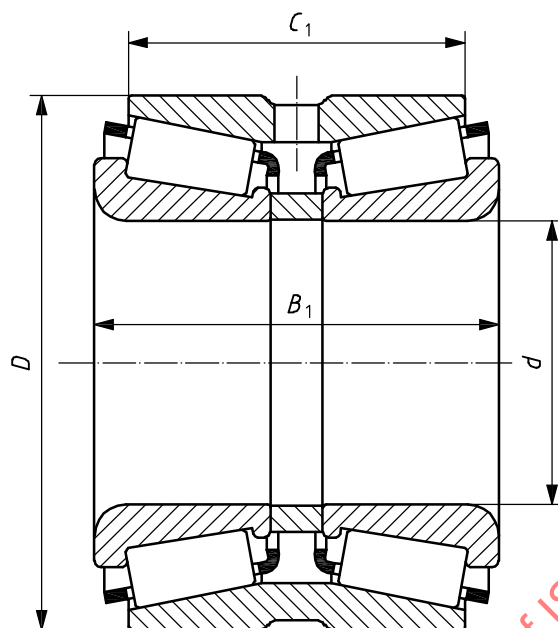
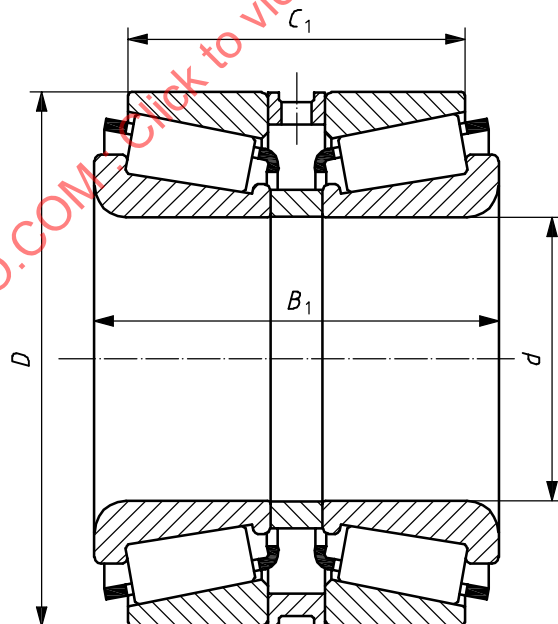


Figure 1 — Single-row tapered roller bearing



NOTE The double-row bearing outer ring may, or may not, have a lubrication groove and holes.

**Figure 2 — Double-row tapered roller bearing with double outer ring**



NOTE The double-row bearing outer spacer may, or may not, have a lubrication groove and holes.

**Figure 3 — Double-row tapered roller bearing with two single outer rings and spacer**

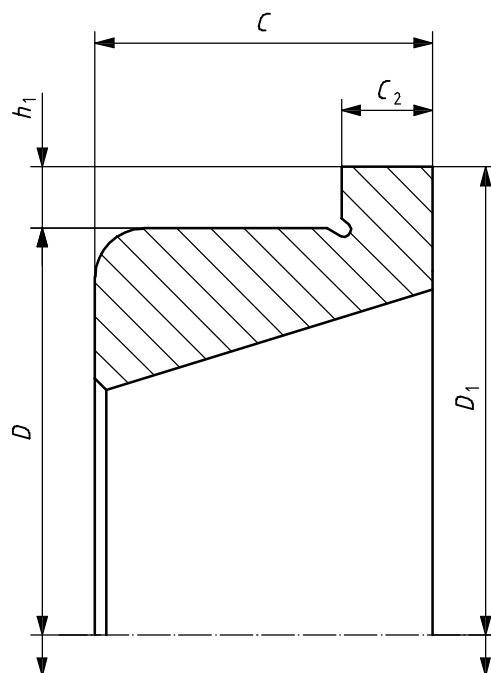


Figure 4 — Single-row tapered roller bearing with flanged outer ring

## 5 Series designations

Each bearing whose dimensions are given in this International Standard is referred to a dimension series. The dimension series is designated by a combination of three symbols, for example 2AC.

The first symbol is a numeric character, which represents a range of contact angles: contact angle series.

The second symbol is an alphabetic character, which represents a range of numeric values for the outside diameter to bore relationship: diameter series.

The third symbol is an alphabetic character, which represents a range of numeric values for the width to height relationship of a single-row bearing: width series.

The designations for the standardized bearings conform generally with the angle ranges and the numeric values for the relationships given in Tables 1 to 3. In some cases, an exception has been made to avoid the condition that the same designation be used for two different bearings with the same bore diameter.

The series designations shown in this clause shall not be applied to bearings other than those specified in Clause 6.

Table 1 — Designation of contact angle series

| Designation of contact angle series | $\alpha$                |         |
|-------------------------------------|-------------------------|---------|
|                                     | $>$                     | $\leq$  |
| 1                                   | Reserved for future use |         |
| 2                                   | 10°                     | 13° 52' |
| 3                                   | 13° 52'                 | 15° 59' |
| 4                                   | 15° 59'                 | 18° 55' |
| 5                                   | 18° 55'                 | 23°     |
| 6                                   | 23°                     | 27°     |
| 7                                   | 27°                     | 30°     |

Table 2 — Designation of diameter series

| Designation of diameter series | $\frac{D}{d^{0,77}}$    |     |
|--------------------------------|-------------------------|-----|
|                                | >                       | ≤   |
| A                              | Reserved for future use |     |
| B                              | 3,4                     | 3,8 |
| C                              | 3,8                     | 4,4 |
| D                              | 4,4                     | 4,7 |
| E                              | 4,7                     | 5   |
| F                              | 5                       | 5,6 |
| G                              | 5,6                     | 7   |

Table 3 — Designation of width series

| Designation of width series | $\frac{T}{(D-d)^{0,95}}$ |      |
|-----------------------------|--------------------------|------|
|                             | >                        | ≤    |
| A                           | Reserved for future use  |      |
| B                           | 0,5                      | 0,68 |
| C                           | 0,68                     | 0,8  |
| D                           | 0,8                      | 0,88 |
| E                           | 0,88                     | 1    |

## 6 Boundary dimensions

### 6.1 General

The bearing and subunit boundary dimensions given in Tables 4 to 16 are grouped by contact angle series and then listed in ascending order of bore, outside diameter and bearing width. Tolerances for the dimensions are given in ISO 492. Maximum chamfer dimensions are given in ISO 582.

No values are given in this International Standard for the inner ring and outer ring front face chamfer dimension,  $r_2$ , however, the front face corners shall not be sharp.

### 6.2 Single-row tapered roller bearings

Boundary dimensions for contact angle series 2, 3, 4, 5 and 7 are given in Tables 4, 5, 6, 7 and 8 respectively.

**Table 4 — Contact angle series 2**

Dimensions in millimetres

| $d$ | $D$ | $T$   | $B$  | $r_{s \min}^a$ | $C$  | $r_{1s \min}^a$ | $\alpha$    | $E$    | Dimension series |
|-----|-----|-------|------|----------------|------|-----------------|-------------|--------|------------------|
| 15  | 42  | 14,25 | 13   | 1              | 11   | 1               | 10° 45' 29" | 33,272 | 2FB              |
| 17  | 40  | 13,25 | 12   | 1              | 11   | 1               | 12° 57' 10" | 31,408 | 2DB              |
| 17  | 40  | 17,25 | 16   | 1              | 14   | 1               | 11° 45'     | 31,17  | 2DD              |
| 17  | 47  | 15,25 | 14   | 1              | 12   | 1               | 10° 45' 29" | 37,42  | 2FB              |
| 17  | 47  | 20,25 | 19   | 1              | 16   | 1               | 10° 45' 29" | 36,09  | 2FD              |
| 20  | 37  | 12    | 12   | 0,3            | 9    | 0,3             | 12°         | 29,621 | 2BD              |
| 20  | 45  | 17    | 17,5 | 1              | 13,5 | 1               | 12°         | 35,815 | 2DC              |
| 20  | 47  | 15,25 | 14   | 1              | 12   | 1               | 12° 57' 10" | 37,304 | 2DB              |
| 20  | 47  | 19,25 | 18   | 1              | 15   | 1               | 12° 28'     | 35,81  | 2DD              |
| 20  | 50  | 22    | 22   | 2              | 18,5 | 1,5             | 12° 30'     | 38,063 | 2ED              |
| 20  | 52  | 16,25 | 15   | 1,5            | 13   | 1,5             | 11° 18' 36" | 41,318 | 2FB              |
| 20  | 52  | 22,25 | 21   | 1,5            | 18   | 1,5             | 11° 18' 36" | 39,518 | 2FD              |
| 22  | 40  | 12    | 12   | 0,3            | 9    | 0,3             | 12°         | 32,665 | 2BC              |
| 22  | 47  | 17    | 17,5 | 1              | 13,5 | 1               | 12° 35'     | 37,542 | 2CC              |
| 22  | 52  | 22    | 22   | 2              | 18,5 | 1,5             | 12° 14'     | 40,548 | 2ED              |
| 25  | 42  | 12    | 12   | 0,3            | 9    | 0,3             | 12°         | 34,608 | 2BD              |
| 25  | 47  | 17    | 17   | 0,6            | 14   | 0,6             | 10° 55'     | 38,278 | 2CE              |
| 25  | 50  | 17    | 17,5 | 1,5            | 13,5 | 1               | 13° 30'     | 40,205 | 2CC              |
| 25  | 52  | 19,25 | 18   | 1              | 16   | 1               | 13° 30'     | 41,331 | 2CD              |
| 25  | 52  | 22    | 22   | 1              | 18   | 1               | 13° 10'     | 40,441 | 2DE <sup>b</sup> |
| 25  | 58  | 26    | 26   | 2              | 21   | 1,5             | 12° 30'     | 44,805 | 2EE              |
| 25  | 62  | 18,25 | 17   | 1,5            | 15   | 1,5             | 11° 18' 36" | 50,637 | 2FB              |
| 25  | 62  | 25,25 | 24   | 1,5            | 20   | 1,5             | 11° 18' 36" | 48,637 | 2FD              |
| 28  | 45  | 12    | 12   | 0,3            | 9    | 0,3             | 12°         | 37,639 | 2BD              |
| 28  | 55  | 19    | 19,5 | 1,5            | 15,5 | 1,5             | 12° 10'     | 44,888 | 2CD              |
| 28  | 58  | 24    | 24   | 1              | 19   | 1               | 12° 45'     | 45,846 | 2DE              |
| 28  | 65  | 27    | 27   | 2              | 22   | 2               | 12° 45'     | 50,33  | 2ED              |
| 30  | 47  | 12    | 12   | 0,3            | 9    | 0,3             | 12°         | 39,617 | 2BD              |
| 30  | 55  | 20    | 20   | 1              | 16   | 1               | 11°         | 45,283 | 2CE              |
| 30  | 58  | 19    | 19,5 | 1,5            | 15,5 | 1,5             | 12° 50'     | 47,309 | 2CD              |
| 30  | 62  | 25    | 25   | 1              | 19,5 | 1               | 12° 50'     | 49,524 | 2DE              |
| 30  | 68  | 29    | 29   | 2              | 24   | 2               | 12° 28'     | 52,696 | 2EE              |
| 30  | 72  | 20,75 | 19   | 1,5            | 16   | 1,5             | 11° 51' 35" | 58,287 | 2FB              |
| 30  | 72  | 28,75 | 27   | 1,5            | 23   | 1,5             | 11° 51' 35" | 55,767 | 2FD              |

Table 4 (continued)

