

# klamp™

Efficient workholding



Collet Chucks  
Mandrels  
Collets

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**efficient** | i'fɪʃ(ə) nt |

*adjective*

*(of a system or machine) achieving maximum productivity with minimum wasted effort or expense.*

**workholding** | wɜːkhɒl-dɪŋ |

*noun*

*refers to any device that is used to secure a workpiece against the forces of machining.*

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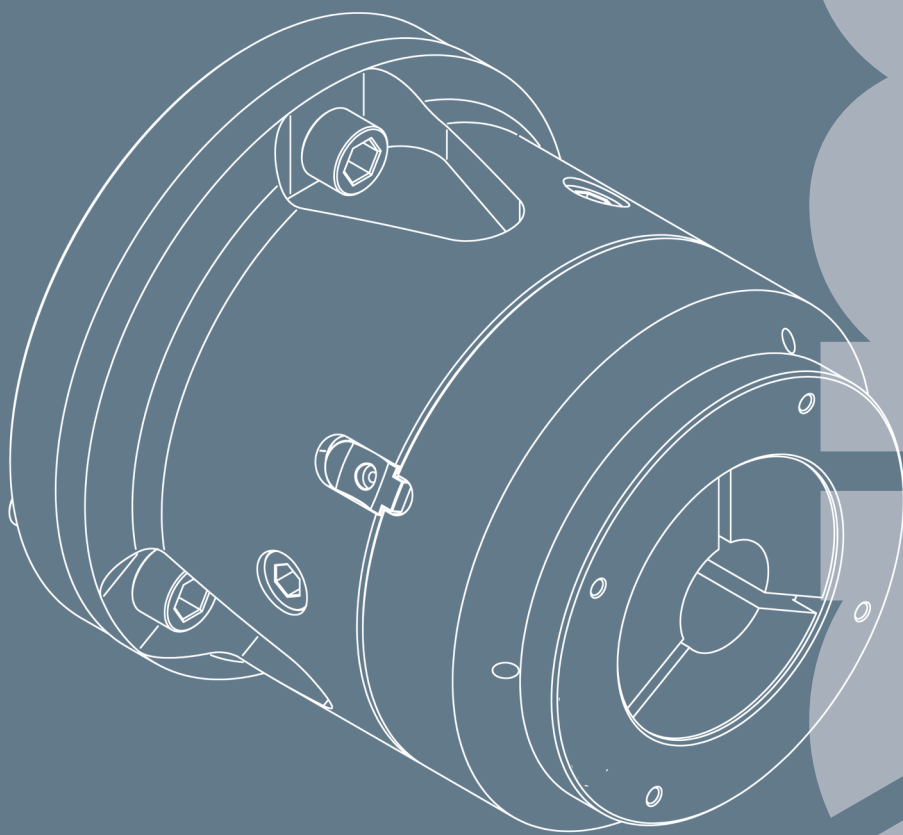
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# Collet Chucks

## QC & C Series



Collet Chuck  
QC & C Series

## Quick Change Series Power Collet Chuck for Bar Machining

### Two Different Systems:

#### Direct Mount System

- This system mounts directly to the lathe spindle to ensure a consistent mounting without the need for correction.
- Klamp QDCRL collet chucks are suitable for spring, varibore and rubberflex collets increasing its flexibility. Varibore and rubberflex collets allow rough, unfinished bar to be machined in the first operation and spring collets can be used for high accuracy in the second operation.
- Workpiece remains in a fixed position during actuation allowing for precise z-axis positioning. A tapered sleeve is pushed forward, compressing the collet and gripping the workpiece.
- All Klamp collet chucks are case hardened, optimising the rigidity, strength and durability.

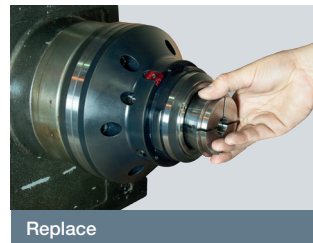


#### Modular System

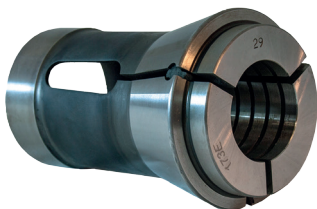
- As the direct mount system except with interchangeable adaptors enables the collet chuck to be moved from one machine spindle nose to another
- Cost-effective as only additional adaptors and connectors are required when changing different spindle/machine.
- The need for adjustment is minimal, meaning less machine downtime.



### Ultra-Fast 10 Second Collet Changes



### 3 Different Collet Types Available



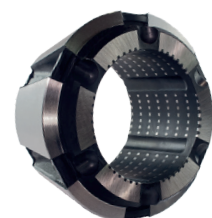
#### Spring Collets\*

Suited for second operation work, collets are size matched according to gripped diameters, enabling you to have a high gripping accuracy. Collets can be supplied as smooth or serrated as required.



#### Varibore Collets\*\*

Ideal for first operation work as they have a 2-3mm gripping range enabling you to handle rough bar. Supplied either as smooth, serrated or super grip.



#### Rubberflex Collets\*\*\*

The same accuracy specification as spring collets. Elastic rubber-metal vulcanization allows a clamping range of +/- 1mm to the nominal diameter.

## Quick Change Series Power Collet Chuck for Bar Machining

### Bar Seals Prevent Swarf & Coolant Ingress



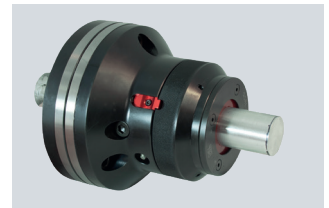
Remove bar seal from housing



Mark the diameter you require



Cut out the diameter



Reassemble and proceed

### Adjustable Collet Mounted Workstop for Spring Collets



- Easy to use, installation time – less than one minute
- Available for D173E (Part No: **WS-D173E**) and D185E (Part No: **WS-D185E**) spring collet types
- Suitable for round, square and hexagon spring collets
- No deformation of collet shank
- No influence on clamping characteristics of collet or collet chuck



Insert collet work stopper



Lock stopper housing in position



Adjust stopper shaft position



Lock stopper shaft and install

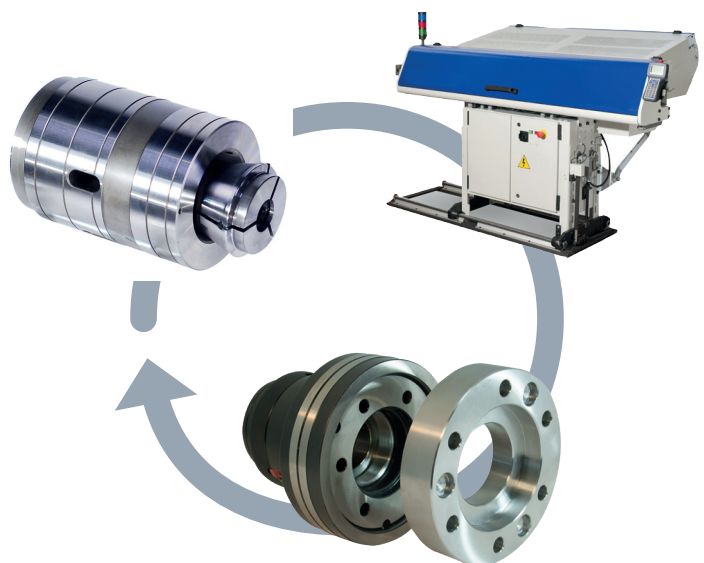
### Application Advantages

- Klamp collet chucks are designed to work with bar loaders and bar feeders by not interfering with the actions of the bar feeder or loader.
- All types of QCRL42, QCRL60 & QCRL80 have interchangeable match ground reduction sleeves to allow you to use a wider range of collets on one chuck.
- Wide adaptor plates for all models available upon request.
- Clamping/unclamping of chuck during spindle rotation is possible.
- Less deformation of thin-walled components during clamping.
- High operating reliability due to a minimum number of parts.
- High axial positioning accuracy of the components by means of push type collet system.

\* See pages 14-18 for more Spring Collet information.

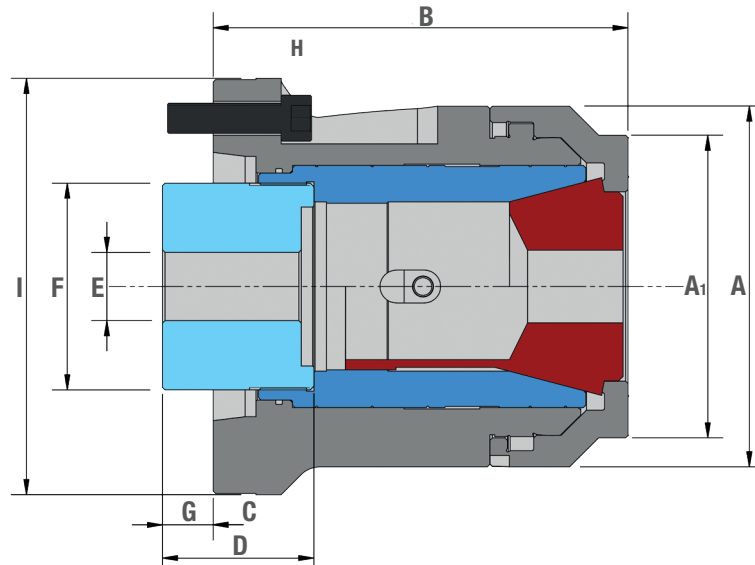
\*\* See pages 22-23 for more Varibore Collet information.

\*\*\* DRFC673 Rubber-flex collets are only suitable for the CRL42 Collet chuck and are available in smooth and full grip versions (smooth version is only available for 11mm diameters and smaller). DRFC677 Rubber-flex collets are only suitable for the CRL60 Collet chuck and are available in smooth and full grip versions (smooth version is only available for 61mm diameters and larger). See pages 24-25 for more information.



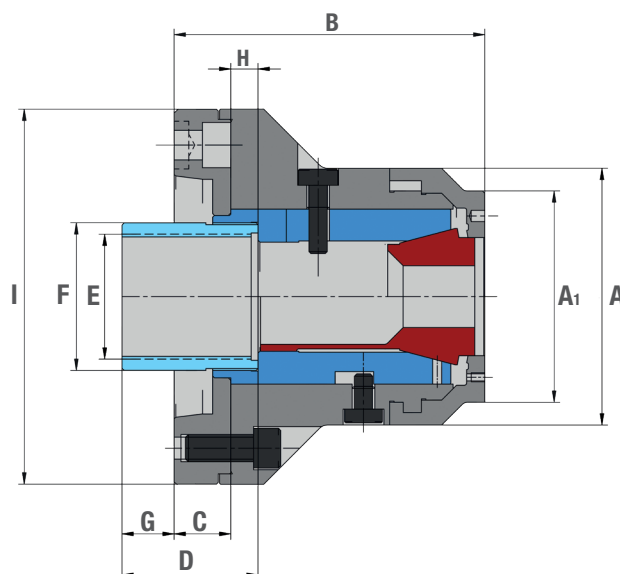


## Quick Change Series Power Collet Chuck for Bar Machining



| KLAMP Type                       |         | QDCRL42<br>DIN  | QDCRL60<br>DIN | QCRS66<br>Inch |          | QCRS80<br>Inch  |          | QCRL80<br>DIN   |          |
|----------------------------------|---------|-----------------|----------------|----------------|----------|-----------------|----------|-----------------|----------|
| Mounting                         |         | A5              | A6             | Z220           | A8       | Z220            | A8       | Z220            | A8       |
| Part Number                      |         | QDCRL42A5       | QDCRL60A6      | QCRS66         | QCRS66A8 | QCRS80          | QCRS80A8 | QCRL80          | QCRL80A8 |
| Spring Collet Type               |         | D-173E          | D-185E         | -              | -        | -               | -        | D-193E          |          |
| Spring Collet Gripping Range     | Minimum | 2               | 3              | -              | -        | -               | -        | 12              |          |
|                                  | Maximum | 42              | 60             | -              | -        | -               | -        | 80              |          |
| Spring Collet Increments         |         | 0.5             | 0.5            | -              | -        | -               | -        | 0.5             |          |
| Varibore Collet Type             |         | D-673           | D-677          | D-285          |          | D-175           |          | -               |          |
| Varibore Collet Gripping Range   | Minimum | 4               | 4              | 3              |          | 12              |          | -               |          |
|                                  | Maximum | 42              | 60             | 66             |          | 80              |          | -               |          |
| Varibore Collet Increments       |         | 2               | 2              | 3              |          | 3               |          | -               |          |
| Rubberflex Collet Type           |         | DRFC-673        | DRFC-677       | -              |          | -               |          | -               |          |
| Rubberflex Collet Gripping Range | Minimum | 7*              | 19*            | -              |          | -               |          | -               |          |
|                                  | Maximum | 45*             | 65*            | -              |          | -               |          | -               |          |
| Rubberflex Collet Increments     |         | 2               | 2              | -              |          | -               |          | -               |          |
| A                                |         | 113             | 143            | 162            |          | 196             |          | 196             |          |
| A1                               |         | 93              | 120            | 136            |          | 166             |          | 166             |          |
| B                                |         | 136             | 164.5          | 146            |          | 164.5           | 162      | 216             | 209      |
| C                                |         | N / A           | N / A          | N / A          |          | N / A           |          | N / A           |          |
| D                                |         | 60              | 60             | 80             |          | 80              |          | 80              |          |
| E Maximum                        |         | M58 x 2.0       | M75 x 2.0      | M90 x 2.0      |          | M90 x 2.0       |          | M90 x 2.0       |          |
| F                                |         | 65              | 82             | 100            |          | 100             |          | 100             |          |
| G Maximum                        |         | 23              | 20             | 5              | 25       | 37              | 20       | 33              | 16       |
| G Minimum                        |         | 16              | 13             | -5             | 15       | 25              | 8        | 25              | 8        |
| H                                |         | N / A           | N / A          | N / A          |          | N / A           |          | N / A           |          |
| I                                |         | 135             | 165            | 230            | 220      | 230             | 220      | 230             | 220      |
| Sleeve stroke                    |         | 7               | 7              | 10             |          | 12              |          | 8               |          |
| Max. input force                 | kN      | 25              | 30             | 38             |          | 45              |          | 45              |          |
| Max. Gripping Force              | kN      | 55              | 60             | 84             |          | 78              |          | 78              |          |
| Max. Speed                       | min-1   | 7100            | 6300           | 4500           |          | 4500            |          | 4500            |          |
| Net Weight                       | kg      | 10              | 17             | 23.3           | 21.5     | 28.3            | 28.5     | 37              | 36       |
| Matching Kitagawa Cylinders      |         | S1246<br>SS1246 | S1552<br>S1875 | S1552<br>S1875 |          | S2091<br>SS1881 |          | S2091<br>SS1881 |          |

## Quick Change Series Power Collet Chuck for Bar Machining



| KLAMP Type                       |                   | Q-CRL42<br>DIN  |          |          | Q-CRL54<br>Inch |          |          |          | Q-CRL60<br>DIN |          |          |          |
|----------------------------------|-------------------|-----------------|----------|----------|-----------------|----------|----------|----------|----------------|----------|----------|----------|
| Mounting                         |                   | Z140            | A5       | A6       | Z170            | A5       | A6       | A8       | Z170           | A5       | A6       | A8       |
| Part Number                      |                   | QCRL42          | QCRL42A5 | QCRL42A6 | QCRL54          | QCRL54A5 | QCRL54A6 | QCRL54A8 | QCRL60         | QCRL60A5 | QCRL60A6 | QCRL60A8 |
| Spring Collet Type               |                   | D173E           |          |          | D853            |          |          |          | D185E          |          |          |          |
| Spring Collet Gripping Range     | Minimum           | 2               |          |          | 1.6             |          |          |          | 3              |          |          |          |
|                                  | Maximum           | 42              |          |          | 54              |          |          |          | 60             |          |          |          |
| Spring collet increments         |                   | 0.5             |          |          | 0.5             |          |          |          | 0.5            |          |          |          |
| Varibore Collet Type             |                   | D673            |          |          | D-120           |          |          |          | D-677          |          |          |          |
| Varibore Collet Gripping Range   | Minimum           | 4               |          |          | 3               |          |          |          | 4              |          |          |          |
|                                  | Maximum           | 42              |          |          | 53.9            |          |          |          | 60             |          |          |          |
| Varibore Collet Increments       |                   | 2               |          |          | 3               |          |          |          | 2              |          |          |          |
| Rubberflex Collet Type           |                   | DRFC673         |          |          | -               |          |          |          | DRFC677        |          |          |          |
| Rubberflex Collet Gripping Range | Minimum           | 7               |          |          | -               |          |          |          | 19*            |          |          |          |
|                                  | Maximum           | 45              |          |          | -               |          |          |          | 65*            |          |          |          |
| Rubberflex Collet Increments     |                   | 2               |          |          | -               |          |          |          | 2              |          |          |          |
| A                                |                   | 113             |          |          | 143             |          |          |          | 143            |          |          |          |
| A1                               |                   | 93              |          |          | 118             |          |          |          | 118            |          |          |          |
| B                                |                   | 137             |          |          | 175             | 184      | 169      | 169      | 171            | 180      | 165      | 165      |
| C                                |                   | 25              |          |          | 31.5            | 46.5     | 31.5     | 31.5     | 31.5           | 46.5     | 31.5     | 31.5     |
| D                                |                   | 60              |          |          | 60              |          |          |          | 60             |          |          |          |
| E Maximum                        |                   | M58 x 1.5       |          |          | M75 x 1.5       |          |          |          | M75 x 1.5      |          |          |          |
| F                                |                   | 65              |          |          | 82              |          |          |          | 82             |          |          |          |
| G Maximum                        |                   | 17              | 23       | 23       | 15              | 5        | 21       | 21       | 14             | 5        | 21       | 21       |
| G Minimum                        |                   | 10              | 16       | 16       | 5               | -5       | 11       | 11       | 7              | -2       | 14       | 14       |
| H                                |                   | 12              |          |          | 8.3             |          |          |          | 8.3            |          |          |          |
| I                                |                   | 165             |          |          | 220             |          |          |          | 220            |          |          |          |
| Sleeve stroke                    |                   | 7               |          |          | 10              |          |          |          | 7              |          |          |          |
| Max. input force                 | kN                | 25              |          |          | 30              |          |          |          | 30             |          |          |          |
| Max. Gripping Force              | kN                | 55              |          |          | 60              |          |          |          | 60             |          |          |          |
| Max. Speed                       | min <sup>-1</sup> | 7100            |          |          | 6300            |          |          |          | 6300           |          |          |          |
| Net Weight                       | kg                | 14.5            | 14       | 13.5     | 28.3            | 32       | 28.3     | 26.3     | 28.3           | 32       | 28.3     | 26.3     |
| Matching Kitagawa Cylinders      |                   | S1246<br>SS1246 |          |          | S1552<br>S1875  |          |          |          | S1552<br>S1875 |          |          |          |

## Short Series Power Collet Chuck for Bar Machining

### Short Body/Wide Range

Varibore & rubber-flex collets allow for a compact body design maximising the lathe work envelope. Gripping capacities of the series range from 3 mm to 66mm

### High Speed

Direct mount design ensures high concentricity suitable for higher speed operations.

### First Operation Collet Chuck

Klamp CRS collet chucks are suitable for collets which have a large gripping range. Allowing the collet chuck to handle very rough and unfinished bar, preparing it for a high accuracy second operation.

### Fixed Length Collet

Workpiece remains in a fixed position during actuation, allowing for precise z-axis positioning. A tapered sleeve is pushed forward, compressing the collet and gripping the workpiece.

### Problem Free Installation

Klamp collet chucks are provided with mounting bolts and an optional custom-machined drawtube connector, allowing you to start using the Klamp collet chuck straight out of the box.

### Quick & Easy Mounting

Klamp collet chucks mount directly to the lathe spindle or use a precision adaptor plate to ensure a consistent mounting without the need for correction. The precision fit of the Klamp collet chuck enhances the rigidity of the overall system. The need for adjustment is minimal, meaning less machine downtime.

### Long service life

All Klamp collet chucks are case hardened, optimising the rigidity, strength and durability.



### Designed for Bar Pushers/Barfeeders



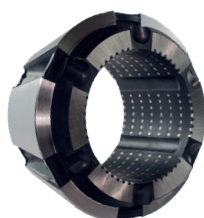
Fixed-length Klamp collet chucks are designed to work with bar loaders and bar feeders by not interfering with the process of the bar feeder action.

## 2 Different Collet Types Available



### Varibore Collets\*\*

Ideal for first operation work as they have a 2-3mm gripping range enabling you to handle rough bar. Supplied either as smooth, serrated or super grip.



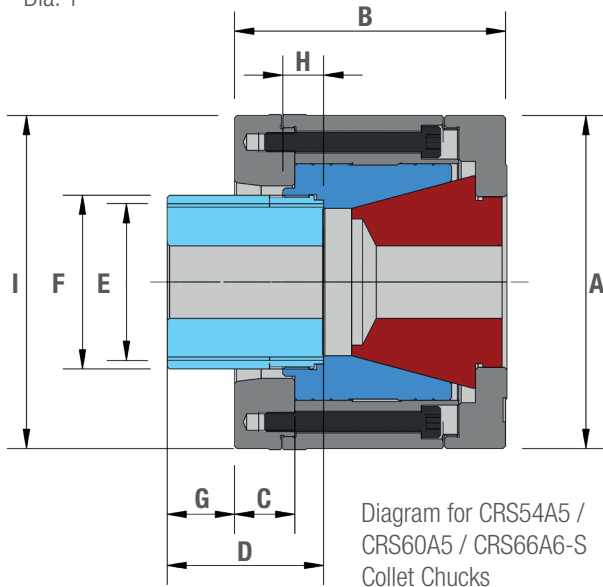
### Rubberflex Collets\*\*\*

The same accuracy specification as spring collets. Elastic rubber-metal vulcanization allows a clamping range of +/- 1mm to the nominal diameter.

