

### **COUNTERSINKS | 3 FLUTE**

### METRIC | COBALT M35 | TIN COATED

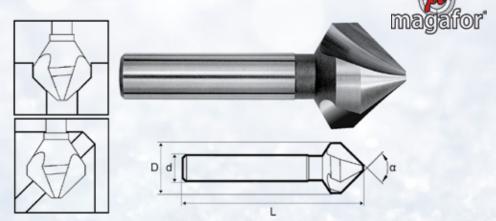
This highly productive countersinking cutter is a much improved version of the traditional multiflute milling cutter:

- wide flutes provide good chip evacuation
- positive cut
- · constant profile aids regrinding of the tool
- self-centering of the cutting mill (three bearing points)
- virtually eliminates vibration

Dimensions are adapted so as to sink 90 degree screw caps up to M12. We recommend lubricating.

#### Carbide:

Diameter 12.4 to 31 = 3 flatted shanks Diameter 4.3 to 8.3 = cylindrical shank Diameter 10.4 to 31 = brazed carbide head



| D<br>Overall<br>Diameter | d<br>Shank<br>Diameter | Chamfer<br>Range<br>Min/Max | L<br>Overall<br>Length | 60° A<br>Ser<br>43 | ies    | 82° A<br>Ser<br>43 | ies    | 82° A<br>Ser<br>4834 |        |         | Angle<br>ries<br>31 | 90° A<br>Ser<br>4831 | ies    | 100° /<br>Ser<br>43 | ies    | 120° /<br>Ser<br>43 |        |
|--------------------------|------------------------|-----------------------------|------------------------|--------------------|--------|--------------------|--------|----------------------|--------|---------|---------------------|----------------------|--------|---------------------|--------|---------------------|--------|
| (mm)                     | (mm)                   | (mm)                        | (Inch)                 | Code               | Price  | Code               | Price  | Code                 | Price  | Code    | Price               | Code                 | Price  | Code                | Price  | Code                | Price  |
| 10.4                     | 6                      | 2.5-10.4                    | 2                      | 540301             | 39.69  | 540311             | 39.69  | 540361               | 38.11  | 540321  | 39.69               | 540371               | 38.11  | 540331              | 39.69  | 540341              | 39.69  |
| 16.5                     | 10                     | 3.2-16.5                    | 2-1/4                  | 540302             | 57.95  | 540312             | 57.95  | 540362               | 56.10  | 540322  | 57.95               | 540372               | 56.10  | 540332              | 57.95  | 540342              | 57.95  |
| 20.5                     | 10                     | 3.5-20.5                    | 2-1/2                  | 540303             | 65.04  | 540313             | 65.04  | 540363               | 66.01  | 540323  | 65.04               | 540373               | 66.01  | 540333              | 65.04  | 540343              | 64.04  |
| 25.0                     | 10                     | 3.8-25                      | 2-5/8                  | 540304             | 79.36  | 540314             | 79.36  | 540364               | 86.34  | 540324  | 79.36               | 540374               | 86.34  | 540334              | 79.36  | 540344              | 79.36  |
| 31.0                     | 12                     | 4.2-31                      | 2-3/4                  | 540305             | 118.01 | 540315             | 118.01 | 540365               | 112.49 | 540325  | 118.01              | 540375               | 112.49 | 540335              | 118.01 | 540345              | 118.01 |
| 40.0                     | 16                     | 8-40                        | 4-1/2                  | -                  |        | -                  |        | -                    |        | *540326 | 315.27              | -                    |        | -                   |        | -                   |        |
| 50.0                     | 16                     | 10-50                       | 5                      | -                  |        | -                  |        | -                    |        | *540327 | 286.71              | -                    |        | -                   |        | -                   |        |
| 63.0                     | 16                     | 10-63                       | 5-1/2                  | -                  |        | -                  |        | -                    |        | *540328 | 665.74              | -                    |        | -                   |        | -                   |        |
| 80.0                     | 16                     | 14-80                       | 6-1/2                  | -                  |        | -                  |        | -                    |        | *540329 | 1331.36             | -                    |        | -                   |        | -                   |        |

<sup>\*</sup> Three gripping flats on shank

CONTACT YOUR LOCAL KAR DISTRIBUTOR FOR MORE DETAILS OR VISIT WWW.KAR.CA

#### YOUR AUTHORIZED KAR DISTRIBUTOR:



Email: sales@duramill.ca

Tel: (905) 738-8665 | Fax: (905) 738-4862

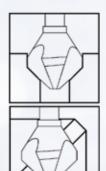
www.duramill.ca

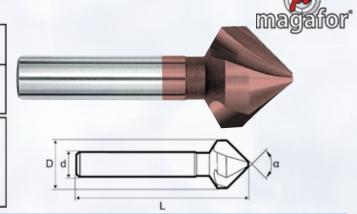
6877 Edwards Blvd., Mississauga, ON L5T 2T9

