



## ADVANTAGES AND INTRODUCTION TO AUTOMATIC TOOL CHANGE COOLANT RETROFIT SYSTEMS

### TOOLHOLDER VARIETY

Our selection of standard holders includes V-Flange and BT Shanks. The types of holders available include single and double angle collet chucks, end mill holders, morse taper and ABS® modular holders. Special application holders can be designed to meet your specifications.

### TOOLHOLDER VERSATILITY

The same toolholder may be used for:  
1. Automatic rotary induced coolant operation  
2. Manual rotary induced coolant operation.

### MAXIMUM CLEARANCE

Our compact design allows for trouble free tool change operations as well as maximum tool pocket clearance.

### EASY MAINTENANCE

Simplicity of design and ease of assembly and disassembly allows for quick, economical maintenance.

### ADAPTABILITY

The ATC Retrofit System can be easily adapted to most domestic and imported machines and is interchangeable with most competitive tooling systems.

### TOOLHOLDER POSITIONING

ATC toolholders are equipped with a fully adjustable orientation ring.

### TOOL EFFICIENCY

The light weight of the adapter and coolant gland allows for maximum cutting tool weight.

### PROLONG TOOL LIFE

Cutting tool life is increased by applying coolant-thru-the-tool to prevent heat at the cutting edge, thus reducing premature tool chipping and tool breakage.

### IMPROVED PRODUCTION

Coolant-thru-the-tool allows for increased speeds and feeds, improving surface finish and overall performance.

### VALUE

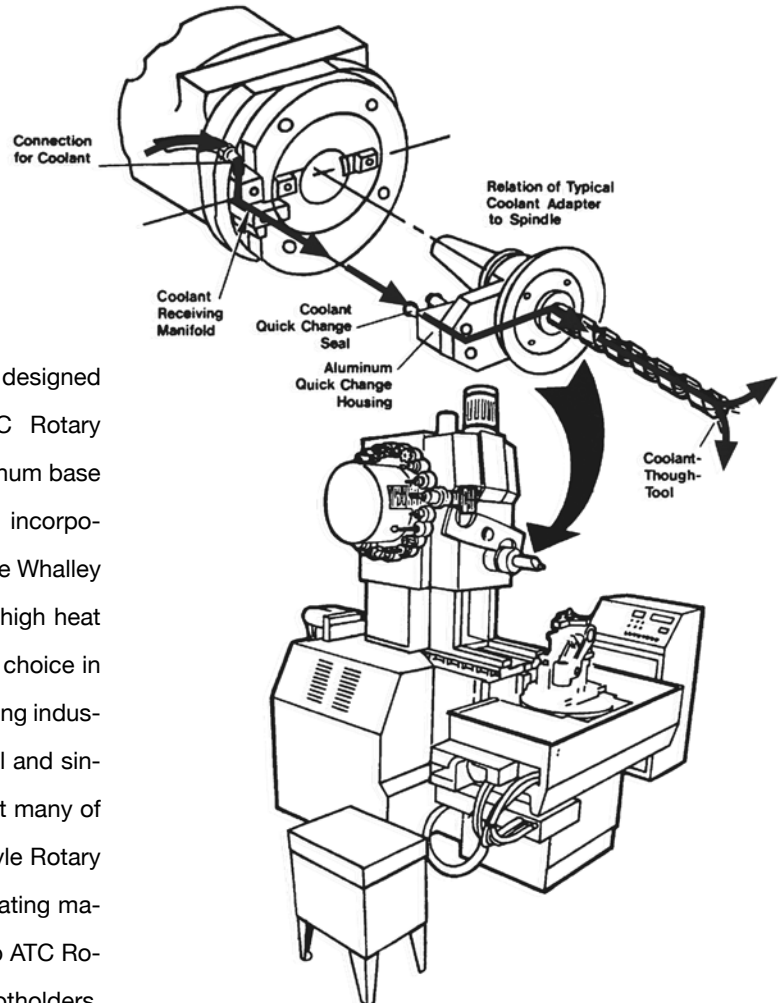
Point for point, feature for feature, The George Whalley Company ATC System for coolant-fed tooling, is the most economically priced and easily adapted system available.



## INTRODUCTION TO AUTOMATIC TOOL CHANGE (ATC) RETROFIT SYSTEM

The George Whalley Company Automatic Tool Change (ATC) Retrofit System is available to users of CNC machining centers with magazine or matrix-type tool storage features. The ATC Retrofit System eliminates the need for manual loading of coolant-fed tooling when high speed unattended operation is desired.

The ATC Retrofit System consists of a specially designed coolant-thru-the-tool holder assembled with an ATC Rotary Coolant Gland. The gland, which is mounted in an aluminum base assembly, is a uniquely designed bronze wear bushing incorporated with a special double seal only found in The George Whalley ATC Rotary Coolant Gland. The seal is self-lubricating, high heat and wear resistant making it the rotary coolant gland of choice in many manufacturing facilities throughout the metal working industry. ATC Rotary Coolant Glands are supplied in face seal and single or dual pin O-ring seal configurations, designed to fit many of today's popular machining centers. The Manual ATC Style Rotary Coolant Gland is a cost effective alternative when evaluating machine feasibility. These glands can be upgraded easily to ATC Rotary Coolant Glands without having to purchase new toolholders.

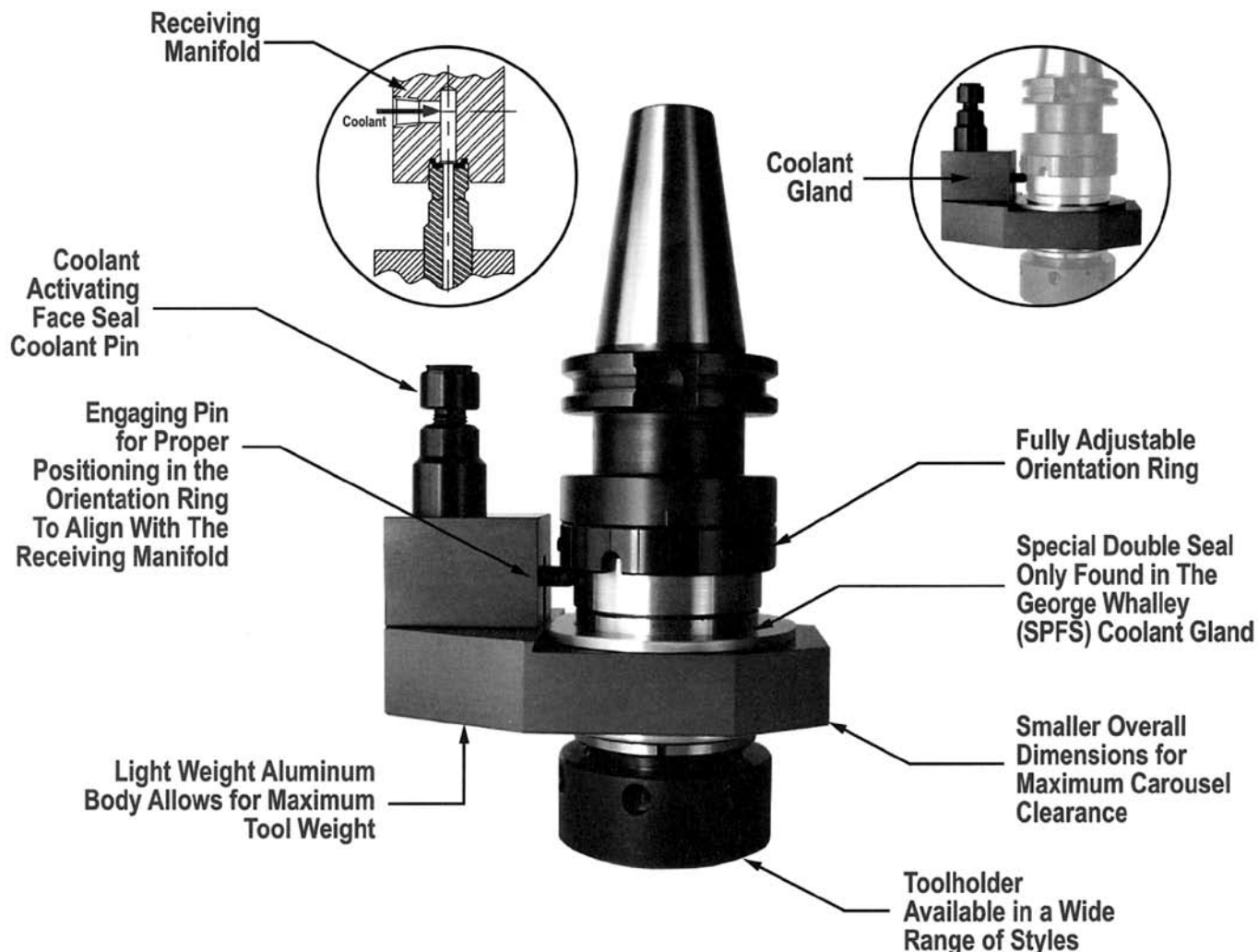


### REQUIREMENTS FOR RETROFITTING

- SUFFICIENT CLEARANCE IN TOOL CAROUSEL AND TOOL TRANSFER ARM AREAS.
- PROPER FILTERED AND PRESSURIZED COOLANT SUPPLY TO SERVE AUXILIARY MANIFOLD AT SPINDLE FACE.
- COOLANT FILTRATION AND PUMPING SYSTEM CAPABLE OF PRODUCING THE VOLUME AND PRESSURE NECESSARY FOR TYPES OF TOOLS BEING USED.
- PROPER MATCHING OF THE SPINDLE SPECIFICATIONS TO THE CORRECT HOLDER AND GLAND.
- CNC CONTROLS ABLE TO OPERATE COOLANT FLOW TO THE AUXILIARY MANIFOLD.
- APPROPRIATE SHIELDING OF THE MACHINE TO HANDLE COOLANT FLOW WITHOUT SPLASHING.



## SINGLE PIN FACE SEAL (SPFS) • AUTOMATIC TOOL CHANGE (ATC) ROTARY COOLANT GLAND ASSEMBLY



### COOLANT GLAND SELECTION

The Single Pin Face Seal (SPFS) Rotary Coolant Gland is the newest and most popular of The George Whalley Company ATC Coolant Gland assemblies. It is interchangeable with most foreign and domestic automatic tool change systems.

The Single Pin Face Seal (SPFS) Coolant Gland is used when your CNC machine spindle accepts a toolholder with a Cat 40, 45, 50 V-Flange or BT40, BT50 shank.

### TOOLHOLDER SELECTION

- To order V-Flange Holders with (SPFS) Rotary Coolant Glands see pages 90-93.
- To order BT Shank Holders with (SPFS) Rotary Coolant Glands see pages 93-94.

### RECEIVING MANIFOLD SELECTION AND SET-UP INFORMATION

The (SPFS) Coolant Gland requires the installation of a (SPFS) Receiving Manifold to activate the system (see next page).

*General Operating  
Recommendations  
For All Coolant  
Glands See  
Page 88*

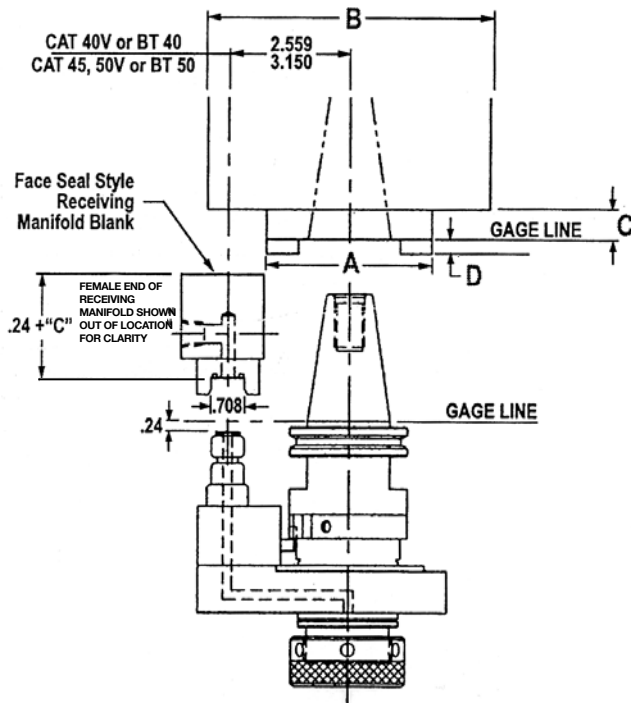


## SINGLE PIN FACE (SPFS) RECEIVING MANIFOLD BLANK

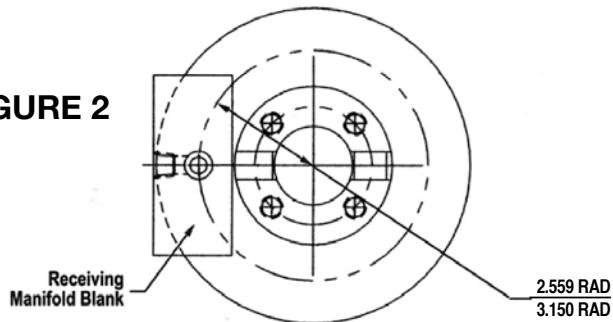
### (SPFS) RECEIVING MANIFOLD SET-UP DIMENSIONS

Single Pin Face Seal Style Manifold (Figure 1) showing how a Receiving Manifold is mounted to the spindle cover of the machine.

**FIGURE 1**



**FIGURE 2**



Spindle face (Figure 2) showing where the Receiving Manifold must be mounted. A radius of 2.559 must be maintained for CAT 40V or BT 40 shanks. A radius of 3.150 must be maintained for CAT 45, 50V or BT 50 shanks.

### SINGLE PIN FACE SEAL RECEIVING MANIFOLD BLANK

Interchangeable with most foreign and domestic manufacturers CAT 40, 45, 50V or BT 40 and BT 50 shanks.

#### ORDERING OPTIONS (Figure 3)

1. Purchase (SPFS) Manifold Blank (Part No. 117-100) and you alter to suit your machine requirements.
2. Purchase (SPFS) Manifold Blank and have The George Whalley Company custom machine your Manifold Blank to suit your requirements by filling out the information listed below. Pricing and delivery will be quoted after receipt of this information.

Using Figure 1 and Figure 2, please supply the following information for modifications on the Receiving Manifold Block

**Machine Spindle Taper**  
(check one)

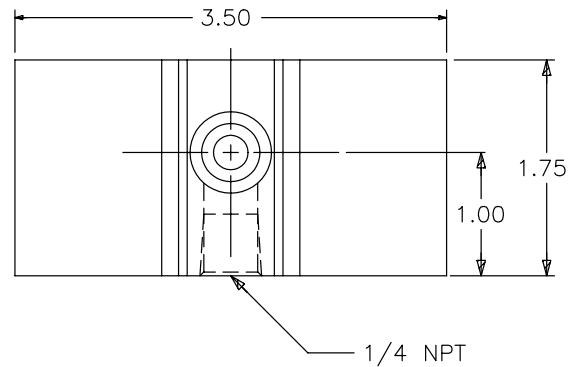
**A**

**B**

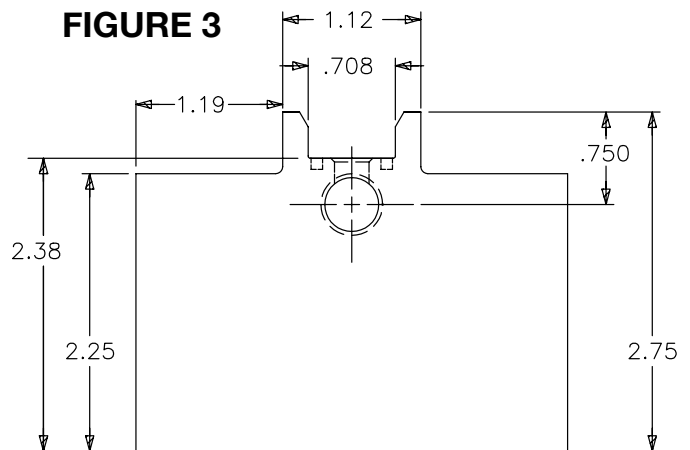
**C**

**D**

- ☐ CAT 40V  
☐ BT 40  
☐ CAT 45V  
☐ CAT 50V  
☐ BT 50



**FIGURE 3**



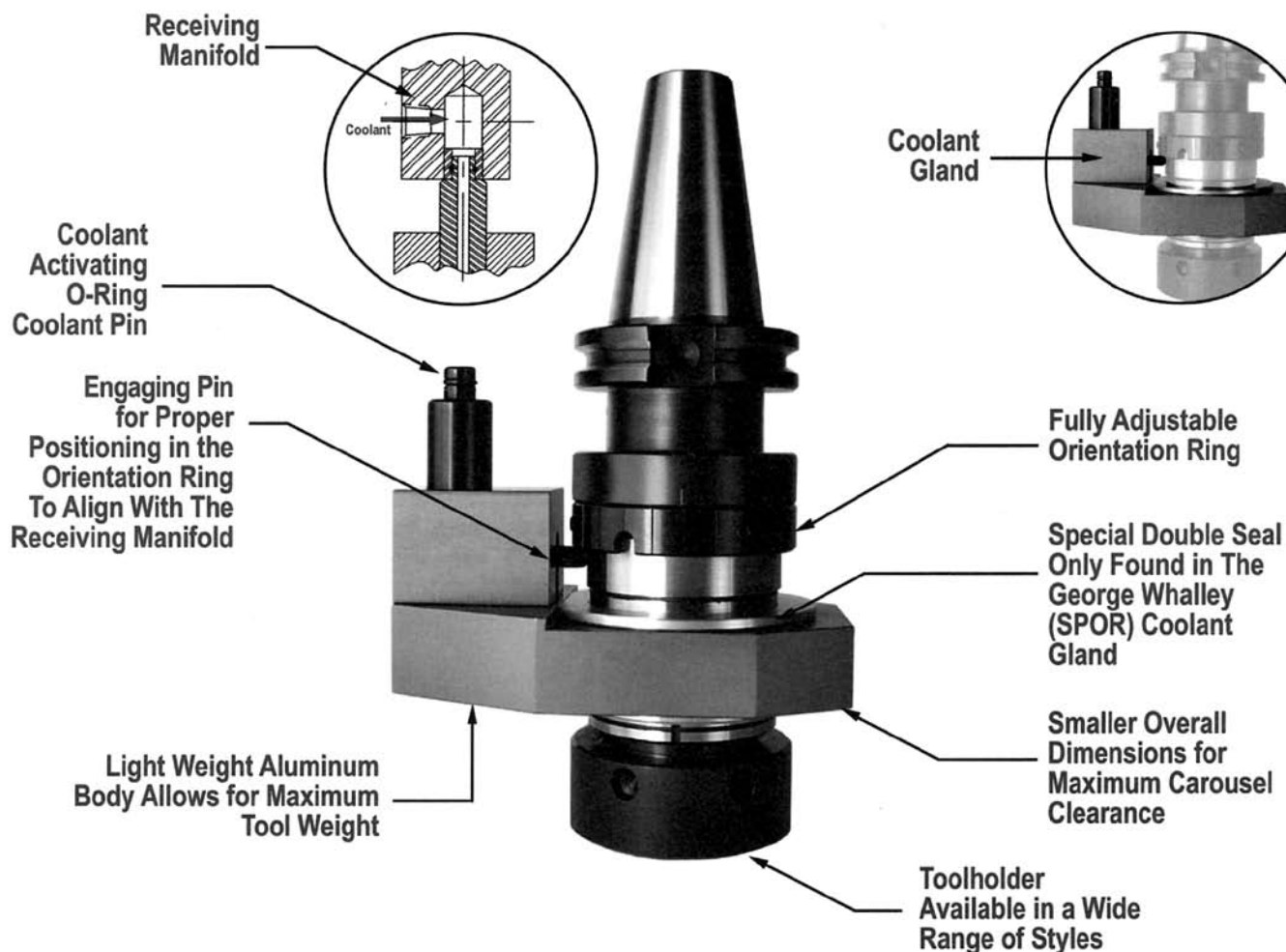
Shown are the basic dimensions of the Receiving Manifold Blank BEFORE modification.

