

E-Z BURR TOOL COMPANY

Hole Deburring, Chamfering and Drilling Tools





The E-Z Burr Tool Company has always been intensely focused on designing and manufacturing the highest quality deburring tools. Over the years, we've developed a line that we feel is absolutely the best in the world. As part of our ongoing commitment to service, we've also developed a strong worldwide network of distributors and manufacturers' reps, ready to assist you in every way possible. We're confident you'll be totally satisfied with our responsiveness, technical expertise and, of course, our products. In fact, we guarantee it.

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Deburring Innovation and Versatility Since 1960

For more than four decades, the E-Z Burr Tool Company has been building a solid reputation as an innovative manufacturer of high quality high speed steel (HSS) deburring and chamfering tools. We have expanded our product line to include carbide deburring and chamfering tools; precision chamfering and deburring tools; and drilling and deburring tools.

From the very start, our goal has not only been to provide tools that are durable, dependable and easy to use and maintain, but also to offer them at a fair and affordable price. The fact that 95% of our customers are repeat customers is a strong indication that we have achieved and continue to uphold that goal.

A multitude of tools...

All of our tools, starting with the original E-Z Burr HSS deburring tool, have a patented design that enables you to deburr both the front and rear of a hole in a single pass. Our patented locking system also allows you to change the blade or insert in seconds—without affecting the chamfer setting—while the tool is still in the machine. And, with the exception of the Micro Series, you can adjust the cutting pressure from extreme low to extreme high on all E-Z Burr Tools with a simple turn of the Allen screw on the side of the shank.

With a range of .040 to .092 inches, our patented Micro Series is unique. In fact, it's the smallest solid arbor style deburring tool in the world.

The patented E-Z Burr Carbide Tool is ideal for manufacturers with high volume and/or faster speeds and feeds. Even with heavy burrs and tough materials, it can be run at speeds and feeds at least three times faster than regular high-speed steel deburring tools. And the titanium nitrate-coated carbide insert lasts more than five times as long as HSS blades.



The E-Z Burr Precision Chamfer Tool, part of our specialty tool group, was designed to meet some very specific needs for a number of our customers. Combining the patented carbide concept with a fixed carbide insert, this one tool can perform precision front chamfers or countersinks and rear deburring, all in a single pass. These precision chamfer tools can all be custom made to meet your requirements.

The most recent addition to the line of E-Z Burr specialty tools is the BurrFree Drill. The ultimate in combination tooling, again combining the patented carbide concept with a spade drill, this tool enables you to drill a hole and deburr both the top and bottom side of the hole in one pass, giving you a burr-free hole. Each BurrFree Drill is custom made to your specifications.

The power-packed E-Z Burr Kit is the perfect solution for smaller shops. Versatile and economical, the kit comes with four tool diameters that provide a deburring range from .062 to 1.0 inches when used with your standard boring head or the custom boring head offered by E-Z Burr. That's substantially greater than any other kit on the market.

In stock for immediate delivery.

No other company anywhere offers you a greater selection of precision, in-stock HSS and carbide deburring tools. For example, while you've had to search far and wide to find a tool for a hole size

smaller than .093, E-Z Burr has 16 standard sizes between .040 and .092 inches in stock. What's more, while other companies can take up to weeks to deliver, we ship our standards the very same day, or the next day.

In all, more than 150 different tool sizes are stocked for immediate delivery, including all fractional and metric sizes from .040" through 2.0" (1.0mm through 50.8mm.) Designed for all types of machines and hand tools, E-Z Burr tools are produced under the guidelines of ISO 9000. That's why all E-Z Burr products and services are guaranteed. If you aren't completely satisfied, simply return the tool and we will refund your money.

Custom orders filled fast.

If you need a special tool, let us know. Our staff is easy to work with and takes great pride in their ability to solve problems. We'll design and build a specific tool for a specialized application. Such special orders can often be produced and delivered in as little as two weeks. Every tool we ship is designed and manufactured to extremely rigid quality standards. And our technical staff is always ready to help.



E-Z BURR

How the Tools Work



As the rotating tool is fed into the work piece, the extended blade/insert cuts and deburrs the front burr as the blade/insert is collapsing into the blade/insert slot.



When it's completely collapsed, the tool continues through the hole. The top of the blade/insert has a polished crown so it does not mark the bore while being fed through.



Once the tool has cleared the backside of the hole, the blade/insert springs back out of the arbor, the feed direction is reversed and the rear burr is cut as the tool is withdrawn.

After the cutting blade has finished the operation and is completely collapsed in the bore on the return stroke, the tool may be rapid fed out of the part and begin the next hole.

Easy to Use in All Machines

E-Z Burr Tools are easy to maintain, and set-up is quick and straight-forward. Used in metal working operations all over the world, the tools run on a variety of machines including Dial, Transfer and CNC machining centers, along with Bridgeports, drill presses and even hand drills. Because of the simple feed and retrieve action, no special skills are needed.

These photos demonstrate two of the applications where E-Z Burr Tools are used.



In this CNC illustration, a round stainless steel tube with a 5/8" cross hole is being deburred on the O.D and I.D. (top and bottom or even the front and rear side) of the hole. The customer is using a 5/8" diameter carbide tool. The carbide insert lasted over ten thousand parts before having to be changed.



This is a lower volume job being run on a Bridgeport. The 3/32" cross-holes were breaking into the 1.0" bores and it was very difficult to remove the burrs until an E-Z Burr Tool was used. Now clean, burr-free holes are achieved without any difficulty.

The E-Z Burr Tool Line-up

Micro Series

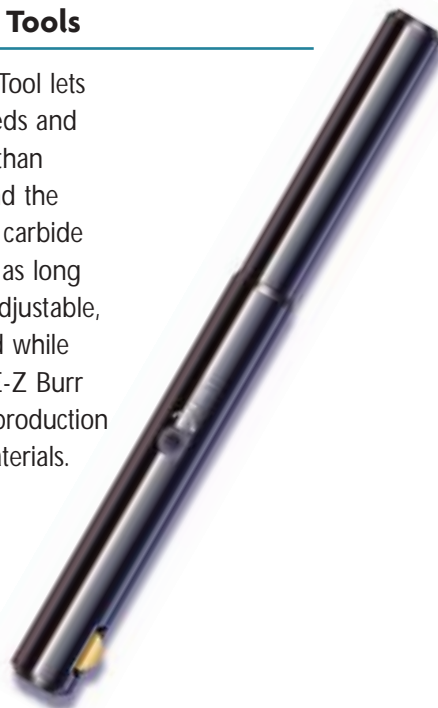
One millimeter. Four one-hundredths of an inch. That's how small a hole you can deburr with the E-Z Burr Micro Series, the world's smallest solid arbor style deburring tool. Economically priced, the E-Z Burr Micro Tool lets you deburr thousands of super-small holes before the cartridge needs replacing. Still more economy is provided by the two-piece construction, which lets you remove and replace the cartridge in seconds while the tool is still in the spindle. That also eliminates the need to handle and perhaps lose miniature parts.

All cartridges must be used with a cartridge holder. One size holder accommodates all cartridges.



Carbide Series Deburring Tools

The patented E-Z Burr Carbide Tool lets you deburr and chamfer at speeds and feeds at least three times faster than regular HSS deburring tools. And the standard titanium nitrate-coated carbide insert lasts more than five times as long as HSS blades. The inserts are adjustable, replaceable and can be changed while the tool is in the machine. The E-Z Burr Carbide Series is ideal for large production runs, heavy burrs and tough materials.