# **ANTI-VIBRATION COUNTERSINKS | 3 FLUTE**

METRIC | COBALT M35 | 90° ANGLE | RED'X COATED

- Decreases the axial force compared to traditional countersinks, reducing tool vibrations which provides a better finish
- $\bullet$  The equal division 3 x 120° of the flutes offer good results in most materials
- HSSE-Cobalt (M35) with Red'X is 65 HRC, to machine steels up to 1000N/mm<sup>2</sup>
- Cast irons up to 200 HB, copper, brass, bronze, aluminum
- Red'X coating is 3500 HV and considerably increases the tool life by increasing wear resistance and improving surface finish





| D<br>Overall     | d<br>Shank       | Chamfer<br>Range | L<br>Overall   | Ser<br>49 |       |
|------------------|------------------|------------------|----------------|-----------|-------|
| Diameter<br>(mm) | Diameter<br>(mm) | Min/Max<br>(mm)  | Length<br>(mm) | Code      | Price |
| 4.3              | 4                | 1.3-4.3          | 40             | 541160    | 31.23 |
| 5.3              | 4                | 1.5-5.3          | 40             | 541161    | 32.34 |
| 6.0              | 5                | 1.5-6.0          | 45             | 541162    | 33.42 |
| 6.3              | 5                | 1.5-6.3          | 45             | 541163    | 33.42 |
| 8.0              | 6                | 2.0-8.0          | 50             | 541164    | 34.47 |
| 8.3              | 6                | 2.0-8.3          | 50             | 541165    | 34.47 |
| 9.4              | 6                | 2.2-9.4          | 50             | 541166    | 35.76 |
| 10.0             | 6                | 2.5-10.0         | 50             | 541167    | 36.45 |
| 10.4             | 6                | 2.5-10.4         | 50             | 541168    | 36.45 |
| 11.5             | 8                | 2.8-11.5         | 56             | 541169    | 40.94 |

| D<br>Overall     | d<br>Shank       | Chamfer<br>Range | L<br>Overall   | Ser<br>49 |        |
|------------------|------------------|------------------|----------------|-----------|--------|
| Diameter<br>(mm) | Diameter<br>(mm) | Min/Max<br>(mm)  | Length<br>(mm) | Code      | Price  |
| 12.0             | 8                | 2.8-12.0         | 56             | 541170    | 44.23  |
| 12.4             | 8                | 2.8-12.4         | 56             | 541171    | 44.23  |
| 15.0             | 10               | 3.2-15.0         | 60             | 541172    | 51.77  |
| 16.5             | 10               | 3.2-16.5         | 60             | 541173    | 55.61  |
| 20.5             | 10               | 3.5-20.5         | 63             | 541174    | 63.60  |
| 25.0             | 10               | 3.8-25.0         | 67             | 541175    | 86.25  |
| 28.0             | 12               | 4.0-28.0         | 71             | 541176    | 113.20 |
| 30.0             | 12               | 4.2-30.0         | 71             | 541177    | 117.48 |
| 31.0             | 12               | 4.2-31.0         | 71             | 541178    | 119.70 |

# **TAP & DRILL SETS**

#### FRACTIONAL/MACHINE SCREW & METRIC

- 16 piece sets (8 taps/8 drills) supplied in vinyl pouch
- Larger drill diameters which reduce tap breakage
- Supplied in vinyl storage case







Code 311526

126.36

| Taps      | Tap   |
|-----------|-------|
| (Plug)    | Drill |
| 6 - 32    | 7/64  |
| 8 - 32    | #29   |
| 10 - 24   | #23   |
| 10 - 32   | #20   |
| 1/4 - 20  | 13/64 |
| 5/16 - 18 | 17/64 |
| 3/8 - 16  | P     |
| 1/2 - 13  | 7/16  |

Code 311527

212.88

| Taps        | Tap Drill |
|-------------|-----------|
| (Plug)      | (mm)      |
| M3 x 0.50   | 2.50      |
| M3.5 x 0.60 | 2.90      |
| M4 x 0.70   | 3.30      |
| M5 x 0.80   | 4.20      |
| M6 x 1.00   | 5.00      |
| M8 x 1.25   | 6.75      |
| M10 x 1.50  | 8.50      |
| M12 x 1.75  | 10.25     |

