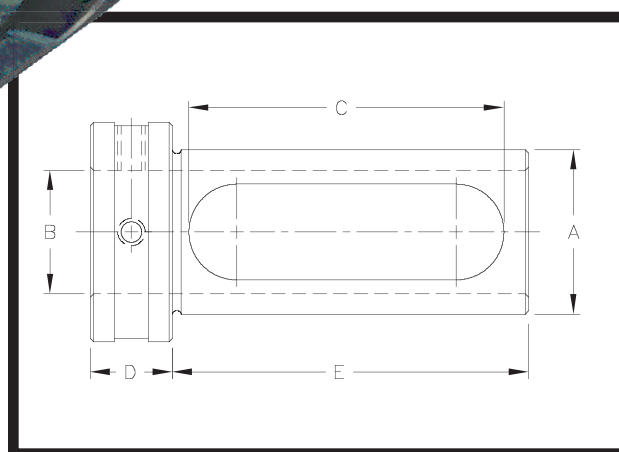
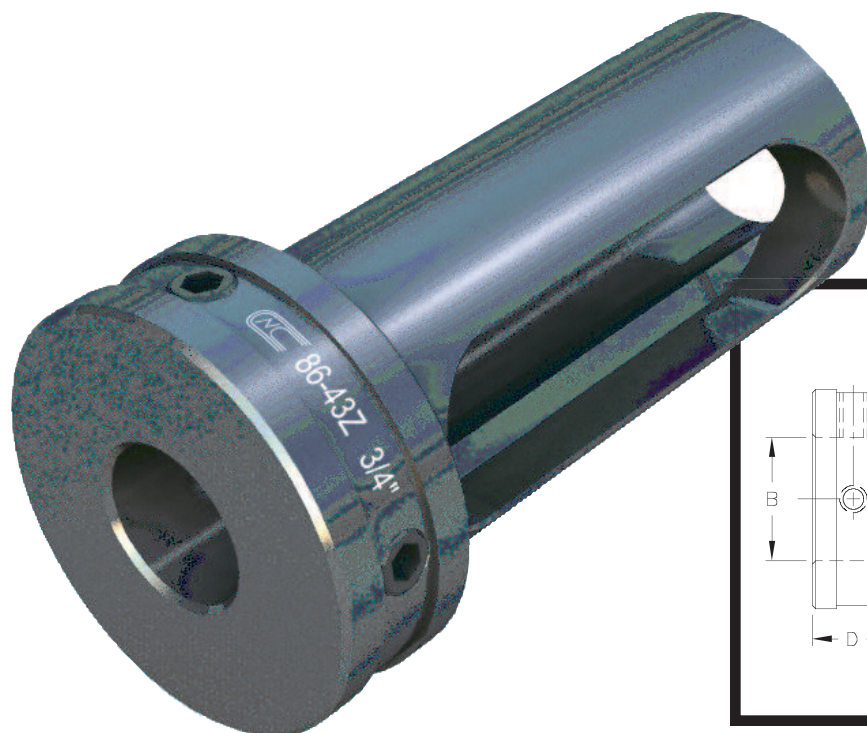




Toolholder Bushing Type “Z”

The most flexible Toolholder Bushing for all types of CNC Turning Centers, Turret Lathes and Chuckers. The Elongated Slot gives the user a complete interchangeability with all brands of equipment. The added Set Screws in the Head allow for increased rigidity. The bushings are hardened and precision ground concentric. Can also be used for Preset Tooling. Select the O.D. size that fits your machine and order from the chart below.



CNC PART NUMBER	BUSH DIA.		STANDARD BORE SIZES STOCKED		LENGTH OF SLOT			HEAD THICKNESS	LENGTH UNDER HEAD		
					ZS	Z	ZL		ZS	Z	ZL
	A		B		C			D	E		
INCH	MM	INCH	MM								
CNC 86-40Z	¾	20	¼, ⅝ ₁₆ , ⅜, ½	6, 8, 10, 12		2⅜		½		2½	
CNC 86-41Z	1	25	¼, ⅝ ₁₆ , ⅜, ½, ⅝ ₈ , ¾	8, 10, 12, 16, 20		2⅜		½		2¾	
CNC 86-42Z	1¼	32	⅜, ½, ⅝ ₈ , ¾, ⅞, 1	10, 12, 16, 20, 25	1⅞	2⅝	3⅛	⅝ ₈	2¼	3	3¾
CNC 86-43Z	1½	40	⅜, ½, ⅝ ₈ , ¾, ⅞, 1, 1¼	10, 12, 16, 20, 25, 32	2⅛	2⅞	3⅝	¾	2½	3¼	4
CNC 86-44Z	1¾	45	½, ⅝ ₈ , ¾, ⅞, 1, 1¼, 1½	12, 16, 20, 25, 32, 40	2⅜	3⅛	3⅞	¾	2¾	3½	4¼
CNC 86-45Z	2	50	½, ⅝ ₈ , ¾, ⅞, 1, 1¼, 1½, 1¾	12, 16, 20, 25, 32, 40, 45	2⅝	3½	4⅛	¾	3	3¾	4½
CNC 86-46Z	2½	65	⅝ ₈ , ¾, ⅞, 1, 1¼, 1½, 1¾, 2, 2¼	16, 20, 25, 32, 40, 45, 50	3⅛	3⅞	4⅝	¾	3½	4¼	5
CNC 86-47Z	3	80	1, 1¼, 1½, 1¾, 2, 2¼, 2½	25, 32, 40, 50, 60, 65	3⅝	4⅜	5⅝	¾	3¾	4¾	5¾
CNC 86-48Z	3½	90	1¼, 1½, 1¾, 2, 2¼, 2½, 3	32, 40, 50, 60, 65	3⅞	4⅞	5⅞	1	4½	5½	6½
CNC 86-49Z	4	100	1½, 1¾, 2, 2¼, 2½, 3	40, 50, 60, 65, 80	4⅜	5⅝	7⅞	1	5	6¼	7½

*Special sizes available to fit your machine specifications: inch-metric, metric-inch, or metric-metric.

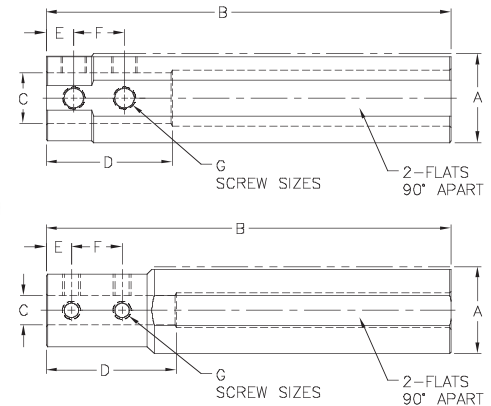
*All Orders ship standard in inch sizes. If required; please specify metric O.D. or I.D., when ordering.



Boring Bar Sleeves

CNC Boring Bar Sleeves are universally used to adapt all Boring Bar or shank type tools to any CNC Turning Machines and Machining Centers for extensions or hard to reach areas. They are hardened, precision ground, concentric, and black oxidized for long lasting protection. Select the O.D. size, length, and ID size from the chart below.

*This NEW innovative design on the 1½ O.D. boring bar sleeves helps the tools stay cool longer by projecting the coolant directly on the cutting edge.