Dimensions in millimetres

| $d$ | $D$ | $T$   | $B$  | $r_{s \min}^a$ | $C$  | $r_{1s \min}^a$ | $\alpha$    | $E$     | Dimension series |
|-----|-----|-------|------|----------------|------|-----------------|-------------|---------|------------------|
| 32  | 52  | 14    | 15   | 0,6            | 10   | 0,6             | 12°         | 44,261  | 2BD              |
| 32  | 62  | 21    | 21   | 1,5            | 17   | 1,5             | 12° 30'     | 50,554  | 2CD              |
| 32  | 65  | 26    | 26   | 1              | 20,5 | 1               | 13°         | 51,791  | 2DE              |
| 32  | 72  | 29    | 29   | 2              | 24   | 2               | 12° 41' 30" | 56,151  | 2ED              |
| 35  | 55  | 14    | 14   | 0,6            | 11,5 | 0,6             | 11°         | 47,22   | 2BD              |
| 35  | 62  | 21    | 21   | 1              | 17   | 1               | 11° 30'     | 51,32   | 2CE              |
| 35  | 68  | 23    | 23   | 2              | 18,5 | 2               | 12° 35'     | 55,4    | 2DD              |
| 35  | 72  | 28    | 28   | 1,5            | 22   | 1,5             | 13° 15'     | 57,186  | 2DE              |
| 35  | 78  | 33    | 32,5 | 2,5            | 27   | 2               | 12° 12'     | 61,925  | 2EE <sup>b</sup> |
| 35  | 80  | 22,75 | 21   | 2              | 18   | 1,5             | 11° 51' 35" | 65,769  | 2FB              |
| 35  | 80  | 32,75 | 31   | 2              | 25   | 1,5             | 11° 51' 35" | 62,829  | 2FE              |
| 40  | 62  | 15    | 15   | 0,6            | 12   | 0,6             | 10° 55'     | 53,388  | 2BC              |
| 40  | 68  | 22    | 22   | 1              | 18   | 1               | 10° 40'     | 57,29   | 2BE <sup>b</sup> |
| 40  | 75  | 24    | 24   | 2              | 19,5 | 2               | 12° 07'     | 62,155  | 2CD              |
| 40  | 75  | 26    | 26   | 1,5            | 20,5 | 1,5             | 13° 20'     | 61,169  | 2CE              |
| 40  | 80  | 32    | 32   | 1,5            | 25   | 1,5             | 13° 25'     | 63,405  | 2DE              |
| 40  | 85  | 33    | 32,5 | 2,5            | 28   | 2               | 12° 55'     | 66,612  | 2EE              |
| 40  | 90  | 25,25 | 23   | 2              | 20   | 1,5             | 12° 57' 10" | 72,703  | 2FB              |
| 40  | 90  | 35,25 | 33   | 2              | 27   | 1,5             | 12° 57' 10" | 69,253  | 2FD              |
| 45  | 68  | 15    | 15   | 0,6            | 12   | 0,6             | 12°         | 58,852  | 2BC              |
| 45  | 75  | 24    | 24   | 1              | 19   | 1               | 11° 05'     | 63,116  | 2CE              |
| 45  | 80  | 24    | 24   | 2              | 19,5 | 2               | 13°         | 66,615  | 2CD              |
| 45  | 95  | 36    | 35   | 2,5            | 30   | 2,5             | 12° 09'     | 75,712  | 2ED <sup>b</sup> |
| 45  | 100 | 27,25 | 25   | 2              | 22   | 1,5             | 12° 57' 10" | 81,78   | 2FB              |
| 45  | 100 | 38,25 | 36   | 2              | 30   | 1,5             | 12° 57' 10" | 78,33   | 2FD              |
| 50  | 72  | 15    | 15   | 0,6            | 12   | 0,6             | 12° 50'     | 62,748  | 2BC              |
| 50  | 80  | 24    | 24   | 1              | 19   | 1               | 11° 55'     | 67,775  | 2CE              |
| 50  | 82  | 21,5  | 21,5 | 3              | 17   | 0,5             | 11° 30'     | 70,594  | 2CC              |
| 50  | 85  | 24    | 24   | 2              | 19,5 | 2               | 13° 52'     | 70,969  | 2CD              |
| 50  | 90  | 28    | 28   | 3              | 23   | 2,5             | 12° 22'     | 74,538  | 2DD              |
| 50  | 100 | 36    | 35   | 2,5            | 30   | 2,5             | 12° 51'     | 79,996  | 2ED              |
| 50  | 110 | 29,25 | 27   | 2,5            | 23   | 2               | 12° 57' 10" | 90,633  | 2FB              |
| 50  | 110 | 42,25 | 40   | 2,5            | 33   | 2               | 12° 57' 10" | 86,263  | 2FD              |
| 55  | 80  | 17    | 17   | 1              | 14   | 1               | 11° 39'     | 69,503  | 2BC              |
| 55  | 85  | 18    | 18,5 | 2              | 14   | 2               | 12° 49'     | 73,586  | 2CC              |
| 55  | 90  | 27    | 27   | 1,5            | 21   | 1,5             | 11° 45'     | 76,656  | 2CE              |
| 55  | 95  | 27    | 27   | 2              | 21,5 | 2               | 12° 43' 30" | 80,106  | 2CD              |
| 55  | 95  | 29    | 29   | 1,5            | 23,5 | 2,5             | 12° 35'     | 79,593  | 2DD <sup>b</sup> |
| 55  | 110 | 39    | 39   | 2,5            | 32   | 2,5             | 13°         | 88,446  | 2ED <sup>b</sup> |
| 55  | 120 | 31,5  | 29   | 2,5            | 25   | 2               | 12° 57' 10" | 99,146  | 2FB              |
| 55  | 120 | 45,5  | 43   | 2,5            | 35   | 2               | 12° 57' 10" | 94,316  | 2FD              |
| 60  | 85  | 17    | 17   | 1              | 14   | 1               | 12° 27'     | 74,185  | 2BC              |
| 60  | 90  | 18    | 18,5 | 2              | 14   | 2               | 13° 38' 30" | 78,249  | 2CC              |
| 60  | 95  | 27    | 27   | 1,5            | 21   | 1,5             | 12° 20'     | 80,422  | 2CE              |
| 60  | 100 | 27    | 27   | 2              | 21,5 | 2               | 13° 27'     | 84,587  | 2CD              |
| 60  | 115 | 40    | 39   | 2,5            | 33   | 2,5             | 12° 30'     | 93,46   | 2EE              |
| 60  | 130 | 33,5  | 31   | 3              | 26   | 2,5             | 12° 57' 10" | 107,769 | 2FB              |
| 60  | 130 | 48,5  | 46   | 3              | 37   | 2,5             | 12° 57' 10" | 102,939 | 2FD              |

Table 4 (continued)

Dimensions in millimetres

| $d$ | $D$ | $T$   | $B$    | $r_{s \min}^a$ | $C$    | $r_{1s \min}^a$ | $\alpha$    | $E$     | Dimension series |
|-----|-----|-------|--------|----------------|--------|-----------------|-------------|---------|------------------|
| 65  | 90  | 17    | 17     | 1              | 14     | 1               | 13° 15'     | 78,849  | 2BC              |
| 65  | 100 | 22    | 22     | 2              | 17,5   | 2               | 12° 10' 30" | 87,433  | 2CC              |
| 65  | 100 | 27    | 27     | 1,5            | 21     | 1,5             | 13° 05'     | 85,257  | 2CE              |
| 65  | 110 | 31    | 31     | 2              | 25     | 2               | 12° 27'     | 93,09   | 2DD              |
| 65  | 120 | 39    | 38,5   | 3              | 32     | 2,5             | 12° 40'     | 98,572  | 2ED              |
| 65  | 125 | 43    | 42     | 2,5            | 35     | 2,5             | 12°         | 102,378 | 2FD              |
| 65  | 140 | 36    | 33     | 3              | 28     | 2,5             | 12° 57' 10" | 116,846 | 2GB              |
| 65  | 140 | 51    | 48     | 3              | 39     | 2,5             | 12° 57' 10" | 111,786 | 2GD              |
| 70  | 100 | 20    | 20     | 1              | 16     | 1               | 11° 53'     | 88,59   | 2BC              |
| 70  | 105 | 22    | 22     | 2              | 17,5   | 2               | 12° 49' 30" | 92,004  | 2CC              |
| 70  | 110 | 31    | 31     | 1,5            | 25,5   | 1,5             | 10° 45'     | 95,021  | 2CE              |
| 70  | 120 | 34    | 33     | 2              | 27     | 2               | 12° 22'     | 101,343 | 2DD              |
| 70  | 130 | 43    | 42     | 3              | 35     | 2,5             | 12° 31' 30" | 106,766 | 2ED              |
| 70  | 150 | 38    | 35     | 3              | 30     | 2,5             | 12° 57' 10" | 125,244 | 2GB              |
| 70  | 150 | 54    | 51     | 3              | 42     | 2,5             | 12° 57' 10" | 119,724 | 2GD              |
| 75  | 105 | 20    | 20     | 1              | 16     | 1               | 12° 31'     | 93,223  | 2BC              |
| 75  | 115 | 25    | 25     | 2              | 20     | 2               | 12°         | 100,414 | 2CC              |
| 75  | 115 | 31    | 31     | 1,5            | 25,5   | 1,5             | 11° 15'     | 99,4    | 2CE              |
| 75  | 125 | 34    | 33     | 2,5            | 27     | 2               | 12° 55'     | 105,786 | 2DD              |
| 75  | 135 | 43    | 42     | 3              | 35     | 2,5             | 13° 03'     | 111,153 | 2ED              |
| 75  | 145 | 51    | 51     | 3              | 42     | 2,5             | 13° 34'     | 117,744 | 2FE              |
| 75  | 160 | 40    | 37     | 3              | 31     | 2,5             | 12° 57' 10" | 134,097 | 2GB              |
| 75  | 160 | 58    | 55     | 3              | 45     | 2,5             | 12° 57' 10" | 127,887 | 2GD              |
| 80  | 110 | 20    | 20     | 1              | 16     | 1               | 13° 10'     | 97,974  | 2BC              |
| 80  | 120 | 25    | 25     | 2              | 20     | 2               | 12° 33' 30" | 105,003 | 2CC              |
| 80  | 125 | 36    | 36     | 1,5            | 29,5   | 1,5             | 10° 30'     | 107,75  | 2CE              |
| 80  | 130 | 34    | 33     | 2,5            | 27     | 2               | 13° 30'     | 110,475 | 2DD              |
| 80  | 145 | 46    | 45     | 3              | 38     | 2,5             | 12° 02'     | 120,366 | 2ED              |
| 80  | 170 | 42,5  | 39     | 3              | 33     | 2,5             | 12° 57' 10" | 143,174 | 2GB              |
| 80  | 170 | 61,5  | 58     | 3              | 48     | 2,5             | 12° 57' 10" | 136,504 | 2GD              |
| 85  | 120 | 23    | 23     | 1,5            | 18     | 1,5             | 12° 18'     | 106,599 | 2BC <sup>b</sup> |
| 85  | 125 | 25    | 25     | 2,5            | 20     | 2               | 13° 07' 30" | 109,65  | 2CC              |
| 85  | 130 | 36    | 36     | 1,5            | 29,5   | 1,5             | 11°         | 112,838 | 2CE              |
| 85  | 135 | 34    | 33     | 2,5            | 28     | 2               | 13° 02'     | 115,904 | 2DD              |
| 85  | 150 | 46    | 46     | 3              | 38     | 3               | 12° 30'     | 124,965 | 2ED              |
| 85  | 180 | 44,5  | 41     | 4              | 34     | 3               | 12° 57' 10" | 150,433 | 2GB              |
| 85  | 180 | 63,5  | 60     | 4              | 49     | 3               | 12° 57' 10" | 144,223 | 2GD              |
| 90  | 125 | 23    | 23     | 1,5            | 18     | 1,5             | 12° 51'     | 111,282 | 2BC <sup>b</sup> |
| 90  | 135 | 28    | 27,5   | 2,5            | 23     | 2               | 12° 01' 30" | 119,139 | 2CC              |
| 90  | 140 | 34    | 33     | 2,5            | 28     | 2,5             | 12° 02' 30" | 121,86  | 2CD              |
| 90  | 140 | 39    | 39     | 2              | 32,5   | 1,5             | 10° 10'     | 122,363 | 2CE              |
| 90  | 155 | 44    | 44     | 3              | 35,5   | 2,5             | 12° 48' 40" | 130,944 | 2EC <sup>b</sup> |
| 90  | 155 | 46    | 46     | 3              | 38     | 3               | 12° 17'     | 130,206 | 2ED              |
| 90  | 165 | 47    | 46     | 3              | 39     | 3               | 12°         | 140,251 | 2FC              |
| 90  | 190 | 46,5  | 43     | 4              | 36     | 3               | 12° 57' 10" | 159,061 | 2GB              |
| 90  | 190 | 57,15 | 57,531 | 8              | 46,038 | 3,3             | 12° 35'     | 157,96  | 2GC              |
| 90  | 190 | 67,5  | 64     | 4              | 53     | 3               | 12° 57' 10" | 151,701 | 2GD              |