PART NUMBER	DESCRIPTION
117-100	Single Pin Face Seal (SPFS) Receiving Manifold Blank

**AUTO TOOL  
CHANGE : ATC**



## SINGLE PIN O-RING (SPOR) • AUTOMATIC TOOL CHANGE (ATC) ROTARY COOLANT GLAND ASSEMBLY



### COOLANT GLAND SELECTION

The Single Pin O-Ring (SPOR) Rotary Coolant Gland of The George Whalley Company offers excellent radial location for the best engagement of the Coolant Pin into the Receiving Manifold.

The Single Pin O-Ring (SPOR) Coolant Gland is used when your CNC machine spindle accepts a toolholder with a Cat 40 V-Flange or BT40 shank.

### TOOLHOLDER SELECTION

- To order V-Flange Holders with (SPOR) Rotary Coolant Glands see pages 95-97.
- To order BT Shank Holders with (SPOR) Rotary Coolant Glands see pages 97-98.

### RECEIVING MANIFOLD

The (SPOR) Coolant Gland requires the installation of a (SPOR) Receiving Manifold to activate the system (see next page).

*General Operating  
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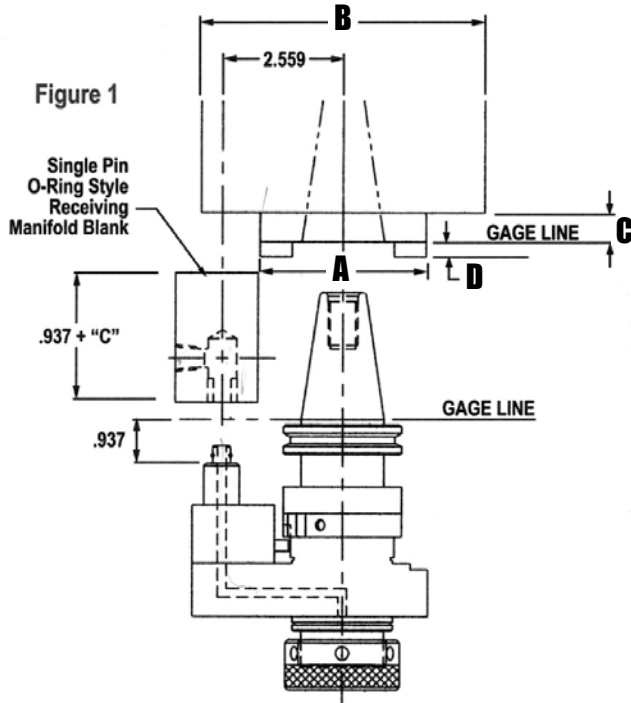


## SINGLE PIN O-RING (SPOR) RECEIVING MANIFOLD BLANK

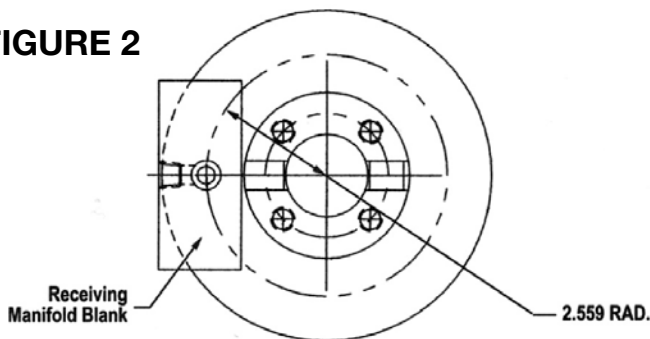
### (SPOR) RECEIVING MANIFOLD SET-UP DIMENSIONS

Single Pin O-Ring Seal Style Manifold (**Figure 1**) showing how a Receiving Manifold is mounted to the spindle cover of the machine.

**FIGURE 1**



**FIGURE 2**



Spindle face (**Figure 2**) showing where the Receiving Manifold must be mounted. A radius of 2.559 must be maintained for CAT 40V or BT 40 shanks.

### SINGLE PIN O-RING RECEIVING MANIFOLD BLANK

For CAT 40 V or BT 40 shanks

#### ORDERING OPTIONS (**Figure 3**)

1. Purchase (SPOR) Manifold Blank (Part No.117-200) and you alter to suit your machine requirements.
2. Purchase (SPOR) Manifold Blank and have The George Whalley Company custom machine your Manifold Blank to suit your requirements by filling out the information listed below. Pricing and delivery will be quoted after receipt of this information.

Using **Figure 1** and **Figure 2**, please supply the following information for modifications on the Receiving Manifold Block

**Machine Spindle Taper**  
(check one)

**A**

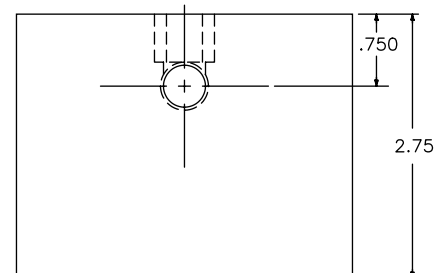
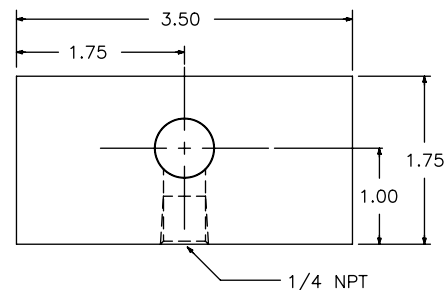
**B**

**C**

**D**

- ☐ CAT 40V  
☐ BT 40

**FIGURE 3**



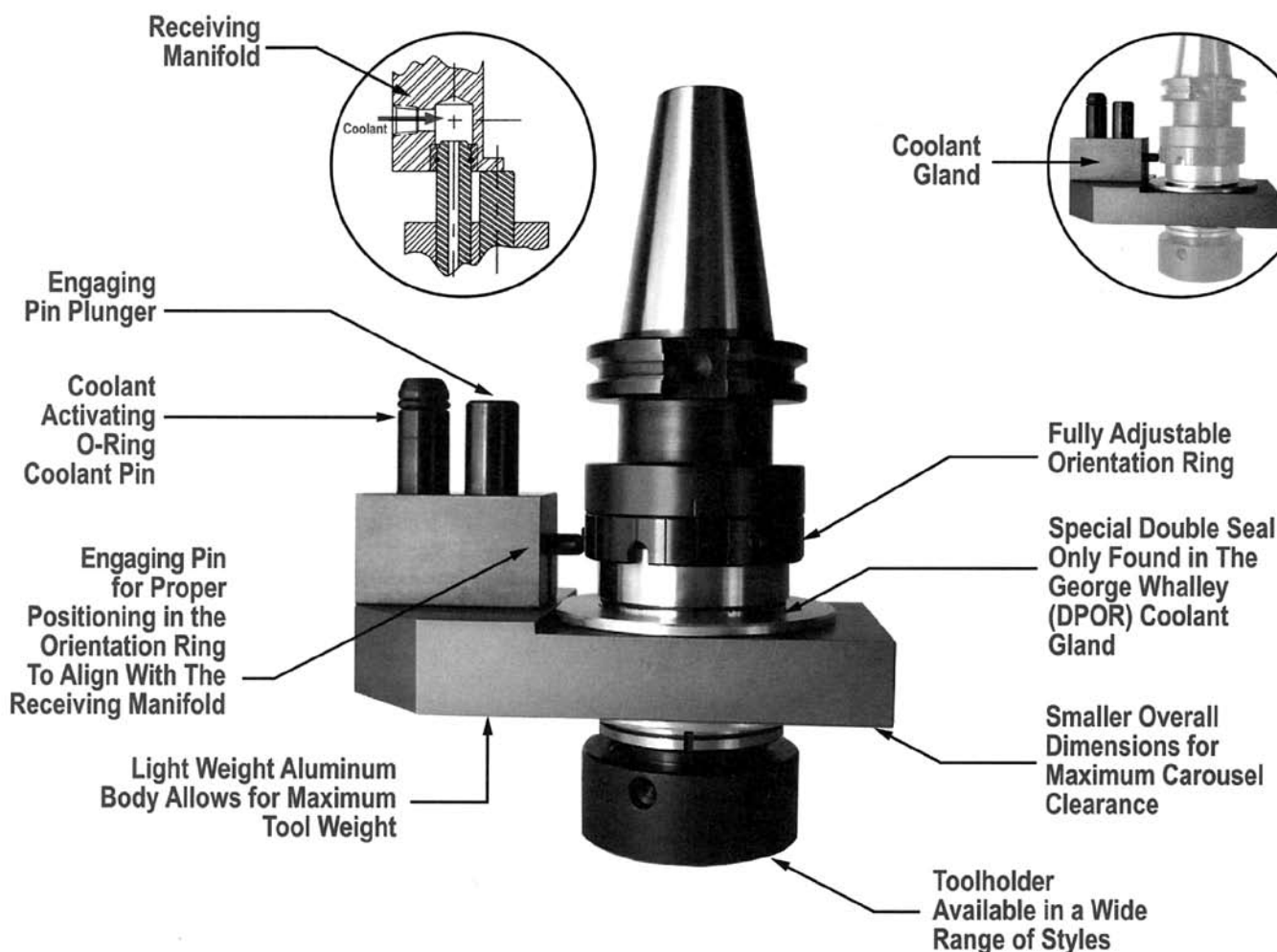
Shown are the basic dimensions of the Receiving Manifold Blank **BEFORE** modification.

PART NUMBER	DESCRIPTION
117-200	Single Pin O-Ring (SPOR) Receiving Manifold Blank

AUTO TOOL  
CHANGE : ATC



## DUAL PIN O-RING (DPOR) • AUTOMATIC TOOL CHANGE (ATC) ROTARY COOLANT GLAND ASSEMBLY



### COOLANT GLAND SELECTION

The Dual Pin O-Ring (DPOR) Rotary Coolant Gland of The George Whalley Company offers minimum as well as maximum coolant pressure capabilities. It also provides the best radial location for the proper engagement of the Coolant Pin to the Receiving Manifold.

The Dual Pin O-Ring (DPOR) Coolant Gland is used when your CNC machine spindle accepts a toolholder with a Cat 45, 50 V-Flange, BT50 or K&T 200/300 Series. (K&T by special request)

### TOOLHOLDER SELECTION

- To order V-Flange Holders with (DPOR) Rotary Coolant Glands see pages 99-101.
- To order BT Shank Holders with (DPOR) Rotary Coolant Glands see pages 103-104.
- To order K&T Holders with (DPOR) Rotary Coolant Glands see page 102.

### RECEIVING MANIFOLD

The (DPOR) Coolant Gland requires the installation of a (DPOR) Receiving Manifold to activate the system (see next page).

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Operating  
Recommendations  
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Glands See  
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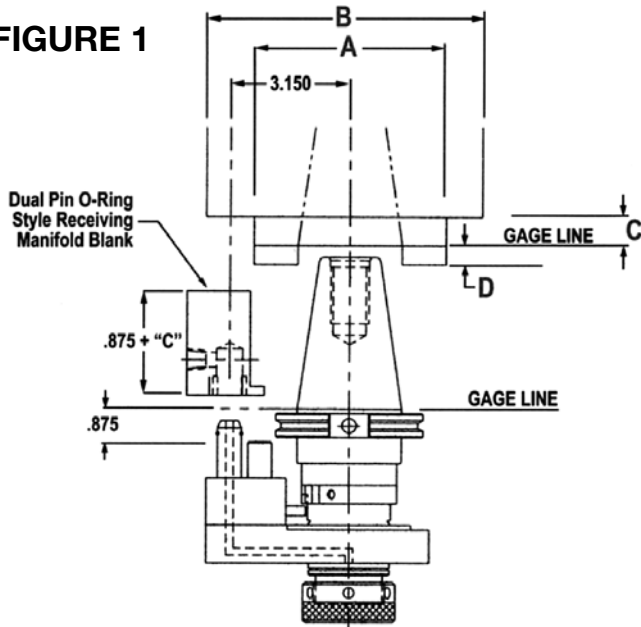


## DUAL PIN O-RING (DPOR) RECEIVING MANIFOLD BLANK

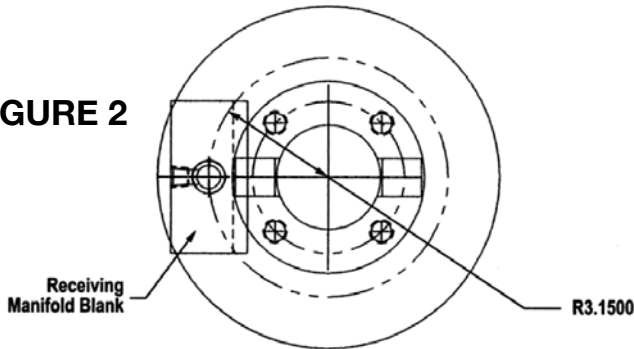
### (DPOR) RECEIVING MANIFOLD SET-UP DIMENSIONS

Dual Pin O-Ring Style Manifold (**Figure 1**) showing how a Receiving Manifold is mounted to the spindle cover of the machine.

**FIGURE 1**



**FIGURE 2**



Spindle face (**Figure 2**) showing where the Receiving Manifold must be mounted. A radius of 3.150 must be maintained for CAT 45V, 50V or BT 50 shanks.

### DUAL PIN O-RING RECEIVING MANIFOLD BLANK

For CAT 45, CAT 50V, or BT 50 shanks

#### ORDERING OPTIONS (**Figure 3**)

1. Purchase (DPOR) Manifold Blank (Part No.117-300) and you alter to suit your machine requirements.
2. Purchase (DPOR) Manifold Blank and have The George Whalley Company custom machine your Manifold Blank to suit your requirements by filling out the information listed below. Pricing and delivery will be quoted after receipt of this information.

Using **Figure 1** and **Figure 2**, please supply the following information for modifications on the Receiving Manifold Block

**Machine Spindle Taper**  
(check one)

**A**

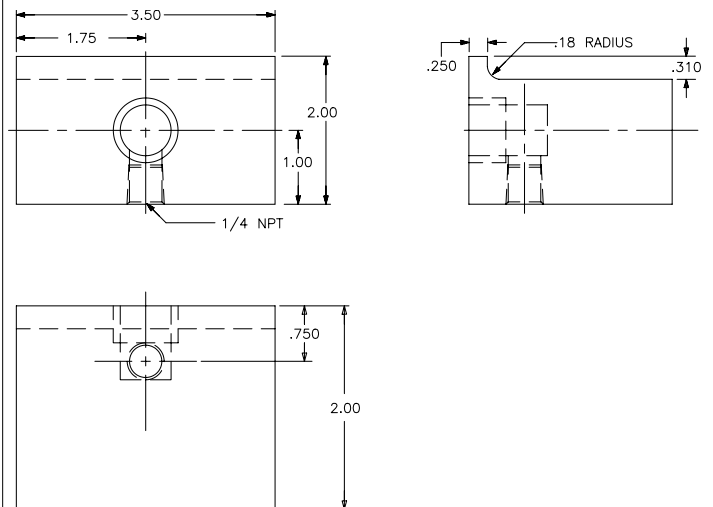
**B**

**C**

**D**

- ☐ CAT 45  
☐ CAT 50V  
☐ BT 50

**FIGURE 3**



Shown are the basic dimensions of the Receiving Manifold Blank **BEFORE** modification.

