



INTRODUCTION

Ordering Information

TERMS AND CONDITIONS OF SALE

ORDER VALIDITY

Purchase order terms are valid for all orders. Any customer change to a Purchase Order is valid only if approved in writing by KEB Industries, Inc.

PRICES

All prices are in United States Dollar currency. Prices are subject to change without prior notice. Call for current price quotations.

PAYMENT CONDITIONS

All invoices are payable in Net 30 day terms from the invoice date. No deductions are allowed from invoices. For overdue accounts, we shall debit your account 1.5% per month until the balance is paid in full. Accounts 60 days past due, shall be shipped COD until the account is made current. All new accounts must have a favorable Dun & Bradstreet rating. If the account is unrated, financial information including credit references must be supplied and a credit limit established prior to shipping on credit.

FREIGHT AND PACKAGING COSTS

All freight and packaging costs shall be paid by the customer. These amounts shall be shown separately on each invoice. All orders are FOB Willoughby, Ohio. Title of ownership transfers when the carrier accepts the merchandise. Although it is not our responsibility, we may assist you in tracking any lost or late shipments.

INSURANCE

Any insurance costs shall be included in the freight costs and shall be the responsibility of the customer.

CLAIMS AND RETURNS

1. All claims, written or verbal, must be made within five (5) business days after receipt of the product. If you require a return, please call for a RETURN MERCHANDISE AUTHORIZATION number (RMA). An explanation of the return must be enclosed.
2. KEB shall replace or accept for return undamaged KEB product subject to the following conditions:
 - a. Made-to-order items and standard items with special bores ordered incorrectly are not returnable.
 - b. If the item shipped is not what you ordered, we shall replace the product and pay any additional shipping charges incurred.
 - c. If the item is found to be defective by KEB, due to workmanship, KEB shall replace and return the item at no charge.

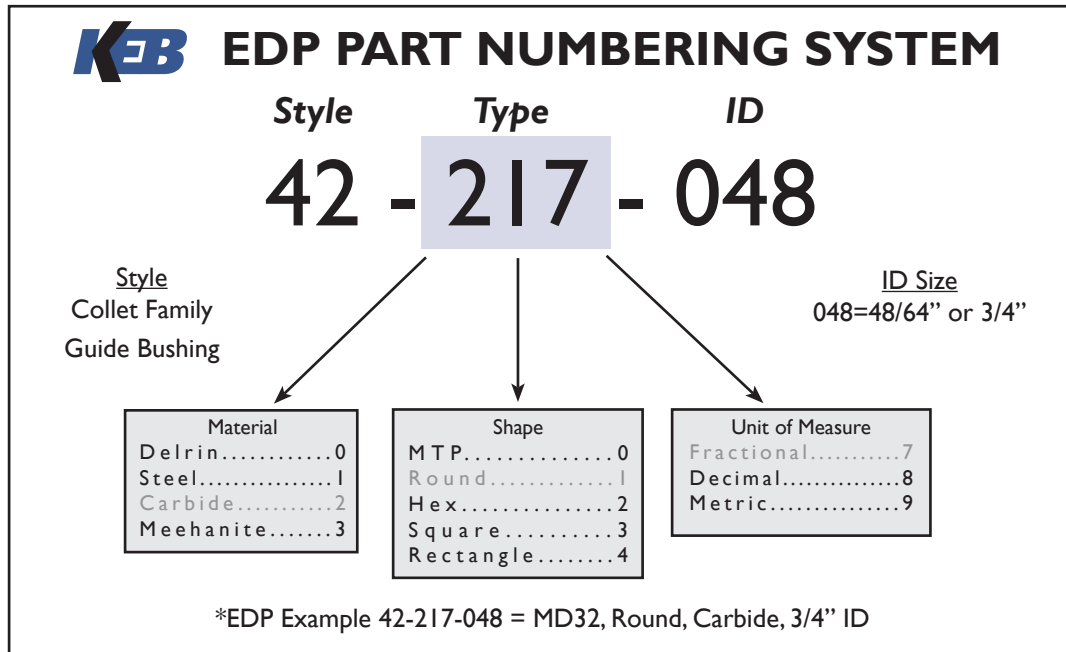
ORDERING INSTRUCTIONS

- 1.) Call (866) 395-4438 toll free and reference the product family and size or the EDP number according to the chart on the following page.
- 2.) For Extended Noses, be sure to reference the A dimension and the B dimension when required.
- 3.) For custom products, please fill out the appropriate RFQ Fax Cover Sheet found in the "Customs" tab and fax it to (440) 953-9209. A sample of material may be required for extrusions.

**Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com**

INTRODUCTION

Ordering Information



EDP IDENTIFICATION CODES FOR SPECIALS

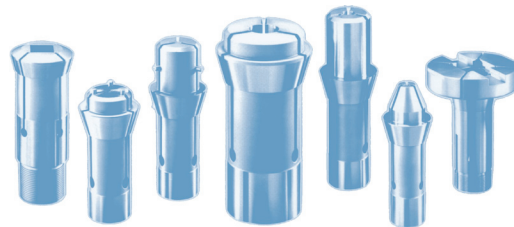
EDP CODE	DESCRIPTION OF CODE	*SPECIAL INSTRUCTIONS
CB	COUNTER BORE	MFG ACCORDING TO ATTACHED PRINT
EC	ECCENTRIC	MFG ACCORDING TO ATTACHED PRINT
EN	EXTENDED NOSE	EXTENDED TAPERED NOSE: A & B DIM.
ENSN	EXTENDED NOSE STEP NOSE	EXTENDED NOSE WITH STEP INSTEAD OF TAPER
ENGR (BUSHING)	EXTENDED NOSE UNDERSIZE GRIND	GRIND 0.0002" FOR BUSHINGS
ENGR (COLLET)	EXTENDED NOSE UNDERSIZE GRIND	GRIND 0.0005" FOR COLLETS
ENEM	EXTENDED NOSE UNDERSIZE EDM	EDM 0.002" FOR COLLETS & BUSHINGS
FAC	FACING	MFG ACCORDING TO ATTACHED PRINT
KW	KEY WAY	MFG ACCORDING TO ATTACHED PRINT
LL/ML	LONG LAND/MAX LAND	LONG LAND FOLLOWED BY PAD LENGTH
MTP	MFG ACCORDING TO PRINT	MFG ACCORDING TO ATTACHED PRINT
OS	OVERSIZE	N/A
SB	SMOOTH BORE	SMOOTH BORE
SL	SHORT LAND	SHORT LAND FOLLOWED BY PAD LENGTH
SP	SPECIAL	SPECIAL INSTR. NOT REQUIRING A PRINT
SR	SERRATED COLLET	SERRATED
TIR (BUSHING)	XX PRECISION	TIR .0001"
TIR (COLLET)	XX PRECISION	TIR .0002"
TPF	TAPERED PER FOOT	MFG ACCORDING TO ATTACHED PRINT
USGR	UNDERSIZE GRIND	GRIND 0.0002" FOR BUSHINGS
USGR	UNDERSIZE GRIND	GRIND 0.0005" FOR COLLETS
USEM	UNDERSIZE EDM	EDM 0.002" FOR COLLETS & BUSHINGS

Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

QUICK REFERENCE Cross Reference Table

QUICK REFERENCE

<u>COLLETS</u>		<u>GUIDE BUSHINGS</u>	
KEB PART NUMBERS	ALTERNATE PART NUMBERS	KEB PART NUMBERS	ALTERNATE PART NUMBERS
B42	B42	BS32B	BS32B
BS32C	BS32C	MCD25	CD25
MC18579	F18-579	MD125R	SD125R
MC20-201	F20-201	MD15	SNC15
MC32-221	F32-221	MD38S	STM38
MC8	TF8	MD7	SW7
MC10	TF10	MD10	TD10
MC12	TF12	MD20	TD20
MC13	TF13	MD20R	TD20R
MC15	TF15	MD25TS	TD25
MC16	TF16	MD25	TD25S
MC20	TF20	MD25	TD25NS
MC24	TF24	MD32	TD32
MC25	TF25	MD32S	TD32S
MC30	TF30	MD35	TD35
MC34	TF34	MD38S	TD38S
MC37	TF37	MSD20	TSD20
MC40	TF40	MD20RTS	TSG-20R
MC44	TF44	MD0201	0201
MC48	TF48		
MC0161	0161		



**Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com**

CITIZEN CNC TURNING CENTERS MACHINE PART REFERENCE CHART

MACHINE MODEL #	COLLET [Headstock]	COLLET [Emergency]	BUSHING GUIDE	COLLET* [Drill Sleeve]	COLLET* [Rotary Tool]	COLLET PICK-OFF
A16	MC20	E20/E20EN	MD020I	-	-	MC20
A20	MC25	E25/E25EN	MD25	-	-	MC25
B12	MC16	E16/E16EN	MD125R	MC8/PC11	PC11	MC16
B20	MC25	E25/E25EN	MD25	MC8/PC11	PC11	MC25
C16	MC20	E20/E20EN	MD020I	PC11	PC11	MC20
C32	MC37	E37/E37EN	MD32	PC11/PC16	PC11/PC16	MC37
D10	MC15	E15/E15EN	MD10	MC8	-	-
D16	MC25	E25/E25EN	MD20	MC12	-	-
E16j	MC25	E25/E25EN	MD020I	MC8/PC16	0136/PC11	MC25
E216	MC25	E25/E25EN	MD020I	PC16	PC12/16	MC25
E220	MC25	E25/E25EN	MSD20	PC16	PC12/16	MC25
E225(E25j)	MC30	E30/E30EN	MCD25	PC16	PC12/16	MC30
E232	MC37	E37/E37EN	MD32	PC16	PC12/16	MC37
E32	MC37	E37/E37EN	MD32	MC10/PC16	PC12/16	MC37
E32K	MC37	E37/E37EN	MD32	PC16	PC12/16	MC37
F10	MC15	E15/E15EN	MD10	MC8	-	-
F12	MC16	E16/E16EN	MD125R	MC8/PC16	0136	MC16
F16	MC25	E25/E25EN	MD020I	MC8/PC16	0136	MC25
F20	MC25	E25/E25EN	MSD20	MC10/PC16	MC8/PC16	MC25
F25	MC30	E30/E30EN	MCD25	PC15/MC10	MC8/PC16	MC30
FL32	MC37	E37/E37EN	NON BUSHING TYPE	PC20/PC25	PC11/16/20	MC37
FL42	MC48	E48/E48EN	NON BUSHING TYPE	PC20/PC25	PC11/16/20	MC48
G16	MC25	E25/E25EN	MD020I	MC8	-	-
K16	MC20	E25/E25EN	MD020I	-	-	MC20
L10	MC15	E15/E15EN	MD10	MC8	MC8	MC8
L16	MC25	E25/E25EN	MD020I	MC8/PC16	-	-
L16-V	MC25	E25/E25EN	MD020I	MC8/PC16	-	MC25
L16-VI	MC25	E25/E25EN	MD020I	MC8/PC16	PC16	MC25
L20	MC25	E25/E25EN	MD25	PC16	PC16	MC25
L20-VII	MC25	E25/E25EN	MD25	PC16	PC11/16	MC25
L25	MC30	E30/E30EN	MCD25	MC10/PC16	PC16	MC30
L32	MC37	E37/E37EN	MD32	PC16	PC12/16	MC37
M12	MC16	E16/E16EN	MD125R	PC11/16	MC8/PC16	MC16
M16	MC20	E20/E20EN	MD020I	MC8/PC11/16	MC8/PC11	MC20
M20	MC25	E25/E25EN	MD25	MC8/PC16	MC8/0136/ PC11/16	MC25
M32	MC37	E37/E37EN	MD32	PC16	PC11/16	MC37

* Accessory Collets

KEB Catalog Rev. 11/06

Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

QUICK REFERENCE

Hanwha & KSI

HANWHA CNC SWISS TURNING CENTERS MACHINE PART REFERENCE CHART

MACHINE MODEL #	COLLET [Headstock]	COLLET [Emergency]	BUSHING GUIDE	COLLET* [Drill Sleeve]	COLLET* [Rotary Tool]	COLLET PICK-OFF
HANEX 17	MC16	E16/E16EN	MD25	PC11/PC16		MC16
HANEX 25	MC30	E30/E30EN	MCD25	PC11/PC16		MC30
ML12S	MC16	E16/E16EN	MD125R	PC11		MC16
ML20H (18H)	MC25	E25/E25EN	MD25	PC11/PC16		MC25
ML20S (18S)	MC30	E30/E30EN	MD25	PC11/PC16		MC30
ML26H	MC30	E30/E30EN	MCD25	PC11/PC16		MC30
ML26S	MC30	E30/E30EN	MCD25	PC11/PC16		MC16
SL12H	MC16	E16/E16EN	MD125R	PC11/PC16		MC16
SL12S	MC16	E16/E16EN	MD125R	PC11/PC16		MC16
SL12SE	MC16	E16/E16EN	MD125R	PC11/PC16		MC25
SL20H	MC25	E25/E25EN	MD25	PC11/PC16		MC25
SL20HP	MC25	E25/E25EN	MD25	PC11/PC16		MC25
SL20S	MC25	E25/E25EN	MD25	PC11/PC16		MC25
SL26H	MC30	E30/E30EN	MCD25	PC11/PC16		MC30
SL26HP	MC30	E30/E30EN	MCD25	PC11/PC16		MC30
SL26S	MC30	E30/E30EN	MCD25	PC11/PC16		MC30
SL32HP	MC37	E37/E37EN	MD32S	PC16		MC37
SL35HP	MC40	E40/E40EN	MD35	PC20		MC40

*Accessory Collet

KSI CNC TURNING CENTERS MACHINE PART REFERENCE CHART

MACHINE MODEL #	COLLET [Headstock]	COLLET [Emergency]	BUSHING GUIDE	COLLET* [Drill Sleeve]	COLLET* [Rotary Tool]	COLLET PICK-OFF
SA12	MC16	E16/E16EN	MD125R	PC11	-	MC16
SA20	MC25	E25/E25EN	MD25	PC16	-	MC25
SA26	MC32-221 †	E32-221/E32-221EN †	MCD25	PC16	-	MC32-221 †
SA32	MC37	E37/E37EN	MD32S	PC16	-	MC37
SA38	MC44	E44/E44EN	MD38S	PC16	-	MC37
SQC20	MC25	E25/E25EN	MD25		-	MC25
SQC32	MC37	E37/E37EN	MD32S		-	MC37
SCQ38	MC48	E48/E48EN	MD38S		-	MC48

*Accessory Collet

†Call for availability

KEB Catalog Rev. 03/06

**Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com**

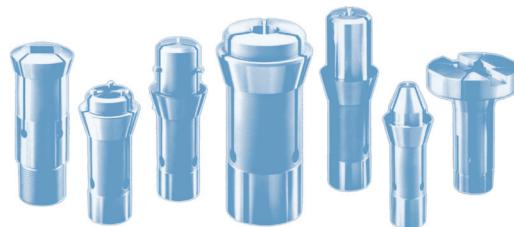
MAIER CNC TURNING CENTERS
MAIER MACHINE PART REFERENCE CHART

MACHINE MODEL #	COLLET [Headstock]	COLLET [Emergency]	BUSHING GUIDE	COLLET* [Drill Sleeve]	COLLET* [Rotary Tool]	COLLET PICK-OFF
ML-12A	MC15	E15/E15EN	MD125R	PC11		MC15
ML-12B	MC15	E15/E15EN	MD125R	PC11		MC15
ML-12C	MC15	E15/E15EN	MD125R	PC11		MC15
ML-12D	MC15	E15/E15EN	MD125R	PC11		MC15
ML-16A	MC20	E20/E20EN	MD20R	PC11		MC20
ML-16B	MC20	E20/E20EN	MD20R	PC11		MC20
ML-16C	MC20	E20/E20EN	MD20R	PC11		MC20
ML-16D	MC20	E20/E20EN	MD20R	PC11		MC20
ML-20A	MC25	E25/E25EN	MD25	PC16		MC25
ML-20B	MC25	E25/E25EN	MD25	PC16		MC25
ML-20C	MC25	E25/E25EN	MD25	PC16		MC25
ML-20D	MC25	E25/E25EN	MD25	PC16		MC25
ML-20E	MC25	E25/E25EN	MD25	PC16		MC25
ML-26A	MC32-221†	E32-221/E32-221EN†	MCD25	PC16		MC32-221†
ML-26B	MC32-221†	E32-221/E32-221EN†	MCD25	PC16		MC32-221†
ML-26C	MC32-221†	E32-221/E32-221EN†	MCD25	PC16		MC32-221†
ML-26D	MC32-221†	E32-221/E32-221EN†	MCD25	PC16		MC32-221†
ML-26E	MC32-221†	E32-221/E32-221EN†	MCD25	PC16		MC32-221†
ML-32A	MC37	E37/E37EN	MD32	PC16		MC37
ML-32B	MC37	E37/E37EN	MD32	PC16		MC37
ML-32C	MC37	E37/E37EN	MD32	PC16		MC37
ML-32D	MC37	E37/E37EN	MD32	PC16		MC37
ML-32E	MC37	E37/E37EN	MD32	PC16		MC37

