

## МЕЖГОСУДАРСТВЕННЫЙ СТАНДАРТ

КАЛИБРЫ КОМПЛЕКСНЫЕ ДЛЯ КОНТРОЛЯ  
ПЛИЦЕВЫХ ПРЯМОБОЧНЫХ СОЕДИНЕНИЙ

Виды, основные размеры

Complex gauges for splined straight-sided joints.  
Types, basic dimensionsГОСТ  
24968—81Введен  
МН 2957-61—  
МН 2969-61МКС 17.040.30  
ОКП 39 3182

Настоящий стандарт Государственного комитета СССР по стандартам от 29 октября 1981 г. № 4410 дата введения установлена

01.01.82

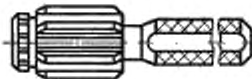
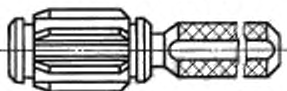
Настоящий стандарт распространяется на комплексные калибры (пробки и кольца), предназначенные для контроля суммарных отклонений наружного и внутреннего диаметров, ширины пазов или толщины зубьев, а также отклонений формы и расположения элементов профиля плечевых валов и отверстий с прямобочным профилем зубьев по ГОСТ 1139—80.

Настоящий стандарт полностью соответствует СТ СЭВ1922—79.

## 1. ВИДЫ

1.1. Виды комплексных калибров должны соответствовать указанным в табл. 1.

Таблица 1

| Номер вида калибра | Назначение вида калибра, наименование | Чертеж                                                                                              | Примечание                                                                             |
|--------------------|---------------------------------------|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1                  | Калибр-пробка плечевой прямобочный    | Исполнение 1<br> | При центрировании по $d$ , $D$ или $b$ и длине контролируемого отверстия не более $2l$ |
|                    |                                       | Исполнение 2<br> | При центрировании по $d$ и длине контролируемого отверстия не менее $1,5l$             |

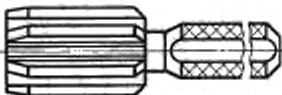
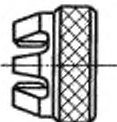
Надпись официальная

★

Первичный экземпляр

Издание с Изменениями № 1, утвержденным в марте 1985 г. (ИУС 5—85).

Продолжение табл. 1

| Номер вида калибра | Наименование вида калибра, исполнения | Чертеж                                                                                            | Примечание                                                                         |
|--------------------|---------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| 1                  | Калибр-пробка шлицевый прямоугольный  | Исполнение 3<br> | При центрировании по $D$ или $d$ и длине контролируемого отверстия не более $2d_1$ |
| 2                  | Калибр-кольцо шлицевый прямоугольный  |                  |                                                                                    |

## 2. ОБОЗНАЧЕНИЯ

2.1. В настоящем стандарте приняты следующие обозначения размеров калибров:

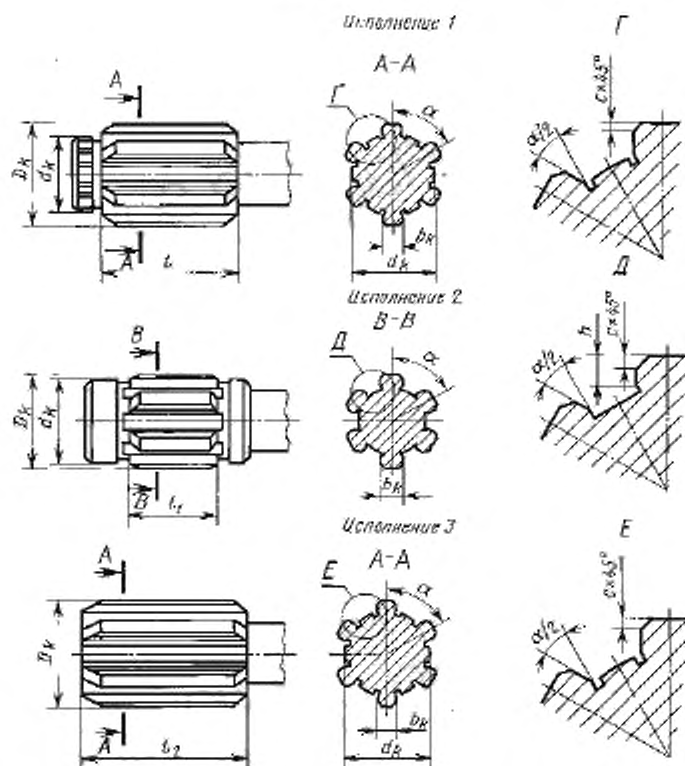
- $b$  — номинальная толщина зуба вала и ширина паза втулки;
- $b_k$  — номинальная толщина зуба калибра-пробки и ширина паза калибра-кольца;
- $D$  — номинальный наружный диаметр вала и втулки;
- $D_k$  — номинальный наружный диаметр калибра-пробки и калибра-кольца;
- $d$  — номинальный внутренний диаметр втулки и вала;
- $d_k$  — номинальный диаметр калибра-пробки и калибра-кольца для центрирующего диаметра  $d$  нарезки;
- $d_1$  — номинальный наружный диаметр направляющей части калибра-пробки исполнения 1;
- $c$  — номинальная величина фаски калибра;
- $h$  — номинальная рабочая высота зуба калибра;
- $l$  — номинальная длина рабочей части калибра-пробки исполнения 1;
- $l_1$  — номинальная длина рабочей части калибра-пробки исполнения 2;
- $l_2$  — номинальная длина рабочей части калибра-пробки исполнения 3;
- $l_3$  — номинальная длина рабочей части калибра-кольца;
- $r$  — номинальный радиус закругления калибра;
- $z$  — число зубьев;
- $\alpha$  — угловой шаг.

## 3. ОСНОВНЫЕ РАЗМЕРЫ

3.1. Основные размеры калибров-пробок должны соответствовать указанным на черт. 1 и в табл. 2, калибров-колец — на черт. 2 и в табл. 3.

Исполнительные размеры  $D_k$ ,  $d_k$ ,  $b_k$  — по ГОСТ 7951—80.

## Камбры-ребри



Примечание. Вместо фаски с  $45^\circ$  допускается закругление  $r$  с предельным отклонением  $+0,1$  мм.

Черт.1

Таблица 2

Размеры, мм

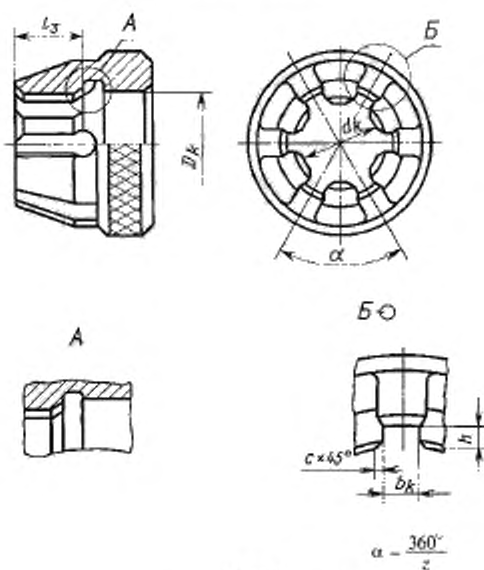
| $z \times d \times D$   | Число<br>зубов,<br>$z$ | $d_z$ | $D_z$ | $l_z$ | $l$      |          | $l_1$ | $l_2$ | $d_1$   |                                                  |                  | $e$<br>+0,1 | $h$<br>-0,2      |                  |
|-------------------------|------------------------|-------|-------|-------|----------|----------|-------|-------|---------|--------------------------------------------------|------------------|-------------|------------------|------------------|
|                         |                        |       |       |       | Ряд<br>А | Ряд<br>В |       |       | Номинал | Предельные<br>отклонения при<br>запрессовке лот. |                  |             |                  |                  |
|                         |                        |       |       |       |          |          |       |       |         | $d$                                              | $D, h$           |             |                  |                  |
| $6 \times 11 \times 14$ | 6                      | 11    | 14    | 3,0   | 12       | 25       | 16    | 36    | 11      | -0,016<br>-0,034                                 | -0,095<br>-0,205 | 0,2         | 1,5              |                  |
| $6 \times 13 \times 16$ |                        | 13    | 16    | 3,5   | 16       | 30       | 20    | 40    | 13      |                                                  |                  |             |                  | 2,0              |
| $6 \times 16 \times 20$ |                        | 16    | 20    | 4,0   | 20       |          | 22    | 45    | 16      |                                                  |                  |             |                  |                  |
| $6 \times 18 \times 22$ |                        | 18    | 22    | 5,0   |          |          | 24    | 35    | 25      | 50                                               | 18               |             | -0,020<br>-0,041 | -0,110<br>-0,240 |
| $6 \times 21 \times 25$ |                        | 21    | 25    | 6,0   | 21       | 1,5      |       |       |         |                                                  |                  |             |                  |                  |
| $6 \times 23 \times 26$ |                        | 23    | 26    |       | 23       |          |       |       |         |                                                  | 2,5              |             |                  |                  |
| $6 \times 23 \times 28$ |                        | 23    | 28    |       | 7,0      | 40       |       |       |         |                                                  |                  |             |                  |                  |
| $6 \times 26 \times 30$ |                        | 26    | 30    | 0,3   |          |          |       |       |         |                                                  |                  |             |                  |                  |
| $6 \times 26 \times 32$ |                        | 26    | 32    |       |          |          | 0,2   |       |         |                                                  |                  |             |                  |                  |
| $6 \times 28 \times 32$ |                        | 28    | 32    | 3,0   |          |          |       |       |         |                                                  |                  |             |                  |                  |
| $6 \times 28 \times 34$ |                        | 28    | 34    |       | 2,0      |          |       |       |         |                                                  |                  |             |                  |                  |
|                         |                        |       |       |       |          |          |       |       |         |                                                  |                  |             | 3,0              |                  |

Размеры, мм

| z x d x D      | Число<br>зубьев,<br>z | d <sub>к</sub> | D <sub>к</sub> | d <sub>ф</sub> | j        |          | l <sub>1</sub> | l <sub>2</sub> | d <sub>1</sub> |                                                 | e<br>+0,1        | h<br>-0,2 |     |     |
|----------------|-----------------------|----------------|----------------|----------------|----------|----------|----------------|----------------|----------------|-------------------------------------------------|------------------|-----------|-----|-----|
|                |                       |                |                |                | Ряд<br>А | Ряд<br>В |                |                | Номинал        | Предельные<br>отклонения при<br>нормировании по |                  |           |     |     |
|                |                       |                |                |                |          |          |                |                |                | d                                               | D, b             |           |     |     |
| 8 x 32 x 36    | 8                     | 32             | 36             | 6,0            | 30       | 40       | 28             | 55             | 32             | -0,025<br>-0,050                                | -0,120<br>-0,280 | 0,3       | 2,0 |     |
| 8 x 32 x 38    |                       |                | 38             |                |          |          |                |                |                |                                                 |                  |           | 3,0 |     |
| 8 x 36 x 40    |                       | 36             | 40             | 7,0            |          | 45       | 35             | 60             | 36             |                                                 |                  |           | 2,0 |     |
| 8 x 36 x 42    |                       |                | 42             |                |          |          |                |                |                |                                                 |                  |           | 3,0 |     |
| 8 x 42 x 46    |                       | 42             | 46             | 8,0            | 36       | 50       | 40             | 65             | 42             | -0,025<br>-0,050                                | -0,130<br>-0,290 | 0,3       | 2,0 |     |
| 8 x 42 x 48    |                       |                | 48             |                |          |          |                |                |                |                                                 |                  |           | 3,0 |     |
| 8 x 46 x 50    |                       | 46             | 50             | 9,0            |          |          |                |                | 46             |                                                 |                  |           | 2,0 |     |
| 8 x 46 x 54    |                       |                | 54             |                |          |          |                |                |                |                                                 |                  |           | 4,0 |     |
| 8 x 52 x 58    |                       | 52             | 58             |                | 40       | 50       | 40             | 65             | 52             | -0,030<br>-0,060                                | -0,140<br>-0,330 | 0,5       | 3,0 |     |
| 8 x 52 x 60    |                       |                | 60             |                |          |          |                |                |                |                                                 |                  |           | 4,0 |     |
| 8 x 56 x 62    |                       | 56             | 62             | 10,0           |          | 55       | 42             | 70             | 56             |                                                 |                  |           | 3,0 |     |
| 8 x 56 x 65    |                       |                | 65             |                |          |          |                |                |                |                                                 |                  |           | 4,5 |     |
| 8 x 62 x 68    |                       | 62             | 68             | 12,0           |          |          |                |                | 62             |                                                 |                  |           | 3,0 |     |
| 8 x 62 x 72    |                       |                | 72             |                |          |          |                |                |                |                                                 |                  |           | 5,0 |     |
| 10 x 16 x 20   | 10                    | 16             | 20             | 2,5            | 16       | 30       | 22             | 45             | 16             | -0,016                                          | -0,095           | 0,2       | 2,0 |     |
| 10 x 18 x 23   |                       | 18             | 23             | 3,0            | 20       |          |                |                | 18             | -0,034                                          | -0,205           |           | 2,5 |     |
| 10 x 21 x 26   |                       | 21             | 26             |                | 24       | 35       | 25             | 50             | 21             | -0,020<br>-0,041                                | -0,110<br>-0,240 |           | 0,3 | 3,0 |
| 10 x 23 x 29   |                       | 23             | 29             |                |          |          |                |                | 23             |                                                 |                  |           |     |     |
| 10 x 26 x 32   |                       | 26             | 32             | 4,0            |          | 40       | 28             | 55             | 26             |                                                 |                  | 0,3       |     | 3,5 |
| 10 x 28 x 35   |                       | 28             | 35             |                |          |          |                |                | 28             |                                                 |                  |           |     | 4,0 |
| 10 x 32 x 40   |                       | 32             | 40             | 5,0            | 30       | 45       | 35             | 60             | 32             | -0,025<br>-0,050                                | -0,120<br>-0,280 | 0,3       | 4,5 |     |
| 10 x 36 x 45   |                       | 36             | 45             |                | 36       | 50       |                | 65             | 36             |                                                 |                  |           | 5,0 |     |
| 10 x 42 x 52   |                       | 42             | 52             | 6,0            |          |          | 40             |                | 42             |                                                 |                  |           | 0,5 |     |
| 10 x 46 x 56   |                       | 46             | 56             | 7,0            |          |          |                | 70             | 46             |                                                 |                  |           |     | 3,0 |
| 10 x 52 x 78   |                       | 52             | 78             | 12,0           | 50       | 55       |                |                | 52             | -0,030<br>-0,060                                | -0,150<br>-0,340 |           | 5,0 |     |
| 10 x 52 x 82   |                       |                | 82             |                | 50       | 58       | 40             | 75             | 82             | -0,036<br>-0,071                                | -0,170<br>-0,390 | 0,5       | 3,0 |     |
| 10 x 82 x 88   |                       | 82             | 88             |                |          |          |                |                |                |                                                 |                  |           | 5,0 |     |
| 10 x 82 x 92   |                       |                | 92             |                |          |          |                |                | 92             |                                                 |                  |           | 3,0 |     |
| 10 x 92 x 98   |                       | 92             | 98             | 14,0           |          |          |                |                |                |                                                 |                  |           | 5,0 |     |
| 10 x 92 x 102  |                       |                | 102            |                | 60       | 63       | 45             | 80             | 102            | -0,036<br>-0,071                                | -0,180<br>-0,400 | 0,5       | 3,0 |     |
| 10 x 102 x 108 |                       | 102            | 108            | 16,0           |          |          |                |                |                |                                                 |                  |           | 5,0 |     |
| 10 x 102 x 112 |                       |                | 112            |                |          | 68       | 50             | 85             | 112            |                                                 |                  |           | 4,0 |     |
| 10 x 112 x 120 |                       | 112            | 120            | 18,0           |          |          |                |                |                |                                                 |                  |           | 6,5 |     |
| 10 x 112 x 125 |                       |                | 125            |                | 40       | 50       | 40             | 65             | 52             | -0,030<br>-0,060                                | -0,140<br>-0,330 | 0,5       | 4,5 |     |
| 16 x 52 x 60   | 16                    | 52             | 60             | 5,0            |          |          |                |                | 52             |                                                 |                  |           | 5,0 |     |
| 16 x 56 x 65   |                       | 56             | 65             |                |          | 55       |                | 70             | 56             |                                                 |                  |           |     |     |
| 16 x 62 x 72   |                       | 62             | 72             | 6,0            |          |          |                |                | 62             |                                                 |                  |           |     |     |
| 16 x 72 x 82   |                       | 72             | 82             | 7,0            |          |          |                |                | 72             |                                                 |                  |           |     |     |
| 20 x 82 x 92   | 20                    | 82             | 92             | 6,0            | 60       | 63       | 45             | 80             | 102            | -0,036<br>-0,071                                | -0,170<br>-0,390 | 0,5       | 3,0 |     |
| 20 x 92 x 102  |                       | 92             | 102            | 7,0            |          | 58       |                | 75             | 82             |                                                 |                  |           | 5,0 |     |
| 20 x 102 x 115 |                       | 102            | 115            | 8,0            |          |          |                |                | 92             |                                                 |                  |           | 6,5 |     |
| 20 x 112 x 125 |                       | 112            | 125            | 9,0            |          | 68       | 50             | 85             | 112            |                                                 |                  |           |     |     |

Примечание. Размеры по ряду В являются предпочтительными.