Table 4 (continued)

Dimensions in millimetres

| $d$ | $D$ | $T$    | $B$    | $r_{s \min}^a$ | $C$    | $r_{1s \min}^a$ | $\alpha$    | $E$     | Dimension series |
|-----|-----|--------|--------|----------------|--------|-----------------|-------------|---------|------------------|
| 95  | 130 | 23     | 23     | 1,5            | 18     | 1,5             | 13° 25'     | 116,082 | 2BC <sup>b</sup> |
| 95  | 140 | 28     | 27,5   | 2,5            | 23     | 2,5             | 12° 30'     | 123,797 | 2CC              |
| 95  | 145 | 34     | 33     | 2,5            | 28     | 2,5             | 12° 30'     | 126,419 | 2CD              |
| 95  | 145 | 39     | 39     | 2              | 32,5   | 1,5             | 10° 30'     | 126,346 | 2CE              |
| 95  | 160 | 46     | 46     | 3              | 38     | 3               | 12° 43'     | 134,711 | 2ED              |
| 95  | 200 | 49,5   | 45     | 4              | 38     | 3               | 12° 57' 10" | 165,861 | 2GB              |
| 95  | 200 | 71,5   | 67     | 4              | 55     | 3               | 12° 57' 10" | 160,318 | 2GD              |
| 100 | 140 | 25     | 25     | 1,5            | 20     | 1,5             | 12° 23'     | 125,717 | 2CC              |
| 100 | 145 | 28     | 27,5   | 2,5            | 23     | 2,5             | 12° 58' 30" | 128,448 | 2DC <sup>b</sup> |
| 100 | 150 | 34     | 33     | 2,5            | 28     | 2,5             | 12° 57' 30" | 130,992 | 2CD              |
| 100 | 150 | 39     | 39     | 2              | 32,5   | 1,5             | 10° 50'     | 130,323 | 2CE              |
| 100 | 165 | 47     | 46     | 3              | 39     | 3               | 12°         | 140,251 | 2EE              |
| 100 | 215 | 51,5   | 47     | 4              | 39     | 3               | 12° 57' 10" | 178,578 | 2GB              |
| 100 | 215 | 66,675 | 66,675 | 7              | 53,975 | 3,3             | 12° 15'     | 177,891 | 2GC              |
| 100 | 215 | 77,5   | 73     | 4              | 60     | 3               | 12° 57' 10" | 171,65  | 2GD              |
| 105 | 145 | 25     | 25     | 1,5            | 20     | 1,5             | 12° 51'     | 130,359 | 2CC              |
| 105 | 155 | 33     | 31,5   | 2,5            | 27     | 2,5             | 12° 17' 30" | 137,045 | 2CD              |
| 105 | 160 | 38     | 37     | 3              | 31     | 2,5             | 12° 17' 30" | 139,734 | 2DD              |
| 105 | 160 | 43     | 43     | 2,5            | 34     | 2               | 10° 40'     | 139,304 | 2DE              |
| 105 | 170 | 47     | 46     | 3              | 39     | 3               | 12° 18' 30" | 145,104 | 2EE              |
| 105 | 225 | 53,5   | 49     | 4              | 41     | 3               | 12° 57' 10" | 186,752 | 2GB              |
| 105 | 225 | 81,5   | 77     | 4              | 63     | 3               | 12° 57' 10" | 179,359 | 2GD              |
| 110 | 150 | 25     | 25     | 1,5            | 20     | 1,5             | 13° 20'     | 135,182 | 2CC              |
| 110 | 160 | 33     | 31,5   | 2,5            | 27     | 2,5             | 12° 42' 30" | 141,607 | 2CD              |
| 110 | 165 | 38     | 37     | 3              | 31     | 2,5             | 12° 42' 30" | 144,376 | 2DD              |
| 110 | 170 | 47     | 47     | 2,5            | 37     | 2               | 10° 50'     | 146,265 | 2DE              |
| 110 | 175 | 47     | 46     | 4              | 39     | 3               | 12° 41' 30" | 149,543 | 2EE <sup>b</sup> |
| 110 | 240 | 54,5   | 50     | 4              | 42     | 3               | 12° 57' 10" | 199,925 | 2GB              |
| 110 | 240 | 84,5   | 80     | 4              | 65     | 3               | 12° 57' 10" | 192,071 | 2GD              |
| 120 | 165 | 29     | 29     | 1,5            | 23     | 1,5             | 13° 05'     | 148,464 | 2CC              |
| 120 | 175 | 36     | 35     | 2,5            | 29     | 2,5             | 12° 08'     | 155,479 | 2DC <sup>b</sup> |
| 120 | 180 | 41     | 40     | 3              | 33     | 2,5             | 12° 08' 30" | 158,233 | 2DD              |
| 120 | 180 | 48     | 48     | 2,5            | 38     | 2               | 11° 30'     | 154,777 | 2DE              |
| 120 | 190 | 50     | 49     | 4              | 41     | 3               | 12° 09' 30" | 163,635 | 2EE              |
| 120 | 260 | 59,5   | 55     | 4              | 46     | 3               | 12° 57' 10" | 214,892 | 2GB              |
| 120 | 260 | 90,5   | 86     | 4              | 69     | 3               | 12° 57' 10" | 207,039 | 2GD              |
| 130 | 180 | 32     | 32     | 2              | 25     | 1,5             | 12° 45'     | 161,652 | 2CC              |
| 130 | 185 | 36     | 35     | 3              | 29     | 2,5             | 12° 52'     | 164,714 | 2DC <sup>b</sup> |
| 130 | 190 | 41     | 40     | 3              | 33     | 2,5             | 12° 51' 30" | 167,414 | 2DD              |
| 130 | 200 | 50     | 49     | 4              | 41     | 3               | 12° 50' 30" | 172,653 | 2DE <sup>b</sup> |
| 130 | 200 | 55     | 55     | 2,5            | 43     | 2               | 12° 50'     | 172,017 | 2EE              |
| 130 | 280 | 63,75  | 58     | 5              | 49     | 4               | 12° 57' 10" | 232,028 | 2GB              |
| 140 | 190 | 32     | 32     | 2              | 25     | 1,5             | 13° 30'     | 171,032 | 2CC              |
| 140 | 200 | 39     | 38     | 3              | 31     | 2,5             | 12°         | 179,234 | 2DC              |
| 140 | 205 | 44     | 43     | 3              | 36     | 2,5             | 12°         | 181,645 | 2DD              |
| 140 | 210 | 56     | 56     | 2,5            | 44     | 2               | 13° 30'     | 180,353 | 2DE              |
| 140 | 215 | 53     | 52     | 4              | 44     | 3               | 12°         | 187,051 | 2ED              |
| 140 | 300 | 67,75  | 62     | 5              | 53     | 4               | 12° 57' 10" | 247,91  | 2GB              |

Table 4 (continued)

Dimensions in millimetres

| $d$ | $D$ | $T$ | $B$ | $r_{s \min}^a$ | $C$ | $r_{1s \min}^a$ | $\alpha$    | $E$     | Dimension series |
|-----|-----|-----|-----|----------------|-----|-----------------|-------------|---------|------------------|
| 150 | 210 | 38  | 38  | 2,5            | 30  | 2               | 12° 20'     | 187,926 | 2DC              |
| 150 | 215 | 44  | 43  | 3              | 36  | 3               | 12° 37'     | 190,81  | 2DD              |
| 150 | 225 | 53  | 52  | 4              | 44  | 4               | 12° 35' 30" | 196,097 | 2ED              |
| 150 | 225 | 59  | 59  | 3              | 46  | 2,5             | 13° 40'     | 194,26  | 2EE              |
| 150 | 320 | 72  | 65  | 5              | 55  | 4               | 12° 57' 10" | 265,955 | 2GB              |
| 160 | 220 | 38  | 38  | 2,5            | 30  | 2               | 13°         | 197,962 | 2DC              |
| 160 | 225 | 44  | 43  | 3              | 36  | 3               | 13° 14' 30" | 200,146 | 2DD              |
| 160 | 235 | 53  | 52  | 4              | 44  | 4               | 13° 11' 30" | 205,257 | 2ED              |
| 160 | 340 | 75  | 68  | 5              | 58  | 4               | 12° 57' 10" | 282,751 | 2GB              |
| 170 | 235 | 44  | 43  | 3              | 36  | 3               | 12° 13' 30" | 211,345 | 2DD              |
| 170 | 245 | 53  | 52  | 5              | 44  | 4               | 12° 14'     | 216,61  | 2ED <sup>b</sup> |
| 170 | 360 | 80  | 72  | 5              | 62  | 4               | 12° 57' 10" | 299,991 | 2GB              |
| 180 | 240 | 39  | 38  | 3              | 31  | 3               | 12° 47'     | 218,311 | 2DC              |
| 180 | 245 | 44  | 43  | 3              | 36  | 3               | 12° 46' 30" | 220,684 | 2DD              |
| 180 | 255 | 53  | 52  | 5              | 44  | 4               | 12° 46'     | 225,875 | 2ED <sup>b</sup> |
| 190 | 255 | 41  | 40  | 3              | 33  | 3               | 12° 15'     | 232,395 | 2DC              |
| 190 | 260 | 47  | 46  | 4              | 38  | 3               | 12° 15'     | 234,615 | 2DD              |
| 190 | 270 | 56  | 55  | 5              | 46  | 4               | 12° 15' 30" | 240,017 | 2ED              |
| 200 | 265 | 41  | 40  | 3              | 33  | 3               | 12° 45'     | 241,71  | 2DC              |
| 200 | 270 | 47  | 46  | 4              | 38  | 3               | 12° 45'     | 244,043 | 2DD              |
| 200 | 280 | 56  | 55  | 5              | 46  | 4               | 12° 44' 30" | 249,3   | 2ED              |
| 220 | 285 | 41  | 40  | 4              | 33  | 3               | 12°         | 262,657 | 2DC              |
| 220 | 290 | 47  | 46  | 4              | 38  | 3               | 12°         | 265,261 | 2DD              |
| 220 | 300 | 56  | 55  | 5              | 46  | 4               | 12° 04' 30" | 270,389 | 2ED              |
| 240 | 305 | 41  | 40  | 4              | 33  | 3               | 12° 53'     | 281,653 | 2DC              |
| 240 | 310 | 47  | 46  | 4              | 38  | 3               | 12° 52'     | 284,085 | 2DD              |
| 240 | 320 | 57  | 56  | 6              | 46  | 4               | 12° 55' 30" | 289,075 | 2EE              |
| 260 | 325 | 41  | 40  | 4              | 33  | 4               | 13° 46'     | 300,661 | 2DC              |
| 260 | 330 | 47  | 46  | 4              | 38  | 4               | 13° 44' 30" | 303,004 | 2DD              |
| 260 | 340 | 57  | 56  | 6              | 46  | 4               | 12° 07' 30" | 310,322 | 2DE              |
| 280 | 360 | 57  | 56  | 6              | 46  | 5               | 12° 52' 30" | 329,164 | 2DE              |

<sup>a</sup> Maximum chamfer dimensions are given in ISO 582.<sup>b</sup> Dimension series deviates from the rules in Clause 5.