CNC PART NUMBER	DIMENSIONS								SCREW SIZE
	A		B	C		D	E	F	
	IN.	MM		IN	MM				
CNC 8815	¾	20	5	¼	6	1½	⅝	⅝	10-32
CNC 8816	¾	20	5	⅝	8	1½	⅝	⅝	10-32
CNC 8817	¾	20	5	¾	10	1½	⅝	⅝	10-32
CNC 8818	¾	20	5	½	12	3	⅝	⅝	10-32
CNC 8819	1	25	6	⅝	8	1¾	⅞	⅝	¼-28
CNC 8820	1	25	6	¾	10	1¾	⅞	⅝	¼-28
CNC 8821	1	25	6	½	12	2	⅞	⅝	¼-28
CNC 88125	1¼	32	6½	¾	10	1½	⅝	⅝	¼-28
CNC 88126	1¼	32	6½	½	12	2¼	⅞	⅝	¼-28
CNC 88127	1¼	32	6½	⅝	16	2½	⅞	¾	¼-28
CNC 88128	1¼	32	6½	¾	20	3	⅞	¾	¼-28
CNC 88129	1¼	32	6½	⅞	22	4	⅞	¾	10-32
CNC 88130	1¼	32	6½	1	25	4	⅞	¾	10-32
CNC 8822	1½	40	7	¾	10	2	⅝	⅝	¼-28
CNC 8823	1½	40	7	½	12	2¼	⅞	11⁄16	⅝-24
CNC 8824	1½	40	7	⅝	16	2¼	⅞	¾	⅝-24
CNC 8825	1½	40	7	¾	20	2½	⅞	¾	⅝-24
CNC 8826	1½	40	8	⅞	22	3	⅞	¾	¼-28
CNC 8827	1½	40	8	1	25	4	⅞	⅞	¼-28
CNC 8828	1¾	45	8	½	12	2½	⅝	⅝	⅝-24
CNC 8829	1¾	45	8	⅝	16	2½	⅞	1	⅝-24
CNC 8830	1¾	45	8	¾	20	2½	⅞	1	¾-24
CNC 8831	1¾	45	8	⅞	22	2½	⅞	1	¾-24
CNC 8832	1¾	45	8	1	25	2½	⅞	1	¾-24

CNC PART NUMBER	DIMENSIONS								SCREW SIZE
	A		B	C		D	E	F	
	IN.	MM		IN	MM				
CNC 8834	2	50	9	5⁄8	16	2	7⁄16	1	7⁄16-20
CNC 8835	2	50	9	¾	20	2¾	7⁄16	1	7⁄16-20
CNC 8833	2	50	9	7⁄8	22	2	7⁄16	1	7⁄16-20
CNC 8836	2	50	9	1	25	3½	7⁄16	1	½-20
CNC 8837	2	50	9	1¼	32	3	5⁄8	1	½-20
CNC 8838	2½	65	10	5⁄8	16	3½	7⁄16	1	½-20
CNC 8839	2½	65	10	¾	20	3½	7⁄16	1	½-20
CNC 8840	2½	65	10	1	25	4	7⁄16	1	½-20
CNC 8841	2½	65	10	1¼	32	4	5⁄8	1	½-20
CNC 8842	2½	65	10	1½	40	3½	½	1	½-20
CNC 8845	3	80	11½	1	25	4	½	1	½-20
CNC 8843	3	80	11½	1¼	32	3½	½	1	½-20
CNC 8844	3	80	11½	1½	40	4½	½	1	½-20
CNC 8847	3	80	11½	1¾	45	3¾	5⁄8	1¼	½-20
CNC 8846	3	80	11½	2	50	4½	½	1	½-20
CNC 8850	4	100	14	1½	40	3¾	19⁄32	1⅞	5⁄8-18
CNC 8851	4	100	14	1¾	45	3¾	5⁄8	1⅞	5⁄8-18
CNC 8852	4	100	14	2	50	3¾	19⁄32	1¾	5⁄8-18
CNC 8853	4	100	14	2½	65	4	5⁄8	2	5⁄8-18
CNC 8854	4	100	14	3	80	4	¾	1¼	5⁄8-18

*Special sizes available to fit your machine specifications: inch-metric, metric-inch, or metric-metric.

*All Orders ship standard in inch sizes. If required; please specify metric O.D. or I.D., when ordering.



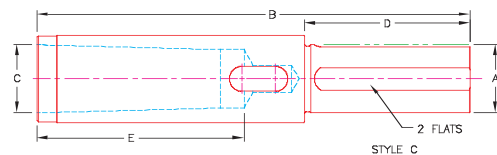
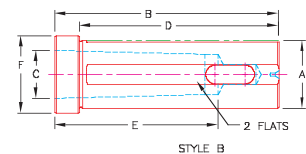
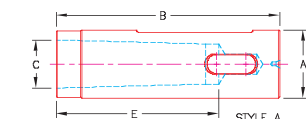
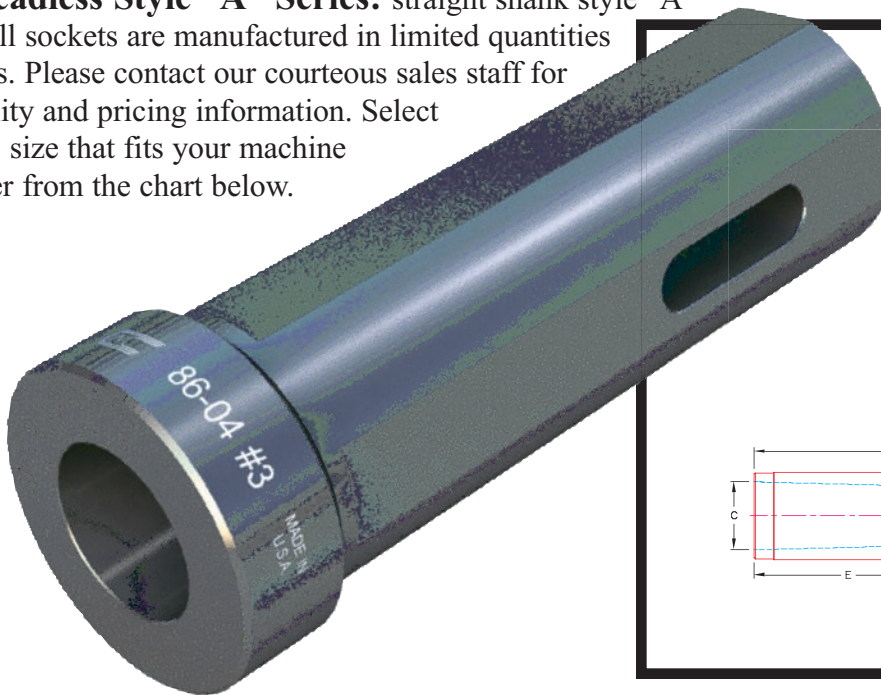
Taper Drill Sockets: Morse Taper

The New Headed Series:

All of our Taper Drill Sockets have been redesigned with a shoulder, as a "B" style, to further insure correct depth of the drilling operation. This new style also provides safety for secondary operations such as boring and reaming. It is held with set screws on two flats so that it will never push back or turn.

Our taper drill sockets are hardened, precision ground, and concentric within .0002 of an inch. They fit directly into tool holders and turrets to positively drive all morse taper shank tools, drills, reamers and counterbores.

The Headless Style "A" Series: straight shank style "A" taper drill sockets are manufactured in limited quantities and sizes. Please contact our courteous sales staff for availability and pricing information. Select the O.D. size that fits your machine and order from the chart below.



CNC PART NUMBER	STYLE	SHANK DIA.		B	MORSED TAPER	D	E	F
		A			C			
		INCH	MM					
CNC 86-01#1	A	¾	20	3¼	#1	2⅝ ₁₆	2⅜ ₁₆	1
CNC 86-02#1	B	1	25	3¾	#1	3⅛	2⅜ ₁₆	1¼
CNC 86-02#2	B	1	25	3¾	#2	3⅛	2⅝	1¼
CNC 86-03#1	B	1¼	32	4	#1	3⅜	2⅜ ₁₆	1½
CNC 86-03#2	B	1¼	32	4	#2	3⅜	2⅝	1½
CNC 86-03#3	B	1¼	32	4	#3	4	3¼	1½
CNC 86-04#1	B	1½	40	5	#1	4⅜	2⅜ ₁₆	1¾
CNC 86-04#2	B	1½	40	5	#2	4⅜	2⅝	1¾
CNC 86-04#3	B	1½	40	5	#3	4⅜	3¼	1¾
CNC 86-04#4	B	1½	40	5¾	#4	4⅜	4⅛	1¾
CNC 86-05#1	B	1¾	45	5¾	#1	5⅞	2⅜ ₁₆	2
CNC 86-05#2	B	1¾	45	5¾	#2	5⅞	2⅝	2
CNC 86-05#3	B	1¾	45	5¾	#3	5⅞	3¼	2
CNC 86-05#4	B	1¾	45	5¾	#4	4⅜	4⅛	2
CNC 86-06#5	C	1¾	45	11⅞	#5	4¼	5¼	1⅞