## Камбёр-шпатель



Черт. 2

Таблица 3

Размеры, мм

| $z \times d \times D$ | Число<br>зубьев,<br>$z$ | $d_1$ | $D_2$ | $d_t$ | $i_t$ |       | $e$<br>$+0,1$ | $k$<br>$-0,2$ |
|-----------------------|-------------------------|-------|-------|-------|-------|-------|---------------|---------------|
|                       |                         |       |       |       | Ряд А | Ряд В |               |               |
| 6 × 11 × 14           | 6                       | 11    | 14    | 3,0   | 8     | 13    | 0,2           | 2,0           |
| 6 × 13 × 16           |                         | 13    | 16    | 3,5   | 10    | 15    |               | 2,5           |
| 6 × 16 × 20           |                         | 16    | 20    | 4,0   | 12    |       |               |               |
| 6 × 18 × 22           |                         | 18    | 22    | 5,0   | 14    | 17    |               |               |
| 6 × 21 × 25           |                         | 21    | 25    | 6,0   |       |       |               |               |
| 6 × 23 × 26           |                         | 23    | 26    |       |       | 14    |               | 17            |
| 6 × 23 × 28           |                         | 23    | 28    |       |       |       |               |               |
| 6 × 26 × 30           |                         | 26    | 30    |       | 16    | 20    | 0,3           | 3,5           |
| 6 × 26 × 32           |                         | 28    | 32    | 7,0   |       |       | 0,2           | 2,5           |
| 6 × 28 × 32           |                         |       | 28    |       | 34    |       | 18            | 22            |
| 6 × 28 × 34           | 32                      | 36    | 6,0   | 20    | 2,5   |       |               |               |
| 8 × 32 × 36           |                         | 38    |       |       | 7,0   | 3,5   |               |               |
| 8 × 32 × 38           | 36                      | 40    | 22    |       |       | 2,5   |               |               |
| 8 × 36 × 40           |                         | 42    |       |       |       | 3,5   |               |               |
| 8 × 36 × 42           | 42                      | 46    | 8,0   | 27    | 2,5   |       |               |               |
| 8 × 42 × 46           |                         | 48    |       |       | 3,5   |       |               |               |
| 8 × 42 × 48           | 46                      | 50    | 9,0   | 25    | 0,5   | 4,5   |               |               |
| 8 × 46 × 50           |                         | 54    |       |       |       | 3,5   |               |               |
| 8 × 46 × 54           | 52                      | 58    | 10,0  | 27    |       | 4,5   |               |               |
| 8 × 52 × 58           |                         | 60    |       |       |       | 3,5   |               |               |
| 8 × 52 × 60           | 56                      | 62    | 12,0  | 20    | 30    | 5,0   |               |               |
| 8 × 56 × 62           |                         | 65    |       |       |       | 3,5   |               |               |
| 8 × 56 × 65           | 62                      | 68    | 12,0  | 22    | 30    | 3,5   |               |               |
| 8 × 62 × 68           |                         | 72    |       |       |       | 5,5   |               |               |
| 8 × 62 × 72           |                         |       |       |       |       |       |               |               |

Размеры, мм

| $\varepsilon \times d \times D$ | Число<br>зубов,<br>$z$ | $d_z$ | $D_z$ | $b_z$ | $l_z$ |       | $\sigma$<br>+0,1 | $\delta$<br>-0,2 |     |
|---------------------------------|------------------------|-------|-------|-------|-------|-------|------------------|------------------|-----|
|                                 |                        |       |       |       | Ряд А | Ряд В |                  |                  |     |
| 10 × 16 × 20                    | 10                     | 16    | 20    | 2,5   | 12    | 15    | 0,2              | 2,5              |     |
| 10 × 18 × 23                    |                        | 18    | 23    | 3,0   |       |       |                  | 3,0              |     |
| 10 × 21 × 26                    |                        | 21    | 26    | 4,0   | 14    | 17    |                  | 3,5              |     |
| 10 × 23 × 29                    |                        | 23    | 29    |       |       | 0,3   | 4,0              |                  |     |
| 10 × 26 × 32                    |                        | 26    | 32    |       | 16    |       | 20               |                  | 4,5 |
| 10 × 28 × 35                    |                        | 28    | 35    | 5,0   |       |       |                  |                  |     |
| 10 × 32 × 40                    |                        | 32    | 40    | 6,0   | 18    | 25    | 0,5              | 5,5              |     |
| 10 × 36 × 45                    |                        | 36    | 45    |       |       |       |                  | 3,5              |     |
| 10 × 42 × 52                    |                        | 42    | 52    | 7,0   | 22    | 30    |                  | 5,5              |     |
| 10 × 46 × 56                    |                        | 46    | 56    |       |       | 12,0  |                  | 35               |     |
| 10 × 72 × 78                    |                        | 72    | 78    | 12,0  | 24    | 37    |                  | 5,5              |     |
| 10 × 72 × 82                    |                        | 82    | 82    |       |       | 0,5   | 3,5              |                  |     |
| 10 × 82 × 88                    |                        |       | 88    | 14,0  | 27    |       | 40               |                  | 5,5 |
| 10 × 82 × 92                    |                        | 92    | 92    |       |       |       |                  |                  | 7,0 |
| 10 × 92 × 98                    |                        | 92    | 98    |       | 27    |       | 40               |                  | 4,5 |
| 10 × 92 × 102                   |                        | 102   | 102   | 18,0  |       |       | 0,5              | 5,5              |     |
| 10 × 102 × 108                  |                        |       | 108   | 16,0  | 27    | 40    |                  | 3,5              |     |
| 10 × 102 × 112                  |                        | 112   | 112   |       |       |       |                  | 7,0              |     |
| 10 × 112 × 120                  |                        |       | 120   | 18,0  | 27    | 40    |                  | 4,5              |     |
| 10 × 112 × 125                  |                        | 125   | 125   |       |       | 18,0  |                  |                  | 7,0 |
| 16 × 52 × 60                    | 16                     | 52    | 60    | 5,0   | 18    | 27    | 0,5              | 4,5              |     |
| 16 × 56 × 65                    |                        | 56    | 65    | 6,0   |       |       |                  | 5,0              |     |
| 16 × 62 × 72                    |                        | 62    | 72    | 6,0   | 22    | 30    |                  | 5,5              |     |
| 16 × 72 × 82                    |                        | 72    | 82    | 7,0   |       | 35    |                  |                  |     |
| 20 × 82 × 92                    | 20                     | 82    | 92    | 6,0   | 24    | 37    | 0,5              | 3,5              |     |
| 20 × 92 × 102                   |                        | 92    | 102   | 7,0   |       |       |                  | 27               | 40  |
| 20 × 102 × 115                  |                        | 102   | 115   | 8,0   |       |       |                  |                  |     |
| 20 × 112 × 125                  |                        | 112   | 125   | 9,0   |       |       |                  |                  |     |

Примечание. Длины по ряду В являются предпочтительными.  
(Изменения редакции, Изм. № 1).

3.2. Условное обозначение калибра должно состоять из наименования калибра («пробка» или «кыльце»), обозначения калибра, коды, указанного в приложении 2 настоящего стандарта, и обозначения настоящего стандарта.

Пример условного обозначения комплексного калибра-пробки исполнения 2 для шлицевой втулки  $d=8 \times 36H7 \times 40H12 \times 7D9$ :

*Пробка 8311-0592-1 ГОСТ 24960-81*

То же, комплексного калибра-кольца для шлицевого вала  $d=8 \times 36e8 \times 40h11 \times 7e9$ :

*Кальцо 8312-0245-6 ГОСТ 24960-81*

3.3. Технические требования — по ГОСТ 24959—81.

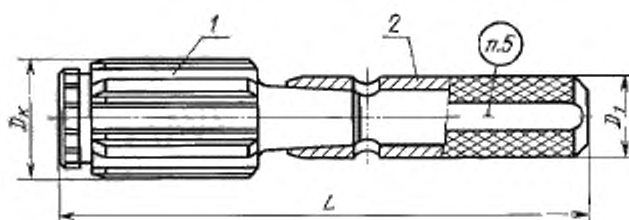
3.4. Конструкция и размеры калибров приведены в приложении 1.

3.5. Коды полноты допуска шлицевых валов и отверстий по ГОСТ 1139—80, для которых выполнены размеры калибров одинаковы, указаны в приложении 2.

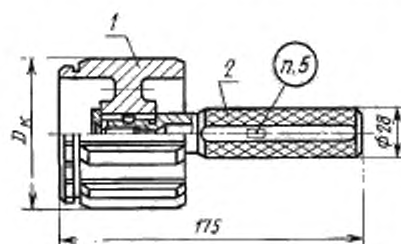
**КОНСТРУКЦИИ И РАЗМЕРЫ КАЛИБРОВ**

1. Размеры калибров-пробок исполнения 1 должны соответствовать указанным на черт.1 и в табл.1 и 2.

Для  $z = 6$  и 8;  $z = 10$  при  $D \leq 56$  мм



Для  $z = 10$  при  $D > 56$  мм;  $z = 16$  и 20



Черт.1

| При центрировании |             |           |             |           |             |                |     |                |                   | Пос.1 Вспом.  |               |                    | Пос.2<br>Ручка<br>по ГОСТ<br>14748-69 |
|-------------------|-------------|-----------|-------------|-----------|-------------|----------------|-----|----------------|-------------------|---------------|---------------|--------------------|---------------------------------------|
| по D              | Обозначение | по d      | Обозначение | по b      | Обозначение | D <sub>1</sub> | L   | Мас-<br>са, кг | При центрировании |               |               |                    |                                       |
|                   |             |           |             |           |             |                |     |                | по D              | по d          | по b          |                    |                                       |
|                   |             |           |             |           |             |                |     |                |                   |               |               | Обозначение детали |                                       |
| 8311-0401         |             | 8311-0402 |             | 8311-0403 |             | 14             | 106 | 0,04           | 8311-0401/001     | 8311-0402/001 | 8311-0403/001 | 8054-0013          |                                       |
| 8311-0404         |             | 8311-0405 |             | 8311-0406 |             | 16             | 109 | 0,06           | 8311-0404/001     | 8311-0405/001 | 8311-0406/001 |                    |                                       |
| 8311-0407         |             | 8311-0408 |             | 8311-0409 |             | 20             | 126 | 0,10           | 8311-0407/001     | 8311-0408/001 | 8311-0409/001 | 8054-0014          |                                       |
| 8311-0411         |             | 8311-0412 |             | 8311-0413 |             | 22             |     | 0,13           | 8311-0411/001     | 8311-0412/001 | 8311-0413/001 |                    |                                       |
| 8311-0414         |             | 8311-0415 |             | 8311-0416 |             | 25             |     | 0,20           | 8311-0414/001     | 8311-0415/001 | 8311-0416/001 |                    |                                       |
| 8311-0417         |             | 8311-0418 |             | 8311-0419 |             | 26             | 137 | 0,23           | 8311-0417/001     | 8311-0418/001 | 8311-0419/001 | 8054-0015          |                                       |
| 8311-0421         |             | 8311-0422 |             | 8311-0423 |             | 28             |     | 0,24           | 8311-0421/001     | 8311-0422/001 | 8311-0423/001 |                    |                                       |
| 8311-0424         |             | 8311-0425 |             | 8311-0426 |             | 30             |     | 0,27           | 8311-0424/001     | 8311-0425/001 | 8311-0426/001 |                    |                                       |
| 8311-0427         |             | 8311-0428 |             | 8311-0429 |             | 32             | 153 | 0,34           | 8311-0427/001     | 8311-0428/001 | 8311-0429/001 | 8054-0016          |                                       |
| 8311-0431         |             | 8311-0432 |             | 8311-0433 |             | 32             |     | 0,35           | 8311-0431/001     | 8311-0432/001 | 8311-0433/001 |                    |                                       |
| 8311-0434         |             | 8311-0435 |             | 8311-0436 |             | 34             |     | 0,37           | 8311-0434/001     | 8311-0435/001 | 8311-0436/001 |                    |                                       |
| 8311-0437         |             | 8311-0438 |             | 8311-0439 |             | 36             | 154 | 0,54           | 8311-0437/001     | 8311-0438/001 | 8311-0439/001 |                    |                                       |
| 8311-0441         |             | 8311-0442 |             | 8311-0443 |             | 38             |     | 0,57           | 8311-0441/001     | 8311-0442/001 | 8311-0443/001 |                    |                                       |
| 8311-0444         |             | 8311-0445 |             | 8311-0446 |             | 40             | 159 | 0,67           | 8311-0444/001     | 8311-0445/001 | 8311-0446/001 | 8054-0017          |                                       |
| 8311-0447         |             | 8311-0448 |             | 8311-0449 |             | 42             |     | 0,69           | 8311-0447/001     | 8311-0448/001 | 8311-0449/001 |                    |                                       |
| 8311-0451         |             | 8311-0452 |             | 8311-0453 |             | 46             |     | 0,94           | 8311-0451/001     | 8311-0452/001 | 8311-0453/001 |                    |                                       |
| 8311-0454         |             | 8311-0455 |             | 8311-0456 |             | 48             |     | 1,01           | 8311-0454/001     | 8311-0455/001 | 8311-0456/001 |                    |                                       |
| 8311-0457         |             | 8311-0458 |             | 8311-0459 |             | 50             | 174 | 1,14           | 8311-0457/001     | 8311-0458/001 | 8311-0459/001 | 8054-0018          |                                       |
| 8311-0461         |             | 8311-0462 |             | 8311-0463 |             | 54             |     | 1,23           | 8311-0461/001     | 8311-0462/001 | 8311-0463/001 |                    |                                       |
| 8311-0464         |             | 8311-0465 |             | 8311-0466 |             | 58             |     | 1,40           | 8311-0464/001     | 8311-0465/001 | 8311-0466/001 |                    |                                       |
| 8311-0467         |             | 8311-0468 |             | 8311-0469 |             | 60             |     | 1,45           | 8311-0467/001     | 8311-0468/001 | 8311-0469/001 |                    |                                       |
| 8311-0471         |             | 8311-0472 |             | 8311-0473 |             | 62             |     | 1,70           | 8311-0471/001     | 8311-0472/001 | 8311-0473/001 |                    |                                       |
| 8311-0474         |             | 8311-0475 |             | 8311-0476 |             | 65             | 180 | 1,77           | 8311-0474/001     | 8311-0475/001 | 8311-0476/001 | 8054-0019          |                                       |
| 8311-0477         |             | 8311-0478 |             | 8311-0479 |             | 68             |     | 1,97           | 8311-0477/001     | 8311-0478/001 | 8311-0479/001 |                    |                                       |
| 8311-0481         |             | 8311-0482 |             | 8311-0483 |             | 72             |     | 2,09           | 8311-0481/001     | 8311-0482/001 | 8311-0483/001 |                    |                                       |
| 8311-0484         |             | 8311-0485 |             | 8311-0486 |             | 20             | 126 | 0,10           | 8311-0484/001     | 8311-0485/001 | 8311-0486/001 | 8054-0014          |                                       |
| 8311-0487         |             | 8311-0488 |             | 8311-0489 |             | 23             |     | 0,12           | 8311-0487/001     | 8311-0488/001 | 8311-0489/001 |                    |                                       |
| 8311-0491         |             | 8311-0492 |             | 8311-0493 |             | 26             | 137 | 0,19           | 8311-0491/001     | 8311-0492/001 | 8311-0493/001 | 8054-0015          |                                       |