* Accessory Collets

† Call For Availability

KEB Catalog Rev. 03/06



Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

STAR CNC TURNING CENTERS STAR MACHINE PART REFERENCE CHART

MACHINE MODEL #	COLLET [Headstock]	COLLET [Emergency]	BUSHING GUIDE	COLLET* [Drill Sleeve]	COLLET* [Rotary Tool]	COLLET PICK-OFF
ECAS12	MC20	E20/E20EN	MD20R	PC11/PC16	PC11/PC16	MC20
ECAS20	MC25	E25/E25EN	MD25	PC11/PC16	PC11/PC16	MC25
ECAS32	MC37	E37/E37EN	MD32S			MC37
JNC10	MC15	E15/E15EN	MD10	-	MC10†	-
JNC16	MC20	E20/E20EN	MD20R/MD15	PC11/PC16	MC10†	-
JNC25/32	MC37	E37/E37EN	MD32S	PC11/PC16	-	-
KJR16B	MC20	E20/E20EN	MD20R	PC11/PC16	PC11/PC16	MC20
KJR25/25B	MC30	E30/E30EN	MCD25	PC11/PC16	PC11/PC16	MC30
KNC16/20B	MC25	E25/E25EN	MD25	PC11/PC16	PC11/PC16	MC25
KNC25/32B	MC37	E37/E37EN	MD32S	PC11/PC16	PC11/PC16	MC37
RNC10/10B	MC15	E15/E15EN	MD10	-	-	-
RNC16/16B	MC20	E20/E20EN	MD20R	PC11/PC16	-	MC15/MC20
SA12	MC20	E20/E20EN	MD15	PC16	PC11	MC20
SA16/16R	MC20	E20/E20EN	MD20R	PC16	PC11	MC20
SBI6B/16S	MC20	E20/E20EN	MD20R	PC11/PC16	PC11/PC16	MC20
SE12	MC20	E20/E20EN	MD15	PC16	-	MC20
SE16	MC20	E20/E20EN	MD20R	PC16	-	MC20
SH7	MC15	E15/E15EN	MD7†	PC11/PC16	-	-
SH12	MC20	E20/E20EN	MD15	PC11/PC16	-	-
SH16	MC20	E20/E20EN	MD20R	PC11/PC16	-	-
SH2/12C	MC20	E20/E20EN	MD15	PC11/PC16	PC11/PC16	MC20
SNC10DX	MC15	E15/E15EN	MD10	-	MC10†	-
SNC15DX	MC20	E20/E20EN	MD20R	-	MC10†	-
SNC25DX	MC34	E34/E34EN	MD32S/MD25	-	MC10/MC18579†	-
SR16/16R	MC20	E20/E20EN	MD20R	PC11/PC16	PC11/PC16	MC20
SR20/20R/20R11/20RS	MC25	E25/E25EN	MD25	PC11/PC16	PC11/PC16	MC25
SR32/SR32J	MC37	E37/E37EN	MD32S	PC16/PC20	PC16/PC20	MC37
STM32	MC37	E37/E37EN	MD32S	-	MC10/MC15/MC18579†	-
SST16	MC20	E20/E20EN	MD20R	PC11/PC16	-	
SV12	MC20	E20/E20EN	MD20R	-	-	-
SV20	MC25	E25/E25EN	MD25	PC11/PC16/PC20	PC11/PC16	MC25
SV32/32J/32J11	MC37	E37/E37EN	MD32S	PC16/PC20	PC11/PC16	MC37
SW7	MC15	E15/E15EN	MD7†/MD10	PC11	PC11	MC15
VNC12	MC20	E20/E15EN	MD15/MD20R	PC11/PC16	-	MC15
VNC20	MC25	E25/E20EN	MD25	PC11/PC16	-	MC20
VNC32	MC37	E37/E30EN	MD32S	PC11/PC16	-	MC30

* Accessory Collets

† Call For Availability

KEB Catalog Rev. 03/06

**Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com**

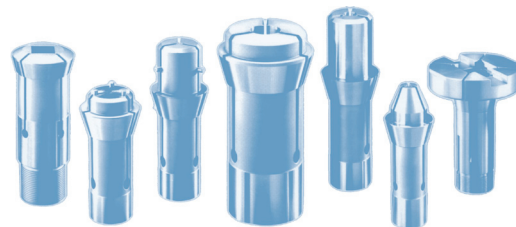
TORNOS CNC TURNING CENTERS MACHINE PART REFERENCE CHART

MACHINE MODEL #	COLLET [Headstock]	COLLET [Emergency]	BUSHING GUIDE	COLLET* [Drill Sleeve]	COLLET* [Cross Drill]	COLLET PICK-OFF
DECO 2000 10	MC13	E13/E13EN	MD10	PC11/12	PC11/12	MC13
DECO 2000 13/16	MC20-20I	E20-20I/E20-20IEN	MD020I	PC20	PC20	MC20-20I
DECO 2000 20	MC25	E25/E25EN	MD25TS	PC25	PC25	MC25
DECO 2000 25.4	MC016I	E016I/E016IEN	MCD25	PC25	PC25	MC016I
DECO 2000 26/32	MC37	E37/E37EN	MD32S	PC25	PC25	MC37
ELECTOR 16	MC20-20I	E20-20I/E20-20IEN	MD020I	-	-	MC20-20I
ENC74	MC13	E13/E13EN	MD10	PC12	PC12	MC13
ENC162	MC15/MC20-20I	E15/EC20-20I	MD020I	PC16/25		-
ENC164	MC15/MC20-20I	E15/E20-20I	MD020I	PC16/25		MC15/MC20-20I
ENC167	MC25	E25/E25EN	MD25TS	PC12/16/20	PC12/16/20	MC25
ENC262	MC25/MC016I	E25/E016I	MD200†	PC16/25	PC25	-
ENC264	MC25/MC016I	E25/E016I	MD200†	PC16/25	PC25	MC25/MC016I
M10	MC15	E15/E15EN	MD10/MD125R	-	-	-
M20	MC25	E25/E25EN	MD25TS	-	-	-
M25	MC34	E34/E34EN	MD25TS	-	-	-
M28	MC34	E34/E34EN	MD25TS	-	-	-
MR32	MC37	E37/E37EN	MD32	-	-	-
R10	MC15	E15/E15EN	MD10/MD125R	-	-	-
R125	MC16	E16/E16EN	MD10/MD125R	-	-	-
R20	MC25	E25/E25EN	MD25TS	-	-	-
RR20	MC25	E25/E25EN	MD25TS	-	-	-
TOP-100	MC16	E16/E16EN	MD10/MD18†	PC16/25	PC12/25	MC13
TOP-200	MC016I	E016I/E016IEN	MD200†	PC16/20/25	PC20/25	MC016I

*Accessory Collet

†Call for availability

KEB Catalog Rev. 03/06



Call (866) 395-4438 Toll Free to Order or
 Fax your Order to (440) 953-9209
www.kebkollets.com

QUICK REFERENCE

Tsugami

TSUGAMI CNC TURNING CENTERS MACHINE PART REFERENCE CHART

MACHINE MODEL #	COLLET [Headstock]	COLLET [Emergency]	BUSHING GUIDE	COLLET* [Drill Sleeve]	COLLET* [Rotary Tool]	COLLET PICK-OFF
B007	MC10†	E10/E10EN†	MD7†	-	-	MC10†
BS12/BS18	MC24	E24/E24EN	MD20RTS	-	-	MC24
BS19/BS20	MC25	E25/E25EN	MD25TS	-	-	MC25
BS26	MC0166†	E0166/E0166EN†	MCD25	-	-	MC0166†
BS32	BS32C	E32C/E32CEN	BS32B	-	-	BS32C†
BU20	MC25	E25/E25EN	MD25	-	-	MC25
BW07	MC10†	E10/E10EN†	MD7†	-	-	MC10†
BX12/BX18	MC24	E24/E24EN	MD20RTS	-	-	MC24
BZ12/BZ18	MC24	E24/E24EN	MD20RTS	-	-	MC24
NMP1611	MC20	E20/E20EN	MD25TS	-	-	MC20
NP11	MC15	E15/E15EN	MD125R	-	-	MC15
NP16	MC20	E20/E20EN	MD25TS	-	-	MC20
NP16II	MC20	E20/E20EN	MD25TS	-	-	MC20
NP17	MC24	E24/E24EN	MD20RTS	-	-	MC24
NP20	MC25	E25/E25EN	MD25TS	-	-	MC25
NP20II	MC25	E25/E25EN	MD25TS	-	-	MC25
NP20III	MC25	E25/E25EN	MD25TS	-	-	MC25
NP32	MC37	E37/E37EN	MD32	-	-	MC37
NP32II	MC37	E37/E37EN	MD32	-	-	MC37
NP32II	MC37	E37/E37EN	MD32	-	-	MC37
NT11	MC15	E15/E15EN	MD125R	-	-	MC15
NT11S	MC15	E15/E15EN	MD125R	-	-	MC15
NT12	MC20	E20/E20EN	MD20R	-	-	-
NT16	MC20	E20/E20EN	MD25TS	-	-	-
NT17	MC15	E15/E15EN	MD125R	-	-	-
NT20	MC25	E25/E25EN	MD25TS	-	-	-
NT25	MC37	E37/E37EN	MD32	-	-	-
NT32	MC37	E37/E37EN	MD32	-	-	-
S16D	MC24	E24/E24EN	MD20RTS	-	-	MC24
S16H	MC24	E24/E24EN	MD20RTS	-	-	MC24
S16P	MC24	E24/E24EN	MD20RTS	-	-	MC24
S20P/SX20	MC25	E25/E24EN	MD25TS	-	-	MC25
S20D/SX20	MC25	E25/E25EN	MD25TS	-	-	MC25
S20H/SX20	MC25	E25/E25EN	MD25TS	-	-	MC25
S25P/SX26	MC0166†	E0166/E0166EN†	MCD25	-	-	MC0166†
S25D/SX26	MC0166†	E0166/E0166EN†	MCD25	-	-	MC0166†
S25H/SX26	MC0166†	E0166/E0166EN†	MCD25	-	-	MC0166†

*Accessory Collet

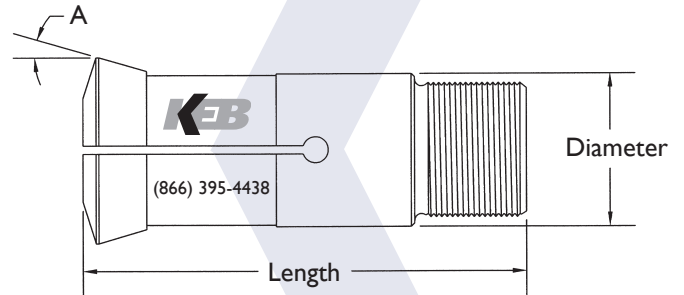
† Call For Availability

KEB Catalog Rev. 03/06

Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

DRAW BUSHINGS

Product Data



DESCRIPTION: Draw Bushings, also known as Bushings and Guide Bushings, are available in a variety of standard sizes, shapes and materials. All of our Guide Bushings are manufactured from a proprietary material possessing both high tensile strengths and wearability. Bushings are available in fractional, decimal and metric sizes. Standard stock includes round, hexagonal and square shapes.

QUALITY: KEB is redefining the industry by measuring Bushings coaxially. Coaxiality measures the concentricity of multiple diameters of an ID and OD to a theoretical axis or center line. Coaxiality, a more rigorous measurement than Total Indicator Reading (TIR), ensures precision. It is our mission to provide our customers with the highest caliber product and service, therefore, our product measures within a coaxiality of .0002 or better at no additional cost.

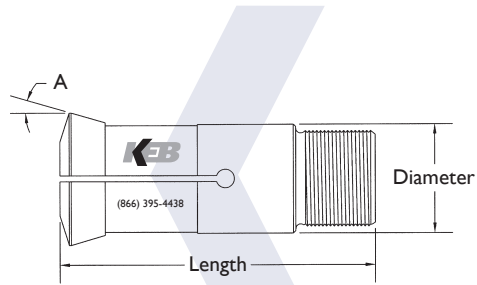
CARBIDE: Carbide lined Guide Bushings provide a wear life many times that of steel. Carbide may also prevent galling or scratching associated with certain types of softer metals. Carbide bores are available in fractional, decimal or metric sizes.

MEEHANITE: Guide Bushings constructed of Meehanite, due to its natural lubricity, are most commonly used on materials which “load up” or “smear”. Meehanite Guide Bushings are also suitable for any type of material but Meehanite Guide Bushings generally have a wear life much shorter than that of Carbide lined Guide Bushings. Meehanite Guide Bushings are available in round bores only.

HEXAGONAL & SQUARE: Hexagonal and Square Guide Bushings are hardened to increase wear life and are available in various stock ranges as listed.

**Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com**

DRAW BUSHINGS MD10 & MD125R



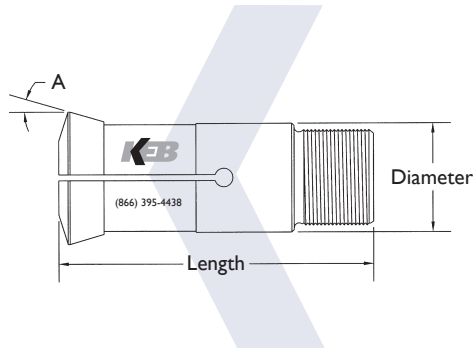
1. Standard Guide Bushings are manufactured to .0002 Coaxiality.
2. Carbide lined Guide Bushings provide a much longer wear life than that of steel.
3. Meehanite Guide Bushings are recommended for use on materials which "load up."
4. Use the appropriate suffix when ordering custom Guide Bushings. See the Customs tab or call for more details.

TYPE	KEB FAMILY NO.	DIMENSION			THD. MM	INCREMENT	STOCK RANGE
		DIAMETER	LENGTH	ANGLE			
MD10							
MD10-CARBIDE							
ROUND FRACTIONAL	16-217-SIZE	16MM 0.630	60MM 2.362	16°	14X1	1/64	1/16 to 13/32
ROUND DECIMAL	16-218-SIZE	16MM 0.630	60MM 2.362	16°	14X1	0.001	0.100 to 0.406
MD10-STEEL							
HEXAGON FRACTIONAL	16-127-SIZE	16MM 0.630	60MM 2.362	16°	14X1	1/16	1/8 to 5/16
SQUARE FRACTIONAL	16-137-SIZE	16MM 0.630	60MM 2.362	16°	14X1	1/16	1/8 to 9/32
MD10-MEEHANITE							
ROUND FRACTIONAL	16-317-SIZE	16MM 0.630	60MM 2.362	16°	14X1	1/64	1/16 to 13/32
ROUND DECIMAL	16-318-SIZE	16MM 0.630	60MM 2.362	16°	14X1	0.001	0.100 to 0.406
MD125R							
MD125R-CARBIDE							
ROUND FRACTIONAL	18-217-SIZE	18MM 0.709	60MM 2.362	30°	18X1	1/64	1/16 to 1/2
ROUND DECIMAL	18-218-SIZE	18MM 0.709	60MM 2.362	30°	18X1	0.001	0.0625 to 0.505
MD125R-STEEL							
HEXAGON FRACTIONAL	18-127-SIZE	18MM 0.709	60MM 2.362	30°	18X1	1/16	1/8 to 7/16
SQUARE FRACTIONAL	18-137-SIZE	18MM 0.709	60MM 2.362	30°	18X1	1/16	1/8 to 5/16
MD125R-MEEHANITE							
ROUND FRACTIONAL	18-317-SIZE	18MM 0.709	60MM 2.362	30°	18X1	1/64	1/16 to 1/2
ROUND DECIMAL	18-318-SIZE	18MM 0.709	60MM 2.362	30°	18X1	0.001	0.0625 to 0.505

**Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com**

DRAW BUSHINGS

MD15 & MD20R



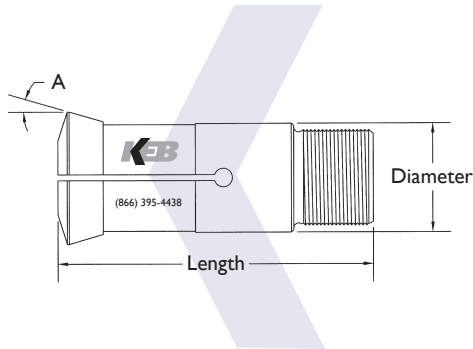
1. Standard Guide Bushings are manufactured to .0002 Coaxiality.
2. Carbide lined Guide Bushings provide a much longer wear life than that of steel.
3. Meehanite Guide Bushings are recommended for use on materials which "load up."
4. Use the appropriate suffix when ordering custom Guide Bushings. See the Customs tab or call for more details.

TYPE	KEB FAMILY NO.	DIMENSION			THD. MM	INCREMENT	STOCK RANGE
		DIAMETER	LENGTH	ANGLE			
MD15							
MD15-CARBIDE							
ROUND FRACTIONAL	21-217-SIZE	21MM .826	57MM 2.244	12.5°	18X1	1/64	1/8 to 1/2
ROUND DECIMAL	21-218-SIZE	21MM 0.826	57MM 2.244	12.5°	18X1	0.001	0.0625 to 0.505
MD15-STEEL							
HEXAGON FRACTIONAL	21-127-SIZE	21MM .826	57MM 2.244	12.5°	18X1	1/16	1/8 to 3/8
SQUARE FRACTIONAL	21-137-SIZE	21MM 0.826	57MM 2.244	12.5°	18X1	1/16	1/8 to 5/16
MD15-MEEHANITE							
ROUND FRACTIONAL	21-317-SIZE	21MM .826	57MM 2.244	12.5°	18X1	1/64	1/8 to 1/2
ROUND DECIMAL	21-318-SIZE	21MM 0.826	57MM 2.244	12.5°	18X8	0.001	0.050 to 0.505
MD20R							
MD20R-CARBIDE							
ROUND FRACTIONAL	22-217-SIZE	22MM 0.866	68MM 2.677	16°	22X1	1/32	1/8 to 5/8
ROUND DECIMAL	22-218-SIZE	22MM 0.866	68MM 2.677	16°	22X1	0.001	0.0625 to 0.630
MD20R-STEEL							
HEXAGON FRACTIONAL	22-127-SIZE	22MM 0.866	68MM 2.677	16°	22X1	1/16	1/8 to 1/2
SQUARE FRACTIONAL	22-137-SIZE	22MM 0.866	68MM 2.677	16°	22X1	1/16	1/8 to 7/16
MD20R-MEEHANITE							
ROUND FRACTIONAL	22-317-SIZE	22MM 0.866	68MM 2.677	16°	22X1	1/32	1/8 to 5/8
ROUND DECIMAL	22-318-SIZE	22MM 0.866	68MM 2.677	16°	22X1	0.001	0.050 to 0.630

**Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com**

DRAW BUSHINGS

MD0201 & MD25



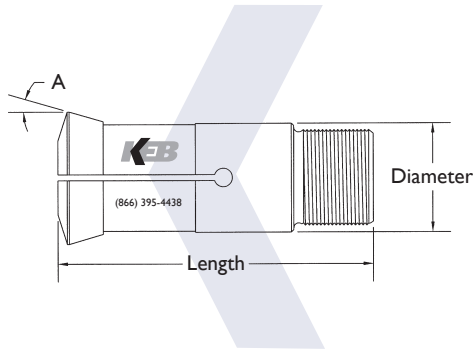
1. Standard Guide Bushings are manufactured to .0002 Coaxiality.
2. Carbide lined Guide Bushings provide a much longer wear life than that of steel.
3. Meehanite Guide Bushings are recommended for use on materials which "load up."
4. Use the appropriate suffix when ordering custom Guide Bushings. See the Customs tab or call for more details.