CNC PART NUMBER	STYLE	SHANK DIA.		B	MORSED TAPER	D	E	F
		A			C			
		INCH	MM					
CNC 86-07#2	B	2	50	6⅞	#2	5½	2⅞	2¼
CNC 86-07#3	B	2	50	6⅞	#3	5½	3¼	2¼
CNC 86-07#4	B	2	50	6⅞	#4	5½	4⅞	2¼
CNC 86-08#5	C	2	50	11⅞	#5	4¼	5¼	2⅜
CNC 86-09#2	B	2½	65	5¾	#2	5⅞	2⅞	2¾
CNC 86-09#3	B	2½	65	6⅝	#3	6	3¼	2¾
CNC 86-09#4	B	2½	65	6⅝	#4	6	4⅞	2¾
CNC 86-09#5	B	2½	65	7⅝	#5	7	5¼	2¾
CNC 86-11#4	B	3	80	6⅝	#4	6	4⅞	3⅜
CNC 86-12#5	B	3	80	7⅝	#5	7	5¼	3⅜
CNC 86-13#4	B	2¼	60	6⅝	#4	6	4⅞	2½
CNC 86-14#5	B	2¼	60	7⅝	#5	7	5¼	2½
CNC 86-15#4	B	2¾	70	6⅝	#4	6	4⅞	3
CNC 86-16#5	B	2¾	70	7⅝	#5	7	5¼	3

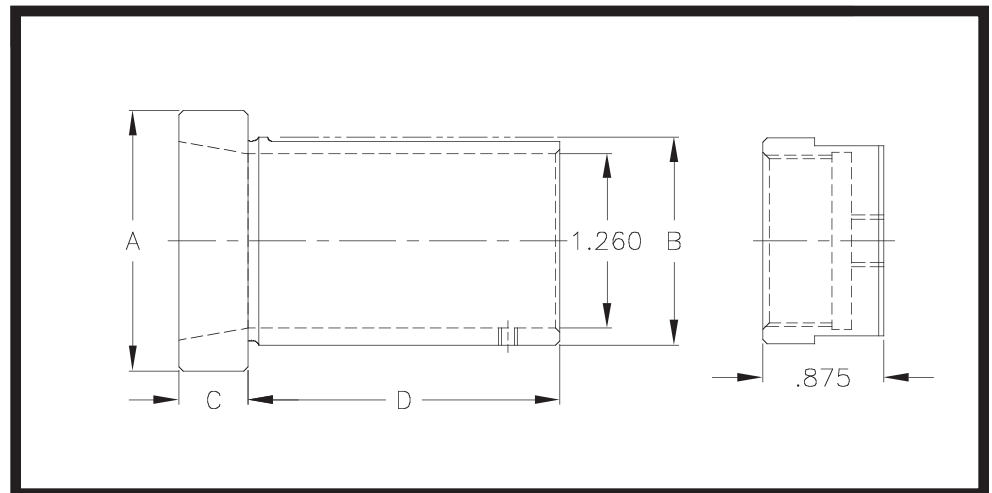
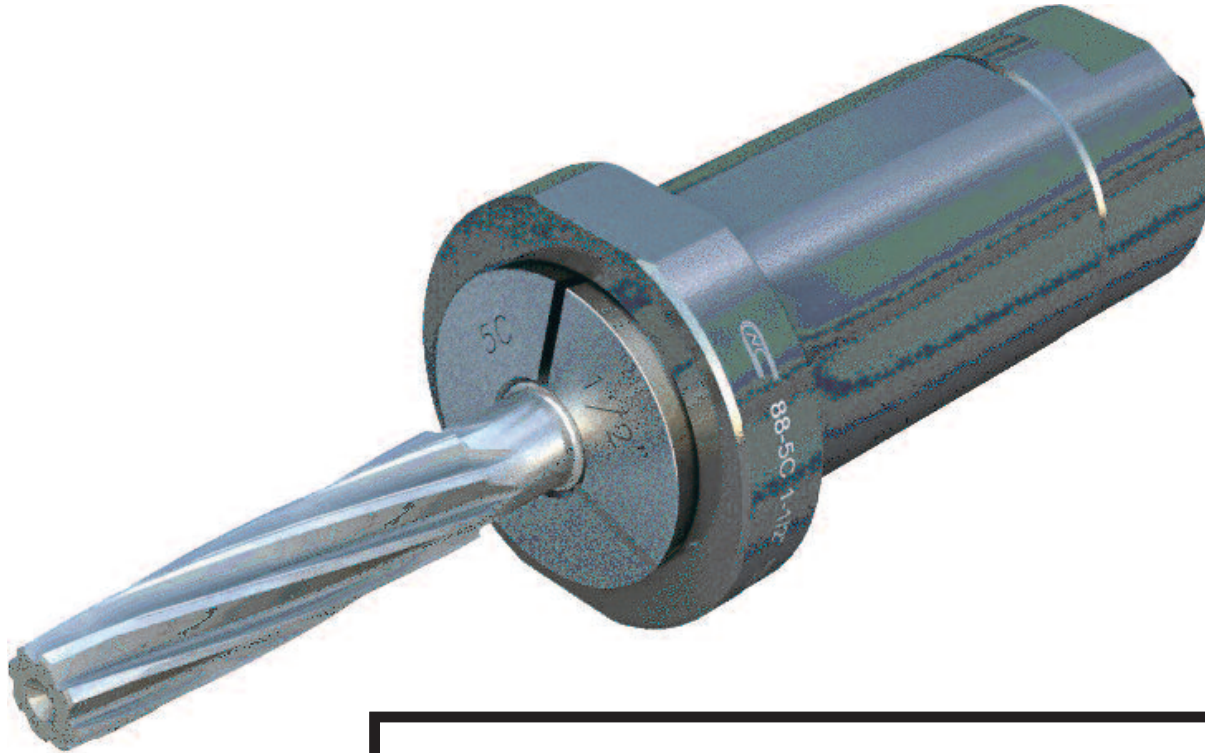
*Special sizes available to fit your machine specifications: inch-metric, metric-inch, or metric-metric.

*All Orders ship standard in inch sizes. If required; please specify metric O.D. or I.D., when ordering.



“5C” Collet Holder Bushing

This brand new 5C Collet Holder Bushing is used to adapt all kinds of Drills, Reamers, Counter Bores and End Mills to your CNC machines. Adds flexibility, versatility and reduces set-up time. Includes back locking nut and screw to hold your 5C Collet in place.