PART NUMBER	DESCRIPTION
117-300	Dual Pin O-Ring (DPOR) Receiving Manifold Blank

AUTO TOOL  
CHANGE : ATC





## MANUAL (MG), ROTARY COOLANT GLAND ASSEMBLY

- **Designed for preliminary manual applications.**
- **Upgrade to an Automatic Coolant Gland Assembly without purchasing another holder.**
- **For use on CNC machines with CAT 40, 45, 50V and BT 40, BT 50 shanks.**

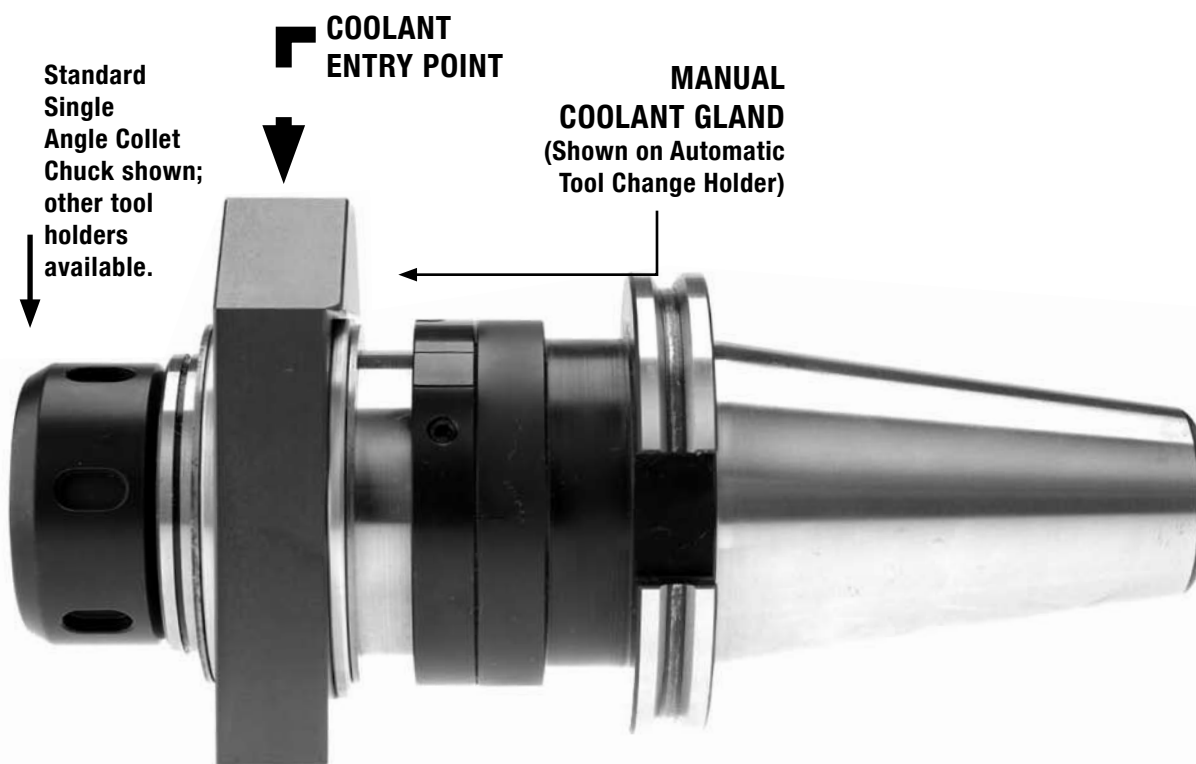
Toolholders can be utilized with a Manual Rotary Coolant Gland if the automatic tool change function is not required.

The Manual Rotary Coolant Gland is an economical means for proving out coolant-thru-the-tool processing.

The Manual Rotary Gland can also be used on Manual Machines with auxiliary coolant.

## TOOLHOLDER SELECTION

- To order V-Flange Holders with Manual (MG) Rotary Coolant Glands see pages 104-106.
- To order BT Shank Holders with Manual (MG) Rotary Coolant Glands see pages 107-108.



*General Operating Recommendations For All Coolant Glands See Page 88.*



## INSTALLING THE RECEIVING MANIFOLD & COOLANT SYSTEM FOR AUTOMATIC CHANGING OF COOLANT-FED TOOLS

It is necessary to have the receiving block, tool holder and coolant gland assembly before the start of installation. The make and design of your particular machine will indicate which three modes of receiving block installations will best serve your operation. The George Whalley Company attempts to maintain records on specifications for machine tools. We cannot be responsible for changes or improvements to your particular machine tool and therefore must ask that you carefully review all specifications which we may provide. Use the following suggested procedure and double check each step of the installation.

**Note:** These instructions are to be followed after modification of Receiving Manifold Blank have been made to suit your machine.

1. Orient the spindle to the tool change position.
2. Load the automatic tool holder and gland assembly to the spindle. Observe the area where the receiving manifold is to be located. If there are any bolts, pins, or fasteners in this area, remove them at this time. Temporarily mark the location where the Receiving Manifold is to be mounted.
3. Remove the automatic tool holder assembly and receiving manifold from the machine. Thoroughly clean the manifold locating surface and the marked area to contain the manifold. Use lacquer thinner or solvent to clean oil or dirt from the mating surfaces.
4. Apply a generous coating of any brand of super type glue to the receiving manifold and mating surface to contain the manifold. Re-check spindle orient location at this time. Load the gland assembly to the machine along with the receiving manifold. The spring pressure of the gland assembly will hold the receiving manifold in place. Allow a proper time for the glue to set and adhere.
5. Remove the gland assembly from the spindle.
6. Use the existing mounting holes in the receiving manifold as a template to locate the matching holes on the machine member. Drill and tap holes as required. Drill dowel pin holes.
7. Re-assemble the coolant gland to the machine. Do not securely tighten the mounting bolts.
8. Re-load the gland assembly to the spindle allowing the receiving manifold and mating machine member to each find its ideal location. Secure all bolts. Ream the dowel pin holes and install the dowel pins.  
*See pages 80-85 for Receiving Manifold mounting information and dimensions.*

AUTO TOOL  
CHANGE : ATC

### TWO PIECE CONSTRUCTION TOOLHOLDERS AS SEEN ON PAGES 92, 93, AND 101.

The Two Piece Construction Holder with matching coolant gland assembly (shown on pages 92, 93, and 101) is designed to adapt large shank tooling to The George Whalley Company automatic tool change system. The system consists of the following three units:

1. **Shank Assembly** -The shank assembly has a #50 Cat. V-Flange taper with a #40 internal taper and two drive keys.
2. **Head Assembly** -The head assembly has a #40 taper shank and two drive slots. Straight bore or collet style front ends are available.
3. **Coolant Gland** - The coolant gland is located on the head assembly and automatically connects and disconnects from the receiving manifold which is mounted in proximity to the machine spindle.

The head and shank assemblies are located by drive and slot keys. The head and shank are fastened together by a draw screw. Concentricity is the same as one piece holders, approximately 0.0005" at the toolholder face.



## BRIEF CHECK LIST FOR START-UP

The following is a useful outline of procedures for installation of coolant-fed automatic tool change equipment in your machine:

1. Check to see that you have a receiving manifold properly installed on your machine and connected to its coolant system.
2. If you have a face seal adjustable coolant pin make sure it is adjusted for appropriate length to release the Activating Pin. Be sure that the set screw on top pin is locked.
3. Adjust orientation ring on toolholder to suit manifold location.
4. Tighten orientation ring screws in position, place coolant holder and gland in tool carousel and run slowly through tool change cycle, making sure of clearance at all points.
5. Follow Break In and Operating Recommendations (listed below).
6. After completion of break in procedure, you may bring the tool holder up to speed.

**CAUTION!** Should gland show signs of overheating, stop operations and consult detailed operating instructions.

## BREAK IN AND OPERATING RECOMMENDATIONS FOR AUTOMATIC AND MANUAL TOOL CHANGE COOLANT GLANDS

In order to assure proper lubrication, even wear, and proper seating, high RPM glands should be broken in at 100 RPM for 3 minutes with coolant introduced at a pressure and volume between 100 PSI and 500 PSI to prevent overloading seals. Repeat procedure at 500 RPM for 3 minutes, and again at 1000 RPM. After break in procedure is complete, units may be run at pressure between 100 PSI and 1000 PSI.

For maximum life and performance of these coolant glands and seals the following conditions are recommended:

1. Coolant filtration: 30 to 50 micron minimum; 5 micron optimum
2. Proper type & viscosity of coolant: preferably a good water soluble synthetic with good lubrication and heat dissipation under pressure.
3. Coolant pressure: minimum of 100 lbs. coolant pressure at high R.P.M's (1800 SFM or more based on I.D. dimension of coolant gland or O.D. bearing diameter of tool holder). Maximum pressure of 1000 PSI
4. Coolant volume must be sufficient to properly lubricate cutting tool as recommended by its manufacturer. The combination of volume and pressure can not exceed the coolant orifice delivery capability of your tool or premature gland failure may result due to excessive heat build up.

**CAUTION!** All coolant glands require coolant at all speeds.

**CAUTION!** Operating RPM up to 1800 SFM based on the I.D. size of coolant gland or O.D. bearing diameter of toolholder.



## SPECIAL APPLICATION ROTARY COOLANT GLAND ASSEMBLIES



FIGURE 1



FIGURE 2



FIGURE 3

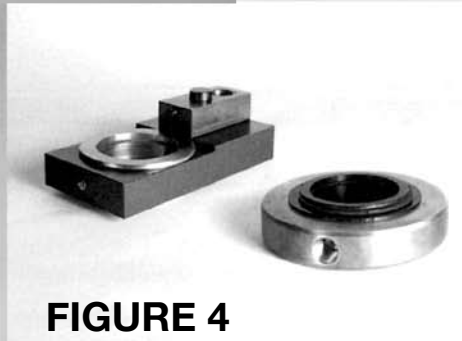


FIGURE 4

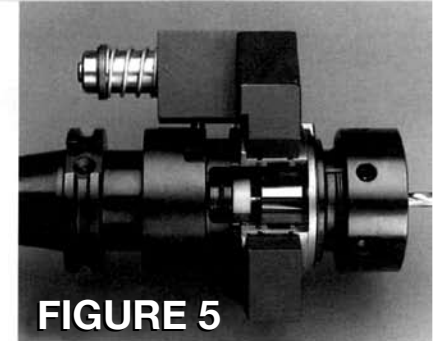


FIGURE 5

AUTO TOOL  
CHANGE : ATC

SEE PAGE 110 FOR SPECIAL APPLICATION ROTARY COOLANT GLAND ASSEMBLY QUESTIONNAIRE.

**FIGURE 1** -HSK Shank tooling with high speed coolant gland

**FIGURE 2** -Various Style Coolant Gland Assemblies, Manifolds and Convertible Adapter Coolant Pin  
-Can be supplied for 40, 45, 50, and 60 taper V-Flange or BT Style Shanks

**FIGURE 3** -Coolant Gland With High Pressure Sealing Device

**FIGURE 4** -Low Profile Coolant Gland Assembly and Special 2 Piece Flexible Rotary Gland

**FIGURE 5** -Special Coolant Gland With Unique Internal Sealing Adaptation

The George Whalley Company will design and develop Automatic Coolant Systems to meet your requirements. The following is a partial list of some of the more popular machines our engineering staff has designed systems for:

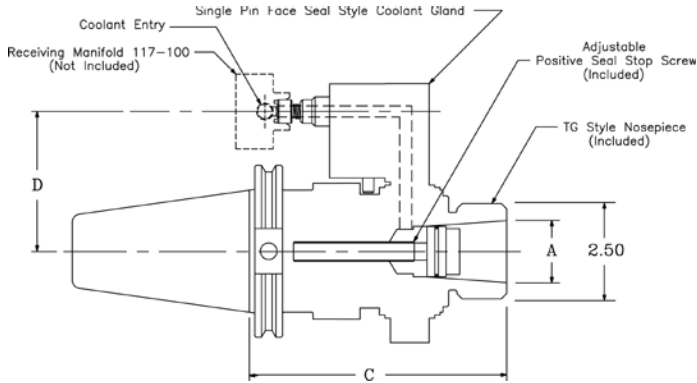
- |                        |                    |                    |
|------------------------|--------------------|--------------------|
| • Bohle                | • LeBlonde -Makino | • Osaka Kiko (OKK) |
| • Cincinnati -Milacron | • Mazak            | • Toshiba          |
| • Giddings & Lewis     | • Mitsubishi       | • Toyoda           |
| • Hitachi -Seiki       | • Mori Seiki       | • Hillyer          |
| • Kearney & Trecker    | • Niigata          | • Maho             |



Visit our website at [www.coolantfedtooling.com](http://www.coolantfedtooling.com) for technical information and our latest product offerings.



## V-FLANGE SINGLE ANGLE COLLET CHUCK • SINGLE PIN FACE SEAL ROTARY COOLANT GLAND



**TG STYLE COLLETS**  
See Page 146.



•See page 111 for positive seal stop screw.

ASSEMBLY PART NUMBER	A RANGE (IN.)	COLLET SERIES	CLEARANCE DIAMETER (IN.)	C PROJ. (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	OPTIONAL EXTENSION STYLE STOP SCREW (NOT INCLUDED)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)	SPANNER WRENCH (NOT INCLUDED)
<b>40 V-FLANGE</b>												
C40-TG10-SPFS-6	0.094 - 1.000	TG 100	2.50	6.00	2.559	AI-9889N	100 PSI	1000 PSI	3000	116-004	585-916	112-001
<b>45 V-FLANGE</b>												
*C45-TG10-SPFS-6	0.094 - 1.000	TG 100	2.50	6.00	3.150	AI-9989S	100 PSI	1000 PSI	2500	116-001	585-920	112-001
<b>50 V-FLANGE</b>												
C50-TG10-SPFS-6	0.094 - 1.000	TG 100	2.50	6.00	3.150	AI-9989S	100 PSI	1000 PSI	2500	116-001	585-920	112-001

### \* Outgoing Items

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

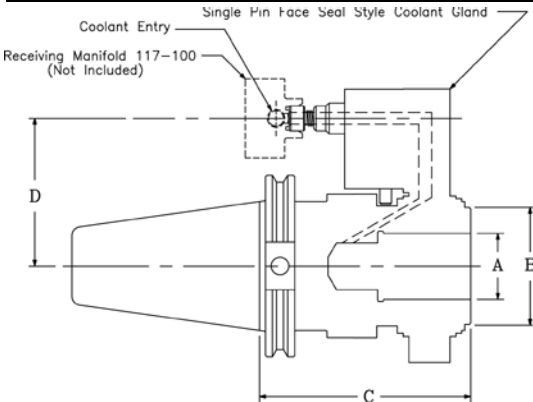
(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**

## V-FLANGE END MILL HOLDERS • SINGLE PIN FACE SEAL ROTARY COOLANT GLAND



ASSEMBLY PART NUMBER	A I.D. (IN.)	B CLEARANCE DIA. (IN.)	C PROJECTION (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	COOLANT STOP SCREW (INCLUDED)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>40 V-FLANGE</b>										
C40-EM75-SPFS-6	0.750	1.312	5.50	2.559	AI-9789V	100 PSI	1000 PSI	4000	NONE	585-904
C40-EM10-SPFS-6	1.000	1.625	5.50	2.559	AI-9789T	100 PSI	1000 PSI	3300	NONE	585-912
^C40-EM12-SPFS-5	1.250	2.125	4.50	2.559	AI-9889N	100 PSI	1000 PSI	3000	105-005	585-916
<b>45 V-FLANGE</b>										
*C45-EM75-SPFS-5	0.750	1.312	4.50	3.150	AI-0189Y	100 PSI	1000 PSI	4000	NONE	585-904
*C45-EM10-SPFS-5	1.000	1.625	4.50	3.150	AI-0189T	100 PSI	1000 PSI	3300	NONE	585-912
^C45-EM12-SPFS-5	1.250	2.500	4.50	3.150	AI-9989S	100 PSI	1000 PSI	2500	105-003	585-920
^^C45-EM15-SPFS-5	1.500	2.500	4.50	3.150	AI-9989S	100 PSI	1000 PSI	2500	105-003	585-920
<b>50 V-FLANGE</b>										
C50-EM75-SPFS-6	0.750	1.312	5.50	3.150	AI-0189Y	100 PSI	1000 PSI	4000	NONE	585-904
C50-EM10-SPFS-6	1.000	1.625	5.50	3.150	AI-0189T	100 PSI	1000 PSI	3300	NONE	585-912
^C50-EM12-SPFS-5	1.250	2.500	4.50	3.150	AI-9989S	100 PSI	1000 PSI	2500	105-004	585-920
^C50-EM15-SPFS-5	1.500	2.500	4.50	3.150	AI-9989S	100 PSI	1000 PSI	2500	105-004	585-920
^C50-EM20-SPFS-7	2.000	3.187	6.50	3.150	AR-0689Z	100 PSI	1000 PSI	1800	105-010	585-922

\* Outgoing Items ^ - Socket set screw location does not conform to ANSI specification. Request information if set screw location is critical

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

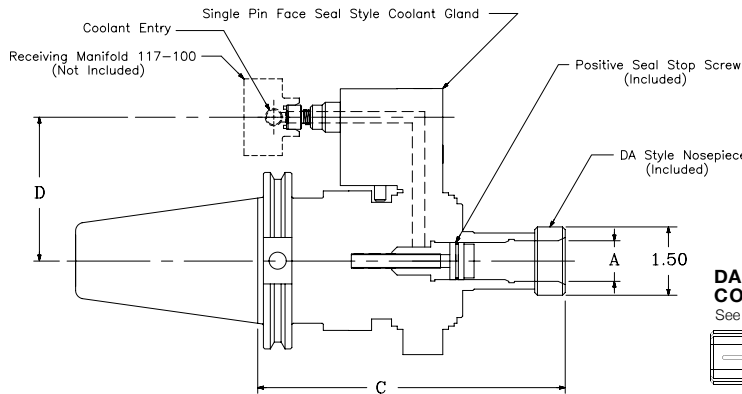
Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**

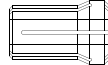




## V-FLANGE DOUBLE ANGLE COLLET CHUCK • SINGLE PIN FACE SEAL ROTARY COOLANT GLAND



**DA STYLE COLLETS**  
See Page 147.



•See page 111 for positive seal stop screw.