TYPE	KEB FAMILY NO.	DIMENSION			THD. MM	INCREMENT	STOCK RANGE
		DIAMETER	LENGTH	ANGLE			
MD0201							
MD0201-CARBIDE							
ROUND FRACTIONAL	24-217-SIZE	24MM 0.945	61MM 2.402	30°	24X1	1/32	1/8 to 5/8
ROUND DECIMAL	24-218-SIZE	24MM 0.945	61MM 2.402	30°	24X1	0.001	0.100 to 0.630
MD0201-STEEL							
HEXAGON FRACTIONAL	24-127-SIZE	24MM 0.945	61MM 2.402	30°	24X1	1/16	3/16 to 1/2
SQUARE FRACTIONAL	24-137-SIZE	24MM 0.945	61MM 2.402	30°	24X1	1/16	3/16 to 7/16
MD0201-MEEHANITE							
ROUND FRACTIONAL	24-317-SIZE	24MM 0.945	61MM 2.402	30°	24X1	1/32	1/8 to 5/8
ROUND DECIMAL	24-318-SIZE	24MM 0.945	61MM 2.402	30°	24X1	0.001	0.100 to 0.630
MD25							
MD25-CARBIDE							
ROUND FRACTIONAL	28-217-SIZE	28MM 1.102	82MM 3.228	16°	25X1	1/32	1/8 to 13/16
ROUND DECIMAL	28-218-SIZE	28MM 1.102	82MM 3.228	16°	25X1	0.001	0.100 to 0.812
MD25-STEEL							
HEXAGON FRACTIONAL	28-127-SIZE	28MM 1.102	82MM 3.228	16°	25X1	1/16	3/16 to 11/16
SQUARE FRACTIONAL	28-137-SIZE	28MM 1.102	82MM 3.228	16°	25X1	1/16	3/16 to 9/16
MD25-MEEHANITE							
ROUND FRACTIONAL	28-317-SIZE	28MM 1.102	82MM 3.228	16°	25X1	1/32	1/8 to 13/16
ROUND DECIMAL	28-318-SIZE	28MM 1.102	82MM 3.228	16°	25X1	0.001	0.100 to 0.812

Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

DRAW BUSHINGS

MD25TS & MSD20



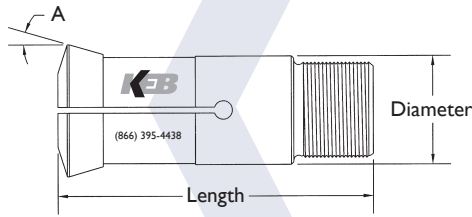
1. Standard Guide Bushings are manufactured to .0002 Coaxiality.
2. Carbide lined Guide Bushings provide a much longer wear life than that of steel.
3. Meehanite Guide Bushings are recommended for use on materials which "load up."
4. Use the appropriate suffix when ordering custom Guide Bushings. See the Customs tab or call for more details.

TYPE	KEB FAMILY NO.	DIMENSION			THD. MM	INCREMENT	STOCK RANGE
		DIAMETER	LENGTH	ANGLE			
MD25TS							
MD25TS-CARBIDE							
ROUND FRACTIONAL	28TS-217-SIZE	28MM 1.102	82MM 3.228	30°	25X1	1/32	1/8 to 13/16
ROUND DECIMAL	28TS-218-SIZE	28MM 1.102	82MM 3.228	30°	25X1	0.001	0.100 to 0.812
MD25TS-STEEL							
HEXAGON FRACTIONAL	28TS-127-SIZE	28MM 1.102	82MM 3.228	30°	25X1	1/16	3/16 to 5/8
SQUARE FRACTIONAL	28TS-137-SIZE	28MM 1.102	82MM 3.228	30°	25X1	1/16	3/16 to 1/2
MD25TS-MEEHANITE							
ROUND FRACTIONAL	28TS-317-SIZE	28MM 1.102	82MM 3.228	30°	25X1	1/32	1/8 to 13/16
ROUND DECIMAL	28TS-318-SIZE	28MM 1.102	82MM 3.228	30°	25X1	0.001	0.100 to 0.812
MSD20							
MSD20-CARBIDE							
ROUND FRACTIONAL	32-217-SIZE	32MM 1.260	70MM 2.756	30°	32X1	1/32	1/8 to 13/16
ROUND DECIMAL	32-218-SIZE	32MM 1.260	70MM 2.756	30°	32X1	0.001	0.100 to 0.817
MSD20-STEEL							
HEXAGON FRACTIONAL	32-127-SIZE	32MM 1.260	70MM 2.756	30°	32X1	1/16	1/4 to 11/16
SQUARE FRACTIONAL	32-137-SIZE	32MM 1.260	70MM 2.756	30°	32X1	1/16	1/4 to 9/16
MSD20-MEEHANITE							
ROUND FRACTIONAL	32-317-SIZE	32MM 1.260	70MM 2.756	30°	32X1	1/32	1/8 to 13/16
ROUND DECIMAL	32-318-SIZE	32MM 1.260	70MM 2.756	30°	32X1	0.001	0.100 to 0.817

Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

DRAW BUSHINGS

MCD25 & BS32B



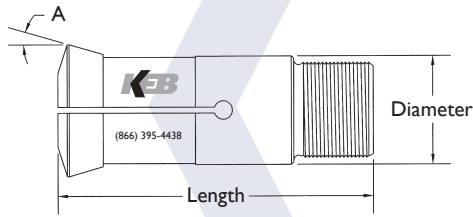
1. Standard Guide Bushings are manufactured to .0002 Coaxiality.
2. Carbide lined Guide Bushings provide a much longer wear life than that of steel.
3. Meehanite Guide Bushings are recommended for use on materials which "load up."
4. Use the appropriate suffix when ordering custom Guide Bushings. See the Customs tab or call for more details.

TYPE	KEB FAMILY NO.	DIMENSION			THD. MM	INCREMENT	STOCK RANGE
		DIAMETER	LENGTH	ANGLE			
MCD25							
MCD25-CARBIDE							
ROUND FRACTIONAL	34-217-SIZE	34MM 1.339	87.5MM 3.445	10°	34X1	1/32	3/16 to 1
ROUND DECIMAL	34-218-SIZE	34MM 1.339	87.5 3.445	10°	34X1	0.001	0.100 to 1.005
MCD25-STEEL							
HEXAGON FRACTIONAL	34-127-SIZE	34MM 1.339	87.5MM 3.445	10°	34X1	1/16	1/4 to 13/16
SQUARE FRACTIONAL	34-137-SIZE	34MM 1.339	87.5MM 3.445	10°	34X1	1/16	1/4 to 11/16
MCD25-MEEHANITE							
ROUND FRACTIONAL	34-317-SIZE	34MM 1.339	87.5MM 3.445	10°	34X1	1/32	3/16 to 1
ROUND DECIMAL	34-318-SIZE	34MM 1.339	87.5MM 3.445	10°	34X1	0.001	0.100 to 1.005
BS32B							
BS32B-CARBIDE							
ROUND FRACTIONAL	34-217-SIZE	41MM 1.614	54MM 2.126	10°	38X1	1/32	1/4 to 1 1/4
ROUND DECIMAL	34-218-SIZE	41MM 1.614	54MM 2.126	10°	38X1	0.001	0.200 to 1.250
BS32B-STEEL							
HEXAGON FRACTIONAL	34-127-SIZE	41MM 1.614	54MM 2.126	10°	38X1	1/16	1/4 to 1 1/16
SQUARE FRACTIONAL	34-137-SIZE	41MM 1.614	54MM 2.126	10°	38X1	1/16	1/4 to 7/8
BS32B-MEEHANITE							
ROUND FRACTIONAL	34-317-SIZE	41MM 1.614	54MM 2.126	10°	38X1	1/32	1/4 to 1 1/4
ROUND DECIMAL	34-318-SIZE	41MM 1.614	54MM 2.126	10°	38X1	0.001	0.200 to 1.250

Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

DRAW BUSHINGS

MD32 & MD32S



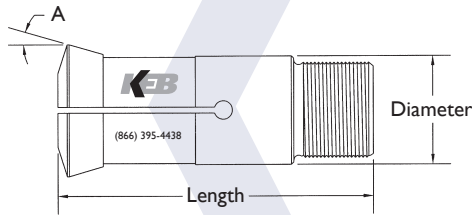
1. Standard Guide Bushings are manufactured to .0002 Coaxiality.
2. Carbide lined Guide Bushings provide a much longer wear life than that of steel.
3. Meehanite Guide Bushings are recommended for use on materials which "load up."
4. Use the appropriate suffix when ordering custom Guide Bushings. See the Customs tab or call for more details.

TYPE	KEB FAMILY NO.	DIMENSION			THD. MM	INCREMENT	STOCK RANGE
		DIAMETER	LENGTH	ANGLE			
MD32							
MD32-CARBIDE							
ROUND FRACTIONAL	42-217-SIZE	42MM 1.654	82MM 3.228	20°	40X1	1/32	1/4 to 1 1/4
ROUND DECIMAL	42-218-SIZE	42MM 1.654	82MM 3.228	20°	40X1	0.001	0.200 to 1.255
MD32-STEEL							
HEXAGON FRACTIONAL	42-127-SIZE	42MM 1.654	82MM 3.228	20°	40X1	1/16	1/4 to 1 1/16
SQUARE FRACTIONAL	42-137-SIZE	42MM 1.654	82MM 3.228	20°	40X1	1/16	1/4 to 7/8
MD32-MEEHANITE							
ROUND FRACTIONAL	42-317-SIZE	42MM 1.654	82MM 3.228	20°	40X1	1/32	1/4 to 1 1/4
ROUND DECIMAL	42-318-SIZE	42MM 1.654	82MM 3.228	20°	40X1	0.001	0.200-1.255
MD32S							
MD32S-CARBIDE							
ROUND FRACTIONAL	42S-217-SIZE	42MM 1.654	82MM 3.228	16°	40X1	1/32	1/4 to 1 1/4
ROUND DECIMAL	42S-218-SIZE	42MM 1.654	82MM 3.228	16°	40X1	0.001	0.200 to 1.255
MD32S-STEEL							
HEXAGON FRACTIONAL	42S-127-SIZE	42MM 1.654	82MM 3.228	16°	40X1	1/16	1/4 to 1 1/16
SQUARE FRACTIONAL	42S-137-SIZE	42MM 1.654	82MM 3.228	16°	40X1	1/16	1/4 to 7/8
MD32S-MEEHANITE							
ROUND FRACTIONAL	42S-317-SIZE	42MM 1.654	82MM 3.228	16°	40X1	1/32	1/4 to 1 1/4
ROUND DECIMAL	42S-318-SIZE	42MM 1.654	82MM 3.228	16°	40X1	0.001	0.200-1.255

Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

DRAW BUSHINGS

MD35 & MD38S



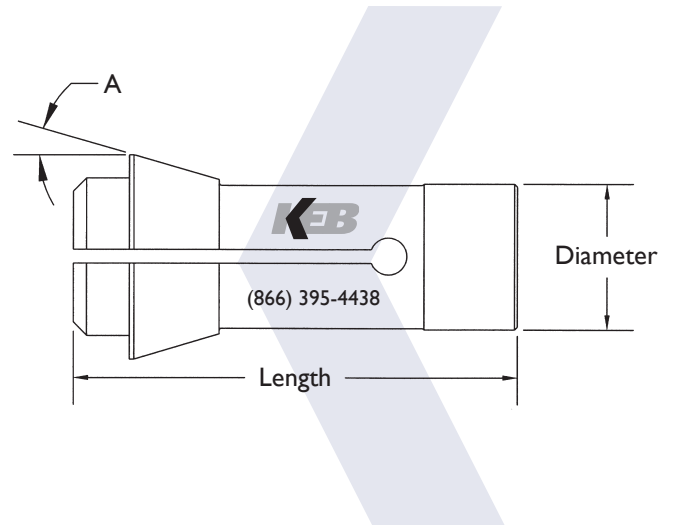
1. Standard Guide Bushings are manufactured to .0002 Coaxiality.
2. Carbide lined Guide Bushings provide a much longer wear life than that of steel.
3. Meehanite Guide Bushings are recommended for use on materials which "load up."
4. Use the appropriate suffix when ordering custom Guide Bushings. See the Customs tab or call for more details.

TYPE	KEB FAMILY NO.	DIMENSION			THD. MM	INCREMENT	STOCK RANGE
		DIAMETER	LENGTH	ANGLE			
MD35							
MD35-CARBIDE							
ROUND FRACTIONAL	45-217-SIZE	45MM 1.772	82MM 3.228	16°	42X1	1/16	1/4 to 1 3/8
ROUND DECIMAL	4-218-SIZE	45MM 1.772	82MM 3.228	16°	42X1	0.001	0.250 to 1.380
MD35-STEEL							
HEXAGON FRACTIONAL	45-127-SIZE	45MM 1.772	82MM 3.228	16°	42X1	1/16	1/4 to 1 5/32
SQUARE FRACTIONAL	45-137-SIZE	45MM 1.772	82MM 3.228	16°	42X1	1/16	1/4 to 31/32
MD35-MEEHANITE							
ROUND FRACTIONAL	45-317-SIZE	45MM 1.772	82MM 3.228	16°	42X1	1/32	1/4 to 1 3/8
ROUND DECIMAL	45-318-SIZE	45MM 1.772	82MM 3.228	16°	42X1	0.001	0.250 to 1.380
MD38S							
MD38S-CARBIDE							
ROUND FRACTIONAL	48-217-SIZE	46MM 1.818	92MM 3.622	16°	46X1	1/16	1/4 to 1 1/2
ROUND DECIMAL	48-218-SIZE	46MM 1.818	92MM 3.622	16°	46X1	0.001	0.250 to 1.500
MD38S-STEEL							
HEXAGON FRACTIONAL	48-127-SIZE	46MM 1.818	92MM 3.6228	16°	46X1	1/16	3/8 to 1 1/4
SQUARE FRACTIONAL	48-137-SIZE	46MM 1.818	92MM 3.622	16°	46X1	1/16	3/8 to 1 1/32
MD38S-MEEHANITE							
ROUND FRACTIONAL	48-317-SIZE	46MM 1.818	92MM 3.622	16°	46X1	1/32	1/4 to 1 1/2
ROUND DECIMAL	48-318-SIZE	46MM 1.818	92MM 3.622	16°	46X1	0.001	0.250 to 1.500

Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

COLLETS

Product Data



DESCRIPTION: Collets are available in a variety of standard sizes and shapes for headstocks and attachments. Our Collets are manufactured from a proprietary steel developed for its high hardness and extreme wear resistance. They are available in fractional, decimal and metric sizes. Standard stock includes round, hexagonal and square shapes. Keyways are available upon request.

QUALITY: KEB Collets are precisely ground to a tolerance of .0005 or better Total Indicator Reading (TIR) and hardened to provide maximum wear resistance. Each Collet is specifically sprung for the ground diameter to hold your stock concentrically.

SERRATED: Collet bores 1/2" and over are serrated to provide greater gripping power over your stock. Serrations are available on bores under 1/2", starting around 1/4" as nonstandard product.

SMOOTH BORE: Standard Collet bores under 1/2" are smooth.

PICK-OFF COLLETS: When ordering Pick-Off Collets, please specify smooth bore to prevent damaging any finished characteristic of your part.

EXTENDED NOSES: Please refer to the section labeled "Customs."

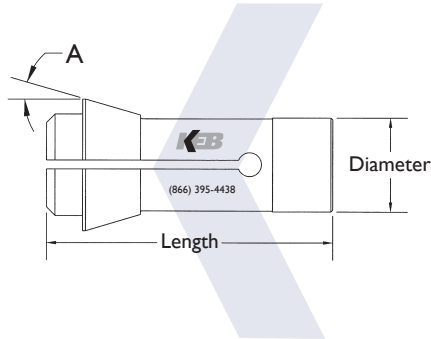
EMERGENCIES: Emergency Collets are available for use until a hardened Collet is available.

HEXAGONAL & SQUARE: Hexagonal and Square Collets are available in various stock ranges as listed.

Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebcollets.com

COLLETS

MCI3, MCI5 & MCI6

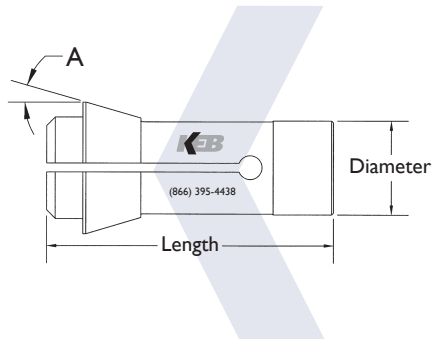


1. Standard Collets are manufactured to .0005 TIR.
2. All Collets 1/2" and larger are serrated.
3. Serrations are available on Collets under 1/2". See the Customs Tab or call for details.
4. Please specify smooth bore, if required, when ordering Pick-Off Collets.
5. Keyways are available upon request.
6. Please specify "EN" when ordering Extended Nose Collets. See the Customs Tab or call for more details.

