SPEEDGRIP
CHUCK CO.

Standard Chucking Mechanisms

PRODUCTS & SPECIFICATIONS

AHB
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COMPLETE METALWORKING SOLUTIONS

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SPG1008 RR312

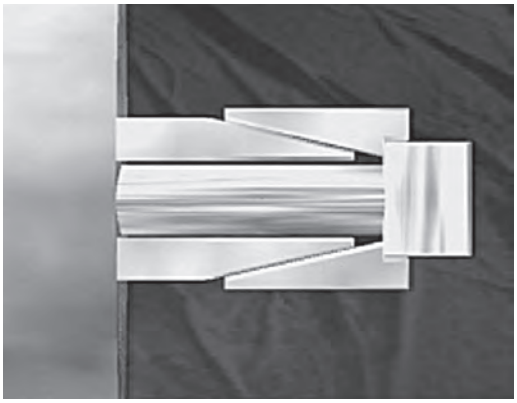
SPEEDGRIP STANDARD CHUCKING MECHANISMS

SPEEDGRIP STANDARD CHUCKING MECHANISMS

Quality crafted, cost efficient, and capable, Speedgrip Chuck has been in the business of manufacturing precision workholding products for over fifty years. Although we have often been copied, we have not been equaled in the quality, cost efficiency or capability that our mechanisms offer to customers. The backbone of our success has been our standard I.D. chucking components which have served as a trade mark to the machine tool industry since 1948. Today, more than ever, Speedgrip standards are assisting customers in being more productive in a very competitive world with the ability to address a broader range of applications and provide solid workholding solutions.

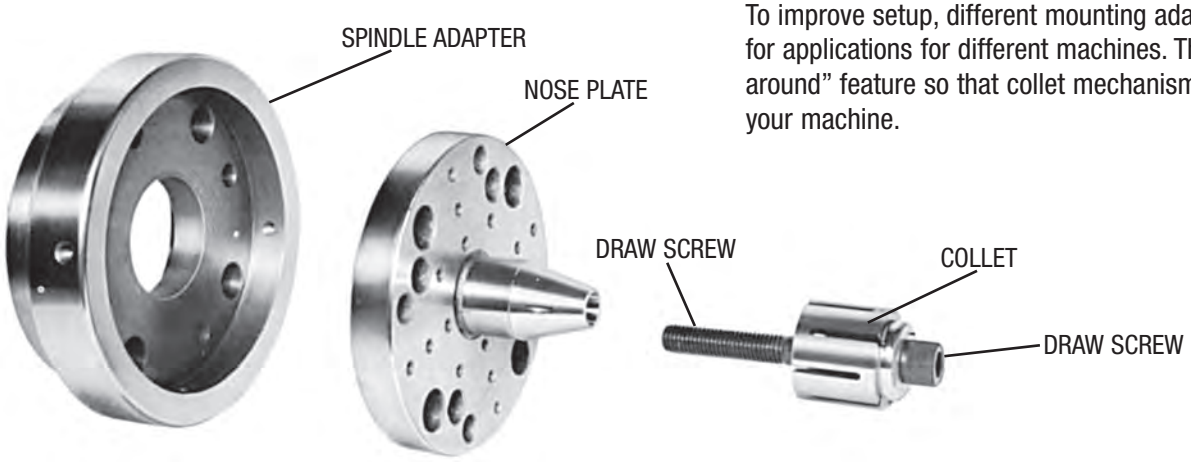
STANDARD CHUCKING COMPONENTS

Speedgrip manufactures a full line of standard I.D. Collet Chucks and Locators for manual or drawbar actuation and Between Center Mandrels, with many items in stock. Various Single Taper, Double Taper and Reverse Taper collets in various sizes from .500˝ to 17˝ diameter are standard with special sizes and configurations available by quote. A broader range of applications provide solid workholding solutions.



HOW THEY WORK

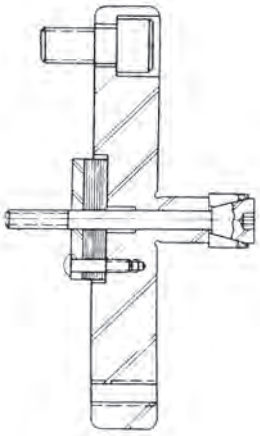
By drawing a slotted sleeve over a tapered nose, even expansion occurs on the grip diameter while, at the same time, “pull back” action of the mechanism moves the part back against its locating surface for a strong grip and accurate positioning. With components ground to high tolerances, .0005 repeatability can be achieved.



To improve setup, different mounting adapters are available for applications for different machines. These offer a “stir-around” feature so that collet mechanisms can be trued to your machine.

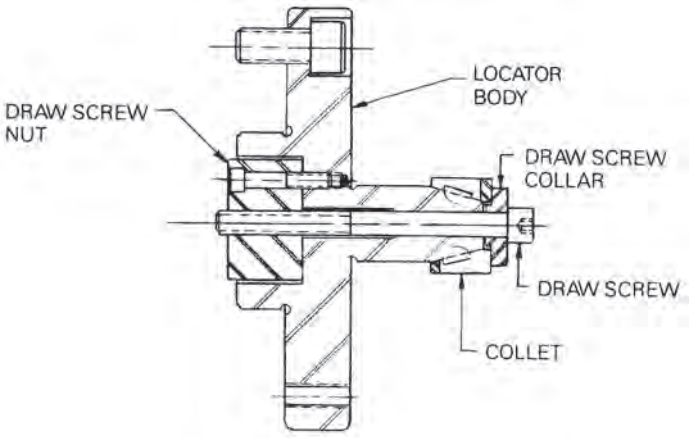
Phone: (574) 294-1506 Fax: (574) 294-2465

QUALITY CRAFTED, COST EFFICIENT AND CAPABLE . . .



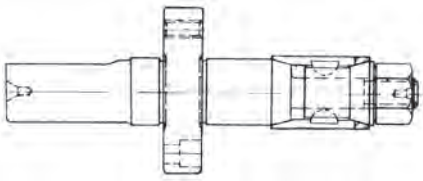
STANDARD CHUCKING ASSEMBLY

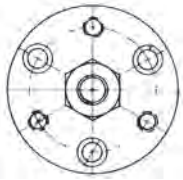
For use with spindle adapters which provide the "stir-around" feature for accuracy. Supplied for manual or drawbar actuation and applicable to turning, milling, grinding and many other uses.



LOCATOR ASSEMBLY

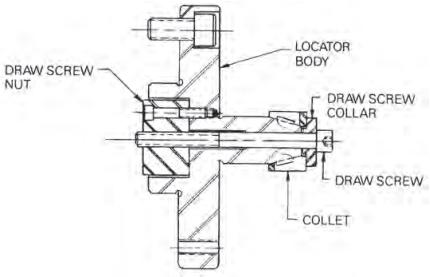
For use as a fixture component with its ground pilot, for position accuracy. Designed for manual or drawbar actuation on subplates, angle plates and tombstones.





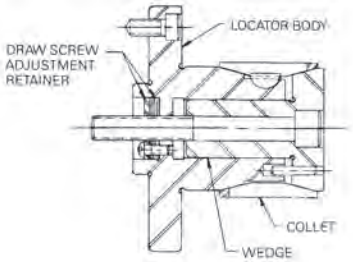
BETWEEN CENTER MANDREL ASSEMBLIES

Primarily for between center workholding applications but adaptable to hobbing, inspection and other applications.



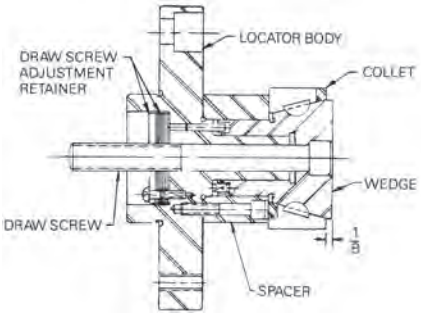
SINGLE TAPERS

Provide parts with radial grip force while pulling them back against a locating surface for zero position accuracy. Ideal for bores with longer diameter to length ratios, stepped bores or blind bores.



DOUBLE TAPERS

Ideal for bores with longer diameter to length ratios, stepped bores, or blind bores where radial grip force and "pull-back" action for locating the part is required.



REVERSE TAPERS

For parts that require "dead length" positioning or parts that may be subject to distortion, this taper only provides radial grip force.

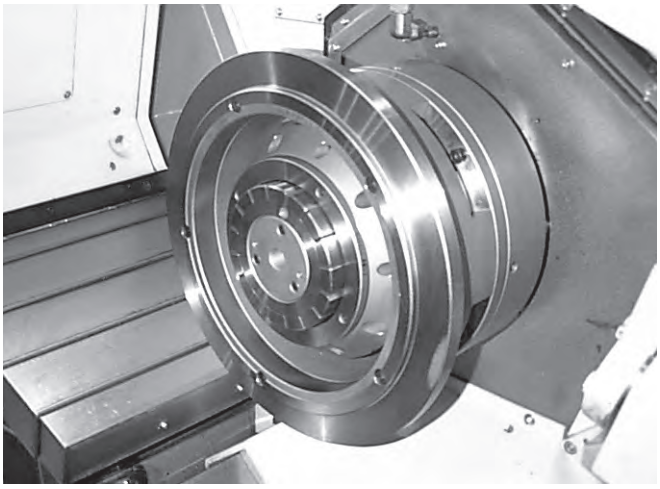
STANDARD CHUCKING APPLICATIONS

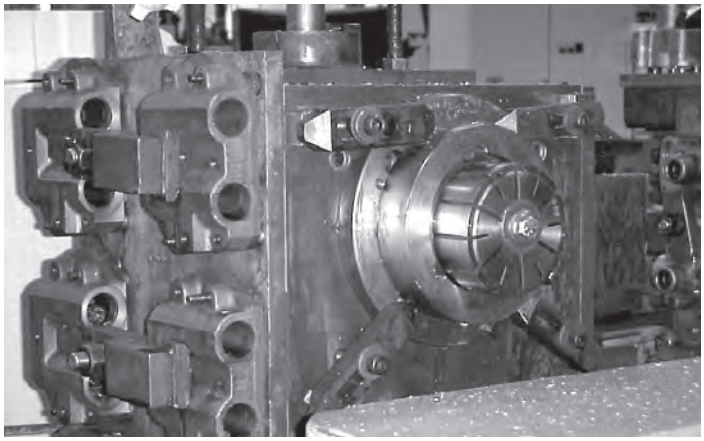
APPLICATION & USE

Speedgrip collet mechanisms are used in a broad range of applications. Once thought of for just turning operations, these are used today throughout the shop on various types of production and inspection equipment. Broad size ranges, quick changeover, and .0005″ repeatability make Speedgrip a fundamental consideration in second operation machining processes.

TURNING

Speedgrip I.D. Collet Systems are adaptable to most lathes with various spindle adapters. Part bores can range from .500″ to 17″. The part shown is an aircraft part with an 18″ diameter being machined on a Mazak twin headed machine.



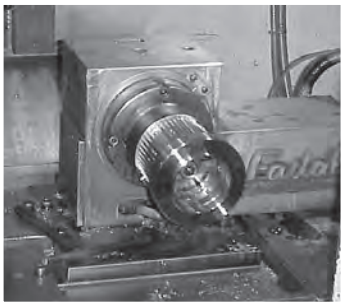


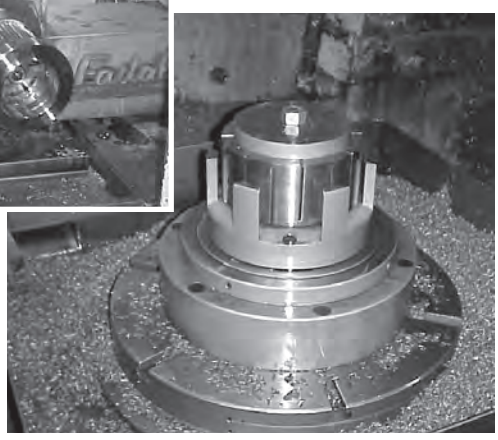
VERTICAL/HORIZONTAL MACHINING CENTERS

When fixtures are going to be used, components can be easily adapted to a pallet, subplate or tombstone. Speedgrip mechanisms can provide better centralization, eliminate cumbersome clamping and offer quicker part changeover.

MILLING & DRILLING

Speedgrip standards are not just for turning. Adaptability is important. Applications such as milling and drilling are common and mounting to either the table direct, a rotary table, or an indexer, as shown here on this Fadal machining center can easily be accomplished. Stationary Actuators are also available to automate your load/unload cycle.





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STANDARD CHUCKING APPLICATIONS

GEAR MACHINING

If your hobbing, shaping, broaching or any other gear application where you either need to grip on the bore or you need to grip on the pitch diameter, Speedgrip's standard chucks, arbors, and collets may offer you a cost effective solution. Users of Gleason, Leibherr, Barber Coleman, and other equipment have found this out.

BALANCING

This operation is becoming a bigger part of the Tier 2 shops every day. When these machines are purchased, owners find that Speedgrip Standards are what is being supplied from builders such as American Hofmann, Hines, Balance Technologies, Raven Engineering, Schenck and others.

OTHER APPLICATIONS

INSPECTION

Speedgrip Locators are adaptable to CMM's and inspection fixtures. Between Center Mandrels can be used for gear checking.

GRINDING

Speedgrip components can be mounted to the workhead and can use either manual or automated actuation. Between Center Mandrels are also available.

ALSO AVAILABLE, AIR AND HYDRAULIC ACTUATORS

When turning is not the issue, but milling, drilling, grinding or fixturing is, Speedgrip manufactures a line of actuators that can automate your chucking operation. Designed with a spring actuated piston for holding the part, and porting for air or hydraulic release, Speedgrip actuators are the answer to simple set-up needs.

INDEX

Speedgrip standard workholding mechanisms are designed to give the customer a satisfactory machining solution and a profitable return on their work. To that end we offer our customers the opportunity to review their applications with our engineering department so that tooling supplied works the first time and every time. To assist with this, we ask that part prints and machine and operation information be supplied to us for proper review. This will assist in doing layouts, making specific recommendations and quoting prices to address your workholding needs.

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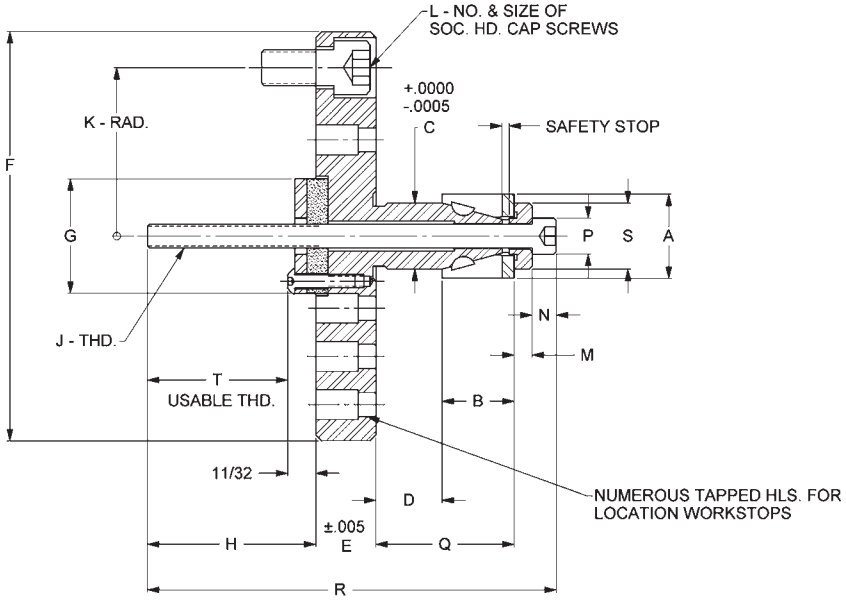
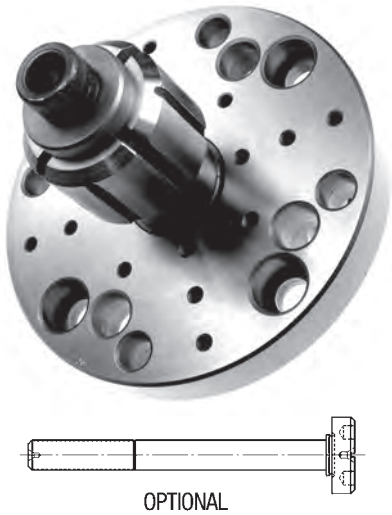
STANDARD SINGLE TAPER CHUCKS

For Drawbar Operation

STN-X-DBXX





OPTIONAL
DRAW SCREW FOR USE WITH THIS COLLET

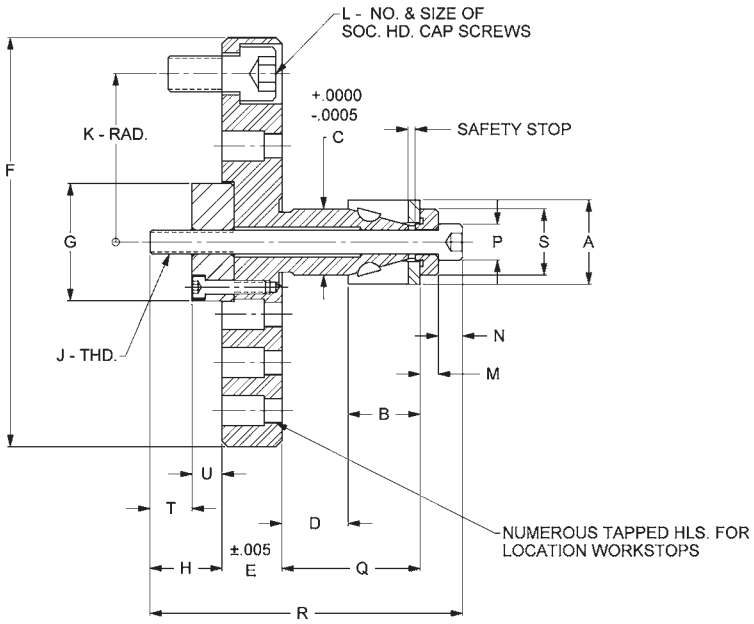
NOTE: REPEATABILITY GUARANTEED WITHIN .0005″ MAX.