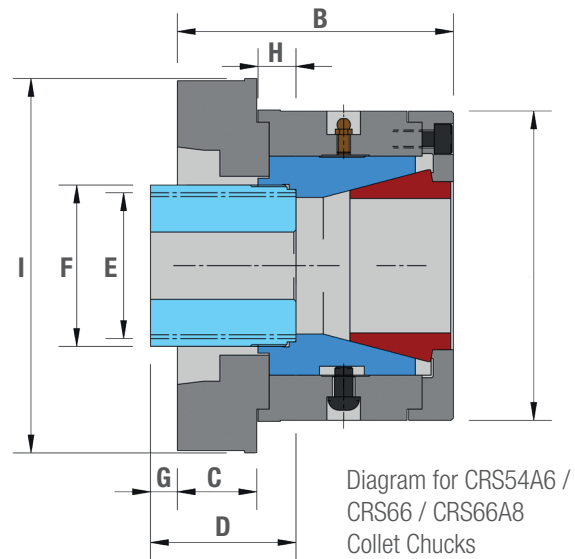


## Short Series Power Collet Chuck for Bar Machining

Dia. 1



Dia. 2



| KLAMP Type                         |                   | CRS54     |         | CRS60     | CRS66     |           |         |
|------------------------------------|-------------------|-----------|---------|-----------|-----------|-----------|---------|
| Mounting                           |                   | A5        | A6      | A5        | Z220      | A6        | A8      |
| Part number                        |                   | CRS54A5   | CRS54A6 | CRS60A5   | CRS66     | CRS66A6-S | CRS66A8 |
| Varibore Collet Type               |                   | D-120     |         | D-677     | D-285     |           |         |
| Varibore Collet Gripping range*    | Minimum           | 3         |         | 4         | 3.2       |           |         |
|                                    | Maximum           | 53.9      |         | 60        | 66.6      |           |         |
| Varibore Collet Increments         |                   | 3         |         | 2         | 3         |           |         |
| Rubberflex Collet Type             |                   | -         |         | DRFC677   | -         |           |         |
| Rubberflex Collet Gripping Range** | Minimum           | -         |         | 19*       | -         |           |         |
|                                    | Maximum           | -         |         | 65*       | -         |           |         |
| Rubberflex Collet Increments       |                   | -         |         | 2         | -         |           |         |
| A                                  |                   | 138       |         | 138       | 150       | 165       | 150     |
| B                                  |                   | 113       | 127.4   | 107.5     | 134       | 131       | 140     |
| C                                  |                   | 25        | 41      | 25        | 24        | N/A       | 30      |
| D                                  |                   | 65        |         | 65        | 80        |           |         |
| E Maximum                          |                   | M65 x 1.5 |         | M65 x 1.5 | M80 x 2.0 |           |         |
| F                                  |                   | 72        |         | 72        | 90        |           |         |
| G Maximum                          |                   | 28        | 12      | 28        | 27        | 29.5      | 21      |
| G Minimum                          |                   | 18        | 2       | 21        | 17        | 19.5      | 11      |
| H                                  |                   | 17        |         | 17        | 24        |           |         |
| I                                  |                   | N/A       | 167     | N/A       | 230       | N/A       | 210     |
| Sleeve stroke                      |                   | 10        |         | 7         | 10        |           |         |
| Max. input force                   | kN                | 30        |         | 30        | 38        |           |         |
| Max. Gripping Force                | kN                | 60        |         | 60        | 84        |           |         |
| Max. Speed                         | min <sup>-1</sup> | 6300      |         | 6300      | 4500      |           |         |
| Net Weight                         | kg                | 11        | 12.5    | 11        | 19        |           | 18      |
| Matching Kitagawa Cylinders        |                   | S1552     |         | S1552     | S1875     |           |         |

\* See pages 22-23 for more Varibore Collet information

\*\* DRFC677 Rubber-flex collets are only suitable for the CRS60 Collet chuck and are available in smooth and full grip versions (smooth version is only available for 61mm diameters and larger).

## Long Series Power Collet Chuck for Bar Machining

### Long Body/Wide Range

High accuracy spring collets require a longer body design but Klamp collet chuck design ensures that all external dimensions have been optimised to provide maximum tool clearance. Gripping capacities of the series range from 1.6mm to 80mm

### High Speed

Direct mount design ensures high concentricity suitable for higher speed operations.

### First & Second Operation Collet Chuck

Klamp CRL collet chucks are suitable for spring, varibore and rubberflex collets increasing its flexibility. Varibore and rubberflex collets allow rough, unfinished bar to be machined in the first operation and spring collets can be used for high accuracy in the second operation.

### Fixed Length Collet

Workpiece remains in a fixed position during actuation allowing for precise z-axis positioning. A tapered sleeve is pushed forward, compressing the collet and gripping the workpiece.

### Problem Free Installation

Klamp collet chucks are provided with mounting bolts and an optional custom machined drawtube connector allowing you to start using the Klamp collet chuck straight out of the box.



### Quick & Easy Mounting

Klamp collet chucks mount directly to the lathe spindle or use a precision adaptor plate to ensure a consistent mounting without the need for correction. The precision fit of the Klamp collet chuck enhances the rigidity of the overall system. The need for adjustment is minimal, meaning less machine downtime.

### Long service life

All Klamp collet chucks are case hardened, optimising the rigidity, strength and durability.

### Adjustable Collets Mounted Workstop for Spring Collets



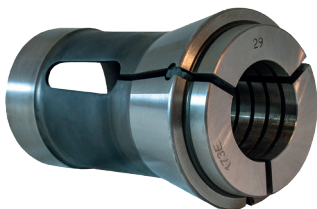
- Easy to use, installation time – less than one minute
- Available for D173E (Part No: **WS-D173E**) and D185E (Part No: **WS-D185E**) spring collet types
- Suitable for round, square and hexagon spring collets
- No deformation of collet shank
- No influence on clamping characteristics of collet or collet chuck

### Designed for Bar Pushers/Barfeeders



Fixed-length Klamp collet chucks are designed to work with bar loaders and bar feeders by not interfering with the process of the bar feeder action.

### 3 Different Collet Types Available



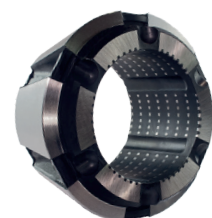
#### Spring Collets\*

Suited for second operation work, collets are size matched according to gripped diameters, enabling you to have a high gripping accuracy. Collets can be supplied as smooth or serrated as required.



#### Varibore Collets\*\*

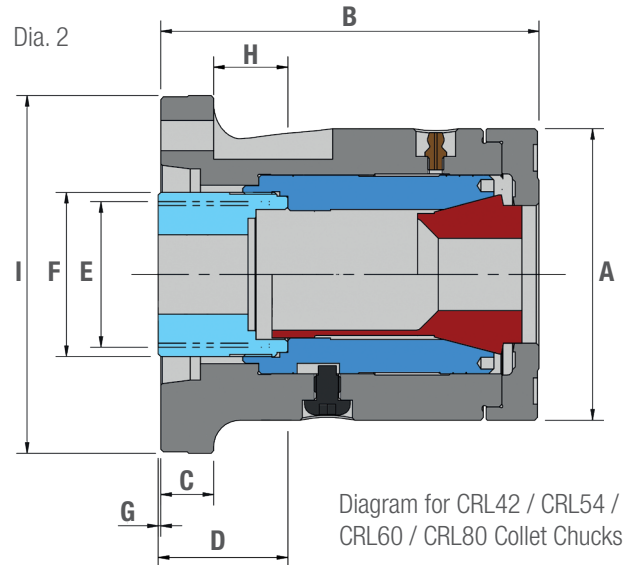
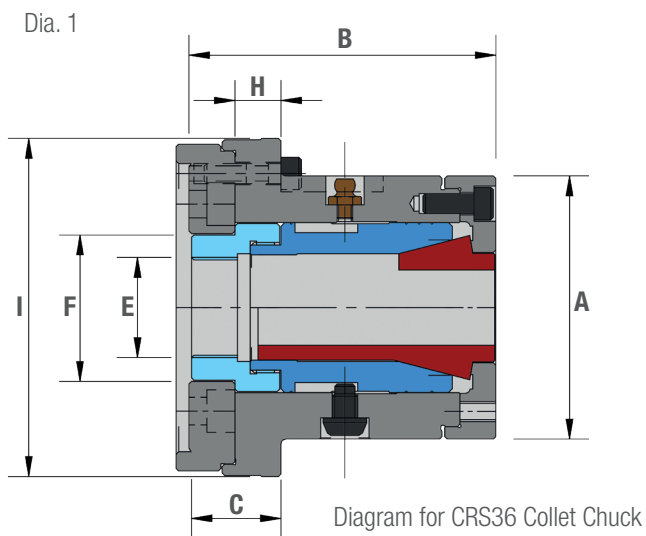
Ideal for first operation work as they have a 2-3mm gripping range enabling you to handle rough bar. Supplied either as smooth, serrated or super grip.



#### Rubberflex Collets\*\*\*

The same accuracy specification as spring collets. Elastic rubber-metal vulcanization allows a clamping range of +/- 1mm to the nominal diameter.

## Long Series Power Collet Chuck for Bar Machining



| KLAMP Type                          |                   | CRS36     | CRL42     |         |         | CRL54     | CRL60       |         |         | CRL80     |         |
|-------------------------------------|-------------------|-----------|-----------|---------|---------|-----------|-------------|---------|---------|-----------|---------|
| Mounting                            |                   | Z115      | Z140      | A5      | A6      | A6        | Z170        | A6      | A8      | Z220      | A8      |
| Part Number                         |                   | CRS36     | CRL42     | CRL42A5 | CRL42A6 | CRL54A6   | CRL60       | CRL60A6 | CRL60A8 | CRL80     | CRL80A8 |
| Spring Collet Type                  |                   | D171E     | D173E     |         |         | D853      | D185E       |         |         | D193E     |         |
| Spring Collet Gripping Range *      | Minimum           | 1.6       | 2         |         |         | 2         | 3           |         |         | 12        |         |
|                                     | Maximum           | 36        | 42        |         |         | 54        | 60          |         |         | 80        |         |
| Spring Collet Increments            |                   | 0.5       | 0.5       |         |         | 0.5       | 0.5         |         |         | 0.5       |         |
| Varibore Collet Type                |                   | D671      | D673      |         |         | D120      | D677        |         |         | -         |         |
| Varibore Collet Gripping range**    | Minimum           | 4         | 4         |         |         | 4         | 4           |         |         | -         |         |
|                                     | Maximum           | 36        | 42        |         |         | 53.9      | 60          |         |         | -         |         |
| Varibore Collet Increments          |                   | 2         | 2         |         |         | 3         | 2           |         |         | -         |         |
| Rubberflex Collet Type              |                   | -         | DRFC673   |         |         | -         | DRFC677     |         |         | -         |         |
| Rubberflex Collet Gripping Range*** | Minimum           | -         | 7*        |         |         | -         | 19*         |         |         | -         |         |
|                                     | Maximum           | -         | 43*       |         |         | -         | 65*         |         |         | -         |         |
| Rubberflex Collet Increments        |                   | -         | 2         |         |         | -         | 2           |         |         | -         |         |
| A                                   |                   | 105       | 110       |         |         | 138       | 138         |         |         | 190       |         |
| B                                   |                   | 125       | 128       | 143     | 145     | 166       | 143         | 160     | 156     | 170       | 176     |
| C                                   |                   | 18        | 20        | 20      | 30      | 27        | 24          | 27      | 36      | 19        | 25      |
| D                                   |                   | 35        | 49        |         |         | 48        | 48          |         |         | 63        |         |
| E Maximum                           |                   | M50 x 1.5 | M55 x 1.5 |         |         | M70 x 1.5 | M70 x 1.5   |         |         | M90 x 2.0 |         |
| F                                   |                   | 58        | 62        |         |         | 80        | 80          |         |         | 100       |         |
| G Maximum                           |                   | -1        | 16        | 1       | -1      | -2        | 15          | -2      | 2       | 48        | 42      |
| G Minimum                           |                   | -8        | 9         | -6      | -8      | -12       | 8           | -9      | -5      | 36        | 30      |
| H                                   |                   | 18        | 18        | 28      | 19      | 23        | 14          | 23      | 9       | 13        | 13      |
| I                                   |                   | 135       | 160       | 135     | 165     | 165       | 190         | 165     | 210     | 230       | 220     |
| Sleeve stroke                       |                   | 7         | 7         |         |         | 10        | 7           |         |         | 12        |         |
| Max. input force                    | kN                | 18        | 25        |         |         | 30        | 30          |         |         | 45        |         |
| Max. Gripping Force                 | kN                | 36        | 55        |         |         | 60        | 60          |         |         | 78        |         |
| Max. Speed                          | min <sup>-1</sup> | 7000      | 7100      |         |         | 6300      | 6300        |         |         | 4500      |         |
| Net Weight                          | kg                | 8         | 9         | 9.5     | 11      | 16        | 15.2        | 16      | 19      | 30        |         |
| Matching Kitagawa Cylinders         |                   | S1036     | S1246     |         |         | S1552     | S1552/S1875 |         |         | S2091     |         |

\* See pages 14-18 for more Spring Collet information.

\*\* See pages 22-23 for more Varibore Collet information.

\*\*\* DRFC673 Rubber-flex collets are only suitable for the CRL42 Collet chuck and are available in smooth and full grip versions (smooth version is only available for 11mm diameters and smaller). DRFC677 Rubber-flex collets are only suitable for the CRL60 Collet chuck and are available in smooth and full grip versions (smooth version is only available for 61mm diameters and larger). See pages 24-25 for more information.





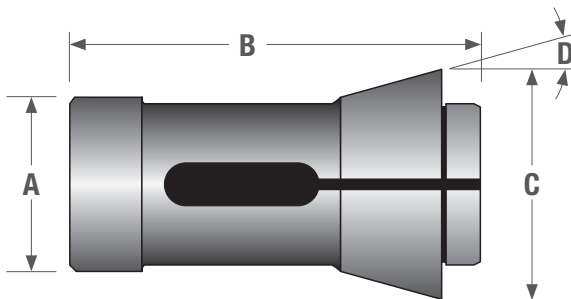
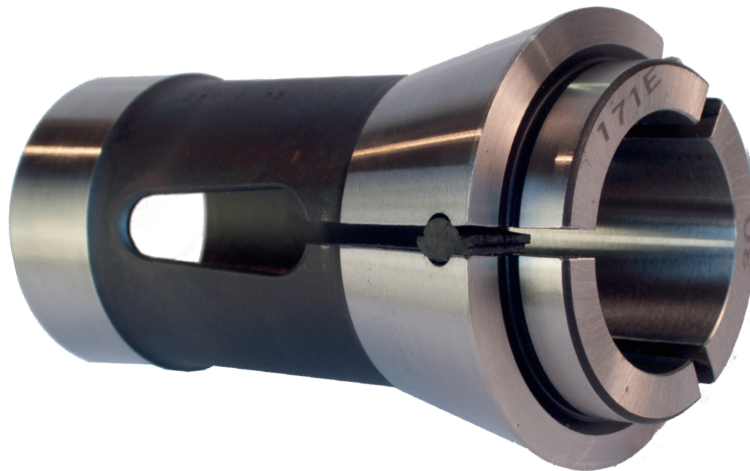
# Spring Collets

to suit **QC & C Series**



Spring Collets  
QC & C Series

## Spring Collets for CRS36 Collet Chucks



### D171E Spring Collets

- DIN 6343 Type: 8742
- Round standard shape only
- Specify which gripping surface you require Annular serrations or smooth
- 0.5mm sizes and other shapes available upon request

### Dimensions (Metric)

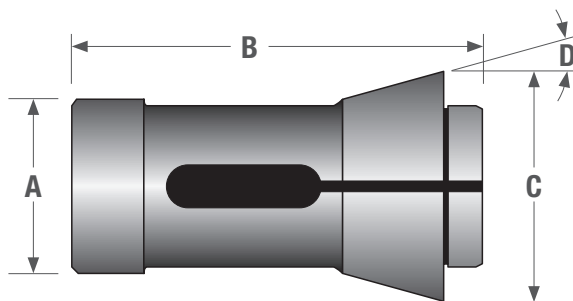
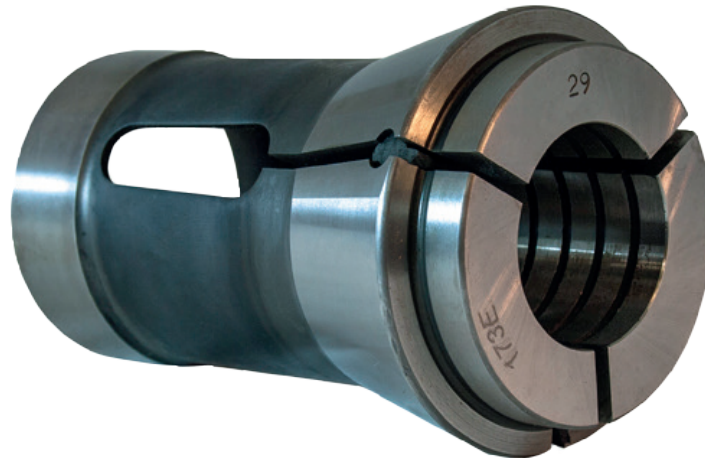
| A  | B  | C  | D   |
|----|----|----|-----|
| 42 | 94 | 55 | 15° |

| Gripping Diameter | Round     |
|-------------------|-----------|
| 2mm               | D171E R02 |
| 3mm               | D171E R03 |
| 4mm               | D171E R04 |
| 5mm               | D171E R05 |
| 6mm               | D171E R06 |
| 7mm               | D171E R07 |
| 8mm               | D171E R08 |
| 9mm               | D171E R09 |
| 10mm              | D171E R10 |
| 11mm              | D171E R11 |
| 12mm              | D171E R12 |
| 13mm              | D171E R13 |
| 14mm              | D171E R14 |
| 15mm              | D171E R15 |
| 16mm              | D171E R16 |
| 17mm              | D171E R17 |
| 18mm              | D171E R18 |
| 19mm              | D171E R19 |

| Gripping Diameter | Round     |
|-------------------|-----------|
| 20mm              | D171E R20 |
| 21mm              | D171E R21 |
| 22mm              | D171E R22 |
| 23mm              | D171E R23 |
| 24mm              | D171E R24 |
| 25mm              | D171E R25 |
| 26mm              | D171E R26 |
| 27mm              | D171E R27 |
| 28mm              | D171E R28 |
| 29mm              | D171E R29 |
| 30mm              | D171E R30 |
| 31mm              | D171E R31 |
| 32mm              | D171E R32 |
| 33mm              | D171E R33 |
| 34mm              | D171E R34 |
| 35mm              | D171E R35 |
| 36mm              | D171E R36 |

Emergency Collet with soft face and pilot hole 3mm diameter is available – Part No. **D171E-EMERGENCY**

## Spring Collets for CRL42 and QCRL42 Collet Chucks



### D173E Spring Collets

- DIN 6343 Type: 4728 (Also known as B42)
- Round, Hexagon or Square
- Specify which gripping surface you require Annular serrations or smooth
- 0.5mm sizes and other shapes available upon request

### Dimensions (Metric)

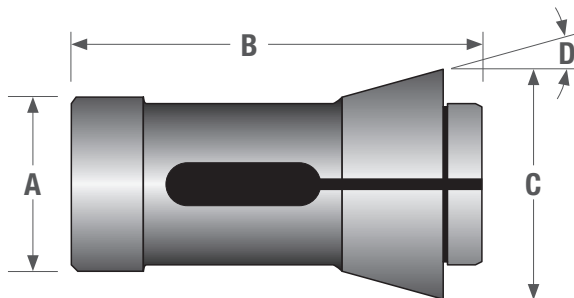
| A  | B  | C  | D   |
|----|----|----|-----|
| 48 | 94 | 60 | 15° |

| Gripping Diameter | Round     | Hexagon   | Square    |
|-------------------|-----------|-----------|-----------|
| 2mm               | D173E R02 | -         | -         |
| 3mm               | D173E R03 | -         | -         |
| 4mm               | D173E R04 | -         | -         |
| 5mm               | D173E R05 | D173E X05 | D173E S05 |
| 6mm               | D173E R06 | -         | D173E S06 |
| 7mm               | D173E R07 | D173E X07 | D173E S07 |
| 8mm               | D173E R08 | D173E X08 | D173E S08 |
| 9mm               | D173E R09 | -         | -         |
| 10mm              | D173E R10 | D173E X10 | D173E S10 |
| 11mm              | D173E R11 | D173E X11 | -         |
| 12mm              | D173E R12 | D173E X12 | D173E S12 |
| 13mm              | D173E R13 | D173E X13 | -         |
| 14mm              | D173E R14 | D173E X14 | D173E S14 |
| 15mm              | D173E R15 | D173E X15 | D173E S15 |
| 16mm              | D173E R16 | D173E X16 | D173E S16 |
| 17mm              | D173E R17 | D173E X17 | -         |
| 18mm              | D173E R18 | D173E X18 | D173E S18 |
| 19mm              | D173E R19 | D173E X19 | -         |
| 20mm              | D173E R20 | D173E X20 | D173E S20 |
| 21mm              | D173E R21 | -         | -         |
| 22mm              | D173E R22 | D173E X22 | D173E S22 |

| Gripping Diameter | Round     | Hexagon   | Square    |
|-------------------|-----------|-----------|-----------|
| 23mm              | D173E R23 | -         | -         |
| 24mm              | D173E R24 | D173E X24 | -         |
| 25mm              | D173E R25 | D173E X25 | D173E S25 |
| 26mm              | D173E R26 | D173E X26 | -         |
| 27mm              | D173E R27 | D173E X27 | -         |
| 28mm              | D173E R28 | -         | D173E S28 |
| 29mm              | D173E R29 | -         | -         |
| 30mm              | D173E R30 | D173E X30 | -         |
| 31mm              | D173E R31 | -         | -         |
| 32mm              | D173E R32 | D173E X32 | -         |
| 33mm              | D173E R33 | -         | -         |
| 34mm              | D173E R34 | -         | -         |
| 35mm              | D173E R35 | D173E X35 | -         |
| 36mm              | D173E R36 | D173E X36 | -         |
| 37mm              | D173E R37 | -         | -         |
| 38mm              | D173E R38 | -         | -         |
| 39mm              | D173E R39 | -         | -         |
| 40mm              | D173E R40 | -         | -         |
| 41mm              | D173E R41 | -         | -         |
| 42mm              | D173E R42 | -         | -         |

Emergency Collet with soft face and pilot hole 3mm diameter is available – Part No. **D173E-EMERGENCY**

## Spring collets for CRL60 and QCRL60 Collet Chucks



### D185E Spring Collets

- DIN 6343 Type: 4291 (Also known as B60)
- Round, Hexagon or Square
- Specify which gripping surface you require Annular serrations or smooth
- 0.5mm sizes and other shapes available upon request