TYPE	KEB FAMILY NO.	DIMENSION			INCREMENT	STOCK RANGE
		DIAMETER	LENGTH	ANGLE		
MCI3						
MCI3						
ROUND FRACTIONAL	C13-117-SIZE	13MM 0.512	64MM 2.520	16°	1/64	1/16 to 3/8
ROUND DECIMAL	C13-118-SIZE	13MM 0.512	64MM 2.520	16°	0.001	0.0625 to 0.385
HEXAGON FRACTIONAL	C13-127-SIZE	13MM 0.512	64MM 2.520	16°	1/32	1/8 to 5/16
SQUARE FRACTIONAL	C13-137-SIZE	13MM 0.512	64MM 2.520	16°	1/32	1/8 to 1/4
MCI5						
MCI5						
ROUND FRACTIONAL	C15-117-SIZE	15MM 0.590	64MM 2.520	16°	1/64	1/16 to 7/16
ROUND DECIMAL	C15-118-SIZE	15MM 0.590	64MM 2.520	16°	0.001	0.0625 to 0.442
HEXAGON FRACTIONAL	C15-127-SIZE	15MM 0.590	64MM 2.520	16°	1/32	1/8 to 3/8
SQUARE FRACTIONAL	C15-137-SIZE	15MM 0.590	64MM 2.520	16°	1/32	1/8 to 5/16
MCI6						
MCI6						
ROUND FRACTIONAL	C16-117-SIZE	16MM 0.630	64MM 2.520	16°	1/64	1/16 to 1/2
ROUND DECIMAL	C16-118-SIZE	16MM 0.630	64MM 2.520	16°	0.001	0.0625 to 0.510
HEXAGON FRACTIONAL	C16-127-SIZE	16MM 0.630	64MM 2.520	16°	1/16	1/8 to 7/16
SQUARE FRACTIONAL	C16-137-SIZE	16MM 0.630	64MM 2.520	16°	1/16	1/8 to 5/16

**Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebcollets.com**

MC18579, MC20-201 & MC20

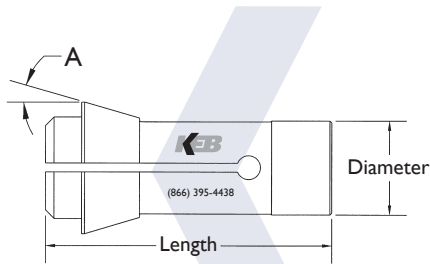


1. Standard Collets are manufactured to .0005 TIR.
2. All Collets 1/2" and larger are serrated.
3. Serrations are available on Collets under 1/2". See the Customs Tab or call for details.
4. Please specify smooth bore, if required, when ordering Pick-Off Collets.
5. Keyways are available upon request.
6. Please specify "EN" when ordering Extended Nose Collets. See the Customs Tab or call for more details.

TYPE	KEB FAMILY NO.	DIMENSION			INCREMENT	STOCK RANGE
		DIAMETER	LENGTH	ANGLE		
MC18579						
MC18579						
ROUND FRACTIONAL	C18579-117-SIZE	18MM 0.708	64MM 2.520	16°	1/32	1/8 to 1/2
ROUND DECIMAL	C18579-118-SIZE	18MM 0.708	64MM 2.520	16°	0.001	0.050 to 0.505
MC20-201						
MC20-201						
ROUND FRACTIONAL	C20201-117-SIZE	20MM 0.787	54MM 2.126	15°	1/32	1/16 to 5/8
ROUND DECIMAL	C20201-118-SIZE	20MM 0.787	54MM 2.126	15°	0.001	0.062 to 0.630
HEXAGON FRACTIONAL	C20201-127-SIZE	20MM 0.787	54MM 2.126	15°	1/16	1/8 to 1/2
SQUARE FRACTIONAL	C20201-137-SIZE	20MM 0.787	54MM 2.126	15°	1/16	1/8 to 7/16
MC20						
MC20						
ROUND FRACTIONAL	C20-117-SIZE	20MM 0.787	67MM 2.638	16°	1/32	1/8 to 5/8
ROUND DECIMAL	C20-118-SIZE	20MM 0.787	67MM 2.638	16°	0.001	0.0625 to 0.630
HEXAGON FRACTIONAL	C20-127-SIZE	20MM 0.787	67MM 2.638	16°	1/16	1/8 to 1/2
SQUARE FRACTIONAL	C20-137-SIZE	20MM 0.787	67MM 2.638	16°	1/16	1/8 to 7/16

**Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com**

MC24, MC25 & MC0161

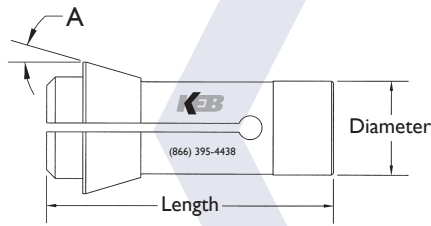


1. Standard Collets are manufactured to .0005 TIR.
2. All Collets 1/2" and larger are serrated.
3. Serrations are available on Collets under 1/2". See the Customs Tab or call for details.
4. Please specify smooth bore, if required, when ordering Pick-Off Collets.
5. Keyways are available upon request.
6. Please specify "EN" when ordering Extended Nose Collets. See the Customs Tab or call for more details.

TYPE	KEB FAMILY NO.	DIMENSION			INCREMENT	STOCK RANGE
		DIAMETER	LENGTH	ANGLE		
MC24						
MC24						
ROUND FRACTIONAL	C24-117-SIZE	24MM 0.944	62MM 2.440	15°	1/32	1/8 to 11/16
ROUND DECIMAL	C24-118-SIZE	24MM 0.944	62MM 2.440	15°	0.001	0.062-0.687
HEXAGON FRACTIONAL	C24-127-SIZE	24MM 0.944	62MM 2.440	15°	1/16	3/16 to 9/16
SQUARE FRACTIONAL	C24-137-SIZE	24MM 0.944	62MM 2.440	15°	1/16	3/16 to 1/2
MC25						
MC25						
ROUND FRACTIONAL	C25-117-SIZE	25MM 0.984	77MM 3.032	16°	1/32	1/8 to 13/16
ROUND DECIMAL	C25-118-SIZE	25MM 0.984	77MM 3.032	16°	0.001	0.100 to 0.817
HEXAGON FRACTIONAL	C25-127-SIZE	25MM 0.984	77MM 3.032	16°	1/16	3/16 to 11/16
SQUARE FRACTIONAL	C25-137-SIZE	25MM 0.984	77MM 3.032	16°	1/16	3/16 to 9/16
MC0161						
MC0161						
ROUND FRACTIONAL	C0161-117-SIZE	30MM 1.181	65MM 1.496	15°	1/16	3/16 to 1
ROUND DECIMAL	C0161-118-SIZE	30MM 1.181	65MM 1.496	15°	0.001	0.200 to 1.005
HEXAGON FRACTIONAL	C0161-127-SIZE	30MM 1.181	65MM 1.496	15°	1/32	1/4 to 3/4
SQUARE FRACTIONAL	C0161-137-SIZE	30MM 1.181	65MM 1.496	15°	1/32	1/4 to 11/16

**Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com**

MC30, MC32-221 & MC34



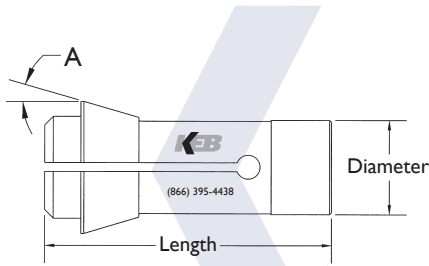
1. Standard Collets are manufactured to .0005 TIR.
2. All Collets 1/2" and larger are serrated.
3. Serrations are available on Collets under 1/2". See the Customs Tab or call for details.
4. Please specify smooth bore, if required, when ordering Pick-Off Collets.
5. Keyways are available upon request.
6. Please specify "EN" when ordering Extended Nose Collets. See the Customs Tab or call for more details.

TYPE	KEB FAMILY NO.	DIMENSION			INCREMENT	STOCK RANGE
		DIAMETER	LENGTH	ANGLE		
MC30						
MC30						
ROUND FRACTIONAL	C30-117-SIZE	30MM 1.181	80MM 3.150	16°	1/32	3/16 to 1
ROUND DECIMAL	C30-118-SIZE	30MM 1.181	80MM 3.150	16°	0.001	0.100 to 1.005
HEXAGON FRACTIONAL	C30-127-SIZE	30MM 1.181	80MM 3.150	16°	1/32	1/4 to 13/16
SQUARE FRACTIONAL	C30-137-SIZE	30MM 1.181	80MM 3.150	16°	1/32	1/4 to 11/16
MC32-221*						
MC32-221*						
ROUND FRACTIONAL	C32221-117-SIZE	32MM 1.260	75MM 2.953	15°	1/16	1/4 to 1 1/4
ROUND DECIMAL	C32221-118-SIZE	32MM 1.260	75MM 2.953	15°	0.001	0.200 to 1.250
HEXAGON FRACTIONAL	C32221-127-SIZE	32MM 1.260	75MM 2.953	15°	1/32	1/4 to 13/16
SQUARE FRACTIONAL	C32221-137-SIZE	32MM 1.260	75MM 2.953	15°	1/32	1/4 to 3/4
*SPECIAL ORDER						
MC34						
MC34						
ROUND FRACTIONAL	C34-117-SIZE	34MM 1.338	80MM 3.150	16°	1/32	3/16 to 1 1/8
ROUND DECIMAL	C34-118-SIZE	34MM 1.338	80MM 3.150	16°	0.001	0.100 to 1.130
HEXAGON FRACTIONAL	C34-127-SIZE	34MM 1.338	80MM 3.150	16°	1/32	1/4 to 15/16
SQUARE FRACTIONAL	C34-137-SIZE	34MM 1.338	80MM 3.150	16°	1/32	1/4 to 3/4

**Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebcollets.com**

COLLETS

BS32C, MC37 & MC40



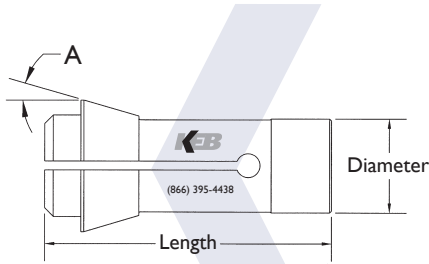
1. Standard Collets are manufactured to .0005 TIR.
2. All Collets 1/2" and larger are serrated.
3. Serrations are available on Collets under 1/2". See the Customs Tab or call for details.
4. Please specify smooth bore, if required, when ordering Pick-Off Collets.
5. Keyways are available upon request.
6. Please specify "EN" when ordering Extended Nose Collets. See the Customs Tab or call for more details.

TYPE	KEB FAMILY NO.	DIMENSION			INCREMENT	STOCK RANGE
		DIAMETER	LENGTH	ANGLE		
BS32C						
BS32C						
ROUND FRACTIONAL	C32C-117-SIZE	37MM 1.456	91MM 3.583	16°	1/16	1/4 to 1 1/4
ROUND DECIMAL	C32C-118-SIZE	37MM 1.456	91MM 3.583	16°	0.001	0.100 to 1.130
HEXAGON FRACTIONAL	C32C-127-SIZE	37MM 1.456	91MM 3.583	16°	1/16	1/4 to 1 1/16
SQUARE FRACTIONAL	C32C-137-SIZE	37MM 1.456	91MM 3.583	16°	1/16	1/4 to 7/8
MC37						
MC37						
ROUND FRACTIONAL	C37-117-SIZE	37MM 1.456	92MM 3.622	16°	1/32	1/4 to 1 1/4
ROUND DECIMAL	C37-118-SIZE	37MM 1.456	92MM 3.622	16°	0.001	0.200 to 1.130
HEXAGON FRACTIONAL	C37-127-SIZE	37MM 1.456	92MM 3.622	16°	1/16	1/4 to 1 1/16
SQUARE FRACTIONAL	C37-137-SIZE	37MM 1.456	92MM 3.622	16°	1/16	1/4 to 7/8
MC40						
MC40						
ROUND FRACTIONAL	C40-117-SIZE	40MM 1.575	92MM 3.622	16°	1/16	1/32 to 1 3/8
ROUND DECIMAL	C40-118-SIZE	40MM 1.575	92MM 3.622	16°	0.001	0.030 to 1.380
HEXAGON FRACTIONAL	C40-127-SIZE	40MM 1.575	92MM 3.622	16°	1/16	1/16 to 1 3/16
SQUARE FRACTIONAL	C40-137-SIZE	40MM 1.575	92MM 3.622	16°	1/16	1/16 to 31/32

**Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebcollets.com**

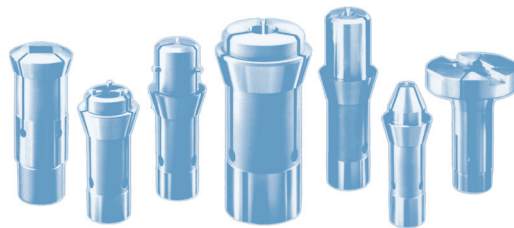
COLLETS

MC44 & MC48/B42



1. Standard Collets are manufactured to .0005 TIR.
2. All Collets 1/2" and larger are serrated.
3. Serrations are available on Collets under 1/2". See the Customs Tab or call for details.
4. Please specify smooth bore, if required, when ordering Pick-Off Collets.
5. Keyways are available upon request.
6. Please specify "EN" when ordering Extended Nose Collets. See the Customs Tab or call for more details.

TYPE	KEB FAMILY NO.	DIMENSION			INCREMENT	STOCK RANGE
		DIAMETER	LENGTH	ANGLE		
MC44						
MC44						
ROUND FRACTIONAL	C44-117-SIZE	44MM 1.732	92MM 3.622	16.5°	1/16	1/32 to 1 3/8
ROUND DECIMAL	C44-118-SIZE	44MM 1.732	92MM 3.622	16.5°	0.001	0.300 to 1.380
HEXAGON FRACTIONAL	C44-127-SIZE	44MM 1.732	92MM 3.622	16.5°	1/16	1/16 to 1 5/32
SQUARE FRACTIONAL	C44-137-SIZE	44MM 1.732	92MM 3.622	16.5°	1/16	1/16 to 15/16
MC48/B42						
MC48						
ROUND FRACTIONAL	C48-117-SIZE	48MM 1.889	94MM 3.700	15°	1/16	3/8 to 1 1/2
ROUND DECIMAL	C48-118-SIZE	48MM 1.889	94MM 3.700	15°	0.001	0.300 to 1.500
HEXAGON FRACTIONAL	C48-127-SIZE	48MM 1.889	94MM 3.700	15°	1/16	3/8 to 1 1/4
SQUARE FRACTIONAL	C48-137-SIZE	48MM 1.889	94MM 3.700	15°	1/16	3/8 to 1



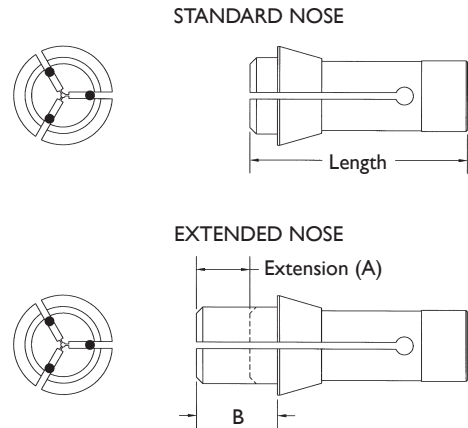
Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

COLLETS

Emergency Collets

DESCRIPTION: In most cases, Emergency Collets are for temporary use when a permanent collet is not available. Emergency collets are thru-hardened for wear resistance yet soft enough to machine to your custom needs. Emergency Collets are available in standard lengths or extended nose lengths. It is good practice to maintain a small inventory of Emergency Collets for each machine to safeguard against that inevitable crash. The procedure is simple:

- 1.) order a permanent hardened replacement collet;
- 2.) place your Emergency Collet in your sub spindle;
- 3.) place the 3 pins into the holes on the face;
- 4.) apply pressure;
- 5.) drill and bore the ID to your custom size.



EMERGENCY COLLETS					
Standard Emergencies			Extended-Nose Emergencies		
Collet	Length	Pilot Hole	Extension (A)	B	Pilot Hole
E13	64MM 2.520	1/16	0.500	0.750	1/16
E15	64MM 2.520	1/16	0.625	0.850	1/16
E16	64MM 2.520	1/16	0.625	0.850	1/16
E20-201	26MM 1.024	1/16	0.625	0.825	1/16
E20	67MM 2.638	1/16	0.750	1.006	1/16
E24	62MM 2.440	1/16	0.625	0.895	1/16
E25	77MM 3.032	1/16	0.750	1.130	1/16
E0161	65MM 2.559	1/16	0.850	1.000	1/16
E30	80MM 3.150	1/16	1.000	1.400	1/16
E34	80MM 3.150	1/16	1.000	1.400	1/16
E32C	91MM 3.583	1/16	1.000	1.400	1/16
E37	92MM 3.622	1/16	1.000	1.375	1/16
E40	92MM 3.622	1/16	1.000	1.394	1/16
E44	92MM 3.622	1/16	1.000	1.394	1/16
E48	94MM 3.700	1/16	1.000	1.315	1/16

Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

CUSTOM COLLETS & GUIDE BUSHINGS

Custom Collets and Guide Bushings are available per your specifications. They command longer lead times and higher prices, since each item is made per custom specifications. Custom Collets and Guide Bushings are manufactured from the same materials and held to the same rigorous tolerances as our standard products. Our engineering department is here to help in designing the perfect custom collet for your application.

When it comes to customs, your imagination is the limit. Here are a few examples of custom configurations:

Bearing Relief	Chamfer per Depth	Chamfer per Diameter
Radius	Land Length	Counterbore
Eccentric	Eccentric Step	Elliptical
Extrusion	Single Step	Double Step
Triple Step	Step Nose	Threaded Bore
Taper	Keyway	2 Slot
Overgrip		

When ordering Customs, clarity is critical, so it is preferred to have a print supplied. Errors happen when assumptions are made so be sure to provide us with the most amount of information possible.