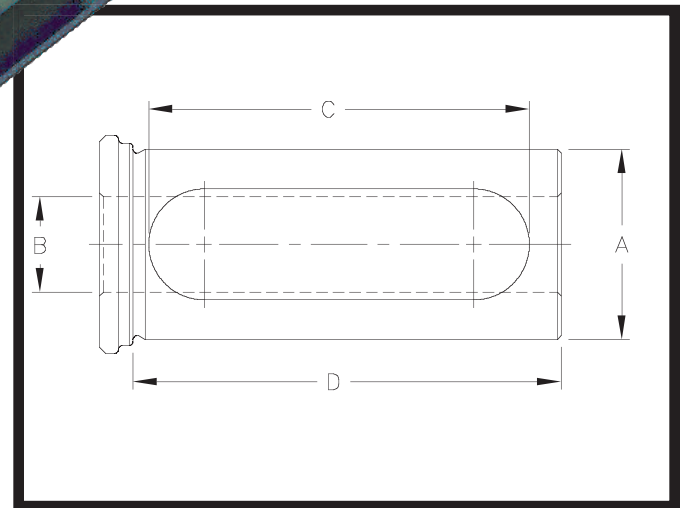
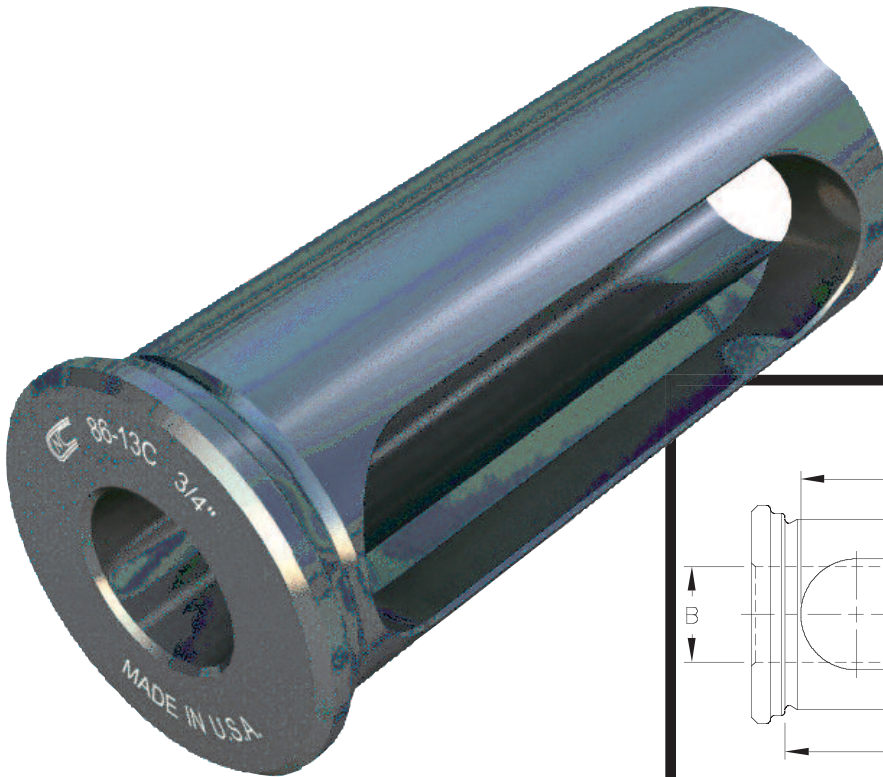
CNC PART NUMBER	A	B		C	D	OD NUT SIZE
		INCH	MM			
CNC 885C 1½	2	1½	40	½	2¼	1¾/64
CNC 885C 1¾	2¼	1¾	45	½	2¼	1¹¹/16
CNC 885C 2	2½	2	50	½	2¼	1¹⁹/16
CNC 885C 2½	3	2½	65	½	2¼	2 ⁷/16

Special sizes available to fit your machine specifications: inch-metric, metric-inch, or metric-metric.
All Orders ship standard in inch sizes. If required; please specify metric O.D. or I.D., when ordering.



Toolholder Bushing Type “C”

This CNC Type C Bushing is designed for universal use on all C/N/C turning machines. To adapt a wide variety of Boring Bars, Drills, Reamers and Shank type tools. Precision machine hardened and ground concentric; made in the U.S.A. – BUILT TO LAST! Select the O.D. size that fits your machine and order from the chart below.



CNC PART NUMBER	BUSH DIA.		STANDARD BORE SIZES STOCKED		LENGTH OF SLOT	LENGTH UNDER HEAD	NUMBER OF SLOTS
	A		B		C	D	
	INCH	MM	INCH	MM			
CNC 86-10C	¾	20	¼, ⅝, ⅜, ½	6, 8, 10, 12	1½	2	1
CNC 86-11C	1	25	¼, ⅝, ⅜, ½, ⅝, ¾	8, 10, 12, 16, 20	2⅝	2¾	1
CNC 86-12C	1¼	32	⅜, ½, ⅝, ¾, ⅞, 1	10, 12, 16, 20, 25	2¾	3¼	1
CNC 86-13C	1½	40	⅜, ½, ⅝, ¾, ⅞, 1, 1¼	10, 12, 16, 20, 25, 32	3	3⅝	1
CNC 86-14C	1¾	45	½, ⅝, ¾, ⅞, 1, 1¼, 1½	12, 16, 20, 25, 32, 40	3⅛	3½	1
CNC 86-15C	2	50	½, ⅝, ¾, 1, 1¼, 1½, 1¾	12, 16, 20, 25, 32, 40, 45	3⅝	4	1
CNC 86-16C	2½	65	¾, 1, 1¼, 1½, 1¾, 2, 2¼	20, 25, 32, 40, 45, 50	4⅛	4½	1 or 2*
CNC 86-17C	3	80	1, 1¼, 1½, 1¾, 2, 2¼, 2½	25, 32, 40, 45, 50, 60, 65	4⅝	5	1 or 2*
CNC 86-18C	3½	90	1, 1¼, 1½, 1¾, 2, 2¼, 2½, 3	25, 32, 40, 45, 50, 60, 65	5	5¾	1 or 2*

*Special sizes available to fit your machine specifications: inch-metric, metric-inch, or metric-metric.

*Bushings 2 1/2 OD and larger: ID's larger than 1 1/2" have 2 slots.

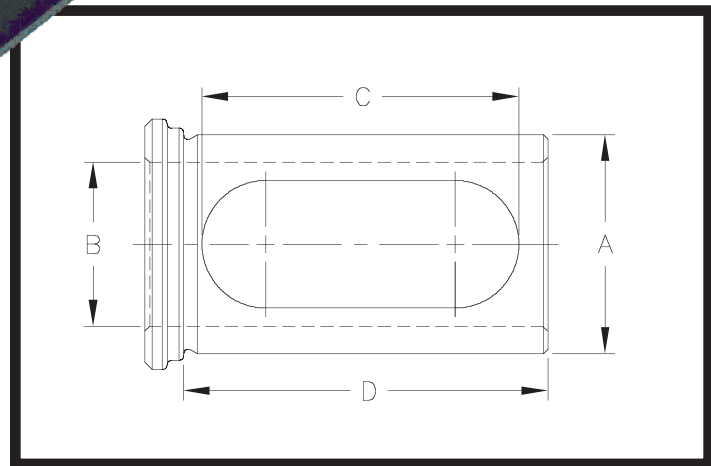
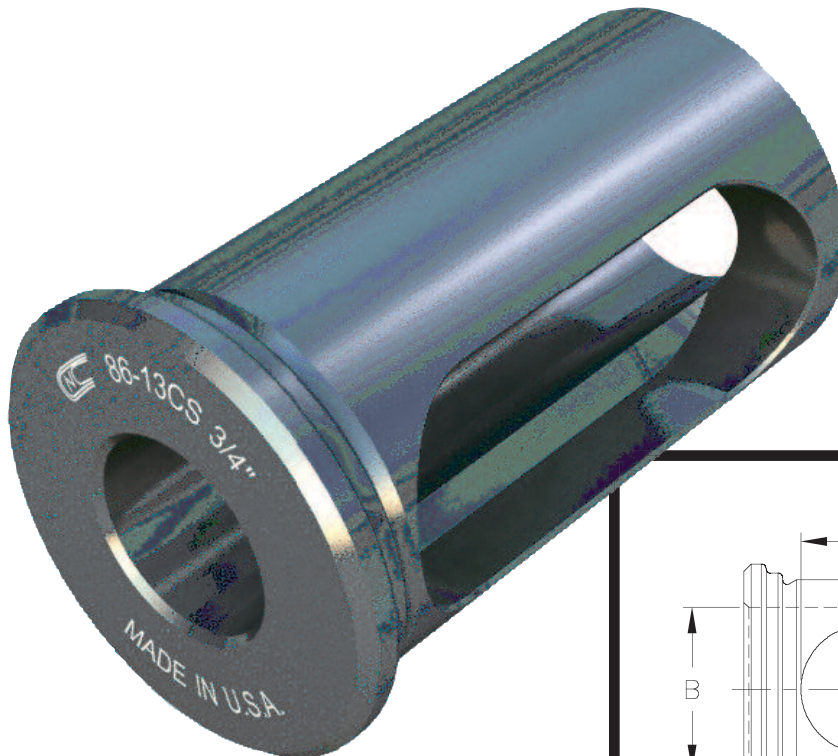
*All Orders ship standard in inch sizes. If required; please specify metric O.D. or I.D. when ordering.



Toolholder Bushing Type “CS”

Short Series

Introducing the “all new” CNC Type CS Bushing designed for universal use on all CNC Turning machines. The Bushings are hardened & precision ground concentric. Select the O.D. size that fits your machine and order from the chart below.