HSS Series Deburring Tools

E-Z Burr Tools are the industry standard for quick, effective and consistent front and rear burr removal. They're the only deburring tools of their type that offer a flexible blade which operates independently of springs and plungers. The result is a solid shank—not hollow like the competition—and a more durable tool. Additionally, the patented E-Z Burr Tool lets you change chamfer settings and cutting blades without removal from the holder! And once you set the desired chamfer it won't change even from blade to blade. These features ensure less downtime, more production and higher profits.



The E-Z Burr Tool Line-up

E-Z Burr Customs—Made for You

E-Z Burr is proud of our ability to produce custom deburring tools to meet even the most demanding and unique applications. Our capabilities include special lengths, diameters, pilots or shanks, flats, tangs or whistle notches. While we maintain a large inventory of standard tools for deburring holes from .040" (1.0mm) to 2.0" (50.8mm), we can produce special tools for larger holes or whatever your unique application may be. In fact, we stock a wide variety of blanks for quick turnaround on such special orders.

Specialty Combination Tooling

The carbide deburring tool technology enables us to create some very productive combinations of tools, which can result in some meaningful cost savings for you. In other words, we can engineer all kinds of custom tooling combinations, such as a tool that cuts a precision front chamfer or countersink on the top of the part and deburrs on the backside of the hole. That's all with one tool in one pass. This custom E-Z Burr Chamfer Tool utilizes a replaceable TiN coated carbide insert and the same quick TiN coated carbide deburring insert as the standard E-Z Burr Carbide Series.

How many drills can make the claim, "We can drill a burr-free hole?" E-Z Burr's BurrFree Drill is the newest addition to the precision lineup of E-Z Burr Specialty Combination Tools. By incorporating a spade drill to the arbor of the carbide series tool, we have created the perfect one-step burr-free drill. Think of the savings you'll enjoy by combining a couple of independent machining operations into one.

We can even combine the BurrFree Drill with the precision chamfering tool and have one tool that does three operations;

drills the hole, puts a precision chamfer on the topside and deburrs the backside. All in one stroke! Now that's a practical, time- and money-saving concept!

Each of the combination tools uses the same quick insert change and deburr adjustment features as all of our other standard deburring tools.

E-Z Burr Specialty Combination Tools are custom made to your specifications.

Hole Deburring Kit

E-Z Burr Tools have always been designed and built for the needs of mid- to high-volume manufacturers. Now, with the E-Z Burr Hole Deburring Kit, even small production runs can be effectively, consistently and economically deburred. The power-packed E-Z Burr Hole Deburring Kit comes with four tool diameters. With this combination of tools, you'll be able to deburr any sized hole between .062" (1.6mm) through 1.0" (25mm), more than any other kit sold today. The E-Z Burr Kit provides a boring head designed to work perfectly with all your tools. However, you can expect the same optimal performance using an adjustable boring head that you already have.



Everything you need to deburr holes from .062" (1.6mm) through 1.0" (25mm).

Shared Product Features

All E-Z Burr product lines utilize the same exclusive E-Z Burr patents.* That's why they share the following common features: solid arbor design, easy blade adjustment, quick blade/insert exchange and the unique spring-type blade and flex arm. These patented features not only make our products extremely durable but also insure outstanding part-to-part consistency.

*With the exception of the Micro Series.

Solid Arbor

Unlike the hollow arbor or the tuning fork styles of some competitors, the E-Z Burr Deburring Tool has a solid arbor. This not only makes it tough and rigid, it also maximizes cutting power and lengthens the life of the tool, especially in rugged machining conditions where weaker tools might break.



Easy Adjustability



With the E-Z Burr Tool, cutting pressure adjusts with a simple turn of the Allen screw conveniently exposed on the side of the shank.



This provides a range of cutting pressures from extreme low to extreme high, depending on the nature of the burr size, the amount of material to be removed and the composition of the work piece.



Once the tension is set, Low-break Loctite seals the adjusting screw to maintain torque tension so part-to-part consistency is assured.

Patented Locking System

For Quick Blade Replacement...

E-Z Burr's patented blade locking system lets you change blades in seconds, with the tool still in the machine. All it takes is a one-eighth turn. Try finding this feature on the competition.

To Remove the HSS Blade



Unlock the blade with a simple 1/8 counterclockwise turn of the locking screw.



Once in the unlocked position the blade can be pulled up and out of the holder.

To Replace the HSS Blade



Insert the tab at the end of the blade into the groove of the adjusting screw. Lower the slot of the blade over the lock screw.



Lock the flex arm back into place with a simple 1/8 clockwise turn of the locking screw.

And Quick Insert Replacement...

The carbide system uses the same patented locking system as the HSS series, enabling you to change inserts in seconds with the tool still in the machine. All it takes is a one-eighth turn. Just follow these four steps for easy replacement.

To Remove the Carbide Insert



Unlock the flex arm with a simple 1/8 counterclockwise turn of the locking screw.



Once in the unlocked position, the insert can be pulled up and out of the holder.

To Replace the Carbide Insert



With the flex arm at its most extended position, engage the slot of the insert over the tip of the flex arm.



Carefully slide the end of the insert back into the arbor slot until the flex arm is lowered into position. Lock the flex arm back into place with a simple 1/8 clockwise turn of the locking screw.

High Speed Steel Cutting Blades and Carbide Cutting Inserts

High Speed Steel Cutting Blades

The E-Z Burr Tool's unique spring-type blade made from high speed steel has set the standard for durability and reliability in the tooling industry since 1978. Our blade configuration is designed for exactly the same long service and easy maintenance you've come to expect. Precision blades assure part-to-part consistency.



B Style



F Style



R Style

There are three styles of blades:

- B = front and rear cutting
- F = front cutting only
- R = rear cutting only

Unless otherwise specified, we supply all tools with front and back cutting.

Special blade angles by quotation only.

For specific ordering information or additional options, see full chart on page 22-23.

NOTE: HSS blades and carbide inserts are not interchangeable.

Carbide Cutting Inserts

The E-Z Burr Carbide Series uses the same spring-type flex concept that is used in the high speed steel blade, except it has a replaceable carbide insert that is independent from the flex arm.



B Style

R Style

There are two styles of inserts:

- B = front and rear cutting
- R = rear cutting only

Unless otherwise specified, we supply all tools with front and back cutting.

Special insert angles by quotation only.

For specific ordering information or additional options, see full chart on page 21.

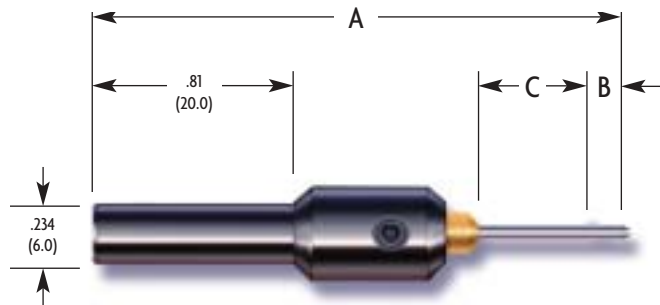
E-Z Burr Tool Specifications – Micro Series

E-Z Micro Series Tools

For holes .040" to .092" (1.00mm to 2.33mm).