EXTENDED NOSE PICK-OFF COLLETS & EXTENDED TAPERED NOSES

Extended Nose and Extended Tapered Nose Collets are smooth bore unless otherwise stated. An "A" dimension is required for all Extended Nose Collets. A "B" dimension is required, in addition to an "A" dimension, when ordering all Extended Nose Tapered Collets. The "A" dimension is the length of the extension while the "B" dimension is the diameter of the nose. An angle may be used in lieu of a "B" dimension. Please refer to the appropriate RFQ sheet accompanying this section.

EXTENDED NOSE GUIDE BUSHINGS

Although rare, Extended Nose Carbide Guide Bushings are available. They are designed to prevent deflection caused by back working. An "A" dimension is required for the length of extension and a "B" dimension is required for a nose diameter. Please call to talk with an Engineer for further details.

COUNTERBORE COLLETS & MULTIPLE BORE COLLETS

A variety of Counterbore Collets are available including, Standard, Counterbore Extended Nose and Counterbore Extended Tapered Nose. An undercut is recommended to seat the part correctly. "D" and "E" dimensions are required for the two bore diameters. A "C" dimension is required for the depth of the larger bore. Please refer to the appropriate diagram on the following pages. When ordering Collets with more than two bores, list the depths with each corresponding bore diameter.

STEP NOSE COLLETS

Extended Nose Collets are also available with steps in lieu of a taper. They are designed for specialty applications to provide greater tool clearances. Please call to talk with an Engineer for further details.

EXTRUSIONS

A customer supplied drawing is required for all Extrusions. To assure the highest caliber product, it is requested that a stock sample be sent with the purchase order.

ORDERING INSTRUCTIONS

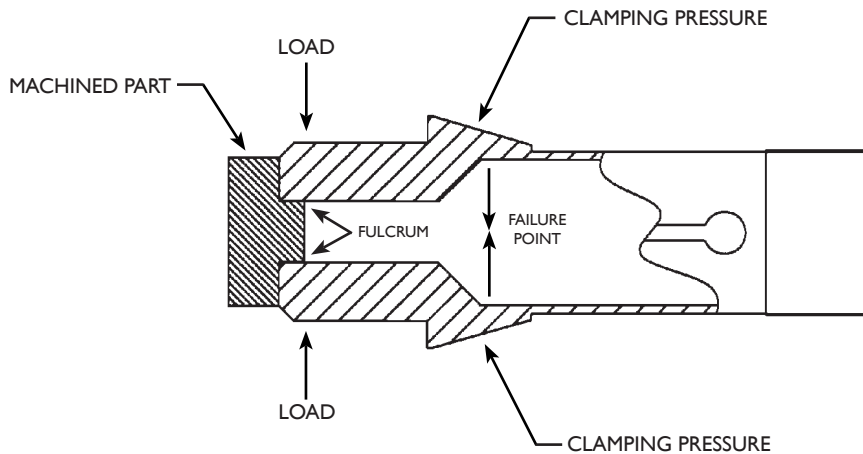
In order to provide you the exact custom collet for your specialty application, it is critical that all of the information is accurately represented and understood by both parties. Please copy the appropriate drawing and fill in the required information and fax it to (440) 953-9209. In some instances, a conference call may be required by our personnel to clarify any issues.

**Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com**

A WORD ABOUT PICK-OFF COLLETS

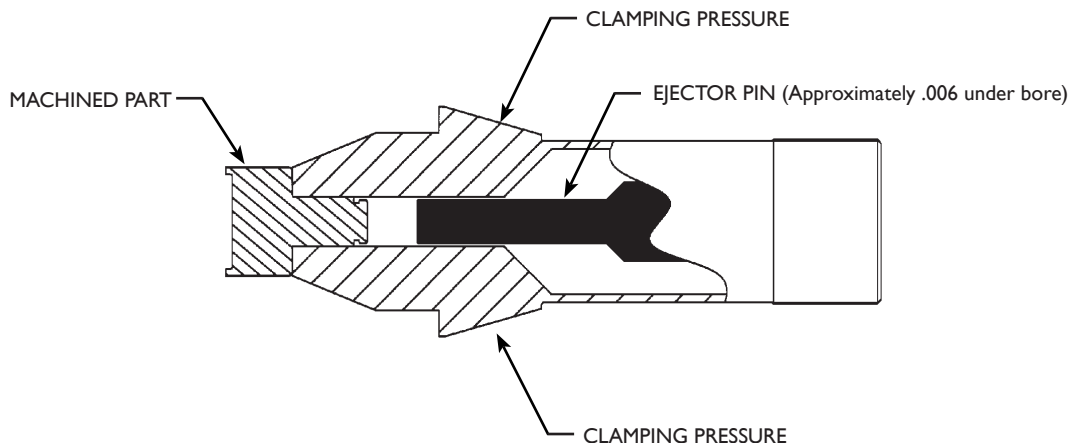
PROBLEMS

Pick-Off Collets are primarily used to grip finished characteristics of a product for final machining of any backside operations. Typically, this gripping action occupies only a short section of the bore pad. Due to the considerable distance between the angle and part at the nose, undue pressure is exerted behind the angled journal of the collet resulting in a bore which is no longer parallel (see below). This causes the machined part to run eccentric or to slip or spin in the collet. Increasing the clamping pressure does not correct the problem. It dramatically intensifies the pressure, potentially causing premature collet failure. Another problem occasionally occurs when a Pick-Off Collet is closed without a part in place. This lack of outward resistance exerts excessive force on the collet walls potentially causing premature collet failure.



RECOMMENDATIONS

Whenever possible, use an ejector pin to limit the flex by absorbing the pressure exerted from clamping. Turn the ejector pin to .006" under the bore size. When retracted, the ejector pin should be approximately 1/8" behind the part. The proper use of an ejector pin should alleviate any problems associated with over clamping and missing parts in the Pick-Off Collet. Also, when running your first piece, place a gage pin in your Pick-Off Collet to prevent over clamping due to the absence of a part.



**Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com**



REQUEST FOR QUOTE FAX COVER SHEET

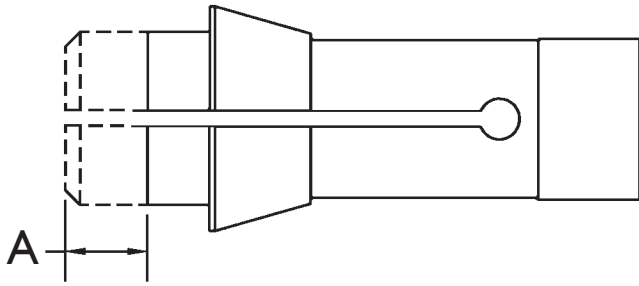
TO: KEB Industries, Inc.
ATTN: SALES
FAX: (440) 953-9209

FROM: _____
COMPANY: _____
PHONE NUMBER: _____

MACHINE MAKE & MODEL: _____

COLLET/GUIDE BUSHING REQUIRED: _____

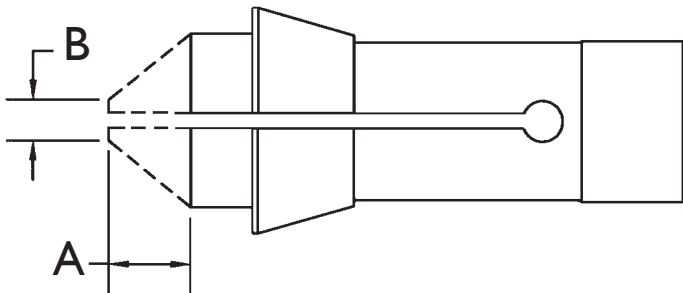
NOTE: All Pick-Off Collets are smooth bore. *Duplicate this sheet prior to use.



EXTENDED NOSE

A= _____

Bore Dia.: _____

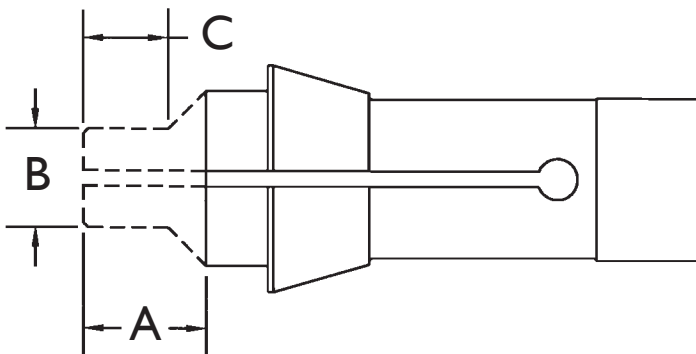


EXTENDED NOSE TAPERED

A= _____

B= _____

Bore Dia.: _____



STEP NOSE

A= _____

B= _____

C= _____

Bore Dia.: _____



REQUEST FOR QUOTE FAX COVER SHEET

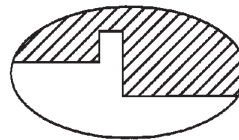
TO: KEB Industries, Inc.
ATTN: SALES
FAX: (440) 953-9209

FROM: _____
COMPANY: _____
PHONE NUMBER: _____

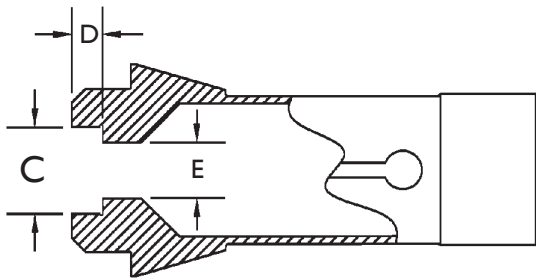
MACHINE MAKE & MODEL: _____

COLLET/GUIDE BUSHING REQUIRED: _____

*All Counter Bore Collets are smooth bore.
**Duplicate this sheet prior to use.



NOTE:
.015 X .010 Deep Undercut
on all Bores

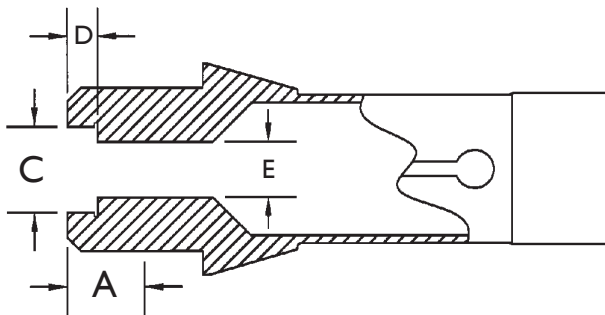


COUNTER BORE

C= _____ D= _____ E= _____

Additional Bore:

C2= _____ D2= _____ E2= _____



EXTENDED NOSE COUNTER BORE

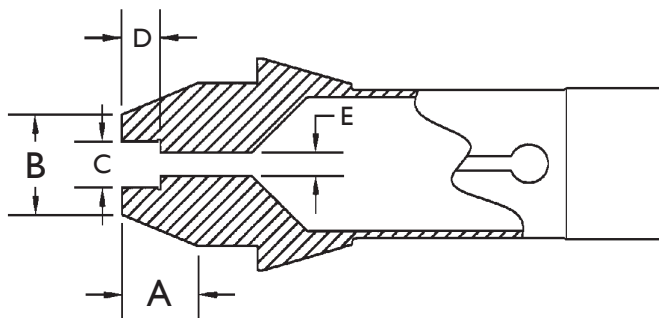
A= _____

C= _____ D= _____ E= _____

Additional Bores:

C2= _____ D2= _____ E2= _____

C3= _____ D3= _____ E3= _____



EXTENDED NOSE TAPERED COUNTER BORE

A= _____ B= _____

C= _____ D= _____ E= _____

Additional Bores:

C2= _____ D2= _____ E2= _____

C3= _____ D3= _____ E3= _____



REQUEST FOR QUOTE FAX COVER SHEET

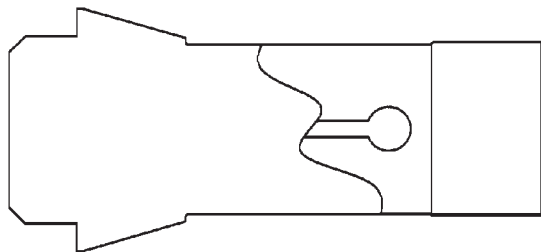
TO: KEB Industries, Inc.
ATTN: SALES
FAX: (440) 953-9209

FROM: _____
COMPANY: _____
PHONE NUMBER: _____

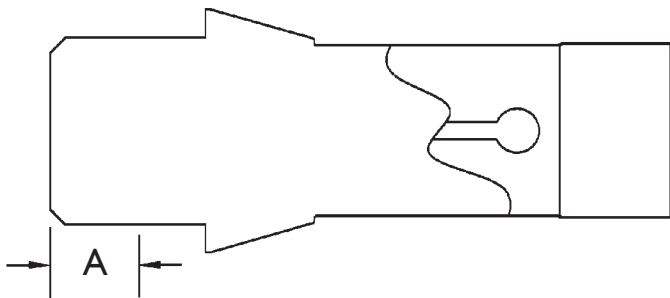
MACHINE MAKE & MODEL: _____

COLLET/GUIDE BUSHING REQUIRED: _____

***DIRECTIONS:** Use the appropriate sketch to draw your custom collet. Make sure to note all the dimensional characteristics, such as diameters, lengths, depths and angles. Make notes as required.
*Duplicate this sheet prior to use.



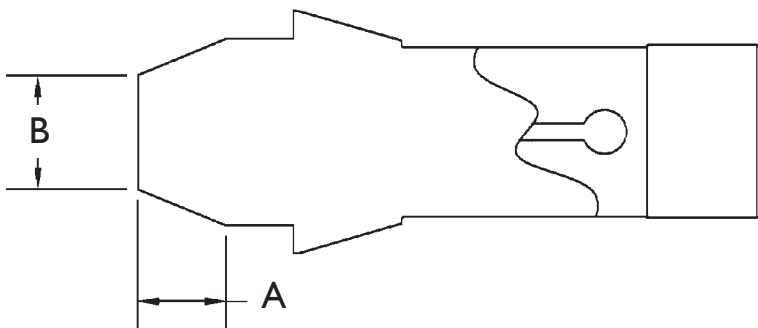
NOTES:



EXTENDED NOSE

A= _____

NOTES:



EXTENDED NOSE TAPERED

A= _____

B= _____

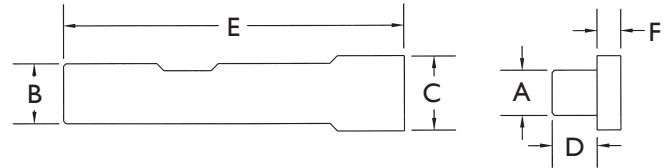
NOTES:

ACCESSORIES

Saw Arbors

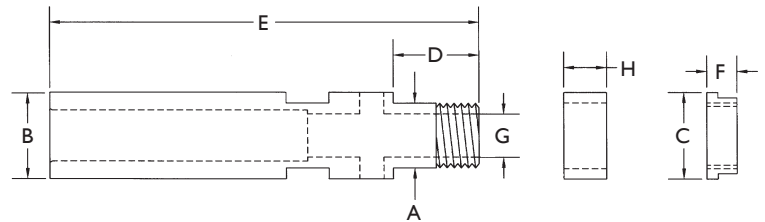


DESCRIPTION: KEB Saw Arbors are manufactured from hardened aircraft quality alloy steel and ground to a concentricity of .0002 Total Indicator Reading (TIR) or better. Thru-coolant arbors are available on request.



ARBORS										
EDP NO.	DESCRIPTION	A	B	C	D	E	F	G	H	
MA125	ARBOR FOR 1/8" ID SAW	1/8	1/4	N/A	.200	2 7/8	.200	-	-	
MA250	ARBOR FOR 1/4" ID SAW	1/4	3/8	N/A	3/8	2 7/8	.200	-	-	
MA250-1	ARBOR FOR 1/4" ID SAW	1/4	1/2	N/A	3/8	2 7/8	.200	-	-	
MA312	ARBOR FOR 5/16" ID SAW	5/16	3/8	N/A	3/8	2 7/8	.200	-	-	
MA375	ARBOR FOR 3/8" ID SAW	3/8	1/2	5/8	3/8	2 7/8	.200	-	-	
MA500	ARBOR FOR 1/2" ID SAW	1/2	1/2	3/4	3/8	2 7/8	.200	-	-	
MA625	ARBOR FOR 5/8" ID SAW	5/8	3/4	1	7/8	4	.250	-	-	
MA875	ARBOR FOR 7/8" ID SAW	7/8	3/4	1 1/4	7/8	4	.250	-	-	
MA1000	ARBOR FOR 1" ID SAW	1	3/4	1 1/2	1	4	.250	-	-	
MA1000-1	ARBOR FOR 1" ID SAW	1	1	1 1/2	1	5	.250	-	-	
MA1250	ARBOR FOR 1 1/4" ID SAW	1 1/4	1	1 3/4	1 3/8	5	.250	-	-	

DESCRIPTION: Extra Capacity Arbors are manufactured to the same precision specifications as our standard Arbors with the addition of an ID bore, spacer and cap designed to hold a variety of tooling in addition to the saw.



EXTRA CAPACITY ARBORS										
EDP NO.	DESCRIPTION	A	B	C	D	E	F	G	H	
MA250-125XC	ARBOR FOR 1/4" ID SAW 1/8" BORE TO HOLD ADDITIONAL TOOL	1/4	3/8	3/8	1/2	2	.225	1/8	.200	
MA375-1875XC	ARBOR FOR 3/8" ID SAW 3/16" BORE TO HOLD ADDITIONAL TOOL	3/8	1/2	1/2	1/2	2 1/2	.175	3/16	1/4	
MA375-250XC	ARBOR FOR 3/8" ID SAW 1/4" BORE TO HOLD ADDITIONAL TOOL	3/8	1/2	1/2	1/2	2 1/2	.175	1/4	1/4	

Call (866) 395-4438 Toll Free to Order or
 Fax your Order to (440) 953-9209
www.kebkollets.com

ACCESSORIES

Carbide Saws



DESCRIPTION: Carbide saws are available in a variety of sizes ranging from 1/4" OD to 4" OD. Carbide saws can increase your speed by 50% over HSS. TiN and TiCN coatings are available upon request. Keyways are optional at extra cost. Tolerances are +/- .0005 on thickness, +/- .005 on OD and +.001/- .000 on the ID. Closer tolerances are available at additional cost. Specials are also available upon request. Specify thickness and number of teeth when ordering.

