

CORROSION RESISTANT **SLIDE-RITE™ CR GEARBOX**

5
DAYS
BUILT TO ORDER



0100-4004_00

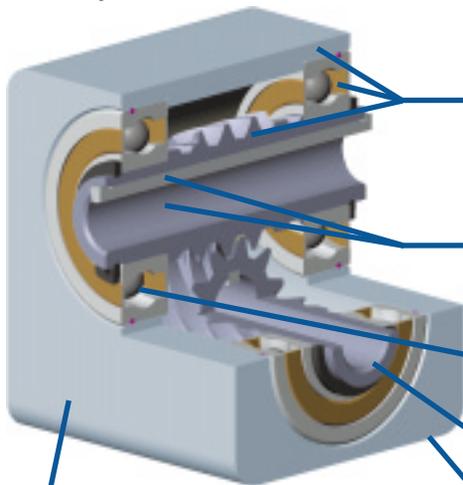
TOL-O-MATIC, INC.

SLIDE-RITE™ CR GEARBOX

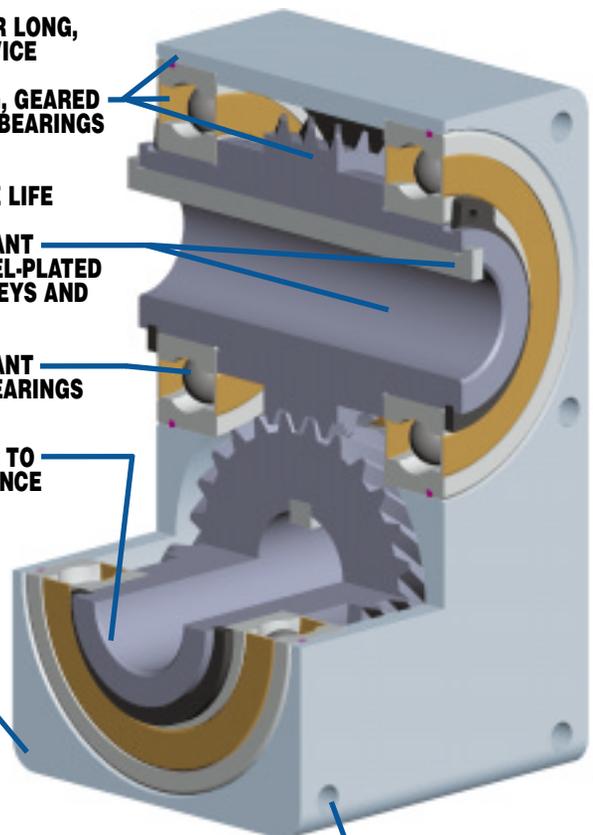
CORROSION RESISTANT COMPONENTS. EFFICIENT POWER PERFORMANCE IN ENVIRONMENTALLY TOUGH APPLICATIONS.

Like Tol-O-Matic's original Slide-Rite™ gearbox, the new CR version is designed to turn power around any corner. With the **Slide-Rite™ CR Gearbox**, you get the added advantage of specially selected corrosion resistant components, making it the perfect choice for those environmentally challenging applications. Based on the classic Float-A-Shaft design, the **Slide-Rite™ CR Gearbox** consists of two 45° helical gears that mesh at right angles. Its unique floating design maintains perfect alignment, allowing ease of installation.

Slide-Rite™ CR Gearbox Compact Series



Slide-Rite™ CR Gearbox Standard Series



- SHAFT SPEEDS UP TO 1200 RPM FIT A WIDE VARIETY OF APPLICATION REQUIREMENTS

- ONLY 1° OF BACKLASH ON REVERSAL OF INPUT FOR FAST STOPS

- FLEXIBLE OPERATION IN EITHER DIRECTION

- PRELUBRICATED FOR LONG, TROUBLE-FREE SERVICE

- ONE-PIECE HOUSING, GEARED SHAFT AND SEALED BEARINGS OFFER LEAK-PROOF PERFORMANCE AND EXCELLENT SERVICE LIFE

- CORROSION RESISTANT ELECTROLESS NICKEL-PLATED GEARED SLEEVES, KEYS AND RETAINING RINGS

- CORROSION RESISTANT STAINLESS-STEEL BEARINGS AND RACES

- BORES ARE GROUND TO .002" TOTAL TOLERANCE

- MOUNTING HOLES

- HARD COATED ALUMINUM CASE RESISTS CORROSION AND FORMS ITS OWN LUBRICANT RESERVOIR

- SLIDE-RITE™ CAN SLIDE ALONG THE SHAFT, LIMITED ONLY BY THE LENGTH OF THE KEYWAY.