Tool #	Hole Range	Hole Range	A	B	C
	Inches	mm			
CAR0400	.0400 - .0415	1.00 - 1.06	1.90	.15	.25
CAR0420	.0420 - .0445	1.07 - 1.13	1.90	.15	.25
CAR0450	.0450 - .0480	1.14 - 1.22	1.90	.15	.25
CAR0485	.0485 - .0515	1.23 - 1.31	1.97	.16	.31
CAR0520	.0520 - .0535	1.32 - 1.36	1.97	.16	.31
CAR0540	.0540 - .0565	1.37 - 1.44	1.97	.16	.31
CAR0570	.0570 - .0610	1.45 - 1.55	2.06	.19	.38
CAR0615	.0615 - .0650	1.56 - 1.65	2.10	.19	.41
CAR0655	.0655 - .0685	1.66 - 1.74	2.13	.19	.44
CAR0690	.0690 - .0715	1.75 - 1.82	2.21	.21	.50
CAR0720	.0720 - .0745	1.83 - 1.89	2.21	.21	.50
CAR0750	.0750 - .0775	1.90 - 1.97	2.21	.21	.50
CAR0780	.0780 - .0800	1.98 - 2.03	2.24	.24	.50
CAR0805	.0805 - .0835	2.04 - 2.12	2.24	.24	.50
CAR0840	.0840 - .0875	2.13 - 2.22	2.24	.24	.50
CAR0880	.0880 - .0920	2.23 - 2.34	2.24	.24	.50

All cartridges must be used with a Cartridge Holder (part# CAR-HOLDER) featured below.



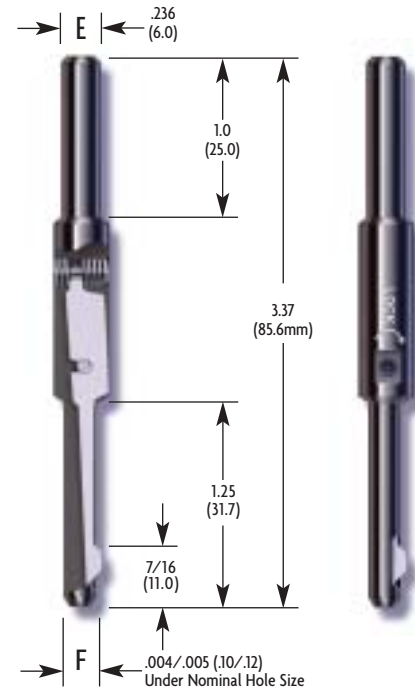
E-Z Burr Tool Specifications – HSS Series

E-Z Burr Series L1A-L1B

For holes .093" through .153" (2.38mm to 3.90mm).

Tool #	Hole diameter (F)		Shank diameter (E)		Blade Series	
	Inches	mm	Inches	mm		
EZL 0093	3/32	0.0937	2.38	.236	6.00	L1A
EZL 0098		0.0984	2.50	.236	6.00	L1A
EZL 0102		0.1023	2.60	.236	6.00	L1A
EZL 0106		0.1062	2.70	.236	6.00	L1A
EZL 0109	7/64	0.1093	2.77	.236	6.00	L1A
EZL 0114		0.1141	2.90	.236	6.00	L1A
EZL 0118		0.1181	3.00	.236	6.00	L1A
EZL 0122		0.1220	3.10	.236	6.00	L1B
EZL 0125	1/8	0.1250	3.17	.236	6.00	L1B
EZL 0129		0.1299	3.30	.236	6.00	L1B
EZL 0133		0.1338	3.40	.236	6.00	L1B
EZL 0137		0.1378	3.50	.236	6.00	L1B
EZL 0140	9/64	0.1406	3.57	.236	6.00	L1B
EZL 0145		0.1456	3.70	.236	6.00	L1B
EZL 0149		0.1496	3.80	.236	6.00	L1B
EZL 0153		0.1535	3.90	.236	6.00	L1B

Note: Series L1A and L1B tools have a working range of -0.0+.006 inches and -.03+.15mm.

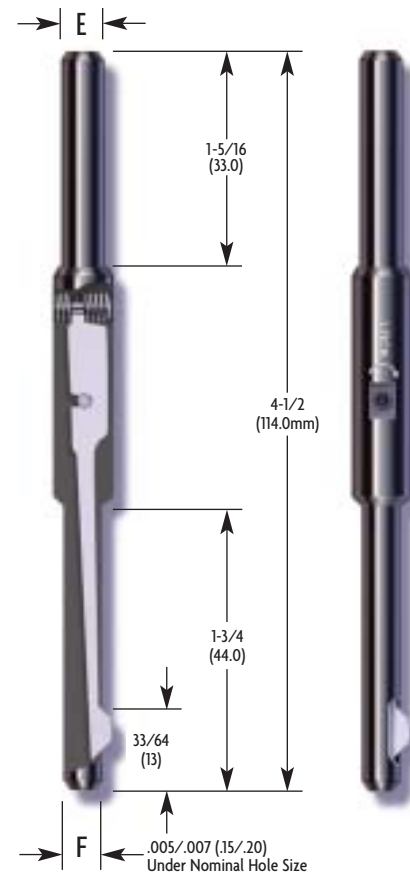


E-Z Burr Series L2A-L2B

For holes .156" through .236" (3.96mm to 6.0mm).

Tool #	Hole diameter (F)		Shank diameter (E)		Blade Series	
	Inches	mm	Inches	mm		
EZL 0156	5/32	0.1562	3.96	.250	6.35	L2A
EZL 0157		0.1574	4.00	.236	6.00	L2A
EZL 0165		0.1653	4.20	.236	6.00	L2A
EZL 0171	11/64	0.1718	4.36	.250	6.35	L2A
EZL 0177		0.1771	4.50	.236	6.00	L2A
EZL 0187	3/16	0.1875	4.76	.250	6.35	L2B
EZL 0196		0.1968	5.00	.236	6.00	L2B
EZL 0203	13/64	0.2031	5.15	.250	6.35	L2B
EZL 0208		0.2086	5.30	.236	6.00	L2B
EZL 0216		0.2165	5.50	.236	6.00	L2B
EZL 0218	7/32	0.2185	5.55	.250	6.35	L2B
EZL 0228		0.2283	5.80	.236	6.00	L2B
EZL 0234	15/64	0.2343	5.95	.250	6.35	L2B
EZL 0236		0.2362	6.00	.236	6.00	L2B

Note: Series L2A and L2B tools have a working range of -0.0+.016 inches and -.10+.40mm.

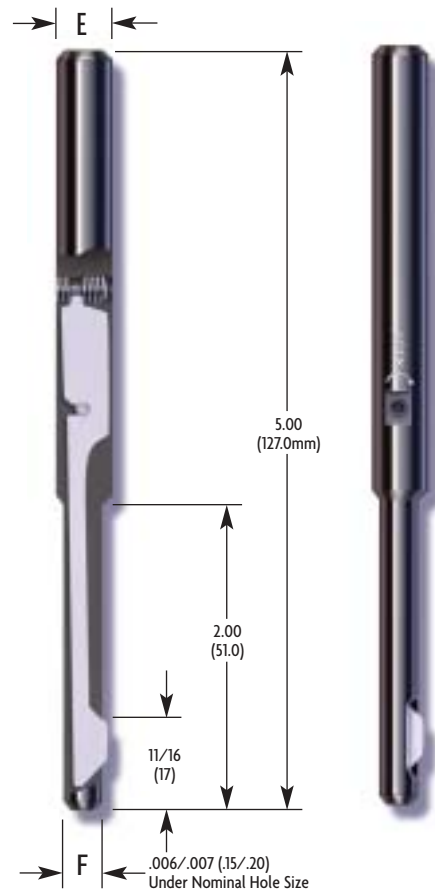


E-Z Burr Series L3A

For holes .250" through .334" (6.35mm to 8.50mm).