CHUCK NO.	A		B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T
	MIN.	MAX.																	
STN-0-DB4	.500	1.000	.375	.438	.500	.625	4.250	1.219	1.125	#10-32	1.750	(3).375-16	.125	.188	.313	.875	2.750	.438	.781
STN-0-DB6	.500	1.000	.375	.438	.500	.875	6.250	1.813	.875	#10-32	2.500	(4).500-13	.125	.188	.313	.875	2.750	.437	.531
STN-.5-DB4	.625	1.250	.563	.563	.563	.625	4.250	1.219	.875	.250-20	1.750	(3).375-16	.125	.250	.375	1.125	2.750	.563	.531
STN-.5-DB6	.625	1.250	.563	.563	.563	.875	6.250	1.813	.875	.250-20	2.500	(4).500-13	.125	.250	.375	1.125	3.000	.563	.531
STN-1-DB4	.750	1.500	.750	.688	.688	.625	4.250	1.219	1.750	.250-20	1.750	(3).375-16	.188	.250	.375	1.438	4.000	.688	1.000
STN-1-DB6	.750	1.500	.750	.688	.688	.875	6.250	1.813	1.500	.250-20	2.500	(4).500-13	.188	.250	.375	1.438	4.000	.688	1.000
STN-2-DB4	.938	2.000	.875	.875	.875	.625	4.250	1.563	1.438	.375-16	1.750	(3).375-16	.188	.375	.563	1.750	4.000	.875	1.094
STN-2-DB6	.938	2.000	.875	.875	.875	.875	6.250	1.813	1.187	.375-16	2.500	(4).500-13	.188	.375	.563	1.750	4.000	.875	.875
STN-2-DB10	.938	2.000	.875	.875	.875	1.000	9.875	1.813	1.563	.375-16	3.750	(4).625-11	.188	.375	.563	1.750	4.500	.875	1.219
STN-2.5-DB4	1.375	3.000	1.250	1.250	1.125	.625	4.250	1.563	1.750	.500-13	1.750	(3).375-16	.250	.500	.750	2.375	5.000	1.250	1.406
STN-2.5-DB6	1.375	3.000	1.250	1.250	1.125	.875	6.250	1.813	1.500	.500-13	2.500	(4).500-13	.250	.500	.750	2.375	5.000	1.250	1.156
STN-2.5-DB10	1.375	3.000	1.250	1.250	1.125	1.000	9.875	1.813	1.375	.500-13	3.750	(4).625-11	.250	.500	.750	2.375	5.000	1.250	1.031
STN-3-DB4	1.625	4.250	1.500	1.500	1.125	.625	4.250	1.563	1.938	.625-11	1.750	(3).375-16	.313	.625	.313	2.625	5.500	1.563	1.594
STN-3-DB6	1.625	4.250	1.500	1.500	1.125	.875	6.250	1.813	1.688	.625-11	2.500	(4).500-13	.313	.625	.938	2.625	5.500	1.563	1.344
STN-3-DB10	1.625	4.250	1.500	1.500	1.125	1.000	9.875	1.813	1.563	.625-11	3.750	(4).625-11	.313	.625	.938	2.625	5.500	1.563	1.219
STN-3.5-DB4	2.375	5.500	2.000	2.250	1.125	.625	4.250	1..813	2.875	.750-16	1.750	(3).375-16	.375	.750	1.125	3.125	7.000	2.250	2.531
STN-3.5-DB6	2.375	5.500	2.000	2.250	1.125	.875	6.250	1.813	2.625	.750-16	2.500	(4).500-13	.375	.750	1.125	3.125	7.000	2.250	2.281
STN-3.5-DB10	2.375	5.500	2.000	2.250	1.125	1.000	9.875	1.813	2.500	.750-16	3.750	(4).625-11	.375	.750	1.125	3.125	7.000	2.250	2.156
STN-3.5-DB13	2.375	5.500	2.000	2.250	1.125	1.000	12.875	1.813	2.500	.750-16	4.875	(4).625-11	.375	.750	1.125	3.125	7.000	2.250	2.156
STN-4-DB6	2.875	7.000	2.250	2.750	1.125	.875	6.250	1.813	2.281	.750-16	2.500	(4).500-13	.469	.750	1.125	3.375	7.000	2.750	1.9380
STN-4-DB10	2.875	7.000	2.250	2.750	1.125	1.000	9.875	1.813	2.156	.750-16	3.750	(4).625-11	.469	.750	1.125	3.375	7.000	2.750	1.813
STN-4-DB13	2.875	7.000	2.250	2.750	1.125	1.000	12.875	1.813	2.183	.750-16	4.875	(4).625-11	.469	.750	1.125	3.375	7.000	2.750	1.813
STN-4.5-DB6	4.000	10.000	2.750	3.750	1.125	.875	6.250	1.813	2.750	.750-16	2.500	(4).500-13	.500	.750	1.125	3.875	8.000	3.750	2.406
STN-4.5-DB10	4.000	10.000	2.750	3.750	1.125	1.000	9.875	1.813	2.625	.750-16	3.750	(4).625-11	.500	.750	1.125	3.875	8.000	3.750	2.281
STN-4.5-DB13	4.000	10.000	2.750	3.750	1.125	1.000	12.875	1.813	2.625	.750-16	4.875	(4).625-11	.500	.750	1.125	3.875	8.000	3.750	2.281
STN-5-DB10	4.750	11.000	3.250	4.500	1.125	1.000	9.875	1.813	1.938	.750-16	3.750	(4).625-11	.688	.750	1.125	4.375	8.000	4.500	1.594
STN-5-DB13	4.750	11.000	3.250	4.500	1.125	1.000	12.875	1.813	1.938	.750-16	4.875	(4).625-11	.688	.750	1.125	4.375	8.000	4.500	1.594
STN-6-DB10	6.250	13.000	3.250	6.000	1.125	1.000	9.875	2.250	1.875	1.000-8	3.750	(4).625-11	.750	1.000	1.500	4.375	8.000	6.000	1.531
STN-6-DB13	6.250	13.000	3.250	6.000	1.125	1.000	12.875	2.250	1.875	1.000-8	4.875	(4).625-11	.750	1.000	1.500	4.375	8.000	6.000	1.531
STN-8-DB13	8.250	17.000	3.250	6.000	1.125	1.000	12.875	2.250	1.625	1.000-8	4.875	(4).625-11	1.000	1.000	1.500	4.375	8.000	8.000	1.281

NOTE: No. 0 and .5 CHUCKS DO NOT HAVE WOODRUFF KEYS.
*ALTERATIONS TO STANDARD DIMENSIONS ARE AVAILABLE AND ARE QUOTED AS SPECIAL.

CT-710

STN-X-MXX



NOTE: REPEATABILITY GUARANTEED WITHIN .0005″ MAX.

CHUCK NO.	A MIN.	A MAX.	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U
STN-0-M4	.500	1.000	.375	.438	.500	.625	4.250	1.219	.375	#10-32	1.750	(3).375-16	.125	.188	.313	.875	2.75	.438	—	.375
STN-0-M6	.500	1.000	.375	.438	.500	.875	6.250	1.813	.531	#10-32	2.500	(4).500-13	.125	.188	.313	.875	2.75	.438	—	.531
STN-.5-M4	.625	1.250	.563	.563	.563	.625	4.250	1.219	.375	.250-20	1.750	(3).375-16	.125	.250	.375	1.125	2.500	.563	—	.375
STN-.5-M6	.625	1.250	.563	.563	.563	.875	6.250	1.813	.531	.250-20	2.500	(4).500-13	.125	.250	.375	1.125	2.75	.563	—	.531
STN-1-M4	.750	1.500	.750	.688	.688	.625	4.250	1.219	.375	.250-20	1.750	(3).375-16	.188	.250	.375	1.438	3.000	.688	—	.375
STN-1-M6	.750	1.500	.750	.688	.688	.875	6.250	1.813	.531	.250-20	2.500	(4).500-13	.188	.250	.563	1.438	3.000	.688	—	.531
STN-2-M4	.938	2.000	.875	.875	.875	.625	4.250	1.563	.625	.375-16	1.750	(3).375-16	.188	.375	.563	1.750	3.250	.875	—	.625
STN-2-M6	.938	2.000	.875	.875	.875	.875	6.250	1.813	.469	.375-16	2.500	(4).500-13	.188	.375	.563	1.750	3.500	.875	—	.469
STN-2-M10	.938	2.000	.875	.875	.875	1.000	9.875	1.813	.569	.375-16	3.750	(4).625-11	.188	.375	.563	1.750	4.000	.875	.100	.469
STN-2.5-M4	1.375	3.000	1.250	1.250	1.125	.625	4.250	1.563	.750	.500-13	1.750	(3).375-16	.250	.500	.750	2.375	4.000	1.250	.125	.625
STN-2.5-M6	1.375	3.000	1.250	1.250	1.125	.875	6.25	1.813	.750	.500-13	2.500	(4).500-13	.250	.500	.750	2.375	4.500	1.250	.156	.594
STN-2.5-M10	1.375	3.000	1.250	1.250	1.125	1.000	9.875	1.813	.594	.500-13	3.750	(4).625-11	.250	.500	.750	2.375	4.500	1.250	—	.594
STN-3-M4	1.625	4.250	1.500	1.500	1.125	.625	4.250	1.563	.938	.625-11	1.750	(3).375-16	.313	.625	.938	2.625	4.500	1.563	.313	.625
STN-3-M6	1.625	4.250	1.500	1.500	1.125	.875	6.250	1.813	.688	.625-11	2.500	(4).500-13	.313	.625	.938	2.625	4.500	1.563	.218	.469
STN-3-M10	1.625	4.250	1.500	1.500	1.125	1.000	9.875	1.813	.550	.625-11	3.750	(4).625-11	.313	.625	.938	2.625	5.000	1.563	.081	.469
STN-3.5-M4	2.375	5.500	2.000	2.250	1.125	.625	4.250	1.813	.885	.750-16	1.750	(3).375-16	.375	.750	1.125	3.125	5.500	2.250	.385	.500
STN-3.5-M6	2.375	5.500	2.000	2.250	1.125	.875	6.250	1.813	.625	.750-16	2.500	(4).500-13	.375	.750	1.125	3.125	5.500	2.250	.156	.469
STN-3.5-M10	2.375	5.500	2.000	2.250	1.125	1.000	9.875	1.813	1.000	.750-16	3.750	(4).625-11	.375	.750	1.125	3.125	5.500	2.250	.531	.469
STN-3.5-M13	2.375	5.500	2.000	2.250	1.125	1.000	12.875	1.813	1.000	.750-16	4.875	(4).625-11	.375	.750	1.125	3.125	5.500	2.250	.531	.469
STN-4-M6	2.875	7.000	2.250	2.750	1.125	.875	6.250	1.813	.781	.750-16	2.500	(4).500-13	.469	.750	1.125	3.375	5.500	2.75	.312	.469
STN-4-M10	2.875	7.000	2.250	2.750	1.125	1.000	9.875	1.813	.656	.750-16	3.750	(4).625-11	.469	.750	1.125	3.375	5.500	2.750	.187	.469
STN-4-M13	2.875	7.000	2.250	3.750	1.125	1.000	12.875	1.813	.656	.750-16	4.875	(4).625-11	.469	.750	1.125	3.375	5.500	2.750	.187	.469
STN-4.5-M6	4.000	10.000	2.750	3.750	1.125	.875	6.250	1.813	.750	.750-16	2.500	(4).500-13	.500	.750	1.125	3.875	7.000	3.750	.281	.469
STN-4.5-M10	4.000	10.000	2.750	3.750	1.125	1.000	9.875	1.813	.625	.750-16	3.75	(4).625-11	.500	.750	1.125	3.875	7.000	3.750	.156	.469
STN-4.5-M13	4.000	10.000	2.750	3.750	1.125	1.000	12.875	1.813	.625	.750-16	4.875	(4).625-11	.500	.750	1.125	3.875	7.000	3.375	.125	.500
STN-5-M10	4.750	11.000	3.250	4.500	1.125	1.000	9.875	1.813	.938	.750-16	3.750	(4).625-11	.688	.750	1.125	4.375	7.000	4.500	.469	.469
STN-5-M13	4.750	11.000	3.250	4.500	1.125	1.000	12.875	1.813	.938	.750-16	4.875	(4).625-11	.688	.750	1.125	4.375	7.000	4.500	.469	.469
STN-6-M10	6.250	13.000	3.250	6.000	1.125	1.000	9.875	2.250	.875	1.000-8	3.750	(4).625-11	.750	1.000	1.500	4.375	8.000	6.000	.156	.719
STN-6-M13	6.250	13.000	3.250	6.000	1.125	1.000	12.875	2.250	.875	1.000-8	4.875	(4).625-11	.750	1.000	1.500	4.375	8.000	6.000	.156	.719
STN-8-M13	8.250	17.000	3.250	8.000	1.125	1.000	12.875	2.250	1.125	1.000-8	4.875	(4).625-11	1.000	1.000	1.500	4.375	8.000	8.000	.406	.719

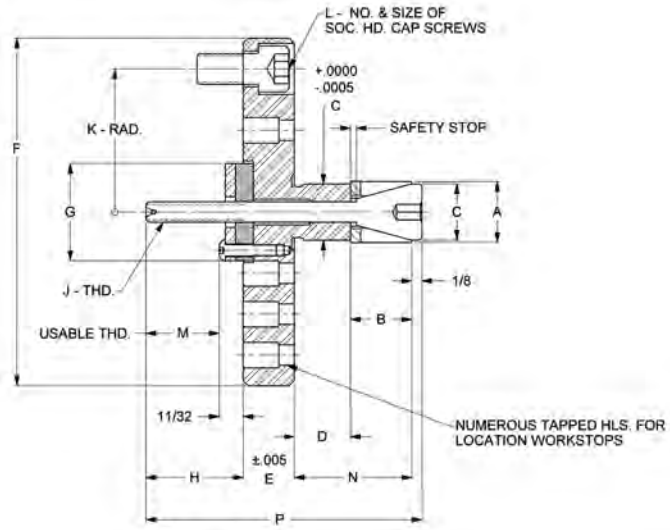
NOTE: No. 0 and .5 CHUCKS DO NOT HAVE WOODRUFF KEYS.

*ALTERATIONS TO STANDARD DIMENSIONS ARE AVAILABLE AND ARE QUOTED AS SPECIAL.

CT-709

STANDARD REVERSE TAPER CHUCKS

For Draw Bar Operation



RTN-X-DBXX

NOTE:
MANUALLY OPERATED CHUCKS CAN BE FURNISHED ON RTN-4.5-DB6 THRU RTN-8-DB13 SIZES

Where pullback action is not desirable with a part, due to thin cross sections that may allow warping, Reverse Taper Chucks provide dead length positioning with radial grip force only. These chucks can also be used with parts that have shallow or blind bores where the head of the drawscrew cannot interfere with the grip area or cutting tool. Please consult the factory when considering Reverse Taper Chucks due to the grip force requirements of various parts and processes.

NOTE: REPEATABILITY GUARANTEED WITHIN .001″ MAX.