Table 5 — Contact angle series 3

Dimensions in millimetres

| $d$ | $D$ | $T$   | $B$ | $r_{s \min}^a$ | $C$  | $r_{1s \min}^a$ | $\alpha$    | $E$     | Dimension series |
|-----|-----|-------|-----|----------------|------|-----------------|-------------|---------|------------------|
| 20  | 42  | 15    | 15  | 0,6            | 12   | 0,6             | 14°         | 32,781  | 3CC              |
| 22  | 44  | 15    | 15  | 0,6            | 11,5 | 0,6             | 14° 50'     | 34,708  | 3CC              |
| 25  | 52  | 16,25 | 15  | 1              | 13   | 1               | 14° 02' 10" | 41,135  | 3CC              |
| 30  | 62  | 17,25 | 16  | 1              | 14   | 1               | 14° 02' 10" | 49,99   | 3DB              |
| 30  | 62  | 21,25 | 20  | 1              | 17   | 1               | 14° 02' 10" | 48,982  | 3DC              |
| 32  | 65  | 18,25 | 17  | 1              | 15   | 1               | 14°         | 52,5    | 3DB              |
| 35  | 72  | 18,25 | 17  | 1,5            | 15   | 1,5             | 14° 02' 10" | 58,844  | 3DB              |
| 35  | 72  | 24,25 | 23  | 1,5            | 19   | 1,5             | 14° 02' 10" | 57,087  | 3DC              |
| 40  | 68  | 19    | 19  | 1              | 14,5 | 1               | 14° 10'     | 56,897  | 3CD              |
| 40  | 80  | 19,75 | 18  | 1,5            | 16   | 1,5             | 14° 02' 10" | 65,73   | 3DB              |
| 40  | 80  | 24,75 | 23  | 1,5            | 19   | 1,5             | 14° 02' 10" | 64,715  | 3DC              |
| 45  | 75  | 20    | 20  | 1              | 15,5 | 1               | 14° 40'     | 63,248  | 3CC              |
| 45  | 80  | 26    | 26  | 1,5            | 20,5 | 1,5             | 14° 20'     | 65,7    | 3CE              |
| 45  | 85  | 20,75 | 19  | 1,5            | 16   | 1,5             | 15° 06' 34" | 70,44   | 3DB              |
| 45  | 85  | 24,75 | 23  | 1,5            | 19   | 1,5             | 15° 06' 34" | 69,61   | 3DC              |
| 45  | 85  | 32    | 32  | 1,5            | 25   | 1,5             | 14° 25'     | 68,075  | 3DE              |
| 50  | 80  | 20    | 20  | 1              | 15,5 | 1               | 15° 45'     | 67,841  | 3CC              |
| 50  | 85  | 26    | 26  | 1,5            | 20   | 1,5             | 15° 20'     | 70,214  | 3CE              |
| 50  | 90  | 21,75 | 20  | 1,5            | 17   | 1,5             | 15° 38' 32" | 75,078  | 3DB              |
| 50  | 90  | 24,75 | 23  | 1,5            | 19   | 1,5             | 15° 38' 32" | 74,226  | 3DC              |
| 50  | 90  | 32    | 32  | 1,5            | 24,5 | 1,5             | 15° 25'     | 72,727  | 3DE              |
| 55  | 90  | 23    | 23  | 1,5            | 17,5 | 1,5             | 15° 10'     | 76,505  | 3CC              |
| 55  | 90  | 23    | 23  | 1,5            | 18,5 | 0,5             | 15°         | 75,417  | 3CB <sup>b</sup> |
| 55  | 95  | 30    | 30  | 1,5            | 23   | 1,5             | 14°         | 78,893  | 3CE              |
| 55  | 100 | 22,75 | 21  | 2              | 18   | 1,5             | 15° 06' 34" | 84,197  | 3DB              |
| 55  | 100 | 26,75 | 25  | 2              | 21   | 1,5             | 15° 06' 34" | 82,837  | 3DC              |
| 55  | 100 | 35    | 35  | 2              | 27   | 1,5             | 14° 55'     | 81,24   | 3DE              |
| 60  | 95  | 24    | 24  | 5              | 19   | 2,5             | 15°         | 80,256  | 3CD              |
| 60  | 100 | 30    | 30  | 1,5            | 23   | 1,5             | 14° 50'     | 83,522  | 3CE              |
| 60  | 110 | 23,75 | 22  | 2              | 19   | 1,5             | 15° 06' 34" | 91,876  | 3EB              |
| 60  | 110 | 29,75 | 28  | 2              | 24   | 1,5             | 15° 06' 34" | 90,236  | 3EC              |
| 60  | 110 | 38    | 38  | 2              | 29   | 1,5             | 15° 05'     | 89,032  | 3EE              |
| 65  | 110 | 28    | 28  | 3              | 22,5 | 2,5             | 15°         | 91,897  | 3DC              |
| 65  | 110 | 34    | 34  | 1,5            | 26,5 | 1,5             | 14° 30'     | 91,653  | 3DE              |
| 65  | 120 | 24,75 | 23  | 2              | 20   | 1,5             | 15° 06' 34" | 101,934 | 3EB              |
| 65  | 120 | 32,75 | 31  | 2              | 27   | 1,5             | 15° 06' 34" | 99,484  | 3EC              |
| 65  | 120 | 41    | 41  | 2              | 32   | 1,5             | 14° 35'     | 97,863  | 3EE              |
| 65  | 135 | 52    | 51  | 5              | 43   | 3               | 15° 55' 30" | 102,611 | 3FE              |
| 70  | 120 | 37    | 37  | 2              | 29   | 1,5             | 14° 10'     | 99,733  | 3DE              |
| 70  | 125 | 26,25 | 24  | 2              | 21   | 1,5             | 15° 38' 32" | 105,748 | 3EB              |
| 70  | 125 | 33,25 | 31  | 2              | 27   | 1,5             | 15° 38' 32" | 103,765 | 3EC              |
| 70  | 125 | 41    | 41  | 2              | 32   | 1,5             | 15° 15'     | 102,275 | 3EE              |
| 75  | 125 | 37    | 37  | 2              | 29   | 1,5             | 14° 50'     | 104,358 | 3DE              |
| 75  | 130 | 41    | 41  | 2              | 31   | 1,5             | 15° 55'     | 106,675 | 3EE <sup>b</sup> |
| 75  | 145 | 52    | 51  | 5              | 43   | 3               | 15° 57'     | 112,507 | 3FE              |

Table 5 (continued)

Dimensions in millimetres

| $d$ | $D$ | $T$   | $B$ | $r_{s \min}^a$ | $C$  | $r_{1s \min}^a$ | $\alpha$    | $E$     | Dimension series |
|-----|-----|-------|-----|----------------|------|-----------------|-------------|---------|------------------|
| 80  | 125 | 29    | 29  | 1,5            | 22   | 1,5             | 15° 45'     | 107,334 | 3CC              |
| 80  | 130 | 35    | 34  | 3              | 28,5 | 2,5             | 14° 31'     | 108,958 | 3DD              |
| 80  | 130 | 37    | 37  | 2              | 29   | 1,5             | 15° 30'     | 108,97  | 3DE              |
| 80  | 140 | 28,25 | 26  | 2,5            | 22   | 2               | 15° 38' 32" | 119,169 | 3EB              |
| 80  | 140 | 35,25 | 33  | 2,5            | 28   | 2               | 15° 38' 32" | 117,466 | 3EC              |
| 80  | 140 | 46    | 46  | 2,5            | 35   | 2               | 15° 50'     | 114,582 | 3EE              |
| 85  | 140 | 39    | 38  | 3              | 31,5 | 2,5             | 15° 11'     | 116,301 | 3DD              |
| 85  | 140 | 41    | 41  | 2,5            | 32   | 2               | 15° 10'     | 117,097 | 3DE              |
| 85  | 150 | 30,5  | 28  | 2,5            | 24   | 2               | 15° 38' 32" | 126,685 | 3EB              |
| 85  | 150 | 38,5  | 36  | 2,5            | 30   | 2               | 15° 38' 32" | 124,97  | 3EC              |
| 85  | 150 | 49    | 49  | 2,5            | 37   | 2               | 15° 35'     | 122,894 | 3EE              |
| 85  | 160 | 55    | 54  | 5              | 45   | 3               | 15° 43'     | 126,101 | 3FE              |
| 90  | 140 | 32    | 32  | 2              | 24   | 1,5             | 15° 45'     | 119,948 | 3CC              |
| 90  | 150 | 45    | 45  | 2,5            | 35   | 2               | 14° 50'     | 125,283 | 3DE              |
| 90  | 160 | 32,5  | 30  | 2,5            | 26   | 2               | 15° 38' 32" | 134,901 | 3FB              |
| 90  | 160 | 42,5  | 40  | 2,5            | 34   | 2               | 15° 38' 32" | 132,615 | 3FC              |
| 90  | 160 | 55    | 55  | 2,5            | 42   | 2               | 15° 40'     | 129,82  | 3FE              |
| 95  | 160 | 49    | 49  | 2,5            | 38   | 2               | 14° 35'     | 133,24  | 3EE              |
| 95  | 170 | 34,5  | 32  | 3              | 27   | 2,5             | 15° 38' 32" | 143,385 | 3FB              |
| 95  | 170 | 45,5  | 43  | 3              | 37   | 2,5             | 15° 38' 32" | 140,259 | 3FC              |
| 95  | 170 | 58    | 58  | 3              | 44   | 2,5             | 15° 15'     | 138,642 | 3FE              |
| 100 | 165 | 52    | 52  | 2,5            | 40   | 2               | 15° 10'     | 137,129 | 3EE              |
| 100 | 180 | 37    | 34  | 3              | 29   | 2,5             | 15° 38' 32" | 151,31  | 3FB              |
| 100 | 180 | 49    | 46  | 3              | 39   | 2,5             | 15° 38' 32" | 148,184 | 3FC              |
| 100 | 180 | 63    | 63  | 3              | 48   | 2,5             | 15° 05'     | 145,949 | 3FE              |
| 105 | 175 | 56    | 56  | 2,5            | 44   | 2               | 15° 05'     | 144,427 | 3EE              |
| 105 | 190 | 39    | 36  | 3              | 30   | 2,5             | 15° 38' 32" | 159,795 | 3FB              |
| 105 | 190 | 53    | 50  | 3              | 43   | 2,5             | 15° 38' 32" | 155,269 | 3FC              |
| 105 | 190 | 68    | 68  | 3              | 52   | 2,5             | 15°         | 153,622 | 3FE              |
| 110 | 180 | 56    | 56  | 2,5            | 43   | 2               | 15° 35'     | 149,127 | 3EE              |
| 110 | 190 | 58    | 57  | 6              | 47   | 3               | 15° 48'     | 154,133 | 3FE              |
| 110 | 200 | 41    | 38  | 3              | 32   | 2,5             | 15° 38' 32" | 168,548 | 3FB              |
| 110 | 200 | 56    | 53  | 3              | 46   | 2,5             | 15° 38' 32" | 164,022 | 3FC              |
| 120 | 200 | 62    | 62  | 2,5            | 48   | 2               | 14° 50'     | 166,144 | 3FE              |
| 130 | 210 | 58    | 57  | 6              | 47   | 4               | 15° 50' 30" | 174,091 | 3EE              |
| 150 | 235 | 61    | 59  | 6              | 50   | 4               | 15° 53'     | 196,798 | 3EE              |
| 170 | 230 | 38    | 38  | 2,5            | 30   | 2               | 14° 20'     | 206,564 | 3DC              |
| 170 | 230 | 39    | 38  | 3              | 31   | 2,5             | 14° 20'     | 206,562 | 3DD <sup>b</sup> |
| 170 | 255 | 61    | 59  | 6              | 50   | 4               | 15° 55'     | 216,949 | 3EE              |
| 180 | 280 | 64    | 64  | 3              | 48   | 2,5             | 15° 45'     | 239,898 | 3FD              |
| 190 | 280 | 64    | 62  | 6              | 52   | 4               | 15° 58' 30" | 239,995 | 3EE              |
| 200 | 280 | 51    | 51  | 3              | 39   | 2,5             | 14° 45'     | 249,698 | 3EC              |
| 200 | 360 | 104   | 98  | 5              | 82   | 4               | 15° 10'     | 294,88  | 3GD              |
| 220 | 300 | 51    | 51  | 3              | 39   | 2,5             | 15° 50'     | 267,685 | 3EC              |

