

**POWERLOK® II™ SCREWS**  
**ALL-METAL LOCKING FASTENERS**



## **POWERLOK® II™ Screws**

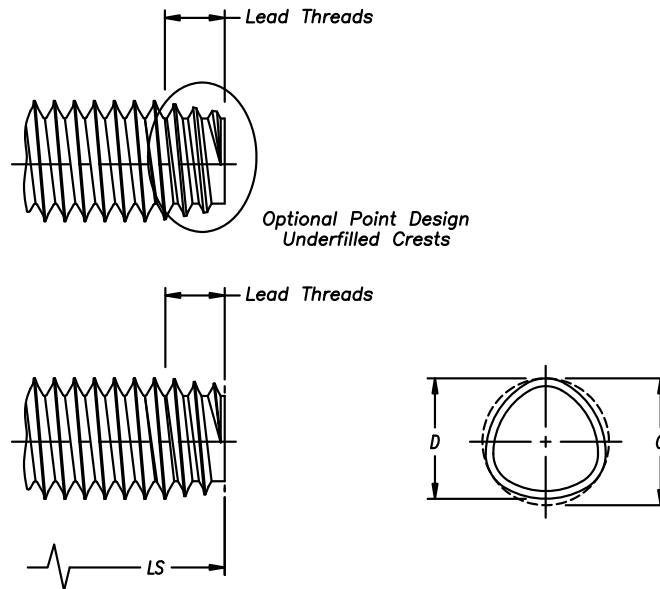
**Designed for the Demanding Locking Applications of Today & Tomorrow**

**POWERLOK® II™ TRILOBULAR® All-Metal Locking Fasteners Solve Assembly Problems and Reduce Your In-Place Fastening Costs.**

**Leaders in Lowering the Cost of Assembly**

# POWERLOK® II™ SCREWS

## ALL-METAL LOCKING FASTENERS



### POWERLOK® II™ Fastener Geometry

#### **Thread Profile:**

The innovative Dual-Angle™ thread form provides "live-action" locking.

The deflection of the thread tip creates classic "stored energy" locking.

Interferes in the root of the nut thread. Locking is not affected by an incomplete internal thread form.

#### **TRILOBULAR® Body:**

Capitalizes on elastic memory of nut member.

Further prevents vibrational loosening by providing additional locking action.

Reduces friction during installation.



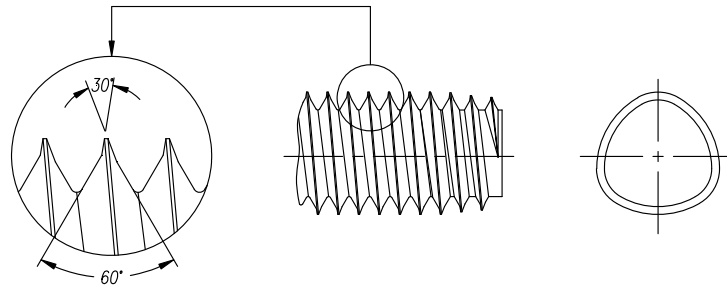
**Spring action of the Dual-Angle™ Thread Profile**

### POWERLOK® II™ Fastener Advantages

- No need for patches, adhesives or assembly line applied locking compounds.
- Locking action is over the entire length of the screw thread.
- Locking action is not affected by temperature.
- No adhesive curing time—instantaneous locking action.
- No need for under head locking elements.
- No need for costly lock washers.
- Works with all finishes.
- Easily hand started.

# POWERLOK® II™ SCREWS

## ALL-METAL LOCKING FASTENERS



### Inch Series

Screw Size	LIMITS	Screw Body	
		C	D
4-40	MAX	0.1170	0.1145
	MIN	0.1120	0.1095
5-40	MAX	0.1310	0.1285
	MIN	0.1250	0.1225
6-32	MAX	0.1470	0.1439
	MIN	0.1410	0.1379
8-32	MAX	0.1725	0.1694
	MIN	0.1665	0.1634
10-24	MAX	0.2050	0.2008
	MIN	0.1980	0.1938
10-32	MAX	0.1995	0.1964
	MIN	0.1925	0.1894
12-24	MAX	0.2310	0.2268
	MIN	0.2240	0.2198
1/4-20	MAX	0.2695	0.2645
	MIN	0.2615	0.2565
1/4-28	MAX	0.2625	0.2589
	MIN	0.2545	0.2509
5/16-18	MAX	0.3315	0.3259
	MIN	0.3235	0.3179
3/8-16	MAX	0.3945	0.3883
	MIN	0.3865	0.3803
7/16-14	MAX	0.4595	0.4524
	MIN	0.4515	0.4444
1/2-13	MAX	0.5235	0.5158
	MIN	0.5155	0.5078