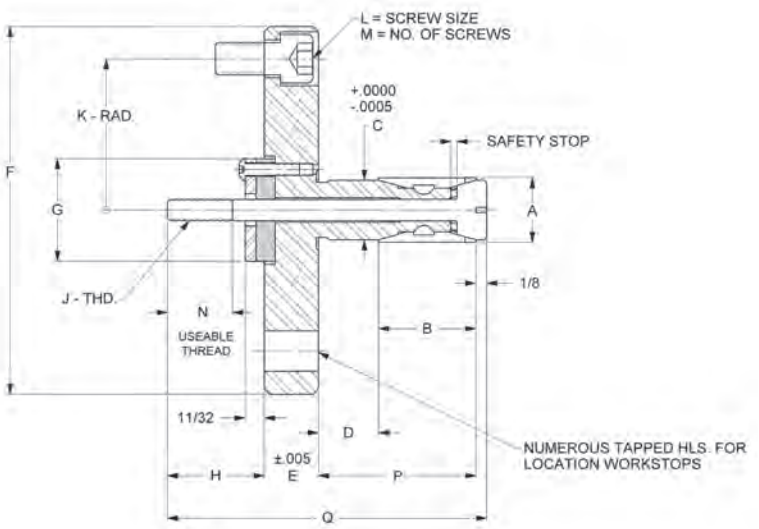
CHUCK NO.	A		B	C	D	E	F	G	H	J	K	L	M	N	P
	MIN.	MAX.													
RTN-0-DB4	.500	1.000	.375	.438	.500	.625	4.25	1.219	1.125	#10-32	1.750	(3).375-16	.831	.875	2.75
RTN-0-DB6	.500	1.000	.375	.438	.500	.875	6.25	1.813	.875	#10-32	2.500	(4).500-13	.531	.875	2.75
RTN-.5-DB4	.625	1.250	.563	.563	.563	.625	4.25	1.219	1.250	.25-20	1.750	(3).375-16	.938	1.125	3.125
RTN-.5-DB6	.625	1.250	.563	.563	.563	.875	6.250	1.813	1.000	.250-20	2.500	(4).500-13	.656	1.125	3.125
RTN-1-DB4	.750	1.500	.750	.688	.688	.625	4.250	1.219	1.188	.250-20	1.750	(3).375-16	.875	1.438	3.375
RTN-1-DB6	.750	1.500	.750	.688	.688	.875	6.250	1.813	.938	.250-20	2.500	(4).500-13	.594	1.438	3.375
RTN-2-DB4	.938	2.000	.875	.875	.875	.625	4.250	1.563	1.500	.375-16	1.750	(3).375-16	1.156	1.750	4.000
RTN-2-DB6	.938	2.000	.875	.875	.875	.875	6.250	1.813	1.250	.375-16	2.500	(4).500-13	.906	1.750	4.000
RTN-2-DB10	.938	2.000	.875	.875	.875	1.000	9.875	1.813	1.125	.375-16	3.750	(4).625-11	.813	1.750	4.000
RTN-2.5-DB4	1.375	3.000	1.250	1.250	1.125	.625	4.250	1.563	1.625	.500-13	1.750	(3).375-16	1.281	2.375	4.750
RTN-2.5-DB6	1.375	3.000	1.250	1.250	1.125	.875	6.250	1.813	1.375	.500-13	2.500	(4).500-13	1.031	2.375	4.750
RTN-2.5-DB10	1.375	3.000	1.250	1.250	1.125	1.000	9.875	1.813	1.250	.500-13	3.750	(4).625-11	.906	2.375	4.750
RTN-3-DB4	1.625	4.250	1.500	1.500	1.125	.625	4.250	1.563	1.750	.625-11	1.750	(3).375-16	1.406	2.625	5.125
RTN-3-DB6	1.625	4.250	1.500	1.500	1.125	.875	6.250	1.813	1.500	.625-11	2.500	(4).500-13	1.156	2.625	5.125
RTN-3-DB10	1.625	4.250	1.500	1.500	1.125	1.000	9.875	1.813	1.375	.625-11	3.750	(4).625-11	1.031	2.625	5.125
RTN-3.5-DB4	2.375	5.500	2.000	2.250	1.125	.625	4.250	1.813	2.125	.750-16	1.750	(3).375-16	1.750	3.125	6.000
RTN-3.5-DB6	2.375	5.500	2.000	2.250	1.125	.875	6.250	1.813	1.875	.750-16	2.500	(4).500-13	1.531	3.125	6.000
RTN-3.5-DB10	2.375	5.500	2.000	2.250	1.125	1.000	9.875	1.813	1.750	.750-16	3.750	(4).625-11	1.406	3.125	6.000
RTN-3.5-DB13	2.375	5.500	2.000	2.250	1.125	1.000	12.875	1.813	1.750	.750-16	4.875	(4).625-11	1.406	3.125	6.000
RTN-4-DB6	2.875	7.000	2.250	2.750	1.125	.875	6.250	1.813	1.875	.750-16	2.500	(4).500-13	1.531	3.375	6.250
RTN-4-DB10	2.875	7.000	2.250	2.750	1.125	1.000	9.875	1.813	1.750	.750-16	3.750	(4).625-11	1.406	3.375	6.250
RTN-4-DB13	2.875	7.000	2.250	2.750	1.125	1.000	12.875	1.813	1.750	.750-16	4.875	(4).625-11	1.375	3.375	6.250
RTN-4.5-DB6	4.000	10.000	2.750	3.750	1.125	.875	6.250	1.813	2.937	.750-16	2.500	(4).500-13	2.000	3.875	7.750
RTN-4.5-DB10	4.000	10.000	2.750	3.750	1.125	1.000	9.875	1.813	2.813	.750-16	3.750	(4).625-11	2.000	3.875	7.750
RTN-4.5-DB13	4.000	10.000	2.750	3.750	1.125	1.000	12.875	1.813	2.813	.750-16	4.875	(4).625-11	2.000	3.875	7.750
RTN-5-DB10	4.750	11.000	3.250	4.500	1.125	1.000	9.875	1.813	2.250	.750-16	3.750	(4).625-11	1.906	4.375	7.750
RTN-5-DB13	4.750	11.000	3.250	4.500	1.125	1.000	12.875	1.813	2.250	.750-16	4.875	(4).625-11	1.906	4.375	7.750
RTN-6-DB10	6.250	13.000	3.250	6.000	2.125	1.000	9.875	2.250	2.563	1.000-8	3.750	(4).625-11	2.156	5.375	9.000
RTN-6-DB13	6.250	13.000	3.250	6.000	2.125	1.000	12.875	2.250	2.563	1.000-8	4.875	(4).625-11	2.156	5.375	9.000
RTN-8-DB13	8.250	17.000	3.250	8.000	2.125	1.000	12.875	2.250	2.563	1.000-8	4.875	(4).625-11	2.156	5.375	9.000

*ALTERATIONS TO STANDARD DIMENSIONS ARE AVAILABLE AND ARE QUOTED AS SPECIAL.

STANDARD DOUBLE TAPER CHUCKS - Short Series

For Draw Bar Operation

DTNS-X-DBXX



NOTE:
MANUALLY OPERATED CHUCKS CAN BE FURNISHED ON DTNS-4.5-DB6 THRU DTNS-8-DB13 SIZES

NOTE: REPEATABILITY GUARANTEED WITHIN .0005˝ MAX.

CHUCK NO.	SIZE	A		B	C	D	E	F	G	H	J	K	L	M	N	P	Q
		MIN.	MAX.														
DTNS-0-DB4	4.000	.500	1.000	.625	.438	.500	.625	4.250	1.188	1.125	#10-32	1.750	.375-16	3	.750	1.125	3.000
DTNS-0-DB6	6.000	.500	1.000	.625	.438	.500	.875	6.250	1.813	.875	#10-32	2.500	.500-13	4	.231	1.125	3.000
DTNS-.5-DB4	4.000	.625	1.250	.750	.563	.563	.625	4.250	1.188	1.125	.250-20	1.750	.375-16	3	.750	1.313	3.188
DTNS-.5-DB6	6.000	.625	1.250	.750	.563	.563	.875	6.250	1.813	.875	.250-20	2.500	.500-13	4	.563	1.313	3.188
DTNS-1-DB4	4.000	.750	1.500	.875	.688	.688	.625	4.250	1.188	1.125	.250-20	1.750	.375-16	2	.750	1.563	3.438
DTNS-1-DB6	6.000	.750	1.500	.875	.688	.688	.875	6.250	1.813	.875	.250-20	2.500	.500-13	4	.563	1.563	3.438
DTNS-2-DB4	4.000	.938	2.000	1.000	.875	.875	.625	4.250	1.563	1.500	.375-16	1.750	.375-16	3	1.000	1.875	4.125
DTNS-2-DB6	6.000	.938	2.000	1.000	.875	.875	.875	6.250	1.813	1.250	.375-16	2.500	.500-13	4	.906	1.875	4.125
DTNS-2-DB10	10.000	.938	2.000	1.000	.875	.875	1.000	9.875	1.813	1.125	.375-16	3.750	.625-11	4	.812	1.875	4.125
DTNS-2.5-DB4	4.000	1.375	3.000	1.250	1.250	1.125	.625	4.250	1.563	1.750	.500-13	1.750	.375-16	3	1.000	2.375	4.875
DTNS-2.5-DB6	6.000	1.375	3.000	1.250	1.250	1.125	.875	6.250	1.813	1.500	.500-13	2.500	.500-13	4	1.000	2.375	4.875
DTNS-2.5-DB10	10.000	1.375	3.000	1.250	1.250	1.125	1.000	9.875	1.813	1.375	.500-13	3.750	.625-11	4	1.000	2.375	4.875
DTNS-3-DB4	4.000	1.625	4.250	1.625	1.500	1.125	.625	4.250	1.563	2.000	.625-11	1.750	.375-16	3	1.500	2.750	5.500
DTNS-3-DB6	6.000	1.625	4.250	1.625	1.500	1.125	.875	6.250	1.813	1.750	.625-11	2.500	.500-13	4	1.406	2.750	5.500
DTNS-3-DB10	10.000	1.625	4.250	1.625	1.500	1.125	1.000	9.875	1.813	1.625	.625-11	3.750	.625-11	4	1.281	2.750	5.500
DTNS-3.5-DB4	4.000	2.375	5.500	2.000	2.250	1.125	.625	4.250	1.813	2.000	.750-16	1.750	.375-16	3	1.500	3.125	5.875
DTNS-3.5-DB6	6.000	2.375	5.500	2.000	2.250	1.125	.875	6.250	1.813	1.750	.750-16	2.500	.500-13	4	1.406	3.125	5.875
DTNS-3.5-DB10	10.000	2.375	5.500	2.000	2.250	1.125	1.000	9.875	1.813	1.625	.750-16	3.750	.625-11	4	1.281	3.125	5.875
DTNS-3.5-DB13	13.000	2.375	5.500	2.000	2.250	1.125	1.000	12.875	1.813	1.625	.750-16	4.875	.625-11	4	1.281	3.125	5.875
DTNS-4-DB6	6.000	2.875	7.000	2.500	2.750	1.125	.875	6.250	1.813	2.250	.750-16	2.500	.500-13	4	1.906	3.625	6.875
DTNS-4-DB10	10.000	2.875	7.000	2.500	2.750	1.125	1.000	9.875	1.813	2.125	.750-16	3.750	.625-11	4	1.781	3.625	6.875
DTNS-4-DB13	13.000	2.875	7.000	2.500	2.750	1.125	1.000	12.875	1.813	2.125	.750-16	4.875	.625-11	4	1.781	3.625	6.875
DTNS-4.5-DB6	6.000	4.000	10.000	3.000	3.750	1.125	.875	6.250	1.813	2.250	.750-16	2.500	.500-13	4	1.906	4.125	7.375
DTNS-4.5-DB10	10.000	4.000	10.000	3.000	3.750	1.125	1.000	9.875	1.813	2.125	.750-16	3.750	.625-11	4	1.781	4.125	7.375
DTNS-4.5-DB13	13.000	4.000	10.000	3.000	3.750	1.125	1.000	12.875	1.813	2.125	.750-16	4.875	.625-11	4	1.781	4.125	7.375
DTNS-5-DB10	10.000	4.750	11.000	3.500	4.500	1.125	1.000	9.875	1.813	2.125	.750-16	3.750	.625-11	4	1.781	4.625	7.875
DTNS-5-DB13	13.000	4.750	11.000	3.500	4.500	1.125	1.000	12.875	1.813	2.125	.750-16	4.875	.625-11	4	1.781	4.625	7.875
DTNS-6-DB10	10.000	6.250	13.000	4.000	6.000	1.125	1.000	9.875	2.250	2.125	1.000-8	3.750	.625-11	4	1.750	5.125	8.375
DTNS-6-DB13	13.000	6.250	13.000	4.000	6.000	1.125	1.000	12.875	2.250	2.125	1.000-8	4.875	.625-11	4	1.750	5.125	8.375
DTNS-8-DB13	13.000	8.250	17.000	4.500	8.000	1.125	1.000	12.875	2.250	2.125	1.000-8	4.875	.625-11	4	1.750	5.625	8.875

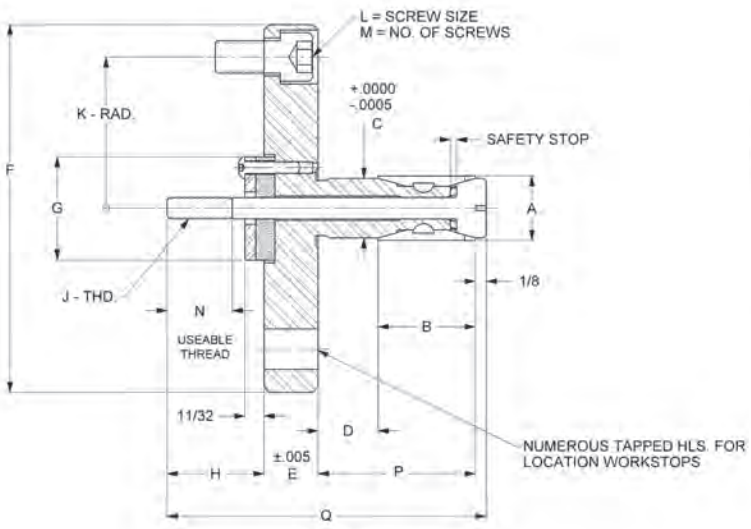
NOTE: No. 0 and .5 CHUCKS DO NOT HAVE WOODRUFF KEYS.
*ALTERATIONS TO STANDARD DIMENSIONS ARE AVAILABLE AND ARE QUOTED AS SPECIAL.

Phone: (574) 294-1506 Fax: (574) 294-2465

STANDARD DOUBLE TAPER CHUCKS - Long Series

For Draw Bar Operation

DTNL-X-DBXX



NOTE:
MANUALLY OPERATED CHUCKS CAN BE FURNISHED ON DTNL-4.5-DB6 THRU DTNL-8-DB13 SIZES

NOTE: REPEATABILITY GUARANTEED WITHIN .0005″ MAX.