- MOUNTING HOLES

SLIDE-RITE™ CR GEARBOX

SELECTION

1. DETERMINE INPUT TORQUE AND RPM REQUIRED

To select the **Slide-Rite™ CR Gearbox** model required for an application, first determine the input torque and RPM required for the application. The maximum RPM rating of the **Slide-Rite™ CR Gearbox** is 1,200 RPM.

2. REFER TO THE CATALOG PAGE FOR THE GEARBOX SELECTED.

Find the required input torque in inch-pounds for the selected **Slide-Rite™ CR Gearbox** on the graph and intersect it with the RPM of the input shaft. If the torque vs RPM intersects below the 300°F curve, the correct **Slide-Rite™ CR**

Gearbox has been selected for the application.

If the torque vs RPM intersection point is above the 300°F curve on the performance graph, then it is not a proper application. Reduce either the application input torque or RPM to get under the 300°F curve.

3. SELECT PROPER BORE SIZE

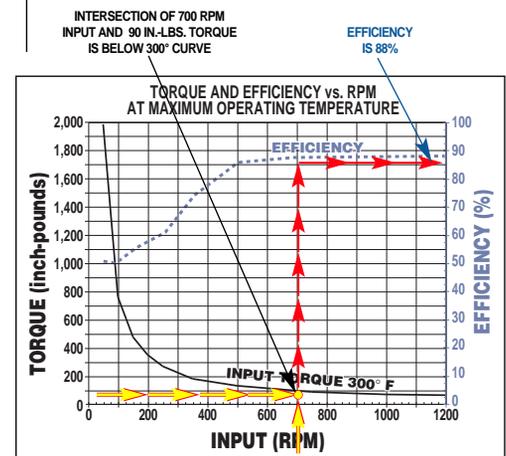
Once a gearbox has been selected, then pick the bore size that suits the application shaft requirements.

4. DETERMINE OUTPUT TORQUE

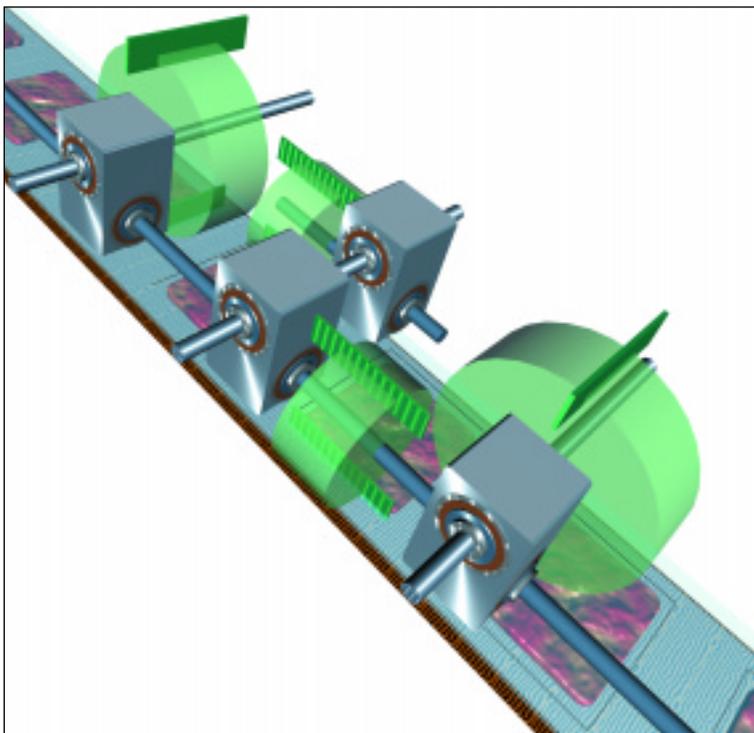
Multiply the input torque times the efficiency of the gearing times the gear ratio.
See the following example:

Example: **Slide-Rite™ CR Gearbox** Standard Series at 700 RPM and 90 inch-pounds of input torque (Refer to the graph shown below, reproduced from page 6)

Output torque = (Input torque) (efficiency) (ratio)
Output torque = (90 in.-lbs.) (.88) (1:1)
Output torque = 79 in.-lbs.



