

# WINTER WARMUP 2024

## 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

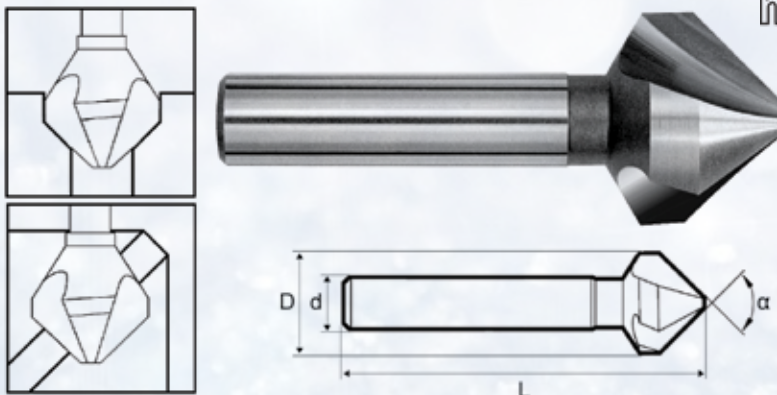
Dimensions are adapted so as to sink 90 degree screw caps up to M12. We recommend lubricating.

### 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 Overall Diameter (mm)	d Shank Diameter (mm)	Chamfer Range Min/Max (mm)	L Overall Length (Inch)	60° Angle Series 432		82° Angle Series 434		82° Angle Series 4834 - TiN		90° Angle Series 431		90° Angle Series 4831 - TiN		100° Angle Series 435		120° Angle Series 433	
				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	-	-	-	-	-	-

\* Three gripping flats on shank

CONTACT YOUR LOCAL KAR DISTRIBUTOR FOR MORE DETAILS OR VISIT [WWW.KAR.CA](http://WWW.KAR.CA)

YOUR AUTHORIZED KAR DISTRIBUTOR:

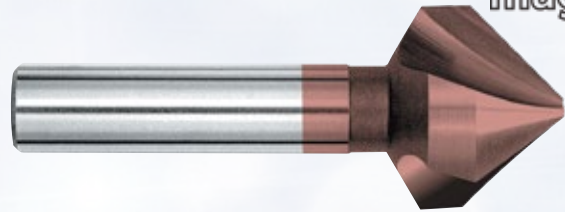
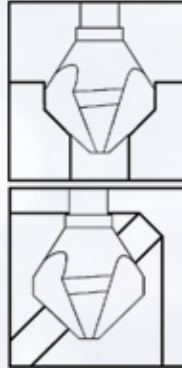
# WINTER WARMUP

## 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
- DIN 335-C
- 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/mm²
- 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 Overall Diameter (mm)	d Shank Diameter (mm)	Chamfer Range Min/Max (mm)	L Overall Length (mm)	Series 493A	
				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 Overall Diameter (mm)	d Shank Diameter (mm)	Chamfer Range Min/Max (mm)	L Overall Length (mm)	Series 493A	
				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



Code 311527

212.88

Taps (Plug)	Tap 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

Taps (Plug)	Tap Drill (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	17. <sup>14</sup>
AQUEOUS 16oz. ....	Code 219225	15. <sup>50</sup>
ECO-OIL 16oz. ....	Code 219232	15. <sup>03</sup>
EP-XTRA 16oz. ....	Code 219202	14. <sup>69</sup>
ALUMINUM 16oz. ....	Code 219210	14. <sup>68</sup>

## 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 Diameter (Inch)	Shank Diameter (Inch)	Length of Cut (Inch)	Overall Length (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 Diameter (Inch)	Shank Diameter (Inch)	Length of Cut (Inch)	Overall Length (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

- 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 Diameter (Inch)	Shank Diameter (Inch)	Length of Cut (Inch)	Overall Length (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 Diameter (Inch)	Shank Diameter (Inch)	Length of Cut (Inch)	Overall Length (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

