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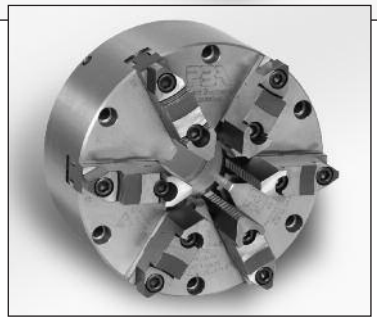


# Self-Centering Universal Steel Body SETRITE® Chuck

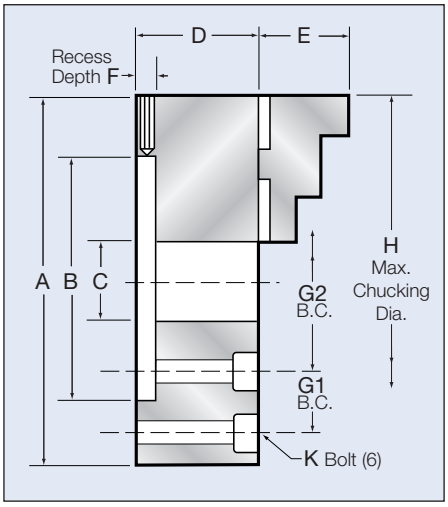
## 253 Series - 3 Jaw • 263 Series - 6 Jaw

### Direct Replacement for the Buck Ajust-Tru® Early Design

- Two-year warranty
- Precision manufactured for adapter mounting
- .0005 TIR repeatability on duplicate parts
- Steel body on sizes 6" thru 24"
- Semi-steel body on the 5" chucks
- 4 adjusting screws - 5", 6", 8", 10", 12"
- 8 adjusting screws - 15"
- Sizes 5" to 24", larger sizes available on request
- Nitride hardened scroll
- Hardened pinion
- Two-piece American standard tongue and groove jaws on chuck sizes 6" thru 24"
- 5" chucks equipped with one set of solid I.D jaws and one set of solid O.D. jaws
- One pinion - 5", 6", 8", 10", 12"; 3 pinions - 15", 18", 24" - **Larger Models Available**
- Durability - double the contact surface of the master jaw and body versus our competitor's chucks

| Chuck Size (in) | Model Number | Approx. Weight (lbs) | Maximum RPM* |
|---|---|---|---|
| **253 Series - 3 Jaw** | | | |
| 5 | 0515400 | 14 | 5000 |
| 6 | 0625300 | 26 | 4900 |
| 8 | 0825300 | 46 | 4200 |
| 10 | 1025300 | 71 | 3300 |
| 12 | 1225300 | 112 | 2300 |
| 15 | 1525300 | 146 | 2000 |
| 18 | 1825300 | 270 | 1300 |
| 24 | 2425300 | 550 | 850 |
| **263 Series - 6 Jaw** | | | |
| 5 | 0516400 | 15 | 3600 |
| 6 | 0626300 | 27 | 3500 |
| 8 | 0826300 | 49 | 3000 |
| 10 | 1026300 | 76 | 2400 |
| 12 | 1226300 | 116 | 2000 |
| 15 | 1526300 | 205 | 1500 |
| 18 | 1826300 | 290 | 880 |
| 24 | 2426300 | 570 | 740 |

*Eccentric adjustment of chuck on mounting plate to obtain required TIR on the workpiece may result in unacceptable vibration at these speeds. Reduce RPMs accordingly. Jaws must be fully engaged in the chuck body.




Jaws shown in O.D. position

## Dimensional Data for Series 253 & 263 Adapter Mounting Self-Centering Chucks

| Chuck Size | A | B* | C | D | E | F | G1 | G2 | H | K | Gripping Capacity Min.** | Gripping Capacity Max. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5" | 5.00" | 2.375"[1] | 1.30" | 2.84" | | .66" | 4.44" | - | 5.00" | 1/4" | 1/16" | 4" |
| 6" | 6.31" | 3.125" | 1.81" | 2.88" | 1.59" | 0.69" | 5.34" | - | 7.31" | 1/4" | 3/16" | 5" |
| 8" | 8.25" | 4.750" | 2.25" | 3.25" | 1.75" | 0.75" | 7.50" | - | 9.25" | 3/8" | 3/16" | 6½" |
| 10" | 9.85" | 6.375" | 3.00" | 3.63" | 2.13" | 0.81" | - | 4.38" | 11.00" | 7/16" | 3/16" | 8" |
| 12" | 12.20" | 7.906" | 4.06" | 4.00" | 2.28" | 0.84" | - | 5.25" | 14.00" | 1/2" | 3/4" | 10" |
| 15" | 15.74" | 11.7812" | 4.56" | 5.13" | 3.16" | 1.13" | - | 6.75" | 17.00" | 5/8" | 1½" | 13" |
| 18" | 18.00" | 11.781" | 5.04" | 5.781" | 3.27" | 1.125" | - | 6.75" | 19.00" | 5/8" | 1½" | 16" |
| 24" | 24.00" | 16.030" | 7.025" | 6.530" | 3.27" | 1.188" | - | 9.25" | 25.00" | 3/4" | 2 | 22" |

** Tolerance - .000/+.001 **6-Jaw Chuck minimum grip, consult factory [1]Recess can be opened up to 2.745" - 2.755"*

Soft top jaws shown on page 75. ® Ajust-Tru is a registered trade mark of Illinois Tool Works.

HOW TO ORDER: State quantity, Model Number of chuck, Part Number of adapter, and shipping instructions.

# Mounting Plates For "SETRITE"™
# 3 Jaw and 6 Jaw - 253 & 263 Series Chucks

PBA offers a full line of Mounting Plates type "D", "A", "L" and threaded plates for the "SETRITE" Chucks. PBA Mounting Plates are interchangeable with other popular adjustable universal style Chucks.

Mounting plates are precision machined to suit the spindle nose of your machine. For maximum accuracy of "SETRITE" mounting plates, mount plate on machine spindle nose, place a dial indicator on the chuck side face of the adapter close to the mounting holes, rotate the adapter and if the total indicator reading (TIR) exceeds .0005" take a light truing cut across the face of the mounting plate.

## Type D Mounting Plates "Camlock"

| Spindle | 6" | 8" | 10" | 12" | 15" | 18" | 24" |
|---|---|---|---|---|---|---|---|
| D-3 | 0605020 | 0805020 | - | - | - | - | - |
| D-4 | 0605021 | 0805021 | 1005021 | - | - | - | - |
| D-5 | 0605022 | 0805022 | 1005022 | - | - | - | - |
| D-6 | - | 0805023 | 1005023 | 1205023 | 1505023 | | |
| D-8 | - | - | 1005024 | 1205024 | 1505024 | 1805024 | 2405024 |
| D-11 | - | - | - | 1205025 | 1505025 | 1805025 | 2405025 |

## Type A American Standard Short Taper A-1 & A-2, Spindles

| Spindle | 6" | 8" | 10" | 12" | 15" | 18" | 24" |
|---|---|---|---|---|---|---|---|
| A-4 | 0605009 | - | - | - | - | - | - |
| A-5 | 0605010 | 0805010 | 1005010 | - | - | - | - |
| A-6 | - | 0805011 | 1005011 | 1205011 | - | - | - |
| A-8 | - | - | 1005012 | 1205012 | 1505012 | 1805012 | |
| A-11 | - | - | - | - | 1505013 | 1805013 | 2405013 |
| A-15 | - | - | - | - | - | - | 2405014 |

## Type L American Standard Long Taper Key Drive Spindle

| Spindle | 6" | 8" | 10" | 12" | 15" | 18" | 24" |
|---|---|---|---|---|---|---|---|
| L-00 | 0605031 | 0805031 | 1005031 | - | - | - | - |
| L-0 | 0605032 | 0805032 | 1005032 | 1205032 | - | - | - |
| L-1 | - | 0805033 | 1005033 | 1205033 | 1505033 | 1805033 | 2405033 |
| L-2 | - | - | 1005034 | 1205034 | 1505034 | 1805034 | 2405034 |
| L-3 | - | - | - | - | 1505035 | 1805035 | 2405035 |

## For Hardinge® and Elgin Lathe

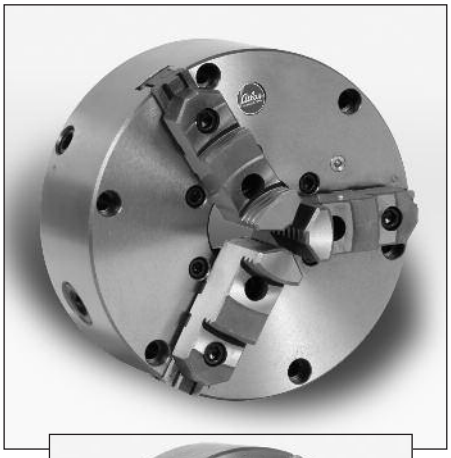
| Spindle | 5" | 6" |
|---|---|---|
| 4° Taper | 0505044 | 0605044 |
| 2 3/16"-10 Threaded | 0505045 | 0605045 |

Also available plates for rotary tables

## Threaded & Blank Mountings for SETRITE™ Chucks

| Spindle | 5" | 6" | 8" | 10" | 12" |
|---|---|---|---|---|---|
| Blank | 0505040 | 0605040 | 0805040 | 1005040 | 1205040 |
| 1½"-8 | 0505041 | 0605041 | 0805041 | - | - |
| 1¾"-8 | 0505042 | 0605042 | 0805042 | - | - |
| 2¼"-8 | 0505043 | 0605043 | 0805043 | - | - |
| 2⅜"-6 | - | 0605046 | 0805046 | - | - |

*Threaded adapter plates and special plates are available upon request.
"SETRITE" chucks and adapters are shipped unassembled unless ordered assembled at extra charge.
When ordering special adapters give make, model number, size, and spindle dimensions of machine.
For standard spindle dimensions, see page 103.

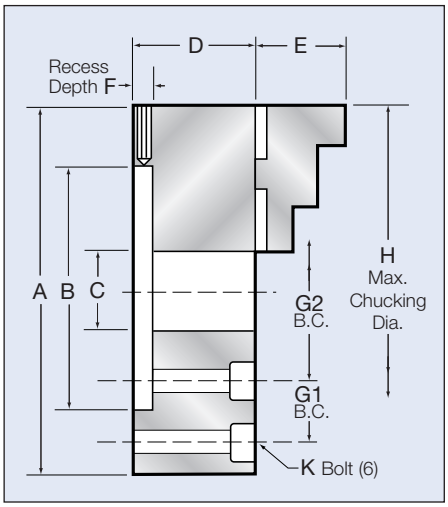


# Easy-Set™ Self-Centering Universal Chuck

## Low Cost 3 & 6 Jaw Chucks

### Direct Replacement for the Buck Adjust-Tru® Early Design

- High value, Lower cost
- One-year warranty
- Precision manufactured for adapter plate mounting - UTILIZES the same mounting plate as the PBA SETRITE™ and other popular adjustable universal chucks
- .0005 repeatability on duplicate parts
- 4 adjusting screws
- Chuck Sizes 6", 8", 10", 12" and 15"
- Hardened scroll
- Hardened pinion
- Two-piece tongue and groove jaws
- Semi-steel body




| Chuck Size (in) | Model Number | Approx. Weight (lbs) | Maximum RPM* |
|---|---|---|---|
| **Easy-set - 3 Jaw** | | | |
| 6 | EZ63 | 20 | 3400 |
| 8 | EZ83 | 43 | 3100 |
| 10 | EZ103 | 67 | 2700 |
| 12 | EZ123 | 104 | 2200 |
| 15 | EZ153 | 141 | 1800 |
| **Easy-set - 6 Jaw** | | | |
| 6 | EZ66 | 18 | 2500 |
| 8 | EZ86 | 47 | 2200 |
| 10 | EZ106 | 70 | 2000 |
| 12 | EZ126 | 108 | 1500 |

*Eccentric adjustment of chuck on adapter to obtain required TIR on the workpiece may result in unacceptable vibration at maximum RPM's. Reduce RPMs accordingly.

## Dimensional Data for Series Adapter Mounting Self-Centering Chucks

| Chuck Size | A | B* | C | D | E | F | G1 | G2 | H | K | Gripping Capacity Min.** | Gripping Capacity Max. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6" | 6.0" | 3.125" | 1.540" | 2.35" | 1.53" | 0.69" | 5.34" | - | 6.5" | 1/4" | 1/8" | 5" |
| 8" | 8.25" | 4.750" | 2.346" | 3.15" | 2.10" | 0.75" | 7.50" | - | 8.5" | 3/8" | 3/16" | 6½" |
| 10" | 10.0" | 6.375" | 2.860" | 3.40" | 2.58" | 0.81" | - | 4.38" | 11.0" | 7/16" | 15/32" | 8" |
| 12" | 12.0" | 7.906" | 3.285" | 4.00" | 2.58" | 0.84" | - | 5.25" | 12.5" | 1/2" | 27/64" | 10" |
| 15" | 15.0" | 11.781" | 4.250" | 5.78" | 3.55" | 1.13" | - | 6.75" | 16.0" | 3/4" | 9/16" | 15" |

** Tolerance - .003/+.002  **6-Jaw Chuck minimum grip, consult factory*

1. Bolt circle on 6" and 8" chucks are outside the pilot recess "B" as shown.
Bolt circle on 10", 12" and 15" Dia. chucks are inside "B" dimension.

® Ajust-Tru is a registered trade mark of Illinois Tool Works.

HOW TO ORDER: State quantity, Model Number of chuck, Part Number of adapter, and shipping instructions.

# Mounting Plates For Easy-Set™ 3-Jaw and 6-Jaw Chucks

Atlas Workholding offers a full line of Mounting Plates type "D", "A", "L" and threaded plates for the Easy-Set™ Chucks. Our Mounting Plates are interchangeable with other popular adjustable universal style Chucks.

Mounting plates are precision machined to suit the spindle nose of your machine. For maximum accuracy of mounting plates, mount plate on machine spindle nose, place a dial indicator on the chuck side face of the adapter close to the mounting holes, rotate the adapter and if the total indicator reading (TIR) exceeds .0005" take a light truing cut across the face of the mounting plate.

## Type D Mounting Plates "Camlock"

| Spindle | 6" | 8" | 10" | 12" | 15" |
|---|---|---|---|---|---|
| D-3 | 0605020 | 0805020 | - | - | - |
| D-4 | 0605021 | 0805021 | - | - | - |
| D-5 | 0605022 | 0805022 | 1005022 | - | - |
| D-6 | - | 0805023 | 1005023 | 1205023 | - |
| D-8 | - | - | 1005024 | 1205024 | 1505024 |
| D-11 | - | - | - | 1205025 | 1505025 |

## Type A American Standard A-1 & A-2, Spindles

| Spindle | 6" | 8" | 10" | 12" |
|---|---|---|---|---|
| A-4 | 0605009 | - | - | - |
| A-5 | 0605010 | 0805010 | 1005010 | - |
| A-6 | - | 0805011 | 1005011 | 1205011 |
| A-8 | - | - | 1005012 | 1205012 |

## Type L American Standard Long Taper Key Drive Spindle

| Spindle | 6" | 8" | 10" | 12" |
|---|---|---|---|---|
| L-00 | 0605031 | 0805031 | 1005031 | - |
| L-0 | 0605032 | 0805032 | 1005032 | 1205032 |
| L-1 | - | 0805033 | 1005033 | 1205033 |
| L-2 | - | - | 1005034 | 1205034 |

## For Hardinge® and Elgin Lathe

| Spindle | 6" |
|---|---|
| 4° Taper | 0605044 |
| 2 3/16"-10 TH'D | 0605045 |

Also available plates for rotary tables

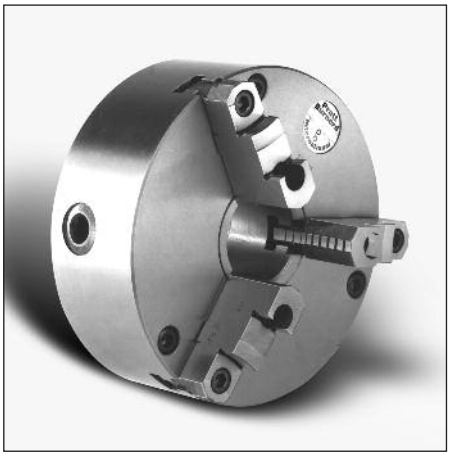
## Threaded & Blank Mountings* for Easy-Set™Chucks

| Spindle | 6" | 8" |
|---|---|---|
| Blank | 0605040 | 0805040 |
| 1½"-8 | 0605041 | 0805041 |
| 1¾"-8 | 0605042 | 0805042 |
| 2¼"-8 | 0605043 | 0805043 |
| 2⅜"-6 | 0605046 | 0805046 |

*Blank Mountings are finished on the chuck side of the mounting plate, and blank on the machine side

Hardinge is a registered trademark of Hardinge Inc.

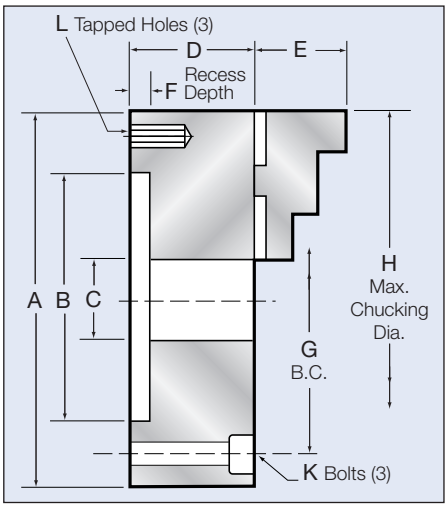
For standard spindle dimensions, see page 103.



# Self-Centering High Quality 3 Jaw Universal Chucks

## Super-Precision, 3 Pinion Non-Adjustable Self-Centering Type: 234 and 235 Series 5" thru 15"

- Two-year warranty
- Precision manufactured to fit types A, D and L spindles and adapter mounting
- .0015" T.I.R. 6-12" sizes, 15" size .003" T.I.R. using nominated pinion.
- Repeatability .0005" on all sizes
- Sizes 5" thru 15"
- Three hardened pinions
- Two-piece American standard tongue and groove jaws
- High tensile ductile iron bodies




| Chuck Size | Adapter Mounting Model No. | Type A Spindle Short Taper Size | Type A Spindle Short Taper Model No. | Type D Spindle Camlock Size | Type D Spindle Camlock Model No. | Type L Spindle Long Taper Size | Type L Spindle Long Taper Model No. |
|---|---|---|---|---|---|---|---|
| 5 | 0523500 | - | - | D-3 | 0523520 | - | - |
| 5 | - | - | - | D-4 | 0523521 | - | - |
| 6 | 0623500 | A-5 | 0623510 | D-3 | 0623520 | L-00 | 0623531 |
| 6 | - | - | - | D-4 | 0623521 | L-0 | 0623532 |
| 8 | 0823500 | A-5 | 0823510 | D-3 | 0823520 | L-00 | 0823531 |
| 8 | - | A-6 | 0823511 | D-4 | 0823521 | L-0 | 0823532 |
| 8 | - | - | - | D-5 | 0823522 | - | - |
| 8 | - | - | - | D-6 | 0823523 | L-1 | 0823533 |
| 10 | 1023500 | A-5 | 1023510 | D-4 | 1023521 | L-00 | 1023531 |
| 10 | - | A-6 | 1023511 | D-6 | 1023523 | L-0 | 1023532 |
| 10 | - | A-8 | 1023512 | D-8 | 1023524 | L-1 | 1023533 |
| 12 | 1223500 | A-6 | 1223511 | D-6 | 1223523 | L-0 | 1223532 |
| 12 | - | A-8 | 1223512 | D-8 | 1223524 | L-1 | 1223533 |
| 12 | - | - | - | D-11 | 1223525 | L-2 | 1223534 |
| 15 | 1523400 | A-8 | 1523412 | D-6 | 1523423 | L-1 | 1523433 |
| 15 | - | A-11 | 1523413 | D-8 | 1523424 | L-2 | 1523434 |
| 15 | - | - | - | D-11 | 1523425 | - | - |

Larger diameter chucks available, contact PBA for price and delivery.

## Dimensional Data for 235 Series Adapter Mounting Self-Centering Chucks

| Chuck Size | A | B | C | D | E | F | G | H | K | Lbs Wt. | Gripping Capacity Min. | Gripping Capacity Max. | Max. RPM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5" | 4.92" | 3.740" | 1.38" | 2.31" | 1.375" | .15" | 4.25" | 6.75" | M8 | 10.5 | 3/16" | 4" | 3600 |
| 6" | 6.30" | 4.921" | 1.81" | 2.53" | 1.59" | .15" | 5.51" | 7.75" | M10 | 18 | 3/16" | 5" | 3400 |
| 8" | 7.87" | 6.299" | 2.16" | 2.87" | 1.75" | .15" | 6.93" | 9.75" | M10 | 31.5 | 3/16" | 6½" | 3100 |
| 10" | 9.84" | 7.875" | 2.99" | 3.31" | 2.13" | .19" | 8.82" | 12.25" | M12 | 59 | 1/2" | 8" | 2700 |
| 12" | 12.20" | 10.236" | 4.05" | 3.56" | 2.28" | .19" | 11.26" | 14.25" | M12 | 89 | 3/4" | 10" | 2200 |
| 15" | 15.74" | 12.990" | 5.35" | 3.96" | 2.75" | .19" | 14.25" | 16.25" | M16 | 150 | 1½" | 13" | 1800 |

HOW TO ORDER: State quantity, Model Number of chuck, Part Number of adapter, and shipping instructions.

# Mounting Plates For 234 and 235, Series Chucks

Mounting plates are precision machined to suit the spindle nose of your machine. Plates are stocked semi-finished. If ordering plate separately, specify the model number of your chuck so that PBA can finish machine the adapter to suit your Pratt Burnerd chuck.

## Type D Camlock Mountings

| Spindle | 5" | 6" | 8" | 10" | 12" | 15" |
|---|---|---|---|---|---|---|
| D-3 | 0503020 | 0603020 | 0803020 | 1003020 | - | - |
| D-4 | 0503021 | 0603021 | 0803021 | 1003021 | - | - |
| D-5 | - | - | 0803022 | 1003022 | - | - |
| D-6 | - | - | 0803023 | 1003023 | 1203023 | 1503023 |
| D-8 | - | - | - | 1003024 | 1203024 | 1503024 |
| D-11 | - | - | - | - | 1203025 | 1503025 |

## Type A American Standard Short Taper A-1 & A-2 Spindles

| Spindle | 5" | 6" | 8" | 10" | 12" | 15" |
|---|---|---|---|---|---|---|
| A-5 | 0503010 | 0603010 | 0803010 | 1003010 | - | - |
| A-6 | - | - | 0803011 | 1003011 | 1203011 | 1503011 |
| A-8 | - | - | - | 1003012 | 1203012 | 1503012 |
| A-11 | - | - | - | - | 1203013 | 1503013 |

## Type L American Standard Long Taper Key Drive Spindles

| Spindle | 5" | 6" | 8" | 10" | 12" | 15" |
|---|---|---|---|---|---|---|
| L-00 | 0503031 | 0603031 | 0803031 | 1003031 | - | |
| L-0 | - | 0603032 | 0803032 | 1003032 | 1203032 | |
| L-1 | - | - | 0803033 | 1003033 | 1203033 | 1503033 |
| L-2 | - | - | - | 1003034 | 1203034 | 1503034 |
| L-3 | - | - | - | - | - | 1503035 |

## Threaded Spindles

| Spindle | 5" | 6" | 8" | 10" |
|---|---|---|---|---|
| 1½"-8 | 0503041 | 0603041 | 0803041 | - |
| 1¾"-8 | 0503042 | 0603042 | 0803042 | - |
| 2¼"-8 | 0503043 | 0603043 | 0803043 | 1003043 |

Special adapter plates available upon request. Specify chuck number and spindle nose specifications.
For spindle nose specifications, see page 103.

3-Jaw Universal Chucks

# Special Manual Large Thru-Hole Rotary Table Chucks and Lathe Chucks

- 3-Jaw Universal Chucks and 4-Jaw Independent Chucks
- Special Large Thru-Hole
- Straight Mounting Recess
- Custom Chuck Sizes and Thru-Hole Available
- Custom Rotary Table Chuck Adapters Available
- Lathe Mounting Adapters A, D and L Available
- One Year Warranty
- Also Available 3 and 6 Jaw Setrite (page 4) & Easy-Set Chucks (page 6) for Rotary Tables

## 3-Jaw Universal Chucks

| Part Number | Chuck Size | Thru Hole | Jaw Type | Body Thickness | Mounting Recess Dia | Bolt Circle | Thru Bolts | Bolt Size |
|---|---|---|---|---|---|---|---|---|
| 1433-2000-6.1 | 14" | 6.1" | 2pc. Am. Std. | 3.937" (100mm) | 11.614" (295mm) | 12.598" (320mm) | 3-120° | M14 |
| 1634-2000-6.5 | 16" | 6.5" | 2pc. Am. Std. | 4.33" (110mm) | 13.78" (350mm) | 14.763" (375mm) | 3-120° | M12 |
| 1833-2000-8.3 | 18" | 8.3" | 2pc. Am. Std. | 4.25" (108mm) | 15.039" (382mm) | 16.535" (420mm) | 3-120° | M16 |
| 2033-2000-10.3 | 20" | 10.3" | 2pc. Am. Std. | 4.449" (113mm) | 15.039" (382mm) | 18.11" (460mm) | 6-60° | M20 |
| 2033-2000-10.65 | 20" | 10.65" | 2pc. Am. Std. | 4.449" (113mm) | 15.039" (382mm) | 18.11" (460mm) | 6-60° | M20 |

Other Chuck Diameters and Thru-Hole combinations available, contact factory

4-Jaw Independdent Chucks

## 4-Jaw Independent Chucks

| Part Number | Chuck Size | Thru Hole | Jaw Type | Body Thickness | Mounting Recess Dia | Bolt Circle | Thru Bolts | Bolt Size |
|---|---|---|---|---|---|---|---|---|
| 1643-2000-6.1 | 16" | 6.1" | 2pc. Am. Std. | 4.693" (119.30mm) | 11.811" (300mm) | 12.598" (320mm) | 4 | M16 |
| 2143-2000-320 | 21" | 12.6" | 2pc. Am. Std. | 4.5" (114.30mm) | 15.748" (400mm) | 17.323" (440mm) | 4 | M16 |

Other Chuck Diameters and Thru-Hole combinations available, contact factory

# Chuck Semi-Finished Mounting Plates

- Semi-finished suitable for all adapter mount chucks.
- Sizes available 6"-24", larger diameter mounting plates available upon request
- Mounting types available “D” camlock, “A” Am. Std., “L” long tapered nose and threaded type.
- Supplied with finish turning instructions.



## “D” camlock

| Part No. | Spindle Type | Diameter | Plate Thickness |
|---|---|---|---|
| 0603020 | D1-3 | 6.25" | 1.125" |
| 0603021 | D1-4 | 6.25" | 1.125" |
| 0603022 | D1-5 | 6.25" | 1.125" |
| 0803020 | D1-3 | 8.25" | 1.125" |
| 0803021 | D1-4 | 8.25" | 1.125" |
| 0803022 | D1-5 | 8.25" | 1.125" |
| 0803023 | D1-6 | 8.25" | 1.125" |
| 1003020 | D1-3 | 10.25" | 1.125" |
| 1003021 | D1-4 | 10.25" | 1.125" |
| 1003022 | D1-5 | 10.25" | 1.125" |
| 1003023 | D1-6 | 10.25" | 1.250" |
| 1003024 | D1-8 | 10.25" | 1.375" |
| 1203022 | D1-5 | 12.50" | 1.250" |
| 1203023 | D1-6 | 12.50" | 1.250" |
| 1203024 | D1-8 | 12.50" | 1.375" |
| 1203025 | D1-11 | 12.50" | 1.625" |
| 1503023 | D1-6 | 15.75" | 1.375" |
| 1503024 | D1-8 | 15.75" | 1.5" |
| 1503025 | D1-11 | 15.75" | 1.625" |
| 2003024 | D1-8 | 20.375" | 1.875" |
| 2003025 | D1-11 | 20.375" | 1.875" |

## “A” short taper

| Part No. | Spindle Type | Diameter | Plate Thickness |
|---|---|---|---|
| 0603009 | A-4 | 6.250" | 1.250" |
| 0603010 | A-5 | 6.250" | 1.250" |
| 0603011 | A-6 | 6.250" | 1.375" |
| 0803010 | A-5 | 8.250" | 1.375" |
| 0803011 | A-6 | 8.250" | 1.500" |
| 1003010 | A-5 | 10.50" | 1.375" |
| 1003011 | A-6 | 10.50" | 1.500" |
| 1003012 | A-8 | 10.50" | 1.750" |
| 1203011 | A-6 | 12.75" | 1.625" |
| 1203012 | A-8 | 12.75" | 1.787" |
| 1203013 | A-11 | 12.75" | 2.125" |
| 1503011 | A-6 | 15.75" | 1.625"" |
| 1503012 | A-8 | 15.75" | 1.787" |
| 1503013 | A-11 | 15.75" | 2.125" |
| 2003012 | A-8 | 20.375" | 2.125" |
| 2003013 | A-11 | 20.375" | 2.375" |
| 2403012 | A-8 | 25.0" | 2.375" |
| 2403013 | A-11 | 25.0" | 2.625" |

## “L” long tapered nose

| Part No. | Spindle Type | Diameter | Plate Thickness |
|---|---|---|---|
| 0603031 | L-00 | 6.25" | 1.25" |
| 0603032 | L-0 | 6.25" | 1.50" |
| 0803031 | L-00 | 8.25" | 1.25" |
| 0803032 | L-0 | 8.25" | 1.50" |
| 0803033 | L-1 | 8.25" | 1.75" |
| 1003031 | L-00 | 10.5" | 1.25" |
| 1003032 | L-0 | 10.5" | 1.50" |
| 1003033 | L-1 | 10.5" | 1.75" |
| 1003034 | L-2 | 10.5" | 2.0" |
| 1203032 | L-0 | 12.5" | 1.5" |
| 1203033 | L-1 | 12.5" | 1.75" |
| 1203034 | L-2 | 12.5" | 2.0" |
| 1503033 | L-1 | 15.75" | 1.75" |
| 1503034 | L-2 | 15.75" | 2.0" |
| 2003034 | L-2 | 20.375" | 2.0" |
| 2403034 | L-2 | 25.0" | 2.0" |

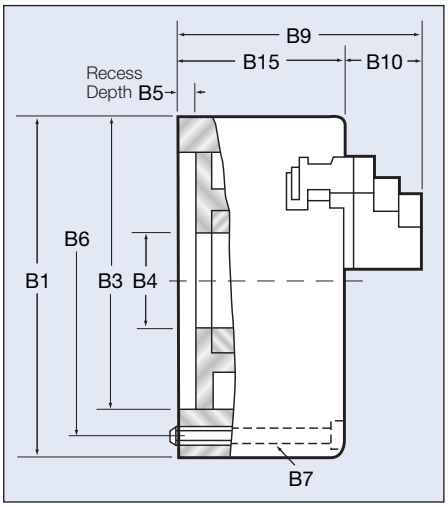
## Threaded Mounts

| Part No. | Spindle Type | Diameter | Plate Thickness |
|---|---|---|---|
| 0503039 | 1-10 | 5.0" | .750" |
| 0503041 | 1-1/2-8 | 5.0" | .750" |
| 0603041 | 1-1/2-8 | 6.312" | .687" |
| 0603042 | 1-3/4-8 | 6.312" | .687" |
| 0603043 | 2-1/4-8 | 6.312" | .687" |
| 0803043 | 2-1/4-8 | 7.875" | .781" |
| 0803046 | 2-3/8-6 | 7.875" | .781" |
| 1003043 | 2-1/4-8 | 9.875" | .906" |
| 1203046 | 2-3/8-8 | 12.42" | 1.10" |

# Self-Centering 3-Jaw Universal Iron Body Chucks

## Series 342 Medium-Duty Value Line Flatback, D and A Type Mounting: Sizes 5" thru 25"

- High value and lower cost
- One year warranty
- Standard chuck sizes 5" Thru 25"
- Maximum .003" TIR using nominating pinion - thru 12"
- .001" Repeatability using nominating pinion - thru 12"
- Two-piece American Standard tongue and groove jaws
- Hardened scroll
- Three hardened pinions
- Semi steel bodies




| Chuck Size | Flatback Chuck No. | Type D Spindle Size | Type D Spindle Chuck No. | Type A Spindle Size | Type A Spindle Chuck No. |
|---|---|---|---|---|---|
| 5" | 0534-2000 | | ------- | | ------- |
| 6" | 0634-2000 | D-4 | 0634-20D4 | A-4 | 0634-20A4 |
| 6" | ------- | | ------- | A-5 | 0634-20A5 |
| 8" | 0834-2000 | D-4 | 0834-20D4 | | ------- |
| 8" | ------- | D-5 | 0834-20D5 | A-5 | 0834-20A5 |
| 8" | | D-6 | 0834-20D6 | A-6 | 0834-20A6 |
| 10" | 1034-2000 | D-5 | 1034-20D5 | A-5 | 1034-20A5 |
| 10" | ------- | D-6 | 1034-20D6 | A-6 | 1034-20A6 |
| 10" | ------- | D-8 | 1034-20D8 | A-8 | 1034-20A8 |
| 12" | 1234-2000 | D-6 | 1234-20D6 | A-6 | 1234-20A6 |
| 12" | ------- | D-8 | 1234-20D8 | A-8 | 1234-20A8 |
| 16" | 1634-2000 | D-8 | 1634-20D8 | A-8 | 1634-20A8 |
| 16" | ------- | D-11 | 1634-2D11 | A-11 | 1634-2A11 |
| 20" | 2034-2000 | D-8 | 2034-20D8 | A-8 | 2034-20A8 |
| 20" | ------- | D-11 | 2034-2D11 | A-11 | 2034-2A11 |
| 25" | 2534-2000 | D-8 | 2534-20D8 | A-8 | 2534-20A8 |
| 25" | -------- | D-11 | 2534-2D11 | A-11 | 2534-2A11 |
| 25" | -------- | | ------- | A-15 | 2534-2A15 |

Consult factory for chucks sizes larger than 25".

## Dimensions for Universal Flatback Mounting Chucks with Two-piece Jaws (in/mm)

| Chuck Size | B1 | B3 | B4 | B5 | B6 | B7 | B9 | B10 | B15 | Max RPM |
|---|---|---|---|---|---|---|---|---|---|---|
| 5"/125 | 4.92"/125 | 3.74"/95 | 1.18"/30 | .157"/4 | 4.25"/108 | (3) M-8 | 3.94"/100 | 1.65"/42 | 2.28"/58 | 3000 |
| 6"/160 | 6.30"/160 | 4.92"/125 | 1.77"/45 | .197"/5 | 5.51"/140 | (6) M-10 | 4.53"/115 | 1.97"/50 | 2.56"/65 | 2500 |
| 8"/200 | 7.87"/200 | 6.30"/160 | 2.56"/65 | .197"/5 | 6.93"/176 | (6) M-10 | 5.00"/127 | 2.05"/52 | 2.95"/75 | 2000 |
| 10"/250 | 9.84"/250 | 7.87"/200 | 3.15"/80 | .197"/5 | 8.81"/224 | (6) M-12 | 5.59"/142 | 2.44"/62 | 3.15"/80 | 1600 |
| 12"/315 | 12.40"/315 | 10.23"/260 | 3.94"/100 | .236"/6 | 11.26"/286 | (6) M-16 | 6.53"/166 | 3.15"/76 | 3.54"/90 | 1200 |
| 16"/400 | 15.75"/400 | 12.99"/330 | 5.12"/130 | .236"/6 | 14.25"/362 | (6) M-16 | 7.32"/186 | 3.38"/86 | 3.94"/100 | 1000 |
| 20"/500 | 19.68"/500 | 16.53"/420 | 8.26"/210 | .236"/6 | 18.03"/458 | (6) M-16 | 8.07"/205 | 3.54"/90 | 4.53"/115 | 800 |
| 25"/630 | 24.80"/630 | 21.45"/545 | 9.92"/252 | .275"/7 | 23.07"/586 | (6) M-16 | 8.68"/220.5 | 3.36"/85.5 | 5.31"/135 | 800 |

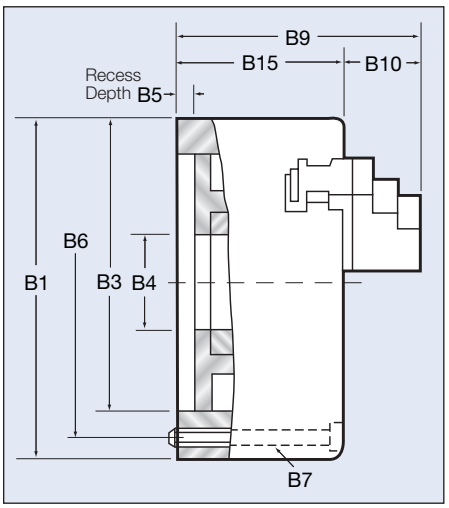
Note: Dimensions are for flatback chucks; for D or A mounted chucks dimension B15 will vary.
(1) Model No. 2034-2A11 and 2534-2A11 have a 6.5" thru-hole

HOW TO ORDER: State quantity, chuck number, and shipping instructions.

# Self-Centering 3-Jaw Universal Steel Body Value Line Chucks

## Series 333 Value Line Flatback, D and A Type Mounting: Sizes 6" thru 25"

- High value and lower cost
- One year warranty
- Standard chuck sizes 6" thru 25"
- Maximum .003" TIR using nominating pinion - thru 12"
- .001" Repeatability using nominating pinion - thru 12"
- Two-piece American Standard tongue and groove jaws
- Hardened scroll
- Three hardened pinions
- Steel bodies




| Chuck Size | Flatback Chuck No. | Type D Spindle Size | Type D Spindle Chuck No. | Type A Spindle Size | Type A Spindle Chuck No. |
|---|---|---|---|---|---|
| 6" | 0633-3000 | D-4 | 0633-30D4 | A-4 | 0633-30A4 |
| 6" | ------- | | ------- | A-5 | 0633-30A5 |
| 8" | 0833-3000 | D-4 | 0833-30D4 | | ------- |
| 8" | ------- | D-5 | 0833-30D5 | A-5 | 0833-30A5 |
| 8" | ------- | D-6 | 0833-30D6 | A-6 | 0833-30A6 |
| 10" | 1033-3000 | D-5 | 1033-30D5 | A-5 | 1033-30A5 |
| 10" | ------- | D-6 | 1033-30D6 | A-6 | 1033-30A6 |
| 10" | ------- | | ------- | A-8 | 1033-30A8 |
| 12" | 1233-3000 | D-6 | 1233-30D6 | A-6 | 1233-30A6 |
| 12" | ------- | D-8 | 1233-30D8 | A-8 | 1233-30A8 |
| 16" | 1633-3000 | D-8 | 1633-30D8 | A-8 | 1633-30A8 |
| 16" | ------- | D-11 | 1633-3D11 | A-11 | 1633-3A11 |
| 20" | 2033-3000 | D-8 | 2033-30D8 | A-8 | 2033-30A8 |
| 20" | ------- | D-11 | 2033-3D11 | A-11 | 2033-3A11 |
| 25" | 2533-3000 | D-8 | 2533-30D8 | A-8 | 2533-30A8 |
| 25" | ------- | D-11 | 2533-3D11 | A-11 | 2533-3A11 |

Consult factory for chucks sizes larger than 25".

## Dimensions for Universal Flatback Mounting Chucks with Two-piece Jaws (in/mm)

| Chuck Size | B1 | B3 | B4 | B5 | B6 | B7 | B9 | B10 | B15 | Max RPM |
|---|---|---|---|---|---|---|---|---|---|---|
| 6"/160 | 6.30"/160 | 4.92"/125 | 1.77"/45 | .197"/5 | 5.51"/140 | (6) M-10 | 4.53"/115 | 2.57"/50 | 2.56"/65 | 4500 |
| 8"/200 | 7.87"/200 | 6.30"/160 | 2.56"/65 | .197"/5 | 6.93"/176 | (6) M-10 | 5.00"/127 | 2.05"/52 | 2.95"/75 | 4000 |
| 10"/250 | 9.84"/250 | 7.87"/200 | 3.15"/80 | .197"/5 | 8.81"/224 | (6) M-12 | 5.59"/142 | 2.44"/62 | 3.15"/80 | 3000 |
| 12"/315 | 12.40"/315 | 10.23"/260 | 3.94"/100 | .236"/6 | 11.26"/286 | (6) M-16 | 6.53"/166 | 3.15"/76 | 3.54"/90 | 2300 |
| 16"/400 | 15.75"/400 | 12.99"/330 | 5.12"/130 | .236"/6 | 14.25"/362 | (6) M-16 | 7.32"/186 | 3.38"/86 | 3.94"/100 | 2000 |
| 20"/500 | 19.68"/500 | 16.53"/420 | 8.26"/210 | .236"/6 | 18.03"/458 | (6) M-16 | 8.07"/205 | 3.54"/90 | 4.52"/115 | 1200 |
| 25"/630 | 24.80"/630 | 21.45"/545 | 9.92"/252 | .275"/7 | 23.07"/586 | (6) M-16 | 8.68"/220.5 | 3.36"/85.5 | 4.52"/135 | 1200 |

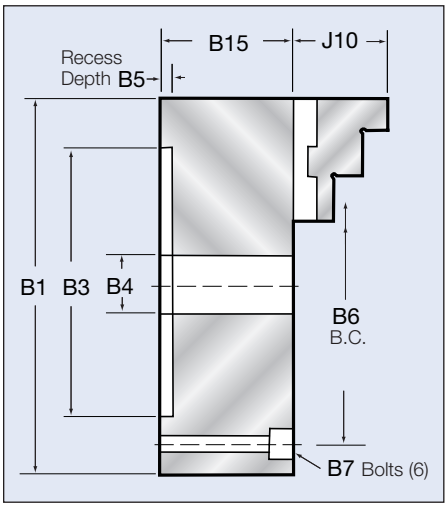
Note: Dimensions are for flatback chucks; for D or A mounted chucks dimension B15 will vary.

HOW TO ORDER: State quantity, chuck number and shipping instructions.

# Self-Centering 3-Jaw Universal Steel Body Chucks

## Series 332 Heavy-Duty Flatback, A, L, and D Type Mountings, Sizes 20" thru 32"

- One year warranty
- *Steel body*
- Sizes 20" thru 32"
- Maximum .003" TIR using nominating pinion
- .001" Repeatability using nominating pinion
- Two-piece American Standard tongue and groove jaws
- Nitride hardened and ground scroll
- Three hardened pinions
- **Larger chuck sizes available upon request.**




| Chuck Size | Flatback Chuck No. | Type A Spindle Size | Type A Spindle Chuck No. | Type L Spindle Size | Type L Spindle Chuck No. | Fits Camlock Spindle Type D Size | Fits Camlock Spindle Type D Chuck No. |
|---|---|---|---|---|---|---|---|
| 20" | 2033-2000 | A-8 | 2033-20A8 | L-1 | 2033-20L1 | D-8 | 2033-20D8 |
| 20" | --- | A-11 | 2033-2A11 | L-2 | 2033-20L2 | D-11 | 2033-2D11 |
| 24" | 2433-2000 | A-8 | 2433-20A8 | L-2 | 2433-20L2 | D-8 | 2433-20D8 |
| 24" | --- | A-11 | 2433-2A11 | | --- | D-11 | 2433-2D11 |
| 28" | 2833-2000 | A-15 | 2833-2A15 | L-2 | 2833-20L2 | D-11 | 2833-2D11 |
| 28" | --- | A-20 | 2833-2A20 | | | --- | |
| 32" | 3233-2000 | A-15 | 3233-2A15 | L-3 | 3233-20L3 | D-11 | 3233-2D11 |
| 32" | | A-20 | 3233-2A20 | | | | |

Consult factory for chucks sizes larger than 32".

## Dimensional Data for Universal Flatback Mounting Chucks

| Chuck Dia. | B1 | B3 | B4 | B5 | B6 | B7 | B15 | J10 | RPM |
|---|---|---|---|---|---|---|---|---|---|
| 20" | 19.6" | 15.748" | 5.51"(1) | .236" | 18.03" | M-16 | 4.17" | 3.26" | 1100 |
| 24" | 23.6" | 21.456" | 9.094"(1) | .236" | 23.07" | M-16 | 4.25" | 3.26" | 850 |
| 28" | 27.5" | 23.818" | 10.23" | .236" | 25.98" | M-16 | 5.25" | 3.96" | 750 |
| 32" | 31.5" | 27.755" | 10.23" | .236" | 29.99" | M-16 | 5.25" | 3.66" | 600 |

Note: Dimensions are for flatback chucks; for A, D or L mounted chucks dimension B15 will vary, add approx. 1" to B15 dimension.
(1) Model No. 2033-2A11 and 2433-2A11 have a 6.5" thru-hole.

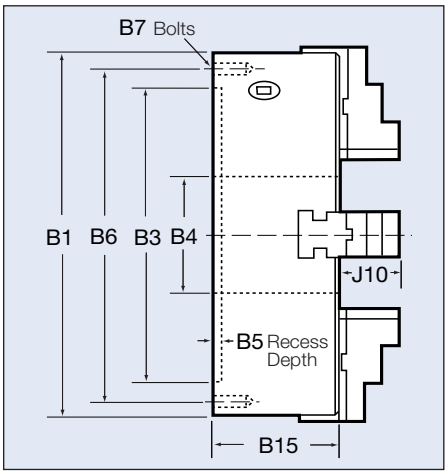
HOW TO ORDER: State quantity, chuck number, and shipping instructions.

# Self-Centering 4-Jaw Universal Steel Body Chucks

## Series 743 Sizes 6" thru 24"

- One year warranty
- Sizes 6" thru 24"
- Chucks can be supplied with thru holes from front of chuck for mounting on rotary tables or centers
- Maximum .003" TIR using nominating pinion
- .001" Repeatability using nominating pinion
- Two-piece American Standard tongue and groove jaws
- Nitride hardened and ground scroll
- Hardened pinions
- Steel body
- Can be used for either two jaw or four jaw concentric, self-centering chucking
- Larger sizes available on request
- Sizes 20" and 24" chucks also available in iron body on request

| Chuck Size | Flatback Chuck No. | Camlock type D Spindle Size | Camlock type D Spindle Chuck No. | Type L Spindle Size | Type L Spindle Chuck No. | Type A Spindle Size | Type A Spindle Chuck No. | Threaded Type Spindle Size | Threaded Type Spindle Chuck No. |
|---|---|---|---|---|---|---|---|---|---|
| 6" | 0673-2000 | D-3 | 0673-20D3 | L-00 | 0673-2L00 | A-4 | 0673-20A4 | 1-1/2-8 | 0673-2041 |
| 6" | | D-4 | 0673-20D4 | L-0 | 0673-20L0 | A-5 | 0673-20A5 | 1-3/4-8 | 0673-2042 |
| 6" | | | | | | | | 2-1/4-8 | 0673-2043 |
| 6" | | | | | | | | 2-3/8-6 | 0673-2046 |
| 8" | 0873-2000 | D-4 | 0873-20D4 | L-00 | 0873-2L00 | A-5 | 0873-20A5 | 2-1/4-8 | 0873-2043 |
| 8" | | D-5 | 0873-20D5 | L-0 | 0873-20L0 | A-6 | 0873-20A6 | 2-3/8-6 | 0873-2046 |
| 8" | | D-6 | 0873-20D6 | | | | | | |
| 10" | 1073-2000 | D-5 | 1073-20D5 | L-0 | 1073-20L0 | A-5 | 1073-20A5 | 2-1/4-8 | 1073-2043 |
| 10" | | D-6 | 1073-20D6 | L-1 | 1073-20L1 | A-6 | 1073-20A6 | 2-3/8-6 | 1073-2046 |
| 10" | | D-8 | 1073-20D8 | | | A-8 | 1073-20A8 | | |
| 12" | 1273-2000 | D-6 | 1273-20D6 | L-0 | 1273-20L0 | A-6 | 1273-20A6 | | |
| 12" | | D-8 | 1273-20D8 | L-1 | 1273-20L1 | A-8 | 1273-20A8 | | |
| 12" | | D-11 | 1273-2D11 | L-2 | 1273-20L2 | | | | |
| 16" | 1673-2000 | D-6 | 1673-20D6 | L-1 | 1673-20L1 | A-8 | 1673-20A8 | | |
| 16" | | D-8 | 1673-20D8 | L-2 | 1673-20L2 | A-11 | 1673-2A11 | | |
| 16" | | D-11 | 1673-2D11 | | | | | | |
| 20" | 2073-2000 | D-8 | 2073-20D8 | L-1 | 2073-20L1 | A-8 | 2073-20A8 | | |
| 20" | | D-11 | 2073-2D11 | L-2 | 2073-20L2 | A-11 | 2073-2A11 | | |
| 24" | 2473-2000 | D-8 | 2473-20D8 | L-2 | 2473-20L2 | A-8 | 2473-20A8 | | |
| 24" | | D-11 | 2473-2D11 | | | A-11 | 2473-2A11 | | |

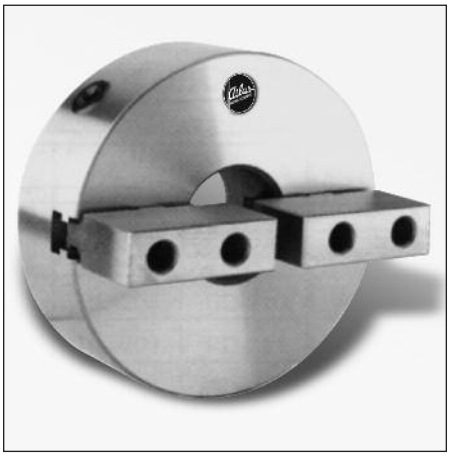



## Dimensional Data For Universal Flatback Mounting Chucks with Two-piece Jaws

| Chuck Dia. | B1 | B3 | B4 | B5 | B6 | B7 | B15 | J10 |
|---|---|---|---|---|---|---|---|---|
| 6-¼" | 6.3" | 4.921" | 1.65" | .157" | 5.51" | 3xM10 | 2.56" | 1.64" |
| 8" | 7.9" | 6.299" | 2.16" | .157" | 6.92" | 3xM10 | 2.95" | 1.69" |
| 10" | 9.8" | 7.875" | 3.15" | .165" | 8.74" | 3xM12 | 3.26" | 2.11" |
| 12" | 12.4" | 10.157" | 3.74" | .196" | 11.18" | 3xM14 | 4.13" | 2.12" |
| 16" | 15.8" | 12.598" | 5.11" | .196" | 14.25" | 3xM16 | 5.55 | 2.44" |
| 20" | 19.6" | 15.748" | 6.49" | .236" | 18.03" | 3xM16 | 4.17" | 2.93" |
| 24" | 23.6" | 21.456" | 8.07" | .275" | 23.07" | 3xM16 | 5.51" | 2.93" |

Note: Dimensions are for flatback chucks; on A, L and D mounted chucks dimension B15 will vary.

HOW TO ORDER: State quantity, chuck number, and shipping instructions.

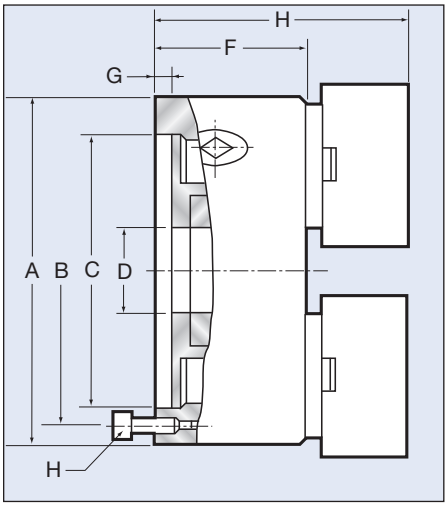


# Self-Centering 2-Jaw Scroll Chucks

## Sizes 6-25 inches

- American standard two-piece tongue and groove jaws
- Scroll and jaws hardened and ground
- Sizes 6", 8", 10", 12" 15" 20" and 25",
- Top reversible jaws
- Semi-steel body
- Comes with master jaws and top jaws, T-wrench and mounting screws
- One year warranty

| Chuck Size | Flatback Chuck No. | Camlock type D Spindle Size | Camlock type D Spindle Chuck No. | Type L Spindle Size | Type L Spindle Chuck No. | Type A Spindle Size | Type A Spindle Chuck No. | Threaded Type Spindle Size | Threaded Type Spindle Chuck No. |
|---|---|---|---|---|---|---|---|---|---|
| 6" | 0624-2000 | D-3 | 0624-20D3 | L-00 | 0624-2L00 | A-4 | 0624-20A4 | 1-1/2-8 | 0624-2041 |
| 6" | | D-4 | 0624-20D4 | L-0 | 0624-20L0 | A-5 | 0624-20A5 | 1-3/4-8 | 0624-2042 |
| 6" | | | | | | | | 2-1/4-8 | 0624-2043 |
| 6" | | | | | | | | 2-3/8-6 | 0624-2046 |
| 8" | 0824-2000 | D-4 | 0824-20D4 | L-00 | 0824-2L00 | A-5 | 0824-20A5 | 2-1/4-8 | 0824-2043 |
| 8" | | D-5 | 0824-20D5 | L-0 | 0824-20L0 | A-6 | 0824-20A6 | 2-3/8-6 | 0824-2046 |
| 8" | | D-6 | 0824-20D6 | | | | | | |
| 10" | 1024-2000 | D-5 | 1024-20D5 | L-0 | 1024-20L0 | A-5 | 1024-20A5 | 2-1/4-8 | 1024-2043 |
| 10" | | D-6 | 1024-20D6 | L-1 | 1024-20L1 | A-6 | 1024-20A6 | 2-3/8-6 | 1024-2046 |
| 10" | | D-8 | 1024-20D8 | | | A-8 | 1024-20A8 | | |
| 12" | 1224-2000 | D-6 | 1224-20D6 | L-0 | 1224-20L0 | A-6 | 1224-20A6 | | |
| 12" | | D-8 | 1224-20D8 | L-1 | 1224-20L1 | A-8 | 1224-20A8 | | |
| 12" | | D-11 | 1224-2D11 | L-2 | 1224-20L2 | | | | |
| 15" | 1624-2000 | D-6 | 1624-20D6 | L-1 | 1624-20L1 | A-8 | 1624-20A8 | | |
| 15" | | D-8 | 1624-20D8 | L-2 | 1624-20L2 | A-11 | 1624-2A11 | | |
| 15" | | D-11 | 1624-2D11 | | | | | | |
| 20" | 2024-2000 | D-8 | 2024-20D8 | L-1 | 2024-20L1 | A-8 | 2024-20A8 | | |
| 20" | | D-11 | 2024-2D11 | L-2 | 2024-20L2 | A-11 | 2024-2A11 | | |
| 25" | 2424-2000 | D-8 | 2424-20D8 | L-2 | 2424-20L2 | A-8 | 2424-20A8 | | |
| 25" | | D-11 | 2424-2D11 | | | A-11 | 2424-2A11 | | |




## Dimensional Data 2-Jaw Self Centering Scroll Chucks

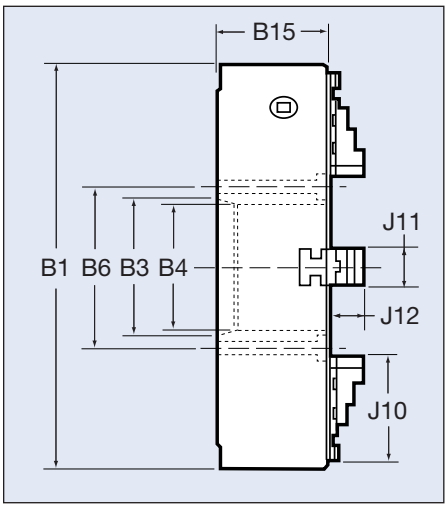
| Chuck Dia. | A | B | C | D | E | F | G | H | Weight |
|---|---|---|---|---|---|---|---|---|---|
| 6" | 6.299" | 5.591" | 5.118" | 1.575" | 4.291" | 2.559" | 0.197" | 3-M8 | 22 lbs. |
| 8" | 7.874" | 7.087" | 6.496" | 2.559" | 4.803" | 2.953" | 0.197" | 3-M10 | 35 lbs. |
| 10" | 9.843" | 8.898" | 8.110" | 3.150" | 5.276" | 3.150" | 0.197" | 3-M12 | 51 lbs. |
| 12" | 12.795" | 11.654" | 10.709" | 3.937" | 6.102" | 3.780" | 0.472" | 3-M16 | 99 lbs. |
| 15" | 14.961" | 13.780" | 12.795" | 5.315" | 6.181" | 3.858" | 0.236" | 3-M16 | 155 lbs |
| 20" | 19.685" | 18.307" | 17.323" | 8.268" | 8.268" | 4.528" | 0.236" | 6-M16 | 262 lbs |
| 25" | 24.803" | 23.425 | 22.047 | 10.630" | 8.582" | 5.256 | 0.276" | 6-M16 | 460 lbs |

HOW TO ORDER: State quantity, chuck number, and shipping instructions.

# King Bore Oil Country 3-Jaw Universal Chucks

## Series 332EX Extra Heavy-Duty Sizes 20" thru 48"

- Sizes 20" to 48"
- Forged Steel Body
- Hardened Jaw Ways
- Extra Heavy Duty American Standard, Hard Top and Master Jaws.
- Gripping surfaces serrated for more holding power
- Large Thru-Holes Standard
- Hardened Scroll Gear for long life
- A Type Mount standard also available with D1 Camlock Mounting
- T-slots optional




| Chuck Size | Model No. | Mount | Thru Hole | Max rpm's | Approx. Weight |
|---|---|---|---|---|---|
| 20 | 2033-2A11EX | A2-11 | 6.75 | 1100 | 475 lbs |
| 20 | 2033-2A15EX | A2-15 | 7.30 | 1100 | 450 lbs |
| 24 | 2433-2A15EX | A2-15 | 11.06 | 850 | 695 lbs |
| 24 | 2433-2A20EX | A2-20 | 12.60① | 850 | 670 lbs |
| 28 | 2833-2A15EX | A2-15 | 11.06 | 750 | 890 lbs |
| 28 | 2833-2A20EX | A2-20 | 12.60① | 750 | 870 lbs |
| 32 | 3233-2A15EX | A2-15 | 11.06 | 600 | 1290 lbs |
| 32 | 3233-2A20EX | A2-20 | 12.60① | 600 | 1270 lbs |
| 36 | 3633-2A20EX | A2-20 | 12.60① | 550 | 1610 lbs |
| 40 | 4033-2A20EX | A2-20 | 14.56① | 500 | 1975 lbs |
| 40 | 4033-2A28EX | A2-28 | 18.50 | 500 | 1910 lbs |

①Optional 14.7" & 16.06" thru-hole
Consult factory for 48" and larger chucks

## Dimensional Data 3-Jaw Universal King Bore Oil Country Chuck

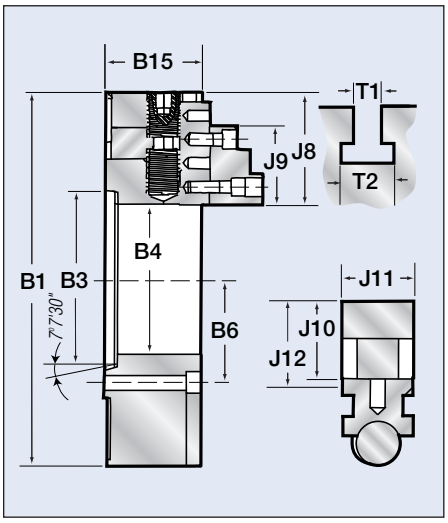
| Model No. | B1 O. D. | Mount Type | B3 Mount Recess | B4 Thru Hole | B6 Mounting Bolt Radius | B15 Body Width | J10 Master Jaw Length | J11 Top Jaw Width | J12 Top Jaw Height |
|---|---|---|---|---|---|---|---|---|---|
| 2033-2A11EX | 19.68" | A2-11 | 7.75" | 6.75" | 4.625" | 6.34" | 6.50" | 2.36" | 3.27" |
| 2033-2A15EX | 19.68" | A1-15 | 11.25" | 7.30" | 4.875" | 6.34" | 6.50" | 2.36" | 3.27" |
| 2433-2A15EX | 24.80" | A2-15 | 11.25" | 11.06" | 6.50" | 6.61" | 7.08" | 2.36" | 3.27" |
| 2433-2A20EX | 24.80" | A1-20 | 16.25" | 12.60"① | 7.25" | 6.69" | 7.08" | 2.36" | 3.27" |
| 2833-2A15EX | 27.56" | A2-15 | 11.25" | 11.06" | 6.50" | 6.81" | 8.26" | 2.95" | 3.62" |
| 2833-2A20EX | 27.56" | A1-20 | 16.25" | 12.60"① | 7.25" | 6.89" | 8.26" | 2.95" | 3.62" |
| 3233-2A15EX | 31.49" | A2-15 | 11.25" | 11.06" | 6.50" | 7.01" | 9.84" | 2.95" | 3.62" |
| 3233-2A20EX | 31.49" | A2-20 | 16.25" | 12.60"① | 9.175" | 7.09" | 8.50" | 2.95" | 3.62" |
| 3633-2A20EX | 35.43" | A2-20 | 16.25" | 12.60"① | 9.175" | 7.48" | 9.84" | 2.95" | 3.62" |
| 4033-2A20EX | 39.37" | A2-20 | 16.25" | 14.56"① | 9.175" | 7.48" | 9.84" | 2.95"" | 3.62" |
| 4033-2A28EX | 39.37" | A2-28 | 23.00" | 18.50" | 12.750" | 7.48" | 9.84" | 2.95" | 3.62" |

HOW TO ORDER: State quantity, Model Number of chuck, Part Number of adapter, and shipping instructions.

# King Bore Oil Country 4-Jaw Independent Chucks

## Series 432EX Extra Heavy-Duty Sizes 18" thru 48"

- Forged Steel Body
- Extra Heavy Duty American Standard, Hard Top and Master Jaws.
- Gripping surfaces serrated for more holding power
- Large Thru-Holes Standard
- T-Slots Standard
- Direct A Type Mounting
- One Year Warranty
- Available in smaller and larger sizes on request



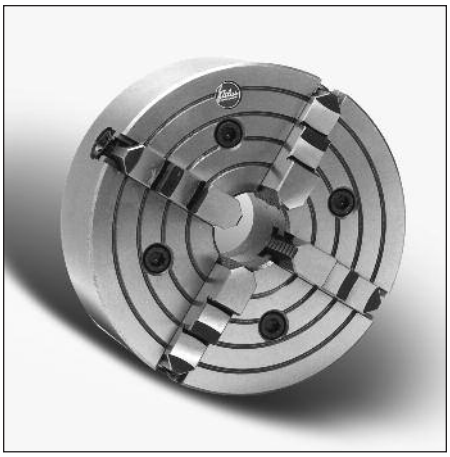

| Chuck Size | Model No. | Mount | Thru Hole | Max rpm's① | Approx. Weight |
|---|---|---|---|---|---|
| 18 | 1843-2A11EX | A2-11 | 6.70" | 1100 | 350 lbs |
| 21 | 2143-2A11EX | A2-11 | 6.70" | 1000 | 540 lbs |
| 21 | 2143-2A15EX | A2-15 | 7.30" | 1000 | 533 lbs |
| 24 | 2443-2A11EX | A2-11 | 6.70" | 850 | 720 lbs |
| 24 | 2443-2A15EX | A2-15 | 11.00" | 850 | 700 lbs |
| 24 | 2443-2A20EX | A2-20 | 12.60" | 850 | 685 lbs |
| 28 | 2843-2A15EX | A2-15 | 11.00" | 750 | 905 lbs |
| 28 | 2843-2A20EX | A2-20 | 12.60" | 750 | 920 lbs |
| 32 | 3243-2A15EX | A2-15 | 11.00" | 600 | 1265 lbs |
| 32 | 3243-2A20EX | A2-20 | 12.60"* | 600 | 1255 lbs |
| 36 | 3643-2A20EX | A2-20 | 12.60"* | 550 | 1930 lbs |
| 40 | 4043-2A20EX | A2-20 | 12.60"* | 500 | 2350 lbs |
| 40 | 4043-2A28EX | A2-28 | 18.50" | 500 | 2275 lbs |

*Optional 14.7" thru hole. ① To achieve maximum RPM read instruction manual. Consult factory for 48" and larger sizes.

## Dimensional Data 4-Jaw Independent King Bore Oil Country Chuck

| Model No. | B1 O. D. | Mount Type | B3 Mount Recess | B4 Thru Hole | B6 Mounting Bolt Radius | B15 Body Width | J8 Master Jaw Length | J9 Top Jaw Length | J10 Top Jaw Height | J11 Top Jaw Width | J12 Top Jaw Height From Face | T1 T-Slot | T2 T-Slot |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1843-2A11EX | 18" | A2-11 | 7.75" | 6.50" | 4.625" | 5.75" | 6.50" | 5.00" | 2.87" | 2.40" | 3.26" | .708" | 1.557" |
| 2143-2A11EX | 21" | A2-11 | 7.75" | 6.57" | 4.625" | 5.75" | 6.50" | 5.00" | 2.87" | 2.40" | 3.26" | .866" | 1.557" |
| 2143-2A15EX | 21" | A2-15 | 11.25" | 7.30" | 6.50" | 5.75" | 6.50" | 5.00" | 2.87" | 2.40" | 3.26" | .866" | 1.557" |
| 2443-2A11EX | 23.62" | A2-11 | 7.75" | 6.57" | 4.625" | 6.10" | 7.75" | 5.00" | 3.26" | 3.00" | 3.62" | .866" | 1.557" |
| 2443-2A15EX | 23.62" | A2-15 | 11.25" | 10.51" | 6.50" | 6.10" | 7.75" | 5.00" | 3.26" | 3.00" | 3.62" | .866" | 1.557" |
| 2443-2A20EX | 23.62" | A2-20 | 16.25" | 12.59" | 9.125" | 6.10" | 7.75" | 5.00" | 3.26" | 3.00" | 3.62" | .866" | 1.557" |
| 2843-2A15EX | 27.55" | A2-15 | 11.25" | 10.51" | 6.50" | 6.10" | 7.75" | 5.00" | 3.26" | 3.00" | 3.62" | .866" | 1.557" |
| 2843-2A20EX | 27.55" | A2-20 | 16.25" | 12.59" | 9.125" | 6.10" | 7.75" | 5.00" | 3.26" | 3.00" | 3.62" | .866" | 1.557" |
| 3243-2A15EX | 31.49" | A2-15 | 11.25" | 10.51" | 6.50" | 6.50" | 7.75" | 5.00" | 3.26" | 3.00" | 3.62" | .866" | 1.557" |
| 3243-2A20EX | 31.49" | A2-20 | 16.25" | 12.59" | 9.125" | 6.50" | 7.75" | 5.00" | 3.26" | 3.00" | 3.62" | .866" | 1.557" |
| 3643-2A20EX | 35.43" | A2-20 | 16.25" | 12.59" | 9.125" | 6.50" | 7.75" | 5.00" | 3.26" | 3.00" | 3.62" | .866" | 1.557" |
| 4043-2A20EX | 39.37" | A2-20 | 16.25" | 12.59" | 9.125" | 6.50" | 7.75" | 5.00" | 3.26" | 3.00" | 3.62" | 1.100" | 1.565" |
| 4043-2A28EX | 39.37" | A2-28 | 23.00" | 18.50" | 12.75" | 6.50" | 7.75" | 5.00" | 3.26" | 3.00" | 3.62" | 1.100" | 1.565" |

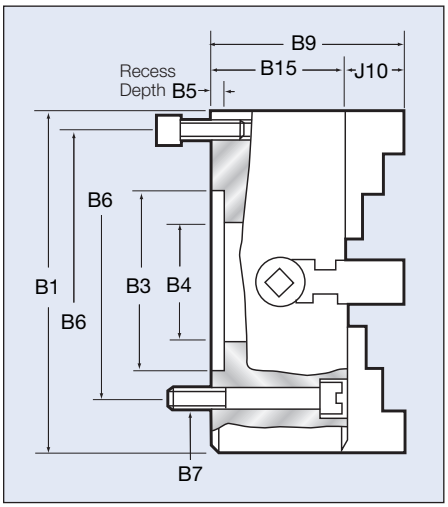
HOW TO ORDER: State quantity, Model Number of chuck, Part Number of adapter, and shipping instructions.