# **CUTTING FLUID**





| XTRA-THICK 16oz Code 219238 | 18 <sup>.39</sup> |
|-----------------------------|-------------------|
| PROTAP 16oz Code 219217     |                   |
| AQUEOUS 16oz Code 219225    | <b>15</b> .50     |
| ECO-OIL 16ozCode 219232     |                   |
| EP-XTRA 16ozCode 219202     | <b>14</b> .69     |
| ALUMINUM 16oz Code 219210   |                   |



# **SAVE AT KAR**

# **END MILLS | ALU-POWER**

#### MICROGRAIN SOLID CARBIDE | 2 & 3 FLUTE | 42° & 45° HELIX



- For high velocity milling of aluminum and other non-ferrous materials
- Provides improved surface roughness
- Tightly controlled cylindrical margin

#### 2 FLUTE | 42° HELIX | REGULAR LENGTH | "BANSHEE"

- Excellent plunging capabilities
- Excellent chip removal due to higher rake angle, higher helix angle (42°) and bigger chip pocket













Tolerance: 0/-0.0012

| Cutter<br>Diameter<br>(Inch) | Shank<br>Diameter<br>(Inch) | Length<br>of Cut<br>(Inch) | Overall<br>Length<br>(Inch) | Code   | Price  |
|------------------------------|-----------------------------|----------------------------|-----------------------------|--------|--------|
| 1/16                         | 1/8                         | 1/8                        | 1-1/2                       | 888310 | 36.65  |
| 3/32                         | 1/8                         | 1/4                        | 1-1/2                       | 888311 | 36.65  |
| 1/8                          | 1/4                         | 5/16                       | 1-3/4                       | 888312 | 42.47  |
| 3/16                         | 1/4                         | 7/16                       | 2                           | 888313 | 43.77  |
| 1/4                          | 3/8                         | 3/4                        | 2-1/2                       | 888314 | 60.31  |
| 5/16                         | 3/8                         | 13/16                      | 2-1/2                       | 888315 | 60.31  |
| 3/8                          | 3/8                         | 1                          | 2-1/2                       | 888316 | 61.45  |
| 7/16                         | 7/16                        | 1                          | 2-3/4                       | 888317 | 123.21 |
|                              |                             |                            |                             |        |        |

| Cutter<br>Diameter<br>(Inch) | Shank<br>Diameter<br>(Inch) | Length<br>of Cut<br>(Inch) | Overall<br>Length<br>(Inch) | Code   | Price  |
|------------------------------|-----------------------------|----------------------------|-----------------------------|--------|--------|
| 1/2                          | 1/2                         | 1                          | 3                           | 888318 | 112.75 |
| 1/2                          | 1/2                         | 2                          | 4                           | 888319 | 146.62 |
| 5/8                          | 5/8                         | 1-1/4                      | 3-1/2                       | 888320 | 229.38 |
| 3/4                          | 3/4                         | 1-1/2                      | 4                           | 888321 | 338.66 |
| 3/4                          | 3/4                         | 3                          | 5-1/2                       | 888322 | 440.15 |
| 1                            | 1                           | 1-1/2                      | 4                           | 888323 | 599.96 |
| 1                            | 1                           | 3                          | 5-1/2                       | 888324 | 779.86 |

#### 3 FLUTE | 45° HELIX

- $\bullet\,$  3 flute and 45° helix allow harmonic balance at high speed conditions and smooth cutting
- Maximum material removal, chip evacuation, and stability











Tolerance: 0/-0.0005

#### **REGULAR LENGTH**



| Cutter<br>Diameter<br>(Inch) | Shank<br>Diameter<br>(Inch) | Length<br>of Cut<br>(Inch) | Overall<br>Length<br>(Inch) | Code   | Price  |
|------------------------------|-----------------------------|----------------------------|-----------------------------|--------|--------|
| 1/8                          | 1/8                         | 3/8                        | 1-1/2                       | 888409 | 39.88  |
| 3/16                         | 3/16                        | 9/16                       | 2                           | 888410 | 43.19  |
| 1/4                          | 1/4                         | 5/8                        | 2-1/2                       | 888411 | 48.58  |
| 5/16                         | 5/16                        | 5/8                        | 2-1/2                       | 888412 | 54.25  |
| 3/8                          | 3/8                         | 1                          | 2-1/2                       | 888413 | 63.13  |
| 7/16                         | 7/16                        | 1-1/4                      | 2-3/4                       | 888414 | 107.40 |
| 1/2                          | 1/2                         | 1-1/4                      | 3                           | 888415 | 117.51 |
| 5/8                          | 5/8                         | 1-5/8                      | 3-1/2                       | 888416 | 253.52 |
| 3/4                          | 3/4                         | 1-5/8                      | 4                           | 888417 | 313.92 |
| 1                            | 1                           | 2                          | 5                           | 888418 | 744.98 |