Tool #	Hole diameter (F)		Shank diameter (E)		Blade Series	
	Inches	mm	Inches	mm		
EZL 0250	1/4	0.2500	6.35	.359	9.10	L3A
EZL 0255		0.2559	6.50	.354	9.00	L3A
EZL 0265	17/64	0.2656	6.74	.359	9.10	L3A
EZL 0275		0.2755	7.00	.354	9.00	L3A
EZL 0281	9/32	0.2812	7.14	.359	9.10	L3A
EZL 0287		0.2874	7.30	.354	9.00	L3A
EZL 0295		0.2953	7.50	.354	9.00	L3A
EZL 0296	19/64	0.2968	7.54	.359	9.10	L3A
EZL 0305		0.3051	7.75	.354	9.00	L3A
EZL 0312	5/16	0.3125	7.93	.359	9.10	L3A
EZL 0314		0.3149	8.00	.354	9.00	L3A
EZL 0328	21/64	0.3281	8.33	.359	9.10	L3A
EZL 0334		0.3346	8.50	.354	9.00	L3A

Note: Series L3A and L3B tools have a working range of $-0.004+.015$ inches and $-.10+.40$ mm.

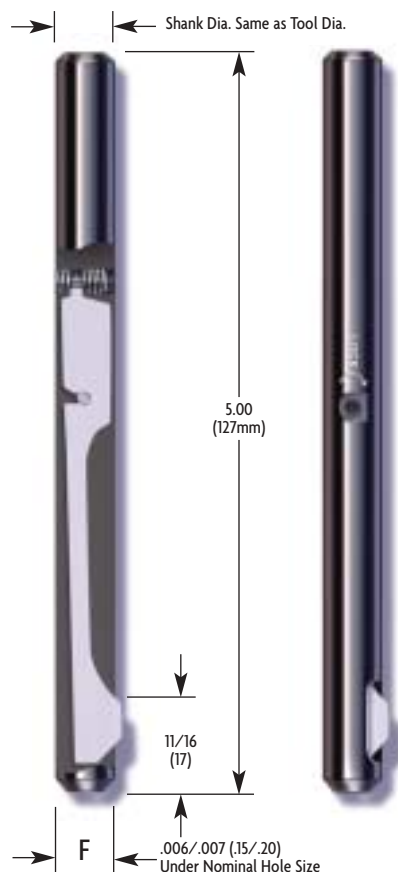


E-Z Burr Series L3B

For holes .343" through .500" (8.73mm to 12.70mm).

Tool #	Hole diameter (F)		Blade Series	
	Inches	mm		
EZL 0343	11/32	0.3437	8.73	L3B
EZL 0354		0.3543	9.00	L3B
EZL 0359	23/64	0.3593	9.12	L3B
EZL 0366		0.3661	9.30	L3B
EZL 0374		0.3740	9.50	L3B
EZL 0375	3/8	0.3750	9.52	L3B
EZL 0381		0.3818	9.70	L3B
EZL 0390	25/64	0.3906	9.92	L3B
EZL 0393		0.3937	10.00	L3B
EZL 0406	13/32	0.4062	10.31	L3B
EZL 0413		0.4133	10.50	L3B
EZL 0421	27/64	0.4218	10.71	L3B
EZL 0433		0.4330	11.00	L3B
EZL 0437	7/16	0.4375	11.11	L3B
EZL 0444		0.4448	11.30	L3B
EZL 0453	29/64	0.4531	11.50	L3B
EZL 0460		0.4606	11.70	L3B
EZL 0468	15/32	0.4687	11.90	L3B
EZL 0472		0.4724	12.00	L3B
EZL 0484	31/64	0.4843	12.30	L3B
EZL 0492		0.4921	12.50	L3B
EZL 0500	1/2	0.5000	12.70	L3B

Note: Series L3A and L3B tools have a working range of $-0.004+.04$ inches and $-.10+.10$ mm.



E-Z Burr Tool Specifications – HSS Series

E-Z Burr Series L3B

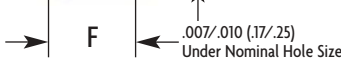
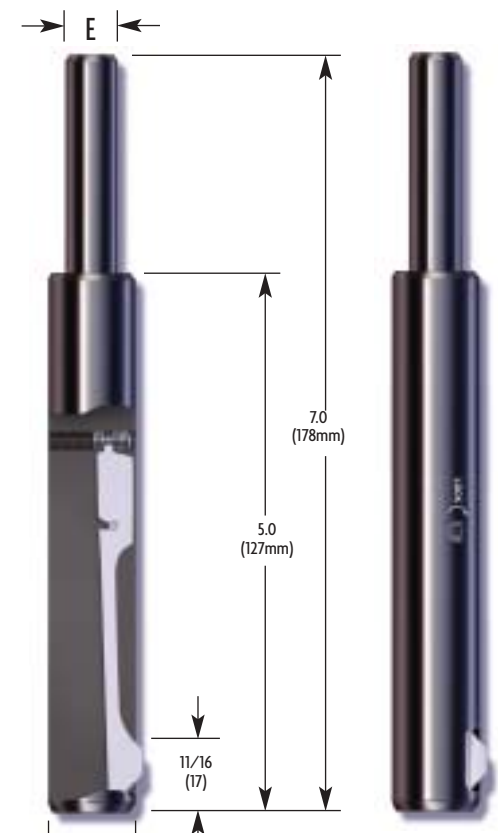
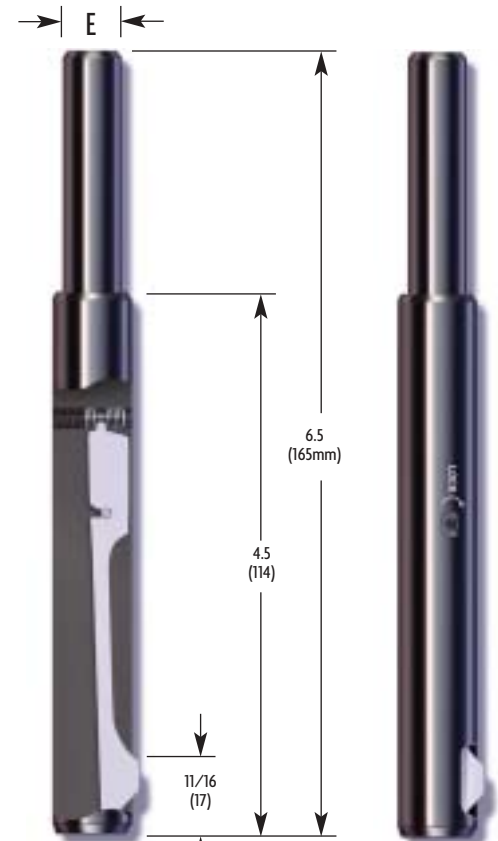
For holes .511" through .671" (13.00mm to 17.06mm).

Tool #	Hole diameter (F)		Shank diameter (E)		Blade Series	
	Inches	mm	Inches	mm		
EZL 0511		0.5118	13.00	.472	12.0	L3B
EZL 0515	33/64	0.5156	13.09	.500	12.7	L3B
EZL 0531	17/32	0.5312	13.49	.500	12.7	L3B
EZL 0546	35/64	0.5468	13.89	.500	12.7	L3B
EZL 0551		0.5511	14.00	.472	12.0	L3B
EZL 0562	9/16	0.5625	14.28	.500	12.7	L3B
EZL 0570		0.5708	14.50	.472	12.0	L3B
EZL 0578	37/64	0.5781	14.68	.500	12.7	L3B
EZL 0590		0.5905	15.00	.472	12.0	L3B
EZL 0593	19/32	0.5937	15.08	.500	12.7	L3B
EZL 0600		0.6003	15.25	.472	12.0	L3B
EZL 0610	39/64	0.6093	15.47	.500	12.7	L3B
EZL 0625	5/8	0.6250	15.87	.500	12.7	L3B
EZL 0629		0.6299	16.00	.472	12.0	L3B
EZL 0640	41/64	0.6406	16.27	.500	12.7	L3B
EZL 0649		0.6496	16.50	.472	12.0	L3B
EZL 0656	21/32	0.6562	16.66	.500	12.7	L3B
EZL 0669		0.6692	17.00	.472	12.0	L3B
EZL 0671	43/64	0.6718	17.06	.500	12.7	L3B

For holes .687" through 1.00" (17.46mm to 24.00mm).