CHUCK NO.	SIZE	A MIN.	A MAX.	B	C	D	E	F	G	H	J	K	L	M	N	P	Q
DTNL-0-DB4	4.000	.500	1.000	.875	.438	.500	.625	4.250	1.188	1.125	#10-32	1.750	.375-16	3	.750	1.375	3.250
DTNL-0-DB6	6.000	.500	1.000	.875	.438	.500	.875	6.250	1.813	.875	#10-32	2.500	.500-13	4	.562	1.375	3.250
DTNL-.5-DB4	4.000	.625	1.250	1.000	.563	.563	.625	4.250	1.188	1.125	.250-20	1.750	.375-16	3	.750	1.563	3.438
DTNL-.5-DB6	6.000	.625	1.250	1.000	.563	.563	.875	6.250	1.813	.875	.250-20	2.500	.500-13	4	.531	1.563	3.438
DTNL-1-DB4	4.000	.750	1.50	1.125	.688	.688	.625	4.250	1.188	1.125	.250-20	1.750	.375-16	3	.750	1.813	3.688
DTNL-1-DB6	6.000	.750	1.500	1.125	.688	.688	.875	6.250	1.813	.875	.250-20	2.500	.500-13	4	.531	1.813	3.688
DTNL-2-DB4	4.000	.938	2.000	1.250	.875	.875	.625	4.250	1.563	1.500	.375-16	1.750	.375-16	3	1.000	2.125	4.375
DTNL-2-DB6	6.000	.938	2.000	1.250	.875	.875	.875	6.250	1.813	1.250	.375-16	2.500	.500-13	4	.906	2.125	4.375
DTNL-2-DB10	10.000	.938	2.000	1.250	.875	.875	1.000	9.875	1.813	1.125	.375-16	3.750	.625-11	4	.781	2.125	4.375
DTNL-2.5-DB4	4.000	1.375	3.000	1.500	1.250	1.125	.625	4.250	1.563	1.750	.500-13	1.750	.375-16	3	1.250	2.625	5.125
DTNL-2.5-DB6	6.000	1.375	3.000	1.500	1.250	1.125	.875	6.250	1.813	1.500	.500-13	2.500	.500-13	4	1.188	2.625	5.125
DTNL-2.5-DB10	10.000	1.375	3.000	1.500	1.250	1.125	1.000	9.875	1.813	1.375	.500-13	3.750	.625-11	4	1.063	2.625	5.125
DTNL-3-DB4	4.000	1.625	4.250	2.000	1.500	1.125	.625	4.250	1.563	2.000	.625-11	1.750	.375-16	3	1.656	3.125	5.875
DTNL-3-DB6	6.000	1.625	4.250	2.000	1.500	1.125	.875	6.250	1.813	1.750	.625-11	2.500	.500-13	4	1.437	3.125	5.875
DTNL-3-DB10	10.000	1.625	4.250	2.000	1.500	1.125	1.000	9.875	1.813	1.625	.625-11	3.750	.625-11	4	1.312	3.125	5.875
DTNL-3.5-DB4	4.000	2.375	5.500	2.375	2.250	1.125	.625	4.250	1.813	2.000	.750-16	1.750	.375-16	3	1.625	3.500	6.250
DTNL-3.5-DB6	6.000	2.375	5.500	2.375	2.250	1.125	.875	6.250	1.813	1.750	.750-16	2.500	.500-13	4	1.375	3.500	6.250
DTNL-3.5-DB10	10.000	2.375	5.500	2.375	2.250	1.125	1.000	9.875	1.813	1.625	.750-16	3.750	.625-11	4	1.250	3.500	6.250
DTNL-3.5-DB13	13.000	2.375	5.500	2.375	2.250	1.125	1.000	12.875	1.813	1.625	.750-16	4.875	.625-11	4	1.250	3.500	6.250
DTNL-4-DB6	6.000	2.875	7.000	3.000	2.750	1.125	.875	6.250	1.813	2.250	.750-16	2.500	.500-13	4	1.938	4.125	7.375
DTNL-4-DB10	10.000	2.875	7.000	3.000	2.750	1.125	1.000	9.875	1.813	2.125	.750-16	3.750	.625-11	4	1.781	4.125	7.375
DTNL-4-DB13	13.000	2.875	7.000	3.000	2.750	1.125	1.000	12.875	1.813	2.125	.750-16	4.875	.625-11	4	1.781	4.125	7.375
DTNL-4.5-DB6	6.000	4.000	10.000	3.500	3.750	1.125	.875	6.250	1.813	2.250	.750-16	2.500	.500-13	4	1.938	4.625	7.875
DTNL-4.5-DB10	10.000	4.000	10.000	3.500	3.750	1.125	1.000	9.875	1.813	2.125	.750-16	3.750	.625-11	4	1.813	4.625	7.875
DTNL-4.5-DB13	13.000	4.000	10.000	3.500	3.750	1.125	1.000	12.875	1.813	2.125	.750-16	4.875	.625-11	4	1.813	4.625	7.875
DTNL-5-DB10	10.000	4.750	11.000	4.000	4.500	1.125	1.000	9.875	1.813	2.125	.750-16	3.750	.625-11	4	1.813	5.125	8.375
DTNL-5-DB13	13.000	4.750	11.000	4.000	4.500	1.125	1.000	12.875	1.813	2.125	.750-16	4.875	.625-11	4	1.813	5.125	8.375
DTNL-6-DB10	10.000	6.250	13.000	4.500	6.000	1.125	1.000	9.875	2.250	2.125	1.000-8	3.750	.625-11	4	1.750	5.625	8.875
DTNL-6-DB13	13.000	6.250	13.000	4.500	6.000	1.125	1.000	12.875	2.250	2.125	1.000-8	4.875	.625-11	4	1.750	5.625	8.875.
DTNL-8-DB13	13.000	8.250	17.000	5.000	8.000	1.125	1.000	12.875	2.250	2.125	1.000-8	4.875	.625-11	4	1.750	6.125	9.375

NOTE: No. 0 and .5 CHUCKS DO NOT HAVE WOODRUFF KEYS.
*ALTERATIONS TO STANDARD DIMENSIONS ARE AVAILABLE AND ARE QUOTED AS SPECIAL.

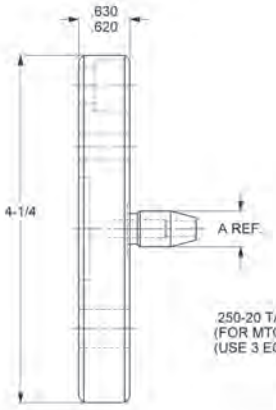
CT-701

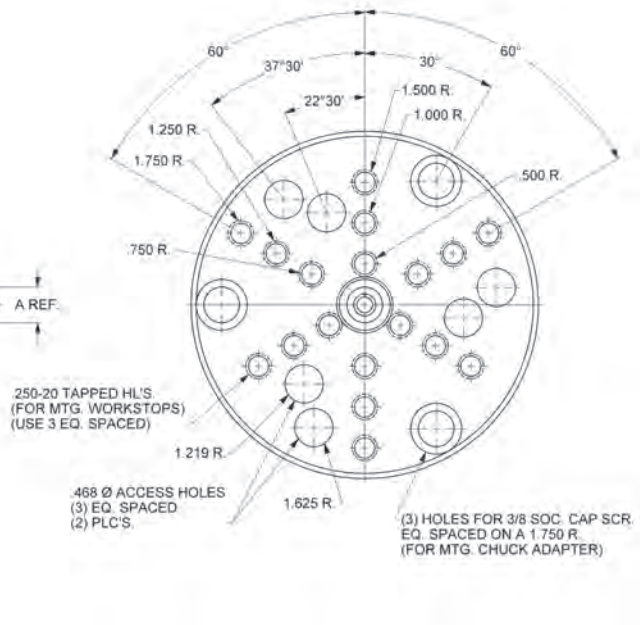
STANDARD NOSE PLATES

4″ SERIES NOSE PLATES

NOTE: HOLE LOCATIONS & SIZES SHOWN ARE SAME ON ALL STD. SPEEDGRIP SINGLE, DOUBLE & REVERSE TAPER CHUCKS

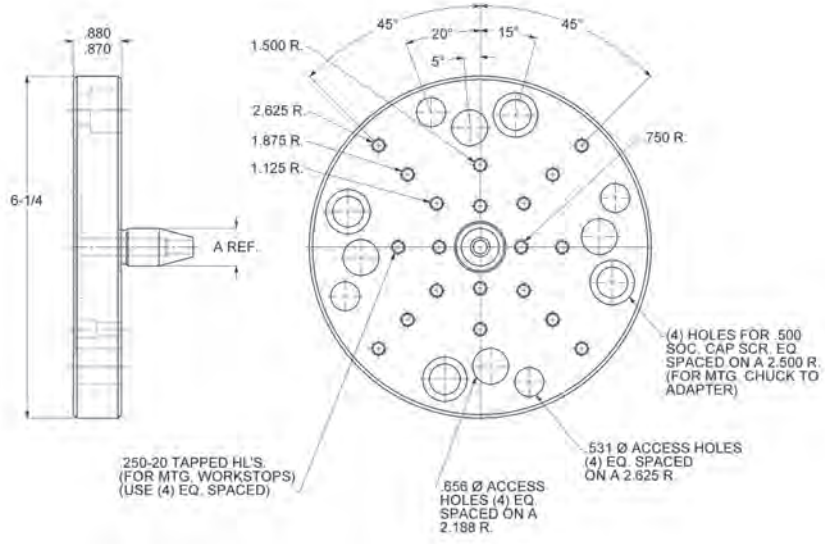
NOSE SIZE	A	TAPPED HOLES						ACCESS HOLES	
		.5R	.75R	1R	1.25R	1.5R	1.75R	1.219R	1.625R
0	.437	√	√	√	√	√	√	√	√
0.5	.562		√	√	√	√	√	√	√
1.0	.687		√	√	√	√	√	√	√
2.0	.875		√	√	√	√	√	√	√
2.5	1.250			√	√	√	√	√	√
3.0	1.500			√	√	√	√	√	√
3.5	2.250					√	√		√





The drawings and tables below show the four flange sizes that are available in Speedgrip STN, DTN, and RTN nose plates. Standard mounting holes, access holes, and tapped holes for the mounting of workstops are shown for the various taper sizes. Special hole patterns can be supplied and are quoted as special.

6″ SERIES NOSE PLATES



NOTE: HOLE LOCATIONS & SIZES SHOWN ARE SAME ON ALL STD. SPEEDGRIP SINGLE, DOUBLE & REVERSE TAPER CHUCKS

NOSE SIZE	A	TAPPED HOLES					ACCESS HOLES	
		.75R	1.125R	1.5R	1.875R	2.625R	2.219R	2.625
0	.437	√	√	√	√	√	√	√
0.5	.562	√	√	√	√	√	√	√
1.0	.687	√	√	√	√	√	√	√
2.0	.875	√	√	√	√	√	√	√
2.5	1.250		√	√	√	√	√	√
3.0	1.500		√	√	√	√	√	√
3.5	2.250			√	√	√	√	√
4.0	2.750				√	√	√	√
4.5	3.750					√		√

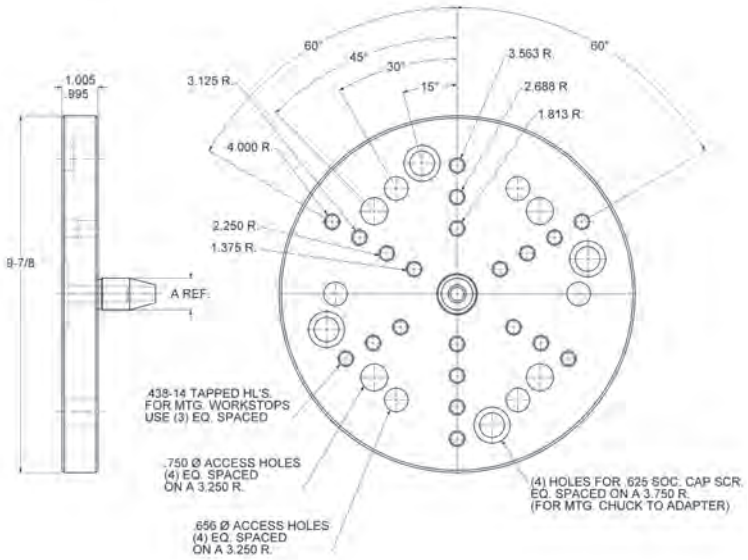
Phone: (574) 294-1506 Fax: (574) 294-2465

STANDARD NOSE PLATES

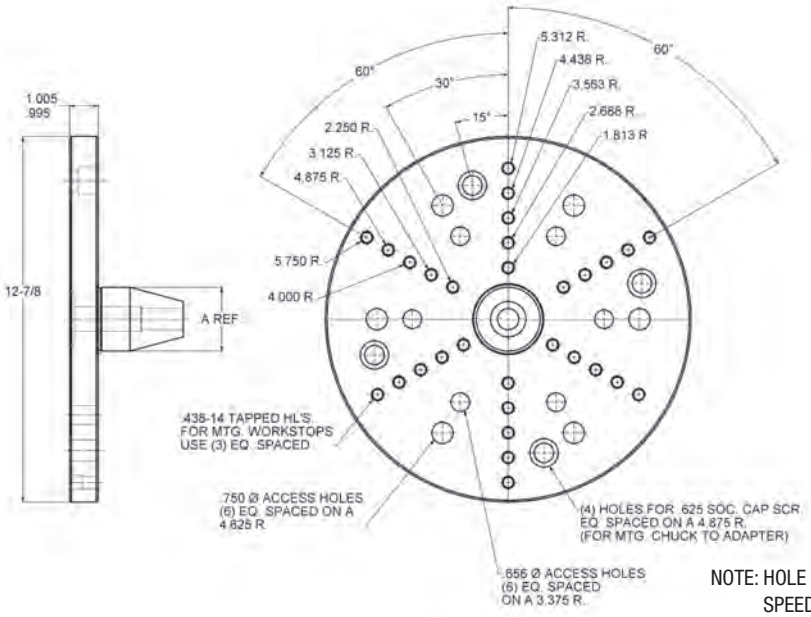
10″ SERIES NOSE PLATES

NOTE: HOLE LOCATIONS & SIZES SHOWN ARE SAME ON ALL STD. SPEEDGRIP SINGLE, DOUBLE & REVERSE TAPER CHUCKS

NOSE SIZE	A	TAPPED HOLES							ACCESS HOLES	
		1.375R	1.813R	2.25R	2.688R	3.125R	3.563R	4.0R	3.25R	3.375R
2.0	.875	√	√	√	√	√	√	√	√	√
2.5	1.250	√	√	√	√	√	√	√	√	√
3.0	1.500	√	√	√	√	√	√	√	√	√
3.5	2.250		√	√	√	√	√	√	√	√
4.0	2.750		√	√	√	√	√	√	√	√
4.5	3.750				√	√	√	√	√	√
5.0	4.500				√	√	√	√	√	√
6.0	6.000						√	√		√



13″ SERIES NOSE PLATES



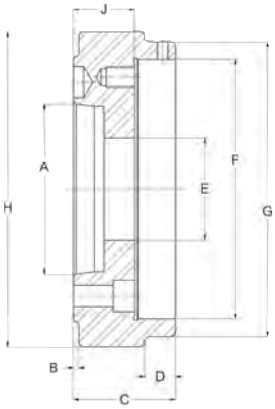
NOTE: HOLE LOCATIONS & SIZES SHOWN ARE SAME ON ALL STD. SPEEDGRIP SINGLE, DOUBLE & REVERSE TAPER CHUCKS

NOSE SIZE	A	TAPPED HOLES										ACCESS HOLES	
		1.813R	2.25R	2.688R	3.125R	3.563R	4.0R	4.438R	4.875R	5.313R	5.75R	3.375R	4.625R
3.5	2.250	√	√	√	√	√	√	√	√	√	√	√	√
4.0	2.750		√	√	√	√	√	√	√	√	√	√	√
4.5	3.750			√	√	√	√	√	√	√	√	√	√
5.0	4.500				√	√	√	√	√	√	√	√	√
6.0	6.000					√	√	√	√	√	√	√	√
8.0	8.000							√	√	√	√		√

TYPE A-STANDARD LENGTH ADAPTERS

ADAPTER NO.	A +0000 −0000	B	C	D	E	F	G	H	J
D-5A4	3.250	.125	2.375	–	2.000	4.375	–	5.750	1.781
C-5A6	3.250	.125	2.125	–	3.110	6.375	–	7.750	1.281
C-5A10	3.250	.750	3.000	–	3.110	10.000	–	11.500	2.031
B-5A13	3.250	.750	3.125	–	3.110	13.000	–	14.500	2.156
C-6A4	4.188	–	2.000	–	2.250	4.375	–	6.375	1.406
C-6A6	4.188	1.000	2.375	–	4.063	6.375	–	7.750	1.531
C-6A10	4.188	.625	3.000	–	4.030	10.000	–	11.500	2.031
B-6A13	4.188	.750	3.125	–	4.030	13.000	–	14.500	2.156
C-8A4	5.500	–	2.062	.750	2.750	4.375	5.625	7.875	1.469
C-8A6	5.500	–	3.094	–	2.750	6.375	–	8.250	2.250
C-8A10	5.500	.625	3.000	–	5.360	10.000	–	11.500	2.031
B-8A13	5.500	.750	3.125	–	5.360	13.000	–	14.500	2.156
C-11A6	7.750	–	3.250	.875	2.500	6.375	6.875	11.000	2.406
C-11A10	7.750	–	3.750	–	4.000	10.000	–	11.500	2.781
B-11A13	7.750	.750	3.125	–	7.594	13.000	–	14.500	2.156
B-15A10	11.250	–	3.469	1.500	6.000	10.000	11.500	15.000	2.500
B-15A13	11.250	–	4.250	–	5.000	13.000	–	15.000	3.281

The flange diameter of a chuck assembly mounts in the counterbored diameter (F) of the spindle adapter. Radial clearance is provided in the chuck assembly so that the required concentricity can be attained.

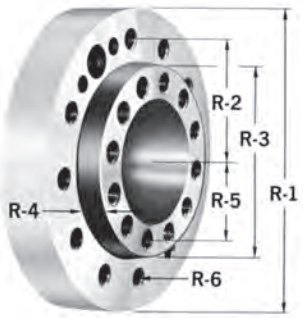


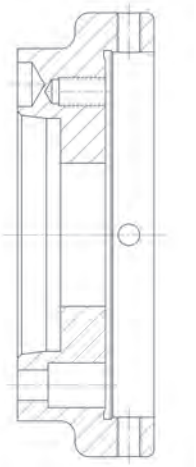
Speedgrip adapters fit D-1 (Camlock) spindles and "L" (Taper Key Drive) spindles. Contact Speedgrip for dimensional data on the particular size and type of spindle involved.