# WINTER WARMUP

## 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
<b>No. 00 PRECISION SET:</b> The most common keyway combinations for small keyways and bores. 3 broaches and 5 bushings = 15 keyway combinations (Collared bushings only)	605500	<b>586.<sup>93</sup></b>
<b>No. 10 STANDARD SET:</b> Our best selling broach set. 4 broaches and 9 bushings = 18 keyway combinations (Collared bushings only)	605501	<b>1024.<sup>67</sup></b>
<b>No. 10A STANDARD SET:</b> Same as No. 10 Set, but for sixteenth-sized bores. 4 broaches and 9 bushings = 18 keyway combinations (Collared bushings only)	605502	<b>1024.<sup>67</sup></b>
<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	<b>1315.<sup>75</sup></b>
<b>No. 20 COMBINATION SET:</b> 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.<sup>35</sup></b>
<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	<b>1919.<sup>92</sup></b>
<b>No. 40 SET:</b> Same as No. 40A, but for sixteenth sized bores. 4 broaches and 8 bushings = 32 keyway combinations (Plain bushings only)	605506	<b>1919.<sup>92</sup></b>
<b>No. 40-1/2A HEAVY DUTY SET:</b> The most common keyway combinations for large keyways and bores. 2 broaches and 6 bushings = 12 keyway combinations (Plain bushings only)	605507	<b>1978.<sup>66</sup></b>
<b>No. 40-1/2 HEAVY DUTY SET:</b> Same as No. 40-1/2A but for sixteenth sized bores. 2 broaches and 6 bushings = 12 keyway combinations (Plain bushings only)	605508	<b>1978.<sup>66</sup></b>
<b>No. 50 HEAVY DUTY SET:</b> 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.<sup>75</sup></b>
<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	<b>469.<sup>71</sup></b>
<b>No. 70 METRIC SET:</b> Our most popular metric broach set. 4 broaches and 13 bushings = 26 keyway combinations (Collared bushings only)	605511	<b>1205.<sup>86</sup></b>
<b>No. 80 METRIC SET:</b> The most common metric keyway combination for medium-sized keyways and bores. 3 broaches and 12 bushings = 36 keyway combinations (Plain bushings only)	605512	<b>1888.<sup>11</sup></b>
<b>No. 90 METRIC SET:</b> The most common metric keyway combination for large keyways and bores. 2 broaches and 8 bushings = 16 keyway combinations (Plain bushings only)	605513	<b>2541.<sup>10</sup></b>
<b>No. 100 HEAVY DUTY COMBINATION SET:</b> 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	<b>6632.<sup>88</sup></b>

## PRECISION MILLING MACHINE VISES

### FCD-60 DUCTILE IRON



8 x 10 Inch | Code 277066

6 x 7.5 Inch | Code 277064

**610.<sup>07</sup>**



6 x 8.9 Inch | Code 277065

**662.<sup>75</sup>**



**1364.<sup>53</sup>**





# SAVE AT KAR

**SHAVIV**  
Leading Deburring Solutions

## 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



F20



Code 550613

**61.63**

Handle	Holder	Blades
Mango	FR	F20

### 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



F26X



Code 550614

**67.19**

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



**WHILE  
QUANTITIES  
LAST**

**79.99**/box of 100

Code 550830 (individual)

**SHAVIV EXCLUSIVELY AVAILABLE AT KAR IN CANADA**

## KNURLING TOOLS

### MODEL M10 | STRAIGHT | FORM KNURLING



**719.65**  
/each

- 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 (mm)	Knurl Size (mm)	C (mm)	E (mm)	Weight (kg)	Spare Bushing/Washer 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 M10 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 (mm)	Size (mm)	Code	Pitch (mm)	Size (mm)	Code
0.4	25 x 10 x 11	180310	1.2	25 x 10 x 11	180322
0.5		180312	1.4		180324
0.6		180314	1.5		180326
0.7		180316	1.6		180328
0.8		180318	1.8		180330
1.0		180320	2.0		180332

# WINTER WARMUP

## 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



### 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"/1mm)
- USB cable and software
- AC/DC adaptor

OPTIONAL ACCESSORIES:  
Standard or Universal stand  
Green, Yellow or Blue filters

Code 816685

463.<sup>80</sup>

Magnification	Focus Distance (Inch)	View Field (Inch)	Accuracy (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 x 0.08	0.4
200x	0.75	0.07 x 0.06	0.3

## ELECTRONIC CALIPERS



### COOLANT PROOF



- Resolution: 0.0005"/0.01mm
- Coolant proof, IP67 Ingress protection level
- Button functions: zero, on/off, inch/mm, ABS/REL, hold
- Battery CR2032
- Stainless steel
- Supplied in fitted storage case

0-6 Inch/0-150mm  
Accuracy:  $\pm 0.0015"$   
Code 816018

197.<sup>36</sup>

0-8 Inch/0-200mm  
Accuracy:  $\pm 0.0015"$   
Code 280014

340.<sup>25</sup>

0-12 Inch/0-300mm  
Accuracy:  $\pm 0.0015"$   
Code 280015

394.<sup>47</sup>

### ABSOLUTE



- 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  
Code 285127

74.<sup>47</sup>

0-8"/0-200mm  
Code 285128

104.<sup>63</sup>

0-12"/0-300mm  
Code 285129

187.<sup>30</sup>

### LEFT-HAND



OPTIONAL ACCESSORY: SPC cable

- Accuracy:  $\pm 0.0012"$
- 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

0-6"/0-150mm  
Code 816615

219.<sup>80</sup>

0-8"/0-200mm  
Code 816616

260.<sup>15</sup>

0-12"/0-300mm  
Code 816617

375.<sup>83</sup>

## ACCESSORY SET FOR ELECTRONIC CALIPERS



- Suitable for 0-6"/0-150mm and 0-8"/0-200mm electronic calipers (thickness of lower jaws  $\leq 0.146"$ )