Table 5 (continued)

Dimensions in millimetres

| $d$ | $D$ | $T$  | $B$  | $r_{s \min}^a$ | $C$ | $r_{1s \min}^a$ | $\alpha$ | $E$     | Dimension series |
|-----|-----|------|------|----------------|-----|-----------------|----------|---------|------------------|
| 260 | 360 | 63,5 | 63,5 | 3              | 48  | 2,5             | 15° 10'  | 320,783 | 3EC              |
| 300 | 420 | 76   | 76   | 4              | 57  | 3               | 14° 45'  | 374,706 | 3FD              |
| 320 | 440 | 76   | 76   | 4              | 57  | 3               | 15° 30'  | 393,406 | 3FD              |

<sup>a</sup> Maximum chamfer dimensions are given in ISO 582.

<sup>b</sup> Dimension series deviates from the rules in Clause 5.

Table 6 — Contact angle series 4

Dimensions in millimetres

| $d$ | $D$ | $T$ | $B$  | $r_{s \min}^a$ | $C$  | $r_{1s \min}^a$ | $\alpha$    | $E$     | Dimension series |
|-----|-----|-----|------|----------------|------|-----------------|-------------|---------|------------------|
| 20  | 45  | 14  | 14   | 1              | 10   | 1               | 16° 40'     | 35,679  | 4DB              |
| 22  | 47  | 14  | 14   | 1              | 10   | 1               | 17° 30'     | 37,443  | 4CB              |
| 25  | 47  | 15  | 15   | 0,6            | 11,5 | 0,6             | 16°         | 37,393  | 4CC              |
| 25  | 50  | 14  | 14   | 1              | 10   | 1               | 18° 45'     | 40,025  | 4CB              |
| 28  | 52  | 16  | 16   | 1              | 12   | 1               | 16°         | 41,991  | 4CC              |
| 28  | 55  | 15  | 14,5 | 1              | 11   | 1               | 17° 30'     | 44,597  | 4CB              |
| 30  | 55  | 17  | 17   | 1              | 13   | 1               | 16°         | 44,438  | 4CC              |
| 30  | 60  | 17  | 16,5 | 1              | 12,5 | 1               | 17° 30'     | 48,465  | 4CB              |
| 32  | 58  | 17  | 17   | 1              | 13   | 1               | 16° 50'     | 46,708  | 4CC              |
| 32  | 65  | 18  | 17,5 | 1              | 13,5 | 1               | 17° 30'     | 52,418  | 4DB              |
| 35  | 62  | 18  | 18   | 1              | 14   | 1               | 16° 50'     | 50,51   | 4CC              |
| 35  | 70  | 19  | 18   | 1              | 14   | 1               | 16° 49' 30" | 57,138  | 4DB              |
| 40  | 75  | 19  | 18   | 1              | 14   | 1               | 18° 10' 30" | 61,526  | 4CB              |
| 45  | 85  | 21  | 20   | 2              | 15,5 | 2               | 16° 55' 30' | 70,252  | 4DB              |
| 50  | 84  | 22  | 22   | 3,5            | 17,5 | 1,5             | 16° 15'     | 69,283  | 4CC              |
| 50  | 90  | 21  | 20   | 2              | 15,5 | 2               | 18° 04' 30" | 74,87   | 4DB              |
| 50  | 105 | 37  | 36   | 3              | 29   | 2,5             | 18°         | 80,243  | 4FD              |
| 50  | 105 | 41  | 40   | 4              | 34   | 2,5             | 16° 41'     | 78,494  | 4FE              |
| 55  | 95  | 21  | 20   | 2              | 15,5 | 2               | 16° 33'     | 80,79   | 4CB              |
| 55  | 115 | 44  | 42   | 5              | 37   | 2,5             | 16° 15'     | 86,683  | 4FE              |
| 60  | 95  | 23  | 23   | 1,5            | 17,5 | 1,5             | 16°         | 80,634  | 4CC              |
| 60  | 100 | 21  | 20   | 2              | 15,5 | 2               | 17° 30'     | 85,256  | 4CB              |
| 60  | 125 | 48  | 46   | 5              | 40   | 2,5             | 16° 15'     | 94,207  | 4FE              |
| 65  | 100 | 23  | 23   | 1,5            | 17,5 | 1,5             | 17°         | 85,567  | 4CC              |
| 65  | 105 | 21  | 20   | 2              | 15,5 | 2               | 18° 27'     | 89,709  | 4CB              |
| 65  | 105 | 24  | 23   | 3              | 18,5 | 1               | 16° 50'     | 88,892  | 4CD <sup>b</sup> |
| 70  | 110 | 21  | 20   | 2              | 15,5 | 2               | 17° 05'     | 95,533  | 4CB              |
| 70  | 110 | 25  | 25   | 1,5            | 19   | 1,5             | 16° 10'     | 93,633  | 4CC              |
| 70  | 110 | 26  | 25   | 1              | 20,5 | 2,5             | 18°         | 91,539  | 4CD <sup>b</sup> |
| 70  | 115 | 29  | 29   | 3              | 23   | 2,5             | 16°         | 96,479  | 4DC <sup>b</sup> |
| 70  | 140 | 52  | 51   | 5              | 43   | 3               | 16° 34' 30" | 106,644 | 4FE              |

Table 6 (continued)

Dimensions in millimetres

| $d$ | $D$ | $T$   | $B$  | $r_{s \min}^a$ | $C$  | $r_{1s \min}^a$ | $\alpha$    | $E$     | Dimension series |
|-----|-----|-------|------|----------------|------|-----------------|-------------|---------|------------------|
| 75  | 115 | 21    | 20   | 2              | 15,5 | 2               | 17° 55'     | 100,019 | 4CB              |
| 75  | 115 | 25    | 25   | 1,5            | 19   | 1,5             | 17°         | 98,358  | 4CC              |
| 75  | 115 | 25    | 25   | 3              | 19   | 2,5             | 17°         | 98,358  | 4CC              |
| 75  | 120 | 31    | 29,5 | 3              | 25   | 2,5             | 16° 30'     | 99,926  | 4CD              |
| 75  | 130 | 27,25 | 25   | 2              | 22   | 1,5             | 16° 10' 20" | 110,408 | 4DB              |
| 75  | 130 | 33,25 | 31   | 2              | 27   | 1,5             | 16° 10' 20" | 108,932 | 4DC              |
| 80  | 125 | 24    | 22,5 | 2              | 17,5 | 2               | 16° 46'     | 108,745 | 4CB              |
| 80  | 150 | 52    | 51   | 5              | 43   | 3               | 16° 33'     | 116,58  | 4FE              |
| 85  | 130 | 24    | 22,5 | 2              | 17,5 | 2               | 17° 30'     | 113,315 | 4CB              |
| 85  | 130 | 29    | 29   | 1,5            | 22   | 1,5             | 16° 25'     | 111,788 | 4CC              |
| 90  | 135 | 24    | 22,5 | 2              | 17,5 | 2               | 18° 14'     | 117,895 | 4CB              |
| 90  | 145 | 35    | 34   | 3              | 27   | 2,5             | 16° 30'     | 122,392 | 4DC              |
| 90  | 165 | 55    | 54   | 5              | 45   | 3               | 16° 15'     | 130,224 | 4FE              |
| 95  | 140 | 24    | 22,5 | 2              | 17,5 | 2               | 16° 51'     | 123,776 | 4CB              |
| 95  | 145 | 32    | 32   | 2              | 24   | 1,5             | 16° 25'     | 124,927 | 4CC              |
| 95  | 150 | 35    | 34   | 3              | 27   | 2,5             | 16° 25'     | 125,409 | 4DC              |
| 95  | 170 | 55    | 54   | 5              | 45   | 3               | 16° 47'     | 134,331 | 4FE              |
| 100 | 145 | 24    | 22,5 | 3              | 17,5 | 3               | 17° 30'     | 128,389 | 4CB              |
| 100 | 155 | 36    | 35   | 3              | 28   | 2,5             | 17° 30'     | 130,754 | 4DC              |
| 100 | 160 | 41    | 40   | 3              | 32   | 2,5             | 17° 25'     | 133,441 | 4DD              |
| 100 | 150 | 32    | 32   | 2              | 24   | 1,5             | 17°         | 129,269 | 4CC              |
| 100 | 175 | 55    | 54   | 6              | 45   | 3               | 16°         | 140,655 | 4FE              |
| 105 | 150 | 24    | 22,5 | 3              | 17,5 | 3               | 18° 09'     | 132,982 | 4CB              |
| 105 | 160 | 35    | 35   | 2,5            | 26   | 2               | 16° 30'     | 137,685 | 4DC              |
| 105 | 180 | 55    | 54   | 6              | 45   | 3               | 16° 30'     | 144,884 | 4EE              |
| 110 | 160 | 27    | 25,5 | 3              | 19,5 | 3               | 16° 24'     | 142,292 | 4CB              |
| 110 | 170 | 38    | 38   | 2,5            | 29   | 2               | 16°         | 146,29  | 4DC              |
| 115 | 165 | 28    | 27   | 3,3            | 21   | 3               | 17°         | 142,481 | 4CC              |
| 120 | 170 | 27    | 25   | 3              | 19,5 | 3               | 17° 30'     | 151,495 | 4CB              |
| 120 | 180 | 38    | 38   | 2,5            | 29   | 2               | 17°         | 155,239 | 4DC              |
| 120 | 200 | 58    | 57   | 6              | 47   | 3               | 16° 42'     | 162,59  | 4FE              |
| 120 | 215 | 43,5  | 40   | 3              | 34   | 2,5             | 16° 10' 20" | 181,257 | 4FB              |
| 120 | 215 | 61,5  | 58   | 3              | 50   | 2,5             | 16° 10' 20" | 174,825 | 4FD              |
| 130 | 185 | 29    | 27   | 3              | 21   | 3               | 17° 30'     | 165,002 | 4CB              |
| 130 | 200 | 45    | 45   | 2,5            | 34   | 2               | 16° 10'     | 172,043 | 4EC              |
| 130 | 230 | 43,75 | 40   | 4              | 34   | 3               | 16° 10' 20" | 196,42  | 4FB              |
| 130 | 230 | 67,75 | 64   | 4              | 54   | 3               | 16° 10' 20" | 187,088 | 4FD              |
| 140 | 195 | 29    | 27   | 3              | 21   | 3               | 18° 32'     | 174,512 | 4CB              |
| 140 | 210 | 45    | 45   | 2,5            | 34   | 2               | 17°         | 180,72  | 4DC              |
| 140 | 220 | 58    | 57   | 6              | 47   | 4               | 16° 39' 30" | 182,746 | 4EE              |
| 140 | 250 | 45,75 | 42   | 4              | 36   | 3               | 16° 10' 20" | 212,27  | 4FB              |
| 140 | 250 | 71,75 | 68   | 4              | 58   | 3               | 16° 10' 20" | 204,046 | 4FD              |
| 150 | 210 | 32    | 30   | 3              | 23   | 3               | 17° 04'     | 188,281 | 4DB              |
| 150 | 225 | 48    | 48   | 3              | 36   | 2,5             | 17°         | 193,674 | 4EC              |
| 150 | 270 | 49    | 45   | 4              | 38   | 3               | 16° 10' 20" | 227,408 | 4GB              |
| 150 | 270 | 77    | 73   | 4              | 60   | 3               | 16° 10' 20" | 219,157 | 4GD              |