ASSEMBLY PART NUMBER	A RANGE (IN.)	COLLET SERIES	CLEARANCE DIAMETER (IN.)	C PROJECTION (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)	SPANNER WRENCH (NOT INCLUDED)
<b>40 V-FLANGE</b>											
*C40-DA18-SPFS-7	0.047 - 0.750	DA 180	1.50	7.00	2.559	AI-9789V	100 PSI	1000 PSI	4000	585-904	112-019

### \* Outgoing Items

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

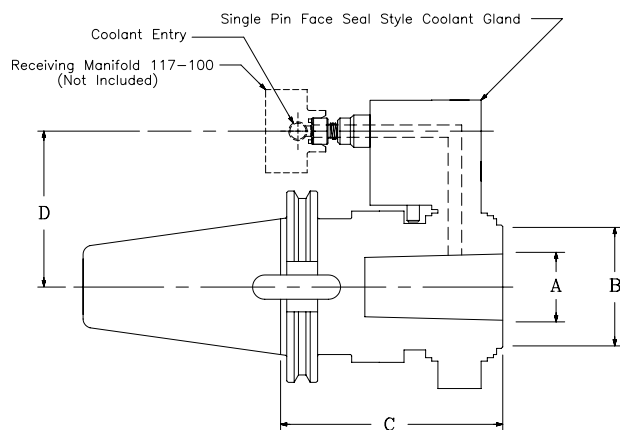
(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**

## V-FLANGE MORSE TAPER HOLDERS • SINGLE PIN FACE SEAL ROTARY COOLANT GLAND



Retention Knobs  
Sold Separately,  
See Pages 163-167.



ASSEMBLY PART NUMBER	A MORSE TAPER	B CLEARANCE DIA. (IN.)	C PROJECTION (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>40 V-FLANGE</b>									
C40-MT3-SPFS-5	MT3	2.125	4.50	2.559	AI-9889N	100 PSI	1000 PSI	3000	585-916
C40-MT3-SPFS-5A	MT3	1.312	4.50	2.559	AI-9789V	100 PSI	1000 PSI	4000	585-904
C40-MT4-SPFS-5	MT4	2.125	4.50	2.559	AI-9889N	100 PSI	1000 PSI	3000	585-916
C40-MT4-SPFS-5A	MT4	1.312	4.50	2.559	AI-9789V	100 PSI	1000 PSI	4000	585-904
<b>45 V-FLANGE</b>									
*C45-MT3-SPFS-5	MT3	2.500	4.50	3.150	AI-9989S	100 PSI	1000 PSI	2500	585-920
*C45-MT3-SPFS-5A	MT3	1.312	4.50	3.150	AI-0189Y	100 PSI	1000 PSI	4000	585-904
*C45-MT4-SPFS-5	MT4	2.500	4.50	3.150	AI-9889S	100 PSI	1000 PSI	2500	585-920
*C45-MT4-SPFS-5A	MT4	1.312	4.50	3.150	AI-0189Y	100 PSI	1000 PSI	4000	585-904
<b>50 V-FLANGE</b>									
C50-MT3-SPFS-5	MT3	2.500	4.50	3.150	AI-9989S	100 PSI	1000 PSI	2500	585-920
C50-MT3-SPFS-5A	MT3	1.312	4.50	3.150	AI-0189Y	100 PSI	1000 PSI	4000	585-904
C50-MT4-SPFS-5	MT4	2.500	4.50	3.150	AI-9989S	100 PSI	1000 PSI	2500	585-920
C50-MT4-SPFS-5A	MT4	1.312	4.50	3.150	AI-0189Y	100 PSI	1000 PSI	4000	585-904
C50-MT5-SPFS-5	MT5	2.500	4.50	3.150	AI-9989S	100 PSI	1000 PSI	2500	585-920

### \* Outgoing Items

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

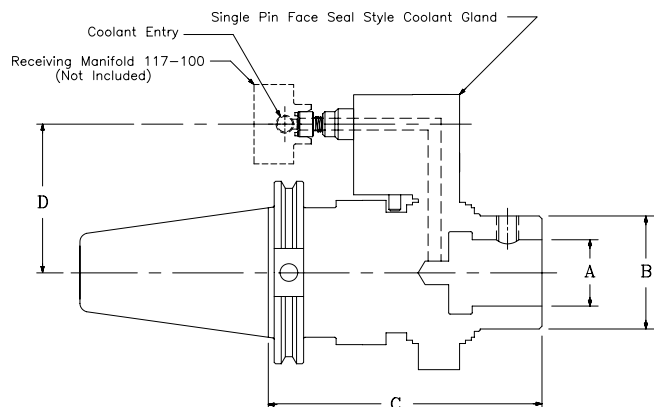
**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**



## V-FLANGE ABS® STYLE HOLDERS • SINGLE PIN FACE SEAL ROTARY COOLANT GLAND



ASSEMBLY PART NUMBER	A ABS® CONNECTION	B CLEARANCE DIA. (IN.)	C PROJECTION (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>40 V-FLANGE</b>									
C40-ABS40-SPFS-6	ABS 40	1.625	5.25	2.559	AI-9789T	100 PSI	1000 PSI	3300	585-912
C40-ABS50-SPFS-6	ABS 50	2.125	5.50	2.559	AI-9889N	100 PSI	1000 PSI	3000	585-916
<b>45 V-FLANGE</b>									
<b>*C45-ABS40-SPFS-6</b>	<b>ABS 40</b>	<b>1.625</b>	<b>5.25</b>	<b>3.150</b>	<b>AI-0189T</b>	<b>100 PSI</b>	<b>1000 PSI</b>	<b>3300</b>	<b>585-912</b>
<b>*C45-ABS50-SPFS-6</b>	<b>ABS 50</b>	<b>2.125</b>	<b>5.50</b>	<b>3.150</b>	<b>AI-9989X</b>	<b>100 PSI</b>	<b>1000 PSI</b>	<b>3000</b>	<b>585-916</b>
<b>*C45-ABS63-SPFS-6</b>	<b>ABS 63</b>	<b>2.500</b>	<b>5.62</b>	<b>3.150</b>	<b>AI-9989S</b>	<b>100 PSI</b>	<b>1000 PSI</b>	<b>2500</b>	<b>585-920</b>
<b>50 V-FLANGE ^</b>									
C50-ABS40-SPFS-6	ABS 40	1.625	5.25	3.150	AI-0189T	100 PSI	1000 PSI	3300	585-912
C50-ABS50-SPFS-6	ABS 50	2.125	5.50	3.150	AI-9989X	100 PSI	1000 PSI	3000	585-916
C50-ABS63-SPFS-5	ABS 63	2.500	5.75	3.150	AI-9989S	100 PSI	1000 PSI	2500	585-920

**\* Outgoing Items** ^ - ABS 80 & 100 holders available by special quotation on 50 V-Flange units.

ABS® is registered trademark of KOMET.

- Please refer to the Modular Tooling Section on pages 140-143 for Modular Adapters

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

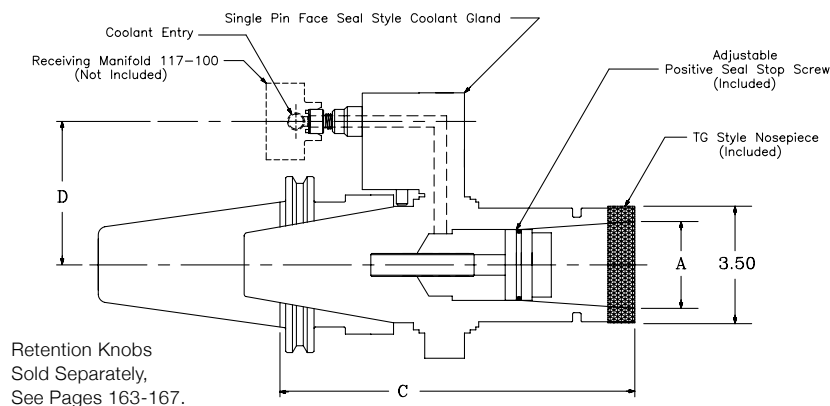
(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**

## V-FLANGE 2 PIECE SINGLE ANGLE COLLET CHUCK • SINGLE PIN FACE SEAL ROTARY COOLANT GLAND



**TG STYLE COLLETS**  
See Page 146.



- See page 111 for positive seal stop screw.

ASSEMBLY PART NUMBER	A RANGE (IN.)	COLLET SERIES	CLEARANCE DIA. (IN.)	C PROJ. (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)	SPANNER WRENCH (NOT INCLUDED)
<b>50 V-FLANGE</b>											
C50-TG15-2P-SPFS-9	0.500 - 1.500	TG 150	3.50	8.38	3.150	AI-9989S	100 PSI	1000 PSI	2500	585-920	112-002

- Especially designed to suit large shanked tools in a CNC carousel with limited space. • Utilizes standard coolant gland assemblies.

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

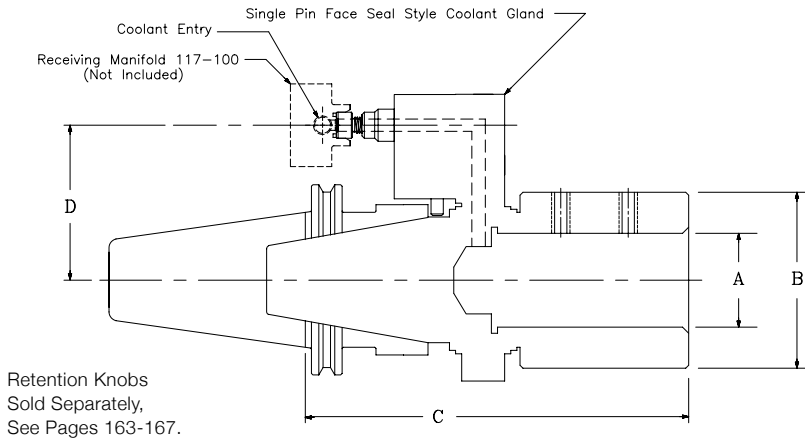
**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**



## V-FLANGE 2 PIECE END MILL HOLDERS • SINGLE PIN FACE SEAL ROTARY COOLANT GLAND



ASSEMBLY PART NUMBER	A I.D. (IN.)	B CLEARANCE DIA. (IN.)	C PROJECTION (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>50 V-FLANGE</b>									
C50-EM17-2P-SPFS-9	1.750	3.750	8.25	3.150	AI-9989S	100 PSI	1000 PSI	2500	585-920
C50-EM20-2P-SPFS-9	2.000	3.750	8.25	3.150	AI-9989S	100 PSI	1000 PSI	2500	585-920
C50-EM22-2P-SPFS-9	2.250	4.000	8.25	3.150	AI-9989S	100 PSI	1000 PSI	2500	585-920
C50-EM25-2P-SPFS-9	2.500	4.000	8.25	3.150	AI-9989S	100 PSI	1000 PSI	2500	585-920

- Especially designed to suit large shanked tools in a CNC carousel with limited space.
- Utilizes standard coolant gland assemblies.

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

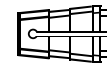
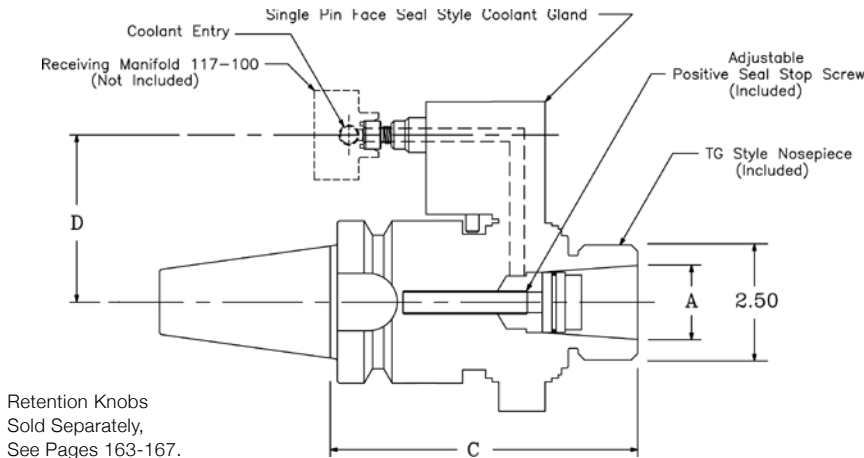
**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

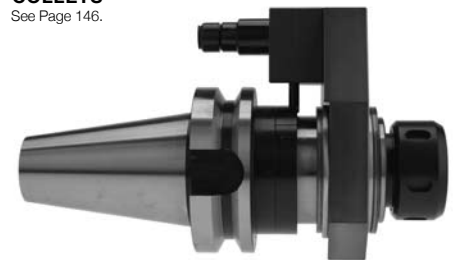
**All units require coolant at all speeds.**

AUTO TOOL  
CHANGE : ATC

## BT SINGLE ANGLE COLLET CHUCK • SINGLE PIN FACE SEAL ROTARY COOLANT GLAND



**TG STYLE COLLETS**  
See Page 146.



- See page 111 for positive seal stop screw.

ASSEMBLY PART NUMBER	A RANGE (IN.)	COLLET SERIES	CLEARANCE DIA. (IN.)	C PROJ. (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	OPTIONAL EXTENSION STYLE STOP SCREW (NOT INCLUDED)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)	SPANNER WRENCH (NOT INCLUDED)
<b>BT 40</b>												
BT40-TG10-SPFS-6	0.094 - 1.000	TG 100	2.50	5.25	2.559	AI-9889N	100 PSI	1000 PSI	3000	116-004	585-916	112-001
<b>BT 50</b>												
BT50-TG10-SPFS-6	0.094 - 1.000	TG 100	2.50	5.25	3.150	AI-9989S	100 PSI	1000 PSI	2500	116-001	585-920	112-001

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

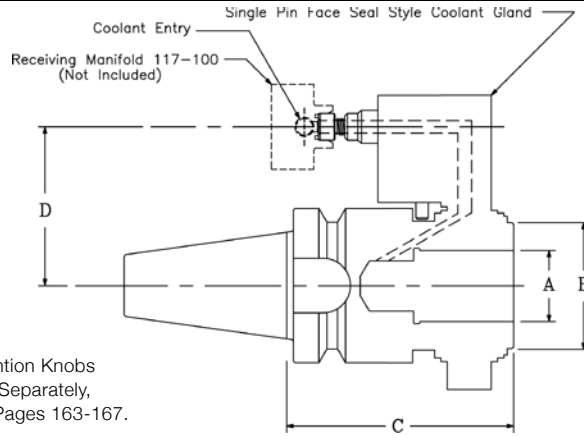
**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**



## BT END MILL HOLDERS • SINGLE PIN FACE SEAL ROTARY COOLANT GLAND



Retention Knobs  
Sold Separately,  
See Pages 163-167.



ASSEMBLY PART NUMBER	A I.D. (IN.)	CLEARANCE DIA. (IN.)	C PROJECTION (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	COOLANT STOP SCREW (INCLUDED)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>BT 40</b>										
BT40-EM75-SPFS-6	0.750	1.312	5.50	2.559	AI-9789V	100 PSI	1000 PSI	4000	105-007	585-904
BT40-EM10-SPFS-5	1.000	2.125	4.50	2.559	AI-9889N	100 PSI	1000 PSI	3000	105-007	585-916
^BT40-EM12-SPFS-5	1.250	2.125	4.50	2.559	AI-9889N	100 PSI	1000 PSI	3000	105-007	585-916
<b>BT 50</b>										
BT50-EM10-SPFS-5	1.000	2.500	4.50	3.150	AI-9989S	100 PSI	1000 PSI	2500	105-006	585-920
^BT50-EM12-SPFS-5	1.250	2.500	4.50	3.150	AI-9989S	100 PSI	1000 PSI	2500	105-006	585-920
^BT50-EM15-SPFS-5	1.500	2.500	4.50	3.150	AI-9989S	100 PSI	1000 PSI	2500	105-006	585-920

^ - Socket set screw location does not conform to ANSI specification. Request information if set screw location is critical

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

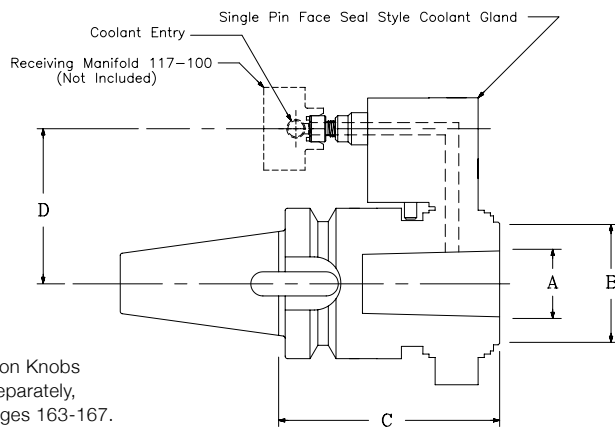
(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**

## BT MORSE TAPER HOLDERS • SINGLE PIN FACE SEAL ROTARY COOLANT GLAND



Retention Knobs  
Sold Separately,  
See Pages 163-167.