### Dimensions (Metric)

| A  | B   | C  | D   |
|----|-----|----|-----|
| 66 | 110 | 84 | 15° |

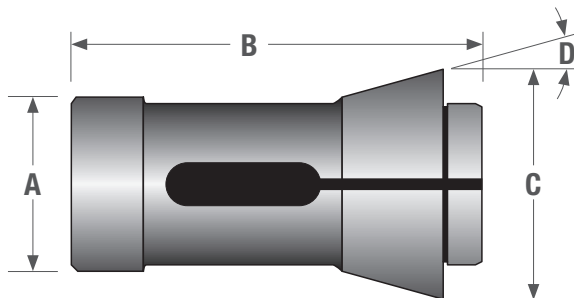
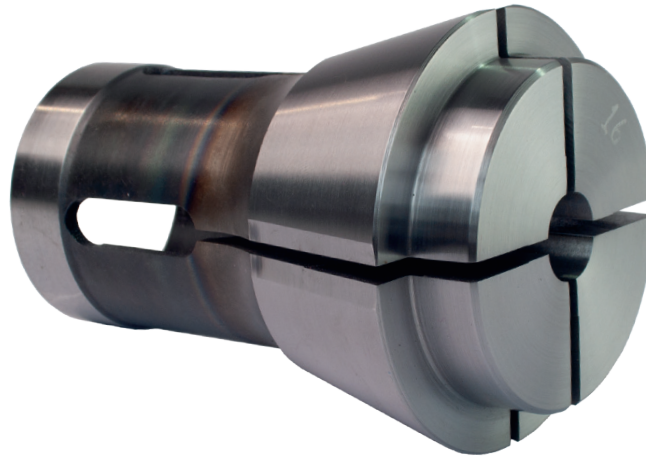
| Gripping Diameter | Round     | Hexagon   | Square    |
|-------------------|-----------|-----------|-----------|
| 3mm               | D185E R03 | -         | -         |
| 4mm               | D185E R04 | -         | -         |
| 5mm               | D185E R05 | D185E X05 | D185E S05 |
| 6mm               | D185E R06 | -         | D185E S06 |
| 7mm               | D185E R07 | D185E X07 | D185E S07 |
| 8mm               | D185E R08 | D185E X08 | D185E S08 |
| 9mm               | D185E R09 | -         | -         |
| 10mm              | D185E R10 | D185E X10 | D185E S10 |
| 11mm              | D185E R11 | D185E X11 | -         |
| 12mm              | D185E R12 | D185E X12 | D185E S12 |
| 13mm              | D185E R13 | D185E X13 | -         |
| 14mm              | D185E R14 | D185E X14 | D185E S14 |
| 15mm              | D185E R15 | D185E X15 | D185E S15 |
| 16mm              | D185E R16 | D185E X16 | D185E S16 |
| 17mm              | D185E R17 | D185E X17 | -         |
| 18mm              | D185E R18 | D185E X18 | D185E S18 |
| 19mm              | D185E R19 | D185E X19 | -         |
| 20mm              | D185E R20 | D185E X20 | D185E S20 |
| 21mm              | D185E R21 | -         | -         |
| 22mm              | D185E R22 | D185E X22 | D185E S22 |
| 23mm              | D185E R23 | -         | -         |
| 24mm              | D185E R24 | D185E X24 | -         |
| 25mm              | D185E R25 | D185E X25 | D185E S25 |
| 26mm              | D185E R26 | D185E X26 | -         |
| 27mm              | D185E R27 | D185E X27 | -         |
| 28mm              | D185E R28 | -         | -         |
| 29mm              | D185E R29 | -         | -         |
| 30mm              | D185E R30 | D185E X30 | D185E S30 |
| 31mm              | D185E R31 | -         | -         |

| Gripping Diameter | Round     | Hexagon   | Square    |
|-------------------|-----------|-----------|-----------|
| 32mm              | D185E R32 | D185E X32 | D185E S32 |
| 33mm              | D185E R33 | -         | -         |
| 34mm              | D185E R34 | -         | -         |
| 35mm              | D185E R35 | D185E X35 | D185E S35 |
| 36mm              | D185E R36 | D185E X36 | D185E S36 |
| 37mm              | D185E R37 | -         | -         |
| 38mm              | D185E R38 | -         | -         |
| 39mm              | D185E R39 | -         | -         |
| 40mm              | D185E R40 | -         | D185E S40 |
| 41mm              | D185E R41 | D185E X41 | -         |
| 42mm              | D185E R42 | -         | -         |
| 43mm              | D185E R43 | -         | -         |
| 44mm              | D185E R44 | -         | -         |
| 45mm              | D185E R45 | -         | -         |
| 46mm              | D185E R46 | -         | -         |
| 47mm              | D185E R47 | -         | -         |
| 48mm              | D185E R48 | -         | -         |
| 49mm              | D185E R49 | -         | -         |
| 50mm              | D185E R50 | D185E X50 | -         |
| 51mm              | D185E R51 | -         | -         |
| 52mm              | D185E R52 | -         | -         |
| 53mm              | D185E R53 | -         | -         |
| 54mm              | D185E R54 | -         | -         |
| 55mm              | D185E R55 | -         | -         |
| 56mm              | D185E R56 | -         | -         |
| 57mm              | D185E R57 | -         | -         |
| 58mm              | D185E R58 | -         | -         |
| 59mm              | D185E R59 | -         | -         |
| 60mm              | D185E R60 | -         | -         |

Emergency Collet with soft face and pilot hole 4mm diameter is available - Part No. **D185E-EMERGENCY**



## Spring Collets for CRL54 and QCRL54 Collet Chucks



### D853 Spring Collets

- Type: 1503
- Round standard shape only
- Specify which gripping surface you require Annular serrations or smooth
- 0.5mm sizes and other shapes available upon request

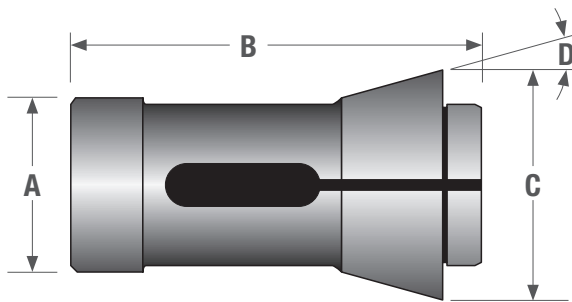
### Dimensions (Metric)

| A     | B     | C    | D       |
|-------|-------|------|---------|
| 60.28 | 125.4 | 88.1 | 15° 15' |

| Gripping Diameter | Round     | Gripping Diameter | Round     |
|-------------------|-----------|-------------------|-----------|
| 2mm               | D853E R02 | 29mm              | D853E R29 |
| 3mm               | D853E R03 | 30mm              | D853E R30 |
| 4mm               | D853E R04 | 31mm              | D853E R31 |
| 5mm               | D853E R05 | 32mm              | D853E R32 |
| 6mm               | D853E R06 | 33mm              | D853E R33 |
| 7mm               | D853E R07 | 34mm              | D853E R34 |
| 8mm               | D853E R08 | 35mm              | D853E R35 |
| 9mm               | D853E R09 | 36mm              | D853E R36 |
| 10mm              | D853E R10 | 37mm              | D853E R37 |
| 11mm              | D853E R11 | 38mm              | D853E R38 |
| 12mm              | D853E R12 | 39mm              | D853E R39 |
| 13mm              | D853E R13 | 40mm              | D853E R40 |
| 14mm              | D853E R14 | 41mm              | D853E R41 |
| 15mm              | D853E R15 | 42mm              | D853E R42 |
| 16mm              | D853E R16 | 43mm              | D853E R43 |
| 17mm              | D853E R17 | 44mm              | D853E R44 |
| 18mm              | D853E R18 | 45mm              | D853E R45 |
| 19mm              | D853E R19 | 46mm              | D853E R46 |
| 20mm              | D853E R20 | 47mm              | D853E R47 |
| 21mm              | D853E R21 | 48mm              | D853E R48 |
| 22mm              | D853E R22 | 49mm              | D853E R49 |
| 23mm              | D853E R23 | 50mm              | D853E R50 |
| 24mm              | D853E R24 | 51mm              | D853E R51 |
| 25mm              | D853E R25 | 52mm              | D853E R52 |
| 26mm              | D853E R26 | 53mm              | D853E R53 |
| 27mm              | D853E R27 | 54mm              | D853E R54 |
| 28mm              | D853E R28 |                   |           |

Emergency Collet with soft face and pilot hole 6mm dia. is available - Part No. **D853-EMERGENCY**

## Spring Collets for CRL80 and QCRL80 Collet Chucks



### D193E Spring Collets

- DIN 6343 Type: H-47
- Round standard shape only
- Specify which gripping surface you require – Annular Serrations or Smooth
- 0.5mm sizes and other shapes available upon request

### Dimensions (Metric)

| A  | B   | C   | D   |
|----|-----|-----|-----|
| 90 | 130 | 107 | 15° |

| Gripping Diameter | Round     |
|-------------------|-----------|
| 12mm              | D193E R12 |
| 13mm              | D193E R13 |
| 14mm              | D193E R14 |
| 15mm              | D193E R15 |
| 16mm              | D193E R16 |
| 17mm              | D193E R17 |
| 18mm              | D193E R18 |
| 19mm              | D193E R19 |
| 20mm              | D193E R20 |
| 21mm              | D193E R21 |
| 22mm              | D193E R22 |
| 23mm              | D193E R23 |
| 24mm              | D193E R24 |
| 25mm              | D193E R25 |
| 26mm              | D193E R26 |
| 27mm              | D193E R27 |
| 28mm              | D193E R28 |
| 29mm              | D193E R29 |
| 30mm              | D193E R30 |
| 31mm              | D193E R31 |
| 32mm              | D193E R32 |
| 33mm              | D193E R33 |
| 34mm              | D193E R34 |
| 35mm              | D193E R35 |
| 36mm              | D193E R36 |
| 37mm              | D193E R37 |
| 38mm              | D193E R38 |
| 39mm              | D193E R39 |
| 40mm              | D193E R40 |
| 41mm              | D193E R41 |
| 42mm              | D193E R42 |
| 43mm              | D193E R43 |
| 44mm              | D193E R44 |
| 45mm              | D193E R45 |
| 46mm              | D193E R46 |

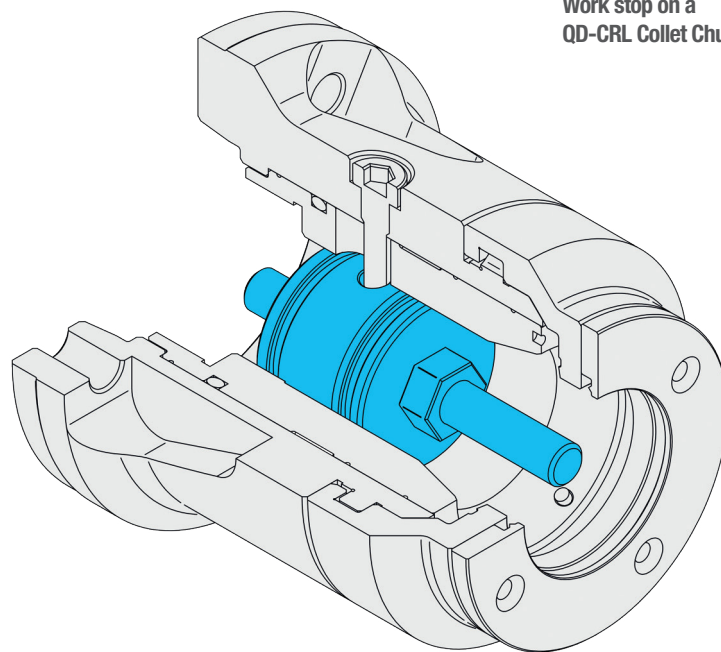
| Gripping Diameter | Round     |
|-------------------|-----------|
| 47mm              | D193E R47 |
| 48mm              | D193E R48 |
| 49mm              | D193E R49 |
| 50mm              | D193E R50 |
| 51mm              | D193E R51 |
| 52mm              | D193E R52 |
| 53mm              | D193E R53 |
| 54mm              | D193E R54 |
| 55mm              | D193E R55 |
| 56mm              | D193E R56 |
| 57mm              | D193E R57 |
| 58mm              | D193E R58 |
| 59mm              | D193E R59 |
| 60mm              | D193E R60 |
| 61mm              | D193E R61 |
| 62mm              | D193E R62 |
| 63mm              | D193E R63 |
| 64mm              | D193E R64 |
| 65mm              | D193E R65 |
| 66mm              | D193E R66 |
| 67mm              | D193E R67 |
| 68mm              | D193E R68 |
| 69mm              | D193E R69 |
| 70mm              | D193E R70 |
| 71mm              | D193E R71 |
| 72mm              | D193E R72 |
| 73mm              | D193E R73 |
| 74mm              | D193E R74 |
| 75mm              | D193E R75 |
| 76mm              | D193E R76 |
| 77mm              | D193E R77 |
| 78mm              | D193E R78 |
| 79mm              | D193E R79 |
| 80mm              | D193E R80 |

Emergency Collet with soft face and pilot hole 10mm dia. is available - Part No. **D193E-EMERGENCY**

## QC & C Series Standard Accessories

### Work Stops

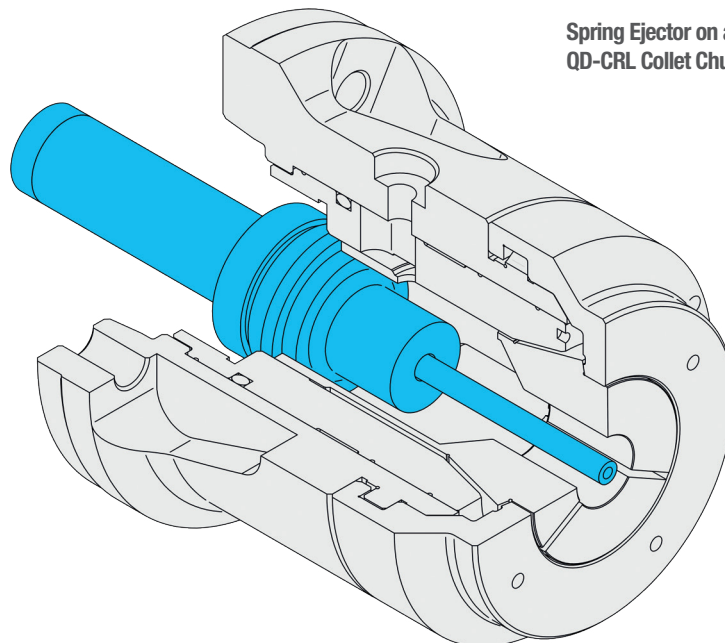
- Stops can be provided to allow for accurate z-axis positioning of short workpieces within the collet chuck.
- A threaded stud is provided for easy adjustment to suit your work piece
- All stops are easily installed from the front face utilising a side bolt to hold the stop securely in place.
- These stops can be installed on all QC & C series collet chucks.
- Full length spindle stops can also be provided for long work pieces, these can utilise the entire length of your machine spindle, please contact your Klamp supplier to see the maximum length stop your machine could accommodate.



Work stop on a  
QD-CRL Collet Chuck

### Spring Ejectors

- Standard spring ejectors for QC & C series are used for second-spindle operations to expel finished workpieces into the parts catcher.
- Many variants of spring ejector are available to suit your production process.
- Spring ejectors can be installed on all QC & C series collet chucks.
- Full length hydraulic or pneumatic ejectors can also be provided for long work pieces, this can utilise the entire length of your machine spindle, please contact your Klamp supplier to see the maximum length stop your machine could accommodate.

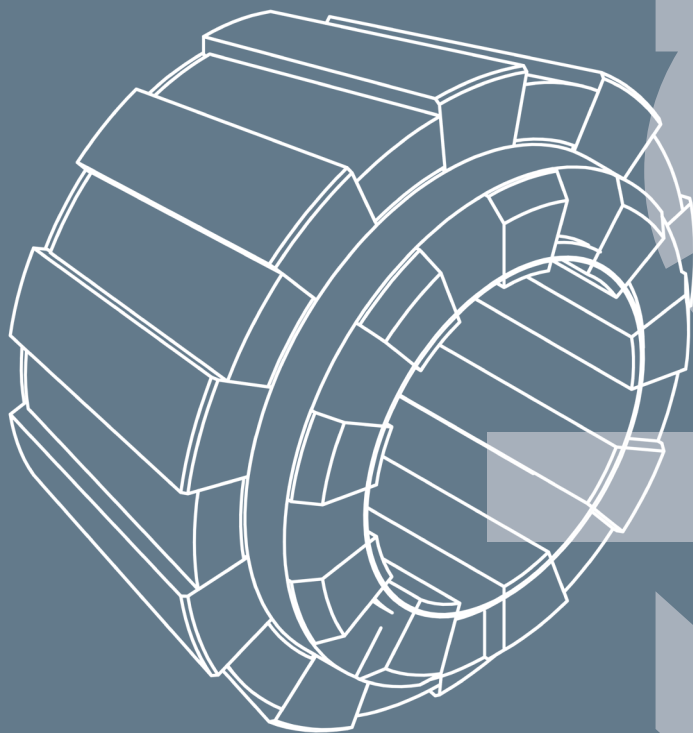
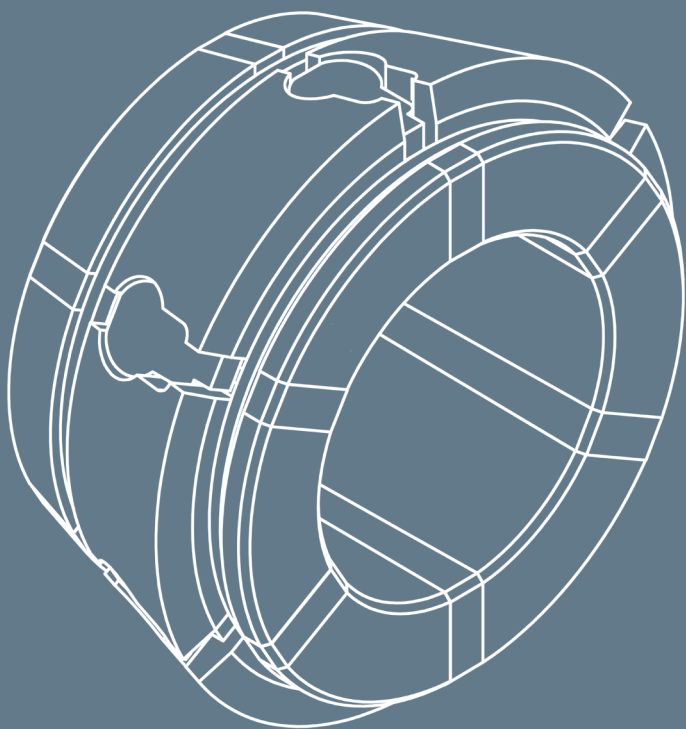


Spring Ejector on a  
QD-CRL Collet Chuck



# Varibore Collets

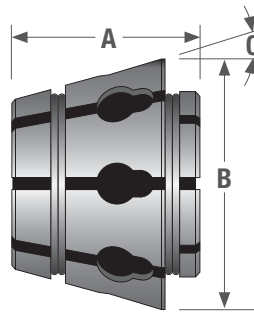
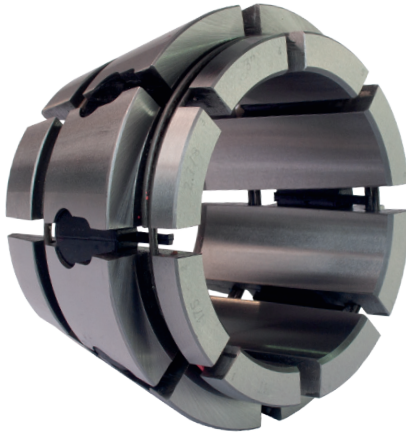
to suit **QC & C Series**



Varibore Collets  
QC & C Series



## Varibore Collets for CRS54, QCRL54, CRS66, QCRS66, QCRL66 & QCRS80 Collet Chucks



### Varibore Collets

- Round, Hexagon or Square
- Specify which gripping surface you require –  
Supergrip Serrations (Heavy duty), Annular Serrations or Smooth
- Other shapes available upon request

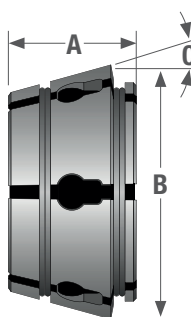
### Dimensions (Metric)

| Part No. | A    | B    | C   |
|----------|------|------|-----|
| D120     | 62.7 | 88   | 15° |
| D285     | 73.2 | 99.3 | 15° |
| D175     | 80   | 120  | 15° |

| Gripping Range |               | D120<br>for CRS54 & QCRL54 |           |           | D285<br>for CRS66, QCRS66 & QCRL66 |           |           | D175<br>for QCRS80 |           |            |
|----------------|---------------|----------------------------|-----------|-----------|------------------------------------|-----------|-----------|--------------------|-----------|------------|
| Inch           | mm            | Round                      | Hexagon   | Square    | Round                              | Hexagon   | Square    | Round              | Hexagon   | Square     |
| 1/16 - 3/16    | 1.58 - 4.76   | D120R-D01                  | -         | -         | -                                  | -         | -         | -                  | -         | -          |
| 1/8 - 1/4      | 3.17 - 6.35   | D120R-D02                  | D120X-D69 | D120S-D87 | D285R-E02                          | D285X-E69 | D285S-E87 | -                  | -         | -          |
| 1/4 - 3/8      | 6.35 - 9.52   | D120R-D03                  | D120X-D70 | D120S-D88 | D285R-E03                          | D285X-E70 | D285S-E88 | -                  | -         | -          |
| 3/8 - 1/2      | 9.52 - 12.70  | D120R-D04                  | D120X-D71 | D120S-D89 | D285R-E04                          | D285X-E71 | D285S-E89 | -                  | -         | -          |
| 1/2 - 5/8      | 12.70 - 15.87 | D120R-D05                  | D120X-D72 | D120S-D90 | D285R-E05                          | D285X-E72 | D285S-E90 | D175R-F05          | D175X-F72 | D175S-F100 |
| 5/8 - 3/4      | 15.87 - 19.05 | D120R-D06                  | D120X-D73 | D120S-D91 | D285R-E06                          | D285X-E73 | D285S-E91 | D175R-F06          | D175X-F73 | D175S-F101 |
| 3/4 - 7/8      | 19.05 - 22.22 | D120R-D07                  | D120X-D74 | D120S-D92 | D285R-E07                          | D285X-E74 | D285S-E92 | D175R-F07          | D175X-F74 | D175S-F102 |
| 7/8 - 1        | 22.22 - 25.40 | D120R-D08                  | D120X-D75 | D120S-D93 | D285R-E08                          | D285X-E75 | D285S-E93 | D175R-F08          | D175X-F75 | D175S-F103 |
| 1 - 1.1/8      | 25.40 - 28.57 | D120R-D09                  | D120X-D76 | D120S-D94 | D285R-E09                          | D285X-E76 | D285S-E94 | D175R-F09          | D175X-F76 | D175S-F104 |
| 1.1/8 - 1.1/4  | 28.57 - 31.75 | D120R-D10                  | D120X-D77 | D120S-D95 | D285R-E10                          | D285X-E77 | D285S-E95 | D175R-F10          | D175X-F77 | D175S-F105 |
| 1.1/4 - 1.3/8  | 31.75 - 34.92 | D120R-D11                  | D120X-D78 | D120S-D96 | D285R-E11                          | D285X-E78 | D285S-E96 | D175R-F11          | D175X-F78 | D175S-F106 |
| 1.3/8 - 1.1/2  | 34.92 - 38.10 | D120R-D12                  | D120X-D79 | D120S-D97 | D285R-E12                          | D285X-E79 | D285S-E97 | D175R-F12          | D175X-F79 | D175S-F107 |
| 1.1/2 - 1.5/8  | 38.10 - 41.27 | D120R-D13                  | D120X-D80 | D120S-D98 | D285R-E13                          | D285X-E80 | D285S-E98 | D175R-F13          | D175X-F80 | D175S-F108 |
| 1.5/8 - 1.3/4  | 41.27 - 44.45 | D120R-D14                  | D120X-D81 | -         | D285R-E14                          | D285X-E81 | D285S-E99 | D175R-F14          | D175X-F81 | D175S-F109 |
| 1.3/4 - 1.7/8  | 44.45 - 47.62 | D120R-D15                  | D120X-D82 | -         | D285R-E15                          | D285X-E82 | -         | D175R-F15          | D175X-F82 | D175S-F110 |
| 1.7/8 - 2      | 47.62 - 50.80 | D120R-D16                  | D120X-D83 | -         | D285R-E16                          | D285X-E83 | -         | D175R-F16          | D175X-F83 | D175S-F111 |
| 2 - 2.1/8      | 50.80 - 53.97 | D120R-D17                  | -         | -         | D285R-E17                          | D285X-E84 | -         | D175R-F17          | D175X-F84 | D175S-F112 |
| 2.1/8 - 2.1/4  | 53.97 - 57.15 | -                          | -         | -         | D285R-E18                          | D285X-E85 | -         | D175R-F18          | D175X-F85 | -          |
| 2.1/4 - 2.3/8  | 57.15 - 60.32 | -                          | -         | -         | D285R-E19                          | -         | -         | D175R-F19          | D175X-F86 | -          |
| 2.3/8 - 2.1/2  | 60.32 - 63.50 | -                          | -         | -         | D285R-E20                          | -         | -         | D175R-F20          | D175X-F87 | -          |
| 2.1/2 - 2.5/8  | 63.50 - 66.67 | -                          | -         | -         | D285R-E21                          | -         | -         | D175R-F21          | D175X-F88 | -          |
| 2.5/8 - 2.3/4  | 66.67 - 69.85 | -                          | -         | -         | -                                  | -         | -         | D175R-F22          | -         | -          |
| 2.3/4 - 2.7/8  | 69.85 - 73.02 | -                          | -         | -         | -                                  | -         | -         | D175R-F23          | -         | -          |
| 2.7/8 - 3      | 73.02 - 76.20 | -                          | -         | -         | -                                  | -         | -         | D175R-F24          | -         | -          |
| 3 - 3.1/8      | 76.20 - 79.37 | -                          | -         | -         | -                                  | -         | -         | D175R-F25          | -         | -          |