KEB EDP NO. FOR CARBIDE SAWS

TOLERANCES:

OD: ± .005
 ID: +.001/- .000
 Thickness: ± .0005

OD (A) **ID (B)** **Thickness (C)**
CS0250 - 0125 - 01500

NOTES:

Please add -KW for a Keyway and/or -SP for specials.

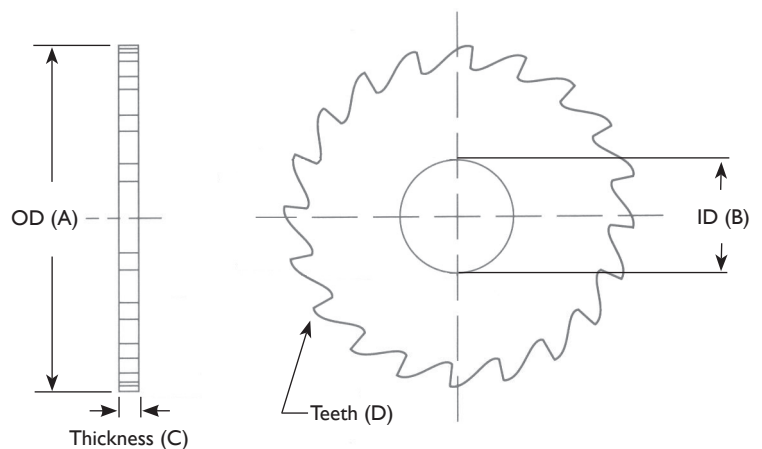
OD REFERENCE
 References Carbide Saw
OD in decimal format

ID REFERENCE
 References **ID** of Carbide
 Saw in decimal format

THICKNESS REFERENCE
 References **thickness** in
 decimal format

EDP Example CS0250-0125-01500 = Carbide Saw with 1/4" OD, 1/8" ID and a thickness of .150", 12 teeth
 EDP Example CS1000-0500-02180 = Carbide Saw with 1" OD, 1/2" ID and a thickness of .218", 22 teeth

STANDARD NO. OF TEETH PER OD	
OD	NO. OF TEETH
1/4"-1/2"	12
9/16"-5/8"	16
3/4"	18
7/8"-1"	20
1-1/8"	22
1 1/4"-1 3/8"	24
1 1/2"	36
1 3/4"	38
2"	40



**Call (866) 395-4438 Toll Free to Order or
 Fax your Order to (440) 953-9209
www.kebkollets.com**

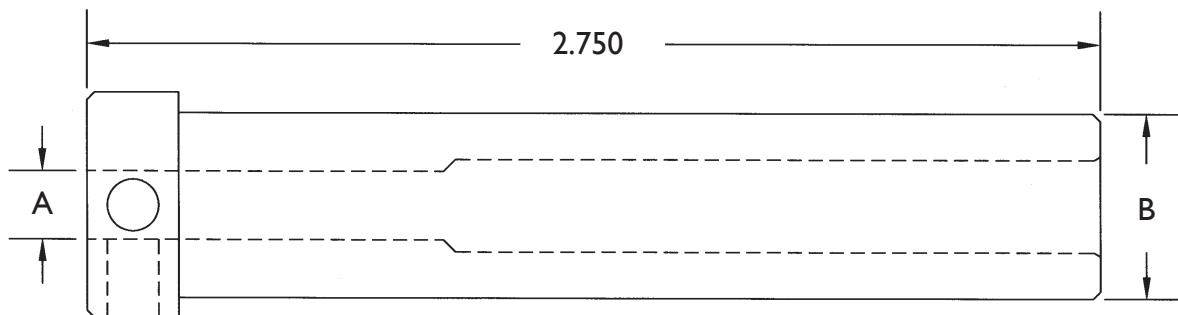
ACCESSORIES

Tool Sleeve Holders



DESCRIPTION: KEB Tool Sleeve Holders are manufactured from an aircraft quality alloy steel and heat treated to 28 Rc for greater wear ability. Designed for use on all CNC or manual turning and boring operations.

QUALITY: KEB Tool Sleeve Holders are ground to an OD/ID tolerance of .0005 Total Indicator Reading (TIR), guaranteeing your small tool on center.



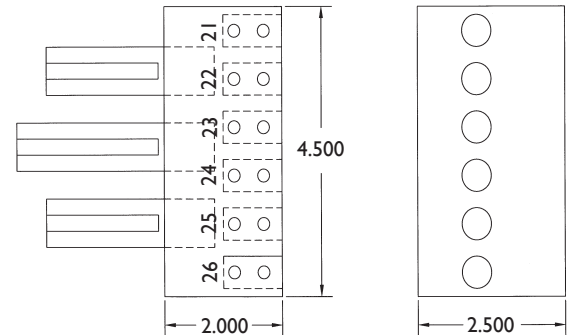
TOOL SLEEVE HOLDERS		
EDP NUMBER	A	B
TSH5		
TSH5-008	1/8"	1/2"
TSH5-012	3/16"	1/2"
TSH5-016	1/4"	1/2"
TSH5-020	5/16"	1/2"
TSH5-024	3/8"	1/2"
TSH6		
TSH6-008	1/8"	5/8"
TSH6-012	3/16"	5/8"
TSH6-016	1/4"	5/8"
TSH6-020	5/16"	5/8"
TSH6-024	3/8"	5/8"

Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

ACCESSORIES

Quick Set Tool Blocks

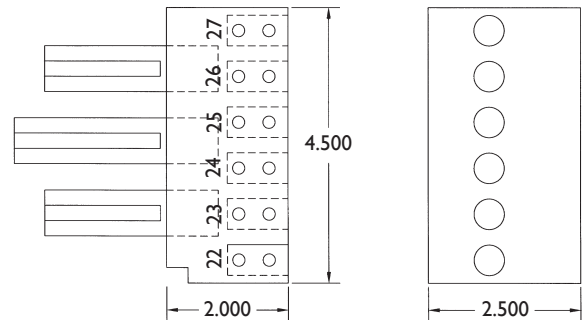
DESCRIPTION: Specifically designed for Citizen L16 and L20 Machines, the QSC1500 and QSC1625 provide six ID tool positions, doubling the tooling capacity of your sub spindle. The QSC Block is ideal for short or long runs. Place one block in your machine and preset another for quick changeover. For fast and efficient set-ups, tool several QSC Blocks to support groups or families of parts.



L16/L20 QUICK SET TOOL BLOCK

DESCRIPTION	L16/L20	L16/L20
PART NUMBER	QSC1500	QSC1625
LENGTH	4.500	4.500
WIDTH	2.500	2.500
DEPTH	2.000	2.000
TOOL HOLE DIAMETER	1/2	5/8
CENTER DISTANCE BETWEEN TOOL HOLE DIAMTERS	3/4	3/4

DESCRIPTION: Specifically designed for Citizen L25 and L32 Machines, the QSC2625 provides six ID tool positions, doubling the tooling capacity of your sub spindle. The QSC Block is ideal for short or long runs. Place one block in your machine and preset another for quick changeover. For fast and efficient set-ups, tool several QSC Blocks to support groups or families of parts.



L25/L32 QUICK SET TOOL BLOCK

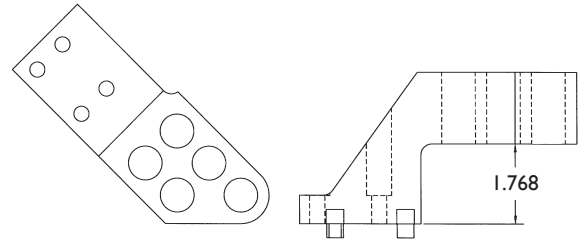
DESCRIPTION	L25/L32
PART NUMBER	QSC2625
LENGTH	4.500
WIDTH	2.500
DEPTH	2.000
TOOL HOLE DIAMETER	5/8
CENTER DISTANCE BETWEEN TOOL HOLE DIAMTERS	3/4

Call (866) 395-4438 Toll Free to Order or
 Fax your Order to (440) 953-9209
www.kebkollets.com

ACCESSORIES

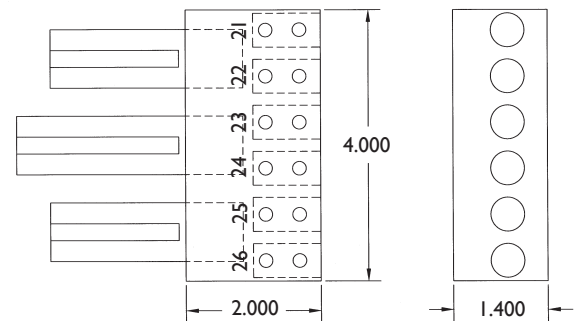
Quick Set Tool Blocks

DESCRIPTION: Specifically designed for the Citizen B12 Machine, the QSC3750 provides five ID tool positions, increasing the tooling capacity of your sub spindle. The QSC Block is ideal for short or long runs. Place one block in your machine and preset another for quick changeover. For fast and efficient set-ups, tool several QSC Blocks to support groups or families of parts.



B12 QUICK SET TOOL BLOCK	
DESCRIPTION	B12
PART NUMBER	QSC3750
TOOL HOLE DIAMETER	3/4
DISTANCE BETWEEN TOOL HOLDER FACE & SPINDLE NOSE	1.768

DESCRIPTION: Specifically designed for the Star SR16 and SR20 Machines, the QSS1500 provides six ID tool positions, doubling the tooling capacity of your sub spindle. The QSC Block is ideal for short or long runs. Place one block in your machine and preset another for quick changeover. For fast and efficient set-ups, tool several QSC Blocks to support groups or families of parts.



SR16/SR20 QUICK SET TOOL BLOCK	
DESCRIPTION	SR16/SR20
PART NUMBER	QSS1500
LENGTH	4.000
WIDTH	1.400
DEPTH	2.000
TOOL HOLE DIAMETER	1/2
CENTER DISTANCE BETWEEN TOOL HOLE DIAMETERS	.680

Call (866) 395-4438 Toll Free to Order or
 Fax your Order to (440) 953-9209
www.kebkollets.com

ACCESSORIES

ER Accessory Collets



DESCRIPTION: Swiss Style ER Collet Chucks are a horizontal drilling and milling accessory for your sub-spindle.

Ideal for:

- Face milling;
- High speed drilling;
- Slotting;
- Off center end milling;
- Off center drilling;
- Profile milling.

Get twice the RPM by spinning your sub-spindle in reverse with left handed tools as your main spindle spins on its normal rotation. Turn your sub-spindle into a live tool!

ER ACCESSORY COLLETS

PART NUMBER	ER COLLET TYPE	SHANK TYPE	EXTENSION
MC20ER	ER11	MC20	0.900
MC25ER	ER16	MC25	1.100
MC30ER	ER16	MC30	1.100
MC37ER	ER16	MC37	1.100
MC15ER†	ER8	MC15	0.800
MC16ER†	ER8	MC16	0.800

†Specialty Application; Made to order.

**Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com**

Micro Tools, Endmills & Drills



DESCRIPTION: As an authorized distributor of Melin Tool Company products, KEB offers high quality carbide end mills, drills, chamfer tools and countersinks, as well as, HSS cobalt end mills, drills and countersinks. Specials are available upon request.

SWISS CNC SPECIFIC CARBIDE ENDMILLS

2 FLUTE CARBIDE MINIATURE END MILLS						4 FLUTE CARBIDE MINIATURE END MILLS					
Tool Name	EDP	MILL Ø	SHANK	LOC	OAL	Tool Name	EDP	MILL Ø	SHANK	LOC	OAL
AMG-.005	10615	.005	1/8	.015	1 1/2	CCMG-.010	10655	.010	1/8	.030	1 1/2
AMG-.010	10617	.010	1/8	.030	1 1/2	CCMG-.015	10657	.015	1/8	.045	1 1/2
AMG-.015	10619	.015	1/8	.045	1 1/2	CCMG-.020	10659	.020	1/8	.060	1 1/2
AMG-.020	10621	.020	1/8	.060	1 1/2	CCMG-.025	10661	.025	1/8	.075	1 1/2
AMG-.025	10623	.025	1/8	.075	1 1/2	CCMG-.030	10663	.030	1/8	.090	1 1/2
AMG-.030	10625	.030	1/8	.090	1 1/2	CCMG-.035	10665	.035	1/8	.105	1 1/2
AMG-.035	10627	.035	1/8	.105	1 1/2	CCMG-.040	10667	.040	1/8	.120	1 1/2
AMG-.040	10629	.040	1/8	.120	1 1/2	CCMG-.045	10669	.045	1/8	.135	1 1/2
AMG-.045	10631	.045	1/8	.135	1 1/2	CCMG-.050	10671	.050	1/8	.150	1 1/2
AMG-.050	10633	.050	1/8	.150	1 1/2	CCMG-.055	10673	.055	1/8	.165	1 1/2
AMG-.055	10635	.055	1/8	.165	1 1/2	CCMG-.060	10675	.060	1/8	.180	1 1/2
AMG-.060	10637	.060	1/8	.180	1 1/2	CCMG-.065	10677	.065	1/8	.195	1 1/2
AMG-.065	10639	.065	1/8	.195	1 1/2	CCMG-.070	10679	.070	1/8	.210	1 1/2
AMG-.070	10641	.070	1/8	.210	1 1/2	CCMG-.075	10681	.075	1/8	.225	1 1/2
AMG-.075	10643	.075	1/8	.225	1 1/2	CCMG-.080	10683	.080	1/8	.240	1 1/2
AMG-.080	10645	.080	1/8	.240	1 1/2	CCMG-.085	10685	.085	1/8	.255	1 1/2
AMG-.085	10647	.085	1/8	.255	1 1/2	CCMG-.090	10687	.090	1/8	.270	1 1/2
AMG-.090	10649	.090	1/8	.270	1 1/2	CCMG-.095	10689	.095	1/8	.285	1 1/2
AMG-.095	10651	.095	1/8	.285	1 1/2	CCMG-.100	10691	.100	1/8	.300	1 1/2
AMG-.100	10653	.100	1/8	.300	1 1/2						

CARBIDE END MILLS

Square End	Long Reach
Ball End	NC Tolerance
Double Square End	Drill Point
Double Ball End	Corner Radius
High Performance	Tapered End Mills

CARBIDE DRILLS

Jobber Length	Combined Drill & C'Sink
Stub Length	NC Spotting Drills
Straight Flute	High Performance

HSS & COBALT HSS END MILLS

Single End	Angle Mills
Double End	NC Spotting
Corner Radius	Coarse/Fine Roughers
Drill Point	Left Hand

COUNTERSINKS

Zero, Single, 4 Flute, 6 Flute Carbide & HSS

AVAILABLE COATINGS

TiN-Titanium Nitride

TiN reduces wear and improves chip formation to extend tool life. Ideal for machining iron-based materials, molding of plastics. Resistant to abrasive wear.

TiCN-Titanium Carbonitride

TiCN provides excellent wear resistance with its high hardness and low coefficient of friction. TiCN performs well cutting alloy steels, stainless steels, and in high speed applications where moderate temperatures are generated.

ALTiN-Aluminum Titanium Nitride

ALTiN is ideal for high temperature cutting applications. The aluminum in the coating provides a protective barrier around the tool to extend life. Ideal for cutting titanium, nickel alloys, stainless steels, alloy steels and cast iron. It is ideal for high speed and dry machining applications.

MADE IN THE USA.
FULL CATALOGS AVAILABLE
UPON REQUEST.

Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

Swiss Silver - KEB Cutting Oils

THE
CLEAR
CHOICE

FEATURES

BENEFITS

HIGH PRESSURE DELIVERY

- A product designed specifically for high pressure delivery
- Low mist – Low foam – Low air entrapment

HIGHLY REFINED GRADE OF MINERAL OIL BASE THAT IS WATER CLEAR, CLEAN, AND PURE

- Greater operator visibility
- Greater operator acceptance
- Easy on the hands and skin
- Pleasant fragrance
- Cleans up easily with paper, cartridge or centrifuge

MINERAL OIL BASE AND ADDITIVES ALL HAVE A HIGH FLASH POINT

- Safer - reduced possibility of machine fires
- Excellent for unattended machining
- Greater heat dissipation

CONTAINS A UNIQUE MIXTURE OF ADDITIVES TO CREATE MAXIMUM LUBRICITY AND PERFORMANCE ENHANCEMENT

- High performance product
- Higher speeds, feeds, and stock removal
- Increased tool life
- Greater heat dissipation
- Multi-Metal including hard metals like stainless steels and exotic metals

LOW VISCOSITY FLUID

- Greater penetration for micro-part
- Less fluid carry out on parts
- Use less fluid
- Cleaner Machine
- More cost effective
- Better heat dissipation
- Reduced cycle time
- Less chance for tolerance change as machine oil temperature increases



KEB Industries, Inc.

38151 Willoughby Parkway, Suite A

Willoughby, Ohio 44094

Phone: 440-953-4623 • Fax: 440-953-9209

e-mail: sales@kebkollets.com

**Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com**



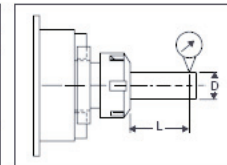
CENTAUR
PRECISION TOOLS INC.
An ISO 9001:2000 Certified Company

RD/ER COLLET SYSTEM FEATURES

- **High Accuracy.** 16 slots for rigid clamping and extra concentricity.
- **Wide Clamping Range.** For fewer changes and a low cost per set that covers a continuous range of sizes.
- **Versatility.** Interchangeable with ER and ESX type collets.
- **Ideal for Tool Extensions.** High accuracy for long-reach applications.
- **Multiple Applications.** Same collets can be used for drilling, milling, tapping and reaming.
- **Precision Manufacturing.** High grade spring steel is hardened and precision ground, with 100% quality inspection.
- **Long Life.** Exceeding that of other collet styles.
- **Factory Guarantee.** Fully backed.