Продолжение табл. 1

Размеры, мм

| При проектировании |             |           |             |           |            | Пос.1 Высота        |                |     | Пос.2<br>Рукав<br>по ГОСТ<br>14748-69 |                |               |               |           |
|--------------------|-------------|-----------|-------------|-----------|------------|---------------------|----------------|-----|---------------------------------------|----------------|---------------|---------------|-----------|
| по D               | Обозначение | по d      | Обозначение | по b      | Примечание | D <sub>н</sub>      | D <sub>в</sub> | L   |                                       | Мас-<br>са, кг |               |               |           |
|                    |             |           |             |           |            |                     |                |     |                                       |                |               |               |           |
|                    |             |           |             |           |            |                     |                |     |                                       |                |               |               |           |
| Обозначение        |             |           |             |           |            | Обозначение деталей |                |     |                                       |                |               |               |           |
| Р311-0494          |             | Р311-0495 |             | Р311-0496 |            | 20                  | 16             | 137 | 0,24                                  | Р311-0494/001  | Р311-0495/001 | Р311-0496/001 | 8054-0015 |
| Р311-0497          |             | Р311-0498 |             | Р311-0499 |            | 32                  | 20             | 153 | 0,34                                  | Р311-0497/001  | Р311-0498/001 | Р311-0499/001 | 8054-0016 |
| Р311-0501          |             | Р311-0502 |             | Р311-0503 |            | 35                  |                |     | 0,37                                  | Р311-0501/001  | Р311-0502/001 | Р311-0503/001 |           |
| Р311-0504          |             | Р311-0505 |             | Р311-0506 |            | 40                  | 24             | 154 | 0,56                                  | Р311-0504/001  | Р311-0505/001 | Р311-0506/001 | 8054-0017 |
| Р311-0507          |             | Р311-0508 |             | Р311-0509 |            | 45                  |                | 159 | 0,69                                  | Р311-0507/001  | Р311-0508/001 | Р311-0509/001 |           |
| Р311-0511          |             | Р311-0512 |             | Р311-0513 |            | 52                  | 28             | 174 | 1,01                                  | Р311-0511/001  | Р311-0512/001 | Р311-0513/001 | 8054-0018 |
| Р311-0514          |             | Р311-0515 |             | Р311-0516 |            | 56                  |                |     | 1,23                                  | Р311-0514/001  | Р311-0515/001 | Р311-0516/001 |           |

Т а б л и ц а 2

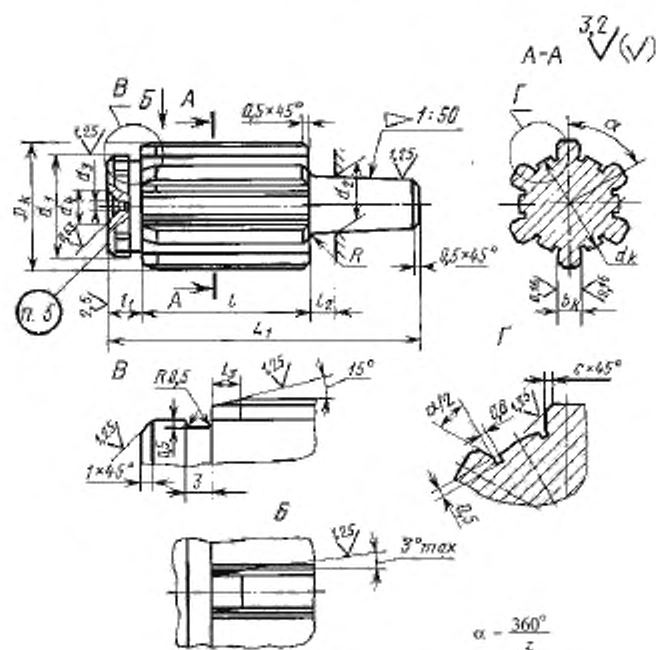
Размеры, мм

| При проектировании |             |           |           |             | D <sub>1</sub> | L    | Мас-<br>са, кг | D <sub>2</sub> | D <sub>3</sub> | D <sub>4</sub> | 175 | 8055-0028 |             |            |             |            |
|--------------------|-------------|-----------|-----------|-------------|----------------|------|----------------|----------------|----------------|----------------|-----|-----------|-------------|------------|-------------|------------|
| по D               | Обозначение | по d      | по b      | по b        |                |      |                |                |                |                |     |           |             |            |             |            |
|                    |             |           |           |             |                |      |                |                |                |                |     |           | Обозначение | Примечание | Обозначение | Примечание |
|                    |             |           |           |             |                |      |                |                |                |                |     |           |             |            |             |            |
| Р311-0517          |             | Р311-0518 | Р311-0519 | 106x72x78   | 78             | 2,27 | Р311-0517/001  | Р311-0518/001  | Р311-0519/001  |                |     |           |             |            |             |            |
| Р311-0521          |             | Р311-0522 | Р311-0523 | 106x72x82   | 82             | 2,37 | Р311-0521/001  | Р311-0522/001  | Р311-0523/001  |                |     |           |             |            |             |            |
| Р311-0524          |             | Р311-0525 | Р311-0526 | 106x82x88   | 88             | 2,63 | Р311-0524/001  | Р311-0525/001  | Р311-0526/001  |                |     |           |             |            |             |            |
| Р311-0527          |             | Р311-0528 | Р311-0529 | 106x82x92   | 92             | 2,73 | Р311-0527/001  | Р311-0528/001  | Р311-0529/001  |                |     |           |             |            |             |            |
| Р311-0531          |             | Р311-0532 | Р311-0533 | 106x92x98   | 98             | 3,23 | Р311-0531/001  | Р311-0532/001  | Р311-0533/001  |                |     |           |             |            |             |            |
| Р311-0534          |             | Р311-0535 | Р311-0536 | 106x92x102  | 102            | 3,33 | Р311-0534/001  | Р311-0535/001  | Р311-0536/001  |                |     |           |             |            |             |            |
| Р311-0537          |             | Р311-0538 | Р311-0539 | 106x102x108 | 108            | 4,03 | Р311-0537/001  | Р311-0538/001  | Р311-0539/001  |                |     |           |             |            |             |            |
| Р311-0541          |             | Р311-0542 | Р311-0543 | 106x108x112 | 112            | 4,23 | Р311-0541/001  | Р311-0542/001  | Р311-0543/001  |                |     |           |             |            |             |            |
| Р311-0544          |             | Р311-0545 | Р311-0546 | 106x112x120 | 120            | 4,63 | Р311-0544/001  | Р311-0545/001  | Р311-0546/001  |                |     |           |             |            |             |            |
| Р311-0547          |             | Р311-0548 | Р311-0549 | 106x120x125 | 125            | 5,03 | Р311-0547/001  | Р311-0548/001  | Р311-0549/001  |                |     |           |             |            |             |            |
| Р311-0551          |             | Р311-0552 | Р311-0553 | 166x52x60   | 60             | 1,43 | Р311-0551/001  | Р311-0552/001  | Р311-0553/001  |                |     |           |             |            |             |            |
| Р311-0554          |             | Р311-0555 | Р311-0556 | 166x56x65   | 65             | 1,73 | Р311-0554/001  | Р311-0555/001  | Р311-0556/001  |                |     |           |             |            |             |            |
| Р311-0557          |             | Р311-0558 | Р311-0559 | 166x62x72   | 72             | 1,73 | Р311-0557/001  | Р311-0558/001  | Р311-0559/001  |                |     |           |             |            |             |            |
| Р311-0561          |             | Р311-0562 | Р311-0563 | 166x72x82   | 82             | 2,33 | Р311-0561/001  | Р311-0562/001  | Р311-0563/001  |                |     |           |             |            |             |            |
| Р311-0564          |             | Р311-0565 | Р311-0566 | 206x82x92   | 92             | 2,73 | Р311-0564/001  | Р311-0565/001  | Р311-0566/001  |                |     |           |             |            |             |            |
| Р311-0567          |             | Р311-0568 | Р311-0569 | 206x82x102  | 102            | 3,23 | Р311-0567/001  | Р311-0568/001  | Р311-0569/001  |                |     |           |             |            |             |            |
| Р311-0571          |             | Р311-0572 | Р311-0573 | 206x102x115 | 115            | 3,83 | Р311-0571/001  | Р311-0572/001  | Р311-0573/001  |                |     |           |             |            |             |            |
| Р311-0574          |             | Р311-0575 | Р311-0576 | 206x112x125 | 125            | 4,93 | Р311-0574/001  | Р311-0575/001  | Р311-0576/001  |                |     |           |             |            |             |            |

1.1. Размеры вставок калибров-пробок исполнения 1 должны соответствовать указанным на черт.2, 3 и в табл.3, 4:

Исполнительные размеры  $D$ ,  $d$ ,  $b$  — по ГОСТ 7951—80.

Для  $z = 6$  и 8;  $z = 10$  при  $D \leq 56$  мм



Черт.2

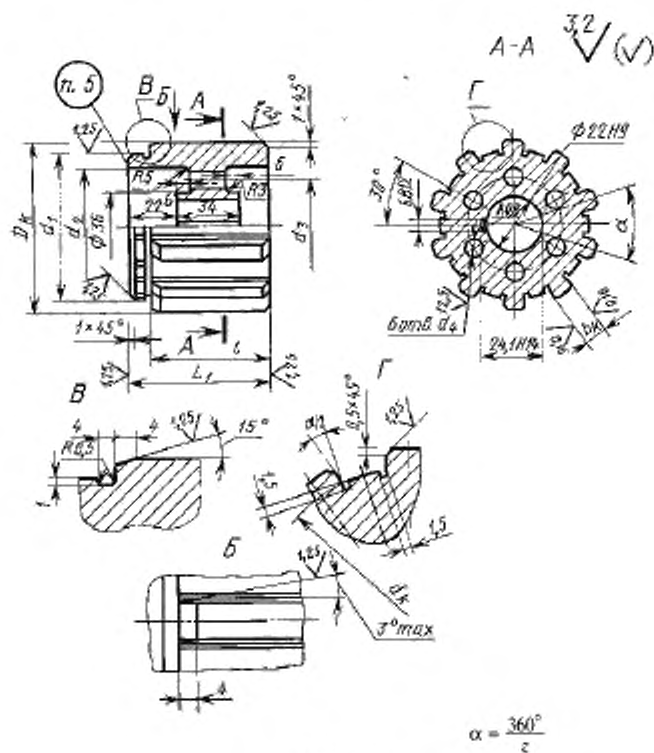
Примечание. Допускается нанесение маркировки на хвостовик.

Таблица 3

Размеры, мм

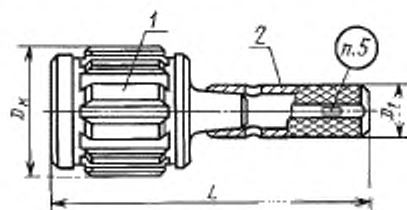
| E × d × D | Число<br>ступеней<br>z | d <sub>2</sub> | D <sub>2</sub> | d <sub>1</sub> | Z <sub>1</sub> | I      | l <sub>1</sub> | l <sub>2</sub> | l <sub>3</sub> | d <sub>1</sub>                        |        |          |                | d <sub>2</sub> |                | d <sub>3</sub> | d <sub>4</sub> | d <sub>5</sub> | d <sub>6</sub> | Масса,<br>кг |                |                |                |                |                |                |
|-----------|------------------------|----------------|----------------|----------------|----------------|--------|----------------|----------------|----------------|---------------------------------------|--------|----------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------|----------------|----------------|----------------|----------------|----------------|----------------|
|           |                        |                |                |                |                |        |                |                |                | Центры ступеней<br>перегруппировки по |        |          |                | Номин.         | Прес.<br>откл. |                |                |                |                |              | d <sub>1</sub> | d <sub>2</sub> | d <sub>3</sub> | d <sub>4</sub> | d <sub>5</sub> | d <sub>6</sub> |
|           |                        |                |                |                |                |        |                |                |                | a                                     | D; b   | Номинал. | Прес.<br>откл. |                |                |                |                |                |                |              |                |                |                |                |                |                |
| 6×11×14   | 5                      | 11             | 14             | 3,0            | 60             | 25     | 11             | 10             | 2              | 11                                    | 11     | —0,016   | 6              | —0,030         | 1,0            | 4              | 1              | 0,03           |                |              |                |                |                |                |                |                |
| 6×13×16   |                        | 13             | 16             | 3,5            | 63             | 30     | 10             | 9              |                |                                       | 13     | —0,095   | 8              | —0,036         | 1,5            | 5              | 2              | 0,04           |                |              |                |                |                |                |                |                |
| 6×16×20   |                        | 16             | 20             | 4,0            | 71             | 30     | 11             | 11             |                |                                       | 16     | —0,205   | 11             | —0,043         | 2,0            | 8              | 3              | 0,06           |                |              |                |                |                |                |                |                |
| 6×18×22   |                        | 18             | 22             | 5,0            | 73             | 35     | 7              | 8              |                |                                       | 18     | —0,110   | 15             | —0,043         | 2,0            | 8              | 3              | 4              | 0,09           |              |                |                |                |                |                |                |
| 6×21×25   |                        | 21             | 25             | 21             |                |        |                |                |                |                                       | —0,240 |          |                |                |                |                |                |                |                |              |                |                |                |                |                |                |
| 6×23×26   |                        | 23             | 26             | 23             |                |        |                |                |                |                                       | —0,020 |          |                |                |                |                |                |                |                |              |                |                |                |                |                |                |
| 6×26×30   |                        | 26             | 30             | 26             |                |        |                |                |                |                                       | —0,041 |          |                |                |                |                |                |                |                |              |                |                |                |                |                |                |
| 6×26×32   |                        | 6              | 28             | 32             | 7,0            | 82     | 40             | 8              |                |                                       | 9      | 10       | 52             | —0,120         | 18             | —0,043         | 2,0            | 8              | 4              | 0,17         |                |                |                |                |                |                |
| 6×28×34   |                        |                | 34             | 34             | 32             |        |                |                |                |                                       |        |          |                |                |                |                |                |                |                |              | —0,280         |                |                |                |                |                |
| 6×32×36   |                        |                | 36             | 36             | 36             |        |                |                |                |                                       |        |          |                |                |                |                |                |                |                |              | —0,130         |                |                |                |                |                |
| 6×32×38   | 38                     |                | 38             | 42             | —0,205         |        |                |                |                |                                       |        |          |                |                |                |                |                |                |                |              |                |                |                |                |                |                |
| 6×36×40   | 40                     |                | 40             | 42             | —0,130         | 21     | —0,052         | 2,5            | 10             | 2                                     | 3      | 4        | 0,24           |                |                |                |                |                |                |              |                |                |                |                |                |                |
| 6×36×42   | 42                     |                | 42             | 46             | —0,025         |        |                |                |                |                                       |        |          |                |                |                |                |                |                |                |              |                |                |                |                |                |                |
| 6×42×46   | 46                     |                | 46             | 46             | —0,050         |        |                |                |                |                                       |        |          |                |                |                |                |                |                |                |              |                |                |                |                |                |                |
| 6×42×48   | 48                     |                | 48             | 52             | —0,205         |        |                |                |                |                                       |        |          |                |                |                |                |                |                |                |              |                |                |                |                |                |                |
| 6×46×50   | 10                     |                | 50             | 54             | 9,0            | 98     | 50             | 15             | 10             | 56                                    | —0,140 | 24       | —0,036         | 1,5            | 8              | 3              | 4              | 0,27           |                |              |                |                |                |                |                |                |
| 6×46×54   |                        |                | 54             | 54             | 56             |        |                |                |                |                                       |        |          |                |                |                |                |                |                | —0,330         |              |                |                |                |                |                |                |
| 6×52×58   |                        | 58             | 60             | 62             | —0,030         |        |                |                |                |                                       |        |          |                |                |                |                |                |                |                |              |                |                |                |                |                |                |
| 6×52×60   |                        | 60             | 62             | 62             | —0,060         |        |                |                |                |                                       |        |          |                |                |                |                |                |                |                |              |                |                |                |                |                |                |
| 6×56×62   |                        | 62             | 65             | 68             | —0,095         | 8      | —0,036         | 2,5            | 10             | 2                                     | 3      | 4        | 0,32           |                |                |                |                |                |                |              |                |                |                |                |                |                |
| 6×56×65   |                        | 65             | 68             | 72             | —0,205         |        |                |                |                |                                       |        |          |                |                |                |                |                |                |                |              |                |                |                |                |                |                |
| 6×62×68   |                        | 68             | 72             | 72             | —0,110         |        |                |                |                |                                       |        |          |                |                |                |                |                |                |                |              |                |                |                |                |                |                |
| 6×62×72   |                        | 72             | 72             | 72             | —0,240         |        |                |                |                |                                       |        |          |                |                |                |                |                |                |                |              |                |                |                |                |                |                |
| 10×16×20  |                        | 10             | 16             | 20             | 2,5            | 71     | 30             | 11             | 11             | 2                                     | 11     | 16       | —0,016         | 8              | —0,036         | 1,0            | 4              | 0,06           |                |              |                |                |                |                |                |                |
| 10×18×23  |                        |                | 18             | 23             | 3,0            | 73     | 35             | 10             | 9              |                                       |        | 18       | —0,034         | 11             | —0,043         | 1,5            | 5              | 2              | 0,09           |              |                |                |                |                |                |                |
| 10×21×26  | 21                     |                | 26             | 4,0            | 82             | 40     | 7              | 8              | 21             |                                       |        | —0,110   | 15             | —0,043         | 2,0            | 8              | 3              | 4              | 0,13           |              |                |                |                |                |                |                |
| 10×23×28  | 23                     |                | 28             |                |                |        |                |                | 23             |                                       |        |          |                |                |                |                |                |                |                | —0,240       |                |                |                |                |                |                |
| 10×26×32  | 26                     |                | 32             |                |                |        |                |                | 26             |                                       |        |          |                |                |                |                |                |                |                | —0,020       |                |                |                |                |                |                |
| 10×28×35  | 28                     |                | 35             |                |                |        |                |                | 28             |                                       |        |          |                |                |                |                |                |                |                | —0,041       |                |                |                |                |                |                |
| 10×32×40  |                        |                | 32             | 40             | 5,0            | 85     | 45             | 3              | 9              |                                       |        | 16       | —0,120         | 18             | —0,043         | 2,0            | 8              | 3              | 4              | 0,17         |                |                |                |                |                |                |
| 10×36×45  |                        |                | 36             | 45             | 36             | —0,280 |                |                |                |                                       |        |          |                |                |                |                |                |                |                |              |                |                |                |                |                |                |
| 10×42×52  |                        |                | 42             | 52             | 42             | —0,025 |                |                |                |                                       |        |          |                |                |                |                |                |                |                |              |                |                |                |                |                |                |
| 10×46×56  |                        |                | 46             | 56             | 46             | —0,050 |                |                |                |                                       |        |          |                |                |                |                |                |                |                |              |                |                |                |                |                |                |

Для  $z = 10$  при  $D > 56$  мм;  $z = 16$  и 28



Черт.3

2. Размеры калибров-пробок исполнения 2 должны соответствовать указанным на черт.4 и в табл.5.