#### LONG LENGTH



| Cutter<br>Diameter<br>(Inch) | Shank<br>Diameter<br>(Inch) | Length<br>of Cut<br>(Inch) | Overall<br>Length<br>(Inch) | Code   | Price  |
|------------------------------|-----------------------------|----------------------------|-----------------------------|--------|--------|
| 1/4                          | 1/4                         | 1-1/4                      | 3-1/4                       | 888419 | 63.67  |
| 5/16                         | 5/16                        | 1-1/4                      | 3-1/2                       | 888420 | 73.73  |
| 3/8                          | 3/8                         | 1-1/2                      | 3-1/2                       | 888421 | 87.43  |
| 7/16                         | 7/16                        | 2                          | 4                           | 888422 | 134.19 |
| 1/2                          | 1/2                         | 2                          | 4                           | 888423 | 147.87 |
| 5/8                          | 5/8                         | 2-1/2                      | 5                           | 888424 | 338.23 |
| 3/4                          | 3/4                         | 3-1/4                      | 6                           | 888425 | 423.00 |
| 1                            | 1                           | 3-1/4                      | 6                           | 888426 | 811.85 |

# **BROACH SETS**



#### **STANDARD & HEAVY DUTY**



- All Minute Man® Broach Sets are supplied in storage boxes, and come complete with precision broaches, slotted bushings, and necessary shims
- Collared bushings are recommended and are supplied unless plain bushings are specified on your order

TiN coated sets available on request

| Set Description  | Code   | Price               |
|--|--------|---------------------|
| No. 00 PRECISION SET: The most common keyway combinations for small keyways and bores. 3 broaches and 5 bushings = 15 keyway combinations (Collared bushings only)   | 605500 | <b>586</b> .93      |
| No. 10 STANDARD SET: Our best selling broach set. 4 broaches and 9 bushings = 18 keyway combinations (Collared bushings only)  | 605501 | 1024 <sup>.67</sup> |
| No. 10A STANDARD SET: Same as No. 10 Set, but for sixteenth-sized bores. 4 broaches and 9 bushings = 18 keyway combinations (Collared bushings only)   | 605502 | 1024.67             |
| <b>No. 10-10A COMBINATION SET:</b> Combines 10 and 10A sets features all bore sizes in 1/16 inch increments for keyways 1/8 to 3/8 inches. 4 broaches and 18 bushings = 36 keyway combinations (Collared bushings only)  | 605503 | 1315 <sup>.75</sup> |
| No. 20 COMBINATION SET: Same as No. 10-10A combination set plus a 5/16" keyway for 11 extra combinations. 5 broaches and 18 bushings = 47 keyway combinations (Collared bushings only)   | 605504 | <b>1516</b> .35     |
| <b>No. 40A SET:</b> The most common keyway combinations for medium sized keyways and bores. 4 broaches and 8 bushings = 32 keyway combinations (Plain bushings only)   | 605505 | 1919 <sup>.92</sup> |
| No. 40 SET: Same as No. 40A, but for sixteenth sized bores. 4 broaches and 8 bushings = 32 keyway combinations (Plain bushings only)   | 605506 | 1919 <sup>.92</sup> |
| No. 40-1/2A HEAVY DUTY SET: The most common keyway combinations for large keyways and bores. 2 broaches and 6 bushings = 12 keyway combinations (Plain bushings only)  | 605507 | 1978.66             |
| No. 40-1/2 HEAVY DUTY SET: Same as No. 40-1/2A but for sixteenth sized bores. 2 broaches and 6 bushings = 12 keyway combinations (Plain bushings only)   | 605508 | 1978 <sup>.66</sup> |
| No. 50 HEAVY DUTY SET: Includes the most common keyway combinations for medium and large keyways. 3 broaches and 17 bushings = 29 keyway combinations (Plain bushings only)  | 605509 | <b>3685</b> .75     |
| <b>No. 60 METRIC SET:</b> The most common metric keyway combination for small keyways and bores. 2 broaches and 3 bushings = 6 keyway combinations (Collared bushings only)  | 605510 | 469.71              |
| No. 70 METRIC SET: Our most popular metric broach set. 4 broaches and 13 bushings = 26 keyway combinations (Collared bushings only)  | 605511 | 1205.86             |
| No. 80 METRIC SET: The most common metric keyway combination for medium-sized keyways and bores. 3 broaches and 12 bushings = 36 keyway combinations (Plain bushings only)   | 605512 | 1888.11             |
| No. 90 METRIC SET: The most common metric keyway combination for large keyways and bores. 2 broaches and 8 bushings = 16 keyway combinations (Plain bushings only)   | 605513 | 2541.10             |
| No. 100 HEAVY DUTY COMBINATION SET: The most complete set available including all popular combinations without duplication. Supplied in three wood boxes for convenient handling and storage, and comes with broaches, slotted bushings, and necessary shims. 9 broaches and 44 bushings = 102 keyway combinations (Collared bushings B & C; Plain bushings D & E) | 605514 | 6632.88             |