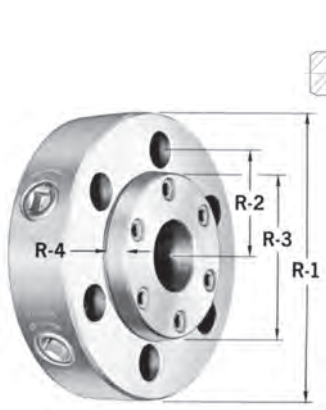
Special Speedgrip adapters can also be designed to fit any desired application. Please submit drawings and dimensions of your particular spindle and a design will be promptly quoted.

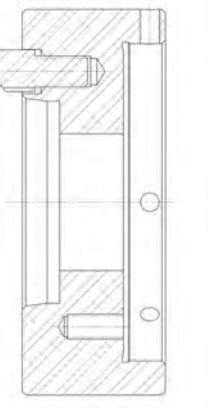
Spindle adapters listed on this page are used in conjunction with single and double taper chuck assemblies.

SPINDLE TYPES









AMERICAN STD. TYPE A-1

	A5	A6	A8	A11	A15
R-1	5.250	6.500	8.250	11.000	15.000
R-2	2.063	2.625	3.375	4.625	6.500
R-3	3.250	4.188	5.501	7.751	11.251
R-4	.5625	.625	.688	.750	.813
R-5	1.219	1.625	2.188	3.250	4.875
R-6	.438-14	.5-13	.625-11	.75-10	.875-9

CAMLOCK TYPE D-1

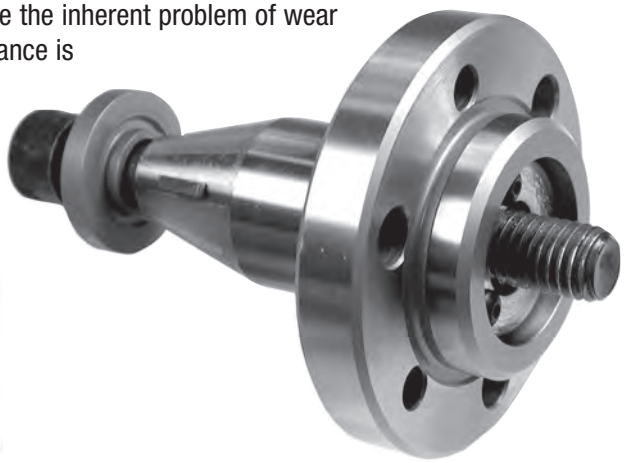
	D3	D4	D5	D6	D8	D11
R-1	3.625	4.625	5.750	7.125	8.875	11.750
R-2	1.391	1.625	2.063	2.625	3.375	4.625
R-3	2.125	2.500	3.250	4.188	5.500	7.750
R-4	.438	.438	.500	.563	.625	.688
R-5	–	–	–	–	–	–
R-6	–	–	–	–	–	–

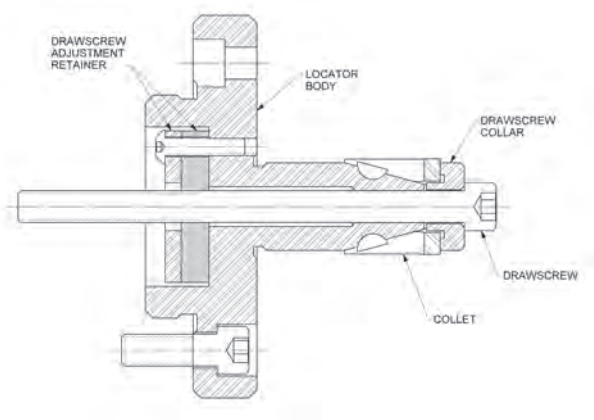
When requesting quotations, or when ordering Speedgrip equipment, be sure to specify size and type of spindle nose. If the spindle is of the threaded type, be sure to send a print or sketch of the spindle, along with all pertinent dimensions.

A-1 Has tapped holes on both the inner bolt circle and the outer bolt circle.
A-2 Has tapped holes on both the outer bolt circle but has no holes on the inner bolt circle.
B-1 Has drilled holes on the outer bolt circle and tapped holes on the inner bolt circle.
B-2 Has drilled holes on the outer bolt circle but has no holes on the inner bolt circle.

INTRODUCTION TO LOCATORS

Speedgrip Expanding Locators can be used in a variety of applications throughout the shop. Their most popular use is as a replacement for solid plug locators that have the inherent problem of wear and lost tolerance due to the need for load clearance. This load clearance is also required so that parts do not stick. What sometimes come from this is chatter which leaves unacceptable surfaces.





Speedgrip Expanding Locators are the answer to many location and holding problems. By applying the principle of expanding a sleeve over a taper load clearance can be accomplished and repeatability of .0005˝ can be easily achieved. Also rigidity is maximized to the set up by using locators that can provide "pull-back" positioning of parts against a workstop. With a standard male pilot ground to a +.0003˝ - .0000˝, locators can assure positive positioning of parts on jigs & fixtures, inspection equipment, balancing machines, and many other uses.

TOMBSTONE APPLICATIONS

SHUTTLE PALLET WORKHOLDING

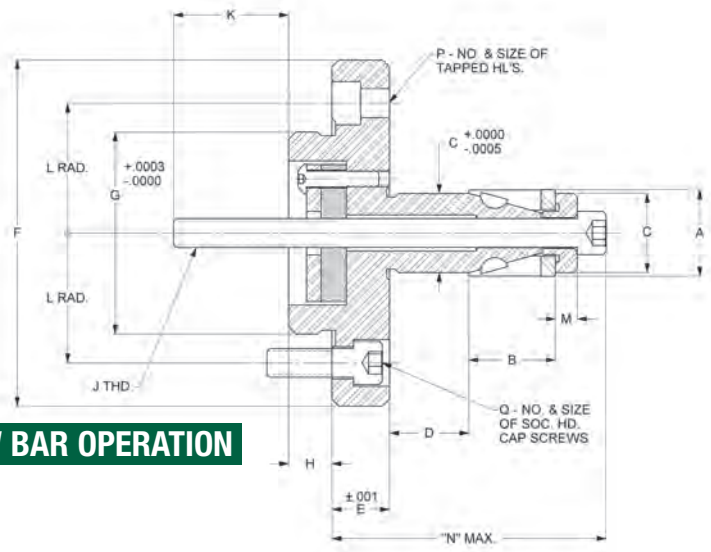
Single and Double Taper Collets are stocked as unground blanks to reduce delivery time. When ordered, these parts are pulled from stock and ground to meet your requirements. If alterations are needed, these can be quoted to meet your special needs.

STANDARD SINGLE TAPER LOCATORS

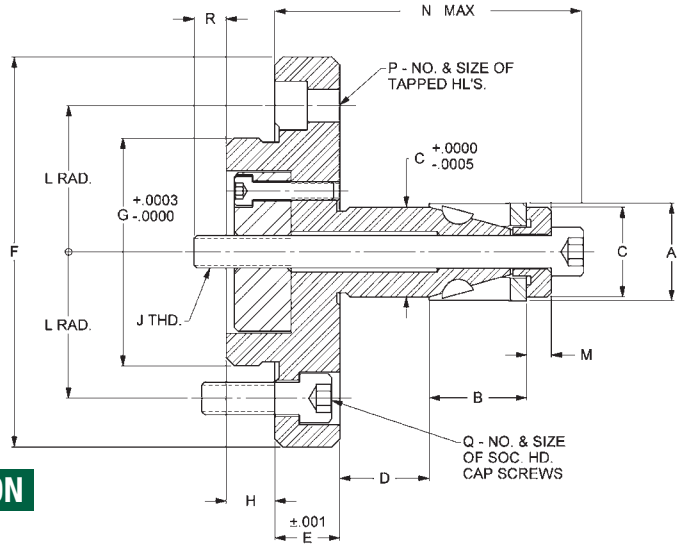
For Drawbar and Manual Operation

JF-X-DB

JF-X-M



DRAW BAR OPERATION



MANUAL OPERATION

NOTE: REPEATABILITY GUARANTEED WITHIN .0005˝ MAX.

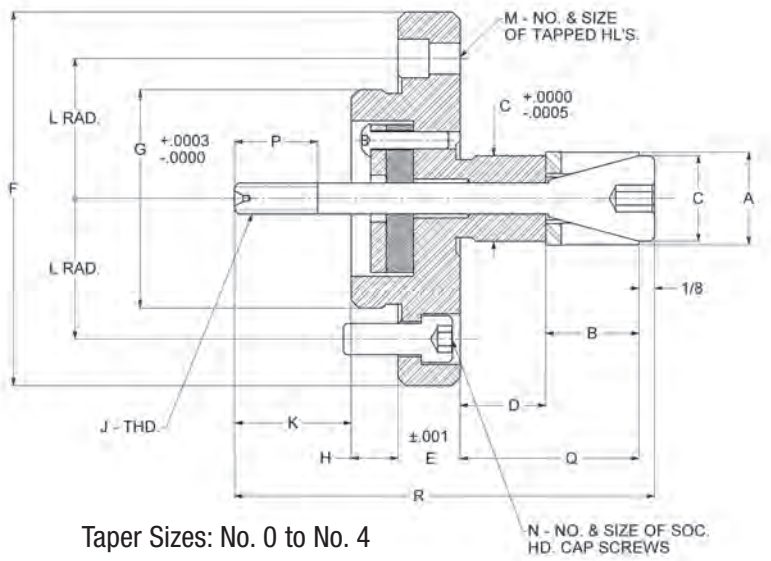
CHUCK NO. DRAWBAR	CHUCK NO. MANUAL	A DIA. MIN.	A DIA. MAX.	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
JF-0-DB	JF-0-M	.500	1.000	.375	.438	.500	.500	3.000	1.750	.375	#10-32	.875	1.125	.125	1.688	(3).250-20	(3).250-20	—
JF-.5-DB	JF-.5-M	.625	1.250	.563	.563	.563	.500	3.000	1.750	.375	.250-20	.656	1.125	.125	2.000	(3).250-20	(3).250-20	—
JF-1-DB	JF-1-M	.750	1.500	.750	.688	.688	.500	3.000	1.750	.375	.250-20	.500	1.125	.188	2.375	(3).250-20	(3).250-20	—
JF-2-DB	**JF-2-M**	.938	2.000	.875	.875	.875	.500	3.000	1.750	.375	.375-16	1.188	1.125	.188	2.813	(3).250-20	(3).250-20	.250
JF-2.5-DB	JF-2.5-M	1.375	3.000	1.250	1.250	1.125	.500	3.000	1.750	.375	.500-13	.500	1.125	.250	3.625	(3).250-20	(3).250-20	—
JF-3-DB	JF-3-M	1.625	4.250	1.500	1.500	1.125	.875	4.500	2.750	.375	.625-11	1.312	1.875	.313	4.313	(4).250-20	(4).375-16	.313
JF-3.5-DB	JF-3.5-M	2.375	5.500	2.000	2.250	1.125	.875	4.500	2.750	.375	.750-16	.750	1.875	.375	5.125	(4).250-20	(4).375-16	.250
JF-4-DB	JF-4-M	2.875	7.000	2.250	2.750	1.125	.875	4.500	2.750	.375	.750-16	1.906	1.875	.438	5.438	(4).250-20	(4).375-16	.406
JF-4.5-DB	JF-4.5-M	4.000	10.000	2.750	3.750	1.125	1.000	7.500	2.750	.500	.750-16	1.125	3.125	.500	6.125	(3).375-16	(3).500-13	.125
JF-5-DB	JF-5-M	4.750	11.000	3.250	4.500	1.125	1.000	7.500	2.750	.500	.750-16	1.438	3.125	.625	6.813	(3).375-16	(3).500-13	.500
JF-6-DB	JF-6-M	6.250	13.000	3.250	6.000	1.125	1.000	9.000	2.750	.500	1.000-8	1.375	3.875	.750	7.125	(3).375-16	(3).500-13	.375
JF-8-DB	JF-8-M	8.250	17.000	3.250	8.000	1.125	1.000	11.000	2.750	.500	1.000-8	1.125	4.875	1.000	7.375	(3).375-16	(3).500-13	.125

* ALTERATIONS TO STANDARD DIMENSIONS ARE AVAILABLE AND ARE QUOTED AS SPECIAL

DT-711

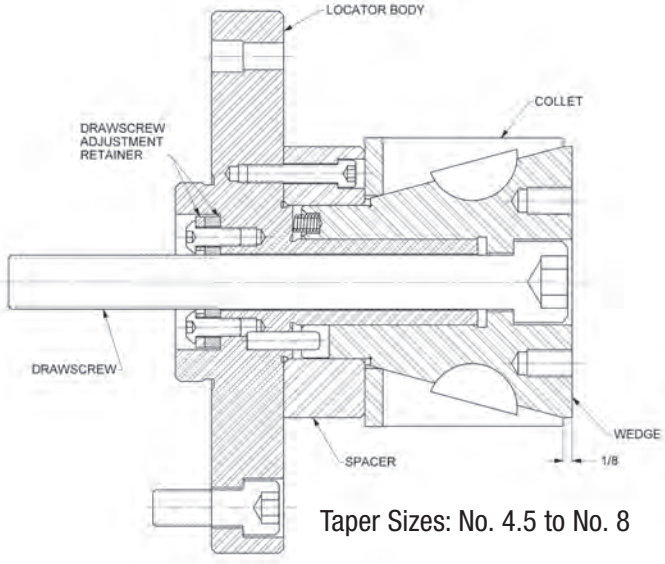
Phone: (574) 294-1506 Fax: (574) 294-2465

RTL-X-DB



Taper Sizes: No. 0 to No. 4

Where pullback action is not desirable with a part, due to thin cross sections that may allow warping, Reverse Taper Chucks provide dead length positioning with radial grip force only. These chucks can also be used with parts that have shallow or blind bores where the head of the drawscrew cannot interfere with the grip area or cutting tool. Please consult the factory when considering Reverse Taper Chucks due to the grip force requirements of various parts and processes.



Taper Sizes: No. 4.5 to No. 8

NOTE:
MANUALLY OPERATED CHUCKS CAN BE FURNISHED ON RTL-4.5-DB THRU RTL-8-DB SIZES

NOTE: REPEATABILITY GUARANTEED WITHIN .001″ MAX.