Table 6 (continued)

Dimensions in millimetres

| $d$ | $D$ | $T$  | $B$  | $r_{s \min}^a$ | $C$  | $r_{1s \min}^a$ | $\alpha$    | $E$     | Dimension series |
|-----|-----|------|------|----------------|------|-----------------|-------------|---------|------------------|
| 160 | 220 | 32   | 30   | 3              | 23   | 3               | 17° 57' 30" | 197,895 | 4DB              |
| 160 | 240 | 46   | 44,5 | 3              | 37   | 2,5             | 16° 15'     | 209,765 | 4EB <sup>b</sup> |
| 160 | 240 | 51   | 51   | 3              | 38   | 2,5             | 17°         | 207,209 | 4EC              |
| 160 | 245 | 61   | 59   | 6              | 50   | 4               | 16° 37'     | 205,576 | 4EE              |
| 160 | 290 | 52   | 48   | 4              | 40   | 3               | 16° 10' 20" | 244,958 | 4GB              |
| 160 | 290 | 84   | 80   | 4              | 67   | 3               | 16° 10' 20" | 234,942 | 4GD              |
| 170 | 230 | 32   | 30   | 3              | 23   | 3               | 17° 06'     | 208,314 | 4DB              |
| 170 | 240 | 46   | 44,5 | 3              | 37   | 2,5             | 16° 15'     | 209,765 | 4DD              |
| 170 | 260 | 57   | 57   | 3              | 43   | 2,5             | 16° 30'     | 223,031 | 4EC              |
| 170 | 310 | 57   | 52   | 5              | 43   | 4               | 16° 10' 20" | 262,483 | 4GB              |
| 170 | 310 | 91   | 86   | 5              | 71   | 4               | 16° 10' 20" | 251,873 | 4GD              |
| 180 | 240 | 32   | 30   | 3              | 23   | 3               | 17° 54'     | 217,699 | 4DB              |
| 180 | 250 | 45   | 45   | 2,5            | 34   | 2               | 17° 45'     | 218,571 | 4DC              |
| 180 | 250 | 47   | 45   | 3              | 37   | 2,5             | 17° 45'     | 218,569 | 4DD              |
| 180 | 265 | 61   | 59   | 6              | 50   | 4               | 16° 35'     | 225,723 | 4EE              |
| 180 | 320 | 57   | 52   | 5              | 43   | 4               | 16° 41' 57" | 270,928 | 4GB              |
| 180 | 320 | 91   | 86   | 5              | 71   | 4               | 16° 41' 57" | 259,938 | 4GD              |
| 190 | 260 | 37   | 34   | 3              | 27   | 3               | 16° 46'     | 234,451 | 4DB              |
| 190 | 260 | 45   | 45   | 2,5            | 34   | 2               | 17° 39'     | 228,578 | 4DC              |
| 190 | 260 | 46   | 44   | 3              | 36,5 | 2,5             | 17° 39'     | 228,577 | 4DD              |
| 190 | 290 | 64   | 64   | 3              | 48   | 2,5             | 16° 25'     | 249,853 | 4FD              |
| 190 | 340 | 60   | 55   | 5              | 46   | 4               | 16° 10' 20" | 291,083 | 4GB              |
| 190 | 340 | 97   | 92   | 5              | 75   | 4               | 16° 10' 20" | 279,024 | 4GD              |
| 200 | 270 | 37   | 34   | 3              | 27   | 3               | 17° 30'     | 244,35  | 4DB              |
| 200 | 290 | 64   | 62   | 6              | 52   | 4               | 16° 34'     | 248,588 | 4EE              |
| 200 | 310 | 70   | 70   | 3              | 53   | 2,5             | 16°         | 266,039 | 4FD              |
| 200 | 360 | 64   | 58   | 5              | 48   | 4               | 16° 10' 20" | 307,196 | 4GB              |
| 220 | 290 | 37   | 34   | 3              | 27   | 3               | 18° 54'     | 263,12  | 4DB              |
| 220 | 340 | 76   | 76   | 4              | 57   | 3               | 16°         | 292,464 | 4FD              |
| 240 | 320 | 42   | 39   | 3              | 30   | 3               | 16° 56'     | 291,676 | 4EB              |
| 240 | 320 | 51   | 51   | 3              | 39   | 2,5             | 17°         | 286,952 | 4EC              |
| 240 | 360 | 76   | 76   | 4              | 57   | 3               | 17°         | 310,356 | 4FD              |
| 260 | 340 | 42   | 39   | 3              | 30   | 3               | 18° 04'     | 310,497 | 4DB              |
| 260 | 400 | 87   | 87   | 5              | 65   | 4               | 16° 10'     | 344,432 | 4FC              |
| 280 | 370 | 48   | 44   | 3              | 34   | 3               | 17° 30'     | 337,067 | 4EB              |
| 280 | 380 | 63,5 | 63,5 | 3              | 48   | 2,5             | 16° 05'     | 339,778 | 4EC              |
| 280 | 420 | 87   | 87   | 5              | 65   | 4               | 17°         | 361,811 | 4FC              |
| 300 | 400 | 52   | 49   | 3              | 37   | 3               | 17°         | 364,238 | 4EB              |
| 300 | 460 | 100  | 100  | 5              | 74   | 4               | 16° 10'     | 395,676 | 4GD              |
| 320 | 420 | 53   | 49   | 3              | 38   | 3               | 17° 55'     | 382,798 | 4EB              |
| 320 | 480 | 100  | 100  | 5              | 74   | 4               | 17°         | 415,64  | 4GD              |
| 340 | 460 | 76   | 76   | 4              | 57   | 3               | 16° 15'     | 412,043 | 4FD              |
| 360 | 480 | 76   | 76   | 4              | 57   | 3               | 17°         | 430,612 | 4FD              |

<sup>a</sup> Maximum chamfer dimensions are given in ISO 582.<sup>b</sup> Dimension series deviates from the rules in Clause 5.

Table 7 — Contact angle series 5

Dimensions in millimetres

| $d$ | $D$ | $T$   | $B$  | $r_{s \min}^a$ | $C$  | $r_{1s \min}^a$ | $\alpha$    | $E$     | Dimension series |
|-----|-----|-------|------|----------------|------|-----------------|-------------|---------|------------------|
| 20  | 47  | 19,25 | 18   | 1              | 15   | 1               | 19°         | 33,708  | 5DD              |
| 25  | 52  | 19,25 | 18   | 1              | 15   | 1               | 21° 15'     | 37,555  | 5CD              |
| 28  | 58  | 20,25 | 19   | 1              | 16   | 1               | 20° 34'     | 42,436  | 5DD              |
| 30  | 62  | 21,25 | 20   | 1              | 17   | 1               | 20° 34'     | 46,389  | 5DC              |
| 30  | 72  | 28,75 | 27   | 1,5            | 23   | 1,5             | 20°         | 50,518  | 5FD              |
| 32  | 65  | 22    | 21,5 | 1              | 17   | 1               | 20°         | 48,523  | 5DC              |
| 32  | 75  | 29,75 | 28   | 1,5            | 23   | 1,5             | 20°         | 53,594  | 5FD              |
| 35  | 72  | 24,25 | 23   | 1,5            | 19   | 1,5             | 21° 10'     | 53,052  | 5DC              |
| 35  | 80  | 32,75 | 31   | 2              | 25   | 1,5             | 20°         | 57,011  | 5FE              |
| 40  | 80  | 24,75 | 23   | 1,5            | 19   | 1,5             | 20°         | 61,438  | 5DC              |
| 40  | 80  | 27    | 26,5 | 4              | 21,5 | 2               | 20° 43' 30" | 58,963  | 5DD              |
| 40  | 90  | 35,25 | 33   | 2              | 27   | 1,5             | 20°         | 63,708  | 5FD              |
| 45  | 85  | 24,75 | 23   | 1,5            | 19   | 1,5             | 21° 35'     | 66,138  | 5DC              |
| 45  | 90  | 32    | 31   | 4              | 26   | 2               | 20°         | 66,466  | 5ED              |
| 45  | 100 | 38,25 | 36   | 2              | 30   | 1,5             | 20°         | 71,639  | 5FD              |
| 50  | 90  | 24,75 | 23   | 1,5            | 18   | 1,5             | 21° 20'     | 72,169  | 5DC              |
| 50  | 100 | 36    | 34,5 | 4              | 29   | 2               | 19° 27' 30" | 74,391  | 5ED              |
| 50  | 110 | 42,25 | 40   | 2,5            | 33   | 2               | 20°         | 78,582  | 5FD              |
| 55  | 100 | 30    | 28,5 | 4              | 24   | 2,5             | 20°         | 77,839  | 5DD              |
| 55  | 105 | 36    | 34,5 | 4              | 29   | 2,5             | 20° 32' 30" | 78,283  | 5ED              |
| 55  | 120 | 45,5  | 43   | 2,5            | 35   | 2               | 20°         | 86,3    | 5FD              |
| 60  | 110 | 34    | 32   | 4              | 27   | 2,5             | 19° 30'     | 85,698  | 5DD <sup>b</sup> |
| 60  | 115 | 39    | 38   | 4              | 31   | 2,5             | 19° 32'     | 87,309  | 5ED              |
| 60  | 130 | 48,5  | 46   | 3              | 37   | 2,5             | 20°         | 94,2    | 5FD              |
| 65  | 115 | 34    | 32   | 4              | 27   | 2,5             | 20° 30'     | 89,829  | 5DD              |
| 65  | 120 | 39    | 38   | 4              | 31   | 2,5             | 20° 28'     | 91,214  | 5ED              |
| 65  | 140 | 51    | 48   | 3              | 39   | 2,5             | 20°         | 102,319 | 5GD              |
| 70  | 125 | 37    | 34,5 | 4              | 30   | 2,5             | 19° 34'     | 98,1    | 5DD <sup>b</sup> |
| 70  | 130 | 42    | 40   | 4              | 34   | 2,5             | 19° 11'     | 100,186 | 5ED              |
| 70  | 150 | 54    | 51   | 3              | 42   | 2,5             | 20°         | 110,219 | 5GD              |
| 75  | 130 | 37    | 34,5 | 4              | 30   | 2,5             | 20° 26'     | 102,199 | 5DD              |
| 75  | 135 | 42    | 40   | 5              | 34   | 2,5             | 20°         | 104,21  | 5ED              |
| 75  | 160 | 58    | 55   | 3              | 45   | 2,5             | 20°         | 117,465 | 5GD              |
| 80  | 135 | 37    | 34,5 | 4              | 30   | 2,5             | 19° 36'     | 108,128 | 5DD              |
| 80  | 140 | 42    | 40   | 5              | 34   | 3               | 20° 49'     | 108,199 | 5ED              |
| 80  | 170 | 61,5  | 58   | 3              | 48   | 2,5             | 20°         | 125,001 | 5GD              |
| 85  | 140 | 37    | 34,5 | 4              | 30   | 3               | 20° 24'     | 112,385 | 5DD              |
| 85  | 145 | 42    | 40   | 5              | 34   | 3               | 19° 16'     | 115,106 | 5ED              |
| 85  | 180 | 63,5  | 60   | 4              | 49   | 3               | 20°         | 132,736 | 5GD              |
| 90  | 145 | 37    | 34,5 | 4              | 30   | 3               | 19° 16'     | 118,567 | 5DD              |
| 90  | 150 | 42    | 40   | 5              | 34   | 3               | 20°         | 119,254 | 5ED <sup>b</sup> |

Table 7 (continued)

Dimensions in millimetres

| $d$ | $D$ | $T$ | $B$  | $r_{s \min}^a$ | $C$ | $r_{1s \min}^a$ | $\alpha$ | $E$     | Dimension series |
|-----|-----|-----|------|----------------|-----|-----------------|----------|---------|------------------|
| 95  | 150 | 37  | 34,5 | 4              | 30  | 3               | 20°      | 122,832 | 5DD              |
| 95  | 155 | 42  | 40   | 5              | 34  | 3               | 20° 44'  | 123,374 | 5ED <sup>b</sup> |
| 100 | 155 | 37  | 34,5 | 5              | 30  | 3               | 20° 44'  | 127,221 | 5DD              |
| 100 | 160 | 42  | 40   | 5              | 34  | 3               | 19° 20'  | 130,033 | 5ED <sup>b</sup> |
| 105 | 160 | 37  | 34,5 | 5              | 30  | 3               | 19° 40'  | 133,284 | 5DD              |

<sup>a</sup> Maximum chamfer dimensions are given in ISO 582.  
<sup>b</sup> Dimension series deviates from the rules in Clause 5.