APPLICATION EXAMPLE



APPLICATION DESCRIPTION:

A manufacturer of frozen pizzas needed a way to cut and seal the plastic packaging for multiple sizes of their signature square pizza.

APPLICATION REQUIREMENTS:

- Output of 60 pizzas per minute
- 4" adjustment range
- No maintenance - washdown environment

TOL-O-MATIC SOLUTION:

Slide-Rite™ CR Gearboxes were chosen for this application, due to their ability to slide along the entire length of the shaft, to accommodate adjustment for pizza width. The rotary cutting/sealing units are synchronously powered by one motor, located out of the washdown area. **Slide-Rite™ CR Gearboxes** provided the high speed, leak proof construction and corrosion resistance required for this application.

SLIDE-RITE™ CR GEARBOX

COMPACT SERIES

1:1 RATIO



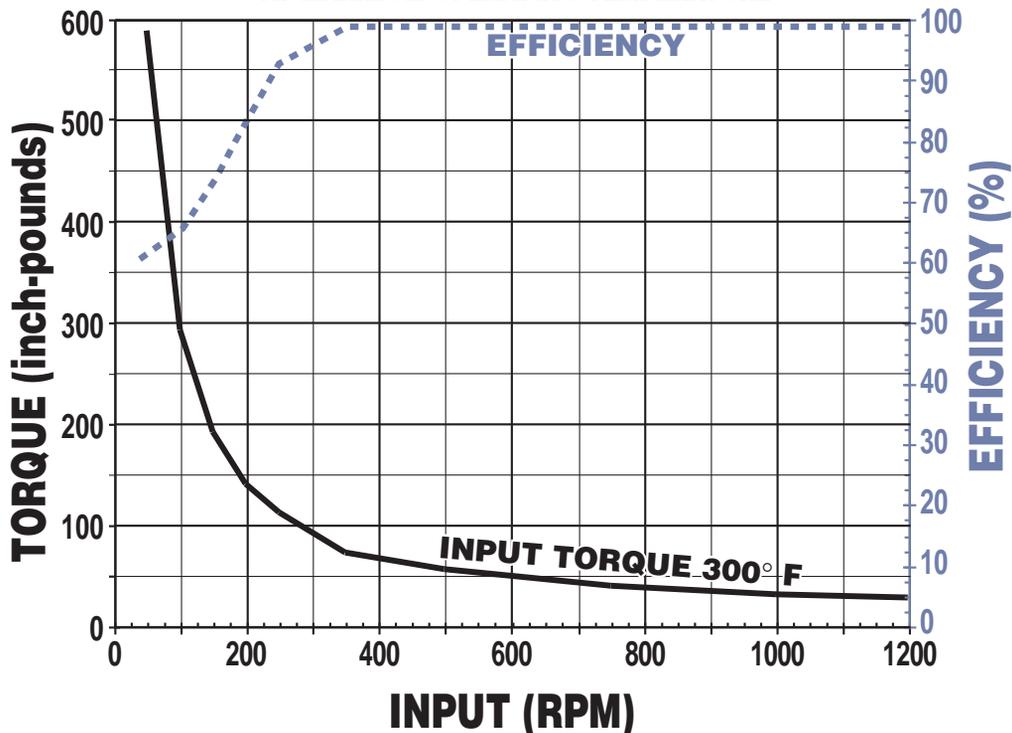
SLIDE-RITE™ CR GEARBOX

- COMPACT
- HIGH TORQUE
- BALL BEARING
- CORROSION RESISTANT

Visit
www.tolomatic.com to
get the most up-to-date