# PRECISION MILLING MACHINE VISES

**FCD-60 DUCTILE IRON** 



8 x 10 Inch | Code 277066

6 x 7.5 Inch | Code 277064

6 x 8.9 Inch | Code 277065



# **SAVE AT KAR**



# **DEBURRING**

#### MANGO II SET FR | RATCHET-BURR FOR ID

- Features FR ratchet holder, ideal for rotational chamfering, even when workspace is limited
- Inside diameter (ID) up to 0.79" (20mm)
- Deburrs steel, aluminum, copper, brass, cast iron, stainless steel and plastics

#### MANGO II SET BURR-EX | RACHET-BURR FOR OD

- Features FR ratchet holder, ideal for rotational chamfering, even when workspace is limited
- Outside diameter (OD) up to 1" (26mm)
- Deburrs steel, aluminum, copper, brass, cast iron, stainless steel and plastics













Code 550614

67.19

- Handle Holder Blades

  Mango FR F20
- Code 550613

| Handle   | Holder | Blades |
|----------|--------|--------|
| Mango II | FR     | F26X   |

#### B12 MODIFIED BLADE | SPECIAL BLADE FOR PLASTICS

SIMILAR TO B25 BLADE! MORE AGGRESSIVE CUT!

HSS | Short-nosed Fits B handles/holders





79.99/box of 100 Code 550830 (individual)

**SHAVIV** EXCLUSIVELY AVAILABLE AT KAR IN CANADA

### **KNURLING TOOLS**



MODEL M10 | STRAIGHT | FORM KNURLING

Ointegi

- Recommended for RAA type knurling
- Straight knurling up to face
- High speed steel bushing
- Able to fit on right hand or left hand
- Wear resistant tool surface
- Adjustment of tool clearance angle by threaded studs integrated in the shank
- Supplied with a high speed steel hardened washer to prevent tool wear

| Model        | Version | Capacity<br>(mm) | Knurl Size<br>(mm)   | C<br>(mm) | E<br>(mm) | Weight<br>(kg) | Spare<br>Bushing/Washer<br>Code | Code   |
|--------------|---------|------------------|----------------------|-----------|-----------|----------------|---------------------------------|--------|
| M10 25.10.20 | R+L     | Ø8-200           | 25 x 10 x 11 (or 15) | 20        | 30        | 0.7            | 180198                          | 180305 |
| M10 25.10.25 | R+L     | Ø8-200           | 25 x 10 x 11 (or 15) | 25        | 35        | 0.8            | 180198                          | 180307 |

### FORM KNURLS | TYPE AA FOR MODEL MIO KNURLING TOOLS | HIGH SPEED STEEL



- Knurls according to DIN403 for knurlings as DIN82
- HRC 61±1 standard
- High speed steel
- Ground faces and central bore
- Knurls sold separately

93.37 /each

| Pitch<br>(mm) | Size<br>(mm) | Code   | Pitch<br>(mm) | Size<br>(mm) | Code   |
|---------------|--------------|--------|---------------|--------------|--------|
| 0.4           | 25 x 10 x 11 | 180310 | 1.2           |              | 180322 |
| 0.5           |              | 180312 | 1.4           | 25 x 10 x 11 | 180324 |
| 0.6           |              | 180314 | 1.5           |              | 180326 |
| 0.7           | 23 X 10 X 11 | 180316 | 1.6           |              | 180328 |
| 0.8           |              | 180318 | 1.8           |              | 180330 |
| 1.0           |              | 180320 | 2.0           |              | 180332 |

### **ELECTRONIC MEASURING MICROSCOPE**

- Maximum working distance is 200" under WiFi mode
- May be connected to multiple iPads, Android devices or computers at the same time under WiFi mode
- Records photos and video
- Supplied with measuring software
- Magnification: 10X to 200X
- Pixels: 1.3M (resolution: 1280x1024)
- Built-in adjustable LED
- Power supply: built-in rechargeable battery

OPTIONAL ACCESSORIES:

Standard or Universal stand Green. Yellow or Blue filters

Code 816685

463.80



#### Includes one of each:

Microscope

Base support

Focus support ring 80X/150X

Focus support ring 60X/200X

Calibration rule (graduation 0.004"/0.1mm)

Calibration rule (graduation 0.039"/lmm)