Table 8 — Contact angle series 7

Dimensions in millimetres

| $d$ | $D$ | $T$   | $B$  | $r_{s \min}^a$ | $C$  | $r_{1s \min}^a$ | $\alpha$    | $E$     | Dimension series |
|-----|-----|-------|------|----------------|------|-----------------|-------------|---------|------------------|
| 25  | 62  | 18,25 | 17   | 1,5            | 13   | 1,5             | 28° 48' 39" | 44,13   | 7FB              |
| 30  | 72  | 20,75 | 19   | 1,5            | 14   | 1,5             | 28° 48' 39" | 51,771  | 7FB              |
| 35  | 80  | 22,75 | 21   | 2              | 15   | 1,5             | 28° 48' 39" | 58,861  | 7FB              |
| 40  | 90  | 25,25 | 23   | 2              | 17   | 1,5             | 28° 48' 39" | 66,984  | 7FB              |
| 45  | 95  | 29    | 26,5 | 2,5            | 20   | 2,5             | 30°         | 67,061  | 7FC              |
| 45  | 100 | 27,25 | 25   | 2              | 18   | 1,5             | 28° 48' 39" | 75,107  | 7FB              |
| 50  | 105 | 32    | 29   | 3              | 22   | 3               | 30°         | 74,245  | 7FC              |
| 50  | 110 | 29,25 | 27   | 2,5            | 19   | 2               | 28° 48' 39" | 82,747  | 7FB              |
| 55  | 115 | 34    | 31   | 3              | 23,5 | 3               | 30°         | 81,787  | 7FC              |
| 55  | 120 | 31,5  | 29   | 2,5            | 21   | 2               | 28° 48' 39" | 89,563  | 7FB              |
| 60  | 125 | 37    | 33,5 | 3              | 26   | 3               | 28° 39'     | 89,849  | 7FC              |
| 60  | 130 | 33,5  | 31   | 3              | 22   | 2,5             | 28° 48' 39" | 98,236  | 7FB              |
| 65  | 130 | 37    | 33,5 | 3              | 26   | 3               | 30°         | 93,445  | 7FC              |
| 65  | 140 | 36    | 33   | 3              | 23   | 2,5             | 28° 48' 39" | 106,359 | 7GB              |
| 70  | 140 | 39    | 35,5 | 3              | 27   | 3               | 30°         | 101,717 | 7FC              |
| 70  | 150 | 38    | 35   | 3              | 25   | 2,5             | 28° 48' 39" | 113,449 | 7GB              |
| 75  | 150 | 42    | 38   | 3              | 29   | 3               | 30°         | 108,847 | 7FC              |
| 75  | 160 | 40    | 37   | 3              | 26   | 2,5             | 28° 48' 39" | 122,122 | 7GB              |
| 80  | 160 | 45    | 41   | 3              | 31   | 3               | 30°         | 115,93  | 7FC              |
| 80  | 170 | 42,5  | 39   | 3              | 27   | 2,5             | 28° 48' 39" | 129,213 | 7GB              |
| 85  | 170 | 48    | 45   | 4              | 33   | 4               | 28° 04' 30" | 125,628 | 7FC              |
| 85  | 180 | 44,5  | 41   | 4              | 28   | 3               | 28° 48' 39" | 137,403 | 7GB              |
| 90  | 175 | 48    | 45   | 4              | 33   | 4               | 29° 02' 30" | 129,385 | 7FC              |
| 90  | 190 | 46,5  | 43   | 4              | 30   | 3               | 28° 48' 39" | 145,527 | 7GB              |
| 95  | 180 | 49    | 45   | 4              | 33   | 4               | 30°         | 133,033 | 7FC              |
| 95  | 200 | 49,5  | 45   | 4              | 32   | 3               | 28° 48' 39" | 151,584 | 7GB              |

Table 8 (continued)

Dimensions in millimetres

| $d$ | $D$ | $T$  | $B$ | $r_{s \min}^a$ | $C$ | $r_{1s \min}^a$ | $\alpha$    | $E$     | Dimension series |
|-----|-----|------|-----|----------------|-----|-----------------|-------------|---------|------------------|
| 100 | 190 | 52   | 47  | 4              | 35  | 4               | 30°         | 140,384 | 7FC              |
| 100 | 215 | 56,5 | 51  | 4              | 35  | 3               | 28° 48' 39" | 162,739 | 7GB              |
| 105 | 200 | 54   | 49  | 4              | 37  | 4               | 30°         | 147,838 | 7FC              |
| 105 | 225 | 58   | 53  | 4              | 36  | 3               | 28° 48' 39" | 170,724 | 7GB              |
| 110 | 210 | 57   | 51  | 4              | 39  | 4               | 28° 25'     | 157,271 | 7GC              |
| 110 | 240 | 63   | 57  | 4              | 38  | 3               | 28° 48' 39" | 182,014 | 7GB              |
| 120 | 220 | 57   | 51  | 4              | 39  | 4               | 30°         | 164,848 | 7FC              |
| 120 | 260 | 68   | 62  | 4              | 42  | 3               | 28° 48' 39" | 197,022 | 7GB              |
| 130 | 230 | 57   | 51  | 5              | 39  | 5               | 30°         | 175,117 | 7FC              |
| 130 | 280 | 72   | 66  | 5              | 44  | 4               | 28° 48' 39" | 211,753 | 7GB              |
| 140 | 240 | 57   | 52  | 5              | 39  | 5               | 28° 37'     | 187,175 | 7FC              |
| 140 | 300 | 77   | 70  | 5              | 47  | 4               | 28° 48' 39" | 227,999 | 7GB              |
| 150 | 250 | 57   | 52  | 5              | 39  | 5               | 30°         | 195,041 | 7FC              |
| 150 | 320 | 82   | 75  | 5              | 50  | 4               | 28° 48' 39" | 244,244 | 7GB              |

<sup>a</sup> Maximum chamfer dimensions are given in ISO 582.

### 6.3 Double-row tapered roller bearings

Boundary dimensions for contact angle series 2, 3, 4 and 7 are given in Tables 9, 10, 11 and 12 respectively.

NOTE The dimension series given in Tables 9 to 12 are identical to the corresponding single-row bearings in Tables 4 to 8, respectively.

Table 9 — Contact angle series 2

Dimensions in millimetres

| $d$ | $D$ | $B_1$ | $C_1$ | Dimension series |
|-----|-----|-------|-------|------------------|
| 20  | 45  | 39    | 32    | 2DC              |
| 20  | 50  | 50    | 43    | 2ED              |
| 22  | 47  | 39    | 32    | 2CC              |
| 22  | 52  | 50    | 43    | 2ED              |
| 25  | 50  | 39    | 32    | 2CC              |
| 25  | 58  | 58    | 48    | 2EE              |
| 28  | 55  | 43    | 36    | 2CD              |
| 28  | 65  | 61    | 51    | 2ED              |
| 30  | 58  | 44    | 37    | 2CD              |
| 30  | 68  | 65    | 55    | 2EE              |
| 32  | 62  | 47    | 39    | 2CD              |
| 32  | 72  | 65    | 55    | 2ED              |
| 35  | 68  | 51    | 42    | 2DD              |
| 35  | 78  | 73    | 61    | 2EE              |

Table 9 (continued)

Dimensions in millimetres

| $d$ | $D$ | $B_1$ | $C_1$ | Dimension series |
|-----|-----|-------|-------|------------------|
| 40  | 75  | 53    | 44    | 2CD              |
| 40  | 85  | 73    | 63    | 2EE              |
| 45  | 80  | 53    | 44    | 2CD              |
| 45  | 95  | 79    | 67    | 2ED              |
| 50  | 85  | 53    | 44    | 2CD              |
| 50  | 100 | 79    | 67    | 2ED              |
| 55  | 85  | 41    | 33    | 2CC              |
| 55  | 95  | 60    | 49    | 2CD              |
| 55  | 110 | 87    | 73    | 2ED              |
| 60  | 90  | 42    | 34    | 2CC              |
| 60  | 100 | 60    | 49    | 2CD              |
| 60  | 115 | 88    | 74    | 2EE              |
| 65  | 100 | 50    | 41    | 2CC              |
| 65  | 110 | 70    | 58    | 2DD              |
| 65  | 125 | 95    | 79    | 2FD              |
| 70  | 105 | 50    | 41    | 2CC              |
| 70  | 120 | 76    | 62    | 2DD              |
| 70  | 130 | 95    | 79    | 2ED              |
| 75  | 115 | 56    | 46    | 2CC              |
| 75  | 125 | 76    | 62    | 2DD              |
| 75  | 135 | 95    | 79    | 2ED              |
| 80  | 120 | 56    | 46    | 2CC              |
| 80  | 130 | 76    | 62    | 2DD              |
| 80  | 145 | 104   | 88    | 2ED              |
| 85  | 125 | 58    | 48    | 2CC              |
| 85  | 135 | 76    | 64    | 2DD              |
| 85  | 150 | 104   | 88    | 2ED              |
| 90  | 135 | 64    | 54    | 2CC              |
| 90  | 140 | 76    | 64    | 2CD              |
| 90  | 155 | 104   | 88    | 2ED              |
| 90  | 165 | 104   | 88    | 2FC              |
| 95  | 140 | 64    | 54    | 2CC              |
| 95  | 145 | 76    | 64    | 2CD              |
| 95  | 160 | 104   | 88    | 2ED              |
| 100 | 145 | 64    | 54    | 2DC              |
| 100 | 150 | 76    | 64    | 2CD              |
| 100 | 165 | 104   | 88    | 2EE              |
| 105 | 155 | 74    | 62    | 2CD              |
| 105 | 160 | 84    | 70    | 2DD              |
| 105 | 170 | 104   | 88    | 2EE              |
| 110 | 160 | 74    | 62    | 2CD              |
| 110 | 165 | 84    | 70    | 2DD              |
| 110 | 175 | 104   | 88    | 2EE              |

Table 9 (continued)

