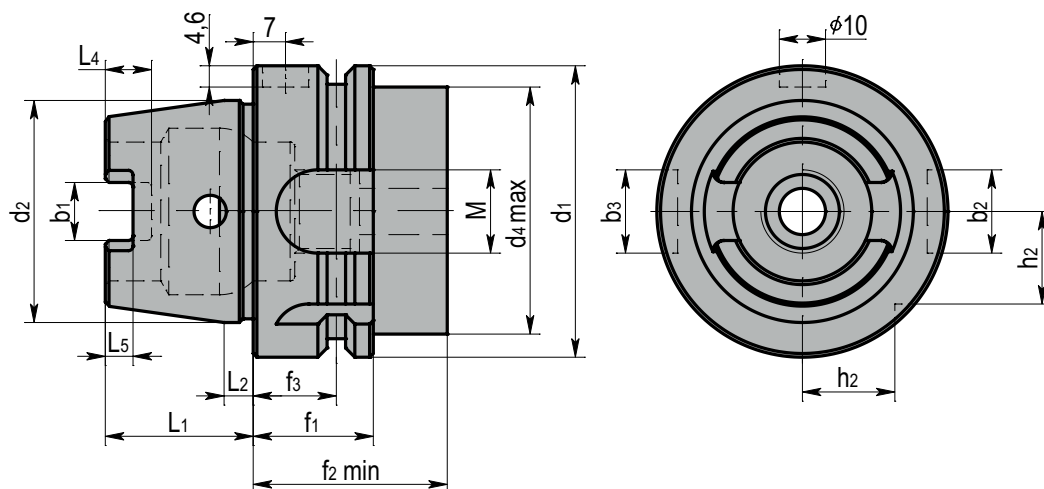


## Зажимные приспособления для станков фрезерно-расточной группы DIN 69893 (HSK). Форма A/T ISO 12164-1 (ГОСТ Р 51547-2000)

Патроны цанговые тип ER  
 Патроны силовые прецизионные фрезерные  
 Патрон цанговый для цанг тип OZ  
 Патрон цанговый для цанг тип SK  
 Патроны цанговые тянущего типа FPC  
 Оправка для инструмента с хвостовиком типа «Weldon»  
 Оправка для инструмента с хвостовиком типа «Whistle Notch»  
 Оправки для инструмента с хвостовиком конус Морзе  
 Переходник, соединение HSK-C  
 Переходник, соединение PS ISO26623-1 (CAPTO®)  
 Оправка комбинированная для насадных торцовых и дисковых фрез  
 Оправка для насадных торцовых фрез  
 Оправка для фрез с резьбовым хвостовиком  
 Оправки с коррекцией биения  
 Оправки для сверлильных патронов  
 Сверлильные патроны  
 Резьбонарезные патроны  
 Заготовки для изготовления специальных оправок  
 Контрольные оправки  
 Патроны с термозажимом  
 Патроны гидропластовые

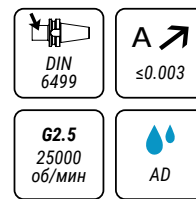


- Применяется для обрабатывающих центров, фрезерных станков и специальных станков с автоматической сменой инструмента.
- Подвод СОЖ через центр патрона при помощи специального сопла.
- Передача крутящего момента с помощью двух пазов на конце конуса.
- 2 паза для фиксации в инструментальном магазине и паз на фланце для ориентирования режущей кромки инструмента.
- Отверстие для носителя информации по DIN 69873 на фланце.

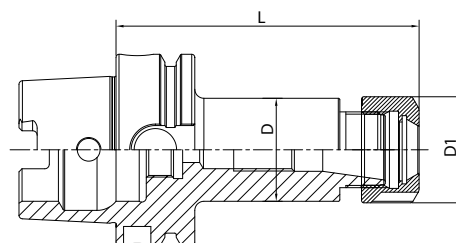
| HSK-A | Размеры, мм |    |    |    |     |     |     |         |    |    |    |       |    |    |      |
|-------|-------------|----|----|----|-----|-----|-----|---------|----|----|----|-------|----|----|------|
|       | d1          | d2 | d4 | L1 | L2  | L4  | L5  | M       | f1 | f2 | f3 | b1    | b2 | b3 | h2   |
|       | 32          | 24 | 26 | 16 | 3,2 | 5   | 3   | M10×1   | 20 | 35 | 16 | 7,05  | 7  | 9  | 9,5  |
|       | 40          | 30 | 34 | 20 | 4   | 6   | 3,5 | M12×1   | 20 | 35 | 16 | 8,05  | 9  | 11 | 12   |
|       | 50          | 38 | 42 | 25 | 5   | 7,5 | 4,5 | M16×1   | 26 | 42 | 18 | 10,54 | 12 | 14 | 15,5 |
|       | 63          | 48 | 53 | 32 | 6,3 | 10  | 6   | M18×1   | 26 | 42 | 18 | 12,54 | 16 | 18 | 20   |
|       | 80          | 60 | 67 | 40 | 8   | 12  | 8   | M20×1,5 | 26 | 42 | 18 | 16,04 | 18 | 20 | 25   |
|       | 100         | 75 | 85 | 50 | 10  | 15  | 10  | M24×1,5 | 29 | 45 | 20 | 20,02 | 20 | 22 | 31,5 |

|                                                                                                                                                  |                                                                                                                                      |                                                                                                                                                              |                                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| <b>E-5.3</b><br><br>Патроны цанговые тип ER                     | <b>E-5.6</b><br><br>Патроны силовые прецизионные    | <b>E-5.7</b><br><br>Патроны цанговые тип OZ                                | <b>E-5.7</b><br><br>Патроны цанговые тип SK              |
| <b>E-5.8</b><br><br>Патроны цанговые тянущего типа FPC          | <b>E-5.9</b><br><br>Оправки под «Weldon»            | <b>E-5.11</b><br><br>Оправки под «Whistle Notch»                           | <b>E-5.12</b><br><br>Оправки под конус Морзе             |
| <b>E-5.13</b><br><br>Переходники, соединение HSK-C             | <b>E-5.14</b><br><br>Переходники, соединение CAPTO | <b>E-5.15</b><br><br>Оправки комбинированные для торцовых и дисковых фрез | <b>E-5.16</b><br><br>Оправки для насадных торцовых фрез |
| <b>E-5.17</b><br><br>Оправки для фрез с резьбовым хвостовиком | <b>E-5.20</b><br><br>Оправки с коррекцией биения  | <b>E-5.21</b><br><br>Патроны сверлильные                                 | <b>E-5.19</b><br><br>Патроны резьбонарезные            |
| <b>E-5.22</b><br><br>Заготовки                                | <b>E-5.22</b><br><br>Контрольные оправки          | <b>E-5.23</b><br><br>Термопатроны                                        | <b>E-5.31</b><br><br>Патроны гидропластиковые          |
| <b>E-12</b><br><br>Запасные части и аксессуары                |                                                                                                                                      | <b>E-13</b><br><br>Техническая информация                                |                                                                                                                                             |

## Патрон цанговый для цанг типа ER по DIN 6499 исполнение с накидной гайкой



| Обозначение              |   | Тип  | D,<br>мм | D1,<br>мм | L1,<br>мм | Диапазон |
|--------------------------|---|------|----------|-----------|-----------|----------|
| Размер хвостовика HSK32A |   |      |          |           |           |          |
| A32.R16.80               | ○ | ER16 | 28       | 32        | 80        | 1-10     |
| A32.R20.80               | ○ | ER20 | 34       | 35        | 80        | 1-13     |
| A32.R25.80               | ○ | ER25 | 42       | 42        | 80        | 2-16     |
| A32.R32.50               | ○ | ER32 | 50       | 50        | 50        | 3-20     |
| Размер хвостовика HSK40A |   |      |          |           |           |          |
| A40.R16.80               | ○ | ER16 | 28       | 32        | 80        | 1-10     |
| A40.R20.80               | ○ | ER20 | 34       | 35        | 80        | 1-13     |
| A40.R25.80               | ○ | ER25 | 42       | 42        | 80        | 2-16     |
| A40.R32.80               | ○ | ER32 | 50       | 50        | 80        | 3-20     |
| Размер хвостовика HSK50A |   |      |          |           |           |          |
| A50.R16.80               | ○ | ER16 | 28       | 32        | 80        | 1-10     |
| A50.R20.80               | ○ | ER20 | 34       | 35        | 80        | 1-13     |
| A50.R25.80               | ○ | ER25 | 42       | 42        | 80        | 2-16     |
| A50.R32.100              | ○ | ER32 | 50       | 50        | 100       | 3-20     |
| Размер хвостовика HSK63A |   |      |          |           |           |          |
| A63.R16.75               | ○ | ER16 | 28       | 32        | 75        | 1-10     |
| A63.R20.75               | ○ | ER20 | 34       | 35        | 75        | 1-13     |
| A63.R25.75               | ○ | ER25 | 42       | 42        | 75        | 2-16     |
| A63.R32.75               | ○ | ER32 | 50       | 50        | 75        | 3-20     |
| A63.R40.80               | ○ | ER40 | 50       | 63        | 80        | 4-26     |
| A63.R16.100              | ○ | ER16 | 28       | 32        | 100       | 1-10     |
| A63.R20.100              | ○ | ER20 | 34       | 35        | 100       | 1-13     |
| A63.R25.100              | ○ | ER25 | 42       | 42        | 100       | 2-16     |
| A63.R32.100              | ○ | ER32 | 50       | 50        | 100       | 3-20     |
| A63.R40.100              | ○ | ER40 | 50       | 63        | 100       | 4-26     |
| A63.R16.120              | ○ | ER16 | 28       | 32        | 120       | 1-10     |
| A63.R20.120              | ○ | ER20 | 34       | 35        | 120       | 1-13     |
| A63.R25.120              | ○ | ER25 | 42       | 42        | 120       | 2-16     |
| A63.R32.120              | ○ | ER32 | 50       | 50        | 120       | 3-20     |
| A63.R40.120              | ○ | ER40 | 50       | 63        | 120       | 4-26     |
| A63.R16.160K             | ○ | ER16 | 28       | 32        | 160       | 1-10     |
| A63.R20.160              | ○ | ER20 | 34       | 35        | 160       | 1-13     |
| A63.R25.160              | ○ | ER25 | 42       | 42        | 160       | 2-16     |
| A63.R32.160              | ○ | ER32 | 50       | 50        | 160       | 3-20     |
| A63.R40.160              | ○ | ER40 | 50       | 63        | 160       | 4-26     |
| A63.R16.200K             | ○ | ER16 | 28       | 32        | 200       | 1-10     |
| A63.R20.200              | ○ | ER20 | 34       | 35        | 200       | 1-13     |
| A63.R25.200              | ○ | ER25 | 42       | 42        | 200       | 2-16     |
| A63.R32.200              | ○ | ER32 | 50       | 50        | 200       | 3-20     |
| A63.R40.200              | ○ | ER40 | 50       | 63        | 200       | 4-26     |



Гайка ER  
стр. E-12.21 - E-12.22



Цанга ER  
стр. E-12.3 - E-12.9



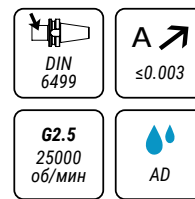
Ключ ER  
стр. E-12.24



Сопла HSK  
стр. E-12.26

K - коническое исполнение рабочей части.

## Патрон цанговый для цанг типа ER по DIN 6499 исполнение с накидной гайкой



| Обозначение | Тип | D,<br>мм | D1,<br>мм | L1,<br>мм | Диапазон |
|-------------|-----|----------|-----------|-----------|----------|
|-------------|-----|----------|-----------|-----------|----------|

Размер хвостовика HSK80A

|             |   |      |    |    |     |      |
|-------------|---|------|----|----|-----|------|
| A80.R16.100 | ○ | ER16 | 28 | 32 | 100 | 1-10 |
| A80.R20.100 | ○ | ER20 | 34 | 35 | 100 | 1-13 |
| A80.R25.100 | ○ | ER25 | 42 | 42 | 100 | 2-16 |
| A80.R32.100 | ○ | ER32 | 50 | 50 | 100 | 3-20 |
| A80.R40.120 | ○ | ER40 | 50 | 63 | 120 | 4-26 |

Размер хвостовика HSK100A

|              |   |      |    |    |     |      |
|--------------|---|------|----|----|-----|------|
| A100.R16.100 | ○ | ER16 | 28 | 32 | 100 | 1-10 |
| A100.R20.100 | ○ | ER20 | 34 | 35 | 100 | 1-13 |
| A100.R25.100 | ○ | ER25 | 42 | 42 | 100 | 2-16 |
| A100.R32.100 | ○ | ER32 | 50 | 50 | 100 | 3-20 |
| A100.R40.100 | ○ | ER40 | 63 | 63 | 100 | 4-26 |

|              |   |      |     |    |     |      |
|--------------|---|------|-----|----|-----|------|
| A100.R50.120 | ○ | ER50 | 100 | 78 | 120 | 6-34 |
|--------------|---|------|-----|----|-----|------|

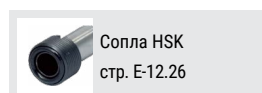
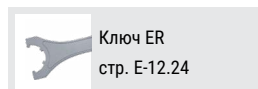
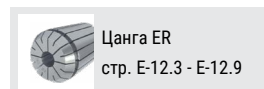
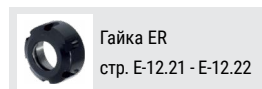
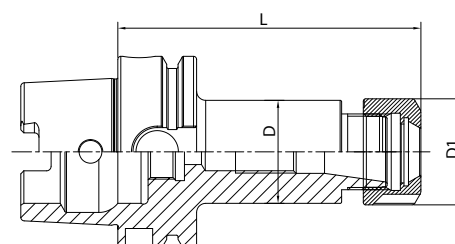
|               |   |      |    |    |     |      |
|---------------|---|------|----|----|-----|------|
| A100.R16.120K | ○ | ER16 | 28 | 32 | 120 | 1-10 |
| A100.R20.120  | ○ | ER20 | 34 | 35 | 120 | 1-13 |
| A100.R25.120  | ○ | ER25 | 42 | 42 | 120 | 2-16 |
| A100.R32.120  | ○ | ER32 | 50 | 50 | 120 | 3-20 |
| A100.R40.120  | ○ | ER40 | 63 | 63 | 120 | 4-26 |

|               |   |      |    |    |     |      |
|---------------|---|------|----|----|-----|------|
| A100.R16.160K | ○ | ER16 | 28 | 32 | 160 | 1-10 |
| A100.R20.160  | ○ | ER20 | 34 | 35 | 160 | 1-13 |
| A100.R25.160  | ○ | ER25 | 42 | 42 | 160 | 2-16 |
| A100.R32.160  | ○ | ER32 | 50 | 50 | 160 | 3-20 |
| A100.R40.160  | ○ | ER40 | 63 | 63 | 160 | 4-26 |

|               |   |      |    |    |     |      |
|---------------|---|------|----|----|-----|------|
| A100.R16.200K | ○ | ER16 | 28 | 32 | 200 | 1-10 |
| A100.R20.200  | ○ | ER20 | 34 | 35 | 200 | 1-13 |
| A100.R25.200  | ○ | ER25 | 42 | 42 | 200 | 2-16 |
| A100.R32.200  | ○ | ER32 | 50 | 50 | 200 | 3-20 |
| A100.R40.200  | ○ | ER40 | 63 | 63 | 200 | 4-26 |

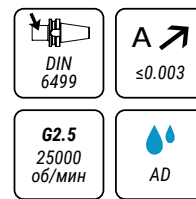
|              |   |      |    |    |     |      |
|--------------|---|------|----|----|-----|------|
| A100.R25.250 | ○ | ER25 | 42 | 42 | 250 | 2-16 |
| A100.R32.250 | ○ | ER32 | 50 | 50 | 250 | 3-20 |
| A100.R40.250 | ○ | ER40 | 63 | 63 | 250 | 4-26 |

|              |   |      |    |    |     |      |
|--------------|---|------|----|----|-----|------|
| A100.R25.300 | ○ | ER25 | 42 | 42 | 300 | 2-16 |
| A100.R32.300 | ○ | ER32 | 50 | 50 | 300 | 3-20 |
| A100.R40.300 | ○ | ER40 | 63 | 63 | 300 | 4-26 |

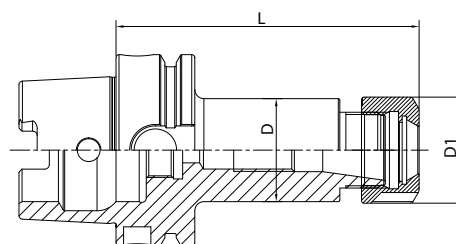


К - коническое исполнение рабочей части.