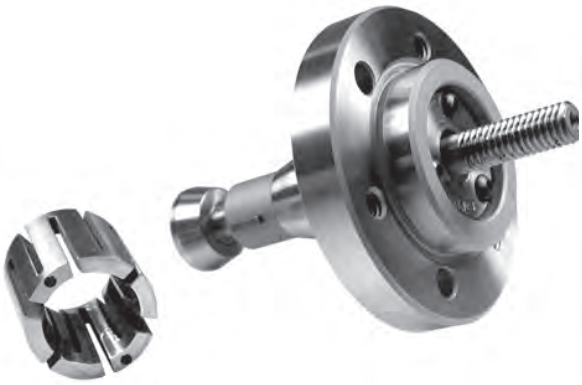
LOCATOR NO.	A DIA. MIN.	A DIA. MAX.	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
RTL-0-DB	.500	1.000	.375	.438	.500	.500	3.000	1.750	.375	#10-32	.875	1.125	(3).250-20	(3).250-20	.875	.875	2.750
RTL-.5-DB	.625	1.250	.563	.563	.563	.500	3.000	1.750	.375	.250-20	1.000	1.125	(3).250-20	(3).250-20	1.000	1.125	3.125
RTL-1-DB	.750	1.500	.750	.688	.688	.500	3.000	1.750	.375	.250-20	.938	1.125	(3).250-20	(3).250-20	.938	1.438	3.375
RTL-2-DB	.938	2.000	.875	.875	.875	.500	3.000	1.750	.375	.375-16	1.250	1.125	(3).250-20	(3).250-20	1.188	1.750	4.000
RTL-2.5-DB	1.375	3.000	1.250	1.250	1.125	.500	3.000	1.750	.375	.500-13	1.375	1.125	(3).250-20	(3).250-20	1.313	2.375	4.750
RTL-3-DB	1.625	4.250	1.500	1.500	1.125	.875	4.500	2.750	.375	.625-11	1.125	1.875	(4).250-20	(4).375-16	1.125	2.625	1.125
RTL-3.5-DB	2.375	5.500	2.000	2.250	1.125	.875	4.500	2.750	.375	.750-16	1.500	1.875	(4).250-20	(4).375-16	1.500	3.125	6.000
RTL-4-DB	2.875	7.000	2.250	2.750	1.125	.875	4.500	2.750	.375	.750-16	1.500	1.875	(4).250-20	(4).375-16	1.500	3.375	6.250
RTL-4.5-DB	4.000	10.000	2.750	3.750	1.125	1.000	7.500	2.750	.500	.750-16	2.250	3.125	(3).375-16	(3).500-13	2.000	3.875	7.750
RTL-5-DB	4.750	11.000	3.250	4.500	1.125	1.000	7.500	2.750	.500	.750-16	1.750	3.125	(3).375-16	(3).500-13	1.750	4.375	7.750
RTL-6-DB	6.250	13.000	3.250	6.000	2.125	1.000	9.000	2.750	.500	1.000-8	1.750	3.875	(3).375-16	(3).500-13	1.750	5.375	9.000
RTL-8-DB	8.250	17.000	3.250	8.000	2.125	1.000	11.000	2.750	.500	1.000-8	2.062	4.875	(3).375-16	(3).500-13	2.000	5.375	9.000

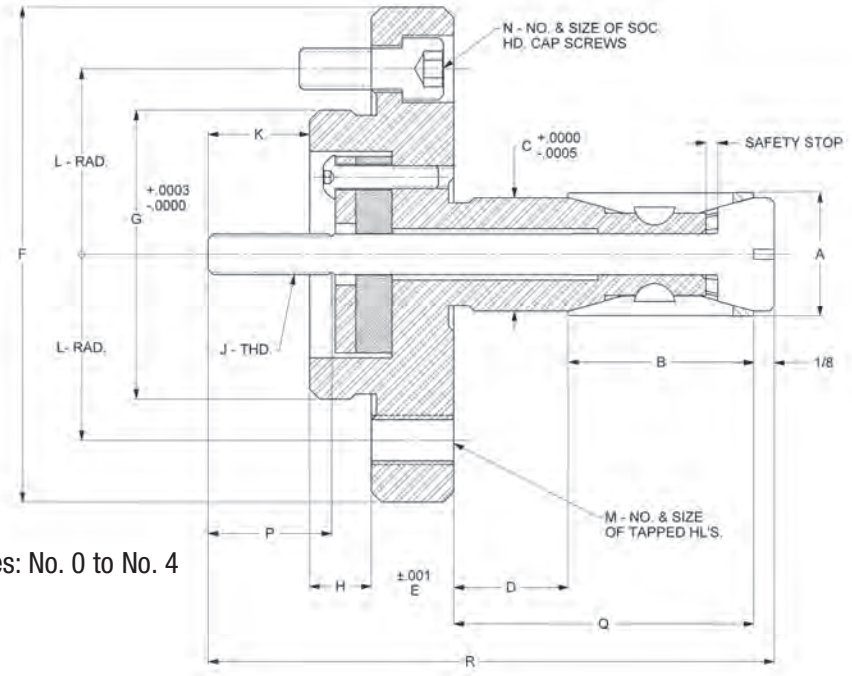
* ALTERATIONS TO STANDARD DIMENSIONS ARE AVAILABLE AND ARE QUOTED AS SPECIAL

STANDARD DOUBLE TAPER LOCATORS - Short Series

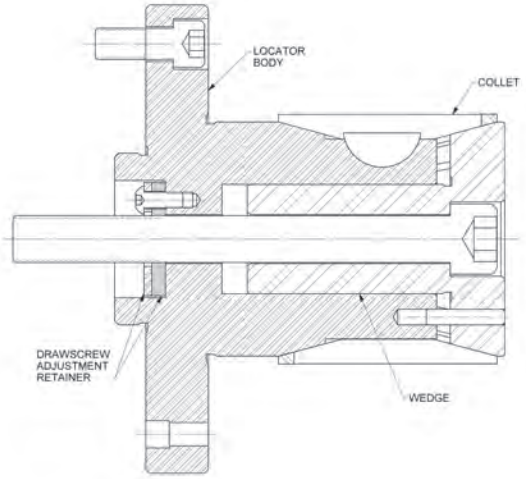
For Drawbar Operation

DTLS-X-DB





Taper Sizes: No. 0 to No. 4



NOTE:
MANUALLY OPERATED CHUCKS CAN BE FURNISHED ON DTLS-4.5-DB6 THRU DTLS-8DB SIZES

NOTE: REPEATABILITY GUARANTEED WITHIN .0005˝ MAX.

LOCATOR NO.	A DIA. MIN.	A DIA. MAX.	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
DTLS-0-DB	.500	1.000	.625	.438	.500	.500	3.000	1.750	.375	#10-32	.875	1.125	(3).250-20	(3).250-20	.750	1.125	3.000
DTLS-.5-DB	.625	1.250	.750	.563	.563	.500	3.000	1.750	.375	.250-20	.875	1.125	(3).250-20	(3).250-20	.750	1.313	3.188
DTLS-1-DB	.750	1.500	.875	.688	.688	.500	3.000	1.750	.375	.250-20	.875	1.125	(3).250-20	(3).250-20	.750	1.563	3.438
DTLS-2-DB	.938	2.000	1.000	.875	.875	.500	3.000	1.750	.375	.375-16	1.250	1.125	(3).250-20	(3).250-20	1.000	1.875	4.125
DTLS-2.5-DB	1.375	3.000	1.250	1.250	1.125	.500	3.000	1.750	.375	.500-13	1.500	1.125	(3).250-20	(3).250-20	1.000	2.375	4.875
DTLS-3-DB	1.625	4.250	1.625	1.500	1.125	.875	4.500	2.750	.375	.625-11	1.375	1.875	(4).250-20	(4).375-16	1.375	2.750	5.500
DTLS-3.5-DB	2.375	5.500	2.000	2.250	1.125	.875	4.500	2.750	.375	.75016	1.375	1.875	(4).250-20	(4).375-16	1.375	3.125	5.875
DTLS-4-DB	2.875	7.000	2.500	2.750	1.125	.875	4.500	2.750	.375	.750-16	1.875	1.875	(4).250-20	(4).375-16	1.875	3.625	6.875
DTLS-4.5-DB	4.000	10.000	3.000	3.750	1.128	1.000	7.500	2.750	.500	.750-16	1.625	3.125	(3).375-16	(3).500-13	1.625	4.125	7.375
DTLS-5-DB	4.750	11.000	3.500	4.500	1.125	1.000	7.500	2.750	.500	.750-16	1.625	3.125	(3).375-16	(3).500-13	1.625	4.625	7.875
DTLS-6-DB	6.250	13.000	4.000	6.000	1.125	1.000	9.000	2.750	.500	1.000-8	1.625	3.875	(3).375-16	(3).500-13	1.625	5.125	8.375
DTLS-8-DB	8.250	17.000	4.500	8.000	1.125	1.000	11.000	2.750	.500	1.000-8	1.625	4.875	(3).375-16	(3).500-13	1.625	5.625	8.875

NOTE: No. 0 and .5 CHUCKS DO NOT HAVE WOODRUFF KEYS.
*ALTERATIONS TO STANDARD DIMENSIONS ARE AVAILABLE AND ARE QUOTED AS SPECIAL.

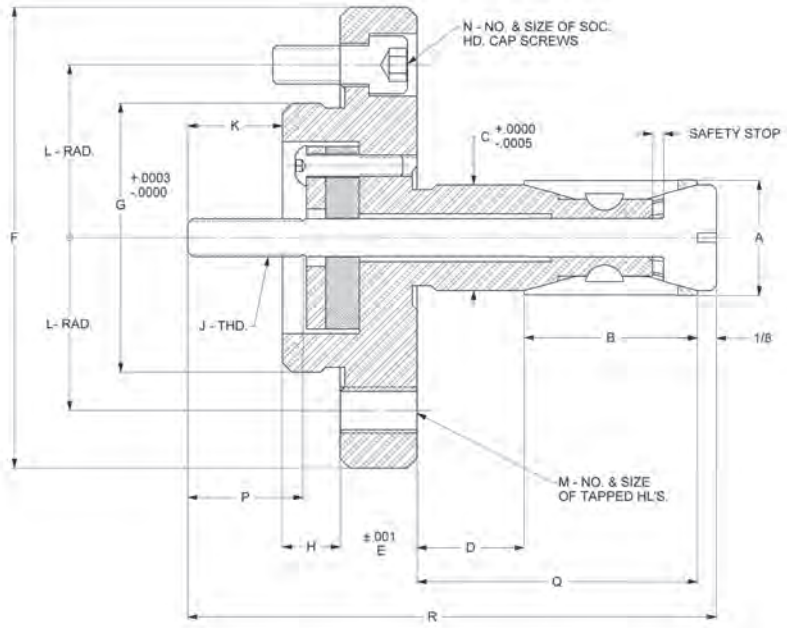
CT-704

Phone: (574) 294-1506 Fax: (574) 294-2465

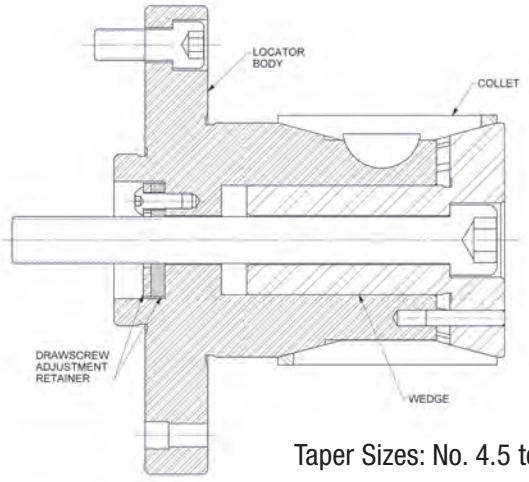
STANDARD DOUBLE TAPER LOCATORS - Long Series

For Drawbar Operation

DTLL-X-DB



Taper Sizes: No. 0 to No. 4



Taper Sizes: No. 4.5 to No. 8

NOTE;
MANUALLY OPERATED CHUCKS CAN BE FURNISHED ON DTLL-4.5-DB THRU DTLL-8DB SIZES

NOTE: REPEATABILITY GUARANTEED WITHIN .0005″ MAX.

LOCATOR NO.	A DIA. MIN.	A DIA. MAX.	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
DTLL-0-DB	.500	1.000	.875	.438	.500	.500	3.000	1.750	.375	#10-32	.875	1.125	(3).250-20	(3).250-20	.750	1.375	3.250
DTLL-.5-DB	.625	1.250	1.000	.563	.563	.500	3.000	1.750	.375	.250-20	.875	1.125	(3).250-20	(3).250-20	.750	1.563	3.438
DTLL-1-DB	.750	1.500	1.125	.688	.688	.500	3.000	1.750	.375	.250-20	.875	1.125	(3).250-20	(3).250-20	.750	1.813	3.688
DTLL-2-DB	.938	2.000	1.250	.875	.875	.500	3.000	1.750	.375	.375-16	1.25	1.125	(3).250-20	(3).250-20	1.000	2.125	4.375
DTLL-2.5-DB	1.375	3.000	1.500	1.250	1.125	.500	3.000	1.750	.375	.500-13	1.500	1.125	(3).250-20	(3).250-20	1.250	2.625	5.125
DTLL-3-DB	1.625	4.250	2.000	1.500	1.125	.875	4.500	2.750	.375	.625-11	1.375	1.875	(4).250-20	(4).375-16	1.375	3.125	5.875
DTLL-3.5-DB	2.375	5.500	2.375	2.250	1.125	.875	4.500	2.750	.375	.750-16	1.375	1.875	(4).250-20	(4).375-16	1.375	3.500	6.250
DTLL-4-DB	2.875	7.000	3.000	2.750	1.125	.875	4.500	2.750	.375	.750-16	1.875	1.875	(4).250-20	(4).375-16	1.875	4.125	7.375
DTLL-4.5-DB	4.000	10.000	3.500	3.750	1.125	1.000	7.500	2.750	.500	.750-16	1.625	3.125	(3).375-16	(3).500-13	1.625	4.625	7.875
DTLL-5-DB	4.750	11.000	4.000	4.500	1.125	1.000	7.500	2.750	.500	.750-16	2.125	3.125	(3).375-16	(3).500-13	2.125	5.125	8.3750
DTLL-6-DB	6.250	13.000	4.500	6.000	1.125	1.000	9.000	2.750	.500	1.000-8	2.125	3.875	(3).375-16	(3).500-13	2.125	5.625	8.875.
DTLL-8-DB	8.250	17.000	5.000	8.000	1.125	1.000	11.000	2.750	.500	1.000-8	1.625	4.875	(3).375-16	(3).500-13	1.625	6.125	9.375

NOTE: NO. 0 AND .5 LOCATORS DO NOT HAVE WOODRUFF KEYS.

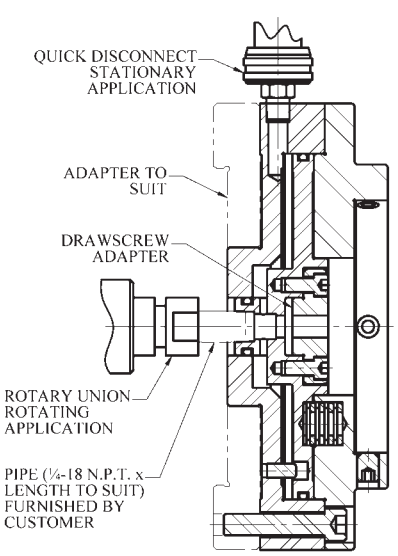
CT-705

* ALTERATIONS TO STANDARD DIMENSIONS ARE AVAILABLE AND ARE QUOTED AS SPECIAL

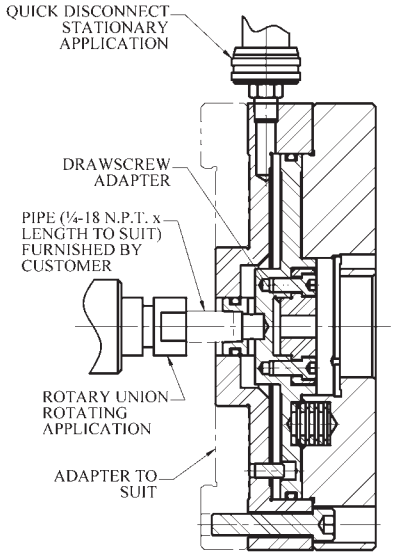
STANDARD SELF-CONTAINED COLLET ACTUATORS

Air or Hydraulic Operation

Speedgrip collet actuators offer versatility in applying standard collet mechanisms beyond the traditional use of lathe turning operations. With the capability to adapt to other types of machine tools and fixturing, these self contained cylinders actuate the collet mechanisms allowing for “hands off” clamping of parts and the use of automation for loading where applicable. These actuators accept Speedgrip standard collet chucks with “stir-around” capability or Speedgrip locators with slip fit.



SELF-CONTAINED ACTUATOR FOR COLLET CHUCKS



SELF-CONTAINED ACTUATOR FOR JF LOCATORS

Added Versatility Three Ways . . .

MACHINE VERSATILITY

Speedgrip actuators are adaptable to machines such as grinders, horizontal and vertical machining centers, balancers, fixtures and many other rotating and non-rotating applications. Intermediate adapters quoted upon application.

GRIP FORCE SAFETY AND VERSATILITY

By using the concept of spring chucking to generate grip force and air or hydraulic pressure for relaxing the collet, Speedgrip actuators provide safer workholding by not relying on air or hydraulic systems to hold the part. Also grip force can be easily adjusted to specific needs by changes in spring combinations.

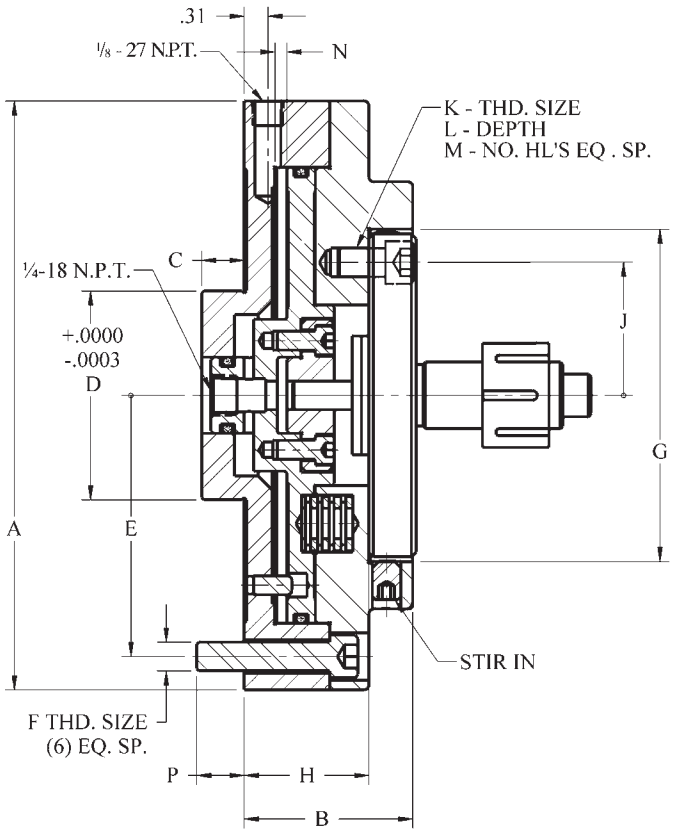
MOUNTING VERSATILITY

Additional versatility is offered by our design which allows for piloted mounting to tombstones and subplates. Air and hydraulic ports are located on both the side and rear of actuators for release. Front mounted collector ring styles for low rpm rotating are available for quote.