# 4-Jaw Independent Iron Body Chucks

## Series 441 Medium-Duty Value Line
## Sizes 5" thru 32"

- High value and lower cost
- One year warranty
- 1 set Solid Reversible Jaws
- Hardened and ground operating screws
- High tensile iron bodies
- Straight recess for adapter mounting
- Available with A, D, L and straight recess mounting




| Chuck Size | Flatback Chuck No. | Type D Spindle Size | Type D Spindle Chuck No. | Type A Spindle Size | Type A Spindle Chuck No. |
|---|---|---|---|---|---|
| 5" | 0544-1000 | | | | |
| 6" | 0644-1000 | D-3 | 0644-10D3 | | |
| 6" | | D-4 | 0644-10D4 | | |
| 8" | 0844-1000 | D-3 | 0844-10D3 | | |
| 8" | | D-4 | 0844-10D4 | | |
| 8" | | D-5 | 0844-10D5 | A-5 | 0844-10A5 |
| 10" | 1044-1000 | D-5 | 1044-10D5 | A-5 | 1044-10A5 |
| 10" | | D-6 | 1044-10D6 | A-6 | 1044-10A6 |
| 12" | 1244-1000 | D-6 | 1244-10D6 | A-6 | 1244-10A6 |
| 12" | | D-8 | 1244-10D8 | A-8 | 1244-10A8 |
| 16" | 1644-1000 | D-8 | 1644-10D8 | A-8 | 1644-10A8 |
| 16" | | D-11 | 1644-1D11 | A-11 | 1644-1A11 |
| 18" | 1844-1000 | D-8 | 1844-10D8 | A-8 | 1844-10A8 |
| 18" | | D-11 | 1844-1D11 | A-11 | 1844-1A11 |
| 20" | 2044-1000 | D-8 | 2044-10D8 | A-8 | 2044-10A8 |
| 20" | | D-11 | 2044-1D11 | A-11 | 2044-1A11 |
| 24" | 2444-1000 | D-8 | 2444-10D8 | A-8 | 2444-10A8 |
| 24" | | D-8 | 2444-1D11 | A-11 | 2444-1A11 |
| 32" | 3244-1000 | D-11 | 3244-1D11 | A-11 | 3244-1A11 |
| 32" | | D-15 | 3244-1D15 | A-15 | 3244-1A15 |

Contact PBA for price and availability for “L” type mounted chucks

## Dimensional Data 4-Jaw Independent Iron Body Chucks (in/mm)

| Chuck Dia. | B1 | B3 | B4 | B5 | B6 | B7 | B9 | B15 | J10 |
|---|---|---|---|---|---|---|---|---|---|
| 6"/160 | 6.30"/160 | 2.56"/65 | 1.77"/45 | .197"/5 | 3.74"/95 | (4) M-10 | 2.36"/96.5 | 2.56"/65 | 1.24"/31.5 |
| 8"/200 | 7.87"/200 | 4.92"/125 | 1.97"/50 | .236"/6 | 4.11"/104.5 | (4) M-10 | 4.33"/110 | 2.95"/75 | 1.37"/35 |
| 10"/250 | 9.84"/250 | 4.33"/110 | 2.56"/65 | .236"/6 | 4.72"/120 | (4) M-12 | 4.62"/117.5 | 3.29"/82 | 1.39"/35.5 |
| 12"/315 | 12.40"/315 | 5.51"/140 | 3.74"/95 | .236"/6 | 6.49"/165 | (4) M-16 | 5.27"/134 | 3.54"/90 | 1.73"/44 |
| 16"/400 | 15.75"/400 | 6.30"/160 | 4.92"/125 | .315"/8 | 7.28"/185 | (4) M-16 | 5.63"/143 | 3.74"/95 | 1.89"/48 |
| 18"/450 | 17.71"/450 | 7.08"/180 | 5.51"/140 | .315"/8 | 8.07"/205 | (4) M-16 | 5.79"/147 | 3.94"/100 | 1.85"/47 |
| 20"/500 | 19.68"/500 | 7.87"/200 | 6.30"/160 | .315"/8 | 9.29/236 | (4) M-20 | 6.39"/161 | 4.17"/106 | 2.16"/55 |
| 24"/630 | 24.80"/630 | 8.66"/220 | 7.08"/180 | .394"/10 | 10.26/258 | (4) M-20 | 7.06"/180 | 4.64"/118 | 2.56"/65 |
| 32"/800 | 31.49"/800 | 9.84"/250 | 8.26"/210 | .472"/12 | 10.26/258 | (8) M-20 | 7.95"/202 | 5.19"/132 | 2.76"/65 |

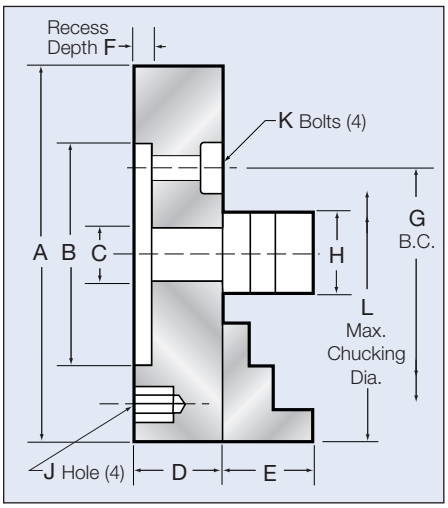
Note: Dimensions are for flatback-mounted chucks; on A, L and D mounted chucks dimension B15 will vary.
All A & D-11 mount chucks have 6.5" thru-hole as standard.

HOW TO ORDER: State quantity, chuck number, and shipping instructions.

# 4-Jaw High Quality Independent Chucks

## Medium Duty-144 Series
## Heavy Duty-145 Series

- Two-year warranty
- Precision manufactured to fit types A, D, L, and threaded spindles or adapter mounting
- Ductile iron body
- Sizes 6" - 16"
- Hardened operating screws
- Solid reversible hard jaws
- Special jaw and jaw way design adding extra bearing surfaces, increases chuck life and rigidity




| Chuck Size | Adapter Mounting Model No. | Type A Spindle Short Taper Size | Type A Spindle Short Taper Model No. | Type D Spindle Camlock Size | Type D Spindle Camlock Model No. | Type L Spindle Long Taper Size | Type L Spindle Long Taper Model No. |
|---|---|---|---|---|---|---|---|
| 6 | 0614400 | - | - | D-3 | 0614420 | L-00 | 0614431 |
| 6 | - | - | - | D-4 | 0614421 | L-0 | 0614433 |
| 8 | 0814400 | A-5 | 0814410 | D-3 | 0814420 | L-00 | 0814431 |
| 8 | - | - | - | D-4 | 0814421 | L-0 | 0814432 |
| 8 | - | - | - | - | - | L-1 | 0814433 |
| 10 | 1014400 | A-5 | 1014410 | D-4 | 1014421 | L-00 | 1014431 |
| 10 | - | - | - | D-5 | 1014422 | - | - |
| 10 | - | A-6 | 1014411 | D-6 | 1014423 | L-0 | 1014432 |
| 10 | - | A-8 | 1014412 | D-8 | 1014424 | L-1 | 1014433 |
| 12 | 1214400 | A-6 | 1214411 | D-6 | 1214423 | L-0 | 1214432 |
| 12 | - | A-8 | 1214412 | D-8 | 1214424 | L-1 | 1214433 |
| 14 | 1414500 | A-6 | 1414511 | D-6 | 1414523 | L-1 | 1414533 |
| 14 | - | A-8 | 1414512 | D-8 | 1414524 | L-2 | 1414534 |
| 16 | 1614500 | A-8 | 1614512 | D-8 | 1614524 | L-1 | 1614533 |
| 16 | - | A-11 | 1614513 | D-11 | 1614525 | L-2 | 1614534 |

Larger diameter chucks available, contact us for price and delivery.

## Dimensional Data for Adapter Mounting Chucks

| Chuck Size | A | B | C | D | E | F | G | H | J | K | L | Gripping Capacity Min. | Gripping Capacity Max. | Wt. lbs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6" | 6.30" | 4.921" | 1.77" | 2.12" | .87" | .16" | 5.512" | .94" | M10 | M10 | 7⅛" | 5/16" | 5" | 16 |
| 8" | 7.87" | 4.921" | 1.97" | 2.83" | 1.22" | .16" | 5.512" | 1.26" | M10 | M10 | 9¼" | 5/16" | 7" | 31 |
| 10" | 9.84" | 7.874" | 2.36" | 2.83" | 1.22" | .19" | 8.819" | 1.26" | M12 | M12 | 12" | 1/2" | 8" | 43 |
| 12" | 12.40" | 7.874" | 2.95" | 3.15" | 1.42" | .19" | 8.819" | 1.42" | M12 | M12 | 14" | 1/2" | 10" | 72 |
| 14" | 13.80" | 10.236" | 2.95" | 3.58" | 1.47" | .19" | 11.26" | 1.42" | - | M12 | 16" | 3/4" | 12" | 126 |
| 16" | 15.75" | 10.236" | 4.05" | 3.58" | 1.47" | .19" | 11.26" | 1.42" | - | M12 | 18" | 3/4" | 14" | 180 |

HOW TO ORDER: State quantity, Model Number of chuck, Part Number of adapter, and shipping instructions.

# Mounting Plates for 144 and 145 Series Independent Chucks

Mounting plates are precision machined to suit the spindle nose of your machine. Plates are stocked semi-finished. If ordering plate separately, specify the model number of your chuck so that PBA can finish machine the adapter to suit your Pratt Burnerd chuck.

## Type D Camlock Mountings

| Spindle | 6" | 8" | 10" | 12" | 14" | 16" |
|---|---|---|---|---|---|---|
| D-3 | 0603020 | 0603020 | 1003020 | 1003020 | - | - |
| D-4 | 0603021 | 0603021 | 1003021 | 1003021 | - | - |
| D-5 | 0603022 | 0603022 | 1003022 | 1003022 | 1203022 | - |
| D-6 | - | 0603023 | 1003023 | 1003023 | 1203023 | 1203023 |
| D-8 | - | - | 1003024 | 1003024 | 1203024 | 1203024 |
| D-11 | - | - | - | - | 1203025 | 1203025 |

## Type A American Standard Short Taper A1 & A2 Spindles

| Spindle | 6" | 8" | 10" | 12" | 14" | 16" |
|---|---|---|---|---|---|---|
| A-5 | 0603010 | 0603010 | 1003010 | - | - | - |
| A-6 | 0603011 | 0603011 | 1003011 | 1003011 | - | - |
| A-8 | - | - | 1003012 | 1003012 | 1203012 | 1203012 |
| A-11 | - | - | - | - | 1203013 | 1203013 |

## Type L American Standard Long Taper Spindles

| Spindle | 6" | 8" | 10" | 12" | 14" | 16" |
|---|---|---|---|---|---|---|
| L-00 | 0603031 | 0603031 | 1003031 | - | - | |
| L-0 | 0603032 | 0603032 | 1003032 | 1003032 | 1203032 | |
| L-1 | - | - | 1003033 | 1003033 | 1203033 | 1203033 |
| L-2 | - | - | 1003034 | 1003034 | 1203034 | 1203034 |

## Threaded Spindles

| Spindle | 6" | 8" | 10" |
|---|---|---|---|
| 1½"-8 | 0603041 | 0603041 | - |
| 1¾"-8 | 0603042 | 0603042 | - |
| 2¼"-8 | 0603043 | 0603043 | 1003043 |

## Hardinge 4° Taper Plate

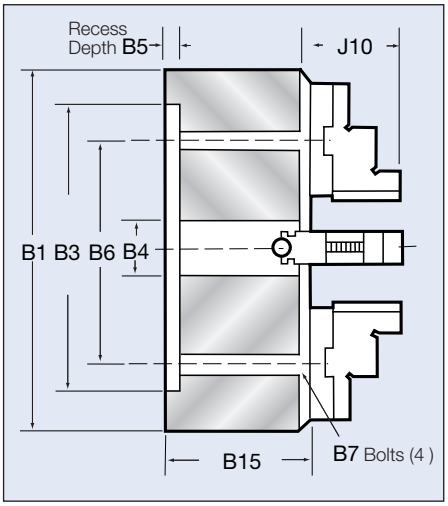
| Spindle | 6" | 8" |
|---|---|---|
| 4° Taper | 0604044 | 0604044 |

Special adapter plates available upon request. Specify chuck number and spindle nose specifications.
6", 8", 10" and 12" adapters are the same as 3 Jaw adapters on page 9.
For standard spindle dimensions, see page 103.

# 4-Jaw Standard Independent Steel Body Chucks

## Series 432 Heavy-Duty Sizes 12" thru 80"

- One year warranty
- Sizes 12" thru 80"
- Two-piece reversible American Standard tongue and groove jaws
- Hardened and ground operating screws
- Steel body
- T-slots standard
- Straight recess for adapter mounting
- **Larger chucks available up to 80" on request**




| Chuck Size | Flatback Chuck No. | Type A Spindle Size | Type A Spindle Chuck No. | Type D Spindle Size | Type D Spindle Chuck No. |
|---|---|---|---|---|---|
| 12" | 1243-2000 | A-6 | 1243-20A6 | D-6 | 1243-20D6 |
| 12" | | A-8 | 1243-20A8 | D-8 | 1243-20D8 |
| 12" | | A-11 | 1243-2A11 | D-11 | 1243-2D11 |
| 14" | 1443-2000 | A-6 | 1443-20A6 | D-6 | 1443-20D6 |
| 14" | | A-8 | 1443-20A8 | D-8 | 1443-20D8 |
| 14" | | A-11 | 1443-2A11 | D-11 | 1443-2D11 |
| 16" | 1643-2000 | A-8 | 1643-20A8 | D-8 | 1643-20D8 |
| 16" | | A-11 | 1643-2A11 | D-11 | 1643-2D11 |
| 18" | 1843-2000 | A-8 | 1843-20A8 | D-8 | 1843-20D8 |
| 18" | | A-11 | 1843-2A11 | D-11 | 1843-2D11 |
| 20" | 2043-2000 | A-8 | 2043-20A8 | D-8 | 2043-20D8 |
| 20" | | A-11 | 2043-2A11 | D-11 | 2043-2D11 |
| 24" | 2443-2000 | A-8 | 2443-20A8 | D-8 | 2443-20D8 |
| 24" | | A-11 | 2443-2A11 | D-11 | 2443-2D11 |
| 28" | 2843-2000 | A-11 | 2843-2A11 | D-11 | 2843-2D11 |
| 28" | | A-15 | 2843-2A15 | | |
| 32" | 3243-2000 | A-11 | 3243-2A11 | D-11 | 3243-2D11 |
| 32" | | A-15 | 3243-2A15 | | |
| 32" | | A-20 | 3243-2A20 | | |
| 36" | 3643-2000 | A-11 | 3643-2A11 | D-11 | 3643-2D11 |
| 36" | | A-15 | 3643-2A15 | | |
| 36" | | A-20 | 3643-2A20 | | |

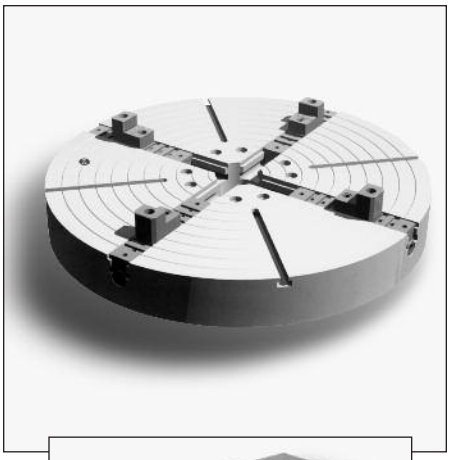
Larger sizes available, up to 80" dia., contact PBA for price quotation.
Consult factory for 40" and larger sizes.

## Dimensional Data 4-Jaw Independent Steel Body Chucks

| Chuck Dia. | B1 | B3 | B4 | B5 | B6 | B7 | B15 | J10 | Weight |
|---|---|---|---|---|---|---|---|---|---|
| 12" | 12.4" | 7.874" | 3.07" | .295" | 8.819" | M-12 | 4.055" | 2.34" | 126 lbs. |
| 14" | 13.78" | 10.236" | 3.07" | .216" | 11.26" | M-12 | 4.08" | 2.34" | 165 lbs. |
| 16" | 15.74" | 10.236" | 4.13" | .295" | 11.26" | M-12 | 3.86" | 2.34" | 210 lbs. |
| 18" | 17.7" | 7.874" | 4.055" | .196" | 6.61" | M-20 | 4.33" | 3.22" | 320 lbs. |
| 20" | 19.6" | 9.842" | 4.055" | .196" | 8.66" | M-20 | 4.33" | 3.22" | 415 lbs. |
| 24" | 23.6" | 9.842" | 4.055" | .196" | 8.66" | M-20 | 4.92" | 3.22" | 720 lbs. |
| 28" | 27.5" | 9.842" | 4.72" | .196" | 8.66" | M-20 | 4.92" | 3.39" | 1050 lbs. |
| 32" | 31.5" | 9.842" | 5.31" | .196" | 8.66" | M-20 | 4.92" | 3.39" | 1230 lbs. |
| 36" | 35.43" | * | * | * | * | M-20 | * | 3.39" | 1475 lbs. |

Dimensions are for flatback-mount chucks; on A, L and D mounted chucks dimension B15 will vary. *Specify when ordering.
"L" type mounts available upon request.
(1) B4 are standard thru-holes. Thru-holes can be larger upon request. All A-11 mount chucks have 6.5" thru-hole as standard.

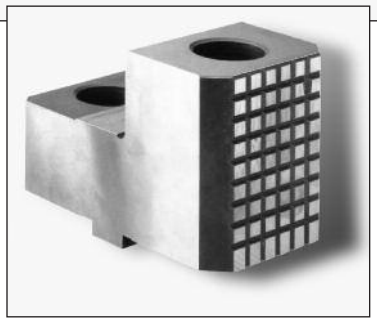
HOW TO ORDER: State quantity, chuck number, and shipping instructions.



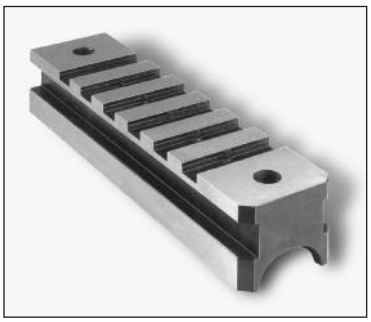
# Heavy Duty
# 4 Jaw Independent Chucks

## 32" to 79" Steel Body chucks

- One-year warranty
- Heavy duty steel body
- Two-piece reversible jaws
- Long master jaws
- One step top jaws
- Hardened and ground jaws, operating screws and thrust bearings
- Chuck Sizes 32", 36", 40", 48", 56", 60", 63", 71" and 79"
- Direct mount
- Thru-hole can be altered to suit customers requirements
- Special larger sizes available upon request

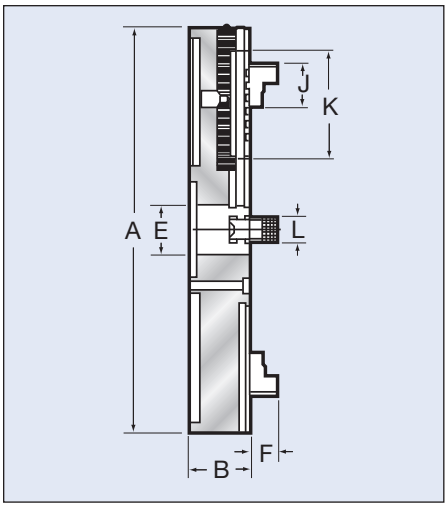


One Step Top Jaw



Optional Long Base Jaw

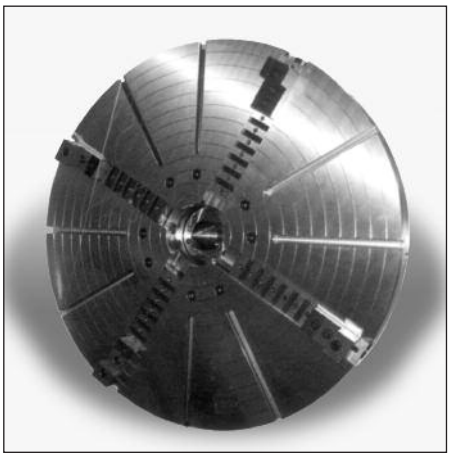
| Chuck Size | Recess Mount Cast Steel | Size | Type A Spindle Cast Steel |
|---|---|---|---|
| 32" | 3224500 | A-8 | 3224512 |
| 32" | | A-11 | 3224513 |
| 32" | | A-15 | 3224514 |
| 36" | 3624500 | A-11 | 3624513 |
| 36" | | A-15 | 3624514 |
| 40" | 4024500 | A-11 | 4024513 |
| 40" | | A-15 | 4024514 |
| 40" | | A-20 | 4024515 |
| 48" | 4824500 | A-11 | 4824513 |
| 48" | | A-15 | 4824514 |
| 48" | | A-20 | 4824515 |
| 55" | 5524500 | A-11 | 5524513 |
| 55" | | A-15 | 5524514 |
| 55" | | A-20 | 5524515 |
| 60" | 6024500 | A-15 | 6024514 |
| 60" | | A-20 | 6024515 |
| 63" | 6324500 | A-15 | 6324514 |
| 63" | | A-20 | 6324515 |
| 71" | 7124500 | A-15 | 7124514 |
| 71" | | A-20 | 7124515 |
| 71" | | A-28 | 7124516 |
| 79" | 7924500 | A-15 | 7924514 |
| 79" | | A-20 | 7924515 |
| 79" | | A-28 | 7924516 |




## Dimensional Data

| Chuck Size | A | B | E | F | J | L | K | Optional K |
|---|---|---|---|---|---|---|---|---|
| 32" | 31.50" | 5.31" | 5.31" | 2.87" | 5" | 2.36" | 7.99" | 11.18" |
| 36" | 35.43" | 5.31" | 5.51" | 2.87" | 5" | 2.36" | 7.99" | 12.68" |
| 40" | 39.37" | 5.51" | 5.91" | 3.07" | 5" | 2.95" | 7.99" | 12.68" |
| 48" | 47.24" | 6.30" | 6.30" | 3.07" | 5" | 2.95" | 7.99" | 15.75" |
| 55" | 55.12" | 6.69" | 6.30" | 3.07" | 5" | 2.95" | 7.99" | 17.72" |
| 60" | 59.06" | 7.28" | 6.30" | 3.07" | 5" | 2.95" | 7.99" | 19.69" |
| 63" | 62.99" | 7.68" | 6.69" | 3.62" | 5" | 3.54" | 21.65" | 21.65" |
| 71" | 70.87" | 8.07" | 7.09" | 3.62" | 5" | 3.54" | 23.62" | 23.62" |
| 79" | 78.74" | 8.46" | 7.09" | 3.62" | 5" | 3.54" | 25.59" | 25.59" |

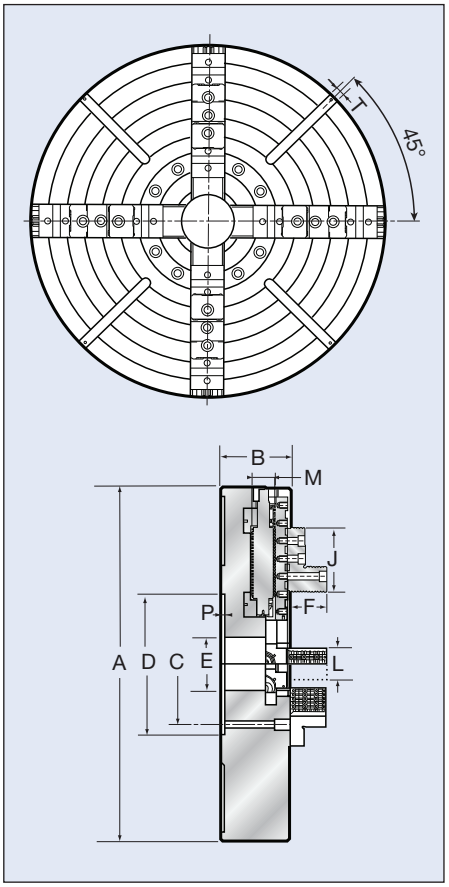
HOW TO ORDER: State quantity, Chuck Number, and shipping instructions.



# Heavy Duty 4-Jaw Independent XL Chucks

## Sizes 24" to 79 "

- Super Heavy-Duty for Heavy Parts
- Steel Body
- Hardened and Ground Master and Top Jaws
- Extra Long Master Jaws for more rigidity and ajustability
- Hardened and Ground Operating Screws and Thrust Bearing




(mm/inch)

| Chuck Size | Recess Mount | Mount | Type D Spindle | Mount | Type A Spindle |
|---|---|---|---|---|---|
| 600/23.6 | 2443-2000XL | D-8 | 2443-20D8XL | A-8 | 2443-20A8XL |
| 600/23.6 | | D-11 | 2443-2D11XL | A-11 | 2443-2A11XL |
| 700/27.5 | 2843-2000XL | D-8 | 2843-20D8XL | A-8 | 2843-20A8XL |
| 700/27.5 | | D-11 | 2843-2A11XL | A-11 | 2843-2A11XL |
| 800/31.5 | 3243-2000XL | D-11 | 3243-2D11XL | A-11 | 3243-2A11XL |
| 800/31.5 | | D-15 | 3243-2D15XL | A-15 | 3243-2A15XL |
| 900/35.5 | 3643-2000XL | D-11 | 3643-2D11XL | A-11 | 3643-2A11XL |
| 900/35.5 | | D-15 | 3643-2D15XL | A-15 | 3643-2A15XL |
| 1000/39.4 | 4043-2000XL | D-11 | 4043-2D11XL | A-11 | 4043-2A11XL |
| 1000/39.4 | | D-15 | 4043-2D15XL | A-15 | 4043-2A15XL |
| 1000/39.4 | | D-20 | 4043-2D20XL | A-20 | 4043-2A20XL |
| 1200/47.2 | 4843-2000XL | D-11 | 4843-2D11XL | A-11 | 4843-2A11XL |
| 1200/47.2 | | D-15 | 4843-2D15XL | A-15 | 4843-2A15XL |
| 1200/47.2 | | D-20 | 4843-2D20XL | A-20 | 4843-2A20XL |
| 1400/55 | 5543-2000XL | D-11 | 5543-2D11XL | A-11 | 5543-2A11XL |
| 1400/55 | | D-15 | 5543-2D15XL | A-15 | 5543-2A15XL |
| 1400/55 | | D-20 | 5543-2D20XL | A-20 | 5543-2A20XL |
| 1500/59 | 5943-2000XL | D-15 | 5943-2D15XL | A-15 | 5943-2A15XL |
| 1500/59 | | D-20 | 5943-2D20XL | A-20 | 5943-2A20XL |
| 1600/63 | 6343-2000XL | D-15 | 6343-2D15XL | A-15 | 6343-2A15XL |
| 1600/63 | | D-20 | 6343-2D20XL | A-20 | 6343-2A20XL |
| 1800/71 | 7143-2000XL | D-15 | 7143-2D15XL | A-15 | 7143-2A15XL |
| 1800/71 | | D-20 | 7143-2D20XL | A-20 | 7143-2A20XL |
| 1800/71 | | D-28 | 7143-2D28XL | A-28 | 7143-2A28XL |
| 2000/79 | 7943-2000XL | D-15 | 7943-2D15XL | A-15 | 7943-2A15XL |
| 2000/79 | | D-20 | 7943-2D20XL | A-20 | 7943-2A20XL |
| 2000/79 | | D-28 | 7943-2D28XL | A-28 | 7943-2A28XL |

Consult factory for larger sizes

(mm/inch)

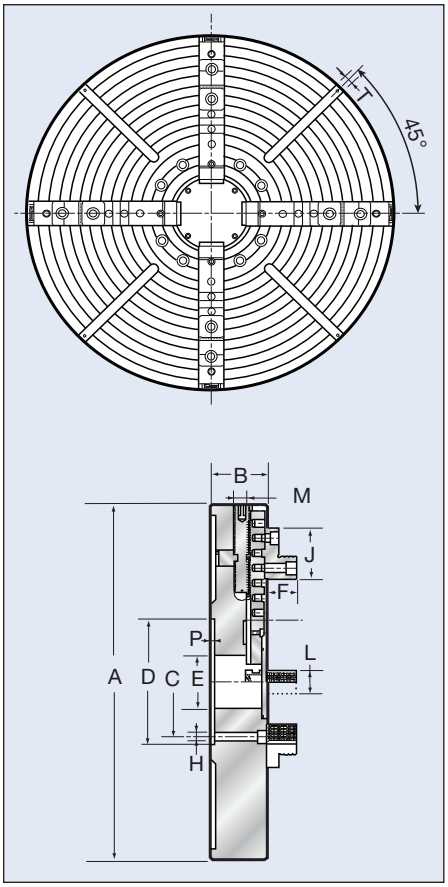
| Size A | B | C | D | H | E | F | J | L | K | T-Slot | M | rpm | Weight |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 600/23.6 | 150/5.90 | 235/9.25 | 300/11.81 | 8xM20 | 120/4.72 | 78/3.07 | 130/5.12 | 75/2.95 | 203/7.99 | 4x22/.866 | 50/1.968 | 970 | 573 lbs |
| 700/27.5 | 150/5.90 | 235/9.25 | 300/11.81 | 8xM20 | 140/5.51 | 78/3.07 | 130/5.12 | 75/2.95 | 203/7.99 | 4x22/.866 | 50/1.968 | 875 | 838 lbs |
| 800/31.5 | 150/5.90 | 330.2/13.0 | 380/14.96 | 8xM24 | 155/2.91 | 78/3.07 | 130/5.12 | 75/2.95 | 280/11.02 | 4x22/.866 | 50/1.968 | 764 | 1124 lbs |
| 900/35.4 | 150/5.90 | 330.2/13.0 | 380/14.96 | 8xM24 | 160/6.10 | 78/3.07 | 130/5.12 | 75/2.95 | 315/12.04 | 4x22/.866 | 50/1.968 | 679 | 1378 lbs |
| 1000/39.4 | 180/7.08 | 330.2/13.0 | 380/14.96 | 8xM24 | 170/6.69 | 102/4.01 | 180/7.08 | 90/3.54 | 350/13.78 | 4x22/.866 | 64/2.519 | 611 | 2160 lbs |
| 1200/47 | 180/7.08 | 463.6/18.25 | 520/20.47 | 8xM24 | 180/7.08 | 102/4.01 | 180/7.08 | 90/3.54 | 450/17.71 | 4x22/.866 | 64/2.519 | 509 | 3086 lbs |
| 1400/55 | 185/7.28 | 463.6/18.25 | 520/20.47 | 8xM24 | 180/7.08 | 102/4.01 | 180/7.08 | 90/3.54 | 550/21.65 | 4x22/.866 | 64/2.519 | 437 | 4233 lbs |
| 1500/59 | 185/7.28 | 647.6/25.50 | 720/28.35 | 8xM30 | 180/7.08 | 102/4.01 | 180/7.08 | 90/3.54 | 550/21.65 | 4x22/.866 | 64/2.519 | 407 | 5048 lbs |
| 1600/63 | 195/7.68 | 647.6/25.50 | 720/28.35 | 8xM30 | 190/7.48 | 102/4.01 | 180/7.08 | 100/3.94 | 650/25.59 | 4x28/1.10 | 64/2.519 | 382 | 6063 lbs |
| 1800/71 | 205/8.08 | 647.6/25.50 | 720/28.35 | 8xM30 | 200/7.87 | 102/4.01 | 180/7.08 | 100/3.94 | 650/25.59 | 4x28/1.10 | 64/2.519 | 340 | 7783 lbs |
| 2000/79 | 230/9.05 | 647.6/25.50 | 720/28.35 | 8xM30 | 240/9.45 | 142/5.59 | 245/9.64 | 120/4.72 | 800/31.50 | 4x28/1.10 | 80/3.149 | 306 | 11022 lbs |

HOW TO ORDER: State quantity, Model Number of chuck, Part Number of adapter, and shipping instructions.

# 4-Jaw Independent Manual VTL Chucks

## Sizes 24" to 120 "

- Forged Steel Body
- 2 Piece American Standard Master & Hard Top Jaws
- Hardened Operating Screws and Thrust Bearings
- Reduced Maintenance
- Master Jaw Wiper Blade
- Extra Length Master Jaws for internal Chuck component protection
- Thru-Hole Cover Plate
- Custom T-Slots available
- Available for straight recess, A Type Spindles or Custom Mounting
- Larger sizes are available consult the factory for special quotations



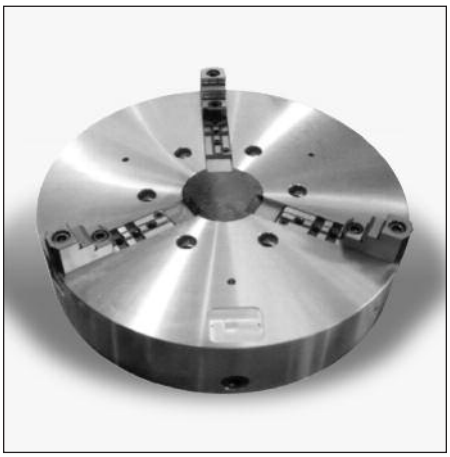

(mm/inch)

| Chuck Size | Recess Mount | Mount | Type A Spindle | Max. rpm | Min. Clamping | Approx. Weight |
|---|---|---|---|---|---|---|
| 600/23.6 | 2443-2000VTL | A-8 | 2443-2A8VTL | 970 | 180/7.08 | 530 lbs |
| 600/23.6 | | A-11 | 2443-2A11VTL | 970 | 180/7.08 | 530 lbs |
| 700/27.5 | 2843-2000VTL | A-8 | 2843-2A8VTL | 873 | 180/7.08 | 838 lbs |
| 700/27.5 | | A-11 | 2843-2A11VTL | 873 | 180/7.08 | 838 lbs |
| 800/31.5 | 3243-2000VTL | A-11 | 3243-2A11VTL | 764 | 180/7.08 | 1125 lbs |
| 800/31.5 | | A-15 | 3243-2A15VTL | 764 | 180/7.08 | 1125 lbs |
| 900/35.5 | 3643-2000VTL | A-11 | 3643-2A11VTL | 679 | 180/7.08 | 1380 lbs |
| 900/35.5 | | A-15 | 3643-2A15VTL | 679 | 180/7.08 | 1380 lbs |
| 1000/39.4 | 4043-2000VTL | A-11 | 4043-2A11VTL | 611 | 200/7.87 | 1874 lbs |
| 1000/39.4 | | A-15 | 4043-2A15VTL | 611 | 200/7.87 | 1874 lbs |
| 1000/39.4 | | A-20 | 4043-2A20VTL | 611 | 200/7.87 | 1874 lbs |
| 1200/47.2 | 4843-2000VTL | A-11 | 4843-2A11VTL | 509 | 240/11.0 | 2646 lbs |
| 1200/47.2 | | A-15 | 4843-2A15VTL | 509 | 240/11.0 | 2646 lbs |
| 1200/47.2 | | A-20 | 4843-2A20VTL | 509 | 240/11.0 | 2646 lbs |
| 1400/55 | 5543-2000VTL | A-11 | 5543-2A11VTL | 437 | 240/11.0 | 3748 lbs |
| 1400/55 | | A-15 | 5543-2A15VTL | 437 | 240/11.0 | 3748 lbs |
| 1400/55 | | A-20 | 5543-2A20VTL | 437 | 240/11.0 | 3748 lbs |
| 1500/59 | 5943-2000VTL | A-15 | 5943-2A15VTL | 407 | 240/11.0 | 4718 lbs |
| 1500/59 | | A-20 | 5943-2A20VTL | 407 | 240/11.0 | 4718 lbs |
| 1600/63 | 6343-2000VTL | A-15 | 6343-2A15VTL | 382 | 240/11.0 | 5732 lbs |
| 1600/63 | | A-20 | 6343-2A20VTL | 382 | 240/11.0 | 5732 lbs |
| 1800/71 | 7143-2000VTL | A-15 | 7143-2A15VTL | 340 | 240/11.0 | 6900 lbs |
| 1800/71 | | A-20 | 7143-2A20VTL | 340 | 240/11.0 | 6900 lbs |
| 1800/71 | | A-28 | 7143-2A28VTL | 340 | 240/11.0 | 6900 lbs |
| 2000/79 | 7943-2000VTL | A-15 | 7943-2A15VTL | 306 | 240/11.0 | 9260 lbs |
| 2000/79 | | A-20 | 7943-2A20VTL | 306 | 240/11.0 | 9260 lbs |
| 2000/79 | | A-28 | 7943-2A28VTL | 306 | 240/11.0 | 9260 lbs |

(mm/inch)

| Size A | B | C | D | H | F | J | L | T-Slot | M |
|---|---|---|---|---|---|---|---|---|---|
| 600/23.6 | 135/5.31 | 235/9.25 | 300/11.81 | 8xM20 | 74/2.91 | 130/5.12 | 60/2.36 | 4x22/.866 | 40/1.575 |
| 700/27.5 | 135/5.31 | 235/9.25 | 300/11.81 | 8xM20 | 74/2.91 | 130/5.12 | 60/2.36 | 4x22/.866 | 40/1.575 |
| 800/31.5 | 135/5.31 | 330/12.99 | 380/14.96 | 8xM24 | 74/2.91 | 130/5.12 | 60/2.36 | 4x22/.866 | 40/1.575 |
| 900/35.4 | 135/5.31 | 330/12.99 | 380/14.96 | 8xM24 | 74/2.91 | 130/5.12 | 60/2.36 | 4x22/.866 | 40/1.575 |
| 1000/39.4 | 150/5.90 | 330/12.99 | 380/14.96 | 8xM24 | 78/3.07 | 130/5.12 | 75/2.95 | 4x22/.866 | 50/1.968 |
| 1200/47 | 160/6.30 | 463.6/18.25 | 520/20.47 | 8xM24 | 78/3.07 | 130/5.12 | 75/2.95 | 4x22/.866 | 50/1.968 |
| 1400/55 | 170/6.69 | 463.6/18.25 | 520/20.47 | 8xM24 | 78/3.07 | 130/5.12 | 75/2.95 | 4x22/.866 | 50/1.968 |
| 1500/59 | 175/6.89 | 647.6/25.50 | 720/28.35 | 8xM30 | 78/3.07 | 130/5.12 | 75/2.95 | 4x22/.866 | 50/1.968 |
| 1600/63 | 185/7.28 | 647.6/25.50 | 720/28.35 | 8xM30 | 102/4.01 | 180/7.09 | 90/3.54 | 4x28/1.10 | 64/2.519 |
| 1800/71 | 185/7.28 | 647.6/25.50 | 720/28.35 | 8xM30 | 102/4.01 | 180/7.09 | 90/3.54 | 4x28/1.10 | 64/2.519 |
| 2000/79 | 200/7.87 | 647.6/25.50 | 720/28.35 | 8xM30 | 102/4.01 | 180/7.09 | 100/3.94 | 4x28/1.10 | 64/2.519 |

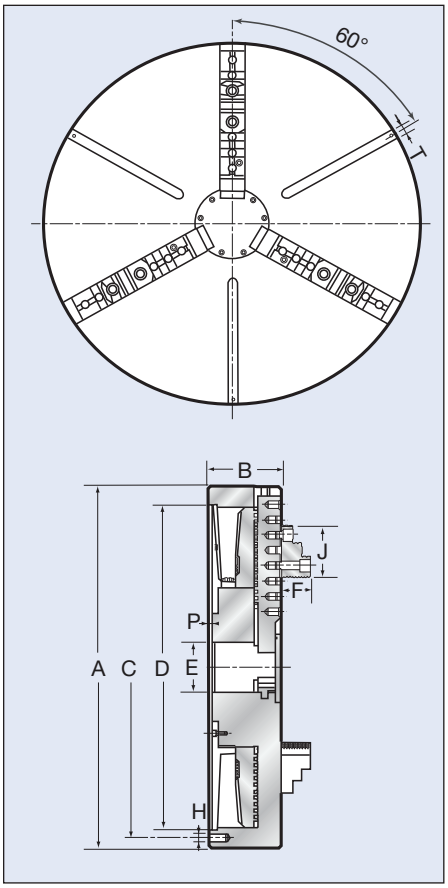
HOW TO ORDER: State quantity, Model Number of Chuck, Part Number of Adapter, and shipping instructions.



# Self Centering VTL Manual 3-Jaw Universal Chucks

## Sizes 630mm/27.5" to 2500mm/71"

- Forged Steel Body
- 2 Piece American Standard Master & Hard Top Jaws
- Hardened Jaw Ways
- Hardened Scroll and Pinion Gears
- Reduced Maintenance
- Master Jaw Wiper Blade
- Extra Length Master Jaws for internal Chuck component protection
- Thru-Hole Cover Plate
- Custom T-Slots optional
- Available for straight recess, A Type Spindles or Custom Mounting
- Larger sizes are available consult the factory for special quotations




(mm/inch)

| Chuck Size | Model No. | Mount | Max rpm's | Min Clamping | Approx. Weight |
|---|---|---|---|---|---|
| 700/27.5 | 2833-2000VTL | Recess | 825 | 180/7 | 739 lbs |
| 800/31.5 | 3233-2000VTL | Recess | 740 | 180/7 | 904 lbs |
| 900/35.4 | 3633-2000VTL | Recess | 650 | 180/7 | 1246 lbs |
| 1000/39.4 | 4033-2000VTL | Recess | 600 | 200/7.8 | 1590 lbs |
| 1200/47 | 4833-2000VTL | Recess | 450 | 240/9.5 | 2646 lbs |
| 1400/55 | 5033-2000VTL | Recess | 400 | 240/9.5 | 4078 lbs |
| 1600/63 | 6333-2000VTL | Recess | 335 | 240/9.5 | 6173 lbs |
| 1800/71 | 7233-2000VTL | Recess | 300 | 240/9.5 | 9479 lbs |

(mm/inch)

| Model | A | B | C | D | F | H | L | P | T-Slot | J |
|---|---|---|---|---|---|---|---|---|---|---|
| 2833-2000VTL | 700/27.5 | 162/6.38 | 660/25.98 | 630/24.80 | 71/2.74 | 6XM20 | 60/2.36 | 8/.315 | 4x18/.708 | 127/5.000 |
| 3233-2000VTL | 800/31.5 | 167/6.57 | 760/29.92 | 730/28.24 | 71/2.74 | 6XM20 | 60/2.36 | 8/.315 | 4x18/.708 | 127/5.000 |
| 3633-2000VTL | 900/35.4 | 172/6.77 | 850/33.46 | 810/31.89 | 71/2.74 | 6XM22 | 60/2.36 | 8/.315 | 4x18/.708 | 127/5.000 |
| 4033-2000VTL | 1000/39.4 | 200/7.87 | 950/37.40 | 910/35.82 | 71/2.74 | 6XM24 | 75/2.95 | 10/.394 | 4x18/.708 | 130/5.118 |
| 4833-2000VTL | 1200/47 | 200/7.87 | 950/37.40 | 910/35.82 | 80/3.15 | 6XM24 | 75/2.95 | 10/.394 | 4x22/.866 | 130/5.118 |
| 5033-2000VTL | 1400/55 | 200/7.87 | 950/37.40 | 910/35.82 | 80/3.15 | 6XM24 | 75/2.95 | 10/.394 | 4x22/.866 | 130/5.118 |
| 6333-2000VTL | 1600/63 | 200/7.87 | 1050/41.33 | 910/35.82 | 80/3.15 | 6XM30 | 75/2.95 | 10/.394 | 4x22/.866 | 130/5.118 |
| 7233-2000VTL | 1800/71 | 200/7.87 | 1050/41.33 | 910/35.82 | 80/3.15 | 6XM30 | 75/2.95 | 10/.394 | 4x22/.866 | 130/5.118 |

HOW TO ORDER: State quantity, Model Number of Chuck, Part Number of Adapter, and shipping instructions.

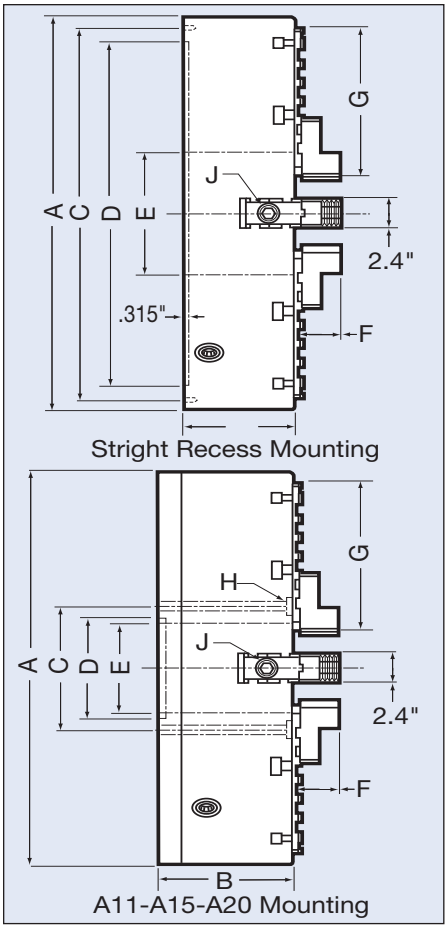
# 4 Jaw Large Diameter Combination Chuck for Large Swing Lathes and VTL

## 24" - 120" Chucks

- Forged steel body
- Induction hardened in areas of friction
- Chuck bodies fully ground, including guideways
- Two piece jaws according to ASA norms
- Steel jaws cement hardened, treated and ground on all surfaces
- Scroll induction hardened and ground on spiral and internal diameter
- Operating screws hardened and ground
- Larger sizes available upon request
- Also available in 3-Jaw and 6-Jaw

| Chuck Size | Recessed Mount Steel | Straight D Mount Type Steel | | A Spindle Mount Steel | |
|---|---|---|---|---|---|
| **24"** | 2427300 | D-11<br>D-15 | 2427325<br>2427326 | A2-11<br>A2-15 | 2427313<br>2427314 |
| **28"** | 2827300 | D-11<br>D-15 | 2827325<br>2827326 | A2-11<br>A2-15 | 2827313<br>2827314 |
| **32"** | 3227300 | D-11<br>D-15 | 3227325<br>3227326 | A2-11<br>A2-15<br>A2-20 | 3227313<br>3227314<br>3227315 |
| **36"** | 3627300 | D-11<br>D-15 | 3627325<br>3627326 | A2-11<br>A2-15<br>A2-20 | 3627313<br>3627314<br>3627315 |
| **40"** | 4027300 | D-15 | 4027326 | A2-15<br>A2-20 | 4027314<br>4027315 |

For sizes larger then 40" consult factory




## Dimensional Data (in inches)

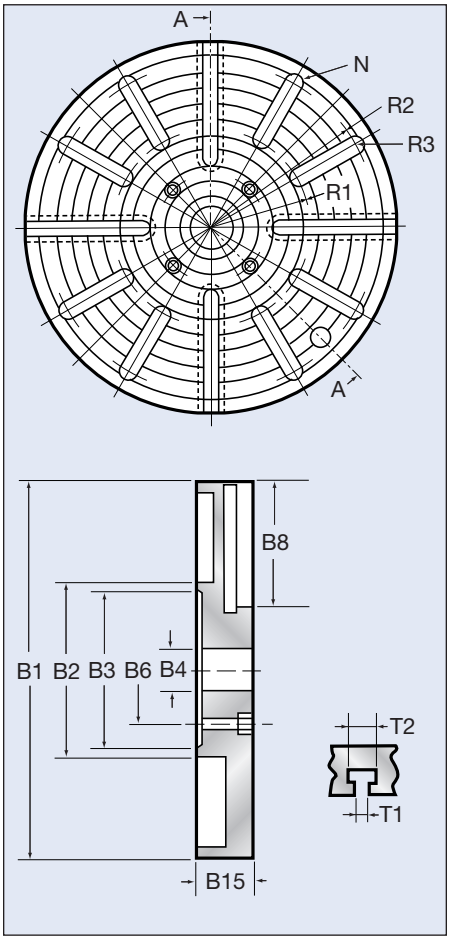
| SIZE A | Mount | B | C | D | E | F | G | H | J |
|---|---|---|---|---|---|---|---|---|---|
| 24" | Recess | 7.68" | 23.07" | 21.45" | 7.09/10.55" | 3.39" | 8.35/7.09" | 6xM16 | 1.57" |
| | A11 | 8.66" | 9.25" | 7.75 | 7.09" | 3.39" | 8.35" | - | 1.57" |
| | A15 | 9.65" | 13.00" | 11.25 | 10.51" | 3.39" | 7.09" | - | 1.57" |
| 27.5" | Recess | 7.87" | 25.98" | 23.82 | 7.56/10.55" | 3.39" | 9.72/8.35" | 6xM20 | 1.57" |
| | A11 | 8.86" | 9.25" | 7.75 | 7.56" | 3.39" | 9.72" | - | 1.57" |
| | A15 | 8.86" | 13.00" | 11.25 | 10.51" | 3.39" | 8.35" | - | 1.57" |
| 31.5" | Recess | 8.07" | 29.92" | 27.76 | 10.55/15.00" | 3.39" | 9.72/7.24" | 6xM20 | 1.57" |
| | A11 | 9.06" | 9.25" | 7.75 | 7.56" | 3.39" | 10.71" | - | 1.57" |
| | A15 | 9.06" | 13.00" | 11.25 | 10.51" | 3.39" | 9.72" | - | 1.57" |
| | A20 | 9.06" | 18.25" | 16.25 | 15.00" | 3.39" | 7.24" | - | 1.57" |
| 35.43" | Recess | 8.46" | 33.46" | 31.69 | 11.02/15.00" | 3.39" | 10.71/9.72" | 6xM24 | 1.57" |
| | A11 | 9.45" | 9.25" | 7.75 | 7.56" | 3.39" | 10.71" | - | 1.57" |
| | A15 | 9.45" | 13.00" | 11.25 | 11.02" | 3.39" | 10.71" | - | 1.57" |
| | A20 | 9.45 | 18.25" | 16.25 | 15.00" | 3.39" | 9.72" | - | 1.57" |
| 39.37" | Recess | 8.86" | 37.40" | 35.63 | 11.02/16.06" | 3.39" | 12.87/10.71" | 6xM24 | 1.57" |
| | A15 | 9.84" | 13.00" | 11.25 | 11.02" | 3.39" | 12.87" | - | 1.57" |
| | A20 | 9.84" | 18.25" | 16.25 | 16.06" | 3.39" | 10.71" | - | 1.57" |

HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.

Sample only

# Chucks Face Plates up to 275"

- Steel or Cast Face Plate for special Fixturing needs
- All Face Plates are custom made
- Available as direct mount or flatback
- Smaller sizes and specials available on request
- Available in forged steel up to 275" dia. on special request
- Photo, Drawing and Dimensions shown have Windows and T-slots. This is only a Sample, each Plate is custom made and can be designed with the number of Windows and or T-slots required. Consult Factory




Sample only

| Part No. | Diameter | Type |
|---|---|---|
| 1602000 | 16" | Flatback |
| 2002000 | 20" | Flatback |
| 2402000 | 24" | Flatback |
| 2802000 | 28" | Flatback |
| 3202000 | 32" | Flatback |
| 3602000 | 36" | Flatback |
| 4002000 | 40" | Flatback |
| 4802000 | 48" | Flatback |
| 5502000 | 55" | Flatback |
| 6002000 | 60" | Flatback |
| 6302000 | 63" | Flatback |
| 7102000 | 71" | Flatback |
| 7902000 | 79" | Flatback |

| Part No. | Diameter | Spindle Type |
|---|---|---|
| 1602022 | 16" | D-5 |
| 1602023 | 16" | D-6 |
| 1602024 | 16" | D-8 |
| 2002023 | 20" | D-6 |
| 2002024 | 20" | D-8 |
| 2002025 | 20" | D-11 |
| 2402023 | 24" | D-6 |
| 2402024 | 24" | D-8 |
| 2402025 | 24" | D-11 |
| 2802024 | 28" | D-8 |
| 2802025 | 28" | D-11 |
| 2802026 | 28" | D-15 |
| 3202024 | 32" | D-8 |
| 3202025 | 32" | D-11 |
| 3202026 | 32" | D-15 |
| 3602024 | 36" | D-8 |
| 3602025 | 36" | D-11 |
| 3602026 | 36" | D-15 |
| 4002025 | 40" | D-11 |
| 4002026 | 40" | D-15 |
| 4802025 | 48" | D-11 |
| 4802026 | 48" | D-15 |
| 5502025 | 55" | D-11 |
| 5502026 | 55" | D-15 |
| 5502027 | 55" | D-20 |
| 6002025 | 60" | D-11 |
| 6002026 | 60" | D-15 |
| 6002027 | 60" | D-20 |
| 6302025 | 63" | D-11 |
| 6302026 | 63" | D-15 |
| 6302027 | 63" | D-20 |

| Part No. | Diameter | Spindle Type |
|---|---|---|
| 1602010 | 16" | A-5 |
| 1602011 | 16" | A-6 |
| 1602012 | 16" | A-8 |
| 2002011 | 20" | A-6 |
| 2002012 | 20" | A-8 |
| 2002013 | 20" | A-11 |
| 2402011 | 24" | A-6 |
| 2402012 | 24" | A-8 |
| 2402013 | 24" | A-11 |
| 2802012 | 28" | A-8 |
| 2802013 | 28" | A-11 |
| 2802014 | 28" | A-15 |
| 3202012 | 32" | A-8 |
| 3202013 | 32" | A-11 |
| 3202014 | 32" | A-15 |
| 3602012 | 36" | A-8 |
| 3602013 | 36" | A-11 |
| 3602014 | 36" | A-15 |
| 4002013 | 40" | A-11 |
| 4002014 | 40" | A-15 |
| 4802013 | 48" | A-11 |
| 4802014 | 48" | A-15 |
| 5502013 | 55" | A-11 |
| 5502014 | 55" | A-15 |
| 5502015 | 55" | A-20 |
| 6002013 | 60" | A-11 |
| 6002014 | 60" | A-15 |
| 6002015 | 60" | A-20 |

## Dimensional Data (in inch)

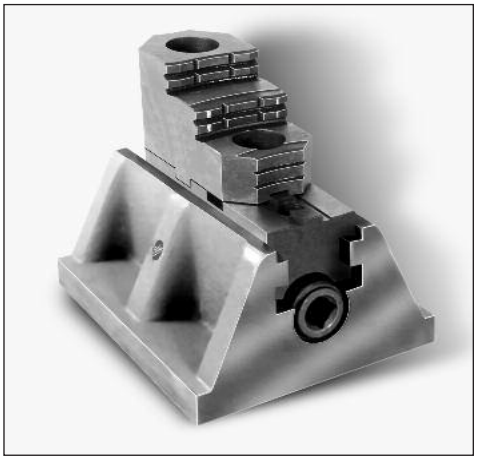
| Dia. B1 | B2 | B3 | B4 | B6 | B7 | B8 | B15 | T1 | T2 | R1 | R2 | R3 | Windows N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.75 | 8.27 | 6.89 | 2.44 | 5.91 | 4xM18 | - | 3.07 | - | - | 4.69 | 6.73 | 0.39 | 12 |
| 19.66 | 8.27 | 6.89 | 2.56 | 5.91 | 4xM18 | - | 2.95 | - | - | 4.92 | 6.73 | 0.39 | 12 |
| 23.62 | 11.02 | 9.84 | 2.68 | 6.89 | 4xM18 | 7.87 | 3.15 | 0.87 | 1.57 | 6.30 | 10.43 | 0.59 | 8 |
| 27.56 | 11.02 | 9.84 | 2.76 | 8.66 | 4xM18 | 9.84 | 3.35 | 0.87 | 1.57 | 6.61 | 11.97 | 0.59 | 8 |
| 31.50 | 11.02 | 9.84 | 2.95 | 8.66 | 8xM18 | 11.81 | 3.35 | 0.87 | 1.57 | 7.28 | 12.99 | 0.59 | 8 |
| 35.43 | 11.81 | 10.83 | 2.95 | 9.84 | 8xM18 | 12.80 | 3.35 | 0.87 | 1.57 | 7.28 | 14.96 | 0.59 | 8 |
| 39.37 | 11.81 | 10.83 | 3.15 | 9.84 | 8xM18 | 14.76 | 4.724 | 0.87 | 1.57 | 7.28 | 16.73 | 0.59 | 8 |
| 47.24 | 11.81 | 10.83 | 3.35 | 9.84 | 8xM18 | 18.31 | 4.724 | 1.10 | 1.97 | 7.28 | 20.67 | 0.59 | 8 |
| 55.12 | 11.81 | 10.83 | 3.35 | 9.84 | 8xM20 | 21.65 | 5.51 | 1.10 | 1.97 | 7.28/13.78 | 23.62/21.65 | 0.59 | 8/12 |
| 59.06 | 14.96 | 11.81 | 3.94 | 10.63 | 8xM24 | 23.62 | 5.90 | 1.10 | 1.97 | 10.24/17.72 | 26.57/18.11 | 0.59 | 8/12 |

# Boring Mill Jaws for Parallel Tee-slot and Face Plate Jaws for Radial Tee-slot

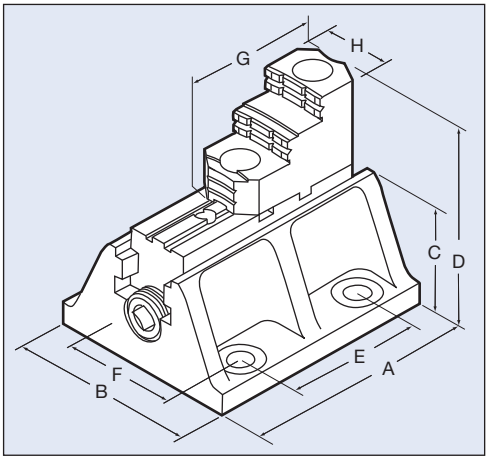
- One year warranty
- Heavy Duty



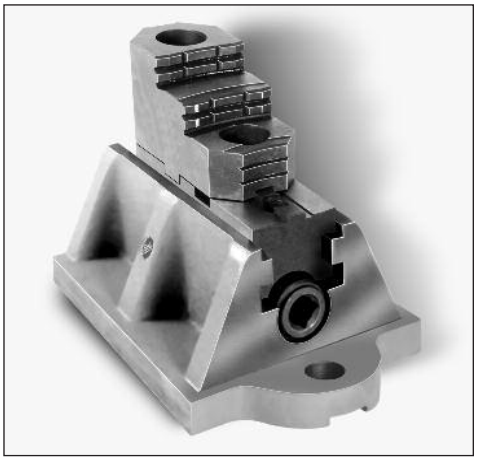
## Boring Mill Jaw Set with 2 piece Jaw for Parallel Tee Slots



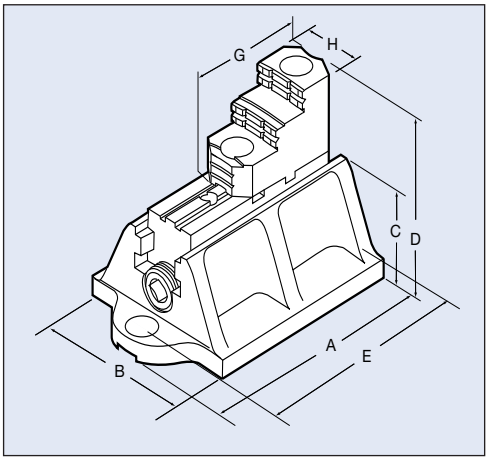
| Model | 1BL0100300 | 1BL0100400 |
|---|---|---|
| A | 8.26" | 12.00" |
| B | 6.77" | 8.66" |
| C | 3.86" | 4.66" |
| D | 7.10" | 8.40" |
| E | 4.92" | 7.00" |
| F | 4.92" | 6.00" |
| G | 5.00" | 5.00" |
| H | 2.36" | 2.95" |




## Face Plate Jaw Set with 2 piece Jaw for Radial Tee Slots



| Model | 1BL0000600 |
|---|---|
| A | 14.17" |
| B | 6.69" |
| C | 3.65" |
| D | 8.40" |
| E | 12.40" |
| G | 5.00" |
| H | 2.95" |

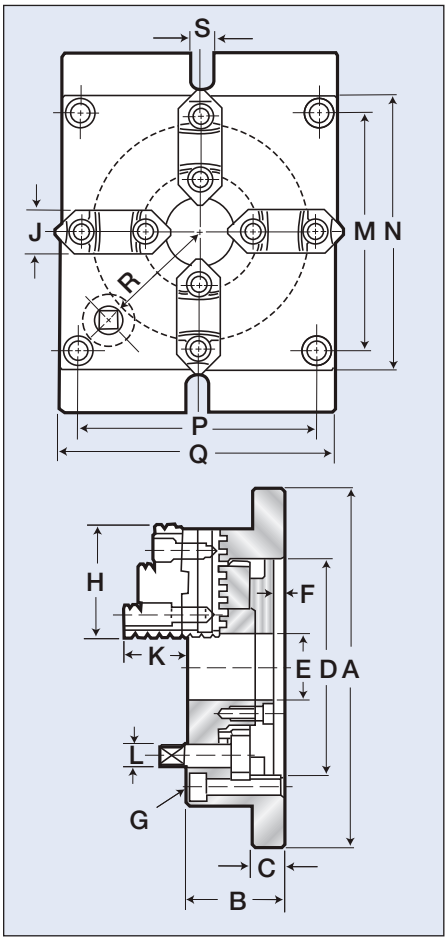



HOW TO ORDER: State quantity, model number and shipping instructions.

# Super Thin Low Profile Square Chucks

## Series MCA

- Universal scroll chuck design
- End-surface clamping design enables fast efficient mounting of several chucks to a worktable
- Super thin design allows greater Z-axis machining
- Elongated slots allows fast and easy positioning on worktable, simply use standard T-bolts, versus mounting connecting plates required by conventional chucks
- Milled key-slots on the base plate allows accurate quick changing of the chucks
- Ideal for pallet applications, Standard Mills, Vertical Machining Centers, Angle Plates, Tombstones, and Grinding Machines.
- American standard, hard top and master jaws
- One year warranty




| Model | Approx Weight | Gripping capacity External Min. | External Max. | Internal Min. | Internal Max. |
|---|---|---|---|---|---|
| MCA6 | 25 lbs | .16" | 5.04" | 2.17" | 5.04" |
| MCA8 | 41 lbs | .20" | 6.38" | 2.44" | 6.34" |
| MCA10 | 70 lbs | .24" | 7.78" | 2.83" | 7.78" |
| MCA12 | 125 lbs | .39 " | 10.43" | 3.54 " | 10.43" |

## Dimensional Data (in inch)

| Model | A | B | C | D | E | F | G | H | J | K | L | M | N | P | Q | R | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MCA6 | 8.46 | 2.24 | .71 | 5.12 | 1.57 | .22 | 4-M10x1.5P | 2.68 | 1.02 | 1.54 | .551* | 5.67 | 6.50 | 5.67 | 6.50 | 2.60 | .71 |
| MCA8 | 9.84 | 2.56 | .79 | 6.30 | 2.17 | .24 | 4-M12x1.7P | 3.23 | 1.10 | 1.69 | .669* | 6.85 | 7.87 | 6.85 | 7.87 | 3.27 | .71 |
| MCA10 | 12.20 | 2.83 | .87 | 7.87 | 2.76 | .24 | 4-M14x2P | 3.66 | 1.26 | 1.97 | .827* | 8.58 | 9.84 | 8.58 | 9.84 | 4.09 | .71 |
| MCA12 | 14.96 | 3.35 | .98 | 10.24 | 3.94 | .27 | 4-M16x2P | 4.64 | 1.57 | 2.20 | .905* | 10.79 | 12.20 | 10.79 | 12.20 | 5.31 | .87 |

*square drive

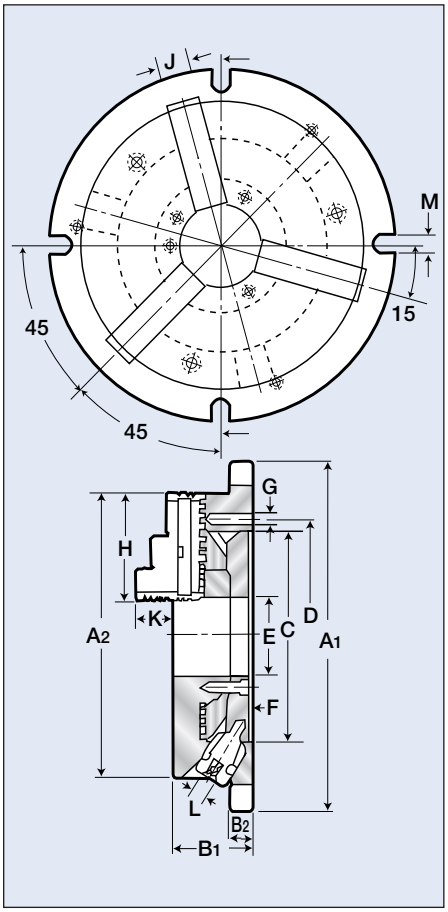
HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.

# Super Thin Low Profile Round Chucks

## Series NBK

### The Ultimate Low Profile 3-Jaw Universal Chuck

- Three operating pinions positioned at a 45 degree angle for easier operation.
- Sizes available 6, 8, 10 and 12 inch diameter.
- Easy Installation with flange type mounting.
- One Year Warranty
- Accurate- .001" repeatability on duplicate parts using the nominated pinion.
- Ideal for Drill Presses, Standard Mills, Vertical Machining Centers, Angle Plates, Tombstones, and Grinding Machines.
- American standard hard top and master jaws




| Model | Approx. Weight | Gripping capacity External Min. | External Max. | Internal Min. | Internal Max. |
|---|---|---|---|---|---|
| NBK6 | 24 lbs. | .31" | 6.30" | 1.89" | 5.91" |
| NBK8 | 40 lbs. | .43" | 7.87" | 2.44" | 7.48" |
| NBK10 | 62 lbs. | .47" | 9.84" | 2.83" | 9.41" |
| NBK12 | 95 lbs. | .59" | 11.81" | 3.38" | 11.41" |

## Dimensional Data (in inch)

| Model | A1 | A2 | B1 | B2 | C | D | E | F | G | H | J | K | L | M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NBK6 | 8.66 | 6.69 | 2.28 | .71 | 5.12 | 5.79 | 1.77 | .24 | 3-M10x1.5P | 2.68 | 1.02 | 1.57 | .394* | .512 |
| NBK8 | 10.63 | 8.27 | 2.56 | .78 | 6.10 | 6.77 | 2.36 | .24 | 3-M10x1.5P | 3.23 | 1.10 | 1.69 | .433* | .512 |
| NBK10 | 12.40 | 10.04 | 2.87 | .78 | 7.48 | 8.27 | 3.15 | .24 | 3-M12x1.75P | 3.66 | 1.26 | 2.04 | .472* | .630 |
| NBK12 | 14.57 | 12.00 | 3.15 | .87 | 9.84 | 11.22 | 4.13 | .21 | 3-M12x1.75P | 4.64 | 1.57 | 2.32 | .551* | .708 |

*square drive

HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.