ASSEMBLY PART NUMBER	A MORSE TAPER	CLEARANCE DIA. (IN.)	C PROJECTION (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>BT 40</b>									
BT40-MT2-SPFS-5	MT2	2.125	4.50	2.559	AI-9889N	100 PSI	1000 PSI	3000	585-916
BT40-MT3-SPFS-5	MT3	2.125	4.50	2.559	AI-9889N	100 PSI	1000 PSI	3000	585-916
BT40-MT4-SPFS-5	MT4	2.125	4.50	2.559	AI-9889N	100 PSI	1000 PSI	3000	585-916
<b>BT 50</b>									
BT50-MT3-SPFS-5	MT3	2.500	4.50	3.150	AI-9989S	100 PSI	1000 PSI	2500	585-920
BT50-MT4-SPFS-5	MT4	2.500	4.50	3.150	AI-9989S	100 PSI	1000 PSI	2500	585-920
BT50-MT5-SPFS-5	MT5	2.500	4.50	3.150	AI-9989S	100 PSI	1000 PSI	2500	585-920

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

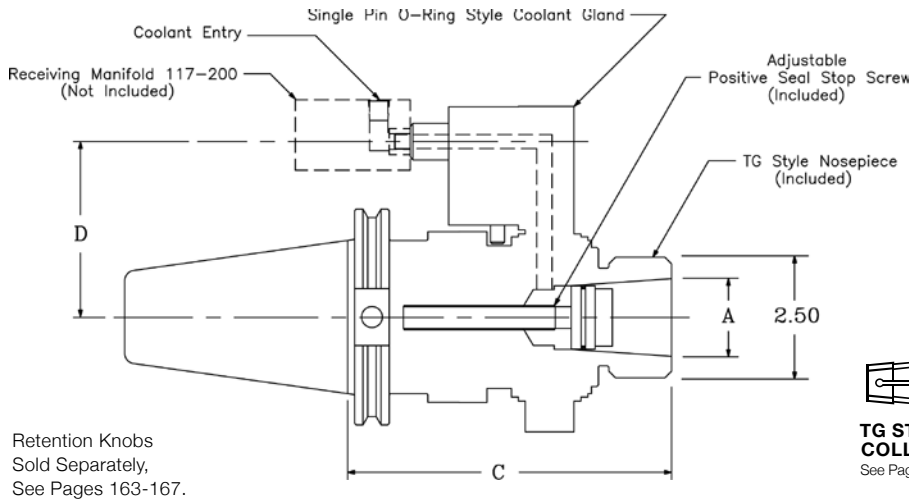
**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**



## V-FLANGE SINGLE ANGLE COLLET CHUCK • SINGLE PIN O-RING ROTARY COOLANT GLAND



**TG STYLE COLLETS**  
See Page 146.



•See page 111 for positive seal stop screw.

ASSEMBLY PART NUMBER	A RANGE (IN.)	COLLET SERIES	CLEARANCE DIA. (IN.)	C PROJ. (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	OPTIONAL EXTENSION STYLE STOP SCREW (NOT INCLUDED)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)	SPANNER WRENCH (NOT INCLUDED)
<b>40 V-FLANGE</b>												
C40-TG10-SPOR-6	0.094 - 1.000	TG 100	2.50	6.00	2.559	V-7419M	100 PSI	1000 PSI	3000	116-004	585-916	112-001

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

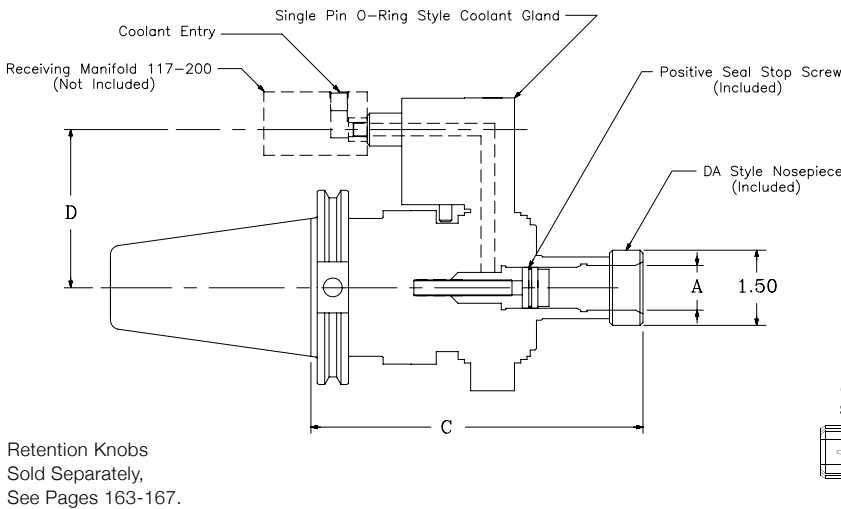
**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**

AUTO TOOL  
CHANGE : ATC

## V-FLANGE DOUBLE ANGLE COLLET CHUCK • SINGLE PIN O-RING ROTARY COOLANT GLAND



**DA STYLE COLLETS**  
See Page 147.



•See page 111 for positive seal stop screw.

ASSEMBLY PART NUMBER	A RANGE (IN.)	COLLET SERIES	CLEARANCE DIA. (IN.)	C PROJECTION (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)	SPANNER WRENCH (NOT INCLUDED)
<b>40 V-FLANGE</b>											
*C40-DA18-SPOR-7	0.047 - 0.750	DA 180	1.50	7.00	2.559	V-7419B	100 PSI	1000 PSI	4000	585-904	112-019

### \* Outgoing Items

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

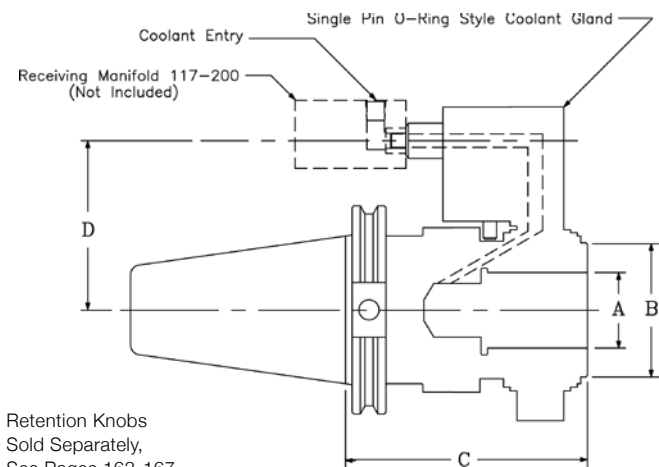
Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**





## V-FLANGE END MILL HOLDERS • SINGLE PIN O-RING ROTARY COOLANT GLAND



ASSEMBLY PART NUMBER	A I.D. (IN.)	CLEARANCE DIA. (IN.)	C PROJ. (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	COOLANT STOP SCREW (INCLUDED)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>40 V-FLANGE</b>										
C40-EM75-SPOR-6	0.750	1.312	5.50	2.559	V-7419B	100 PSI	1000 PSI	4000	NONE	585-904
C40-EM10-SPOR-6	1.000	1.625	5.50	2.559	V-7419J	100 PSI	1000 PSI	3300	NONE	585-912
^C40-EM12-SPOR-5	1.250	2.125	4.50	2.559	V-7419M	100 PSI	1000 PSI	3000	105-005	585-916

^ - Socket set screw location does not conform to ANSI specification. Request information if set screw location is critical

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

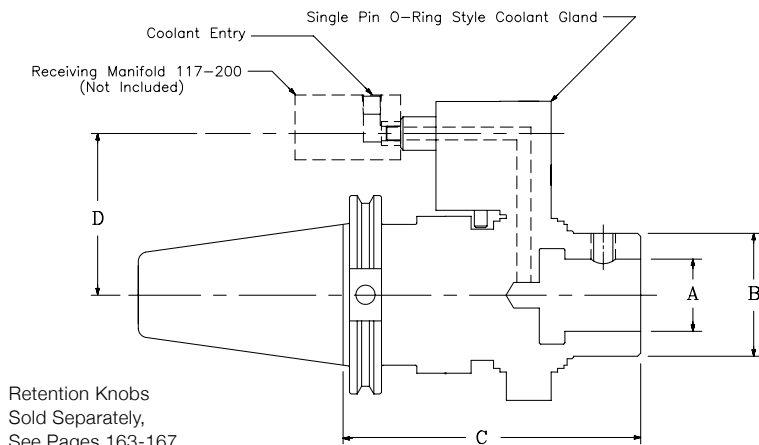
(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**

## V-FLANGE ABS® STYLE HOLDERS • SINGLE PIN O-RING ROTARY COOLANT GLAND



ASSEMBLY PART NUMBER	A ABS® CONNECTION	B CLEARANCE DIA. (IN.)	C PROJ. (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE(1)	MAXIMUM COOLANT PRESSURE(2)	MAXIMUM SPEED (RPM)(3)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>40 V-FLANGE</b>									
C40-ABS40-SPOR-6	ABS 40	1.625	5.25	2.559	V-7419J	100 PSI	1000 PSI	3300	585-912
C40-ABS50-SPOR-6	ABS 50	2.125	5.50	2.559	V-7419M	100 PSI	1000 PSI	3000	585-916

• Please refer to the Modular Tooling Section on pages 140-143 for Modular Adapters

ABS® is a registered trademark of KOMET.

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

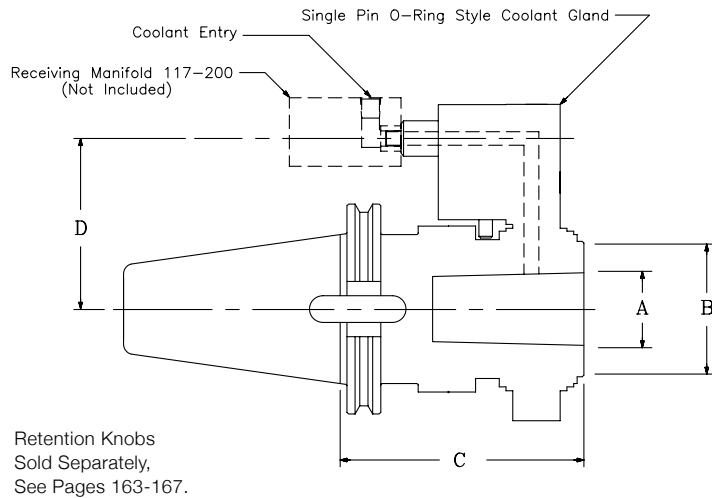
**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**



## V-FLANGE MORSE TAPER HOLDERS • SINGLE PIN O-RING ROTARY COOLANT GLAND



ASSEMBLY PART NUMBER	A MORSE TAPER	B CLEARANCE DIA. (IN.)	C PROJ. (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>40 V-FLANGE</b>									
C40-MT3-SPOR-5	MT3	2.125	4.50	2.559	V-7419M	100 PSI	1000 PSI	3000	585-916
C40-MT3-SPOR-5A	MT3	1.312	4.50	2.559	V-7419B	100 PSI	1000 PSI	4000	585-904
C40-MT4-SPOR-5	MT4	2.125	4.50	2.559	V-7419M	100 PSI	1000 PSI	3000	585-916
C40-MT4-SPOR-5A	MT4	1.312	4.50	2.559	V-7419B	100 PSI	1000 PSI	4000	585-904

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

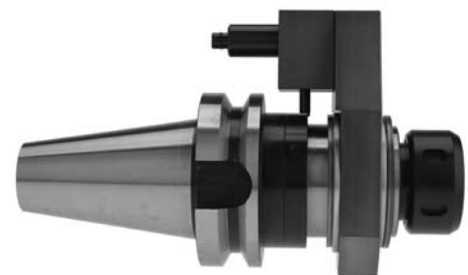
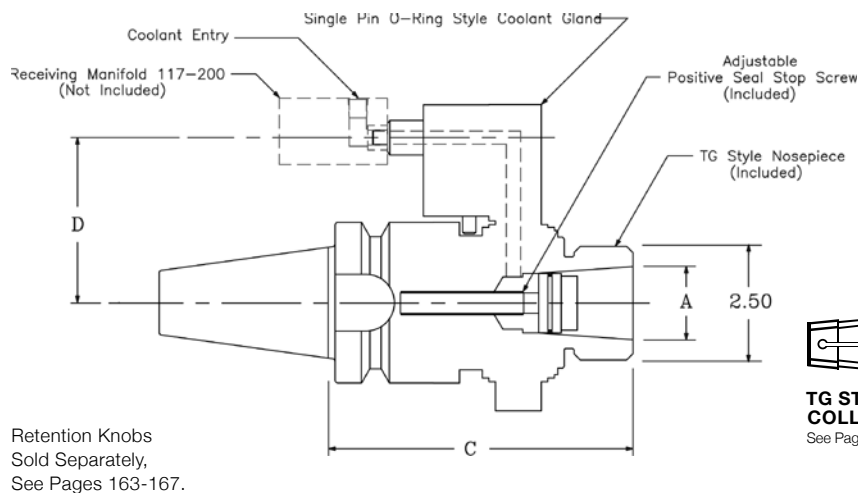
**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**

AUTO TOOL  
CHANGE : ATC

## BT SINGLE ANGLE COLLET CHUCK • SINGLE PIN O-RING ROTARY COOLANT GLAND



•See page 111 for positive seal stop screw.

ASSEMBLY PART NUMBER	A RANGE (IN.)	COLLET SERIES	CLEARANCE DIA. (IN.)	C PROJ. (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	OPTIONAL EXTENSION STYLE STOP SCREW (NOT INCLUDED)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)	SPANNER WRENCH (NOT INCLUDED)
<b>BT 40</b>												
BT40-TG10-SPOR-6	0.094 - 1.000	TG 100	2.50	5.25	2.559	V-7419M	100 PSI	1000 PSI	3000	116-004	585-916	112-001

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

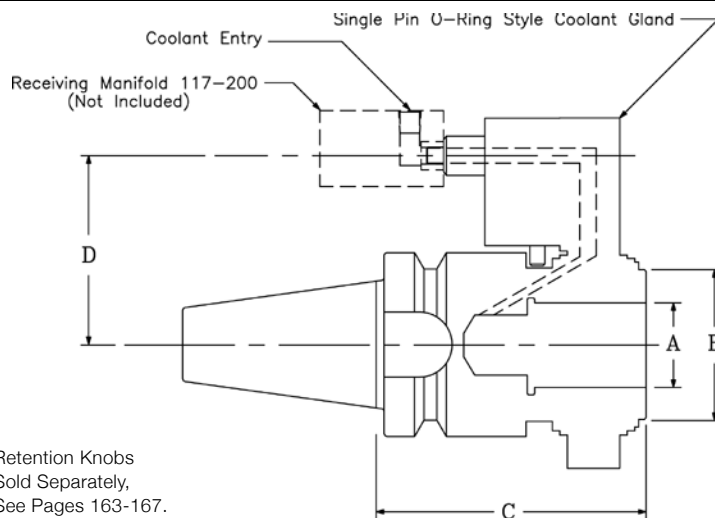
**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**



## BT END MILL HOLDERS • SINGLE PIN O-RING ROTARY COOLANT GLAND



Retention Knobs  
Sold Separately,  
See Pages 163-167.



ASSEMBLY PART NUMBER	A I.D. (IN.)	B CLEARANCE DIA. (IN.)	C PROJ. (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	COOLANT STOP SCREW (INCLUDED)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>BT 40</b>										
BT40-EM75-SPOR-6	0.750	1.312	5.50	2.559	V-7419B	100 PSI	1000 PSI	4000	105-007	585-904
BT40-EM10-SPOR-5	1.000	2.125	4.50	2.559	V-7419M	100 PSI	1000 PSI	3000	105-007	585-916
^BT40-EM12-SPOR-5	1.250	2.125	4.50	2.559	V-7419M	100 PSI	1000 PSI	3000	105-007	585-916

^ - Socket set screw location does not conform to ANSI specification. Request information if set screw location is critical.

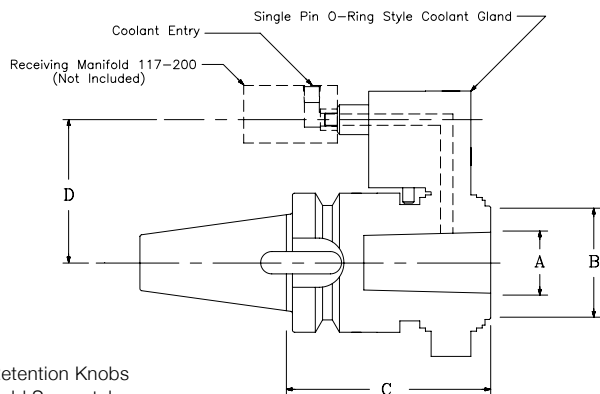
(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.  
(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**

## BT MORSE TAPER HOLDERS • SINGLE PIN O-RING ROTARY COOLANT GLAND



Retention Knobs  
Sold Separately,  
See Pages 163-167.



ASSEMBLY PART NUMBER	A MORSE TAPER	B CLEARANCE DIA. (IN.)	C PROJECTION (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>BT 40</b>									
BT40-MT2-SPOR-5	MT2	2.125	4.50	2.559	V-7419M	100 PSI	1000 PSI	3000	585-916
BT40-MT3-SPOR-5	MT3	2.125	4.50	2.559	V-7419M	100 PSI	1000 PSI	3000	585-916
BT40-MT4-SPOR-5	MT4	2.125	4.50	2.559	V-7419M	100 PSI	1000 PSI	3000	585-916

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

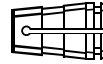
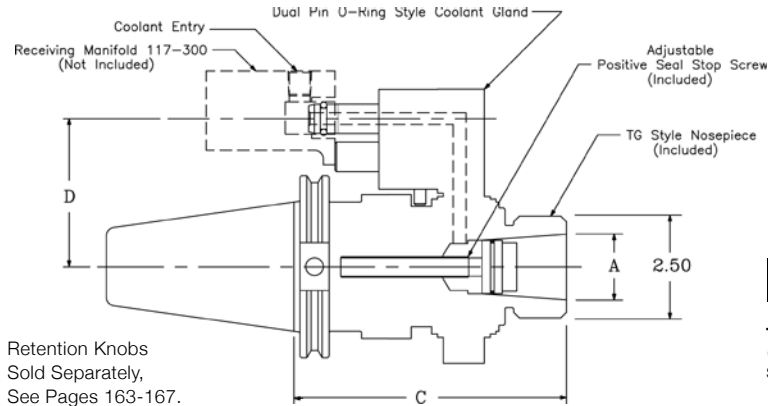
**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**



## V-FLANGE SINGLE ANGLE COLLET CHUCK • DUAL PIN O-RING ROTARY COOLANT GLAND



**TG STYLE COLLETS**  
See Page 146.



•See page 111 for positive seal stop screw.