Tool #	Hole diameter (F)		Shank diameter (E)		Blade Series	
	Inches	mm	Inches	mm		
EZL 0687	11/16	0.6875	17.46	.500	12.7	L3B
EZL 0703	45/64	0.7031	17.85	.500	12.7	L3B
EZL 0708		0.7086	18.00	.472	12.0	L3B
EZL 0718	23/32	0.7187	18.25	.500	12.7	L3B
EZL 0734	47/64	0.7343	18.65	.500	12.7	L3B
EZL 0748		0.7480	19.00	.472	12.0	L3B
EZL 0750	3/4	0.7500	19.05	.500	12.7	L3B
EZL 0763	49/64	0.7656	19.44	.500	12.7	L3B
EZL 0781	25/32	0.7812	19.84	.500	12.7	L3B
EZL 0787		0.7874	20.00	.472	12.0	L3B
EZL 0796	51/64	0.7968	20.24	.500	12.7	L3B
EZL 0812	13/16	0.8125	20.63	.500	12.7	L3B
EZL 0826		0.8267	21.00	.472	12.0	L3B
EZL 0843	27/32	0.8437	21.43	.500	12.7	L3B
EZL 0859	55/64	0.8593	21.82	.500	12.7	L3B
EZL 0866		0.8661	22.00	.472	12.0	L3B
EZL 0875	7/8	0.8750	22.22	.500	12.7	L3B
EZL 0890	57/64	0.8906	22.62	.500	12.7	L3B
EZL 0905		0.9055	23.00	.472	12.0	L3B
EZL 0906	29/32	0.9062	23.01	.500	12.7	L3B
EZL 0921	59/64	0.9218	23.41	.500	12.7	L3B
EZL 0937	15/16	0.9375	23.81	.500	12.7	L3B
EZL 0944		0.9448	24.00	.472	12.0	L3B
EZL 0953	61/64	0.9531	24.20	.500	12.7	L3B
EZL 0968	31/32	0.9687	24.60	.500	12.7	L3B
EZL 0984		0.9842	25.00	.472	12.0	L3B
EZL 1000	1.0	1.0000	25.40	.500	12.7	L3B

Note: Series L3B tools for these hole ranges have a working range of -0.004+.04 inches and -.10+.10mm.



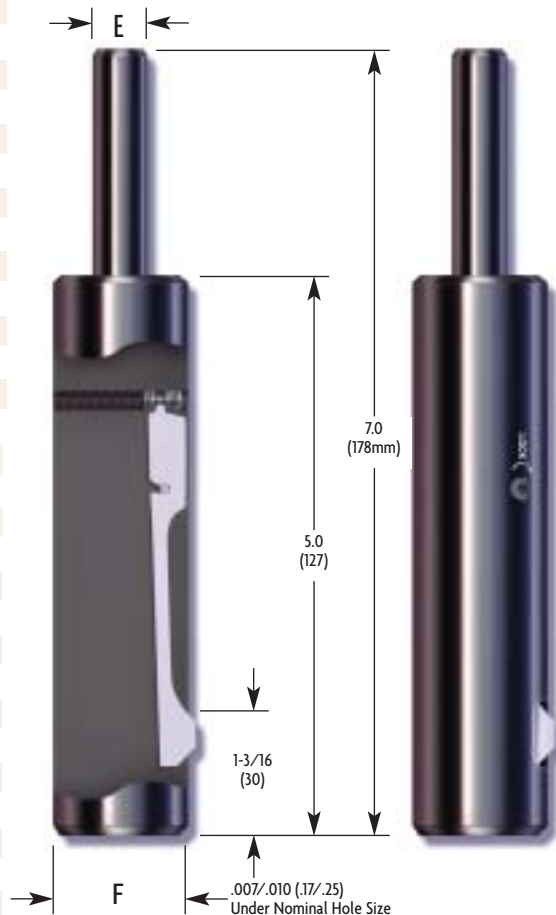
E-Z Burr Series L3B

For holes 1.023" through 2.0" (26.00mm to 50.80mm).

Tool #	Hole diameter (F)		Shank diameter (E)		Blade Series	
	Inches	mm	Inches	mm		
EZL 1023		1.0236	26.00	.472	12.0	L3B
EZL 1062	1 1/16	1.0625	26.98	.500	12.7	L3B
EZL 1063		1.0629	27.00	.472	12.0	L3B
EZL 1102		1.1023	28.00	.472	12.0	L3B
EZL 1125	1 1/8	1.1250	28.57	.500	12.7	L3B
EZL 1141		1.1417	29.00	.472	12.0	L3B
EZL 1181		1.1811	30.00	.472	12.0	L3B
EZL 1187	1 3/16	1.1875	30.16	.500	12.7	L3B
EZL 1220		1.2204	31.00	.472	12.0	L3B
EZL 1250	1 1/4	1.2500	31.75	.500	12.7	L3B
EZL 1259		1.2598	32.00	.472	12.0	L3B
EZL 1299		1.2992	33.00	.472	12.0	L3B
EZL 1312	1 5/16	1.3125	33.33	.500	12.7	L3B
EZL 1338		1.3385	34.00	.472	12.0	L3B
EZL 1375	1 3/8	1.3750	34.92	1.000	25.4	L3B
EZL 1377		1.3779	35.00	.984	25.0	L3B
EZL 1417		1.4173	36.00	.984	25.0	L3B
EZL 1437	1 7/16	1.4375	36.51	1.000	25.4	L3B
EZL 1456		1.4566	37.00	.984	25.0	L3B
EZL 1496		1.4960	38.00	.984	25.0	L3B
EZL 1500	1 1/2	1.5000	38.10	1.000	25.4	L3B
EZL 1535		1.5354	39.00	.984	25.0	L3B
EZL 1562	1 9/16	1.5625	39.68	1.000	25.4	L3B
EZL 1574		1.5748	40.00	.984	25.0	L3B
EZL 1614		1.6141	41.00	.984	25.0	L3B
EZL 1625	1 5/8	1.6250	41.27	1.000	25.4	L3B
EZL 1653		1.6535	42.00	.984	25.0	L3B
EZL 1692		1.6929	43.00	.984	25.0	L3B
EZL 1732		1.7322	44.00	.984	25.0	L3B
EZL 1750	1 3/4	1.7500	44.45	1.000	25.4	L3B
EZL 1771		1.7716	45.00	.984	25.0	L3B
EZL 1811		1.8110	46.00	.984	25.0	L3B
EZL 1850		1.8503	47.00	.984	25.0	L3B
EZL 1875	1 7/8	1.8750	47.62	1.000	25.4	L3B
EZL 1889		1.8897	48.00	.984	25.0	L3B
EZL 1929		1.9291	49.00	.984	25.0	L3B
EZL 1968		1.9685	50.00	.984	25.0	L3B
EZL 2000	2.00	2.0000	50.80	1.000	25.4	L3B

*Larger tools available upon request.

Note: Series L3B tools for these hole ranges have a working range of -.004+.04 inches and -.10+.10mm.



E-Z Burr Tool Specifications – Carbide Series

E-Z Burr Series C6A-C6C

For holes .250" through .334" (6.35mm to 8.50mm).