### Metric Series

SCREW SIZE	LIMITS	BODY	
		C	D
M2.0 x 0.40	MAX	2.15	2.11
	MIN	2.05	2.01
M2.5 x 0.45	MAX	2.66	2.62
	MIN	2.56	2.52
M3.0 x 0.50	MAX	3.18	3.13
	MIN	3.08	3.03
M3.5 x 0.60	MAX	3.69	3.63
	MIN	3.59	3.53
M4.0 x 0.70	MAX	4.22	4.15
	MIN	4.10	4.03
M5.0 x 0.80	MAX	5.26	5.18
	MIN	5.13	5.05
M6.0 x 1.00	MAX	6.30	6.20
	MIN	6.15	6.05
M8 x 1.25	MAX	8.35	8.23
	MIN	8.20	8.08
M10 x 1.50	MAX	10.40	10.25
	MIN	10.25	10.10
M12 x 1.75	MAX	12.45	12.28
	MIN	12.30	12.13

### Length Tolerance - Inch - Per ANSI B18.6.3

Nominal Screw Length	Nominal Screw Size	
	#4 - #12	1/4" - 1/2"
	Tolerance On Length	
To 1/2" Inclusive	+0, - .020	+0, - .030
Over 1/2" to 1" Inclusive	+0, - .030	+0, - .030
Over 1" to 2" Inclusive	+0, - .060	+0, - .060
Over 2"	+0, - .090	+0, - .090

### Length Tolerance - Metric - Per ANSI B18.6.7M

Nominal Screw Length	Tolerance on Length
	mm
To 3mm included	± 0.2
Over 3 to 10mm	± 0.3
Over 10 to 16mm	± 0.4
Over 16 to 50mm	± 0.5
Over 50mm	± 1.0

## REMINC/CONTI

Research Engineering & Manufacturing Inc. (REMINC) and CONTI Fasteners AG (CONTI) have successfully marketed TAPTITE® fastener technology internationally since 1961. Their success has been accomplished by licensing and training leading fastener producers worldwide.

The technical program in the United States is under the direction of REMINC, located in Middletown, Rhode Island and in other countries under the direction of CONTI, situated in Baar, Switzerland.

Although REMINC and CONTI are separate corporations and operate independently, each is dependent on the other for certain functional activities.

## AVAILABILITY

Currently there are 68 qualified producers located in 20 countries utilizing the Technical Know-How, Patents, Trademarks, and Engineering and Marketing services of REMINC/CONTI. These producers delivered a volume in excess of 17,000,000,000 pieces of TRILOBULAR® fasteners in 2000, comprising a mix of products.

The proprietary products available in the program are marketed and sold, not as fastener items, but rather as **COST REDUCTIONS TO END-USERS OF ASSEMBLED PRODUCTS.**

The proprietary fasteners offered to the assemblers are the means to an end, i.e. used to generate cost reductions while at the same time providing reliably tightened joints.

## ORDERING/SUPPLY

When ordering from qualified TRILOBULAR® fastener producers, be sure in all cases to specify the TAPTITE 2000® brand name, thread size, nominal length, head and point style, strength grade if CORFLEX®-'N' or CORFLEX®-'I' is involved, any other special features required, finish, and of course, quantity.

## DISCLAIMER CLAUSE

The values shown in this brochure are for guidance only. They are not meant to be used for design criteria. Their use and reliance thereon for any purpose by anyone is entirely voluntary and at the sole risk of the user. REMINC/CONTI are not responsible for any loss, claim, or damage resulting from their use. Consult our application engineers or the application engineering department of one of our many qualified producers for your specific application data.

## TECHNICAL ASSISTANCE

This brochure contains basic information needed to achieve the cost-savings potential of TAPTITE 2000® fasteners.

To obtain further assistance and a list of qualified producers, visit our website at [www.taptite.net](http://www.taptite.net) or contact;

In North America;

REMINC  
Tel: 401-841-8880  
Fax: 401-841-5008  
Email: [reminc@reminc.net](mailto:reminc@reminc.net)

In Europe and all other countries;

CONTI Fasteners AG  
Tel: +41 (0)41/761 58 22  
Fax: +41 (0)41/761 30 18  
Email: [conti@contifasteners.ch](mailto:conti@contifasteners.ch)

## SERVICES

A summary of the capabilities of REMINC/CONTI in support of manufacturers:

### Technical Support

- New Product Development
- Research and Development Reports
- Technical Manuals
- Technical Reports
- Technical Information Updates
- Engineering Consultation
- Computer Aided Design and Analysis
- Engineering Training
- Tooling Design and Procurement
- Manufacturing Guidance
- Manufacturing Cost Reduction
- Metallurgical Analysis
- End-User Application Guidance
- Technical Training Seminars

### MARKETING SUPPORT

- Application Definition
- Application Reports
- Performance Documentation
- Sales Seminars
- Audio/Video Materials
- Graphics
- Customer Product Brochures
- Technical Liaison
- Joint Customer Visits
- Cooperative Studies
- Trademark and Patent Use

In addition to the above stated detail, REMINC/CONTI are positioned to provide:

- Contract Testing
- Contract Engineering
- Consultation Activities
- Contract Joint Analysis
- Fastener Engineering
- Training



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