## Патрон цанговый для цанг типа ER по DIN 6499 исполнение с шестигранной гайкой



| Обозначение               |   | Тип  | D,<br>мм | D1,<br>мм | L1,<br>мм | Диапазон |
|---------------------------|---|------|----------|-----------|-----------|----------|
| Размер хвостовика HSK32A  |   |      |          |           |           |          |
| A32.R16H.80               | ○ | ER16 | 28       | 28        | 80        | 1-10     |
| A32.R20H.80               | ○ | ER20 | 34       | 34        | 80        | 1-13     |
| A40.R16H.80               | ○ | ER16 | 28       | 28        | 80        | 1-10     |
| A40.R20H.80               | ○ | ER20 | 34       | 34        | 80        | 1-13     |
| A50.R16H.80               | ○ | ER50 | 28       | 28        | 80        | 1-10     |
| A50.R20H.80               | ○ | ER50 | 34       | 34        | 80        | 1-13     |
| Размер хвостовика HSK63A  |   |      |          |           |           |          |
| A63.R16H.75               | ○ | ER16 | 28       | 28        | 75        | 1-10     |
| A63.R20H.75               | ○ | ER20 | 34       | 34        | 75        | 1-13     |
| A63.R16H.100              | ○ | ER16 | 28       | 28        | 100       | 1-10     |
| A63.R20H.100              | ○ | ER20 | 34       | 34        | 100       | 1-13     |
| A63.R16H.120              | ○ | ER16 | 28       | 28        | 120       | 1-10     |
| A63.R20H.120              | ○ | ER20 | 34       | 34        | 120       | 1-13     |
| A63.R16H.160K             | ○ | ER16 | 28       | 28        | 160       | 1-10     |
| A63.R20H.160              | ○ | ER20 | 34       | 34        | 160       | 1-13     |
| A63.R16H.200K             | ○ | ER16 | 28       | 28        | 200       | 1-10     |
| A63.R20H.200              | ○ | ER20 | 34       | 34        | 200       | 1-13     |
| Размер хвостовика HSK80A  |   |      |          |           |           |          |
| A80.R16H.100              | ○ | ER16 | 28       | 28        | 100       | 1-10     |
| A80.R20H.100              | ○ | ER20 | 34       | 34        | 100       | 1-13     |
| Размер хвостовика HSK100A |   |      |          |           |           |          |
| A100.R16H.100             | ○ | ER16 | 28       | 28        | 100       | 1-10     |
| A100.R20H.100             | ○ | ER20 | 34       | 34        | 100       | 1-13     |
| A100.R16H.120K            | ○ | ER16 | 28       | 28        | 120       | 1-10     |
| A100.R20H.121             | ○ | ER20 | 34       | 34        | 120       | 1-13     |
| A100.R16H.160K            | ○ | ER16 | 28       | 28        | 160       | 1-10     |
| A100.R20H.160             | ○ | ER20 | 34       | 34        | 160       | 1-13     |
| A100.R16H.200K            | ○ | ER16 | 28       | 28        | 200       | 1-10     |
| A100.R20H.200             | ○ | ER20 | 34       | 34        | 200       | 1-13     |



Гайка ER  
стр. E-12.21 - E-12.22



Цанга ER  
стр. E-12.3 - E-12.9



Ключ ER  
стр. E-12.24

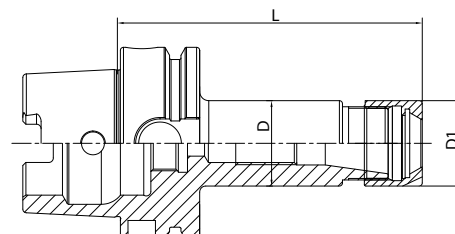
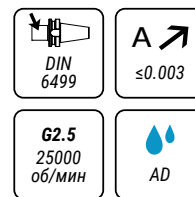


Сопла HSK  
стр. E-12.26

К - коническое исполнение рабочей части.

## Патрон цанговый ER mini для цанг типа ER по DIN 6499

| Обозначение               |   | Тип  | D,<br>мм | D1,<br>мм | L,<br>мм | Диапазон |
|---------------------------|---|------|----------|-----------|----------|----------|
| Размер хвостовика HSK32A  |   |      |          |           |          |          |
| A32.R11M.50               | ○ | ER11 | 16       | 16        | 50       | 1-7      |
| A32.R16M.50               | ○ | ER16 | 22       | 22        | 50       | 1-10     |
| A32.R20M.50               | ○ | ER20 | 28       | 28        | 50       | 1-13     |
| Размер хвостовика HSK40A  |   |      |          |           |          |          |
| A40.R11M.40               | ○ | ER11 | 16       | 16        | 40       | 1-7      |
| A40.R16M.60               | ○ | ER16 | 22       | 22        | 60       | 1-10     |
| A40.R20M.60               | ○ | ER20 | 28       | 28        | 60       | 1-13     |
| Размер хвостовика HSK50A  |   |      |          |           |          |          |
| A50.R11M.60               | ○ | ER11 | 16       | 16        | 60       | 1-7      |
| A50.R16M.60               | ○ | ER16 | 22       | 22        | 60       | 1-10     |
| A50.R20M.60               | ○ | ER20 | 28       | 28        | 60       | 1-13     |
| Размер хвостовика HSK63A  |   |      |          |           |          |          |
| A63.R11M.100              | ○ | ER11 | 16       | 16        | 100      | 1-7      |
| A63.R16M.100              | ○ | ER16 | 22       | 22        | 100      | 1-10     |
| A63.R20M.100              | ○ | ER20 | 28       | 28        | 100      | 1-13     |
| A63.R25M.100              | ○ | ER25 | 35       | 35        | 100      | 2-16     |
| A63.R11M.160K             | ○ | ER11 | 16       | 16        | 160      | 1-7      |
| A63.R16M.160K             | ○ | ER16 | 22       | 22        | 160      | 1-10     |
| A63.R20M.160              | ○ | ER20 | 28       | 28        | 160      | 1-13     |
| A63.R25M.160              | ○ | ER25 | 35       | 35        | 160      | 2-16     |
| Размер хвостовика HSK100A |   |      |          |           |          |          |
| A100.R16M.100             | ○ | ER16 | 22       | 22        | 100      | 1-10     |
| A100.R20M.100             | ○ | ER20 | 28       | 28        | 100      | 1-1      |
| A100.R25M.100             | ○ | ER25 | 35       | 35        | 100      | 2-16     |
| A100.R11M.160 *           | ○ | ER11 | 16       | 16        | 160      | 1-7      |
| A100.R16M.160K            | ○ | ER16 | 22       | 22        | 160      | 1-10     |
| A100.R20M.160             | ○ | ER20 | 28       | 28        | 160      | 1-13     |
| A100.R25M.160             | ○ | ER25 | 35       | 35        | 160      | 2-16     |



К - коническое исполнение рабочей части.  
\* - по запросу



Гайка ER Mini  
стр. E-12.21



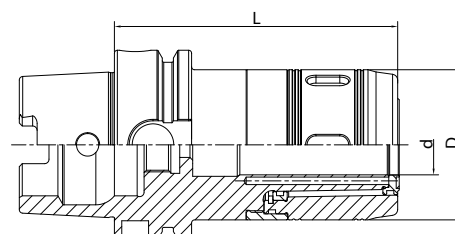
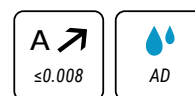
Цанга ER  
стр. E-12.3 - E-12.9



Ключ ER Mini  
стр. E-12.24

## Патрон фрезерный силовой прецизионный

| Обозначение               |   | d,<br>мм | D,<br>мм | L,<br>мм | Диапазон |
|---------------------------|---|----------|----------|----------|----------|
| Размер хвостовика HSK63A  |   |          |          |          |          |
| A63.HC20.100              | ○ | 20       | 50       | 100      | 3-16     |
| A63.HC25.100              | ○ | 25       | 59       | 100      | 3-20     |
| A63.HC32.120              | ○ | 32       | 72       | 120      | 3-25     |
| Размер хвостовика HSK100A |   |          |          |          |          |
| A100.HC20.105             | ○ | 20       | 50       | 105      | 3-16     |
| A100.HC25.105             | ○ | 25       | 59       | 105      | 3-20     |
| A100.HC32.120             | ○ | 32       | 72       | 120      | 3-25     |
| A100.HC32.165             | ○ | 32       | 72       | 165      | 3-25     |
| A100.HC32.200             | ○ | 32       | 72       | 200      | 3-25     |



Цанга KS силовая  
стр. E-12.10



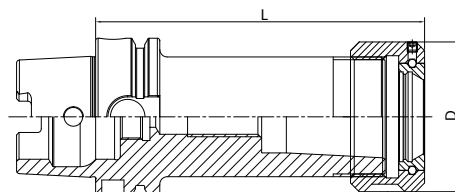
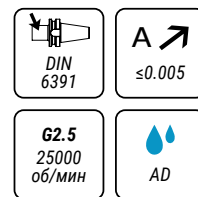
Ключ накидной  
стр. E-12.24



Сопла HSK  
стр. E-12.26

## Патрон цанговый для цанг тип OZ по DIN 6388

| Обозначение               |   | D,<br>мм | L,<br>мм | Диапазон |
|---------------------------|---|----------|----------|----------|
| Размер хвостовика HSK32A  |   |          |          |          |
| A50.OZ16.90               | ○ | 43       | 90       | 2-16     |
| A50.OZ25.110              | ○ | 60       | 110      | 2-25     |
| Размер хвостовика HSK63A  |   |          |          |          |
| A63.OZ16.100              | ○ | 43       | 100      | 2-16     |
| A63.OZ25.100              | ○ | 60       | 100      | 2-25     |
| A63.OZ32.120              | ○ | 72       | 120      | 3-32     |
| Размер хвостовика HSK100A |   |          |          |          |
| A100.OZ16.110             | ○ | 43       | 110      | 2-16     |
| A100.OZ25.120             | ○ | 60       | 120      | 2-25     |
| A100.OZ32.130             | ○ | 72       | 130      | 3-32     |



Гайка OZ  
стр. E-12.23



Цанги OZ  
стр. E-12.11 - E-12.12



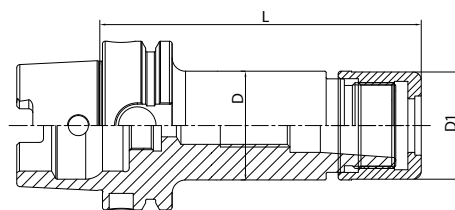
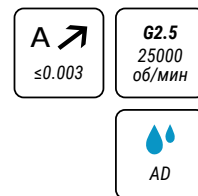
Ключ накладной  
стр. E-12.24



Сопла HSK  
стр. E-12.26

## Патрон цанговый для цанг тип SK

| Обозначение               |   | D,<br>мм | D1,<br>мм | L,<br>мм | Диапазон | M       |
|---------------------------|---|----------|-----------|----------|----------|---------|
| Размер хвостовика HSK63A  |   |          |           |          |          |         |
| A63.SK10.90               | ○ | 27,5     | 27,1      | 90       | 2-10     | M21,5×1 |
| A63.SK16.90               | ○ | 40,6     | 40        | 90       | 3-16     | M32×1,5 |
| A63.SK10.120              | ○ | 27,5     | 27,1      | 120      | 2-10     | M21,5×1 |
| A63.SK16.120              | ○ | 40,6     | 40        | 120      | 3-16     | M32×1,5 |
| Размер хвостовика HSK100A |   |          |           |          |          |         |
| A100.SK10.90              | ○ | 27,5     | 27,1      | 90       | 2-10     | M21,5×1 |
| A100.SK16.90              | ○ | 40,6     | 40        | 90       | 3-16     | M32×1,5 |
| A100.SK10.120             | ○ | 27,5     | 27,1      | 120      | 2-10     | M21,5×1 |
| A100.SK16.120             | ○ | 40,6     | 40        | 120      | 3-16     | M32×1,5 |



Гайка SK  
стр. E-12.23



Цанга SK  
высокоточная  
стр. E-12.13 - E-12.14



Ключ роликовый  
стр. E-12.25



Сопла HSK  
стр. E-12.26

Техническая информация стр. E-13

# Высокоточный цанговый патрон с втягивающей цангой

| Обозначение | D,<br>мм | L,<br>мм | Диапазон |
|-------------|----------|----------|----------|
|-------------|----------|----------|----------|

Размер хвостовика HSK63A

|               |   |    |     |      |
|---------------|---|----|-----|------|
| A63.FPC06.60  | ○ | 14 | 60  | 1-6  |
| A63.FPC06.90  | ○ | 14 | 90  | 1-6  |
| A63.FPC06.120 | ○ | 14 | 120 | 1-6  |
| A63.FPC06.150 | ○ | 14 | 150 | 1-6  |
| A63.FPC08.60  | ○ | 22 | 60  | 1-10 |
| A63.FPC08.90  | ○ | 22 | 90  | 1-10 |
| A63.FPC08.120 | ○ | 22 | 120 | 1-10 |
| A63.FPC08.150 | ○ | 22 | 150 | 1-10 |
| A63.FPC08.200 | ○ | 22 | 200 | 1-10 |
| A63.FPC12.90  | ○ | 34 | 90  | 1-12 |
| A63.FPC12.120 | ○ | 34 | 120 | 1-12 |
| A63.FPC12.150 | ○ | 34 | 150 | 1-12 |
| A63.FPC12.200 | ○ | 34 | 200 | 1-12 |

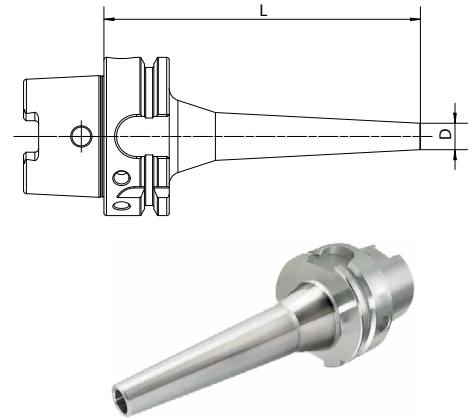
Размер хвостовика HSK100A

|                |   |    |     |      |
|----------------|---|----|-----|------|
| A100.FPC06.110 | ○ | 14 | 110 | 1-6  |
| A100.FPC06.150 | ○ | 14 | 150 | 1-6  |
| A100.FPC08.110 | ○ | 22 | 110 | 1-10 |
| A100.FPC08.150 | ○ | 22 | 150 | 1-10 |
| A100.FPC08.200 | ○ | 22 | 200 | 1-10 |
| A100.FPC12.120 | ○ | 34 | 120 | 1-12 |
| A100.FPC12.150 | ○ | 34 | 150 | 1-12 |
| A100.FPC12.200 | ○ | 34 | 200 | 1-12 |

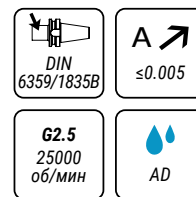

 Цанга тянущая  
стр. E-12.14

 Сопла HSK  
стр. E-12.26

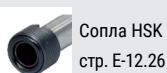
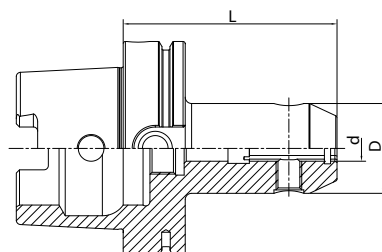
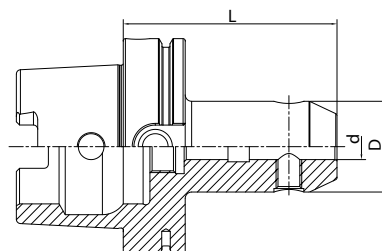
 A ↗  
≤0.005