Tool #	Hole diameter (F)		Shank diameter (E)		Insert Series	
	Inches	mm	Inches	mm		
CRB 0250	1/4	0.2500	6.35	.312	7.92	C6A
CRB 0255		0.2559	6.50	.314	8.00	C6A
CRB 0265	17/64	0.2656	6.74	.312	7.92	C6A
CRB 0275		0.2755	7.00	.314	8.00	C6A
CRB 0281	9/32	0.2812	7.14	.312	7.92	C6B
CRB 0287		0.2874	7.30	.314	8.00	C6B
CRB 0295		0.2953	7.50	.314	8.00	C6B
CRB 0296	19/64	0.2968	7.54	.312	7.92	C6B
CRB 0305		0.3051	7.75	.314	8.00	C6B
CRB 0312	5/16	0.3125	7.93	.312	7.92	C6C
CRB 0314		0.3149	8.00	.314	8.00	C6C
CRB 0328	21/64	0.3281	8.33	.312	7.92	C6C
CRB 0334		0.3346	8.50	.314	8.00	C6C

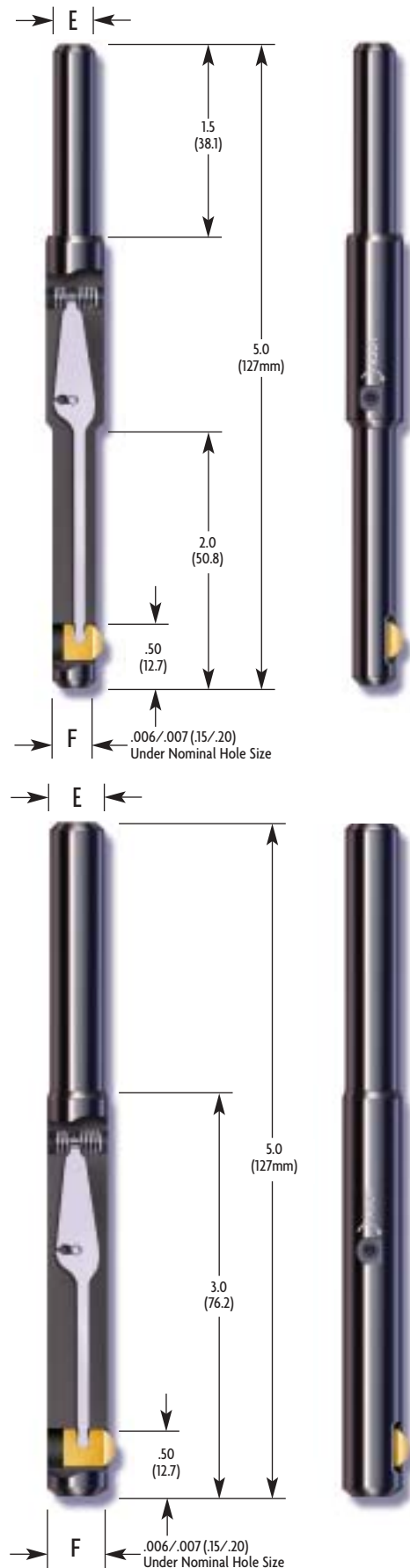
Note: Series C6A, C6B & C6C tools have a working range of -.0004+.015 inches and -.10+.40mm.

E-Z Burr Series C7A-C7B

For holes .343 through .500" (8.73mm to 12.70mm).

Tool #	Hole diameter (F)		Shank diameter (E)		Insert Series	
	Inches	mm	Inches	mm		
CRB 0343	11/32	0.3437	8.73	.312	7.92	C7A
CRB 0354		0.3543	9.00	.314	8.00	C7A
CRB 0359	23/64	0.3593	9.12	.312	7.92	C7A
CRB 0366		0.3661	9.30	.314	8.00	C7A
CRB 0374		0.3740	9.50	.314	8.00	C7A
CRB 0375	3/8	0.3750	9.52	.312	7.92	C7A
CRB 0381		0.3818	9.70	.314	8.00	C7A
CRB 0390	25/64	0.3906	9.92	.312	7.92	C7A
CRB 0393		0.3937	10.00	.314	8.00	C7A
CRB 0406	13/32	0.4062	10.31	.312	7.92	C7A
CRB 0413		0.4133	10.50	.393	10.00	C7B
CRB 0421	27/64	0.4218	10.71	.375	9.52	C7B
CRB 0433		0.4330	11.00	.393	10.00	C7B
CRB 0437	7/16	0.4375	11.11	.375	9.52	C7B
CRB 0444		0.4448	11.30	.393	10.00	C7B
CRB 0453	29/64	0.4531	11.50	.375	9.52	C7B
CRB 0460		0.4606	11.70	.393	10.00	C7B
CRB 0468	15/32	0.4687	11.90	.375	9.52	C7B
CRB 0472		0.4724	12.00	.393	10.00	C7B
CRB 0484	31/64	0.4843	12.30	.375	9.52	C7B
CRB 0492		0.4921	12.50	.393	10.00	C7B
CRB 0500	1/2	0.5000	12.70	.375	9.52	C7B

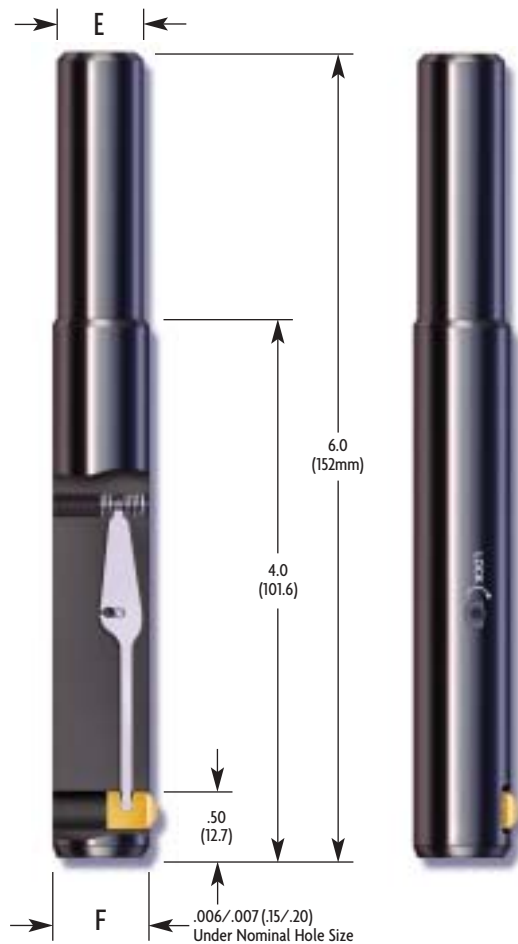
Note: Series C7A & C7B tools have a working range of -.0004+.015 inches and -.10+.40mm.



E-Z Burr Series C8A

For holes .511" through 1.00 (13.0mm to 25.40mm).