technical information

PERFORMANCE DATA

TORQUE AND EFFICIENCY VS RPM
AT MAXIMUM OPERATING TEMPERATURE



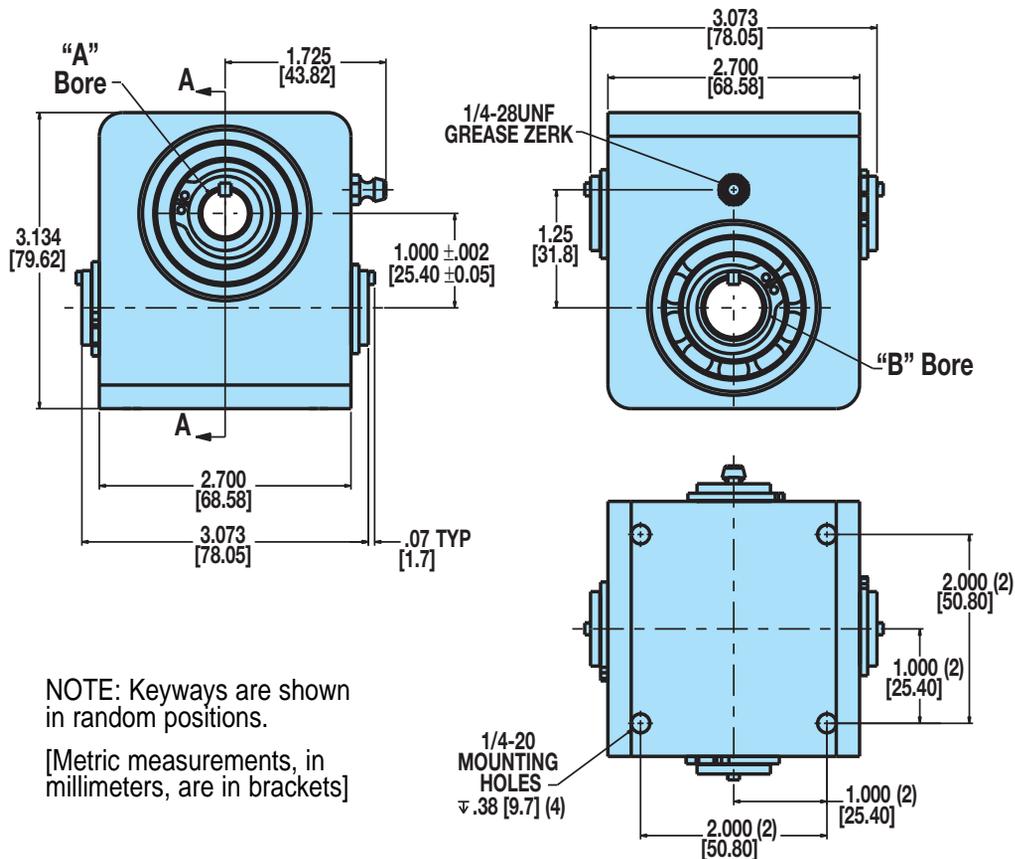
SLIDE-RITE™ CR GEARBOX

COMPACT SERIES

1:1 RATIO



DIMENSIONAL DATA



NOTE: Keyways are shown in random positions.

[Metric measurements, in millimeters, are in brackets]

OTHER TOL-O-MATIC PRODUCTS

See the original Slide-Rite™ Gearbox brochure #0100-4000 if you don't require corrosion resistance. Need a different shaft size, metric sizes or different power ratio? Check the wide choices available in our original Float-A-Shaft Gearbox. See the Power Transmission Products catalog #9900-4009. It also contains information about Tol-O-Matic's wide choices of clutches and brakes.

Need other automation products? Consult our Fluid Power Products catalog #9900-4000 and the Axidyne Electric Linear Motion Products catalog 3600-4609. Call Tol-O-Matic at 1-800-328-2174 to order. Visit www.tolomatic.com for complete product information.