CNC PART NUMBER	BUSH DIA.		STANDARD BORE SIZES STOCKED		LENGTH OF SLOT	LENGTH UNDER HEAD
	A		B		C	D
	INCH	MM	INCH	MM		
CNC 86-10CS	¾	20	¼, ⅝, ⅜, ½	6, 8, 10, 12	1⅛	1½
CNC 86-11CS	1	25	¼, ⅝, ⅜, ½, ⅝, ¾	8, 10, 12, 16, 20	1⅜	1¾
CNC 86-12CS	1¼	32	⅜, ½, ⅝, ¾, ⅞, 1	10, 12, 16, 20, 25	1¾	2⅛
CNC 86-13CS	1½	40	⅜, ½, ⅝, ¾, ⅞, 1, 1¼	10, 12, 16, 20, 25, 32	2⅛	2½
CNC 86-14CS	1¾	45	½, ⅝, ¾, ⅞, 1, 1¼, 1½	12, 16, 20, 25, 32, 40	2⅝	3
CNC 86-15CS	2	50	½, ⅝, ¾, 1, 1¼, 1½, 1¾	12, 16, 20, 25, 32, 40, 45	3	3½
CNC 86-16CS	2½	65	¾, 1, 1¼, 1½, 1¾, 2, 2¼	20, 25, 32, 40, 45, 50	3½	4
CNC 86-17CS	3	80	1, 1¼, 1½, 1¾, 2, 2¼, 2½	25, 32, 40, 45, 50, 60, 65	4⅛	4½
CNC 86-18CS	3½	90	1, 1¼, 1½, 1¾, 2, 2¼, 2½, 3	25, 32, 40, 45, 50, 60, 65	4¾	5¼

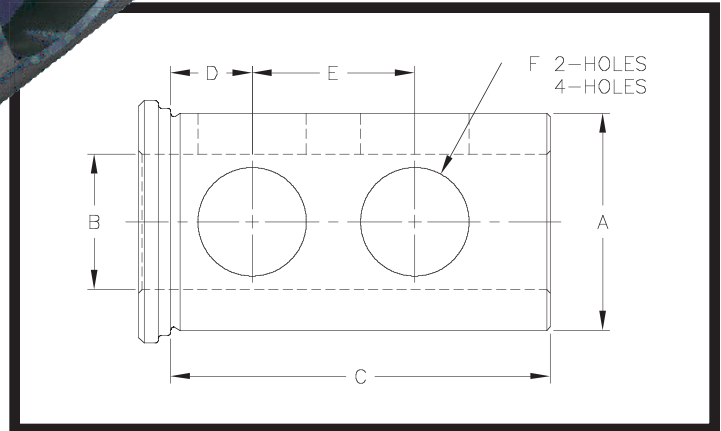
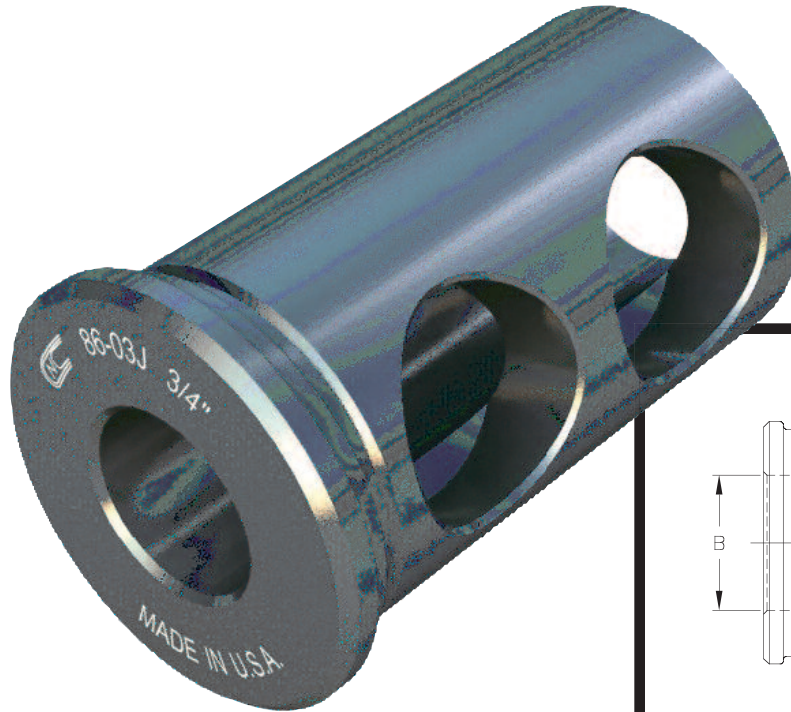
*Special sizes available to fit your machine specifications: inch-metric, metric-inch, or metric-metric.

*All Orders ship standard in inch sizes. If required; please specify metric O.D. or I.D., when ordering.



Toolholder Bushing Type “J”

This Type J Toolholder Bushing, with long solid body, has clearance holes so that you can clamp directly on the tool with set screws for positive alignment of the cutting edge of the tool. They are hardened and precision ground concentric. Select the O.D. size that fits your machine and order from the chart below.



CNC PART NUMBER	BUSH DIA.		STANDARD BORE SIZES STOCKED		SPECIAL BORE SIZES AVAILABLE		LENGTH UNDER HEAD	LENGTH DIMENSIONS		HOLE SIZE	NO. HOLES
	A		B		MIN.	MAX.	C	D	E	F	
	IN.	MM	IN.	MM							
CNC 86-01J	3/4	20	1/4, 5/16, 3/8, 1/2,	6, 8, 10, 12,	3/16	5/8	1 1/2	3/8	13/16	3/8	2
CNC 86-02J	1	25	3/8, 1/2, 5/8, 3/4	10, 12, 16, 20	1/4	7/8	1 3/4	7/16	7/8	5/8	2
CNC 86-12J	1 1/4	32	3/8, 1/2, 5/8, 3/4, 7/8, 1	10, 12, 16, 20, 25	1/4	1 1/8	2 1/8	5/8	1	3/4	2
CNC 86-03J	1 1/2	40	3/8, 1/2, 5/8, 3/4, 7/8, 1, 1 1/4	10, 12, 16, 20, 25, 32	1/4	1 1/4	2 1/2	1 1/16	1 1/8	7/8	2
CNC 86-04J	1 3/4	45	1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2	12, 16, 20, 25, 32, 40	1/4	1 1/2	3	3/4	1 1/4	7/8	2
CNC 86-05J	2	50	1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2, 1 3/4	12, 16, 20, 25, 32, 40, 45	3/8	1 3/4	3 1/2	3/4	1 1/2	1	2
CNC 86-06J	2 1/2	65	3/4, 7/8, 1, 1 1/4, 1 1/2, 1 3/4, 2, 2 1/4	20, 25, 32, 40, 45, 50	1/2	2 1/4	4	7/8	1 3/4	1 1/4	2
CNC 86-07J	3	80	1, 1 1/4, 1 1/2, 1 3/4, 2, 2 1/4, 2 1/2	25, 32, 40, 45, 50, 60, 65	1/2	2 1/2	4 1/2	1	2	1 1/4	4
CNC 86-08J	3 1/2	90	1, 1 1/4, 1 1/2, 1 3/4, 2, 2 1/4, 2 1/2, 3	25, 32, 40, 45, 50, 60, 65	3/4	3	5 1/4	1 1/4	2 1/2	1 1/4	4

