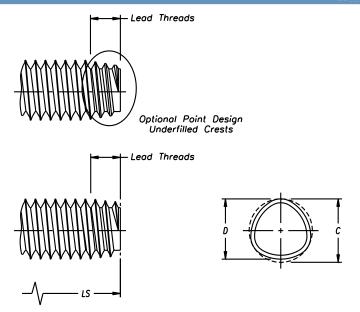
# POWERLOK® II<sup>TM</sup> SCREWS ALL-METAL LOCKING FASTENERS





## **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.

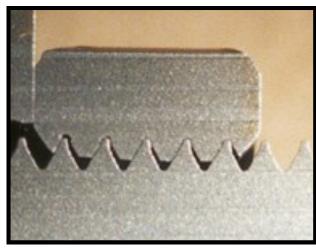
Interferes in the root of the nut thread. Locking is not affected by an incomplete internal thread form.

## TRILOBULAR® Body:

Capitalizes on elastic memory of nut member.

Further prevents vibrational loosening by providing additional locking action.

Reduces friction during installation.



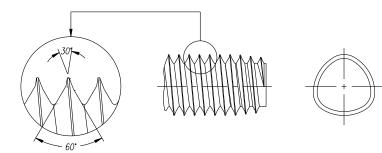
Spring action of the Dual-Angle™ Thread Profile

## **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<sup>®</sup> II<sup>™</sup> SCREWS **ALL-METAL LOCKING FASTENERS**



Inch Series				
Screw Size	LIMITS	Screw	Body	
Size		С	D	
4-40	MAX	0.1170	0.1145	
	MIN	0.1120	0.1095	
5-40	MAX	0.1310	0.1285	
3-40	MIN	0.1250	0.1225	
6-32	MAX	0.1470	0.1439	
0-32	MIN	0.1410	0.1379	
8-32	MAX	0.1725	0.1694	
6-32	MIN	0.1665	0.1634	
10-24	MAX	0.2050	0.2008	
10-24	MIN	0.1980	0.1938	
10-32	MAX	0.1995	0.1964	
10-32	MIN	0.1925	0.1894	
12-24	MAX	0.2310	0.2268	
12-27	MIN	0.2240	0.2198	
1/4-20	MAX	0.2695	0.2645	
1/ +-20	MIN	0.2615	0.2565	
1/4-28	MAX	0.2625	0.2589	
1/4-20	MIN	0.2545	0.2509	
5/16-18	MAX	0.3315	0.3259	
3/10-10	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	
1/2-13	MIN	0.5155	0.5078	

## **Metric Series**

SCREW	LIMITS	BODY	
SIZE		С	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	Nominal Screw Size		
Screw Length	#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		
	Tolerance on Length	
Nominal Screw 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	

# POWERLOK® IITM SCREWS ALL-METAL LOCKING FASTENERS

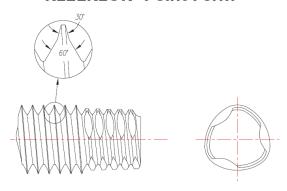


## KLEERLOK® Thread Clearing Lock Screw

The KLEERLOK® feature is designed to be used in conjunction with TRILOBULAR™ fasteners in pre-tapped holes which may be contaminated with weld splatter, paint, primer or other foreign matter.

The KLEERLOK® feature can be combined on a POWERLOK® screw for paint clearing and locking torque or on a reduced diameter TAPTITE® screw as a version for joints where classical torque-tension fastening rather than a locking screw is desired.

### KLEERLOK® Point Form



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