COMPACT - 1:1 HIGH TORQUE / BALL BEARING

MODEL NUMBER	RH or LH	"A" BORE		"B" BORE		APPROX. WEIGHT (LBS.)
		BORE SIZE (IN.)	WxD KEYWAY (IN.)	BORE SIZE (IN.)	WxD KEYWAY (IN.)	
0120-0420	RH	1/2	1/8 x 1/16	1/2	1/8 x 1/16	2.7
0121-0420	LH	1/2	1/8 x 1/16	1/2	1/8 x 1/16	2.7
0122-0420	RH	1/2	1/8 x 1/16	5/8	1/8 x 1/16	2.6
0123-0420	LH	1/2	1/8 x 1/16	5/8	1/8 x 1/16	2.6
0124-0420	RH	5/8	1/8 x 1/16	5/8	1/8 x 1/16	2.5
0125-0420	LH	5/8	1/8 x 1/16	5/8	1/8 x 1/16	2.5

SLIDE-RITE™ CR GEARBOX

STANDARD SERIES

1:1 RATIO



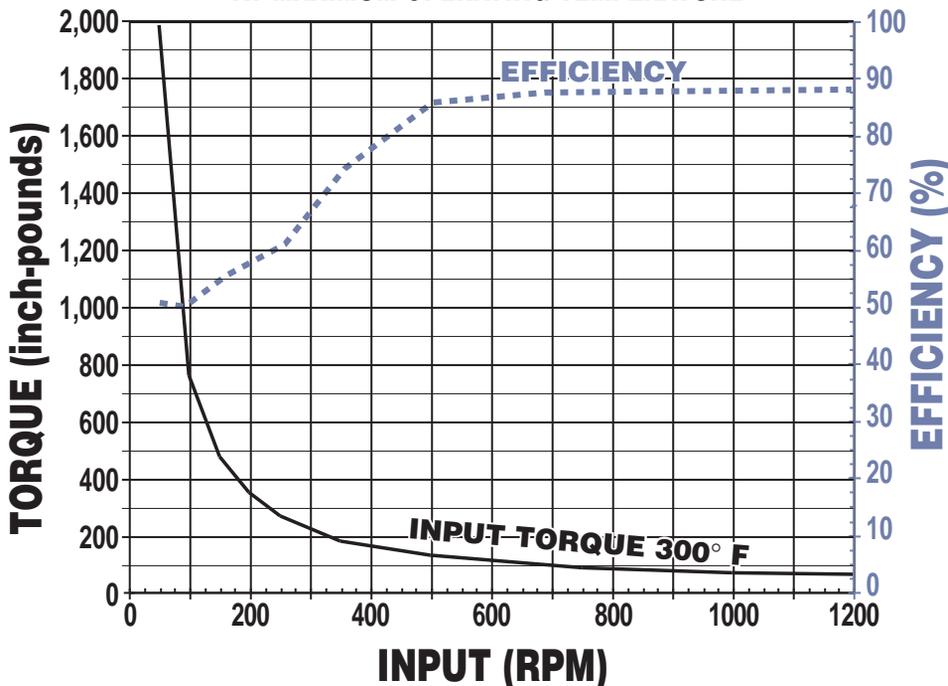
SLIDE-RITE™ CR GEARBOX

- STANDARD
- HIGH TORQUE
- BALL BEARING
- CORROSION RESISTANT

Visit
www.tolomatic.com to
get the most up-to-date
technical information

PERFORMANCE DATA

TORQUE AND EFFICIENCY VS RPM
AT MAXIMUM OPERATING TEMPERATURE



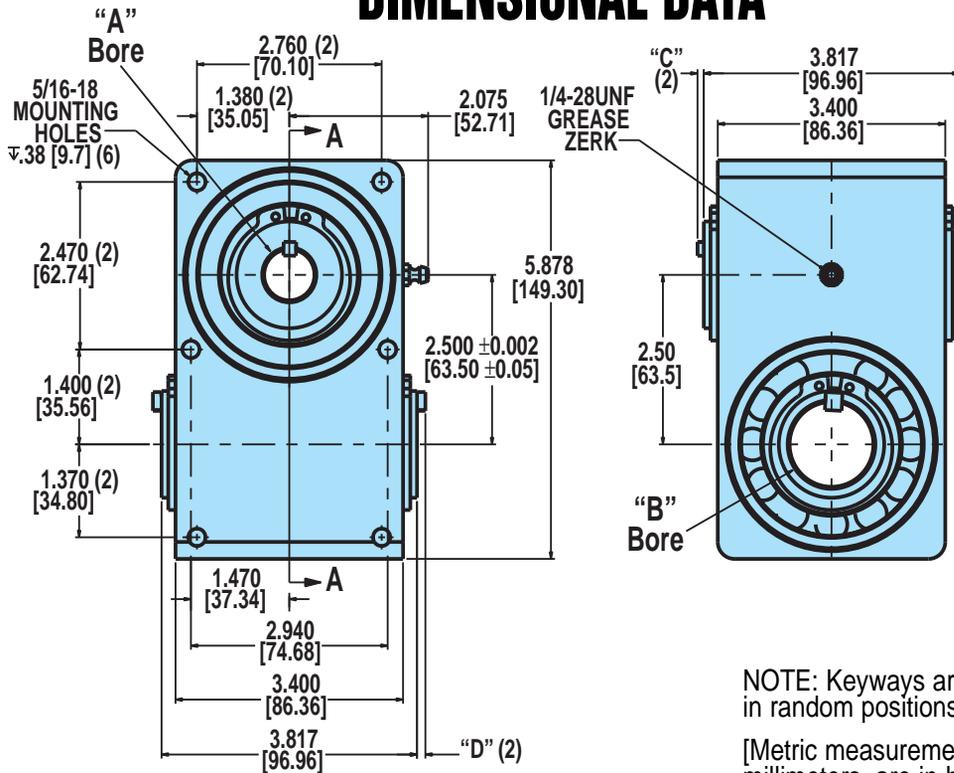
SLIDE-RITE™ CR GEARBOX

STANDARD SERIES

1:1 RATIO



DIMENSIONAL DATA



NOTE: Keyways are shown in random positions.

[Metric measurements, in millimeters, are in brackets]

OTHER TOL-O-MATIC PRODUCTS

See the original Slide-Rite™ Gearbox brochure #0100-4000 if you don't require corrosion resistance. Need a different shaft size, metric sizes or different power ratio? Check the wide choices available in our original Float-A-Shaft Gearbox. See the Power Transmission Products catalog #9900-4009. It also contains information about Tol-O-Matic's wide choices of clutches and brakes.