 G2.5  
25000  
об/мин


# Оправка по DIN 6359 для инструмента с хвостовиком типа «Weldon» по DIN 1835B



| Обозначение              |   |                                                                                       |   | d,<br>мм | D,<br>мм | L,<br>мм | M,<br>мм | Кол. зажим.<br>винтов |
|--------------------------|---|---------------------------------------------------------------------------------------|---|----------|----------|----------|----------|-----------------------|
| Без СОЖ                  |   | СОЖ  |   |          |          |          |          |                       |
| Размер хвостовика HSK50A |   |                                                                                       |   |          |          |          |          |                       |
| A50.WE06.65              | ○ | -                                                                                     | ○ | 6        | 25       | 65       | M6       | 1                     |
| A50.WE08.65              | ○ | -                                                                                     | ○ | 8        | 28       | 65       | M8       | 1                     |
| A50.WE10.65              | ○ | -                                                                                     | ○ | 10       | 35       | 65       | M10      | 1                     |
|                          |   |                                                                                       |   |          |          |          |          |                       |
| A50.WE12.80              | ○ | -                                                                                     | ○ | 12       | 42       | 80       | M12      | 1                     |
| A50.WE14.80              | ○ | -                                                                                     | ○ | 14       | 44       | 80       | M12      | 1                     |
| A50.WE16.80              | ○ | -                                                                                     | ○ | 16       | 48       | 80       | M14      | 1                     |
| A50.WE18.80              | ○ | -                                                                                     | ○ | 18       | 50       | 80       | M14      | 1                     |
| A50.WE20.80              | ○ | -                                                                                     | ○ | 20       | 52       | 80       | M16      | 1                     |
|                          |   |                                                                                       |   |          |          |          |          |                       |
| A50.WE25.110             | ○ | -                                                                                     | ○ | 25       | 60       | 110      | M18×2    | 2                     |
| A50.WE32.110             | ○ | -                                                                                     | ○ | 32       | 60       | 110      | M20×2    | 2                     |
|                          |   |                                                                                       |   |          |          |          |          |                       |
| Размер хвостовика HSK63A |   |                                                                                       |   |          |          |          |          |                       |
|                          |   |                                                                                       |   |          |          |          |          |                       |
| A63.WE06.65              | ○ | A63.WE06.65KKB                                                                        | ○ | 6        | 25       | 65       | M6       | 1                     |
| A63.WE08.65              | ○ | A63.WE08.65KKB                                                                        | ○ | 8        | 28       | 65       | M8       | 1                     |
| A63.WE10.65              | ○ | A63.WE10.65KKB                                                                        | ○ | 10       | 35       | 65       | M10      | 1                     |
|                          |   |                                                                                       |   |          |          |          |          |                       |
| A63.WE12.80              | ○ | A63.WE12.80KKB                                                                        | ○ | 12       | 42       | 80       | M12      | 1                     |
| A63.WE14.80              | ○ | A63.WE14.80KKB                                                                        | ○ | 14       | 44       | 80       | M12      | 1                     |
| A63.WE16.80              | ○ | A63.WE16.80KKB                                                                        | ○ | 16       | 48       | 80       | M14      | 1                     |
| -                        | ○ | A63.WE18.80KKB                                                                        | ○ | 18       | 50       | 80       | M14      | 1                     |
| A63.WE20.80              | ○ | A63.WE20.80KKB                                                                        | ○ | 20       | 52       | 80       | M16      | 1                     |
|                          |   |                                                                                       |   |          |          |          |          |                       |
| A63.WE25.110             | ○ | A63.WE25.110KKB                                                                       | ○ | 25       | 65       | 110      | M18×2    | 2                     |
| A63.WE32.110             | ○ | A63.WE32.110KKB                                                                       | ○ | 32       | 72       | 110      | M20×2    | 2                     |
|                          |   |                                                                                       |   |          |          |          |          |                       |
| A63.WE40.125             | ○ | A63.WE40.125KKB                                                                       | ○ | 40       | 80       | 125      | M20×2    | 2                     |
|                          |   |                                                                                       |   |          |          |          |          |                       |
| A63.WE06.100             | ○ | -                                                                                     | ○ | 6        | 25       | 100      | M6       | 1                     |
| A63.WE08.100             | ○ | -                                                                                     | ○ | 8        | 28       | 100      | M8       | 1                     |
| A63.WE10.100             | ○ | -                                                                                     | ○ | 10       | 35       | 100      | M10      | 1                     |
| A63.WE14.100             | ○ | -                                                                                     | ○ | 14       | 44       | 100      | M12      | 1                     |
| A63.WE16.100             | ○ | -                                                                                     | ○ | 16       | 48       | 100      | M12      | 1                     |
| A63.WE18.100             | ○ | -                                                                                     | ○ | 18       | 50       | 100      | M14      | 1                     |
| A63.WE20.100             | ○ | -                                                                                     | ○ | 20       | 52       | 100      | M16      | 1                     |
|                          |   |                                                                                       |   |          |          |          |          |                       |
| A63.WE06.160             | ○ | -                                                                                     | ○ | 6        | 25       | 160      | M        | 1                     |
| A63.WE08.160             | ○ | -                                                                                     | ○ | 8        | 28       | 160      | M8       | 1                     |
| A63.WE10.160             | ○ | -                                                                                     | ○ | 10       | 35       | 160      | M10      | 1                     |
| A63.WE12.160             | ○ | -                                                                                     | ○ | 12       | 42       | 160      | M12      | 1                     |
| A63.WE14.160             | ○ | -                                                                                     | ○ | 14       | 44       | 160      | M12      | 1                     |
| A63.WE16.160             | ○ | -                                                                                     | ○ | 16       | 48       | 160      | M14      | 1                     |
| A63.WE18.160             | ○ | -                                                                                     | ○ | 18       | 50       | 160      | M14      | 1                     |
| A63.WE20.160             | ○ | -                                                                                     | ○ | 20       | 52       | 160      | M16      | 1                     |
| A63.WE25.160             | ○ | -                                                                                     | ○ | 25       | 65       | 160      | M18×2    | 2                     |
| A63.WE32.160             | ○ | -                                                                                     | ○ | 32       | 72       | 160      | M20×2    | 2                     |



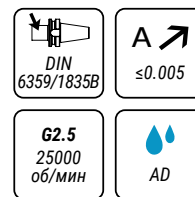
Сопла HSK  
стр. E-12.26

Исполнение AD/B - по запросу.

Исполнение KKB - с отверстием для подвода СОЖ;

Для заказа указывайте KKB в обозначении A63.WE06.65KKB

# Оправка по DIN 6359 для инструмента с хвостовиком типа «Weldon» по DIN 1835B



| Обозначение |     | d, мм | D, мм | L, мм | M, мм | Кол. зажим. винтов |
|-------------|-----|-------|-------|-------|-------|--------------------|
| Без СОЖ     | СОЖ |       |       |       |       |                    |

Размер хвостовика HSK80A

|             |   |   |   |    |    |    |     |   |
|-------------|---|---|---|----|----|----|-----|---|
| A80.WE06.80 | ○ | - | ○ | 6  | 25 | 80 | M6  | 1 |
| A80.WE08.80 | ○ | - | ○ | 8  | 28 | 80 | M8  | 1 |
| A80.WE10.80 | ○ | - | ○ | 10 | 35 | 80 | M10 | 1 |
| A80.WE12.80 | ○ | - | ○ | 12 | 42 | 80 | M12 | 1 |
| A80.WE14.80 | ○ | - | ○ | 14 | 44 | 80 | M12 | 1 |

|              |   |   |   |    |    |     |       |   |
|--------------|---|---|---|----|----|-----|-------|---|
| A80.WE16.100 | ○ | - | ○ | 16 | 48 | 100 | M14   | 1 |
| A80.WE18.100 | ○ | - | ○ | 18 | 50 | 100 | M14   | 1 |
| A80.WE20.100 | ○ | - | ○ | 20 | 52 | 100 | M16   | 1 |
| A80.WE25.100 | ○ | - | ○ | 25 | 65 | 100 | M18×2 | 2 |

|              |   |   |   |    |    |     |       |   |
|--------------|---|---|---|----|----|-----|-------|---|
| A80.WE32.110 | ○ | - | ○ | 32 | 72 | 110 | M20×2 | 2 |
|--------------|---|---|---|----|----|-----|-------|---|

|              |   |   |   |    |    |     |       |   |
|--------------|---|---|---|----|----|-----|-------|---|
| A80.WE40.120 | ○ | - | ○ | 40 | 80 | 120 | M20×2 | 2 |
|--------------|---|---|---|----|----|-----|-------|---|

Размер хвостовика HSK100A

|              |   |                 |   |    |    |    |     |   |
|--------------|---|-----------------|---|----|----|----|-----|---|
| -            | ○ | A100.WE06.80KKB | ○ | 6  | 25 | 80 | M6  | 1 |
| A100.WE08.80 | ○ | A100.WE08.80KKB | ○ | 8  | 28 | 80 | M8  | 1 |
| A100.WE10.80 | ○ | A100.WE10.80KKB | ○ | 10 | 35 | 80 | M10 | 1 |
| A100.WE12.80 | ○ | A100.WE12.80KKB | ○ | 12 | 42 | 80 | M12 | 1 |
| A100.WE14.80 | ○ | A100.WE14.80KKB | ○ | 14 | 44 | 80 | M12 | 1 |

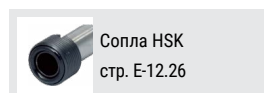
|               |   |                  |   |    |    |     |       |   |
|---------------|---|------------------|---|----|----|-----|-------|---|
| A100.WE16.100 | ○ | A100.WE16.100KKB | ○ | 16 | 48 | 100 | M14   | 1 |
| A100.WE18.100 | ○ | A100.WE18.100KKB | ○ | 18 | 50 | 100 | M14   | 1 |
| A100.WE20.100 | ○ | A100.WE20.100KKB | ○ | 20 | 52 | 100 | M16   | 1 |
| A100.WE25.100 | ○ | A100.WE25.100KKB | ○ | 25 | 65 | 100 | M18×2 | 2 |
| A100.WE32.100 | ○ | A100.WE32.100KKB | ○ | 32 | 72 | 100 | M20×2 | 2 |

|               |   |                  |   |    |    |     |       |   |
|---------------|---|------------------|---|----|----|-----|-------|---|
| A100.WE40.105 | ○ | A100.WE40.105KKB | ○ | 40 | 80 | 105 | M20×2 | 2 |
|---------------|---|------------------|---|----|----|-----|-------|---|

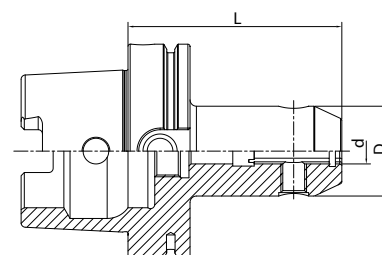
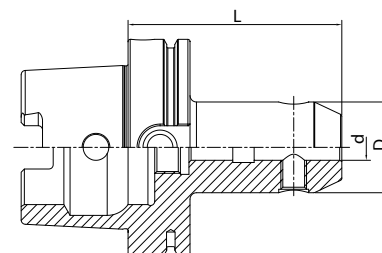
|               |   |   |   |    |     |     |       |   |
|---------------|---|---|---|----|-----|-----|-------|---|
| A100.WE60.130 | ○ | - | ○ | 50 | 100 | 130 | M24×2 | 2 |
|---------------|---|---|---|----|-----|-----|-------|---|

|               |   |   |   |    |    |     |       |   |
|---------------|---|---|---|----|----|-----|-------|---|
| A100.WE08.160 | ○ | - | ○ | 8  | 28 | 160 | M8    | 1 |
| A100.WE10.160 | ○ | - | ○ | 10 | 35 | 160 | M10   | 1 |
| A100.WE12.160 | ○ | - | ○ | 12 | 42 | 160 | M12   | 1 |
| A100.WE14.160 | ○ | - | ○ | 14 | 44 | 160 | M12   | 1 |
| A100.WE16.160 | ○ | - | ○ | 16 | 48 | 160 | M14   | 1 |
| A100.WE18.160 | ○ | - | ○ | 18 | 50 | 160 | M14   | 1 |
| A100.WE20.160 | ○ | - | ○ | 20 | 52 | 160 | M16   | 1 |
| A100.WE25.160 | ○ | - | ○ | 25 | 65 | 160 | M18×2 | 2 |
| A100.WE32.160 | ○ | - | ○ | 32 | 72 | 160 | M20×2 | 2 |
| A100.WE40.160 | ○ | - | ○ | 40 | 80 | 160 | M20×2 | 2 |

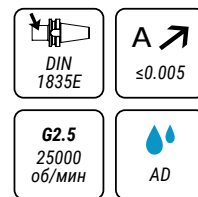
|                |   |   |   |    |    |     |       |   |
|----------------|---|---|---|----|----|-----|-------|---|
| A100.WE16.200* | ○ | - | ○ | 16 | 48 | 200 | M14   | 1 |
| A100.WE20.200* | ○ | - | ○ | 20 | 52 | 200 | M16   | 1 |
| A100.WE25.200* | ○ | - | ○ | 25 | 65 | 200 | M18×2 | 2 |
| A100.WE32.200* | ○ | - | ○ | 32 | 72 | 200 | M20×2 | 2 |



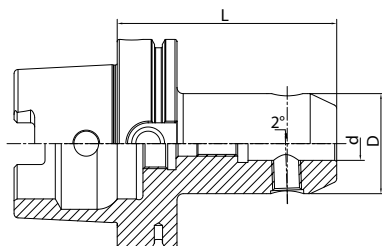
\* - по запросу  
Исполнение AD/B - по запросу.  
Исполнение KKB - с отверстием для подвода СОЖ;  
Для заказа указывайте **KKB** в обозначении A63.WE06.65**KKB**



# Оправка по DIN 6359 для инструмента с хвостовиком типа «Whistle Notch» по DIN 1835E

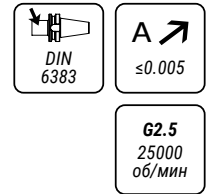


| Обозначение               |   | d,<br>мм | D,<br>мм | L,<br>мм | M,<br>мм | Кол. зажим.<br>винтов |
|---------------------------|---|----------|----------|----------|----------|-----------------------|
| Размер хвостовика HSK63A  |   |          |          |          |          |                       |
| A63.WN06.80               | ○ | 6        | 25       | 80       | M6       | 1                     |
| A63.WN08.80               | ○ | 8        | 28       | 80       | M8       | 1                     |
| A63.WN10.80               | ○ | 10       | 35       | 80       | M10      | 1                     |
| A63.WN12.90               | ○ | 12       | 42       | 90       | M12      | 1                     |
| A63.WN14.90               | ○ | 14       | 44       | 90       | M12      | 1                     |
| A63.WN16.100              | ○ | 16       | 48       | 100      | M14      | 1                     |
| A63.WN18.100              | ○ | 18       | 50       | 100      | M14      | 1                     |
| A63.WN20.100              | ○ | 20       | 52       | 100      | M16      | 1                     |
| A63.WN25.110              | ○ | 25       | 65       | 110      | M18×2    | 2                     |
| A63.WN32.110              | ○ | 32       | 72       | 110      | M20×2    | 2                     |
| A63.WN40.125              | ○ | 40       | 80       | 125      | M20×2    | 2                     |
| Размер хвостовика HSK100A |   |          |          |          |          |                       |
| A100.WN06.90              | ○ | 6        | 25       | 90       | M6       | 1                     |
| A100.WN08.90              | ○ | 8        | 28       | 90       | M8       | 1                     |
| A100.WN10.90              | ○ | 10       | 35       | 90       | M10      | 1                     |
| A100.WN12.100             | ○ | 12       | 42       | 100      | M12      | 1                     |
| A100.WN14.100             | ○ | 14       | 44       | 100      | M12      | 1                     |
| A100.WN16.100             | ○ | 16       | 48       | 100      | M14      | 1                     |
| A100.WN18.100             | ○ | 18       | 50       | 100      | M14      | 1                     |
| A100.WN20.110             | ○ | 20       | 52       | 110      | M16      | 1                     |
| A100.WN25.120             | ○ | 25       | 65       | 120      | M18×2    | 2                     |
| A100.WN32.120             | ○ | 32       | 72       | 120      | M20×2    | 2                     |
| A100.WN40.120             | ○ | 40       | 80       | 120      | M20×2    | 2                     |



Сопла HSK  
стр. E-12.26

# **Втулка переходная для инструмента с хвостовиком конус Морзе (с лапкой) по DIN 6383**



| Обозначение | МК | D, мм | L, мм |
|-------------|----|-------|-------|
|-------------|----|-------|-------|

## **Размер хвостовика HSK50A**

|              |   |   |    |     |
|--------------|---|---|----|-----|
| A50.MTL1.100 | ○ | 1 | 25 | 100 |
| A50.MTL2.120 | ○ | 2 | 32 | 120 |
| A50.MTL3.140 | ○ | 3 | 40 | 140 |

## **Размер хвостовика HSK63A**

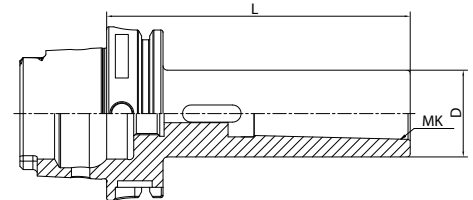
|              |   |   |    |     |
|--------------|---|---|----|-----|
| A63.MTL1.100 | ○ | 1 | 25 | 100 |
| A63.MTL2.120 | ○ | 2 | 32 | 120 |
| A63.MTL3.140 | ○ | 3 | 40 | 140 |
| A63.MTL4.160 | ○ | 4 | 48 | 160 |

## **Размер хвостовика HSK80A**

|              |   |   |    |     |
|--------------|---|---|----|-----|
| A80.MTL1.110 | ○ | 1 | 25 | 110 |
| A80.MTL2.120 | ○ | 2 | 32 | 120 |
| A80.MTL3.140 | ○ | 3 | 40 | 140 |
| A80.MTL4.160 | ○ | 4 | 48 | 160 |

## **Размер хвостовика HSK100A**

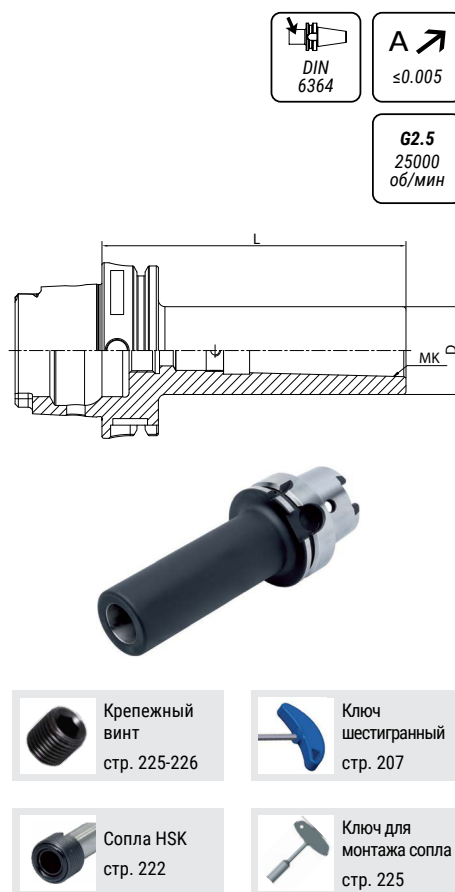
|               |   |   |    |     |
|---------------|---|---|----|-----|
| A100.MTL1.110 | ○ | 1 | 25 | 110 |
| A100.MTL2.120 | ○ | 2 | 32 | 120 |
| A100.MTL3.150 | ○ | 3 | 40 | 150 |
| A100.MTL4.170 | ○ | 4 | 48 | 170 |
| A100.MTL5.200 | ○ | 5 | 63 | 200 |