Tool #	Hole diameter (F)		Shank diameter (E)		Insert Series	
	Inches	mm	Inches	mm		
CRB 0511		0.5118	13.00	.472	12.00	C8A
CRB 0515	33/64	0.5156	13.09	.500	12.70	C8A
CRB 0531	17/32	0.5312	13.49	.500	12.70	C8A
CRB 0546	35/64	0.5468	13.89	.500	12.70	C8A
CRB 0551		0.5511	14.00	.472	12.00	C8A
CRB 0562	9/16	0.5625	14.28	.500	12.70	C8A
CRB 0570		0.5708	14.50	.472	12.00	C8A
CRB 0578	37/64	0.5781	14.68	.500	12.70	C8A
CRB 0590		0.5905	15.00	.472	12.00	C8A
CRB 0593	19/32	0.5937	15.08	.500	12.70	C8A
CRB 0600		0.6003	15.25	.472	12.00	C8A
CRB 0610	39/64	0.6093	15.47	.500	12.70	C8A
CRB 0625	5/8	0.6250	15.87	.500	12.70	C8A
CRB 0629		0.6299	16.00	.472	12.00	C8A
CRB 0640	41/64	0.6406	16.27	.500	12.70	C8A
CRB 0649		0.6496	16.50	.472	12.00	C8A
CRB 0656	21/32	0.6562	16.66	.500	12.70	C8A
CRB 0669		0.6692	17.00	.472	12.00	C8A
CRB 0671	43/64	0.6718	17.06	.500	12.70	C8A
CRB 0687	11/16	0.6875	17.46	.500	12.70	C8A
CRB 0703	45/64	0.7031	17.85	.625	15.87	C8A
CRB 0708		0.7086	18.00	.629	16.00	C8A
CRB 0718	23/32	0.7187	18.25	.625	15.87	C8A
CRB 0734	47/64	0.7343	18.65	.625	15.87	C8A
CRB 0748		0.7480	19.00	.629	16.00	C8A
CRB 0750	3/4	0.7500	19.05	.625	15.87	C8A
CRB 0763	49/64	0.7656	19.44	.625	15.87	C8A
CRB 0781	25/32	0.7812	19.84	.625	15.87	C8A
CRB 0787		0.7874	20.00	.629	16.00	C8A
CRB 0796	51/64	0.7968	20.24	.625	15.87	C8A
CRB 0812	13/16	0.8125	20.63	.625	15.87	C8A
CRB 0826		0.8267	21.00	.629	16.00	C8A
CRB 0843	27/32	0.8437	21.43	.625	15.87	C8A
CRB 0859	55/64	0.8593	21.82	.625	15.87	C8A
CRB 0866		0.8661	22.00	.629	16.00	C8A
CRB 0875	7/8	0.8750	22.22	.625	15.87	C8A
CRB 0890	57/64	0.8906	22.62	.625	15.87	C8A
CRB 0905		0.9055	23.00	.629	16.00	C8A
CRB 0906	29/32	0.9062	23.01	.625	15.87	C8A
CRB 0921	59/64	0.9218	23.41	.625	15.87	C8A
CRB 0937	15/16	0.9375	23.81	.625	15.87	C8A
CRB 0944		0.9448	24.00	.629	16.00	C8A
CRB 0953	61/64	0.9531	24.20	.625	15.87	C8A
CRB 0968	31/32	0.9687	24.06	.625	15.87	C8A
CRB 0984		0.9842	25.00	.629	16.00	C8A
CRB 1000	1.00	1.0000	25.40	.625	15.87	C8A



Note: Series C8A tools have a working range of -.004+.015 decimal and -.10+.40mm.

The E-Z Burr Kit

The power-packed E-Z Burr Kit is the perfect solution for smaller shops. Versatile and economical, the kit comes with four tool diameters that provide a deburring range from .062 to 1.0 inches

when used with your standard boring head or the custom boring head offered by E-Z Burr. That's substantially greater than any other kit on the market.

How the Kit Works

The work piece must be held down firmly, with the adjustable deburring head on the same centerline as the hole. With the appropriate arbor locked into the deburring head, the tool is lowered so the pilot of the arbor is in the hole. Then, using the hex key, the head is adjusted so that the arbor is .004" shy of touching the side of

the hole. (SEE DIAGRAM) As the tool is withdrawn, the deburring process begins. A step-by-step instruction sheet is included with each kit to guide you through the process. Chamfer size is fully adjustable due to E-Z Burr's quick and easy chamfer adjustment feature.



The tool is lowered into the hole with the head adjusted so that the arbor has approximately .004" clearance.



The spindle is withdrawn and then started. The tool is rapid fed to approximately .040" above the work piece, and then fine fed into the part until the blade is collapsed into the holder.



The tool is rapid fed through the part so the blade is beyond the burr by approximately .040". The feed direction is then reversed and fine fed back into the part until the blade is collapsed into the holder.



The tool is rapid fed out of the part and is ready to proceed to the next hole.

NOTE: The blade will not mark or damage the hole.

What Comes in the Kit?

Two kits are available. Both are packaged in an impact-resistant plastic carrying case to protect the tools and come complete with the appropriate four Allen wrenches.

Kit# KIT-BH-061 includes:

- Four E-Z Burr deburring tools to cover the full diameter range to deburr the front and rear of the hole.
- Three replacement blades and one cartridge to deburr the rear side only.
- One boring head with 1/2" (12.7mm) diameter bore.
- One adapter sleeve with 1/2" (12.7mm) OD x 6.0mm ID to accommodate all needed tool shanks.



Kit# KIT-SL-061 is for users who already have an adjustable boring head. It includes:

- Two adapter sleeves: 1/2" (12.7mm) OD x 6mm ID and 3/4" (19mm) OD x 1/2" (12.7mm) ID to fit into larger boring heads.
- Four E-Z Burr deburring tools to cover the full diameter range.
- Three replacement blades and one cartridge to deburr the rear side only.



E-Z Burr Custom and Specialty Tools

E-Z-Burr Custom Tools

The bulk of our business is in high-production custom tools. Your job may require special lengths, diameters, pilots, shanks, or flats. Whatever your needs may be, please fill out our custom template or make a copy of your drawing and fax it to us. An engineer at E-Z Burr will contact you to discuss the application in more detail. Remember, E-Z Burr can produce most custom tools in about two weeks. Note: The custom template is located on page 24, at the end of the ordering section.



E-Z-Burr Specialty Combination Tools

Using the patented technology of the E-Z Burr Carbide Tool, we have the capability to manufacture three extremely versatile combination tools with the capability of performing multiple tasks. One drills and deburrs, one deburrs and precision chamfers and the third drills, deburrs and precision chamfers. All operations are performed in a single pass, saving you both time and money. As with our Custom Tools, E-Z Burr Specialty Tools are made to your specifications.



Ordering E-Z Burr Tools, Blades and Inserts

E-Z Burr Carbide and Micro Tools are ordered by using the tool number for the appropriate hole diameter, then adding a dash and the letter designating the insert style (R or B). Refer to the charts provided to determine the number of the particular tool you wish to order. For standard HSS tools, the suffix is a number (01 through 18), rather than a letter. It's important the part number is complete to ensure the proper blade or insert is installed in the tool. Part numbers are derived from tool style, hole diameter and blade or insert required. Refer to the blade configuration chart to determine the blade angles and cutting feature designated by the numeric suffix. Examples are provided below.

NOTE: E-Z Burr's tool numbers are broken down by decimals, e.g. .25 hole diameter = tool number 0250. Micro Series Cartridges, High-Speed Holders, and Carbide Holders are indicated by CAR, EZL and CRB respectively.

How to Order a Micro Series CAR0615-R Cartridge

CAR0615-R = standard CAR cartridge + .061 arbor diameter + blade suffix -R for rear cutting only.

There are two cartridge styles:

B style cuts both front and rear indicated by the part number + B

R style cuts rear only and is indicated by the part number + R

Please refer to chart on page 11 to locate the cartridge for the requested hole size.

How to Order a Carbide CRB0312-B Tool

CRB0312-B = standard CRB arbor + .312 arbor diameter + blade suffix -B for front and back cutting.

There are two insert styles:

B style cuts both front and rear indicated by the part number + B

R style cuts rear-only and is indicated by the part number + R

Please refer to charts on pages 16 to 17 to locate the arbor diameter for the requested hole size.