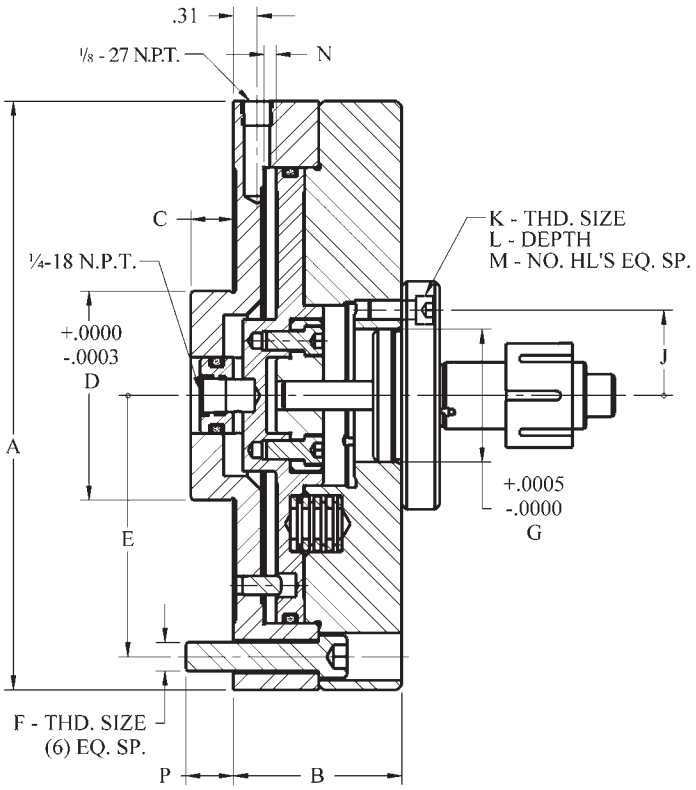
Phone: (574) 294-1506 Fax: (574) 294-2465

STANDARD SELF-CONTAINED COLLET ACTUATORS

Air or Hydraulic Operation



SELF-CONTAINED ACTUATOR
FOR COLLET CHUCKS
(CHUCK AND COLLET NOT
SUPPLIED WITH ACTUATOR)



SELF-CONTAINED ACTUATOR
FOR JF LOCATORS
(LOCATOR AND COLLET NOT
SUPPLIED WITH ACTUATOR)

DRAWSCREW ADAPTER SIZES

ACTUATOR NO.	ADAPTER NO.	THD. SIZE
C-8358 C-8360 C-10479 C-10481	D-8416	#10-32
	D-8417	.250-20
	D-8418	.375-16
	D-8419	.500-13
	D-8420	.625-11
	D-8421	.750-16
C-8369	D-8424	.375-16
	D-8425	.500-13
	D-8426	.625-11
C-8369 & C-8370	D-8427	.750-16
	D-8428	1.000-8

Actuator will accept any standard single, double, reverse taper chuck, or JF locator having the corresponding flange.

Chucking pressures can be changed using various spring combinations, contingent upon available release pressure.

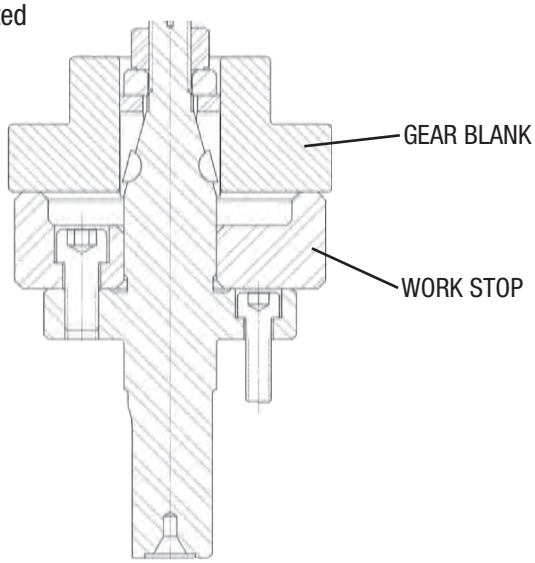
NOTE:
WHEN ORDERING, SPECIFY: 1) ACTUATOR NO.
2) DRAW SCREW ADAPTER NO.
3) AIR OR HYDRAULIC RELEASE

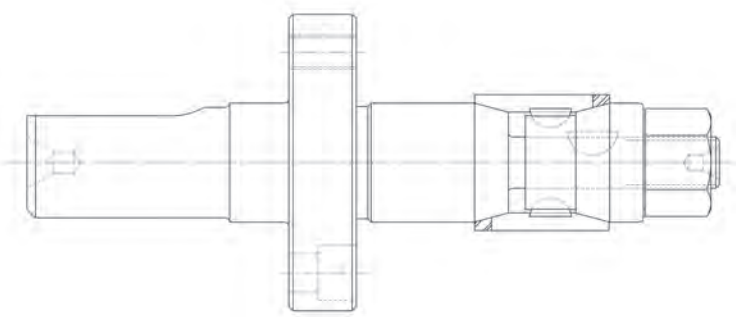
ACTUATOR NO.	CHUCK FLANGE	JF LOCATOR	A	B	C	D	E	F	G	H	J	K	L	M	N	P	CHUCKING PRESSURE
C-8358	4″	—	7.750	2.219	.563	2.750	3.438	.375-16	4.375	1.625	1.750	.375-16	.500	3	.158	.625	2008
C-8360	6″	—	7.750	2.469	.563	2.750	3.438	.375-16	6.375	1.625	2.500	.500-13	.500	4	.158	.625	2008
C-8369	10″	—	11.500	3.844	.813	3.750	5.000	.500-13	10.000	2.875	3.750	.625-11	.938	4	.190	.875	4693
C-8370	13″	—	14.500	3.844	.813	3.750	6.000	.500-13	13.000	2.875	4.875	.625-11	1.000	4	.190	.875	6257
C-10479	—	0 THRU 2.5	7.750	2.219	.563	2.750	3.438	.375-16	1.7500	—	1.125	.250-20	.625	3	.158	.625	2008
C-10481	—	3 THRU 5	7.750	2.219	.563	2.750	3.438	.375-16	2.7500	—	1.875	.375-16	.625	4	.158	.625	2008

STANDARD MANDREL ASSEMBLIES

Speedgrip standard, straight shank Single and Double Taper Mandrels are supplied in twelve different taper sizes for each. Collets for these mandrels will accommodate parts from .500 to 17". All mandrels are case hardened and ground to hold concentricity to .0005". Closer concentricities can be requested and are quoted as special. Flanges shown allow for the use of workstops to take advantage of the pull-back action of the collet and maximize grip force.

Speedgrip Mandrels were initially designed to be used for between center work or inspection, their versatility has expanded into a broader range of production applications. One of the more creative uses of these has been with gear hobbing. Customers with Barber Coleman equipment or today's machines such as Gleasons, and Leibherrs have adapted these for single or multiple part machining where small lot and quick changeover is important.





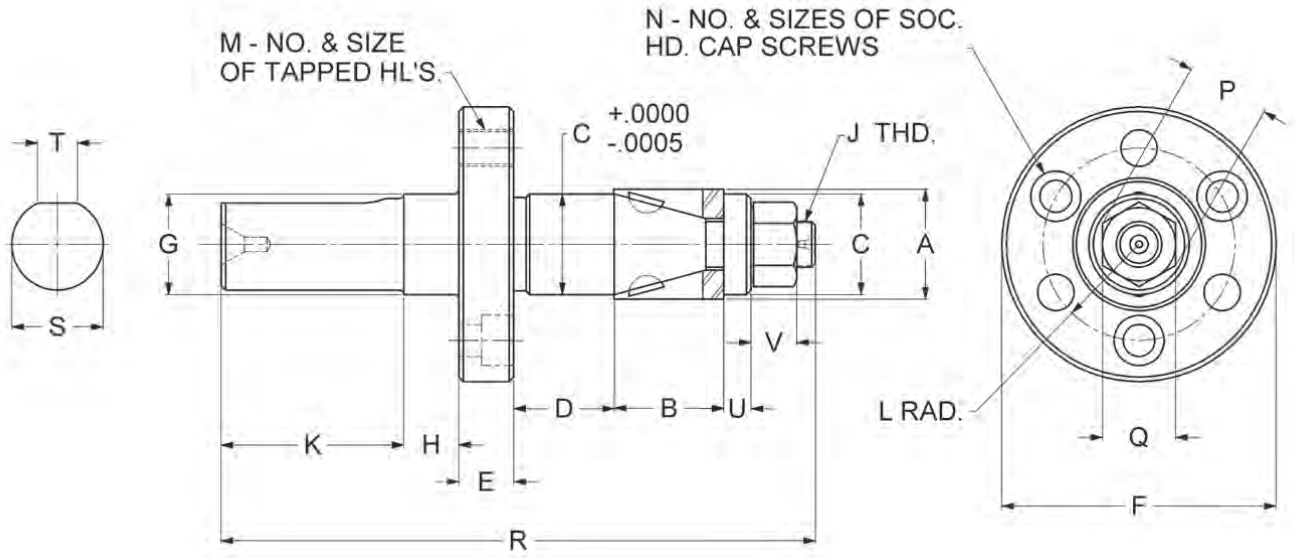
Double Taper Mandrels come in both short and long series and are ideal for stepped bores or bores with a slight taper. If you have special needs, Speedgrip will make alterations to standard dimensions or design new mandrels.

Single and Double Taper Collets are stocked as unground blanks to reduce delivery time. When ordered, these parts are pulled from stock and ground to meet your requirements. If alterations are needed, these can be quoted to meet your special needs.

Phone: (574) 294-1506 Fax: (574) 294-2465

STANDARD SINGLE TAPER MANDRELS

STM-X



NOTE: REPEATABILITY GUARANTEED WITHIN .0005˝ MAX.

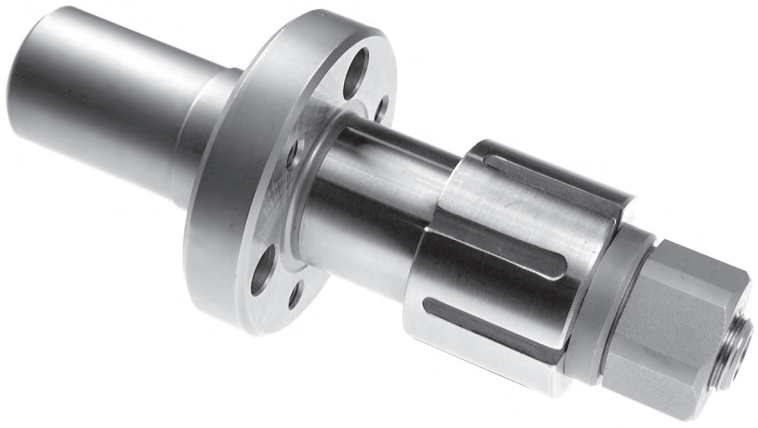
MANDREL NO.	A DIA. MIN.	A DIA. MAX.	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V
STM-0	.500	1.000	.375	.438	.500	.375	1.625	.438	.375	.250-28	1.000	.531	(3).250-20	(3)#10-24	.433	.375	3.188	.375	.188	.125	.313
STM-.5	.625	1.250	.563	.563	.563	.375	1.750	.563	.375	.250-28	1.125	.594	(3).250-20	(3)#10-24	.577	.500	3.563	.500	.250	.125	.313
STM-1	.750	1.500	.750	.688	.688	.375	1.875	.688	.375	.313-24	1.250	.656	(3).250-20	(3)#10-24	.577	.500	4.063	.625	.313	.188	.313
STM-2	.938	2.000	.875	.875	.875	.500	2.188	.875	.438	.375-24	1.500	.813	(3).250-20	(3).250-20	.793	.688	5.000	.813	.438	.188	.500
STM-2.5	1.375	3.000	1.250	1.250	1.125	.563	2.625	1.250	.500	.625-18	1.625	.969	(3).250-20	(3).250-20	1.299	1.125	6.188	1.188	.563	.250	.750
STM-3	1.625	4.250	1.500	1.500	1.125	.625	3.125	1.500	.500	.625-18	1.750	1.188	(3).375-16	(3).375-16	1.443	1.250	6.750	1.375	.625	.313	.813
STM-3.5	2.375	5.500	2.000	2.250	1.125	.625	4.000	2.250	.563	1.250-12	2.000	1.625	(3).375-16	(3).375-16	2.020	1.750	8.063	1.750	.75	.375	1.250
STM-4	2.875	7.000	2.250	2.750	1.125	.750	4.875	2.750	.563	1.500-12	2.250	1.969	(3).500-13	(3).375-16	2.598	2.250	8.750	2.250	.875	.438	1.250
STM-4.5	4.000	10.000	2.750	3.750	1.125	.750	5.750	3.750	.625	2.000-12	2.500	2.438	(3).500-13	(3).438-14	3.464	3.000	10.125	2.500	1.000	.500	1.750
STM-5	4.750	11.000	3.250	4.500	1.125	.875	6.750	4.500	.625	2.000-12	3.000	2.844	(3).500-13	(3).500-13	4.464	3.000	11.375	3.000	1.000	.625	1.750
STM-6	6.250	13.000	3.250	6.000	1.125	.875	8.250	6.000	.625	2.000-12	3.000	3.563	(3).500-13	(3).500-13	3.464	3.000	11.375	3.000	1.000	.625	1.750
STM-8	8.250	17.000	3.250	8.000	1.125	.875	10.250	8.000	.625	2.000-12	4.000	4.625	(3).500-13	(3).500-13	3.464	3.000	12.750	4.000	1.000	1.000	1.750

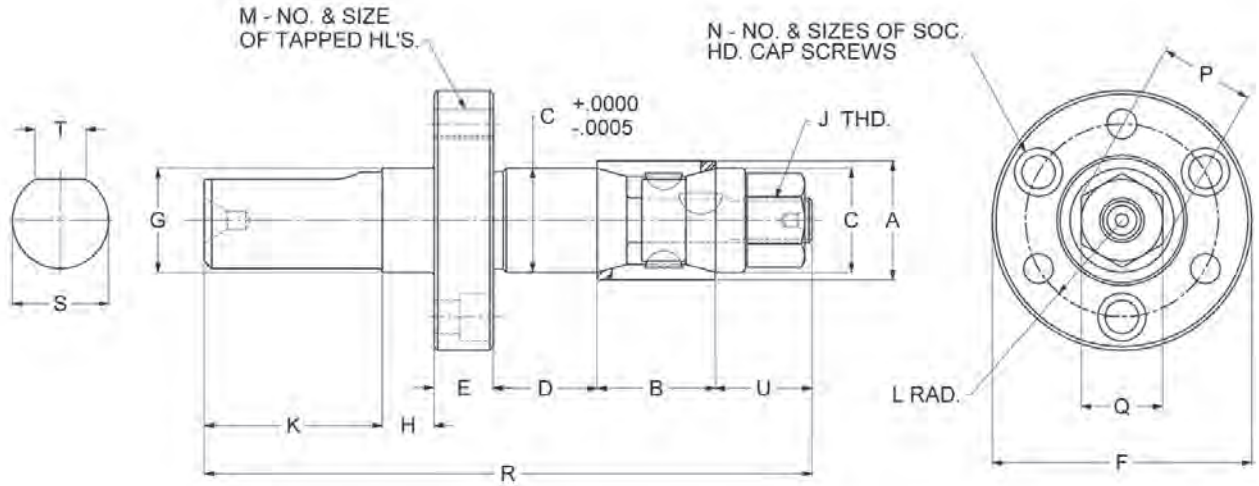
NOTE: No. 0 and .5 CHUCKS DO NOT HAVE WOODRUFF KEYS.

CT-721

*ALTERATIONS TO STANDARD DIMENSIONS ARE AVAILABLE AND ARE QUOTED AS SPECIAL.

