

PEM[®] LINE

Fastening Products, Systems, and Applications from the Industry Pioneer

NEW FASTENER SOLUTION

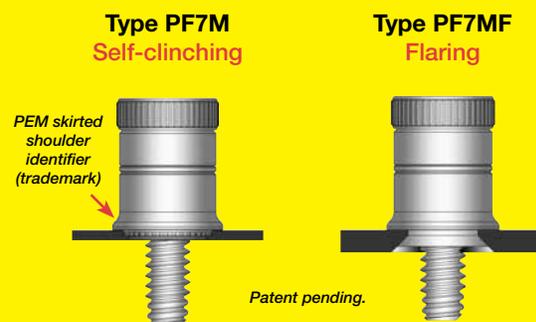
PEM[®] TYPES PF7M™ AND PF7MF™ CAPTIVE PANEL SCREWS AVAILABLE IN TWO MOUNTING STYLES

- *Small, compact and low-profile design for limited access areas.*
 - *MAThread[®] anti cross-thread feature.*
 - *Phillips recess for tool or hand operation.*
- *Available in two mounting styles, self-clinching (Type PF7M) or flaring (Type PF7MF).*
 - *Shoulder on retainer to provide a positive stop during installation.*
 - *Available in two screw lengths.*

The new PF7M™ and PF7MF™ captive panel screws introduce two distinct mounting styles for permanent installation into thin aluminum or steel sheets. Both types feature small, compact, and low-profile designs ideally suited for limited access areas and benefit from patented MAThread[®] anti-cross threading technology that easily corrects off-angle installations, aligns components, and slides through clogged internal threads. Their Phillips recess allows for tool or hand operation.

Type PF7M captive panel screws integrate a self-clinching mounting design providing high pushout resistance. Type

PF7MF captive panel screws feature a flaring design engineered for close centerline-to-edge applications, install flush on the backside, and can be installed permanently with minimum force into any panel hardness.



PennEngineering is a licensee for MAThread[®] technology, a registered trademark of MAThread Inc.



Webinar now available for viewing

The trend toward smaller, lighter, and thinner electronic devices and their inherently restrictive design envelopes have presented particular challenges on the road to their assembly and manufacture. Hardware for component attachment must perform reliably, despite the shrinking and limited footprints for fastener placement and installation.

This presentation, hosted by NASA Tech Briefs, will expand on the new hardware demands and profile several advanced micro fastener technologies gaining traction as suitable attachment solutions in the marketplace. The spotlight particularly will shine on an evolving line of self-clinching and flaring micro fasteners serving today - and tomorrow -- as practical and cost-effective alternatives to conventional loose hardware, welding, and adhesives. To view entire presentation go to:

<http://video.webcasts.com/events/abpi001/38209/>

Best new product award

Design News' annual Golden Mousetrap Awards recognize engineering innovation and creativity in product design. This year awards were given in four major categories: Electronics & Test, Automation & Control, Design Tools: Hardware & Software, and Materials & Assembly. The record number of entries received was distributed to the Design News editors for judging based on their expertise in each technology.



The PEM[®] Type MSO4 Micro Self-clinching Standoffs won the Best Product Award in the Fastening, Joining, and Assembly Components category.

PEM[®] micro self-clinching standoffs are for spacing or stacking applications in compact electronic assemblies. These microPEM standoffs can serve as practical, cost-effective, and permanently secure solutions enabling quicker assembly of devices ranging from handheld consumer electronics to medical equipment.

New hires

Bob Reece has been named President of 3V Fasteners. Bob succeeds Daryl VerDoorn, who is retiring after founding the Company in 1982.

PEM[®] North America

Jim Antinozzi - Territory Manager based in Minnesota.

PEM[®] Europe

Andrew Boden has re-joined PEM Europe as Regional Manager for Northern Europe.

Martin Dull - Automotive Applications Manager in Germany.

Jean-Michel Guignard - Regional Manager for France.

Anna Nestor - Product Manager for Europe. Anna will be based at the Galway, Ireland headquarters.

Andrea Parlangei - Territory Manager for Italy.

Piotr Streiss - Territory Manager for Poland and Baltic's.

Albert Szabo - Territory Manager for Central/Eastern Europe.

Distributor News

AERO-SPACE SOUTHWEST, INC. (Phoenix, Arizona) will now also be an authorized distributor for PEM[®] brand products in California, Nevada, Oregon, Washington, and Idaho.

PALMAR PNOMATIK ALET VE BAGLANT ELEMENLARI SAN. VE TIC. LTD. STI. has been appointed as the PEM[®] authorized distributor in Turkey.