ASSEMBLY PART NUMBER	A RANGE (IN.)	COLLET SERIES	CLEARANCE DIAMETER (IN.)	C PROJ. (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	OPTIONAL EXTENSION STYLE STOP SCREW (NOT INCLUDED)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)	SPANNER WRENCH (NOT INCLUDED)
<b>45 V-FLANGE</b>												
*C45-TG10-DPOR-6	0.094 - 1.000	TG 100	2.500	6.00	3.150	E-7353S	100 PSI	1000 PSI	2500	116-001	585-920	112-001
<b>50 V-FLANGE</b>												
C50-TG10-DPOR-6	0.094 - 1.000	TG 100	2.500	6.00	3.150	E-7353S	100 PSI	1000 PSI	2500	116-001	585-920	112-001

### \* Outgoing Items

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

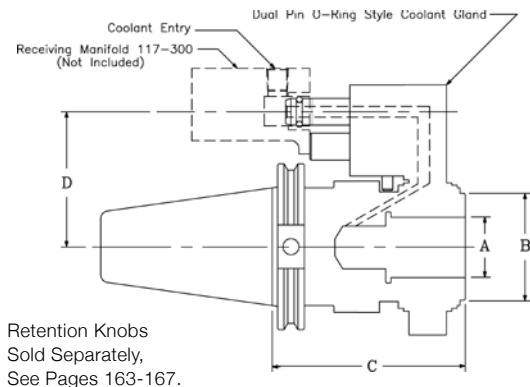
**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**

AUTO TOOL  
CHANGE : ATC

## V-FLANGE END MILL HOLDERS • DUAL PIN O-RING ROTARY COOLANT GLAND



ASSEMBLY PART NUMBER	A I.D. (IN.)	B CLEARANCE DIA. (IN.)	C PROJECTION (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	COOLANT STOP SCREW (NOT INCLUDED)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>45 V-FLANGE</b>										
*C45-EM75-DPOR-5	0.750	1.312	4.50	3.150	E-7353B	100 PSI	1000 PSI	4000	NONE	585-904
*C45-EM10-DPOR-5	1.000	1.625	4.50	3.150	E-7353D	100 PSI	1000 PSI	3300	NONE	585-912
^C45-EM12-DPOR-5	1.250	2.500	4.50	3.150	E-7353S	100 PSI	1000 PSI	2500	105-003	585-920
^C45-EM15-DPOR-5	1.500	2.500	4.50	3.150	E-7353S	100 PSI	1000 PSI	2500	105-003	585-920
<b>50 V-FLANGE</b>										
C50-EM75-DPOR-6	0.750	1.312	5.50	3.150	E-7353B	100 PSI	1000 PSI	4000	NONE	585-904
C50-EM10-DPOR-6	1.000	1.625	5.50	3.150	E-7353D	100 PSI	1000 PSI	3300	NONE	585-912
^C50-EM12-DPOR-5	1.250	2.500	4.50	3.150	E-7353S	100 PSI	1000 PSI	2500	105-004	585-920
^C50-EM15-DPOR-5	1.500	2.500	4.50	3.150	E-7353S	100 PSI	1000 PSI	2500	105-004	585-920

### \* Outgoing Items

^ - Socket set screw location does not conform to ANSI specification. Request information if set screw location is critical.

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

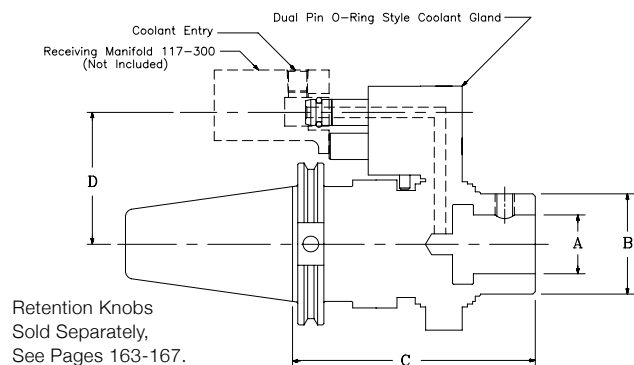
**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**



## V-FLANGE ABS® STYLE HOLDERS • DUAL PIN O-RING ROTARY COOLANT GLAND



ASSEMBLY PART NUMBER	A ABS® CONNECTION	B CLEARANCE DIA. (IN.)	C PROJECTION (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>45 V-FLANGE</b>									
*C45-ABS40-DPOR-6	ABS 40	1.625	5.25	3.150	E-7353D	100 PSI	1000 PSI	3300	585-912
*C45-ABS50-DPOR-6	ABS 50	2.125	5.50	3.150	E-7353X	100 PSI	1000 PSI	3000	585-916
*C45-ABS63-DPOR-6	ABS 63	2.500	5.62	3.150	E-7353S	100 PSI	1000 PSI	2500	585-920
<b>50 V-FLANGE ^</b>									
C50-ABS40-DPOR-6	ABS 40	1.625	5.25	3.150	E-7353D	100 PSI	1000 PSI	3300	585-912
C50-ABS50-DPOR-6	ABS 50	2.125	5.50	3.150	E-7353X	100 PSI	1000 PSI	3000	585-916
C50-ABS63-DPOR-5	ABS 63	2.500	5.75	3.150	E-7353S	100 PSI	1000 PSI	2500	585-920

**\* Outgoing Items** ^ - ABS 80 & ABS 100 holders available by special quotation on 50 V-Flange units.

ABS® is a registered trademark of KOMET.

• Please refer to the Modular Tooling Section on pages 140-143 for Modular Adapters

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

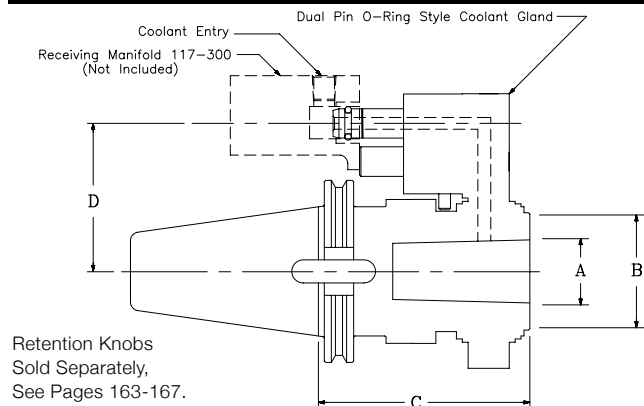
(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**

## V-FLANGE MORSE TAPER HOLDERS • DUAL PIN O-RING ROTARY COOLANT GLAND



ASSEMBLY PART NUMBER	A MORSE TAPER	B CLEARANCE DIA. (IN.)	C PROJECTION (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>45 V-FLANGE</b>									
*C45-MT3-DPOR-5	MT3	2.500	4.50	3.150	E-7353S	100 PSI	1000 PSI	2500	585-920
*C45-MT3-DPOR-5A	MT3	1.312	4.50	3.150	E-7353B	100 PSI	1000 PSI	4000	585-904
*C45-MT4-DPOR-5	MT4	2.500	4.50	3.150	E-7353S	100 PSI	1000 PSI	2500	585-920
*C45-MT4-DPOR-5A	MT4	1.312	4.50	3.150	E-7353B	100 PSI	1000 PSI	4000	585-904
<b>50 V-FLANGE</b>									
C50-MT3-DPOR-5	MT3	2.500	4.50	3.150	E-7353S	100 PSI	1000 PSI	2500	585-920
C50-MT3-DPOR-5A	MT3	1.312	4.50	3.150	E-7353B	100 PSI	1000 PSI	4000	585-904
C50-MT4-DPOR-5	MT4	2.500	4.50	3.150	E-7353S	100 PSI	1000 PSI	2500	585-920
C50-MT4-DPOR-5A	MT4	1.312	4.50	3.150	E-7353B	100 PSI	1000 PSI	4000	585-904
C50-MT5-DPOR-5	MT5	2.500	4.50	3.150	E-7353S	100 PSI	1000 PSI	2500	585-920

**\* Outgoing Items**

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

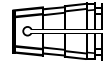
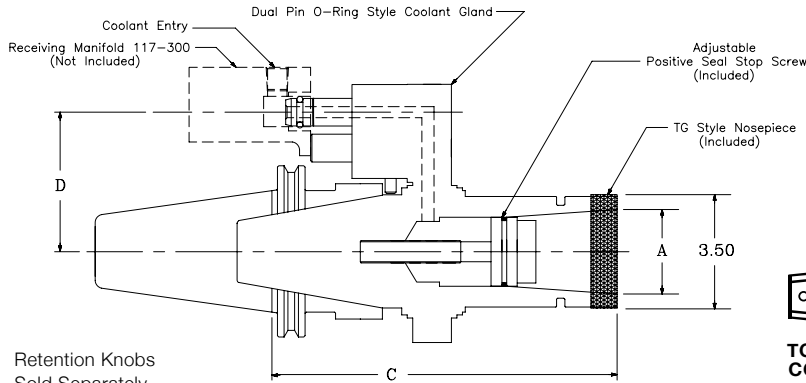
Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**





## V-FLANGE 2 PIECE SINGLE ANGLE COLLET CHUCK • DUAL PIN O-RING ROTARY COOLANT GLAND



**TG STYLE COLLETS**  
See Page 146.



• See page 111 for positive seal stop screw.

ASSEMBLY PART NUMBER	A RANGE (IN.)	COLLET SERIES	CLEARANCE DIA. (IN.)	C PROJ. (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)	SPANNER WRENCH (NOT INCLUDED)
<b>50 V-FLANGE</b>											
C50-TG15-2P-DPOR-9	0.500 - 1.500	TG 150	3.50	8.38	3.150	E-7353S	100 PSI	1000 PSI	2500	585-920	112-002

• Especially designed to suit large shanked tools in a CNC carousel with limited space. • Utilizes standard coolant gland assemblies.

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.  
(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

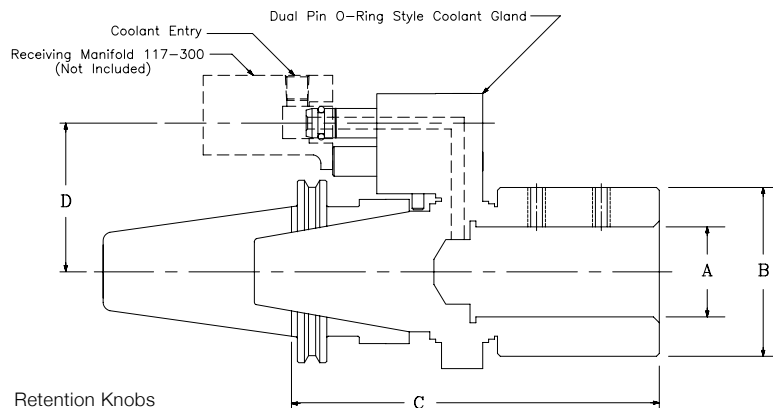
**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**

AUTO TOOL  
CHANGE : ATC

## V-FLANGE 2 PIECE END MILL HOLDERS • DUAL PIN O-RING ROTARY COOLANT GLAND



ASSEMBLY PART NUMBER	A I.D. (IN.)	B CLEARANCE DIA. (IN.)	C PROJECTION (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>50 V-FLANGE</b>									
C50-EM17-2P-DPOR-9	1.750	3.750	8.25	3.150	E-7353S	100 PSI	1000 PSI	2500	585-920
C50-EM20-2P-DPOR-9	2.000	3.750	8.25	3.150	E-7353S	100 PSI	1000 PSI	2500	585-920
C50-EM22-2P-DPOR-9	2.250	4.000	8.25	3.150	E-7353S	100 PSI	1000 PSI	2500	585-920
C50-EM25-2P-DPOR-9	2.500	4.000	8.25	3.150	E-7353S	100 PSI	1000 PSI	2500	585-920

• Especially designed to suit large shanked tools in a CNC carousel with limited space. • Utilizes standard coolant gland assemblies.

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.  
(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

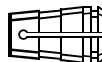
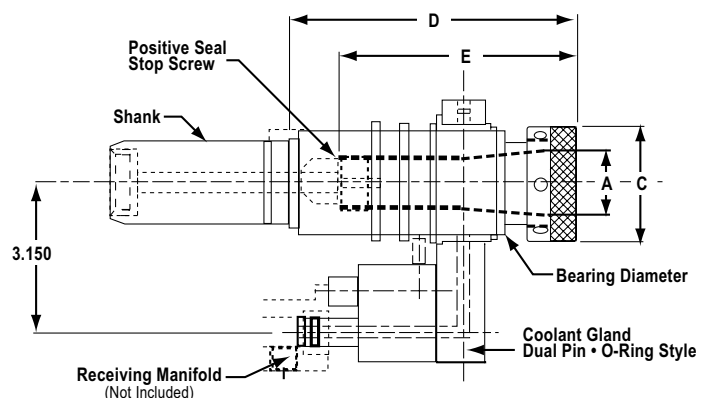
**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**



## KEARNEY & TRECKER SINGLE ANGLE COLLET CHUCK • DUAL PIN O-RING ROTARY COOLANT GLAND



**TG STYLE  
COLLETS**  
See Page 146.



ASSEMBLY PART NUMBER	A RANGE (IN.)	COLLET SERIES	BEARING DIA. (IN.)	C CLEARANCE (IN.)	D PROJ. (IN.)	E MAX DEPTH (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	POSITIVE SEAL STOP SCREW (INCLUDED)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)	SPANNER WRENCH (NOT INCLUDED)
<b>200 SERIES</b>												
*KT200-TG10-DPOR-6P	0.094 - 1.000	TG 100	2.125	2.50	6.00	5.50	E-7353X	100 PSI	1000 PSI	104-001	585-916	112-001
<b>300 SERIES</b>												
*KT300-TG10-DPOR-6P	0.094 - 1.000	TG 100	2.500	2.50	6.00	5.50	E-7353S	100 PSI	1000 PSI	102-003	585-920	112-001

### \* Outgoing Items

- All Kearney & Trecker holders are furnished with coolant stop screws, location keys and code ring locknuts

(1),(2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended. PSI may cause internal damage to seals.

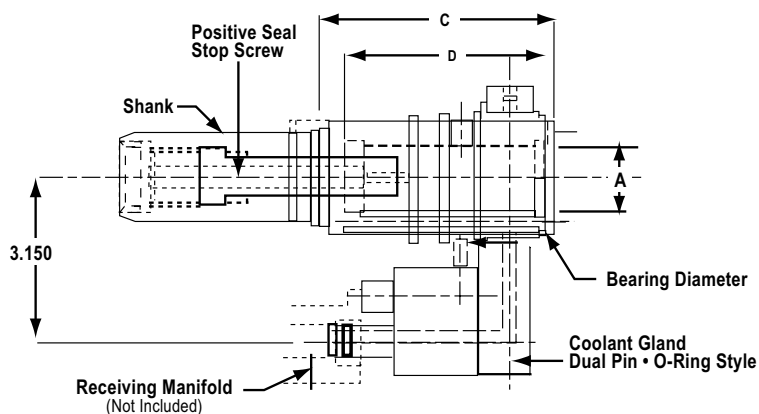
(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

**These RPM and Pressure ranges are not a guarantee of performance. The life and performance of the units depends on the following conditions:**

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**

## KEARNEY & TRECKER END MILL HOLDERS • DUAL PIN O-RING ROTARY COOLANT GLAND



ASSEMBLY PART NUMBER	A BORE (IN.)	BEARING DIA. (IN)	C PROJ. (IN)	D MAX DEPTH (IN)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	COOLANT STOP SCREW (INCLUDED)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>200 SERIES</b>									
*KT200-EM12-DPOR-5	1.25	2.125	4.50	4.00	E-7353X	100 PSI	1000 PSI	105-001	585-916
<b>300 SERIES</b>									
*KT300-EM12-DPOR-5	1.25	2.500	4.50	4.00	E-7353S	100 PSI	1000 PSI	105-002	585-920
*KT300-EM15-DPOR-5	1.50	2.500	4.50	4.00	E-7353S	100 PSI	1000 PSI	105-002	585-920

### \* Outgoing Items

- All Kearney & Trecker holders are furnished with coolant stop screws, location keys and code ring locknuts

(1),(2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended. PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

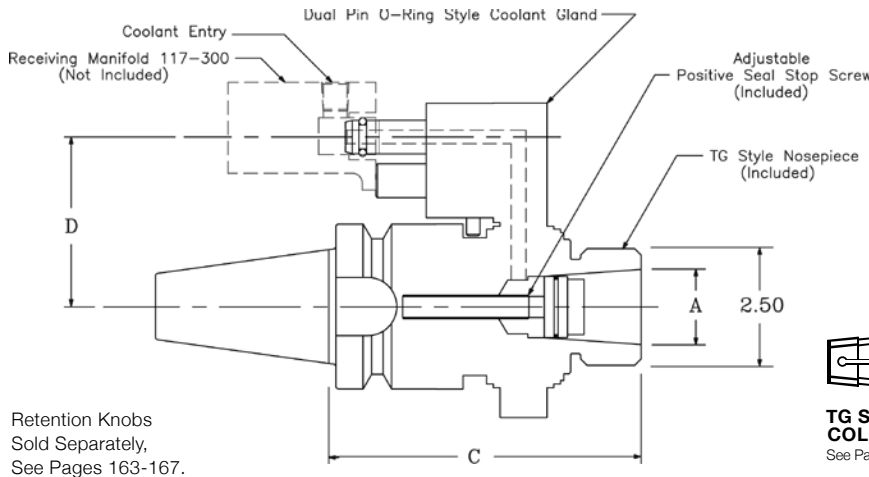
**These RPM and Pressure ranges are not a guarantee of performance. The life and performance of the units depends on the following conditions:**

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**



## BT SINGLE ANGLE COLLET CHUCK • DUAL PIN O-RING ROTARY COOLANT GLAND



•See page 111 for positive seal stop screw.