Сопла HSK  
стр. E-12.26

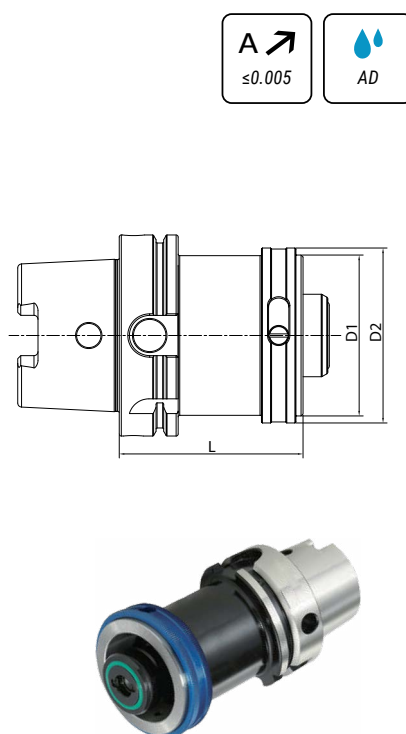
## Втулка переходная для инструмента с хвостовиком конус Морзе (с винтом) по DIN 6364

| Обозначение               | МК | D, мм | L, мм |
|---------------------------|----|-------|-------|
| Размер хвостовика HSK50A  |    |       |       |
| A50.MTG1.100              | ○  | 1     | 25    |
| A50.MTG2.120              | ○  | 2     | 32    |
| A50.MTG3.140              | ○  | 3     | 40    |
| Размер хвостовика HSK63A  |    |       |       |
| A63.MTG1.100              | ○  | 1     | 25    |
| A63.MTG2.120              | ○  | 2     | 32    |
| A63.MTG3.140              | ○  | 3     | 40    |
| A63.MTG4.160              | ○  | 4     | 48    |
| Размер хвостовика HSK80A  |    |       |       |
| A80.MTG1.110              | ○  | 1     | 25    |
| A80.MTG2.120              | ○  | 2     | 32    |
| A80.MTG3.150              | ○  | 3     | 40    |
| A80.MTG4.170              | ○  | 4     | 48    |
| Размер хвостовика HSK100A |    |       |       |
| A100.MTG1.110             | ○  | 1     | 25    |
| A100.MTG2.120             | ○  | 2     | 32    |
| A100.MTG3.150             | ○  | 3     | 40    |
| A100.MTG4.170             | ○  | 4     | 48    |
| A100.MTG5.200             | ○  | 5     | 63    |



## Переходник, соединение HSK-C/A/T

| Обозначение     | D1, мм | D2, мм | L, мм |
|-----------------|--------|--------|-------|
| A50.HSK50.80    | ○      | 50     | 80    |
| A50.HSK50.100   | ○      | 50     | 100   |
| A63.HSK63.100   | ○      | 63     | 100   |
| A63.HSK.63.140  | ○      | 63     | 140   |
| A80.HSK80.120   | ○      | 80     | 120   |
| A80.HSK80.160   | ○      | 80     | 160   |
| A100.HSK100.140 | ○      | 100    | 140   |
| A100.HSK100.200 | ○      | 100    | 200   |
| A50.HSK32.60    | ○      | 32     | 60    |
| A50.HSK32.70    | ○      | 40     | 70    |
| A63.HSK32.70    | ○      | 32     | 70    |
| A63.HSK40.80    | ○      | 40     | 80    |
| A63.HSK50.80    | ○      | 50     | 80    |
| A80.HSK40.80    | ○      | 40     | 80    |
| A80.HSK50.80    | ○      | 50     | 80    |
| A80.HSK63.100   | ○      | 63     | 100   |
| A100.HSK50.80   | ○      | 50     | 80    |
| A100.HSK63.100  | ○      | 63     | 100   |
| A100.HSK80.100  | ○      | 80     | 100   |

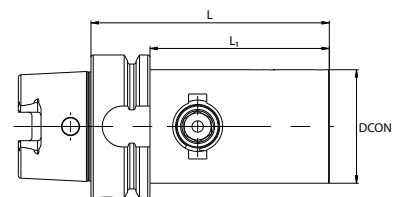


## Переходник, соединение PS ISO26623-1 (CAPTO®), боковое крепление

| Обозначение               |   |     |    | L   | L <sub>1</sub> |
|---------------------------|---|-----|----|-----|----------------|
| Размер хвостовика HSK63A  |   |     |    |     |                |
| A63.C5.115R               | ○ | 63  | 50 | 141 | 115            |
| Размер хвостовика HSK100A |   |     |    |     |                |
| A100.C6.135R              | ○ | 100 | 63 | 184 | 135            |
| A100.C8.165R              | ○ | 100 | 80 | 214 | 165            |



Сопла HSK  
стр. E-12.26

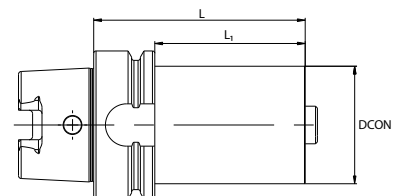


## Переходник, соединение PS ISO26623-1 (CAPTO®)

| Обозначение               |   | PS  | DCON | L   | L <sub>1</sub> |
|---------------------------|---|-----|------|-----|----------------|
| Размер хвостовика HSK63A  |   |     |      |     |                |
| A63.C3.75                 | ○ | C3  | 32   | 75  | 49             |
| A63.C4.80                 | ○ | C4  | 40   | 80  | 54             |
| A63.C5.90                 | ○ | C5  | 50   | 90  | 64             |
| Размер хвостовика HSK100A |   |     |      |     |                |
| A100.C3.80                | ○ | C3  | 32   | 80  | 43             |
| A100.C4.90                | ○ | C4  | 40   | 90  | 61             |
| A100.C5.100               | ○ | C5  | 50   | 100 | 71             |
| A100.C6.110               | ○ | C6  | 63   | 110 | 81             |
| A100.C8.120               | ○ | C8  | 80   | 120 | 91             |
| A100.C10.155              | ○ | C10 | 100  | 155 | 155            |



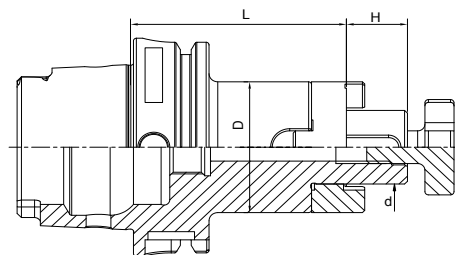
Сопла HSK  
стр. E-12.26



## Оправка комбинированная для насадных торцовых и дисковых фрез



| Обозначение               |   | d,<br>мм | D,<br>мм | L,<br>мм | L1,<br>мм |
|---------------------------|---|----------|----------|----------|-----------|
| Размер хвостовика HSK50A  |   |          |          |          |           |
| A50.D16C.50               | ○ | 16       | 32       | 50       | 17        |
| A50.D22C.50               | ○ | 22       | 40       | 50       | 19        |
| A50.D27C.65               | ○ | 27       | 48       | 65       | 21        |
| A50.D32C.65               | ○ | 32       | 58       | 65       | 24        |
| Размер хвостовика HSK63A  |   |          |          |          |           |
| A63.D16C.60               | ○ | 16       | 32       | 60       | 17        |
| A63.D22C.60               | ○ | 22       | 40       | 60       | 19        |
| A63.D27C.60               | ○ | 27       | 48       | 60       | 21        |
| A63.D32C.60               | ○ | 32       | 58       | 60       | 24        |
| A63.D40C.70               | ○ | 40       | 70       | 70       | 27        |
| A63.D16C.100              | ○ | 16       | 32       | 100      | 17        |
| A63.D22C.100              | ○ | 22       | 40       | 100      | 19        |
| A63.D27C.100              | ○ | 27       | 48       | 100      | 21        |
| A63.D32C.100              | ○ | 32       | 58       | 100      | 24        |
| Размер хвостовика HSK80A  |   |          |          |          |           |
| A80.D16C.60               | ○ | 16       | 32       | 60       | 17        |
| A80.D22C.60               | ○ | 22       | 40       | 60       | 19        |
| A80.D27C.60               | ○ | 27       | 48       | 60       | 21        |
| A80.D32C.60               | ○ | 32       | 58       | 60       | 24        |
| A80.D40C.70               | ○ | 40       | 70       | 70       | 27        |
| Размер хвостовика HSK100A |   |          |          |          |           |
| A100.D16C.60              | ○ | 16       | 32       | 60       | 17        |
| A100.D22C.60              | ○ | 22       | 40       | 60       | 19        |
| A100.D27C.60              | ○ | 27       | 48       | 60       | 21        |
| A100.D32C.60              | ○ | 32       | 58       | 60       | 24        |
| A100.D40C.70              | ○ | 40       | 70       | 70       | 27        |



Винты зажимные  
стр. E-12.27



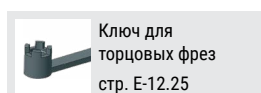
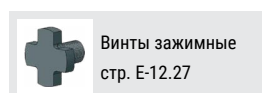
Кольцо приводное  
стр. E-12.27



Ключ для  
торцовых фрез  
стр. E-12.25

# Оправка для насадных торцовых фрез по DIN 6357

| Обозначение              |   | d,<br>мм | D,<br>мм | H,<br>мм | L,<br>мм | M,<br>мм |
|--------------------------|---|----------|----------|----------|----------|----------|
| Размер хвостовика HSK50A |   |          |          |          |          |          |
| A50.D16F.50              | ○ | 16       | 38       | 17       | 50       | M8       |
| A50.D22F.60              | ○ | 22       | 48       | 19       | 60       | M10      |
| A50.D27F.60              | ○ | 27       | 58       | 21       | 60       | M12      |
| A50.D32F.60              | ○ | 32       | 78       | 24       | 60       | M16      |
| Размер хвостовика HSK63A |   |          |          |          |          |          |
| A63.D16F.50              | ○ | 16       | 38       | 17       | 50       | M8       |
| A63.D22F.50              | ○ | 22       | 48       | 19       | 50       | M10      |
| A63.D27F.60              | ○ | 27       | 58       | 21       | 60       | M12      |
| A63.D32F.60              | ○ | 32       | 78       | 24       | 60       | M16      |
| A63.D16F.100             | ○ | 16       | 38       | 17       | 100      | M8       |
| A63.D22F.100             | ○ | 22       | 48       | 19       | 100      | M10      |
| A63.D27F.100             | ○ | 27       | 58       | 21       | 100      | M12      |
| A63.D32F.100             | ○ | 32       | 78       | 24       | 100      | M16      |
| A63.D16F.160             | ○ | 16       | 38       | 17       | 160      | M8       |
| A63.D22F.160             | ○ | 22       | 48       | 19       | 160      | M10      |
| A63.D27F.160             | ○ | 27       | 58       | 21       | 160      | M12      |
| A63.D32F.160             | ○ | 32       | 78       | 24       | 160      | M16      |
| A63.D16F.200             | ○ | 16       | 38       | 17       | 200      | M8       |
| A63.D22F.200             | ○ | 22       | 48       | 19       | 200      | M10      |
| A63.D27F.200             | ○ | 27       | 58       | 21       | 200      | M12      |
| A63.D32F.200             | ○ | 32       | 78       | 24       | 200      | M16      |
| Размер хвостовика HSK80A |   |          |          |          |          |          |
| A80.D22F.50              | ○ | 22       | 48       | 19       | 50       | M10      |
| A80.D27F.50              | ○ | 27       | 58       | 21       | 50       | M12      |
| A80.D32F.60              | ○ | 32       | 78       | 24       | 60       | M16      |



Исполнение AD/B - по запросу.

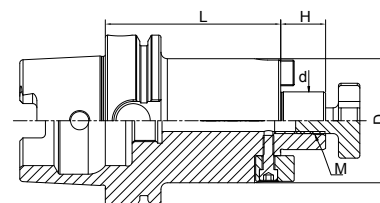
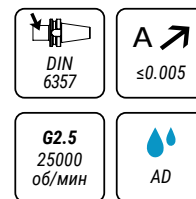


Рис. 1



Рис. 2



По умолчанию оправки комплектуются винтом (крестообразным) (рис.1).  
По запросу возможна комплектация винтом (круглым)(рис.2).

## Оправка для насадных торцовых фрез по DIN 6357

| Обозначение               |   | d,<br>мм | D,<br>мм | H,<br>мм | L,<br>мм | M   |
|---------------------------|---|----------|----------|----------|----------|-----|
| Размер хвостовика HSK100A |   |          |          |          |          |     |
| A100.D22F.50              | ○ | 22       | 48       | 19       | 50       | M10 |
| A100.D27F.50              | ○ | 27       | 58       | 21       | 50       | M12 |
| A100.D32F.60              | ○ | 32       | 78       | 24       | 60       | M16 |
| A100.D22F.100             | ○ | 22       | 48       | 19       | 100      | M10 |
| A100.D27F.100             | ○ | 27       | 58       | 21       | 100      | M12 |
| A100.D32F.100             | ○ | 32       | 78       | 24       | 100      | M16 |
| A100.D22F.160             | ○ | 22       | 48       | 19       | 160      | M10 |
| A100.D27F.160             | ○ | 27       | 58       | 21       | 160      | M12 |
| A100.D32F.160             | ○ | 32       | 78       | 24       | 160      | M16 |
| A100.D22F.200             | ○ | 22       | 48       | 19       | 200      | M10 |
| A100.D27F.200             | ○ | 27       | 58       | 21       | 200      | M12 |
| A100.D32F.200             | ○ | 32       | 78       | 24       | 200      | M16 |
| A100.D22F.250             | ○ | 22       | 48       | 19       | 250      | M10 |
| A100.D27F.250             | ○ | 27       | 58       | 21       | 250      | M12 |
| A100.D32F.250             | ○ | 32       | 78       | 24       | 250      | M16 |
| A100.D22F.300             | ○ | 22       | 48       | 19       | 300      | M10 |
| A100.D27F.300             | ○ | 27       | 58       | 21       | 300      | M12 |
| A100.D32F.300             | ○ | 32       | 78       | 24       | 300      | M16 |

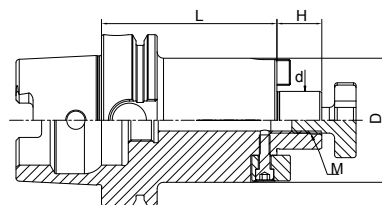
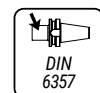


Рис. 1



Рис. 2



Винты зажимные  
стр. Е-12.27



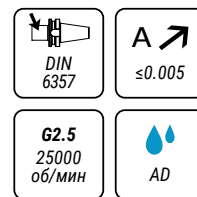
Ключ для  
торцовых фрез  
стр. Е-12.25

Исполнение AD/B - по запросу.

По умолчанию оправки комплектуются винтом (крестообразным) (рис.1).

По запросу возможна комплектация винтом (круглым)(рис.2).