Черт.4

Таблица 4

Размеры, мм

| x × d × D  | Число<br>зубов<br>z | d <sub>к</sub> | D <sub>к</sub> | d <sub>т</sub> | L <sub>1</sub> | l  | d <sub>1</sub> |                                  | d <sub>2</sub> | d <sub>3</sub> | d <sub>4</sub> | Масса,<br>кг<br>" |                  |      |
|------------|---------------------|----------------|----------------|----------------|----------------|----|----------------|----------------------------------|----------------|----------------|----------------|-------------------|------------------|------|
|            |                     |                |                |                |                |    | Нормы          | Пред. откл. при<br>построении по |                |                |                |                   |                  |      |
|            |                     |                |                |                |                |    |                | a                                |                |                |                |                   | D <sub>к</sub> b |      |
| 10×72×78   | 10                  | 72             | 78             | 12             | 70             | 55 | 72             | —0,030                           | —0,150         | 55             | —              | —                 | 1,94             |      |
| 10×72×82   |                     |                | 82             |                |                |    |                | —0,060                           | —0,340         |                |                |                   | 2,04             |      |
| 10×82×88   |                     | 82             | 88             |                | 75             | 58 | 82             | —0,036                           | —0,170         | 68             | 52             | 10                | 2,30             |      |
| 10×82×92   |                     |                | 92             |                |                |    | —0,390         |                                  |                | 75             | 54             |                   | 2,40             |      |
| 10×92×98   |                     | 92             | 98             | 14             |                |    |                |                                  |                |                |                |                   | 2,90             |      |
| 10×92×102  |                     |                | 102            |                |                |    |                |                                  |                |                |                | 3,00              |                  |      |
| 10×102×108 |                     | 102            | 108            | 16             | 80             | 63 | 102            | —0,071                           | —0,180         | 82             | 58             | 15                | 3,70             |      |
| 10×102×112 |                     |                | 112            |                |                |    |                |                                  |                | —0,400         | 92             | 65                | 18               | 3,90 |
| 10×112×120 |                     | 112            | 120            | 18             | 85             | 68 | 112            |                                  |                |                |                | 20                | 4,30             |      |
| 10×112×125 |                     |                | 125            |                |                |    |                |                                  |                |                |                |                   | 4,70             |      |
| 16×52×60   | 16                  | 52             | 60             | 5              | 65             | 50 | 52             | —0,030                           | —0,140         | 42             | —              | —                 | 1,00             |      |
| 16×56×65   |                     | 56             | 65             | 70             | 55             | 56 | —0,330         |                                  | 45             | 1,10           |                |                   |                  |      |
| 16×62×72   |                     | 62             | 72             |                |                | 6  | 62             |                                  | —0,060         |                |                |                   | 1,40             |      |
| 16×72×82   |                     | 72             | 82             |                |                | 7  | 72             |                                  |                | —0,150         |                |                   | 55               | 2,00 |
|            |                     |                |                |                |                |    |                | —0,340                           |                |                |                |                   |                  |      |
| 20×82×92   | 20                  | 82             | 92             | 6              | 75             | 58 | 82             | —0,036                           | —0,170         | 68             | 52             | 10                | 2,40             |      |
| 20×92×102  |                     | 92             | 102            | 7              |                |    | 92             |                                  | —0,390         | 75             | 54             |                   | 2,90             |      |
| 20×102×115 |                     | 102            | 115            | 8              | 80             | 63 | 102            |                                  | —0,071         | —0,180         | 82             | 58                | 18               | 3,50 |
| 20×112×125 |                     | 112            | 125            | 9              | 85             | 68 | 112            |                                  |                | —0,400         | 92             | 65                | 20               | 4,60 |

Таблица 5

Размеры, мм

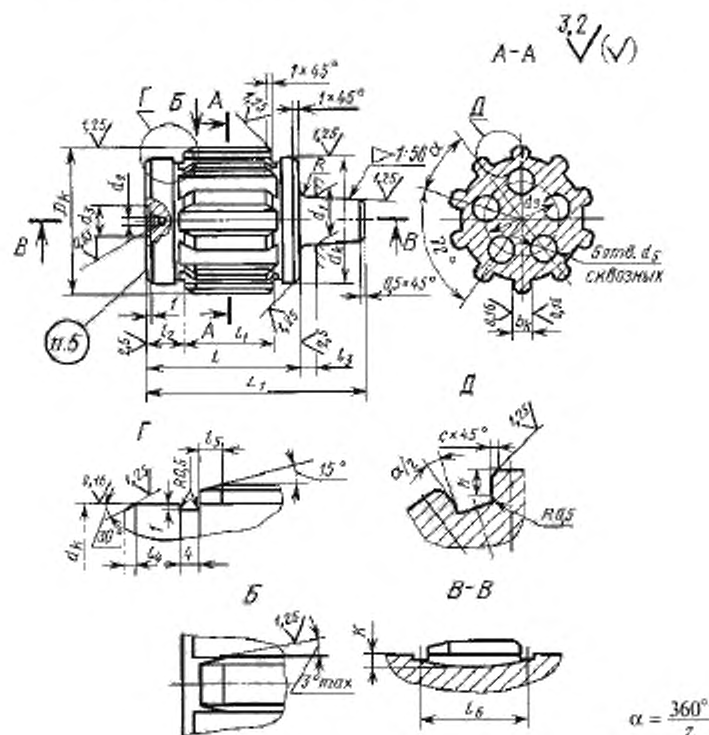
| Обозначение | При-<br>надле-<br>жность | x × d × D | D <sub>1</sub> | D <sub>2</sub> | L   | Масса,<br>кг<br>— | Показ. 1      | Показ. 2                 |
|-------------|--------------------------|-----------|----------------|----------------|-----|-------------------|---------------|--------------------------|
|             |                          |           |                |                |     |                   | Вставки       | Рука по ГОСТ<br>14748—69 |
| Обозначения |                          |           |                |                |     |                   |               |                          |
| 8311-0577   |                          | 6×11×14   | 14             | 10             | 106 | 0,06              | 8311-0577/001 | 8054-0013                |
| 8311-0578   |                          | 6×13×16   | 16             |                | 109 | 0,09              | 8311-0578/001 |                          |
| 8311-0579   |                          | 6×16×20   | 20             | 13             | 126 | 0,17              | 8311-0579/001 | 8054-0014                |
| 8311-0581   |                          | 6×18 ×22  | 22             |                |     | 0,19              | 8311-0581/001 |                          |
| 8311-0582   |                          | 6×21×25   | 25             | 16             | 137 | 0,30              | 8311-0582/001 | 8054-0015                |
| 8311-0583   |                          | 6×23×26   | 26             |                |     | 0,31              | 8311-0583/001 |                          |
| 8311-0584   |                          | 6×23×28   | 28             |                |     | 0,35              | 8311-0584/001 |                          |
| 8311-0585   |                          | 6×26×30   | 30             | 20             | 153 | 0,39              | 8311-0585/001 | 8054-0016                |
| 8311-0586   |                          | 6×26×32   | 32             |                |     | 0,49              | 8311-0586/001 |                          |
| 8311-0587   |                          | 6×28×32   |                |                |     |                   | 8311-0587/001 |                          |
| 8311-0588   |                          | 6×28×34   | 34             | 24             | 154 | 0,54              | 8311-0588/001 | 8054-0017                |
| 8311-0589   |                          | 8×32×36   | 36             |                |     | 0,64              | 8311-0589/001 |                          |
| 8311-0591   |                          | 8×32×38   | 38             |                |     | 0,70              | 8311-0591/001 |                          |
| 8311-0592   |                          | 8×36×40   | 40             |                | 159 | 0,83              | 8311-0592/001 |                          |
| 8311-0593   |                          | 8×36×42   | 42             |                |     | 0,95              | 8311-0593/001 |                          |

Размеры, мм

| Обозначение | Примечание | $r \times d \times D$ | $D_2$ | $D_1$ | $L$  | Масса, кг     | Пояс.1        | Пояс.2                    |
|-------------|------------|-----------------------|-------|-------|------|---------------|---------------|---------------------------|
|             |            |                       |       |       |      |               | Вставка       | Руковод. по ГОСТ 14748—69 |
| Обозначение |            |                       |       |       |      |               |               |                           |
| 8311-0594   |            | 8×42×46               | 46    | 28    | 174  | 1,27          | 8311-0594/001 | 8054-0018                 |
| 8311-0595   |            | 8×42×48               | 48    |       |      | 1,35          | 8311-0595/001 |                           |
| 8311-0596   |            | 8×46×50               | 50    |       |      | 1,44          | 8311-0596/001 |                           |
| 8311-0597   |            | 8×46×54               | 54    |       |      | 1,63          | 8311-0597/001 |                           |
| 8311-0598   |            | 8×52×58               | 58    |       |      | 1,83          | 8311-0598/001 |                           |
| 8311-0599   |            | 8×52×60               | 60    |       |      | 1,93          | 8311-0599/001 |                           |
| 8311-0601   |            | 8×56×62               | 62    | 32    | 180  | 2,25          | 8311-0601/001 | 8054-0019                 |
| 8311-0602   |            | 8×56×65               | 65    |       |      | 2,35          | 8311-0602/001 |                           |
| 8311-0603   |            | 8×62×68               | 68    |       |      | 2,53          | 8311-0603/001 |                           |
| 8311-0604   |            | 8×62×72               | 72    |       |      | 3,00          | 8311-0604/001 |                           |
| 8311-0605   |            | 10×16×20              | 20    | 13    | 126  | 0,16          | 8311-0605/001 | 8054-0014                 |
| 8311-0606   |            | 10×18×23              | 23    |       |      | 0,19          | 8311-0606/001 |                           |
| 8311-0607   |            | 10×21×26              | 26    | 16    | 137  | 0,27          | 8311-0607/001 | 8054-0015                 |
| 8311-0608   |            | 10×23×29              | 29    |       |      | 0,32          | 8311-0608/001 |                           |
| 8311-0609   |            | 10×26×32              | 32    | 20    | 153  | 0,37          | 8311-0609/001 | 8054-0016                 |
| 8311-0611   |            | 10×28×35              | 35    |       |      | 0,43          | 8311-0611/001 |                           |
| 8311-0612   |            | 10×32×40              | 40    | 24    | 159  | 0,76          | 8311-0612/001 | 8054-0017                 |
| 8311-0613   |            | 10×36×45              | 45    |       | 164  | 1,06          | 8311-0613/001 |                           |
| 8311-0614   |            | 10×42×52              | 52    | 28    | 174  | 1,42          | 8311-0614/001 | 8054-0018                 |
| 8311-0615   |            | 10×46×56              | 56    |       |      | 1,65          | 8311-0615/001 |                           |
| 8311-0616   |            | 10×72×78              | 78    | 32    | 180  | 2,34          | 8311-0616/001 | 8054-0019                 |
| 8311-0617   |            | 10×72×82              | 82    |       |      | 3,03          | 8311-0617/001 |                           |
| 8311-0618   |            | 10×82×88              | 88    |       | 185  | 3,35          | 8311-0618/001 |                           |
| 8311-0619   |            | 10×82×92              | 92    |       |      | 3,73          | 8311-0619/001 |                           |
| 8311-0621   |            | 10×92×98              | 98    |       |      | 3,81          | 8311-0621/001 |                           |
| 8311-0622   |            | 10×92×102             | 102   |       |      | 4,26          | 8311-0622/001 |                           |
| 8311-0623   |            | 10×102×108            | 108   | 36    | 200  | 4,72          | 8311-0623/001 | 8054-0020                 |
| 8311-0624   |            | 10×102×112            | 112   |       |      | 5,23          | 8311-0624/001 |                           |
| 8311-0625   |            | 10 ×112×120           | 120   |       | 205  | 5,56          | 8311-0625/001 |                           |
| 8311-0626   |            | 10 ×112×125           | 125   |       |      | 6,26          | 8311-0626/001 |                           |
| 8311-0627   |            | 16 ×52×60             | 60    | 28    | 174  | 1,90          | 8311-0627/001 | 8054-0018                 |
| 8311-0628   |            | 16 ×56×65             | 65    | 32    | 180  | 2,31          | 8311-0628/001 | 8054-0019                 |
| 8311-0629   |            | 16 ×62×72             | 72    |       |      | 2,73          | 8311-0629/001 |                           |
| 8311-0631   |            | 16 ×72×82             | 82    |       | 2,38 | 8311-0631/001 |               |                           |
| 8311-0632   |            | 20 ×82×92             | 92    |       | 185  | 2,95          | 8311-0632/001 |                           |
| 8311-0633   |            | 20 ×92×102            | 102   |       |      | 3,35          | 8311-0633/001 |                           |
| 8311-0634   |            | 20 ×102×115           | 115   |       | 36   | 200           | 4,25          |                           |
| 8311-0635   |            | 20 ×112×125           | 125   | 205   |      | 5,22          | 8311-0635/001 |                           |

2.1. Размеры детали калибра-пробки исполнения 2 должны соответствовать указанным на черт.5 и в табл. 6.

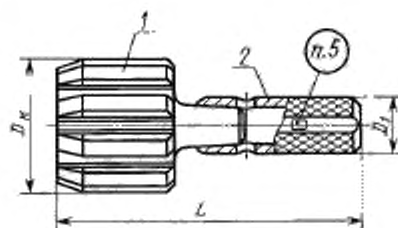
Исчислительные размеры  $D$ ,  $d$ ,  $b$  — по ГОСТ 7951—80.



Черт.5

Примечание. Допускается нанесение маркировки на хвостовик.

3. Размеры калибров-пробок исполнения 3 должны соответствовать указанным на черт.6 и в табл.7.