NEW FASTENER SOLUTION

New ATLAS® AE938 pull-to-pressure tool

The new ATLAS® AE938 pull-to-pressure tool for installing blind threaded inserts promotes consistent performance and longer mandrel life in service. The portable tool's pressure-controlled setting allows for installation of the same insert type into various material thicknesses without requiring adjustment and a pull-to-pressure feature helps extend life of the tool's mandrel (standard socket head cap screw).

Among other tool features, an auto-reverse



mode after fastener installation serves to help accelerate production rates and the tool prevents over-installing or double installing to ensure integrity of fastener threads.



New QRP titanium pins

QRP, Inc. introduces a new capability to supply titanium quick release pins to satisfy standard designs or accommodate custom requirements for a wide range of attachment applications in the military, aerospace, automotive, marine, and industrial markets, among others. The pins are manufactured from traditional titanium alloy Ti-6AL-4V Grade 5 and can serve as ideal alternatives to standard steel and stainless steel pins by delivering weight savings up to 50%, depending on size.

QRP titanium quick release pins additionally exhibit high strength-to-weight ratio, high-temperature properties and stability, low density, and corrosion resistance due to a thin oxide surface protecting against harsh atmospheric and salt-water conditions and a wide variety of chemicals.

These single-acting high-performance pins can be ordered in various sizes with standard diameters as small as 3/16" and are offered with either 2 detents or 4 ball detents (for enhanced tensile strength). Titanium can be used for pin and/or spindle components. Available finishes include plain (passivated), aluminum pigment, solid film lube, or both aluminum pigment and solid film.



UPDATES

New addition to pemnet site

Fastener Installation Animations

We are in the process of creating PEM® fastener installation animations for each product type. These animations will show the installations using the same method and tooling types as depicted in the installation section of the PEM Bulletins. Where appropriate the animation will also call out the proper side for attaching the screw.

In many cases one animation will be used to demonstrate several different fastener types. The current animations can be found at:

http://www.pemnet.com/design_info/animation_library.html

PEMSERTER® service support update

We have added additional resources to our global customer service team. This will let us provide even faster response time on all service issues for our complete line of PEMSERTER tools and equipment.



Also, PEMSERTER tooling inventory can now be found in the inventory lookup section on the PEMNET website. The tool shows all available inventory at the company as well as the availability from North American PEMSERTER distributors. This along with the PEMSERTER ToolPro™ identification tool (http://www.pemnet.com/presses/PEMSERTERToolPro_DynamicToolingSelector_RevB.xls) should make it easier overall to select and locate PEMSERTER tooling.

The PEMSERTER global support email address is pemserter@pemnet.com.

TECH TIP

NASM25027 As Applied to PEM® Self-clinching, Self-locking Nuts

PEM types FE, FEO, LAS, LAC, LA4, LK, LKS, LKA, PL and PLC are produced to meet the locking torque requirements of NASM25027. Specification NASM25027 is a rather lengthy spec which includes many requirements for attributes such as tensile strength and wrenching strength which are not applicable to PEM self-clinching, self-locking nuts. It is difficult for those not familiar with the specification to determine exactly which portions of it apply to the locking torque of PEM self-clinching, self-locking nuts. This matter is further complicated by the fact that many of the requirements in the specification that do apply, apply only to qualification and are not so called "quality conformance inspections" which need to be applied to every lot of product. The fact of the matter is that only one test needs to be applied on a regular basis of PEM self-clinching, self-locking nuts. You can read more about this at:

http://www.pemnet.com/design_info/articles/NASM25027.pdf

PennEngineering® develops and manufactures PEM® brand fasteners, 3V® brand precision aerospace fasteners, SI® inserts for plastics, ATLAS® blind threaded inserts and QRP™ brand quick release pins.

Fastener installation systems include PEMSERTER® automatic and manual precision presses, In-Die and robotics capabilities, and the StickScrew® System for small-screw insertion.

PennEngineering®



North America: Danboro, PA USA • E-mail: info@pemnet.com • Tel: +1-215-766-8853 • Fax: +1-215-766-0143 • 800-237-4736 (USA Only)
Europe: Galway, Ireland • E-mail: europa@pemnet.com • Tel: +353-91-751714 • Fax: +353-91-753541
Asia/Pacific: Singapore • E-mail: singapore@pemnet.com • Tel: +65-6-745-0660 • Fax: +65-6-745-2400
Shanghai, China • E-mail: china@pemnet.com • Tel: +86-21-5868-3688 • Fax: +86-21-5868-3988

Visit our PEMNET™ Resource Center at www.pemnet.com