# Quick-Change Jaw Grip Fast Power Chucks, Standard and King Bore

Shown with optional jaw setting fixture and hard reversible top jaws.

Jaw Presetting Fixture Order number 1009-07090

for use with 6", 8", 10", 12", 15", 18", and 20" sizes Standard Bore and King Bore Models Quick Change Jaw Power Chucks.

## Constant Grip High Speed Thru-Hole Power Chucks Sizes 6" Thru 24"

- One Year Warranty ±.0005" Repeatability
- 3-Point Adjusting Feature in the chuck body permits indicating in to zero. Increase Soft Jaw Life by using adjustment feature. Reduce or eliminate re-boring of Soft Jaws.
- High RPM ... up to 6,000 using standard top jaws ... without loss of gripping force, due to internally counter-balanced design.
- Quick Change Master Jaws, 2 sets supplied with each chuck permits offline pre-assembly of top tooling for next job reducing traditional setup time by 95%.
- SAFE Visual Indicator shows when Master Jaws are in the unlocked mode.
- Utilize existing top tooling by selecting style of master jaws from 1.5 x 60, 1/16 x 90, Am. Std. Acme, Am. Std Tongue & Groove and Square Serrations or substitute mono block jaws. Sets can be mixed styles.
- Doubles as collet chuck as master jaws have keyed radius in front that accept standard W & S collet pads. Eliminate time wasted on switching over to collet chuck.
- Large Thru-Hole Capacity
- Utilize the machine's existing actuating cylinder - does not require long stroke cylinder.
- Easy Installation - removable blank sleeve in the chuck allows the customer to bore and thread the sleeve of the chuck to match existing drawtube or drawbar. PBA can supply chuck sleeve prethreaded on request, at a nominal charge.
- Optional Jaw Setting Fixture (as shown) for presetting top jaws off the machine for the next job, while the machine is still running. A real timesaver!
- Sizes 6", 8", 10", 12", 15", 18", 20", and 24" diameters.

| Chuck Size | Mount (D)Direct (I)Indirect | RPM | Model No. ① | Jaw Stroke | Sleeve Stroke | Thru Hole | Collet Pad Bar Capacity | Tooling Hole Size | Operating Force lbs/f | Grip Force lbs/f | Wt (lbs) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.5" | A2-4(I) | 6000 | 9131-217__ | .140" | .630" | 1.65" | 1.5" | 5/16" UNC | 3,600 | 9,900 | 31 |
| 6.5" | A2-5(D) | 6000 | 9131-317__ | .140" | .630" | 1.65" | 1.5" | 5/16" UNC | 3,600 | 9,900 | 31 |
| 6.5" | A2-6(I) | 6000 | 9131-417__ | .140" | .630" | 1.65" | 1.5" | 5/16" UNC | 3,600 | 9,900 | 31 |
| 8.25" | A2-5(I) | 5500 | 9131-321__ | .140" | .630" | 2.05" | 2.0" | 5/16" UNC | 5,400 | 15,000 | 53 |
| 8.25" | A2-6(D) | 5500 | 9131-421__ | .140" | .630" | 2.05" | 2.0" | 5/16" UNC | 5,400 | 15,000 | 53 |
| 8.25" | A2-8(I) | 5500 | 9131-521__ | .140" | .630" | 2.05" | 2.0" | 5/16" UNC | 5,400 | 15,000 | 53 |
| 10.0" | A2-6(I) | 5000 | 9131-426__ | .160" | .730" | 2.56" | 2.5" | 3/8" UNC | 7,200 | 19,800 | 82 |
| 10.0" | A2-8(D) | 5000 | 9131-526__ | .160" | .730" | 2.56" | 2.5" | 3/8" UNC | 7,200 | 19,800 | 82 |
| 12.0" | A2-8(I) | 4200 | 9131-531__ | .160" | .730" | 3.54" | 3.0" | 3/8" UNC | 9,900 | 27,000 | 150 |
| 12.0" | A2-11(D) | 4200 | 9131-631__ | .160" | .730" | 3.54" | 3.0" | 3/8" UNC | 9,900 | 27,000 | 150 |
| 15.0" | A2-8(I) | 3000 | 9131-538__ | .200" | .790" | 4.92" | 4.5" | 3/8" UNC | 13,500 | 31,500 | 280 |
| 15.0" | A2-11(D) | 3000 | 9131-638__ | .200" | .790" | 4.92" | 4.5" | 3/8" UNC | 13,500 | 31,500 | 280 |
| 18.0" | A2-8(I) | 2500 | 9131-546__ | .236" | .984" | 5.59" | 5.5" | 1/2" UNC | 15,500 | 38,250 | 375 |
| 18.0" | A2-11(I) | 2500 | 9131-646__ | .236" | .984" | 5.59" | 5.5" | 1/2" UNC | 15,500 | 38,250 | 375 |
| 20.0" | A2-11(I) | 2500 | 9131-650__ | .236" | .984" | 5.59" | 5.5" | 1/2" UNC | 15,500 | 38,250 | 550 |
| 24.0" | A2-11(I) | 2000 | 9131-661__ | .315" | .984" | 6.299" | 6.0" | 1/2" UNC | 20,700 | 38,250 | 760 |
| 24.0" | A2-15(D) | 2000 | 9131-761__ | .315" | .984" | 6.299" | 6.0" | 1/2" UNC | 20,700 | 38,250 | 760 |
| **King Bore Quick-Change Chucks** | | | | | | | | | | | |
| 7.0" | A2-5(D) | 7000 | 9171-317__ | .140" | .630" | 2.20" | 2.0" | 5/16" UNC | 4,500 | 13,000 | 37 |
| 8.25" | A2-6(D) | 5500 | 9171-421__ | .140" | .630" | 2.59" | 2.5" | 5/16" UNC | 5,400 | 15,000 | 53 |
| 8.25" | A2-8(D) | 5500 | 9171-521__ | .140" | .630" | 2.59" | 2.5" | 5/16" UNC | 5,400 | 15,000 | 53 |
| 10.43" | A2-6(I) | 5000 | 9171-426__ | .160" | .730" | 3.03" | 3.0" | 3/8" UNC | 7,200 | 19,800 | 82 |
| 10.43" | A2-8(D) | 5000 | 9171-526__ | .160" | .730" | 3.03" | 3.0" | 3/8" UNC | 7,200 | 19,800 | 82 |
| 12.40" | A2-8(I) | 4200 | 9171-531__ | .160" | .730" | 4.05" | 4.0" | 3/8" UNC | 9,900 | 27,000 | 183 |
| 12.40" | A2-11(D) | 4200 | 9171-631__ | .160" | .730" | 4.05" | 4.0" | 3/8" UNC | 9,900 | 27,000 | 183 |

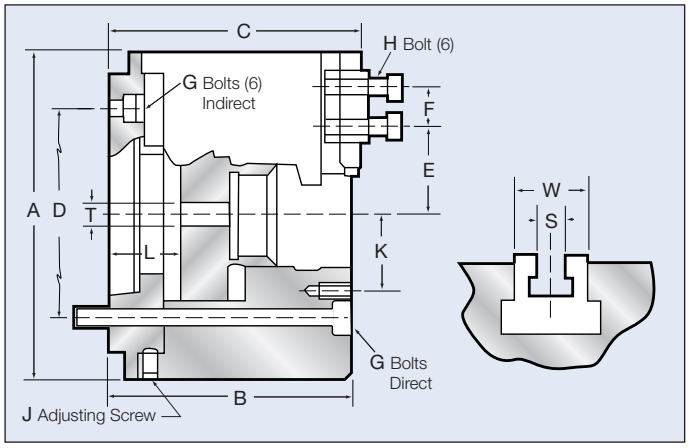
① Insert last two digits for Master Jaw type...Example 9131-21723...Indicates 1.5mm x 60°: Master Jaw Required
**Use 23** for 1.5mm x 60° Japanese type.** **Use 07** for Am. Std Tongue & Groove. **Use 10** for 1/16 X 90° Serrations.*
**Use 26** for Acme Serration. **Use 27** for Square Serration.
**NOTE:** 18, 20" & 24" dia. chucks require separate collet pad master jaws: 18"-#8130-46696, 20"-#8130-50696 & 24"-#8130-61696.

HOW TO ORDER: State quantity, Model Number of chuck, Machine Make & Model, and shipping instructions.

## Dimensional and Performance Data (in inch)

| Chuck Size | A | B | C | D | F | E Max | E Min | G | H | J | K | L Min | L Max | S | W |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6-A4 | 6.496 | 4.685 | 4.803 | 3.250 | .787 | 2.126 | 1.339 | M10x25(6) | M10x25 | 5/16 UNFx½ | 2.99 | .94 | 1.57 | .475 | 1.22 |
| 6-A5 | 6.496 | 4.842 | 4.960 | 4.125 | .787 | 2.126 | 1.339 | M10x130(3) | M10x25 | 5/16 UNFx½ | 2.99 | 1.10 | 1.73 | .475 | 1.22 |
| 6-A6 | 6.496 | 5.078 | 5.196 | 5.250 | .787 | 2.126 | 1.339 | M12x30(6) | M10x25 | 5/16 UNFx½ | 2.99 | 1.50 | 2.13 | .475 | 1.22 |
| 8-A5 | 8.26 | 5.119 | 5.275 | 4.125 | 1.000 | 2.637 | 1.733 | M10x30(6) | M12x35 | ⅜ UNFx¾ | 3.94 | .98 | 1.61 | .551 | 1.57 |
| 8-A6 | 8.26 | 5.354 | 5.510 | 5.250 | 1.000 | 2.637 | 1.733 | M12x130(3) | M12x35 | ⅜ UNFx¾ | 3.94 | 1.19 | 1.81 | .551 | 1.57 |
| 8-A8 | 8.26 | 5.705 | 5.862 | 6.750 | 1.000 | 2.637 | 1.733 | M16x30(6) | M12x35 | ⅜ UNFx¾ | 3.94 | 2.02 | 1.75 | .551 | 1.57 |
| 10-A6 | 10 | 5.511 | 5.669 | 5.250 | 1.181 | 3.268 | 2.087 | M12x35(6) | M12x35 | ½ UNFx¾ | 4.53 | 1.02 | 2.15 | .630 | 1.57 |
| 10-A8 | 10 | 5.905 | 6.063 | 6.750 | 1.181 | 3.268 | 2.087 | M16x150(3) | M12x35 | ½ UNFx¾ | 4.53 | 1.41 | 2.03 | .630 | 1.57 |
| 12-A8 | 12 | 6.614 | 6.771 | 6.750 | 1.181 | 4.291 | 2.362 | M16x40(6) | M14x45 | ½ UNFx¾ | 5.71 | 1.30 | 2.03 | .710 | 1.81 |
| 12-A11 | 12 | 6.614 | 6.771 | 9.250 | 1.181 | 4.291 | 2.362 | M20x160(3) | M14x45 | ½ UNFx¾ | 5.71 | 1.30 | 2.03 | .710 | 1.81 |
| 15-A8 | 15 | 6.929 | 7.086 | 6.750 | 1.693 | 5.000 | 3.228 | M16x35(6) | M20x55 | ½ UNFx¾ | 7.08/11.81 | 1.38 | 2.16 | .866 | 2.36 |
| 15-A11 | 15 | 6.929 | 7.086 | 9.250 | 1.693 | 5.000 | 3.228 | M20x180(6) | M20x55 | ½ UNFx¾ | 7.08/11.81 | 1.38 | 2.36 | .866 | 2.36 |
| 18-A8 | 18 | 7.720 | 7.780 | 6.750 | 1.693 | 6.772 | 4.527 | M16x40(6) | M20x55 | ½ UNFx¾ | 8.66/12.6 | 1.38 | 2.36 | .984 | 2.36 |
| 18-A11 | 18 | 7.720 | 7.780 | 9.250 | 1.693 | 6.772 | 4.527 | M20x35(6) | M20x55 | ½ UNFx¾ | 8.66/12.6 | 1.38 | 2.36 | .984 | 2.36 |
| 20-A11 | 19.68 | 7.362 | 7.499 | 9.250 | 2.362 | 8.090 | 5.059 | M20x45(6) | M20x35 | ½ UNFx¾ | 8.66/12.21 | 1.38 | 2-.36 | .984 | 2.36 |
| 24-A11 | 24.02 | 7.560 | 7.720 | 9.250 | 2.362 | 10.09 | 5.770 | M20x45(6) | M20x35 | ½ UNFx¾ | *** | 1.57 | 2.56 | .984 | 2.36 |
| 24-A15 | 24.02 | 7.560 | 7.720 | 13.000 | 2.362 | 10.09 | 5.770 | 7/8-9x8(6) | M20x35 | ½ UNFx¾ | *** | 1.57 | 2.56 | .984 | 2.36 |

***9.45"/13"/16.53"/20.08"




(T) Draw Tube Thread Blank

1. Dimensions listed are with 1.5 x 60° Japanese type master jaws. Some dimensions will vary using other Master Jaw types such as Acme, 1/16" x 90° or Am. Std. Tongue & Groove.
2. Chuck is at mid stroke with master jaws flush with the body O.D.
3. UNC mounting bolts available upon request.

**Mono Block Jaws**
See page 67 for Dimensions.

Mono block jaws are extremely accurate solid one piece design ideal for dedicated jobs, and will allow you to work closer to the chuck face, due to no jaw bolt obstructions. For longer service **Mono Block Jaws** are made from a nitride hardening material to allow hardening after forming without major distortion.

## Extra Sets of Master Jaws for Quick Change Jaw Power Chucks

| | 6" | 8" | 10" | 12" | 15" | 18" | 20" | 24" |
|---|---|---|---|---|---|---|---|---|
| Master Jaw Type - 1.5mm x 60° Fine Serration (Japanese Type) | 8130-17623 | 8130-21623 | 8130-26623 | 8130-31623 | 8130-40623 | 8130-46623 | 8130-50623** | 8130-61623** |
| 1/16 x 90° Fine serration (European Type) | 8130-17610 | 8130-21610 | 8130-26610 | 8130-31610 | 8130-38610* | 8130-46610* | 8130-50610* | 8130-61610* |
| Acme Serration | N/A | 8130-21626 | 8130-26626 | 8130-31626 | 8130-40626 | 8130-46626 | 8130-50626 | 8130-61626 |
| American Std. Tongue & Groove | 8130-17607 | 8130-21607 | 8130-26607 | 8130-31607 | 8130-38607 | 8130-46607 | 8130-50607 | 8130-61607 |
| Square Serration | N/A | 8130-21627 | 8130-26627 | 8130-31627 | 8130-38627 | 8130-46627 | 8130-50627 | 8130-61627 |
| Mono Block Jaw*** | 8130-17601P | 8130-21601 | 8130-26601 | 8130-31601 | 8130-38601 | 8130-46601 | 8130-50601 | 8130-61601 |

**20" & 24" diameter chucks supplied with 3mm x 60° serrations * 15", 18" 20" and 24" diameter chucks supplied with 3/32" x 90° serrations
*** Also available in longer pointed design

# 3-Jaw Constant Grip Power Chucks

## Constant Grip High Speed Standard and King Bore Thru-Hole Power Chucks Sizes 6" Thru 24"

- One Year Warranty
- High RPM - up to 6000
- Constant Grip, internally counter-balanced design that reduces grip loss from centrifugal force of the jaws at high RPM.
- Easy Retrofit on most all existing NC and CNC lathes utilizing the same drawtube and actuating cylinder including Japanese types.
- Accurate - repeatability of ± .0005"
- 3-Point Adjusting Feature in the chuck body permits indicating in to zero. Increase Soft Jaw Life by using adjustment feature. Reduce or eliminate re-boring of Soft Jaws.
- Doubles as collet chuck as master jaws have keyed radius in front that accept standard W & S collet pads. Eliminate time wasted on switching over to collet chuck.
- Large Thru-Hole Capacity
- Utilize existing top tooling by selecting style of master jaws from 1.5 x 60, 1/16" x 90, Am. Std. Acme, Am. Std Tongue & Groove and Square Serrations or substitute mono block jaws. Sets can be mixed styles.
- Also available in 2-jaw style.
- Chuck sizes available 6", 8", 10", 12", 15",18", 20" and 24" diameters.

| Chuck Size | Mount (D)Direct (I)Indirect | RPM | Model No. ① | Jaw Stroke | Sleeve Stroke | Thru Hole | Collet Pad Bar Capacity | Tooling Hole Size | Operating Force lbs/f | Grip Force lbs/f | Wt (lbs) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.5" | A2-4(I) | 6000 | 9151-217__ | .140" | .630" | 1.65" | 1.5" | 5/16" UNC | 3,600 | 9,900 | 31 |
| 6.5" | A2-5(D) | 6000 | 9151-317__ | .140" | .630" | 1.65" | 1.5" | 5/16" UNC | 3,600 | 9,900 | 31 |
| 6.5" | A2-6(I) | 6000 | 9151-417__ | .140" | .630" | 1.65" | 1.5" | 5/16" UNC | 3,600 | 9,900 | 31 |
| 8.25" | A2-5(I) | 5500 | 9151-321__ | .140" | .630" | 2.05" | 2.0" | 5/16" UNC | 6,200 | 15,000 | 53 |
| 8.25" | A2-6(D) | 5500 | 9151-421__ | .140"" | .630" | 2.05" | 2.0" | 5/16" UNC | 6,200 | 15,000 | 53 |
| 8.25" | A2-8(I) | 5500 | 9151-521__ | .140" | .630" | 2.05" | 2.0" | 5/16" UNC | 6,200 | 15,000 | 53 |
| 10.0" | A2-6(I) | 5000 | 9151-426__ | .160" | .730" | 2.56" | 2.5" | 3/8" UNC | 7,200 | 19,800 | 82 |
| 10.0" | A2-8(D) | 5000 | 9151-526__ | .160" | .730" | 2.56" | 2.5" | 3/8" UNC | 7,200 | 19,800 | 82 |
| 12.0" | A2-8(I) | 4200 | 9151-531__ | .160" | .730" | 3.54" | 3.0" | 3/8" UNC | 9,900 | 27,000 | 150 |
| 12.0" | A2-11(D) | 4200 | 9151-631__ | .160" | .730" | 3.54" | 3.0" | 3/8" UNC | 9,900 | 27,000 | 150 |
| 15.0" | A2-8(I) | 3000 | 9151-538__ | .200" | .790" | 4.92" | 4.5" | 3/8" UNC | 13,500 | 31,500 | 280 |
| 15.0" | A2-11(D) | 3000 | 9151-638__ | .200" | .790" | 4.92" | 4.5" | 3/8" UNC | 13,500 | 31,500 | 280 |
| 18.0" | A2-8(I) | 2500 | 9151-546__ | .236" | .984" | 5.59" | 5.5" | 1/2" UNC | 15,500 | 38,250 | 375 |
| 18.0" | A2-11(I) | 2500 | 9151-646__ | .236" | .984" | 5.59" | 5.5" | 1/2" UNC | 15,500 | 38,250 | 375 |
| 20.0" | A2-11(I) | 2500 | 9151-650__ | .236" | .984" | 5.59" | 5.5" | 1/2" UNC | 15,500 | 38,250 | 550 |
| 24.0" | A2-11(I) | 1800 | 9151-660__ | .315" | .984" | 6.299" | 6.25" | 1/2" UNC | 20,700 | 38,250 | 760 |
| 24.0" | A2-15(D) | 1800 | 9151-760__ | .315" | .984" | 6.299" | 6.25" | 1/2" UNC | 20,700 | 38,250 | 760 |
| **King Bore Chucks** | | | | | | | | | | | |
| 7.0" | A2-5(D) | 7000 | 9161-318__ | .140" | .630" | 2.20" | 2.0" | 5/16" UNC | 4,500 | 13,000 | 37 |
| 8.25" | A2-6(D) | 5500 | 9161-421__ | .140" | .630" | 2.59" | 2.5" | 5/16" UNC | 5,400 | 15,000 | 53 |
| 10.43" | A2-6(I) | 5000 | 9161-426__ | .160" | .730" | 3.03" | 3.0" | 3/8" UNC | 7,200 | 19,800 | 82 |
| 10.43" | A2-8(D) | 5000 | 9161-526__ | .160" | .730" | 3.03" | 3.0" | 3/8" UNC | 7,200 | 19,800 | 82 |
| 12.40" | A2-8(I) | 4200 | 9161-531__ | .160" | .730" | 4.05" | 4.0" | 3/8" UNC | 9,900 | 27,000 | 183 |
| 12.40" | A2-11(D) | 4200 | 9161-531__ | .160" | .730" | 4.05" | 4.0" | 3/8" UNC | 9,900 | 27,000 | 183 |

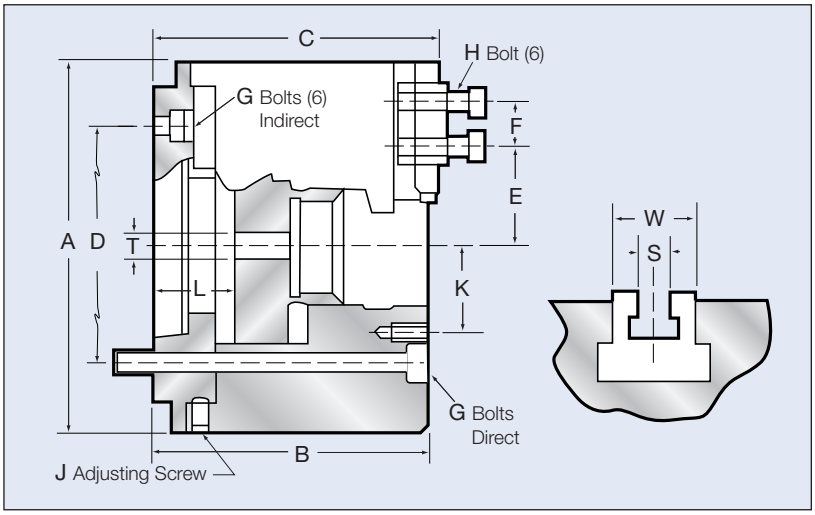
① Insert last two digits for Master Jaw type...Example 9151-21723...Indicates 1.5mm x 60°: Master Jaw Required
**Use 23** for 1.5mm x 60° Japanese type.** **Use 07** for Am. Std Tongue & Groove. **Use 10** for 1/16 X 90° Serrations.***
**Use 26** for Acme Serration. **Use 27** for Square Serration.
**NOTE:** 18, 20" & 24" dia. chucks require separate collet pad master jaws: 18"-#8130-46696, 20"-#8130-50696 & 24"-#8130-61696.
**3mm on 20" and 24" dia. chucks ***3/32 x 90° on 20" and 24" chucks

HOW TO ORDER: State quantity, Model Number of chuck, Machine make & Model, and shipping instructions.

## Dimensional and Performance Data (in inch)

| Chuck Size | A | B | C | D | F | E | | G | H | J | K | L | | S | W |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Max | Min | | | | | Min | Max | | |
| 6-A4 | 6.5 | 4.685 | 4.803 | 3.250 | .787 | 2.126 | 1.339 | M10x25(6) | M10x25 | 5⁄16 UNFx½ | 2.99 | .94 | 1.57 | .475 | 1.22 |
| 6-A5 | 6.5 | 4.842 | 4.960 | 4.125 | .787 | 2.126 | 1.339 | M10x130(3) | M10x25 | 5⁄16 UNFx½ | 2.99 | 1.10 | 1.73 | .475 | 1.22 |
| 6-A6 | 6.5 | 5.078 | 5.196 | 5.250 | .787 | 2.126 | 1.339 | M12x30(6) | M10x25 | 5⁄16 UNFx½ | 2.99 | 1.50 | 2.13 | .475 | 1.22 |
| 8-A5 | 8.25 | 5.119 | 5.275 | 4.125 | 1.000 | 2.637 | 1.733 | M10x30(6) | M12x35 | ⅜ UNFx¾ | 3.94 | .98 | 1.61 | .551 | 1.57 |
| 8-A6 | 8.25 | 5.354 | 5.510 | 5.250 | 1.000 | 2.637 | 1.733 | M12x130(3) | M12x35 | ⅜ UNFx¾ | 3.94 | 1.19 | 1.81 | .551 | 1.57 |
| 8-A8 | 8.25 | 5.705 | 5.862 | 6.750 | 1.000 | 2.637 | 1.733 | M16x30(6) | M12x35 | ⅜ UNFx¾ | 3.94 | 2.02 | 2.65 | .551 | 1.57 |
| 10-A6 | 10 | 5.511 | 5.669 | 5.250 | 1.181 | 3.268 | 2.087 | M12x35(6) | M12x35 | ½ UNFx¾ | 4.53 | 1.02 | 1.75 | .630 | 1.57 |
| 10-A8 | 10 | 5.905 | 6.063 | 6.750 | 1.181 | 3.268 | 2.087 | M16x150(3) | M12x35 | ½ UNFx¾ | 4.53 | 1.41 | 2.15 | .630 | 1.57 |
| 12-A8 | 12 | 6.614 | 6.771 | 6.750 | 1.181 | 4.291 | 2.362 | M16x40(6) | M14x45 | ½ UNFx¾ | 5.71 | 1.30 | 2.03 | .710 | 1.81 |
| 12-A11 | 12 | 6.614 | 6.771 | 9.250 | 1.181 | 4.291 | 2.362 | M20x160(3) | M14x45 | ½ UNFx¾ | 5.71 | 1.30 | 2..03 | .710 | 1.81 |
| 15-A8 | 15 | 6.929 | 7.086 | 6.750 | 1.693 | 5.000 | 3.228 | M16x35(6) | M20x55 | ½ UNFx¾ | 7.08/11.81 | 1.38 | 2.16 | .866 | 2.36 |
| 15-A11 | 15 | 6.929 | 7.086 | 9.250 | 1.693 | 5.000 | 3.228 | M20x180(6) | M20x55 | ½ UNFx¾ | 7.08/11.81 | 1.38 | 2.36 | .866 | 2.36 |
| 18-A8 | 18 | 7.720 | 7.780 | 6.750 | 1.693 | 6.772 | 4.527 | M16x40(6) | M20x55 | ½ UNFx¾ | 8.66/12.6 | 1.38 | 2.36 | .984 | 2.36 |
| 18-A11 | 18 | 7.720 | 7.780 | 9.250 | 1.693 | 6.772 | 4.527 | M20x35(6) | M20x55 | ½ UNFx¾ | 8.66/12.6 | 1.38 | 2.36 | .984 | 2.36 |
| 20-A11 | 19.7 | 7.362 | 7.499 | 9.250 | 2.362 | 8.090 | 5.059 | M20x45(6) | M20x35 | ½ UNFx¾ | 8.66/12.21 | 1.38 | 236 | .984 | 2.36 |
| 24-A11 | 24 | 7.560 | 7.720 | 9.250 | 2.362 | 10.090 | 5.770 | M20x45(6) | M20x35 | ½ UNFx¾ | *** | 1.57 | 2.56 | .984 | 2.36 |
| 24-A15 | 24 | 7.560 | 7.720 | 13.000 | 2.362 | 10.090 | 5.770 | 7/8-9x8(6) | M20x35 | ½ UNFx¾ | *** | 1.57 | 2.56 | .984 | 2.36 |

***9.45"/13"/16.53"/20.08"




(T) Draw Tube Thread Blank

1. Dimensions listed are with 1.5 x 60° master jaws. Some dimensions will vary using other Master Jaw types such as Acme, 1/16" x 90° or Am. Std. Tongue & Groove.
2. Chuck is at mid stroke with master jaws flush with the body O.D.
3. UNC mounting bolts available upon request.
4. Standard master jaw serration for 20 and 24 inch chucks are 3mm x 60°.

# Quick-Change 2-Jaw Power Chucks

## Constant Grip High Speed Thru-Hole Power Chucks

- One Year Warranty
- ±.0005" Repeatability
- 4-Point Adjusting Feature in the chuck body allows you to true up to virtually zero. Increase Soft Jaw Life by using the adjustment feature instead of skim cutting soft jaws as often. 6 points on 15" chucks and larger
- High RPM ... up to 6,000 using standard top jaws ... without loss of gripping force, due to internally counter-balanced design.
- Quick Change Master Jaws, 2 sets supplied with each chuck permits offline pre-assembly of top tooling for next job reducing traditional setup time by 95%.
- SAFE Visual Indicator shows when Master Jaws are in the unlocked mode.
- Master jaws available in 1.5mm x 60° (Japanese type), 1/16" x 90°, Acme serration and square serration, American Standard tongue and groove.
- Utilize existing top tooling by selecting style of master jaws from 1.5 x 60, 1/16" x 90, Am. Std. Acme, Am. Std Tongue & Groove and Square Serrations or substitute mono block jaws. Sets can be mixed styles.
- Large Thru-Hole Capacity
- Utilize the machine's existing actuating cylinder - including Japanese types.
- Easy Installation - removable blank sleeve in the chuck allows the customer to bore and thread the sleeve of the chuck to match existing drawtube of drawbar PBA can supply chuck sleeve pre-threaded on request, at a nominal charge.
- Optional Jaw Setting Fixture for presetting top jaws off the machine for the next job, while the machine is still running. A real timesaver!
- Sizes 6", 8", 10", and 12", diameters...other sizes available on request.

Jaw Presetting Fixture Order number 1009-07090

for use with 6", 8", 10", 12", 15", 18", and 20" sizes Standard Bore and King Bore Models Quick Change Jaw Power Chucks.

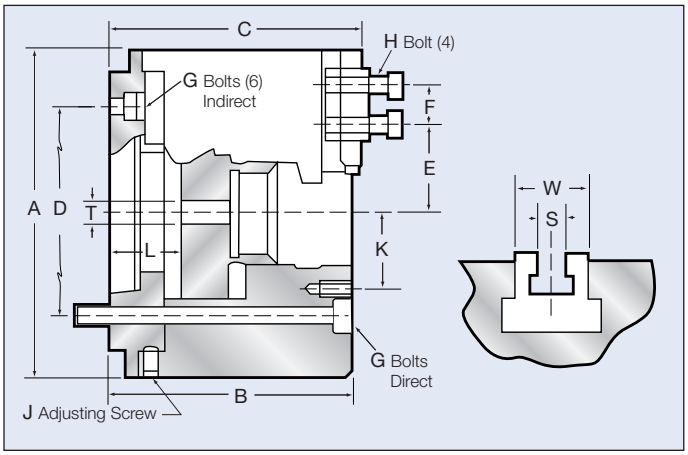
| Chuck Size | Mount (D)Direct (I)Indirect | RPM | Model No. ① | Jaw Stroke | Sleeve Stroke | Thru Hole | Collet Pad Bar Capacity | Tooling Hole Size | Operating Force lbs/f | Grip Force lbs/f | Wt (lbs) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.5" | A2-4(I) | 6000 | 9141-217__ | .140" | .630" | 1.65" | 1.5" | 5/16" UNC | 2,400 | 6,600 | 31 |
| 6.5" | A2-5(D) | 6000 | 9141-317__ | .140" | .630" | 1.65" | 1.5" | 5/16" UNC | 2,400 | 6,600 | 31 |
| 6.5" | A2-6(I) | 6000 | 9141-417__ | .140" | .630" | 1.65" | 1.5" | 5/16" UNC | 2,400 | 6,600 | 31 |
| 8.25" | A2-5(I) | 5500 | 9141-321__ | .140" | .630" | 2.05" | 2.0" | 5/16" UNC | 4,100 | 10,000 | 53 |
| 8.25" | A2-6(D) | 5500 | 9141-421__ | .140" | .630" | 2.05" | 2.0" | 5/16" UNC | 4,100 | 10,000 | 53 |
| 8.25" | A2-8(I) | 5500 | 9141-521__ | .140" | .630" | 2.05" | 2.0" | 5/16" UNC | 4,100 | 10,000 | 53 |
| 10.0" | A2-6(I) | 5000 | 9141-426__ | .160" | .730" | 2.56" | 2.5" | 3/8" UNC | 4,800 | 13,200 | 82 |
| 10.0" | A2-8(D) | 5000 | 9141-526__ | .160" | .730" | 2.56" | 2.5" | 3/8" UNC | 4,800 | 13,200 | 82 |
| 12.0" | A2-8(I) | 4200 | 9141-531__ | .160" | .730" | 3.54" | 3.0" | 3/8" UNC | 6,600 | 18,000 | 150 |
| 12.0" | A2-11(D) | 4200 | 9141-631__ | .160" | .730" | 3.54" | 3.0" | 3/8" UNC | 6,600 | 18,000 | 150 |

① Insert last two digits for Master Jaw type...Example 9141-21723...Indicates 1.5mm x 60°: Master Jaw Required
**Use 23** for 1.5mm x 60° Japanese type.
**Use 26** for Acme Serration.
**Use 10** for 1/16 X 90° Serrations.
**Use 07** for Am. Std Tongue & Groove.
**Use 27** for Square Serration.

HOW TO ORDER: State quantity, Model Number of chuck, Machine Make & Model, and shipping instructions.

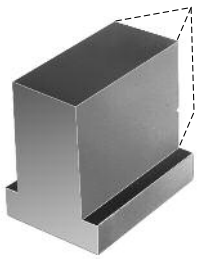
## Dimensional and Performance Data (in inch)

| Chuck Size | A | B | C | D | F | E Max | E Min | G | H | J | K | L Min | L Max | S | W |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6-A4 | 6.5 | 4.685 | 4.803 | 3.250 | .787 | 2.126 | 1.339 | M10x25(6) | M10x25 | 5⁄16 UNFx½ | 2.99 | .94 | 1.57 | .475 | 1.22 |
| 6-A5 | 6.5 | 4.842 | 4.960 | 4.125 | .787 | 2.126 | 1.339 | M10x130(4) | M10x25 | 5⁄16 UNFx½ | 2.99 | 1.10 | 1.73 | .475 | 1.22 |
| 6-A6 | 6.5 | 5.078 | 5.196 | 5.250 | .787 | 2.126 | 1.339 | M12x30(6) | M10x25 | 5⁄16 UNFx½ | 2.99 | 1.50 | 2.13 | .475 | 1.22 |
| 8-A5 | 8.25 | 5.119 | 5.275 | 4.125 | 1.000 | 2.637 | 1.733 | M10x30(6) | M12x35 | ⅜ UNFx¾ | 3.94 | .98 | 1.61 | .551 | 1.57 |
| 8-A6 | 8.25 | 5.354 | 5.510 | 5.250 | 1.000 | 2.637 | 1.733 | M12x130(4) | M12x35 | ⅜ UNFx¾ | 3.94 | 1.19 | 1.81 | .551 | 1.57 |
| 8-A8 | 8.25 | 5.705 | 5.862 | 6.750 | 1.000 | 2.637 | 1.733 | M16x30(6) | M12x35 | ⅜ UNFx¾ | 3.94 | 2.02 | 2.65 | .551 | 1.57 |
| 10-A6 | 10 | 5.511 | 5.669 | 5.250 | 1.181 | 3.268 | 2.087 | M12x35(6) | M12x35 | ½ UNFx¾ | 4.53 | 1.02 | 1.75 | .630 | 1.57 |
| 10-A8 | 10 | 5.905 | 6.063 | 6.750 | 1.181 | 3.268 | 2.087 | M16x150(4) | M12x35 | ½ UNFx¾ | 4.53 | 1.44 | 2.15 | .630 | 1.57 |
| 12-A8 | 12 | 6.614 | 6.771 | 6.750 | 1.181 | 4.291 | 2.362 | M16x40(6) | M14x45 | ½ UNFx¾ | 5.71 | 1.30 | 2.03 | .710 | 1.81 |
| 12-A11 | 12 | 6.614 | 6.771 | 9.250 | 1.181 | 4.291 | 2.362 | M16x160(4) | M14x45 | ½ UNFx¾ | 5.71 | 1.30 | 2.03 | .710 | 1.81 |




(T) Draw Tube Thread Blank

1. Dimensions listed are with 1.5 x 60° Japanese type master jaws. Some dimensions will vary using other Master Jaw types such as Acme, 1/16" x 90° or Am. Std. Tongue & Groove.
2. Chuck is at mid stroke with master jaws flush with the body O.D.
3. UNC mounting bolts available upon request.



**Mono Block Jaws**
See page 67 Dimensions.

Mono block jaws are extremely accurate solid one piece design ideal for dedicated jobs, and will allow you to work closer to the chuck face, due to no jaw bolt obstructions. For longer service **Mono Block Jaws** are made from a nitride hardening material to allow hardening after forming without major distortion.

## Extra Sets of Master Jaws for Quick Change Jaw Power Chucks

| | 6" | 8" | 10" | 12" |
|---|---|---|---|---|
| Master Jaw Type - 15mm x 60° Fine Serration (Japanese Type) | 8140-17623 | 8140-21623 | 8140-26623 | 8140-31623 |
| 1/16 x 90° Fine serration (European Type) | 8140-17610 | 8140-21610 | 8140-26610 | 8140-31610 |
| Acme Serration | N/A | 8140-21626 | 8140-26626 | 8140-31626 |
| American Std. Tongue & Groove | 8140-17607 | 8140-21607 | 8140-26607 | 8140-31607 |
| Square Serration | N/A | 8140-21627 | 8140-26627 | 8140-31627 |
| Mono Block Jaw*** | 8130-17601P | 8130-21601 | 8130-26601 | 8130-31601 |

*** Also available in longer pointed design

# Constant Grip Quick Change and Non-Quick Change Power Chuck

## Closed Center Power Chucks Designed for Vertical Turning Lathes

- One Year Warranty
- ±.0005" Repeatability
- 3-Point Adjusting Feature in the chuck body permits indicating in to zero. Increase Soft Jaw Life by using adjustment feature. Reduce or eliminate re-boring of Soft Jaws.
- Close center design with chip ejecting discharge chutes in the chuck body face reducing build-up to near zero.
- High RPM ... up to 5,000 using standard top jaws ... without loss of gripping force, due to internally counter-balanced design.
- Quick Change Master Jaws, 2 sets supplied with each chuck permits offline pre-assembly of top tooling for next job reducing traditional setup time by 95%.
- SAFE Visual Indicator shows when Master Jaws are in the unlocked mode.
- Utilize existing top tooling by selecting style of master jaws from 1.5 x 60, 1/16 x 90, Am. Std. Acme, Am. Std Tongue & Groove and Square Serrations or substitute mono block jaws. Sets can be mixed styles.
- Doubles as collet chuck as master jaws have keyed radius in front that accept standard W & S collet pads. Eliminate time wasted on switching over to collet chuck.
- Utilize the machine's existing actuating cylinder - including Japanese types.
- Easy Installation - removable blank sleeve in the chuck allows the customer to bore and thread the sleeve of the chuck to match existing drawtube of drawbar PBA can supply chuck sleeve prethreaded on request, at a nominal charge.
- Optional Jaw Setting Fixture (as shown) for presetting top jaws off the machine for the next job, while the machine is still running. A real timesaver!
- Sizes 6", 8", 10", 12", 15", 18", 20", and 24" diameters.

Jaw Presetting Fixture Order number 1009-07090

for use with 6", 8", 10", 12", 15", 18", and 20" sizes Standard Bore and King Bore Models Quick Change Jaw Power Chucks.

| Chuck Size | Mount (D)Direct (I)Indirect | RPM | Model No. ① | Jaw Stroke | Sleeve Stroke | Collet Pad Bar Capacity | Tooling Hole Size | Operating Force lbs/f | Grip Force lbs/f | Wt (lbs) |
|---|---|---|---|---|---|---|---|---|---|---|
| **Quick Change Jaw VTL Chucks** | | | | | | | | | | |
| 10.0" | A2-6(I) | 5000 | 9101-426__ | .160" | .730" | 2.5" | 3/8" UNC | 7,200 | 19,800 | 82 |
| 10.0" | A2-8(D) | 5000 | 9101-526__ | .160" | .730" | 2.5" | 3/8" UNC | 7,200 | 19,800 | 82 |
| 12.0" | A2-8(I) | 4200 | 9101-531__ | .160" | .730" | 3.0" | 3/8" UNC | 9,900 | 27,000 | 150 |
| 12.0" | A2-11(D) | 4200 | 9101-631__ | .160" | .730" | 3.0" | 3/8" UNC | 9,900 | 27,000 | 150 |
| 15.0" | A2-8(I) | 3000 | 9101-538__ | .200" | .790" | 4.5" | 3/8" UNC | 13,500 | 31,500 | 280 |
| 15.0" | A2-11(D) | 3000 | 9101-638__ | .200" | .790" | 4.5" | 3/8" UNC | 13,500 | 31,500 | 280 |
| 18.0" | A2-8(I) | 2500 | 9101-546__ | .236" | .984" | 5.5" | 1/2" UNC | 15,500 | 38,250 | 375 |
| 18.0" | A2-11(I) | 2500 | 9101-646__ | .236" | .984" | 5.5" | 1/2" UNC | 15,500 | 38,250 | 375 |
| 20.0" | A2-11(I) | 2500 | 9101-650__ | .236" | .984" | 5.5" | 1/2" UNC | 15,500 | 38,250 | 550 |
| 24.0" | A2-11(I) | 1800 | 9101-660__ | .315" | .984" | 6.25" | 1/2" UNC | 20,700 | 38,250 | 760 |
| 24.0" | A2-15(I) | 1800 | 9101-760__ | .315" | .984" | 6.25" | 1/2" UNC | 20,700 | 38,250 | 760 |
| **Non-Quick Change Jaw VTL Chucks** | | | | | | | | | | |
| 10.0" | A2-6(I) | 5000 | 9111-426__ | .160" | .730" | 2.5" | 3/8" UNC | 7,200 | 19,800 | 82 |
| 10.0" | A2-8(D) | 5000 | 9111-526__ | .160" | .730" | 2.5" | 3/8" UNC | 7,200 | 19,800 | 82 |
| 12.0" | A2-8(I) | 4200 | 9111-531__ | .160" | .730" | 3.0" | 3/8" UNC | 9,900 | 27,000 | 150 |
| 12.0" | A2-11(D) | 4200 | 9111-631__ | .160" | .730" | 3.0" | 3/8" UNC | 9,900 | 27,000 | 150 |
| 15.0" | A2-8(I) | 3000 | 9111-538__ | .200" | .790" | 4.5" | 3/8" UNC | 13,500 | 31,500 | 280 |
| 15.0" | A2-11(D) | 3000 | 9111-638__ | .200" | .790" | 4.5" | 3/8" UNC | 13,500 | 31,500 | 280 |
| 18.0" | A2-8(I) | 2500 | 9111-546__ | .236" | .984" | 5.5" | 1/2" UNC | 15,500 | 38,250 | 375 |
| 18.0" | A2-11(I) | 2500 | 9111-646__ | .236" | .984" | 5.5" | 1/2" UNC | 15,500 | 38,250 | 375 |
| 20.0" | A2-11(I) | 2500 | 9111-650__ | .236" | .984" | 5.5"" | 1/2" UNC | 15,500 | 38,250 | 550 |
| 24.0" | A2-11(I) | 1800 | 9111-660__ | .315" | .984" | 6.25" | 1/2" UNC | 20,700 | 38,250 | 760 |
| 24.0" | A2-15(I) | 1800 | 9111-760__ | .315" | .984" | 6.25" | 1/2" UNC | 20,700 | 38,250 | 760 |

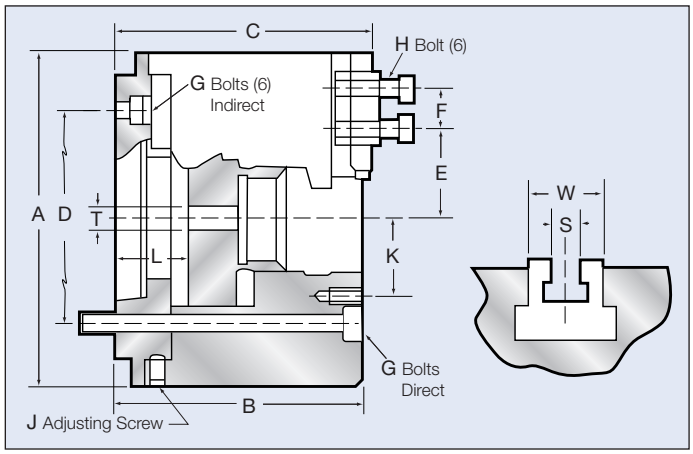
① Insert last two digits for Master Jaw type...Example 9101-42623...Indicates 1.5mm x 60°: Master Jaw Required
**Use 23** for 1.5mm x 60° Japanese type.** **Use 07** for Am. Std Tongue & Groove. **Use 10** for 1/16 X 90° Serrations.*
**Use 26** for Acme Serration. **Use 27** for Square Serration.

HOW TO ORDER: State quantity, Model Number of chuck, Machine make & Model, and shipping instructions.

## Dimensional and Performance Data (in inch)

| Chuck Size | A | B | C | D | F | E Max | E Min | G | H | J | K | L Min | L Max | S | W |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10-A6 | 10 | 5.511 | 5.669 | 5.250 | 1.181 | 3.268 | 2.087 | M12x35(6) | M12x35 | ½ UNFx¾ | 4.53 | 1.42 | 2.15 | .630 | 1.57 |
| 10-A8 | 10 | 5.905 | 6.063 | 6.750 | 1.181 | 3.268 | 2.087 | M16x150(3) | M12x35 | ½ UNFx¾ | 4.53 | 1.30 | 2.03 | .630 | 1.57 |
| 12-A8 | 12 | 6.614 | 6.771 | 6.750 | 1.181 | 4.291 | 2.362 | M16x40(6) | M14x45 | ½ UNFx¾ | 5.71 | 1.30 | 2.03 | .710 | 1.81 |
| 12-A11 | 12 | 6.614 | 6.771 | 9.250 | 1.181 | 4.291 | 2.362 | M20x110(3) | M14x45 | ½ UNFx¾ | 5.71 | 1.38 | 2.16 | .710 | 1.81 |
| 15-A8 | 15 | 6.929 | 7.086 | 6.750 | 1.693 | 5.000 | 3.228 | M16x35(6) | M20x55 | ½ UNFx¾ | 7.08/11.81 | 1.38 | 2.16 | .866 | 2.36 |
| 15-A11 | 15 | 6.929 | 7.086 | 9.250 | 1.693 | 5.000 | 3.228 | M20x180(6) | M20x55 | ½ UNFx¾ | 7.08/11.81 | 1.38 | 2.36 | .866 | 2.36 |
| 18-A8 | 18 | 7.720 | 7.780 | 6.750 | 1.693 | 6.772 | 4.527 | M16x40(6) | M20x55 | ½ UNFx¾ | 8.66/12.6 | 1.38 | 2.36 | .984 | 2.36 |
| 18-A11 | 18 | 7.720 | 7.780 | 9.250 | 1.693 | 6.772 | 4.527 | M20x35(6) | M20x55 | ½ UNFx¾ | 8.66/12.6 | 1.38 | 2.36 | .984 | 2.36 |
| 20-A11 | 19.7 | 7.362 | 7.499 | 9.250 | 2.362 | 8.090 | 5.059 | M20x45(6) | M20x35 | ½ UNFx¾ | 8.66/12.21 | 1.38 | 3.36 | .984 | 2.36 |
| 24-A11 | 24 | 7.560 | 7.720 | 9.250 | 2.362 | 10.090 | 5.770 | M20x45(6) | M20x35 | ½ UNFx¾ | *** | 1.57 | 2.56 | .984 | 2.36 |
| 24-A15 | 24 | 7.560 | 7.720 | 13.000 | 2.362 | 10.090 | 5.770 | 7/8-9x8(6) | M20x35 | ½ UNFx¾ | *** | 1.57 | 2.56 | .984 | 2.36 |

***9.45"/13"/16.53"/20.08"




(**T**) Draw Tube Thread Blank

1. Dimensions listed are with 1.5 x 60° Japanese type master jaws. Some dimensions will vary using other Master Jaw types such as Acme, 1/16" x 90° or Am. Std. Tongue & Groove.
2. Chuck is at mid stroke with master jaws flush with the body O.D.
3. UNC mounting bolts available upon request.

**Mono Block Jaws**
See page 67 for Dimensions.

Mono block jaws are extremely accurate solid one piece design ideal for dedicated jobs, and will allow you to work closer to the chuck face, due to no jaw bolt obstructions. For longer service **Mono Block Jaws** are made from a nitride hardening material to allow hardening after forming without major distortion.

## Extra Sets of Master Jaws for Quick Change Jaw Power Chucks

| | 10" | 12" | 15" | 18" | 20" | 24" |
|---|---|---|---|---|---|---|
| Master Jaw Type - 15mm x 60° Fine Serration (Japanese Type) | 8130-26623 | 8130-31623 | 8130-40623 | 8130-46623 | 8130-50623** | 8130-61623** |
| 1/16 x 90° Fine serration (European Type) | 8130-26610 | 8130-31610 | 8130-38610* | 8130-46610* | 8130-50610* | 8130-61610* |
| Acme Serration | 8130-26626 | 8130-31626 | 8130-40626 | 8130-46626 | 8130-50626 | 8130-61626 |
| American Std. Tongue & Groove | 8130-26607 | 8130-31607 | 8130-40607 | 8130-46607 | 8130-50607 | 8130-61607 |
| Square Serration | 8130-26627 | 8130-31627 | 8130-40627 | 8130-46627 | 8130-50627 | 8130-61627 |
| Mono Block Jaw *** | 8130-26601 | 8130-31601 | 8130-38601 | 8130-46601 | 8130-50601 | 8130-61601 |

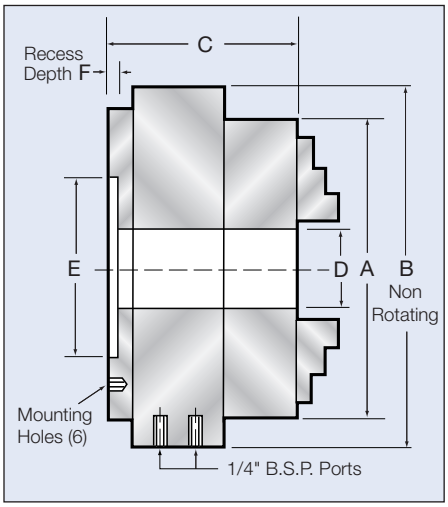
** 20" and 24" diameter chucks supplied with 3mm x 60° serrations * 15", 18", 20" and 24" diameter chucks supplied with 3/32" x 90° serrations
*** Also available in long pointed design

Chuck shown with optional hard reversible top jaws.

# MK3 3-Jaw Self-Contained Air Power Chucks

Turn your engine lathe into a production machine with this easy retrofit self-contained power chuck.

- One-year warranty
- Precision manufactured to fit types A and D spindles and adapter mounting
- Repetitive gripping within .001" TIR
- Safe, Chuck operates independently of air supply when gripping
- No separate actuating cylinder
- No draw tube to restrict thru-hole
- Sizes 61/2", 8", 10", 12", and 14"
- Suitable for chucking or barwork
- Less overhang. Lighter in weight
- Minimum maintenance
- Quick, simple Lever or Foot Pedal Operation
- Easy installation ref. page 41
- Optional top jaws ref. page 41
- 1/16" x 90° serrated master jaws standard with T-nut




Dimensions are for adapter mount chucks.

| Chuck Size | Adapter Mount Model No. | Type D Spindles Spindle Size | Type D Spindles 3-Jaw Model No. | Type A Spindles Spindle Size | Type A Spindles 3-Jaw Model No. |
|---|---|---|---|---|---|
| 6½" | 3-Jaw 9760-01710 | D-3 | 9762-21710 | - | - |
| | | D-4 | 9762-31710 | - | - |
| | | D-5 | 9762-41710 | A-5 | 9761-31710 |
| | | D-6 | 9762-51710 | A-6 | - |
| 8" | 3-Jaw 9760-02110 | D-4 | 9762-32110 | - | - |
| | | D-5 | 9762-42110 | A-5 | 9761-32110 |
| | | D-6 | 9762-52110 | A-6 | 9761-42110 |
| 10" | 3-Jaw 9760-02610 | D-5 | 9762-42610 | - | - |
| | | D-6 | 9762-52610 | A-6 | 9761-42610 |
| | | D-8 | 9762-62610 | A-8 | 9761-52610 |
| 12" | 3-Jaw 9760-03210 | D-8 | 9762-63210 | A-8 | 9761-53210 |
| | | D-11 | 9762-73210 | A-11 | 9761-63210 |
| 14" | 3-Jaw 9760-03510 | D-8 | 9762-63510 | A-8 | 9761-53510 |
| | | D-11 | 9762-73510 | A-11 | 9761-63510 |

Table Mount, “L” Type Mounts and Special Mounts available upon request.

## Dimensional and Technical Data (in inch)

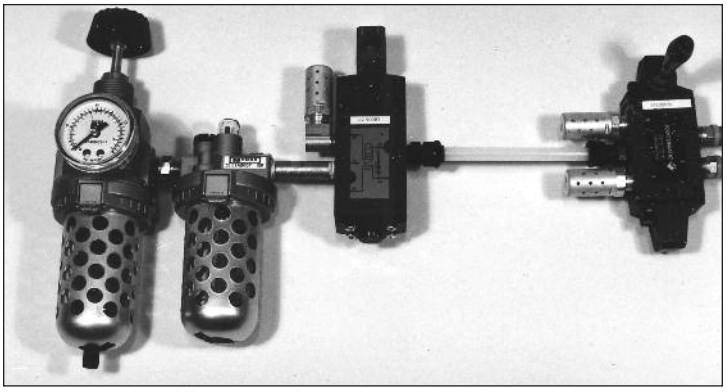
| Chuck Size | A | B | C | D | E | F | Mtg Hole | 6-Hole B.C. | Wt. Lbs | Max rpm* | Jaw Travel | Ext. Gripping Range Std. Hard Jaws | Int. Gripping Range Std. Hard Jaws | Force** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6½ | 6.50 | 9.45 | 5.06 | 1.50 | 4.921 | .24 | M10 | 5.91 | 50 | 3000 | .180 | .63 to 7.09 | 2.80 to 7.80 | 6,930 |
| 8 | 7.87 | 10.63 | 5.16 | 2.05 | 6.102 | .24 | M10 | 7.09 | 68 | 2500 | .180 | .98 to 8.62 | 3.58 to 9.58 | 10,230 |
| 10 | 9.84 | 12.20 | 5.73 | 2.56 | 7.283 | .24 | M10 | 8.27 | 100 | 2000 | .197 | 1.22 to 10.71 | 4.45 to 11.39 | 15,180 |
| 12½ | 12.40 | 13.98 | 5.79 | 3.54 | 8.858 | .26 | M10 | 9.84 | 144 | 1500 | .197 | 1.57 to 13.35 | 5.31 to 14.69 | 18,080 |
| 14 | 13.78 | 15.35 | 7.28 | 5.59 | 10.000 | .26 | M12 | 11.00 | 200 | 1300 | .236 | 3.50 to 14.60 | 7.30 to 15.90 | 18,960 |

*Max. RPM at 85 PSI with standard hard top jaws. Consult factory for increased RPM rating.
** Total Gripping Force (lbs) at 85 PSI

HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.

# Pratt Burnerd Accessories and Installation For MK3 Self-Contained Power Chucks

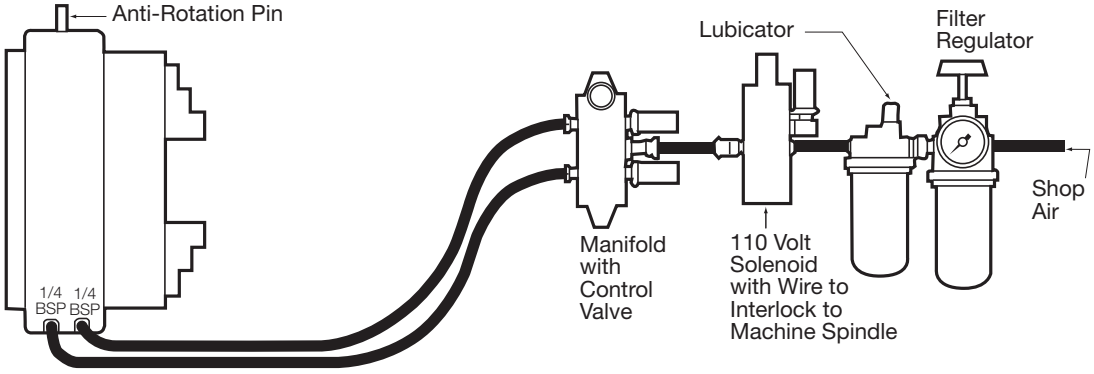
## Lever Control Unit - Part Number 1157-12800
## Foot Pedal Control Unit - Part Number 1157-12801 (Not Shown)



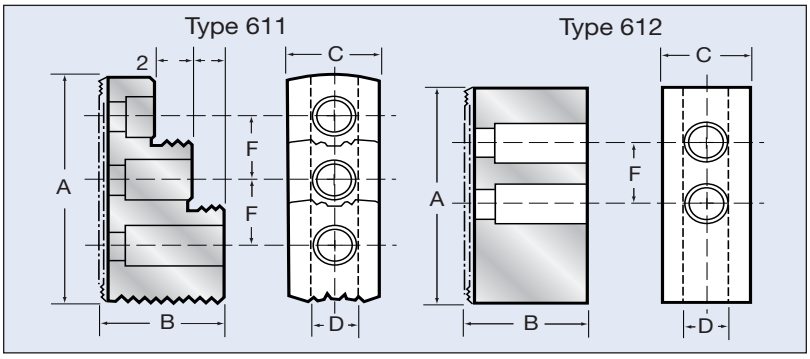
This unit is essential in order to operate MK3 self-contained power chucks. It is designed to be interlocked with the machine spindle so that the chuck cannot be actuated while the spindle is under power. Care must be taken not to actuate the chuck while the spindle is decelerating.

Units are supplied complete with pressure gage, pressure regulator, oil mist lubricator, air filter and lines with fittings.

Unit is operated by air and 110 volt/60 cycle (24 volt DC on request).




## Top Jaws for MK3 Self-Contained Chucks - 1/16" x 90° Serrations

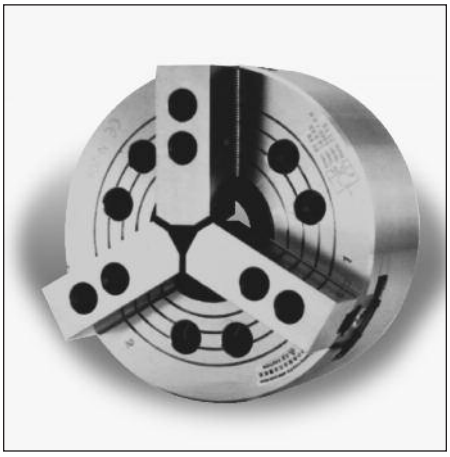



**Type 611** - Hardened and ground reversible jaws with serrated gripping faces. (supplied in sets of 3 for 3 jaw chucks only)

**Type 612** - Soft blank jaws, case hardening quality steel. (supplied as single units only)

### Dimensional Data

| Chuck Size | Jaw Type | Part Number | A | B | C | D | F | Bolt Size | Step Height |
|---|---|---|---|---|---|---|---|---|---|
| 6½" | 611 | 8130-17611 | 2.56" | 1.56" | 1.18" | .475" | .67" | M8 | .39" |
| 6½" | 612 | 8140-17512 | 2.75" | 1.50" | 1.25" | .475" | .787" | M8 | - |
| 8"/10" | 611 | 8130-21611 | 3.00" | 1.97" | 1.57" | .670" | .75" | M12 | .47" |
| 8"/10" | 612 | 2860-21512 | 3.50" | 2.00" | 1.50" | .670" | 1.00" | M12 | - |
| 12"/14" | 611 | 8130-31611 | 4.92" | 2.36" | 2.36" | .830" | 1.25" | M16 | .55" |
| 12"/14" | 612 | 2860-32512 | 4.50" | 2.50" | 2.00" | .830" | 1.25" | M16 | - |



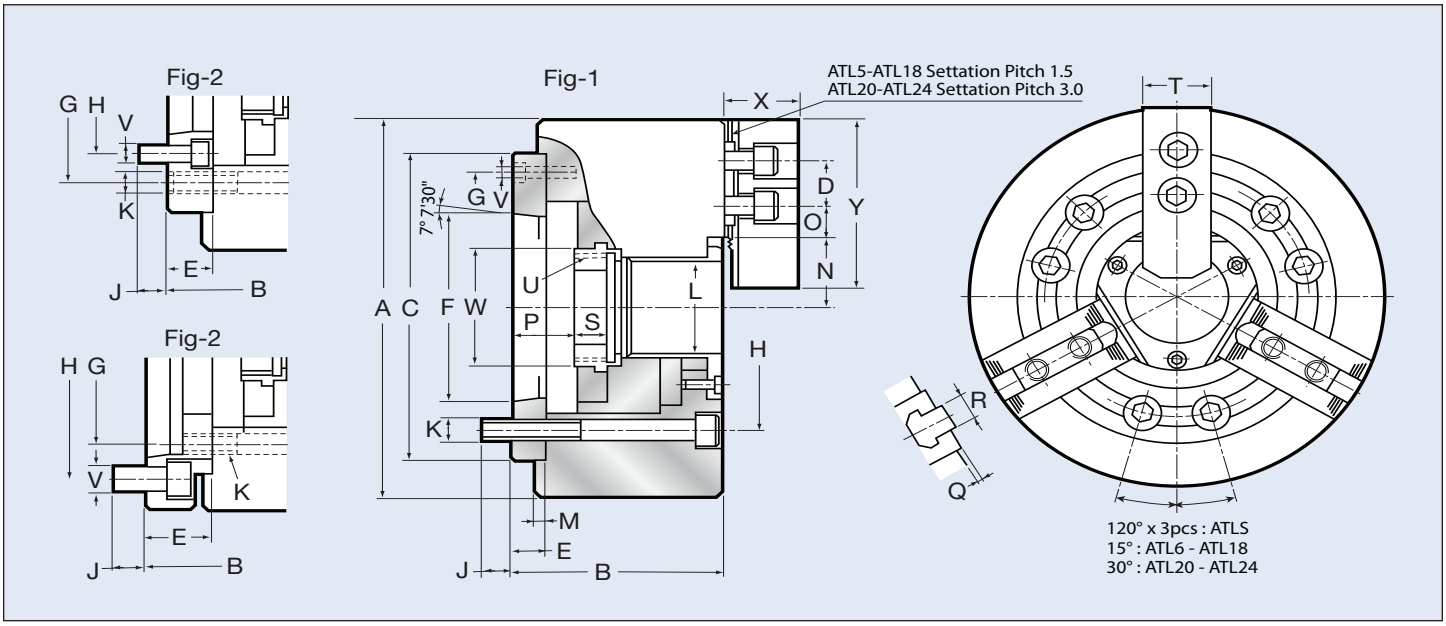
# ATL Series 3 Jaw Power Chuck 5" thru 24"

## Direct replacement chucks for Kitagawa B200 Series

- Easy retrofit
- Interchangeable Top Tooling 1.5mm x 60° Serrations up to 18" sizes, 3mm x 60° Serrations 20" & 24" sizes
- High speed
- Full 2 year warranty parts and labor
- Hardened jaw ways, master jaws and internal parts
- Large thru-holes, plus Quick Change cover plate for closed center applications.
- Chuck accuracy plus/minus .0005" repeatability
- Great price and value

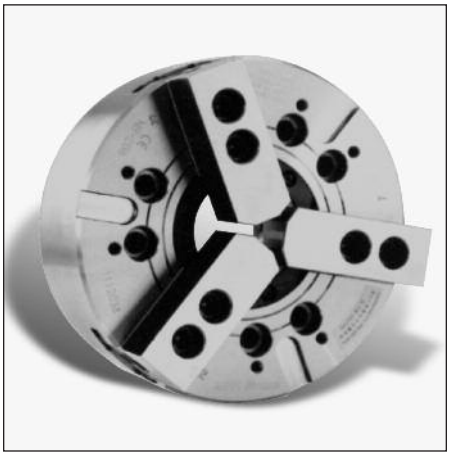
| Model | Through Hole (in) | Plunger Stroke (in) | Jaw Stroke (Dia. in) | Max. Pull Force (lbf) | Max. Gripping Force (lbf) | Max. Speed (rpm) | Weight (lbs) | Moment of Inertia I (kg - m$^2$) | Gripping O. D. Range (in) |
|---|---|---|---|---|---|---|---|---|---|
| ATL5-A5 | 1.30 | .394 | .2125 | 3925 | 8080 | 7000 | 20 | 0.023 | .24-4.0 |
| ATL6-A5 | 1.77 | .472 | .2165 | 4935 | 12790 | 6000 | 33 | 0.062 | .59-5.0 |
| ATL6-A6 | 1.77 | .472 | .2165 | 4935 | 12790 | 6000 | 38 | 0.073 | .59-5.0 |
| ATL8-A5 | 2.07 | .630 | .2913 | 7830 | 19970 | 5000 | 57 | 0.190 | .79-6.16 |
| ATL8-A6 | 2.07 | .630 | .2913 | 7830 | 19970 | 5000 | 55 | 0.184 | .79-6.16 |
| ATL8-A8 | 2.07 | .630 | .2913 | 7830 | 19970 | 5000 | 65 | 0.217 | .79-6.16 |
| ATL10-A6 | 2.95 | .748 | .3464 | 9659 | 24902 | 4200 | 90 | 0.370 | .98-8.0 |
| ATL10-A8 | 2.95 | .748 | .3464 | 9650 | 24902 | 4200 | 84 | 0.340 | .98-8.0 |
| ATL12-A6 | 3.58 | .905 | .4173 | 12790 | 32978 | 3300 | 138 | 0.809 | 1.18-10.0 |
| ATL12-A8 | 3.58 | .905 | .4173 | 12790 | 32978 | 3300 | 131 | 0.770 | 1.18-10.0 |
| ATL12-A11 | 3.58 | .905 | .4173 | 12790 | 32978 | 3300 | 154 | 0.912 | 1.18-10.0 |
| ATL15-A8 | 4.62 | .905 | .4173 | 15930 | 40382 | 2500 | 276 | 2.255 | 1.96-13.0 |
| ATL15-A11 | 4.62 | .905 | .4173 | 15930 | 40382 | 2500 | 260 | 2.241 | 1.96-13.0 |
| ATL18-A8 | 4.62 | .905 | .4173 | 15930 | 40382 | 2000 | 322 | 3.961 | 1.96-16.0 |
| ATL18-A11 | 4.62 | .905 | .4173 | 15930 | 40382 | 2000 | 364 | 3.744 | 1.96-16.0 |
| ATL18-A15 | 4.62 | .905 | .4173 | 15930 | 40382 | 2000 | 421 | 5.183 | 1.96-16.0 |
| ATL20-A11 | 7.08 | .905 | .4173 | 20190 | 52495 | 1800 | 173 | 7.355 | 4.72-18.0 |
| ATL20-A15 | 7.08 | .905 | .4173 | 20190 | 52495 | 1800 | 445 | 6.910 | 4.72-18.0 |
| ATL24-A11 | 8.07 | 1.023 | .4724 | 20190 | 52495 | 1400 | 732 | 18.199 | 5.90-22.0 |
| ATL24-A15 | 8.07 | 1.023 | .4724 | 20190 | 52495 | 1400 | 699 | 17.376 | 5.90-22.0 |
| ATL24-A20 | 8.07 | 1.023 | .4724 | 20190 | 52495 | 1400 | 630 | 15.677 | 5.90-22.0 |

HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.