How to Order Carbide Inserts

The carbide insert in the E-Z Burr C Series is available in two styles. The B style allows for both front and rear deburring, while the R style is for rear or backside deburring only. All inserts come standard with a positive rake and TiN coating.

Replacement inserts are ordered by calling out the appropriate insert series followed by the style. For example: A replacement insert to deburr the front and rear of a 3/8" hole would be C7AB.

For help with ordering or technical assistance, contact your local distributor or call E-Z Burr Tool Company at 800-783-2877.



Insert Series Example



Ordering E-Z Burr HSS Tools and Blades

How to Order a Standard High Speed Steel EZL0250-02 Tool

EZL0250-02 = standard EZL arbor +
 .250 arbor diameter + blade suffix
 -02 for 45° (front) x 45° (back)
 P (positive rake) blade.

Please refer to chart on pages 12 to 15 to locate the arbor diameter for the requested hole size.

Specifications for HSS Blades

	Front Angle	Rear Angle	Cutting Feature	Blade Suffix
Front and Rear	45°	45°	S	1
	45°	45°	P	2
	45°	45°	N	3
	45°	60°	S	4
	45°	60°	P	5
	45°	60°	N	6
Rear Only	0	45°	S	7
	0	45°	P	8
	0	45°	N	9
	0	60°	S	10
	0	60°	P	11
	0	60°	N	12
Front Only	45°	0	S	13
	45°	0	P	14
	45°	0	N	15
	60°	0	S	16
	60°	0	P	17
	60°	0	N	18

- Standard Rake (10° Relief Angle)
Suffix 01, 07, 13
- Positive Rake (w/Chip Breakers)
Suffix 02, 08, 14
- Negative Rake
Suffix 03, 09, 15

For Larger Burrs

If you identify large burrs or require a larger chamfer size on the rear side of the hole, reference the suffix with the 60 degree rear angle for the same material.

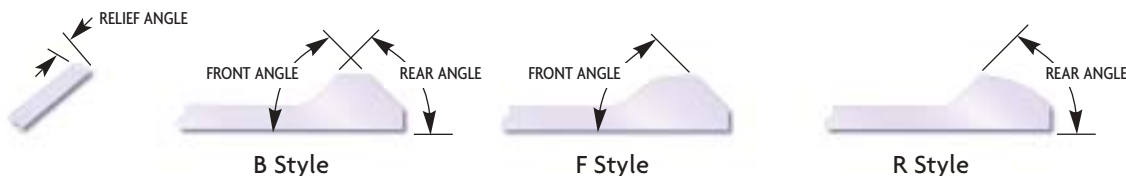
- Standard Rake (10° Relief Angle)
Suffix 04, 10
- Positive Rake (w/Chip Breakers)
Suffix 05, 11
- Negative Rake
Suffix 06, 12

Recommendations for HSS Blades

Cutting Features

Standard (10° Relief Angle)

Recommend for: Cast Iron, Zinc, Alloy Steel, Malleable Iron, High Carbon



Positive Rake (10° Relief Angle, 12° Positive Rake Angle)

Recommended for: Stainless, Aluminum, Low Carbon Steel



Negative Rake (10° Relief Angle, 8° Negative Rake Angle)

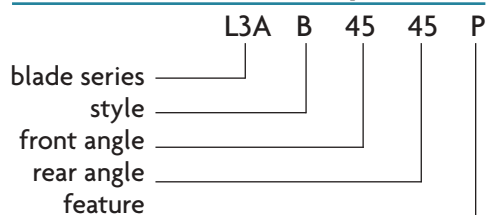
Recommended for: Brass, Bronze



Blade Series	For Sizes	Blade Styles	Blade Features
L1A	.093 - .118	B F R	S (Standard) P (Positive) N (Negative)
L1B	.122 - .153	B F R	
L2A	.156 - .177	B F R	
L2B	.187 - .236	B F R	
L3A	.250 - .334	B F R	
L3B	.343 - 2.0+	B F R	

Note: Special blade cutting angles by quotation only. Standard blade cutting angle is 45°. We can produce any blade angle required, from 30° to 70°. Please specify F (Front) and R (Rear) blade angle for angles other than 45°.

Blade Series Example



For help with ordering or technical assistance, contact your local distributor or call E-Z Burr Tool Company at 800-783-2877.

How To Order Custom and Specialty Tooling

How to Order Custom Tooling

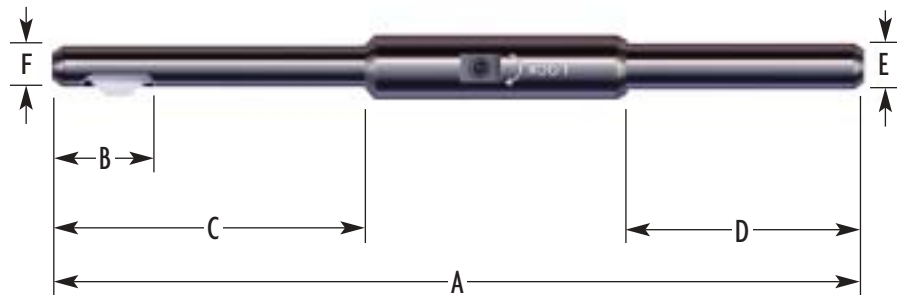
"Custom" tool requests should include the following application data:

- Material type.
- Hole diameter and depth.
- Machine type (CNC, Transfer, Bridgeport, etc.).
- Drawings or sketches to illustrate the application.
- You may also use the E-Z custom design template.
- Any other critical information.

How to Order Specialty Tooling

E-Z Burr's BurrFree Drills and Precision Chamfering Tools are custom-made per order. For additional information, simply contact E-Z Burr with specifications required for custom tooling.

Custom Design Template



A. Overall Length:

B. Blade Depth:

C. Pilot Length:

D. Shank Length:

E. Shank Depth:

F. Hole Diameter:

G. Blade Number:

For a custom tool estimate, please photocopy this form, fill in the dimensions, and fax or send the copy to E-Z Burr. For help with ordering or technical assistance, contact your local distributor or call E-Z Burr Tool Company at 800-783-2877.

Recommended Speeds and Feeds

Recommended Speeds and Feeds

Material	Carbide Series		HSS Series	
	SFM	Feed (IPR)	SFM	Feed (IPR)
Free Machining	230 - 260	0.008 - 0.015	75 - 126	.003 - .010
Aluminum	230 - 260	0.008 - 0.015	90 - 150	.003 - .008
Cast Iron	230 - 260	0.008 - 0.015	40 - 60	.003 - .010
Low Carbon	230 - 260	0.008 - 0.015	60 - 100	.004 - .011
Med Carbon	200 - 230	0.006 - 0.012	45 - 80	.003 - .010
Stainless	180 - 220	0.004 - 0.008	20 - 40	.003 - .010
High Alloy Steel	180 - 220	0.006 - 0.012	25 - 50	.003 - .010

The speeds and feeds above are intended as guidelines only.

Terms

IPM = Inches Per Minute
 IPR = Inches Per Revolution
 RPM = Revolutions Per Minute
 SFM = Surface Feet Per Minute
 DIA = Tool Diameter

Formula

Inches (decimal)	mm (metric)
$RPM = \frac{SFM \times 3.82}{DIA}$	$RPM = \frac{M/min \times 318.47}{DIA}$
$IPM = RPM \times IPR$	$mm/min = RPM \times mm/REV$
$SFM = \frac{RPM \times DIA}{3.82}$	$M/min = \frac{RPM \times DIA}{318.47}$



TOOL COMPANY

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