Emergency Collets with soft face and pilot hole is available for all types

## Varibore Collets for CRS36, CRL42, QCRL42, CRL60 & QCRL60 Collet Chucks



### Varibore Collets - Type: DIN 6343

- Round, Hexagon or Square
- Specify which gripping surface you require – Supergrip Serrations (Heavy duty), Annular serrations or Smooth
- Other shapes available upon request

### Dimensions (Metric)

| Part No. | A  | B    | C      |
|----------|----|------|--------|
| D671     | 38 | 56.5 | 14.75° |
| D673     | 39 | 61.5 | 14.75° |
| D677     | 45 | 85.5 | 14.75° |

| Gripping Range | D671 DIN<br>for CRS36 |          |          | D673 DIN<br>for CRL42 & QCRL42 |          |          | D677 DIN<br>for CRL60 & QCRL60 |          |          |
|----------------|-----------------------|----------|----------|--------------------------------|----------|----------|--------------------------------|----------|----------|
| mm             | Round                 | Hexagon  | Square   | Round                          | Hexagon  | Square   | Round                          | Hexagon  | Square   |
| 4 - 6          | D671-R06              | D671-X06 | D671-S06 | D673-R06                       | D673-X06 | D673-S06 | -                              | -        | -        |
| 6 - 8          | D671-R08              | D671-X08 | D671-S08 | D673-R08                       | D673-X08 | D673-S08 | D677-R08                       | D677-X08 | D677-S08 |
| 8 - 10         | D671-R10              | D671-X10 | D671-S10 | D673-R10                       | D673-X10 | D673-S10 | D677-R10                       | D677-X10 | D677-S10 |
| 10 - 12        | D671-R12              | D671-X12 | D671-S12 | D673-R12                       | D673-X12 | D673-S12 | D677-R12                       | D677-X12 | D677-S12 |
| 12 - 14        | D671-R14              | D671-X14 | D671-S14 | D673-R14                       | D673-X14 | D673-S14 | D677-R14                       | D677-X14 | D677-S14 |
| 14 - 16        | D671-R16              | D671-X16 | D671-S16 | D673-R16                       | D673-X16 | D673-S16 | D677-R16                       | D677-X16 | D677-S16 |
| 16 - 18        | D671-R18              | D671-X18 | D671-S18 | D673-R18                       | D673-X18 | D673-S18 | D677-R18                       | D677-X18 | D677-S18 |
| 18 - 20        | D671-R20              | D671-X20 | D671-S20 | D673-R20                       | D673-X20 | D673-S20 | D677-R20                       | D677-X20 | D677-S20 |
| 20 - 22        | D671-R22              | D671-X22 | D671-S22 | D673-R22                       | D673-X22 | D673-S22 | D677-R22                       | D677-X22 | D677-S22 |
| 22 - 24        | D671-R24              | D671-X24 | D671-S24 | D673-R24                       | D673-X24 | D673-S24 | D677-R24                       | D677-X24 | D677-S24 |
| 24 - 26        | D671-R26              | D671-X26 | -        | D673-R26                       | D673-X26 | D673-S26 | D677-R26                       | D677-X26 | D677-S26 |
| 26 - 28        | D671-R28              | D671-X28 | -        | D673-R28                       | D673-X28 | D673-S28 | D677-R28                       | D677-X28 | D677-S28 |
| 28 - 30        | D671-R30              | -        | -        | D673-R30                       | D673-X30 | D673-S30 | D677-R30                       | D677-X30 | D677-S30 |
| 30 - 32        | D671-R32              | -        | -        | D673-R32                       | D673-X32 | -        | D677-R32                       | D677-X32 | D677-S32 |
| 32 - 34        | D671-R34              | -        | -        | D673-R34                       | D673-X34 | -        | D677-R34                       | D677-X34 | D677-S34 |
| 34 - 36        | D671-R36              | -        | -        | D673-R36                       | D673-X36 | -        | D677-R36                       | D677-X36 | D677-S36 |
| 36 - 38        | -                     | -        | -        | D673-R38                       | -        | -        | D677-R38                       | D677-X38 | D677-S38 |
| 38 - 40        | -                     | -        | -        | D673-R40                       | -        | -        | D677-R40                       | D677-X40 | D677-S40 |
| 40 - 42        | -                     | -        | -        | D673-R42                       | -        | -        | D677-R42                       | D677-X42 | D677-S42 |
| 42 - 44        | -                     | -        | -        | -                              | -        | -        | D677-R44                       | D677-X44 | -        |
| 44 - 46        | -                     | -        | -        | -                              | -        | -        | D677-R46                       | D677-X46 | -        |
| 46 - 48        | -                     | -        | -        | -                              | -        | -        | D677-R48                       | D677-X48 | -        |
| 48 - 50        | -                     | -        | -        | -                              | -        | -        | D677-R50                       | D677-X50 | -        |
| 50 - 52        | -                     | -        | -        | -                              | -        | -        | D677-R52                       | D677-X52 | -        |
| 52 - 54        | -                     | -        | -        | -                              | -        | -        | D677-R54                       | -        | -        |
| 54 - 56        | -                     | -        | -        | -                              | -        | -        | D677-R56                       | -        | -        |
| 56 - 58        | -                     | -        | -        | -                              | -        | -        | D677-R58                       | -        | -        |
| 58 - 60        | -                     | -        | -        | -                              | -        | -        | D677-R60                       | -        | -        |
| 60 - 62        | -                     | -        | -        | -                              | -        | -        | -                              | -        | -        |
| 62 - 64        | -                     | -        | -        | -                              | -        | -        | -                              | -        | -        |
| 64 - 66        | -                     | -        | -        | -                              | -        | -        | -                              | -        | -        |
| 66 - 68        | -                     | -        | -        | -                              | -        | -        | -                              | -        | -        |
| 68 - 70        | -                     | -        | -        | -                              | -        | -        | -                              | -        | -        |
| 70 - 72        | -                     | -        | -        | -                              | -        | -        | -                              | -        | -        |
| 72 - 74        | -                     | -        | -        | -                              | -        | -        | -                              | -        | -        |
| 74 - 76        | -                     | -        | -        | -                              | -        | -        | -                              | -        | -        |
| 76 - 78        | -                     | -        | -        | -                              | -        | -        | -                              | -        | -        |
| 78 - 80        | -                     | -        | -        | -                              | -        | -        | -                              | -        | -        |

Emergency Collets with soft face and pilot hole is available for all types

## Rubber-Flex Collets

### Five spring collets into one Rubber-Flex collet

With same accuracy specification as standard spring collets, the Elastic rubber-metal vulcanization allows a clamping range of +/- 1mm to the nominal diameter. This reduces the need for numerous changeovers when

clamping different diameters, saving your time. Instead of purchasing four additional spring collets to cover the same diameter range you can save up to 50% in investment costs with one Rubber-Flex collet.



### Versatile

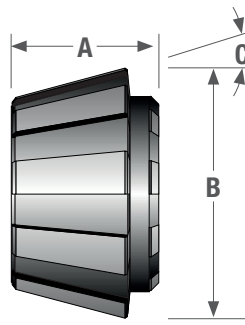
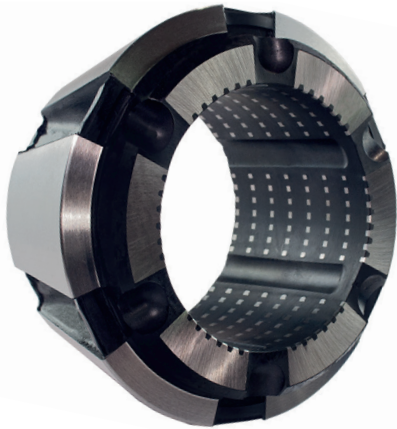
Rubber-Flex collets, type DRFC 673 (173E equivalent) and DRFC 677 (185E equivalent) are available in "Smooth" or "Full Grip" design. "Smooth" collets are ideal for 2nd Operation work or sensitive workpieces with surfaces that should not be marked. "Full Grip" collets have wider steel segments provide a higher rigidity. These double-serrated collets have an increased clamping force and are especially designed to machine bar material with wide clamping tolerances and high torque.

Due to the unique design Rubber-Flex collets also increase the diameters that your collet chuck can clamp. For example, a Q-CRL42 collet chuck can clamp up to 45mm from the standard 42mm and for a Q-CRL60 collet chuck can clamp up to 65mm from the standard 60mm using Rubber-Flex.

- Perfect sealing against coolant and swarf
- More surface area = higher torque transfer
- Coolant and temperature resistant up to 100° C
- Gentle surface clamping with parallel closing of steel segments



## Rubber-Flex Collets for CRL42, QCRL42, CRS60, CRL60, QCRL60 Collet Chucks



### Rubberflex Collets – Type: DIN 6343

- Round, Hexagon or Square
- Specify which gripping surface you require – Full Grip or Smooth
- Smooth Type – **DRFCXXX-RXX**
- Full Grip Type – **DRFCXXX-RXX/R**

### Dimensions (Metric)

| Part No. | A  | B    | C      |
|----------|----|------|--------|
| DRFC673  | 39 | 61.5 | 14.75° |
| DRFC677  | 45 | 85.5 | 14.75° |

| Gripping Range | DRFC673 DIN<br>for CRL42 & QCRL42 | DRFC677 DIN<br>for CRS60, CRL60 & QCRL60 |
|----------------|-----------------------------------|------------------------------------------|
| mm             | Round                             | Round                                    |
| 7 - 9          | DRFC673-R09                       | -                                        |
| 9 - 11         | DRFC673-R11                       | -                                        |
| 11 - 13        | DRFC673-R13*                      | -                                        |
| 13 - 15        | DRFC673-R15*                      | -                                        |
| 15 - 17        | DRFC673-R17*                      | -                                        |
| 17 - 19        | DRFC673-R19*                      | -                                        |
| 19 - 21        | DRFC673-R21*                      | DRFC677-R21*                             |
| 21 - 23        | DRFC673-R23*                      | DRFC677-R23*                             |
| 23 - 25        | DRFC673-R25*                      | DRFC677-R25*                             |
| 25 - 27        | DRFC673-R27*                      | DRFC677-R27*                             |
| 27 - 29        | DRFC673-R29*                      | DRFC677-R29*                             |
| 29 - 31        | DRFC673-R31*                      | DRFC677-R31*                             |
| 31 - 33        | DRFC673-R33*                      | DRFC677-R33*                             |
| 33 - 35        | DRFC673-R35*                      | DRFC677-R35*                             |
| 35 - 37        | DRFC673-R37*                      | DRFC677-R37*                             |
| 37 - 39        | DRFC673-R39*                      | DRFC677-R39*                             |
| 39 - 41        | DRFC673-R41*                      | DRFC677-R41*                             |
| 41 - 43        | DRFC673-R43*                      | DRFC677-R43*                             |
| 43 - 45        | DRFC673-R45                       | DRFC677-R45*                             |
| 45 - 47        | -                                 | DRFC677-R47*                             |
| 47 - 49        | -                                 | DRFC677-R49*                             |
| 49 - 51        | -                                 | DRFC677-R51*                             |
| 51 - 53        | -                                 | DRFC677-R53*                             |
| 53 - 55        | -                                 | DRFC677-R55*                             |
| 55 - 57        | -                                 | DRFC677-R57*                             |
| 57 - 59        | -                                 | DRFC677-R59*                             |
| 59 - 61        | -                                 | DRFC677-R61*                             |
| 61 - 63        | -                                 | DRFC677-R63                              |
| 63 - 65        | -                                 | DRFC677-R65                              |

\*Available as full grip & smooth specification, otherwise can only be supplied in smooth specification





# Collet Chucks

## D Series



Collet Chucks  
D Series

## Pull Back Series Power Collet Chuck for Bar Machining

### First Operation Collet Chuck

Klamp DHP collet chucks are suitable for collets which have a  $\pm 0.5\text{mm}$  gripping range. Allowing the collet chuck to handle rough and unfinished bar, preparing it for a high accuracy second operation.

### Pull Back Action

The Collet pulled into the chuck to close and pushed out to open. This action means that back stops cannot be provided and must be used where accurate axial positioning is not important.

### Problem Free Installation

Klamp collet chucks are provided with mounting bolts and a custom-machined drawtube connector allowing you to start using the Klamp collet chuck straight out of the box.

### Quick & Easy Mounting

Klamp collet chucks mount directly to the lathe spindle or use a precision adaptor plate to ensure a consistent mounting without the need for correction. The precision fit of the Klamp collet chuck enhances the rigidity of the overall system. The need for adjustment is minimal, meaning less machine down-time.

### Long Service Life

All Klamp collet chucks are case hardened, optimising the rigidity, strength and durability.

### Short Body/Wide Range

DC Varibore collets allow for a compact body design maximising the lathe work envelope. Gripping capacities of the series range from 4mm to 80mm.

### Low Profile

Small nose diameter to provide excellent tool clearance.

### Fully Sealed

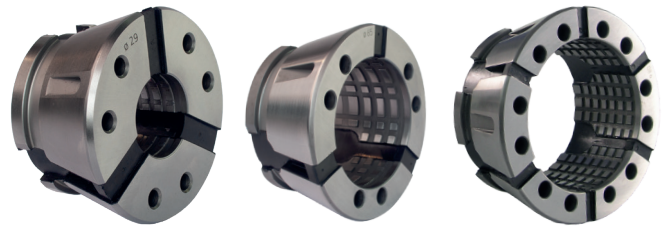
No grease required to operate the collet chuck. O-ring seals are incorporated within the design to prevent coolant and chip ingress.

### High Speed

Direct mount design ensures high concentricity that is suitable for higher speed operations that are not appropriate for conventional 3-jaw chuck due to the negative effects of centrifugal force.



### Suitable for DC Varibore Collet Types



Klamp DHP collet chucks accept DC Varibore Collets that have the same accuracy specification as spring collets whilst maintaining a gripping range of  $\pm 0.5\text{mm}$ . Supplied with either smooth or serrated gripping surface. Serrated collets are ideal for aggressive first operation gripping of rough bar work.

Vulcanized rubber between the hardened steel collet segments provides excellent protection against coolant and chip ingress. Counter boring and special profile shapes are available upon request.

### Ultra-Fast 10 Second Collet Changes



Insert & Unlock DC Collet



Remove DC Collet

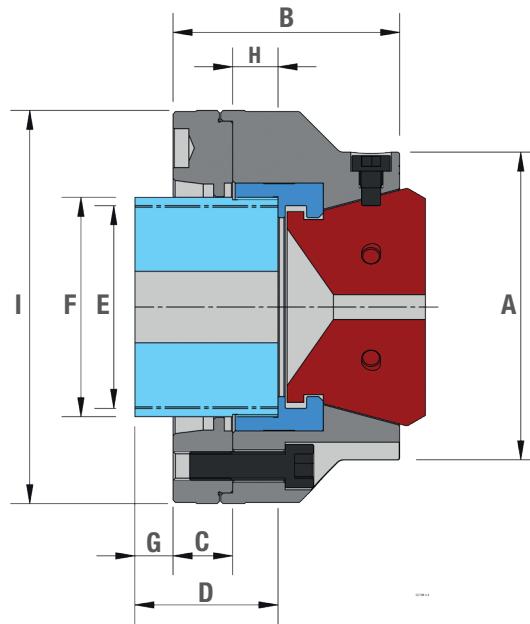


Insert DC Collet

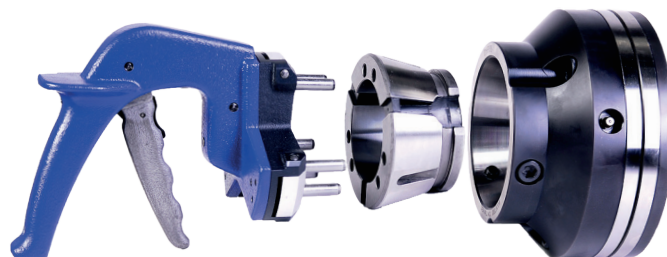


Lock & Remove DC

## Pull Back Series Power Collet Chuck for Bar Machining



| KLAMP Type                      |                   | DHP42                     |         | DHP52                     |           |         | DHP65                     |           |         | DHP80                     |           |            |          |
|---------------------------------|-------------------|---------------------------|---------|---------------------------|-----------|---------|---------------------------|-----------|---------|---------------------------|-----------|------------|----------|
| Mounting                        |                   | Z140                      | A5      | A5                        | A6        | A8      | A5                        | A6        | A8      | Z220                      | A6        | A8         | A11      |
| Part Number                     |                   | DHP42                     | DHP42A5 | DHP52A5                   | DHP52A6   | DHP52A8 | DHP65A5                   | DHP65A6   | DHP65A8 | DHP80                     | DHP80A6   | DHP80A8    | DHP80A11 |
| Varibore Collet Type            |                   | DC42                      |         | DC52                      |           |         | DC65                      |           |         | DC80                      |           |            |          |
| Varibore Collet Gripping range* | Minimum           | 4                         |         | 4                         |           |         | 4                         |           |         | 7                         |           |            |          |
|                                 | Maximum           | 42                        |         | 52                        |           |         | 65                        |           |         | 80                        |           |            |          |
| Varibore Collet Increments      |                   | 1                         |         | 1                         |           |         | 1                         |           |         | 1                         |           |            |          |
| A                               |                   | 100                       |         | 120                       |           |         | 130                       |           |         | 160                       |           |            |          |
| B                               |                   | 110                       |         | 89                        |           | 109     | 95                        |           | 115     | 109.5                     | 134.5     | 127.5      | 156.5    |
| C                               |                   | 15                        |         | 25                        |           | 45      | 25                        |           | 45      | NA                        | 25        | 18         | 47       |
| D                               |                   | 60                        |         | 60                        |           |         | 60                        |           |         | 70                        | 68        | 70         |          |
| E Maximum                       |                   | M58 x 2.0                 |         | M70 x 2.0                 | M85 x 2.0 |         | M70 x 2.0                 | M85 x 2.0 |         | M105 x 2.0                | M92 x 2.0 | M105 x 2.0 |          |
| F                               |                   | 65                        |         | 79                        |           | 92      | 79                        |           | 92      | 115                       | 100       | 115        |          |
| G Maximum                       |                   | 25                        | 10      | 20.5                      | 16        | -4      | 44                        |           | -4      | 32                        | 5         | 14         | -15      |
| G Minimum                       |                   | 20.5                      | 5.5     | 16                        | 11.5      | 0.5     | 39.5                      |           | 0.5     | 36.5                      | 9.5       | 18.5       | -10.5    |
| H                               |                   | 39.5                      |         | 19                        |           |         | 19                        |           |         | 38                        |           |            |          |
| I                               |                   | 150                       |         | 165                       |           | 210     | 165                       |           | 210     | 230                       |           | 280        |          |
| Sleeve stroke                   |                   | 4.5                       |         | 4.5                       |           |         | 4.5                       |           |         | 4.5                       |           |            |          |
| Max. input force                | kN                | 35                        |         | 40                        |           |         | 45                        |           |         | 50                        |           |            |          |
| Max. Gripping Force             | kN                | 60                        |         | 94                        |           |         | 105                       |           |         | 115                       |           |            |          |
| Max. Speed                      | min <sup>-1</sup> | 6000                      |         | 6500                      |           |         | 6000                      |           |         | 5500                      |           |            |          |
| Net Weight                      | kg                | 8                         | 9       | 11.3                      | 11.6      | 16      | 11.6                      | 11.8      | 16.3    | 24.6                      | 29.6      | 27.5       | 34       |
| Matching Kitagawa Cylinders     |                   | S1246<br>SS1246<br>SR1146 |         | S1552<br>SS1452<br>SR1453 |           |         | S1875<br>SS1771<br>SR1566 |           |         | S2091<br>SS1881<br>SR1781 |           |            |          |



## Fixed Length Series Power Collet Chuck for Bar Machining

### First & Second Operation Collet Chuck

Designed with a fixed length actuation system that ensures the collet is held stationary. Allowing the collet chuck to be used in bar feeding operations and highly accurate second operations. Klamp DKF collet chucks are suitable for collets which have a  $\pm 0.5\text{mm}$  gripping range.

### Fixed Length Collet

Workpiece remains in a fixed position during actuation, allowing for precise z-axis positioning. A tapered sleeve is pushed forward, compressing the collet and gripping the workpiece.

### Problem Free Installation

Klamp collet chucks are provided with mounting bolts and a custom-machined drawtube connector allowing you to start using the Klamp collet chuck straight out of the box.

### Quick & Easy Mounting

Klamp collet chucks mount directly to the lathe spindle or use a precision adaptor plate to ensure a consistent mounting without the need for correction. The precision fit of the Klamp collet chuck enhances the rigidity of the overall system. The need for adjustment is minimal, meaning less machine down-time.

### Long Service Life

All Klamp collet chucks are case hardened, optimising the rigidity, strength and durability.

### Short Body/Wide Range

DC Varibore collets allow for a compact body design maximising the lathe work envelope. Gripping capacities of the series range from 4mm to 65mm.