## Оправка для насадных торцовых фрез по DIN 6357 для больших диаметров



| Обозначение | d, мм | D, мм | D1, мм | H, мм | L, мм | M | m |
|-------------|-------|-------|--------|-------|-------|---|---|
|-------------|-------|-------|--------|-------|-------|---|---|

Размер хвостовика HSK63A

|              |   |    |    |      |    |     |     |     |
|--------------|---|----|----|------|----|-----|-----|-----|
| A63.D40F.60  | ○ | 40 | 88 | 66,7 | 27 | 60  | M20 | M12 |
| A63.D40F.100 | ○ | 40 | 88 | 66,7 | 27 | 100 | M20 | M12 |
| A63.D40F.160 | ○ | 40 | 88 | 66,7 | 27 | 160 | M20 | M12 |
| A63.D40F.200 | ○ | 40 | 88 | 66,7 | 27 | 200 | M20 | M12 |

Размер хвостовика HSK80A

|             |   |    |    |      |    |    |     |     |
|-------------|---|----|----|------|----|----|-----|-----|
| A80.D40F.60 | ○ | 40 | 88 | 66,7 | 27 | 60 | M20 | M12 |
|-------------|---|----|----|------|----|----|-----|-----|

Размер хвостовика HSK100A

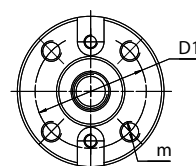
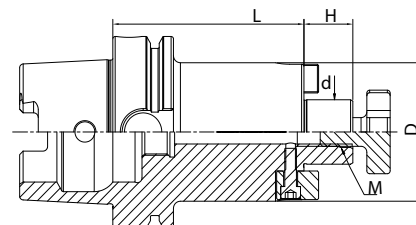
|               |   |    |     |       |    |     |     |     |
|---------------|---|----|-----|-------|----|-----|-----|-----|
| A100.D40F.60  | ○ | 40 | 88  | 66,7  | 27 | 60  | M20 | M12 |
| A100.D60F.70  | ○ | 60 | 129 | 101,6 | 27 | 70  | M20 | M16 |
| A100.D40F.100 | ○ | 40 | 88  | 66,7  | 27 | 100 | M20 | M12 |
| A100.D40F.160 | ○ | 40 | 88  | 66,7  | 27 | 160 | M20 | M12 |
| A100.D40F.200 | ○ | 40 | 88  | 66,7  | 27 | 200 | M20 | M12 |
| A100.D40F.250 | ○ | 40 | 88  | 66,7  | 27 | 250 | M20 | M12 |
| A100.D40F.300 | ○ | 40 | 88  | 66,7  | 27 | 300 | M20 | M12 |



Винты зажимные  
стр. E-12.27



Ключ для  
торцовых фрез  
стр. E-12.25



Ø40, для больших диаметров торцовых фрез  
с четырьмя резьбовыми отверстиями по DIN 2079

## Оправка для фрез с резьбовым хвостовиком

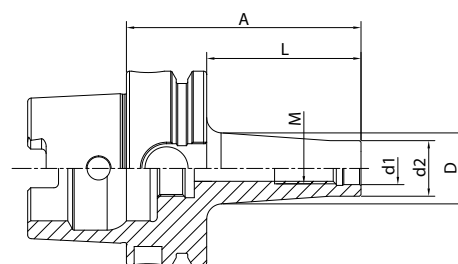
**A**   
≤0.005

**G2.5**  
25000  
об/мин

  
AD

| Обозначение              | M | d1<br>мм | d2,<br>мм | A,<br>мм | L,<br>мм | D,<br>мм |
|--------------------------|---|----------|-----------|----------|----------|----------|
| Размер хвостовика HSK63A |   |          |           |          |          |          |
| A63.M08.25T              | ○ | 8        | 8,5       | 14,5     | 25       | 15       |
| A63.M08.50T              | ○ | 8        | 8,5       | 14,5     | 76       | 23       |
| A63.M08.75T              | ○ | 8        | 8,5       | 14,5     | 101      | 23       |
| A63.M10.25T              | ○ | 10       | 10,5      | 18       | 25       | 20       |
| A63.M10.50T              | ○ | 10       | 10,5      | 18       | 76       | 23       |
| A63.M10.100T             | ○ | 10       | 10,5      | 18       | 126      | 32       |
| A63.M10.150T             | ○ | 10       | 10,5      | 18       | 176      | 36,5     |
| A63.M12.25T              | ○ | 12       | 12,5      | 21       | 25       | 24       |
| A63.M12.50T              | ○ | 12       | 12,5      | 21       | 76       | 34       |
| A63.M12.75T              | ○ | 12       | 12,5      | 21       | 101      | 31       |
| A63.M12.100T             | ○ | 12       | 12,5      | 21       | 126      | 33       |
| A63.M12.150T             | ○ | 12       | 12,5      | 21       | 176      | 40       |
| A63.M16.25T              | ○ | 16       | 17        | 29       | 25       | 29       |
| A63.M16.50T              | ○ | 16       | 17        | 29       | 76       | 34       |
| A63.M16.75T              | ○ | 16       | 17        | 29       | 101      | 34       |
| A63.M16.100T             | ○ | 16       | 17        | 29       | 126      | 36       |
| A63.M16.150T             | ○ | 16       | 17        | 29       | 176      | 42,5     |

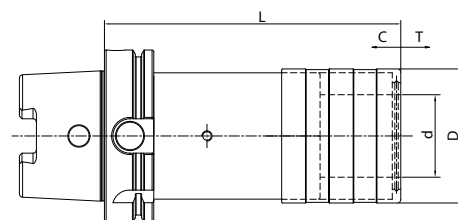
|                           |   |    |      |      |     |      |
|---------------------------|---|----|------|------|-----|------|
| Размер хвостовика HSK100A |   |    |      |      |     |      |
| A100.M08.50T              | ○ | 8  | 8,5  | 14,5 | 79  | 23   |
| A100.M10.50T              | ○ | 10 | 10,5 | 18   | 79  | 23   |
| A100.M10.100T             | ○ | 10 | 10,5 | 18   | 129 | 32   |
| A100.M10.150T             | ○ | 10 | 10,5 | 18   | 179 | 36,5 |
| A100.M12.50T              | ○ | 12 | 12,5 | 21   | 79  | 24   |
| A100.M12.100T             | ○ | 12 | 12,5 | 21   | 129 | 33   |
| A100.M12.150T             | ○ | 12 | 12,5 | 21   | 179 | 40   |
| A100.M16.50T              | ○ | 16 | 17   | 29   | 79  | 34   |
| A100.M16.100T             | ○ | 16 | 17   | 29   | 129 | 36   |
| A100.M16.150T             | ○ | 16 | 17   | 29   | 179 | 42,5 |



Сопла HSK  
стр. E-12.26

## Патрон резьбонарезной с осевой компенсацией

| Обозначение               | d,<br>мм | D,<br>мм | L,<br>мм | T,<br>мм | C,<br>мм |
|---------------------------|----------|----------|----------|----------|----------|
| Размер хвостовика HSK63A  |          |          |          |          |          |
| A63.M2-14.102CT1          | ○        | 19       | 36       | 102      | 7,5      |
| A63.M5-24.140CT2          | ○        | 31       | 53       | 140      | 12,5     |
| A63.M14-36.210CT3         | ○        | 48       | 78       | 210      | 22       |
| Размер хвостовика HSK100A |          |          |          |          |          |
| A100.M2-14.112CT1         | ○        | 19       | 36       | 112      | 7,5      |
| A100.M5-24.148CT2         | ○        | 31       | 53       | 148      | 12,5     |
| A100.M14-36.210CT3        | ○        | 48       | 78       | 210      | 22       |

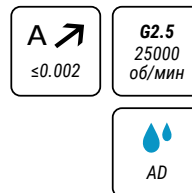


Сопла HSK  
стр. E-12.26



Вставка резьба  
стр. E-12.17 - E-12.18

# **Патрон для закрепления осевого инструмента с возможностью компенсации биения**



| Обозначение |  | D1,<br>мм | D2,<br>мм | D3,<br>мм | L,<br>мм |
|-------------|--|-----------|-----------|-----------|----------|
|-------------|--|-----------|-----------|-----------|----------|

Размер хвостовика HSK50A

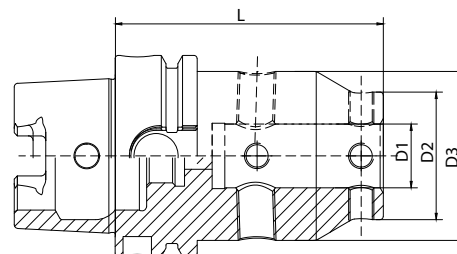
|              |   |    |    |      |     |
|--------------|---|----|----|------|-----|
| A50.RC12.85  | ○ | 12 | 28 | 44,5 | 85  |
| A50.RC16.85  | ○ | 16 | 32 | 48   | 85  |
| A50.RC20.95  | ○ | 20 | 40 | 53   | 95  |
| A50.RC25.105 | ○ | 25 | 48 | 63   | 105 |
| A50.RC32.110 | ○ | 32 | 52 | 63   | 110 |

Размер хвостовика HSK63A

|              |   |    |    |      |     |
|--------------|---|----|----|------|-----|
| A63.RC12.75  | ○ | 12 | 28 | 44,5 | 75  |
| A63.RC16.75  | ○ | 16 | 32 | 48   | 75  |
| A63.RC20.85  | ○ | 20 | 40 | 53   | 85  |
| A63.RC25.105 | ○ | 25 | 48 | 63   | 105 |
| A63.RC32.110 | ○ | 32 | 52 | 63   | 110 |

Размер хвостовика HSK100A

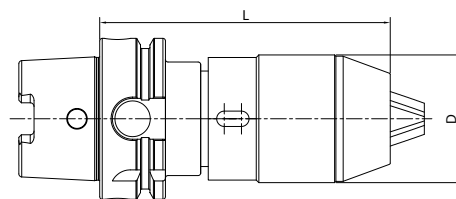
|               |   |    |    |      |     |
|---------------|---|----|----|------|-----|
| A100.RC12.80  | ○ | 12 | 28 | 44,5 | 80  |
| A100.RC16.80  | ○ | 16 | 32 | 48   | 80  |
| A100.RC20.95  | ○ | 20 | 40 | 53   | 95  |
| A100.RC25.110 | ○ | 25 | 48 | 63   | 110 |
| A100.RC32.115 | ○ | 32 | 52 | 63   | 115 |



Сопла HSK  
стр. E-12.26

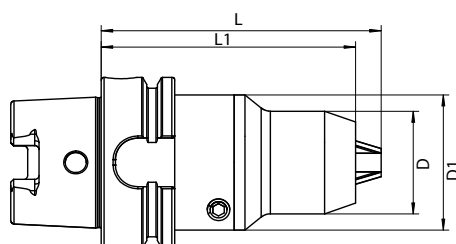
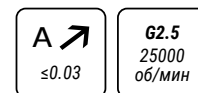
## Патрон сверлильный самозажимной

| Обозначение               |   | D,<br>мм | L,<br>мм | Диапазон |
|---------------------------|---|----------|----------|----------|
| Размер хвостовика HSK63A  |   |          |          |          |
| A63.PCC13.130             | ○ | 48       | 130      | 1-13     |
| A63.PCC16.140             | ○ | 53       | 140      | 3-16     |
| Размер хвостовика HSK100A |   |          |          |          |
| A100.PCC13.140            | ○ | 48       | 140      | 1-13     |
| A100.PCC16.150            | ○ | 56       | 150      | 3-16     |



## Патрон сверлильный высокоточный

| Обозначение               |   | D,<br>мм | D1,<br>мм | L,<br>мм | L1,<br>мм | Диапазон |
|---------------------------|---|----------|-----------|----------|-----------|----------|
| Размер хвостовика HSK63A  |   |          |           |          |           |          |
| A63.PCP10.90              | ○ | 38       | 50        | 90       | 32        | 1-10     |
| A63.PCP13.100             | ○ | 50       | -         | 100      | -         | 1-13     |
| A63.PCP16.100             | ○ | 50       | -         | 100      | -         | 1-16     |
| Размер хвостовика HSK100A |   |          |           |          |           |          |
| A100.PCP13.105            | ○ | 50       | -         | 105      | -         | 1-13     |
| A100.PCP16.105            | ○ | 50       | -         | 105      | -         | 1-16     |



## Заготовка для изготовления специальных оправок

| Обозначение               |   | D,<br>мм | L,<br>мм |
|---------------------------|---|----------|----------|
| Размер хвостовика HSK50A  |   |          |          |
| A50.17.D050.160           | ○ | 50       | 160      |
| A50.17.D065.200           | ○ | 65       | 200      |
| Размер хвостовика HSK63A  |   |          |          |
| A63.17.D065.160           | ○ | 65       | 160      |
| A63.17.D065.210           | ○ | 65       | 210      |
| A63.17.D065.250           | ○ | 65       | 250      |
| A63.17.D065.300           | ○ | 65       | 300      |
| A63.17.D080.160           | ○ | 80       | 160      |
| A63.17.D080.210           | ○ | 80       | 210      |
| A63.17.D080.250           | ○ | 80       | 250      |
| A63.17.D080.300           | ○ | 80       | 300      |
| A63.17.D100.160           | ○ | 100      | 160      |
| A63.17.D100.210           | ○ | 100      | 210      |
| A63.17.D100.250           | ○ | 100      | 250      |
| A63.17.D100.300           | ○ | 100      | 300      |
| A63.17.D120.160           | ○ | 120      | 160      |
| A63.17.D120.210           | ○ | 120      | 210      |
| A63.17.D120.250           | ○ | 120      | 250      |
| A63.17.D120.300           | ○ | 120      | 300      |
| Размер хвостовика HSK100A |   |          |          |
| A100.17.D080.160          | ○ | 80       | 160      |
| A100.17.D080.210          | ○ | 80       | 210      |
| A100.17.D080.250          | ○ | 80       | 250      |
| A100.17.D080.300          | ○ | 80       | 300      |
| A100.17.D100.160          | ○ | 100      | 160      |
| A100.17.D100.210          | ○ | 100      | 210      |
| A100.17.D100.250          | ○ | 100      | 250      |
| A100.17.D100.300          | ○ | 100      | 300      |
| A100.17.D120.160          | ○ | 120      | 160      |
| A100.17.D120.210          | ○ | 120      | 210      |
| A100.17.D120.250          | ○ | 120      | 250      |
| A100.17.D120.300          | ○ | 120      | 300      |



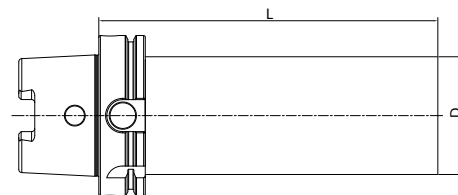
Сопла HSK  
стр. E-12.26

## Контрольная оправка

| Обозначение |   | D,<br>мм | L,<br>мм |
|-------------|---|----------|----------|
| A50.32.200  | ○ | 32       | 200      |
| A63.40.300  | ○ | 40       | 300      |
| A80.50.300  | ○ | 50       | 300      |
| A100.50.300 | ○ | 50       | 300      |



Сопла HSK  
стр. E-12.26



# Патрон с термозажимом, 4,5°

**A** ↗  
≤0.003

**G2.5**  
25000  
об/мин

  
AD

| Обозначение |  | d,<br>мм | D,<br>мм | D1,<br>мм | L,<br>мм | L2,<br>мм | L1,<br>мм | N,<br>мм | G,<br>мм |
|-------------|--|----------|----------|-----------|----------|-----------|-----------|----------|----------|
|-------------|--|----------|----------|-----------|----------|-----------|-----------|----------|----------|

Размер хвостовика HSK32A

|              |   |   |    |    |    |    |   |   |   |
|--------------|---|---|----|----|----|----|---|---|---|
| A32.25.03.65 | ○ | 3 | 15 | 20 | 65 | 45 | - | - | - |
| A32.25.04.65 | ○ | 4 | 15 | 20 | 65 | 45 | - | - | - |
| A32.25.05.65 | ○ | 5 | 15 | 20 | 65 | 45 | - | - | - |

|              |   |    |    |    |    |    |    |    |      |
|--------------|---|----|----|----|----|----|----|----|------|
| A32.25.06.75 | ○ | 6  | 21 | 26 | 75 | 55 | 36 | 10 | M5   |
| A32.25.08.75 | ○ | 8  | 21 | 26 | 75 | 55 | 36 | 10 | M6   |
| A32.25.10.75 | ○ | 10 | 24 | 29 | 75 | 55 | 42 | 10 | M8×1 |

|              |   |    |    |    |    |    |    |   |       |
|--------------|---|----|----|----|----|----|----|---|-------|
| A32.25.12.80 | ○ | 12 | 24 | 29 | 80 | 60 | 47 | 5 | M10×1 |
|--------------|---|----|----|----|----|----|----|---|-------|

Размер хвостовика HSK40A

|              |   |   |    |    |    |    |   |   |   |
|--------------|---|---|----|----|----|----|---|---|---|
| A40.25.03.60 | ○ | 3 | 15 | 20 | 60 | 40 | - | - | - |
| A40.25.04.60 | ○ | 4 | 15 | 20 | 60 | 40 | - | - | - |
| A40.25.05.60 | ○ | 5 | 15 | 20 | 60 | 40 | - | - | - |

|              |   |    |    |    |    |    |    |    |      |
|--------------|---|----|----|----|----|----|----|----|------|
| A40.25.06.80 | ○ | 6  | 21 | 27 | 80 | 60 | 36 | 10 | M5   |
| A40.25.08.80 | ○ | 8  | 21 | 27 | 80 | 60 | 36 | 10 | M6   |
| A40.25.10.80 | ○ | 10 | 24 | 32 | 80 | 60 | 42 | 10 | M8×1 |

|              |   |    |    |    |    |    |    |    |       |
|--------------|---|----|----|----|----|----|----|----|-------|
| A40.25.12.90 | ○ | 12 | 24 | 32 | 90 | 70 | 47 | 10 | M10×1 |
| A40.25.14.90 | ○ | 14 | 27 | 34 | 90 | 70 | 47 | 10 | M10×1 |
| A40.25.16.90 | ○ | 16 | 27 | 34 | 90 | 70 | 50 | 10 | M12×1 |

Размер хвостовика HSK50A

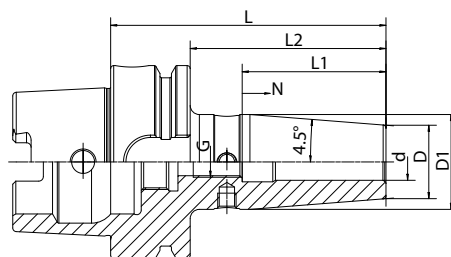
|              |   |   |    |    |    |    |    |    |    |
|--------------|---|---|----|----|----|----|----|----|----|
| A50.25.03.80 | ○ | 3 | 15 | 20 | 80 | 54 | -  | -  | -  |
| A50.25.04.80 | ○ | 4 | 15 | 20 | 80 | 54 | -  | -  | -  |
| A50.25.05.80 | ○ | 5 | 15 | 20 | 80 | 54 | -  | -  | -  |
| A50.25.06.80 | ○ | 6 | 21 | 27 | 80 | 54 | 36 | 10 | M5 |
| A50.25.08.80 | ○ | 8 | 21 | 27 | 80 | 54 | 36 | 10 | M6 |

|              |   |    |    |    |    |    |    |    |      |
|--------------|---|----|----|----|----|----|----|----|------|
| A50.25.10.85 | ○ | 10 | 24 | 32 | 85 | 59 | 42 | 10 | M8×1 |
|--------------|---|----|----|----|----|----|----|----|------|

|              |   |    |    |    |    |    |    |    |       |
|--------------|---|----|----|----|----|----|----|----|-------|
| A50.25.12.90 | ○ | 12 | 24 | 32 | 90 | 64 | 47 | 10 | M10×1 |
| A50.25.14.90 | ○ | 14 | 27 | 34 | 90 | 64 | 47 | 10 | M10×1 |

|              |   |    |    |    |    |    |    |    |       |
|--------------|---|----|----|----|----|----|----|----|-------|
| A50.25.16.95 | ○ | 16 | 27 | 34 | 95 | 69 | 50 | 10 | M12×1 |
| A50.25.18.95 | ○ | 18 | 33 | 42 | 95 | 69 | 50 | 10 | M12×1 |

|               |   |    |    |    |     |    |    |    |      |
|---------------|---|----|----|----|-----|----|----|----|------|
| A50.25.20.100 | ○ | 20 | 33 | 42 | 100 | 74 | 52 | 10 | M1×1 |
|---------------|---|----|----|----|-----|----|----|----|------|