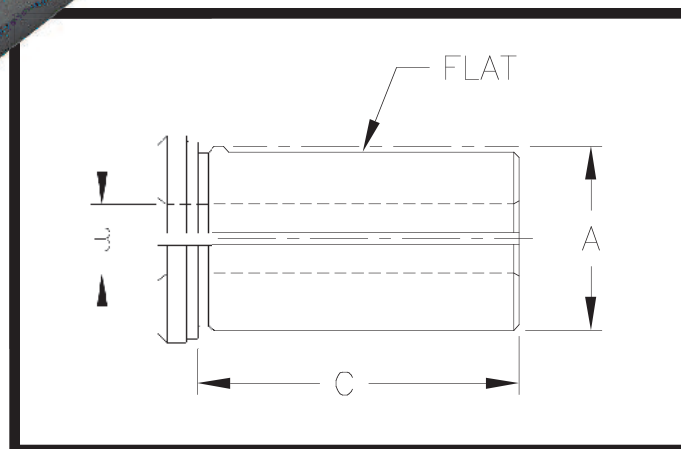
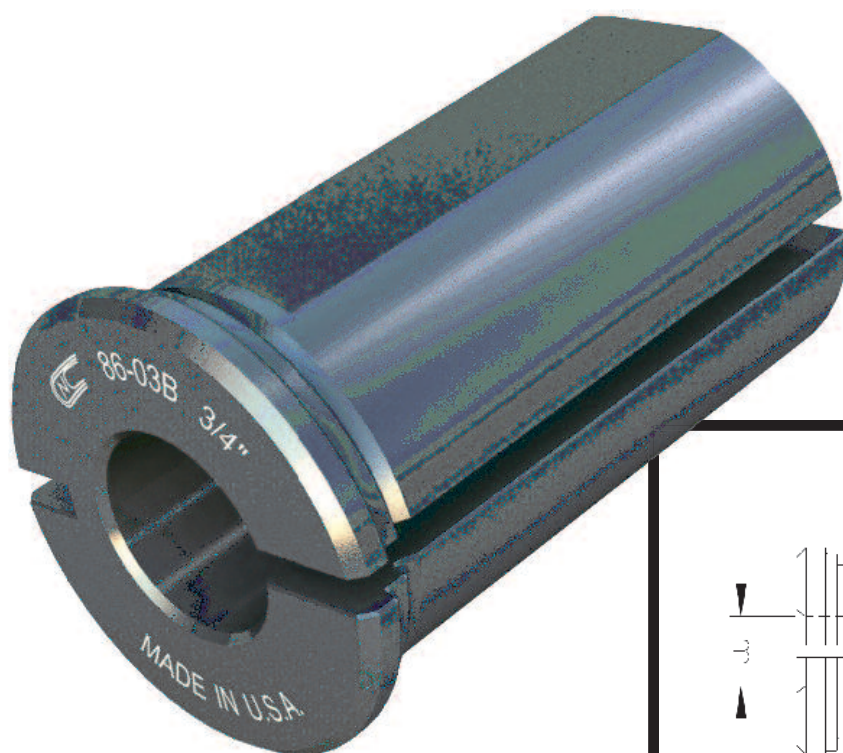
*Special sizes available to fit your machine specifications: inch-metric, metric-inch, or metric-metric.

*All Orders ship standard in inch sizes. If required; please specify metric O.D. or I.D., when ordering.



Toolholder Bushing Type “B”

These split Type B Bushings are manufactured with flexible manufacturing systems, for all Types and sizes of CNC Lathes and Chucks; are Heat Treated and precision ground concentric. It is used to adapt Drills, Boring Bars, and other Shank Tools. Select the O.D. size that fits your machine and order from the chart below.



CNC PART NUMBER	BUSH DIA.		STANDARD BORE SIZES STOCKED		SPECIAL BORE SIZES AVAILABLE		LENGTH UNDER HEAD
	A		B		MIN.	MAX.	C
	IN.	MM	IN.	MM			
CNC 86-01B	3/4	20	1/4, 5/16, 3/8, 1/2	6, 8, 10, 12	3/16	5/8	1 1/2
CNC 86-02B	1	25	3/8, 1/2, 5/8, 3/4	10, 12, 16, 20	3/16	7/8	1 3/4
CNC 86-12B	1 1/4	32	3/8, 1/2, 5/8, 3/4, 7/8, 1	10, 12, 16, 20, 25	3/16	1	2 1/8
CNC 86-03B	1 1/2	40	3/8, 1/2, 5/8, 3/4, 7/8, 1, 1 1/4	10, 12, 16, 20, 25, 32	3/16	1 1/4	2 1/2
CNC 86-04B	1 3/4	45	1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2	10, 12, 16, 20, 25, 32, 40	1/4	1 1/2	3
CNC 86-05B	2	50	1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2, 1 3/4	12, 16, 20, 25, 32, 40	1/2	1 3/4	3 1/2
CNC 86-06B	2 1/2	65	1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2, 1 3/4, 2, 2 1/4	20, 25, 32, 40, 45, 50	1/2	2 1/4	4
CNC 86-07B	3	80	1, 1 1/4, 1 1/2, 1 3/4, 2, 2 1/4, 2 1/2	25, 32, 40, 45, 50, 60, 65	5/8	2 1/2	4 1/2
CNC 86-08B	3 1/2	90	1, 1 1/4, 1 1/2, 1 3/4, 2, 2 1/4, 2 1/2, 3	25, 32, 40, 45, 50, 60, 65	5/8	3	5 1/4

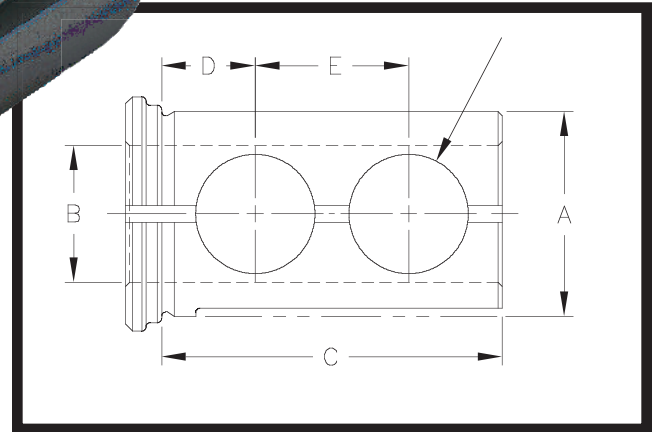
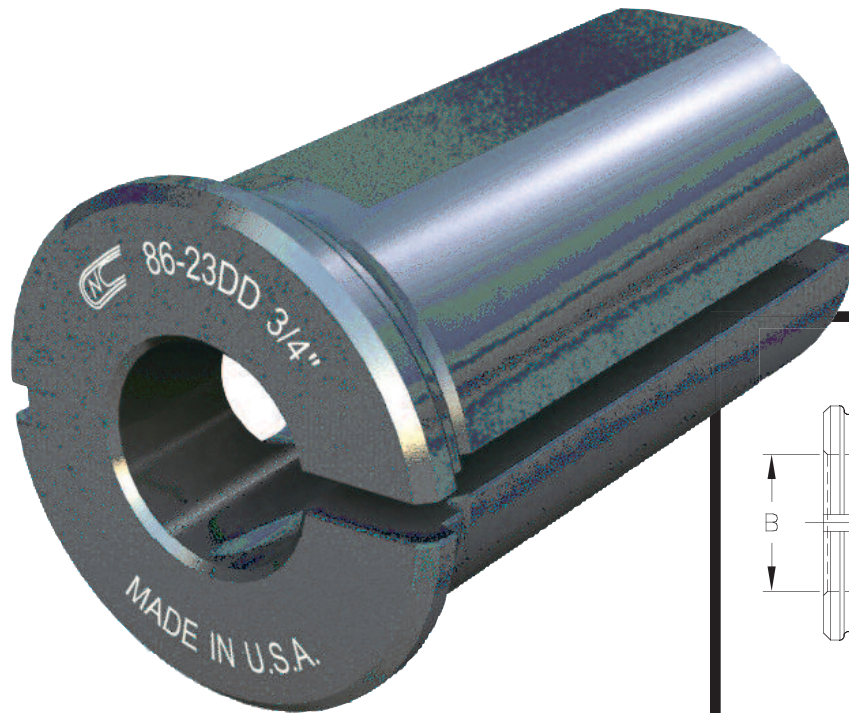
*Special sizes available to fit your machine specifications: inch-metric, metric-inch, or metric-metric.

*All Orders ship standard in inch sizes. If required; please specify metric O.D. or I.D., when ordering.



Toolholder Bushing Type “DD”

With the combination of the industry standard “B” style split bushing and “J” set screw clearance bushing design, CNC has a set a precedent with its new innovative “DD” Double Duty bushing. This new improved “DD” bushing with clearance holes and split milled flat can be used as a conventional “B” style or “J” style bushing. “Double Duty” one of CNC’s latest innovations. Select the O.D. size that fits your machine and order from the chart below.