### Low-Profile Nose

Klamp DKF Series Collet Chucks have a small nose diameter for superior tool clearance.

### Fully Sealed

No grease required to operate the collet chuck. O-ring seals are incorporated within the design to prevent coolant and chip ingress.

### High Speed

Direct mount design ensures high concentricity that is suitable for higher speed operations that are not appropriate for conventional 3-jaw chuck due to the negative effects of centrifugal force.

### Designed for Bar Pushers/Barfeeders

Fixed-length Klamp collet chucks are designed to work with bar loaders and bar feeders by not interfering with the process of the bar feeder action.

### Ultra-Fast 10 Second Collet Changes



### Suitable for DC Varibore Collet Types



Klamp DKF collet chucks accept DC Varibore Collets that have the same accuracy specification as spring collets whilst maintaining a gripping range of  $\pm 0.5\text{mm}$ . Supplied with either smooth or serrated gripping surface. Serrated collets are ideal for aggressive first operation gripping of rough bar work.

Vulcanized rubber between the hardened steel collet segments provides excellent protection against coolant and chip ingress. Counter boring and special profile shapes are available upon request.



Insert & Unlock DC Collet



Remove DC Collet

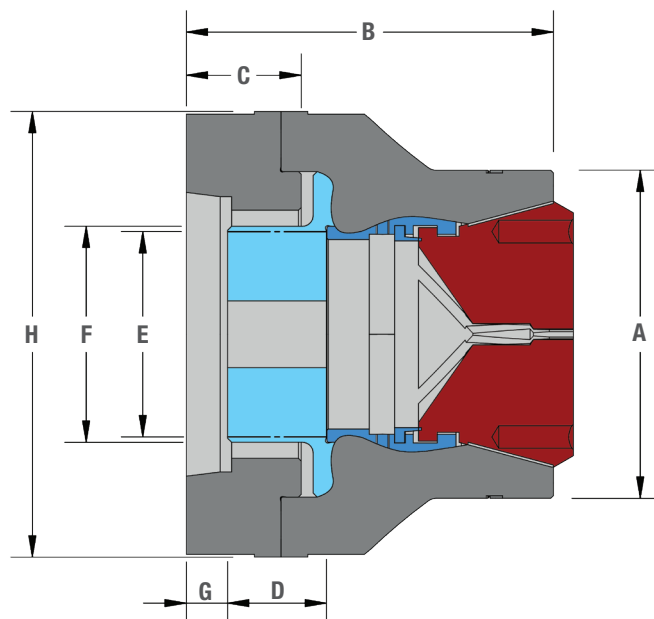


Insert DC Collet



Lock & Remove DC

## Fixed Length Series Power Collet Chuck for Bar Machining



| KLAMP Type                      | DKF42                     |         |         | DKF52                     |         |         | DKF65                     |                 |                 |         | DKF80                     |         |         |          |
|---------------------------------|---------------------------|---------|---------|---------------------------|---------|---------|---------------------------|-----------------|-----------------|---------|---------------------------|---------|---------|----------|
| Mounting                        | Z140                      | A5      | A6      | Z140                      | A5      | A6      | Z140                      | A5              | A6              | A8      | Z220                      | A6      | A8      | A11      |
| Part Number                     | DKF42                     | DKF42A5 | DKF42A6 | DKF52                     | DKF52A5 | DKF52A6 | DKF65                     | DKF65A5         | DKF65A6         | DKF65A8 | DKF80                     | DKF80A6 | DKF80A8 | DKF80A11 |
| Varibore Collet Type            | DC42                      |         |         | DC52                      |         |         | DC65                      |                 |                 |         | DC80                      |         |         |          |
| Varibore Collet Gripping range* | Min.                      | 3       |         | 4                         |         |         | 4                         |                 |                 |         | 5                         |         |         |          |
|                                 | Max.                      | 42      |         | 52                        |         |         | 65                        |                 |                 |         | 80                        |         |         |          |
| Varibore Collet Increments      | 1                         |         |         | 1                         |         |         | 1                         |                 |                 |         | 1                         |         |         |          |
| A                               | 103                       |         |         | 106                       |         |         | 123                       |                 |                 |         | 138                       |         |         |          |
| B                               | 121                       |         |         | 132                       | 137     |         | 137.5                     |                 |                 | 161.5   | 146.2                     | 164.25  | 142     | 186.25   |
| C                               | 42.5                      |         |         | 44.5                      | 49.5    |         | 43                        |                 |                 | 67      | 50                        | 67.8    | 45.75   | 47       |
| D                               | 30.5                      |         |         | 31                        |         |         | 31                        |                 |                 |         | 51.5                      |         |         |          |
| E Maximum                       | M50<br>x<br>2.0           |         |         | M60<br>x<br>2.0           |         |         | M75<br>x<br>2.0           | M74<br>x<br>2.0 | M75<br>x<br>2.0 |         | M80<br>x<br>2.0           |         |         |          |
| F                               | 66                        |         |         | 68                        |         |         | 81                        | 79.5            | 81              | 81      | 97                        |         |         |          |
| G Maximum                       | 12                        | 17      |         | 14                        | 24      |         | 10.5                      | 15.5            |                 | 39.5    | 2                         | 27      | 4.75    | 49       |
| G Minimum                       | 7.5                       | 12.5    |         | 9.5                       | 19.5    |         | 6                         | 11              |                 | 35      | 2.5                       | 22.5    | 0.25    | 44.5     |
| H                               | 152                       | 157     |         | 162                       |         |         | 167                       |                 |                 | 201.5   | 232                       |         | 207     | 280      |
| Sleeve stroke                   | 4.5                       |         |         | 4.5                       |         |         | 4.5                       |                 |                 |         | 4.5                       |         |         |          |
| Max. input force                | kN                        | 40      |         | 40                        |         |         | 45                        |                 |                 |         | 50                        |         |         |          |
| Max. Gripping Force             | kN                        | 94      |         | 94                        |         |         | 105                       |                 |                 |         | 114                       |         |         |          |
| Max. Speed                      | min <sup>-1</sup>         | 6500    |         | 6500                      |         |         | 6000                      |                 |                 |         | 5000                      |         |         |          |
| Net Weight                      | kg                        | 11      |         | 12                        |         |         | 13                        | 14              | 13              | 19      | 22                        | 27      | 21      | 34       |
| Matching Kitagawa Cylinders     | S1246<br>SS1246<br>SR1146 |         |         | S1552<br>SS1452<br>SR1453 |         |         | S1875<br>SS1770<br>SR1566 |                 |                 |         | S2091<br>SS1881<br>SR1781 |         |         |          |

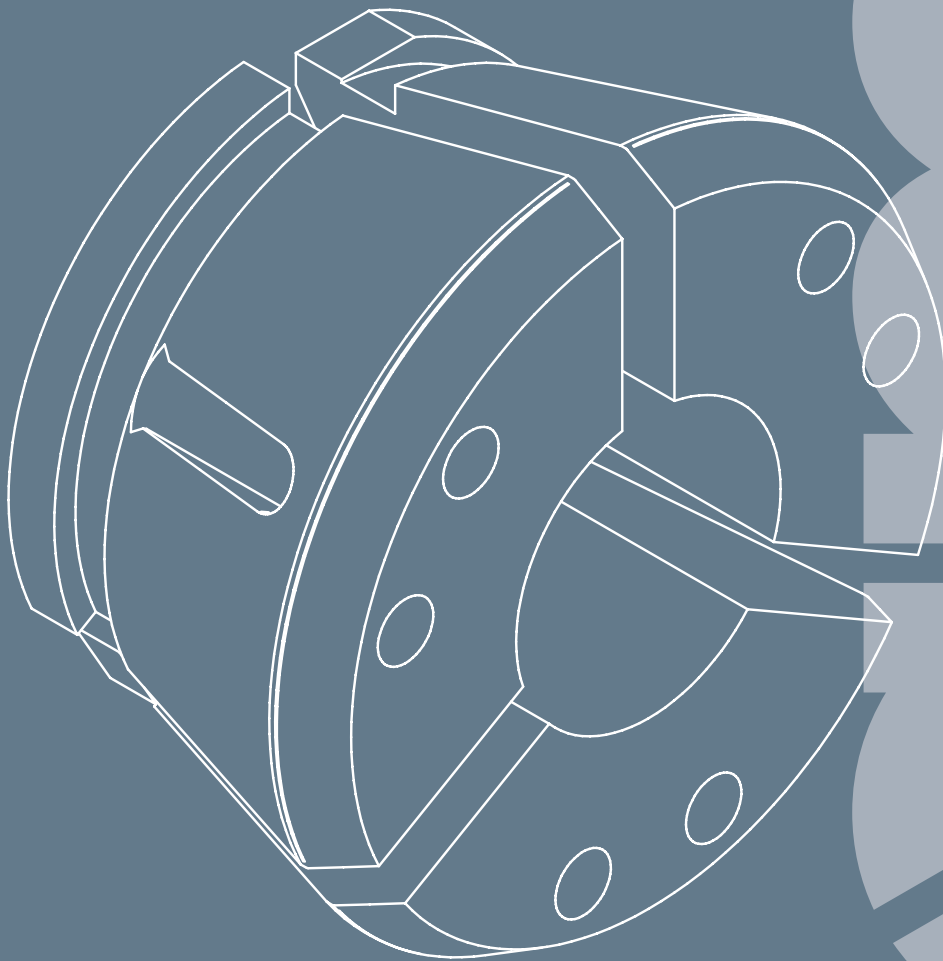






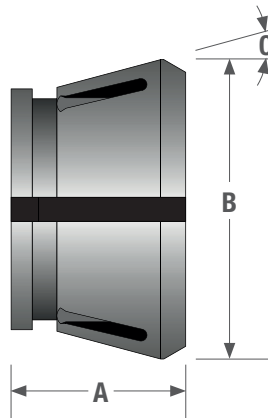
# DC Collets

to suit **D Series**



DC Collets  
D Series

## DC Quick Change Collets to Suit DHP42 Collet Chucks



### DC42 Varibore Collets

- Round, Hexagon, Square or Emergency types available
- Please specify which gripping surface you require – Serrated or Smooth
- Clamping tolerance of +/- 0.5mm
- Counter boring and special profile shapes are available upon request

### Dimensions (Metric)

| Part No. | A  | B    | C   |
|----------|----|------|-----|
| DC42     | 47 | 79.3 | 15° |
| DC42S    | 42 | 79.3 | 15° |

### DC42 Round Collets

| Nominal Gripping Diameter | Serrated Part Number | Smooth Part Number |
|---------------------------|----------------------|--------------------|
| 3mm                       | -                    | DC42S-R03          |
| 4mm                       | -                    | DC42S-R04          |
| 5mm                       | -                    | DC42S-R05          |
| 6mm                       | -                    | DC42S-R06          |
| 7mm                       | -                    | DC42S-R07          |
| 8mm                       | DC42-R08*            | DC42S-R08          |
| 9mm                       | DC42-R09*            | DC42S-R09          |
| 10mm                      | DC42-R10*            | DC42S-R10          |
| 11mm                      | DC42-R11             | DC42S-R11          |
| 12mm                      | DC42-R12             | DC42S-R12          |
| 13mm                      | DC42-R13             | DC42S-R13          |
| 14mm                      | DC42-R14             | DC42S-R14          |
| 15mm                      | DC42-R15             | DC42S-R15          |
| 16mm                      | DC42-R16             | DC42S-R16          |

| Nominal Gripping Diameter | Serrated Part Number | Smooth Part Number |
|---------------------------|----------------------|--------------------|
| 17mm                      | DC42-R17             | DC42S-R17          |
| 18mm                      | DC42-R18             | DC42S-R18          |
| 19mm                      | DC42-R19             | DC42S-R19          |
| 20mm                      | DC42-R20             | DC42S-R20          |
| 21mm                      | DC42-R21             | DC42S-R21          |
| 22mm                      | DC42-R22             | DC42S-R22          |
| 23mm                      | DC42-R23             | DC42S-R23          |
| 24mm                      | DC42-R24             | DC42S-R24          |
| 25mm                      | DC42-R25             | DC42S-R25          |
| 26mm                      | DC42-R26             | DC42S-R26          |
| 27mm                      | DC42-R27             | DC42S-R27          |
| 28mm                      | DC42-R28             | DC42S-R28          |
| 29mm                      | DC42-R29             | DC42S-R29          |

| Nominal Gripping Diameter | Serrated Part Number | Smooth Part Number |
|---------------------------|----------------------|--------------------|
| 30mm                      | DC42-R30             | DC42S-R30          |
| 31mm                      | DC42-R31             | DC42S-R31          |
| 32mm                      | DC42-R32             | DC42S-R32          |
| 33mm                      | DC42-R33             | DC42S-R33          |
| 34mm                      | DC42-R34             | DC42S-R34          |
| 35mm                      | DC42-R35             | DC42S-R35          |
| 36mm                      | DC42-R36             | DC42S-R36          |
| 37mm                      | DC42-R37             | DC42S-R37          |
| 38mm                      | DC42-R38             | DC42S-R38          |
| 39mm                      | DC42-R39             | DC42S-R39          |
| 40mm                      | DC42-R40             | DC42S-R40          |
| 41mm                      | DC42-R41             | DC42S-R41          |
| 42mm                      | DC42-R42             | DC42S-R42          |

\* Radial grooves only - larger sizes have axial and radial grooves

### DC42 Hexagon Collets

Available from 7mm to 38mm across flats sides of the hexagon in 1mm increments. Part number is **DC42-X\*\***. Please state which size you require, smooth (7-38mm) or serrated (8-38mm) gripping surface is available.

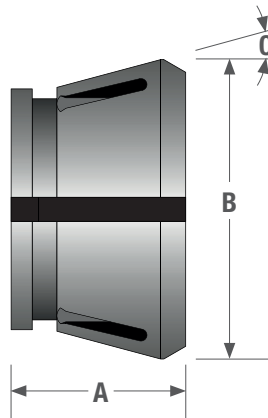
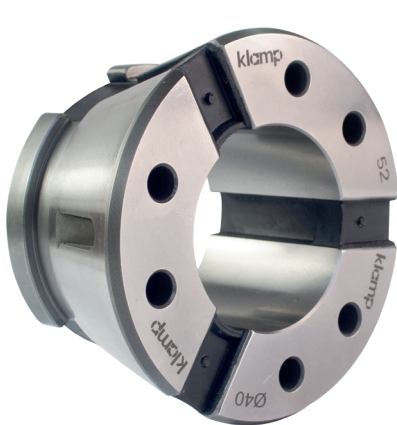
### DC42 Square Collets

Available from 7mm to 28mm across flats sides of the square in 1mm increments. Part number is **DC42-S\*\***. Please state which size you require, smooth (7-28mm) or serrated (8-28mm) gripping surface is available.

### DC42 Emergency Collets

Available only with 5mm, 15mm or 30mm pilot holes. Part number is **DC42-E\*\***. Please state which size you require.

## DC Quick Change Collets to Suit DHP52 Collet Chucks



### DC52 Varibore Collets

- Round, Hexagon, Square or Emergency types available
- Please specify which gripping surface you require – Serrated or Smooth
- Clamping tolerance of +/- 0.5mm
- Counter boring and special profile shapes are available upon request

### Dimensions (Metric)

| Part No. | A  | B    | C   |
|----------|----|------|-----|
| DC52     | 46 | 79.2 | 15° |

### DC52 Round Collets

| Nominal Gripping Diameter | Serrated Part Number | Smooth Part Number |
|---------------------------|----------------------|--------------------|
| 3mm                       | -                    | DC52S-R03          |
| 4mm                       | -                    | DC52S-R04          |
| 5mm                       | -                    | DC52S-R05          |
| 6mm                       | -                    | DC52S-R06          |
| 7mm                       | -                    | DC52S-R07          |
| 8mm                       | DC52-R08*            | DC52S-R08          |
| 9mm                       | DC52-R09*            | DC52S-R09          |
| 10mm                      | DC52-R10*            | DC52S-R10          |
| 11mm                      | DC52-R11             | DC52S-R11          |
| 12mm                      | DC52-R12             | DC52S-R12          |
| 13mm                      | DC52-R13             | DC52S-R13          |
| 14mm                      | DC52-R14             | DC52S-R14          |
| 15mm                      | DC52-R15             | DC52S-R15          |
| 16mm                      | DC52-R16             | DC52S-R16          |
| 17mm                      | DC52-R17             | DC52S-R17          |
| 18mm                      | DC52-R18             | DC52S-R18          |
| 19mm                      | DC52-R19             | DC52S-R19          |

| Nominal Gripping Diameter | Serrated Part Number | Smooth Part Number |
|---------------------------|----------------------|--------------------|
| 20mm                      | DC52-R20             | DC52S-R20          |
| 21mm                      | DC52-R21             | DC52S-R21          |
| 22mm                      | DC52-R22             | DC52S-R22          |
| 23mm                      | DC52-R23             | DC52S-R23          |
| 24mm                      | DC52-R24             | DC52S-R24          |
| 25mm                      | DC52-R25             | DC52S-R25          |
| 26mm                      | DC52-R26             | DC52S-R26          |
| 27mm                      | DC52-R27             | DC52S-R27          |
| 28mm                      | DC52-R28             | DC52S-R28          |
| 29mm                      | DC52-R29             | DC52S-R29          |
| 30mm                      | DC52-R30             | DC52S-R30          |
| 31mm                      | DC52-R31             | DC52S-R31          |
| 32mm                      | DC52-R32             | DC52S-R32          |
| 33mm                      | DC52-R33             | DC52S-R33          |
| 34mm                      | DC52-R34             | DC52S-R34          |
| 35mm                      | DC52-R35             | DC52S-R35          |
| 36mm                      | DC52-R36             | DC52S-R36          |

| Nominal Gripping Diameter | Serrated Part Number | Smooth Part Number |
|---------------------------|----------------------|--------------------|
| 37mm                      | DC52-R37             | DC52S-R37          |
| 38mm                      | DC52-R38             | DC52S-R38          |
| 39mm                      | DC52-R39             | DC52S-R39          |
| 40mm                      | DC52-R40             | DC52S-R40          |
| 41mm                      | DC52-R41             | DC52S-R41          |
| 42mm                      | DC52-R42             | DC52S-R42          |
| 43mm                      | DC52-R43             | DC52S-R43          |
| 44mm                      | DC52-R44             | DC52S-R44          |
| 45mm                      | DC52-R45             | DC52S-R45          |
| 46mm                      | DC52-R46             | DC52S-R46          |
| 47mm                      | DC52-R47             | DC52S-R47          |
| 48mm                      | DC52-R48             | DC52S-R48          |
| 49mm                      | DC52-R49             | DC52S-R49          |
| 50mm                      | DC52-R50             | DC52S-R50          |
| 51mm                      | DC52-R51             | DC52S-R51          |
| 52mm                      | DC52-R52             | DC52S-R52          |

\* Radial grooves only - larger sizes have axial and radial grooves

### DC52 Hexagon Collets

Available from 7mm to 45mm across flats sides of the hexagon in 1mm increments. Part number is **DC52-X\*\***. Please state which size you require, smooth (7-45mm) or serrated (8-45mm) gripping surface is available.

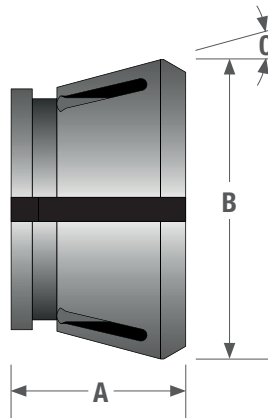
### DC52 Square Collets

Available from 7mm to 36mm across flats sides of the square in 1mm increments. Part number is **DC52-S\*\***. Please state which size you require, smooth (7-36mm) or serrated (8-36mm) gripping surface is available.

### DC52 Emergency Collets

Available only with 5mm, 15mm or 30mm pilot holes. Part number is **DC52-E\*\***. Please state which size you require.

## DC Quick Change Collets to Suit DHP65/DHF65/DRF65 Collet Chucks



### DC65 Varibore Collets

- Round, Hexagon, Square or Emergency types available
- Please specify which gripping surface you require – Serrated or Smooth
- Clamping tolerance of  $\pm 0.5\text{mm}$
- Counter boring and special profile shapes are available upon request

### Dimensions (Metric)

| Part No. | A  | B    | C   |
|----------|----|------|-----|
| DC65     | 58 | 99.5 | 15° |
| DC65S    | 53 | 99.5 | 15° |

### DC65 Round Collets

| Nominal Gripping Diameter | Serrated Part Number | Smooth Part Number |
|---------------------------|----------------------|--------------------|
| 4mm                       | -                    | DC65S-R04          |
| 5mm                       | -                    | DC65S-R05          |
| 6mm                       | -                    | DC65S-R06          |
| 7mm                       | -                    | DC65S-R07          |
| 8mm                       | DC65-R08*            | DC65S-R08          |
| 9mm                       | DC65-R09*            | DC65S-R09          |
| 10mm                      | DC65-R10*            | DC65S-R10          |
| 11mm                      | DC65-R11             | DC65S-R11          |
| 12mm                      | DC65-R12             | DC65S-R12          |
| 13mm                      | DC65-R13             | DC65S-R13          |
| 14mm                      | DC65-R14             | DC65S-R14          |
| 15mm                      | DC65-R15             | DC65S-R15          |
| 16mm                      | DC65-R16             | DC65S-R16          |
| 17mm                      | DC65-R17             | DC65S-R17          |
| 18mm                      | DC65-R18             | DC65S-R18          |
| 19mm                      | DC65-R19             | DC65S-R19          |
| 20mm                      | DC65-R20             | DC65S-R20          |
| 21mm                      | DC65-R21             | DC65S-R21          |
| 22mm                      | DC65-R22             | DC65S-R22          |
| 23mm                      | DC65-R23             | DC65S-R23          |
| 24mm                      | DC65-R24             | DC65S-R24          |

| Nominal Gripping Diameter | Serrated Part Number | Smooth Part Number |
|---------------------------|----------------------|--------------------|
| 25mm                      | DC65-R25             | DC65S-R25          |
| 26mm                      | DC65-R26             | DC65S-R26          |
| 27mm                      | DC65-R27             | DC65S-R27          |
| 28mm                      | DC65-R28             | DC65S-R28          |
| 29mm                      | DC65-R29             | DC65S-R29          |
| 30mm                      | DC65-R30             | DC65S-R30          |
| 31mm                      | DC65-R31             | DC65S-R31          |
| 32mm                      | DC65-R32             | DC65S-R32          |
| 33mm                      | DC65-R33             | DC65S-R33          |
| 34mm                      | DC65-R34             | DC65S-R34          |
| 35mm                      | DC65-R35             | DC65S-R35          |
| 36mm                      | DC65-R36             | DC65S-R36          |
| 37mm                      | DC65-R37             | DC65S-R37          |
| 38mm                      | DC65-R38             | DC65S-R38          |
| 39mm                      | DC65-R39             | DC65S-R39          |
| 40mm                      | DC65-R40             | DC65S-R40          |
| 41mm                      | DC65-R41             | DC65S-R41          |
| 42mm                      | DC65-R42             | DC65S-R42          |
| 43mm                      | DC65-R43             | DC65S-R43          |
| 44mm                      | DC65-R44             | DC65S-R44          |
| 45mm                      | DC65-R45             | DC65S-R45          |

| Nominal Gripping Diameter | Serrated Part Number | Smooth Part Number |
|---------------------------|----------------------|--------------------|
| 46mm                      | DC65-R46             | DC65S-R46          |
| 47mm                      | DC65-R47             | DC65S-R47          |
| 48mm                      | DC65-R48             | DC65S-R48          |
| 49mm                      | DC65-R49             | DC65S-R49          |
| 50mm                      | DC65-R50             | DC65S-R50          |
| 51mm                      | DC65-R51             | DC65S-R51          |
| 52mm                      | DC65-R52             | DC65S-R52          |
| 53mm                      | DC65-R53             | DC65S-R53          |
| 54mm                      | DC65-R54             | DC65S-R54          |
| 55mm                      | DC65-R55             | DC65S-R55          |
| 56mm                      | DC65-R56             | DC65S-R56          |
| 57mm                      | DC65-R57             | DC65S-R57          |
| 58mm                      | DC65-R58             | DC65S-R58          |
| 59mm                      | DC65-R59             | DC65S-R59          |
| 60mm                      | DC65-R60             | DC65S-R60          |
| 61mm                      | DC65-R61             | DC65S-R61          |
| 62mm                      | DC65-R62             | DC65S-R62          |
| 63mm                      | DC65-R63             | DC65S-R63          |
| 64mm                      | DC65-R64             | DC65S-R64          |
| 65mm                      | DC65-R65             | DC65S-R65          |

\* Radial grooves only - larger sizes have axial and radial grooves

### DC65 Hexagon Collets

Available from 7mm to 56mm across flats sides of the hexagon in 1mm increments. Part number is **DC65-X\*\***. Please state which size you require, smooth (7-56mm) or serrated (8-56mm) gripping surface is available.