Code 877188

89.<sup>18</sup>

INSIZE EXCLUSIVELY AVAILABLE AT KAR IN CANADA

## PIN GAGE HANDLES

- Wrench is needed to install pins
- Clamping bushes (0.2-714mm) are made of brass, clamping bushes (714-24.80mm) are made of aluminum



Applicable pin gage diameter (mm)	Includes 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	1 handle; 8 pairs (the clamping range are 1.91-2.08, 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	1 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	1 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
ER16 3.5mm	300841	21. <sup>99</sup> each
ER16 7/32"	312214	
ER16 9/32"	312216	
ER16 11/32"	312218	
ER16 13/32"	312220	
ER16 4.5mm	312223	
ER16 5.5mm	312225	
ER16 6.5mm	312227	22. <sup>99</sup> each
ER16 7.5mm	312229	
ER16 8.5mm	312231	
ER16 9.5mm	312233	
ER20 5/32"	312236	
ER20 7/32"	312238	
ER20 9/32"	312240	
ER20 11/32"	312242	22. <sup>99</sup> each
ER20 15/32"	312246	
ER20 5.0mm	312250	

Description	Code	Price
ER25 5/32"	312260	24. <sup>99</sup> each
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	24. <sup>99</sup> each
ER25 19/32"	312274	
ER25 3.0mm	312276	
ER25 4.0mm	312277	
ER25 5.0mm	312278	
ER32 5/32"	312291	
ER32 3/16"	312292	
ER32 11/32"	312297	24. <sup>99</sup> each
ER32 15/32"	312301	
ER32 17/32"	312303	
ER32 19/32"	312305	
ER32 23/32"	312309	24. <sup>99</sup> each
ER32 5.0mm	312315	

Description	Code	Price
ER40 5/32"	312332	27. <sup>99</sup> each
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	27. <sup>99</sup> each
ER40 21/32"	312348	
ER40 23/32"	312350	
ER40 25/32"	312352	
ER40 27/32"	312354	
ER40 29/32"	312356	
ER40 31/32"	312358	
ER40 4.0mm	312360	27. <sup>99</sup> each
ER40 5.0mm	312361	

CONTACT YOUR LOCAL KAR DISTRIBUTOR FOR MORE DETAILS

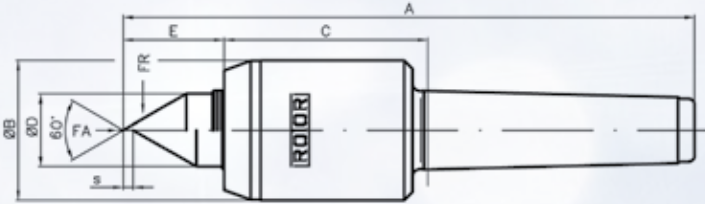


# WINTER WARMUP

## 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.<sup>98</sup>

Code 100091

1195.<sup>98</sup>

Code 100092

1339.<sup>01</sup>

Code 100093

1750.<sup>67</sup>

ACCIDENT PREVENTION  
WITH PRESSURE INDICATOR

Morse Taper	Model	FA daN	FR daN	A (mm)	ØB (mm)	C (mm)	ØD (mm)	E (mm)	S (mm)	Workpiece Maximum (kgs)	Max 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:

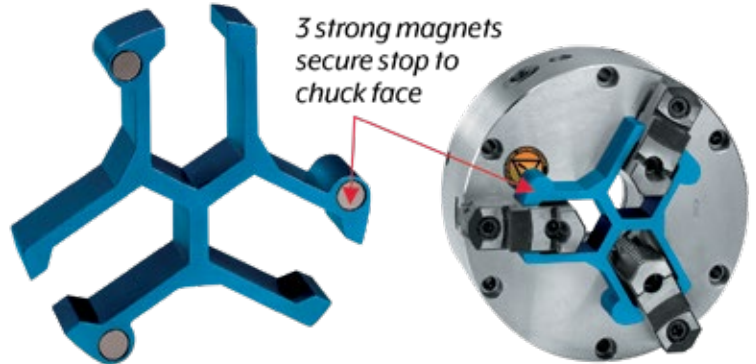
- up to 3/4" inc. 0.000" to +0.002"
- over 3/4" to 1-1/2" inc. 0.000" to +0.003"
- over 1-1/2" to 2-1/2" inc. 0.000" to +0.004"

Size (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 (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



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

537.<sup>90</sup>

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

935.<sup>92</sup>



**KAR Industrial Inc.**  
[www.kar.ca](http://www.kar.ca)

Toronto.....1-800-387-3127  
Montréal.....1-800-363-7862  
Edmonton.....1-866-440-4326

Offer valid until March 31<sup>st</sup>, 2024

\*Products shown may not be exactly as illustrated Code 000333

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