CNC PART NUMBER	BUSH DIA.		STANDARD BORE SIZES STOCKED		SPECIAL BORE SIZES AVAILABLE		LENGTH UNDER HEAD	LENGTH DIMENSIONS		HOLE SIZE	NO. HOLES
	A		B		MIN.	MAX.	C	D	E	F	
	IN.	MM	IN.	MM							
CNC 86-23DD	1 1/2	40	3/8, 1/2, 5/8, 3/4, 7/8, 1, 1 1/4	10, 12, 16, 20, 25, 32	1/4	1 1/4	2 1/2	1 1/16	1 1/8	7/8	2
CNC 86-24DD	1 3/4	45	1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2	12, 16, 20, 25, 32, 40	3/8	1 1/2	3	3/4	1 1/4	7/8	2
CNC 86-25DD	2	50	1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2, 1 3/4	12, 16, 20, 25, 32, 45, 50	3/8	1 3/4	3 1/2	3/4	1 1/2	1	2
CNC 86-26DD	2 1/2	65	1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2, 1 3/4, 2, 2 1/4	20, 25, 32, 40, 45, 50	1/2	2 1/4	4	7/8	1 3/4	1 1/4	2
CNC 86-27DD	3	80	1, 1 1/4, 1 1/2, 1 3/4, 2, 2 1/4, 2 1/2	25, 32, 40, 45, 50, 60, 65	3/4	2 1/2	4 1/2	1	2	1 1/4	4
CNC 86-28DD	3 1/2	90	1 1/2, 1 3/4, 2, 2 1/4, 2 1/2, 3	25, 32, 40, 45, 50, 60, 65	3/4	3	5 1/4	1 1/4	2 1/2	1 1/4	4

*Special sizes available to fit your machine specifications: inch-metric, metric-inch, or metric-metric.

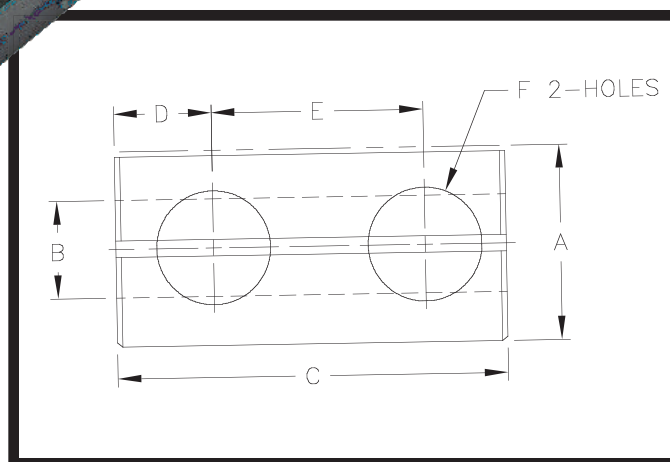
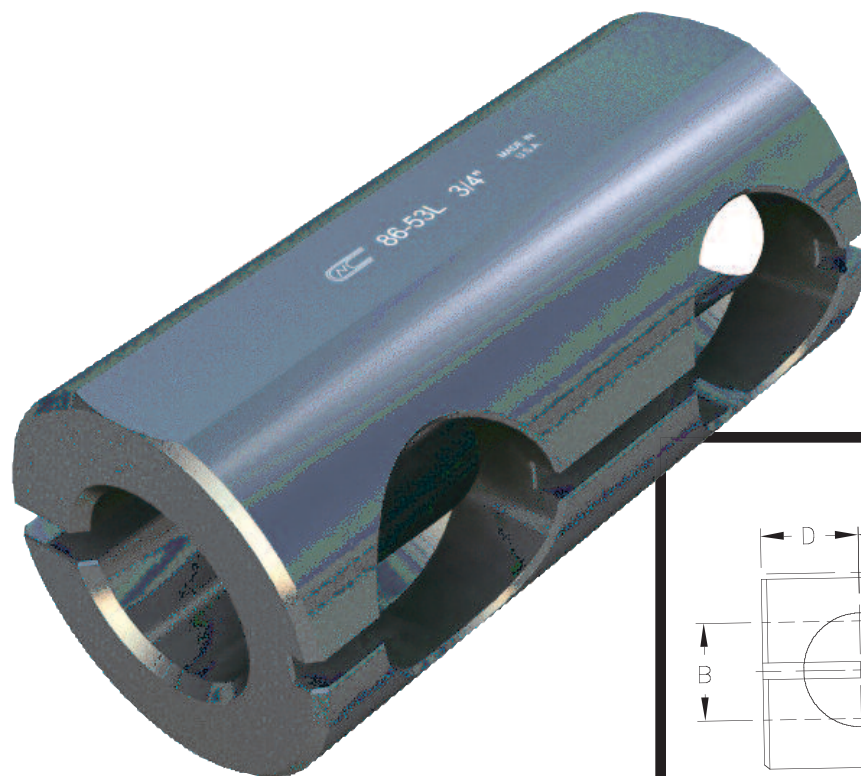
*All Orders ship standard in inch sizes. If required; please specify metric O.D. or I.D., when ordering.



Toolholder Bushing Type “L”

All “L” style bushings are shoulder-less, have set screw clearance holes opposite the slot and have a split with a flat on the O.D.

“L” Style Bushings are used to adapt drills, boring bars and shank tools to any size in a standard turret or toolholder. CNC has full selection and assortment of these bushings. We can supply these to you, minimizing production downtime – allowing you to increase production. Select the O.D. size that fits your machine and order from the chart below.



CNC PART NUMBER	BUSH DIA.		STANDARD BORE SIZES STOCKED		SPECIAL BORE SIZES AVAILABLE		OVERALL LENGTH	LENGTH DIMENSIONS		HOLE SIZE	NO. HOLES
	A		B		MIN.	MAX.	C	D	E	F	
	IN.	MM	IN.	MM							
CNC 86-53L	1½	40	⅜, ½, ⅝, ¾, 1, 1¼	10, 12, 16, 20, 25, 32	¼	1¼	3	¾	1⅝	⅞	2
CNC 86-54L	1¾	45	½, ⅝, ¾, 1, 1¼, 1½	12, 16, 20, 25, 32, 40	⅜	1½	3	¾	1⅝	⅞	2
CNC 86-56L	2¼	60	⅝, ¾, 1, 1¼, 1½, 1¾, 2	16, 20, 25, 32, 40, 50	½	2	4½	⅞	2	1	2
CNC 86-57L	2¾	70	¾, 1, 1¼, 1½, 1¾, 2, 2¼	20, 25, 32, 40, 50	½	2¼	4½	⅞	2	1	2

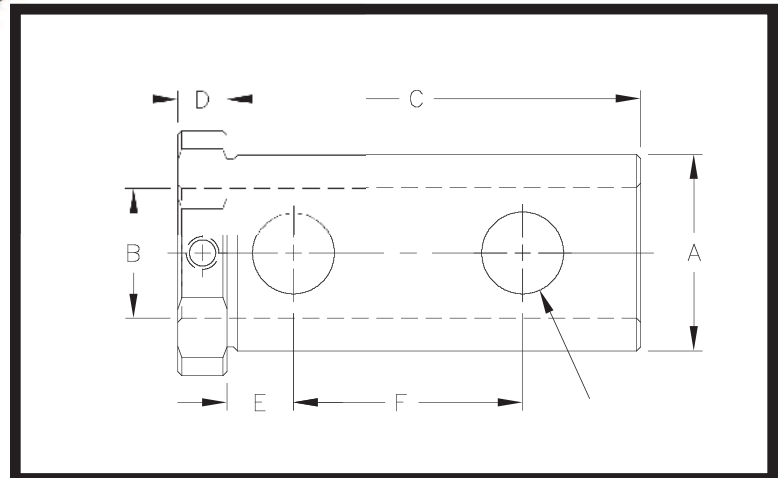
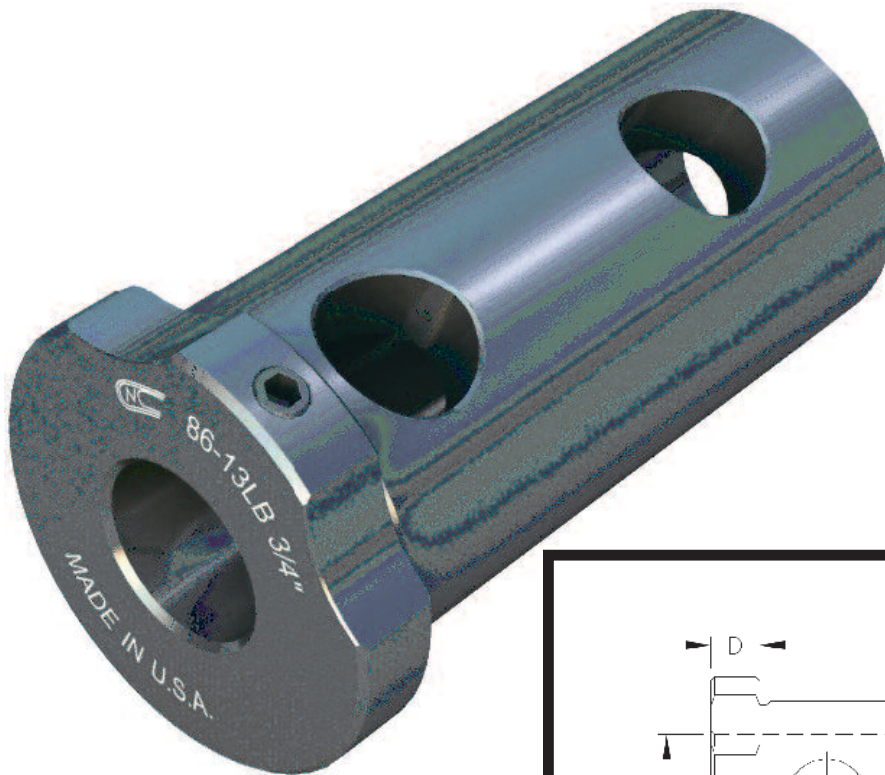
*Special sizes available to fit your machine specifications: inch-metric, metric-inch, or metric-metric.