Dimensions in millimetres

| $d$ | $D$ | $B_1$ | $C_1$ | Dimension series |
|-----|-----|-------|-------|------------------|
| 120 | 175 | 82    | 68    | 2DC              |
| 120 | 180 | 92    | 76    | 2DD              |
| 120 | 190 | 110   | 92    | 2EE              |
| 130 | 185 | 82    | 68    | 2DC              |
| 130 | 190 | 92    | 76    | 2DD              |
| 130 | 200 | 110   | 92    | 2DE              |
| 140 | 200 | 88    | 72    | 2DC              |
| 140 | 205 | 98    | 82    | 2DD              |
| 140 | 215 | 116   | 98    | 2ED              |
| 150 | 215 | 98    | 82    | 2DD              |
| 150 | 225 | 116   | 98    | 2ED              |
| 160 | 225 | 98    | 82    | 2DD              |
| 160 | 235 | 116   | 98    | 2ED              |
| 170 | 235 | 98    | 82    | 2DD              |
| 170 | 245 | 116   | 98    | 2ED              |
| 180 | 240 | 88    | 72    | 2DC              |
| 180 | 245 | 98    | 82    | 2DD              |
| 180 | 255 | 116   | 98    | 2ED              |
| 190 | 255 | 92    | 76    | 2DC              |
| 190 | 260 | 104   | 86    | 2DD              |
| 190 | 270 | 124   | 104   | 2ED              |
| 200 | 265 | 92    | 76    | 2DC              |
| 200 | 270 | 104   | 86    | 2DD              |
| 200 | 280 | 124   | 104   | 2ED              |
| 220 | 285 | 92    | 76    | 2DC              |
| 220 | 290 | 104   | 86    | 2DD              |
| 220 | 300 | 124   | 104   | 2ED              |
| 240 | 305 | 92    | 76    | 2DC              |
| 240 | 310 | 104   | 86    | 2DD              |
| 240 | 320 | 126   | 104   | 2EE              |
| 260 | 325 | 92    | 76    | 2DC              |
| 260 | 330 | 104   | 86    | 2DD              |
| 260 | 340 | 126   | 104   | 2DE              |
| 280 | 360 | 126   | 104   | 2DE              |

**Table 10 — Contact angle series 3**

Dimensions in millimetres

| $d$ | $D$ | $B_1$ | $C_1$ | Dimension series |
|-----|-----|-------|-------|------------------|
| 20  | 42  | 34    | 28    | 3CC              |
| 22  | 44  | 34    | 27    | 3CC              |
| 40  | 68  | 44    | 35    | 3CD              |
| 45  | 75  | 46    | 37    | 3CC              |
| 50  | 80  | 46    | 37    | 3CC              |
| 55  | 90  | 52    | 41    | 3CC              |
| 65  | 135 | 112   | 94    | 3FE              |
| 75  | 145 | 112   | 94    | 3FE              |
| 80  | 125 | 66    | 52    | 3CC              |
| 85  | 160 | 118   | 98    | 3FE              |
| 90  | 140 | 73    | 57    | 3CC              |
| 110 | 190 | 126   | 104   | 3FE              |
| 130 | 210 | 126   | 104   | 3EE              |
| 150 | 235 | 132   | 110   | 3EE              |
| 170 | 255 | 132   | 110   | 3EE              |
| 180 | 280 | 142   | 110   | 3FD              |
| 190 | 280 | 140   | 116   | 3EE              |

**Table 11 — Contact angle series 4**

Dimensions in millimetres

| $d$ | $D$ | $B_1$ | $C_1$ | Dimension series |
|-----|-----|-------|-------|------------------|
| 25  | 47  | 34    | 27    | 4CC              |
| 28  | 52  | 37    | 29    | 4CC              |
| 30  | 55  | 39    | 31    | 4CC              |
| 32  | 58  | 39    | 31    | 4CC              |
| 35  | 62  | 41    | 33    | 4CC              |
| 50  | 105 | 88    | 74    | 4FE              |
| 55  | 115 | 95    | 81    | 4FE              |
| 60  | 95  | 52    | 41    | 4CC              |
| 60  | 125 | 104   | 88    | 4FE              |
| 65  | 100 | 52    | 41    | 4CC              |

Table 11 (continued)

Dimensions in millimetres

| $d$ | $D$ | $B_1$ | $C_1$ | Dimension series |
|-----|-----|-------|-------|------------------|
| 70  | 110 | 57    | 45    | 4CC              |
| 70  | 140 | 112   | 94    | 4FE              |
| 75  | 115 | 58    | 46    | 4CC              |
| 80  | 150 | 112   | 94    | 4FE              |
| 85  | 130 | 67    | 53    | 4CC              |
| 90  | 165 | 120   | 100   | 4FE              |
| 95  | 145 | 73    | 57    | 4CC              |
| 95  | 170 | 120   | 100   | 4FE              |
| 100 | 150 | 73    | 57    | 4CC              |
| 100 | 175 | 120   | 100   | 4FE              |
| 105 | 160 | 80    | 62    | 4DC              |
| 105 | 180 | 120   | 100   | 4EE              |
| 110 | 170 | 86    | 68    | 4DC              |
| 120 | 180 | 88    | 70    | 4DC              |
| 120 | 200 | 126   | 104   | 4FE              |
| 130 | 200 | 102   | 80    | 4EC              |
| 140 | 210 | 104   | 82    | 4DC              |
| 140 | 220 | 126   | 104   | 4EE              |
| 150 | 225 | 110   | 86    | 4EC              |
| 160 | 240 | 116   | 90    | 4EC              |
| 160 | 245 | 132   | 110   | 4EE              |
| 170 | 260 | 128   | 100   | 4EC              |
| 180 | 265 | 132   | 110   | 4EE              |
| 190 | 290 | 142   | 110   | 4FD              |
| 200 | 290 | 140   | 116   | 4EE              |
| 200 | 310 | 154   | 120   | 4FD              |
| 220 | 340 | 166   | 128   | 4FD              |
| 240 | 360 | 166   | 128   | 4FD              |
| 260 | 400 | 190   | 146   | 4FC              |
| 280 | 420 | 190   | 146   | 4FC              |
| 300 | 460 | 220   | 168   | 4GD              |
| 320 | 480 | 220   | 168   | 4GD              |

Table 12 — Contact angle series 7

Dimensions in millimetres

| $d$ | $D$ | $B_1$ | $C_1$ | Dimension series |
|-----|-----|-------|-------|------------------|
| 25  | 62  | 42    | 31,5  | 7FB              |
| 30  | 72  | 47    | 33,5  | 7FB              |
| 35  | 80  | 51    | 35,5  | 7FB              |
| 40  | 90  | 56    | 39,5  | 7FB              |
| 45  | 95  | 63    | 45    | 7FC              |
| 45  | 100 | 60    | 41,5  | 7FB              |
| 50  | 105 | 69    | 49    | 7FC              |
| 50  | 110 | 64    | 43,5  | 7FB              |
| 55  | 115 | 73    | 52    | 7FC              |
| 55  | 120 | 70    | 49    | 7FB              |
| 60  | 125 | 79    | 57    | 7FC              |
| 60  | 130 | 74    | 51    | 7FB              |
| 65  | 130 | 79    | 57    | 7FC              |
| 65  | 140 | 79    | 53    | 7GB              |
| 70  | 140 | 83    | 59    | 7FC              |
| 70  | 150 | 83    | 57    | 7GB              |
| 75  | 150 | 89    | 63    | 7FC              |
| 75  | 160 | 88    | 60    | 7GB              |
| 80  | 160 | 95    | 67    | 7FC              |
| 80  | 170 | 94    | 63    | 7GB              |
| 85  | 170 | 102   | 72    | 7FC              |
| 85  | 180 | 99    | 66    | 7GB              |
| 90  | 175 | 102   | 72    | 7FC              |
| 90  | 190 | 103   | 70    | 7GB              |
| 95  | 180 | 104   | 72    | 7FC              |
| 95  | 200 | 109   | 74    | 7GB              |
| 100 | 190 | 110   | 76    | 7FC              |
| 100 | 215 | 124   | 81    | 7GB              |
| 105 | 200 | 114   | 80    | 7FC              |
| 105 | 225 | 127   | 83    | 7GB              |
| 110 | 210 | 120   | 84    | 7GC              |
| 110 | 240 | 137   | 87    | 7GB              |
| 120 | 220 | 120   | 84    | 7FC              |
| 120 | 260 | 148   | 96    | 7GB              |
| 130 | 230 | 120   | 84    | 7FC              |
| 130 | 280 | 156   | 100   | 7GB              |
| 140 | 240 | 120   | 84    | 7FC              |
| 140 | 300 | 168   | 108   | 7GB              |
| 150 | 250 | 120   | 84    | 7FC              |
| 150 | 320 | 178   | 114   | 7GB              |

#### 6.4 Flanged outer rings for tapered roller bearings

Boundary dimensions for contact angle series 2, 3, 4 and 7 are given in Tables 13, 14, 15 and 16 respectively.

NOTE Flange dimensions suitable for flanged outer rings not listed in Tables 13 to 16 are given in Annex A.

**Table 13 — Contact angle series 2**

Dimensions in millimetres

| $D$ | $D_1$ | $C_2$            |                  |     |     |     |     |     |     |     |     |     |
|-----|-------|------------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     |       | Dimension series |                  |     |     |     |     |     |     |     |     |     |
|     |       | 2CD              | 2CE              | 2DB | 2DD | 2DE | 2EE | 2FB | 2FD | 2FE | 2GB | 2GD |
| 40  | 44    | —                | —                | 3   | 3   | —   | —   | —   | —   | —   | —   | —   |
| 42  | 46    | —                | —                | —   | —   | —   | —   | 3   | —   | —   | —   | —   |
| 47  | 51    | —                | —                | 3   | 3   | —   | —   | 3   | 4   | —   | —   | —   |
| 52  | 57    | 3,5              | —                | —   | —   | —   | —   | 3,5 | 4,5 | —   | —   | —   |
| 62  | 67    | —                | —                | —   | —   | 4,5 | —   | 4   | 5   | —   | —   | —   |
| 65  | 70    | —                | —                | —   | —   | 4,5 | —   | —   | —   | —   | —   | —   |
| 72  | 77    | —                | —                | —   | —   | 5   | —   | 4   | 6   | —   | —   | —   |
| 75  | 79    | —                | 4,5 <sup>a</sup> | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 75  | 80    | —                | 4,5 <sup>b</sup> | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 80  | 84    | —                | 4,5              | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 80  | 85    | —                | —                | —   | —   | 5   | —   | 4,5 | —   | 6   | —   | —   |
| 90  | 94    | —                | 5                | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 90  | 95    | —                | —                | —   | —   | —   | —   | 4,5 | 6   | —   | —   | —   |
| 95  | 99    | —                | 5                | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 95  | 100   | —                | —                | —   | 6   | —   | —   | —   | —   | —   | —   | —   |
| 100 | 104   | —                | 5                | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 100 | 106   | —                | —                | —   | —   | —   | —   | 5   | 7   | —   | —   | —   |
| 110 | 116   | —                | 5                | —   | —   | —   | —   | 5   | 8   | —   | —   | —   |
| 115 | 121   | —                | 5                | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 120 | 127   | —                | —                | —   | —   | —   | —   | 5,5 | 8   | —   | —   | —   |
| 125 | 131   | —                | 5,5              | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 130 | 136   | —                | 5,5              | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 130 | 137   | —                | —                | —   | —   | —   | —   | 5,5 | 8   | —   | —   | —   |
| 140 | 146   | —                | 6                | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 140 | 147   | —                | —                | —   | —   | —   | —   | —   | —   | —   | 6   | 8   |
| 145 | 151   | —                | 6                | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 150 | 156   | —                | 6                | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 150 | 158   | —                | —                | —   | —   | —   | —   | —   | —   | —   | 7   | 10  |
| 160 | 168   | —                | —                | —   | —   | 7,5 | —   | —   | —   | —   | 7   | 10  |