### DC65 Square Collets

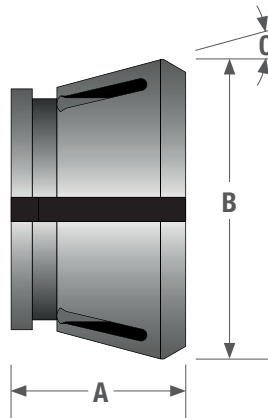
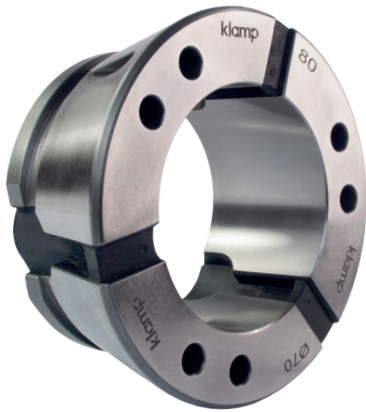
Available from 8mm to 46mm across flats sides of the square in 1mm increments. Part number is **DC65-S\*\***. Please state which size you require, smooth (7-46mm) or serrated (8-46mm) gripping surface is available.

### DC65 Emergency Collets

Available only with 5mm, 10mm, 20mm or 40mm pilot holes. Part number is **DC65-E\*\***. Please state which size you require.



## DC Quick change collets to suit DHP80/DHF80/DRF80 Collet chucks



### DC80 Varibore Collets

- Round, Hexagon, Square or Emergency types available
- Please specify which gripping surface you require – Serrated or Smooth
- Clamping tolerance of  $\pm 0.5\text{mm}$
- Counter boring and special profile shapes are available upon request

### Dimensions (Metric)

| Part No. | A  | B     | C   |
|----------|----|-------|-----|
| DC80     | 53 | 114.5 | 15° |

### DC80 Round Collets

| Nominal Gripping Diameter | Serrated Part Number | Smooth Part Number |
|---------------------------|----------------------|--------------------|
| 5mm                       | -                    | DC80S-R05          |
| 6mm                       | -                    | DC80S-R06          |
| 7mm                       | -                    | DC80S-R07          |
| 8mm                       | DC80-R08*            | DC80S-R08          |
| 9mm                       | DC80-R09*            | DC80S-R09          |
| 10mm                      | DC80-R10*            | DC80S-R10          |
| 11mm                      | DC80-R11             | DC80S-R11          |
| 12mm                      | DC80-R12             | DC80S-R12          |
| 13mm                      | DC80-R13             | DC80S-R13          |
| 14mm                      | DC80-R14             | DC80S-R14          |
| 15mm                      | DC80-R15             | DC80S-R15          |
| 16mm                      | DC80-R16             | DC80S-R16          |
| 17mm                      | DC80-R17             | DC80S-R17          |
| 18mm                      | DC80-R18             | DC80S-R18          |
| 19mm                      | DC80-R19             | DC80S-R19          |
| 20mm                      | DC80-R20             | DC80S-R20          |
| 21mm                      | DC80-R21             | DC80S-R21          |
| 22mm                      | DC80-R22             | DC80S-R22          |
| 23mm                      | DC80-R23             | DC80S-R23          |
| 24mm                      | DC80-R24             | DC80S-R24          |
| 25mm                      | DC80-R25             | DC80S-R25          |
| 26mm                      | DC80-R26             | DC80S-R26          |
| 27mm                      | DC80-R27             | DC80S-R27          |
| 28mm                      | DC80-R28             | DC80S-R28          |
| 29mm                      | DC80-R29             | DC80S-R29          |

| Nominal Gripping Diameter | Serrated Part Number | Smooth Part Number |
|---------------------------|----------------------|--------------------|
| 30mm                      | DC80-R30             | DC80S-R30          |
| 31mm                      | DC80-R31             | DC80S-R31          |
| 32mm                      | DC80-R32             | DC80S-R32          |
| 33mm                      | DC80-R33             | DC80S-R33          |
| 34mm                      | DC80-R34             | DC80S-R34          |
| 35mm                      | DC80-R35             | DC80S-R35          |
| 36mm                      | DC80-R36             | DC80S-R36          |
| 37mm                      | DC80-R37             | DC80S-R37          |
| 38mm                      | DC80-R38             | DC80S-R38          |
| 39mm                      | DC80-R39             | DC80S-R39          |
| 40mm                      | DC80-R40             | DC80S-R40          |
| 41mm                      | DC80-R41             | DC80S-R41          |
| 42mm                      | DC80-R42             | DC80S-R42          |
| 43mm                      | DC80-R43             | DC80S-R43          |
| 44mm                      | DC80-R44             | DC80S-R44          |
| 45mm                      | DC80-R45             | DC80S-R45          |
| 46mm                      | DC80-R46             | DC80S-R46          |
| 47mm                      | DC80-R47             | DC80S-R47          |
| 48mm                      | DC80-R48             | DC80S-R48          |
| 49mm                      | DC80-R49             | DC80S-R49          |
| 50mm                      | DC80-R50             | DC80S-R50          |
| 51mm                      | DC80-R51             | DC80S-R51          |
| 52mm                      | DC80-R52             | DC80S-R52          |
| 53mm                      | DC80-R53             | DC80S-R53          |
| 54mm                      | DC80-R54             | DC80S-R54          |

| Nominal Gripping Diameter | Serrated Part Number | Smooth Part Number |
|---------------------------|----------------------|--------------------|
| 55mm                      | DC80-R55             | DC80S-R55          |
| 56mm                      | DC80-R56             | DC80S-R56          |
| 57mm                      | DC80-R57             | DC80S-R57          |
| 58mm                      | DC80-R58             | DC80S-R58          |
| 59mm                      | DC80-R59             | DC80S-R59          |
| 60mm                      | DC80-R60             | DC80S-R60          |
| 61mm                      | DC80-R61             | DC80S-R61          |
| 62mm                      | DC80-R62             | DC80S-R62          |
| 63mm                      | DC80-R63             | DC80S-R63          |
| 64mm                      | DC80-R64             | DC80S-R64          |
| 65mm                      | DC80-R65             | DC80S-R65          |
| 66mm                      | DC80-R66             | DC80S-R66          |
| 67mm                      | DC80-R67             | DC80S-R67          |
| 68mm                      | DC80-R68             | DC80S-R68          |
| 69mm                      | DC80-R69             | DC80S-R69          |
| 70mm                      | DC80-R70             | DC80S-R70          |
| 71mm                      | DC80-R71             | DC80S-R71          |
| 72mm                      | DC80-R72             | DC80S-R72          |
| 73mm                      | DC80-R73             | DC80S-R73          |
| 74mm                      | DC80-R74             | DC80S-R74          |
| 75mm                      | DC80-R75             | DC80S-R75          |
| 76mm                      | DC80-R76             | DC80S-R76          |
| 77mm                      | DC80-R77             | DC80S-R77          |
| 78mm                      | DC80-R78             | DC80S-R78          |
| 79mm                      | DC80-R79             | DC80S-R79          |
| 80mm                      | DC80-R80             | DC80S-R80          |

\* Radial grooves only - larger sizes have axial and radial grooves

### DC80 Hexagon Collets

Available from 7mm to 68mm across flats sides of the hexagon in 1mm increments. Part number is **DC80-X\*\***. Please state which size you require, smooth (7-68mm) or serrated (8-68mm) gripping surface is available.

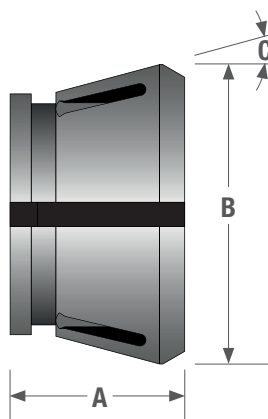
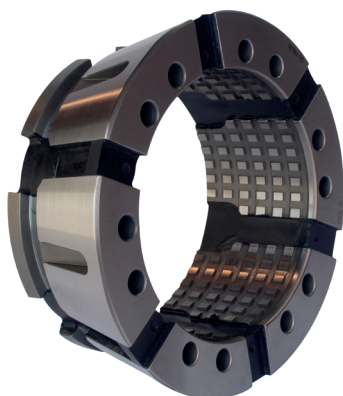
### DC80 Square Collets

Available from 7mm to 56mm across flats sides of the square in 1mm increments. Part number is **DC80-S\*\***. Please state which size you require, smooth (7-56mm) or serrated (8-56mm) gripping surface is available.

### DC80 Emergency Collets

Available only with 8mm, 20mm or 40mm or 60mm pilot holes. Part number is **DC80-E\*\***. Please state which size you require.

## DC Quick Change Collets



### DC100 Variabore Collets

- Round, Hexagon, Square or Emergency types available
- Please specify which gripping surface you require – Serrated or Smooth
- Clamping tolerance of  $\pm 0.5\text{mm}$
- Counter boring and special profile shapes are available upon request

### Dimensions (Metric)

| Part No. | A  | B     | C   |
|----------|----|-------|-----|
| DC100    | 59 | 144.5 | 15° |

### DC100 Round Collets

| Nominal Gripping Diameter | Serrated Part Number | Smooth Part Number |
|---------------------------|----------------------|--------------------|
| 16mm                      | DC100-R16            | DC100S-R16         |
| 17mm                      | DC100-R17            | DC100S-R17         |
| 18mm                      | DC100-R18            | DC100S-R18         |
| 19mm                      | DC100-R19            | DC100S-R19         |
| 20mm                      | DC100-R20            | DC100S-R20         |
| 21mm                      | DC100-R21            | DC100S-R21         |
| 22mm                      | DC100-R22            | DC100S-R22         |
| 23mm                      | DC100-R23            | DC100S-R23         |
| 24mm                      | DC100-R24            | DC100S-R24         |
| 25mm                      | DC100-R25            | DC100S-R25         |
| 26mm                      | DC100-R26            | DC100S-R26         |
| 27mm                      | DC100-R27            | DC100S-R27         |
| 28mm                      | DC100-R28            | DC100S-R28         |
| 29mm                      | DC100-R29            | DC100S-R29         |
| 30mm                      | DC100-R30            | DC100S-R30         |
| 31mm                      | DC100-R31            | DC100S-R31         |
| 32mm                      | DC100-R32            | DC100S-R32         |
| 33mm                      | DC100-R33            | DC100S-R33         |
| 34mm                      | DC100-R34            | DC100S-R34         |
| 35mm                      | DC100-R35            | DC100S-R35         |
| 36mm                      | DC100-R36            | DC100S-R36         |
| 37mm                      | DC100-R37            | DC100S-R37         |
| 38mm                      | DC100-R38            | DC100S-R38         |
| 39mm                      | DC100-R39            | DC100S-R39         |
| 40mm                      | DC100-R40            | DC100S-R40         |
| 41mm                      | DC100-R41            | DC100S-R41         |
| 42mm                      | DC100-R42            | DC100S-R42         |
| 43mm                      | DC100-R43            | DC100S-R43         |
| 44mm                      | DC100-R44            | DC100S-R44         |

| Nominal Gripping Diameter | Serrated Part Number | Smooth Part Number |
|---------------------------|----------------------|--------------------|
| 45mm                      | DC100-R45            | DC100S-R45         |
| 46mm                      | DC100-R46            | DC100S-R46         |
| 47mm                      | DC100-R47            | DC100S-R47         |
| 48mm                      | DC100-R48            | DC100S-R48         |
| 49mm                      | DC100-R49            | DC100S-R49         |
| 50mm                      | DC100-R50            | DC100S-R50         |
| 51mm                      | DC100-R51            | DC100S-R51         |
| 52mm                      | DC100-R52            | DC100S-R52         |
| 53mm                      | DC100-R53            | DC100S-R53         |
| 54mm                      | DC100-R54            | DC100S-R54         |
| 55mm                      | DC100-R55            | DC100S-R55         |
| 56mm                      | DC100-R56            | DC100S-R56         |
| 57mm                      | DC100-R57            | DC100S-R57         |
| 58mm                      | DC100-R58            | DC100S-R58         |
| 59mm                      | DC100-R59            | DC100S-R59         |
| 60mm                      | DC100-R60            | DC100S-R60         |
| 61mm                      | DC100-R61            | DC100S-R61         |
| 62mm                      | DC100-R62            | DC100S-R62         |
| 63mm                      | DC100-R63            | DC100S-R63         |
| 64mm                      | DC100-R64            | DC100S-R64         |
| 65mm                      | DC100-R65            | DC100S-R65         |
| 66mm                      | DC100-R66            | DC100S-R66         |
| 67mm                      | DC100-R67            | DC100S-R67         |
| 68mm                      | DC100-R68            | DC100S-R68         |
| 69mm                      | DC100-R69            | DC100S-R69         |
| 70mm                      | DC100-R70            | DC100S-R70         |
| 71mm                      | DC100-R71            | DC100S-R71         |
| 72mm                      | DC100-R72            | DC100S-R72         |
| 73mm                      | DC100-R73            | DC100S-R73         |

| Nominal Gripping Diameter | Serrated Part Number | Smooth Part Number |
|---------------------------|----------------------|--------------------|
| 74mm                      | DC100-R74            | DC100S-R74         |
| 75mm                      | DC100-R75            | DC100S-R75         |
| 76mm                      | DC100-R76            | DC100S-R76         |
| 77mm                      | DC100-R77            | DC100S-R77         |
| 78mm                      | DC100-R78            | DC100S-R78         |
| 79mm                      | DC100-R79            | DC100S-R79         |
| 80mm                      | DC100-R80            | DC100S-R80         |
| 81mm                      | DC100-R81            | DC100S-R81         |
| 82mm                      | DC100-R82            | DC100S-R82         |
| 83mm                      | DC100-R83            | DC100S-R83         |
| 84mm                      | DC100-R84            | DC100S-R84         |
| 85mm                      | DC100-R85            | DC100S-R85         |
| 86mm                      | DC100-R86            | DC100S-R86         |
| 87mm                      | DC100-R87            | DC100S-R87         |
| 88mm                      | DC100-R88            | DC100S-R88         |
| 89mm                      | DC100-R89            | DC100S-R89         |
| 90mm                      | DC100-R90            | DC100S-R90         |
| 91mm                      | DC100-R91            | DC100S-R91         |
| 92mm                      | DC100-R92            | DC100S-R92         |
| 93mm                      | DC100-R93            | DC100S-R93         |
| 94mm                      | DC100-R94            | DC100S-R94         |
| 95mm                      | DC100-R95            | DC100S-R95         |
| 96mm                      | DC100-R96            | DC100S-R96         |
| 97mm                      | DC100-R97            | DC100S-R97         |
| 98mm                      | DC100-R98            | DC100S-R98         |
| 99mm                      | DC100-R99            | DC100S-R99         |
| 100mm                     | DC100-R100           | DC100S-R100        |

### DC100 Hexagon Collets

Available from 50mm to 86mm across flats sides of the hexagon in 1mm increments. Part number is **DC100-X\*\***. Please state which size you require, smooth or serrated gripping surface is available.

### DC100 Square Collets

Available from 50mm to 70mm across flats sides of the square in 1mm increments. Part number is **DC100-S\*\***. Please state which size you require, smooth or serrated gripping surface is available.

### DC100 Emergency Collets

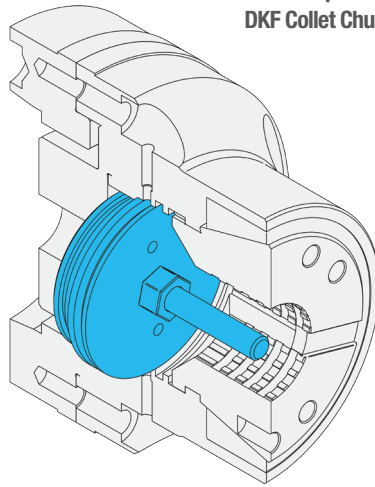
Available only with 30mm, 45mm, 65mm or 90mm pilot holes. Part number is **DC100-E\*\***. Please state which size you require.

## D Series Standard Accessories

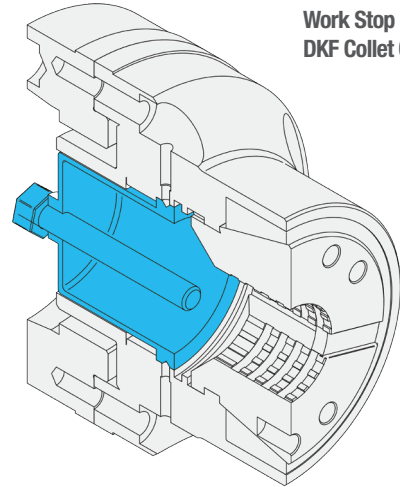
### Work Stops

- Stops can be provided to allow for accurate z-axis positioning of short workpieces within the collet chuck.
- A threaded stud is provided for easy adjustment to suit your work piece
- All stops are easily installed from the front face utilising a side bolt to hold the stop securely in place.
- These stops can be installed on all DHP & DKF series collet chucks.
- Full length spindle stops can also be provided for long work pieces, these can utilise the entire length of your machine spindle, please contact your Klamp supplier to see the maximum length stop your machine could accommodate.

Work Stop on a DKF Collet Chuck



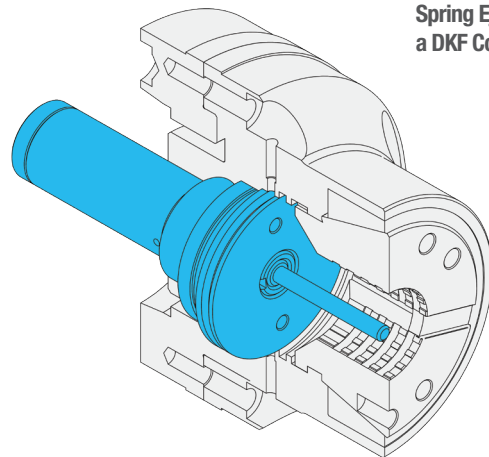
Additional Length Work Stop on a DKF Collet Chuck



### Spring Ejectors DKF Series Only

- Standard spring ejectors for in the DKF series are use for second-spindle operations to expel finished workpiece into the parts catcher.
- All spring ejectors are easily installed from the front face utilising a supplied key
- Many variants of spring ejector are available to suit your production process.
- Full length hydraulic or pneumatic ejectors can also be provided for long work pieces, this can utilise the entire length of your machine spindle, please contact your Klamp supplier to see the maximum length stop your machine could accommodate.

Spring Ejector on a DKF Collet Chuck



### Collet Changing Device D Series Collet Chucks

- Easy to use device to allow DC Collets to be removed or installed.
- Simply insert the steel pins into the Collet face holes and squeeze the trigger to collapse the DC Collet.
- Availabel in both manual and pneumatic versions.

| Part Number | To Suit    |            | Type      |
|-------------|------------|------------|-----------|
|             | DHP Series | DKF Series |           |
| DCD42       | DHP42      | DKF42      | Manual    |
| DCD52       | DHP52      | DKF52      | Manual    |
| DCD65       | DHP65      | DKF65      | Manual    |
| DCD80       | DHP80      | DKF80      | Pneumatic |
| DCD100      | -          | DKF100     | Pneumatic |





# Collet Chucks

## Low-profile





## 5C & 16C Pull Back Power Collet Chucks



### Pull Back Action

The gripping pull-back action to actuate the collet chuck means the work piece will be moved slightly in the Z-Axis. This is normally acceptable for first operation work and the work piece position can easily be determined with a facing cut.

### Problem Free Installation

Klamp collet chucks are provided with mounting bolts and a custom machined drawtube connector allowing you to start using the Klamp collet chuck straight out of the box.

### Quick & Easy Mounting

Klamp collet chucks mount directly to the lathe spindle or use a precision adaptor plate to ensure a consistent mounting without the need for correction. The precision fit of the Klamp collet chuck enhances the rigidity of the overall system. The need for adjustment is minimal, meaning less machine down-time.

### Long Service Life

All Klamp collet chucks are case hardened and ground optimising the rigidity, strength and durability.

### High Speed

Direct mount design ensures high concentricity that is suitable for higher speed operations that are not appropriate for conventional 3-jaw chuck due to the negative effects of centrifugal force.

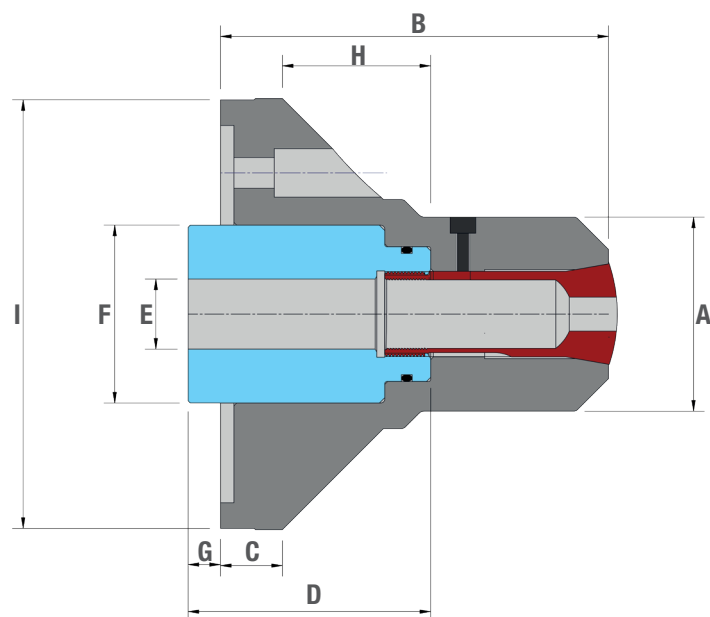
### Low Profile

Small nose diameter to provide excellent tool clearance.