ASSEMBLY PART NUMBER	A RANGE (IN.)	COLLET SERIES	CLEARANCE DIA. (IN.)	C PROJ. (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	OPTIONAL EXTENSION STYLE STOP SCREW (NOT INCLUDED)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)	SPANNER WRENCH (NOT INCLUDED)
<b>BT 50</b>												
BT50-TG10-DPOR-6	0.094 - 1.000	TG 100	2.500	5.25	3.150	E-7353S	100 PSI	1000 PSI	2500	116-001	585-920	112-001

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

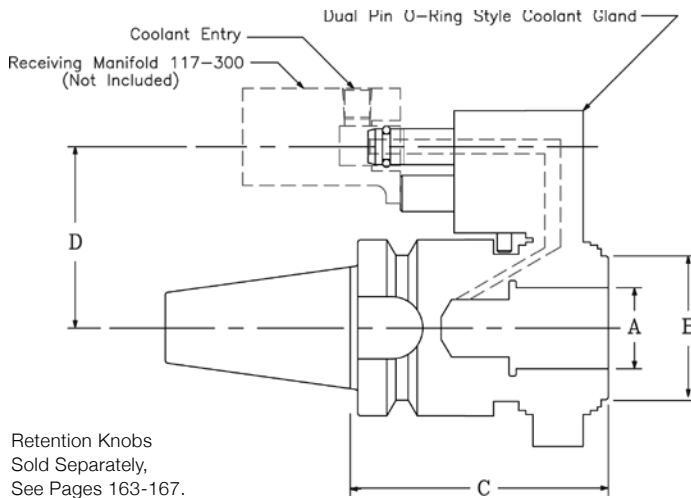
**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**

AUTO TOOL  
CHANGE : ATC

## BT END MILL HOLDERS • DUAL PIN O-RING ROTARY COOLANT GLAND



ASSEMBLY PART NUMBER	A I.D. (IN.)	B CLEARANCE DIA. (IN.)	C PROJECTION (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	COOLANT STOP SCREW (INCLUDED)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>BT 50</b>										
BT50-EM10-DPOR-5	1.000	2.500	4.50	3.150	E-7353S	100 PSI	1000 PSI	2500	105-006	585-920
^BT50-EM12-DPOR-5	1.250	2.500	4.50	3.150	E-7353S	100 PSI	1000 PSI	2500	105-006	585-920
^BT50-EM15-DPOR-5	1.500	2.500	4.50	3.150	E-7353S	100 PSI	1000 PSI	2500	105-006	585-920

^ - Socket set screw location does not conform to ANSI specification. Request information if set screw location is critical.

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

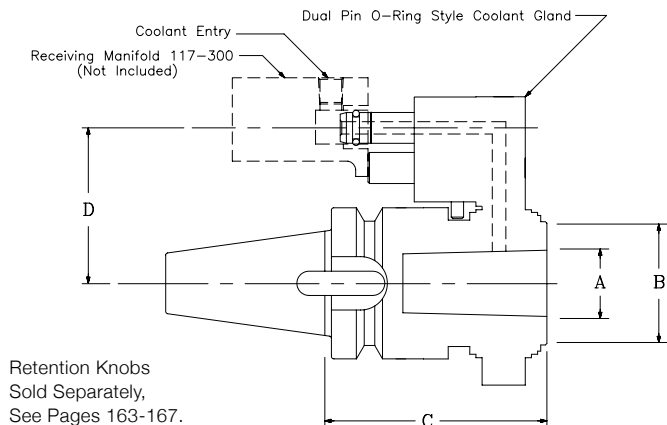
**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**



## BT MORSE TAPER HOLDERS • DUAL PIN O-RING ROTARY COOLANT GLAND



ASSEMBLY PART NUMBER	A MORSE TAPER	B CLEARANCE DIA. (IN.)	C PROJECTION (IN.)	D CTR TO CTR (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>BT 50</b>									
BT50-MT3-DPOR-5	MT3	2.500	4.50	3.150	E-7353S	100 PSI	1000 PSI	2500	585-920
BT50-MT4-DPOR-5	MT4	2.500	4.50	3.150	E-7353S	100 PSI	1000 PSI	2500	585-920
BT50-MT5-DPOR-5	MT5	2.500	4.50	3.150	E-7353S	100 PSI	1000 PSI	2500	585-920

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

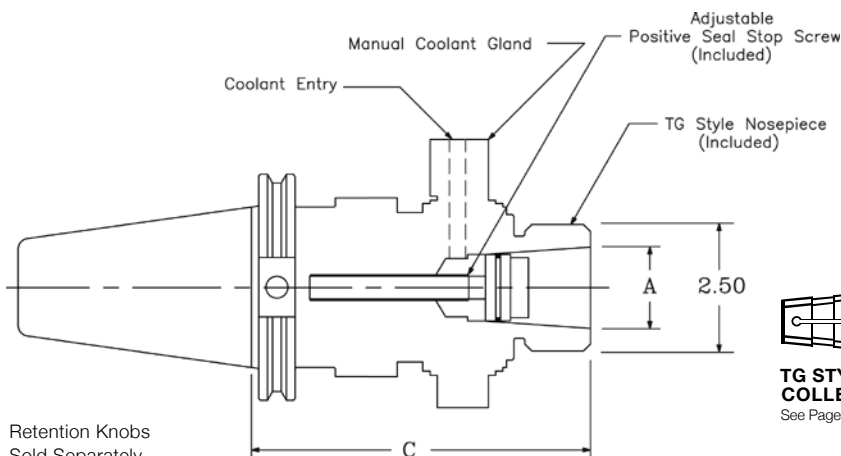
(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**

## V-FLANGE SINGLE ANGLE COLLET CHUCK • MANUAL ROTARY COOLANT GLAND



**TG STYLE COLLETS**  
See Page 146.



•See page 111 for positive seal stop screw.

ASSEMBLY PART NUMBER	A RANGE (IN.)	COLLET SERIES	CLEARANCE DIA. (IN.)	C PROJ. (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	OPTIONAL EXTENSION STYLE STOP SCREW (NOT INCLUDED)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)	SPANNER WRENCH (NOT INCLUDED)
<b>40 V-FLANGE</b>											
C40-TG10-MG-6	0.094 - 1.000	TG 100	2.50	6.00	587-102	100 PSI	1000 PSI	3000	116-004	585-916	112-001
<b>45 V-FLANGE</b>											
*C45-TG10-MG-6	0.094 - 1.000	TG 100	2.50	6.00	587-106	100 PSI	1000 PSI	2500	116-001	585-920	112-001
<b>50 V-FLANGE</b>											
C50-TG10-MG-6	0.094 - 1.000	TG 100	2.50	6.00	587-106	100 PSI	1000 PSI	2500	116-001	585-920	112-001

### \* Outgoing Items

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

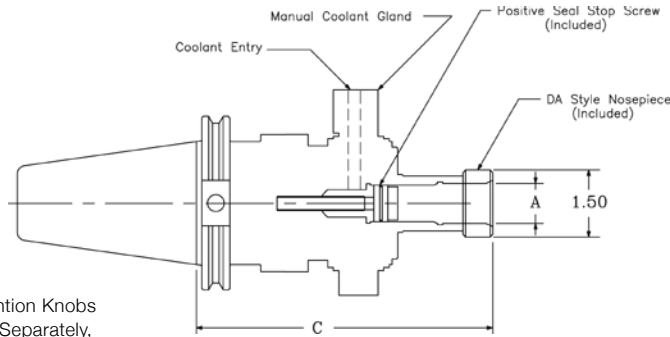
**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

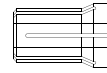
**All units require coolant at all speeds.**



## V-FLANGE DOUBLE ANGLE COLLET CHUCK • MANUAL ROTARY COOLANT GLAND



Retention Knobs  
Sold Separately,  
See Pages 163-167.



**DA STYLE COLLETS**  
See Page 147.



• See page 111 for positive seal stop screw.

ASSEMBLY PART NUMBER	A RANGE (IN.)	COLLET SERIES	CLEARANCE DIA. (IN.)	C PROJECTION (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)	SPANNER WRENCH (NOT INCLUDED)
<b>40 V-FLANGE</b>										
*C40-DA18-MG-7	0.047 - 0.750	DA 180	1.50	7.00	587-100	100 PSI	1000 PSI	4000	585-904	112-019

### \* Outgoing Items

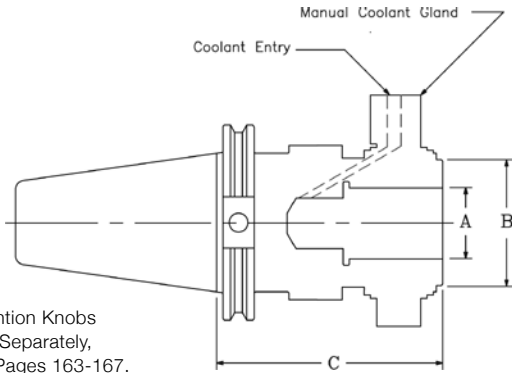
(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.  
(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**

## V-FLANGE END MILL HOLDERS • MANUAL ROTARY COOLANT GLAND



Retention Knobs  
Sold Separately,  
See Pages 163-167.



ASSEMBLY PART NUMBER	A I.D. (IN.)	B CLEARANCE DIA. (IN.)	C PROJECTION (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	COOLANT STOP SCREW (INCLUDED)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>40 V-FLANGE</b>									
C40-EM75-MG-6	0.750	1.312	5.50	587-100	100 PSI	1000 PSI	4000	NONE	585-904
C40-EM10-MG-6	1.000	1.625	5.50	587-101	100 PSI	1000 PSI	3300	NONE	585-912
^C40-EM12-MG-5	1.250	2.125	4.50	587-102	100 PSI	1000 PSI	3000	105-005	585-916
<b>45 V-FLANGE</b>									
*C45-EM75-MG-5	0.750	1.312	4.50	587-104	100 PSI	1000 PSI	4000	NONE	585-904
*C45-EM10-MG-5	1.000	1.625	4.50	587-105	100 PSI	1000 PSI	3300	NONE	585-912
^*C45-EM12-MG-5	1.250	2.500	4.50	587-106	100 PSI	1000 PSI	2500	105-003	585-920
^*C45-EM15-MG-5	1.500	2.500	4.50	587-106	100 PSI	1000 PSI	2500	105-003	585-920
<b>50 V-FLANGE</b>									
C50-EM75-MG-6	0.750	1.312	5.50	587-104	100 PSI	1000 PSI	4000	NONE	585-904
C50-EM10-MG-6	1.000	1.625	5.50	587-105	100 PSI	1000 PSI	3300	NONE	585-912
^C50-EM12-MG-5	1.250	2.500	4.50	587-106	100 PSI	1000 PSI	2500	105-004	585-920
^C50-EM15-MG-5	1.500	2.500	4.50	587-106	100 PSI	1000 PSI	2500	105-004	585-920
^C50-EM20-MG-7	2.000	3.187	6.50	587-107	100 PSI	1000 PSI	1800	105-010	585-922

### \* Outgoing Items

^ - Socket set screw location does not conform to ANSI specification. Request information if set screw location is critical.

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

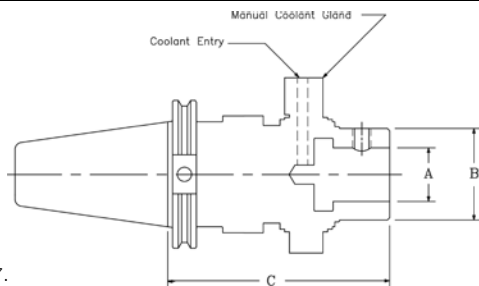
Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**





## V-FLANGE ABS®STYLE HOLDERS • MANUAL ROTARY COOLANT GLAND



Retention Knobs  
Sold Separately,  
See Pages 163-167.



ASSEMBLY PART NUMBER	A ABS® CONNECTION	B CLEARANCE DIA. (IN.)	C PROJECTION (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>40 V-FLANGE</b>								
C40-ABS40-MG-6	ABS 40	1.625	5.25	587-101	100 PSI	1000 PSI	3300	585-912
C40-ABS50-MG-6	ABS 50	2.125	5.50	587-102	100 PSI	1000 PSI	3000	585-916
<b>45 V-FLANGE</b>								
<b>*C45-ABS40-MG-6</b>	<b>ABS 40</b>	<b>1.625</b>	<b>5.25</b>	<b>587-105</b>	<b>100 PSI</b>	<b>1000 PSI</b>	<b>3300</b>	<b>585-912</b>
<b>*C45-ABS50-MG-6</b>	<b>ABS 50</b>	<b>2.125</b>	<b>5.50</b>	<b>587-103</b>	<b>100 PSI</b>	<b>1000 PSI</b>	<b>3000</b>	<b>585-916</b>
<b>*C45-ABS63-MG-6</b>	<b>ABS 63</b>	<b>2.500</b>	<b>5.62</b>	<b>587-106</b>	<b>100 PSI</b>	<b>1000 PSI</b>	<b>2500</b>	<b>585-920</b>
<b>50 V-FLANGE ^</b>								
C50-ABS40-MG-6	ABS 40	1.625	5.25	587-105	100 PSI	1000 PSI	3300	585-912
C50-ABS50-MG-6	ABS 50	2.125	5.50	587-103	100 PSI	1000 PSI	3000	585-916
C50-ABS63-MG-5	ABS 63	2.500	5.75	587-106	100 PSI	1000 PSI	2500	585-920

**\* Outgoing Items** ^ - ABS 80 & ABS 100 holders available by special quotation on 50 V-Flange units.

ABS® is a registered trademark of KOMET.

• Please refer to the Modular Tooling Section on pages 140-143 for Modular Adapters

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

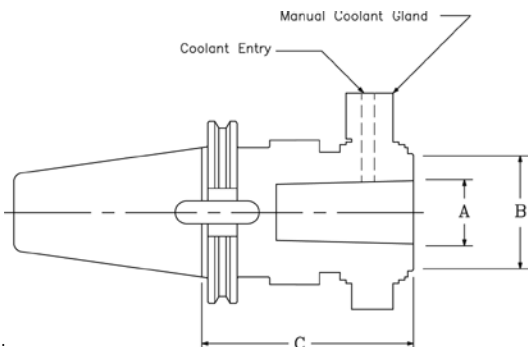
(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**

## V-FLANGE MORSE TAPER HOLDERS • MANUAL ROTARY COOLANT GLAND



Retention Knobs  
Sold Separately,  
See Pages 163-167.



ASSEMBLY PART NUMBER	A MORSE TAPER	B CLEARANCE DIA. (IN.)	C PROJECTION (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>40 V-FLANGE</b>								
C40-MT3-MG-5	MT3	2.125	4.50	587-102	100 PSI	1000 PSI	3000	585-916
C40-MT3-MG-5A	MT3	1.312	4.50	587-100	100 PSI	1000 PSI	4000	585-904
C40-MT4-MG-5	MT4	2.125	4.50	587-102	100 PSI	1000 PSI	3000	585-916
C40-MT4-MG-5A	MT4	1.312	4.50	587-100	100 PSI	1000 PSI	4000	585-904
<b>45 V-FLANGE</b>								
<b>*C45-MT3-MG-5</b>	<b>MT3</b>	<b>2.500</b>	<b>4.50</b>	<b>587-106</b>	<b>100 PSI</b>	<b>1000 PSI</b>	<b>2500</b>	<b>585-920</b>
<b>*C45-MT3-MG-5A</b>	<b>MT3</b>	<b>1.312</b>	<b>4.50</b>	<b>587-104</b>	<b>100 PSI</b>	<b>1000 PSI</b>	<b>4000</b>	<b>585-904</b>
<b>*C45-MT4-MG-5</b>	<b>MT4</b>	<b>2.500</b>	<b>4.50</b>	<b>587-106</b>	<b>100 PSI</b>	<b>1000 PSI</b>	<b>2500</b>	<b>585-920</b>
<b>*C45-MT4-MG-5A</b>	<b>MT4</b>	<b>1.312</b>	<b>4.50</b>	<b>587-104</b>	<b>100 PSI</b>	<b>1000 PSI</b>	<b>4000</b>	<b>585-904</b>
<b>50 V-FLANGE</b>								
C50-MT3-MG-5	MT3	2.500	4.50	587-106	100 PSI	1000 PSI	2500	585-920
C50-MT3-MG-5A	MT3	1.312	4.50	587-104	100 PSI	1000 PSI	4000	585-904
C50-MT4-MG-5	MT4	2.500	4.50	587-106	100 PSI	1000 PSI	2500	585-920
C50-MT4-MG-5A	MT4	1.312	4.50	587-104	100 PSI	1000 PSI	4000	585-904
C50-MT5-MG-5	MT5	2.500	4.50	587-106	100 PSI	1000 PSI	2500	585-920

**\* Outgoing Items**

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at lower pressures.

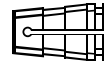
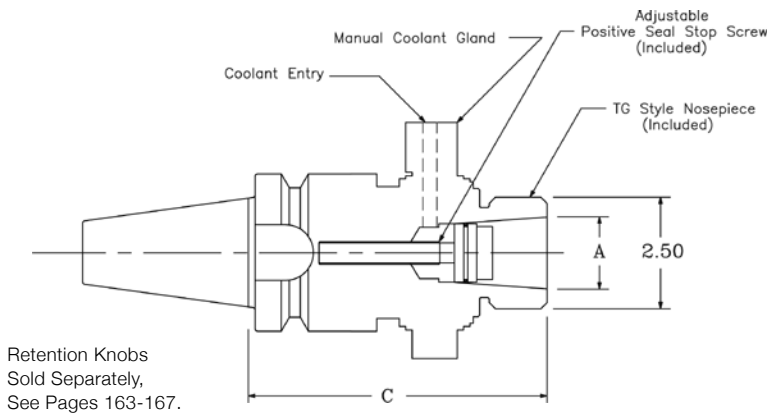
**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**



## BT SINGLE ANGLE COLLET CHUCK • MANUAL ROTARY COOLANT GLAND



**TG STYLE COLLETS**  
See Page 146.



•See page 111 for positive seal stop screw.