Черт.6

Таблица 6

Размеры, мм

| Размеры, мм | L | B | H | L <sub>1</sub> | B <sub>1</sub> | H <sub>1</sub> | L <sub>2</sub> | B <sub>2</sub> | H <sub>2</sub> | L <sub>3</sub> | B <sub>3</sub> | H <sub>3</sub> | L <sub>4</sub> | B <sub>4</sub> | H <sub>4</sub> | L <sub>5</sub> | B <sub>5</sub> | H <sub>5</sub> | L <sub>6</sub> | B <sub>6</sub> | H <sub>6</sub> | L <sub>7</sub> | B <sub>7</sub> | H <sub>7</sub> | L <sub>8</sub> | B <sub>8</sub> | H <sub>8</sub> | L <sub>9</sub> | B <sub>9</sub> | H <sub>9</sub> | L <sub>10</sub> | B <sub>10</sub> | H <sub>10</sub> | L <sub>11</sub> | B <sub>11</sub> | H <sub>11</sub> | L <sub>12</sub> | B <sub>12</sub> | H <sub>12</sub> | L <sub>13</sub> | B <sub>13</sub> | H <sub>13</sub> | L <sub>14</sub> | B <sub>14</sub> | H <sub>14</sub> | L <sub>15</sub> | B <sub>15</sub> | H <sub>15</sub> | L <sub>16</sub> | B <sub>16</sub> | H <sub>16</sub> | L <sub>17</sub> | B <sub>17</sub> | H <sub>17</sub> | L <sub>18</sub> | B <sub>18</sub> | H <sub>18</sub> | L <sub>19</sub> | B <sub>19</sub> | H <sub>19</sub> | L <sub>20</sub> | B <sub>20</sub> | H <sub>20</sub> | L <sub>21</sub> | B <sub>21</sub> | H <sub>21</sub> | L <sub>22</sub> | B <sub>22</sub> | H <sub>22</sub> | L <sub>23</sub> | B <sub>23</sub> | H <sub>23</sub> | L <sub>24</sub> | B <sub>24</sub> | H <sub>24</sub> | L <sub>25</sub> | B <sub>25</sub> | H <sub>25</sub> | L <sub>26</sub> | B <sub>26</sub> | H <sub>26</sub> | L <sub>27</sub> | B <sub>27</sub> | H <sub>27</sub> | L <sub>28</sub> | B <sub>28</sub> | H <sub>28</sub> | L <sub>29</sub> | B <sub>29</sub> | H <sub>29</sub> | L <sub>30</sub> | B <sub>30</sub> | H <sub>30</sub> | L <sub>31</sub> | B <sub>31</sub> | H <sub>31</sub> | L <sub>32</sub> | B <sub>32</sub> | H <sub>32</sub> | L <sub>33</sub> | B <sub>33</sub> | H <sub>33</sub> | L <sub>34</sub> | B <sub>34</sub> | H <sub>34</sub> | L <sub>35</sub> | B <sub>35</sub> | H <sub>35</sub> | L <sub>36</sub> | B <sub>36</sub> | H <sub>36</sub> | L <sub>37</sub> | B <sub>37</sub> | H <sub>37</sub> | L <sub>38</sub> | B <sub>38</sub> | H <sub>38</sub> | L <sub>39</sub> | B <sub>39</sub> | H <sub>39</sub> | L <sub>40</sub> | B <sub>40</sub> | H <sub>40</sub> | L <sub>41</sub> | B <sub>41</sub> | H <sub>41</sub> | L <sub>42</sub> | B <sub>42</sub> | H <sub>42</sub> | L <sub>43</sub> | B <sub>43</sub> | H <sub>43</sub> | L <sub>44</sub> | B <sub>44</sub> | H <sub>44</sub> | L <sub>45</sub> | B <sub>45</sub> | H <sub>45</sub> | L <sub>46</sub> | B <sub>46</sub> | H <sub>46</sub> | L <sub>47</sub> | B <sub>47</sub> | H <sub>47</sub> | L <sub>48</sub> | B <sub>48</sub> | H <sub>48</sub> | L <sub>49</sub> | B <sub>49</sub> | H <sub>49</sub> | L <sub>50</sub> | B <sub>50</sub> | H <sub>50</sub> | L <sub>51</sub> | B <sub>51</sub> | H <sub>51</sub> | L <sub>52</sub> | B <sub>52</sub> | H <sub>52</sub> | L <sub>53</sub> | B <sub>53</sub> | H <sub>53</sub> | L <sub>54</sub> | B <sub>54</sub> | H <sub>54</sub> | L <sub>55</sub> | B <sub>55</sub> | H <sub>55</sub> | L <sub>56</sub> | B <sub>56</sub> | H <sub>56</sub> | L <sub>57</sub> | B <sub>57</sub> | H <sub>57</sub> | L <sub>58</sub> | B <sub>58</sub> | H <sub>58</sub> | L <sub>59</sub> | B <sub>59</sub> | H <sub>59</sub> | L <sub>60</sub> | B <sub>60</sub> | H <sub>60</sub> | L <sub>61</sub> | B <sub>61</sub> | H <sub>61</sub> | L <sub>62</sub> | B <sub>62</sub> | H <sub>62</sub> | L <sub>63</sub> | B <sub>63</sub> | H <sub>63</sub> | L <sub>64</sub> | B <sub>64</sub> | H <sub>64</sub> | L <sub>65</sub> | B <sub>65</sub> | H <sub>65</sub> | L <sub>66</sub> | B <sub>66</sub> | H <sub>66</sub> | L <sub>67</sub> | B <sub>67</sub> | H <sub>67</sub> | L <sub>68</sub> | B <sub>68</sub> | H <sub>68</sub> | L <sub>69</sub> | B <sub>69</sub> | H <sub>69</sub> | L <sub>70</sub> | B <sub>70</sub> | H <sub>70</sub> | L <sub>71</sub> | B <sub>71</sub> | H <sub>71</sub> | L <sub>72</sub> | B <sub>72</sub> | H <sub>72</sub> | L <sub>73</sub> | B <sub>73</sub> | H <sub>73</sub> | L <sub>74</sub> | B <sub>74</sub> | H <sub>74</sub> | L <sub>75</sub> | B <sub>75</sub> | H <sub>75</sub> | L <sub>76</sub> | B <sub>76</sub> | H <sub>76</sub> | L <sub>77</sub> | B <sub>77</sub> | H <sub>77</sub> | L <sub>78</sub> | B <sub>78</sub> | H <sub>78</sub> | L <sub>79</sub> | B <sub>79</sub> | H <sub>79</sub> | L <sub>80</sub> | B <sub>80</sub> | H <sub>80</sub> | L <sub>81</sub> | B <sub>81</sub> | H <sub>81</sub> | L <sub>82</sub> | B <sub>82</sub> | H <sub>82</sub> | L <sub>83</sub> | B <sub>83</sub> | H <sub>83</sub> | L <sub>84</sub> | B <sub>84</sub> | H <sub>84</sub> | L <sub>85</sub> | B <sub>85</sub> | H <sub>85</sub> | L <sub>86</sub> | B <sub>86</sub> | H <sub>86</sub> | L <sub>87</sub> | B <sub>87</sub> | H <sub>87</sub> | L <sub>88</sub> | B <sub>88</sub> | H <sub>88</sub> | L <sub>89</sub> | B <sub>89</sub> | H <sub>89</sub> | L <sub>90</sub> | B <sub>90</sub> | H <sub>90</sub> | L <sub>91</sub> | B <sub>91</sub> | H <sub>91</sub> | L <sub>92</sub> | B <sub>92</sub> | H <sub>92</sub> | L <sub>93</sub> | B <sub>93</sub> | H <sub>93</sub> | L <sub>94</sub> | B <sub>94</sub> | H <sub>94</sub> | L <sub>95</sub> | B <sub>95</sub> | H <sub>95</sub> | L <sub>96</sub> | B <sub>96</sub> | H <sub>96</sub> | L <sub>97</sub> | B <sub>97</sub> | H <sub>97</sub> | L <sub>98</sub> | B <sub>98</sub> | H <sub>98</sub> | L <sub>99</sub> | B <sub>99</sub> | H <sub>99</sub> | L <sub>100</sub> | B <sub>100</sub> | H <sub>100</sub> | L <sub>101</sub> | B <sub>101</sub> | H <sub>101</sub> | L <sub>102</sub> | B <sub>102</sub> | H <sub>102</sub> | L <sub>103</sub> | B <sub>103</sub> | H <sub>103</sub> | L <sub>104</sub> | B <sub>104</sub> | H <sub>104</sub> | L <sub>105</sub> | B <sub>105</sub> | H <sub>105</sub> | L <sub>106</sub> | B <sub>106</sub> | H <sub>106</sub> | L <sub>107</sub> | B <sub>107</sub> | H <sub>107</sub> | L <sub>108</sub> | B <sub>108</sub> | H <sub>108</sub> | L <sub>109</sub> | B <sub>109</sub> | H <sub>109</sub> | L <sub>110</sub> | B <sub>110</sub> | H <sub>110</sub> | L <sub>111</sub> | B <sub>111</sub> | H <sub>111</sub> | L <sub>112</sub> | B <sub>112</sub> | H <sub>112</sub> | L <sub>113</sub> | B <sub>113</sub> | H <sub>113</sub> | L <sub>114</sub> | B <sub>114</sub> | H <sub>114</sub> | L <sub>115</sub> | B <sub>115</sub> | H <sub>115</sub> | L <sub>116</sub> | B <sub>116</sub> | H <sub>116</sub> | L <sub>117</sub> | B <sub>117</sub> | H <sub>117</sub> | L <sub>118</sub> | B <sub>118</sub> | H <sub>118</sub> | L <sub>119</sub> | B <sub>119</sub> | H <sub>119</sub> | L <sub>120</sub> | B <sub>120</sub> | H <sub>120</sub> | L <sub>121</sub> | B <sub>121</sub> | H <sub>121</sub> | L <sub>122</sub> | B <sub>122</sub> | H <sub>122</sub> | L <sub>123</sub> | B <sub>123</sub> | H <sub>123</sub> | L <sub>124</sub> | B <sub>124</sub> | H <sub>124</sub> | L <sub>125</sub> | B <sub>125</sub> | H <sub>125</sub> | L <sub>126</sub> | B <sub>126</sub> | H <sub>126</sub> | L <sub>127</sub> | B <sub>127</sub> | H <sub>127</sub> | L <sub>128</sub> | B <sub>128</sub> | H <sub>128</sub> | L <sub>129</sub> | B <sub>129</sub> | H <sub>129</sub> | L <sub>130</sub> | B <sub>130</sub> | H <sub>130</sub> | L <sub>131</sub> | B <sub>131</sub> | H <sub>131</sub> | L <sub>132</sub> | B <sub>132</sub> | H <sub>132</sub> | L <sub>133</sub> | B <sub>133</sub> | H <sub>133</sub> | L <sub>134</sub> | B <sub>134</sub> | H <sub>134</sub> | L <sub>135</sub> | B <sub>135</sub> | H <sub>135</sub> | L <sub>136</sub> | B <sub>136</sub> | H <sub>136</sub> | L <sub>137</sub> | B <sub>137</sub> | H <sub>137</sub> | L <sub>138</sub> | B <sub>138</sub> | H <sub>138</sub> | L <sub>139</sub> | B <sub>139</sub> | H <sub>139</sub> | L <sub>140</sub> | B <sub>140</sub> | H <sub>140</sub> | L <sub>141</sub> | B <sub>141</sub> | H <sub>141</sub> | L <sub>142</sub> | B <sub>142</sub> | H <sub>142</sub> | L <sub>143</sub> | B <sub>143</sub> | H <sub>143</sub> | L <sub>144</sub> | B <sub>144</sub> | H <sub>144</sub> | L <sub>145</sub> | B <sub>145</sub> | H <sub>145</sub> | L <sub>146</sub> | B <sub>146</sub> | H <sub>146</sub> | L <sub>147</sub> | B <sub>147</sub> | H <sub>147</sub> | L <sub>148</sub> | B <sub>148</sub> | H <sub>148</sub> | L <sub>149</sub> | B <sub>149</sub> | H <sub>149</sub> | L <sub>150</sub> | B <sub>150</sub> | H <sub>150</sub> | L <sub>151</sub> | B <sub>151</sub> | H <sub>151</sub> | L <sub>152</sub> | B <sub>152</sub> | H <sub>152</sub> | L <sub>153</sub> | B <sub>153</sub> | H <sub>153</sub> | L <sub>154</sub> | B <sub>154</sub> | H <sub>154</sub> | L <sub>155</sub> | B <sub>155</sub> | H <sub>155</sub> | L <sub>156</sub> | B <sub>156</sub> | H <sub>156</sub> | L <sub>157</sub> | B <sub>157</sub> | H <sub>157</sub> | L <sub>158</sub> | B <sub>158</sub> | H <sub>158</sub> | L <sub>159</sub> | B <sub>159</sub> | H <sub>159</sub> | L <sub>160</sub> | B <sub>160</sub> | H <sub>160</sub> | L <sub>161</sub> | B <sub>161</sub> | H <sub>161</sub> | L <sub>162</sub> | B <sub>162</sub> | H <sub>162</sub> | L <sub>163</sub> | B <sub>163</sub> | H <sub>163</sub> | L <sub>164</sub> | B <sub>164</sub> | H <sub>164</sub> | L <sub>165</sub> | B <sub>165</sub> | H <sub>165</sub> | L <sub>166</sub> | B <sub>166</sub> | H <sub>166</sub> | L <sub>167</sub> | B <sub>167</sub> | H <sub>167</sub> | L <sub>168</sub> | B <sub>168</sub> | H <sub>168</sub> | L <sub>169</sub> | B <sub>169</sub> | H <sub>169</sub> | L <sub>170</sub> | B <sub>170</sub> | H <sub>170</sub> | L <sub>171</sub> | B <sub>171</sub> | H <sub>171</sub> | L <sub>172</sub> | B <sub>172</sub> | H <sub>172</sub> | L <sub>173</sub> | B <sub>173</sub> | H <sub>173</sub> | L <sub>174</sub> | B< |
|-------------|---|---|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------------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Размеры, мм