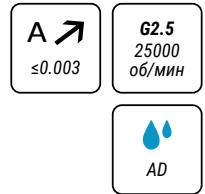


Сопла HSK  
стр. Е-12.26

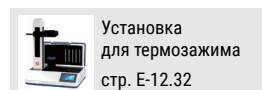
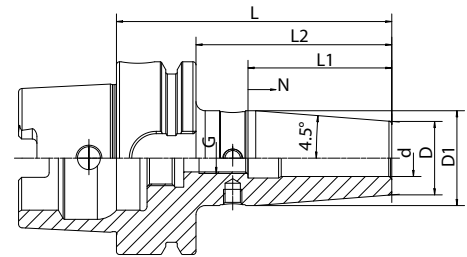


Установка  
для термозажима  
стр. Е-12.32

# Патрон с термозажимом, 4,5°



| Обозначение              |                    | d, мм | D, мм | D1, мм | L, мм | L2, мм | L1, мм | N, мм | G, мм |
|--------------------------|--------------------|-------|-------|--------|-------|--------|--------|-------|-------|
| Без СОЖ                  | СОЖ                |       |       |        |       |        |        |       |       |
| Размер хвостовика HSK63A |                    |       |       |        |       |        |        |       |       |
| A63.25.03.80             | ○ A63.25.03.80KKB  | ○ 3   | 15    | 20     | 80    | 54     | -      | -     | -     |
| A63.25.04.80             | ○ A63.25.04.80KKB  | ○ 4   | 15    | 20     | 80    | 54     | -      | -     | -     |
| A63.25.05.80             | ○ A63.25.05.80KKB  | ○ 5   | 15    | 20     | 80    | 54     | -      | -     | -     |
| A63.25.06.80             | ○ A63.25.06.80KKB  | ○ 6   | 21    | 26,5   | 80    | 54     | 36     | 10    | M5    |
| A63.25.08.80             | ○ A63.25.08.80KKB  | ○ 8   | 21    | 26,5   | 80    | 54     | 36     | 10    | M6x1  |
| A63.25.10.85             | ○ A63.25.10.85KKB  | ○ 10  | 24    | 30,5   | 85    | 59     | 42     | 10    | M8x1  |
| A63.25.12.90             | ○ A63.25.12.90KKB  | ○ 12  | 24    | 31     | 90    | 64     | 47     | 10    | M10x1 |
| A63.25.14.90             | ○ A63.25.14.90KKB  | ○ 14  | 27    | 34     | 90    | 64     | 47     | 10    | M10x1 |
| A63.25.16.95             | ○ A63.25.16.95KKB  | ○ 16  | 27    | 34     | 95    | 69     | 50     | 10    | M12x1 |
| A63.25.18.95             | ○ A63.25.18.95KKB  | ○ 18  | 33    | 41     | 95    | 69     | 50     | 10    | M12x1 |
| A63.25.20.100            | ○ A63.25.20.100KKB | ○ 20  | 33    | 42     | 100   | 74     | 52     | 10    | M16x1 |
| A63.25.25.115            | ○ A63.25.25.115KKB | ○ 25  | 44    | 52,5   | 115   | 89     | 58     | 10    | M16x1 |
| A63.25.32.120            | ○ A63.25.32.120KKB | ○ 32  | 44    | 52,5   | 120   | 94     | 62     | 10    | M16x1 |
| A63.25.03.120            | ○ A63.25.03.120KKB | ○ 3   | 15    | 20     | 120   | 94     | -      | -     | -     |
| A63.25.04.120            | ○ A63.25.04.120KKB | ○ 4   | 15    | 20     | 120   | 94     | -      | -     | -     |
| A63.25.05.120            | ○ A63.25.05.120KKB | ○ 5   | 15    | 20     | 120   | 94     | -      | -     | -     |
| A63.25.06.120            | ○ A63.25.06.120KKB | ○ 6   | 21    | 27     | 120   | 94     | 36     | 10    | M5    |
| A63.25.08.120            | ○ A63.25.08.120KKB | ○ 8   | 21    | 27     | 120   | 94     | 36     | 10    | M6    |
| A63.25.10.120            | ○ A63.25.10.120KKB | ○ 10  | 24    | 32     | 120   | 94     | 42     | 10    | M8x1  |
| A63.25.12.120            | ○ A63.25.12.120KKB | ○ 12  | 24    | 32     | 120   | 94     | 47     | 10    | M10x1 |
| A63.25.14.120            | ○ A63.25.14.120KKB | ○ 14  | 27    | 34     | 120   | 94     | 47     | 10    | M10x1 |
| A63.25.16.120            | ○ A63.25.16.120KKB | ○ 16  | 27    | 34     | 120   | 94     | 50     | 10    | M12x1 |
| A63.25.18.120            | ○ A63.25.18.120KKB | ○ 18  | 33    | 42     | 120   | 94     | 50     | 10    | M12x1 |
| A63.25.20.120            | ○ A63.25.20.120KKB | ○ 20  | 33    | 42     | 120   | 94     | 52     | 10    | M16x1 |
| A63.25.25.120            | ○ A63.25.25.120KKB | ○ 25  | 44    | 52,5   | 120   | 94     | 58     | 10    | M16x1 |



## Патрон с термозажимом, 4,5°

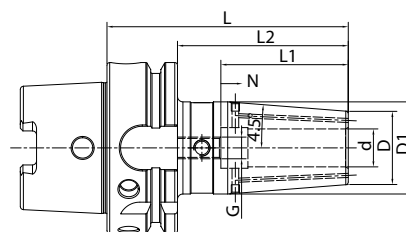
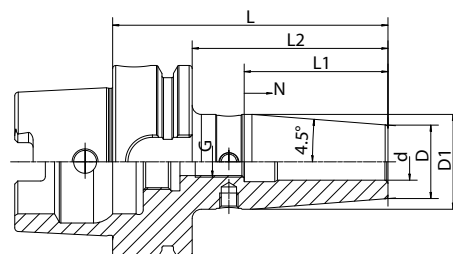
A ↗  
≤0.003G2.5  
25000  
об/мин

| Обозначение |     | d,<br>мм | D,<br>мм | D1,<br>мм | L,<br>мм | L2,<br>мм | L1,<br>мм | N,<br>мм | G,<br>мм |
|-------------|-----|----------|----------|-----------|----------|-----------|-----------|----------|----------|
| Без СОЖ     | СОЖ |          |          |           |          |           |           |          |          |

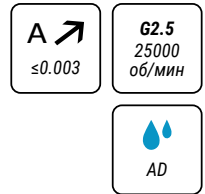
Размер хвостовика HSK63A

|               |   |                  |   |    |    |      |     |     |    |    |       |
|---------------|---|------------------|---|----|----|------|-----|-----|----|----|-------|
| A63.25.03.160 | ○ | A63.25.03.160KKB | ○ | 3  | 15 | 25   | 160 | 134 | -  | -  | -     |
| A63.25.04.160 | ○ | A63.25.04.160KKB | ○ | 4  | 15 | 25   | 160 | 134 | -  | -  | -     |
| A63.25.05.160 | ○ | A63.25.05.160KKB | ○ | 5  | 15 | 25   | 160 | 134 | -  | -  | -     |
| A63.25.06.160 | ○ | A63.25.06.160KKB | ○ | 6  | 21 | 32   | 160 | 134 | 36 | 10 | M5    |
| A63.25.08.160 | ○ | A63.25.08.160KKB | ○ | 8  | 21 | 32   | 160 | 134 | 36 | 10 | M6    |
| A63.25.10.160 | ○ | A63.25.10.160KKB | ○ | 10 | 24 | 34   | 160 | 134 | 42 | 10 | M8×1  |
| A63.25.12.160 | ○ | A63.25.12.160KKB | ○ | 12 | 24 | 34   | 160 | 134 | 47 | 10 | M10×1 |
| A63.25.14.160 | ○ | A63.25.14.160KKB | ○ | 14 | 27 | 42   | 160 | 134 | 47 | 10 | M10×1 |
| A63.25.16.160 | ○ | A63.25.16.160KKB | ○ | 16 | 27 | 42   | 160 | 134 | 50 | 10 | M12×1 |
| A63.25.18.160 | ○ | A63.25.18.160KKB | ○ | 18 | 33 | 51   | 160 | 134 | 50 | 10 | M12×1 |
| A63.25.20.160 | ○ | A63.25.20.160KKB | ○ | 20 | 33 | 51   | 160 | 134 | 52 | 10 | M16×1 |
| A63.25.25.160 | ○ | A63.25.25.160KKB | ○ | 25 | 44 | 52,5 | 160 | 134 | 58 | 10 | M16×1 |
| A63.25.32.160 | ○ | A63.25.32.160KKB | ○ | 32 | 44 | 52,5 | 160 | 134 | 62 | 10 | M16×1 |

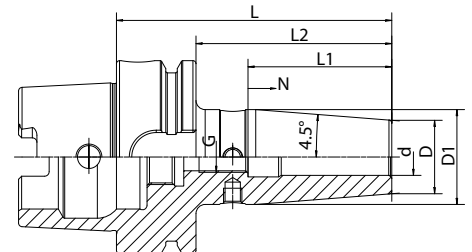
|               |   |   |   |    |    |      |     |     |    |    |       |
|---------------|---|---|---|----|----|------|-----|-----|----|----|-------|
| A63.25.06.200 | ○ | - | ○ | 6  | 21 | 32   | 200 | 174 | 36 | 10 | M5    |
| A63.25.08.200 | ○ | - | ○ | 8  | 21 | 32   | 200 | 174 | 36 | 10 | M6    |
| A63.25.10.200 | ○ | - | ○ | 10 | 24 | 34   | 200 | 174 | 42 | 10 | M8×1  |
| A63.25.12.200 | ○ | - | ○ | 12 | 24 | 34   | 200 | 174 | 47 | 10 | M10×1 |
| A63.25.14.200 | ○ | - | ○ | 14 | 27 | 42   | 200 | 174 | 47 | 10 | M10×1 |
| A63.25.16.200 | ○ | - | ○ | 16 | 27 | 42   | 200 | 174 | 50 | 10 | M12×1 |
| A63.25.18.200 | ○ | - | ○ | 18 | 33 | 51   | 200 | 174 | 50 | 10 | M12×1 |
| A63.25.20.200 | ○ | - | ○ | 20 | 33 | 51   | 200 | 174 | 52 | 10 | M16×1 |
| A63.25.25.200 | ○ | - | ○ | 25 | 44 | 52,5 | 200 | 174 | 58 | 10 | M16×1 |
| A63.25.32.200 | ○ | - | ○ | 32 | 44 | 52,5 | 200 | 174 | 62 | 10 | M16×1 |

Сопла HSK  
стр. E-12.26Установка  
для термозажима  
стр. E-12.32

# Патрон с термозажимом, 4,5°



| Обозначение              |   | d,<br>мм | D,<br>мм | D1,<br>мм | L,<br>мм | L2,<br>мм | L1,<br>мм | N,<br>мм | G,<br>мм |
|--------------------------|---|----------|----------|-----------|----------|-----------|-----------|----------|----------|
| Размер хвостовика HSK63A |   |          |          |           |          |           |           |          |          |
| A63.25.06.250            | ○ | 6        | 21       | 32        | 250      | 224       | 36        | 10       | M5       |
| A63.25.08.250            | ○ | 8        | 21       | 32        | 250      | 224       | 36        | 10       | M6       |
| A63.25.10.250            | ○ | 10       | 24       | 34        | 250      | 224       | 42        | 10       | M8×1     |
| A63.25.12.250            | ○ | 12       | 24       | 34        | 250      | 224       | 47        | 10       | M10×1    |
| A63.25.14.250            | ○ | 14       | 27       | 42        | 250      | 224       | 47        | 10       | M10×1    |
| A63.25.16.250            | ○ | 16       | 27       | 42        | 250      | 224       | 50        | 10       | M12×1    |
| A63.25.18.250            | ○ | 18       | 33       | 51        | 250      | 224       | 50        | 10       | M12×1    |
| A63.25.20.250            | ○ | 20       | 33       | 51        | 250      | 224       | 52        | 10       | M16×1    |
| A63.25.25.250            | ○ | 25       | 44       | 52,5      | 250      | 224       | 58        | 10       | M16×1    |
| A63.25.32.250            | ○ | 32       | 44       | 52,5      | 250      | 224       | 62        | 10       | M16×1    |
|                          |   |          |          |           |          |           |           |          |          |
| A63.25.06.300            | ○ | 6        | 21       | 32        | 300      | 274       | 36        | 10       | M5       |
| A63.25.08.300            | ○ | 8        | 21       | 32        | 300      | 274       | 36        | 10       | M6       |
| A63.25.10.300            | ○ | 10       | 24       | 34        | 300      | 274       | 42        | 10       | M8×1     |
| A63.25.12.300            | ○ | 12       | 24       | 34        | 300      | 274       | 47        | 10       | M10×1    |
| A63.25.14.300            | ○ | 14       | 27       | 42        | 300      | 274       | 47        | 10       | M10×1    |
| A63.25.16.300            | ○ | 16       | 27       | 42        | 300      | 274       | 50        | 10       | M12×1    |
| A63.25.18.300            | ○ | 18       | 33       | 51        | 300      | 274       | 50        | 10       | M12×1    |
| A63.25.20.300            | ○ | 20       | 33       | 51        | 300      | 274       | 52        | 10       | M16×1    |
| A63.25.25.300            | ○ | 25       | 44       | 52,5      | 300      | 274       | 58        | 10       | M16×1    |
| A63.25.32.300            | ○ | 32       | 44       | 52,5      | 300      | 274       | 62        | 10       | M16×1    |



Сопла HSK  
стр. E-12.26



Установка  
для термозажима  
стр. E-12.32

# Патрон с термозажимом, 4,5°

**A** ↗  
≤0.003

**G2.5**  
25000  
об/мин

**AD**

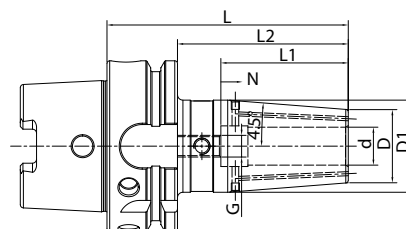
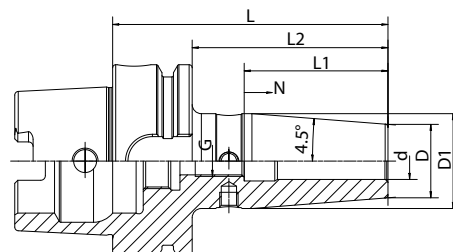
| Обозначение |     | d,<br>мм | D,<br>мм | D1,<br>мм | L,<br>мм | L2,<br>мм | L1,<br>мм | N,<br>мм | G,<br>мм |
|-------------|-----|----------|----------|-----------|----------|-----------|-----------|----------|----------|
| Без СОЖ     | СОЖ |          |          |           |          |           |           |          |          |

Размер хвостовика HSK80A

|              |   |   |   |    |    |    |     |    |    |    |       |
|--------------|---|---|---|----|----|----|-----|----|----|----|-------|
| A80.25.06.85 | ○ | - | ○ | 6  | 21 | 27 | 85  | 59 | 36 | 10 | M5    |
| A80.25.08.85 | ○ | - | ○ | 8  | 21 | 27 | 85  | 59 | 36 | 10 | M6    |
| A80.25.10.85 | ○ | - | ○ | 10 | 24 | 32 | 90  | 64 | 42 | 10 | M8×1  |
| A80.25.12.85 | ○ | - | ○ | 12 | 24 | 32 | 95  | 69 | 47 | 10 | M10×1 |
| A80.25.14.85 | ○ | - | ○ | 14 | 27 | 34 | 95  | 69 | 47 | 10 | M10×1 |
| A80.25.16.85 | ○ | - | ○ | 16 | 27 | 34 | 100 | 74 | 50 | 10 | M12×1 |
| A80.25.18.85 | ○ | - | ○ | 18 | 33 | 42 | 100 | 74 | 50 | 10 | M12×1 |
| A80.25.20.85 | ○ | - | ○ | 20 | 33 | 42 | 105 | 79 | 52 | 10 | M16×1 |
| A80.25.25.85 | ○ | - | ○ | 25 | 44 | 53 | 115 | 89 | 58 | 10 | M16×1 |
| A80.25.32.85 | ○ | - | ○ | 32 | 44 | 53 | 120 | 94 | 62 | 10 | M16×1 |