RD/ER COLLET CONCENTRICITY - PER DIN 6499

METRIC				INCHES					
Clamping Range D		L	Maximum T.I.R.		Clamping Range D		L	Maximum T.I.R.	
Min.	Max.		Precision DIN 6499	High Precision DIN 6499	Min.	Max.		Precision DIN 6499	High Precision DIN 6499
1.0	1.6	6	0.015	0.008	0.039	0.063	0.236	0.0006	0.0003
1.6	3.0	10			0.063	0.118	0.394		
3.0	6.0	16			0.118	0.236	0.630		
6.0	10.0	25			0.236	0.394	0.984		
10.0	18.0	40	0.020	0.010	0.394	0.709	1.575	0.0008	0.0004
18.0	26.0	50			0.709	1.024	1.969		
26.0	34.0	60			1.024	1.339	2.362		

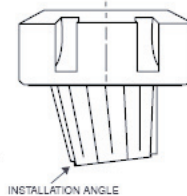


METHOD OF INSERTION & RELEASE FOR RD/ER COLLETS

INSERTING

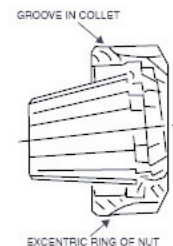
1. Insert collet into nut at angle as shown to engage extraction tongue in groove of collet.
2. Screw nut onto collet holder with collet securely in nut.
3. Insert tool to be gripped and lock nut.

IMPORTANT: Never screw nut onto collet unless collet is properly seated in nut.



RELEASING

Hold nut in vertical position and remove nut at an angle. Collet is automatically withdrawn from chuck by eccentric ring of nut when unscrewed.

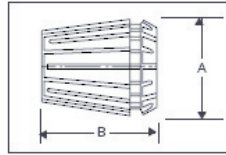


Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

RD/ER 8, 11, 12 Collet Systems

RD/ER 8 COLLET SYSTEM

Clamping Range (mm.)	Clamping Range (in.)	METRIC SIZES	
		STANDARD PRECISION	HIGH PRECISION
1.0-0.5	0.039-0.019	80-001	80-901
1.5-1.0	0.059-0.039	80-002	80-902
2.0-1.5	0.079-0.059	80-003	80-903
2.5-2.0	0.098-0.079	80-004	80-904
3.0-2.5	0.118-0.098	80-005	80-905
3.5-3.0	0.138-0.118	80-006	80-906
4.0-3.5	0.157-0.138	80-007	80-907
4.5-4.0	0.177-0.157	80-008	80-908
5.0-4.5	0.197-0.177	80-009	80-909
9 Pc. Set		80-010	80-910



RD/ER 8
A = 8.5 mm. (0.34 in.)
B = 13.5 mm. (0.53 in.)
RD/ER 11
A = 11.5 mm. (0.45 in.)
B = 18 mm. (0.71 in.)
RD/ER 12
A = 12 mm. (0.47 in.)
B = 19.5 mm. (0.77 in.)



RD/ER 8
Collapse per collet: 0.5 mm. (0.019 in.)
Capacity per set: 0.5 - 5 mm. (0.019 - 0.197 in.)
Precision per DIN 6499

RD/ER 11 COLLET SYSTEM

Clamping Range (mm.)	Clamping Range (in.)	METRIC SIZES		INCH SIZES	
		STANDARD PRECISION	HIGH PRECISION	STANDARD PRECISION	
1.0-0.5	0.039-0.019	110-001	110-901	1/16	110-501
1.5-1.0	0.059-0.039	110-002	110-902	3/32	110-502
2.0-1.5	0.079-0.059	110-003	110-903	1/8	110-503
2.5-2.0	0.098-0.079	110-004	110-904	5/32	110-504
3.0-2.5	0.118-0.098	110-005	110-905	3/16	110-505
3.5-3.0	0.138-0.118	110-006	110-906	7/32	110-506
4.0-3.5	0.157-0.138	110-007	110-907	1/4	110-507
4.5-4.0	0.177-0.157	110-008	110-908		
5.0-4.5	0.197-0.177	110-009	110-909		
5.5-5.0	0.217-0.197	110-010	110-910		
6.0-5.5	0.236-0.217	110-011	110-911		
6.5-6.0	0.256-0.236	110-012	110-912		
7.0-6.5	0.276-0.256	110-013	110-913		
13 Pc. Set		110-014	110-914		

RD/ER 11
Collapse per collet: 0.5 mm. (0.019 in.)
Capacity per set: 0.5 - 7 mm.
(0.019 - 0.276 in.)
Precision per DIN 6499
Maximum tightening torque: 20 ft./lbs.



RD/ER 12 COLLET SYSTEM

RD/ER 12
Collapse per collet: 0.5 (0.019)
Capacity per set: 0.5 - 7 mm.
(0.019 - 0.276 in.)
Precision per DIN 6499
Maximum tightening torque: 20 ft./lbs.

Clamping Range (mm.)	Clamping Range (in.)	STANDARD PRECISION		HIGH PRECISION	
		Part No.	Part No.	Part No.	Part No.
1.0-0.5	0.039-0.019	120-001	120-901		
1.5-1.0	0.059-0.039	120-002	120-902		
2.0-1.5	0.079-0.059	120-003	120-903		
2.5-2.0	0.098-0.079	120-004	120-904		
3.0-2.5	0.118-0.098	120-005	120-905		
3.5-3.0	0.138-0.118	120-006	120-906		
4.0-3.5	0.157-0.138	120-007	120-907		
4.5-4.0	0.177-0.157	120-008	120-908		
5.0-4.5	0.197-0.177	120-009	120-909		
5.5-5.0	0.217-0.197	120-010	120-910		
6.0-5.5	0.236-0.217	120-011	120-911		
6.5-6.0	0.256-0.236	120-012	120-912		
7.0-6.5	0.276-0.256	120-013	120-913		
13Pc. Set		120-014	120-914		



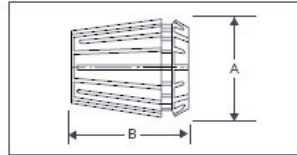
RTS 11 RIGID TAPPING COLLETS

ANSI Tap Size	Part No.
0-6	111-141
8	111-168
10	111-194
12	111-220
1/4	111-255

Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

RD/ER 16 Collet Systems

RD/ER 16 COLLET SYSTEM



A = 17 mm. (0.67 in.)
B = 27 mm. (1.06 in.)

Collapse per collet: 0.5/1 mm. (0.019/0.039 in.)
Capacity per set: 0.5 - 10 mm. (0.019 - 0.394 in.)
Precision per DIN 6499
Maximum tightening torque: 40 ft./lbs.

INTERNAL COOLANT COLLETS



Sealed for coolant-through applications, with pressure resistance tested to 1000 p.s.i.

Sealed collets are exact size collets and have no collapse range.

ND COLLETS



Nominal size collets manufactured per DIN 6499 Form A are available in inch and metric sizes by special order, offering maximum 0.0003 in. TIR.

TAPPING COLLETS

RTS Rigid Tapping Collets with Square Drive

For synchronous tapping operations using any RD/ER collet chuck. Collet bore is exact tool diameter, with square drive, for accuracy and rigidity. Available sealed for coolant-through applications, as well as in DIN and JIS standard metric sizes.



RDT Quick-Change Tapping Collets with Axial Compensation

For use with any RD/ER collet chuck, these tapping collets help prevent tap breakage on machines requiring axial compensation. Friction-free ball-bearing drive. Metric sizes available upon request.



Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

RD/ER 16 Collet System

RD/ER 16 COLLETS

Clamping Range (mm.) (in.)		METRIC SIZES			INCH SIZES		INTERNAL COOLANT COLLETS			
		STANDARD PRECISION	HIGH PRECISION	0.5 INCREMENTS	STANDARD PRECISION		METRIC	INCH		
		Part No.	Part No.	Part No.	Dia. (in.)	Part No.	Dia. (mm.)	Part No.	Dia. (in.)	Part No.
1-0.5	0.039-0.019	160-001	160-901		1/16	160-501	3	160IK03	1/8	160IK501
1.5-1	0.059-0.039			160-101	3/32	160-502	4	160IK04	5/32	160IK502
2-1	0.079-0.039	160-002	160-902		1/8	160-503	5	160IK05	3/16	160IK503
2.5-1.5	0.098-0.059			160-102	5/32	160-504	6	160IK06	7/32	160IK504
3-2	0.118-0.079	160-003	160-903		3/16	160-505	7	160IK07	1/4	160IK505
3.5-2.5	0.138-0.098			160-103	7/32	160-506	8	160IK08	9/32	160IK506
4-3	0.157-0.118	160-004	160-904		1/4	160-507	9	160IK09	5/16	160IK507
4.5-3.5	0.177-0.138			160-104	9/32	160-508	10	160IK10	11/32	160IK508
5-4	0.197-0.157	160-005	160-905		5/16	160-509			3/8	160IK509
5.5-4.5	0.217-0.177			160-105	11/32	160-510				
6-5	0.236-0.197	160-006	160-906		3/8	160-511				
6.5-5.5	0.256-0.217			160-106	13/32	160-512				
7-6	0.276-0.236	160-007	160-907		12-Pc. Set	160-513				
7.5-6.5	0.296-0.256			160-107						
8-7	0.315-0.276	160-008	160-908							
8.5-7.5	0.335-0.296			160-108						
9-8	0.354-0.315	160-009	160-909							
9.5-8.5	0.374-0.335			160-109						
10-9	0.394-0.354	160-010	160-910							
10 Pc. Set		160-011								

NOTE: External flow coolant collets available.

NOTE: High precision also available in inch sizes.

RD/ER 16 TAPPING COLLETS

ANSI Tap Size	RTS RIGID TAPPING COLLETS		RTS INTERNAL COOLANT RIGID TAPPING COLLETS		RDT AXIAL COMPENSATION TAPPING COLLETS	
	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.
0-6	161-141	161-141S			160-141	
8	161-168	161-168S			160-168	
10	161-194	161-194S			160-194	
12	161-220	161-220S				
1/4	161-255	161-255S				
5/16	161-318	161-318S				

Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

RD/ER 20, 25, 32, 40, 50 Collet Systems

RD/ER 20 COLLETS

Clamping Range (mm.) (in.)		METRIC SIZES			INCH SIZES		INTERNAL COOLANT COLLETS			
		STANDARD PRECISION	HIGH PRECISION	0.5 mm. INCREMENTS	STANDARD PRECISION		METRIC	INCH		
Part No.	Part No.	Part No.		Dia. (in.)	Part No.	Dia. (mm.)	Part No.	Dia. (in.)	Part No.	
1-0.5	0.039-0.019			200-100	1/16	200-501	3	200K03	1/8	200K501
1.5-1	0.059-0.039			200-101	3/32	200-502	4	200K04	5/32	200K502
2-1	0.079-0.039	200-001	200-901	200-102	1/8	200-503	5	200K05	3/16	200K503
2.5-1.5	0.098-0.059			200-103	5/32	200-504	6	200K06	7/32	200K504
3-2	0.118-0.079	200-002	200-902	200-104	3/16	200-505	7	200K07	1/4	200K505
3.5-2.5	0.138-0.098			200-105	7/32	200-506	8	200K08	9/32	200K506
4-3	0.157-0.118	200-003	200-903	200-106	1/4	200-507	9	200K09	5/16	200K507
4.5-3.5	0.177-0.138			200-107	9/32	200-508	10	200K10	11/32	200K508
5-4	0.197-0.157	200-004	200-904	200-108	5/16	200-509	11	200K11	3/8	200K509
5.5-4.5	0.217-0.177			200-109	11/32	200-510	12	200K12	13/32	200K510
6-5	0.236-0.197	200-005	200-905	200-110	3/8	200-511	13	200K13	7/16	200K511
6.5-5.5	0.256-0.217			200-111	13/32	200-512			15/32	200K512
7-6	0.276-0.236	200-006	200-906	200-112	7/16	200-513			1/2	200K513
7.5-6.5	0.296-0.256				15/32	200-514				
8-7	0.315-0.276	200-007	200-907		1/2	200-515				
8.5-7.5	0.335-0.296				15 Pc. Set	200-516				
9-8	0.354-0.315	200-008	200-908							
9.5-8.5	0.374-0.335									
10-9	0.394-0.354	200-009	200-909							
10.5-9.5	0.414-0.374									
11-10	0.433-0.394	200-010	200-910							
11.5-10.5	0.453-0.414									
12-11	0.472-0.433	200-011	200-911							
12.5-11.5	0.493-0.453									
13-12	0.512-0.472	200-012	200-912							
12 Pc. Set		200-013	200-913							

NOTE: External flow coolant collets available.

NOTE: High precision also available in inch sizes.

RD/ER 20 TAPPING COLLETS

ANSI Tap Size	RTS RIGID TAPPING COLLETS		RTS INTERNAL COOLANT RIGID TAPPING COLLETS		RDT AXIAL COMPENSATION TAPPING COLLETS	
	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.
0-6	201-141	201-141S	201-141T			
8	201-168	201-168S	200-168			
10	201-194	201-194S	200-194			
12	201-220	201-220S	200-220			
1/4	201-255	201-255S	200-255			
5/16	201-318	201-318S				
3/8	201-381	201-381S				
7/16	201-323	201-323S				
1/2	201-367	201-367S				

RD/ER 25, 32, 40 & 50

*Please note that the specifications for RD/ER 25, 32, 40 & 50 collets are available upon request.

Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

ACCESSORIES

Master Tooling Sets

MASTER TOOLING SETS

Part No.	Collet Type	No. Of Collets	Range (mm.) (in.)		Chuck	Nut	Wrench
MSO 08080	RD 8	9	0.5 - 5	0.019 - 0.177	Cyl. 8 X 80	RD 8 M	E 8 M
MSO 11154	RD 11	13	0.5 - 7	0.019 - 0.276	Cyl. 5/8 X 154	RD 11 M	E 11 M
MSO 11254	RD 11	13	0.5 - 7	0.019 - 0.276	Cyl. 1/2 X 154	RD 11 M	E 11 M
MSO 16140	RD 16	10	0.5 - 10	0.019 - 0.394	Cyl. 1 X 140	RD 16 H	GS 25
MSO 16134	RD 16	10	0.5 - 10	0.019 - 0.394	Cyl. 3/4 X 134	RD 16 M	E 16 M
MSO 160C40	RD 16	10	0.5 - 10	0.019 - 0.394	CAT 40	RD 16 H	GS 25
MSO 160B40	RD 16	10	0.5 - 10	0.019 - 0.394	BT 40	RD 16 H	GS 25
MSO 20134	RD 20	12	1 - 13	0.039 - 0.512	Cyl. 1 X 134	RD 20 M	E 20 M
MSO 200C40	RD 20	12	1 - 13	0.039 - 0.512	CAT 40	RD 20 H	GS 30
MSO 25100	RD 25	15	1 - 16	0.039 - 0.630	Cyl. 1 X 100	RD 25 E	E 25
MSO 250C40	RD 25	15	1 - 16	0.039 - 0.630	CAT 40	RD 25 E	E 25
MSO 32050	RD 32	18	2 - 20	0.079 - 0.787	Cyl. 1 X 50	RD 32 E	E 32
MSO 32060	RD 32	18	2 - 20	0.079 - 0.787	Cyl. 1-1/4 X 60	RD 32 E	E 32
MSO 32008	RD 32	18	2 - 20	0.079 - 0.787	R8	RD 32 E	E 32
MSO 320C40	RD 32	18	2 - 20	0.079 - 0.787	CAT 40	RD 32 E	E 32
MSO 320C50	RD 32	18	2 - 20	0.079 - 0.787	CAT 50	RD 32 E	E 32
MSO 320B40	RD 32	18	2 - 20	0.079 - 0.787	BT 40	RD 32 E	E 32
MSO 320B50	RD 32	18	2 - 20	0.079 - 0.787	BT 50	RD 32 E	E 32
MSO 40050	RD 40	23	3 - 26	0.118 - 1.024	Cyl. 1 X 50	RD 40 E	E 40
MSO 40008	RD 40	23	3 - 26	0.118 - 1.024	R8	RD 40 E	E 40
MSO 400C40	RD 40	23	3 - 26	0.118 - 1.024	CAT 40	RD 40 E	E 40
MSO 400C50	RD 40	23	3 - 26	0.118 - 1.024	CAT 50	RD 40 E	E 40
MSO 400B40	RD 40	23	3 - 26	0.118 - 1.024	BT 40	RD 40 E	E 40
MSO 400B50	RD 40	23	3 - 26	0.118 - 1.024	BT 50	RD 40 E	E 40



All listed items included in fitted wooden box.

