

PEMHEX® Self-Clinching Prevailing Torque Locknuts Integrate Nylon Hexagonal Insert to Prevent Mating Screws from Loosening

PEMHEX® self-clinching prevailing torque locknuts from PennEngineering® integrate a trademarked blue nylon hexagonal insert designed to prevent mating screws from loosening in service due to vibration, thermal cycling, or other application-related factors. The reusable locking element provides the necessary torque resistance to securely grip mating screws and allow for their repeated installation and removal over time. The primary advantage of this locking method is to greatly reduce the possibility of conductive debris being generated from repeated installation and removal of mating screws. Thread-locking torque performance is equivalent to applicable NASM25027 specifications.

These PL steel and PLC stainless steel locknuts install permanently in thin steel or aluminum sheets ranging in thickness from .040" to .070" and 1.0mm to 1.78mm. Shank lengths are .060" and 1.53mm. Standard thread sizes are #4-40 through #10-32 and M3 through M5. Locking elements are blue in color for unified fasteners and black for metric versions.

During installation using a PEMSERTER® or other standard press, the locknut's knurled collar embeds in the host sheet and displaces sheet material, which then fills the undercut cavity beneath the collar to permanently captivate the fastener in the sheet. The strong knurled collar effectively receives the installation force and resists torque, exhibiting spin resistance greatly exceeding the torque exerted by the self-locking feature. Both the self-clinching shank of the locknut and the undercut contribute to high pushout values.

PEMHEX locknuts are part of a growing family of PEM® self-locking fasteners offering ideal attachment solutions for thin metal assemblies. Detailed specifications, fastener drawings and 3D models, and performance data (Bulletin LN) for these RoHS-compliant locknuts can be viewed and downloaded for free at www.pemnet.com.

Founded in 1942, PennEngineering (Danboro, PA, USA) is a global leader in the fastening industry with technical and manufacturing facilities in North America, Europe, and Asia supported by a global engineering-focused sales force and a worldwide network of authorized distributors.

For more information, visit www.pemnet.com, email info@pemnet.com, or contact Michael J. Rossi, PennEngineering®, 5190 Old Easton Road, Danboro, Pennsylvania, 18916-1000, USA. Call 800.237.4736 (toll-free in the U.S.) and 215.766.8853.