## Dimensional Data (in inch)

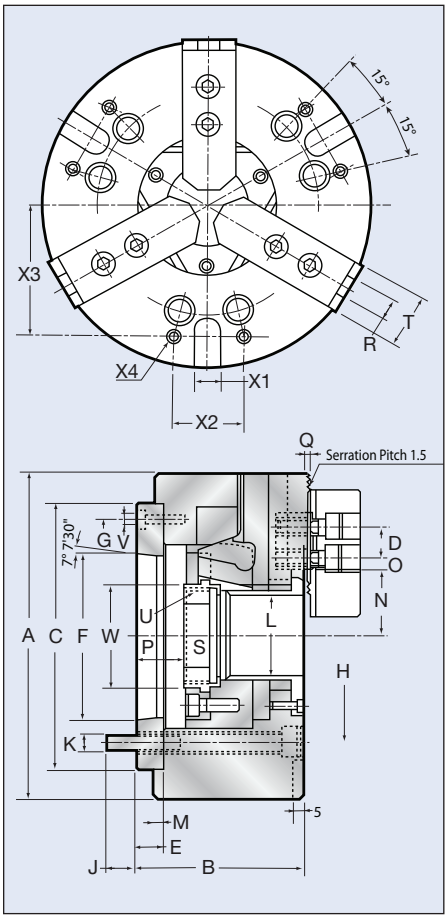
| Model | A | B | C H6 | D | E | F | G | H | J | K | L | M | N Max. | O Max. | O Min. | P Max. | P Min. | Q | R | S | T | U Max. | V | W | X | Y | Ref. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ATL5-A5 | 5.31 | 3.46 | 4.33 | .551 | 1.260 | 3.250 | 3.250 | 4.125 | .551 | 3-M10 | 1.30 | .157 | 1.043 | .777 | .305 | 1.30 | .905 | .079 | .393 | .787 | .984 | M40x1.5 | 6-M10 | 1.771 | 1.220 | 2.126 | Fig-3 |
| ATL6-A5 | 6.65 | 3.58 | 5.51 | .787 | .590 | 3.250 | 4.566 | 4.125 | .629 | 6-M10 | 1.77 | .197 | 1.260 | .895 | .364 | 1.023 | .551 | .079 | .472 | .748 | 1.220 | M55x2 | 3-M6 | 2.362 | 1.456 | 2.874 | Fig-1 |
| ATL6-A6 | 6.65 | 4.37 | 5.51 | .787 | 1.378 | 4.187 | 4.125 | 5.250 | .629 | 6-M10 | 1.77 | .197 | 1.260 | .895 | .364 | 1.811 | 1.338 | .079 | .472 | .748 | 1.220 | M55x2 | 6-M12 | 2.362 | 1.456 | 2.874 | Fig-3 |
| ATL8-A5 | 8.27 | 4.29 | 6.69 | .984 | .905 | 3.250 | 5.250 | 4.125 | .512 | 6-M12 | 2.05 | .197 | 1.523 | 1.171 | .462 | 1.476 | .846 | .079 | .551 | .807 | 1.378 | M60x2 | 6-M10 | 2.598 | 1.496 | 3.740 | Fig-2 |
| ATL8-A6 | 8.27 | 4.05 | 6.69 | .984 | .669 | 4.187 | 5.905 | 5.250 | .708 | 6-M12 | 2.05 | .197 | 1.523 | 1.171 | .462 | 1.240 | .610 | .079 | .551 | .807 | 1.378 | M60x2 | 3-M6 | 2.598 | 1.496 | 3.740 | Fig-1 |
| ATL8-A8 | 8.27 | 4.96 | 6.69 | .984 | 1.575 | 5.50 | 5.205 | 6.750 | .945 | 6-M12 | 2.05 | .197 | 1.523 | 1.171 | .462 | 2.145 | 1.515 | .079 | .551 | .807 | 1.378 | M60x2 | 6-M16 | 2.598 | 1.496 | 3.740 | Fig-3 |
| ATL10-A6 | 10.0 | 4.721 | 8.66 | 1.181 | .987 | 4.187 | 6.750 | 5.250 | .708 | 6-M16 | 2.95 | .197 | 2.007 | 1.328 | .561 | 1.318 | .571 | .079 | .630 | .984 | 1.575 | M85x2 | 6-M12 | 3.70 | 1.693 | 4.338 | Fig-2 |
| ATL10-A8 | 10.0 | 4.45 | 8.66 | 1.181 | .708 | 5.507 | 7.480 | 6.750 | .945 | 6-M16 | 2.95 | .197 | 2.007 | 1.328 | .561 | 1.043 | .295 | .079 | .630 | .984 | 1.575 | M85x2 | 3-M8 | 3.70 | 1.693 | 4.338 | Fig-1 |
| ATL12-A6 | 11.96 | 5.08 | 8.66 | 1.181 | .987 | 4.187 | 6.750 | 5.250 | .708 | 6-M16 | 3.58 | .236 | 2.413 | 1.801 | .620 | 1.30 | .394 | .079 | .826 | 1.102 | 1.968 | M100x2 | 6-M12 | 4.252 | 2.009 | 5.118 | Fig-2 |
| ATL12-A8 | 11.96 | 4.80 | 8.66 | 1.181 | .708 | 5.50 | 7.480 | 6.750 | .984 | 6-M16 | 3.58 | .236 | 2.413 | 1.801 | .620 | 1.023 | .118 | .079 | .826 | 1.102 | 1.968 | M100x2 | 3-M8 | 4.252 | 2.009 | 5.118 | Fig-1 |
| ATL12-A11 | 11.96 | 6.06 | 8.66 | 1.181 | 1.968 | 7.750 | 6.750 | 9.252 | 1.102 | 6-M16 | 3.584 | .236 | 2.413 | 1.801 | .620 | 2.283 | 1.378 | .079 | .826 | 1.102 | 1.968 | M100x2 | 6-M20 | 4.252 | 2.009 | 5.118 | Fig-3 |
| ATL15-A8 | 15.0 | 6.30 | 11.81 | 1.692 | 1.299 | 5.50 | 9.252 | 6.780 | .945 | 6-M20 | 4.62 | .236 | 3.228 | 1.801 | .620 | 1.575 | .669 | .197 | ..866 | 1.693 | 2.441 | M130x2 | 6-M16 | 5.472 | 2.598 | 6.496 | Fig-2 |
| ATL15-A11 | 15.0 | 5.86 | 11.81 | 1.692 | .866 | 7.750 | 10.236 | 9.252 | 1.102 | 6-M20 | 4.62 | .236 | 3.228 | 1.801 | .620 | 1.141 | .236 | .197 | .866 | 1.693 | 2.441 | M130x2 | 6-M20 | 5.472 | 2.598 | 6.496 | Fig-1 |
| ATL18-A8 | 17.72 | 6.30 | 11.81 | 1.692 | 1.299 | 5.50 | 9.252 | 6.750 | .945 | 6-M20 | 4.62 | .236 | 3.228 | 3.139 | .620 | 1.578 | .236 | .197 | .866 | 1.693 | 2.441 | M130x2 | 6-M16 | 5.472 | 2.598 | 6.496 | Fig-2 |
| ATL18-A11 | 17.72 | 5.86 | 11.81 | 1.692 | .866 | 7.750 | 10.236 | 9.252 | 1.102 | 6-M20 | 4.62 | .236 | 3.228 | 3.139 | .620 | 1.141 | .236 | .197 | .866 | 1.693 | 2.441 | M130x2 | 3-M10 | 5.472 | 2.598 | 6.496 | Fig-1 |
| ATL18-A15 | 17.72 | 7.24 | 11.81 | 1.692 | 2.244 | 11.250 | 9.252 | 13.00 | .945 | 6-M20 | 4.62 | .236 | 3.228 | 3.139 | .620 | 2.578 | 1.614 | .197 | .866 | 1.693 | 2.441 | M130x2 | 6-M24 | 5.472 | 2.598 | 6.496 | Fig-3 |
| ATL20-0A11 | 20.0 | 6.65 | 14.96 | 2.362 | 1.614 | 7.750 | 13.00 | 9.252 | 1.181 | 6-M24 | 7.08 | .236 | 4.429 | 2.381 | .964 | 2.047 | 1.141 | .197 | .984 | 1.496 | 2.559 | M190x2 | 6-M20 | 8.110 | 2.874 | 7.086 | Fig-2 |
| ATL20-A15 | 20.0 | 6.10 | 14.96 | 2.362 | 1.062 | 11.250 | 13.00 | 13.00 | 1.299 | 6-M24 | 7.08 | .236 | 4.429 | 2.381 | .964 | 1.496 | .590 | .197 | .984 | 1.496 | 2.559 | M190x2 | 6-M12 | 8.110 | 2.874 | 7.086 | Fig-1 |
| ATL24-A11 | 24.01 | 7.32 | 20.47 | 2.362 | 1.771 | 7.750 | 18.251 | 9.252 | 1.102 | 6-M24 | 8.07 | .236 | 5.507 | 3.445 | .964 | 2.401 | 1.378 | .197 | .984 | 1.496 | 2.559 | M215x2 | 6-M20 | 9.055 | 2.874 | 7.086 | Fig-2 |
| ATL24-A15 | 24.01 | 7.20 | 20.47 | 2.362 | 1.653 | 11.250 | 18.251 | 13.00 | 1.299 | 6-M24 | 8.07 | .236 | 5.507 | 3.445 | .964 | 2.283 | 1.259 | .197 | .984 | 1.496 | 2.559 | M215x2 | 6-M24 | 9.055 | 2.874 | 7.086 | Fig-2 |
| ATL24-A20 | 24.01 | 6.53 | 20.47 | 2.362 | .984 | 16.250 | 18.251 | 18.252 | 1.299 | 6-M24 | 8.07 | .236 | 5.507 | 3.445 | .964 | 1.614 | .590 | .197 | .984 | 1.496 | 2.559 | M215x2 | 3-M10 | 9.055 | 2.874 | 7.086 | Fig-1 |



# King Bore 3 Jaw Power Chuck

## ATLB Series 6" thru 18"

- Super large thru-hole
- Easy Retrofit
- Interchangeable Top Tooling 1.5mm x 60° serrations
- High speed
- Full 2 year warranty parts and labor
- Hardened jaw ways, master jaws and internal parts
- Quick Change cover plate for closed center applications.
- Chuck accuracy plus/minus .0005" repeatability




| MODEL | ATLB6-A5 | ATLB8-A5/A6 | ATLB10-A6/A8 | ATLB12-A8/A11 | ATLB15-A11/A15 | ATLB18-A11/A15 |
|---|---|---|---|---|---|---|
| Through-Hole (in) | 2.047 | 2.598 | 3.071 | 4.803 | 5.590 | 6.555 |
| Plunge Stroke (in) | .472 | .630 | .748 | .905 | .905 | .905 |
| Jaw Stroke (in) | .212 | .291 | .346 | .413 | .413 | .413 |
| Pull Force (lbf) | 7974 | 7828 | 9647 | 12788 | 15928 | 15928 |
| Grip Force (lbf) | 12788 | 19965 | 24902 | 32978 | 40381 | 40381 |
| Oper. Pressure (psi) | 262 | 292 | 392 | 292 | 363 | 363 |
| Max. Speed (rpm) | 6000 | 5000 | 4200 | 3200 | 2500 | 2000 |
| Weight (lbs) | 31 | 53 | 83 | 144 | 287 | 355 |
| Mount of Inertia (kg-m2) | 0.16 | 0.14 | 0.4 | 0.95 | 3.0 | 4.77 |
| Grip O.D. Range (in) | .63-5.0 | .78-6.25 | .98-8.25 | 1.61-10.75 | 2.36-14.0 | 2.95-16.0 |

## Dimensional Data

| Model | A | B | C H6 | D | E | F | G | H | J | K | L | M | N Max. | O Max. | O Min. | P Max. | P Min. | Q | R | S | T | U Max. | V | W | X1 (H12) | X2 | X3 | X4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ATLB6-A5 | 6.69 | 3.58 | 5.51 | .787 | .590 | 3.250 | 4.566 | 4.125 | .570 | 6xM10 | 2.04 | .197 | 1.350 | .718 | .364 | 1.023 | .551 | .079 | .472 | .787 | 1.260 | M60x2 | 3xM6 | 2.559 | .630 | 1.417 | 2.559 | M8 |
| ATLB8-A6 | 8.26 | 4.05 | 6.69 | .984 | .669 | 4.188 | 5.905 | 5.250 | .767 | 6xM12 | 2.59 | .197 | 1.653 | .935 | .462 | 1.240 | .610 | .079 | .551 | .787 | 1.456 | M74x2 | 3xM6 | 3.149 | .630 | 1.771 | 3.149 | M8 |
| ATLB10-A8 | 10.0 | 4.45 | 8.66 | 1.181 | .708 | 5.50 | 7.480 | 6.750 | .944 | 6xM16 | 3.07 | .197 | 2.086 | 1.328 | .561 | 1.043 | .295 | .079 | .630 | .984 | 1.653 | M87x2 | 3xM8 | 3.701 | .630 | 2.362 | 4.016 | M10 |
| ATLB12-A11 | 12.40 | 5.27 | 11.81 | 1.181 | .866 | 7.716 | 10.236 | 9.252 | 1.102 | 6xM20 | 4.80 | .236 | 2.921 | 1.427 | .501 | 1.653 | .748 | .079 | .827 | 1.102 | 2.047 | M135x2 | 3xM10 | 5.630 | .787 | 2.362 | 5.433 | M10 |
| ATLB15-A11 | 15.94 | 6.06 | 14.96 | 1.692 | 1.063 | 11.25 | 13.00 | 13.00 | 1.299 | 6xM24 | 5.59 | .236 | 3.681 | 1.781 | .600 | 1.338 | .433 | .197 | .866 | 1.693 | 2.441 | M155x2 | 3xM12 | 6.456 | .787 | 3.149 | 6.30 | M12 |
| ATLB20-A15 | 18.0 | 6.06 | 14.96 | 1.692 | 1.063 | 11.25 | 13.00 | 3.30 | 1.299 | 3xM24 | 6.65 | .236 | 3.807 | 2.490 | .718 | 1.338 | .433 | .197 | .866 | 1.693 | 2.441 | M180x3 | 3xM12 | 7.440 | .787 | 3.937 | 6.30 | M12 |

HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.

# Front-Mount Hydraulic 3-Jaw Chucks

## For use on machines with hydraulic ports in the spindle nose.

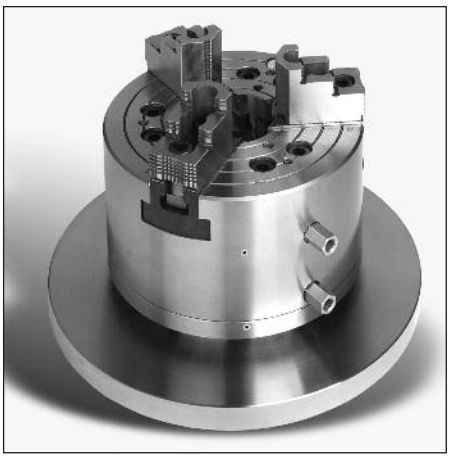
- One Year Warranty
- Hardened Steel Body
- Sizes 8", 10" and 12"
- Large Thru-Hole
- No Draw Tube Required
- .001" T.I.R. Repeatability on Duplicate Parts
- High RPM Ability
- Collet Pad Facility for Bar Work
- Totally Self - Lubricating
- Mechanically Self-Locking - No Hydraulic Check Valves Necessary
- Hydraulic Cylinder and Actuator are Integrated
- Direct Mount to Type "A" Spindles
- Acme, Tongue & Groove, and 1/16" by 90° Base Jaws Available
- Quick-Change Base Jaws Available
- **2-JAW MODELS** Available On Request



### Dimensional and Performance Data

| Part No. | 1749-02400 | 1749-02410① | 1749-02420① |
|---|---|---|---|
| Body Diameter | 8.25" | 10.0" | 12.0" |
| Body Width | 5.35" | 5.91" | 6.93" |
| Tooling Height* | 5.47" | 6.02" | 7.05" |
| Thru-Hole | 2.06" | 2.55"** | 3.18"** |
| Movement Per Jaw | .200" | .236" | .280" |
| Max. RPM | 4750 | 4050 | 3800 |
| Total Static Grip | 24,750 | 34,500 | 51,000 |
| Max. Hydraulic Pressure | 550 psi | 550 psi | 550 psi |
| Approx. Weight | 64.5 lbs | 104 lbs | 170 lbs |

*May vary slightly depending on the style of Base Jaw required.
**Special thru-holes available: 3-1/16" for 10" chuck; 4" for 12" chuck.



### Mounting Plates for Stationary Front Mount Hydraulic 3-Jaw Chucks

### Easy retrofit No Draw Tube Required

| Chuck Size | Chuck Model No. | Mounting Plate Diameter |
|---|---|---|
| 8" | 7749-21000 | 12" |
| 10" | 7749-26000 | 14" |
| 12" | 7749-31000 | 16" |

**NOTE:** As shown in photo at left, flanged base plate is supplied less slots or mounting holes. PBA can machine as required for an additional charge. For dimensional and performance data, reference the above.

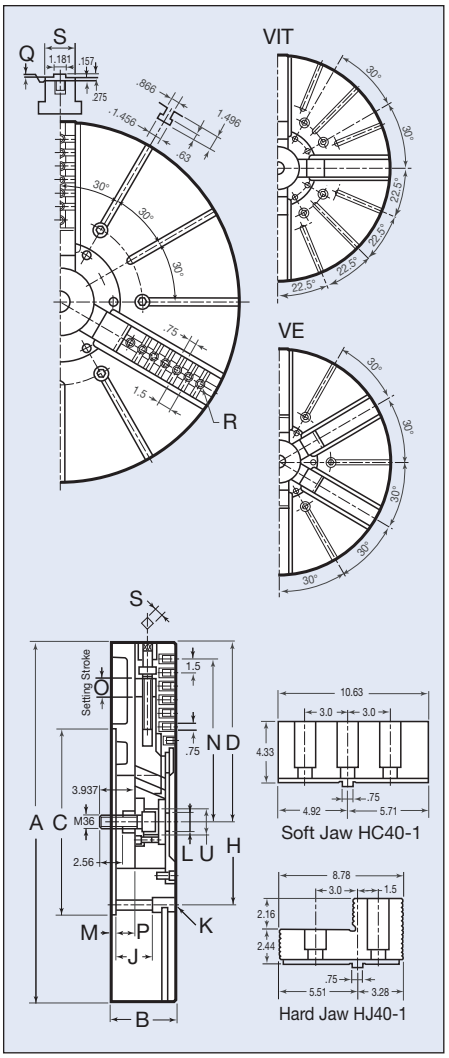
① Chuck numbers shown are for Cincinnati machines with 2 hydraulic ports in spindle. Consult factory for part number of 4-port spindle designs.

HOW TO ORDER: State quantity, Model Number of chuck, Part Number of adapter, and shipping instructions.

# Large Closed Center Adjustable Jaw Power Chucks for Vertical and Horizontal Lathes

## 40 - 79 inches

- Ideal for Large vertical and Horizontal Lathe applications
- Universal Wedge Design with manually adjustable Master Jaws
- Available in 3, 4 and 6-Jaw configurations
- Sealed front Master Jaw design for Vertical Use
- High Speed Design
- Available Mountings Straight Recess and 'A' Type Spindles
- Contact Factory for application expertise and quotation




| MODEL | V-240 | VIT-240 | V-250 | VIT-250 | VE-250 | VIT-263 | VE-263 | VE-279 |
|---|---|---|---|---|---|---|---|---|
| Number of Jaws | 3 | 4 | 3 | 4 | 6 | 4 | 6 | 6 |
| Plunge Stroke (in) | 2.244 | 2.244 | 2.244 | 2.244 | 2.244 | 2.362 | 2.362 | 2.362 |
| Radial Jaw Stroke (+ Manual Setting) (in) | .90+1.18 | .90+1.18 | .90+1.18 | .90+1.18 | .90+1.18 | 1.34+1.57 | 1.34+1.57 | 1.34+1.57 |
| Pull Force (lbf) | 40465 | 40465 | 40465 | 40465 | 40465 | 44961 | 44961 | 44961 |
| Grip Force (lbf) | 71938 | 71938 | 71938 | 71938 | 71938 | 80931 | 80931 | 80931 |
| Oper. Pressure (psi) | 610 | 610 | 610 | 610 | 610 | 670 | 670 | 670 |
| Max. Speed (rpm) | 630 | 550 | 500 | 400 | 360 | 300 | 280 | 230 |
| Weight (lbs) | 1422 | 1544 | 1962 | 2073 | 2140 | 3748 | 3969 | 6284 |
| Mount of Inertia (kg-m2) | 82 | 89 | 168 | 177 | 183 | 518 | 548 | 1350 |
| Matching Cylinder | ALT250C | ALT250C | ALT250C | ALT250C | ALT250C | ALT250C | ALT250C | ALT250C |
| Grip O.D. Range (in) | 11.22-38 | 11.22-38 | 10.63-47 | 10.63-47 | 10.63-47 | 15.35-61 | 15.35-61 | 17.32-76 |

## Dimensional Data (in inch)

| Model | A | B | C | D Max | H | J | K | L | M | N Max. | O | P Max. | P Min. | Q | R | S | T | U |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40" V/VIT-240 | 39.56 | 7.086 | 20.47 | 19.76 | 18.25 | 4.25 | M24 | M52x1.5 | .315 | 17.992 | 1.181 | 2.323 | .078 | .157 | 7-M24 | .748 | 3.346 | 2.834 |
| 50" V/VIT/VE-250 | 49.21 | 7.068 | 20.47 | 24.53 | 18.25 | 4.25 | M24 | M52x1.5 | .315 | 22.165 | 1.181 | 2.323 | .078 | .157 | 10-M24 | .748 | 3.346 | 2.834 |
| 63" VIT/VE-263 | 63.0 | 8.661 | 28.34 | 31.34 | 25.49 | 5.67 | M30 | M52x1.5 | .315 | 29.055 | 1.575 | 3.228 | .866 | .236 | 13-M24 | .866 | 4.331 | 2.834 |
| 79" VE-279 | 78.74 | 9.37 | 28.34 | 39.21 | 25.49 | 5.67 | M30 | M52x1.5 | .315 | 35.984 | 1.575 | 3.937 | .866 | .236 | 17-M24 | .866 | 4.331 | 2.834 |

HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.

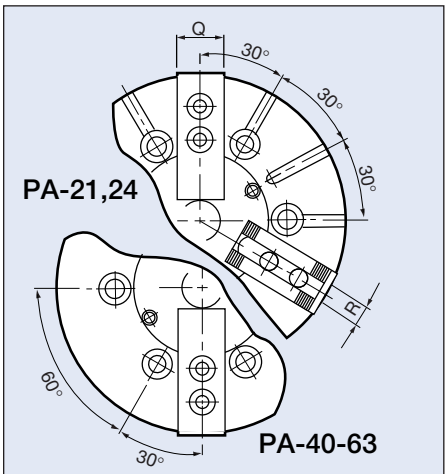
# 3 Jaw Wedge Type Closed Center Power Chuck

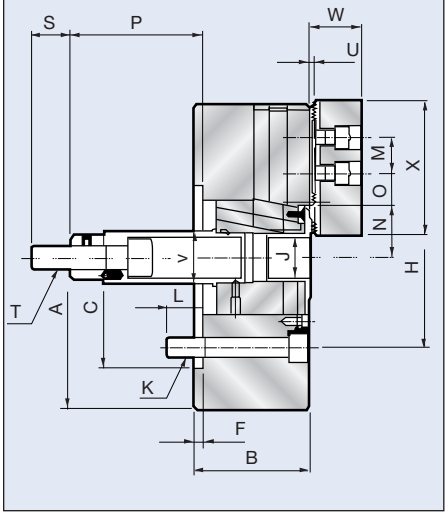
## PA 18" - 63" Large Diameter Chucks

- All steel body
- Standard 3 jaw closed center wedge chuck for general machining
- Hardened jaw ways and all internal parts
- Standard metric serrations 3.0mm serration pitch

| Model No. | Mount Width* | Jaw Stroke Dia | Sleeve Stroke | Gripping Capacity Max | Gripping Capacity Min | Draw Bar Pull lb/f | Grip Force lb/f | Max RPM | Wt lbs |
|---|---|---|---|---|---|---|---|---|---|
| PA18-A11 | 1.06" | .630" | 1.378" | 17.71" | 5.19" | 18,400 | 55,977 | 2710 | 274 |
| PA21-A11 | 1.06" | .630" | 1.378" | 20.87" | 2.68" | 18,400 | 61,350 | 1940 | 367 |
| PA24-A11 | 1.06" | .630" | 1.378" | 24.02" | 5.98" | 18,400 | 61,350 | 1760 | 492 |
| PA24-A15 | 1.06" | .630" | 1.378" | 24.02" | 5.98" | 18,400 | 61,350 | 1760 | 492 |
| PA28-A11 | 1.06" | .630" | 1.378" | 27.95" | 1.37" | 18,400 | 61,350 | 1200 | 617 |
| PA28-A15 | 1.06" | .630" | 1.378" | 27.95" | 1.37" | 18,400 | 61,350 | 1200 | 617 |
| PA32-A11 | 1.06" | .787" | 1.496" | 31.49" | 7.08" | 22,500 | 53,900 | 900 | 705 |
| PA32-A15 | 1.06" | .787" | 1.496" | 31.49" | 7.08" | 22,500 | 53,900 | 900 | 705 |
| PA40-A11 | 1.06" | 1.181" | 2.244" | 39.37" | 11.42" | 40,450 | 89,900 | 500 | 1,323 |
| PA40-A15 | 1.06" | 1.181" | 2.244" | 39.37" | 11.42" | 40,450 | 89,900 | 500 | 1,323 |
| PA40-A20 | 1.06" | 1.181" | 2.244" | 39.37" | 11.42" | 40,450 | 89,900 | 500 | 1,323 |
| PA50 | 1.06" | 1.181" | 2.244" | 49.21" | 11.42" | 40,450 | 89,900 | 450 | 1,763 |
| PA55 | 1.06" | 1.181" | 2.244" | 53.12" | 11.42" | 40,450 | 89,900 | 400 | 2,425 |
| PA63 | 1.06" | 1.181" | 2.244" | 62.99" | 11.42" | 40,450 | 89,900 | 350 | 3,307 |

*Add to dimension B for total width

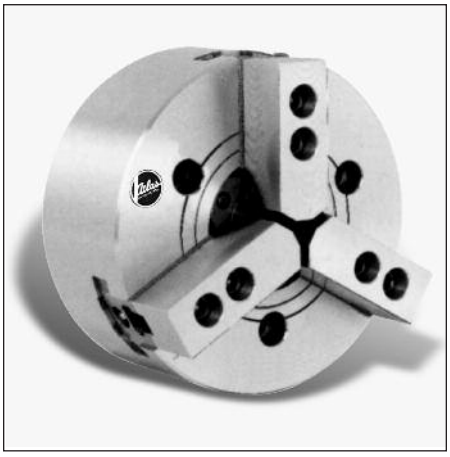



## Dimensional Data (in inch)

| Model | PA-18 | PA-21 | PA-24 | PA-28 | PA-32 | PA-40 | PA-50 | PA-55 | PA-63 |
|---|---|---|---|---|---|---|---|---|---|
| A | 17.71 | 20.87 | 24 | 27.95 | 31.49 | 39.37 | 49.21 | 55 | 63 |
| B | 4.48 | 4.92 | 4.92 | 5.90 | 5.90 | 7.09 | 7.09 | 7.8 | 7.8 |
| C | 11.81 | 14.96 | 14.96 | 14.96 | 14.96 | 20.47 | 20.47 | 28.35 | 28.35 |
| F | .236 | .236 | .236 | .236 | .236 | .314 | .314 | .314 | .314 |
| H | 9.25 | 13.0 | 13.0 | 13.0 | 13.0 | 18.25 | 18.25 | 25.5 | 25.5 |
| J | - | - | - | - | - | - | - | - | - |
| K | 6-M20 | 6-M22 | 6-M22 | 6-M22 | 6-M24 | 6-M24 | 6-M24 | 6-M24 | 6-M24 |
| L | 1.18 | 1.22 | 1.22 | 1.22 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 |
| M | 1.69 | 2.36 | 2.36 | 2.36 | 2.99 | 3.94 | 3.94 | 3.94 | 3.94 |
| N max. | 4.25 | 3.38 | 4.92 | 3.86 | 3.91 | 5.77 | 5.77 | 5.77 | 5.77 |
| N min | 3.93 | 3.07 | 4.61 | 3.46 | 3.52 | 5.18 | 5.18 | 5.18 | 5.18 |
| O max. | 1.98 | 3.68 | 3.68 | 5.63 | 7.08 | 8.86 | 9.25 | 16.73 | 20.67 |
| O min | .91 | .96 | .96 | 1.18 | 1.18 | 1.18 | 1.18 | 1.18 | 1.18 |
| P max. | 3.62 | 3.82 | 3.82 | 1.37 | 1.10 | 1.38 | 1.38 | 1.38 | 1.38 |
| P min | .88 | 2.44 | 2.44 | -.118 | -.39 | -.87 | -.87 | -.87 | -.87 |
| Q | 1.97 | 2.56 | 2.56 | 2.95 | 2.95 | 3.35 | 3.35 | 3.35 | 3.35 |
| R | 1.00 | .984 | .984 | 9.84 | 1.00 | .984 | .984 | .984 | .984 |
| S | 2.16 | 2.165 | 2.17 | 2.56 | 2.36 | 2.539 | 2.559 | 2.559 | 2.559 |
| T | M30x3.5 | M30x3.5 | M30x3.5 | M30x3.5 | M30x3.5 | M36x4.0 | M36x4.0 | M36x4.0 | M36x4.0 |
| U | .078 | .118 | .118 | .354 | .236 | -.159 | -.159 | -.159 | -.159 |
| V | 2.36 | 2.36 | 2.36 | - | - | - | - | - | - |
| W | 2.40 | 2.8 | 2.8 | 2.95 | 3.19 | 4.17 | 4.17 | 4.17 | 4.17 |
| X | 5.31 | 7.09 | 7.09 | 6.30 | 6.30 | 7.87 | 7.87 | 7.87 | 7.87 |

HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.



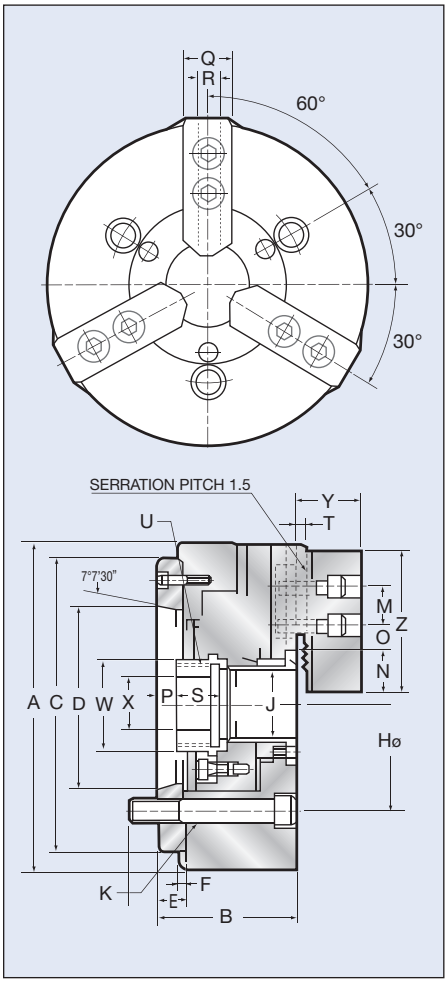
# 3 Jaw Open Center 'Long Stroke' Power Chuck

## ALS 6" - 12" Chucks

- Extended jaw stroke
- ± .0005 repeatability
- 1.5mm x 60° master jaws
- All steel body
- Hardened jaw ways, master jaws and internal parts
- Open center

| Model No. | | Thru Hole Dia | Jaw Stroke Dia | Sleeve Stroke | Gripping Capacity Max | Gripping Capacity Min | Draw Bar Pull lb/f | Grip Force lb/f | Max RPM | Wt lbs |
|---|---|---|---|---|---|---|---|---|---|---|
| ALS6-A5 | (D) | 1.102" | .787" | .590" | 6.49" | 1.102" | 6,272 | 7,015 | 4500 | 31 |
| ALS8-A6 | (D) | 1.771" | .984" | .748" | 8.46" | 1.259" | 9,239 | 11,016 | 3300 | 55 |
| ALS8-A8 | (I) | 1.771" | .984" | .748" | 8.46" | 1.259" | 9,239 | 11,016 | 3300 | 55 |
| ALS10-A6 | (I) | 2.086" | 1.181" | .866" | 10.00" | 1.653" | 12,094 | 14,169 | 3000 | 99 |
| ALS10-A8 | (D) | 2.086" | 1.181" | .866" | 10.00" | 1.653" | 12,094 | 14,169 | 3000 | 99 |
| ALS12-A6 | (I) | 2.480" | 1.377" | .984" | 11.96" | 1.692" | 15,579 | 18,075 | 2200 | 172 |
| ALS12-A8 | (D) | 2.480" | 1.377" | .984" | 11.96" | 1.692" | 15,579 | 18,075 | 2200 | 172 |
| ALS12-A11 | (I) | 2.480" | 1.377" | .984" | 11.96" | 1.692" | 15,579 | 18,075 | 2200 | 172 |

**(I)** Indirect mount **(D)** Direct mount




## Dimensional Data (in inch)

| MODEL | ALS6-A5 | ALS8-A6 | ALS8-A8 | ALS10-A6 | ALS10-A8 | ALS12-A6 | ALS12-A8 | ALS12-A11 |
|---|---|---|---|---|---|---|---|---|
| A | 6.65 | 8.46 | 8.46 | 10.00 | 10.00 | 11.97 | 11.97 | 11.97 |
| B | 5.91 | 6.69 | 7.17 | 5.20 | 5.24 | 9.45 | 9.17 | 9.33 |
| C | 5.512 | 6.693 | 6.693 | 8.661 | 8.661 | 8.661 | 8.661 | 8.661 |
| D | 3.250 | 4.188 | 5.501 | 4.188 | 5.501 | 4.188 | 5.501 | 7.751 |
| E | .622 | .699 | .738 | 1.014 | .738 | .945 | .669 | .827 |
| F | .197 | .197 | .197 | .197 | .197 | .197 | .197 | .197 |
| H | 4.126 | 5.252 | 6.748 | 5.252 | 6.748 | 5.252 | 6.748 | 9.250 |
| J | 1.102 | 1.771 | 1.771 | 2.086 | 2.086 | 2.480 | 2.480 | 2.480 |
| K | M10 | M12 | M16 | M12 | M16 | M12 | M16 | M20 |
| M | .787 | .984 | .984 | 1.181 | 1.181 | 1.181 | 1.181 | 1.181 |
| N max. | 1.545 | 2.086 | 2.086 | 2.460 | 2.460 | 2.933 | 2.933 | 2.933 |
| N min. | 1.151 | 1.594 | 1.594 | 1.870 | 1.870 | 1.244 | 1.244 | 1.244 |
| O max. | .659 | .817 | .817 | 1.053 | 1.053 | 1.505 | 1.505 | 1.505 |
| O min. | .364 | .462 | .462 | .443 | .443 | .502 | .502 | .502 |
| P max. | .394 | .118 | .118 | .236 | .236 | .323 | .323 | .323 |
| P min. | .197 | -.630 | -.630 | -1.102 | -1.102 | -.661 | -.661 | -.661 |
| Q | 1.023 | 1.378 | 1.378 | 1.575 | 1.575 | 1.969 | 1.969 | 1.969 |
| R | .472 | .551 | .551 | .630 | .630 | .826 | .826 | .826 |
| S | .945 | 1.260 | 1.260 | 1.575 | 1.575 | 1.496 | 1.496 | 1.496 |
| T | .079 | .079 | .079 | .079 | .079 | .118 | .118 | .118 |
| U max. | M38x1.5 | M55x2.0 | M55x2.0 | M65x2.0 | M65x2.0 | M75x2.0 | M75x2.0 | M75x2.0 |
| W | 1.771 | 2.560 | 2.560 | 2.874 | 2.874 | 3.268 | 3.268 | 3.268 |
| X | .787 | 1.181 | 1.181 | 1.771 | 1.771 | 1.968 | 1.968 | 1.968 |
| Y | 1.141 | 1.535 | 1.535 | 1.693 | 1.693 | 2.047 | 2.047 | 2.047 |
| Z | 2.598 | 3.740 | 3.740 | 4.331 | 4.331 | 4.370 | 4.370 | 4.370 |

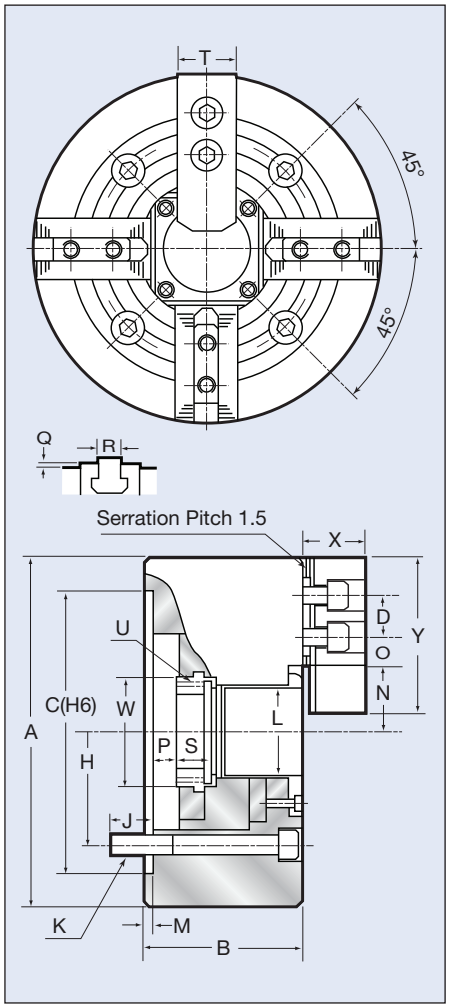
HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.

# 4 Jaw Universal Power Chuck

## 4ATL 6", 8", 10", 12", 15", 18" & 24" Chucks

- All steel body
- Hardened jaw way and internal parts
- ± .0005 repeatability
- 1.5mm x 60° master jaws
- 4-Jaw universal design

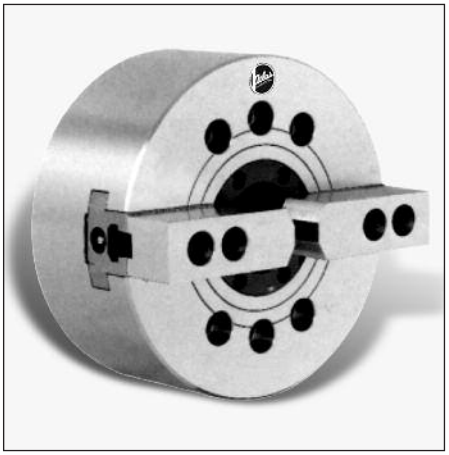
| Model No. | Through Hole | Plunger Stroke | Jaw Stroke | Max Draw Bar Pull Force lb/f | Max. Gripping Force lb/fi | Max RPM② | Wt lbs | Moment of Inertia I (kg-m2) |
|---|---|---|---|---|---|---|---|---|
| 4ATL6-A5 | 1.771" | .472" | .216" | 4,945 | 12,813 | 4500 | 30 | 0.058 |
| 4ATL8-A5 | 2.047" | .629" | .291" | 7,844 | 20,007 | 3600 | 53 | 0.177 |
| 4ATL8-A6 | 2.047" | .629" | .291" | 7,844 | 20,007 | 3600 | 53 | 0.177 |
| 4ATL10-A6 | 2.952" | .748" | .346" | 9,667 | 24.932 | 3200 | 79 | 0.324 |
| 4ATL10-A8 | 2.952" | .748" | .346" | 9,667 | 24.932 | 3200 | 79 | 0.324 |
| 4ATL12-A6 | 3.582" | .905" | .417" | 12,813 | 33,047 | 2700 | 129 | 0.763 |
| 4ATL12-A8 | 3.582" | .905" | .417" | 12,813 | 33,047 | 2700 | 129 | 0.763 |
| 4ATL12-A11 | 3.582" | .905" | .417" | 12,813 | 33,047 | 2700 | 129 | 0.763 |
| 4ATL15-A8 | 4.625" | .905" | .417" | 15,961 | 40,405 | 1900 | 251 | 2.331 |
| 4ATL15-A11 | 4.625" | .905" | .417" | 15,961 | 40,405 | 1900 | 251 | 2.331 |
| 4ATL18-A8 | 4.625" | .905" | .417" | 15,961 | 40,405 | 1500 | 269 | 3.798 |
| 4ATL18-A11 | 4.625" | .905" | .417" | 15,961 | 40,405 | 1500 | 269 | 3.798 |
| 4ATL24-A11 | 8.070" | 1.023" | .472" | 20,232 | 52,604 | 1000 | 582 | 15.20 |
| 4ATL24-A15 | 8.070" | 1.023" | .472" | 20,232 | 52,604 | 1000 | 582 | 15.20 |




## Dimensional Data (in inch)

| MODEL | 4ATL6 | 4ATL8 | 4ATL10 | 4ATL12 | 4ATL15 | 4ATL18 | 4ATL24 |
|---|---|---|---|---|---|---|---|
| A | 6.65 | 8.26 | 10 | 11.96 | 15 | 17.71 | 24 |
| B | 3.18 | 3.58 | 3.93 | 4.33 | 5.23 | 5.23 | 5.78 |
| C (H6) | 5.51 | 6.69 | 8.66 | 8.66 | 11.81 | 11.81 | 20.47 |
| D | .787 | .984 | 1.181 | 1.181 | 1.692 | 1.692 | 2.362 |
| H | 4.125 | 5.25 | 6.75 | 6.75 | 9.251 | 9.251 | 18.251 |
| J | .629 | .787 | .866 | .905 | 1.377 | 1.377 | 1.377 |
| K | 4-M10x80 | 4-M12x90 | 4-M16x100 | 4-M16x110 | 4-M20x135 | 4-M20x135 | 8-M24x150 |
| L | 1.771 | 2.047 | 2.952 | 3.582 | 4.625 | 4.625 | 8.070 |
| M | .196 | .196 | .196 | .236 | .236 | .236 | .236 |
| N max. | 1.259 | 1.523 | 2.007 | 2.413 | 3.22 | 3.22 | 5.507 |
| O max. | .895 | 1.171 | 1.328 | 1.801 | 1.781 | 3.139 | 3.444 |
| O min | .364 | .580 | .561 | .620 | .600 | .600 | .945 |
| P max. | .433 | .570 | .334 | .314 | .275 | .275 | .630 |
| P min | -.039 | -.059 | -.413 | -.590 | -.630 | -.630 | -.393 |
| Q | .078 | .078 | .078 | .078 | .196 | .196 | .196 |
| R | .472 | .551 | .629 | .826 | .866 | .866 | .984 |
| S | .748 | .807 | .984 | 1.102 | 1.692 | 1.162 | 1.496 |
| T | 1.220 | 1.377 | 1.574 | 1.968 | 2.440 | 2.440 | 2.559 |
| U max | M55x2 | M60x2 | M85x2 | M100x2 | M130x2 | M130x2 | M215x3 |
| W | 2.362 | 2.598 | 3.700 | 4.251 | 5.472 | 5.472 | 9.055 |
| X | 1.456 | 1.496 | 1.692 | 2.007 | 2.598 | 2.598 | 2.874 |
| Y | 2.874 | 3.740 | 4.330 | 5.118 | 6.496 | 6.496 | 7.086 |

HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.



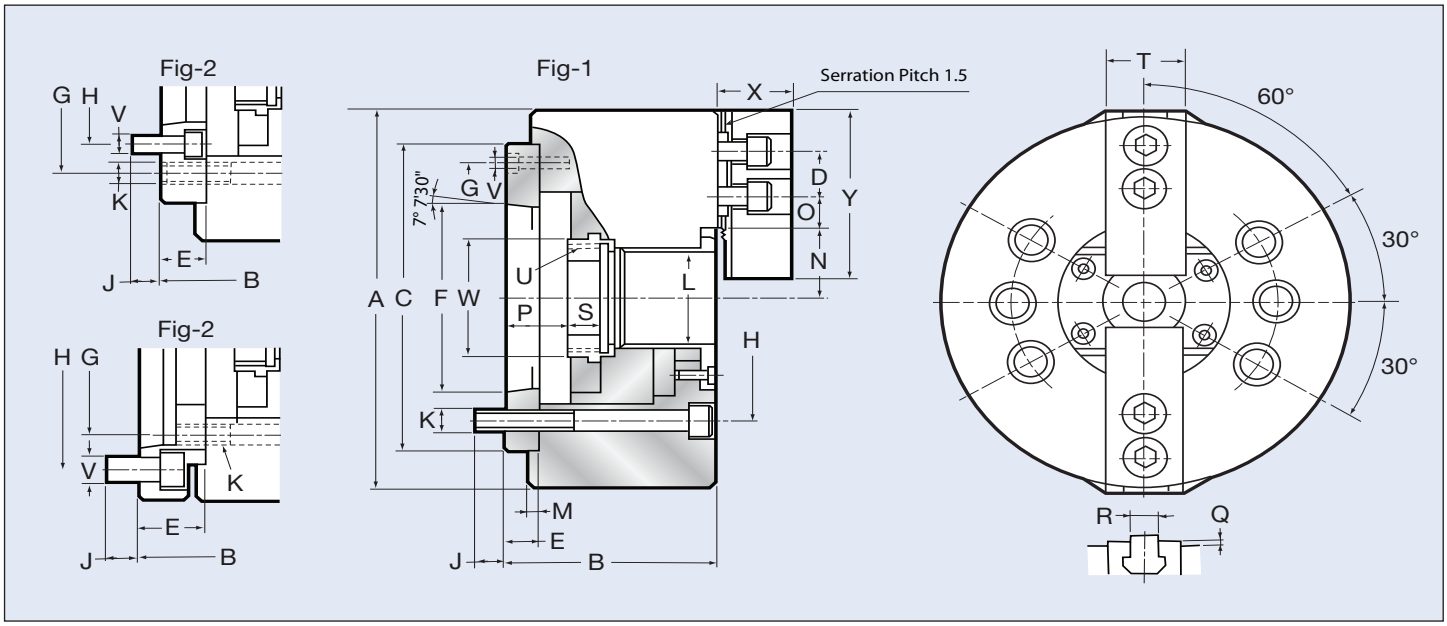
# 2 Jaw High Speed Open Center Power Chuck

## 2ATL 6" - 12" Chucks

- 1.5mm x 60° master jaw
- Repeatability ± .0005"
- Large thru-hole
- Hardened jaw ways and all internal parts
- All steel body
- High RPM

| Model | Through Hole (in) | Plunger Stroke (in) | Jaw Stroke (Dia. in) | Max. Pull Force (lbf) | Max. Gripping Force (lbf) | Max. Speed (rpm) | Weight (lbs) | Moment of Inertia I (kg - $m^2$) | Gripping O. D. Range (in) |
|---|---|---|---|---|---|---|---|---|---|
| 2ATL6-A5 | 1.77 | .472 | .2165 | 4935 | 12790 | 6000 | 33 | 0.062 | .59-5.0 |
| 2ATL8-A5 | 2.07 | .630 | .2913 | 7830 | 19970 | 5000 | 57 | 0.190 | .79-7.0 |
| 2ATL8-A6 | 2.07 | .630 | .2913 | 7830 | 19970 | 5000 | 55 | 0.184 | .79-7.0 |
| 2ATL10-A6 | 2.95 | .748 | .3464 | 9659 | 24902 | 4200 | 90 | 0.370 | .98-8.25 |
| 2ATL10-A8 | 2.95 | .748 | .3464 | 9650 | 24902 | 4200 | 84 | 0.340 | .98-8.25 |
| 2ATL12-A6 | 3.58 | .905 | .4173 | 12790 | 32978 | 3300 | 138 | 0.809 | 1.18-10.0 |
| 2ATL12-A8 | 3.58 | .905 | .4173 | 12790 | 32978 | 3300 | 131 | 0.770 | 1.18-10.0 |
| 2ATL12-A11 | 3.58 | .905 | .4173 | 12790 | 32978 | 3300 | 154 | 0.912 | 1.18-10.0 |
| 2ATL15-A8 | 4.62 | .905 | .4173 | 15930 | 40382 | 2500 | 276 | 2.255 | 1.96-13.0 |
| 2ATL15-A11 | 4.62 | .905 | .4173 | 15930 | 40382 | 2500 | 260 | 2.241 | 1.96-13.0 |
| 2ATL18-A11 | 4.62 | .905 | .4173 | 15930 | 40382 | 2000 | 364 | 3.744 | 1.96-16.0 |
| 2ATL18-A15 | 4.62 | .905 | .4173 | 15930 | 40382 | 2000 | 421 | 5.183 | 1.96-16.0 |

HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.




## Dimensional Data (in inch)

| Model | A | B | C H6 | D | E | F | G | H | J | K | L | M | N Max. | O Max. | O Min. | P Max. | P Min. | Q | R | S | T | U Max. | V | W | X | Y | Ref. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2ATL6-A5 | 6.65 | 3.58 | 5.51 | .787 | .590 | 3.250 | 4.566 | 4.125 | .629 | 3-M10 | 1.77 | .197 | 1.260 | .895 | .364 | 1.023 | .551 | .079 | .472 | .748 | 1.220 | M55x2 | 3-M6 | 2.362 | 1.456 | 2.874 | Fig-1 |
| 2ATL8-A5 | 8.27 | 4.29 | 6.69 | .984 | .905 | 3.250 | 5.250 | 4.125 | .512 | 3-M12 | 2.05 | .197 | 1.523 | 1.171 | .462 | 1.476 | .846 | .079 | .551 | .807 | 1.378 | M60x2 | 6-M10 | 2.598 | 1.496 | 3.740 | Fig-2 |
| 2ATL8-A6 | 8.27 | 4.05 | 6.69 | .984 | .669 | 4.187 | 5.905 | 5.250 | .708 | 3-M12 | 2.05 | .197 | 1.523 | 1.171 | .462 | 1.240 | .610 | .079 | .551 | .807 | 1.378 | M60x2 | 3-M6 | 2.598 | 1.496 | 3.740 | Fig-1 |
| 2ATL10-A6 | 10.0 | 4.721 | 8.66 | 1.181 | .987 | 4.187 | 6.750 | 5.250 | .708 | 3-M16 | 2.95 | .197 | 2.007 | 1.328 | .561 | 1.318 | .571 | .079 | .630 | .984 | 1.575 | M85x2 | 6-M12 | 3.70 | 1.693 | 4.338 | Fig-2 |
| 2ATL10-A8 | 10.0 | 4.45 | 8.66 | 1.181 | .708 | 5.507 | 7.480 | 6.750 | .945 | 3-M16 | 2.95 | .197 | 2.007 | 1.328 | .561 | 1.043 | .295 | .079 | .630 | .984 | 1.575 | M85x2 | 3-M8 | 3.70 | 1.693 | 4.338 | Fig-1 |
| 2ATL12-A6 | 11.96 | 5.08 | 8.66 | 1.181 | .987 | 4.187 | 6.750 | 5.250 | .708 | 3-M16 | 3.58 | .236 | 2.413 | 1.801 | .620 | 1.30 | .394 | .079 | .826 | 1.102 | 1.968 | M100x2 | 6-M12 | 4.252 | 2.009 | 5.118 | Fig-2 |
| 2ATL12-A8 | 11.96 | 4.80 | 8.66 | 1.181 | .708 | 5.50 | 7.480 | 6.750 | .984 | 3-M16 | 3.58 | .236 | 2.413 | 1.801 | .620 | 1.023 | .118 | .079 | .826 | 1.102 | 1.968 | M100x2 | 3-M8 | 4.252 | 2.009 | 5.118 | Fig-1 |
| 2ATL12-A11 | 11.96 | 6.06 | 8.66 | 1.181 | 1.968 | 7.750 | 6.750 | 9.252 | 1.102 | 3-M16 | 3.584 | .236 | 2.413 | 1.801 | .620 | 2.283 | 1.378 | .079 | .826 | 1.102 | 1.968 | M100x2 | 6-M20 | 4.252 | 2.009 | 5.118 | Fig-3 |
| 2ATL15-A8 | 15.0 | 6.30 | 11.81 | 1.692 | 1.299 | 5.50 | 9.252 | 6.780 | .945 | 3-M20 | 4.62 | .236 | 3.228 | 1.801 | .620 | 1.575 | .669 | .197 | ..866 | 1.693 | 2.441 | M130x2 | 6-M16 | 5.472 | 2.598 | 6.496 | Fig-2 |
| 2ATL15-A11 | 15.0 | 5.86 | 11.81 | 1.692 | .866 | 7.750 | 10.236 | 9.252 | 1.102 | 3-M20 | 4.62 | .236 | 3.228 | 1.801 | .620 | 1.141 | .236 | .197 | .866 | 1.693 | 2.441 | M130x2 | 6-M20 | 5.472 | 2.598 | 6.496 | Fig-1 |
| 2ATL18-A11 | 17.72 | 5.86 | 11.81 | 1.692 | .866 | 7.750 | 10.236 | 9.252 | 1.102 | 3-M20 | 4.62 | .236 | 3.228 | 3.139 | .620 | 1.141 | .236 | .197 | .866 | 1.693 | 2.441 | M130x2 | 3-M10 | 5.472 | 2.598 | 6.496 | Fig-1 |
| 2ATL18-A15 | 17.72 | 7.24 | 11.81 | 1.692 | 2.244 | 11.250 | 9.252 | 13.00 | .945 | 3-M20 | 4.62 | .236 | 3.228 | 3.139 | .620 | 2.578 | 1.614 | .197 | .866 | 1.693 | 2.441 | M130x2 | 6-M24 | 5.472 | 2.598 | 6.496 | Fig-3 |

HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.

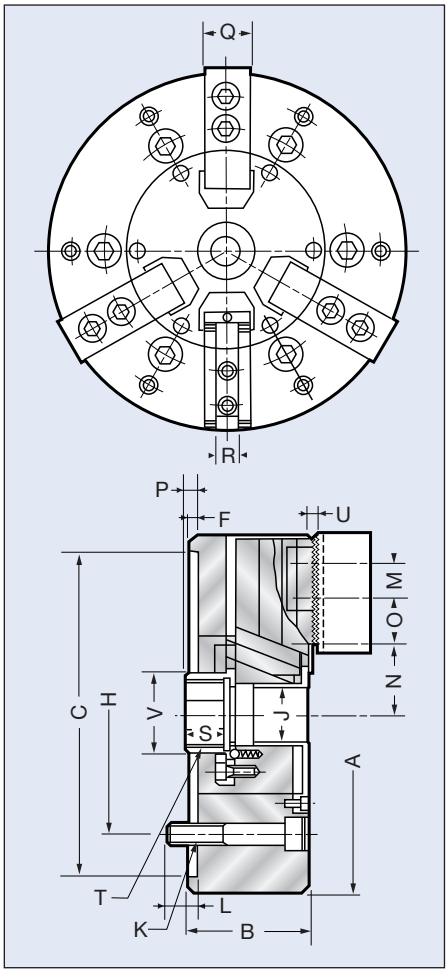
# 2/3 Jaw Thru-Hole Power Chuck

## PAFH 8" - 24" Chucks

- Used as 2 jaw or 3 Jaw Power Chuck
- Thru-hole and long stroke
- Adapter mounted
- Serration Pitch 1.5mm 8", 10" & 12" - 3mm 15"
- Larger diameters available

| Model No. | Jaw Stroke Dia | Sleeve Stroke | Gripping Dia. 2 Jaw Max | Gripping Dia. 3 Jaw Min | Maximum Pull 2 Jaw lbs | Maximum Pull 3 Jaw lbs | Max Grip 2 Jaw lbs | Max Grip 3 Jaw lbs | Max RPM | Wt lbs |
|---|---|---|---|---|---|---|---|---|---|---|
| PAFH8-A5 | .378" | .709" | 7.87 | 1.181 | 3,306 | 4,409 | 7,275 | 9,700 | 3000 | 44 |
| PAFH8-A6 | .378" | .709" | 7.87 | 1.181 | 3,306 | 4,409 | 7,275 | 9,700 | 3000 | 44 |
| PAFH10-A6 | .728" | .984" | 9.84 | 1.181 | 5,070 | 7,716 | 9,038 | 13,668 | 3000 | 70 |
| PAFH10-A8 | .728" | .984" | 9.84 | 1.181 | 5,070 | 7,716 | 9,038 | 13,668 | 3000 | 70 |
| PAFH12-A8 | .803" | 1.102" | 11.81 | 1.967 | 6,613 | 9,920 | 11,684 | 17,636 | 2500 | 121 |
| PAFH12-A11 | .803" | 1.102" | 11.81 | 1.967 | 6,613 | 9,920 | 11,684 | 17,636 | 2500 | 121 |
| PAFH15-A8 | .803" | 1.102" | 13.78 | 2.756 | 8,818 | 13,227 | 15,652 | 23,148 | 2000 | 218 |
| PAFH15-A11 | .803" | 1.102" | 13.78 | 2.756 | 8,818 | 13,227 | 15,652 | 23,148 | 2000 | 218 |

***Also available in 18", 21" and 24", contact factory.***




## Dimensional Data (in inch)

| MODEL | PAFH-8 | PAFH-10 | PAFH-12 | PAFH-15 |
|---|---|---|---|---|
| A | 8.26 | 10 | 11.97 | 15 |
| B | 2.874 | 3.346 | 3.819 | 4.803 |
| C | 7.480 | 9.055 | 11.024 | 13.760 |
| F | .197 | .197 | .197 | .276 |
| H | 5.250 | 6.750 | 7.874 | 9.843 |
| J | 1.378 | 1.575 | 2.165 | 2.953 |
| K | 6-M12 | 6-M16 | 6-M20 | 6-M20 |
| L | .787 | .984 | .984 | 1.063 |
| M | .984 | .984 | 1.181 | 1.969 |
| N max. | 1.803 | 2.020 | 2.891 | 3.378 |
| N min | 1.614 | 1.661 | 2.189 | 2.976 |
| O max. | 1.181 | 1.654 | 1.831 | 2.608 |
| O min | .295 | .374 | .413 | .591 |
| P max. | .827 | 0 | 0 | 0 |
| P min | .118 | -.984 | -1.102 | -1.102 |
| Q | 1.181 | 1.378 | 1.575 | 1.575 |
| R | .475 | .630 | .630 | .826 |
| S | 1.063 | 1.102 | 1.181 | 1.575 |
| T | M42 | M50 | M65 | M85 |
| U | .197 | .197 | .197 | .197 |
| V | 1.890 | 2.283 | 2.953 | 3.740 |

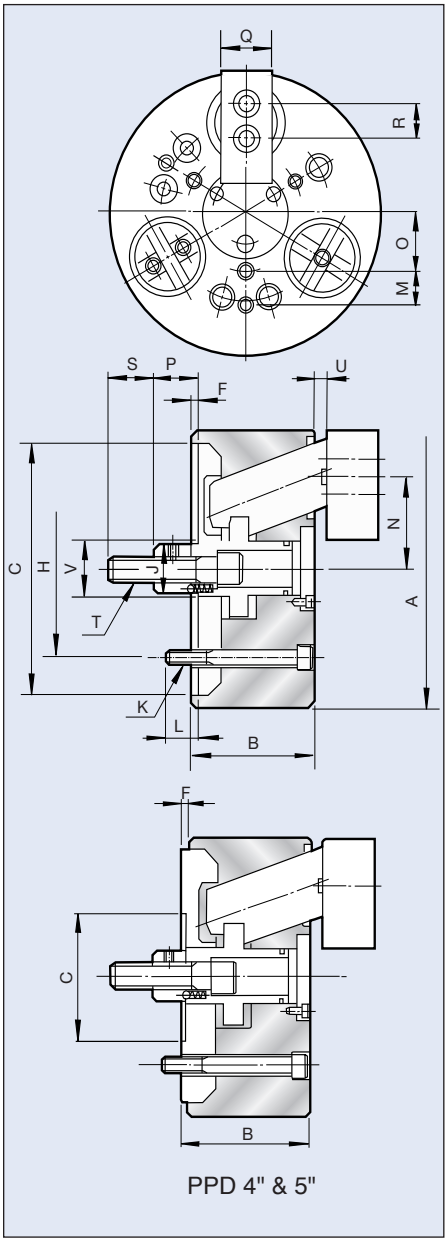
HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.

# Draw Down Power Chuck

## PDD 4" - 15" Chucks

- 3 jaw draw down chuck for machining work requiring squareness and parallelism
- High accuracy
- Maintains high grip forces
- Adapter mount for A type spindles, other mounts available

| Model No. | Jaw Stroke Dia. | Sleeve Stroke | Gripping Capacity Max. | Gripping Capacity Min. | Draw Bar Pull lb/f | Grip Force lb/f | Max RPM | Wt. lbs |
|---|---|---|---|---|---|---|---|---|
| PDD4 | .197" | .276" | 1.97" | .591" | 1,300 | 3,300 | 3500 | 10 |
| PDD5 | .197" | .276" | 2.56" | .591" | 2,200 | 4,400 | 3500 | 16 |
| PDD6-A4 | .285" | .394" | 3.35" | 1.378" | 3,300 | 5,500 | 3500 | 30 |
| PDD6-A5 | .285" | .394" | 3.35" | 1.378" | 3,300 | 5,500 | 3500 | 30 |
| PDD6-A6 | .285" | .394" | 3.35" | 1.378" | 3,300 | 5,500 | 3500 | 30 |
| PDD8-A5 | .283" | .394" | 7.87" | 1.575" | 5,500 | 9,900 | 3000 | 60 |
| PDD8-A6 | .283" | .394" | 7.87" | 1.575" | 5,500 | 9,900 | 3000 | 60 |
| PDD10-A6 | .425" | .591" | 9.84" | 1.969" | 7,700 | 13,200 | 2500 | 101 |
| PDD10-A8 | .425" | .591" | 9.84 | 1.969" | 7,700 | 13,200 | 2500 | 101 |
| PDD12-A8 | .425" | .591" | 11.81" | 1.969" | 9,900 | 16,550 | 2000 | 150 |
| PDD12-A11 | .425" | .591" | 11.81" | 1.969" | 9,900 | 16,550 | 2000 | 150 |
| PDD15-A8 | .573" | .787" | 14.96" | 2.362" | 12,100 | 19,850 | 1500 | 243 |
| PDD15-A11 | .573" | .787" | 14.96" | 2.362" | 12,100 | 19,850 | 1500 | 243 |




PPD 4" & 5"

## Dimensional Data (in inch)

| MODEL | PD-4 | PD-5 | PD-6 | PD-8 | PD-10 | PD-12 | PD-15 |
|---|---|---|---|---|---|---|---|
| A | 4.33 | 5.12 | 6.50 | 8.25 | 10 | 12 | 15 |
| B | 2.36 | 2.76 | 3.35 | 3.74 | 4.33 | 4.92 | 5.52 |
| C | 2.362 | 3.150 | 5.512 | 7.480 | 9.055 | 9.055 | 11.81 |
| F | .197 | .197 | .197 | .197 | .197 | .197 | .315 |
| H | 3.150 | 3.937 | 4.125 | 5.250 | 6.750 | 6.750 | 9.055 |
| J | .984 | 1.103 | 1.260 | 1.496 | 1.969 | 2.047 | 2.362 |
| K | 3-M8 | 3-M8 | 6-M10 | 6-M12 | 6-M16 | 6-M16 | 6-M20 |
| L | .511 | .511 | .630 | .906 | .866 | 1.063 | 1.181 |
| M | - | - | .787 | .984 | 1.181 | 1.378 | 1.772 |
| N max. | 1.657 | 1.732 | 2.283 | 2.795 | 3.346 | 4.016 | 5.261 |
| N min | 1.358 | 1.634 | 2.142 | 2.654 | 3.134 | 3.803 | 4.975 |
| O | .984 | 1.181 | 1.378 | 1.272 | 2.165 | 2.756 | 3.740 |
| P max. | .748 | .748 | 1.299 | 1.496 | 1.850 | 1.850 | 2.795 |
| P min | .472 | .472 | .906 | 1.102 | 1.206 | 1.206 | 2.008 |
| Q | .984 | 1.181 | 1.378 | 1.575 | 1.967 | 2.362 | 2.756 |
| R | - | - | - | 1.024 | 1.260 | 1.417 | 1.575 |
| S | .787 | .984 | 1.417 | 1.417 | 1.811 | 1.989 | 1.989 |
| T | M10x1.5 | M12x1.75 | M16x2.0 | M20x2.5 | M20x3.0 | M20x3.0 | M30x3.5 |
| U max. | .413 | .413 | .551 | .551 | .748 | .748 | 1.024 |
| U min | .138 | .138 | .155 | .155 | .155 | .155 | .236 |
| V | 1.102 | 1.181 | 1.378 | 1.654 | 2.047 | 2.165 | 3.543 |

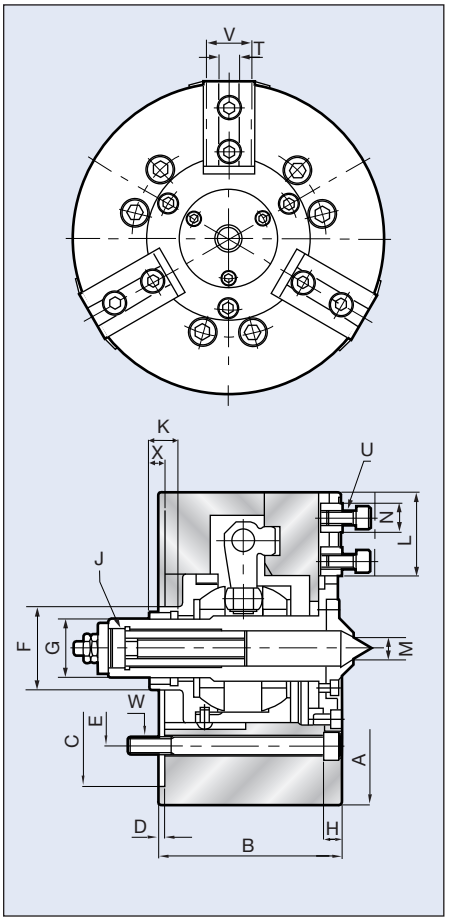
HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.

