NITTOSEIKO

Thread interference type self-locking screw

POWERLOK®

Outline of POWERLOK®

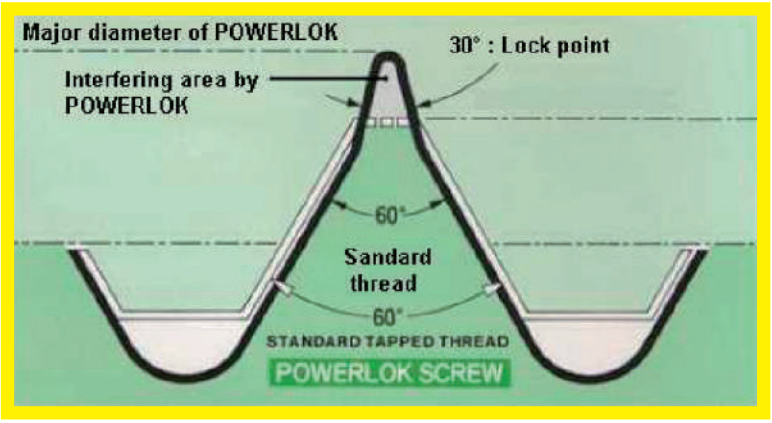
POWERLOK®, a TRILOBULAR™ self locking screws is a unique concept of locking screw.
Made from high strength steel, hardened and tempered to an optimum strength toughness serviceability, the POWERLOK® screw achieves enhanced lock ing ability through the combination of a novel 60°-30° thread form and a TRILOBULAR™ thread body sect ion.
A significant mechanical advantage of this design is that the locking action is developed at the outermost radius of the torque arm of the screw body whereas other locking screws develop their effective resistance at lesser radius points on thread flanks, down even to the thread root surface.
The deeper geometry of the POWERLOK® thread, along with a slight increase in the thread major diameter over equivalent size machine screw, adds to the effective stripping resistance of the fastener.
In addition, the centralization of the POWERLOK® lobes in the nut member thread allows the 30° thread crest on the fastener to flex elastically under clamp load, simulating the live action of spring washers.

Special features

- Enhanced locking ability
- Doesn’ t need adhesive
- Continuous locking action
- Re-usable

Application

- Mobile device
- Camera & watch
- OA equipment
- Power tool
- Air-conditioner



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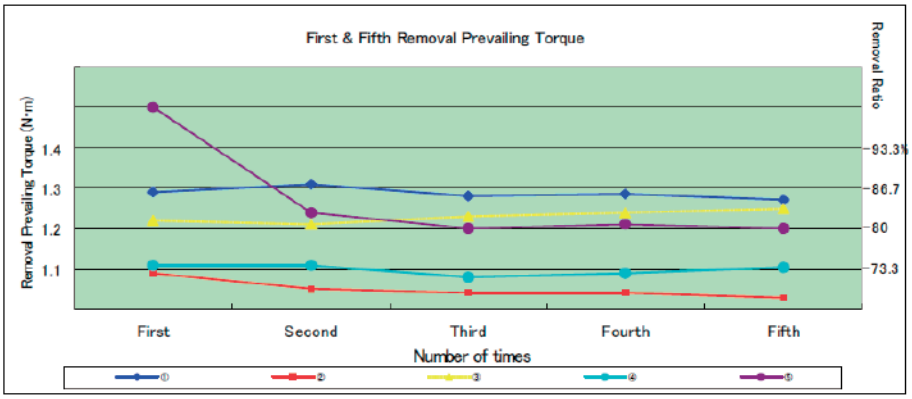
Performance of POWERLOK®



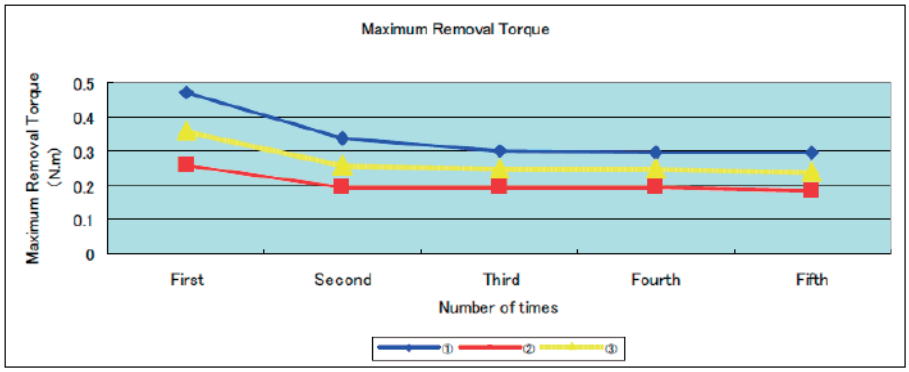
①POWERLOK M5 and Nut (Plain)

②POWERLOK M5 and Aluminum Die-casting (ADC12) with Tap (Grade 2)

③Machine Screw M5 with SOFT-LOCK and Nut (Plain)

④Machine Screw M5 with Spak and Nut (Plain)

⑤Machine Screw M5 with NK-GRIP and Nut (Plain)



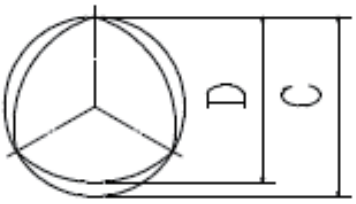
①POWERLOK M5 and Nut (Plain)

②POWERLOK M5 and Aluminum Die-casting (ADC12) with Tap (Grade 2)

③Machine Screw M5 with SOFT-LOCK and Nut (Plain)

Dimension table

Nominal Dia.	Pitch	Thread Diameter			
		C		D	
		Max.	Min.	Max.	Min.
1.4	0.3	1.52	1.46	1.46	1.38
1.6	0.35	1.73	1.67	1.66	1.58
1.7	0.35	1.83	1.77	1.76	1.68
2	0.4	2.15	2.07	2.07	1.99
3	0.5	3.16	3.06	3.06	2.91
3.5	0.6	3.67	3.57	3.55	3.40
4	0.7	4.23	4.08	4.09	3.94
5	0.8	5.26	5.11	5.10	4.95
6	1.0	6.30	6.15	6.10	5.95
8	1.25	8.35	8.20	8.10	7.95



NITTOSEIKO CO.,LTD.

Fastener Division
Global Sales Section

URL: https://global.nittoseiko.com/

[Website] [Inquiry Form]

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ISO9001 JP17/062866

ISO14001 E0954
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·Yata Factory

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