Need other automation products? Consult our Fluid Power Products catalog #9900-4000 and the Axidyne Electric Linear Motion Products catalog 3600-4609. Call Tol-O-Matic at 1-800-328-2174 to order. Visit www.tolomatic.com for complete product information.

STANDARD - 1:1 HIGH TORQUE / BALL BEARING

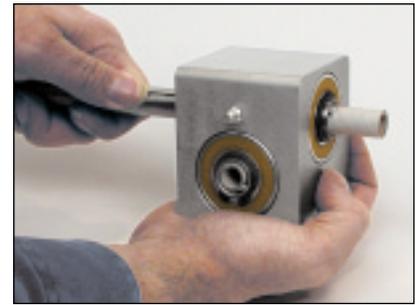
MODEL NUMBER	RH or LH	"A" BORE			"B" BORE			APPROX. WEIGHT (LBS.)
		BORE SIZE (IN.)	WxD KEYWAY (IN.)	"C" DIM. (IN.)	BORE SIZE (IN.)	WxD KEYWAY (IN.)	"D" DIM. (IN.)	
0220-0420	RH	3/4	3/16 x 3/32	.10	3/4	3/16 x 3/32	.10	10.7
0221-0420	LH	3/4	3/16 x 3/32	.10	3/4	3/16 x 3/32	.10	10.7
0222-0420	RH	3/4	3/16 x 3/32	.10	1	1/4 x 1/8	.13	10.4
0223-0420	LH	3/4	3/16 x 3/32	.10	1	1/4 x 1/8	.13	10.4
0224-0420	RH	3/4	3/16 x 3/32	.10	1-1/4	1/4 x 1/8	.13	9.9
0225-0420	LH	3/4	3/16 x 3/32	.10	1-1/4	1/4 x 1/8	.13	9.9
0226-0420	RH	1	1/4 x 1/8	.13	1	1/4 x 1/8	.13	10.0
0227-0420	LH	1	1/4 x 1/8	.13	1	1/4 x 1/8	.13	10.0
0228-0420	RH	1	1/4 x 1/8	.13	1-1/4	1/4 x 1/8	.13	9.6
0229-0420	LH	1	1/4 x 1/8	.13	1-1/4	1/4 x 1/8	.13	9.6
0230-0420	RH	1-1/4	1/4 x 1/8	.13	1-1/4	1/4 x 1/8	.13	9.1
0231-0420	LH	1-1/4	1/4 x 1/8	.13	1-1/4	1/4 x 1/8	.13	9.1