USB cable and software

AC/DC adaptor

| Magnification | Focus Distance<br>(Inch) | View Field<br>(Inch) | Accuracy<br>(mil) |
|---------------|--------------------------|----------------------|-------------------|
| 50x           | 0.83                     | 0.32 x 0.25          | 1.2               |
| 100x          | 0.51                     | 0.15 x 0.12          | 0.6               |
| 150x          | 0.63                     | $0.10 \times 0.08$   | 0.4               |
| 200x          | 0.75                     | $0.07 \times 0.06$   | 0.3               |

**ABSOLUTE** 

### **ELECTRONIC CALIPERS**



Accuracy: ±0.0015"

Code 280014

- Coolant proof, IP67 Ingress protection level
- Button functions: zero, on/off, inch/mm, ABS/REL, hold

0-6 Inch/0-150mm Accuracy: ±0.0015" Code 816018

**197**.36

- Stainless steel
- Supplied in fitted storage case

0-8 Inch/0-200mm 0-12 Inch/0-300mm

> Accuracy: ±0.0015" Code 280015

394.47

- Absolute system
- Resolution: 0.0005"/0.01mm
- Buttons: Inch/mm, ABS/REL, on/off, origin set
- Battery CR2032
- · Auto power off
- Data output
- Stainless steel
- Supplied in fitted storage case

OPTIONAL ACCESSORY: SPC cable

0-6"/0-150mm 0-8"/0-200mm Code 285127

0-12"/0-300mm Code 285128 Code 285129

*\INSIZF>* 

**74**.47

104.63

### Accuracy: ±0.0012"

- Designed for left-handed users • Resolution: 0.0005"/0.01mm
- Buttons: on/off, zero, Inch/mm
- Battery CR2032
- Auto power off, move unit to turn power on
- Data output
- Stainless steel
- Supplied in fitted storage case

### **LEFT-HAND**



OPTIONAL ACCESSORY: SPC cable

0-6"/0-150mm Code 816615

0-8"/0-200mm Code 816616

0-12"/0-300mm Code 816617

**719**.80

260.15

#### ACCESSORY SET FOR ELECTRONIC CALIPERS









Code 877188

**റ്റ**.18

**INSIZE EXCLUSIVELY AVAILABLE AT KAR IN CANADA** 











# **SAVE AT KAR**

### PIN GAGE HANDLES

- Wrench is needed to install pins
- Clamping bushes (0.2~7.14mm) are made of brass, clamping bushes (7.14~24.80mm) are made of aluminum





| Applicable pin<br>gage diameter<br>(mm) | Includes<br>Handle and Clamping Bush (mm)   | Code   | Price  |
|---|---|--------|--------|
| 0.2-1.02                                | 1 handle; 6 pairs (the clamping range are 0.2-0.38, 0.38-0.51, 0.51-0.64, 0.64-0.76, 0.76-0.89, 0.89-1.02)  | 877417 | 37.55  |
| 1.02-1.91                               | 1 handle; 7 pairs (the clamping range are 1.02-1.14, 1.14-1.27, 1.27-1.40, 1.40-1.52, 1.52-1.65, 1.65-1.78, 1.78-1.91)                            | 877434 | 40.24  |
| 1.91-3.33                               | l handle; 8 pairs (the clamping range are l.91-2.08, 2.08-2.26, 2.26-2.44, 2.44-2.62, 2.62-2.79, 2.79-2.97, 2.97-3.15, 3.15-3.33)                 | 877435 | 44.00  |
| 3.33-4.57                               | 1 handle; 7 pairs (the clamping range are 3.33-3.51, 3.51-3.68, 3.68-3.86, 3.86-4.04, 4.04-4.22, 4.22-4.39, 4.39-4.57)                            | 877436 | 40.57  |
| 4.57-5.79                               | 1 handle; 6 pairs (the clamping range are 4.57-4.78, 4.78-4.98, 4.98-5.18, 5.18-5.38, 5.38-5.59, 5.59-5.79)                                       | 877437 | 43.17  |
| 5.79-7.14                               | 1 handle; 6 pairs (the clamping range are 5.79-5.99, 5.99-6.20, 6.20-6.40, 6.40-6.63, 6.63-6.88, 6.88-7.14)                                       | 877438 | 43.91  |
| 7.14-8.66                               | 1 handle; 6 pairs (the clamping range are 7.14-7.39, 7.39-7.65, 7.65-7.90, 7.90-8.15, 8.15-8.41, 8.41-8.66)                                       | 877439 | 51.48  |
| 8.66-10.31                              | l handle; 6 pairs (the clamping range are 8.66-8.92, 8.9 -9.17, 9.17-9.42, 9.42-9.70, 9.70-10.01, 10.01-10.31)                                    | 877440 | 51.48  |
| 10.31-11.81                             | 1 handle; 4 pairs (the clamping range are 10.31-10.67,10.67-11.05, 11.05-11.43, 11.43-11.81)  | 877441 | 48.73  |
| 11.81-12.95                             | 1 handle; 3 pairs (the clamping range are 11.81-12.19, 12.19-12.57, 12.57-12.95)  | 877442 | 42.53  |
| 12.95-14.71                             | 1 handle; 4 pairs (the clamping range are 12.95-13.51, 13.51-13.89, 13.89-14.30, 14.30-14.71)   | 877418 | 61.45  |
| 14.71-16.13                             | 1 handle; 4 pairs (the clamping range are 14.71-15.09, 15.09-15.49, 15.49-15.88, 15.88-16.13)   | 877419 | 61.45  |
| 16.13-17.88                             | 1 handle; 4 pairs (the clamping range are 16.13-16.66, 16.66-17.07, 17.07-17.48, 17.48-17.88)   | 877420 | 71.32  |
| 17.88-19.3                              | 1 handle; 4 pairs (the clamping range are 17.88-18.26, 18.26-18.67, 18.67-19.05, 19.05-19.30)   | 877421 | 71.32  |
| 19.3-24.8                               | l handle; 8 pairs (the clamping range are 19.30-19.84, 19.84-20.62, 20.62-21.41, 21.41-22.23, 22.23-23.03, 23.03-23.80, 23.80-24.59, 24.59-24.80) | 877422 | 133.53 |