ASSEMBLY PART NUMBER	A RANGE (IN.)	COLLET SERIES	CLEARANCE DIA. (IN.)	C PROJ. (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	OPTIONAL EXTENSION STYLE STOP SCREW (NOT INCLUDED)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)	SPANNER WRENCH (NOT INCLUDED)
<b>BT 40</b>											
BT40-TG10-MG-6	0.094 - 1.000	TG 100	2.50	5.25	587-102	100 PSI	1000 PSI	3000	116-004	585-916	112-001
<b>BT 50</b>											
BT50-TG10-MG-6	0.094 - 1.000	TG 100	2.50	5.25	587-106	100 PSI	1000 PSI	2500	116-001	585-920	112-001

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

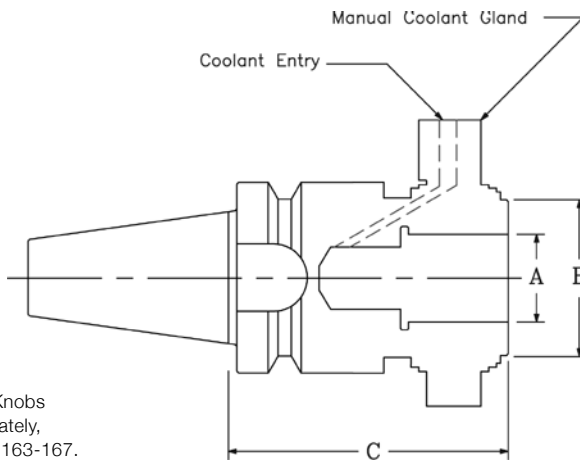
(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at pressures below 1000 PSI.

**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**

## BT END MILL HOLDERS • MANUAL ROTARY COOLANT GLAND



Retention Knobs  
Sold Separately,  
See Pages 163-167.



ASSEMBLY PART NUMBER	A I.D. (IN.)	B CLEARANCE DIA. (IN.)	C PROJ. (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	COOLANT STOP SCREW (INCLUDED)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>BT 40</b>									
BT40-EM75-MG-6	0.750	1.312	5.50	587-100	100 PSI	1000 PSI	4000	105-007	585-904
BT40-EM10-MG-5	1.000	2.125	4.50	587-102	100 PSI	1000 PSI	3000	105-007	585-916
^BT40-EM12-MG-5	1.250	2.125	4.50	587-102	100 PSI	1000 PSI	3000	105-007	585-916
<b>BT 50</b>									
BT50-EM10-MG-5	1.000	2.500	4.50	587-106	100 PSI	1000 PSI	2500	105-006	585-920
^BT50-EM12-MG-5	1.250	2.500	4.50	587-106	100 PSI	1000 PSI	2500	105-006	585-920
^BT50-EM15-MG-5	1.500	2.500	4.50	587-106	100 PSI	1000 PSI	2500	105-006	585-920

^ - Socket set screw location does not conform to ANSI specification. Request information if set screw location is critical.

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at pressures below 1000 PSI.

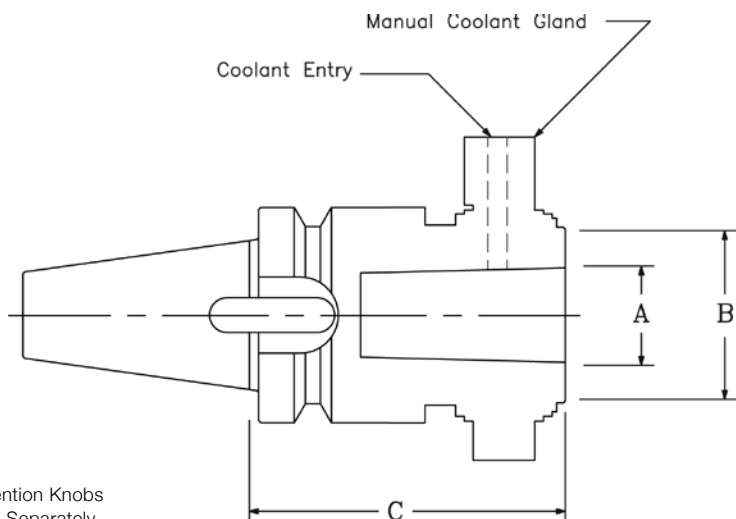
**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**



## BT MORSE TAPER HOLDERS • MANUAL ROTARY COOLANT GLAND



Retention Knobs  
Sold Separately,  
See Pages 163-167.

ASSEMBLY PART NUMBER	A MORSE TAPER	B CLEARANCE DIA. (IN.)	C PROJECTION (IN.)	COOLANT GLAND (INCLUDED)	MINIMUM COOLANT PRESSURE (1)	MAXIMUM COOLANT PRESSURE (2)	MAXIMUM SPEED (RPM) (3)	REPLACEMENT SEAL KIT PART NUMBER (NOT INCLUDED)
<b>BT 40</b>								
BT40-MT2-MG-5	MT2	2.125	4.50	587-102	100 PSI	1000 PSI	3000	585-916
BT40-MT3-MG-5	MT3	2.125	4.50	587-102	100 PSI	1000 PSI	3000	585-916
BT40-MT4-MG-5	MT4	2.125	4.50	587-102	100 PSI	1000 PSI	3000	585-916
<b>BT 50</b>								
BT50-MT3-MG-5	MT3	2.500	4.50	587-106	100 PSI	1000 PSI	2500	585-920
BT50-MT4-MG-5	MT4	2.500	4.50	587-106	100 PSI	1000 PSI	2500	585-920
BT50-MT5-MG-5	MT5	2.500	4.50	587-106	100 PSI	1000 PSI	2500	585-920

(1), (2) - These are recommended pressures. Lower coolant pressures may be utilized at very slow RPM's. Pressures above recommended PSI may cause internal damage to seals.

(3) - Recommended Maximum RPM at Maximum 1000 PSI. Higher speeds may be achieved at pressures below 1000 PSI.

**These RPM and Pressure ranges are not a guarantee of performance.** The life and performance of the units depends on the following conditions:

Proper Filtration - Proper Type & Viscosity of Coolant - Coolant Pressure and Volume.

**All units require coolant at all speeds.**



## ATC GLAND SPECIFICATIONS AND REPAIR PARTS

ATC GLAND PART NUMBER	BEARING DIAMETER (IN.)	MAXIMUM SPEED (RMP)	MINIMUM PRESSURE (PSI)	MAXIMUM PRESSURE (PSI)	SEAL KIT PART NUMBER
<b>SPFS-STYLE</b>					
AI-0189T (45/50V)	1.625	3300	100	1000	585-912
AI-0189Y (45/50V)	1.312	4000	100	1000	585-904
AI-9789V (40V)	1.312	4000	100	1000	585-904
AI-9789T (40V)	1.625	3300	100	1000	585-912
AI-9889N (40V)	2.125	3000	100	1000	585-916
AI-9989S (45/50V)	2.500	2500	100	1000	585-920
AI-9989X (45/50V)	2.125	3300	100	1000	585-916
AR-0689Z (45/50V)	3.187	1800	100	1000	585-922
<b>SPOR-STYLE</b>					
V7419B (40V)	1.312	4000	100	1000	585-904
V7419J (40V)	1.625	3300	100	1000	585-912
V7419M (40V)	2.125	3000	100	1000	585-916
<b>DPOR-STYLE</b>					
E7353B (45/50V)	1.312	4000	100	1000	585-904
E7353D (45/50V)	1.625	3300	100	1000	585-912
E7353X (45/50V)	2.125	3000	100	1000	585-916
E7353S (45/50V)	2.500	2500	100	1000	585-920
<b>MANUAL-STYLE</b>					
587-100 (40V)	1.312	4000	100	1000	585-904
587-101 (40V)	1.625	3300	100	1000	585-912
587-102 (40V)	2.125	3000	100	1000	585-916
587-103 (45/50V)	2.125	3000	100	1000	585-916
587-104 (45/50V)	1.312	4000	100	1000	585-904
587-105 (45/50V)	1.625	3300	100	1000	585-912
587-106 (45/50V)	2.500	2500	100	1000	585-920
587-107 (45/50V)	3.187	1800	100	1000	585-922

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### FACE SEAL REPAIR KIT FOR SPFS-STYLE GLANDS

Kit includes (24) Face seal washers and Two-part Epoxy Adhesive: Order 100-001.

### SPOR-STYLE GLANDS - SPARE O-RING FOR PIN

Order 001-039

### DPOR-STYLE GLANDS - SPARE O-RING FOR PIN

Order 001-038

We offer Repair and Reconditioning services for our ATC glands. Please call us at **1.800.600.2248** for an RGA Number to return the unit to us. We will inspect the unit and forward a quote for the repair to you promptly!



## SPECIAL APPLICATION ROTARY COOLANT GLAND ASSEMBLY QUESTIONNAIRE

For a custom adaptation to suit your machining center, please fill out this questionnaire & fax to **(1-216-481-9966)** or email to **sales@coolantfedtooling.com**.

We will respond promptly to your request for quotation.

<b>COMPANY</b> _____	
<b>ADDRESS</b> _____	
<b>PHONE</b> _____	<b>FAX</b> _____
<b>CONTACT</b> _____	
<b>INDICATE YOUR GEORGE WHALLEY DISTRIBUTOR OR CONTACT</b> _____	

<b>MACHINE SPECIFICATIONS :</b>	<b>SPINDLE</b>
1. All possible data, including manufacturer's name, model name, model number, serial number and whether vertical or horizontal? _____ _____	1. What is the maximum R.P.M. of the machine spindle? _____
2. Machine horsepower? _____	2. What is the R.P.M. requirement for the tool being used in this application? _____
<b>MACHINE LIMITATIONS</b>	3. What is the inside taper (bore) of the spindle (i.e. 30, 35, 40, 45, 50, 60 V-Flange or BT, etc.) _____
1. For purposes of positioning the tool holder and coolant gland in proper relation to the machine spindle, advise what means of orientation is used? A. Drive key _____ B. Drive slot _____ C. Other _____	4. What is the bolt circle diameter on the face of the spindle? _____
2. What is the weight limitation of the holder? A. With the cutting tool _____ B. Without the cutting tool _____	5. What is the thread size and spacing of the bolts in the spindle bolt circle? _____ _____
3. What is the maximum length clearance of the holder? _____ A. With the cutting tool _____ B. Without the cutting tool _____	<b>HOLDER</b>
4. What is the centerline distance on the tool carousel for maximum tool diameter? _____	1. What types of cutting tools will be used? (Indicate shank specifications for each.) _____ _____
	2. Specify type of holder required: A. End Mill (Bore size) _____ B. Collet Chuck (Capacity) _____ C. Morse Taper _____ D. Other _____

## POSITIVE SEAL ADJUSTMENT STOP SCREWS

### IMPORTANT! COLLET CHUCK USERS PLEASE READ

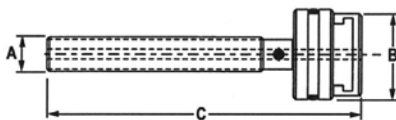
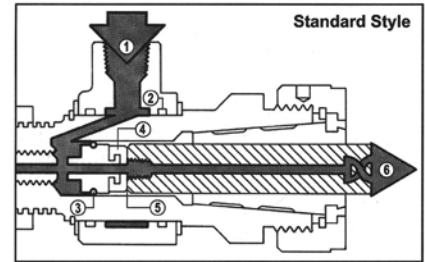
The introduction of The George Whalley Company's positive seal adjustment stop screws provides a solution to a major problem in coolant-fed machining operations. Coolant-fed cutting tools are able to deliver coolant to the cutting edge to assist cooling and chip ejection but this advantage can be seriously reduced when leakage at the stop screw decreases the coolant flow and pressure. The various standard adjustment stop screws generally in use in the machining industry for adjusting cutting tool length have basic disadvantages when used with coolant-fed tools. Steel stop screws have no sealing capability and are of little use in coolant-fed operations. Industry standard nylon capped steel stop screws provide a coolant seal where the tool shank meets the nylon cap but considerable leakage and loss of coolant pressure occurs around the screw threads. Solid nylon stop screws can provide a solution to this problem however they tend to be subject to wear when frequent tool adjustments are required. The George Whalley Company can provide all of the proceeding stop screws to interchange with industry standard holders. We strongly recommend our exclusive positive seal stop screw which will eliminate leakage and will handle necessary pressures to allow peak performance to the cutting tool. The George Whalley Company's positive seal adjustment stop screw also has the advantage of using fine screw threads for finer tool length adjustment. The illustrations and text which follow explain their use and capability.



## STANDARD POSITIVE SEAL ADJUSTMENT STOP SCREWS

These stop screws are designed exclusively for use with The George Whalley Company's positive seal style collet chucks. For information on which collet chucks accept these stop screws please see tool holders section of catalog.

1. Coolant is delivered through the coolant gland pipe thread orifice in rotary inducer style holders or coolant passage through the axis of stop screw in coolant-thru-the-spindle holders.
2. Rotary inducer style holders have seals at the gland bearing surface to prevent coolant leakage.
3. Coolant enters the tool holder chamber where an O-ring seal prevents coolant loss around the outside diameter of stop screw head. A coolant cross hole in the neck of the stop screw then admits coolant for delivery to the cutting tool.
4. At the location where the cutting tool shank end meets the stop screw face, a nylon cap prevents leakage.
5. The nylon extension meets the end of the cutting tool shank, inside the single angle collet, for tool length adjustment and to seal against coolant leakage.
6. Coolant flows out through the cutting tool at maximum available pressure for cooling and chip ejection.

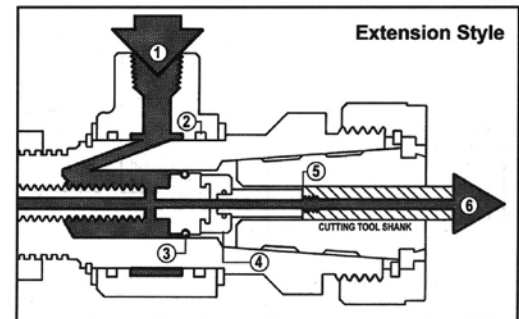


PART NUMBER	OLD PART NO.	(A) THREAD SIZE	B	C
104-001	851-001P	1/2-20 LH	1.135	3.750
104-002	851-002P	7/16-20 LH	0.825	3.750
104-003	851-003P	7/16-20 LH	1.135	3.750
104-004	851-004P	7/16-20 LH	1.135	2.250
104-005	851-005P	7/16-20 LH	1.135	2.750
104-006	851-006P	5/8-18 LH	1.665	1.750
104-007	851-007P	5/8-18 LH	1.665	3.375
104-008	851-008P	5/8-18 LH	1.665	2.250
104-009	851-009P	7/16-20 LH	0.825	2.250

## EXTENSION STYLE POSITIVE SEAL ADJUSTMENT STOP SCREWS

These stop screws are designed to prevent coolant leakage between the stop screw face and the shank of short shanked cutting tools. An extension is projected into the bore of the collet for sealing and tool length adjustment. For use in collet chucks which use TG10 and TG15 series single angle collets.

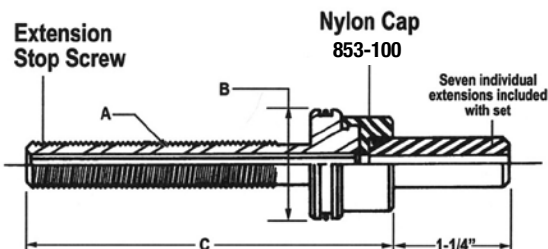
1. Coolant is delivered through the coolant gland pipe thread orifice in rotary inducer style holders or coolant passage through the axis of stop screw in coolant-thru-the-spindle holders.
2. Rotary inducer style holders have seals at the gland bearing surface to prevent coolant leakage.
3. Coolant enters the tool holder chamber where an O-ring seal prevents coolant loss around the outside diameter of stop screw head. A coolant cross hole in the neck of the stop screw then admits coolant for delivery to the cutting tool.
4. Nylon cap is mounted to the positive seal stop screw to accept nylon extensions. These nylon extensions are manufactured slightly undersize to provide clearance for insertion into the rear end of the single angle collet without interfering with collet grip. Where the nylon extension is inserted in the nylon cap, an O-ring is provided to prevent leakage.
5. The nylon extension meets the end of the cutting tool shank, inside the single angle collet, for tool length adjustment and to seal against coolant leakage.
6. Coolant flows out through the cutting tool at maximum available pressure for cooling and chip ejection.



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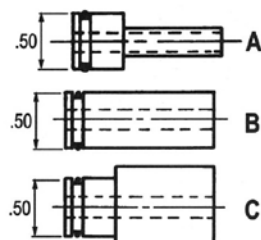
## EXTENSION STYLE STOP SCREW SETS

Each extension stop screw set listed includes **one extension stop screw** and one each of the **seven extensions** listed below.



PART NUMBER	OLD PART NUMBER	(A) THREAD SIZE	B APPROX.	C APPROX.
116-001	851-011P	1/2-20 LH	1.135	3.75
116-002	851-013P	7/16-20 LH	1.135	3.75
116-003	851-014P	7/16-20 LH	1.135	2.25
116-004	851-015P	7/16-20 LH	1.135	2.75

## EXTENSION STYLE POSITIVE SEAL STOP SCREWS



STYLE	PART NUMBER	OLD PART NUMBER	DIA.
A	106-001	853-010	0.250
A	106-002	853-012	0.312
A	106-003	853-014	0.375
A	106-004	853-016	0.437
B	106-005	853-018	0.500
C	106-006	853-020	0.620
C	106-007	853-022	0.750