## Suitable for 5C/16C Collet Types



## 5C & 16C Pull Back Power Collet Chucks



| KLAMP Type                     |                   | DEL5C                     |          |           | DEL16C                    |           |           |
|--------------------------------|-------------------|---------------------------|----------|-----------|---------------------------|-----------|-----------|
| Mounting                       |                   | Z140                      | A5       | A6        | Z170                      | A5        | A6        |
| Part Number                    |                   | DEL5C-Z140                | DEL5C-A5 | DEL5C-A6  | DEL16C-Z170               | DEL16C-A5 | DEL16C-A6 |
| Spring Collet Type             |                   | 5C                        |          |           | 16C                       |           |           |
| Spring Collet Gripping Range * | Minimum           | 1                         |          |           | 2                         |           |           |
|                                | Maximum           | 27                        |          |           | 42                        |           |           |
| Spring collet increments       |                   | 0.5                       |          |           | 0.5                       |           |           |
| A                              |                   | 72                        |          |           | 85                        |           |           |
| B                              |                   | 139                       |          | 141       | 157                       | 152       | 160       |
| C                              |                   | 23                        | 18       | 19        | 18.5                      | 18        | 19        |
| D                              |                   | 90                        |          | 98        | 84.5                      |           | 92.5      |
| E                              |                   | M60 x 2.0                 |          | M75 x 2.0 | M60 x 2.0                 |           | M75 x 2.0 |
| F                              |                   | 66                        |          | 83        | 66                        |           | 83        |
| G Maximum                      |                   | 32                        | 18       |           | 18                        | 10        | 18        |
| G Minimum                      |                   | 31                        | 17       |           | 17                        | 9         | 17        |
| H                              |                   | 55                        |          | 62        | 54.5                      | 49.5      | 56.5      |
| I                              |                   | 159                       | 135      | 170       | 190                       | 135       | 170       |
| Pull Back Ratio                |                   | 1:3                       |          |           | 1:3                       |           |           |
| Max. input force               | kN                | 20                        |          |           | 24                        |           |           |
| Max. Speed                     | min <sup>-1</sup> | 6000                      |          |           | 6000                      |           |           |
| Net Weight                     | kg                | 9.3                       | 6.8      | 10.8      | 12.0                      | 7.5       | 11        |
| Matching Kitagawa Cylinders    |                   | S1246<br>SS1246<br>SR1146 |          |           | S1246<br>SS1246<br>SR1146 |           |           |

## 5C & 16C Collet Chuck Collet Options

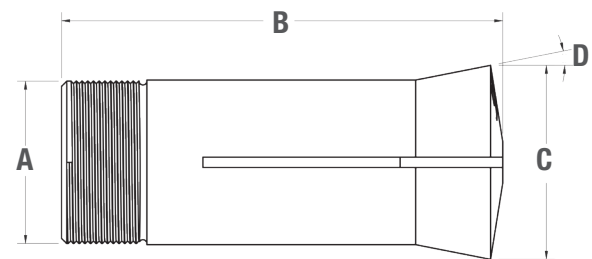


### 5C Collets – Type 0123 16C Collets – Type G119

- Round, Hexagon or Square types available
- Smooth gripping surface only
- 0.5mm sizes available upon request

### Dimensions (Metric)

| Part No. | A     | B      | C     | D   |
|----------|-------|--------|-------|-----|
| 5C       | 31.75 | 83.40  | 37.30 | 10° |
| 16C      | 48    | 110.50 | 57.50 | 10° |



| Gripping Diameter | 5C - Type 0123<br>for DEL 5C |         |        | 16C - Type G119<br>for DEL 16C |         |         |
|-------------------|------------------------------|---------|--------|--------------------------------|---------|---------|
|                   | Round                        | Hexagon | Square | Round                          | Hexagon | Square  |
| 1mm               | 5C-R01                       | -       | -      | -                              | -       | -       |
| 2mm               | 5C-R02                       | -       | -      | 16C-R02                        | -       | -       |
| 3mm               | 5C-R03                       | -       | -      | 16C-R03                        | -       | -       |
| 4mm               | 5C-R04                       | -       | -      | 16C-R04                        | -       | -       |
| 5mm               | 5C-R05                       | 5C-X05  | 5C-S05 | 16C-R05                        | 16C-X05 | 16C-S05 |
| 6mm               | 5C-R06                       | -       | 5C-S06 | 16C-R06                        | -       | 16C-S06 |
| 7mm               | 5C-R07                       | 5C-X07  | 5C-S07 | 16C-R07                        | 16C-X07 | 16C-S07 |
| 8mm               | 5C-R08                       | 5C-X08  | 5C-S08 | 16C-R08                        | 16C-X08 | 16C-S08 |
| 9mm               | 5C-R09                       | -       | -      | 16C-R09                        | -       | -       |
| 10mm              | 5C-R10                       | 5C-X10  | 5C-S10 | 16C-R10                        | 16C-X10 | 16C-S10 |
| 11mm              | 5C-R11                       | -       | -      | 16C-R11                        | 16C-X11 | -       |
| 12mm              | 5C-R12                       | 5C-X12  | 5C-S12 | 16C-R12                        | 16C-X12 | 16C-S12 |
| 13mm              | 5C-R13                       | -       | -      | 16C-R13                        | 16C-X13 | -       |
| 14mm              | 5C-R14                       | 5C-X14  | 5C-S14 | 16C-R14                        | 16C-X14 | 16C-S14 |
| 15mm              | 5C-R15                       | -       | -      | 16C-R15                        | 16C-X15 | 16C-S15 |
| 16mm              | 5C-R16                       | 5C-X16  | 5C-S16 | 16C-R16                        | 16C-X16 | 16C-S16 |
| 17mm              | 5C-R17                       | -       | -      | 16C-R17                        | 16C-X17 | -       |
| 18mm              | 5C-R18                       | 5C-X18  | 5C-S18 | 16C-R18                        | 16C-X18 | 16C-S18 |
| 19mm              | 5C-R19                       | -       | -      | 16C-R19                        | 16C-X19 | -       |
| 20mm              | 5C-R20                       | 5C-X20  | -      | 16C-R20                        | 16C-X20 | 16C-S20 |
| 21mm              | 5C-R21                       | -       | -      | 16C-R21                        | -       | -       |

| Gripping Diameter | 5C - Type 0123<br>for DEL 5C |         |        | 16C - Type G119<br>for DEL 16C |         |         |
|-------------------|------------------------------|---------|--------|--------------------------------|---------|---------|
|                   | Round                        | Hexagon | Square | Round                          | Hexagon | Square  |
| 22mm              | 5C-R22                       | 5C-X22  | -      | 16C-R22                        | 16C-X22 | 16C-S22 |
| 23mm              | 5C-R23                       | -       | -      | 16C-R23                        | -       | -       |
| 24mm              | 5C-R24                       | -       | -      | 16C-R24                        | 16C-X24 | -       |
| 25mm              | 5C-R25                       | -       | -      | 16C-R25                        | 16C-X25 | 16C-S25 |
| 26mm              | 5C-R26                       | -       | -      | 16C-R26                        | 16C-X26 | -       |
| 27mm              | 5C-R27                       | -       | -      | 16C-R27                        | 16C-X27 | -       |
| 28mm              | -                            | -       | -      | 16C-R28                        | -       | -       |
| 29mm              | -                            | -       | -      | 16C-R29                        | -       | -       |
| 30mm              | -                            | -       | -      | 16C-R30                        | 16C-X30 | -       |
| 31mm              | -                            | -       | -      | 16C-R31                        | -       | -       |
| 32mm              | -                            | -       | -      | 16C-R32                        | 16C-X32 | -       |
| 33mm              | -                            | -       | -      | 16C-R33                        | -       | -       |
| 34mm              | -                            | -       | -      | 16C-R34                        | -       | -       |
| 35mm              | -                            | -       | -      | 16C-R35                        | 16C-X35 | -       |
| 36mm              | -                            | -       | -      | 16C-R36                        | -       | -       |
| 37mm              | -                            | -       | -      | 16C-R37                        | -       | -       |
| 38mm              | -                            | -       | -      | 16C-R38                        | -       | -       |
| 39mm              | -                            | -       | -      | 16C-R39                        | -       | -       |
| 40mm              | -                            | -       | -      | 16C-R40                        | -       | -       |
| 41mm              | -                            | -       | -      | 16C-R41                        | -       | -       |
| 42mm              | -                            | -       | -      | 16C-R42                        | -       | -       |

Emergency Collet with soft face and pilot hole 3mm diameter is available both for the 5C and 16C Type –  
Part No. **5C-EMERGENCY / 16C-EMERGENCY**

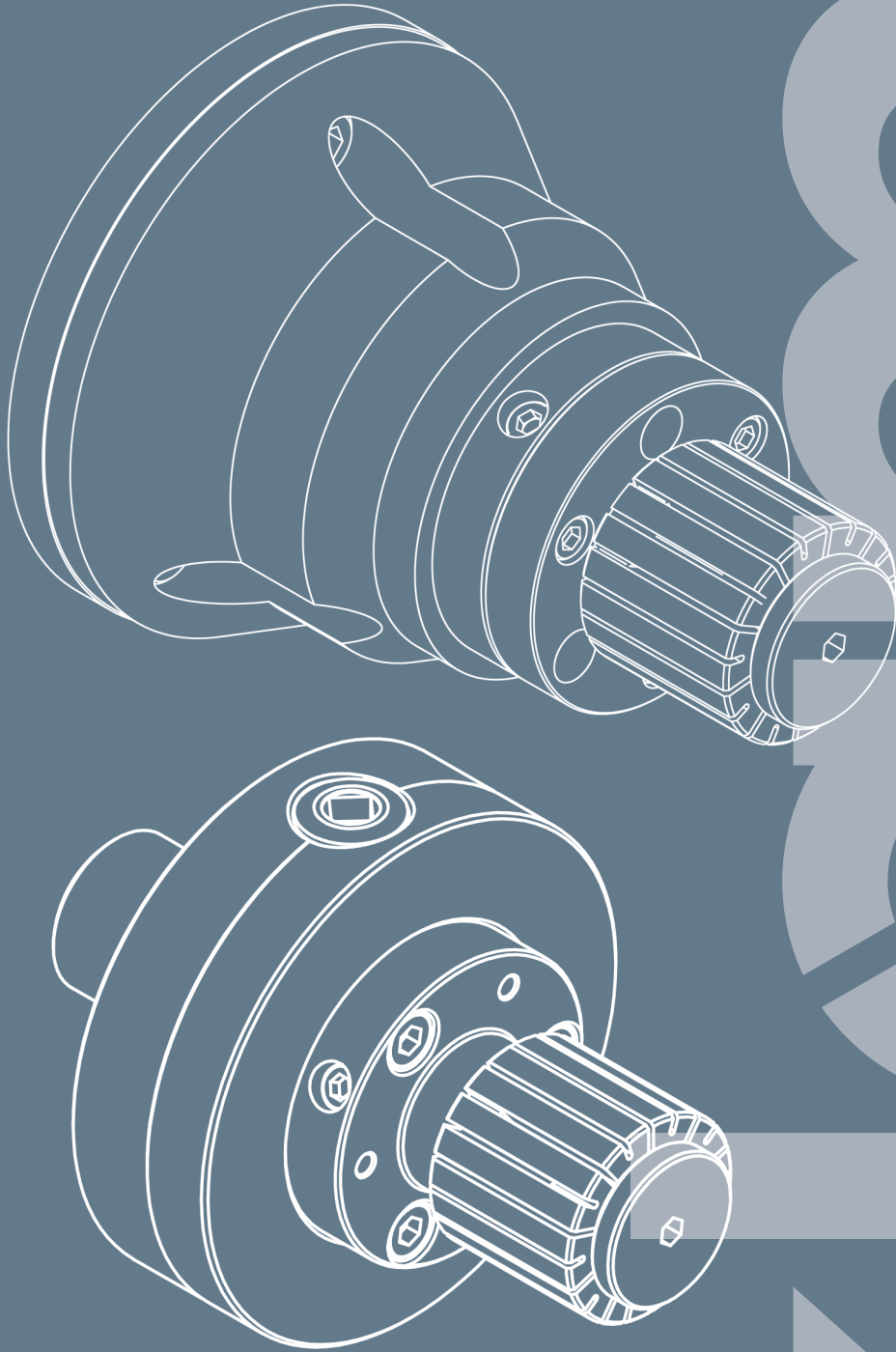






# Expanding Mandrels

## KEM Series



## Power Expanding Mandrels for Lathes

### Rigid and Accurate Workholding for Internal Diameters

#### Internal Clamping Offers Full Part Access

Allows for full access to the entire external profile of the workpiece so all external diameters can be turned in a single operation, guaranteeing perfect concentricity.

#### Quick & Easy Mounting

Klamp expanding mandrels mount directly to the lathe spindle or use a precision adaptor plate to ensure a consistent mounting without the need for correction. The precision fit of the Klamp collet chuck enhances the rigidity of the overall system. The need for adjustment is minimal, meaning less machine down-time.

#### High Accuracy & Rigidity

Pull-back design draws the workpiece securely against a part locator for 'dual-contact' rigidity.

#### Modular Design

All Mandrel models have a common flange configuration, enabling full interchangeability with all back bodies.

#### Parallel Expansion for Optimum Accuracy and Grip Force

The Klamp double-angle design provides parallel sleeve expansion, ensuring full-length part contact and positive release when the part is unclamped.



### Two Regular Sleeve Types Available



#### Standard Sleeves

Cost effective sleeves where the expander pin is outside the sleeve body, with either a 0.5mm or 0.8 gripping range (see pages 51-53 for more detail), suitable for through bores and operated with a part locator.



#### Flush sleeves

Expander pin is inside/level with the sleeve body with either a 0.5mm or 0.8 gripping range (see pages 51-53 for more detail), suitable for blind bores and enables the sleeve to grip as much of the internal diameter as possible.

### Customised Systems Available

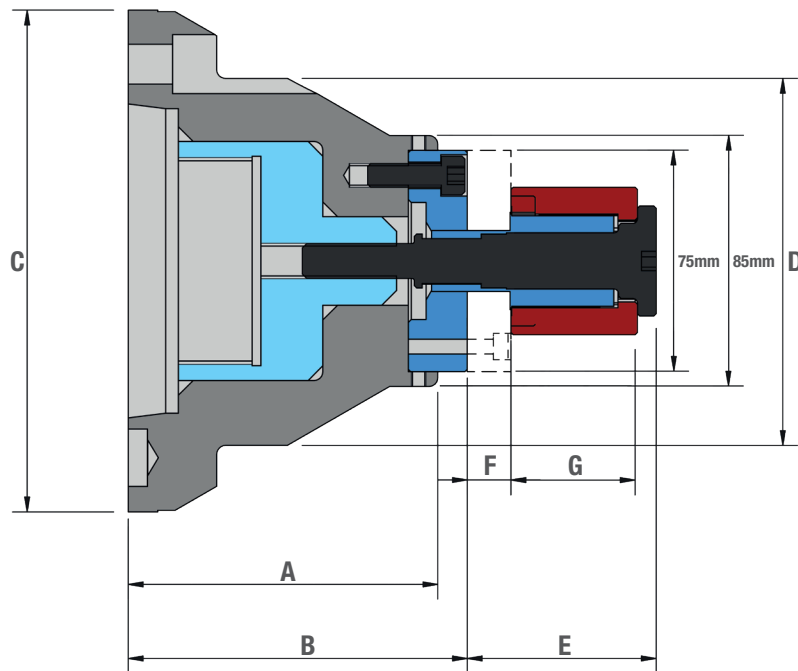


Dual sleeves (as shown above), extended length sleeves, 1/2 length sleeves and larger diameter sizes are on the market with up to 635mm ID gripping for supporting a wide range of parts.



A KEM dual sleeve system mounted on a rotary table. Actuated via a hydraulic cylinder and supported via a special hydraulic tailstock this setup is perfect for automated machining cells allowing multiple parts to be robot loaded and machined at the same time.

## Power Expanding Mandrels for Lathes

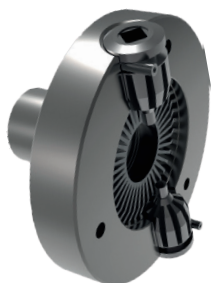
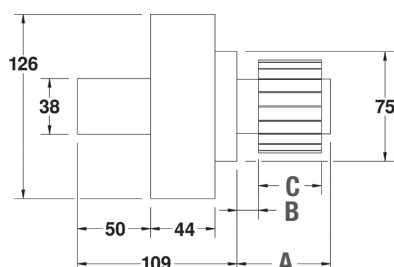


| Mandrel Assembly Type | Spindle Mounting | Part Number | Suitable Sleeve Types | Sleeve Gripping Range* |      | Sleeve Increments | A   | B   | C   | D   | E    | F    | G Standard (G Flush) | Maximum Drawnut Thread Size | Maximum Pull Force kN | Maximum Gripping Force kN |
|-----------------------|------------------|-------------|-----------------------|------------------------|------|-------------------|-----|-----|-----|-----|------|------|----------------------|-----------------------------|-----------------------|---------------------------|
|                       |                  |             |                       | Min                    | Max  |                   |     |     |     |     |      |      |                      |                             |                       |                           |
| KEM-AS                | Z140             | KEM-AS-14   | Standard or Flush     | 12.4                   | 22.4 | 0.5               | 83  | 103 | 160 | 100 | 39.9 | 14.5 | 22.1 (25.4)          | M60 x 1.5                   | 7                     | 12.5                      |
|                       | A5               | KEM-AS-A5   |                       |                        |      |                   | 88  | 108 | 135 | 100 |      |      |                      | M60 x 1.5                   |                       |                           |
|                       | A6               | KEM-AS-A6   |                       |                        |      |                   | 95  | 115 | 170 | 125 |      |      |                      | M75 x 1.5                   |                       |                           |
|                       | A8               | KEM-AS-A8   |                       |                        |      |                   | 100 | 120 | 210 | 125 |      |      |                      | M90 x 2.0                   |                       |                           |
| KEM-BS                | Z140             | KEM-BS-14   | Standard or Flush     | 15.9                   | 29.1 | 0.5               | 83  | 103 | 160 | 100 | 46   | 15   | 27.0 (31.0)          | M60 x 1.5                   | 10                    | 17.8                      |
|                       | A5               | KEM-BS-A5   |                       |                        |      |                   | 88  | 108 | 135 | 100 |      |      |                      | M60 x 1.5                   |                       |                           |
|                       | A6               | KEM-BS-A6   |                       |                        |      |                   | 95  | 115 | 170 | 125 |      |      |                      | M75 x 1.5                   |                       |                           |
|                       | A8               | KEM-BS-A8   |                       |                        |      |                   | 100 | 120 | 210 | 125 |      |      |                      | M90 x 2.0                   |                       |                           |
| KEM-CS                | Z140             | KEM-CS-14   | Standard or Flush     | 21.9                   | 40.3 | 0.8               | 83  | 103 | 160 | 100 | 52.1 | 15.5 | 32.0 (36.6)          | M60 x 1.5                   | 12                    | 21.4                      |
|                       | A5               | KEM-CS-A5   |                       |                        |      |                   | 88  | 108 | 135 | 100 |      |      |                      | M60 x 1.5                   |                       |                           |
|                       | A6               | KEM-CS-A6   |                       |                        |      |                   | 95  | 115 | 170 | 125 |      |      |                      | M75 x 1.5                   |                       |                           |
|                       | A8               | KEM-CS-A8   |                       |                        |      |                   | 100 | 120 | 210 | 125 |      |      |                      | M90 x 2.0                   |                       |                           |
| KEM-DS                | Z140             | KEM-DS-14   | Standard or Flush     | 28.3                   | 51.5 | 0.8               | 83  | 103 | 160 | 100 | 59   | 15.2 | 38.1 (43.8)          | M60 x 1.5                   | 18                    | 32                        |
|                       | A5               | KEM-DS-A5   |                       |                        |      |                   | 88  | 108 | 135 | 100 |      |      |                      | M60 x 1.5                   |                       |                           |
|                       | A6               | KEM-DS-A6   |                       |                        |      |                   | 95  | 115 | 170 | 125 |      |      |                      | M75 x 1.5                   |                       |                           |
|                       | A8               | KEM-DS-A8   |                       |                        |      |                   | 100 | 120 | 210 | 125 |      |      |                      | M90 x 2.0                   |                       |                           |
| KEM-ES                | Z140             | KEM-ES-14   | Standard or Flush     | 41.1                   | 82.7 | 0.8               | 83  | 103 | 160 | 100 | 64   | 14.7 | 43.0 (49.3)          | M60 x 1.5                   | 23                    | 40.9                      |
|                       | A5               | KEM-ES-A5   |                       |                        |      |                   | 88  | 108 | 135 | 100 |      |      |                      | M60 x 1.5                   |                       |                           |
|                       | A6               | KEM-ES-A6   |                       |                        |      |                   | 95  | 115 | 170 | 125 |      |      |                      | M75 x 1.5                   |                       |                           |
|                       | A8               | KEM-ES-A8   |                       |                        |      |                   | 100 | 120 | 210 | 125 |      |      |                      | M90 x 2.0                   |                       |                           |

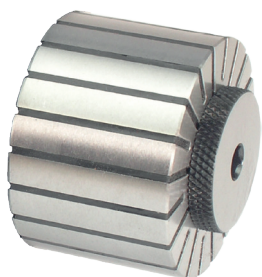
## Manually Actuated Expanding Mandrels

### Heavy Duty Gearing

The Klamp manually actuated mandrel (KEM-MA) provides a high gripping force utilising the same standard Klamp Mandrel assemblies as the power operated systems therefore giving you the ability to have an internal gripping solution that can be rapidly deployed with whatever standard workholding system your machine(s) has.



### Two Regular Sleeve Types Available



#### Standard Sleeves

Cost effective sleeves where the expander pin is outside the sleeve body, with either a 0.5mm or 0.8 gripping range (see pages 51-53 for more detail), suitable for through bores and operated with a part locator.