**INSIZE** EXCLUSIVELY AVAILABLE AT **KAR** IN CANADA



# ER COLLETS | STEEL SEALED | INCH & METRIC

- Collet accuracy: 0.0003" to 0.0004" T.I.R. (0.008 mm to 0.010 mm)
- For optimal collet performance use tools with shank diameter equal to the collet nominal size
- Coolant allowable pressure: 1,500 PSI
- Made from high quality spring steel

### **BLOWOUT PRICING! 50% OFF!**

### WHILE QUANTITIES LAST!

|    | Description | Code   | Price                    |
|----|-------------|--------|--------------------------|
| ER | 16 3.5mm    | 300841 |                          |
| ER | 16 7/32"    | 312214 |                          |
| ER | 16 9/32"    | 312216 |                          |
| ER | 16 11/32"   | 312218 |                          |
| ER | 16 13/32"   | 312220 | 21 99                    |
| ER | 16 4.5mm    | 312223 | <b>21</b> <sup>.99</sup> |
| ER | 16 5.5mm    | 312225 | each                     |
| ER | 16 6.5mm    | 312227 |                          |
| ER | 16 7.5mm    | 312229 |                          |
| ER | 16 8.5mm    | 312231 |                          |
| ER | 16 9.5mm    | 312233 |                          |
| ER | 20 5/32"    | 312236 |                          |
| ER | 20 7/32"    | 312238 |                          |
| ER | 20 9/32"    | 312240 | <b>22</b> <sup>.99</sup> |
| ER | 20 11/32"   | 312242 | each                     |
| ER | 20 15/32"   | 312246 |                          |
| ER | 20 5.0mm    | 312250 |                          |
|    |             |        |                          |

| Description | Code   | Price                    |
|-------------|--------|--------------------------|
| ER25 5/32"  | 312260 |                          |
| ER25 3/16"  | 312261 |                          |
| ER25 7/32"  | 312262 |                          |
| ER25 9/32"  | 312264 |                          |
| ER25 11/32" | 312266 |                          |
| ER25 13/32" | 312268 |                          |
| ER25 15/32" | 312270 |                          |
| ER25 17/32" | 312272 |                          |
| ER25 19/32" | 312274 |                          |
| ER25 3.0mm  | 312276 | <b>24</b> <sup>.99</sup> |
| ER25 4.0mm  | 312277 | each                     |
| ER25 5.0mm  | 312278 |                          |
| ER32 5/32"  | 312291 |                          |
| ER32 3/16"  | 312292 |                          |
| ER32 11/32" | 312297 |                          |
| ER32 15/32" | 312301 |                          |
| ER32 17/32" | 312303 |                          |
| ER32 19/32" | 312305 |                          |
| ER32 23/32" | 312309 |                          |

| Description | Code   | Price                    |
|-------------|--------|--------------------------|
| ER40 5/32"  | 312332 |                          |
| ER40 3/16"  | 312333 |                          |
| ER40 9/32"  | 312336 |                          |
| ER40 5/16"  | 312337 |                          |
| ER40 11/32" | 312338 |                          |
| ER40 13/32" | 312340 |                          |
| ER40 17/32" | 312344 |                          |
| ER40 19/32" | 312346 | <b>27</b> <sup>.99</sup> |
| ER40 21/32" | 312348 | each                     |
| ER40 23/32" | 312350 |                          |
| ER40 25/32" | 312352 |                          |
| ER40 27/32" | 312354 |                          |
| ER40 29/32" | 312356 |                          |
| ER40 31/32" | 312358 |                          |
| ER40 4.0mm  | 312360 |                          |
| ER40 5.0mm  | 312361 |                          |
|             |        |                          |
|             |        |                          |