| Размеры, мм | d <sub>1</sub> | d <sub>2</sub> | d <sub>3</sub> | d <sub>4</sub> | d <sub>5</sub> | d <sub>6</sub> | d <sub>7</sub> | d <sub>8</sub> | d <sub>9</sub> | d <sub>10</sub> | d <sub>11</sub> | d <sub>12</sub> | d <sub>13</sub> | d <sub>14</sub> | d <sub>15</sub> | d <sub>16</sub> | d <sub>17</sub> | d <sub>18</sub> | d <sub>19</sub> | d <sub>20</sub> | d <sub>21</sub> | d <sub>22</sub> | d <sub>23</sub> | d <sub>24</sub> | d <sub>25</sub> | d <sub>26</sub> | d <sub>27</sub> | d <sub>28</sub> | d <sub>29</sub> | d <sub>30</sub> | d <sub>31</sub> | d <sub>32</sub> | d <sub>33</sub> | d <sub>34</sub> | d <sub>35</sub> | d <sub>36</sub> | d <sub>37</sub> | d <sub>38</sub> | d <sub>39</sub> | d <sub>40</sub> | d <sub>41</sub> | d <sub>42</sub> | d <sub>43</sub> | d <sub>44</sub> | d <sub>45</sub> | d <sub>46</sub> | d <sub>47</sub> | d <sub>48</sub> | d <sub>49</sub> | d <sub>50</sub> | d <sub>51</sub> | d <sub>52</sub> | d <sub>53</sub> | d <sub>54</sub> | d <sub>55</sub> | d <sub>56</sub> | d <sub>57</sub> | d <sub>58</sub> | d <sub>59</sub> | d <sub>60</sub> | d <sub>61</sub> | d <sub>62</sub> | d <sub>63</sub> | d <sub>64</sub> | d <sub>65</sub> | d <sub>66</sub> | d <sub>67</sub> | d <sub>68</sub> | d <sub>69</sub> | d <sub>70</sub> | d <sub>71</sub> | d <sub>72</sub> | d <sub>73</sub> | d <sub>74</sub> | d <sub>75</sub> | d <sub>76</sub> | d <sub>77</sub> | d <sub>78</sub> | d <sub>79</sub> | d <sub>80</sub> | d <sub>81</sub> | d <sub>82</sub> | d <sub>83</sub> | d <sub>84</sub> | d <sub>85</sub> | d <sub>86</sub> | d <sub>87</sub> | d <sub>88</sub> | d <sub>89</sub> | d <sub>90</sub> | d <sub>91</sub> | d <sub>92</sub> | d <sub>93</sub> | d <sub>94</sub> | d <sub>95</sub> | d <sub>96</sub> | d <sub>97</sub> | d <sub>98</sub> | d <sub>99</sub> | d <sub>100</sub> | d <sub>101</sub> | d <sub>102</sub> | d <sub>103</sub> | d <sub>104</sub> | d <sub>105</sub> | d <sub>106</sub> | d <sub>107</sub> | d <sub>108</sub> | d <sub>109</sub> | d <sub>110</sub> | d <sub>111</sub> | d <sub>112</sub> | d <sub>113</sub> | d <sub>114</sub> | d <sub>115</sub> | d <sub>116</sub> | d <sub>117</sub> | d <sub>118</sub> | d <sub>119</sub> | d <sub>120</sub> | d <sub>121</sub> | d <sub>122</sub> | d <sub>123</sub> | d <sub>124</sub> | d <sub>125</sub> | d <sub>126</sub> | d <sub>127</sub> | d <sub>128</sub> | d <sub>129</sub> | d <sub>130</sub> | d <sub>131</sub> | d <sub>132</sub> | d <sub>133</sub> | d <sub>134</sub> | d <sub>135</sub> | d <sub>136</sub> | d <sub>137</sub> | d <sub>138</sub> | d <sub>139</sub> | d <sub>140</sub> | d <sub>141</sub> | d <sub>142</sub> | d <sub>143</sub> | d <sub>144</sub> | d <sub>145</sub> | d <sub>146</sub> | d <sub>147</sub> | d <sub>148</sub> | d <sub>149</sub> | d <sub>150</sub> | d <sub>151</sub> | d <sub>152</sub> | d <sub>153</sub> | d <sub>154</sub> | d <sub>155</sub> | d <sub>156</sub> | d <sub>157</sub> | d <sub>158</sub> | d <sub>159</sub> | d <sub>160</sub> | d <sub>161</sub> | d <sub>162</sub> | d <sub>163</sub> | d <sub>164</sub> | d <sub>165</sub> | d <sub>166</sub> | d <sub>167</sub> | d <sub>168</sub> | d <sub>169</sub> | d <sub>170</sub> | d <sub>171</sub> | d <sub>172</sub> | d <sub>173</sub> | d <sub>174</sub> | d <sub>175</sub> | d <sub>176</sub> | d <sub>177</sub> | d <sub>178</sub> | d <sub>179</sub> | d <sub>180</sub> | d <sub>181</sub> | d <sub>182</sub> | d <sub>183</sub> | d <sub>184</sub> | d <sub>185</sub> | d <sub>186</sub> | d <sub>187</sub> | d <sub>188</sub> | d <sub>189</sub> | d <sub>190</sub> | d <sub>191</sub> | d <sub>192</sub> | d <sub>193</sub> | d <sub>194</sub> | d <sub>195</sub> | d <sub>196</sub> | d <sub>197</sub> | d <sub>198</sub> | d <sub>199</sub> | d <sub>200</sub> | d <sub>201</sub> | d <sub>202</sub> | d <sub>203</sub> | d <sub>204</sub> | d <sub>205</sub> | d <sub>206</sub> | d <sub>207</sub> | d <sub>208</sub> | d <sub>209</sub> | d <sub>210</sub> | d <sub>211</sub> | d <sub>212</sub> | d <sub>213</sub> | d <sub>214</sub> | d <sub>215</sub> | d <sub>216</sub> | d <sub>217</sub> | d <sub>218</sub> | d <sub>219</sub> | d <sub>220</sub> | d <sub>221</sub> | d <sub>222</sub> | d <sub>223</sub> | d <sub>224</sub> | d <sub>225</sub> | d <sub>226</sub> | d <sub>227</sub> | d <sub>228</sub> | d <sub>229</sub> | d <sub>230</sub> | d <sub>231</sub> | d <sub>232</sub> | d <sub>233</sub> | d <sub>234</sub> | d <sub>235</sub> | d <sub>236</sub> | d <sub>237</sub> | d <sub>238</sub> | d <sub>239</sub> | d <sub>240</sub> | d <sub>241</sub> | d <sub>242</sub> | d <sub>243</sub> | d <sub>244</sub> | d <sub>245</sub> | d <sub>246</sub> | d <sub>247</sub> | d <sub>248</sub> | d <sub>249</sub> | d <sub>250</sub> | d <sub>251</sub> | d <sub>252</sub> | d <sub>253</sub> | d <sub>254</sub> | d <sub>255</sub> | d <sub>256</sub> | d <sub>257</sub> | d <sub>258</sub> | d <sub>259</sub> | d <sub>260</sub> | d <sub>261</sub> | d <sub>262</sub> | d <sub>263</sub> | d <sub>264</sub> | d <sub>265</sub> | d <sub>266</sub> | d <sub>267</sub> | d <sub>268</sub> | d <sub>269</sub> | d <sub>270</sub> | d <sub>271</sub> | d <sub>272</sub> | d <sub>273</sub> | d <sub>274</sub> | d <sub>275</sub> | d <sub>276</sub> | d <sub>277</sub> | d <sub>278</sub> | d <sub>279</sub> | d <sub>280</sub> | d <sub>281</sub> | d <sub>282</sub> | d <sub>283</sub> | d <sub>284</sub> | d <sub>285</sub> | d <sub>286</sub> | d <sub>287</sub> | d <sub>288</sub> | d <sub>289</sub> | d <sub>290</sub> | d <sub>291</sub> | d <sub>292</sub> | d <sub>293</sub> | d <sub>294</sub> | d <sub>295</sub> | d <sub>296</sub> | d <sub>297</sub> | d <sub>298</sub> | d <sub>299</sub> | d <sub>300</sub> | d <sub>301</sub> | d <sub>302</sub> | d <sub>303</sub> | d <sub>304</sub> | d <sub>305</sub> | d <sub>306</sub> | d <sub>307</sub> | d <sub>308</sub> | d <sub>309</sub> | d <sub>310</sub> | d <sub>311</sub> | d <sub>312</sub> | d <sub>313</sub> | d <sub>314</sub> | d <sub>315</sub> | d <sub>316</sub> | d <sub>317</sub> | d <sub>318</sub> | d <sub>319</sub> | d <sub>320</sub> | d <sub>321</sub> | d <sub>322</sub> | d <sub>323</sub> | d <sub>324</sub> | d <sub>325</sub> | d <sub>326</sub> | d <sub>327</sub> | d <sub>328</sub> | d <sub>329</sub> | d <sub>330</sub> | d <sub>331</sub> | d <sub>332</sub> | d <sub>333</sub> | d <sub>334</sub> | d <sub>335</sub> | d <sub>336</sub> | d <sub>337</sub> | d <sub>338</sub> | d <sub>339</sub> | d <sub>340</sub> | d <sub>341</sub> | d <sub>342</sub> | d <sub>343</sub> | d <sub>344</sub> | d <sub>345</sub> | d <sub>346</sub> | d <sub>347</sub> | d <sub>348</sub> | d <sub>349</sub> | d <sub>350</sub> | d <sub>351</sub> | d <sub>352</sub> | d <sub>353</sub> | d <sub>354</sub> | d <sub>355</sub> | d <sub>356</sub> | d <sub>357</sub> | d <sub>358</sub> | d <sub>359</sub> | d <sub>360</sub> | d <sub>361</sub> | d <sub>362</sub> | d <sub>363</sub> | d <sub>364</sub> | d <sub>365</sub> | d <sub>366</sub> | d <sub>367</sub> | d <sub>368</sub> | d <sub>369</sub> | d <sub>370</sub> | d <sub>371</sub> | d <sub>372</sub> | d <sub>373</sub> | d <sub>374</sub> | d <sub>375</sub> | d <sub>376</sub> | d <sub>377</sub> | d <sub>378</sub> | d <sub>379</sub> | d <sub>380</sub> | d <sub>381</sub> | d <sub>382</sub> | d <sub>383</sub> | d <sub>384</sub> | d <sub>385</sub> | d <sub>386</sub> | d <sub>387</sub> | d <sub>388</sub> | d <sub>389</sub> | d <sub>390</sub> | d <sub>391</sub> | d <sub>392</sub> | d <sub>393</sub> | d <sub>394</sub> | d <sub>395</sub> | d <sub>396</sub> | d <sub>397</sub> | d <sub>398</sub> | d <sub>399</sub> | d <sub>400</sub> | d <sub>401</sub> | d <sub>402</sub> | d <sub>403</sub> | d <sub>404</sub> | d <sub>405</sub> | d <sub>406</sub> | d <sub>407</sub> | d <sub>408</sub> | d <sub>409</sub> | d <sub>410</sub> | d <sub>411</sub> | d <sub>412</sub> | d <sub>413</sub> | d <sub>414</sub> | d <sub>415</sub> | d <sub>416</sub> | d <sub>417</sub> | d <sub>418</sub> | d <sub>419</sub> | d <sub>420</sub> | d <sub>421</sub> | d <sub>422</sub> | d <sub>423</sub> | d <sub>424</sub> | d <sub>425</sub> | d <sub>426</sub> | d <sub>427</sub> | d <sub>428</sub> | d <sub>429</sub> | d <sub>430</sub> | d <sub>431</sub> | d <sub>432</sub> | d <sub>433</sub> | d <sub>434</sub> | d <sub>435</sub> | d <sub>436</sub> | d <sub>437</sub> | d <sub>438</sub> | d <sub>439</sub> | d <sub>440</sub> | d <sub>441</sub> | d <sub>442</sub> | d <sub>443</sub> | d <sub>444</sub> | d <sub>445</sub> | d <sub>446</sub> | d <sub>447</sub> | d <sub>448</sub> | d <sub>449</sub> | d <sub>450</sub> | d <sub>451</sub> | d <sub>452</sub> | d <sub>453</sub> | d <sub>454</sub> | d <sub>455</sub> | d <sub>456</sub> | d <sub>457</sub> | d <sub>458</sub> | d <sub>459</sub> | d <sub>460</sub> | d <sub>461</sub> | d <sub>462</sub> | d <sub>463</sub> | d <sub>464</sub> | d <sub>465</sub> | d <sub>466</sub> | d <sub>467</sub> | d <sub>468</sub> | d <sub>469</sub> | d <sub>470</sub> | d <sub>471</sub> | d <sub>472</sub> | d <sub>473</sub> | d <sub>474</sub> | d <sub>475</sub> | d <sub>476</sub> | d <sub>477</sub> | d <sub>478</sub> | d <sub>479</sub> | d <sub>480</sub> | d <sub>481</sub> | d <sub>482</sub> | d <sub>483</sub> | d <sub>484</sub> | d <sub>485</sub> | d <sub>486</sub> | d <sub>487</sub> | d <sub>488</sub> | d <sub>489</sub> | d <sub>490</sub> | d <sub>491</sub> | d <sub>492</sub> | d <sub>493</sub> | d <sub>494</sub> | d <sub>495</sub> | d <sub>496</sub> | d <sub>497</sub> | d <sub>498</sub> | d <sub>499</sub> | d <sub>500</sub> | d <sub>501</sub> | d <sub>502</sub> | d <sub>503</sub> | d <sub>504</sub> | d <sub>505</sub> | d <sub>506</sub> | d <sub>507</sub> | d <sub>508</sub> | d <sub>509</sub> | d <sub>510</sub> | d <sub>511</sub> | d <sub>512</sub> | d <sub>513</sub> |
|-------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-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|-------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-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Размеры, мм

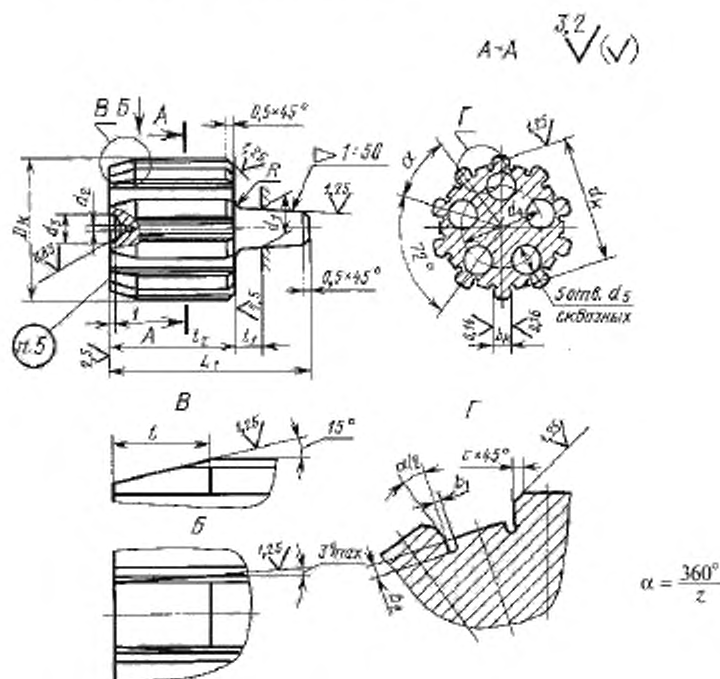
| При изгибании |                   |             |                   |               | D <sub>2</sub> | D <sub>1</sub> | L    | Мно-<br>ст, кт<br>м | Пол. 1. Вставки |                     | Пол. 2<br>Группа<br>по ГОСТ<br>14748-69 |
|---------------|-------------------|-------------|-------------------|---------------|----------------|----------------|------|---------------------|-----------------|---------------------|-----------------------------------------|
| Обозначение   | Примени-<br>мость | Обозначение | Примени-<br>мость | При изгибании |                |                |      |                     |                 |                     |                                         |
|               |                   |             |                   | по D          |                |                |      |                     | по d            |                     |                                         |
|               |                   |             |                   |               |                |                |      |                     |                 | Обозначение деталей |                                         |
| 8311-0636     |                   | 8311-0637   |                   | 6x11x14       | 14             | 10             | 0,06 | 8311-0636/001       | 8311-0637/001   | 8054-0013           |                                         |
| 8311-0638     |                   | 8311-0639   |                   | 6x13x16       | 16             | 109            | 0,09 | 8311-0638/001       | 8311-0639/001   | 8054-0014           |                                         |
| 8311-0641     |                   | 8311-0642   |                   | 6x16x20       | 20             | 126            | 0,16 | 8311-0641/001       | 8311-0642/001   | 8054-0015           |                                         |
| 8311-0643     |                   | 8311-0644   |                   | 6x18x22       | 22             | 137            | 0,18 | 8311-0643/001       | 8311-0644/001   | 8054-0016           |                                         |
| 8311-0645     |                   | 8311-0646   |                   | 6x21x25       | 25             | 153            | 0,28 | 8311-0645/001       | 8311-0646/001   | 8054-0017           |                                         |
| 8311-0648     |                   | 8311-0647   |                   | 6x23x26       | 26             | 159            | 0,30 | 8311-0647/001       | 8311-0648/001   | 8054-0018           |                                         |
| 8311-0651     |                   | 8311-0651   |                   | 6x23x28       | 28             | 174            | 0,33 | 8311-0649/001       | 8311-0651/001   | 8054-0019           |                                         |
| 8311-0653     |                   | 8311-0653   |                   | 6x26x30       | 30             | 180            | 0,40 | 8311-0652/001       | 8311-0653/001   | 8054-0020           |                                         |
| 8311-0654     |                   | 8311-0654   |                   | 6x26x32       | 32             | 197            | 0,45 | 8311-0654/001       | 8311-0655/001   | 8054-0021           |                                         |
| 8311-0656     |                   | 8311-0657   |                   | 6x28x32       | 32             | 208            | 0,46 | 8311-0656/001       | 8311-0657/001   | 8054-0022           |                                         |
| 8311-0658     |                   | 8311-0659   |                   | 6x28x34       | 34             | 224            | 0,53 | 8311-0658/001       | 8311-0659/001   | 8054-0023           |                                         |
| 8311-0661     |                   | 8311-0662   |                   | 8x32x36       | 36             | 240            | 0,58 | 8311-0661/001       | 8311-0662/001   | 8054-0024           |                                         |
| 8311-0663     |                   | 8311-0664   |                   | 8x32x38       | 38             | 256            | 0,63 | 8311-0663/001       | 8311-0664/001   | 8054-0025           |                                         |
| 8311-0665     |                   | 8311-0666   |                   | 8x36x40       | 40             | 272            | 0,72 | 8311-0665/001       | 8311-0666/001   | 8054-0026           |                                         |
| 8311-0667     |                   | 8311-0668   |                   | 8x36x42       | 42             | 288            | 0,86 | 8311-0667/001       | 8311-0668/001   | 8054-0027           |                                         |
| 8311-0669     |                   | 8311-0671   |                   | 8x42x46       | 46             | 304            | 1,16 | 8311-0669/001       | 8311-0671/001   | 8054-0028           |                                         |
| 8311-0672     |                   | 8311-0673   |                   | 8x42x48       | 48             | 320            | 1,24 | 8311-0672/001       | 8311-0673/001   | 8054-0029           |                                         |
| 8311-0674     |                   | 8311-0675   |                   | 8x46x50       | 50             | 336            | 1,31 | 8311-0674/001       | 8311-0675/001   | 8054-0030           |                                         |
| 8311-0676     |                   | 8311-0677   |                   | 8x46x54       | 54             | 352            | 1,55 | 8311-0676/001       | 8311-0677/001   | 8054-0031           |                                         |
| 8311-0678     |                   | 8311-0679   |                   | 8x52x58       | 58             | 368            | 1,66 | 8311-0678/001       | 8311-0679/001   | 8054-0032           |                                         |
| 8311-0681     |                   | 8311-0682   |                   | 8x52x60       | 60             | 384            | 1,76 | 8311-0681/001       | 8311-0682/001   | 8054-0033           |                                         |
| 8311-0683     |                   | 8311-0684   |                   | 8x56x62       | 62             | 400            | 1,85 | 8311-0683/001       | 8311-0684/001   | 8054-0034           |                                         |
| 8311-0685     |                   | 8311-0686   |                   | 8x56x65       | 65             | 416            | 2,27 | 8311-0685/001       | 8311-0686/001   | 8054-0035           |                                         |
| 8311-0687     |                   | 8311-0688   |                   | 8x62x68       | 68             | 432            | 2,44 | 8311-0687/001       | 8311-0688/001   | 8054-0036           |                                         |
| 8311-0689     |                   | 8311-0691   |                   | 8x62x72       | 72             | 448            | 2,68 | 8311-0689/001       | 8311-0691/001   | 8054-0037           |                                         |
| 8311-0692     |                   | 8311-0693   |                   | 10x16x20      | 20             | 136            | 0,18 | 8311-0692/001       | 8311-0693/001   | 8054-0038           |                                         |
| 8311-0694     |                   | 8311-0695   |                   | 10x18x23      | 23             | 152            | 0,22 | 8311-0694/001       | 8311-0695/001   | 8054-0039           |                                         |
| 8311-0696     |                   | 8311-0697   |                   | 10x21x26      | 26             | 168            | 0,29 | 8311-0696/001       | 8311-0697/001   | 8054-0040           |                                         |