# Floating Type Compensating Power Chuck

## DFC Chucks 7" - 16"

- 3 jaw power chuck with float compensation designed for shaft applications machined on centers
- Supplied with fixed or spring center (specify when ordering)
- Maximum durability achieved through internal sliding on spherical surface
- Adapter mount for A type spindles
- Larger sizes available on request

| Model No. | Jaw Stroke Dia. | Sleeve Stroke | Comp Range Stroke | Min. Gripping Dia. | Draw Bar Pull lb/f | Grip Force lb/f | Max RPM | Wt. lbs |
|---|---|---|---|---|---|---|---|---|
| DFC7-A4 | .394 | .787 | .157 | .787 | 3,200 | 5,550 | 4000 | 33 |
| DFC7-A5 | .394 | .787 | .157 | .787 | 3,200 | 5,550 | 4000 | 33 |
| DFC7-A6 | .394 | .787 | .157 | .787 | 3,200 | 5,550 | 4000 | 33 |
| DFC8-A6 | .787 | .984 | .157 | .984 | 4,400 | 6,600 | 3200 | 62 |
| DFC8-A8 | .787 | .984 | .157 | .984 | 4,400 | 6,600 | 3200 | 62 |
| DFC10-A6 | .787 | .984 | .196 | 1.181 | 5,076 | 7,936 | 2500 | 108 |
| DFC10-A8 | .787 | .984 | .196 | 1.181 | 5,076 | 7,936 | 2500 | 108 |
| DFC12-A8 | .984 | 1.181 | .236 | 1.181 | 5,700 | 9,250 | 2000 | 128 |
| DFC12-A11 | .984 | 1.181 | .236 | 1.181 | 5,700 | 9,250 | 2000 | 128 |
| DFC16-A8 | 1.181 | 1.634 | .394 | 1.575 | 6,850 | 19,850 | 1000 | 374 |
| DFC16-A11 | 1.181 | 1.634 | .394 | 1.575 | 6,850 | 19,850 | 1000 | 374 |

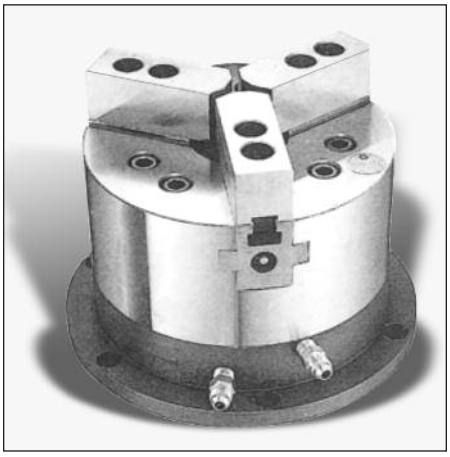



***DFC18 and Larger sizes available on request.***

### Dimensional Data

| MODEL | DFC7 | DFC8 | DFC10 | DFC12 | DFC16 |
|---|---|---|---|---|---|
| A | 6.69 | 8.46 | 10 | 11 | 16.5 |
| B | 3.90 | 4.97 | 5.63 | 6.09 | 7.28 |
| C | 5.512 | 7.480 | 8.66 | 10.039 | 14.961 |
| D | .157 | .165 | .196 | .224 | .224 |
| E | 4.125 | 5.250 | 6.75 | 6.748 | 8.661 |
| F | 1.654 | 2.244 | 2.64 | 2.835 | 3.543 |
| G | 1.024 | 1.575 | 1.77 | 1.969 | 1.969 |
| H | .433 | .512 | .67 | .669 | 1.102 |
| J | M34x1.5 | M50x1.5 | M58x1.5 | M55x1.5 | M70x1.5 |
| K | .787 | .787 | .787 | .787 | .787 |
| L | 1.772 | 2.264 | 2.519 | 2.835 | 5.295 |
| M | .433 | .591 | .708 | .787 | .787 |
| N | .630 | .787 | .745 | 1.024 | 1.102 |
| T | .433 | .551 | .708 | .787 | .826 |
| U | M8 | M10 | M12 | M12 | M16 |
| V | 1.083 | 1.339 | 1.575 | 1.732 | 1.929 |
| W | M10x100 | 6-M12x125 | 6-M16x160 | 6-M16x160 | 9-M20x180 |
| X | 1.102 | 1.062 | 1.062 | 1.063 | .984 |

HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.

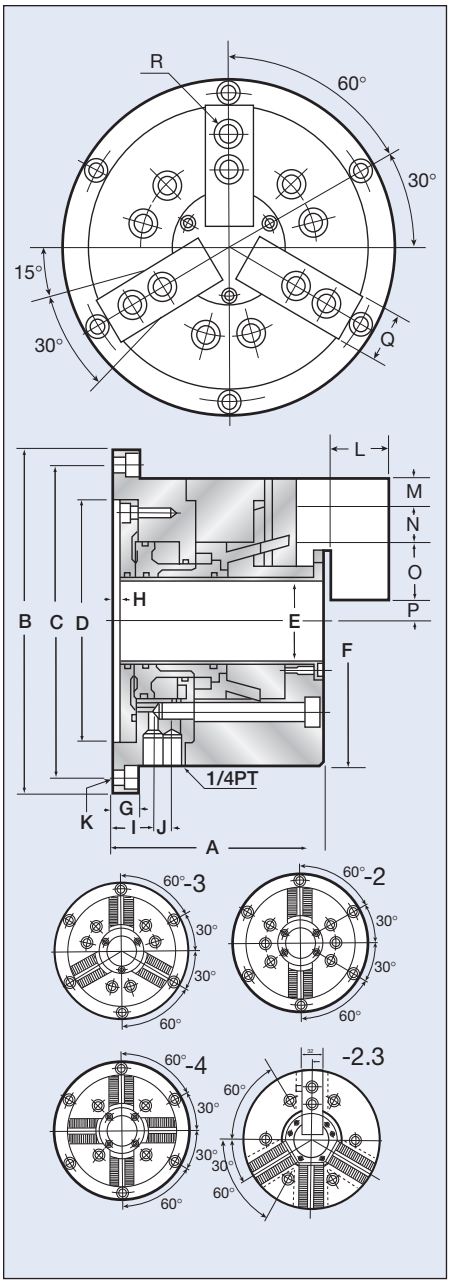


# Stationary 2 and 3 Jaw Power Chuck

## OLU 6" - 10" Chucks

- Super thin body
- Accuracy, plus minus .0005”
- Easy Retrofit
- Hydraulic Operation Standard
- Optional air operation
- Standard 1.5mm 60 degree fine serrated master jaws
- 1 year warranty






| Model | Stroke | Jaw Stroke Dia. | Hydraulic Pressure | Max. Grip ID | Max. Grip OD | Weight |
|---|---|---|---|---|---|---|
| OLU06D | .591" | .197" | 350 psi | 6,888 lbs. | 4,774 lbs. | 46 lbs. |
| OLU08D | .787" | .256" | 350 psi | 11,270 lbs. | 6,370 lbs. | 72 lbs. |
| OLU10D | .787" | .256" | 350 psi | 19,180 lbs | 13,020 lbs. | 98 lbs. |

## Dimensional Data

| MODEL | OLU06D | OLU08D | OLU10D |
|---|---|---|---|
| A | 4.96" | 5.79" | 6.30" |
| B | 7.80" | 9.76" | 10.87" |
| C | 7.09" | 8.86" | 9.84" |
| D | 5.51" | 6.69" | 8.66" |
| E | 1.65" | 2.05" | 2.95" |
| F | 6.50" | 8.07" | 10.00" |
| G | .59" | .59" | .71" |
| H | .177" | .177" | .197" |
| I | 1.10" | 1.10" | 1.18" |
| J | 1.38" | 1.73 | 2.17 |
| K | M8 | M8 | M10 |
| L | 1.42" | 1.50" | 1.65" |
| M | .59" | .94" | 1.18" |
| N | .79" | .98" | 1.18" |
| O | 1.46" | 1.81" | 1.97" |
| P max. | .394" | .531" | .650" |
| P min. | .197" | .256" | .394" |
| Q | 1.26" | 1.38" | 1.57" |
| R | M10 x 30 | M12 x 35 | M12 x 35 |

Hydraulic unit pump and tank available

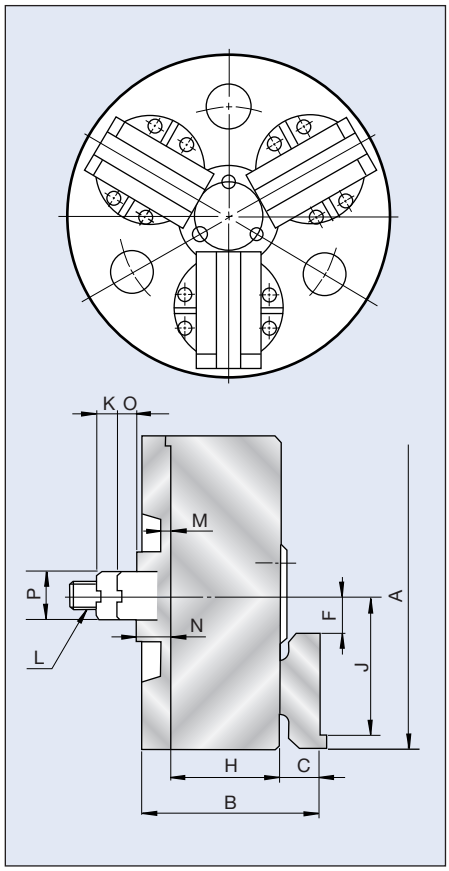
HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.

# Ball Lock Power Chuck

## BL 6" - 21" Chucks

- This chuck is used for gripping castings and forgings. It pulls back workpieces with tapered surfaces of up to 10 degrees while providing a right and left compliance of 5 degrees resulting in strong clamping force.
- Available in self-centering version **(add "CT" to end of part number "BL8-A5CT")**
- Available as compensating chuck with center or plug **(add "CP" to end of part number "BL8-A5CP")**
- Also available in 2 jaw configuration (add "2" to end of part number "BL8-A5PT2")
- Available as adapter or direct mount

| Model* No. | Jaw Stroke Dia | Sleeve Stroke | Gripping Capacity Max | Gripping Capacity Min | Draw Bar Pull lb/f | Grip Force lb/f | Max RPM | Wt lbs |
|---|---|---|---|---|---|---|---|---|
| BL6-A4 | .311" | .445" | 4.72" | .500" | 5,950 | 17,850 | 4000 | 40 |
| BL6-A5 | .311" | .445" | 4.72" | .500" | 5,950 | 17,850 | 4000 | 40 |
| BL6-A6 | .311" | .445" | 4.72" | .500" | 5,950 | 17,850 | 4000 | 40 |
| BL8-A5 | .374" | .563" | 5.98" | .630" | 7,950 | 23,800 | 3500 | 60 |
| BL8-A6 | .374" | .563" | 5.98" | .630" | 7,950 | 23,800 | 3500 | 60 |
| BL10-A6 | .500" | .689" | 7.99" | 1.969" | 9,900 | 29,750 | 3000 | 99 |
| BL10-A8 | .500" | .689" | 7.99" | 1.969" | 9,900 | 29,750 | 3000 | 99 |
| BL12-A8 | .500" | .689" | 9.49" | 2.480" | 9,900 | 35,700 | 2500 | 149 |
| BL12-A11 | .500" | .689" | 9.49" | 2.480" | 9,900 | 35,700 | 2500 | 149 |
| BL15-A8 | .622" | .878" | 12.48" | 2.992" | 15,000 | 45,000 | 2000 | 186 |
| BL15-A11 | .622" | .878" | 12.48" | 2.992" | 15,000 | 45,000 | 2000 | 186 |
| BL18-A8 | .622" | .878" | 15.51" | 3.504" | 15,000 | 45,000 | 1500 | 265 |
| BL18-A11 | .622" | .878" | 15.51" | 3.504" | 15,000 | 45,000 | 1500 | 265 |
| BL21-A11 | .622" | .878" | 18.50" | 6.378" | 15,000 | 45,000 | 1000 | 397 |



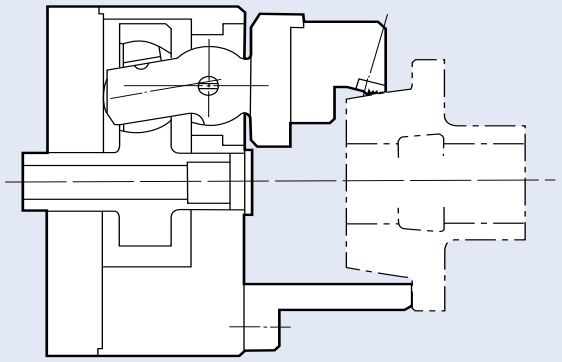

## Dimensional Data

| MODEL | BL6 | BL8 | BL10 | BL12 | BL15 | BL18 | BL21 |
|---|---|---|---|---|---|---|---|
| A | 6.38 | 7.87 | 10 | 11.81 | 15 | 18 | 21 |
| B | 4.12 | 4.85 | 5.79 | 5.79 | 6.433 | 6.433 | 6.433 |
| C | .760 | .917 | 1.146 | 1.46 | 1.276 | 1.276 | 1.276 |
| F | .799 | .990 | 1.181 | 1.988 | 2.991 | 4.091 | 5.591 |
| H | 2.331 | 2.756 | 3.409 | 3.409 | 3.783 | 3.783 | 3.783 |
| J Outer Dia. | 2.880 | 3.502 | 4.437 | 1.307 | 6.750 | 8.250 | 9.750 |
| J Inner Dia. | .874 | .998 | 1.193 | 2.0 | 2.748 | 4.248 | 5.748 |
| K max. | .445 | .563 | .689 | .689 | .878 | .878 | .878 |
| K min | .244 | .354 | .374 | .374 | .472 | .472 | .472 |
| L | M16 | M16 | M18 | .M18 | M24 | M24 | M24 |
| M | .189 | .236 | .279 | .276 | .276 | .276 | .394 |
| N | .780 | .846 | 1.023 | 1.023 | 1.441 | 1.441 | 1.441 |
| O | .173 | .118 | .157 | .157 | .500 | .500 | .500 |
| P | 1.187 | 1.250 | 1.625 | 1.625 | 2.250 | 3.500 | 3.500 |

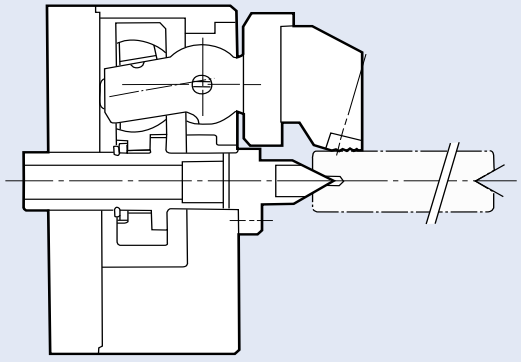
2 jaw dimensions same as 3 jaw

HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.

## BL Chuck Structure



CENTERING TYPE

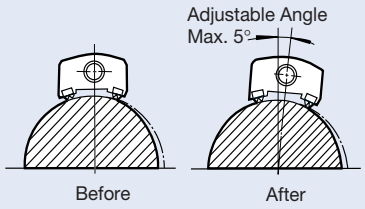


COMPENSATING TYPE

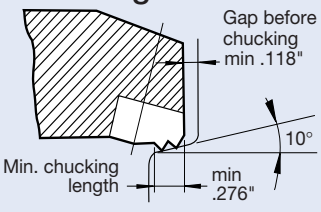
## BL Chuck Features

- Centers work, pulls work back and clamps firm
- Clamps tapered parts up to 10°
- Automatic radial adjustment of ± 5°
- I.D. and O.D. clamping of forgings or castings
- O.D. clamping of shafts
- Sealed against contamination
- High speed rotation
- Excellent retention of clamp force
- Also available as a 2 jaw

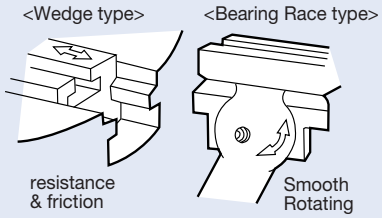
### Automatic Adjustable Angle



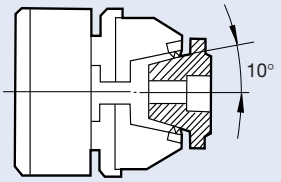

### Min. Length in Chucking Parts



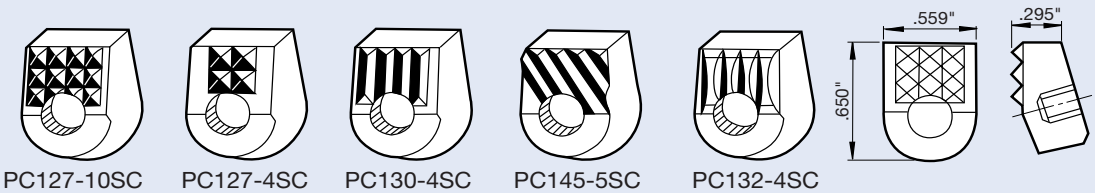

### Smooth Rotating Standard

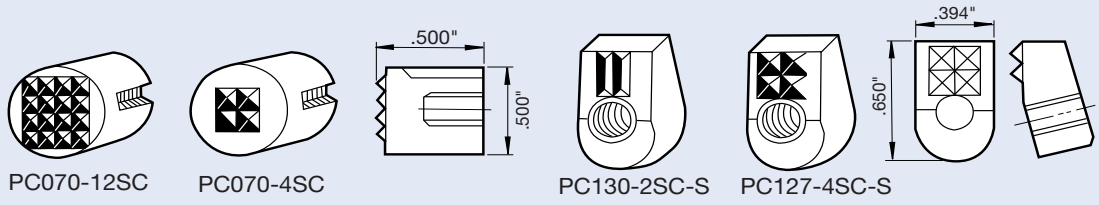



### Max. Taper Angle in Chucking Parts




## BL Inserts



# Cylinder Integrated Diaphragm Chucks

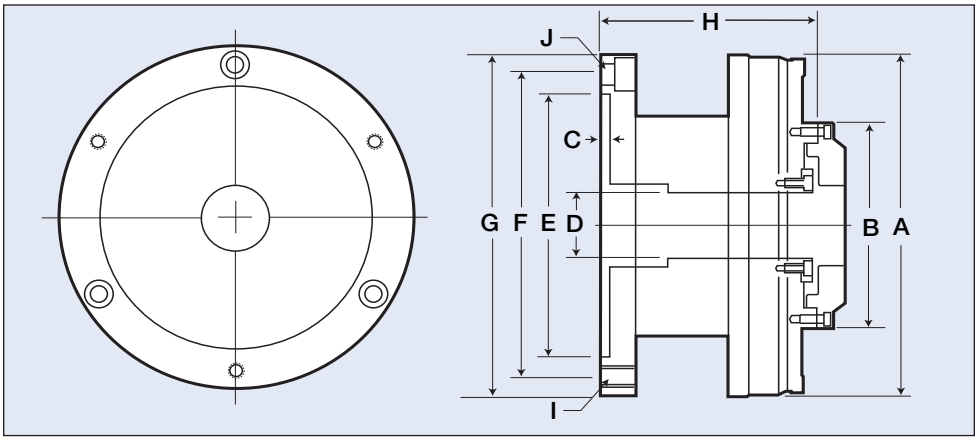
It becomes very easy to set up your precise chucking system by using the Atlas ATL100 series Cylinder-integrated Diaphragm Chuck. ATL100's built-in air cylinder eliminates the needs for installing an additional air cylinder in the back of the spindle, or tailor-making any air tubes. ATL100's front-mounting design, assembling a super precision chucking system has never been easier.

Atlas Precision advanced air cylinder technology that minimizes air leakage by the unique air containing design and by largely decreasing the clearance between the rotary and the stationary parts of the cylinder down to 0.005mm (0.0002"). This technology allows building an open center air cylinder into the diaphragm chuck.

ATL100 uses our patented diaphragm chucking technology. The super precision chucking repeatability is within 0.002mm (0.00008"), plus its gentle clamping force, making this chuck a perfect solution for any accuracy-critical and fragile material machining tasks. Send us your sample and or drawing and we will machine 1 set at no additional charge or buy Soft Blank Jaws and machine in your facility.

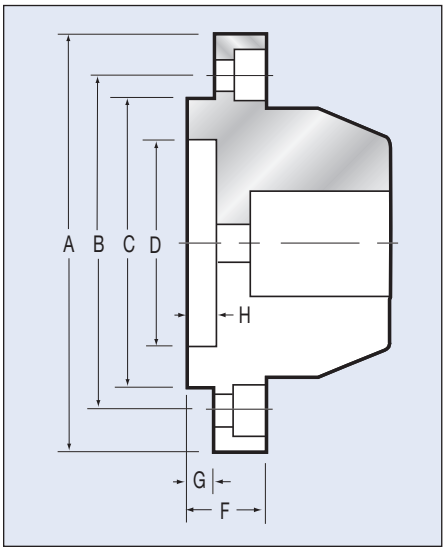
- A Chucking Repeatability is within 0.002mm (0.00008")
- Air Cylinder is integrated into the chuck body: no cylinder or draw tube is needed
- Real front-mounted design allows easy installation and operation
- Complete through-hole is reserved for bar machining, no limitation caused by a draw tube or an air feeder
- Highly-sealed chuck body helps protect cutting chips, dust or coolant fluid from entering
- Gentle and precise clamping: suitable for fragile or thin parts machining.
- No sliding parts to wear out ensures a longer product life.
- Low maintenance is required.
- Oil-mist air lubricated, the chuck generates very low heat under long period operation.
- Clamping force is proportional to input air pressure, easy adjustment

## Dimensional Data




| | Model No. | | ATL104 | ATL105 | ATL106 | ATL107 |
|---|---|---|---|---|---|---|
| A | | mm/in | 100/3.94 | 136.5/5.37 | 166/6.54 | 207/8.15 |
| B | | mm/in | 60/2.36 | 70/2.76 | 100/3.94 | 146/5.75 |
| C | | mm/in | 4/0.16 | 4/0.16 | 5/0.20 | 4/0.16 |
| D | | mm/in | 10/0.39 | 14.5/0.57 | 28/1.10 | 60/2.36 |
| E | | mm/in | 70/2.76 | 100/3.94 | 130/5.12 | 160/6.30 |
| F | | mm/in | 82/3.23 | 115/4.53 | 147/5.79 | 172/6.77 |
| G | | mm/in | 97/3.82 | 136.5/5.37 | 167/6.57 | 197/7.76 |
| H | | mm/in | 73/2.87 | 88.8/3.50 | 101.5/4.0 | 120/4.72 |
| I | | mm/in | N/A | M8 x 3 | M10 x 3 | M10 x 3 |
| J | | mm/in | 7.0x4/.28x4 | 9.0x3/.35x3 | 11.5x3/.45x3 | 11.5x3+M10xP15x3 |
| | Maximum speed | rpm | 5500 | 4750 | 3350 | 2500 |
| | Air pressure | kg-cm2/psi | 0.5-7/7-100 | 0.5-7/7-100 | 0.5-7/7-100 | 0.5-7/7-100 |
| | *Stroke per jaw | mm/in | 0.20/0.008 | 0.25/0.010 | 0.20/0.008 | 0.25/0.010 |
| | Chuck capacity (through hole) | mm/in | 10/.039 | 14.5/0.57 | 28/1.10 | 60/2.36 |
| | Chuck capacity (none-through hole) | mm/in | 45/1.77 | 50/1.97 | 80/3.15 | 124/4.88 |
| | Weight | kg/lbs | 2.8/6.16 | 6/13.2 | 9.5/20.9 | 18/39.7 |

## Blank Jaws for ATL100 Series Air Diaphragm Chucks




| Suitable Diaphragm Chucks | Soft Jaws | A | B | C | D | F | G | H | Segments |
|---|---|---|---|---|---|---|---|---|---|
| ATL104 | JD-60 | 65mm 2.56" | 52mm 2.05" | 45mm 1.77" | 32mm 1.26" | 12mm 0.47" | 4.0mm 0.16" | 4.5mm 0.18" | 6 |
| ATL105 | JD-70 | 75mm 2.95" | 60mm 2.36" | 50mm 1.97" | 37mm 1.46" | 14mm 0.55" | 5.0mm 0.20" | 5.0mm 0.20" | 6 |
| ATL106 | JD-100 | 105mm 4.13" | 90mm 3.54" | 80.2mm 3.16" | 65mm 2.56" | 14mm 0.55" | 5.5mm 0.22" | 5.0mm 0.20" | 6 |
| ATL107 | JD-70 | 147mm 5.79" | 132mm 5.20" | 120mm 4.72" | 100mm 3.94" | 18mm 0.17" | 6mm 0.24" | 6.5mm 0.26" | 6 |

Shown without coolant catcher
Coolent catcher included

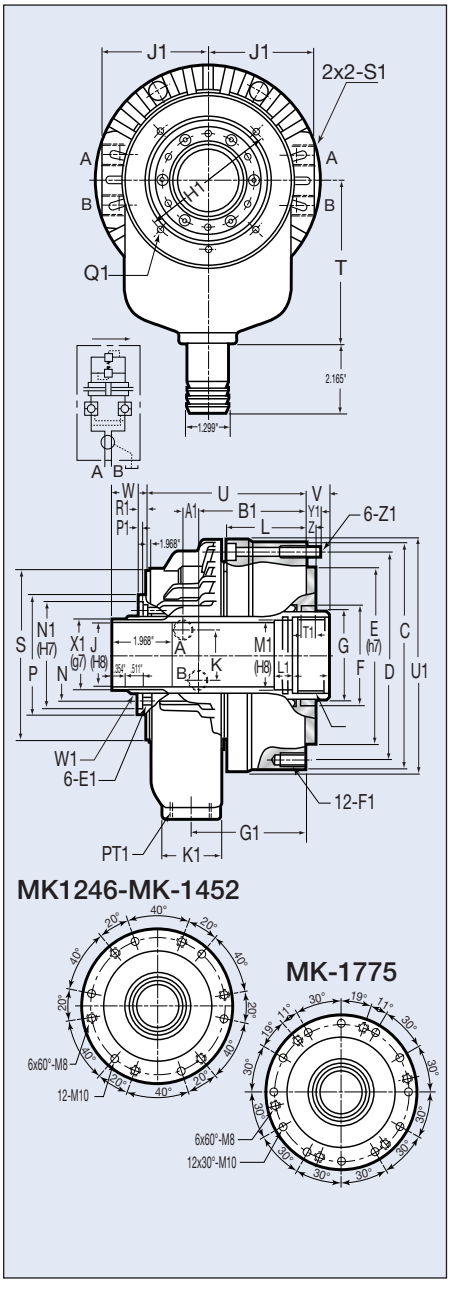
# MK Series High Speed Thru-Hole Hydraulic Cylinders

- Thru-hole
- High speed
- Safety check valve if line pressure is intruded
- Low cost

| Model | Piston Dia. | Piston Area (sq. in.) Push Side | Pull Side | Piston Stroke | Max. Draw Bar Pull Push Side lbf | Pull Side lbf | Operating Pressure psi/(sq. in.) | Max. Speed rpm | Mount of Inertia I kg-m2 | Weight lbs | Total Leakage L/min |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MK-1246 | 5.039" | 15.90 | 14.16 | .630" | 9,846 | 8,746 | 9.92(7.114) | 8000 | 0.017 | 19 | 3.1 |
| MK-1452 | 5.708" | 20.61 | 19.00 | .866" | 12,700 | 11,713 | 9.92(7.114) | 6500 | 0.028 | 26.5 | 3.9 |
| MK-1775 | 6.692" | 25.73 | 23.56 | .984" | 15,893 | 14,543 | 9.92(7.114) | 5500 | 0.060 | 39.5 | 4.5 |

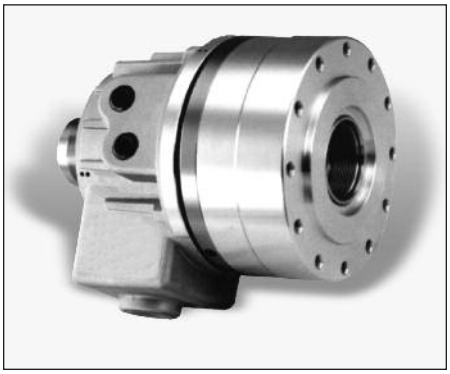
## Dimensional Data

| MODEL | MK-1246 | MK-1452 | MK-1775 |
|---|---|---|---|
| C | 6.378" | 7.244" | 8.34" |
| D | 5.787" | 6.496" | 7.677" |
| E | 5.118" | 5.512" | 6.299" |
| F | 2.953" | 3.149" | 4.134" |
| G | 2.559" | 2.756" | 3.543" |
| H thread | M55 x 2.0 | M60 x 2.5 | M85 x 2.0 |
| J thru-hole | 1.811" | 2.047" | 2.953" |
| K | 1.575" | 1.575" | 1.811" |
| L | 2.283" | 2.598" | 2.795" |
| N | 2.519" | 2.874 | 3.858" |
| P | 3.346" | 3.779" | 4.764" |
| S | 4.467" | 5.315" | 6.457" |
| T | 4.724" | 5.118" | 6.299" |
| U | 4.724" | 5.118" | 6.181" |
| V max. | .512" | .7481" | .866" |
| V min. | -.118" | -.118" | -.118" |
| W max. | 1.732" | 1.850" | 1.968" |
| W min. | 1.102" | .984" | .984 |
| Z | .315" | .315" | .315" |
| A1 | .335" | .354" | .689" |
| B1 | 3.130" | 3.464" | 3.898" |
| C1 | .984" | 1.181" | 1.181" |
| E1 | M6 x 10L | M6 x 7L | M6 x 13L |
| F1 | M10 x 20L | M10 x 20L | M10 x 20L |
| G1 | 3.307" | 3.661" | 4.330" |
| H1 | 3.858" | 4.331" | 6.102" |
| J1 | 2.992" | 3.386" | 3.937" |
| K1 | 1.850" | 1.850" | 1.850" |
| L1 | .590" | .590" | .590" |
| M1 | 1.968" | 2.156" | 3.149" |
| N1 | 2.992" | 3.346" | 4.251" |
| P1 | .157" | .157" | .157" |
| Q1 | M5 x 6L | M6 x 6L | M6 x 10L |
| R1 | .354" | .275" | .275" |
| S1 | PT3/8 | PT3/8 | PT1/2 |
| T1 | .472" | .472" | .472" |
| U1 | 6.496" | 7.254" | 8.504" |
| W1 | M52 x 1.5 | M58 x 1.5 | M84 x 2.0 |
| X1 | 1.968" | 2.204" | 3.189" |
| Y1 | .590" | .472" | .709" |
| Z1 | M8 | M8 | M10 |




Hydraulic unit pump and tank available

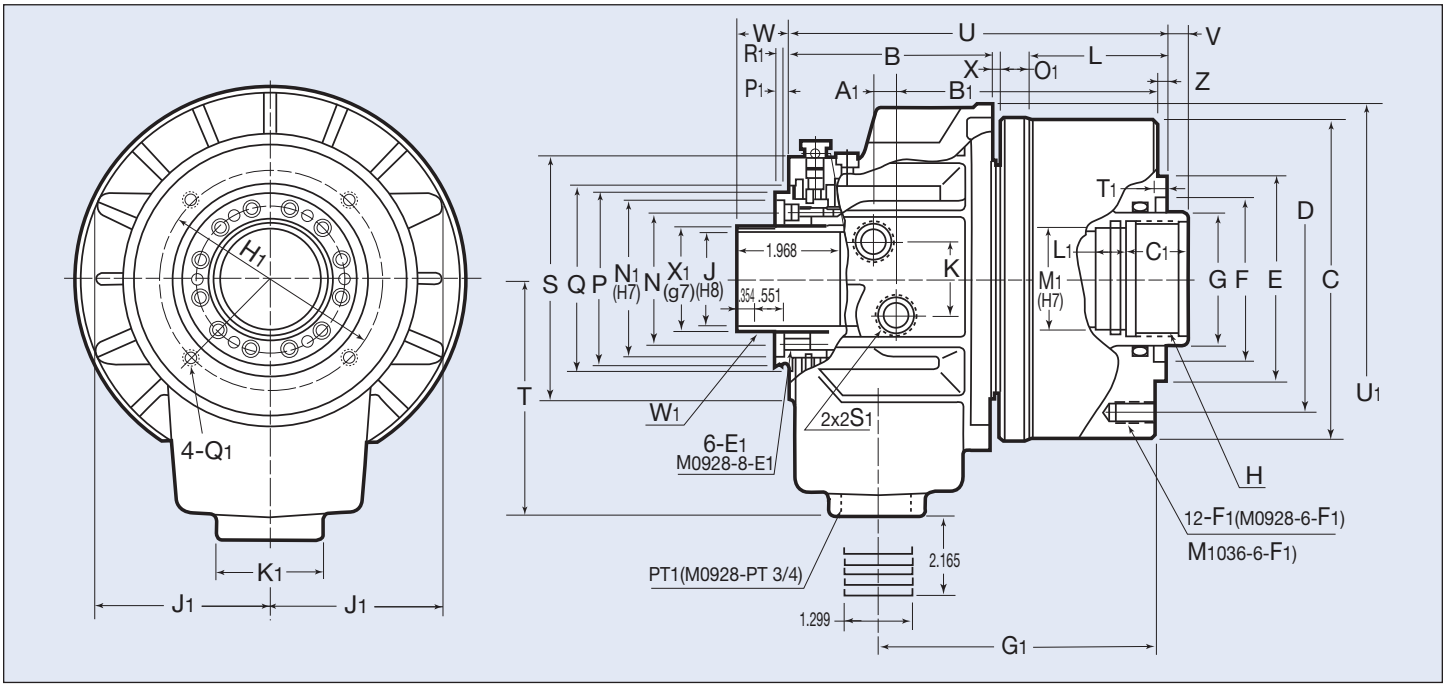
HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.



# ATL Series High Speed Thru-Hole Hydraulic Cylinders

- High speed
- Compact Design-lighter in weight
- Less spindle stress
- Large Thru-hole Capacity
- Include Removable Coolant Catcher
- Built-in Safety Check Valves

| Model | Piston Dia. (in./(mm)) | Piston Area (sq. in.) Push Side (sq. in.) | Piston Area (sq. in.) Pull Side (sq. in.) | Max. Draw Bar Force Push Side lbf | Max. Draw Bar Force Pull Side lbf | Piston Stroke (in./(mm)) | Max. Operating Pressure psi | Thru Hole (in./(mm)) | Max. Speed rpm | Moment of Inertia kg-m2 | Weight lbs | Total Leakage L/min |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ATL1246-CM12B | 4.921/(125) | 15.500 | 13.795 | 8543 | 7418 | .590/(15) | 580 | 1.811/(46) | 7000 | 0.019 | 27 | 3.0 |
| ATL1552-CM15B | 6.102/(155) | 24.955 | 23.250 | 13488 | 12588 | .866/(22) | 580 | 2.047/(52) | 6200 | 0.052 | 37 | 3.9 |
| ATL1868-CM18B | 7.086/(180) | 30.690 | 30.080 | 16636 | 16523 | .984/(25) | 580 | 2.677/(68) | 4700 | 0.098 | 62 | 4.2 |
| ATL1875-CM18B | 7.086/(180) | 30.690 | 28.365 | 16636 | 15511 | .984/(25) | 580 | 2.953/(75) | 4700 | 0.095 | 57 | 4.2 |
| ATL1875-CM18B | 7.086/(180) | 30.690 | 28.365 | 16636 | 15511 | .984/(25) | 580 | 3.071/(78) | 4700 | 0.095 | 56 | 4.2 |
| ATL2091-CM20B | 8.071/(205) | 39.060 | 36.270 | 21131 | 19782 | 1.181/(30) | 580 | 3.582/(91) | 3800 | 0.15 | 82 | 4.5 |
| ATL2511-CM25B | 9.842/(250) | 53.940 | 52.080 | 27875 | 26975 | .905/(23) | 580 | 4.626/(117.5) | 2800 | 0.45 | 126 | 7.0 |




## Dimensional Data (inch)

| Model | C1 | E1 | F1 | G1 | H1 | J1 | K1 | L1 | M1 | N1 | O1 | P1 | Q1 | R1 | S1 | T1 | U1 | W1 | X1 | B | C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ATL1246-CM12B | 1.181 | M6x1.0 | M10x1.5 | 5.315 | 3.838 | 2.992 | 1.850 | .590 | 1.968 | 3.071 | .551 | .157 | M5x0.8 | .236 | PT 1/2 | .236 | 6.653 | M52x1.5 | 1.968 | 3.897 | 6.082 |
| ATL1552-CM15B | 1.181 | M6x1.0 | M10x1.5 | 5.708 | 4.331 | 3.386 | 1.850 | .590 | 2.165 | 3.346 | .551 | .157 | M6x1.0 | .275 | PT 1/2 | .236 | 7.382 | M58x1.5 | 2.205 | 4.055 | 7.480 |
| ATL1868-CM18B | 1.378 | M6x1.0 | M10x1.5 | 6.535 | 6.102 | 3.976 | 1.850 | .590 | 2.756 | 4.252 | .627 | .157 | M6x1.0 | .295 | PT 1/2 | .236 | 8.661 | M84x2 | 3.189 | 4.960 | 8.460 |
| ATL1875-CM18B | 1.378 | M6x1.0 | M10x1.5 | 6.535 | 6.102 | 3.976 | 1.850 | .590 | 3.149 | 4.252 | .627 | .157 | M6x1.0 | .295 | PT 1/2 | .236 | 8.661 | M84x2 | 3.189 | 4.960 | 8.460 |
| ATL1878-CM18B | 1.378 | M6x1.0 | M10x1.5 | 6.535 | 6.102 | 3.976 | 1.850 | .787 | 3.228 | 4.252 | .627 | .157 | M6x1.0 | .295 | PT 1/2 | .236 | 8.661 | M84x2 | 3.189 | 4.960 | 8.460 |
| ATL2091-CM20B | 1.378 | M6x1.0 | M12x1.75 | 7.176 | 6.496 | 4.331 | 1.850 | .590 | 3.740 | 4.724 | .627 | .157 | M6x1.0 | .275 | PT 1/2 | .236 | 10.512 | M99x2 | 3.779 | 5.551 | 9.449 |
| ATL2511-CM25B | 1.771 | M6x1.0 | M16x2.0 | 7.756 | 8.110 | 2.843 | 2.165 | .787 | 4.842 | 6.299 | .708 | .197 | M6x1.0 | .275 | PT 1/2 | .236 | 11.575 | - | 5.299 | 7.323 | 12.204 |

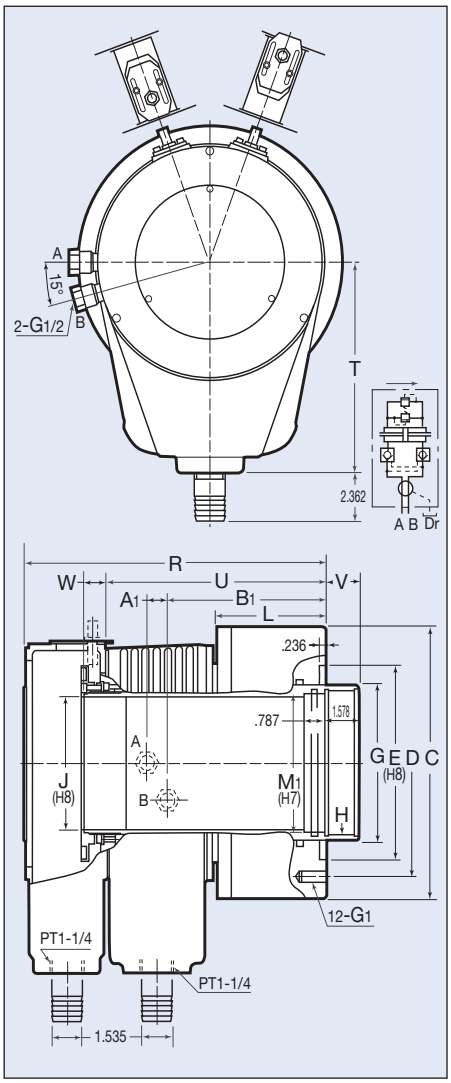
| Model | D | E | F | G | H Thread | J Thru. Hole | K | L | N | P | Q | S | T | U | V | V Max. | W Min. | W Max. | X Min. | Z | A1 | B1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ATL1246-CM12B | 5.118 | 3.937 | 3.149 | 2.559 | M55x2 | 1.811 | 6.750 | 2.519 | 2.519 | 3.346 | 3.543 | 4.645 | 4.488 | 7.244 | .393 | -.199 | 1.575 | .984 | .157 | .197 | .433 | 4.980 |
| ATL1552-CM15B | 6.693 | 5.118 | 3.346 | 2.756 | M60x2 | 2.047 | 6.750 | 2.874 | 2.874 | 3.779 | 4.015 | 5.393 | 5.118 | 7.716 | .669 | -.199 | 1.450 | .984 | .157 | .197 | .433 | 5.0354 |
| ATL1868-CM18B | 7.480 | 6.299 | 4.724 | 3.740 | M75x2 | 2.677 | 7.480 | 3.858 | 3.858 | 4.764 | 5.157 | 6.535 | 6.299 | 9.055 | .787 | -.199 | 1.968 | .984 | .157 | .197 | .689 | 5.984 |
| ATL1875-CM18B | 7.480 | 6.299 | 4.724 | 1.692 | M85x2 | 2.953 | 9.252 | 3.858 | 3.858 | 4.764 | 5.157 | 6.535 | 6.299 | 9.055 | .787 | -.199 | 1.968 | .984 | .157 | .197 | .689 | 5.984 |
| ATL1878-CM18B | 7.480 | 6.299 | 4.724 | 3.740 | M87x2 | 3.071 | 9.252 | 3.858 | 3.858 | 4.764 | 5.157 | 6.535 | 6.299 | 9.055 | .787 | -.199 | 1.968 | .984 | .157 | .197 | .689 | 5.984 |
| ATL2091-CM20B | 8.464 | 7.086 | 5.512 | 4.331 | M100x2 | 3.582 | 10.236 | 3.661 | 4.252 | 5.433 | 5.828 | 7.165 | 7.283 | 9.961 | .984 | -.199 | 2.165 | .984 | .118 | .197 | .827 | 6.555 |
| ATL2511-CM25B | 10.827 | 9.055 | 6.535 | 5.512 | M130x2 | 4.626 | 9.252 | 3.504 | 5.828 | 1.882 | - | 9.134 | 8.464 | 11.653 | .708 | -.199 | 1.496 | .590 | .118 | .197 | 1.063 | 7.264 |

# ATL-KBC King Bore Open Center Hydraulic Cylinders

- Large Thru-Hole up to 8.26"
- High RPM
- Built-in Coolant Catcher included
- Built-in Safety Check Valves

| Model | Piston Dia. inch | Piston Area Push Side (sq. in.) | Piston Area Pull Side (sq. in.) | Piston Stroke inch | Max. Draw Bar Pull Push Side lbf | Max. Draw Bar Pull Pull Side lbf | Max. Operating Presure psi | Thru Hole inch | Max. Speed rpm | Moment of Inertial kg-m2 | Weight lbs | Total Leakage L/min |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ATL2814-CM28B | 11.22 | 61.07 | 54.25 | 1.653 | 26,202 | 23,285 | 478 | 5.708 | 2000 | 1.08 | 198 | 3.1 |
| ATL2816-CM28B | 11.22 | 61.07 | 54.25 | 1.653 | 26,202 | 23,285 | 478 | 6.633 | 2000 | 0.90 | 159 | 3.9 |
| ATL3320-CM33B | 13.18 | 79.82 | 64.62 | 1.653 | 34,300 | 30,712 | 478 | 8.070 | 1600 | 1.09 | 227 | 4.5 |

## Dimensional Data (inch)




| MODEL | ATL2814-CM28B | ATL2816-CM28B | ATL3320-CM33B |
|---|---|---|---|
| C | 13.189 | 13.189 | 15.354 |
| D | 11.023 | 11.023 | 12.598 |
| E (H6) | 9.449 | 9.449 | 11.023 |
| G | 7.480 | 7.480 | 9.055 |
| H | M158x3.0 | M180x3.0 | M215x3.0" |
| J thru-hole | 5.708 | 6.633 | 8.070 |
| L | 5.518 | 5.518 | 5.787 |
| R | 15.04 | 15.04 | 15.43 |
| T | 10.236 | 10.236 | 10.236 |
| U | 10.984 | 10.984 | 11.496 |
| V max. | 1.614 | 1.614 | 1.614 |
| V min. | -.039 | -.039 | -.039 |
| W max. | 2.637 | 2.637 | 2.637 |
| W min. | .984 | .984 | .984 |
| A1 | .708 | .708 | .708 |
| B1 | 7.952 | 7.952 | 7.952 |
| F1 | M16x32L | M16x32L | M20x32L |
| M1 | 5.905 | 6.693 | 8.267 |

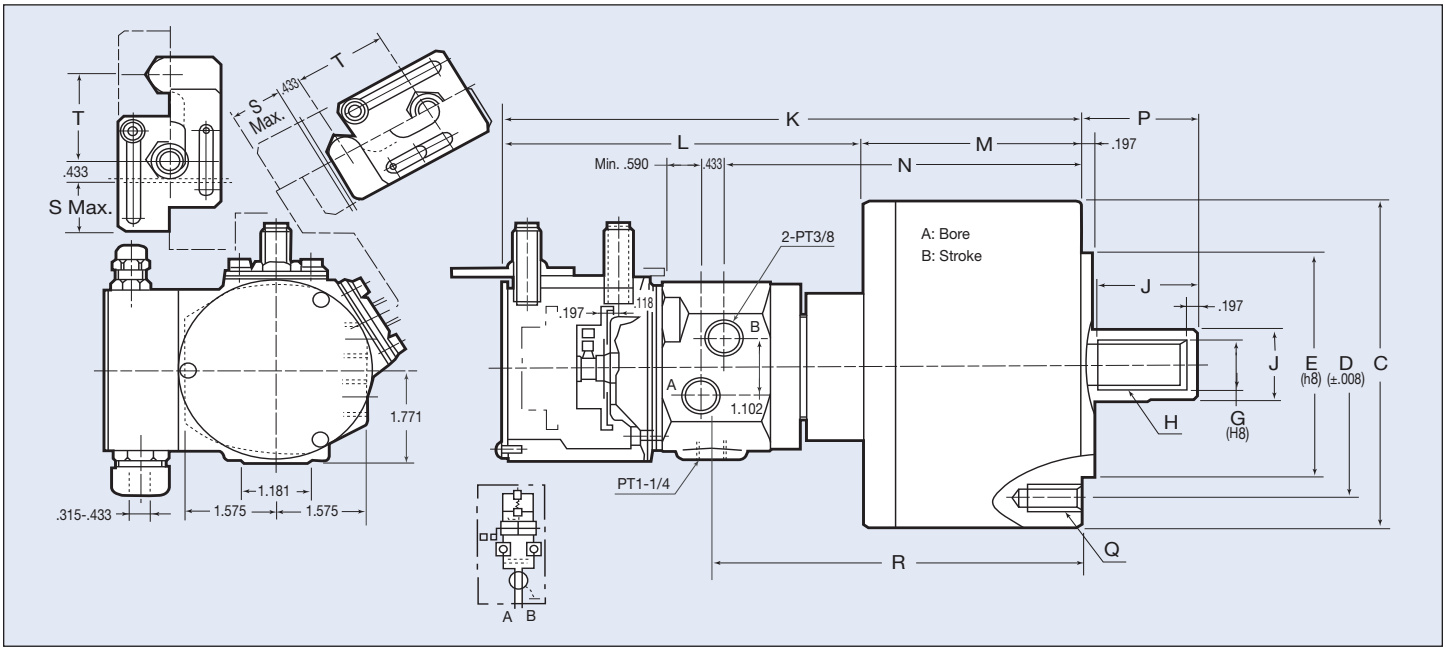
HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.

# ATL-CC Series Closed Center Rotary Hydraulic Cylinders

- High RPM
- Compact Design
- Built-in Safety Check Valves
- Proximity Switch Detective Plate Included
- Proximity Switch optional

| Model | Piston Area (sq. in.) Pull Side | Pull Side | Piston Stroke inch | Max. Draw Bar Force Pull Side lbf | Max. Operating Pressure psi | Max. Speed rpm | Moment of Inertia I kg-m² | Weight lbs | Total Leakage L/min |
|---|---|---|---|---|---|---|---|---|---|
| ATLCC-105C | 13.02 | 12.24 | .787 | 6,505 | 580 | 6000 | 0.0125 | 17 | 0.8 |
| ATLCC-125C | 18.6 | 17.52 | .984 | 9,422 | 580 | 6000 | 0.022 | 24 | 0.8 |
| ATLCC-125C35 | 18.6 | 17.52 | 1.378 | 9,422 | 580 | 6000 | 0.022 | 24 | 0.8 |
| ATLCC-150C | 26.97 | 24.8 | 1.181 | 13,459 | 580 | 5500 | 0.047 | 31 | 0.8 |
| ATLCC-200C | 48.36 | 44.95 | 1.378 | 24,228 | 580 | 5500 | 0.047 | 50 | 0.8 |

## Dimensional Data (inch)



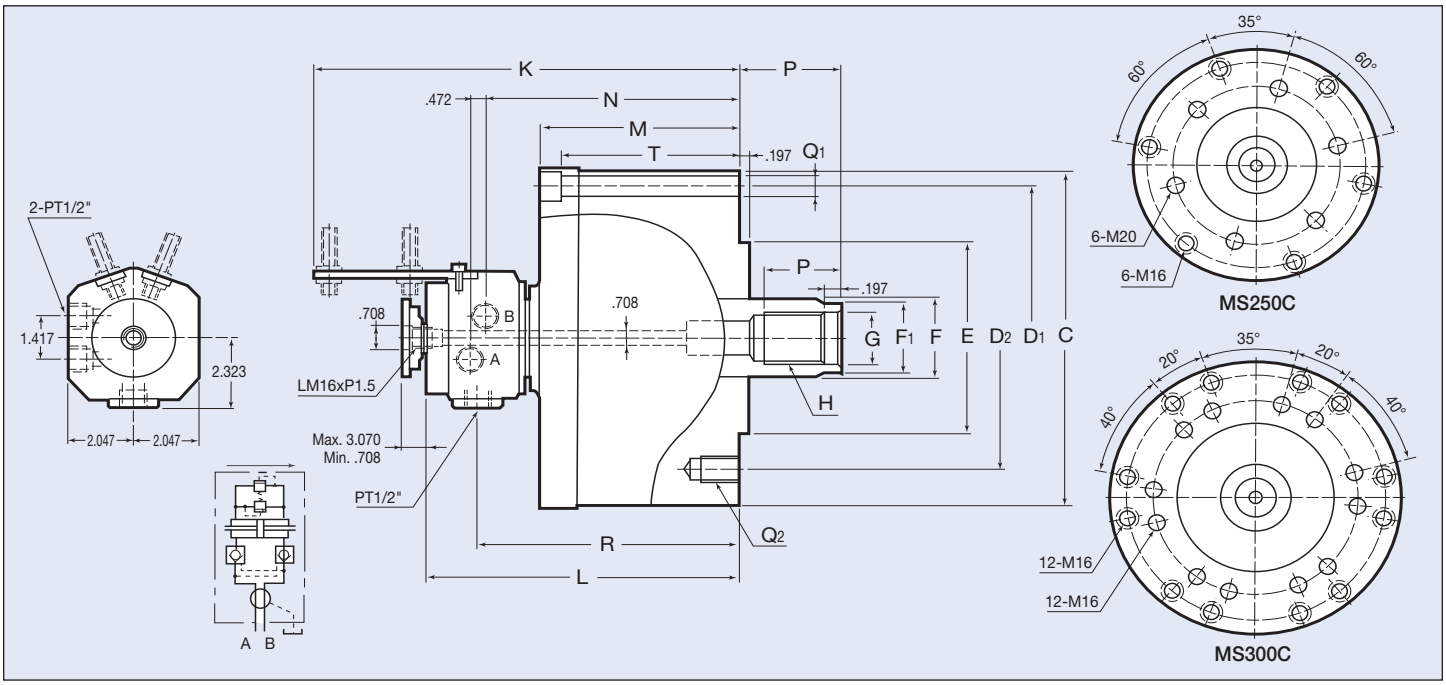

| Model No. | A | B | C | D | E | F | G | H | J | K | L | M | N | P Max | P Min | Q | R | S | T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ATLCC-105C | 4.134 | .787 | 5.315 | 3.937 | 3.149 | 1.181 | .827 | M20x2.5 | 1.378 | 10.118 | 6.614 | 3.504 | 5.984 | 1.771 | .984 | 6-M10x20 | 6.220 | .905 | 1.811 |
| ATLCC-125C | 4.921 | .984 | 6.299 | 5.118 | 4.331 | 1.378 | .984 | M24x3.0 | 1.732 | 10.433 | 6.614 | 3.819 | 6.299 | 2.008 | 1.023 | 6-M12x24 | 6.535 | .905 | 1.811 |
| ATLCC-125C35 | 4.921 | 1.378 | 6.299 | 5.118 | 4.331 | 1.378 | .984 | M24x3.0 | 1.732 | 10.590 | 6.614 | 3.976 | 6.456 | 2.244 | .866 | 6-M12x24 | 6.693 | .905 | 1.811 |
| ATLCC-150C | 5.905 | 1.181 | 7.480 | 5.118 | 4.331 | 1.771 | 1.220 | M30x3.5 | 1.771 | 10.787 | 6.614 | 4.173 | 6.259 | 2.204" | 1.023 | 6-M12x24 | 6.889 | .905 | 1.811 |
| ATLCC-200C | 7.784 | 1.378 | 9.645 | 5.708 | 4.724 | 2.165 | 1.457 | M36x4.0 | 2.362 | 11.338 | 6.535 | 4.803 | 7.204 | 2.716" | 1.338 | 12-M16x30 | 7.440 | 1.102 | 1.811 |

HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.

# ATL250C/ATL300C Closed Center Rotary Hydraulic Cylinders

- Extreme High Force Closed Center Cylinder
- Use with Large Chucks that demand high Draw-Bar Pull
- Mounting Bolts mount from the front or rear
- Built-in Safety Check Valves
- Proximity Bracket included
- Proximity Switch optional

| Model | Piston Dia. inch | Piston Area (sq. in.) Push Side | Pull Side | Piston Stroke inch | Max. Draw Bar Pull Push Side lbf | Pull Side lbf | Operating Pressure psi | Max. Speed rpm | Moment of Inertia I kg-m² | Weight lbs | Total Leakage L/min |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ATL250C | 74.63 | 70.30 | 17.858 | 2.362 | 50923 | 48008 | 710 | 2000 | 0.87 | 172 | 2 |
| ALT300C | 108.11 | 102.08 | 25.929 | 2.362 | 58775 | 55409 | 580 | 1500 | 1.60 | 234 | 3 |




## Dimensional Data (inch)

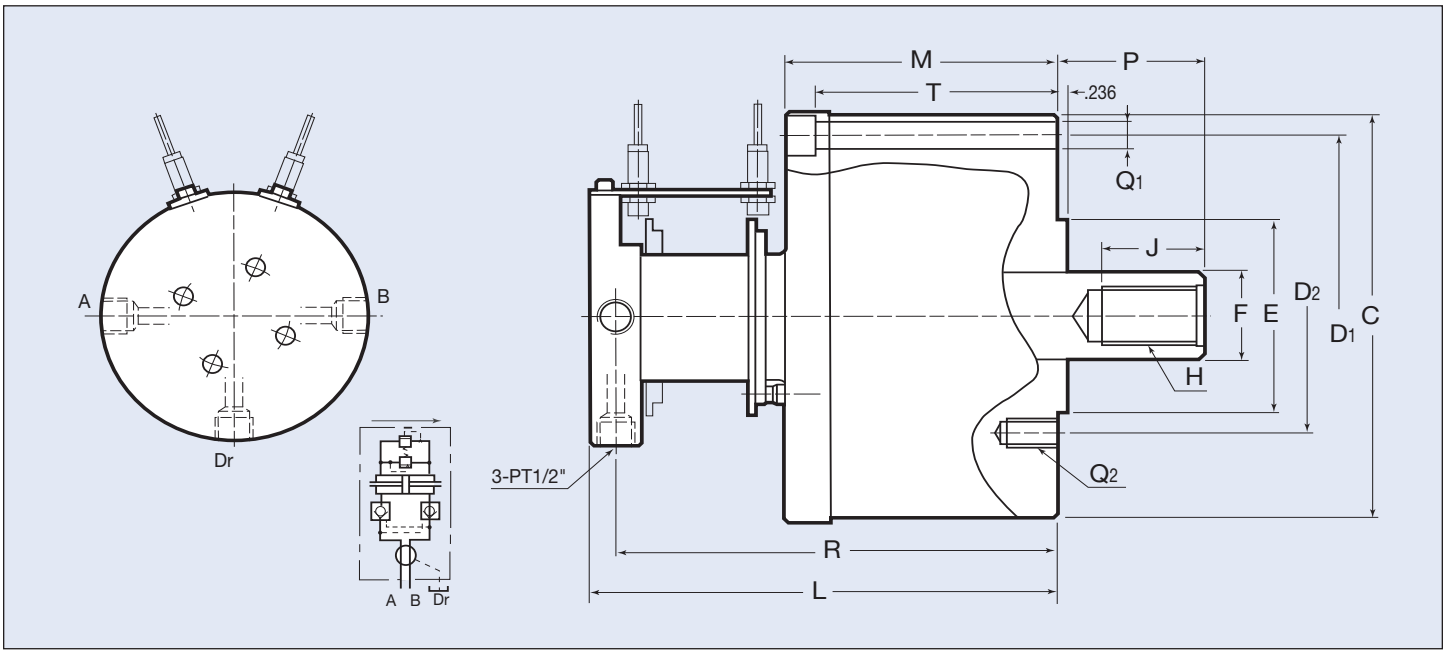
| Model No. | C | D1 | D2 | E (h7) | F | F1 | G | H | J | K | L | M | N | P Max | P Min | Q1 | Q2 | R | T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ATL250C | 11.8100 | 10.826 | 8.661 | 6.299 | 2.559 | 2.441 | 1.732 | M42x3.0 | 2.362 | 14.015 | 10.512 | 6.968 | 8.661 | 3.346 | .984 | 6-.669 | 6-M20 | 8.897 | 6.299 |
| ATL300C | 13.976 | 12.992 | 10.630 | 8.267 | 2.953 | 2.756 | 1.968 | M48x3.0 | 2.756 | 14.134 | 10.630 | 7.165 | 8.779 | 3.346 | .984 | 12-.669 | 12-M20 | 9.016 | 6.496 |

HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.

# ATLV Series Closed Center Rotary Hydraulic Cylinders

- High RPM
- Light Weight design spindle loading for Vertical Lathes
- Rear through mounting bolts
- Built-in Safety Check Valves
- Proximity Switch Bracket
- Proximity Switch optional

| Model | Piston Dia. inch | Piston Area (sq. in.) Push Side | Pull Side | Piston Stroke inch | Max. Draw Bar Pull Push Side lbf | Pull Side lbf | Max. Operating Pressure psi | Max. Speed rpm | Mount of Inertia I kg-m² | Weight lbs | Total Leakage L/min |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ATL20060 | 7.874 | 48.05 | 44.33 | 2.362 | 32751 | 30060 | 710 | 5500 | 0.55 | 108 | 2 |
| ATL25060 | 9.842 | 74.63 | 70.30 | 2.362 | 50923 | 48008 | 710 | 2000 | 0.81 | 159 | 2 |



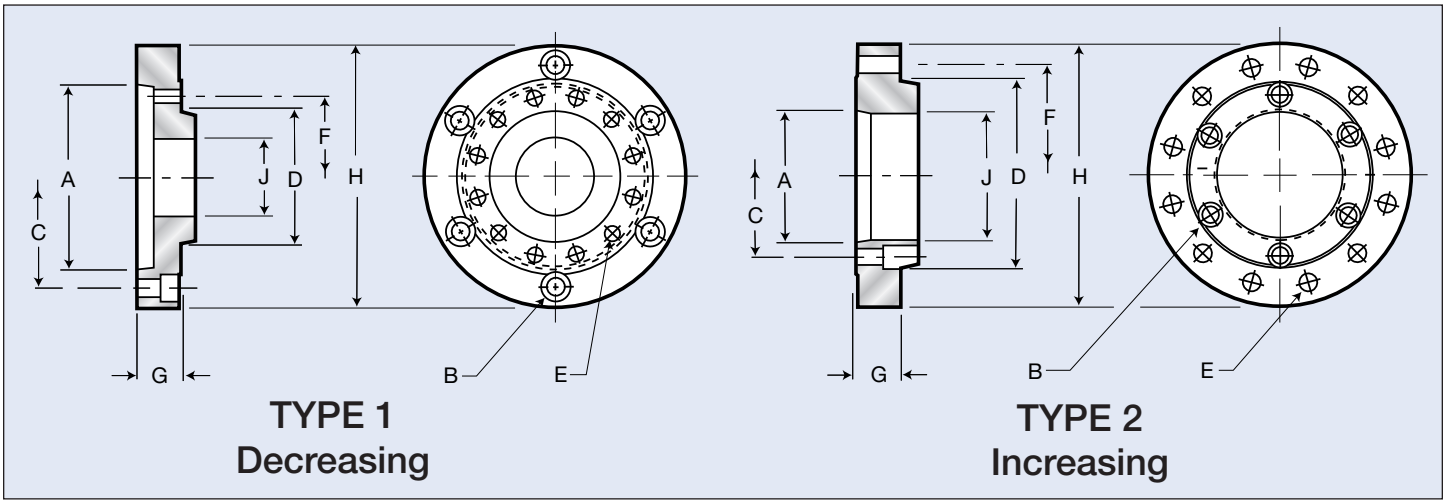

## Dimensional Data (inch)

| Model No. | C | D1 | D2 | E (h7) | F | G | H | J | L | M | P Max | P Min | Q1 | Q2 | R | T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ATL20060 | 9.842 | 8.858 | 5.708 | 4.724 | 2.165 | 1.456 | M36xP4.0 | 2.362 | 10.630 | 6.142 | 3.346 | .984 | 6-.669 | 6-M16 | 10.167 | 5.512 |
| ATL25060 | 11.811 | 10.826 | 8.661 | 6.299 | 2.559 | 1.732 | M42xP3.0 | 2.362 | 11.023 | 6.614 | 3.346 | .984 | 6-.669 | 6-M20 | 10.433 | 5.905 |

HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.

# Spindle Conversion Adapters

- Made from steel
- Dimensions are per USA Standards
- Available with UNC or metric mounting bolt holes
- Precision CNC turned in the U.S.A.




| Part No. | Spindle (Machine) Type | Mount | A | B(bolt) in.* | B(bolt) mm * | C | Chuck Mount | D | E(tap) in | E(tap) mm | F | Offset G | Dia H | Hole J |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A5-A6 | 2 | 5 | 3.250" | 7/16 | 10 | 4.125" | 6 | 4.188" | 1/2x13 | 12x1.75 | 5.250" | 1.000" | 6.500" | 2.500" |
| A5-A8 | 2 | 5 | 3.250" | 7/16 | 10 | 4.125" | 8 | 5.500" | 5/8x11 | 16x2 | 6.750" | 1.125" | 8.250" | 3.000" |
| A6-A5 | 1 | 6 | 4.188" | 1/2 | 12 | 5.250" | 5 | 3.250" | 7/16x14 | 10x1.5 | 4.125" | 1.500" | 6.500" | 1.700" |
| A6-A8 | 2 | 6 | 4.188" | 1/2 | 12 | 5.250" | 8 | 5.500" | 5/8x11 | 16x2 | 6.750" | 1.125" | 8.250" | 3.250" |
| A6-A11 | 2 | 6 | 4.188" | 1/2 | 12 | 5.205" | 11 | 7.750" | 3/4x10 | 20x2.5 | 9.250" | 1.375" | 11.000" | 4.000" |
| A8-A6 | 1 | 8 | 5.500" | 5/8 | 16 | 6.750" | 6 | 4.188" | 1/2x13 | 12x1.75 | 5.250" | 1.750" | 8.250" | 2.500" |
| A8-A11 | 2 | 8 | 5.500" | 5/8 | 18 | 6.750" | 11 | 7.750" | 3/4x10 | 20x2.5 | 9.250" | 1.375" | 11.000" | 5.250" |
| A8-A15 | 2 | 8 | 5.500" | 5/8 | 16 | 6.750" | 15 | 11.250" | 7/8x9 | 22x2.5 | 13.000" | 1.625" | 15.000" | 5.250" |
| A11-A6 | 1 | 11 | 7.750" | 3/4 | 20 | 9.250" | 6 | 4.188" | 1/2x13 | 12x1.75 | 5.250" | 1.750" | 11.000" | 2.500" |
| A11-A8 | 1 | 11 | 7.750" | 3/4 | 20 | 9.250" | 8 | 5.500" | 5/8x11 | 16x2 | 6.750" | 1.875" | 11.000" | 3.250" |
| A11-A15 | 2 | 11 | 7.750" | 3/4 | 20 | 9.250" | 15 | 11.250" | 7/8x9 | 22x2.5 | 13.000" | 1.625" | 15.000" | 7.500" |
| A11-A20 | 2 | 11 | 7.750" | 3/4 | 20 | 9.250" | 20 | 16.250" | 1x8 | 24x3 | 18.250" | 1.875" | 20.500" | 7.500" |
| A15-A8 | 1 | 15 | 11.250" | 7/8 | 22 | 13.000" | 8 | 5.500" | 5/8x11 | 16x2 | 6.750" | 2.000" | 15.000" | 3.250" |
| A15-A11 | 1 | 15 | 11.250" | 7/8 | 22 | 13.000" | 11 | 7.500" | 3/4x10 | 20x2.5 | 9.250" | 2.250" | 15.000" | 5.250" |
| A15-A20 | 2 | 15 | 11.250" | 7/8 | 22 | 13.000" | 20 | 16.250" | 1x8 | 24x3 | 18.250" | 1.875" | 20.500" | 11.000" |
| A20-A11 | 1 | 20 | 16.250" | 1 | 24 | 18.250" | 11 | 7.750" | 3/4x10 | 20x2.5 | 9.250" | 2.125" | 20.500" | 5.250" |
| A20-A15 | 1 | 20 | 16.250" | 1 | 24 | 18.250" | 15 | 11.250" | 7/8x9 | 22x2.5 | 13.000" | 2.500" | 20.500" | 8.250" |

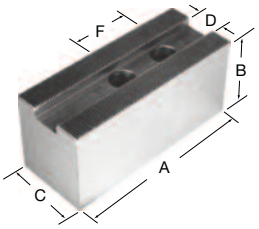
* Specify metric or inch requirements when ordering

NOTE:

1. Spindle and chuck mountings are outer bolt circle (type A2).
2. “A” and “D” are diameters to sharp corners (large diameter of taper).
3. “B” bolts are a total of 6 equally spaced (60 deg. apart) on a bolt circle of “C”.
4. “E” tapped holes are a total of 12 equally spaced (30 deg. apart) on a bolt circle of “F”.
5. See standard spindle dimensions on page 109.