WOODEN TOOL TRAYS

Part No.	Description	Collet Capacity
TRYRD8	RD 8 Metric	10
TRYRD11	RD 11 Metric	14
TRYRD16	RD 16 Inch	10
TRYRD16I	RD 16 Inch	12
TRYRD20	RD 20 Metric	12
TRYRD20I	RD 20 Inch	16
TRYRD25	RD 25 Metric	15
TRYRD25I	RD 25 Inch	19
TRYRD32	RD 32 Metric	18
TRYRD32I	RD 32 Inch	22
TRYRD40	RD 40 Metric	23



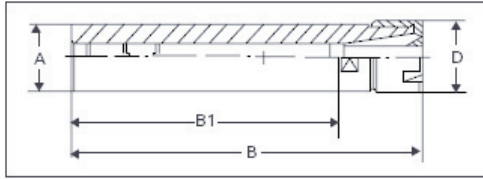
WOODEN TOOL BOXES

Part No.	Description	Collet Capacity
WBXRD8	RD 8 Box	9
WBXRD11	RD 11 Box	13
WBXRD16	RD 16 Box	10
WBXRD20	RD 20 Box	12
WBXRD25	RD 25 Box	15
WBXRD32	RD 32 Box	18
WBXRD40	RD 40 Box	23



Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

Straight-Shank RD/ER Collet Chucks (Extension Style)



	Part No.	A		B		B1		D		Nut Style/ Part No.	Wrench
		(mm.)	(in.)	(mm.)	(in.)	(mm.)	(in.)	(mm.)	(in.)		
RD 8	80856	8	0.31	70	2.76	56	2.20	12	0.47	M-30008	22008
	80880	8	0.31	100	3.94	80	3.15	12	0.47	M-30008	22008
	1008956	10	0.39	70	2.76	56	2.20	12	0.47	M-30008	22008
	10080	10	0.39	100	3.94	80	3.15	12	0.47	M-30008	22008
	12080	12	0.47	95	3.74	80	3.15	12	0.47	M-30008	22008
	50080			1/2	95	3.74	80	3.15	12	0.47	M-30008
RD 11	201180	20	0.79	100	3.94	80	3.15	16	0.63	M-30011	22011
	201115	20	0.79	145	5.71	115	4.53	19	0.75	H-30111	22317
	221100*	22	0.88	130	5.12	100	3.94	19	0.75	H-30111	22317
	121154		1/2	168	6.61	154	6.06	16	0.63	M-30011	22011
	121180		1/2	100	3.94	80	3.15	16	0.63	M-30011	22011
	121181		1/2	100	3.94	80	3.15	19	0.75	H-30111	22317
	5811140		5/8	155	6.10	140	5.51	19	0.75	H-30111	22317
	5811200		5/8	64	2.50	51	2.00	16	0.63	M-30011	22011
	5811300		5/8	90	3.51	76	3.00	16	0.63	M-30011	22011
	581154		5/8	168	6.61	154	6.06	16	0.63	M-30011	22011
	581155		5/8	168	6.61	154	6.06	19	0.75	H-30111	22317
	341185†		3/4	100	3.94	85	3.35	16	0.63	M-30011	22011
	34200011†		3/4	51	2.00	25	1.00	16	0.63	M-30011	22011
	34285011†		3/4	72	2.85	49	1.92	16	0.63	M-30011	22011
	344011		3/4	102	4.00	89	3.50	16	0.63	M-30011	22011
	1001180		1	93	3.66	80	3.15	16	0.63	M-30011	22011
RD 12	141225	14	0.55	38	1.50	25	0.98	19	0.75	H-30112	22317
	201280	20	0.79	93	3.66	80	3.15	19	0.75	H-30112	22317
	10012140		1	153	6.02	140	5.51	19	0.75	H-30112	22317
RD 16	441630	14	0.55	55	2.17	30	1.18	28	1.10	H-30116	22325
	441660	14	0.55	85	3.35	60	2.36	28	1.10	H-30116	22325
	201630	20	0.79	55	2.17	30	1.18	28	1.10	H-30116	22325
	201650	20	0.79	79	3.10	50	1.97	28	1.10	H-30116	22325
	201600	20	0.79	125	4.92	100	3.94	28	1.10	H-30116	22325
	201601	20	0.79	135	5.31	100	3.94	22	0.87	M-30016	22016
	221680*	22	0.88	103	4.06	80	3.15	28	1.10	H-30116	22325
	221634*	22	0.88	160	6.30	134	5.28	28	1.10	H-30116	22325
	581681		5/8	105	4.13	80	3.15	22	0.87	M-30016	22016
	581614		5/8	157	6.18	140	5.51	28	1.10	H-30116	22325
	581654		5/8	179	7.04	154	6.06	22	0.87	M-30016	22016
	341670†		3/4	116	4.60	70	2.76	22	0.87	M-30016	22016
	341680		3/4	103	4.05	80	3.15	28	1.10	H-30116	22325
	341681		3/4	115	4.52	80	3.15	22	0.87	M-30016	22016
	341690†		3/4	136	5.35	90	3.54	22	0.87	M-30016	22016
	341610		3/4	135	5.31	100	3.94	22	0.87	M-30016	22016
341634		3/4	160	6.40	134	5.28	22	0.87	M-30016	22016	
341654		3/4	189	7.44	154	6.06	22	0.87	M-30016	22016	
101600		1	134	5.28	100	3.94	28	1.10	H-30116	22325	
101614		1	157	6.18	140	5.51	28	1.10	H-30116	22325	
RD 20	202000	20	0.79	142	5.60	100	3.94	28	1.10	M-30020	22020
	202100	20	0.79	142	5.60	100	3.94	34	1.34	H-30120	22330
	2220100*	22	0.88	140	5.52	100	3.94	34	1.34	H-30120	22330
	2220120*	22	0.88	160	6.30	120	4.72	34	1.34	H-30120	22330
	222080*	22	0.88	120	4.72	80	3.15	34	1.34	H-30120	22330
	3420100		3/4	142	5.60	100	3.94	28	1.10	M-30020	22020
	1002034		1	160	6.30	134	5.28	28	1.10	M-30020	22020
1002034H		1	160	6.30	134	5.28	34	1.34	H-30120	22330	
RD 25	252500	25	0.98	135	5.31	100	3.94	42	1.65	E-30125	22125
	1002550		1	85	3.35	50	1.97	42	1.65	E-30125	22125
	1002500		1	135	5.31	100	3.94	42	1.65	E-30125	22125
	1002550M		1	85	3.35	50	1.97	35	1.38	M-30025	22025
	1002500M		1	135	5.31	100	3.94	35	1.38	M-30025	22025

*Holders for Star machines.

NOTE: Wrenches are sold separately.

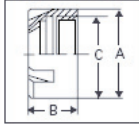
†Double-End Style

**Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com**

Clamping Nuts & Wrenches

CLAMPING NUTS & WRENCHES

MINI NUTS



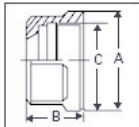
Part No.	Type	A		B		C
		(mm.)	(in.)	(mm.)	(in.)	
30008	RD 8 M	12	0.47	10.8	0.42	M10 X 0.75
30011	RD 11 M	16	0.63	11.3	0.44	M13 X 0.75
30016	RD 16 M	22	0.87	17	0.67	M19 X 1
30020	RD 20 M	28	1.10	19	0.75	M24 X 1
30025	RD 25 M	35	1.38	20	0.79	M30 X 1

MINI WRENCH



Part No.	Type
22008	E 8 M
22011	E 11 M
22016	E 16 M
22020	E 20 M
22025	E 25 M

HEX NUTS



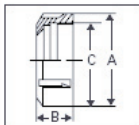
Part No.	Type	A		B		C
		(mm.)	(in.)	(mm.)	(in.)	
30111	UM/RD 11	19	0.75	11.3	0.44	M14 X 0.75
30112	UM/RD 12	19	0.75	12.5	0.49	M14 X 0.75
30116	UM/RD 16	28	1.10	17	0.67	M22 X 1.5
30120	UM/RD 20	34	1.34	19	0.75	M25 X 1.5

HEX WRENCH



Part No.	Type
22317	GS 17
22317	GS 17
22325	GS 25
22330	GS 30

"E" NUT



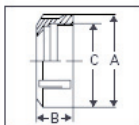
Part No.	Type	A		B		C
		(mm.)	(in.)	(mm.)	(in.)	
30126	UX/RD 16	32	1.26	17.5	0.69	M22 X 1.5
30127	UX/RD 20	35	1.38	18.5	0.73	M25 X 1.5
30125	UM/RD 25	42	1.65	20	0.79	M32 X 1.5
30132	UM/RD 32	50	1.97	22	0.87	M40 X 1.5
30140	UM/RD 40	63	2.48	25	0.98	M50 X 1.5
30150	UM/RD 50	78	2.07	35	1.38	M64 X 2

"E" WRENCH



Part No.	Type
22116	E 16
22120	E 20
22125	E 25
22132	E 32
22140	E 40
22150	E 50

BALL-BEARING NUTS



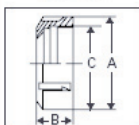
Part No.	Type	A		B		C
		(mm.)	(in.)	(mm.)	(in.)	
30216	KM/RD 16	29	1.14	17.5	0.69	M22 X 1.5
30220	KM/RD 20	34	1.34	18.5	0.73	M25 X 1.5
30225	KM/RD 25	42	1.65	20	0.79	M32 X 1.5
30232	KM/RD 32	50	1.97	22	0.87	M40 X 1.5
30240	KM/RD 40	63	2.48	25	0.98	M50 X 1.5
30250	KM/RD 50	78	3.07	35	1.38	M64 X 2

"E" WRENCH



Part No.	Type
22125	E 25
22132	E 32
22140	E 40
22150	E 50

HIGH-SPEED NUTS



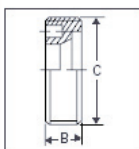
Part No.	Type	A		B		C
		(mm.)	(in.)	(mm.)	(in.)	
30716	HS/RD 16	30	1.18	17	0.67	M22 X 1.5
30720	HS/RD 20	34	1.34	19	0.75	M25 X 1.5
30725	HS/RD 25	42	1.65	20	0.79	M32 X 1.5
30732	HS/RD 32	50	1.97	22.3	0.87	M40 X 1.5
30740	HS/RD 40	63	2.48	25.3	1.00	M50 X 1.5

"E" WRENCH



Part No.	Type
22125	E 25
22132	E 32
22140	E 40

INTERNAL FIT NUTS



Part No.	Type	A		B		C
		(mm.)	(in.)	(mm.)	(in.)	
0035211	RD 11 A	—	—	8	0.32	M18 X 1
0035216	RD 16 A	—	—	8	0.32	M24 X 1
0035220	RD 20 A	—	—	11	0.43	M28 X 1.5
0035225	RD 25 A	—	—	12.5	0.49	M32 X 1.5
0035232	RD 32 A	—	—	14	0.55	M40 X 1.5

IF WRENCH



Part No.	Type
35443	RD 11 A
35443	RD 16 A
35443	RD 20 A
35444	RD 25 A
35444	RD 32 A

Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

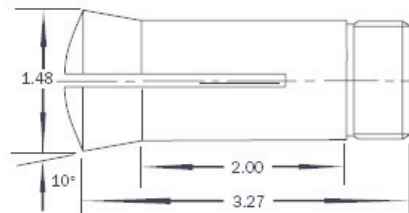


CENTAUR
PRECISION TOOLS INC.
An ISO 9001:2000 Certified Company

5C ROUND COLLETS — INCH SIZES



- Hardened and ground
- External thread = 1.234 x 20 RH
- Internal thread = 1.047 x 24 RH



Part No.	Size	Part No.	Size	Part No.	Size	Part No.	Size
5CR04	1/16"	5CR21	21/64"	5CR37	37/64"	5CR53	53/64"
5CR05	5/64"	5CR22	11/32"	5CR38	19/32"	5CR54	27/32"
5CR06	3/32"	5CR23	23/64"	5CR39	39/64"	5CR55	55/64"
5CR07	7/64"	5CR24	3/8"	5CR40	5/8"	5CR56	7/8"
5CR08	1/8"	5CR25	25/64"	5CR41	41/64"	5CR57	57/64"
5CR09	9/64"	5CR26	13/32"	5CR42	21/32"	5CR58	29/32"
5CR10	5/32"	5CR27	27/64"	5CR43	43/64"	5CR59	59/64"
5CR11	11/64"	5CR28	7/16"	5CR44	11/16"	5CR60	15/16"
5CR12	3/16"	5CR29	29/64"	5CR45	45/64"	5CR61	61/64"
5CR13	13/64"	5CR30	15/32"	5CR46	23/32"	5CR62	31/32"
5CR14	7/32"	5CR31	31/64"	5CR47	47/64"	5CR63	63/64"
5CR15	15/64"	5CR32	1/2"	5CR48	3/4"	5CR64	1"
5CR16	1/4"	5CR33	33/64"	5CR49	49/64"	5CR65	1-1/64"
5CR17	17/64"	5CR34	17/32"	5CR50	25/32"	5CR66	1-1/32"
5CR18	9/32"	5CR35	35/64"	5CR51	51/64"	5CR67	1-3/64"
5CR19	19/64"	5CR36	9/16"	5CR52	13/16"	5CR68	1-1/16"
5CR20	5/16"						

5C COLLET SETS — INCH SIZES

Part No.	Description	Part No.	Description
5CRS07	7 Pc. Set — 1/4 - 1" in 1/8" Incr.	5CRS33	33 Pc. Set — 1/16 - 1-1/16" in 1/32" Incr.
5CRS15	15 Pc. Set — 1/8 - 1" in 1/16" Incr.	5CRS65	65 Pc. Set — 1/16 - 1-1/16" in 1/64" Incr.
5CRS17	17 Pc. Set — 1/16 - 1-1/16" in 1/16" Incr.		

Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

ACCESSORIES

5C Collets



5C ROUND COLLETS — METRIC SIZES

Part No.	Size	Part No.	Size	Part No.	Size	Part No.	Size
5CRM03	3mm	5CRM09	9mm	5CRM15	15mm	5CRM21	21mm
5CRM04	4mm	5CRM10	10mm	5CRM16	16mm	5CRM22	22mm
5CRM05	5mm	5CRM11	11mm	5CRM17	17mm	5CRM23	23mm
5CRM06	6mm	5CRM12	12mm	5CRM18	18mm	5CRM24	24mm
5CRM07	7mm	5CRM13	13mm	5CRM19	19mm	5CRM25	25mm
5CRM08	8mm	5CRM14	14mm	5CRM20	20mm	5CRM26	26mm

5C HEX COLLETS

Part No.	Size	Part No.	Size	Part No.	Size	Part No.	Size
5CH08	1/8"	5CH24	3/8"	5CH36	9/16"	5CH48	3/4"
5CH12	3/16"	5CH28	7/16"	5CH40	5/8"	5CH52	13/16"
5CH16	1/4"	5CH32	1/2"	5CH44	11/16"	5CH56	7/8"
5CH20	5/16"						

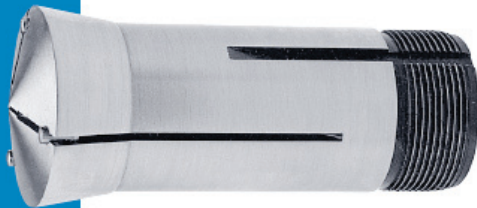
5C SQUARE COLLETS

Part No.	Size	Part No.	Size	Part No.	Size	Part No.	Size
5CS08	1/8"	5CS20	5/16"	5CS32	1/2"	5CS40	5/8"
5CS12	3/16"	5CS24	3/8"	5CS36	9/16"	5CS44	11/16"
5CS16	1/4"	5CS28	7/16"				

Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

5C Collets & Accessories

5C EMERGENCY COLLET



Part No.	Description
5CEM	5C Emergency Collet With Pins

5C STEP COLLET



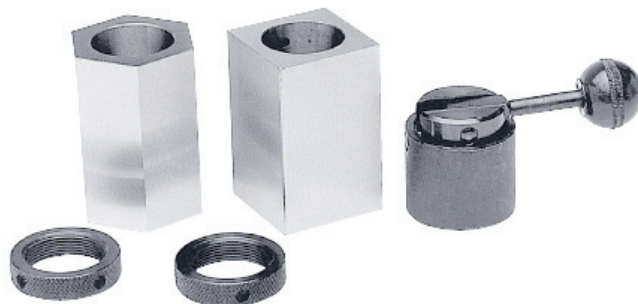
Part No.	Description
5CST2	2" 5C Step Collet
5CST3	3" 5C Step Collet
5CST4	4" 5C Step Collet
5CST5	5" 5C Step Collet
5CST6	6" 5C Step Collet

5C COLLET ADJUSTABLE BACKSTOP



Part No.	Description
5CABS	Adjustable Backstop For 5C Collets

5C COLLET HOLDER SET



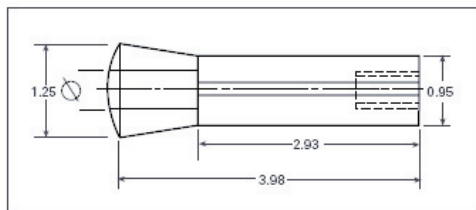
Part No.	Description
5CCHSET	5C Collet Holder Set With Hex, Square and Lever
5CHCH	Hex 5C Collet Holder
5CSCH	Square 5C Collet Holder
5CQAL	Quick-Action Lever For 5C Collet Holders

Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com

CENTAUR
PRECISION TOOLS INC.
An ISO 9001:2000 Certified Company



R8 COLLETS — INCH SIZES



Part No.	Size	Part No.	Size	Part No.	Size	Part No.	Size
R802	1/16"	R808	1/4"	R814	7/16"	R820	5/8"
R803	3/32"	R809	9/32"	R815	15/32"	R821	21/32"
R804	1/8"	R810	5/16"	R816	1/2"	R822	11/16"
R805	5/32"	R811	11/32"	R817	17/32"	R823	23/32"
R806	3/16"	R812	3/8"	R818	9/16"	R824	3/4"
R807	7/32"	R813	13/32"	R819	19/32"	R828	7/8"

R8 COLLET SETS — INCH SIZES

Part No.	Description	Part No.	Description
R8S06	6 Pc. Set — 1/8 - 3/4" in 1/8" Incr.	R8S23	23 Pc. Set — 1/16 - 3/4" in 1/32" Incr.
R8S11	11 Pc. Set — 1/8 - 3/4" in 1/16" Incr.		

R8 COLLETS — METRIC SIZES

Part No.	Size	Part No.	Size	Part No.	Size	Part No.	Size
R8M03	3mm	R8M08	8mm	R8M13	13mm	R8M18	18mm
R8M04	4mm	R8M09	9mm	R8M14	14mm	R8M19	19mm
R8M05	5mm	R8M10	10mm	R8M15	15mm	R8M20	20mm
R8M06	6mm	R8M11	11mm	R8M16	16mm	R8M21	21mm
R8M07	7mm	R8M12	12mm	R8M17	17mm	R8M22	22mm

Call (866) 395-4438 Toll Free to Order or
Fax your Order to (440) 953-9209
www.kebkollets.com