DTMS-X



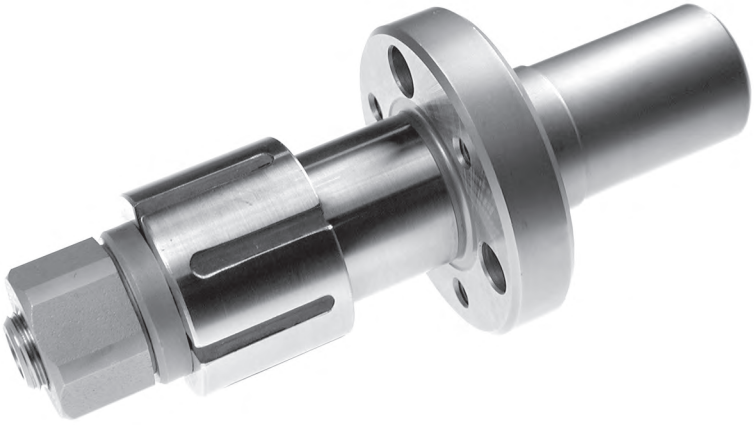


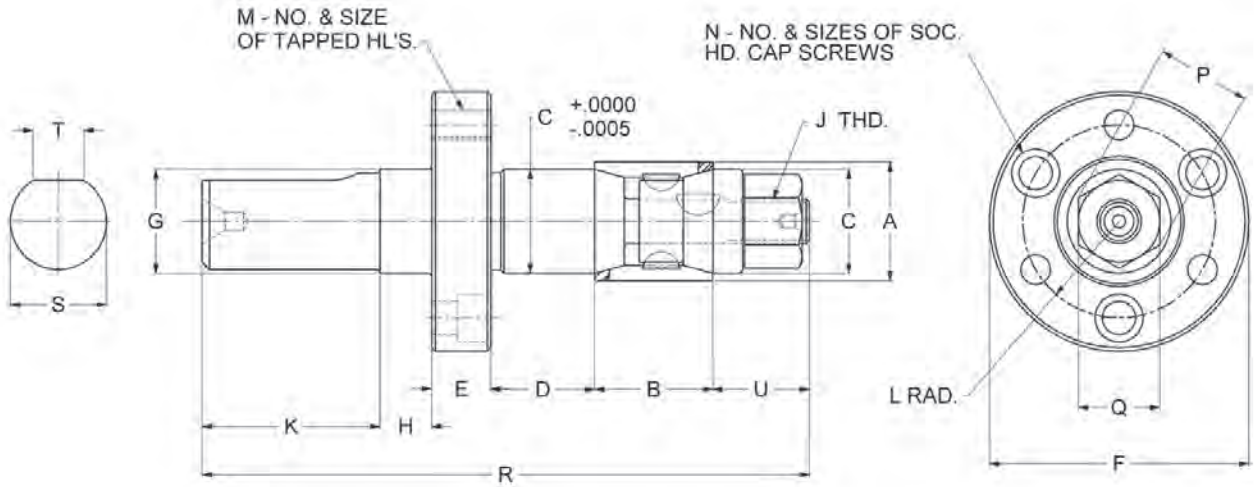
NOTE: REPEATABILITY GUARANTEED WITHIN .0005˝ MAX.

MANDREL NO.	A DIA. MIN.	A DIA. MAX.	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U
DTMS-0	.5000	1.000	.625	.438	.500	.375	1.625	.438	.375	.250-28	1.000	.531	(3).250-20	(3)#10-24	.433	.375	3.688	.375	.188	.813
DTMS-.5	.625	1.250	.750	.563	.563	.375	1.750	.563	.375	.250-28	1.125	.594	(3).250-20	(3)#10-24	.577	.500	3.750	.500	.250	.563
DTMS-1	.750	1.500	.875	.688	.688	.375	1.875	.688	.375	.313-24	1.250	.656	(3).250-20	(3)#10-24	.577	.500	4.250	.625	.313	.688
DTMS-2	.938	2.000	1.000	.875	.875	.500	2.188	.875	.438	.375-24	1.500	.813	(3).250-20	(3).250-20	.793	.688	5.125	.813	.438	.813
DTMS-2.5	1.375	3.000	1.250	1.250	1.125	.563	2.625	1.250	.500	.625-18	1.625	.969	(3).250-20	(3).250-20	1.299	1.125	6.813	1.188	.563	1.750
DTMS-3	1.625	4.250	1.625	1.500	1.125	.625	3.125	1.500	.500	.625-18	1.750	1.188	(3).375-16	(3).375-16	1.443	1.250	7.063	1.375	.625	1.438
DTMS-3.5	2.375	5.500	2.000	2.250	1.125	.625	4.000	2.250	.563	1.250-12	2.000	1.625	(3).375-16	(3).375-16	2.020	1.750	9.500	1.750	.75	3.188
DTMS-4	2.875	7.000	2.500	2.750	1.125	.750	4.875	2.750	.563	1.500-12	2.250	1.969	(3).500-13	(3).375-16	2.598	2.250	10.688	2.250	.875	3.500
DTMS-4.5	4.000	10.000	3.000	3.750	1.125	.750	5.750	3.750	.625	2.000-12	2.500	2.438	(3).500-13	(3).438-14	3.464	3.000	12.563	2.500	1.000	4.563
DTMS-5	4.750	11.000	3.500	4.000	1.125	.875	6.750	4.500	.625	2.000-12	3.000	2.844	(3).500-13	(3).500-13	3.464	3.000	13.375	3.000	1.000	4.250
DTMS-6	6.250	13.000	4.000	6.000	1.125	.875	8.250	6.000	.625	2.000-12	3.000	3.563	(3).500-13	(3).500-13	3.464	3.000	14.250	3.000	1.000	4.625
DTMS-8	8.250	17.000	4.500	8.000	1.125	.875	10.250	8.000	.625	2.000-12	4.000	4.625	(3).500-13	(3).500-13	3.464	3.000	15.250	4.000	1.000	4.125

NOTE: NO. 0 AND .5 MANDRELS DO NOT HAVE WOODRUFF KEYS.
* ALTERATIONS TO STANDARD DIMENSIONS ARE AVAILABLE AND ARE QUOTED AS SPECIAL

DTML-X





NOTE: REPEATABILITY GUARANTEED WITHIN .0005″ MAX.

MANDREL NO.	A DIA. MIN.	A DIA. MAX.	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U
DTML-0	.500	1.000	.875	.438	.500	.375	1.625	.438	.375	.250-28	1.000	.531	(3).250-20	(3)#10-24	.433	.375	3.938	.375	.188	.813
DTML-.5	.625	1.250	1.000	.563	.563	.375	1.750	.563	.375	.250-28	1.125	.594	(3).250-20	(3)#10-24	.577	.500	3.875	.500	.250	.438
DTML-1	.750	1.500	1.125	.688	.688	.375	1.875	.688	.375	.313-24	1.250	.656	(3).250-20	(3)#10-24	.577	.500	4.250	.625	.313	.438
DTML-2	.938	2.000	1.250	.875	.875	.500	2.188	.875	.438	.375-24	1.500	.813	(3).250-20	(3).250-20	.793	.688	5.188	.813	.438	.625
DTML-2.5	1.375	3.000	1.500	1.250	1.125	.563	2.625	1.250	.500	.625-18	1.625	.969	(3).250-20	(3).250-20	1.299	1.125	6.813	1.188	.563	1.500
DTML-3	1.625	4.250	2.000	1.500	1.125	.625	3.128	1.500	.500	.625-18	1.750	1.188	(3).375-16	(3).375-16	1.443	1.250	7.250	1.375	.625	1.250
DTML-3.5	2.375	5.500	2.375	2.250	1.125	.625	4.000	2.250	.563	1.250-12	2.000	1.625	(3).375-16	(3).375-16	2.020	1.750	9.500	1.750	.750	2.813
DTML-4	2.875	7.000	3.000	2.750	1.125	.750	4.875	2.750	.563	1.500-12	2.250	1.969	(3).500-13	(3).375-16	2.598	2.250	10.688	2.250	.875	3.000
DTML-4.5	4.000	10.000	3.500	3.750	1.125	.750	5.750	3.750	.625	2.000-12	2.500	2.438	(3).500-13	(3).438-14	3.464	3.000	12.625	2.500	1.000	4.128
DTML-5	4.750	11.000	4.000	4.500	1.125	.875	6.750	4.500	.625	2.000-12	3.000	2.844	(3).500-13	(3).500-13	3.464	3.000	13.438	3.000	1.000	3.813
DTML-6	6.250	13.000	4.500	6.000	1.125	.875	8.250	6.000	.625	2.000-12	3.000	3.563	(3).500-13	(3).500-13	3.464	3.000	14.250	3.000	1.000	4.125
DTML-8	8.250	17.000	5.000	8.000	1.125	.875	10.250	8.000	.625	2.000-12	4.000	4.625	(3).500-13	(3).500-13	3.464	3.000	15.250	4.000	1.000	3.625

NOTE: NO. 0 AND .5 MANDRELS DO NOT HAVE WOODRUFF KEYS.
* ALTERATIONS TO STANDARD DIMENSIONS ARE AVAILABLE AND ARE QUOTED AS SPECIAL

DRAWSCREW

Figure 1 is a standard socket head screw that is used on drawbar or manually actuated Single Taper Chucks and Locators. It is also used with manually operated Double Taper Chucks and Locators from size No.4 thru No. 8.

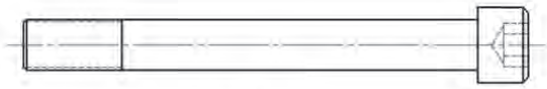


FIG. 1

Figure 2 is a standard taper head draw screw. This screw is used with drawbar actuated Double Taper Chucks and Locators and with draw-bar actuated Reverse Taper Chucks and Locators from size No. 0 thru size No. 4.

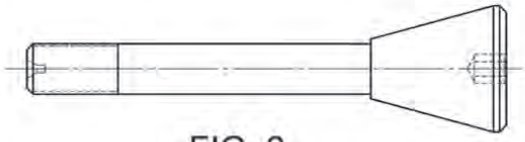


FIG. 2

Figure 3 shows a type of screw for manual operation that can be bolted to the back side of standard Single Taper Nose Plates and Locators. A standard hexagon nut and collar can be used in conjunction with these screws. Prices for these screws will be quoted upon application.

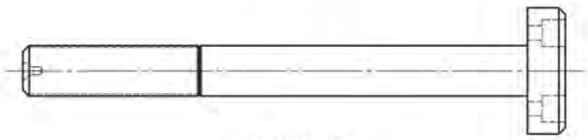


FIG. 3

Figure 4 is an integral drawscrew combining the cap screw and safety collar into a one piece construction. This **safety stop drawscrew** is to prevent overexpansion of the collet and is available for all single taper chucks per the chart below.

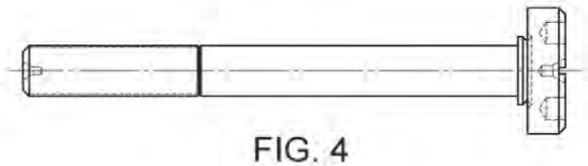


FIG. 4

Chuck #	STN-0	STN-.5	STN-1	STN-2	STN-2.5	STN-3	STN-3.5	STN-4	STN-4.5	STN-5	STN-6	STN-8
Drawscrew#	D-11370	D-11369	D-4348	D-4349	D-4350	D-4351	D-4352	D-4353	D-4354	D-4355	D-4356	D-4357

MAXIMUM DRAWBAR PULL IN POUNDS FOR DRAWSCREWS

The table below shows the various sizes and types of draw screws with the maximum number of pounds of draw bar pull that they can be expected to withstand. Prices for cap screws for Figure 1 are shown in the Standard Chucking Mechanisms Price List.

CAPACITY OF DRAW SCREWS

THREAD SIZE	SIZE CHUCK AND LOCATOR USED ON	MAXIMUM POUNDS DRAWBAR PULL	
		FIG. 1	FIG. 2, 3 & 4
10-32	0	2600	2000
.250-20	.5 & 1	3700	3000
.375-16	2	9000	6000
.500-13	2.5	16000	12000
.625-11	3	27000	16000
.750-16	3.5-4-4.5-5	40000	24000
1.00-8	6 & 8	69000	40000

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EXPANSION AND CLEARANCE DATA

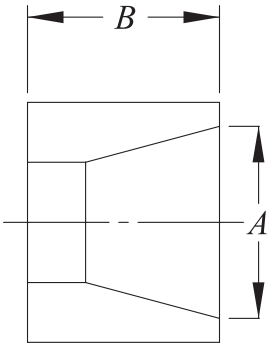
Speedgrip stocked collets are pulled from inventory and ground with the recommended load clearance per the chart below. Additional load clearance can usually be accommodated for autoloaders upon request.

LOAD CLEARANCE CHART FOR STANDARD COLLETS

COLLET SIZE	LOAD CLEARANCE	COLLET SIZE	LOAD CLEARANCE	COLLET SIZE	LOAD CLEARANCE	COLLET SIZE	LOAD CLEARANCE
0	.001-.002	**2**	.002-.003	**3.5**	.003-.004	**5**	.005-.006
.5	.002-.003	**2.5**	.0025-.0035	**4**	.003-.004	**6**	.005-.006
1	.002-.003	**3**	.003-.004	**4.5**	.004-.005	**8**	.006-.007

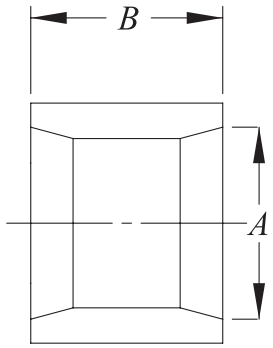
The charts below show the maximum expansion for each standard collet. It is necessary to have expansion beyond the grip diameter left to generate grip force to hold the part. This is typically .005. The sum of the load clearance, part tolerance, and overtravel must not exceed the collets total recommended expansion.

Single Taper



Size	Part No. Steel	Part No. Meehanite	A	B	Max. Steel	Expansion Meehanite
0	D-2000-S	N/A	7/16	3/8	.006	N/A
½	D-200½-S	N/A	9/16	9/16	.008	N/A
1	D-2001-S	N/A	11/16	3/4	.010	N/A
2	D-2002-S	N/A	7/8	7/8	.014	N/A
2½	D-2002½-S	N/A	1 1/4	1 1/4	.018	N/A
3	D-2003-S	N/A	1 1/2	1 1/2	.022	N/A
3½	D-2003½-S	N/A	2 1/4	2	.028	N/A
4	C-2004-S	N/A	2 3/4	2 1/4	.036	N/A
4½	C-2004½-S	C-2004½	3 3/4	2 3/4	.048	.030
5	C-2005-S	C-2005	4 1/2	3 1/4	.056	.034
6	C-2006-S	C-2006	6	3 1/4	.056	.034
8	C-2008-S	C-2008	8	3 1/4	.070	.036

Double Taper



Double Taper Short

Size	Part No.	A	B	Max. Exp.
0	D-10205	7/16	5/8	.012
½	D-10206	9/16	3/4	.014
1	D-10207	11/16	7/8	.015
2	D-10208	7/8	1	.018
2½	D-10209	1 1/4	1 1/4	.023
3	D-10210	1 1/2	1 5/8	.026
3½	D-10211	2 1/4	2	.032
4	D-10212	2 3/4	2 1/2	.040
4½	D-10213	3 3/4	3	.050
5	D-10214	4 1/2	3 1/2	.060
6	D-10215	6	4	.068
8	D-10216	8	4 1/2	.096

Double Taper Long

Size	Part No.	A	B	Max. Exp.
0	D-10217	7/16	7/8	.015
½	D-10218	9/16	1	.017
1	D-10219	11/16	1 1/8	.018
2	D-10220	7/8	1 1/4	.021
2½	D-10221	1 1/4	1 1/2	.027
3	D-10222	1 1/2	2	.032
3½	D-10223	2 1/4	2 3/8	.038
4	D-10224	2 3/4	3	.044
4½	D-10225	3 3/4	3 1/2	.058
5	D-10226	4 1/2	4	.068
6	D-10227	6	4 1/2	.076
8	D-10228	8	5	.108

Note: chamfers, steps, radiuses, splines, coatings and many other features are available.

IDENTIFYING A STANDARD COLLET

Standard collets can generally be identified by the length of the collet and verified by scaling the large end of the taper in the collet.

ORDERING A STANDARD COLLET

Describe the taper size and style of the collet.
Example: a #3 single taper is a D-2003-S. (-S denotes steel, no -S is meehanite)
Designate the minimum part diameter or part tolerance
Example: 2.372 + /- .001 or 2.371-2.373 Collet will be ground a given amount per chart for adequate load clearance.
Note if collet is to have "sealed slots" or "open slots"
Note if collet is to have a chamfer or radius
Example: 1/8 x 30 degree front chamfer, (front / top of collet or back / bottom of collet)

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