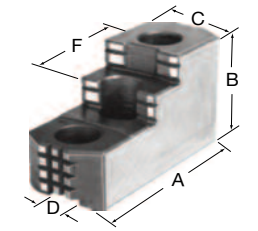
# Top Jaws and Accessories

For Constant Grip, Quick Change, VTL, Setrite® Power, Self Contained and Front Mount Hydraulic Chucks



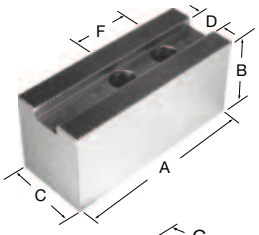

### 1.5mm x 60° Serrated Soft Top Jaws - Constant Grip, Quick Change, & International Chucks

| Chuck Dia. | Jaw No. | A | B | C | D | F | Screw Size | T-Nut 2 Req'd per Jaw |
|---|---|---|---|---|---|---|---|---|
| 6" | 8140-17525* | 3.125" | 1.50" | 1.25" | .475" | .787" | M-10 | 8130-17590 |
| 8" | 8140-21525 | 3.50" | 2.00" | 1.50" | .551" | 1.00" | M-12 | 8130-21590 |
| 10" | 8140-26525 | 4.00" | 2.00" | 1.50" | .630" | 1.18" | M-12 | 8130-26590 |
| 12" | 8140-31525 | 5.25" | 2.00" | 2.00" | .710" | 1.18" | M-14 | 8130-31590 |
| 15/18" | 8140-40525 | 6.50" | 2.50" | 2.00" | .866" | 1.69" | M-20 | 8130-40590 |
| 20/24" | 8130-50525① | 7.00" | 2.50" | 2.50" | .984" | 2.362" | M-20 | 8130-50590 |



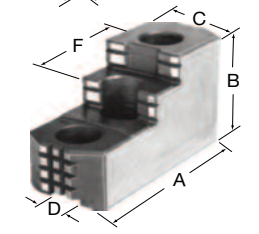

### 1.5mm x 60° Hard Reversible Top Jaw *Comes standard as offset points

| Chuck Dia. | Jaw No. | A | B | C | D | F | Screw Size | T-Nut 2 Req'd per Jaw |
|---|---|---|---|---|---|---|---|---|
| 6" | 8130-17624 | 2.56" | 1.38" | 1.18" | .475" | .669 | M-10 | 8130-17590 |
| 8" | 8130-21624 | 2.95" | 1.96" | 1.57" | .551" | .748 | M-12 | 8130-21590 |
| 10" | 8130-26624 | 2.95" | 1.96" | 1.57" | .630" | .748 | M-12 | 8130-26590 |
| 12" | 8130-31624 | 4.52" | 2.28" | 1.97" | .710" | .948 | M-14 | 8130-31590 |
| 15/18" | 8130-40624 | 4.96" | 2.95" | 2.36" | .866" | .984 | M-20 | 8130-40590 |
| 20/24" | 8130-50624① | 6.50" | 3.50" | 2.50" | .984" | 2.36 | M-20 | 8130-50590 |



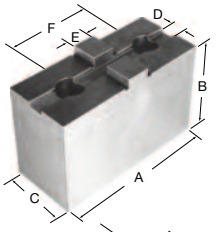

### 1/16 x 90° Serrated Soft Top Jaws for Constant Grip/Int'l and Self Contained Power Chucks

| Chuck Dia. | Jaw No. | A | B | C | D | F | Screw Size | T-Nut 2 Req'd per Jaw |
|---|---|---|---|---|---|---|---|---|
| 6" | 8140-17512 | 2.75" | 1.50" | 1.00" | .475" | .787" | M-8 | 8820-17591 |
| 8" | 2860-21512 | 3.25" | 2.00" | 1.50" | .670" | 1.00" | M-12 | 2870-17591 |
| 10" | 2860-21512 | 3.25" | 2.00" | 1.50" | .670" | 1.00" | M-12 | 2870-17591 |
| 12" | 2860-32512 | 4.50" | 2.50" | 2.00" | .827" | 1.25" | M-16 | 2870-26591 |
| 15"-24" | 2860-40512② | 6.00" | 3.00" | 2.00" | 1.000" | 1.75" | M-20 | |



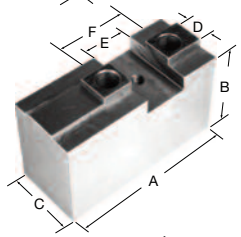

### 1/16 x 90° Hard Reversible Top Jaw

| Chuck Dia. | Jaw No. | A | B | C | D | F | Screw Size | T-Nut 2 Req'd per Jaw |
|---|---|---|---|---|---|---|---|---|
| 6" | 8130-17611 | 2.54" | 1.57" | 1.18" | .475" | .67" | M-8 | 8820-17591 |
| 8" | 8130-21611 | 3.00" | 1.97" | 1.57" | .670" | .75" | M-12 | 2870-17591 |
| 10" | 8130-21611 | 3.00" | 1.97" | 1.57" | .670" | .75" | M-12 | 2870-17591 |
| 12" | 8130-31611 | 4.92" | 2.36" | 2.36" | .830" | .98" | M-16 | 2870-26591 |
| 15"-24" | 8130-40611② | 4.92" | 2.95" | 2.36" | 1.000" | 1.22" | M-20 | |



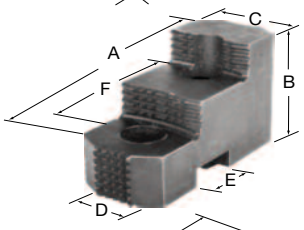

### AM Tongue & Groove Soft Top Jaws for Constant Grip Quick Change Chucks

| Chuck Dia. | Jaw No. | A | B | C | D | E | F | Screw Size | T-Nut |
|---|---|---|---|---|---|---|---|---|---|
| 6" | 2770-17509 | 2.81" | 1.37" | 1.00" | .315" | .499" | 1.50" | 7/16" | Not Required |
| 8" | 8130-21509 | 3.31" | 1.875" | 1.25" | .315" | .499" | 1.75" | 1/2" | |
| 10" | 2770-26509 | 3.93" | 1.875" | 1.50" | .501" | .749" | 2.12" | 5/8" | |
| 12" | 2770-32509 | 4.50" | 2.12" | 1.75" | .501" | .749" | 2.50" | 5/8" | |
| 15" | 2770-38509 | 5.18" | 2.81" | 2.25" | .501" | .749" | 3.00" | 3/4" | |



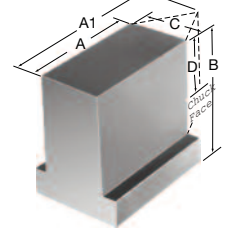

### Acme Serrated Soft Top Jaws for Constant Grip Quick Change/Front Mount Hydraulic Chucks

| Chuck Dia. | Jaw No. | A | B | C | D | E | F | Screw Size | T-Nut 1 Req'd per Jaw |
|---|---|---|---|---|---|---|---|---|---|
| 6" | N/A | - | - | - | - | - | - | - | - |
| 8" | 7749-22038 | 3.75" | 1.812" | 1.50" | .670" | .601" | 1.25" | 1/2" | 2749-02407 |
| 10" | 7749-26047 | 4.12" | 2.31" | 1.75" | .750" | 1.031" | 1.75" | 1/2" | 2749-02417 |
| 12" | 7749-32056 | 5.12" | 2.31" | 1.75" | .875" | 1.031" | 2.00" | 5/8" | 2749-02427 |
| 15"-24" | 8140-40533 | 6.00" | 3.25" | 2.50" | 1.000" | 1.530" | 2.50" | 3/4" | 8130-40531 |




### Acme Serrated Hard Rev. Top Jaws for Constant Grip Quick Change/Front Mount Hydraulic Chucks

| Chuck Dia. | Jaw No. | A | B | C | D | E | F | Screw Size | Acme Key 1 Req'd per Jaw |
|---|---|---|---|---|---|---|---|---|---|
| 6" | N/A | - | - | - | - | - | - | - | - |
| 8" | 7749-22036 | 3.50" | 2.00" | 1.50" | .670" | .601" | 1.25" | 1/2" | 2749-02405 |
| 10" | 7749-26042 | 4.25" | 2.50" | 1.75" | .750" | 1.031" | 1.75" | 1/2" | 2749-02415 |
| 12" | 7749-32052 | 4.87" | 2.50" | 1.75" | .875" | 1.031" | 2.00" | 5/8" | 2749-02425 |
| 15"-24" | 8130-40632 | 5.50" | 3.50" | 2.50" | 1.000" | 1.531" | 2.50" | 3/4" | 8130-40530 |




### Mono Jaws for Quick Change Jaw Power Chucks

| Chuck Dia. | Jaw No. | A | A1 | B | C | D |
|---|---|---|---|---|---|---|
| 6" | 8130-17601P | | 2.598" | 2.835" | 1.218" | 1.66" |
| 8" | 8130-21601 | 3.346" | 4.037" | 3.346" | 1.560" | 2.00" |
| 10" | 8130-26601 | 4.420" | 5.000" | 3.543" | 1.560" | 2.29" |
| 12" | 8130-31601 | 6.039" | 5.950" | 4.133" | 1.811" | 2.42" |
| 15" | 8130-38601 | 6.299" | 7.420" | 4.920" | 2.360" | 2.90" |

Mono jaws are made from nitride hardening steel. This allows them to be case hardened after machining. Mono jaws for 18" and larger chucks available upon request.

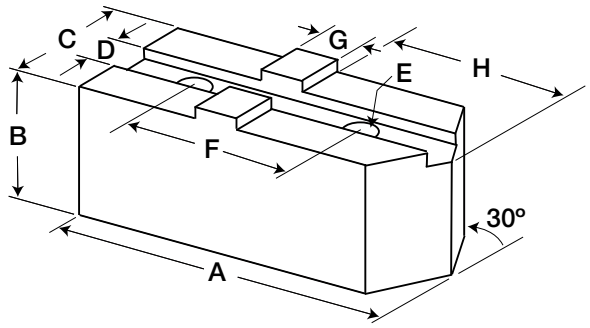
* 8140-17525 are pointed type

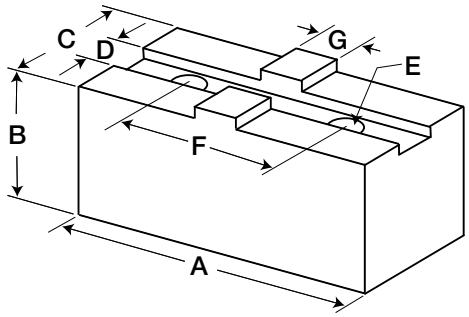
① 3mm x 60° Serrations

② 3/32 x 90° Serrations

# Tongue and Groove
# Soft Blank Top Jaws

## For: Pratt Burnerd, Buck, Cushman, Forkhart, Rohm, SCA and others




## Soft Jaws, Medium Duty

| Chuck Size | Part Number | Length A | Height B | Width C | L/Wise Slot D | Bolt Size E | Bolt Spacing F | Cross Key G | Offset Pointed Part Number | Offset Pointed A | H | Extra High Part Number | Extra High B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5" | 2210-13609 | 2.18" | 1.37" | .75" | .25" | 5/16" | .87" | .375" | N/A | -- | | N/A | -- |
| 6" | 2210-17609 | 2.81" | 1.37" | 1.0" | .31" | 3/8" | 1.5" | .501" | 2210-17609OP | 3.25" | 1.81" | 2210-17609EH | 3.5" |
| 8" | 2210-20609 | 3.31" | 1.87" | 1.25" | .31" | 3/8" | 1.75" | .501" | 2210-20609OP | 3.75" | 2.18" | 2210-20609EH | 3.5" |
| 10" | 2210-25609 | 3.93" | 1.87" | 1.5" | .5" | 1/2" | 2.12" | .749" | 2210-25609OP | 4.62" | 2.62" | 2210-25609EH | 3.5" |
| 12" | 2210-32609 | 4.5" | 2.125" | 1.75" | .5" | 1/2" | 2.5" | .749" | 2210-32609OP | 5.37" | 3.12" | 2210-32609EH | 4.0" |
| 15" | 2210-38609 | 5.18" | 2.125" | 1.75" | .5" | 5/8" | 3.0" | .749" | 2210-38609OP | 6.25" | 3.62" | 2210-38609EH | 3.81" |
| 18"& Up* | 2980-38509 | 5.18" | 2.81" | 2.25" | .5" | 3/4" | 3.0" | .749" | 2980-38509OP | 6.37" | 3.75" | 2980-38509EH | 3.81" |

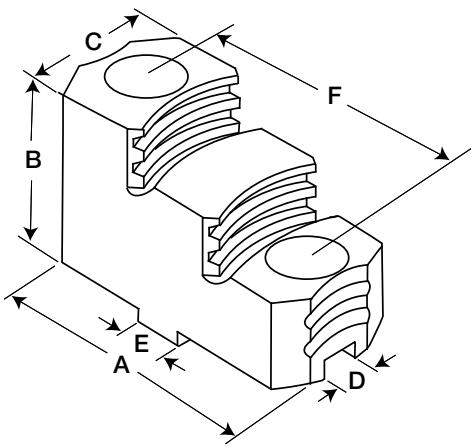
Standard length jaws have centered cross key

## Soft Jaws, Heavy Duty

| Chuck Size | Part Number | Length A | Height B | Width C | L/Wise Slot D | Bolt Size E | Bolt Spacing F | Cross Key G |
|---|---|---|---|---|---|---|---|---|
| 6" | 2770-17509 | 2.81" | 1.37" | 1.0" | .31" | 7/16" | 1.5" | .501" |
| 8" | 8130-21509 | 3.31" | 1.87" | 1.25" | .31" | 1/2" | 1.75" | .501" |
| 10" | 2770-26509 | 3.93" | 1.87" | 1.5" | .5" | 5/8" | 2.12" | .749" |
| 12" | 2770-32509 | 4.5" | 2.125" | 1.75" | .5" | 5/8" | 2.5" | .749" |
| 15" | 2980-38509 | 5.18" | 2.81" | 2.25" | .5" | 3/4" | 3.0" | .749" |

Standard length jaws have centered cross key



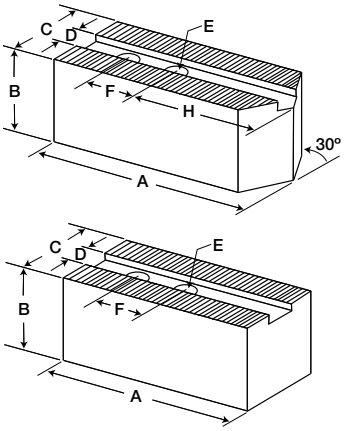



## Hard Top Jaws - Medium Duty

| Chuck Size | Part Number | Length A | Height B | Width C | L/Wise Slot D | Cross Key E | Bolt Spacing F | Bolt Size |
|---|---|---|---|---|---|---|---|---|
| 6" | 8210-17608 | 2.63" | 1.63" | .98" | .313" | .5" | 1.5" | 3/8" |
| 8" | 8210-20608 | 3.34" | 1.71" | 1.06" | .313" | .5" | 1.75" | 3/8" |
| 10" | 8210-25608 | 3.74" | 2.03" | 1.28" | .5" | .75" | 2.12" | 1/2" |
| 12" | 8210-32608 | 4.33" | 2.17" | 1.45" | .5" | .75" | 2.5" | 1/2" |
| 15"* | 8210-38608 | 5.06" | 2.68" | 1.68" | .5" | .75" | 3" | 5/8" |
| 18"& Up* | 2980-38608 | 5.06" | 2.93" | 1.65" | .5" | .75" | 3" | 3/4" |

# Top Tooling
# 1.5mm x 60° and 3mm x 60° Serrations

## For: Pratt Burnerd, Howa, Kitagawa, Matsumoto and others



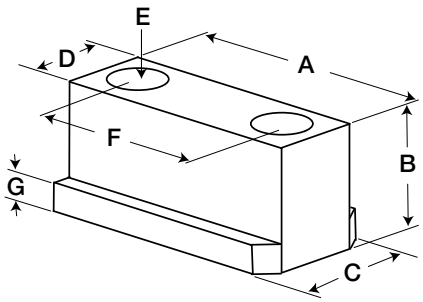




### Soft Jaws

| Chuck Size | Part Number | Length A | Height B | Width C | Slot D | Bolt Size E | Hole Spacing F | Offset Pointed Part Number | Offset Length A | H | Extra High Part Number | Extra High B Height |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6"* | 8140-17525 | 3.125" | 1.5" | 1.25" | .475" | M10 | .78" | N/A | - | - | N/A | - |
| 8" | 8140-21525 | 3.5" | 2.0" | 1.5" | .551" | M12 | 1.0" | 8140-21525OP | 4.25" | 2.45" | 8140-21525EH | 3.5" |
| 10" | 8140-26525 | 4.0" | 2.0" | 1.5" | .630" | M12 | 1.18" | 8140-26525OP | 5.0" | 3.15" | 8140-26525EH | 3.5" |
| 12" | 8140-31525 | 5.25" | 2.0" | 2.0" | .71" | M14 | 1.18" | 8140-31525OP | 6.25" | 4.15" | 8140-31525EH | 3.5" |
| 12" | 8140-B212 | 5.5" | 2.0" | 2.0" | .826" | M16 | 1.18" | 8140-B212OP | 6.25" | 4.15" | 8140-B212EH | 3.5" |
| 15"&18" | 8140-40525 | 6.5" | 2.5" | 2.5" | .866" | M20 | 1.69" | 8140-40525OP | 7.5" | 4.41" | 8140-40525EH | 3.5" |
| 20"x24"** | 8140-50525 | 7.0" | 2.5" | 2.5" | .984" | M20 | 2.36" | 8140-50525OP | 8.0" | - | 8140-50525EH | 3.5" |

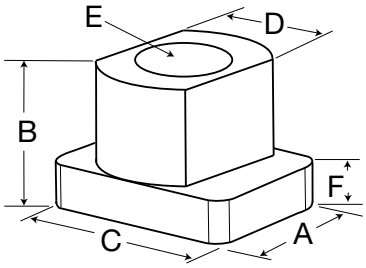
* 6" Jaw Part No. 8140-17525 Comes Standard as Offset Pointed ** 20" & 24" Jaws have 3mm x 60° Serrations




### T-Nuts: for Atlas ATL Series and Kitagawa Chucks (inch/mm)

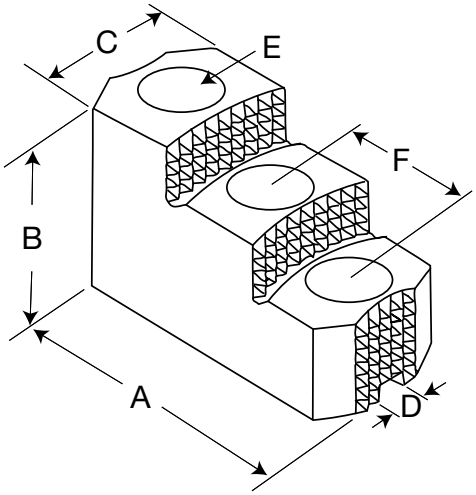
| Chuck Size | Part Number | Length A | Height B | Width C | Neck D | Bolt Size E | Hole Spacing F | Shoulder G |
|---|---|---|---|---|---|---|---|---|
| 6" | N206-10 | 1.417/36 | .728/18.5 | .689/17.5 | .472/12 | M10 | .787/20 | .295/7.5 |
| 8" | N208-10 | 1.83/46.5 | .807/20.5 | .807/20.5 | .551/14 | M12 | .984/25 | .335/8.5 |
| 10" | N210-10 | 2.0/51 | 8.46/21.5 | .886/22.5 | .629/16 | M12 | 1.18/30 | .335/8.5 |
| 12" | N212-10 | 2.18/55.5 | 1.095/27.8 | 1.16/29.5 | .826/21 | M16 | 1.18/30 | .453/11 |
| 15"/18" | N215-10 | 3.15/80 | 1.791/45.5 | 1.32/33.5 | .945/24 | M20 | 1.69/43 | .649/16.5 |
| 20"/24"* | V224-10 | 1.81/46 | 1.77/45 | 1.476/37.5 | .984/25 | M20 | Spilt Design | .748/19 |

* Part No. V224-10 Spit T-Nut design 2 required per jaw




### T-Nuts: for PBA Constant Grip, Quick Change Jaw Chucks and PBA Setrite Power Chucks (Split type) 2 required per jaw

| Chuck Size | Part Number | Length A | Height B | Width C | Neck D | Bolt Size E | Shoulder F |
|---|---|---|---|---|---|---|---|
| 6" | 8130-17590 | .64" | .82" | .69" | .472" | M10 | .30" |
| 8" | 8130-21590 | .74" | .98" | .87" | .550 | M12 | .37" |
| 10" | 8130-26590 | .74" | 1.0" | .91" | .627" | M12 | .34" |
| 12" | 8130-31590 | .97" | 1.3" | 1.03" | .707" | M14 | .53" |
| 15"-18" | 8130-40590 | .97" | 1.75" | 1.32" | .864" | M20 | .62" |
| 20"&Up | 8130-50590 | 1.2" | 1.47" | 1.32" | .980" | M20 | .43" |



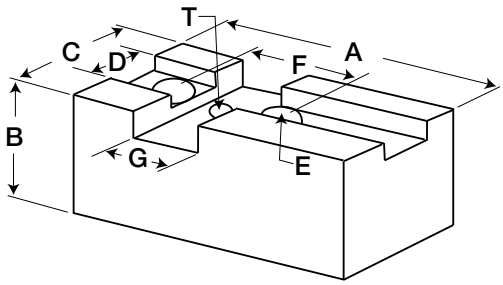

### *Hard Top Jaws: for PBA, Kitagawa and others (Split T-Nut Req'd)

| Chuck Size | Part Number | Length A | Height B | Width C | Slot D | Bolt Size E | Bolt Spacing F |
|---|---|---|---|---|---|---|---|
| 6" | 8130-17624 | 2.56" | 1.57" | 1.18" | .475" | M10 | .669" |
| 8" | 8130-21624 | 2.95" | 1.96" | 1.57" | .551" | M12 | .748" |
| 10" | 8130-26624 | 2.95" | 1.96" | 1.57" | .63" | M12 | .748" |
| 12" | 8130-31624 | 4.52" | 2.36" | 1.96" | .71" | M14 | .948" |
| 15"&18" | 8130-40624 | 4.92" | 2.95" | 2.36" | .866" | M20 | .948" |
| 20"&Up** | 8130-50624 | 6" | 2.95" | 2.36" | .984" | M20 | 2.36" |

* Some manufacturers' "F" dimension may vary. It may be necessary to buy split T-nuts or split existing nuts
** 20" & up" Jaws have 3mm x 60° Serrations

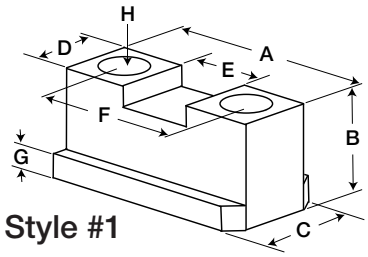
# Top Tooling
# Square Serrations

## For: Pratt Burnerd, S.P., Cushman, Logansport and others

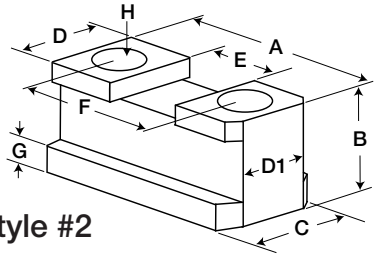



## Soft Jaws

| Chuck Size | Part Number | Length A | Height B | Width C | Tongue D | Bolt Size E | Hole Spacing F | Key Slot G |
|---|---|---|---|---|---|---|---|---|
| 8" | 8140-21527 | 3.0" | 2.0" | 1.25" | .5" | 3/8" | 1.437" | .745" |
| 10"-12" | 8140-26527 | 4.37" | 2.5" | 1.75" | .75" | 1/2" | 1.75" | .994" |
| 15"-18" | 8140-38527 | 5.0" | 3.0" | 2.0" | 1.0" | 3/4" | 2.5" | 1.488" |



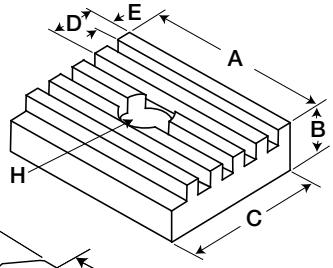

Style #1

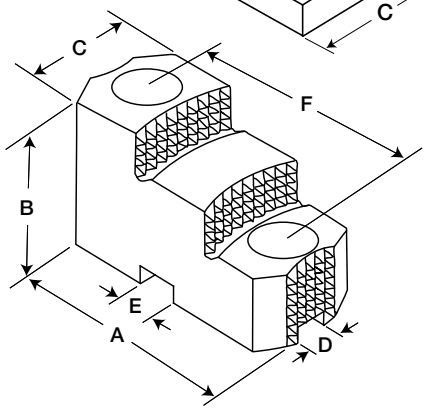



Style #2

## T-Nuts

| Chuck Size | Part Number | Style Number | Length A | Height B | Width C | Neck D | Bolt Neck D1 | Cross Size H | Bolt Slot E | Spacing F | Shoulder G |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8" | 8130-21528 | 1 | 2.12" | .99" | .87" | .49" | - | 3/8"-16 | .875" | 1.44" | .31" |
| 10" | 8130-26528 | 2 | 2.5" | 1.13" | .86" | .74" | .61" | 1/2"-13 | 1.063" | 1.75" | .40" |
| 10"-12" | 8130-25528 | 1 | 2.44" | 1.0" | 1.0" | .74" | - | 1/2"-13 | 1.063" | 1.75" | .37" |
| 12" | 8130-31528 | 1 | 2.5" | .98" | 1.02" | .74" | .61" | 5/8"-11 | 1.063" | 1.75" | .35" |
| 15"-18" | 8130-40528 | 1 | 3.75" | 1.25" | 1.25" | 1.0" | - | 3/4"-10 | 1.563" | 2.5" | .43" |




## Keys

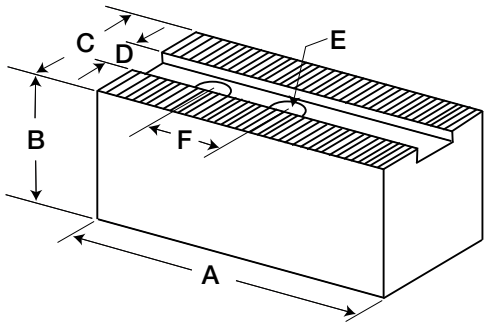
| Chuck Size | Part Number | A | Length B | Height C | Width D | E | Bolt Size H |
|---|---|---|---|---|---|---|---|
| 8" | 2179-00856 | 1.31" | .37" | .744" | .2" | .098" | 1/4"-20 |
| 10"-12" | 2179-01056 | 1.68" | .5" | .993" | .25" | .124" | 5/16"-18 |
| 15"-18"-21" | 8130-40529 | 2.50" | .5" | 1.487" | .25" | .124" | 3/8"-16 |

## Hard Top Jaws

| Chuck Size | Part Number | Length A | Height B | Width C | Tongue D | Key Slot E | Hole Spacing F | Bolt Size |
|---|---|---|---|---|---|---|---|---|
| 10"-12" | 8130-26327 | 4.87" | 2.5" | 1.75" | .75" | .994" | 1.75" | 1/2" |
| 15"-18" | 8130-38327 | 5.5" | 3.5" | 2.25" | 1.0" | 1.488" | 2.5" | 3/4" |

# Top Tooling
# 1/16" x 90° and 3/32" x 90° Serrations

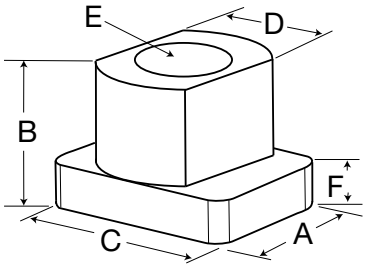
## For: Pratt Burnerd and others




## Soft Jaws

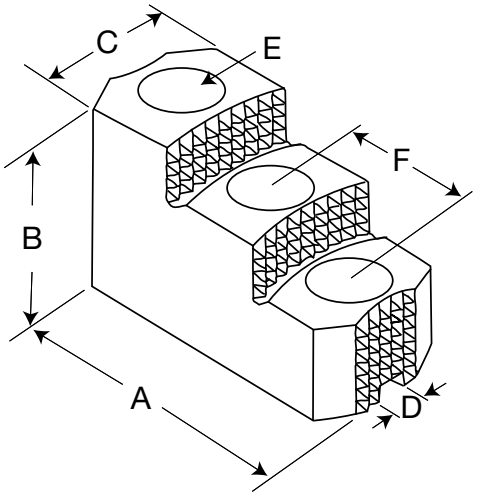
| Chuck Size | Part Number | Length A | Height B | Width C | Slot D | Bolt Size E | Hole Spacing F |
|---|---|---|---|---|---|---|---|
| 6" | 8140-17512 | 2.75" | 1.5" | 1.25" | .475" | M8 | .79" |
| 8" | 2860-21512 | 3.25" | 2.0" | 1.5" | .670" | M12 | 1" |
| 10" | 2860-21512 | 3.25" | 2.0" | 1.5" | .670" | M12 | 1" |
| 12" | 2860-32512 | 4.5" | 2.5" | 2.0" | .830" | M16 | 1.25" |
| 15"&24"* | 2860-40512 | 6.0" | 3.0" | 2.0" | 1.00" | M20 | 1.56" |

*3/32" x 90° serrations




## T-Nuts 2 required per jaw

| Chuck Size | Part Number | Length A | Height B | Width C | Neck D | Bolt Size E | Shoulder |
|---|---|---|---|---|---|---|---|
| 6" | 8820-17591 | .47" | .82" | .69" | .470" | M8 | - |
| 8" | 2870-17591 | .88" | .91" | .73" | .669" | M12 | .35 |
| 10" | 2870-17591 | .88" | .91" | .73" | .669" | M12 | .35 |
| 12" | 2870-26591 | 1.12" | 1.06" | .94" | .826" | M16 | .43 |
| 15"-24" | 2870-40591 | 1.10" | 1.14" | 1.42" | .999" | M20 | .43 |



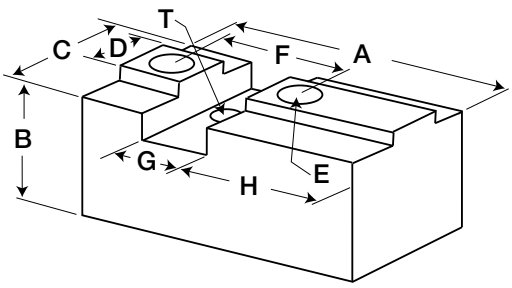

## Hard Stepped Top Jaws

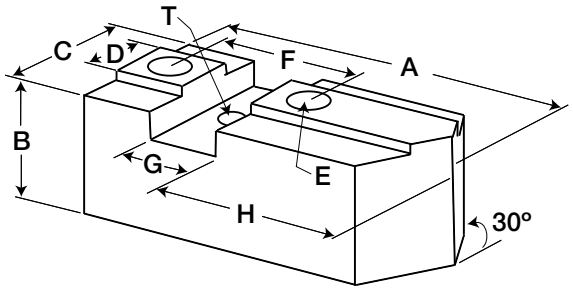
| Chuck Size | Part Number | Length A | Height B | Width C | Slot D | Bolt Size E | Bolt Spacing F |
|---|---|---|---|---|---|---|---|
| 6" | 8130-17611 | 2.56" | 1.56" | 1.18" | .475" | M8 | .67" |
| 8" | 8130-21611 | 3.00" | 1.97" | 1.57" | .670" | M12 | .75" |
| 10" | 8130-21611 | 3.00" | 1.97" | 1.57" | .670" | M12 | .75" |
| 12" | 8130-31611 | 4.92" | 2.36" | 2.36" | .830" | M16 | .98" |
| 15"&24"* | 8130-40611 | 4.92" | 2.95" | 2.36" | 1.00" | M20 | 1.22" |

*3/32" x 90° serrations

# Top Tooling
# American Standard Acme Serrations

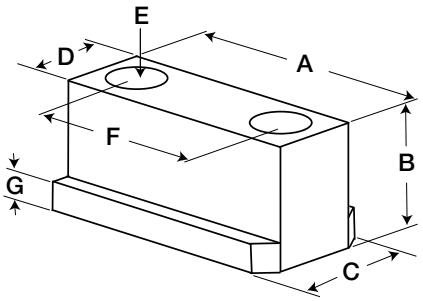
## For: Pratt Burnerd, Buck, Cushman, S. P. and others



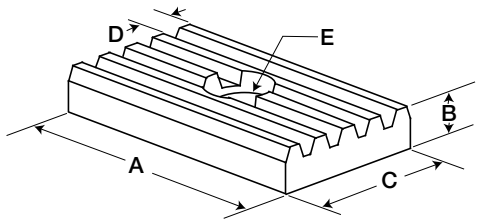

## Soft Jaws

| Chuck Size | Part Number | Length A | Height B | Width C | Tongue D | Bolt Size E | Hole Spacing F | Key Slot G | H | Tapped Hole T | Offset Pointed Part Number | Offset Pointed A | H | Extra High Part Number | Extra High B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8" | 7749-22038 | 3.75" | 2.0" | 1.5" | .67" | 1/2" | 1.25 | .601" | 2.12" | 10-24 | 7749-22038OP | N/A | | 7749-22038EH | N/A |
| 10" | 7749-26047 | 4.12" | 2.31" | 1.75" | .75" | 1/2" | 1.75" | 1.031" | 2.12" | 5/16"-18 | 7749-26047OP | 5.5" | 3.5" | 7749-26047EH | 3.31" |
| 12" | 7749-32056 | 5.12" | 2.31" | 1.75" | .875" | 5/8" | 2.0" | 1.031" | 2.87" | 5/16"-18 | 7749-32056OP | 5.5" | 3.25" | 7749-32056EH | 3.31" |
| 15",18"&20" | 8140-40533 | 6.0" | 3.31" | 2.5" | 1.0" | 3/4" | 2.5" | 1.531" | 2.62" | 3/8"-16 | 8140-40533OP | 7.5" | 4.25" | 8140-40533EH | 4.81" |
| 21"-UP | 8140-50533 | 6.0" | 3.31" | 3.0" | 1.25" | 7/8" | 3.0" | 1.531" | 2.62" | 3/8"-16 | 8140-50533OP | 7.5" | 4.25" | 8140-50533EH | 4.81" |



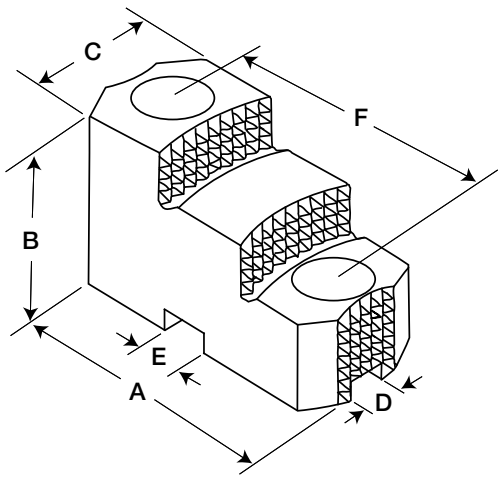

## T-Nuts

| Chuck Size | Part Number | Length A | Height B | Width C | Neck D | Bolt Size E | Hole Spacing F | Shoulder G |
|---|---|---|---|---|---|---|---|---|
| 8" | 2749-02407 | 2.0" | 1.0" | .94" | .670" | 1/2"-13 | 1.25" | .44" |
| 10" | 2749-02417 | 2.5" | .64" | .94" | .678" | 1/2"-13 | 1.75" | .38" |
| 12" | 2749-02427 | 3.0" | .74" | 1.06" | .802" | 5/8"-11 | 2.0" | .44" |
| 15",18"&20 | 8130-40531 | 3.5" | .93" | 1.25" | .933" | 3/4"-10 | 2.5" | .55" |
| 21&Up | 8130-50531 | 4.25" | 1.18" | 1.55" | 1.159" | 7/8"-9 | 3.0" | .68" |




## Keys

| Chuck Size | Part Number | Length A | Height B | Width C | D | Bolt Size E |
|---|---|---|---|---|---|---|
| 8" | 2749-02405 | 1.5" | .38" | .6" | .156" | 10-24 |
| 10" & 12" | 2749-02415 | 1.70" | .5" | 1.030" | .25" | 5/16"-18 |
| 12" | 2749-02425 | 2.25" | .5" | 1.030" | .25" | 5/16"-18 |
| 15" & Up | 8130-40530 | 2.87" | .5" | 1.530" | .25" | 3/8"-16 |




## Hard Top Jaws

| Chuck Size | Part Number | Length A | Height B | Width C | Tongue D | Slot E | Bolt Spacing F |
|---|---|---|---|---|---|---|---|
| 8" | 7749-22036 | 3.50" | 2.0" | 1.75" | .67" | .601" | 1.25" |
| 10" | 7749-26042 | 4.25" | 2.50" | 1.75" | .75" | 1.031" | 1.75" |
| 12" | 7749-32052 | 4.87" | 2.50" | 1.75" | .87" | 1.031" | 2.0" |
| 15",18"&20 | 8130-40632 | 5.5" | 3.31" | 2.5" | 1.0" | 1.531" | 2.5" |
| 21 & UP | 8130-50532 | 6.5" | 3.31" | 2.5" | 1.25" | 1.531" | 3.0" |

# Machining
# Soft Blank Top Jaws

Standard hard top jaws can be used for most normal work. Soft jaws may be used for second operation work, for previously machined surfaces to prevent part marring and for improved concentricity. Soft jaws are generally machined to size, in position on chuck or formed into the desired shape for holding difficult shaped workpieces.

Soft jaws generally conform to existing industry standards or accepted standards to fit master jaws that may have fine, metric, acme or square serrations or have tongue and groove type cross tenon mount.

Steel used in making soft jaws is mostly mild, low carbon content capable of being case hardened through specific heat treating steps. Due to clamping force factors (heavy jaws reduce clamping force and rpm's) reducing weight thru use of lighter materials such as aluminum may be considered. All jaws should be designed and formed keeping in mind the potential grip force loss due to centrifugal forces.

The initial fitting of the top jaws to the chuck prior to machining is important if repeat accuracy is to be achieved. For all types except on chucks with fine serrated base jaws, the jaws should be loaded radially outward to take up any fitting clearance prior to tightening the jaw screws. This applies to top jaws which are intended to hold a workpiece externally. In the case of internal gripping the jaws should load inwards.

Operate the chuck several times gripping a suitable size piece of material to load the top jaws back and then lock the base jaws in their approximate mid-stroke position. On chucks which accept collet pads a suitable sized ring may be placed in the collet seating diameter of the chuck's base jaws. If extreme accuracy is not required the jaws may then be turned directly to the size required to suit the gripped workpiece diameter. On long grip faces a back taper should be allowed to ensure that the jaws initially contact the workpiece at their outer end. A back taper of .003"t per inch on jaw height will be found adequate in most cases.

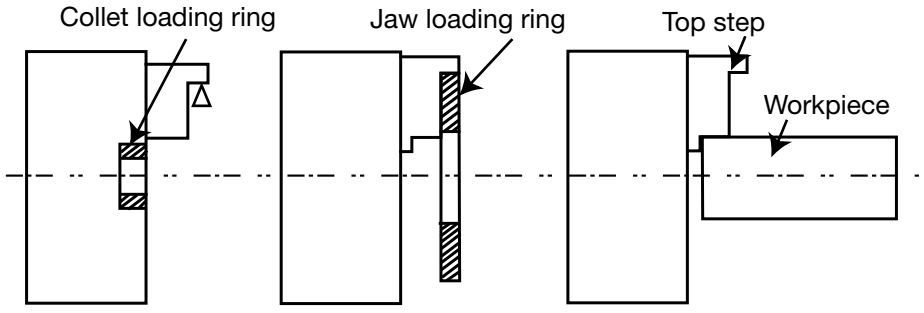
Where very accurate concentricity is required top jaws should be machined as described previously but to accept a suitable loading ring rather than the workpiece itself. The ring should be thin axially but of sufficient radial thickness to withstand the gripping force. A diameter is machined to receive the ring at the outer end of the jaws with the chuck in its mid stroke condition, master jaws are flush with the chuck body. The ring previously fitted to the base jaw collet seating diameter is removed after first opening the chuck. The jaws are then closed to grip the loading ring in the top jaws. This effectively pre-loads the top jaws in a similar manner to the loading which occurs when the workpiece is gripped.

The top jaws are then machined to hold the workpiece. Since the top jaws are fully loaded during machining it is generally unnecessary to include any back taper on the gripping face as this occurs automatically. The jaws are then opened and the loading ring removed. If the top step of the jaw used for holding the loading ring interferes with the workpiece then it may be machined away. Otherwise it should be left on to allow the jaws to be reskimmed at a later date with the loading ring in position. The procedure for carrying out this operation is shown in figure 3.

To obtain good concentricity it is important that the top jaws are loaded in an identical manner when holding the ring as when gripping the workpiece. Thus the same chuck operating pressure should be used and the ring should be held either externally or internally to suit the particular case.

If care is taken in machining top jaws, concentricity between a turned diameter and the gripped diameter of .001" TIR can be achieved. As an aid to improving concentricity it is better when loading the workpiece if the chuck is positioned with a single rather than two jaws at the bottom. Simultaneous location on two jaws can cause a trapping effect on large diameter workpieces as the workpiece is lifted to contact the third jaw. This may be detrimental if very accurate concentricity is demanded.

Figure 3 - Machining Soft Jaws




a) Machine step for jaw loading ring with collet loading ring in position and jaws at midstroke.

b) Insert jaw loading ring and machine step for workpiece

c) Insert workpiece. Top step may be machined away if desired

# Guide to Top Tooling

Top jaws should be designed to hold the workpiece as close to the chuck face as possible. Excessive jaw height reduces the effective gripping force available and is detrimental to accuracy. As a general rule the height of the grip point above the chuck front face should not exceed one-quarter of the chuck's diameter. Thus for a 12 inch chuck the height of the grip point should not exceed 3 inches.

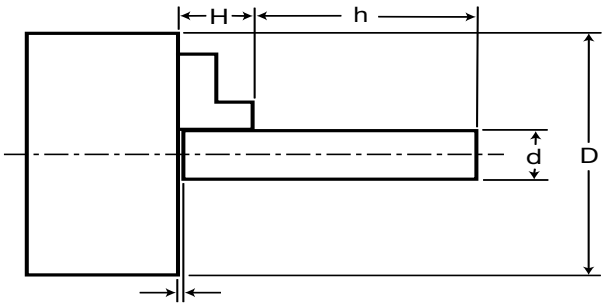
Large heavy top jaws should be avoided if possible since the loss in gripping force due to centrifugal effects at high spindle speeds is increased. If heavy jaws are unavoidable it may be necessary to restrict the spindle speed below the chuck's maximum recommended speed to ensure that sufficient gripping force is retained to hold the workpiece.

All top jaws in a set should be of equal weight to ensure no large out-of-balance forces occur. In the case of workpieces with a residual out-of-balance this may be corrected by designing the top jaws to counteract the imbalance component. Alternatively, it may be necessary to restrict the machine spindle to low speeds to avoid possible vibration problems.

Ideally, top jaws should not extend beyond the chuck periphery. If this is unavoidable, the amount of projection should be restricted within safe limits bearing in mind that the loss in gripping force due to centrifugal effect is a function of the product of top jaw mass and the distance to the jaws center of mass about the chuck's rotational axis. Precautions should also be taken to ensure that projecting top jaws will not collide with tooling during the machining cycle.

Care should be exercised in machining workpieces whose length protrudes excessively beyond the chuck jaws. As a general guide, for workpieces up to approximately one-third of the chuck diameter whose inner end face is located close to the chuck, machining should not be carried out at a distance greater than five times the workpiece diameter or three times the axial length gripped by the jaws measured from the outer end of the jaws. The lesser of these two values should be used and the maximum height of the top jaws should be restricted to one-quarter of the chuck diameter. The proportions for this condition are shown in figure 1.

Figure 1 For d less than D/3

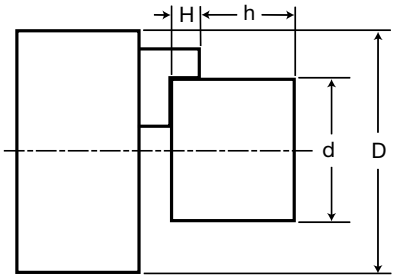



Workpiece close to chuck face
Max h = 3H or 5d whichever is the smallest
Max H = 1/4D

If the protrusion of the workpiece exceeds this amount then support by the tailstock and/or use of a steady rest should be considered.

When the workpiece diameter is greater than approximately one-third of the chuck diameter and the workpiece is well-supported axially close to its outer periphery, the distance to the machining point from the outer end face of the jaws should not normally exceed three-quarters of the workpiece diameter. This is based on the assumption that the axial length of the workpiece gripped by the jaws is not less than one-tenth of the workpiece diameter. The proportions for this condition are shown in figure 2.

Figure 2 For d greater than D/3




Max h = 3/4d  Min H = 1/10d

If these conditions cannot be satisfied, support by the machine's tailstock should be considered.

With slender or thin-walled tubular workpieces, care should be taken to ensure that the workpiece is sufficiently rigid to withstand the cutting force incurred.

The position of the top jaw securing screws is important with tee-slotted and serrated type jaws, particularly when split tee nuts are used. The centers of the screws should always be within the length of the base jaw. In addition, the center distance between pairs of screws on chucks

with split tee nuts should always be as large as possible to restrain any lifting effect. It is particularly important that the inner screws should be as far forward as possible to counteract the couple arising from application of the gripping force at some distance above the chuck face.

If distortion occurs with thin-walled workpieces, the amount may be reduced by lowering the chuck's operating pressure thus reducing the gripping force. In general the amount of distortion reduces in direct proportion to gripping force. Thus, halving the gripping force will reduce distortion to one-half of the original amount. Extreme care should be exercised in lowering the chuck's operating pressure since the resulting lower gripping force may be inadequate to hold the workpiece at high speed due to the effect of centrifugal force. In many cases it is better to overcome distortion problems by using wraparound top jaws. These should preferably contact the workpiece circumferentially at six-equally spaced points with the gripping force distributed equally between all six points. If this ideal arrangement is achieved the resulting distortion will be reduced to approximately 1/20th of that experienced with an equivalent total gripping force distributed over only three grip points. When the diameter to be gripped is not perfectly round the provision of a rocking top jaw arrangement may be necessary to ensure that the total gripping force is equally distributed between all six grip points.

Where it is desired to ensure that the turned end face of a workpiece is perfectly parallel with a previously machined rear face, the use of end location stops should be considered. These are fitted directly to the chuck body so that the machined face of the workpiece rests against them rather than on the top jaw step faces. Tapped holes are provided in most chucks on their front face for this purpose. Three locators of equal length should be used, positioned at as large a diameter as possible. For extreme accuracy the end faces of the locators may be machined in position on the chuck with the top jaws temporarily removed.

Top jaws can be used for holding workpieces either externally or internally and should be positioned on the chuck's base jaws accordingly. When fitting top jaws they should be located to grip the mean workpiece diameter at the master jaw at mid-stroke position, which is indicated when master jaws are flush with the chuck O.D.

The effect of variations in workpiece grip diameters should be considered to ensure in the workpiece maximum metal condition that sufficient clearance exists with the jaws fully opened to permit insertion of the workpiece. It is even more important to ensure that in the workpiece minimum metal condition the jaws do not close an excessive amount to guarantee that the workpiece is securely gripped. The latter is important from a safety aspect since it is possible with an undersize workpiece for the jaws to close to their end-of-stroke position while only loosely holding the part. As a safety check to ensure that the workpiece is gripped, rotating hydraulic cylinders can be fitted with electrical proximity probes to detect the end-of-stroke condition.

The length of the workpiece and its axial location when loaded are important to prevent an excessive depth of cut occurring during end facing operations. This in the extreme case may dislodge the workpiece from the chuck jaws. Similarly, variations in unmachined diameters of forged and cast workpieces should be considered to ensure that an excessive depth of cut does not inadvertently occur. In certain cases an additional preliminary pass of the tool may be necessary in the interest of safety.

Always check that all the top jaw securing screws are correctly tightened. Avoid over-tightening as this can spread the width of tee-slotted master jaws, distorting them and tightening their fit in the chuck body. Use top jaws conforming to flatness and fit tolerance standards since poor quality top jaws can also promote distortion of the chuck's master jaws. Cheap soft blank top jaws not conforming to the tolerance standards can be dangerous and should not be used.

**Pratt Burnerd's Constant Grip, Quick Change Jaw Chuck** will accept collet pads. Collet pads are ideal for bar stock work and are fitted to the inner end of the base jaws. Always ensure that the pads are correctly secured but do not over-tighten the pad expander plug as this can distort the chuck's base jaws.

Do not leave loose keys or tee nuts in the chuck as these will be thrown out if spindle rotation is started and may cause damage or injury. Always check that the workpiece is correctly loaded and securely gripped and ensure that the covers and guards are in place before commencing spindle rotation.

Please understand that the foregoing recommendations can only act as a general guide and may require modification depending on other factors such as the severity of the machining operation being carried out particularly where interrupted cutting conditions appertain.

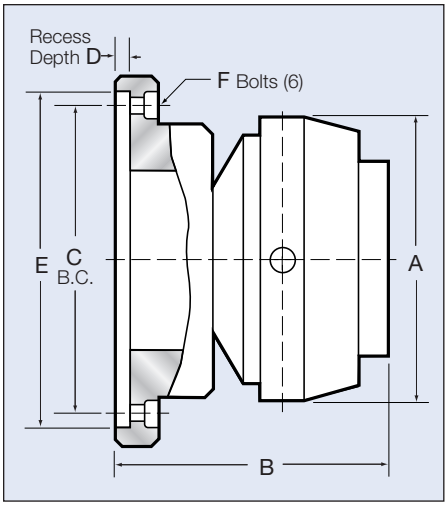
For KC Collets see page 110

# Manual Collet Chucks

## Key Operated KC Series

- Two-year warranty
- .001" repeatability
- Capacities from 1/16" through 2½"
- Precision manufactured to fit types A, D and L spindles and adapter recess
- Steel components are hardened and ground
- Simple operation. No drawbar or actuating cylinder required

| Chuck Size | Capacity | Uses Collet Type | Adapter Recess Model No. | Type A Spindle | | Type D Spindle | | Type L Spindle | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Spindle Size | Chuck Model No. | Spindle Size | Chuck Model No. | Spindle Size | Chuck Model No. |
| KC15 | 1/16" - 1-1/2" | EC | KC15/AP | | | D-3 | 6012-21300 | | |
| | | | | | | D-4 | 6012-31300 | L-00 | 6013-11300 |
| | | | | A-5 | 6011-31300 | D-5 | 6012-41300 | | |
| | | | (6010-01300) | A-6 | 6011-41300 | D-6 | 6012-51300 | L-0 | 6013-21300 |
| KC25 | 1/2" - 2-1/2" | EE | KC25/AP | | | D-6 | 6012-52100 | | |
| | | | | A-6 | 6011-42100 | D-8 | 6012-62100 | L-1 | 6013-32100 |
| | | | (6010-02100) | A-8 | 6011-52100 | D-11 | 6012-72100 | L-2 | 6013-42100 |




Other mounting available upon request.

### Dimensional and Performance Data

| Chuck Size | A | B | C | D | E | F | Max rpm | Wt lbs |
|---|---|---|---|---|---|---|---|---|
| KC15/AP | 4.65 | 4.56 | 5.51 | .15 | 4.921 | M10 | 4000 | 16 |
| KC25/AP | 6.00 | 5.15 | 6.93 | .15 | 6.299 | M10 | 3000 | 30 |

HOW TO ORDER: State quantity, model number, spindle specification and shipping instructions.

# KC Series
# Multisize Collets

## Advantages of the Pratt Burnerd Multisize Collets

**WIDE RANGE CAPACITY**
Each multisize collet has a gripping range of .125" with an extended range of .010" above and below each nominal size for a total range of .145" per collet.

**ADAPTABILITY**
Fractional, decimal, metric and non-standard bar sizes are all accommodated as the collet range is stepless. The collets will accept round and hexagonal bars.

**UNEQUALLED ACCURACY**
Each collet is inspected to .0005 maximum eccentricity at the nose of the collet.

**NO DISTORTION**
Geometrically designed. Ensures freedom from collet distortion and provides constant parallel grip throughout the gripping range with even wear and long life.

**ALL STEEL COLLETS**
Collet blades are all hardened and ground.

**INTERCHANGEABILITY**
Multisize collets are interchangeable between the various types of Pratt Burnerd collet chucks.

**MULTISIZE COLLETS**
Multisize collets are available with smooth blades or serrated blades for gripping black or scaly type material.

| Use with chucks prefixed by No.<br><br>Capacity Collets | KC-15<br><br>Collet Numbers | KC-25<br><br>Collet Numbers |
|---|---|---|
| 1/16 - 3/16 | EC2<br>3150-30200 | - |
| 1/8 - 1/4 | EC3<br>3150-30300 | - |
| 1/4 - 3/8 | EC4<br>3150-30400 | - |
| 3/8 - 1/2 | EC5<br>3150-30500 | - |
| 1/2 - 5/8 | EC6<br>3150-30600 | EE6<br>3150-50600 |
| 5/8 - 3/4 | EC7<br>3150-30700 | EE7<br>3150-50700 |
| 3/4 - 7/8 | EC8<br>3150-30800 | EE8<br>3150-50800 |
| 7/8 - 1 | EC9<br>3150-30900 | EE9<br>3150-50900 |
| 1 - 1-1/8 | EC10<br>3150-31000 | EE10<br>3150-51000 |
| 1-1/8 - 1-1/4 | EC11<br>3150-31100 | EE11<br>3150-51100 |
| 1-1/4 - 1-3/8 | EC12*<br>3150-31200 | EE12<br>3150-51200 |
| 1-3/8 - 1-1/2 | EC13*<br>3150-31300 | EE13<br>3150-51300 |
| 1-1/2 - 1-5/8 | - | EE14<br>3150-51400 |
| 1-5/8 - 1-3/4 | - | EE15<br>3150-51500 |
| 1-3/4 - 1-7/8 | - | EE16<br>3150-51600 |
| 1-7/8 - 2 | - | EE1<br>3150-51700 |
| 2 - 2-1/8 | - | EE18<br>3150-51800 |
| 2-1/8 - 2-1/4 | - | EE19<br>3150-51900 |
| 2-1/4 - 2-3/8 | - | EE20<br>3150-52000 |
| 2-3/8 - 2-1/2 | - | EE21<br>3150-52100 |
| Complete Set | EC14<br>3160-31300 | EE22<br>3160-52100 |

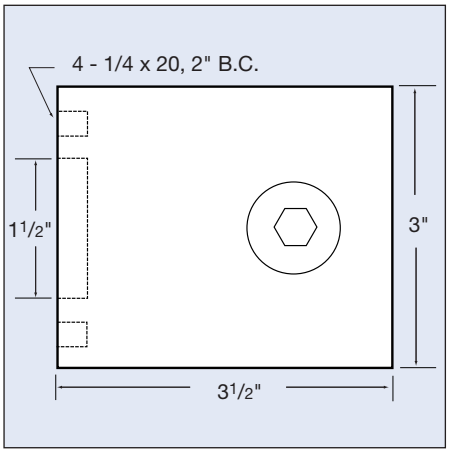
*For round stock only.

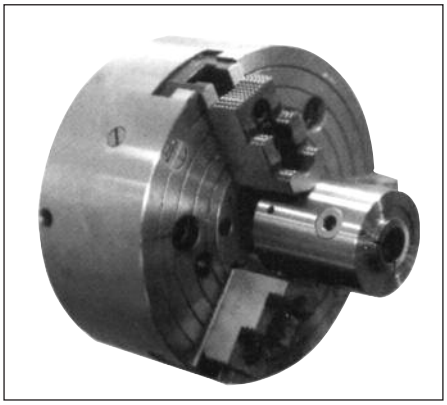
HOW TO ORDER: State quantity, Collet number and shipping instructions.

# Quick Change 5C Collet Chuck

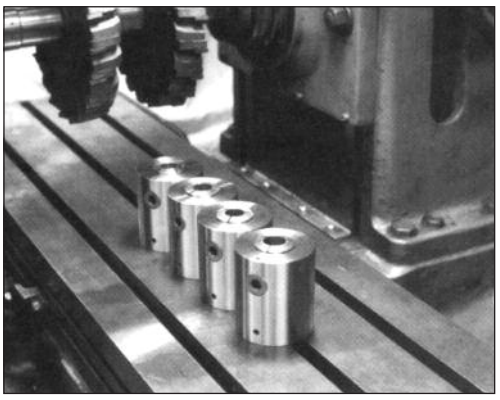
## Atlas Model No. COL5C

- One-year warranty
- Quickly change from chuck work to collet work
- Hold the collet chuck O. D. in your power or manual chucks
- Mount in vertical mills, horizontal mills and machining centers
- Drilled and tapped for fixture mounting
- Dead length
- Hardened and ground
- No set-up
- Hex key included



Ideal for short run production on CNC lathes. No tear down or change over

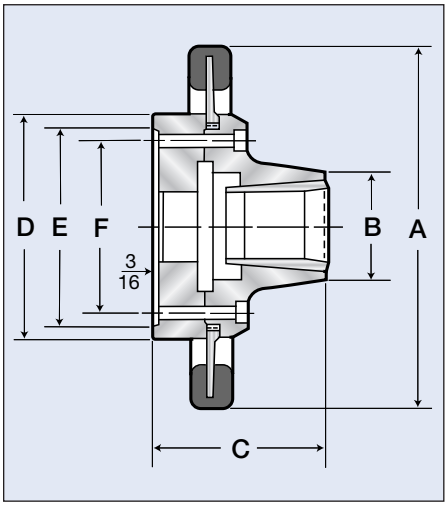


Stack units for multiple part production

HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.

# Front Hand Wheel Quickie 5C Collet Chucks

- Fast and easy, front hand wheel operation
- Reduces operator fatigue
- Quick Change over Chuck to Collet Chuck - No linkages or drawtubes
- For 5C collets
- One year warranty
- Accurate-Maximum cone TIR .0005"
- Available in D type (camlock), A type, L type (long tapered nose) threaded, Flat Back and 4° taper
- Hand wheel teeth nitrided for longer life
- Body nickel plated for corrosion resistance




Uses 5C Collets see page 88-89

## Plain Back Chuck Specifications

| Item No. | Desc. | Collet Type | Round Cap. | A | B | C** | D | E | F | Weight |
|---|---|---|---|---|---|---|---|---|---|---|
| PB23-00 | 5C-PB | 5C | 1.06 | 9.0* | 2.25 | 4.25 | 5.5 | 5.0 | 4.12 | 19 |

## D Type Cam-Lock Chuck Specifications

| Item No. | Spindle | Round Cap. | Weight Lbs |
|---|---|---|---|
| PB23-D3 | D1-3 | 1.06 | 22 |
| PB23-D4 | D1-4 | 1.06 | 22 |
| PB23-D5 | D1-5 | 1.06 | 22 |
| PB23-D6 | D1-6 | 1.06 | 25 |
| PB23-D8 | D1-8 | 1.06 | 30 |
| PB23-D11 | D1-11 | 1.06 | 35 |

## A Type American Standard Chuck Specifications

| Item No. | Spindle | Round Cap. | Weight Lbs |
|---|---|---|---|
| PB23-A4 | A1-4 | 1.06 | 22 |
| PB23-A5 | A1-5 | 1.06 | 22 |
| PB23-A6 | A1-6 | 1.06 | 25 |
| PB23-A8 | A1-8 | 1.06 | 28 |
| PB23-A11 | A1-11 | 1.06 | 33 |

## L Type American Standard Chuck Specifications

| Item No. | Spindle | Round Cap. | Weight Lbs |
|---|---|---|---|
| PB23-L00 | L00 | 1.06 | 23 |
| PB23-L0 | L0 | 1.06 | 25 |
| PB23-L1 | L1 | 1.06 | 35 |
| PB23-L2 | L2 | 1.06 | 40 |

## Threaded Mount Chuck Specifications

| Item No. | Spindle | Round Cap. | Weight Lbs |
|---|---|---|---|
| PB23-41 | 1-1/2-8 | 1.06 | 23 |
| PB23-42 | 1-3/4-8 | 1.06 | 23 |
| PB23-43 | 2-1/4-8 | 1.06 | 23 |
| PB23-44 | 4° Taper | 1.06 | 25 |
| PB23-45 | 2-3/16-10 | 1.06 | 23 |
| PB23-46 | 2-3/8-6 | 1.06 | 23 |

***Dimension C is chuck without spindle adapter mounting plate. Add approximately 1.125" to dimension C. If exact 'B' Dimension with mounting plate is required contact factory.*



HOW TO ORDER: State quantity, Item number and shipping instructions.

5C Collet Chuck

16C Collet Chuck

Uses 5C Collets see page 88-89
or 16C Collets see page 90-91

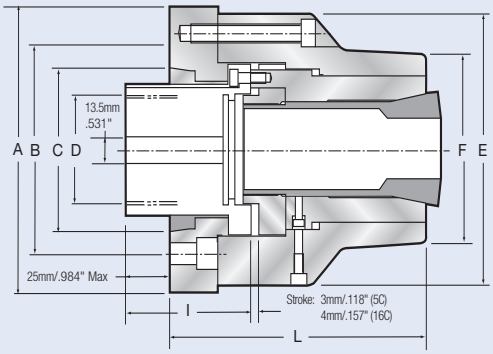
# 5C & 16C Dead Length & Pull Back Collet Power Chucks

## A Type Mount

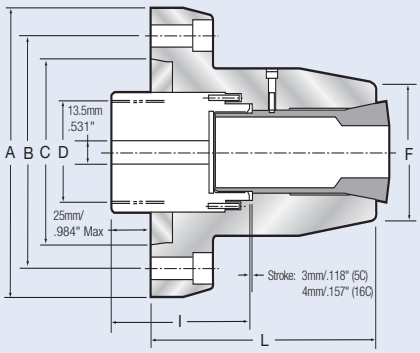
- Short overall length excellent for main or sub-spindle applications.
- Chuck accuracy is 0003" TIR from rear mounting register and working collet taper.
- High speed up to 6000 rpm
- Body nickel plated for corrosion resistance
- Hardened and ground main body and cone
- Dead Length feature eliminates part pullback
- Straight recess or available with A type mountings. Other mounting types available on request
- In second operations work, shoulder components can be stopped against the face of the collet
- Both collet types are internally threaded in the rear end to house either a backstop or ejector if required
- Drawback Spring Collets achieve the highest possible concentric accuracy
- Chuck includes threaded connector to customers specifications

### *5C & 16C Dead Length*

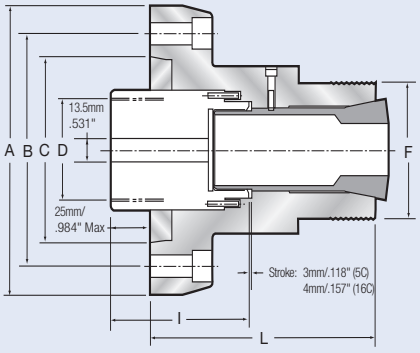
| Chuck Type | 5C | 5C | 16C | 16C |
|---|---|---|---|---|
| Spindle Mount | A2-5 | A2-6 | A2-5 | A2-6 |
| A (mm/in) | 137/5.393 | 158/6.220 | 137/5.393 | 158/6.220 |
| B (mm/in) | 104.8/4.125 | 133.4/5.252 | 104.8/4.125 | 133.4/5.252 |
| C (mm/in) | 82.56/3.250 | 106.38/4.188 | 82.56/3.250 | 106.38/4.188 |
| D (mm/in) | Max. M65 | Max. M65 | Max. M65 | Max. M65 |
| E (mm/in) | 137/5.393 | 137/5.393 | 137/5.393 | 137/5.393 |
| F (mm/in) | 78/3.071 | 78/3.071 | 90/3.543 | 90/3.543 |
| I (mm/in) | 68/2.677 | 68/2.677 | 68/2.677 | 68/2.677 |
| L (mm/in) | 122/4.803 | 122/4.803 | 145/5.708 | 145/5.708 |
| Maximum Force | 1800kaf/3968lbf | 1800kaf/3968lbf | 2300kaf/5070lbf | 2300kaf/5070lbf |
| Maximum RPM | 6000 | 6000 | 5000 | 5000 |
| Chuck Order No. | CPD-5CA5 | CPD-5CA6 | CPD-16CA5 | CPD-16CA6 |




Dead Length Type




Pull Back Type




Pull Back Threaded Nose

### *5C & 16C Pull Back*

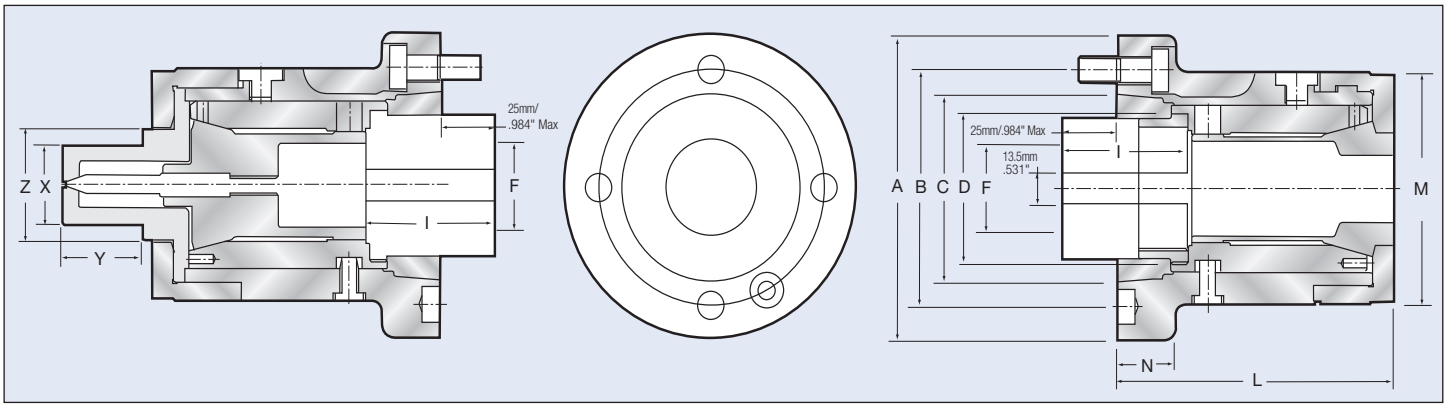
| Chuck Type | 5C | 5C | 5C Threaded | 5C Threaded | 16C | 16C |
|---|---|---|---|---|---|---|
| Spindle Mounting | A2-5 | A2-6 | A2-5 | A2-6 | A2-5 | A2-6 |
| A (mm/in) | 137/5.393 | 166/6.535 | 137/5.393 | 166/6.535 | 137/5.393 | 166/6.535 |
| B (mm/in) | 104.8/4.125 | 133.4/5.252 | 104.8/4.125 | 133.4/5.252 | 104.8/4.125 | 133.4/5.252 |
| C (mm/in) | 82.56/3.250 | 106.38/4.188 | 82.56/3.250 | 106.38/4.188 | 82.56/3.250 | 106.38/4.188 |
| D (mm/in) | Max. M58 | Max. M65 | Max. M65 | Max. M58 | Max. M58 | Max. M65 |
| F (mm/in) | 70/2.756 | 70/2.756 | 55/2.187-10T | 55/2.187-10T | 76/2.992 | 80/3.149 |
| I (mm/in) | 83/3.267 | 83/3.267 | 83/3.267 | 83/3.267 | 89/3.504 | 89/3.504 |
| L (mm/in) | 122/4.803 | 122/4.803 | 122/4.803 | 122/4.803 | 145/5.708 | 145/5.708 |
| Maximum Force | 1800kgf/3968lbf | 1800kgf/3968lbf | 1800kgf/3968lbf | 1800kgf/3968lbf | 2300kgf/5070lbf | 2300kgf/5070lbf |
| Maximum RPM | 6000 | 6000 | 6000 | 6000 | 5000 | 5000 |
| Chuck Order No. | CPB-5CA5 | CPB-5CA6 | CPB-5CA5-TH | CPB-5CA6-TH | CPB-16CA5 | CPB-16CA6 |

Uses B Type Spring Collets
see page 92-96
or Din 6343 Multibore Collets
see page 99

# CPC Series Dead-Length Collet Chucks

## Use with B type Spring or DIN 6343 Multibore Collets

- Ideal for bar work or for second operation work.
- Precision dead-length operation
- High speed up to 8000 rpm
- Body nickel plated for corrosion resistance
- Repeatability .0001” (0.0025mm) on duplicate parts
- Large thru-hole up to 3.15" (80mm)
- Collets are available for Round, Hex or Square parts
- Large clamping force up to 16,060 lbf (7300 kgf)
- CPC collet types: B42, B60 and B80 or Multi-Bore Din 6343 Collets
- 1 Year Warranty
- Chuck includes threaded connector to customers specifications




*CPC Series for B type Spring or DIN 6343 Multi-Bore Collets*

| Order Number | CPC-42A5 | CPC-42A6 | CPC-60A6 | CPC-60A8 | CPC-80A8 |
|---|---|---|---|---|---|
| Spindle Mounting | A2-5 | A2-6 | A2-6 | A2-8 | A2-8 |
| A (mm/in) | 135/5.31 | 170/6.69 | 170/6.69 | 220/8.66 | 220/8.66 |
| B (mm/in) | 104.8/4.13 | 133.4/5.25 | 133.4/5.25 | 171.4/6.75 | 171.4/6.75 |
| C (mm/in) | 82.56/3.25 | 106.3/4.19 | 106.3/4.19 | 139.7/5.50 | 139.7/5.50 |
| D | M66 x P15 | M66 x P15 | M90 x P15 | M90 x P15 | M114 x P2.0 |
| F (Max Threading) | M60 | M60 | M90 | M90 | M100 |
| I (mm/in) | 57/2.244 | 69/2.176 | 66/2.598 | 66/2.598 | 72/2.834 |
| M (mm/in) | 103/4.06 | 103/4.06 | 132/5.20 | 132/5.20 | 155/6.10 |
| N (mm/in) | 27/1.06 | 32/1.26 | 27/1.06 | 32/1.26 | 35/1.38 |
| L (mm/in) | 129/5.08 | 133/5.24 | 155/6.10 | 155/6.10 | 175/6.89 |
| X (mm/in) Std-Max | 16/.63-50/1.968 | 16/.63-50/1.968 | - | - | - |
| Y (mm/in) Std-Max | 40/1.57-80/3.15 | 40/1.57-80/3.15 | - | - | - |
| Mount Screw | M10 x 4 | M12 x 4 | M12 x 6 | M16 x 6 | M16 x 6 |
| Collet (Spring/Multi-Bore) | B42/173E | B42/173E | B60/185E | B60/185E | B80/193E |
| Taper Stroke | 6.0/0.24 | 6.0/0.24 | 6.0/0.24 | 6.0/0.24 | 6.0/0.24 |
| Chuck Thru-Hole (mm/in) | 42/1.65 | 42/1.65 | 60/2.36 | 60/2.36 | 80/3.15 |
| Draw Bar Force (kgf/lbf) | 2500/5500 | 2500/5500 | 3000/6600 | 3000/6600 | 3500/7700 |
| Clamping Force (kgf/lbf) | 5400/11800 | 5400/11800 | 6500/14300 | 6500/14300 | 7300/16060 |
| Max rpm | 6000 | 6000 | 5000 | 5000 | 4000 |
| I.D Function | No | No | No | No | No |

HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.