Размер хвостовика HSK100A

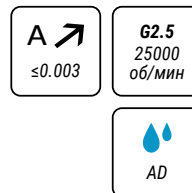
|                |   |                   |   |    |    |      |     |    |    |    |       |
|----------------|---|-------------------|---|----|----|------|-----|----|----|----|-------|
| A100.25.03.85  | ○ | -                 | ○ | 3  | 15 | 20   | 85  | 56 | -  | -  | -     |
| A100.25.04.85  | ○ | -                 | ○ | 4  | 15 | 20   | 85  | 56 | -  | -  | -     |
| A100.25.05.85  | ○ | -                 | ○ | 5  | 15 | 20   | 85  | 56 | -  | -  | -     |
| A100.25.06.85  | ○ | A100.25.06.85KKB  | ○ | 6  | 21 | 26,5 | 85  | 56 | 36 | 10 | M5×1  |
| A100.25.08.85  | ○ | A100.25.08.85KKB  | ○ | 8  | 21 | 26,5 | 85  | 56 | 36 | 10 | M6×1  |
| A100.25.10.90  | ○ | A100.25.10.90KKB  | ○ | 10 | 24 | 30,5 | 90  | 61 | 42 | 10 | M8×1  |
| A100.25.12.95  | ○ | A100.25.12.95KKB  | ○ | 12 | 24 | 31   | 95  | 66 | 47 | 10 | M10×1 |
| A100.25.14.95  | ○ | A100.25.14.95KKB  | ○ | 14 | 27 | 34   | 95  | 66 | 47 | 10 | M10×1 |
| A100.25.16.100 | ○ | A100.25.16.100KKB | ○ | 16 | 27 | 34   | 100 | 71 | 50 | 10 | M12×1 |
| A100.25.18.100 | ○ | A100.25.18.100KKB | ○ | 18 | 33 | 41   | 100 | 71 | 50 | 10 | M12×1 |
| A100.25.20.105 | ○ | A100.25.20.105KKB | ○ | 20 | 33 | 42   | 105 | 76 | 52 | 10 | M16×1 |
| A100.25.25.115 | ○ | A100.25.25.115KKB | ○ | 25 | 44 | 53   | 115 | 86 | 58 | 10 | M16×1 |
| A100.25.32.120 | ○ | A100.25.32.120KKB | ○ | 32 | 44 | 53   | 120 | 91 | 62 | 10 | M16×1 |



Сопла HSK  
стр. E-12.26



Установка  
для термозажима  
стр. E-12.32

**Патрон с термозажимом, 4,5°**


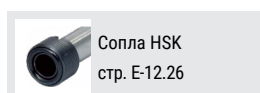
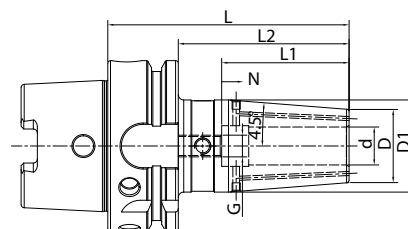
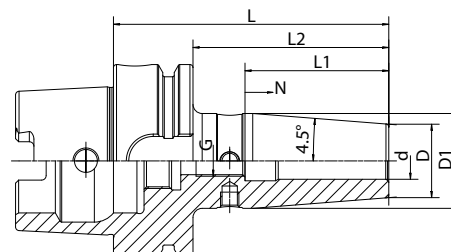
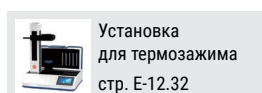
| Обозначение |     | d, мм | D, мм | D1, мм | L, мм | L2, мм | L1, мм | N, мм | G, мм |
|-------------|-----|-------|-------|--------|-------|--------|--------|-------|-------|
| Без СОЖ     | СОЖ |       |       |        |       |        |        |       |       |

**Размер хвостовика HSK100A**

|                |   |                   |   |    |    |    |     |    |    |    |       |
|----------------|---|-------------------|---|----|----|----|-----|----|----|----|-------|
| A100.25.06.120 | o | A100.25.06.120ККВ | o | 6  | 21 | 27 | 120 | 91 | 36 | 10 | M5    |
| A100.25.08.120 | o | A100.25.08.120ККВ | o | 8  | 21 | 27 | 120 | 91 | 36 | 10 | M6    |
| A100.25.10.120 | o | A100.25.10.120ККВ | o | 10 | 24 | 32 | 120 | 91 | 42 | 10 | M8x1  |
| A100.25.12.120 | o | A100.25.12.120ККВ | o | 12 | 24 | 32 | 120 | 91 | 47 | 10 | M10x1 |
| A100.25.14.120 | o | A100.25.14.120ККВ | o | 14 | 27 | 34 | 120 | 91 | 47 | 10 | M10x1 |
| A100.25.16.120 | o | A100.25.16.120ККВ | o | 16 | 27 | 34 | 120 | 91 | 50 | 10 | M12x1 |
| A100.25.18.120 | o | A100.25.18.120ККВ | o | 18 | 33 | 42 | 120 | 91 | 50 | 10 | M12x1 |
| A100.25.20.120 | o | A100.25.20.120ККВ | o | 20 | 33 | 42 | 120 | 91 | 52 | 10 | M16x1 |
| A100.25.25.120 | o | A100.25.25.120ККВ | o | 25 | 44 | 53 | 120 | 91 | 58 | 10 | M16x1 |

|                |   |                   |   |    |    |      |     |     |    |    |       |
|----------------|---|-------------------|---|----|----|------|-----|-----|----|----|-------|
| A100.25.06.160 | o | A100.25.06.160ККВ | o | 6  | 21 | 32   | 160 | 131 | 36 | 10 | M5    |
| A100.25.08.160 | o | A100.25.08.160ККВ | o | 8  | 21 | 32   | 160 | 131 | 36 | 10 | M6    |
| A100.25.10.160 | o | A100.25.10.160ККВ | o | 10 | 24 | 34   | 160 | 131 | 42 | 10 | M8x1  |
| A100.25.12.160 | o | A100.25.12.160ККВ | o | 12 | 24 | 34   | 160 | 131 | 47 | 10 | M10x1 |
| A100.25.14.160 | o | A100.25.14.160ККВ | o | 14 | 27 | 42   | 160 | 131 | 47 | 10 | M10x1 |
| A100.25.16.160 | o | A100.25.16.160ККВ | o | 16 | 27 | 42   | 160 | 131 | 50 | 10 | M12x1 |
| A100.25.18.160 | o | A100.25.18.160ККВ | o | 18 | 33 | 50,5 | 160 | 131 | 50 | 10 | M12x1 |
| A100.25.20.160 | o | A100.25.20.160ККВ | o | 20 | 33 | 50,5 | 160 | 131 | 52 | 10 | M16x1 |
| A100.25.25.160 | o | A100.25.25.160ККВ | o | 25 | 44 | 60   | 160 | 131 | 58 | 10 | M16x1 |
| A100.25.32.160 | o | A100.25.32.160ККВ | o | 32 | 44 | 60   | 160 | 131 | 62 | 10 | M16x1 |

|                |   |                    |   |    |    |    |     |     |    |    |       |
|----------------|---|--------------------|---|----|----|----|-----|-----|----|----|-------|
| A100.25.06.200 | o | A100.25.06.200ККВ* | o | 6  | 21 | 32 | 200 | 171 | 36 | 10 | M5    |
| A100.25.08.200 | o | A100.25.08.200ККВ* | o | 8  | 21 | 32 | 200 | 171 | 36 | 10 | M6    |
| A100.25.10.200 | o | A100.25.10.200ККВ* | o | 10 | 24 | 34 | 200 | 171 | 42 | 10 | M8x1  |
| A100.25.12.200 | o | A100.25.12.200ККВ* | o | 12 | 24 | 34 | 200 | 171 | 47 | 10 | M10x1 |
| A100.25.14.200 | o | -                  | o | 14 | 27 | 42 | 200 | 171 | 47 | 10 | M10x1 |
| A100.25.16.200 | o | A100.25.16.200ККВ* | o | 16 | 27 | 42 | 200 | 171 | 50 | 10 | M12x1 |
| A100.25.18.200 | o | -                  | o | 18 | 33 | 51 | 200 | 171 | 50 | 10 | M12x1 |
| A100.25.20.200 | o | A100.25.20.200ККВ* | o | 20 | 33 | 51 | 200 | 171 | 52 | 10 | M16x1 |
| A100.25.25.200 | o | A100.25.25.200ККВ* | o | 25 | 44 | 60 | 200 | 171 | 58 | 10 | M16x1 |
| A100.25.32.200 | o | -                  | o | 32 | 44 | 60 | 200 | 171 | 62 | 10 | M16x1 |


**Сопла HSK**  
стр. E-12.26

**Установка**  
для термозажима  
стр. E-12.32

\* - по запросу

# Патрон с термозажимом, 4,5°

**A** ↗  
≤0.003

**G2.5**  
25000  
об/мин

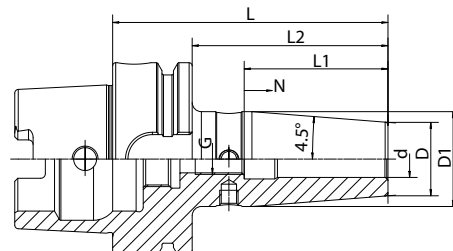


| Обозначение |  | d,<br>мм | D,<br>мм | D1,<br>мм | L,<br>мм | L2,<br>мм | L1,<br>мм | N,<br>мм | G,<br>мм |
|-------------|--|----------|----------|-----------|----------|-----------|-----------|----------|----------|
|-------------|--|----------|----------|-----------|----------|-----------|-----------|----------|----------|

Размер хвостовика HSK100A

|                |   |    |    |    |     |     |    |    |       |
|----------------|---|----|----|----|-----|-----|----|----|-------|
| A100.25.06.250 | ○ | 6  | 21 | 32 | 250 | 221 | 36 | 10 | M5    |
| A100.25.08.250 | ○ | 8  | 21 | 32 | 250 | 221 | 36 | 10 | M6    |
| A100.25.10.250 | ○ | 10 | 24 | 34 | 250 | 221 | 42 | 10 | M8×1  |
| A100.25.12.250 | ○ | 12 | 24 | 34 | 250 | 221 | 47 | 10 | M10×1 |
| A100.25.14.250 | ○ | 14 | 27 | 42 | 250 | 221 | 47 | 10 | M10×1 |
| A100.25.16.250 | ○ | 16 | 27 | 42 | 250 | 221 | 50 | 10 | M12×1 |
| A100.25.18.250 | ○ | 18 | 33 | 51 | 250 | 221 | 50 | 10 | M12×1 |
| A100.25.20.250 | ○ | 20 | 33 | 51 | 250 | 221 | 52 | 10 | M16×1 |
| A100.25.25.250 | ○ | 25 | 44 | 60 | 250 | 221 | 58 | 10 | M16×1 |
| A100.25.32.250 | ○ | 32 | 44 | 60 | 250 | 221 | 62 | 10 | M16×1 |

|                |   |    |    |    |     |     |    |    |       |
|----------------|---|----|----|----|-----|-----|----|----|-------|
| A100.25.06.300 | ○ | 6  | 21 | 32 | 300 | 271 | 36 | 10 | M5    |
| A100.25.08.300 | ○ | 8  | 21 | 32 | 300 | 271 | 36 | 10 | M6    |
| A100.25.10.300 | ○ | 10 | 24 | 34 | 300 | 271 | 42 | 10 | M8×1  |
| A100.25.12.300 | ○ | 12 | 24 | 34 | 300 | 271 | 47 | 10 | M10×1 |
| A100.25.14.300 | ○ | 14 | 27 | 42 | 300 | 271 | 47 | 10 | M10×1 |
| A100.25.16.300 | ○ | 16 | 27 | 42 | 300 | 271 | 50 | 10 | M12×1 |
| A100.25.18.300 | ○ | 15 | 33 | 51 | 300 | 271 | 50 | 10 | M12×1 |
| A100.25.20.300 | ○ | 20 | 33 | 51 | 300 | 271 | 52 | 10 | M16×1 |
| A100.25.25.300 | ○ | 25 | 44 | 60 | 300 | 271 | 58 | 10 | M16×1 |
| A100.25.32.300 | ○ | 32 | 44 | 60 | 300 | 271 | 62 | 10 | M16×1 |



Сопла HSK  
стр. E-12.26



Установка  
для термозажима  
стр. E-12.32

# Патрон с термозажимом, тонкий, 3°

**A**   
≤0.003

**G2.5**  
25000  
об/мин



| Обозначение |  | d,<br>мм | D,<br>мм | D1,<br>мм | L,<br>мм | L3,<br>мм | L2,<br>мм | L1,<br>мм | N,<br>мм | G,<br>мм | R,<br>мм |
|-------------|--|----------|----------|-----------|----------|-----------|-----------|-----------|----------|----------|----------|
|-------------|--|----------|----------|-----------|----------|-----------|-----------|-----------|----------|----------|----------|

Размер хвостовика HSK50A

|               |   |   |    |      |    |    |      |    |    |    |   |
|---------------|---|---|----|------|----|----|------|----|----|----|---|
| A50.25.03.80S | ○ | 3 | 9  | 14,4 | 80 | 54 | 51,5 | -  | -  | -  | 3 |
| A50.25.04.80S | ○ | 4 | 10 | 15,4 | 80 | 54 | 51,5 | -  | -  | -  | 3 |
| A50.25.06.80S | ○ | 6 | 12 | 17,4 | 80 | 54 | 51,5 | 36 | 10 | M5 | 3 |
| A50.25.08.80S | ○ | 8 | 14 | 19,4 | 80 | 59 | 51,5 | 36 | 10 | M6 | 3 |

|               |   |    |    |      |    |    |      |    |    |      |   |
|---------------|---|----|----|------|----|----|------|----|----|------|---|
| A50.25.10.85S | ○ | 10 | 16 | 21,9 | 85 | 59 | 56,5 | 42 | 10 | M8×1 | 3 |
|---------------|---|----|----|------|----|----|------|----|----|------|---|

|               |   |    |    |      |    |    |      |    |    |       |   |
|---------------|---|----|----|------|----|----|------|----|----|-------|---|
| A50.25.12.90S | ○ | 12 | 18 | 24,4 | 90 | 64 | 61,2 | 47 | 10 | M10×1 | 3 |
|---------------|---|----|----|------|----|----|------|----|----|-------|---|

|               |   |    |    |      |    |    |      |    |    |       |   |
|---------------|---|----|----|------|----|----|------|----|----|-------|---|
| A50.25.16.95S | ○ | 16 | 22 | 28,9 | 95 | 69 | 66,2 | 50 | 10 | M12×1 | 3 |
|---------------|---|----|----|------|----|----|------|----|----|-------|---|

Размер хвостовика HSK63A

|               |   |   |    |      |    |    |      |    |    |    |   |
|---------------|---|---|----|------|----|----|------|----|----|----|---|
| A63.25.03.80S | ○ | 3 | 9  | 14   | 80 | 54 | 47,5 | -  | -  | -  | 4 |
| A63.25.04.80S | ○ | 4 | 10 | 15,4 | 80 | 54 | 51,2 | -  | -  | -  | 3 |
| A63.25.06.80S | ○ | 6 | 12 | 17,4 | 80 | 54 | 51,2 | 36 | 10 | M5 | 3 |
| A63.25.08.80S | ○ | 8 | 14 | 19,4 | 80 | 54 | 51,2 | 36 | 10 | M6 | 3 |

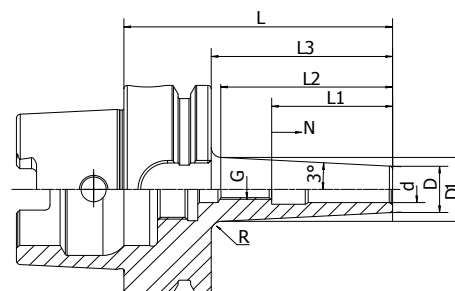
|               |   |    |    |      |    |    |      |    |    |      |   |
|---------------|---|----|----|------|----|----|------|----|----|------|---|
| A63.25.10.85S | ○ | 10 | 16 | 21,8 | 85 | 59 | 56,2 | 42 | 10 | M8×1 | 3 |
|---------------|---|----|----|------|----|----|------|----|----|------|---|

|               |   |    |    |      |    |    |      |    |    |       |   |
|---------------|---|----|----|------|----|----|------|----|----|-------|---|
| A63.25.12.90S | ○ | 12 | 18 | 24,4 | 90 | 64 | 61,2 | 47 | 10 | M10×1 | 3 |
|---------------|---|----|----|------|----|----|------|----|----|-------|---|

|               |   |    |    |      |    |    |      |    |    |       |   |
|---------------|---|----|----|------|----|----|------|----|----|-------|---|
| A63.25.16.95S | ○ | 16 | 22 | 28,7 | 95 | 69 | 64,3 | 50 | 10 | M12×1 | 5 |
|---------------|---|----|----|------|----|----|------|----|----|-------|---|

|                |   |    |    |      |     |    |      |    |    |       |   |
|----------------|---|----|----|------|-----|----|------|----|----|-------|---|
| A63.25.03.120S | ○ | 3  | 9  | 18,4 | 120 | 94 | 89,3 | -  | -  | -     | 5 |
| A63.25.04.120S | ○ | 4  | 10 | 19,4 | 120 | 94 | 89,3 | -  | -  | -     | 5 |
| A63.25.06.120S | ○ | 6  | 12 | 21,4 | 120 | 94 | 89,3 | 36 | 10 | M5    | 5 |
| A63.25.08.120S | ○ | 8  | 14 | 23,4 | 120 | 94 | 89,3 | 36 | 10 | M6    | 5 |
| A63.25.10.120S | ○ | 10 | 16 | 25,4 | 120 | 94 | 89,3 | 42 | 10 | M8×1  | 5 |
| A63.25.12.120S | ○ | 12 | 18 | 27,4 | 120 | 94 | 89,3 | 47 | 10 | M10×1 | 5 |
| A63.25.16.120S | ○ | 16 | 22 | 31,4 | 120 | 94 | 89,3 | 50 | 10 | M12×1 | 5 |

|                |   |    |    |      |     |     |       |    |    |       |   |
|----------------|---|----|----|------|-----|-----|-------|----|----|-------|---|
| A63.25.03.160S | ○ | 3  | 9  | 22,5 | 160 | 134 | 129,3 | -  | -  | -     | 5 |
| A63.25.04.160S | ○ | 4  | 10 | 23,5 | 160 | 134 | 129,3 | -  | -  | -     | 5 |
| A63.25.06.160S | ○ | 6  | 12 | 25,5 | 160 | 134 | 129,3 | 36 | 10 | M5    | 5 |
| A63.25.08.160S | ○ | 8  | 14 | 27,5 | 160 | 134 | 129,3 | 36 | 10 | M6    | 5 |
| A63.25.10.160S | ○ | 10 | 16 | 29,5 | 160 | 134 | 129,3 | 42 | 10 | M8×1  | 5 |
| A63.25.12.160S | ○ | 12 | 18 | 31,5 | 160 | 134 | 129,3 | 47 | 10 | M10×1 | 5 |
| A63.25.16.160S | ○ | 16 | 22 | 35,5 | 160 | 134 | 129,3 | 50 | 10 | M12×1 | 5 |