SLIDE-RITE™ CR GEARBOX

INSTALLATION

A plastic (or cardboard) dowel is inserted through the shaft bores during assembly and shipped in place. It allows installation of the **Slide-Rite™ CR Gearbox** on the shafts in less than a minute.

To install: • Line up the keyway on the shaft with the key and bore of the gearbox. • Push the shaft through into place. The dowel falls out the other side and may be discarded.



SHAFT AND KEYWAY REQUIREMENTS

► SHAFT DIAMETER

Tolerance of +0.000" / -0.002" is recommended and should have runout within 0.002" TIR.

► SHAFT MATERIAL

Use only alloy steel or stainless-steel for shafting, having a minimum hardness of RC40, or transmission shafting grade 4140 or equivalent.

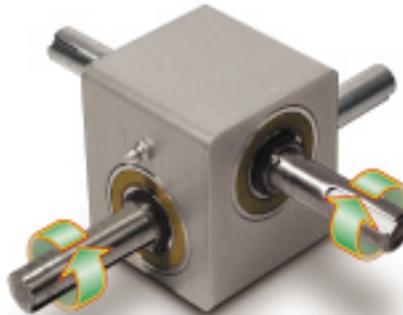
► SHAFT FINISH

In stationary applications, the shaft finish should be 64 RMS or better. Shaft finish for traversing applications should be 32 RMS.

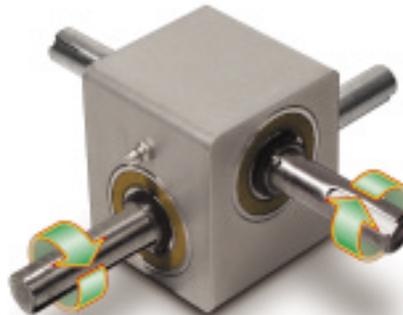
► SHAFT STRAIGHTNESS

Shaft should be straight within 0.0015" TIR per foot.

LEFT HAND DRIVE



RIGHT HAND DRIVE



► KEYWAY

Keyway should be made up to 0.001" oversize than the nominal. See dimension table for nominal keyway sizes. Sharp edges of keyway should be avoided.

► SHAFT SUPPORT

The shafts should be supported rigidly with either bearing blocks or pillow blocks to avoid excessive deflection.

► LUBRICATION *

An extreme-pressure synthetic lubricant with excellent anti-wear and rust protection qualities:

Anderol® 786 or equivalent.

Temperature range 0 - 300°F

NGLI Number 2

Dropping Point (ASTM D566) . . 525+

Penetration Worked (ASTM D217) . . 300

Evaporation (ASTM D972) . . . under 1%

Slide-Rite™ CR Gearbox is a registered trademark of Tol-O-Matic, Inc.

Anderol® 786 is a registered trademark of the Anderol Company, www.anderol.com

*The **Slide-Rite™ CR Gearbox** is lubricated at the factory and is ready for installation. **For most applications the unit is greased for life.** (See the Slide-Rite™ Gearbox service sheet [#0100-4002 at tolomatic.com] for lubrication guidelines.)



TOL-O-MATIC, INC.

3800 County Road 116 • Hamel, MN 55340, U.S.A.

Phone: (763) 478-8000 • Toll-Free: 1-800-328-2174

Fax: (763) 478-8080

(U.S. and Canada)

URL: <http://www.tolomatic.com> • Email: help@tolomatic.com