Uses 5C Collets see page 88-89

**Collet Chuck Order No. with Mount:**

**ATL206-5C**

**Straight Recess Mount**
**Type A Mount**
**ATL206-5CA4**
**ATL206-5CA5**
**ATL206-5CA6**
**ATL206-5CA8**

**Type D Mount**
**ATL206-5CD3**
**ATL206-5CD4**
**ATL206-5CD5**
**ATL206-5CD6**
**ATL206-5CD8**

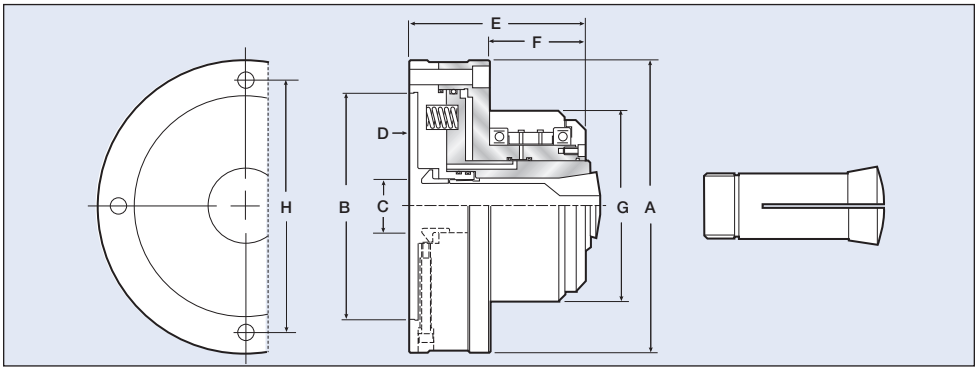
**Other Mounts**
**ATL206-5C43-2¼-8**
**ATL206-5C44-4°-Taper**
**ATL206-5C45-2³⁄₁₆-10**
**ATL206-5C46-2⅜-6**

**Collet Chuck Supplied with:**
- 2 Filter Bars
- 2 Air Hoses
- 1 Fixing Bracket for Hoses
- 1 5C Collet Wrench
- 1 Hex Key
- Mounting Bolts
- Users Manual

# Air Powered Front Mount 5C Dead Length Collet Chucks

## No Draw-tube or Air Feed Tubes Required: for Lathes, Rotary Tables and Grinders: Series ATL206-5C

- No Hydraulic System Required
- No Draw Tube or Air Feed Tubes Restricting Spindle Bore
- No Rear Cylinders and Cylinder Adapters
- Low Cost
- Easily Convert any Lathe or Grinder into a Production Machine
- Ideal for Rotary Table Applications
- Change from Collet Chuck to Standard Chuck Quick and Easy
- High Speed 4000 RPM
- High Accuracy Less Then .001" TIR
- Repeats on Duplicate Parts Plus Minus .00015"
- Dead Length Design
- For Best Accuracy Use High Quality Crawford Collets
- Lever or Foot Pedal Actuated
- Low Maintenance with Oil Mist Lubrication System
- High Resistance to Coolant and Chip Penetration
- Uses 5C Collets, Range 1/64" (.5mm) to 1-1/8" (27mm)
- Available in A, D, L, 4 Degree, Threaded and Straight Recess Mounting




| Collet Chuck | ATL206-5C |
|---|---|
| A | 168mm (6.61") |
| B | 130mm (5.12") |
| C | 26mm (1.02") |
| D | 5mm (0.20") |
| E | 100mm (3.94") |
| F | 55mm (2.17") |
| G | 106mm (4.17") |
| H | 147mm (5.79") |

| Specifications | ATL206-5C |
|---|---|
| Screw Hole Dia | 9mm (0.35") x 4 |
| Collet Type | 5C Collets |
| Max. RPM | 4000 |
| Sleeve Stroke | 4mm (0.16") |
| Air Pressure | 3-8 kg/cm$^2$ (42-114 psi) |
| Through Hole Dia | 26mm (1.06") |
| Chuck Weight | 10kg (22lbs) |
| Grip Force | 10,500 lbs @ 100 PSI |

**NOTE:** "E" shown is for model ATL206-5C Collet Chuck with no mounting plate. Add 3/4" to the "E" dimension for mounting plate. This will vary slightly depending on the mounting required. If an exact "E" dimension is required, consult factory.

**OPTIONS:** **Order No: LEV100** Lever Control Package: *(Includes: Lever Control, Line Filter, Lubricator and regulator.*
**Order No: FOT200** Foot Pedal Control Package: *(Includes: Foot Pedal, Line Filter, Lubricator and regulator.*

# Air Powered Front Mount 16C Dead Length Collet Chucks

## No Draw-tube or Air Feed Tubes Required: for Lathes, Rotary Tables and Grinders: Series ATL207-16C

Uses 16C Collets see page 90-91

**Collet Chuck Order No. with Mount:**

**ATL207-16CAP**

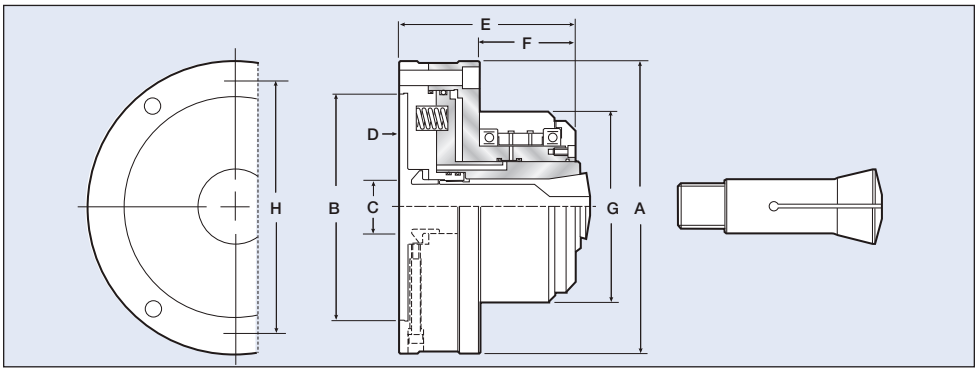
**Straight Recess Mount**
**Type A Mount**
**ATL207-16CA5**
**ATL207-16CA6**
**ATL207-16CA8**

**Type D Mount**
**ATL207-16CD4**
**ATL207-16CD5**
**ATL207-16CD6**
**ATL207-16CD8**

**Other Mounts**
**ATL207-16C44-4° Taper**
**ATL207-16C45-2 3/16-10**
**ATL207-16C46-2 3/8-6**

**Collet Chuck Supplied with:**
- 2 Filter Bars
- 2 Air Hoses
- 1 Fixing Bracket for Hoses
- 1 16C Collet Wrench
- 1 Hex Key
- Mounting Bolts
- Users Manual

- No Hydraulic System Required
- No Draw Tube or Air Feed Tubes Restricting Spindle Bore
- No Rear Cylinders and Cylinder Adapters
- Low Cost
- Easily Convert any Lathe or Grinder into a Production Machine
- Ideal for Rotary Table Applications
- Change from Collet Chuck to Standard Chuck Quick and Easy
- High Speed 3500 RPM
- High Accuracy Less Then .001" TIR7
- Repeats on Duplicate Parts Plus Minus .00015"
- Dead Length Design
- For Best Accuracy Use High Quality Crawford Collets
- Lever or Foot Pedal Actuated
- Low Maintenance with Oil Mist Lubrication System
- High Resistance to Coolant and Chip Penetration
- Uses 16C Collets, Range 1/16" (1mm) to 1-5/8" (42.5mm)
- Available in A, D, L, 4 Degree, Threaded and Straight Recess Mounting




| Collet Chuck | ATL207-16C |
|---|---|
| A | 195mm (7.67") |
| B | 160mm (6.30") |
| C | 40mm (1.57") |
| D | 5mm (0.20") |
| E | 112mm (4.41") |
| F | 63mm (2.48") |
| G | 133mm (5.23") |
| H | 176mm (6.93") |

| Specifications | ATL207-16C |
|---|---|
| Screw Hole Dia | 9mm (0.35") x 3 |
| Collet Type | 16C Collets |
| Max. RPM | 3500 |
| Sleeve Stroke | 4mm (0.16") |
| Air Pressure | 3-8 kg/cm$^2$ (42-114 psi) |
| Through Hole Dia | 40mm (1.57") |
| Chuck Weight | 14kg (30.8lbs) |
| Grip Force | 12,300 lbs @ 100 PSI |

**NOTE:** "E" shown is for model ATL207-16C Collet Chuck with no mounting plate. Add 3/4" to the "E" dimension for mounting plate. This will vary slightly depending on the mounting required. If an exact "E" dimension is required, consult factory.

**OPTIONS:** **Order No: LEV100** Lever Control Package: *(Includes: Lever Control, Line Filter, Lubricator and regulator.*
**Order No: FOT200** Foot Pedal Control Package: *(Includes: Foot Pedal, Line Filter, Lubricator and regulator.*

Uses B42 Collets see page 92-93

**Collet Chuck Order No. with Mount:**

**ATL207-B42**

**Straight Recess Mount Type A Mount**
**ATL207-B42A5**
**ATL207-B42A6**
**ATL207-B42A8**

**Type D Mount**
**ATL207-B42D4**
**ATL207-B42D5**
**ATL207-B42D6**
**ATL207-B42D8**

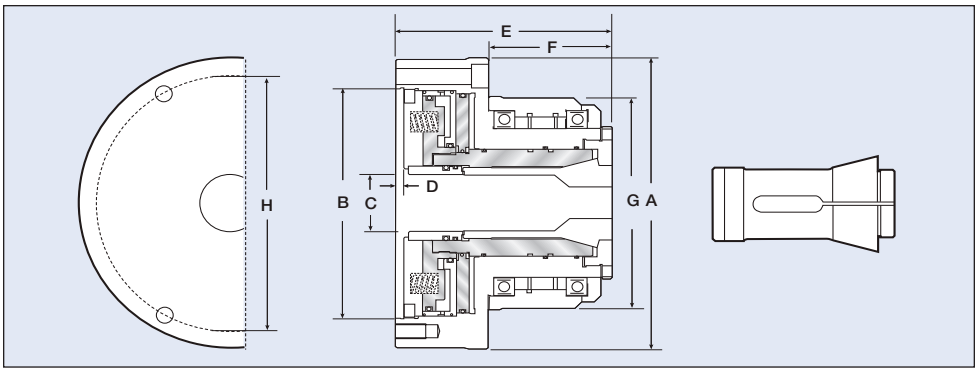
**Other Mounts**
**ATL207-B4244-4°-Taper**
**ATL207-B4245-2 3/16-10**
**ATL207-B4246-2 3/8-6**

**Collet Chuck Supplied with:**
- 2 Filter Bars
- 2 Air Hoses
- 1 Fixing Bracket for Hoses
- 1 Hex Key
- Mounting Bolts
- Users Manual

# Air Powered Front Mount B42 Dead Length Collet Chucks

## No Draw-tube or Air Feed Tubes Required: for Lathes, Rotary Tables and Grinders: Series ATL207-B42

- No Hydraulic System Required
- No Draw Tube or Air Feed Tubes Restricting Spindle Bore
- No Rear Cylinders and Cylinder Adapters
- Low Cost
- Easily Convert any Lathe or Grinder into a Production Machine
- Ideal for Rotary Table Applications
- Change from Collet Chuck to Standard Chuck Quick and Easy
- High Speed 2500 RPM
- High Accuracy Less Then .001" TIR
- Repeats on Duplicate Parts Plus Minus .00015"
- Dead Length Design
- For Best Accuracy Use High Quality Crawford Collets
- Lever or Foot Pedal Actuated
- Low Maintenance with Oil Mist Lubrication System
- High Resistance to Coolant and Chip Penetration
- Uses B42 Collets, Range 1/16" (1mm) to 1-5/8" (42.5mm)
- Available in A, D, L, 4 Degree, Threaded and Straight Recess Mounting




| Collet Chuck | ATL207-B42 |
|---|---|
| A | 196mm (7.72") |
| B | 155mm (6.10") |
| C | 42mm (1.65") |
| D | 5mm (0.20") |
| E | 136mm (5.35") |
| F | 75mm (2.95") |
| G | 150mm (5.92") |
| H | 172mm (6.77") |

| Specifications | ATL207-B42 |
|---|---|
| Screw Hole Dia | 11mm (0.43") x 3 - M10 x P1.5 x 3 |
| Collet Type | B42 Collets |
| Max. RPM | 2500 |
| Sleeve Stroke | 4mm (0.16") |
| Air Pressure | 3-8 kg/cm$^2$ (42-114 psi) |
| Through Hole Dia | 42mm (1.65") |
| Chuck Weight | 16kg (35.2lbs) |
| Grip Force | 13,000 lbs @ 100 PSI |

**NOTE:** "E" shown is for model ATL207-B42 Collet Chuck with no mounting plate. Add 3/4" to the "E" dimension for mounting plate. This will vary slightly depending on the mounting required. If an exact "E" dimension is required, consult factory.

**OPTIONS:** **Order No: LEV100** Lever Control Package: *(Includes: Lever Control, Line Filter, Lubricator and regulator.*
**Order No: FOT200** Foot Pedal Control Package: *(Includes: Foot Pedal, Line Filter, Lubricator and regulator.*

Uses B60 Collets see page 94-95

**Collet Chuck Order No. with Mount:**

**ATL208-B60**

**Straight Recess Mount Type A Mount**
**ATL208-B60A5**
**ATL208-B60A6**
**ATL208-B60A8**

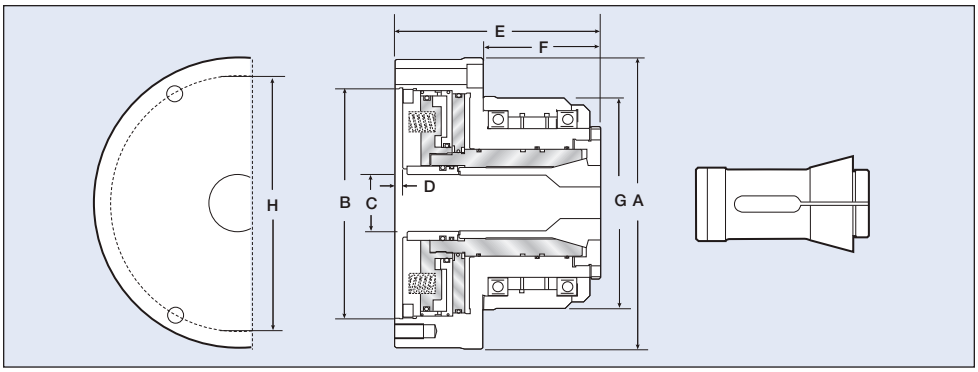
**Type D Mount**
**ATL208-B60D4**
**ATL208-B60D5**
**ATL208-B60D6**
**ATL208-B60D8**

**Collet Chuck Supplied with:**
- 2 Filter Bars
- 2 Air Hoses
- 1 Fixing Bracket for Hoses
- 1 Hex Key
- Mounting Bolts
- Users Manual

# Air Powered Front Mount B60 Dead Length Collet Chucks

## No Draw-tube or Air Feed Tubes Required: for Lathes, Rotary Tables and Grinders: Series ATL208-B60

- No Hydraulic System Required
- No Draw Tube or Air Feed Tubes Restricting Spindle Bore
- No Rear Cylinders and Cylinder Adapters
- Low Cost
- Easily Convert any Lathe or Grinder into a Production Machine
- Ideal for Rotary Table Applications
- Change from Collet Chuck to Standard Chuck Quick and Easy
- High Speed 2500 RPM
- High Accuracy Less Then .001" TIR
- Repeats on Duplicate Parts Plus Minus .0002"
- Dead Length Design
- For Best Accuracy Use High Quality Crawford Collets
- Lever or Foot Pedal Actuated
- Low Maintenance with Oil Mist Lubrication System
- High Resistance to Coolant and Chip Penetration
- Uses B60 Collets, Range 1/16" (1mm) to 2-3/8" (60.5mm)
- Available in A, D, L, Threaded and Straight Recess Mounting




| Collet Chuck | ATL208-B60 |
|---|---|
| A | 207mm (8.15") |
| B | 170mm (6.69") |
| C | 60.5mm (2.37") |
| D | 5mm (0.20") |
| E | 148mm (5.83") |
| F | 86mm (3.39") |
| G | 168mm (6.61") |
| H | 186mm (7.32") |

| Specifications | ATL208-B60 |
|---|---|
| Screw Hole Dia | 11mm (0.43") x 3 - M10 x P1.5 x 3 |
| Collet Type | B60 Collets |
| Max. RPM | 2500 |
| Sleeve Stroke | 4mm (0.16") |
| Air Pressure | 3-8 kg/cm$^2$ (42-114 psi) |
| Through Hole Dia | 65mm (2.375") |
| Chuck Weight | 18.kgkg (42.6lbs) |
| Grip Force | 15,950 lbs @ 100 PSI |

**NOTE:** "E" shown is for model ATL208-B60 Collet Chuck with no mounting plate. Add 3/4" to the "E" dimension for mounting plate. This will vary slightly depending on the mounting required. If an exact "E" dimension is required, consult factory.

**OPTIONS:** **Order No: LEV100** Lever Control Package: *(Includes: Lever Control, Line Filter, Lubricator and regulator.*
**Order No: FOT200** Foot Pedal Control Package: *(Includes: Foot Pedal, Line Filter, Lubricator and regulator.*

# Air Powered Front Mount B80 Dead Length Collet Chucks

## No Draw-tube or Air Feed Tubes Required: for Lathes, Rotary Tables and Grinders: Series ATL210-B80

Uses B80 Collets see page 96

**Collet Chuck Order No. with Mount:**

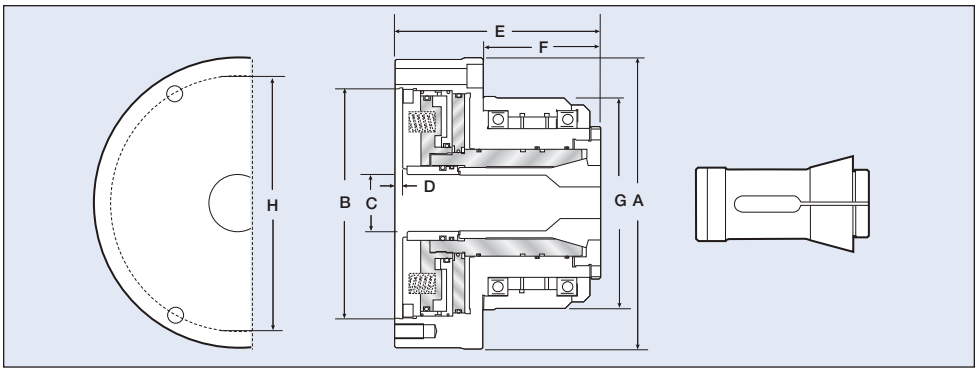
**ATL210-B80**

**Straight Recess Mount Type A Mount**
**ATL210-B80A5**
**ATL210-B80A6**
**ATL210-B80A8**

**Type D Mount**
**ATL210-B80D5**
**ATL210-B80D6**
**ATL210-B80D8**

**Collet Chuck Supplied with:**
- 2 Filter Bars
- 2 Air Hoses
- 1 Fixing Bracket for Hoses
- 1 Hex Key
- Mounting Bolts
- Users Manual

- No Hydraulic System Required
- No Draw Tube or Air Feed Tubes Restricting Spindle Bore
- No Rear Cylinders and Cylinder Adapters
- Low Cost
- Easily Convert any Lathe or Grinder into a Production Machine
- Ideal for Rotary Table Applications
- Change from Collet Chuck to Standard Chuck Quick and Easy
- High Speed 2000 RPM
- High Accuracy Less Then .001" TIR
- Repeats on Duplicate Parts Plus Minus .0002"
- Dead Length Design
- For Best Accuracy Use High Quality Crawford Collets
- Lever or Foot Pedal Actuated
- Low Maintenance with Oil Mist Lubrication System
- High Resistance to Coolant and Chip Penetration
- Uses B80 Collets, Range 1/16" (1mm) to 3.150" (80mm)
- Available in A, D, L, Threaded and Straight Recess Mounting




| Collet Chuck | ATL210-B80 |
|---|---|
| A | 246mm (9.67") |
| B | 200mm (7.87") |
| C | 80mm (3.15") |
| D | 5mm (0.20") |
| E | 152mm (5.98") |
| F | 80mm (3.15") |
| G | 196mm (7.72") |
| H | 226mm (8.90") |

| Specifications | ATL210-B80 |
|---|---|
| Screw Hole Dia | 11mm (0.43") x 6 |
| Collet Type | B80 Collets |
| Max. RPM | 2000 |
| Sleeve Stroke | 4mm (0.16") |
| Air Pressure | 3-8 kg/cm$^2$ (42-114 psi) |
| Through Hole Dia | 80mm (3.15") |
| Grip Force | 19,932 lbs @ 100 PSI |
| Chuck Weight | 32.kg (71.1lbs) |

**NOTE:** "E" shown is for model ATL210-B80 Collet Chuck with no mounting plate. Add 3/4" to the "E" dimension for mounting plate. This will vary slightly depending on the mounting required. If an exact "E" dimension is required, consult factory.

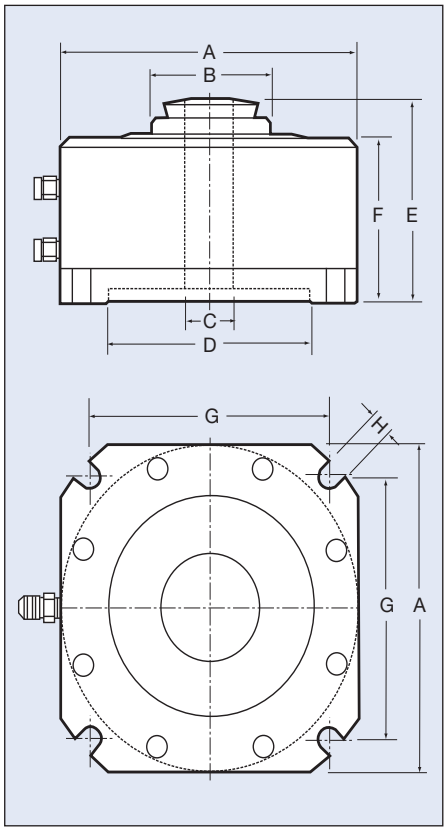
**OPTIONS:** **Order No: LEV100** Lever Control Package: *(Includes: Lever Control, Line Filter, Lubricator and regulator.*
**Order No: FOT200** Foot Pedal Control Package: *(Includes: Foot Pedal, Line Filter, Lubricator and regulator.*

Uses 5C Collets see page 88-89

# Stationary ATL225-5C Dead Length Collet Chuck

## Use for Pallets, Tombstones, Machining Centers, Standard Mills and Drill Presses

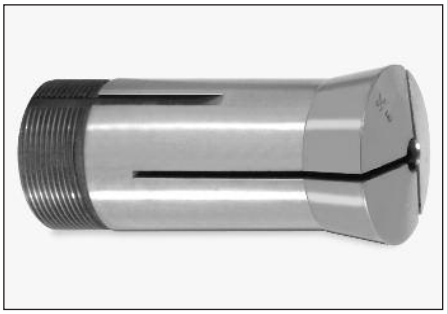
- Powered by Air and/or Hydraulics
- Small Foot Print
- Low Cost
- Easy to Install
- Repeatability Plus Minus .0012"-.002" (0.030-0.050mm)
- Dead Length Design
- Lever or Foot Pedal Actuated
- Low Maintenance with Oil Mist Lubrication System
- High Resistance to Coolant and Chip Penetration
- Low Maintenance, Long Life




ATL225-5C Collet Type

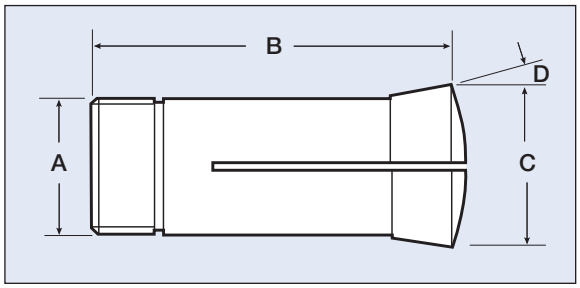
| Order Number | ATL225-5C |
|---|---|
| A (mm/in) | 144/5.67 |
| B (mm/in) | 55/2.17 |
| C (mm/in) | 26/1.02 |
| D (mm/in) | 100/3.94 |
| E (mm/in) | 95/3.74 |
| F (mm/in) | 75/2.95 |
| G (mm/in) | 117/4.65 |
| H (mm/in) | 8.5/0.33 |
| Working Collet/Jaws | 5C Collet |
| Air/Hydro Actuated | Air |
| Operating Pressure | 3-15kg/cm$^2$<br>43-214psi |
| Capacity Min.<br>Max. | 1.0mm/1/16"<br>27mm/1-1/8" |
| Piston Area | 112cm$^2$/17.4in$^2$ |
| Clamping Force | 4950 kgf@7kg/cm$^2$<br>7693 lbf@100psi |
| Net Weight | 9 kgs/19.8 lbs |

HOW TO ORDER: State quantity, Model Number of chuck and shipping instructions.



*See page 101 for Accuracy Chart*

# 5C Collets (Inch)




Dimensions

| A | B | C | D |
|---|---|---|---|
| 1.25" | 3.28" | 1.47" | 10° |

| Size | Round | Hex | Square |
|---|---|---|---|
| 1/16" | 0123-R-1/16 | - | - |
| 5/64" | 0123-R-5/64 | - | - |
| 3/32" | 0123-R-3/32 | - | - |
| 7/64" | 0123-R-7/64 | - | - |
| 1/8" | 0123-R-1/8 | H-0123-1/8 | S-0123-1/8 |
| 9/64" | 0123-R-9/64 | - | - |
| 5/32" | 0123-R-5/32 | - | - |
| 11/64" | 0123-R-11/64 | - | - |
| 3/16" | 0123-R-3/16 | H-0123-3/16 | S-0123-3/16 |
| 13/64" | 0123-R-13/64 | - | - |
| 7/32" | 0123-R-7/32 | - | - |
| 15/64" | 0123-R-15/64 | - | - |
| 1/4" | 0123-R-1/4 | H-0123-1/4 | S-0123-1/4 |
| 17/64" | 0123-R-17/64 | - | - |
| 9/32" | 0123-R-9/32 | - | - |
| 19/64" | 0123-R-19/64 | - | - |
| 5/16" | 0123-R-5/16 | H-0123-5/16 | S-0123-5/16 |
| 21/64" | 0123-R-21/64 | - | - |
| 11/32" | 0123-R-11/32 | - | - |
| 23/64" | 0123-R-23/64 | - | - |
| 3/8" | 0123-R-3/8 | H-0123-3/8 | S-0123-3/8 |
| 25/64" | 0123-R-25/64 | - | - |
| 13/32" | 0123-R-13/32 | - | - |
| 27/64" | 0123-R-27/64 | - | - |
| 7/16" | 0123-R-7/16 | H-0123-7/16 | S-0123-7/16 |
| 29/64" | 0123-R-29/64 | - | - |
| 15/32" | 0123-R-15/32 | - | - |
| 31/64" | 0123-R-31/64 | - | - |
| 1/2" | 0123-R-1/2 | H-0123-1/2 | S-0123-1/2 |
| 33/64" | 0123-R-33/64 | - | - |
| 17/32" | 0123-R-17/32 | - | - |
| 35/64" | 0123-R-35/64 | - | - |
| 9/16" | 0123-R-9/16 | H-0123-9/16 | S-0123-9/16 |
| 37/64" | 0123-R-37/64 | - | - |
| 19/32" | 0123-R-19/32 | - | - |
| 39/64" | 0123-R-39/64 | - | - |
| 5/8" | 0123-R-5/8 | H-0123-5/8 | S-0123-5/8 |
| 41/64" | 0123-R-41/64 | - | - |
| 21/32" | 0123-R-21/32 | - | - |
| 43/64" | 0123-R-43/64 | - | - |
| 11/16" | 0123-R-11/16 | H-0123-11/16 | S-0123-11/16 |
| 45/64" | 0123-R-45/64 | - | - |

*See page 124 for Accuracy Chart*

| Size | Round | Hex | Square |
|---|---|---|---|
| 23/32" | 0123-R-23/32 | - | - |
| 47/64" | 0123-R-47/64 | | - - |
| 3/4" | 0123-R-3/4 | H-0123-3/4 | S-0123-3/4 |
| 49/64" | 0123-R-49/64 | - | - |
| 25/32" | 0123-R-25/32 | - | - |
| 51/64" | 0123-R-51/64 | - | - |
| 13/16" | 0123-R-13/16 | H-0123-13/16 | - |
| 53/64" | 0123-R-53/64 | - | - |
| 27/32" | 0123-R-27/32 | - | - |
| 55/64" | 0123-R-55/64 | - | - |
| 7/8" | 0123-R-7/8 | - | - |
| 57/64" | 0123-R-57/64 | - | - |
| 29/32" | 0123-R-29/32 | - | - |
| 59/64" | 0123-R-59/64 | - | - |
| 15/16" | 0123-R-15/16 | - | - |
| 61/64" | 0123-R-61/64 | - | - |
| 31/32" | 0123-R-31/32 | - | - |
| 63/64" | 0123-R-63/64 | - | - |
| 1" | 0123-R-1 | - | - |
| 1-1/64" | 0123-R-1-1/64 | - | - |
| 1-1/32" | 0123-R-1-1/32 | - | - |
| 1-3/64" | 0123-R-1-3/64 | - | - |
| 1-1/16" | 0123-R-1-1/16 | - | - |
| 1-5/64" | 0123-R-1-5/64 | - | - |
| 1-3/32" | 0123-R-1-3/32 | - | - |
| 1-7/64" | 0123-R-1-7/64 | - | - |
| 1-1/8" | 0123-R-1-1/8 | - | - |

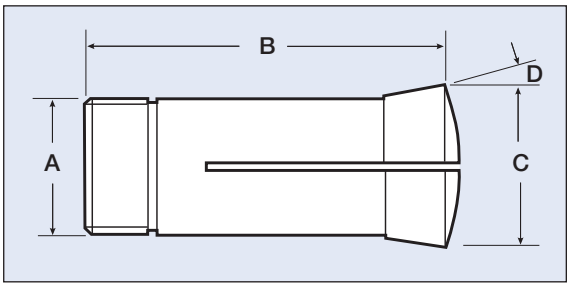
5C Emergency Collet Steel Collet 1/8" P/N: 5C Emergency

## 5C Round Collet Sets (inch)

| Set | No. of Collets | Part No. |
|---|---|---|
| 1/16"-1-1/16" x 64ths | 65 | 0123-SET-4 |
| 1/16"-1-1/16" x 32nds | 33 | 0123-SET-5 |
| 1/16"-1-1/16" x 16ths | 17 | 0123-SET-6 |
| 1/8"-1" x 8ths | 8 | 0123-SET-7 |

*See page 101 for Accuracy Chart*

# 5C Collets (Metric)




Dimensions

| A | B | C | D |
|---|---|---|---|
| 31.75 | 85.4 | 37.3 | 10° |

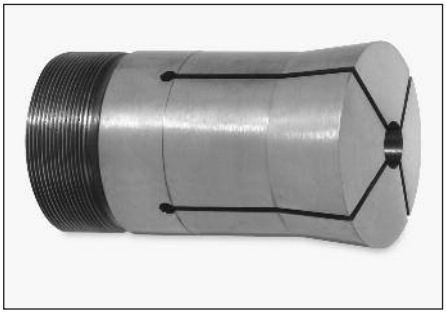
| Size | Part Number |
|---|---|
| 1.0mm | 0123-R-1.0mm |
| 1.5mm | 0123-R-1.5mm |
| 2.0mm | 0123-R-2.0mm |
| 2.5mm | 0123-R-2.5mm |
| 3.0mm | 0123-R-3.0mm |
| 3.5mm | 0123-R-3.5mm |
| 4.0mm | 0123-R-4.0mm |
| 4.5mm | 0123-R-4.5mm |
| 5.0mm | 0123-R-5.0mm |
| 5.5mm | 0123-R-5.5mm |
| 6.0mm | 0123-R-6.0mm |
| 6.5mm | 0123-R-6.5mm |
| 7.0mm | 0123-R-7.0mm |
| 7.5mm | 0123-R-7.5mm |
| 8.0mm | 0123-R-8.0mm |
| 8.5mm | 0123-R-8.5mm |
| 9.0mm | 0123-R-9.0mm |
| 9.5mm | 0123-R-9.5mm |
| 10.0mm | 0123-R-10.0mm |
| 10.5mm | 0123-R-10.5mm |
| 11.0mm | 0123-R-11.0mm |
| 11.5mm | 0123-R-11.5mm |
| 12.0mm | 0123-R-12.0mm |
| 12.5mm | 0123-R-12.5mm |
| 13.0mm | 0123-R-13.0mm |
| 13.5mm | 0123-R-13.5mm |
| 14.0mm | 0123-R-14.0mm |
| 14.5mm | 0123-R-14.5mm |
| 15.0mm | 0123-R-15.0mm |
| 15.5mm | 0123-R-15.5mm |
| 16.0mm | 0123-R-16.0mm |
| 16.5mm | 0123-R-16.5mm |
| 17.0mm | 0123-R-17.0mm |
| 17.5mm | 0123-R-17.5mm |
| 18.0mm | 0123-R-18.0mm |
| 18.5mm | 0123-R-18.5mm |
| 19.0mm | 0123-R-19.0mm |
| 19.5mm | 0123-R-19.5mm |

*See page 124 for Accuracy Chart*

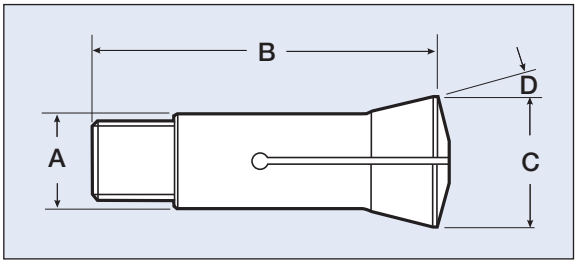
| Size | Part Number |
|---|---|
| 20.0mm | 0123-R-20.0mm |
| 20.5mm | 0123-R-20.5mm |
| 21.0mm | 0123-R-21.0mm |
| 21.5mm | 0123-R-21.5mm |
| 22.0mm | 0123-R-22.0mm |
| 22.5mm | 0123-R-22.5mm |
| 23.0mm | 0123-R-23.0mm |
| 23.5mm | 0123-R-23.5mm |
| 24.0mm | 0123-R-24.0mm |
| 24.5mm | 0123-R-24.5mm |
| 25.0mm | 0123-R-25.0mm |
| 25.5mm | 0123-R-25.5mm |
| 26.0mm | 0123-R-26.0mm |
| 26.5mm | 0123-R-26.5mm |
| 27.0mm | 0123-R-27.0mm |

## 5C Round Collet Sets (Metric)

| Set | No. of Collets | Part No. |
|---|---|---|
| 3mm-27mm x 0.5mm | 49 | 0123-SET-1 |
| 3mm-27mm x 1mm | 25 | 0123-SET-2 |



# 16C Collets (Inch)




*See page 101 for Accuracy Chart*

Emergency Collet P/N G-444

Dimensions

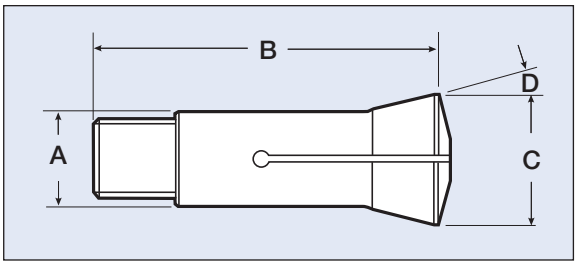
| A | B | C | D |
|---|---|---|---|
| 1.89" | 4.35" | 2.26" | 10° |

| Size | 16C inch Round | Hex | Square |
|---|---|---|---|
| 1/16" | G119-R-1/16 | - | - |
| 5/64" | G119-R-5/64 | - | - |
| 3/32" | G119-R-3/32 | - | - |
| 7/64" | G119-R-7/64 | - | - |
| 1/8" | G119-R-1/8 | - | - |
| 9/64" | G119-R-9/64 | - | - |
| 5/32" | G119-R-5/32 | - | - |
| 11/64" | G119-R-11/64 | - | - |
| 3/16" | G119-R-3/16 | - | - |
| 13/64" | G119-R-13/64 | - | - |
| 7/32" | G119-R- 7/32 | - | - |
| 15/64" | G119-R-15/64 | - | - |
| 1/4" | G119-R-1/4 | G119-X-1/4 | G119-S-1/4 |
| 17/64" | G119-R-17/64 | - | - |
| 9/32" | G119-R-9/32 | - | - |
| 19/64" | G119-R-19/64 | - | - |
| 5/16" | G119-R-5/16 | G119-X-5/16 | G119-S-5/16 |
| 21/64" | G119-R-21/64 | - | - |
| 11/32" | G119-R-11/32 | - | - |
| 23/64" | G119-R-23/64 | - | - |
| 3/8" | G119-R-3/8 | G119-X-3/8 | G119-S-3/8 |
| 25/64" | G119-R-25/64 | - | - |
| 13/32" | G119-R-13/32 | - | - |
| 27/64" | G119-R-27/64 | - | - |
| 7/16" | G119-R-7/16 | G119-X-7/16 | G119-S-7/16 |
| 29/64" | G119-R-29/64 | - | - |
| 15/32" | G119-R-15/32 | - | - |
| 31/64" | G119-R-31/64 | - | - |
| 1/2" | G119-R-1/2 | G119-X-1/2 | G119-S-1/2 |
| 33/64" | G119-R-33/64 | - | - |
| 17/32" | G119-R-17/32 | - | - |
| 35/64" | G119-R-35/64 | - | - |
| 9/16" | G119-R-9/16 | G119-X-9/16 | G119-S-9/16 |
| 37/64" | G119-R-37/64 | - | - |
| 19/32" | G119-R-19/32 | - | - |
| 39/64" | G119-R-39/64 | - | - |
| 5/8" | G119-R-5/8 | G119-X-5/8 | G119-S-5/8 |
| 41/64" | G119-R-41/64 | - | - |
| 21/32" | G119-R-21/32 | - | - |
| 43/64" | G119-R-43/64 | - | - |
| 11/16" | G119-R-11/16 | G119-X-11/16 | G119-S-11/16 |
| 45/64" | G119-R-45/64 | - | - |
| 23/32" | G119-R-23/32 | - | - |
| 47/64" | G119-R-47/64 | - | - |
| 3/4" | G119-R-3/4 | G119-X-3/4 | G119-S-3/4 |
| 49/64" | G119-R-49/64 | - | - |
| 25/32" | G119-R-25/32 | - | - |
| 51/64 | G119-R-51/64 | - | - |
| 13/16" | G119-R-13/16 | G119-X-13/16 | G119-S-13/16 |
| 53/64" | G119-R-53/64 | - | - |
| 27/32" | G119-R-27/32 | - | - |

| Size | 16C inch Round | Hex | Square |
|---|---|---|---|
| 55/64" | G119-R-55/64 | - | - |
| 7/8" | G119-R-7/8 | G119-X-7/8 | G119-S-7/8 |
| 29/32" | G119-R-29/32 | - | - |
| 59/64" | G119-R-59/64 | - | - |
| 15/16" | G119-R-15/16 | G119-X-15/16 | G119-S-15/16 |
| 61/64" | G119-R-61/64 | - | - |
| 31/32" | G119-R-31/32 | - | - |
| 63/64" | G119-R-63/64 | - | - |
| 1" | G119-R-1 | G119-X-1 | G119-S-1 |
| 1-1/64" | G119-R-1-1/64 | - | - |
| 1-1/32 | G119-R-1-1/32 | - | - |
| 1-3/64" | G119-R-1-3/64 | - | - |
| 1-1/16" | G119-R-1-1/16 | G119-X-1-1/16 | - |
| 1-5/64" | G119-R-1-5/64 | - | - |
| 1-3/32" | G119-R-1-3/32 | - | - |
| 1-7/64" | G119-R-1-7/64 | - | - |
| 1-1/8" | G119-R-1-1/8 | G119-X-1-1/8 | - |
| 1-9/64" | G119-R-1-9/64 | - | - |
| 1-5/32" | G119-R-1-5/32 | - | - |
| 1-11/64" | G119-R-1-11/64 | - | - |
| 1-3/16" | G119-R-1-3/16 | G119-X-1-3/16 | - |
| 1-13/64" | G119-R-1-13/64 | - | - |
| 1-7/32" | G119-R-1-7/32 | - | - |
| 1-15/64" | G119-R-1-15/64 | - | - |
| 1-1/4" | G119-R-1-1/4 | G119-X-1-1/4 | - |
| 1-17/64" | G119-R-1-17/64 | - | - |
| 1-9/32" | G119-R-1-9/32 | - | - |
| 1-19/64" | G119-R-1-19/64 | - | - |
| 1-5/16" | G119-R-1-5/16 | G119-X-1-5/16 | - |
| 1-21/64" | G119-R-1-21/64 | - | - |
| 1-11/32" | G119-R-1-11/32 | - | - |
| 1-23/64" | G119-R-1-23/64 | - | - |
| 1-3/8" | G119-R-1-3/8 | G119-X-1-3/8 | - |
| 1-25/64" | G119-R-1-25/64 | - | - |
| 1-13/32" | G119-R-1-13/32 | - | - |
| 1-27/64" | G119-R-1-27/64 | - | - |
| 1-7/16" | G119-R-1-7/16 | - | - |
| 1-29/64" | G119-R-1-29/64 | - | - |
| 1-15/32" | G119-R-1-15/32 | - | - |
| 1-31/64" | G119-R-1-31/64 | - | - |
| 1-1/2" | G119-R-1-1/2 | - | - |
| 1-33/64" | G119-R-1-33/64 | - | - |
| 1-17/32" | G119-R-1-17/32 | - | - |
| 1-35/64" | G119-R-1-35/64 | - | - |
| 1-9/16" | G119-R-1-9/16 | - | - |
| 1-37/64" | G119-R-1-37/64 | - | - |
| 1-19/32" | G119-R-1-19/32 | - | - |
| 1-39/64" | G119-R-1-39/64 | - | - |
| 1-5/8" | G119-R-1-5/8 | - | - |

*See page 101 for Accuracy Chart*

# 16C Collets (Metric)




Dimensions

| A | B | C | D |
|---|---|---|---|
| 48 | 110.5 | 57.5 | 10° |

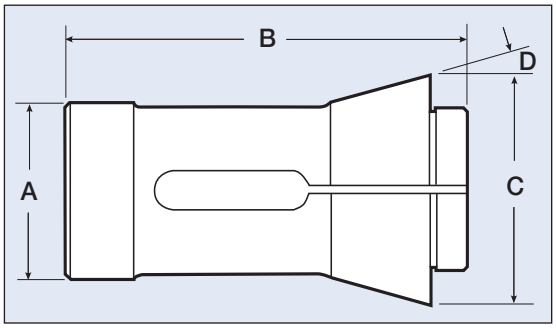
| Size | 16C metric Round | Hex | Square |
|---|---|---|---|
| 1.0mm | G119-R-1.0mm | - | - |
| 1.5mm | G119-R-1.5mm | - | - |
| 2.0mm | G119-R-2.0mm | - | - |
| 2.5mm | G119-R-2.5mm | - | - |
| 3.0mm | G119-R-3.0mm | - | - |
| 3.5mm | G119-R-3.5mm | - | - |
| 4.0mm | G119-R-4.0mm | - | - |
| 4.5mm | G119-R-4.5mm | - | - |
| 5.0mm | G119-R-5.0mm | - | - |
| 5.5mm | G119-R-5.5mm | - | - |
| 6.0mm | G119-R-6.0mm | G119-X-6.0mm | G119-S-6.0mm |
| 6.5mm | G119-R-6.5mm | G119-X-6.5mm | G119-S-6.5mm |
| 7.0mm | G119-R-7.0mm | G119-X-7.0mm | G119-S-7.0mm |
| 7.5mm | G119-R-7.5mm | G119-X-7.5mm | G119-S-7.5mm |
| 8.0mm | G119-R-8.0mm | G119-X-8.0mm | G119-S-8.0mm |
| 8.5mm | G119-R-8.5mm | G119-X-8.5mm | G119-S-8.5mm |
| 9.0mm | G119-R-9.0mm | G119-X-9.0mm | G119-S-9.0mm |
| 9.5mm | G119-R-9.5mm | G119-X-9.5mm | G119-S-9.5mm |
| 10.0mm | G119-R-10.0mm | G119-X-10.0mm | G119-S-10.0mm |
| 10.5mm | G119-R-10.5mm | G119-X-10.5mm | G119-S-10.5mm |
| 11.0mm | G119-R-11.0mm | G119-X-11.0mm | G119-S-11.0mm |
| 11.5mm | G119-R-11.5mm | G119-X-11.5mm | G119-S-11.5mm |
| 12.0mm | G119-R-12.0mm | G119-X-12.0mm | G119-S-12.0mm |
| 12.5mm | G119-R-12.5mm | G119-X-12.5mm | G119-S-12.5mm |
| 13.0mm | G119-R-13.0mm | G119-X-13.0mm | G119-S-13.0mm |
| 13.5mm | G119-R-13.5mm | G119-X-13.5mm | G119-S-13.5mm |
| 14.0mm | G119-R-14.0mm | G119-X-14.0mm | G119-S-14.0mm |
| 14.5mm | G119-R-14.5mm | G119-X-14.5mm | G119-S-14.5mm |
| 15.0mm | G119-R-15.0mm | G119-X-15.0mm | G119-S-15.0mm |
| 15.5mm | G119-R-15.5mm | G119-X-15.5mm | G119-S-15.5mm |
| 16.0mm | G119-R-16.0mm | G119-X-16.0mm | G119-S-16.0mm |
| 16.5mm | G119-R-16.5mm | G119-X-16.5mm | G119-S-16.5mm |
| 17.0mm | G119-R-17.0mm | G119-X-17.0mm | G119-S-17.0mm |
| 17.5mm | G119-R-17.5mm | G119-X-17.5mm | G119-S-17.5mm |
| 18.0mm | G119-R-18.0mm | G119-X-18.0mm | G119-S-18.0mm |
| 18.5mm | G119-R-18.5mm | G119-X-18.5mm | G119-S-18.5mm |
| 19.0mm | G119-R-19.0mm | G119-X-19.0mm | G119-S-19.0mm |
| 19.5mm | G119-R-19.5mm | G119-X-19.5mm | G119-S-19.5mm |
| 20.0mm | G119-R-20.0mm | G119-X-20.0mm | G119-S-20.0mm |
| 20.5mm | G119-R-20.5mm | G119-X-20.5mm | G119-S-20.5mm |
| 21.0mm | G119-R-21.0mm | G119-X-21.0mm | G119-S-21.0mm |
| 21.5mm | G119-R-21.5mm | G119-X-21.5mm | G119-S-21.5mm |

| Size | 16C metric Round | Hex | Square |
|---|---|---|---|
| 22.0mm | G119-R-22.0mm | G119-X-22.0mm | G119-S-22.0mm |
| 22.5mm | G119-R-22.5mm | G119-X-22.5mm | G119-S-22.5mm |
| 23.0mm | G119-R-23.0mm | G119-X-23.0mm | G119-S-23.0mm |
| 23.5mm | G119-R-23.5mm | G119-X-23.5mm | G119-S-23.5mm |
| 24.0mm | G119-R-24.0mm | G119-X-24.0mm | G119-S-24.0mm |
| 24.5mm | G119-R-24.5mm | G119-X-24.5mm | G119-S-24.5mm |
| 25.0mm | G119-R-25.0mm | G119-X-25.0mm | G119-S-25.0mm |
| 25.5mm | G119-R-25.5mm | G119-X-25.5mm | - |
| 26.0mm | G119-R-26.0mm | G119-X-26.0mm | - |
| 26.5mm | G119-R-26.5mm | G119-X-26.5mm | - |
| 27.0mm | G119-R-27.0mm | G119-X-27.0mm | - |
| 27.5mm | G119-R-27.5mm | G119-X-27.5mm | - |
| 28.0mm | G119-R-28.0mm | G119-X-28.0mm | - |
| 28.5mm | G119-R-28.5mm | G119-X-28.5mm | - |
| 29.0mm | G119-R-29.0mm | G119-X-29.0mm | - |
| 29.5mm | G119-R-29.5mm | G119-X-29.5mm | - |
| 30.0mm | G119-R-30.0mm | G119-X-30.0mm | - |
| 30.5mm | G119-R-30.5mm | G119-X-30.5mm | - |
| 31.0mm | G119-R-31.0mm | G119-X-31.0mm | - |
| 31.5mm | G119-R-31.5mm | G119-X-31.5mm | - |
| 32.0mm | G119-R-32.0mm | G119-X-32.0mm | - |
| 32.5mm | G119-R-32.5mm | G119-X-32.5mm | - |
| 33.0mm | G119-R-33.0mm | G119-X-33.0mm | - |
| 33.5mm | G119-R-33.5mm | G119-X-33.5mm | - |
| 34.0mm | G119-R-34.0mm | G119-X-34.0mm | - |
| 34.5mm | G119-R-34.5mm | G119-X-34.5mm | - |
| 35.0mm | G119-R-35.0mm | G119-X-35.0mm | - |
| 35.5mm | G119-R-35.5mm | - | - |
| 36.0mm | G119-R-36.0mm | - | - |
| 36.5mm | G119-R-36.5mm | - | - |
| 37.0mm | G119-R-37.0mm | - | - |
| 37.5mm | G119-R-37.5mm | - | - |
| 38.0mm | G119-R-38.0mm | - | - |
| 38.5mm | G119-R-38.5mm | - | - |
| 39.0mm | G119-R-39.0mm | - | - |
| 39.5mm | G119-R-39.5mm | - | - |
| 40.0mm | G119-R-40.0mm | - | - |
| 40.5mm | G119-R-40.5mm | - | - |
| 41.0mm | G119-R-41.0mm | - | - |
| 41.5mm | G119-R-41.5mm | - | - |
| 42.0mm | G119-R-42.0mm | - | - |
| 42.5mm | G119-R-42.5mm | - | - |

***Emergency Collet P/N G444***

*See page 100 for Accuracy Chart*

# B-42 Spring Series 173E Collets (Inch)




Dimensions

| A | B | C | D |
|---|---|---|---|
| 1.89" | 3.7" | 2.36" | 15° |

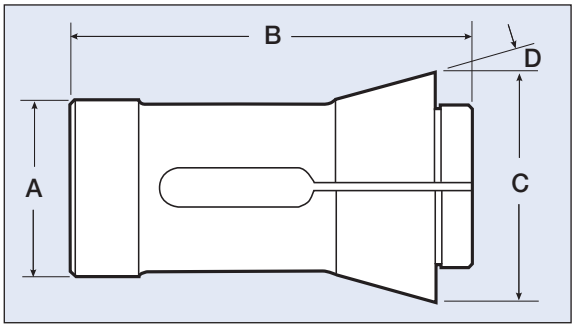
| Size | B-42 inch Round* | Hex | Square |
|---|---|---|---|
| 1/16" | 4728-R-1/16 | 4728-X-1/16 | 4728-S-1/16 |
| 1/8" | 4728-R-1/8 | 4728-X-1/8 | 4728-S-1/8 |
| 3/16" | 4728-R-3/16 | 4728-X-3/16 | 4728-S-3/16 |
| 1/4" | 4728-R-1/4 | 4728-X-1/4 | 4728-S-1/4 |
| 5/16" | 4728-R-5/16 | 4728-X-5/16 | 4728-S-5/16 |
| 3/8" | 4728-R-3/8 | 4728-X-3/8 | 4728-S-3/8 |
| 7/16" | 4728-R-7/16 | 4728-X-7/16 | 4728-S-7/16 |
| 1/2" | 4728-R-1/2 | 4728-X-1/2 | 4728-S-1/2 |
| 9/16" | 4728-R-9/16 | 4728-X-9/16 | 4728-S-9/16 |
| 5/8" | 4728-R-5/8 | 4728-X-5/8 | 4728-S-5/8 |
| 11/16" | 4728-R-11/16 | 4728-X-11/16 | 4728-S-11/16 |
| 3/4" | 4728-R-3/4 | 4728-X-3/4 | 4728-S-3/4 |
| 13/16" | 4728-R-13/16 | 4728-X-13/16 | 4728-S-13/16 |
| 7/8" | 4728-R-7/8 | 4728-X-7/8 | 4728-S-7/8 |
| 15/16" | 4728-R-15/16 | 4728-X-15/16 | 4728-S-15/16 |
| 1" | 4728-R-1 | 4728-X-1 | 4728-S-1 |
| 1-1/16" | 4728-R-1-1/16 | 4728-X-1-1/16 | 4728-S-1-1/16 |
| 1-1/8" | 4728-R-1-1/8 | 4728-X-1-1/8 | 4728-S-1-1/8 |
| 1-3/16" | 4728-R-1-3/16 | 4728-X-1-3/16 | 4728-S-1-3/16 |
| 1-1/4" | 4728-R-1-1/4 | 4728-X-1-1/4 | - |
| 1-5/16" | 4728-R-1-5/16 | 4728-X-1-5/16 | - |
| 1-3/8" | 4728-R-1-3/8 | 4728-X-1-3/8 | - |
| 1-7/16" | 4728-R-1-7/16 | - | - |
| 1-1/2" | 4728-R-1-1/2 | - | - |
| 1-9/16" | 4728-R-1-9/16 | - | - |
| 1-5/8" | 4728-R-1-5/8 | - | - |

Emergency Collet P/N J550

**To order Round Plain Bore Collets replace* **R** *with* **RP** *in part number:*
*Example: 4728-***RP***-1/16*

# B-42 Spring Series 173E
## Collets (Metric)

*See page 100 for Accuracy Chart*




Dimensions

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

| Size | B-42 metric Round* | Hex | Square |
|---|---|---|---|
| 1.0mm | 4728-R-1.0mm | 4728-X-1.0mm | 4728-S-1.0mm |
| 1.5mm | 4728-R-1.5mm | 4728-X-1.5mm | 4728-S-1.5mm |
| 2.0mm | 4728-R-2.0mm | 4728-X-2.0mm | 4728-S-2.0mm |
| 2.5mm | 4728-R-2.5mm | 4728-X-2.5mm | 4728-S-2.5mm |
| 3.0mm | 4728-R-3.0mm | 4728-X-3.0mm | 4728-S-3.0mm |
| 3.5mm | 4728-R-3.5mm | 4728-X-3.5mm | 4728-S-3.5mm |
| 4.0mm | 4728-R-4.0mm | 4728-X-4.0mm | 4728-S-4.0mm |
| 4.5mm | 4728-R-4.5mm | 4728-X-4.5mm | 4728-S-4.5mm |
| 5.0mm | 4728-R-5.0mm | 4728-X-5.0mm | 4728-S-5.0mm |
| 5.5mm | 4728-R-5.5mm | 4728-X-5.5mm | 4728-S-5.5mm |
| 6.0mm | 4728-R-6.0mm | 4728-X-6.0mm | 4728-S-6.0mm |
| 6.5mm | 4728-R-6.5mm | 4728-X-6.5mm | 4728-S-6.5mm |
| 7.0mm | 4728-R-7.0mm | 4728-X-7.0mm | 4728-S-7.0mm |
| 7.5mm | 4728-R-7.5mm | 4728-X-7.5mm | 4728-S-7.5mm |
| 8.0mm | 4728-R-8.0mm | 4728-X-8.0mm | 4728-S-8.0mm |
| 8.5mm | 4728-R-8.5mm | 4728-X-8.5mm | 4728-S-8.5mm |
| 9.0mm | 4728-R-9.0mm | 4728-X-9.0mm | 4728-S-9.0mm |
| 9.5mm | 4728-R-9.5mm | 4728-X-9.5mm | 4728-S-9.5mm |
| 10.0mm | 4728-R-10.0mm | 4728-X-10.0mm | 4728-S-10.0mm |
| 10.5mm | 4728-R-10.5mm | 4728-X-10.5mm | 4728-S-10.5mm |
| 11.0mm | 4728-R-11.0mm | 4728-X-11.0mm | 4728-S-11.0mm |
| 11.5mm | 4728-R-11.5mm | 4728-X-11.5mm | 4728-S-11.5mm |
| 12.0mm | 4728-R-12.0mm | 4728-X-12.0mm | 4728-S-12.0mm |
| 12.5mm | 4728-R-12.5mm | 4728-X-12.5mm | 4728-S-12.5mm |
| 13.0mm | 4728-R-13.0mm | 4728-X-13.0mm | 4728-S-13.0mm |
| 13.5mm | 4728-R-13.5mm | 4728-X-13.5mm | 4728-S-13.5mm |
| 14.0mm | 4728-R-14.0mm | 4728-X-14.0mm | 4728-S-14.0mm |
| 14.5mm | 4728-R-14.5mm | 4728-X-14.5mm | 4728-S-14.5mm |
| 15.0mm | 4728-R-15.0mm | 4728-X-15.0mm | 4728-S-15.0mm |
| 15.5mm | 4728-R-15.5mm | 4728-X-15.5mm | 4728-S-15.5mm |
| 16.0mm | 4728-R-16.0mm | 4728-X-16.0mm | 4728-S-16.0mm |
| 16.5mm | 4728-R-16.5mm | 4728-X-16.5mm | 4728-S-16.5mm |
| 17.0mm | 4728-R-17.0mm | 4728-X-17.0mm | 4728-S-17.0mm |
| 17.5mm | 4728-R-17.5mm | 4728-X-17.5mm | 4728-S-17.5mm |
| 18.0mm | 4728-R-18.0mm | 4728-X-18.0mm | 4728-S-18.0mm |
| 18.5mm | 4728-R-18.5mm | 4728-X-18.5mm | 4728-S-18.5mm |
| 19.0mm | 4728-R-19.0mm | 4728-X-19.0mm | 4728-S-19.0mm |
| 19.5mm | 4728-R-19.5mm | 4728-X-19.5mm | 4728-S-19.5mm |
| 20.0mm | 4728-R-20.0mm | 4728-X-20.0mm | 4728-S-20.0mm |
| 20.5mm | 4728-R-20.5mm | 4728-X-20.5mm | 4728-S-20.5mm |
| 21.0mm | 4728-R-21.0mm | 4728-X-21.0mm | 4728-S-21.0mm |
| 21.5mm | 4728-R-21.5mm | 4728-X-21.5mm | 4728-S-21.5mm |

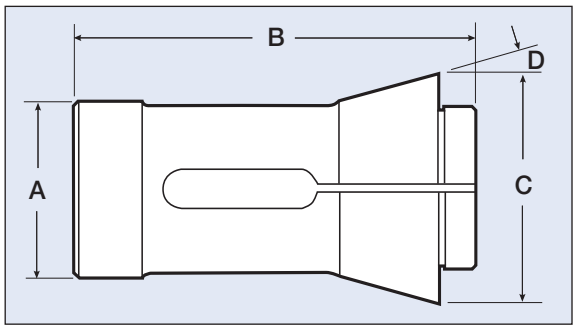
| Size | B-42 metric Round* | Hex | Square |
|---|---|---|---|
| 22.0mm | 4728-R-22.0mm | 4728-X-22.0mm | 4728-S-22.0mm |
| 22.5mm | 4728-R-22.5mm | 4728-X-22.5mm | 4728-S-22.5mm |
| 23.0mm | 4728-R-23.0mm | 4728-X-23.0mm | 4728-S-23.0mm |
| 23.5mm | 4728-R-23.5mm | 4728-X-23.5mm | 4728-S-23.5mm |
| 24.0mm | 4728-R-24.0mm | 4728-X-24.0mm | 4728-S-24.0mm |
| 24.5mm | 4728-R-24.5mm | 4728-X-24.5mm | 4728-S-24.5mm |
| 25.0mm | 4728-R-25.0mm | 4728-X-25.0mm | 4728-S-25.0mm |
| 25.5mm | 4728-R-25.5mm | 4728-X-25.5mm | 4728-S-25.5mm |
| 26.0mm | 4728-R-26.0mm | 4728-X-26.0mm | 4728-S-26.0mm |
| 26.5mm | 4728-R-26.5mm | 4728-X-26.5mm | 4728-S-26.5mm |
| 27.0mm | 4728-R-27.0mm | 4728-X-27.0mm | 4728-S-27.0mm |
| 27.5mm | 4728-R-27.5mm | 4728-X-27.5mm | 4728-S-27.5mm |
| 28.0mm | 4728-R-28.0mm | 4728-X-28.0mm | 4728-S-28.0mm |
| 28.5mm | 4728-R-28.5mm | 4728-X-28.5mm | 4728-S-28.5mm |
| 29.0mm | 4728-R-29.0mm | 4728-X-29.0mm | 4728-S-29.0mm |
| 29.5mm | 4728-R-29.5mm | 4728-X-29.5mm | 4728-S-29.5mm |
| 30.0mm | 4728-R-30.0mm | 4728-X-30.0mm | 4728-S-30.0mm |
| 30.5mm | 4728-R-30.5mm | 4728-X-30.5mm | - |
| 31.0mm | 4728-R-31.0mm | 4728-X-31.0mm | - |
| 31.5mm | 4728-R-31.5mm | 4728-X-31.5mm | - |
| 32.0mm | 4728-R-32.0mm | 4728-X-32.0mm | - |
| 32.5mm | 4728-R-32.5mm | 4728-X-32.5mm | - |
| 33.0mm | 4728-R-33.0mm | 4728-X-33.0mm | - |
| 33.5mm | 4728-R-33.5mm | 4728-X-33.5mm | - |
| 34.0mm | 4728-R-34.0mm | 4728-X-34.0mm | - |
| 34.5mm | 4728-R-34.5mm | 4728-X-34.5mm | - |
| 35.0mm | 4728-R-35.0mm | 4728-X-35.0mm | - |
| 35.5mm | 4728-R-35.5mm | 4728-X-35.5mm | - |
| 36.0mm | 4728-R-36.0mm | 4728-X-36.0mm | - |
| 36.5mm | 4728-R-36.5mm | 4728-X-36.5mm | - |
| 37.0mm | 4728-R-37.0mm | 4728-X-37.0mm | - |
| 37.5mm | 4728-R-37.5mm | 4728-X-37.5mm | - |
| 38.0mm | 4728-R-38.0mm | 4728-X-38.0mm | - |
| 38.5mm | 4728-R-38.5mm | - | - |
| 39.0mm | 4728-R-39.0mm | - | - |
| 39.5mm | 4728-R-39.5mm | - | - |
| 40.0mm | 4728-R-40.0mm | - | - |
| 40.5mm | 4728-R-40.5mm | - | - |
| 41.0mm | 4728-R-41.0mm | - | - |
| 41.5mm | 4728-R-41.5mm | - | - |
| 42.0mm | 4728-R-42.0mm | - | - |
| 42.5mm | 4728-R-42.5mm | - | - |