#### Flush Sleeves

Expander pin is inside/level with the sleeve body with either a 0.5mm or 0.8 gripping range (see pages 51-53 for more detail), suitable for blind bores and enables the sleeve to grip as much of the internal diameter as possible.

| Mandrel Assembly Type | Mounting        | Part Number | Suitable Sleeve Type | Sleeve Gripping Range* |      | Sleeve Increments | A    | B    | C Standard (C Flush) |
|-----------------------|-----------------|-------------|----------------------|------------------------|------|-------------------|------|------|----------------------|
|                       |                 |             |                      | Min                    | Max  |                   |      |      |                      |
| KEM-AS                | Manual Actuator | KEM-AS-MA   | Standard or Flush    | 12.4                   | 22.4 | 0.5               | 39.9 | 14.5 | 22.1 (25.4)          |
| KEM-BS                | Manual Actuator | KEM-BS-MA   |                      | 15.9                   | 29.1 | 0.5               | 46   | 15   | 27.0 (31.0)          |
| KEM-CS                | Manual Actuator | KEM-CS-MA   |                      | 21.9                   | 40.3 | 0.8               | 52.1 | 15.5 | 32.0 (36.6)          |
| KEM-DS                | Manual Actuator | KEM-DS-MA   |                      | 28.3                   | 51.5 | 0.8               | 59   | 15.2 | 38.1 (43.8)          |
| KEM-ES                | Manual Actuator | KEM-ES-MA   |                      | 41.1                   | 82.7 | 0.8               | 64   | 14.7 | 43.0 (49.3)          |



Load the KEM-MA manual actuator into a three jaw or collet chuck, gripping on the 38mm location spigot.

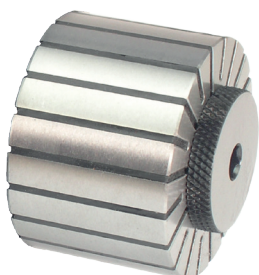


Actuate the power chuck to ensure KEM-MA is locked in position, adjust T.I.R as required.



Load a workpiece's internal diameter over the sleeve and actuate the mandrel using the key provided.

## Sleeve Options for all KEM Series



## KEM-AS

| Standard Sleeve  |                   |                 |
|------------------|-------------------|-----------------|
| Nominal Sleeve Ø | Gripping Range mm | Part Number     |
| 12.50            | 12.40 - 12.90     | 92.000.210.1250 |
| 13.00            | 12.90 - 13.40     | 92.000.210.1300 |
| 13.50            | 13.40 - 13.90     | 92.000.210.1350 |
| 14.00            | 13.90 - 14.40     | 92.000.210.1400 |
| 14.50            | 14.40 - 14.90     | 92.000.210.1450 |
| 15.00            | 14.90 - 15.40     | 92.000.210.1500 |
| 15.50            | 15.40 - 15.90     | 92.000.210.1550 |
| 16.00            | 15.90 - 16.40     | 92.000.210.1600 |

| Flush Sleeve     |                   |                 |
|------------------|-------------------|-----------------|
| Nominal Sleeve Ø | Gripping Range mm | Part Number     |
| 16.50            | 16.40 - 16.90     | 92.001.210.1650 |
| 17.00            | 16.90 - 17.40     | 92.001.210.1700 |
| 17.50            | 17.40 - 17.90     | 92.001.210.1750 |
| 18.00            | 17.90 - 18.40     | 92.001.210.1800 |
| 18.50            | 18.40 - 18.90     | 92.001.210.1850 |
| 19.00            | 18.90 - 19.40     | 92.001.210.1900 |
| 19.50            | 19.40 - 19.90     | 92.001.210.1950 |
| 20.00            | 19.90 - 20.40     | 92.001.210.2000 |
| 20.50            | 20.40 - 20.90     | 92.001.210.2050 |
| 21.00            | 20.90 - 21.40     | 92.001.210.2100 |
| 21.50            | 21.40 - 21.90     | 92.001.210.2150 |
| 22.00            | 21.90 - 22.40     | 92.001.210.2200 |

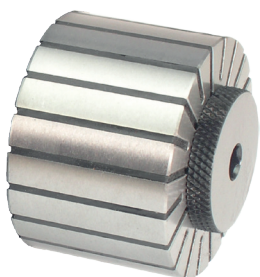
## KEM-BS

| Standard Sleeve  |                   |                 |
|------------------|-------------------|-----------------|
| Nominal Sleeve Ø | Gripping Range mm | Part Number     |
| 16.00            | 15.90 - 16.40     | 92.050.210.1600 |
| 16.50            | 16.40 - 16.90     | 92.050.210.1650 |
| 17.00            | 16.90 - 17.40     | 92.050.210.1700 |
| 17.50            | 17.40 - 17.90     | 92.050.210.1750 |
| 18.00            | 17.90 - 18.40     | 92.050.210.1800 |
| 18.50            | 18.40 - 18.90     | 92.050.210.1850 |
| 19.00            | 18.90 - 19.40     | 92.050.210.1900 |
| 19.50            | 19.40 - 19.90     | 92.050.210.1950 |
| 20.00            | 19.90 - 20.40     | 92.050.210.2000 |
| 20.50            | 20.40 - 20.90     | 92.050.210.2050 |
| 21.00            | 20.90 - 21.40     | 92.050.210.2100 |
| 21.50            | 21.40 - 21.90     | 92.050.210.2150 |
| 22.00            | 21.90 - 22.40     | 92.050.210.2200 |

| Flush Sleeve     |                   |                 |
|------------------|-------------------|-----------------|
| Nominal Sleeve Ø | Gripping Range mm | Part Number     |
| 22.00            | 21.90 - 22.70     | 92.051.210.2200 |
| 22.80            | 22.70 - 23.50     | 92.051.210.2280 |
| 23.60            | 23.50 - 24.30     | 92.051.210.2360 |
| 24.40            | 24.30 - 25.10     | 92.051.210.2440 |
| 25.20            | 25.10 - 25.90     | 92.051.210.2520 |
| 26.00            | 25.90 - 26.70     | 92.051.210.2600 |
| 26.80            | 26.70 - 27.50     | 92.051.210.2680 |
| 27.60            | 27.50 - 28.30     | 92.051.210.2760 |
| 28.40            | 28.30 - 29.10     | 92.051.210.2840 |



## Sleeve Options for all KEM Series



## KEM-CS

| Standard Sleeve  |                   |                 |
|------------------|-------------------|-----------------|
| Nominal Sleeve Ø | Gripping Range mm | Part Number     |
| 22.00            | 21.90 - 22.70     | 92.100.210.2200 |
| 22.80            | 22.70 - 23.50     | 92.100.210.2280 |
| 23.60            | 23.50 - 24.30     | 92.100.210.2360 |
| 24.40            | 24.30 - 25.10     | 92.100.210.2440 |
| 25.20            | 25.10 - 25.90     | 92.100.210.2520 |
| 26.00            | 25.90 - 26.70     | 92.100.210.2600 |
| 26.80            | 26.70 - 27.50     | 92.100.210.2680 |
| 27.60            | 27.50 - 28.30     | 92.100.210.2760 |
| 28.40            | 28.30 - 29.10     | 92.100.210.2840 |

| Flush Sleeve     |                   |                 |
|------------------|-------------------|-----------------|
| Nominal Sleeve Ø | Gripping Range mm | Part Number     |
| 28.40            | 28.30 - 29.10     | 92.101.210.2840 |
| 29.20            | 29.10 - 29.90     | 92.101.210.2920 |
| 30.00            | 29.90 - 30.70     | 92.101.210.3000 |
| 30.80            | 30.70 - 31.50     | 92.101.210.3080 |
| 31.60            | 31.50 - 32.30     | 92.101.210.3160 |
| 32.40            | 32.30 - 33.10     | 92.101.210.3240 |
| 33.20            | 33.10 - 33.90     | 92.101.210.3320 |
| 34.00            | 33.90 - 34.70     | 92.101.210.3400 |
| 34.80            | 34.70 - 35.50     | 92.101.210.3480 |
| 35.60            | 35.50 - 36.30     | 92.101.210.3560 |
| 36.40            | 36.30 - 37.10     | 92.101.210.3640 |
| 37.20            | 37.10 - 37.90     | 92.101.210.3720 |
| 38.00            | 37.90 - 38.70     | 92.101.210.3800 |
| 38.80            | 38.70 - 39.50     | 92.101.210.3880 |
| 39.60            | 39.50 - 40.30     | 92.101.210.3960 |

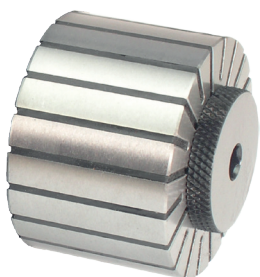
## KEM-DS

| Standard Sleeve  |                   |                 |
|------------------|-------------------|-----------------|
| Nominal Sleeve Ø | Gripping Range mm | Part Number     |
| 28.40            | 28.30 - 29.10     | 92.150.210.2840 |
| 29.20            | 29.10 - 29.90     | 92.150.210.2920 |
| 30.00            | 29.90 - 30.70     | 92.150.210.3000 |
| 30.80            | 30.70 - 31.50     | 92.150.210.3080 |
| 31.60            | 31.50 - 32.30     | 92.150.210.3160 |
| 32.40            | 32.30 - 33.10     | 92.150.210.3240 |
| 33.20            | 33.10 - 33.90     | 92.150.210.3320 |
| 34.00            | 33.90 - 34.70     | 92.150.210.3400 |
| 34.80            | 34.70 - 35.50     | 92.150.210.3480 |
| 35.60            | 35.50 - 36.30     | 92.150.210.3560 |
| 36.40            | 36.30 - 37.10     | 92.150.210.3640 |
| 37.20            | 37.10 - 37.90     | 92.150.210.3720 |
| 38.00            | 37.90 - 38.70     | 92.150.210.3800 |
| 38.80            | 38.70 - 39.50     | 92.150.210.3880 |
| 39.60            | 39.50 - 40.30     | 92.150.210.3960 |
| 40.40            | 40.30 - 41.10     | 92.150.210.4040 |
| 41.20            | 41.10 - 41.90     | 92.150.210.4120 |

| Flush Sleeve     |                   |                 |
|------------------|-------------------|-----------------|
| Nominal Sleeve Ø | Gripping Range mm | Part Number     |
| 39.60            | 39.50 - 40.30     | 92.151.210.3960 |
| 40.40            | 40.30 - 41.10     | 92.151.210.4040 |
| 41.20            | 41.10 - 41.90     | 92.151.210.4120 |
| 42.00            | 41.90 - 42.70     | 92.151.210.4200 |
| 42.80            | 42.70 - 43.50     | 92.151.210.4280 |
| 43.60            | 43.50 - 44.30     | 92.151.210.4360 |
| 44.40            | 44.30 - 45.10     | 92.151.210.4440 |
| 45.20            | 45.10 - 45.90     | 92.151.210.4520 |
| 46.00            | 45.90 - 46.70     | 92.151.210.4600 |
| 46.80            | 46.70 - 47.50     | 92.151.210.4680 |
| 47.60            | 47.50 - 48.30     | 92.151.210.4760 |
| 48.40            | 48.30 - 49.10     | 92.151.210.4840 |
| 49.20            | 49.10 - 49.90     | 92.151.210.4920 |
| 50.00            | 49.90 - 50.70     | 92.151.210.5000 |
| 50.80            | 50.70 - 51.50     | 92.151.210.5080 |



## Sleeve Options for all KEM Series



## KEM-ES

| Standard Sleeve  |                   |                 |
|------------------|-------------------|-----------------|
| Nominal Sleeve Ø | Gripping Range mm | Part Number     |
| 41.20            | 41.10 - 41.90     | 92.200.210.4120 |
| 42.00            | 41.90 - 42.70     | 92.200.210.4200 |
| 42.80            | 42.70 - 43.50     | 92.200.210.4280 |
| 43.60            | 43.50 - 44.30     | 92.200.210.4360 |
| 44.40            | 44.30 - 45.10     | 92.200.210.4440 |
| 45.20            | 45.10 - 45.90     | 92.200.210.4520 |
| 46.00            | 45.90 - 46.70     | 92.200.210.4600 |
| 46.80            | 46.70 - 47.50     | 92.200.210.4680 |
| 47.60            | 47.50 - 48.30     | 92.200.210.4760 |
| 48.40            | 48.30 - 49.10     | 92.200.210.4840 |
| 49.20            | 49.10 - 49.90     | 92.200.210.4920 |
| 50.00            | 49.90 - 50.70     | 92.200.210.5000 |
| 50.80            | 50.70 - 51.50     | 92.200.210.5080 |
| 51.60            | 51.50 - 52.30     | 92.200.210.5160 |
| 52.40            | 52.30 - 53.10     | 92.200.210.5240 |
| 53.20            | 53.10 - 53.90     | 92.200.210.5320 |
| 54.00            | 53.90 - 54.70     | 92.200.210.5400 |
| 54.80            | 54.70 - 55.50     | 92.200.210.5480 |
| 55.60            | 55.50 - 56.30     | 92.200.210.5560 |
| 56.40            | 56.30 - 57.10     | 92.200.210.5640 |
| 57.20            | 57.10 - 57.90     | 92.200.210.5720 |
| 58.00            | 57.90 - 58.70     | 92.200.210.5800 |
| 58.80            | 58.70 - 59.50     | 92.200.210.5880 |
| 59.60            | 59.50 - 60.30     | 92.200.210.5960 |
| 60.40            | 60.30 - 61.10     | 92.200.210.6040 |
| 61.20            | 61.10 - 61.90     | 92.200.210.6120 |
| 62.00            | 61.90 - 62.70     | 92.200.210.6200 |
| 62.80            | 62.70 - 63.50     | 92.200.210.6280 |

| Flush Sleeve     |                   |                 |
|------------------|-------------------|-----------------|
| Nominal Sleeve Ø | Gripping Range mm | Part Number     |
| 50.80            | 50.70 - 51.50     | 92.201.210.5080 |
| 51.60            | 51.50 - 52.30     | 92.201.210.5160 |
| 52.40            | 52.30 - 53.10     | 92.201.210.5240 |
| 53.20            | 53.10 - 53.90     | 92.201.210.5320 |
| 54.00            | 53.90 - 54.70     | 92.201.210.5400 |
| 54.80            | 54.70 - 55.50     | 92.201.210.5480 |
| 55.60            | 55.50 - 56.30     | 92.201.210.5560 |
| 56.40            | 56.30 - 57.10     | 92.201.210.5640 |
| 57.20            | 57.10 - 57.90     | 92.201.210.5720 |
| 58.00            | 57.90 - 58.70     | 92.201.210.5800 |
| 58.80            | 58.70 - 59.50     | 92.201.210.5880 |
| 59.60            | 59.50 - 60.30     | 92.201.210.5960 |
| 60.40            | 60.30 - 61.10     | 92.201.210.6040 |
| 61.20            | 61.10 - 61.90     | 92.201.210.6120 |
| 62.00            | 61.90 - 62.70     | 92.201.210.6200 |
| 62.80            | 62.70 - 63.50     | 92.201.210.6280 |
| 63.60            | 63.50 - 64.30     | 92.201.210.6360 |
| 64.40            | 64.30 - 65.10     | 92.201.210.6440 |
| 65.20            | 65.10 - 65.90     | 92.201.210.6520 |
| 66.00            | 65.90 - 66.70     | 92.201.210.6600 |
| 66.80            | 66.70 - 67.50     | 92.201.210.6680 |
| 67.60            | 67.50 - 68.30     | 92.201.210.6760 |
| 68.40            | 68.30 - 69.10     | 92.201.210.6840 |
| 69.20            | 69.10 - 69.90     | 92.201.210.6920 |
| 70.00            | 69.90 - 70.70     | 92.201.210.7000 |
| 70.80            | 70.70 - 71.50     | 92.201.210.7080 |
| 71.60            | 71.50 - 72.30     | 92.201.210.7160 |
| 72.40            | 72.30 - 73.10     | 92.201.210.7240 |
| 73.20            | 73.10 - 73.90     | 92.201.210.7320 |
| 74.00            | 73.90 - 74.70     | 92.201.210.7400 |
| 74.80            | 74.70 - 75.50     | 92.201.210.7480 |
| 75.60            | 75.50 - 76.30     | 92.201.210.7560 |
| 76.40            | 76.30 - 77.10     | 92.201.210.7640 |
| 77.20            | 77.10 - 77.90     | 92.201.210.7720 |
| 78.00            | 77.90 - 78.70     | 92.201.210.7800 |
| 78.80            | 78.70 - 79.50     | 92.201.210.7880 |
| 79.60            | 79.50 - 80.30     | 92.201.210.7960 |
| 80.40            | 80.30 - 81.10     | 92.201.210.8040 |
| 81.20            | 81.10 - 81.90     | 92.201.210.8120 |
| 82.00            | 81.90 - 82.70     | 92.201.210.8200 |

## Data required to manufacture drawtube actuator

### Check which model is required

Fig. 1

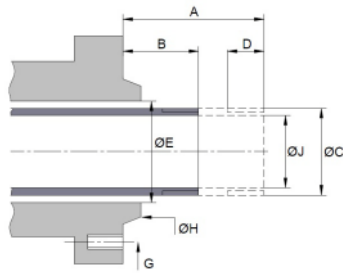


Fig. 2

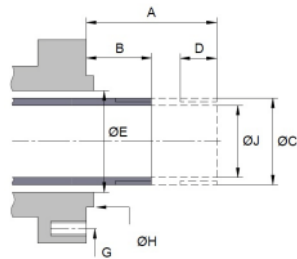


Fig. 3

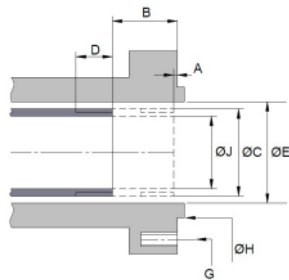
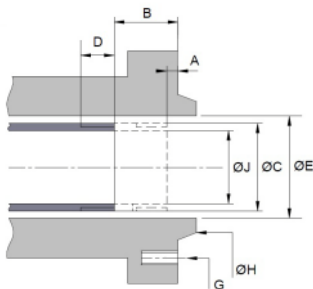


Fig. 4



A) Forward position of (drawtube from spindle face)

B) Backward position of (drawtube from spindle face)

C) Thread diameter form and pitch

State if RH or LH and external or internal

D) Operative length of full thread

E) Spindle bore diameter

State if taper

G) Fixing details. Thread size =

PCD = \_\_\_\_\_ QTY = \_\_\_\_\_

Spacing = \_\_\_\_\_

J) Drawtube internal diameter

American spindle mount

State type

Straight spindle mount

State diameter

### Drawtube Connector / Machine Spindle Information

Machine Make:

Model:

Year:

Chuck Make:

Model:

Serial Number:

Cylinder Make:

Model:

Serial Number:

Contact Name:

Position:

Company Name:

Address:

Postal Code/ZIP:

Country:

Telephone:

Fax:

Email:

Website:



## EUROPE

### **KITAGAWA EUROPE LTD. (UK)**

t +44 1725 514 010 f +44 1725 514 001  
e export@kitagawaeurope.com

### **KITAGAWA EUROPE GmbH (Germany)**

t +49 210 212 37800 f +49 210 212 37869  
e info@kitagawaeurope.de

### **KITAGAWA EUROPE (Czech Republic)**

t +420 603 856 122  
e michal.prokes@kitagawaeurope.de

### **KITAGAWA EUROPE (Hungary)**

t +36 30 510 3550  
e gabor.molnar@kitagawaeurope.de

### **KITAGAWA EUROPE (Poland)**

t +48 32 749 59 18  
e Lukasz.tomanek@kitagawaeurope.de

### **KITAGAWA EUROPE (Romania)**

t +40 727 770 329  
e roxana.tureac@kitagawaeurope.de

### **KITAGAWA EUROPE (Slovenia/Croatia)**

t +385 99 216 1940  
e juraij.perisic@kitagawaeurope.de

## AMERICA

### **KITAGAWA – NORTHTECH INC.**

t +1 847 310 8787 f +1 847 310 9484

## ASIA

### **KITAGAWA PVT LTD. (India)**

t +91 80 2976 5200 f +91 80 2976 5205  
e sales@kitagawaindia.com

### **KITAGAWA IRON WORKS CO., LTD. (Japan)**

t +81 847 40 0526 f +81 847 450 8911

### **KITAGAWA IRON WORKS CO., LTD. (China)**

t +86 21 6295 5772 f +86 21 6295 5792

### **KITAGAWA CO., LTD. (Thailand)**

t +66 2 712 7479 f +66 2 712 7481

### **DEAMARK LIMITED (Taiwan)**

t +886 2 2393 1221 f +886 2 2395 1231

### **KITAGAWA CO., LTD. (Korea)**

t +82 2 2026 2222 f +82 2 2026 2113

## MIDDLE EAST

### **LOMAS MIDDLE EAST (U.A.E)**

t +971 6 551 6551

## OCEANIA

### **DIMAC TOOLING PTY. LTD. (Australia)**

t +61 3 9561 6155 f +61 3 9561 6705

Unit 1, The Headlands, Downton, Salisbury, Wiltshire, SP5 3JJ, UK  
[www.kitagawa.global/en](http://www.kitagawa.global/en)

Borsigstrasse 3, 40880 Ratingen, Germany  
[www.kitagawa.global/de](http://www.kitagawa.global/de)

Lysicka 3, 621 00 Brno  
[www.kitagawa.global/cz](http://www.kitagawa.global/cz)

Déry T. u. 5. H-9024 Gyor  
[www.kitagawa.global/hu](http://www.kitagawa.global/hu)

44-240 Zory, ul. Niepodleglosci 3, Poland  
[www.kitagawa.global/pl](http://www.kitagawa.global/pl)

Heliului 15, Bucharest 1, 013991, Romania  
[www.kitagawa.global/ro](http://www.kitagawa.global/ro)

Pantovcak 24, HR-10000 Zagreb  
[www.kitagawa.global/de](http://www.kitagawa.global/de)

301 E. Commerce Dr, Schaumburg, IL. 60173, USA  
[www.kitagawa.us](http://www.kitagawa.us)

Plot No. 15, 4th Phase, Bommasandra Industrial Area, Bommasandra  
Jigani Link Road, Bangalore - 560 099  
[www.kitagawa.global/in](http://www.kitagawa.global/in)

77-1 Motomachi, Fuchi-shi, Hiroshima-pref. 726-8610, Japan  
[www.kitagawa.com](http://www.kitagawa.com)

Room 1315 13F Building B, Far East International Plaza,  
No. 317 Xian Xia Road, Chang Ning, Shanghai, 20051, China

9th FL, Home Place Office Building, 283/43 Sukhumvit, 55Rd.  
(Thonglor 13), Klongtopn-Nua, Wattana, Bangkok 10110, Thailand

No. 6, Lane 5, Lin Sen North Road, Taipei, Taiwan  
[www.demark.com/tw](http://www.demark.com/tw)

803 Ho, B-Dong, Woolim Lion's Valley, 371-28 Gasan-Dong,  
Gumcheon-Cu, Seoul, Korea  
[www.kitagawa.co.kr](http://www.kitagawa.co.kr)

Lomas ME FZE, Unit Q3-107, SAIF Zone, PO Box 121499, Sharjah, UAE  
[www.kitagawa.global/ae](http://www.kitagawa.global/ae)

61-65 Geddes Street, Mulgrave, Victoria, 3170 Australia  
[www.dimac.co.au](http://www.dimac.co.au)