Размеры, мм

| Примечания  |            |             |      |                      | D <sub>1</sub> | D <sub>2</sub> | L             | Мас-<br>са, кг | Пос.1. Вспом. |                     | Пос.2<br>Группа<br>по ГОСТ<br>14748—49 |
|-------------|------------|-------------|------|----------------------|----------------|----------------|---------------|----------------|---------------|---------------------|----------------------------------------|
| Обозначение | Примечания | Обозначение | по b | Процесс изготовления |                |                |               |                |               |                     |                                        |
|             |            |             |      | по D                 |                |                |               |                | по b          |                     |                                        |
|             |            |             |      |                      |                |                |               |                |               | Обозначение деталей |                                        |
| 8311-0698   |            | 8311-0699   | 29   | 16                   | 137            | 0,36           | 8311-0698/001 | 8311-0699/001  | 8054-0015     |                     |                                        |
| 8311-0701   |            | 8311-0702   | 32   | 20                   | 153            | 0,51           | 8311-0701/001 | 8311-0702/001  | 8054-0016     |                     |                                        |
| 8311-0703   |            | 8311-0704   | 35   |                      |                | 0,58           | 8311-0703/001 | 8311-0704/001  |               |                     |                                        |
| 8311-0705   |            | 8311-0706   | 40   | 24                   | 159            | 0,85           | 8311-0705/001 | 8311-0706/001  | 8054-0017     |                     |                                        |
| 8311-0707   |            | 8311-0708   | 45   |                      | 164            | 1,15           | 8311-0707/001 | 8311-0708/001  |               |                     |                                        |
| 8311-0709   |            | 8311-0711   | 52   | 28                   | 174            | 1,57           | 8311-0709/001 | 8311-0711/001  | 8054-0018     |                     |                                        |
| 8311-0712   |            | 8311-0713   | 56   |                      |                | 1,77           | 8311-0712/001 | 8311-0713/001  |               |                     |                                        |
| 8311-0714   |            | 8311-0715   | 76   |                      | 180            | 2,29           | 8311-0714/001 | 8311-0715/001  |               |                     |                                        |
| 8311-0716   |            | 8311-0717   | 82   |                      |                | 2,57           | 8311-0716/001 | 8311-0717/001  |               |                     |                                        |
| 8311-0718   |            | 8311-0719   | 88   | 32                   |                | 2,91           | 8311-0718/001 | 8311-0719/001  | 8054-0019     |                     |                                        |
| 8311-0721   |            | 8311-0722   | 92   |                      | 185            | 3,24           | 8311-0721/001 | 8311-0722/001  |               |                     |                                        |
| 8311-0723   |            | 8311-0724   | 98   |                      |                | 3,33           | 8311-0723/001 | 8311-0724/001  |               |                     |                                        |
| 8311-0725   |            | 8311-0726   | 102  |                      |                | 3,70           | 8311-0725/001 | 8311-0726/001  |               |                     |                                        |
| 8311-0727   |            | 8311-0728   | 108  |                      | 200            | 4,15           | 8311-0727/001 | 8311-0728/001  |               |                     |                                        |
| 8311-0729   |            | 8311-0731   | 112  | 36                   |                | 4,59           | 8311-0729/001 | 8311-0731/001  | 8054-0020     |                     |                                        |
| 8311-0732   |            | 8311-0733   | 120  |                      | 205            | 5,14           | 8311-0732/001 | 8311-0733/001  |               |                     |                                        |
| 8311-0734   |            | 8311-0735   | 125  |                      |                | 5,78           | 8311-0734/001 | 8311-0735/001  |               |                     |                                        |
| 8311-0736   |            | 8311-0737   | 60   | 28                   | 174            | 2,68           | 8311-0736/001 | 8311-0737/001  | 8054-0018     |                     |                                        |
| 8311-0738   |            | 8311-0739   | 65   |                      |                | 3,46           | 8311-0738/001 | 8311-0739/001  |               |                     |                                        |
| 8311-0741   |            | 8311-0742   | 72   |                      | 180            | 4,26           | 8311-0741/001 | 8311-0742/001  | 8054-0019     |                     |                                        |
| 8311-0743   |            | 8311-0744   | 82   | 32                   |                | 5,18           | 8311-0743/001 | 8311-0744/001  |               |                     |                                        |
| 8311-0745   |            | 8311-0746   | 92   |                      | 185            | 6,61           | 8311-0745/001 | 8311-0746/001  |               |                     |                                        |
| 8311-0747   |            | 8311-0748   | 102  |                      |                | 7,99           | 8311-0747/001 | 8311-0748/001  |               |                     |                                        |
| 8311-0749   |            | 8311-0751   | 115  | 36                   | 200            | 10,19          | 8311-0749/001 | 8311-0751/001  | 8054-0020     |                     |                                        |
| 8311-0752   |            | 8311-0753   | 125  |                      | 205            | 12,85          | 8311-0752/001 | 8311-0753/001  |               |                     |                                        |

3. Размеры вставки канбры-пробки исполнения 3 должны соответствовать указанным на черт. 7 и в табл. 8.

Исчислительные размеры  $D$ ,  $d$ ,  $b$  — по ГОСТ 7951—80.



Черт. 7

Примечание. Допускается нанесение маркировки на сквозные.

Размеры, мм

| L x d x D                                                                                                             | n <sub>н</sub><br>n <sub>н</sub> / n <sub>н</sub> | d <sub>н</sub> | D <sub>н</sub> | d <sub>н</sub> | L <sub>н</sub> | l | l <sub>н</sub> | l <sub>н</sub> | d <sub>н</sub> |               | d <sub>н</sub> | d <sub>н</sub> | d <sub>н</sub> | d <sub>н</sub> | d <sub>н</sub> | K | Масса,<br>кг |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|----------------|----------------|----------------|----------------|---|----------------|----------------|----------------|---------------|----------------|----------------|----------------|----------------|----------------|---|--------------|-----|---|---|---|---|---|------|----|-----|---|---|---|---|---|---|---|------|----|---|---|---|---|---|---|---|------|----|---|---|---|---|---|---|---|------|---|---|---|---|---|---|---|---|------|----|---|---|---|---|---|---|---|---|------|----|---|---|---|---|---|---|---|---|------|----|---|---|---|---|---|---|---|---|------|----|---|---|---|---|---|---|---|---|------|----|---|---|---|---|---|---|---|---|------|
|                                                                                                                       |                                                   |                |                |                |                |   |                |                | Натяг.         | Проп.<br>осн. |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 6x11x14<br>6x13x16<br>6x16x20<br>6x18x22<br>6x21x25<br>6x23x26<br>6x23x28<br>6x26x30<br>6x26x32<br>6x28x32<br>6x28x34 | 6                                                 | 11             | 14             | 3,0            | 60             | 6 | 10             | 36             | 6              | 1,0           | 4              | —              | —              | —              | —              | 1 | 0,04         |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
|                                                                                                                       |                                                   | 13             | 16             | 3,5            | 63             |   | 9              | 40             |                | 5             | —              |                |                |                |                |   |              | —   | — | — | — | — | — | 0,07 |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
|                                                                                                                       |                                                   | 16             | 20             | 4,0            | 71             |   |                | 11             |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      | 45 | 1,5 | — | — | — | — | — | — | — | 0,12 |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
|                                                                                                                       |                                                   | 18             | 22             | 5,0            | 7              |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      | 50 |     |   |   |   |   |   |   |   |      | 11 | — | — | — | — | — | — | — | 0,14 |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
|                                                                                                                       |                                                   | 21             | 25             | 7              |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      | 50 |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      | 11 | — | — | — | — | — | — | — | 0,21 |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
|                                                                                                                       |                                                   | 23             | 26             |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      | 15 |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      | — | — | — | — | — | — | — | — | 0,23 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
|                                                                                                                       |                                                   | 28             | 30             |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 0,26 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
|                                                                                                                       |                                                   | 32             | 32             |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 0,29 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
|                                                                                                                       |                                                   | 34             | 34             |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 0,35 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
|                                                                                                                       |                                                   | 36             | 36             |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 0,43 |    |   |   |   |   |   |   |   |   |      |
|                                                                                                                       |                                                   | 38             | 38             |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 0,48 |
|                                                                                                                       |                                                   | 40             | 40             |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 42                                                                                                                    | 42                                                | 15             | —              |                |                | — |                |                | —              |               |                | —              | —              | —              | —              | — | 0,57         |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 46                                                                                                                    | 46                                                |                |                |                |                |   | 15             |                |                | —             | —              |                |                |                |                |   |              | —   | — | — | — | — | — | 0,71 |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 48                                                                                                                    | 48                                                |                |                |                |                |   |                | 15             |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    | —   | — | — | — | — | — | — | — | 0,94 |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 50                                                                                                                    | 50                                                |                |                |                | 15             |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      | —  | — | — | — | — | — | — | — | 1,02 |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 54                                                                                                                    | 54                                                |                |                | 15             |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      | —  | — | — | — | — | — | — | — | 1,09 |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 58                                                                                                                    | 58                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      | 15 |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      | — | — | — | — | — | — | — | — | 1,26 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 60                                                                                                                    | 60                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 1,44 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 62                                                                                                                    | 62                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 1,54 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 65                                                                                                                    | 65                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 1,64 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 68                                                                                                                    | 68                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 1,98 |    |   |   |   |   |   |   |   |   |      |
| 72                                                                                                                    | 72                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,15 |
| 20                                                                                                                    | 20                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 23                                                                                                                    | 23                                                | 15             | —              |                |                | — |                |                | —              |               |                | —              | —              | —              | —              | — | 2,39         |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                |                |                |   | 15             |                |                | —             | —              |                |                |                |                |   |              | —   | — | — | — | — | — | 2,39 |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                | 15             |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    | —   | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                |                |                |                | 15             |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      | —  | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                | 15             |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      | —  | — | — | — | — | — | — | — | 2,39 |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      | 15 |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                | 15             | —              |                |                | — |                |                | —              |               |                | —              | —              | —              | —              | — | 2,39         |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                |                |                |   | 15             |                |                | —             | —              |                |                |                |                |   |              | —   | — | — | — | — | — | 2,39 |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                | 15             |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    | —   | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                |                |                |                | 15             |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      | —  | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                | 15             |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      | —  | — | — | — | — | — | — | — | 2,39 |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      | 15 |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                | 15             | —              |                |                | — |                |                | —              |               |                | —              | —              | —              | —              | — | 2,39         |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                |                |                |   | 15             |                |                | —             | —              |                |                |                |                |   |              | —   | — | — | — | — | — | 2,39 |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                | 15             |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    | —   | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                |                |                |                | 15             |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      | —  | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                | 15             |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      | —  | — | — | — | — | — | — | — | 2,39 |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      | 15 |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                | 15             | —              |                |                | — |                |                | —              |               |                | —              | —              | —              | —              | — | 2,39         |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                |                |                |   | 15             |                |                | —             | —              |                |                |                |                |   |              | —   | — | — | — | — | — | 2,39 |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                | 15             |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    | —   | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                |                |                |                | 15             |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      | —  | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                | 15             |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      | —  | — | — | — | — | — | — | — | 2,39 |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      | 15 |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                | 15             | —              |                |                | — |                |                | —              |               |                | —              | —              | —              | —              | — | 2,39         |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                |                |                |   | 15             |                |                | —             | —              |                |                |                |                |   |              | —   | — | — | — | — | — | 2,39 |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                | 15             |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    | —   | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                |                |                |                | 15             |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      | —  | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                | 15             |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      | —  | — | — | — | — | — | — | — | 2,39 |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      | 15 |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                | 15             | —              |                |                | — |                |                | —              |               |                | —              | —              | —              | —              | — | 2,39         |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                |                |                |   | 15             |                |                | —             | —              |                |                |                |                |   |              | —   | — | — | — | — | — | 2,39 |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                | 15             |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    | —   | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                |                |                |                | 15             |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      | —  | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                | 15             |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      | —  | — | — | — | — | — | — | — | 2,39 |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      | 15 |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      | 15 | — | — | — | — | — | — | — | — | 2,39 |
| 16                                                                                                                    | 16                                                |                |                |                |                |   |                |                |                |               |                |                |                |                |                |   |              |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 18                                                                                                                    | 18                                                | 15             | —              |                |                | — |                |                | —              |               |                | —              | —              | —              | —              | — | 2,39         |     |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |
| 21                                                                                                                    | 21                                                |                |                |                |                |   | 15             |                |                | —             | —              |                |                |                |                |   |              | —</ |   |   |   |   |   |      |    |     |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |    |   |   |   |   |   |   |   |   |      |