Emergency Collet P/N J-550

**To order Round Plain Bore Collets replace* **R** *with* **RP** *in part number: Example 4728-***RP***-1/16*

# B-60 Spring Series 185E
## Collet (Inch & metric)

*See page 100 for Accuracy Chart*




Dimensions

| A | B | C | D |
|---|---|---|---|
| 2.6" | 4.33" | 3.31" | 15° |

| Size | B-60 inch Round* | Hex | Square |
|---|---|---|---|
| 1/16" | 4291-R-1/16 | 4291-X-1/16 | 4291-S-1/16 |
| 1/8" | 4291-R-1/8 | 4291-X-1/8 | 4291-S-1/8 |
| 3/16" | 4291-R-3/16 | 4291-X-3/16 | 4291-S-3/16 |
| 1/4" | 4291-R-1/4 | 4291-X-1/4 | 4291-S-1/4 |
| 5/16" | 4291-R-5/16 | 4291-X-5/16 | 4291-S-5/16 |
| 3/8" | 4291-R-3/8 | 4291-X-3/8 | 4291-S-3/8 |
| 7/16" | 4291-R-7/16 | 4291-X-7/16 | 4291-S-7/16 |
| 1/2" | 4291-R-1/2 | 4291-X-1/2 | 4291-S-1/2 |
| 9/16" | 4291-R-9/16 | 4291-X-9/16 | 4291-S-9/16 |
| 5/8" | 4291-R-5/8 | 4291-X-5/8 | 4291-S-5/8 |
| 11/16" | 4291-R-11/16 | 4291-X-11/16 | 4291-S-11/16 |
| 3/4" | 4291-R-3/4 | 4291-X-3/4 | 4291-S-3/4 |
| 13/16" | 4291-R-13/16 | 4291-X-13/16 | 4291-S-13/16 |
| 7/8" | 4291-R-7/8 | 4291-X-7/8 | 4291-S-7/8 |
| 15/16" | 4291-R-15/16 | 4291-X-15/16 | 4291-S-15/16 |
| 1" | 4291-R-1 | 4291-X-1 | 4291-S-1 |
| 1-1/16" | 4291-R-1-1/16 | 4291-X-1-1/16 | 4291-S-1-1/16 |
| 1-1/8" | 4291-R-1-1/8 | 4291-X-1-1/8 | 4291-S-1-1/8 |
| 1-3/16" | 4291-R-1-3/16 | 4291-X-1-3/16 | 4291-S-1-3/16 |
| 1-1/4" | 4291-R-1-1/4 | 4291-X-1-1/4 | 4291-S-1-1/4 |
| 1-5/16" | 4291-R-1-5/16 | 4291-X-1-5/16 | 4291-S-1-5/16 |
| 1-3/8" | 4291-R-1-3/8 | 4291-X-1-3/8 | 4291-S-1-3/8 |
| 1-7/16" | 4291-R-1-7/16 | 4291-X-1-7/16 | 4291-S-1-7/16 |
| 1-1/2" | 4291-R-1-1/2 | 4291-X-1-1/2 | 4291-S-1-1/2 |
| 1-9/16" | 4291-R-1-9/16 | 4291-X-1-9/16 | 4291-S-1-9/16 |
| 1-5/8" | 4291-R-1-5/8 | 4291-X-1-5/8 | 4291-S-1-5/8 |
| 1-11/16" | 4291-R-1-11/16 | 4291-X-1-11/16 | - |
| 1-3/4" | 4291-R-1-3/4 | 4291-X-1-3/4 | - |
| 1-13/16" | 4291-R-1-13/16 | 4291-X-1-13/16 | - |
| 1-7/8" | 4291-R-1-7/8 | 4291-X-1-7/8 | - |
| 1-15/16" | 4291-R-1-15/16 | 4291-R-1-15/16 | - |
| 2" | 4291-R-2 | 4291-R-2 | - |
| 2-1/16" | 4291-R-2-1/16 | - | - |
| 2-1/8" | 4291-R-2-1/8 | - | - |
| 2-3/16" | 4291-R-2-3/16 | - | - |
| 2-1/4" | 4291-R-2-1/4 | - | - |
| 2-5/16" | 4291-R-2-5/16 | - | - |

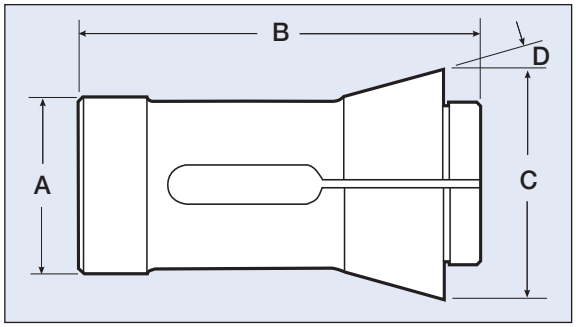
| Size | B-60 metric Round* | Hex | Square |
|---|---|---|---|
| 1.0mm | 4291-R-1.0mm | 4291-X-1.0mm | 4291-S-1.0mm |
| 1.5mm | 4291-R-1.5mm | 4291-X-1.5mm | 4291-S-1.5mm |
| 2.0mm | 4291-R-2.0mm | 4291-X-2.0mm | 4291-S-2.0mm |
| 2.5mm | 4291-R-2.5mm | 4291-X-2.5mm | 4291-S-2.5mm |
| 3.0mm | 4291-R-3.0mm | 4291-X-3.0mm | 4291-S-3.0mm |
| 3.5mm | 4291-R-3.5mm | 4291-X-3.5mm | 4291-S-3.5mm |
| 4.0mm | 4291-R-4.0mm | 4291-X-4.0mm | 4291-S-4.0mm |
| 4.5mm | 4291-R-4.5mm | 4291-X-4.5mm | 4291-S-4.5mm |
| 5.0mm | 4291-R-5.0mm | 4291-X-5.0mm | 4291-S-5.0mm |
| 5.5mm | 4291-R-5.5mm | 4291-X-5.5mm | 4291-S-5.5mm |
| 6.0mm | 4291-R-6.0mm | 4291-X-6.0mm | 4291-S-6.0mm |
| 6.5mm | 4291-R-6.5mm | 4291-X-6.5mm | 4291-S-6.5mm |
| 7.0mm | 4291-R-7.0mm | 4291-X-7.0mm | 4291-S-7.0mm |
| 7.5mm | 4291-R-7.5mm | 4291-X-7.5mm | 4291-S-7.5mm |
| 8.0mm | 4291-R-8.0mm | 4291-X-8.0mm | 4291-S-8.0mm |
| 8.5mm | 4291-R-8.5mm | 4291-X-8.5mm | 4291-S-8.5mm |
| 9.0mm | 4291-R-9.0mm | 4291-X-9.0mm | 4291-S-9.0mm |
| 9.5mm | 4291-R-9.5mm | 4291-X-9.5mm | 4291-S-9.5mm |
| 10.0mm | 4291-R-10.0mm | 4291-X-10.0mm | 4291-S-10.0mm |
| 10.5mm | 4291-R-10.5mm | 4291-X-10.5mm | 4291-S-10.5mm |
| 11.0mm | 4291-R-11.0mm | 4291-X-11.0mm | 4291-S-11.0mm |
| 11.5mm | 4291-R-11.5mm | 4291-X-11.5mm | 4291-S-11.5mm |
| 12.0mm | 4291-R-12.0mm | 4291-X-12.0mm | 4291-S-12.0mm |
| 12.5mm | 4291-R-12.5mm | 4291-X-12.5mm | 4291-S-12.5mm |
| 13.0mm | 4291-R-13.0mm | 4291-X-13.0mm | 4291-S-13.0mm |
| 13.5mm | 4291-R-13.5mm | 4291-X-13.5mm | 4291-S-13.5mm |
| 14.0mm | 4291-R-14.0mm | 4291-X-14.0mm | 4291-S-14.0mm |
| 14.5mm | 4291-R-14.5mm | 4291-X-14.5mm | 4291-S-14.5mm |
| 15.0mm | 4291-R-15.0mm | 4291-X-15.0mm | 4291-S-15.0mm |
| 15.5mm | 4291-R-15.5mm | 4291-X-15.5mm | 4291-S-15.5mm |
| 16.0mm | 4291-R-16.0mm | 4291-X-16.0mm | 4291-S-16.0mm |
| 16.5mm | 4291-R-16.5mm | 4291-X-16.5mm | 4291-S-16.5mm |
| 17.0mm | 4291-R-17.0mm | 4291-X-17.0mm | 4291-S-17.0mm |
| 17.5mm | 4291-R-17.5mm | 4291-X-17.5mm | 4291-S-17.5mm |
| 18.0mm | 4291-R-18.0mm | 4291-X-18.0mm | 4291-S-18.0mm |
| 18.5mm | 4291-R-18.5mm | 4291-X-18.5mm | 4291-S-18.5mm |
| 19.0mm | 4291-R-19.0mm | 4291-X-19.0mm | 4291-S-19.0mm |
| 19.5mm | 4291-R-19.5mm | 4291-X-19.5mm | 4291-S-19.5mm |
| 20.0mm | 4291-R-20.0mm | 4291-X-20.0mm | 4291-S-20.0mm |
| 20.5mm | 4291-R-20.5mm | 4291-X-20.5mm | 4291-S-20.5mm |
| 21.0mm | 4291-R-21.0mm | 4291-X-21.0mm | 4291-S-21.0mm |
| 21.5mm | 4291-R-21.5mm | 4291-X-21.5mm | 4291-S-21.5mm |

Emergency Collet P/N H-767

**To order Round Plain Bore Collets replace* **R** *with* **RP** *in part number: Example 4291-***RP***-1/16*

# B-60 Spring Series 185E Collets (Metric)

*See page 100 for Accuracy Chart*




Dimensions

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

| Size | B-60 metric Round* | Hex | Square |
|---|---|---|---|
| 22.0mm | 4291-R-22.0mm | 4291-X-22.0mm | 4291-S-22.0mm |
| 22.5mm | 4291-R-22.5mm | 4291-X-22.5mm | 4291-S-22.5mm |
| 23.0mm | 4291-R-23.0mm | 4291-X-23.0mm | 4291-S-23.0mm |
| 23.5mm | 4291-R-23.5mm | 4291-X-23.5mm | 4291-S-23.5mm |
| 24.0mm | 4291-R-24.0mm | 4291-X-24.0mm | 4291-S-24.0mm |
| 24.5mm | 4291-R-24.5mm | 4291-X-24.5mm | 4291-S-24.5mm |
| 25.0mm | 4291-R-25.0mm | 4291-X-25.0mm | 4291-S-25.0mm |
| 25.5mm | 4291-R-25.5mm | 4291-X-25.5mm | 4291-S-25.5mm |
| 26.0mm | 4291-R-26.0mm | 4291-X-26.0mm | 4291-S-26.0mm |
| 26.5mm | 4291-R-26.5mm | 4291-X-26.5mm | 4291-S-26.5mm |
| 27.0mm | 4291-R-27.0mm | 4291-X-27.0mm | 4291-S-27.0mm |
| 27.5mm | 4291-R-27.5mm | 4291-X-27.5mm | 4291-S-27.5mm |
| 28.0mm | 4291-R-28.0mm | 4291-X-28.0mm | 4291-S-28.0mm |
| 28.5mm | 4291-R-28.5mm | 4291-X-28.5mm | 4291-S-28.5mm |
| 29.0mm | 4291-R-29.0mm | 4291-X-29.0mm | 4291-S-29.0mm |
| 29.5mm | 4291-R-29.5mm | 4291-X-29.5mm | 4291-S-29.5mm |
| 30.0mm | 4291-R-30.0mm | 4291-X-30.0mm | 4291-S-30.0mm |
| 30.5mm | 4291-R-30.5mm | 4291-X-30.5mm | 4291-S-30.5mm |
| 31.0mm | 4291-R-31.0mm | 4291-X-31.0mm | 4291-S-31.0mm |
| 31.5mm | 4291-R-31.5mm | 4291-X-31.5mm | 4291-S-31.5mm |
| 32.0mm | 4291-R-32.0mm | 4291-X-32.0mm | 4291-S-32.0mm |
| 32.5mm | 4291-R-32.5mm | 4291-X-32.5mm | 4291-S-32.5mm |
| 33.0mm | 4291-R-33.0mm | 4291-X-33.0mm | 4291-S-33.0mm |
| 33.5mm | 4291-R-33.5mm | 4291-X-33.5mm | 4291-S-33.5mm |
| 34.0mm | 291-R-34.0mm | 4291-X-34.0mm | 4291-S-34.0mm |
| 34.5mm | 4291-R-34.5mm | 4291-X-34.5mm | 4291-S-34.5mm |
| 35.0mm | 4291-R-35.0mm | 4291-X-35.0mm | 4291-S-35.0mm |
| 35.5mm | 4291-R-35.5mm | 4291-X-35.5mm | 4291-S-35.5mm |
| 36.0mm | 4291-R-36.0mm | 4291-X-36.0mm | 4291-S-36.0mm |
| 36.5mm | 4291-R-36.5mm | 4291-X-36.5mm | 4291-S-36.5mm |
| 37.0mm | 4291-R-37.0mm | 4291-X-37.0mm | 4291-S-37.0mm |
| 37.5mm | 4291-R-37.5mm | 4291-X-37.5mm | 4291-S-37.5mm |
| 38.0mm | 4291-R-38.0mm | 4291-X-38.0mm | 4291-S-38.0mm |
| 38.5mm | 4291-R-38.5mm | 4291-X-38.5mm | 4291-S-38.5mm |
| 39.0mm | 4291-R-39.0mm | 4291-X-39.0mm | 4291-S-39.0mm |
| 39.5mm | 4291-R-39.5mm | 4291-X-39.5mm | 4291-S-39.5mm |
| 40.0mm | 4291-R-40.0mm | 4291-X-40.0mm | 4291-S-40.0mm |
| 40.5mm | 4291-R-40.5mm | 4291-X-40.5mm | 4291-S-40.5mm |
| 41.0mm | 4291-R-41.0mm | 4291-X-41.0mm | 4291-S-41.0mm |
| 41.5mm | 4291-R-41.5mm | 4291-X-41.5mm | 4291-S-41.5mm |
| 42.0mm | 4291-R-42.0mm | 4291-X-42.0mm | 4291-S-42.0mm |
| 42.5mm | 4291-R-42.5mm | 4291-X-42.5mm | 4291-S-42.5mm |

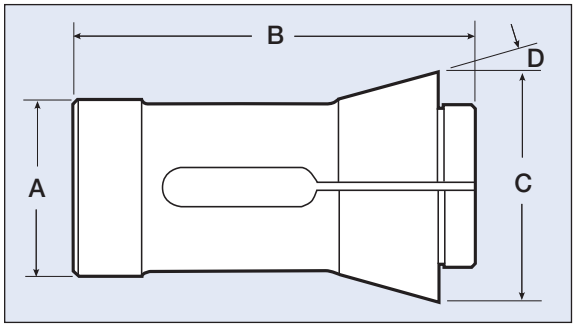
| Size | B-60 metric Round* | Hex | Square |
|---|---|---|---|
| 43.0mm | 4291-R-43.0mm | 4291-X-43.0mm | - |
| 43.5mm | 4291-R-43.5mm | 4291-X-43.5mm | - |
| 44.0mm | 4291-R-44.0mm | 4291-X-44.0mm | - |
| 44.5mm | 4291-R-44.5mm | 4291-X-44.5mm | - |
| 45.0mm | 4291-R-45.0mm | 4291-X-45.0mm | - |
| 45.5mm | 4291-R-45.5mm | 4291-X-45.5mm | - |
| 46.0mm | 4291-R-46.0mm | 4291-X-46.0mm | - |
| 46.5mm | 4291-R-46.5mm | 4291-X-46.5mm | - |
| 47.0mm | 4291-R-47.0mm | 4291-X-47.0mm | - |
| 47.5mm | 4291-R-47.5mm | 4291-X-47.5mm | - |
| 48.0mm | 4291-R-48.0mm | 4291-X-48.0mm | - |
| 48.5mm | 4291-R-48.5mm | 4291-X-48.5mm | - |
| 49.0mm | 4291-R-49.0mm | 4291-X-49.0mm | - |
| 49.5mm | 4291-R-49.5mm | 4291-X-49.5mm | - |
| 50.0mm | 4291-R-50.0mm | 4291-X-50.0mm | - |
| 50.5mm | 4291-R-50.5mm | 4291-X-50.5mm | - |
| 51.0mm | 4291-R-51.0mm | 4291-X-51.0mm | - |
| 51.5mm | 4291-R-51.5mm | 4291-X-51.5mm | - |
| 52.0mm | 4291-R-52.0mm | 4291-X-52.0mm | - |
| 52.5mm | 4291-R-52.5mm | 4291-X-52.5mm | - |
| 53.0mm | 4291-R-53.0mm | - | - |
| 53.5mm | 4291-R-53.5mm | - | - |
| 54.0mm | 4291-R-54.0mm | - | - |
| 54.5mm | 4291-R-54.5mm | - | - |
| 55.0mm | 4291-R-55.0mm | - | - |
| 55.5mm | 4291-R-55.5mm | - | - |
| 56.0mm | 4291-R-56.0mm | - | - |
| 56.5mm | 4291-R-56.5mm | - | - |
| 57.0mm | 4291-R-57.0mm | - | - |
| 57.5mm | 4291-R-57.5mm | - | - |
| 58.0mm | 4291-R-58.0mm | - | - |
| 58.5mm | 4291-R-58.5mm | - | - |
| 59.0mm | 4291-R-59.0mm | - | - |
| 59.5mm | 4291-R-59.5mm | - | - |
| 60.0mm | 4291-R-60.0mm | - | - |
| 60.5mm | 4291-R-60.5mm | - | - |

Emergency Collet P/N H-767

**To order Round Plain Bore Collets replace* **R** *with* **RP** *in part number: Example 4291-***RP***-1/16*

# B-80 Spring Series 193E
## Collets (Inch & metric)

*See page 100 for Accuracy Chart*




Dimensions

| A | B | C | D |
|---|---|---|---|
| 3.543" | 5.118" | 4.212" | 15° |

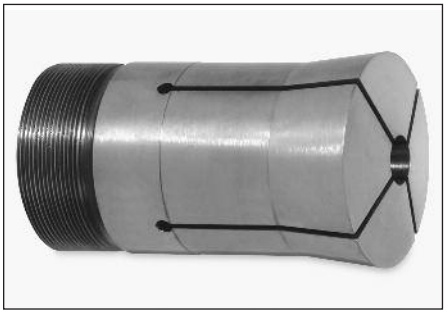
| Size | B-80 (inch) Part Number |
|---|---|
| 9/16" | H047-R-9/16 |
| 5/8" | H047-R-5/8 |
| 11/16" | H047-R-11/16 |
| 3/4" | H047-R-3/4 |
| 13/16" | H047-R-13/16 |
| 7/8" | H047-R-7/8 |
| 15/16" | H047-R-15/16 |
| 1" | H047-R-1-0 |
| 1-1/16" | H047-R-1-1/16 |
| 1-1/8" | H047-R-1-1/8 |
| 1-3/16" | H047-R-1-3/16 |
| 1-1/4" | H047-R-1-1/4 |
| 1-5/16" | H047-R-1-5/16 |
| 1-3/8" | H047-R-1-3/8 |
| 1-7/16" | H047-R-1-7/16 |
| 1-1/2" | H047-R-1-1/2 |
| 1-9/16" | H047-R-1-9/16 |
| 1-5/8" | H047-R-1-5/8 |
| 1-11/16" | H047-R-1-11/16 |
| 1-3/4" | H047-R-1-3/4 |
| 1-13/16" | H047-R-1-13/16 |
| 1-7/8" | H047-R-1-7/8 |
| 1-15/16" | H047-R-1-15/16 |
| 2" | H047-R-2 |
| 2-1/16" | H047-R-2-1/16 |
| 2-1/8" | H047-R-2-1/8 |
| 2-3/16" | H047-R-2-3/16 |
| 2-1/4" | H047-R-2-1/4 |
| 2-5/16" | H047-R-2-5/16 |
| 2-3/8" | H047-R-2-3/8 |
| 2-7/16" | H047-R-2-7/16 |
| 2-1/2" | H047-R-2-1/2 |
| 2-9/16" | H047-R-2-9/16 |
| 2-5/8" | H047-R-2-5/8 |
| 2-11/16" | H047-R-2-11/16 |
| 2-3/4" | H047-R-2-3/4 |
| 2-13/16" | H047-R-2-13/16 |
| 2-7/8" | H047-R-2-7/8 |
| 2-15/16" | H047-R-2-15/16 |
| 3" | H047-R-3 |
| 3-1/16" | H047-R-3-1/16 |

| Size | B-80 (Metric) Part Number |
|---|---|
| 15mm | H047-R-15mm |
| 15.5mm | H047-R-15.5mm |
| 16mm | H047-R-16mm |
| 16.5mm | H047-R-16.5mm |
| 17mm | H047-R-17mm |
| 17.5mm | H047-R-17.5mm |
| 18mm | H047-R-18mm |
| 18.5mm | H047-R-18.5mm |
| 19mm | H047-R-19mm |
| 19.5mm | H047-R-19.5mm |
| 20mm | H047-R-20mm |
| 20.5mm | H047-R-20.5mm |
| 21mm | H047-R-21mm |
| 21.5mm | H047-R-21.5mm |
| 22mm | H047-R-22mm |
| 22.5mm | H047-R-22.5mm |
| 23mm | H047-R-23mm |
| 23.5mm | H047-R-23.5mm |
| 24mm | H047-R-24mm |
| 24.5mm | H047-R-24.5mm |
| 25mm | H047-R-25mm |
| 25.5mm | H047-R-25.5mm |
| 26mm | H047-R-26mm |
| 26.5mm | H047-R-26.5mm |
| 27mm | H047-R-27mm |
| 27.5mm | H047-R-27.5mm |
| 28mm | H047-R-28mm |
| 28.5mm | H047-R-28.5mm |
| 29mm | H047-R-29mm |
| 29.5mm | H047-R-29.5mm |
| 30mm | H047-R-30mm |
| 30.5mm | H047-R-30.5mm |
| 31mm | H047-R-31mm |
| 31.5mm | H047-R-31.5mm |
| 32mm | H047-R-32mm |
| 32.5mm | H047-R-32.5mm |
| 33mm | H047-R-33mm |
| 33.5mm | H047-R-33.5mm |
| 34mm | H047-R-34mm |
| 34.5mm | H047-R-34.5mm |
| 35mm | H047-R-35mm |
| 35.5mm | H047-R-35.5mm |
| 36mm | H047-R-36mm |
| 36.5mm | H047-R-36.5mm |
| 37mm | H047-R-37mm |
| 37.5mm | H047-R-37.5mm |

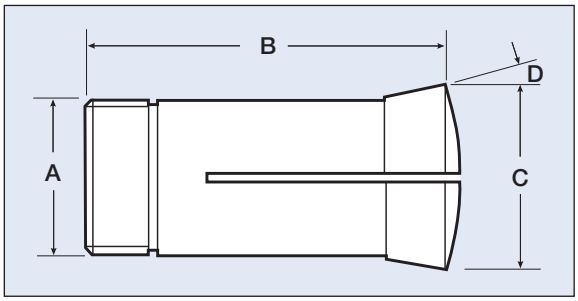
| Size | B-80 (Metric) Part Number |
|---|---|
| 38mm | H047-R-38mm |
| 38.5mm | H047-R-38.5mm |
| 39mm | H047-R-39mm |
| 39.5mm | H047-R-39.5mm |
| 40mm | H047-R-40mm |
| 40.5mm | H047-R-40.5mm |
| 41mm | H047-R-41mm |
| 41.5mm | H047-R-41.5mm |
| 42mm | H047-R-42mm |
| 42.5mm | H047-R-42.5mm |
| 43mm | H047-R-43mm |
| 43.5mm | H047-R-43.5mm |
| 44mm | H047-R-44mm |
| 44.5mm | H047-R-44.5mm |
| 45mm | H047-R-45mm |
| 45.5mm | H047-R-45.5mm |
| 46mm | H047-R-46mm |
| 46.5mm | H047-R-46.5mm |
| 47mm | H047-R-47mm |
| 47.5mm | H047-R-47.5mm |
| 48mm | H047-R-48mm |
| 48.5mm | H047-R-48.5mm |
| 49mm | H047-R-49mm |
| 49.5mm | H047-R-49.5mm |
| 50mm | H047-R-50mm |
| 50.5mm | H047-R-50.5mm |
| 51mm | H047-R-51mm |
| 51.5mm | H047-R-51.5mm |
| 52mm | H047-R-52mm |
| 52.5mm | H047-R-52.5mm |
| 53mm | H047-R-53mm |
| 53.5mm | H047-R-53.5mm |
| 54mm | H047-R-54mm |
| 54.5mm | H047-R-54.5mm |
| 55mm | H047-R-55mm |
| 55.5mm | H047-R-55.5mm |
| 56mm | H047-R-56mm |
| 56.5mm | H047-R-56.5mm |
| 57mm | H047-R-57mm |
| 57.5mm | H047-R-57.5mm |
| 58mm | H047-R-58mm |
| 58.5mm | H047-R-58.5mm |
| 59mm | H047-R-59mm |
| 59.5mm | H047-R-59.5mm |
| 60mm | H047-R-60mm |
| 60.5mm | H047-R-60.5mm |

| Size | B-80 (Metric) Part Number |
|---|---|
| 61mm | H047-R-61mm |
| 61.5mm | H047-R-61.5mm |
| 62mm | H047-R-62mm |
| 62.5mm | H047-R-62.5mm |
| 63mm | H047-R-63mm |
| 63.5mm | H047-R-63.5mm |
| 64mm | H047-R-64mm |
| 64.5mm | H047-R-64.5mm |
| 65mm | H047-R-65mm |
| 65.5mm | H047-R-65.5mm |
| 66mm | H047-R-66mm |
| 66.5mm | H047-R-66.5mm |
| 67mm | H047-R-67mm |
| 67.5mm | H047-R-67.5mm |
| 68mm | H047-R-68mm |
| 68.5mm | H047-R-68.5mm |
| 69mm | H047-R-69mm |
| 69.5mm | H047-R-69.5mm |
| 70mm | H047-R-70mm |
| 70.5mm | H047-R-70.5mm |
| 71mm | H047-R-71mm |
| 71.5mm | H047-R-71.5mm |
| 72mm | H047-R-72mm |
| 72.5mm | H047-R-72.5mm |
| 73mm | H047-R-73mm |
| 73.5mm | H047-R-73.5mm |
| 74mm | H047-R-74mm |
| 74.5mm | H047-R-74.5mm |
| 75mm | H047-R-75mm |
| 75.5mm | H047-R-75.5mm |
| 76mm | H047-R-76mm |
| 76.5mm | H047-R-76.5mm |
| 77mm | H047-R-77mm |
| 77.5mm | H047-R-77.5mm |
| 78mm | H047-R-78mm |
| 78.5mm | H047-R-78.5mm |
| 79mm | H047-R-79mm |
| 79.5mm | H047-R-79.5mm |
| 80mm | H047-R-80mm |

B80-Emergency



# 3J Collets (Inch)



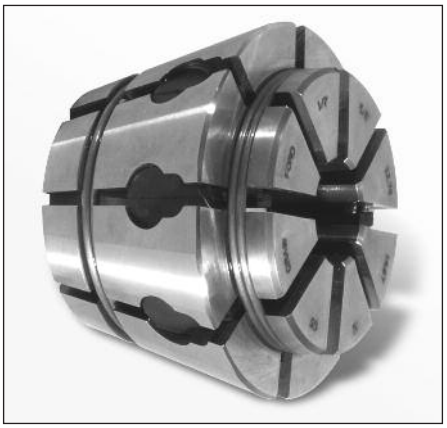

Dimensions

| A | B | C | D |
|---|---|---|---|
| 1.988 x 20 tpi | 3.937" | 2.2" | 7° |

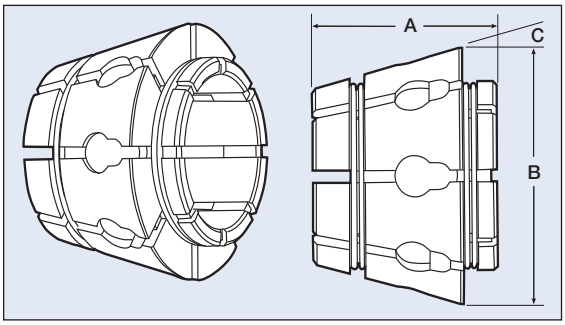
| Size | Part Number |
|---|---|
| 1/16" | 3J-R-1/16 |
| 5/64" | 3J-R-5/64 |
| 3/32" | 3J-R-3/32 |
| 7/64" | 3J-R-7/64 |
| 1/8" | 3J-R-1/8 |
| 9/64" | 3J-R-9/64 |
| 5/32" | 3J-R-5/32 |
| 11/64" | 3J-R-11/64 |
| 3/16" | 3J-R-3/16 |
| 13/64" | 3J-R-13/64 |
| 7/32" | 3J-R-7/32 |
| 15/64" | 3J-R-15/64 |
| 1/4" | 3J-R-1/4 |
| 17/64" | 3J-R-17/64 |
| 9/32" | 3J-R-9/32 |
| 19/64" | 3J-R-19/64 |
| 5/16" | 3J-R-5/16 |
| 21/64" | 3J-R-21/64 |
| 11/32" | 3J3J-R-11/32 |
| 23/64" | 3J-R-23/64 |
| 3/8" | 3J-R-3/8 |
| 25/64" | 3J-R-25/64 |
| 13/32" | 3J-R-13/32 |
| 27/64" | 3J-R-27/64 |
| 7/16" | 3J-R-7/16 |
| 29/64" | 3J-R-29/64 |
| 15/32" | 3J-R-15/32 |
| 31/64" | 3J-R-31/64 |
| 1/2" | 3J-R-1/2 |
| 33/64" | 3J-R-33/64 |
| 17/32" | 3J-R-17/32 |
| 35/64" | 3J-R-35/64 |
| 9/16" | 3J-R-9/16 |
| 37/64" | 3J-R-37/64 |
| 19/32" | 3J-R-19/32 |
| 39/64" | 3J-R-39/64 |
| 5/8" | 3J-R-5/8 |

| Size | Part Number |
|---|---|
| 41/64" | 3J-R-41/64 |
| 21/32" | 3J-R-21/32 |
| 43/64" | 3J-R-43/64 |
| 11/16" | 3J-R-11/16 |
| 45/64" | 3J-R-45/64 |
| 23/32" | 3J-R-23/32 |
| 47/64" | 3J-R-47/64 |
| 3/4" | 3J-R-3/4 |
| 49/64" | 3J-R-49/64 |
| 25/32" | 3J-R-25/32 |
| 51/64" | 3J-R-51/64 |
| 13/16" | 3J-R-13/16 |
| 53/64" | 3J-R-53/64 |
| 27/32" | 3J-R-27/32 |
| 55/64" | 3J-R-55/64 |
| 7/8" | 3J-R-7/8 |
| 57/64" | 3J-R-57/64 |
| 29/32" | 3J-R-29/32 |
| 59/64" | 3J-R-59/64 |
| 15/16" | 3J-R-15/16 |
| 61/64" | 3J-R-61/64 |
| 31/32" | 3J-R-31/32 |
| 63/64" | 3J-R-63/64 |
| 1" | 3J-R-1 |
| 1-1/16" | 3J-R-1-1/16 |
| 1-1/8" | 3J-R-1-1/8 |
| 1-3/16" | 3J-R-1-3/16 |
| 1-1/4" | 3J-R-1-1/4 |
| 1-5/16" | 3J-R-1-5/16 |
| 1-3/8" | 3J-R-1-3/8 |
| 1-7/16" | 3J-R-1-7/16 |
| 1-1/2" | 3J-R-1-1/2 |
| 1-9/16" | 3J-R-1-9/16 |
| 1-5/8" | 3J-R-1-5/8 |
| 1-11/16" | 3J-R-1-11/16 |
| 1-3/4" | 3J-R-1-3/4 |

P/N 3J-Emergency



# Plain Bore Multibore Collets




Dimensions

| Part No. | A | B | C |
|---|---|---|---|
| T-980 | 1.66" | 1.99" | 14° |
| W-850 | 2.04" | 2.76" | 15° |
| V-120 | 2.47" | 3.46" | 15° |
| T-285 | 2.88" | 3.91" | 15° |
| N-175 | 3.15" | 4.72" | 15° |

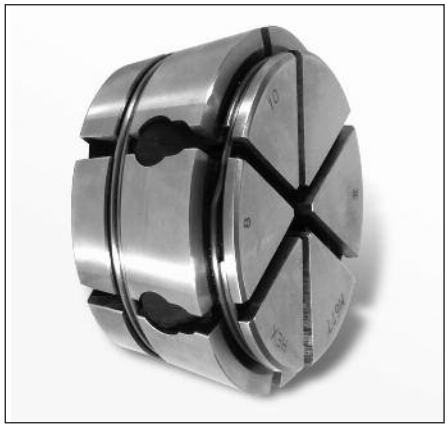
U.S. Trade Mark 2,898,519

| Grip Range | | T-980 | | | W-850 | | |
|---|---|---|---|---|---|---|---|
| Inch | MM | Round | Hex | Square | Round | Hex | Square |
| 1/16 - 3/16 | 1.58 - 4.76 | T980-R-B1 | T980-X-B68 | T980-S-B86 | W850-R-C1 | W850-X-C68 | W850-S-C86 |
| 1/8 - 1/4 | 3.17 - 6.35 | T980-R-B2 | T980-X-B69 | T980-S-B87 | W850-R-C2 | W850-X-C69 | W850-S-C87 |
| 1/4 - 3/8 | 6.35 - 9.52 | T980-R-B3 | T980-X-B70 | T980-S-B88 | W850-R-C3 | W850-X-C70 | W850-S-C88 |
| 3/8 - 1/2 | 9.52 - 12.70 | T980-R-B4 | T980-X-B71 | T980-S-B89 | W850-R-C4 | W850-X-C71 | W850-S-C89 |
| 1/2 - 5/8 | 12.70 - 15.87 | T980-R-B5 | T980-X-B72 | T980-S-B90 | W850-R-C5 | W850-X-C72 | W850-S-C90 |
| 5/8 - 3/4 | 15.87 - 19.05 | T980-R-B6 | T980-X-B73 | T980-S-B91 | W850-R-C6 | W850-X-C73 | W850-S-C91 |
| 3/4 - 7/8 | 19.05 - 22.22 | T980-R-B7 | T980-X-B74 | - | W850-R-C7 | W850-X-C74 | W850-S-C92 |
| 7/8 - 1 | 22.22 - 25.40 | T980-R-B8 | T980-X-B75 | - | W850-R-C8 | W850-X-C75 | W850-S-C93 |
| 1 - 1-1/8 | 25.40 - 28.57 | T980-R-B9 | - | - | W850-R-C9 | W850-X-C76 | W850-S-C94 |
| 1-1/8 - 1-1/4 | 28.57 - 31.75 | - | - | - | W850-R-C10 | W850-X-C77 | W850-S-C95 |
| 1-1/4 - 1-3/8 | 31.75 - 34.92 | - | - | - | W850-R-C11 | W850-X-C78 | - |
| 1-3/8 - 1-1/2 | 34.92 - 38.10 | - | - | - | W850-R-C12 | W850-X-C79 | - |
| 1-1/2 - 1-5/8 | 38.10 - 41.27 | - | - | - | W850-R-C13 | - | - |
| 1-5/8 - 1-3/4 | 41.27 - 44.45 | - | - | - | W850-R-C14* | - | - |

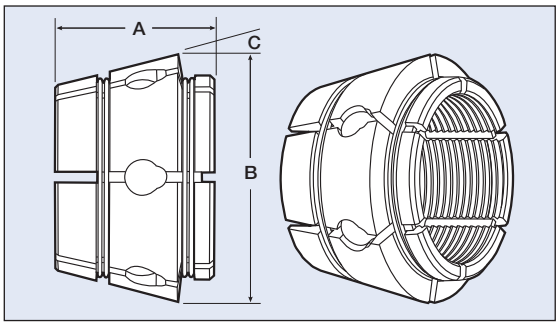
**39-42mm round only*

| Grip Range | | V-120 | | | T-285 | | | Round | N-175 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Inch | MM | Round | Hex | Square | Round | Hex | Square | & Smooth Bore | Hex | Square |
| 1/16 - 3/16 | 1.58 - 4.76 | V120-R-D1 | - | - | - | - | - | - | - | - |
| 1/8 - 1/4 | 3.17 - 6.35 | V120-R-D2 | V120-X-D69 | V120-S-D87 | T285-R-E2 | T285-X-E69 | T285-S-E87 | - | - | - |
| 1/4 - 3/8 | 6.35 - 9.52 | V120-R-D3 | V120-X-D70 | V120-S-D88 | T285-R-E3 | T285-X-E70 | T285-S-E88 | - | - | - |
| 3/8 - 1/2 | 9.52 - 12.70 | V120-R-D4 | V120-X-D71 | V120-S-D89 | T285-R-E4 | T285-X-E71 | T285-S-E89 | - | - | - |
| 1/2 - 5/8 | 12.70 - 15.87 | V120-R-D5 | V120-X-D72 | V120-S-D90 | T285-R-E5 | T285-X-E72 | T285-S-E90 | N175-R-F5 | N175-X-F72 | N175-S-F100 |
| 5/8 - 3/4 | 15.87 - 19.05 | V120-R-D6 | V120-X-D73 | V120-S-D91 | T285-R-E6 | T285-X-E73 | T285-S-E91 | N175-R-F6 | N175-X-F73 | N175-S-F101 |
| 3/4 - 7/8 | 19.05 - 22.22 | V120-R-D7 | V120-X-D74 | V120-S-D92 | T285-R-E7 | T285-X-E74 | T285-S-E92 | N175-R-F7 | N175-X-F74 | N175-S-F102 |
| 7/8 - 1 | 22.22 - 25.40 | V120-R-D8 | V120-X-D75 | V120-S-D93 | T285-R-E8 | T285-X-E75 | T285-S-E93 | N175-R-F8 | N175-X-F75 | N175-S-F103 |
| 1 - 1-1/8 | 25.40 - 28.57 | V120-R-D9 | V120-X-D76 | V120-S-D94 | T285-R-E9 | T285-X-E76 | T285-S-E94 | N175-R-F9 | N175-X-F76 | N175-S-F104 |
| 1-1/8 - 1-1/4 | 28.57 - 31.75 | V120-R-D10 | V120-X-D77 | V120-S-D95 | T285-R-E10 | T285-X-E77 | T285-S-E95 | N175-R-F10 | N175-X-F77 | N175-S-F105 |
| 1-1/4 - 1-3/8 | 31.75 - 34.92 | V120-R-D11 | V120-X-D78 | V120-S-D96 | T285-R-E11 | T285-X-E78 | T285-S-E96 | N175-R-F11 | N175-X-F78 | N175-S-F106 |
| 1-3/8 - 1-1/2 | 34.92 - 38.10 | V120-R-D12 | V120-X-D79 | V120-S-D97 | T285-R-E12 | T285-X-E79 | T285-S-E97 | N175-R-F12 | N175-X-F79 | N175-S-F107 |
| 1-1/2 - 1-5/8 | 38.10 - 41.27 | V120-R-D13 | V120-X-D80 | V120-S-D98 | T285-R-E13 | T285-X-E80 | T285-S-E98 | N175-R-F13 | N175-X-F80 | N175-S-F108 |
| 1-5/8 - 1-3/4 | 41.27 - 44.45 | V120-R-D14 | V120-X-D81 | - | T285-R-E14 | T285-X-E81 | T285-S-E99 | N175-R-F14 | N175-X-F81 | N175-S-F109 |
| 1-3/4 - 1-7/8 | 44.45 - 47.62 | V120-R-D15 | V120-X-D82 | - | T285-R-E15 | T285-X-E82 | - | N175-R-F15 | N175-X-F82 | N175-S-F110 |
| 1-7/8 - 2 | 47.62 - 50.80 | V120-R-D16 | V120-X-D83 | - | T285-R-E16 | T285-X-E83 | - | N175-R-F16 | N175-X-F83 | N175-S-F111 |
| 2 - 2-1/8 | 50.80 - 53.97 | V120-R-D17 | - | - | T285-R-E17 | T285-X-E84 | - | N175-R-F17 | N175-X-F84 | N175-S-F112 |
| 2-1/8 - 2-1/4 | 53.97 - 57.15 | - | - | - | T285-R-E18 | T285-X-E85 | - | N175-R-F18 | N175-X-F85 | - |
| 2-1/4 - 2-3/8 | 57.15 - 60.32 | - | - | - | T285-R-E19 | - | - | N175-R-F19 | N175-X-F86 | - |
| 2-3/8 - 2-1/2 | 60.32 - 63.50 | - | - | - | T285-R-E20 | - | - | N175-R-F20 | N175-X-F87 | - |
| 2-1/2 - 2-5/8 | 63.50 - 66.67 | - | - | - | T285-R-E21 | - | - | N175-R-F21 | N175-X-F88 | - |
| 2-5/8 - 2-3/4 | 66.67 - 69.85 | - | - | - | - | - | - | N175-R-F22 | - | - |
| 2-3/4 - 2-7/8 | 69.85 - 73.02 | - | - | - | - | - | - | N175-R-F23 | - | - |
| 2-7/8 - 3 | 73.02 - 76.20 | - | - | - | - | - | - | N175-R-F24 | - | - |
| 3 - 3-1/8 | 76.20 - 79.37 | - | - | - | - | - | - | N175-R-F25 | - | - |

## Collet Chuck available



# Multibore Collets
## DIN 6343 Serrated Bore




Dimensions

| Part No. | A | B | C |
|---|---|---|---|
| **M-673** | 1.53" | 2.42" | 14.75° |
| **M-677** | 1.77" | 3.36" | 14.75° |
| **J-660** | 1.89" | 4.27" | 14.75° |

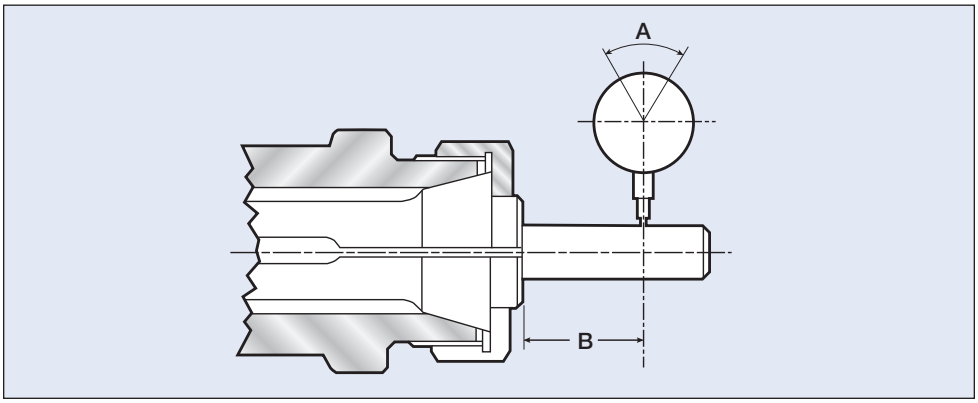
U.S. Trade Mark 2,898,519

| Grip Range | | M-673 175E Compatible (4728) | | | M-677 185E Compatible (4291) | | | J-660 193E Compatible (H-47) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Inch | MM | Round | Hex | Square | Round | Hex | Square | Round | Hex | Square |
| .15 - .23 | 4 - 6 | M673-R-6* | M673-X-6* | M673-S-6* | M677-R-6* | M677-X-6* | M677-S-6* | - | - | - |
| .23 - .31 | 6 - 8 | M673-R-8* | M673-X-8* | M673-S-8* | M677-R-8 | M677-X-8 | M677-S-8 | - | - | - |
| .31 - .39 | 8 - 10 | M673-R-10 | M673-X-10 | M673-S-10 | M677-R-10 | M677-X-10 | M677-S-10 | - | - | - |
| .39 - .47 | 10 - 12 | M673-R-12 | M673-X-12 | M673-S-12 | M677-R-12 | M677-X-12 | M677-S-12 | - | - | - |
| . 47 - .55 | 12 - 14 | M673-R-14 | M673-X-14 | M673-S-14 | M677-R-14 | M677-X-14 | M677-S-14 | J660-R-14 | J660-X-14 | J660-S-14 |
| .55 - .63 | 14 - 16 | M673-R-16 | M673-X-16 | M673-S-16 | M677-R-16 | M677-X-16 | M677-S-16 | J660-R-16 | J660-X-16 | J660-S-16 |
| .63 - .70 | 16 - 18 | M673-R-18 | M673-X-18 | M673-S-18 | M677-R-18 | M677-X-18 | M677-S-18 | J660-R-18 | J660-X-18 | J660-S-18 |
| .70 - .78 | 18 - 20 | M673-R-20 | M673-X-20 | M673-S-20 | M677-R-20 | M677-X-20 | M677-S-20 | J660-R-20 | J660-X-20 | J660-S-20 |
| .78 - .86 | 20 - 22 | M673-R-22 | M673-X-22 | M673-S-22 | M677-R-22 | M677-X-22 | M677-S-22 | J660-R-22 | J660-X-22 | J660-S-22 |
| .86 - .94 | 22 - 24 | M673-R-24 | M673-X-24 | M673-S-24 | M677-R-24 | M677-X-24 | M677-S-24 | J660-R-24 | J660-X-24 | J660-S-24 |
| .94 - 1.02 | 24 - 26 | M673-R-26 | M673-X-26 | M673-S-26 | M677-R-26 | M677-X-26 | M677-S-26 | J660-R-26 | J660-X-26 | J660-S-26 |
| 1.02 - 1.10 | 26 - 28 | M673-R-28 | M673-X-28 | M673-S-28 | M677-R-28 | M677-X-28 | M677-S-28 | J660-R-28 | J660-X-28 | J660-S-28 |
| 1.10 -1.18 | 28 - 30 | M673-R-30 | M673-X-30 | M673-S-30 | M677-R-30 | M677-X-30 | M677-S-30 | J660-R-30 | J660-X-30 | J660-S-30 |
| 1.18 - 1.25 | 30 - 32 | M673-R-32 | M673-X-32 | - | M677-R-32 | M677-X-32 | M677-S-32 | J660-R-32 | J660-X-32 | J660-S-32 |
| 1.25 - 1.33 | 32 - 34 | M673-R-34 | M673-X-34 | - | M677-R-34 | M677-X-34 | M677-S-34 | J660-R-34 | J660-X-34 | J660-S-34 |
| 1.33 - 1.41 | 34 - 36 | M673-R-36 | M673-X-36 | - | M677-R-36 | M677-X-36 | M677-S-36 | J660-R-36 | J660-X-36 | J660-S-36 |
| 1.41 - 1.49 | 36 - 38 | M673-R-38 | - | - | M677-R-38 | M677-X-38 | M677-S-38 | J660-R-38 | J660-X-38 | J660-S-38 |
| 1.49 - 1.57 | 38 - 40 | M673-R-40 | - | - | M677-R-40 | M677-X-40 | M677-S-40 | J660-R-40 | J660-X-40 | J660-S-40 |
| 1.57 - 1.65 | 40 - 42 | M673-R-42 | - | - | M677-R-42 | M677-X-42 | M677-S-42 | J660-R-42 | J660-X-42 | J660-S-42 |
| 1.65 - 1.73 | 42 - 44 | - | - | - | M677-R-44 | M677-X-44 | - | J660-R-44 | J660-X-44 | J660-S-44 |
| 1.73 - 1.81 | 44 - 46 | - | - | - | M677-R-46 | M677-X-46 | - | J660-R-46 | J660-X-46 | J660-S-46 |
| 1.81 - 1.89 | 46 - 48 | - | - | - | M677-R-48 | M677-X-48 | - | J660-R-48 | J660-X-48 | J660-S-48 |
| 1.89 - 1.92 | 48 - 50 | - | - | - | M677-R-50 | M677-X-50 | - | J660-R-50 | J660-X-50 | J660-S-50 |
| 1.92 - 2.04 | 50 - 52 | - | - | - | M677-R-52 | M677-X-52 | - | J660-R-52 | J660-X-52 | J660-S-52 |
| 2.04 - 2.12 | 52 - 54 | - | - | - | M677-R-54 | - | - | J660-R-54 | J660-X-54 | J660-S-54 |
| 2.12 - 2.20 | 54 - 56 | - | - | - | M677-R-56 | - | - | J660-R-56 | J660-X-56 | J660-S-56 |
| 2.20 - 2.28 | 56 - 58 | - | - | - | M677-R-58 | - | - | J660-R-58 | J660-X-58 | - |
| 2.28 - 2.36 | 58 - 60 | - | - | - | M677-R-60 | - | - | J660-R-60 | J660-X-60 | - |
| 2.36 - 2.44 | 60 - 62 | - | - | - | - | - | - | J660-R-62 | J660-X-62 | - |
| 2.44 - 2.52 | 62 - 64 | - | - | - | - | - | - | J660-R-64 | J660-X-64 | - |
| 2.52 - 2.59 | 64 - 66 | - | - | - | - | - | - | J660-R-66 | J660-X-66 | - |
| 2.59 - 2.67 | 66 - 68 | - | - | - | - | - | - | J660-R-68 | J660-X-68 | - |
| 2.67 - 2.75 | 68 - 70 | - | - | - | - | - | - | J660-R-70 | - | - |
| 2.75 - 2.83 | 70 - 72 | - | - | - | - | - | - | J660-R-72 | - | - |
| 2.83 - 2.91 | 72 - 74 | - | - | - | - | - | - | J660-R-74 | - | - |
| 2.91 - 2.99 | 74 - 76 | - | - | - | - | - | - | J660-R-76 | - | - |
| 2.99 - 3.07 | 76 - 78 | - | - | - | - | - | - | J660-R-78 | - | - |
| 3.07 - 3.14 | 78 - 80 | - | - | - | - | - | - | J660-R-80 | - | - |

Round bore collets are supplied with spiral serations except where marked with (*)
Hexagonal and square collets are supplied with annular serations except where marked with (*)
All collets marked with (*) are supplied with plain bore

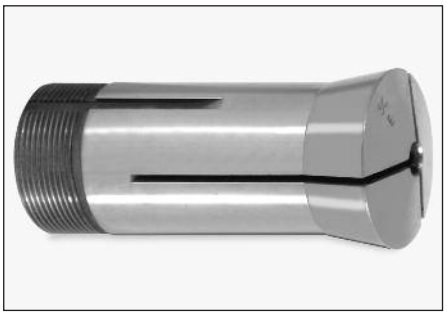
## Collet Chuck available

# B42, B60 & B80 Type Collet Accuracy Chart

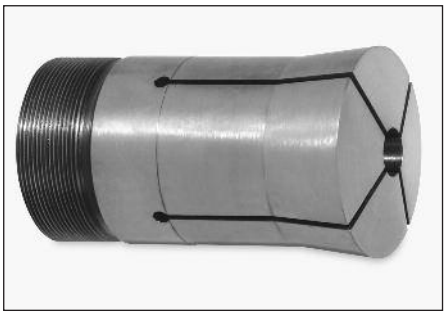



***Accuracy chart for Crawford Drawback, Screwback. Pushback and Dead Length Spring Collets***

| Bore Size Center or A/Flat | A | | B |
|---|---|---|---|
| | Round | Hex & Square | Test Length |
| 1.0mm<br>0.039" | 0.015mm<br>0.0006" | 0.046mm<br>0.0018" | 3.0mm<br>0.125" |
| 1.0mm - 1.5mm<br>0.039" - 0.059" | 0.020mm<br>0.0008" | 0.060mm<br>0.0024" | 6.5mm<br>0.250" |
| 1.5mm - 3.0mm<br>0.059" - 0.118" | 0.020mm<br>0.0008" | 0.060mm<br>0.0024" | 9.5mm<br>0.375" |
| 3.0mm - 6.0mm<br>0.118" - 0.236" | 0.020mm<br>0.0008" | 0.060mm<br>0.0024" | 16.0mm<br>0.625" |
| 6.0mm - 10.0mm<br>0.236" - 0.394" | 0.020mm<br>0.0008" | 0.060mm<br>0.0024" | 25.5mm<br>1.0" |
| 10.0mm - 19.0mm<br>0.394" - 0.748" | 0.030mm<br>0.0012" | 0.091mm<br>0.0036" | 38.0mm<br>1.5" |
| 19.0mm - 25.4mm<br>0.748" - 1.0" | 0.030mm<br>0.0012" | 0.091mm<br>0.0036" | 51.0mm<br>2.0" |
| 25.4mm - 32.0mm<br>1.0" - 1.26" | 0.040mm<br>0.0016" | 0.120mm<br>0.0048" | 63.5mm<br>2.5" |
| 32.0mm - 50.8mm<br>1.26" - 2.0" | 0.040mm<br>0.0016" | 0.120mm<br>0.0048" | 76.0mm<br>3.0" |
| Over 50.8mm<br>2.0" | 0.040mm<br>0.0016" | 0.120mm<br>0.0048" | 101.5mm<br>4.0" |

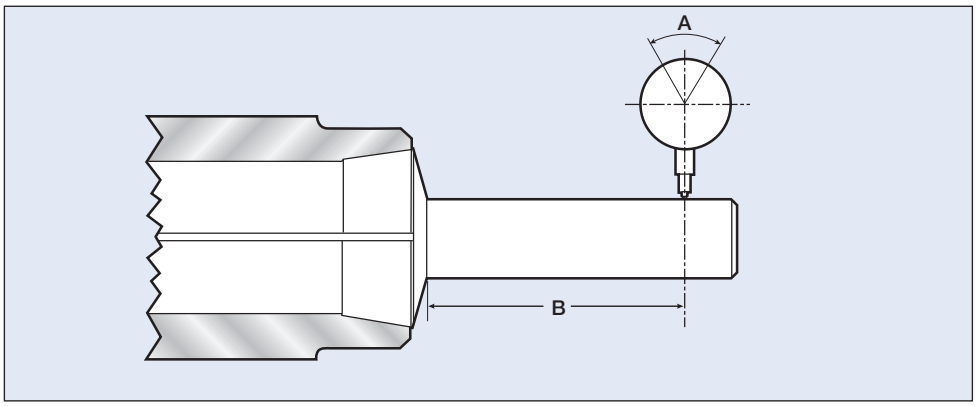


*5C Collets page 88-89*



*16C Collets page 90-91*

# 5C and 16C Collet Accuracy Chart




***Accuracy chart for Crawford Drawback Collets***

| Collet Bore Size Center or A/Flat | A Round | B Test Length |
|---|---|---|
| 1.0mm<br>0.039" | 0.007mm<br>0.0003" | 3.0mm<br>0.125" |
| 1.0mm - 1.5mm<br>0.039" - 0.059" | 0.010mm<br>0.0004" | 6.5mm<br>0.250" |
| 1.5mm - 3.0mm<br>0.059" - 0.118" | 0.020mm<br>0.0004" | 9.5mm<br>0.375" |
| 3.0mm - 6.0mm<br>0.118" - 0.236" | 0.010mm<br>0.0004" | 16.0mm<br>0.625" |
| 6.0mm - 10.0mm<br>0.236" - 0.394" | 0.010mm<br>0.0004" | 25.5mm<br>1.0" |
| 10.0mm - 19.0mm<br>0.394" - 0.748" | 0.015mm<br>0.0006" | 38.0mm<br>1.5" |
| 19.0mm - 25.4mm<br>0.748" - 1.0" | 0.015mm<br>0.0006" | 51.0mm<br>2.0" |
| 25.4mm - 32.0mm<br>1.0" - 1.26" | 0.020mm<br>0.0008" | 63.5mm<br>2.5" |
| 32.0mm - 50.8mm<br>1.26" - 2.0" | 0.020mm<br>0.0008" | 76.0mm<br>3.0" |
| Over 50.8mm<br>2.0" | 0.020mm<br>0.0008" | 101.5mm<br>4.0" |

## Ordering Information:

| Order No. | Description |
|---|---|
| PB16OZ | 16 oz (453.6 gms) tube |
| PB10LB | 10 lb (4.5 kilo) pail |

# Chuck Lubricant

## for Manual and Power Chucks

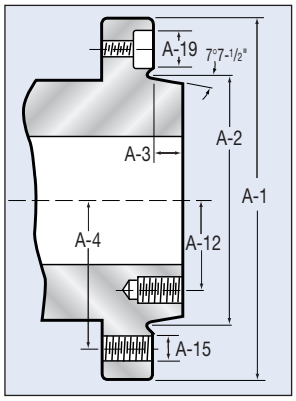
**This is a specially formulated high pressure Chuck Lubricant and is the recommended lubricant to be used in all Pratt Burnerd Chuck that require grease type lubrication.**

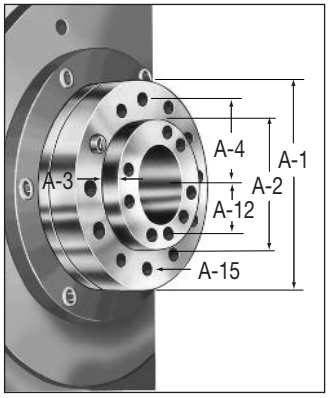
### Features:

- Dramatically improves Chuck jaw forces over conventional lubricants, withstands pressure up to 500,000 pounds per square inch.
- Rust and oxidation inhibitors
- Tacky nature gives high resistance to centrifugal force.
- Contains molybdenum disulfide to reduce seizing, fretting wear galling and lower friction under conditions of extreme pressure.
- Help reduce maintenance costs.
- An effective lubricant for all brands of chucks

# American Standard Spindle Nose Data

## Source: American Standard Bulletin ASA B5.9 1960



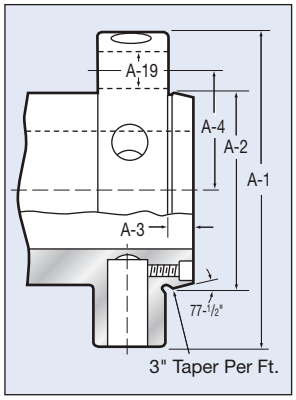



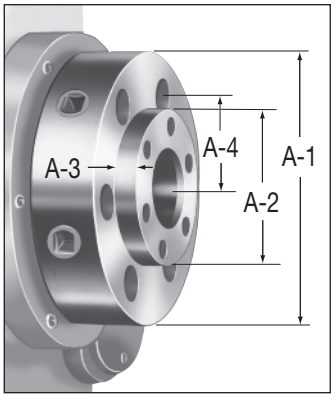

### Type A American Standard A-1, A-2, B-1, B-2 Spindle

| | A5 | A6 | A8 | A11 | A15 | A20 |
|---|---|---|---|---|---|---|
| A-1 | 5¼ | 6½ | 8¼ | 11 | 15 | 20½ |
| A-2* | 3.2505 | 4.1880 | 5.50075 | 7.75075 | 11.251** | 16.251** |
| A-3*** | .5625 | .625 | .6875 | .750 | .8125 | .875 |
| A-4 | 2 1/16 | 2⅝ | 3⅜ | 4⅝ | 6½ | 9⅛ |
| A-12 | 1 7/32 | 1⅝ | 2 3/16 | 3¼ | 4⅞ | 7¼ |
| A-15 | 7/16-14 | ½-13 | ⅝-11 | ¾-10 | ⅞-9 | 1-8 |

*Tolerance +.0005/-.000 **Tolerance +.001/-.000 ***Tolerance +.000/-.001

A-1 Has tapped holes on both the inner bolt circle and outer bolt circle.
A-2 Has tapped holes on the outer bolt circle, but has no hole on inner bolt circle.
B-1 Has drilled holes on the outer bolt circles, and has tapped holes on inner bolt circle.
B-2 Has drilled holes on the outer bolt circles, but has no holes on inner bolt circle.

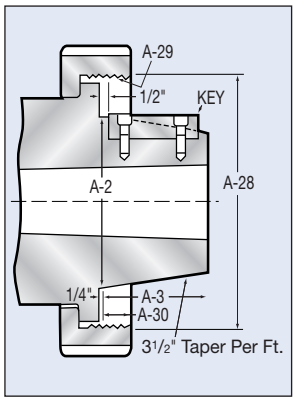


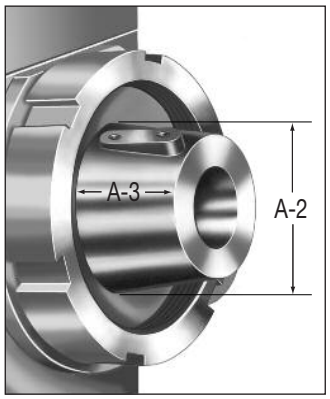




### Type D1 American Standard cam lock spindles

| | D3 | D4 | D5 | D6 | D8 | D11 |
|---|---|---|---|---|---|---|
| A-1 | 3⅝ | 4⅝ | 5¾ | 7¼ | 8⅞ | 11¾ |
| A-2* | 2.1250** | 2.5005 | 3.2505 | 4.1880 | 5.50075 | 7.75075 |
| A-3 | 7/16 | 7/16 | ½ | 9/16 | ⅝ | 1 1/16 |
| A-4 | 1 25/64 | 1⅝ | 2 1/16 | 2⅝ | 3⅜ | 4⅝ |
| A-19 | .594 | .656 | .781 | .906 | 1.031 | 1.218 |

*Tolerance +.0005/-.000 **Tolerance +.00025/-.000

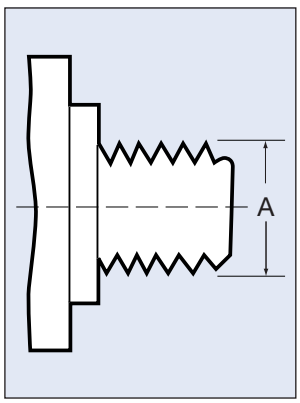


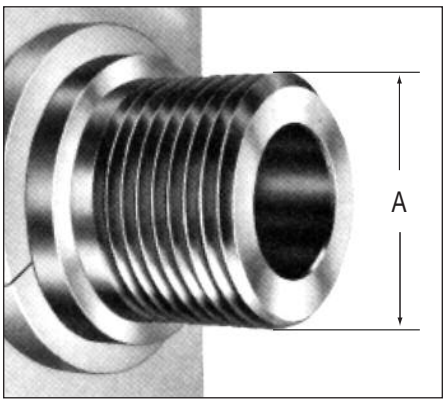




### Type L long taper key drive

| | L00 | L0 | L1 | L2 | L3 |
|---|---|---|---|---|---|
| A-2* | 2¾ | 3¼ | 4⅛ | 5¼ | 6½ |
| A-3 | 2 | 2⅜ | 2⅞ | 3⅜ | 3⅞ |
| A-28 | 3¾ | 4½ | 6 | 7¾ | 10⅜ |
| A-29 | 6TPI | 6TPI | 6TPI | 5TPI | 4TPI |

*Tolerance +.002/-.000




### Threaded Spindle

| Thread size A |
|---|
| 1½-8 |
| 2¼-8 |
| 2⅜-6 |

# Radio Frequency Gripmeter

**The measurement of dynamic clamping force has never been more important than it is today. With the trend for faster and faster cutting speeds and the recent changes in legislation, you cannot afford to ignore it...**

The latest version of our gripmeter now provides a host of new features resulting from the incorporation of 'state of the art' microcontrollers - including the facility to transfer measurements to your personal computer for presentation, analysis or storage. The NEW way to accurately measure the gripping force of manual and power operated chucks under both static and rotating conditions. An indispensable aid for production and maintenance engineers and a necessity for anyone concerned with machine shop safety.

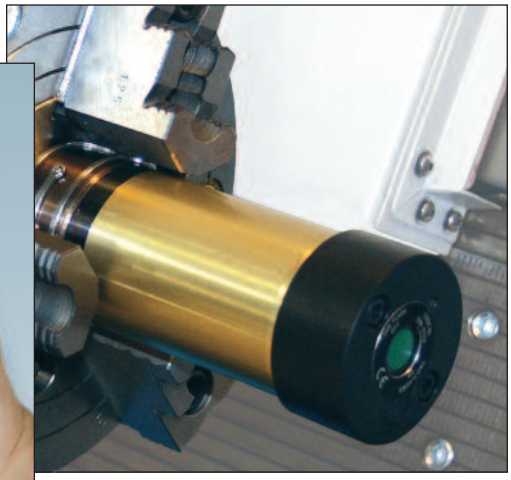
## Features...

- One-year warranty
- Measures the chuck's gripping force under both static and dynamic condition up to 22,480 lbf (or equivalent) per jaw
- Measures speed of rotation up to 6000 rpm
- Convenient and safe during use. Radio frequency signal between loadcell and handset hence no electrical slip rings or connecting wires
- Stores up to 120 readings, comprising grip, speed, cylinder pressure and date/time stamp
- Readings can be stored indefinitely or selectively deleted
- PC compatible - download readings for long term storage, presentation and analysis with 'Grip Analyzer' the new Windows® compatible software from PBA
- Read-out in any one of four selectable units kN, lbf, Mgf, Tons(long)
- High stiffness load cell ensures accurate measurement of gripping force
- Extension rings are are included to enable measurement of larger diameters
- Can be used for 2 jaw chucks and vices
- Low battery warning
- Powered by long-life batteries with automatic "power off" feature to extend battery life to the maximum. New easy battery replacement… uses 4 each AA in the readout unit and 1 each D cell 3.6 volt in the load cell.
- No re-calibration required after a battery change
- Automatic zeroing
- Indication of overload
- Complies with CE and EMC directives

HOW TO ORDER: State quantity, Part Number, and shipping instructions.

## Radio Frequency Gripmeter

The Radio Frequency Gripmeter or RFG comprises a hand held receiver unit and loadcell transmitter that is gripped in the chuck under test. The loadcell is completely self-contained and is free to rotate in the chuck to its maximum speed of 6000rpm. The loadcell when 'on' measures the grip and speed and then transmits the data at a permissible frequency (433.92Mhz) to the handset receiver. A valuable advantage of using radio frequency transmission is that there is no need for 'line of sight' between the loadcell transmitter and handset, which often can be difficult with machine guards obstructing clear view. The reading can be taken even with the loadcell and handset as much as 65.5 feet apart. The data when received at the handset is then converted to the operator's choice of units and displayed at the handset on a dot matrix screen. The grip reading is updated every 1/2 second and the speed measurement every 2 seconds. The data can then be stored at handset simply by pressing a few keys, up to 120 readings can be stored at one time. This information can subsequently be downloaded onto a PC for storage, analysis and printing. The RFG kit includes loadcell extension rings that extend the gripping diameter from 2.36" to 3.93" and 6.30". The instrument may also be used to measure the grip of 2 jaw chucks and vices.



Loadcell Transmitter

Hand Held Receiver

## RFG Kit Contents...

* Magnet required for speed measurement

## Specifications:

| | |
|---|---|
| Maximum Load Per Jaw (3 jaw) | 22,480 lbf |
| Unit of Measurement (user selectable) | kN, lbf, Mgf, Tons (long) |
| Grip Accuracy | ± 1% (FSD) |
| Maximum Distance Between Units | 65.5' |
| Loadcell Diameter | 2.36" |
| Smallest gripping Diameter Over Protection Ring | 2.48" |
| Alternative Diameters with Extension Rings | 3.94"/6.30" |
| Maximum speed | 6000 rpm |
| Set Zero | Automatic |
| PC Communications | RS232 (serial bus) |
| Handset Battery | AA (four) |
| Loadcell Battery lithium | D 3v long-life |
| Part Number | 1009-07360 |

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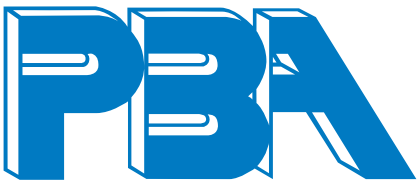


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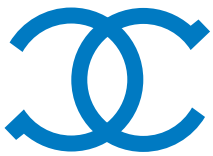

Crawford Collets

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