*All Orders ship standard in inch sizes. If required; please specify metric O.D. or I.D., when ordering.



Toolholder Bushing Type “LB”

This Type LB Toolholder Bushing with long solid body, has four clearance holes so that you can clamp directly on the tool with Set Screws for positive alignment of the cutting edge of the tool. Manufactured to include clearance notches for coolant. They are hardened and precision ground concentric. For use on all Okuma CNC Machines.



CNC PART NUMBER	BUSHING DIA.		STANDARD BORE SIZES STOCKED		LENGTH UNDER HEAD	HEAD THICKNESS	LENGTH DIM.		HOLE SIZE
	A		B		C	D	E	F	G
	INCH	M M	INCH	M M					
CNC 86-12LB	1 1/4	32	3/8, 1/2, 5/8, 3/4, 7/8, 1	10, 12, 16, 20, 25	3 1/8	3/8	1/2	1 3/4	5/8
CNC 86-13LB	1 1/2	40	3/8, 1/2, 5/8, 3/4, 7/8, 1, 1 1/4	10, 12, 16, 20, 25, 32	3 1/8	3/8	1/2	1 3/4	5/8
CNC 86-15LB	2	50	1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2, 1 3/4	12, 16, 20, 25, 32, 40, 45	4 1/2	1/2	1/2	2 3/4	11/16

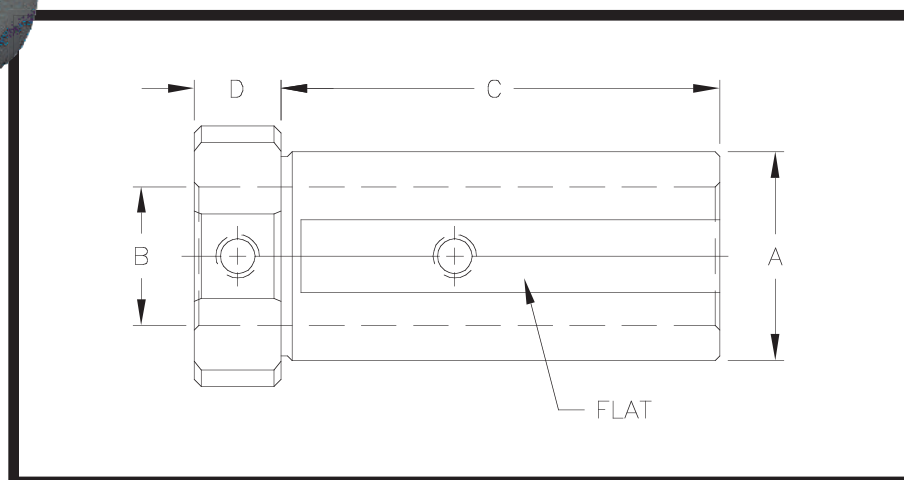
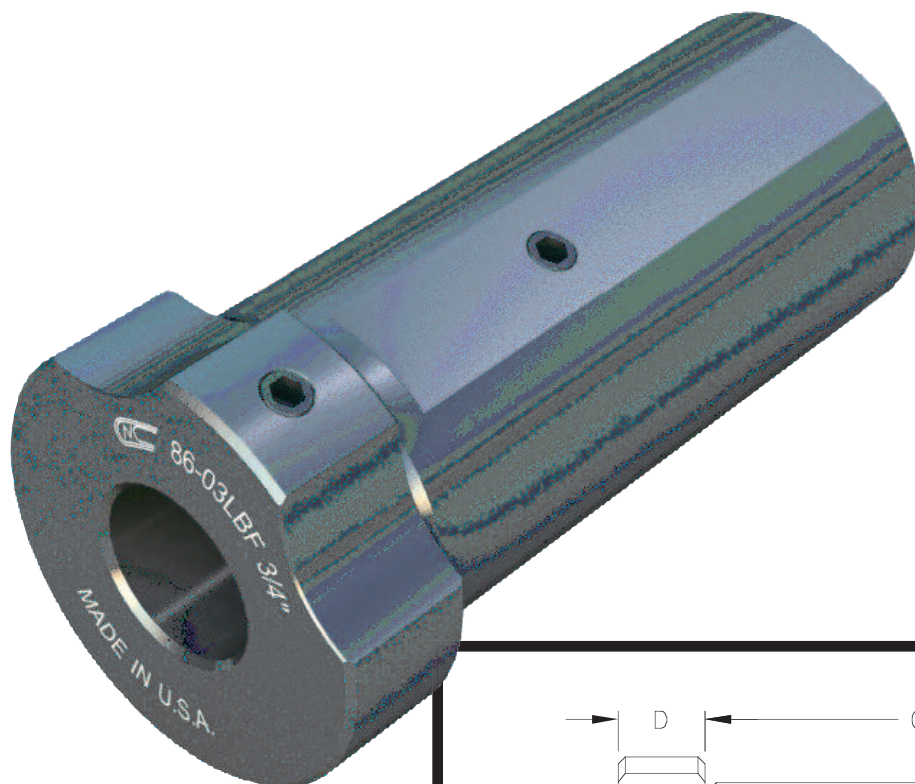
*Special sizes available to fit your machine specifications: inch-metric, metric-inch, or metric-metric.

*All Orders ship standard in inch sizes. If required; please specify metric O.D. or I.D., when ordering.



Toolholder Bushing Type “LBF”

These LBF Type Bushings are manufactured with a flat for clamping the Toolholder and two set screws for clamping a variety of Drills, Boring Bars and other Shank Tools. Equipped with two clearance notches for coolant. Are Heat Treated and precision ground concentric. This Universal Style is good for Coolant Through the Tool applications due to its solid configuration. For use on all Okuma CNC Machines.



CNC PART NUMBER	BUSHING DIA.		STANDARD BORE SIZES STOCKED		LENGTH UNDER HEAD	HEAD THICKNESS
	A		B		C	D
			INCH	M M		
CNC 86-12LBF	1 1/4	32	3/8, 1/2, 5/8, 3/4, 7/8, 1	10, 12, 16, 20, 25	2 13/16	5/8
CNC 86-03LBF	1 1/2	40	3/8, 1/2, 5/8, 3/4, 7/8, 1, 1 1/4	10, 12, 16, 20, 25, 32	3 5/32	5/8
CNC 86-05LBF	2	50	1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2, 1 3/4	12, 16, 20, 25, 32, 40, 45	3 3/4	3/4

*Special sizes available to fit your machine specifications: inch-metric, metric-inch, or metric-metric.

*All Orders ship standard in inch sizes. If required; please specify metric O.D. or I.D., when ordering.