312315 CONTACT YOUR LOCAL KAR DISTRIBUTOR FOR MORE DETAILS

ER32 5.0mm

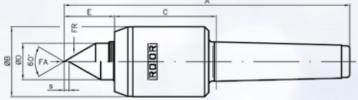
### LIVE CENTERS

#### HIGH SPEED STEEL - MAIN LINE | TYPE DA-N - STANDARD 60° WITH PRESSURE INDICATOR

APPLICATION: A pressure indicator with different colour bands permits rapid setting and monitoring of the optimum pressure. Length tolerances and different centre bores are compensated through a travel stroke at fixed positions. Correspondingly light work pieces can be clamped very finely.







TYPE DA WITH PRESSURE INDICATOR AND LONG TRAVEL STROKE

Code 100090 1195.98

Code 100091 1195.98

Code 100092 1339.01 Code 100093

1750<sup>.67</sup>

**ACCIDENT PREVENTION** WITH PRESSURE INDICATOR

| Morse<br>Taper | Model  | FA<br>daN | FR<br>daN | A<br>(mm) | ØB<br>(mm) | C<br>(mm) | ØD<br>(mm) | E<br>(mm) | S<br>(mm) | Workpiece<br>Maximum<br>(kgs) | Max<br>RPM | Code   |
|----------------|--------|-----------|-----------|-----------|------------|-----------|------------|-----------|-----------|-------------------------------|------------|--------|
| MT2            | 2 STD. | 11-110    | 24-240    | 136       | 34         | 53        | 14         | 19        | 2.7       | 190                           | 7000       | 100090 |
| MT3            | 3 STD. | 20-200    | 40-420    | 174       | 42         | 62        | 22         | 31        | 3.0       | 440                           | 5800       | 100091 |
| MT4            | 4 STD. | 23-230    | 50-500    | 209       | 53         | 72        | 28         | 34        | 4.3       | 900                           | 4800       | 100092 |
| MT5            | 5 STD. | 80-800    | 150-1500  | 259       | 64         | 87        | 38         | 42        | 5.2       | 1850                          | 4000       | 100093 |

CYLINDRICAL OPTION ALSO AVAILABLE. ASK YOUR LOCAL KAR DISTRIBUTOR FOR MORE DETAILS

# SQUARE KEY STOCK



 Cold drawn oversize zinc plated - steel Tolerances for both dimensions:

up to 3/4" inc. 0.000" to +0.002" over 3/4" to 1-1/2" inc. 0.000" to +0.003" over 1-1/2" to 2-1/2" inc. 0.000" to +0.004"

| Size<br>(Inch) | Code   | Price |
|----------------|--------|-------|
| 3/32           | 455510 | 3.37  |
| 1/8            | 455511 | 2.12  |
| 5/32           | 455512 | 2.97  |
| 3/16           | 455513 | 2.48  |
| 7/32           | 455514 | 3.75  |
| 1/4            | 455515 | 2.76  |
| 9/32           | 455516 | 4.81  |
| 5/16           | 455517 | 4.14  |
| 3/8            | 455518 | 5.07  |
| 7/16           | 455519 | 6.54  |
| 1/2            | 455520 | 7.41  |
| 9/16           | 455521 | 15.69 |

| Size<br>(Inch) | Code   | Price  |
|----------------|--------|--------|
| 5/8            | 455522 | 13.24  |
| 11/16          | 455523 | 15.29  |
| 3/4            | 455524 | 17.27  |
| 13/16          | 455525 | 17.80  |
| 7/8            | 455526 | 20.48  |
| 1              | 455527 | 28.07  |
| 1-1/8          | 455528 | 51.11  |
| 1-3/16         | 455529 | 57.73  |
| 1-1/4          | 455530 | 66.06  |
| 1-3/8          | 455531 | 74.21  |
| 1-1/2          | 455532 | 88.66  |
| 1-3/4          | 455533 | 122.17 |
| 2              | 455534 | 174.49 |

### **CHUCK STOP SETS**

**STANDARD & DELUXE** 

secure stop to

chuck face



3-Piece Standard Set 15, 20 and 25mm stops Code 355985

5-Piece Deluxe Set 15, 20, 25, 30 and 35mm stops Code 355986

935.92



**KAR** Industrial Inc. www.kar.ca

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Offer valid until March 31st, 2024