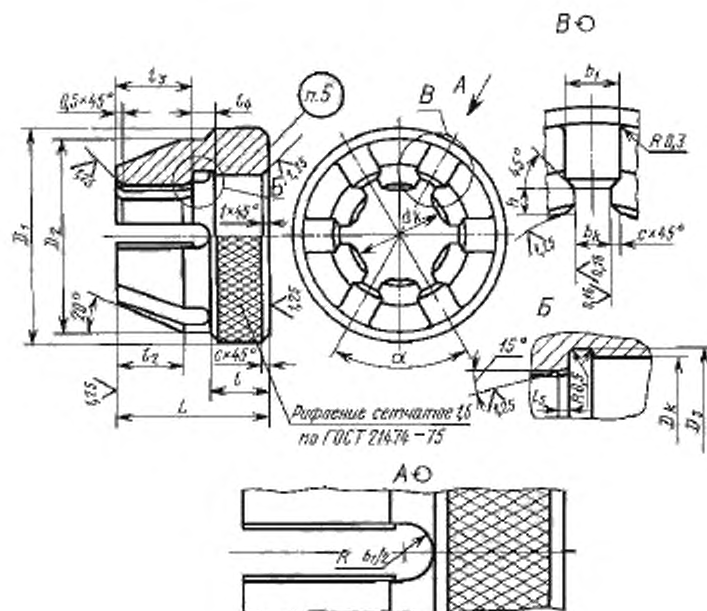
Продолжение табл. 8

Размеры, мм

| L × B × D  | L <sub>1</sub> | B <sub>1</sub> | B <sub>2</sub> | L <sub>2</sub> | I  | J  | K  | L <sub>3</sub> | d <sub>1</sub> |                | d <sub>2</sub> | d <sub>3</sub> | d <sub>4</sub> | d <sub>5</sub> | A <sub>1</sub> | K <sub>1</sub> | C <sub>1</sub><br>+0,1 | K | Масса,<br>кг |
|------------|----------------|----------------|----------------|----------------|----|----|----|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------------|---|--------------|
|            |                |                |                |                |    |    |    |                | Нормат.        | Проп.<br>откл. |                |                |                |                |                |                |                        |   |              |
| 10×23×29   | 23             | 29             | 29             | 73             | 6  | 7  | 50 | 11             | 1,5            | —              | 1,5            | —              | —              | —              | —              | —              | —                      | 3 | 0,30         |
| 10×26×32   | 26             | 32             | 32             | 82             | 6  | 8  | 55 | 15             | 2,0            | —0,043         | 2,0            | —              | —              | —              | —              | —              | —                      | 3 | 0,41         |
| 10×28×35   | 28             | 35             | 35             | 90             | 8  | 9  | 60 | 18             | 2,0            | —              | 2,0            | —              | —              | —              | —              | —              | —                      | 3 | 0,48         |
| 10×32×40   | 32             | 40             | 40             | 90             | 8  | 9  | 65 | 21             | 2,0            | —              | 2,0            | —              | —              | —              | —              | —              | —                      | 3 | 0,67         |
| 10×36×45   | 36             | 45             | 45             | 98             | 12 | 12 | 70 | 24             | 2,5            | —              | 2,5            | —              | —              | —              | —              | —              | —                      | 3 | 0,88         |
| 10×42×52   | 42             | 52             | 52             | 110            | 15 | 15 | 75 | 28             | 3,0            | —              | 3,0            | —              | —              | —              | —              | —              | —                      | 3 | 1,30         |
| 10×46×56   | 46             | 56             | 56             | 115            | 15 | 15 | 80 | 32             | 3,0            | —              | 3,0            | —              | —              | —              | —              | —              | —                      | 3 | 1,50         |
| 10×72×78   | 72             | 78             | 78             | 132            | 15 | 15 | 85 | 36             | 3,0            | —              | 3,0            | —              | —              | —              | —              | —              | —                      | 3 | 2,00         |
| 10×72×82   | 72             | 82             | 82             | 132            | 15 | 15 | 85 | 36             | 3,0            | —              | 3,0            | —              | —              | —              | —              | —              | —                      | 3 | 2,28         |
| 10×82×88   | 82             | 88             | 88             | 132            | 15 | 15 | 85 | 36             | 3,0            | —              | 3,0            | —              | —              | —              | —              | —              | —                      | 3 | 2,62         |
| 10×82×92   | 82             | 92             | 92             | 132            | 15 | 15 | 85 | 36             | 3,0            | —              | 3,0            | —              | —              | —              | —              | —              | —                      | 3 | 2,95         |
| 10×92×98   | 92             | 98             | 98             | 132            | 15 | 15 | 85 | 36             | 3,0            | —              | 3,0            | —              | —              | —              | —              | —              | —                      | 3 | 3,04         |
| 10×92×102  | 92             | 102            | 102            | 132            | 15 | 15 | 85 | 36             | 3,0            | —              | 3,0            | —              | —              | —              | —              | —              | —                      | 3 | 3,41         |
| 10×102×108 | 102            | 108            | 108            | 132            | 15 | 15 | 85 | 36             | 3,0            | —              | 3,0            | —              | —              | —              | —              | —              | —                      | 3 | 3,79         |
| 10×102×112 | 102            | 112            | 112            | 132            | 15 | 15 | 85 | 36             | 3,0            | —              | 3,0            | —              | —              | —              | —              | —              | —                      | 3 | 4,23         |
| 10×112×120 | 112            | 120            | 120            | 132            | 15 | 15 | 85 | 36             | 3,0            | —              | 3,0            | —              | —              | —              | —              | —              | —                      | 3 | 4,78         |
| 10×112×125 | 112            | 125            | 125            | 132            | 15 | 15 | 85 | 36             | 3,0            | —              | 3,0            | —              | —              | —              | —              | —              | —                      | 3 | 5,42         |
| 16×32×60   | 32             | 60             | 60             | 98             | 12 | 12 | 65 | 21             | 2,0            | —              | 2,0            | —              | —              | —              | —              | —              | —                      | 3 | 2,41         |
| 16×36×65   | 36             | 65             | 65             | 110            | 15 | 15 | 70 | 24             | 2,5            | —              | 2,5            | —              | —              | —              | —              | —              | —                      | 3 | 3,11         |
| 16×62×72   | 62             | 72             | 72             | 115            | 15 | 15 | 75 | 28             | 3,0            | —              | 3,0            | —              | —              | —              | —              | —              | —                      | 3 | 3,91         |
| 16×72×82   | 72             | 82             | 82             | 115            | 15 | 15 | 80 | 32             | 3,0            | —              | 3,0            | —              | —              | —              | —              | —              | —                      | 3 | 4,83         |
| 20×82×92   | 82             | 92             | 92             | 132            | 15 | 15 | 85 | 36             | 3,0            | —              | 3,0            | —              | —              | —              | —              | —              | —                      | 3 | 6,26         |
| 20×92×102  | 92             | 102            | 102            | 132            | 15 | 15 | 85 | 36             | 3,0            | —              | 3,0            | —              | —              | —              | —              | —              | —                      | 3 | 7,64         |
| 20×102×115 | 102            | 115            | 115            | 132            | 15 | 15 | 85 | 36             | 3,0            | —              | 3,0            | —              | —              | —              | —              | —              | —                      | 3 | 9,73         |
| 20×112×125 | 112            | 125            | 125            | 132            | 15 | 15 | 85 | 36             | 3,0            | —              | 3,0            | —              | —              | —              | —              | —              | —                      | 3 | 12,39        |

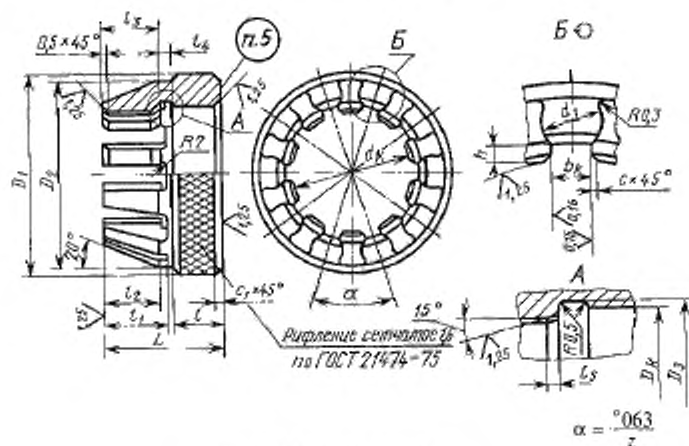
4. Размеры калибров-колец должны соответствовать указанным на черт. 8 и в табл. 9. Исключительные размеры  $D_1$ ,  $d_1$ ,  $b_1$  — по ГОСТ 7951—80.

Для  $z = 6$ ;  $z = 8$ ;  $z = 10$  при  $D \leq 56$ ;  $z = 16$ ;  $z = 20$



Черт. 8

Для  $z = 10$  при  $D \geq 78$



Черт. 8 (продолжение)

Примечание. Допускается изготовление калибров с цилиндрической поверхностью диаметром  $D_2$  (вместо конической поверхности под углом  $20^\circ$ ) с фаской  $1,5 \times 45^\circ$  по  $D_1$  и торцу зубьев.

Таблица 9

Размеры, мм

| При назначении |      |           |             |            |             |            |             |            |    | z x d x D | D <sub>1</sub> | D <sub>2</sub> | D <sub>3</sub> | d <sub>1</sub> | L  | l | l <sub>1</sub> | l <sub>2</sub> | l <sub>3</sub> | l <sub>4</sub> | l <sub>5</sub> | k<br>-0,2 | e<br>+0,1 | c <sub>1</sub> | Мас-<br>ов,<br>кг<br>а |
|----------------|------|-----------|-------------|------------|-------------|------------|-------------|------------|----|-----------|----------------|----------------|----------------|----------------|----|---|----------------|----------------|----------------|----------------|----------------|-----------|-----------|----------------|------------------------|
| по D           | по d | по b      | Обозначение | Примечание | Обозначение | Примечание | Обозначение | Примечание |    |           |                |                |                |                |    |   |                |                |                |                |                |           |           |                |                        |
| 8312-0201      |      | 8312-0202 |             | 8312-0203  |             | 6x11x14    | 32          | 28         | 16 |           | 25             | 8              |                | 8              | 13 |   |                |                |                |                |                | 2,0       |           |                | 0,09                   |
| 8312-0204      |      | 8312-0205 |             | 8312-0206  |             | 6x13x16    |             | 18         |    |           | 30             | 11             |                | 12             | 15 |   |                |                |                |                |                |           |           |                | 0,08                   |
| 8312-0207      |      | 8312-0208 |             | 8312-0209  |             | 6x16x20    | 42          | 38         | 22 |           |                |                |                |                |    |   |                |                |                |                |                | 2,5       | 0,2       |                | 0,19                   |
| 8312-0211      |      | 8312-0212 |             | 8312-0213  |             | 6x18x22    |             | 24         |    |           |                |                |                |                |    |   |                |                |                |                |                |           |           |                | 0,18                   |
| 8312-0214      |      | 8312-0215 |             | 8312-0216  |             | 6x21x25    |             | 25         |    |           |                |                |                |                |    |   |                |                |                |                |                |           |           |                | 0,28                   |
| 8312-0217      |      | 8312-0218 |             | 8312-0219  |             | 6x23x26    | 44          | 44         | 28 |           | 35             | 13             |                | 15             | 17 | 5 | 1,5            |                |                |                |                |           |           |                | 0,27                   |
| 8312-0221      |      | 8312-0222 |             | 8312-0223  |             | 6x23x28    |             | 30         |    |           |                |                |                |                |    |   |                |                |                |                |                |           |           |                | 0,25                   |
| 8312-0224      |      | 8312-0225 |             | 8312-0226  |             | 6x26x30    |             | 32         |    |           | 40             | 16             |                | 16             |    |   |                |                |                |                |                |           |           |                | 0,30                   |
| 8312-0227      |      | 8312-0228 |             | 8312-0229  |             | 6x26x32    |             |            | 34 |           |                |                |                |                |    |   |                |                |                |                |                |           |           |                | 0,47                   |
| 8312-0231      |      | 8312-0232 |             | 8312-0233  |             | 6x28x32    |             | 28         |    |           |                |                |                |                |    |   |                |                |                |                |                |           |           |                |                        |
| 8312-0234      |      | 8312-0235 |             | 8312-0236  |             | 6x28x34    |             |            | 36 |           |                |                |                |                |    |   |                |                |                |                |                |           |           |                |                        |
| 8312-0237      |      | 8312-0238 |             | 8312-0239  |             | 8x32x36    | 65          | 61         | 39 |           | 45             | 18             |                | 19             |    |   |                |                |                |                |                |           |           |                | 0,43                   |
| 8312-0241      |      | 8312-0242 |             | 8312-0243  |             | 8x32x38    |             | 41         |    |           |                |                |                |                |    |   |                |                |                |                |                |           |           |                | 0,67                   |
| 8312-0244      |      | 8312-0245 |             | 8312-0246  |             | 8x36x40    | 70          | 66         | 43 |           |                |                |                |                |    |   |                |                |                |                |                |           |           |                | 0,63                   |
| 8312-0247      |      | 8312-0248 |             | 8312-0249  |             | 8x36x42    |             | 45         |    |           |                |                |                |                |    |   |                |                |                |                |                |           |           |                | 0,76                   |
| 8312-0251      |      | 8312-0252 |             | 8312-0253  |             | 8x42x46    | 75          | 71         | 49 |           |                |                |                |                |    |   |                |                |                |                |                |           |           |                | 0,72                   |
| 8312-0254      |      | 8312-0255 |             | 8312-0256  |             | 8x42x48    | 80          | 76         | 51 |           | 50             | 20             |                | 20             | 22 | 8 | 2,5            |                |                |                |                |           |           |                | 0,90                   |
| 8312-0257      |      | 8312-0258 |             | 8312-0259  |             | 8x46x50    |             |            | 53 |           |                |                |                |                |    |   |                |                |                |                |                |           |           |                | 1,07                   |
| 8312-0261      |      | 8312-0262 |             | 8312-0263  |             | 8x46x54    | 85          | 81         | 57 |           | 55             | 23             |                | 24             | 25 |   |                |                |                |                |                |           |           |                | 1,01                   |
| 8312-0264      |      | 8312-0265 |             | 8312-0266  |             | 8x52x58    | 90          | 86         | 61 |           |                |                |                |                |    |   |                |                |                |                |                |           |           |                | 1,24                   |
| 8312-0267      |      | 8312-0268 |             | 8312-0269  |             | 8x52x60    | 95          | 91         | 63 |           | 60             | 26             |                | 26             | 27 |   |                |                |                |                |                |           |           |                | 1,37                   |
| 8312-0271      |      | 8312-0272 |             | 8312-0273  |             | 8x56x62    | 100         | 96         | 65 |           |                |                |                |                |    |   |                |                |                |                |                |           |           |                | 1,73                   |
| 8312-0274      |      | 8312-0275 |             | 8312-0276  |             | 8x56x65    | 105         | 100        | 68 |           |                |                |                |                |    |   |                |                |                |                |                |           |           |                | 1,99                   |
| 8312-0277      |      | 8312-0278 |             | 8312-0279  |             | 8x62x68    |             |            | 71 |           |                |                |                |                |    |   |                |                |                |                |                |           |           |                | 2,14                   |
| 8312-0281      |      | 8312-0282 |             | 8312-0283  |             | 8x62x72    | 115         | 110        | 75 |           | 65             | 28             |                | 28             | 30 |   |                |                |                |                |                |           |           |                | 1,99                   |
| 8312-0284      |      | 8312-0285 |             | 8312-0286  |             | 10x16x20   |             |            | 22 |           | 30             | 11             |                | 12             | 15 | 5 | 1,5            | 2,5            | 0,2            | 2,0            |                |           |           |                | 0,19                   |

Размеры, мм

| При маркировке |  |  |  |  |  |  |  |  |  | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D | Объем-<br>высота | D |
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## ПРИЛОЖЕНИЕ 2

Рекомендуемое

**КОДЫ ПОЛЕЙ ДОПУСКОВ ПЛАНОВЫХ ВАЛОВ И ОТВЕРСТИЙ  
по ГОСТ 1133—80, ДЛЯ КОТОРЫХ ИСПОЛНИТЕЛЬНЫЕ РАЗМЕРЫ КАЛИБРОВ ОДИНАКОВЫ**

1. Обозначения кодов полей допусков для калибров-пробок должны соответствовать указанным в табл. 1.

Таблица 1

| Обозначение поля допуска конкретного отверстия |                            |          | Код |
|------------------------------------------------|----------------------------|----------|-----|
| <i>d</i> · <i>b</i>                            | <i>D</i> · <i>b</i>        | <i>b</i> |     |
| H7 · D9; H8 · D9                               | H7 · D9                    | —        | 1   |
| H7 · F8; H7 · F10; H8 · F10                    | H7 · F8; H7 · F10; H8 · F8 | —        | 2   |
| H7 · H8                                        | —                          | —        | 3   |
| —                                              | —                          | D9       | 4   |
| —                                              | —                          | F8; F10  | 5   |

2. Обозначения кодов полей допусков для калибров-колец должны соответствовать указанным в табл. 2.

Таблица 2

| Обозначение поля допуска конкретного вала |                     |          | Код | Обозначение поля допуска конкретного вала |                     |          | Код |
|-------------------------------------------|---------------------|----------|-----|-------------------------------------------|---------------------|----------|-----|
| <i>d</i> · <i>b</i>                       | <i>D</i> · <i>b</i> | <i>b</i> |     | <i>d</i> · <i>b</i>                       | <i>D</i> · <i>b</i> | <i>b</i> |     |
| e8 · d10                                  | e8 · d10            | —        | 36  | h7 · h8; h7 · h9                          | —                   | —        | 19  |
| e8 · e8; e8 · e9                          | e8 · e8             | —        | 6   | js 6 · e9                                 | js 6 · e9           | —        | 43  |
| f7 · d9; f7 · d10                         | f7 · d9; f7 · d10   | —        | 7   | js 6 · h7                                 | —                   | —        | 20  |
| f7 · e8; f7 · e9                          | f7 · e8; f7 · e9    | —        | 8   | js 6 · h8                                 | js 6 · h8           | —        | 21  |
| f7 · f7                                   | f7 · f7             | —        | 9   | js 6 · js 7                               | js 6 · js 7         | —        | 22  |
| f7 · f8; f7 · f9                          | f7 · f8; f7 · f9    | —        | 10  | js 6 · k7                                 | —                   | —        | 23  |
| f7 · h7                                   | —                   | —        | 11  | js 7 · h7                                 | —                   | —        | 24  |
| f7 · h8; f7 · h9                          | f7 · h8; f7 · h9    | —        | 12  | js 7 · h8                                 | —                   | —        | 42  |
| g6 · e9                                   | g6 · e9             | —        | 37  | js 7 · js 7                               | —                   | —        | 25  |
| g6 · f7                                   | g6 · f7             | —        | 13  | js 7 · k7                                 | —                   | —        | 26  |
| g6 · f8; g6 · f9                          | g6 · f9             | —        | 14  | n6 · h7                                   | —                   | —        | 27  |
| g6 · h7                                   | —                   | —        | 15  | —                                         | n6 · h 8            | —        | 28  |
| g6 · h8; g6 · h9                          | g6 · h8; g6 · h9    | —        | 16  | n6 · js7                                  | n6 · js 7           | —        | 29  |
| h6 · e9                                   | h6 · e9             | —        | 38  | —                                         | —                   | e9       | 30  |
| h6 · h8                                   | h6 · h8             | —        | 39  | —                                         | —                   | e8; e9   | 31  |
| h7 · d10                                  | h7 · d10            | —        | 40  | —                                         | —                   | f8       | 32  |
| —                                         | h7 · f7             | —        | 41  | —                                         | —                   | h9       | 33  |
| h7 · f8                                   | h7 · f8             | —        | 17  | —                                         | —                   | js7      | 34  |
| h7 · h7                                   | —                   | —        | 18  | —                                         | —                   | k7       | 35  |

Примечание. Обозначения кода поля допуска должны указываться после обозначения калибра.

ПРИЛОЖЕНИЯ 1, 2 (Исключенная редакция, Изм. № 1).