Сопла HSK  
стр. E-12.26



Установка  
для термозажима  
стр. E-12.32

## Патрон гидропластовый

**A**   
≤0.003

**G2.5**  
25000  
об/мин



| Обозначение |  | d,<br>мм | D,<br>мм | D1,<br>мм | L,<br>мм | L1,<br>мм | L2,<br>мм | G,<br>мм |
|-------------|--|----------|----------|-----------|----------|-----------|-----------|----------|
|-------------|--|----------|----------|-----------|----------|-----------|-----------|----------|

Размер хвостовика HSK32A

|              |   |    |    |    |    |    |    |    |
|--------------|---|----|----|----|----|----|----|----|
| A32.65.06.80 | ○ | 6  | 26 | 40 | 80 | 29 | 27 | M5 |
| A32.65.08.80 | ○ | 8  | 28 | 40 | 80 | 29 | 27 | M6 |
| A32.65.10.85 | ○ | 10 | 30 | 40 | 85 | 35 | 32 | M6 |
| A32.65.12.90 | ○ | 12 | 32 | 40 | 90 | 40 | 37 | M6 |

Размер хвостовика HSK40A

|              |   |    |    |    |    |    |    |    |
|--------------|---|----|----|----|----|----|----|----|
| A40.65.06.70 | ○ | 6  | 26 | 34 | 70 | 36 | 27 | M5 |
| A40.65.08.70 | ○ | 8  | 28 | 34 | 70 | 36 | 27 | M6 |
| A40.65.10.75 | ○ | 10 | 30 | 34 | 75 | 42 | 32 | M6 |
| A40.65.12.80 | ○ | 12 | 32 | 34 | 80 | 48 | 37 | M6 |

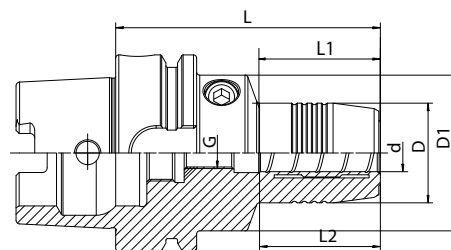
Размер хвостовика HSK50A

|              |   |    |    |    |    |      |    |       |
|--------------|---|----|----|----|----|------|----|-------|
| A50.65.06.70 | ○ | 6  | 26 | 40 | 70 | 28   | 27 | M5    |
| A50.65.08.70 | ○ | 8  | 28 | 40 | 70 | 28   | 27 | M6    |
| A50.65.10.75 | ○ | 10 | 30 | 40 | 75 | 39   | 32 | M8×1  |
| A50.65.12.85 | ○ | 12 | 32 | 40 | 85 | 44   | 37 | M10×1 |
| A50.65.14.85 | ○ | 14 | 34 | 41 | 85 | 43,5 | 39 | M8×1  |
| A50.65.16.90 | ○ | 16 | 38 | 53 | 90 | 30   | 42 | M12×1 |
| A50.65.18.90 | ○ | 18 | 40 | 57 | 90 | 30   | 42 | M8×1  |
| A50.65.20.90 | ○ | 20 | 42 | 60 | 90 | 29   | 42 | M16×1 |

Размер хвостовика HSK63A

|               |   |    |    |    |     |      |    |       |
|---------------|---|----|----|----|-----|------|----|-------|
| A63.65.06.70  | ○ | 6  | 26 | 50 | 70  | 23,5 | 30 | M5    |
| A63.65.08.70  | ○ | 8  | 28 | 50 | 70  | 24   | 30 | M6    |
| A63.65.10.80  | ○ | 10 | 30 | 50 | 80  | 34,5 | 34 | M8×1  |
| A63.65.12.85  | ○ | 12 | 32 | 50 | 85  | 29,5 | 39 | M10×1 |
| A63.65.14.85  | ○ | 14 | 34 | 50 | 85  | 40   | 37 | M10×1 |
| A63.65.16.90  | ○ | 16 | 38 | 50 | 90  | 45,5 | 42 | M10×1 |
| A63.65.18.90  | ○ | 18 | 40 | 50 | 90  | 47   | 42 | M12×1 |
| A63.65.20.90  | ○ | 20 | 42 | 50 | 90  | 46,5 | 44 | M16×1 |
| A63.65.25.120 | ○ | 25 | 57 | 62 | 120 | 59   | 50 | M16×1 |
| A63.65.32.125 | ○ | 32 | 64 | -  | 125 | -    | 54 | M16×1 |

|               |   |    |    |    |     |       |    |       |
|---------------|---|----|----|----|-----|-------|----|-------|
| A63.65.06.150 | ○ | 6  | 26 | 50 | 150 | 103,5 | 30 | M5    |
| A63.65.08.150 | ○ | 8  | 28 | 50 | 150 | 104   | 30 | M6    |
| A63.65.10.150 | ○ | 10 | 30 | 50 | 150 | 104,5 | 34 | M8×1  |
| A63.65.12.150 | ○ | 12 | 32 | 50 | 150 | 104,5 | 39 | M10×1 |
| A63.65.14.150 | ○ | 14 | 34 | 50 | 150 | 105   | 39 | M10×1 |
| A63.65.16.150 | ○ | 16 | 38 | 50 | 150 | 105,5 | 42 | M12×1 |
| A63.65.18.150 | ○ | 18 | 40 | 50 | 150 | 106   | 42 | M12×1 |
| A63.65.20.150 | ○ | 20 | 42 | 50 | 150 | 106   | 44 | M16×1 |
| A63.65.25.150 | ○ | 25 | 57 | 50 | 150 | 89    | 50 | M16×1 |
| A63.65.32.150 | ○ | 32 | 64 | 50 | 150 | 89    | 54 | M16×1 |

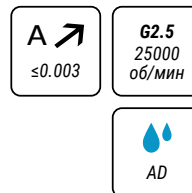


Втулка  
к гидropатрону  
стр. E-12.15 - E-12.16



Сопла HSK  
стр. E-12.26

## Патрон гидропластовый



| Обозначение | d,<br>мм | D,<br>мм | D1,<br>мм | L,<br>мм | L1,<br>мм | L2,<br>мм | G,<br>мм |
|-------------|----------|----------|-----------|----------|-----------|-----------|----------|
|-------------|----------|----------|-----------|----------|-----------|-----------|----------|

Размер хвостовика HSK63A

|               |   |    |    |    |     |       |    |       |
|---------------|---|----|----|----|-----|-------|----|-------|
| A63.65.06.200 | ○ | 6  | 26 | 50 | 200 | 103,5 | 30 | M5    |
| A63.65.08.200 | ○ | 8  | 28 | 50 | 200 | 104   | 30 | M6    |
| A63.65.10.200 | ○ | 10 | 30 | 50 | 200 | 104,5 | 34 | M8×1  |
| A63.65.12.200 | ○ | 12 | 32 | 50 | 200 | 104,5 | 39 | M10×1 |
| A63.65.14.200 | ○ | 14 | 34 | 50 | 200 | 105,5 | 42 | M12×1 |
| A63.65.16.200 | ○ | 16 | 38 | 50 | 200 | 105,5 | 42 | M12×1 |
| A63.65.18.200 | ○ | 18 | 40 | 50 | 200 | 105,5 | 42 | M12×1 |
| A63.65.20.200 | ○ | 20 | 42 | 50 | 200 | 106   | 44 | M16×1 |
| A63.65.25.200 | ○ | 25 | 57 | 50 | 200 | 152   | 50 | M16×1 |
| A63.65.32.200 | ○ | 32 | 64 | 50 | 200 | 152   | 54 | M16×1 |

Размер хвостовика HSK80A

|               |   |    |    |    |     |    |    |       |
|---------------|---|----|----|----|-----|----|----|-------|
| A80.65.12.85  | ○ | 12 | 32 | 50 | 85  | 40 | 37 | M10×1 |
| A80.65.20.95  | ○ | 20 | 42 | 50 | 95  | 52 | 42 | M16×1 |
| A80.65.32.125 | ○ | 32 | 64 | 75 | 125 | 63 | 55 | M16×1 |

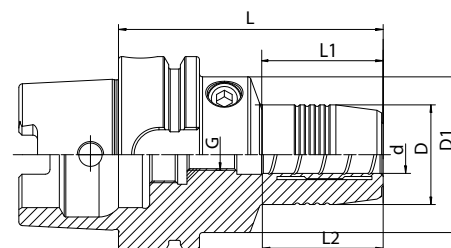
Размер хвостовика HSK100A

|                |   |    |    |    |     |      |    |       |
|----------------|---|----|----|----|-----|------|----|-------|
| A100.65.06.75  | ○ | 6  | 26 | 50 | 75  | 25,5 | 30 | M5    |
| A100.65.08.75  | ○ | 8  | 28 | 50 | 75  | 26   | 30 | M6    |
| A100.65.10.90  | ○ | 10 | 30 | 50 | 90  | 41,5 | 34 | M8×1  |
| A100.65.12.95  | ○ | 12 | 32 | 50 | 95  | 47   | 37 | M10×1 |
| A100.65.14.95  | ○ | 14 | 34 | 50 | 95  | 47   | 37 | M10×1 |
| A100.65.16.100 | ○ | 16 | 38 | 50 | 100 | 52,5 | 42 | M12×1 |
| A100.65.18.100 | ○ | 18 | 40 | 50 | 100 | 53   | 42 | M12×1 |
| A100.65.20.105 | ○ | 20 | 42 | 50 | 105 | 54,5 | 44 | M16×1 |
| A100.65.25.110 | ○ | 25 | 57 | 50 | 110 | 60   | 50 | M16×1 |
| A100.65.32.110 | ○ | 32 | 64 | 50 | 110 | 62   | 54 | M16×1 |

Размер хвостовика HSK100A

|                |   |    |    |    |     |       |    |       |
|----------------|---|----|----|----|-----|-------|----|-------|
| A100.65.06.150 | ○ | 6  | 26 | 50 | 150 | 100   | 30 | M5    |
| A100.65.08.150 | ○ | 8  | 28 | 50 | 150 | 100,5 | 30 | M6    |
| A100.65.10.150 | ○ | 10 | 30 | 50 | 150 | 101   | 34 | M8×1  |
| A100.65.12.150 | ○ | 12 | 32 | 50 | 150 | 101,5 | 39 | M10×1 |
| A100.65.14.150 | ○ | 14 | 34 | 50 | 200 | 105,5 | 42 | M12×1 |
| A100.65.16.150 | ○ | 16 | 38 | 50 | 200 | 105,5 | 42 | M12×1 |
| A100.65.18.150 | ○ | 18 | 40 | 50 | 200 | 105,5 | 42 | M12×1 |
| A100.65.20.150 | ○ | 20 | 42 | 50 | 200 | 106   | 44 | M16×1 |
| A100.65.25.150 | ○ | 25 | 57 | 70 | 150 | 100   | 50 | M16×1 |
| A100.65.32.150 | ○ | 32 | 64 | 70 | 150 | 102   | 54 | M16×1 |

|                |   |    |    |    |     |       |    |       |
|----------------|---|----|----|----|-----|-------|----|-------|
| A100.65.06.200 | ○ | 6  | 26 | 50 | 200 | 103,5 | 30 | M5    |
| A100.65.08.200 | ○ | 8  | 28 | 50 | 200 | 104   | 30 | M6    |
| A100.65.10.200 | ○ | 10 | 30 | 50 | 200 | 104,5 | 34 | M8×1  |
| A100.65.12.200 | ○ | 12 | 32 | 50 | 200 | 104,5 | 39 | M10×1 |
| A100.65.14.200 | ○ | 14 | 34 | 50 | 200 | 105,5 | 42 | M12×1 |
| A100.65.16.200 | ○ | 16 | 38 | 50 | 200 | 105,5 | 42 | M12×1 |
| A100.65.18.200 | ○ | 18 | 40 | 50 | 200 | 105,5 | 42 | M12×1 |
| A100.65.20.200 | ○ | 20 | 42 | 50 | 200 | 106   | 44 | M16×1 |
| A100.65.25.200 | ○ | 25 | 57 | 50 | 200 | 152   | 50 | M16×1 |
| A100.65.32.200 | ○ | 32 | 64 | 50 | 200 | 152   | 54 | M16×1 |



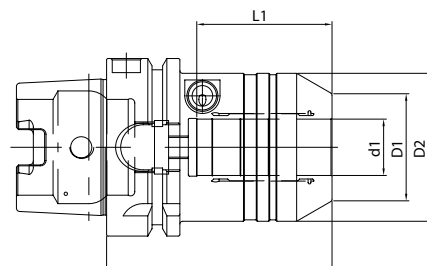
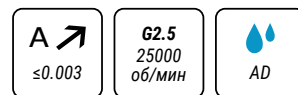
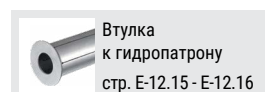
Втулка  
к гидropатрону  
стр. E-12.15 - E-12.16



Сопла HSK  
стр. E-12.26

## Патрон гидропластовый усиленный

| Обозначение               |   | d1,<br>мм | D1,<br>мм | D2,<br>мм | L,<br>мм | L1,<br>мм | G,<br>мм |
|---------------------------|---|-----------|-----------|-----------|----------|-----------|----------|
| Размер хвостовика HSK63A  |   |           |           |           |          |           |          |
| A63.67.12.80              | ○ | 12        | 32        | 42        | 80       | 41        | M8×1     |
| A63.67.20.80              | ○ | 20        | 38        | 52,5      | 80       | 48        | M8×1     |
| Размер хвостовика HSK100A |   |           |           |           |          |           |          |
| A100.67.20.90             | ○ | 20        | 38        | 52,5      | 90       | 48        | M8×1     |
| A100.67.32.100            | ○ | 32        | 58,5      | 72        | 100      | 57        | M8×1     |



## Патрон гидропластовый тонкий, удлиненный

| Обозначение               |   | d1,<br>мм | D1,<br>мм | D2,<br>мм | L,<br>мм | L1,<br>мм | L2,<br>мм | G,<br>мм |
|---------------------------|---|-----------|-----------|-----------|----------|-----------|-----------|----------|
| Размер хвостовика HSK63A  |   |           |           |           |          |           |           |          |
| A63.68.06.145             | ○ | 6         | 20        | 50        | 145      | 90        | 27        | M5       |
| A63.68.08.145             | ○ | 8         | 22        | 50        | 145      | 90        | 27        | M6       |
| A63.68.10.145             | ○ | 10        | 24        | 50        | 145      | 90        | 32        | M8×1     |
| A63.68.12.145             | ○ | 12        | 25        | 50        | 145      | 90        | 37        | M10×1    |
| A63.68.16.145             | ○ | 16        | 32        | 50        | 145      | 90        | 42        | M12×1    |
| A63.68.20.145             | ○ | 20        | 34        | 50        | 145      | 90        | 42        | M16×1    |
| Размер хвостовика HSK100A |   |           |           |           |          |           |           |          |
| A100.68.06.150            | ○ | 6         | 20        | 50        | 150      | 90        | 27        | M5       |
| A100.68.08.150            | ○ | 8         | 22        | 50        | 150      | 90        | 27        | M6       |
| A100.68.10.150            | ○ | 10        | 24        | 50        | 150      | 90        | 32        | M8×1     |
| A100.68.12.150            | ○ | 12        | 25        | 50        | 150      | 90        | 37        | M10×1    |
| A100.68.16.150            | ○ | 16        | 32        | 50        | 150      | 90        | 42        | M12×1    |
| A100.68.20.150            | ○ | 20        | 34        | 50        | 150      | 90        | 42        | M16×1    |

