

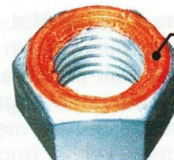
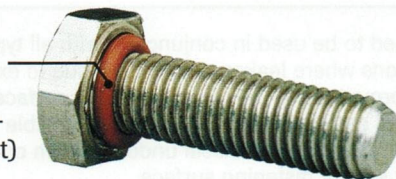
One-Step Re-Usable Self-Sealing Screws, Bolts, & Nuts (SEELSCREWS®, SEELBOLTS®, SEELNUTS®)

Situation: When gas/liquid, under pressure, has to be sealed in equipment from any kind of internal/external exposure, i.e. air, water, lubricants, or gas contaminants, there is a need to also seal the fastener. Or, for any unpressurized panel sealing situation that would benefit from reusable self-sealing fasteners. The question is, which method works best?

Application: In the past, technicians used a combination of fastener (machine screws, bolts, nuts) thread-sealant, sealing-compound, tape or deformable washer to accomplish this requirement. These techniques have inherent limitations. For example, if a thread-sealant has been applied, it is difficult to remove without damage to the fastener or the mounting hole while servicing. The mechanic has to first drill out the existing fastener and then replace with a new one. This results in damage to the original tapped hole threads. New threads then have to be tapped before re-inserting a new screw/bolt – this is time consuming and problems may result from creating an oversized hole. These methods make inspection and bleed applications extremely difficult.

Recommendation: APM Hexseal offers a line of high-pressure, vibration-resistant, stainless steel, self-sealing fasteners that seal to 20,000psig internal/external providing a positive seal without the use of a thread sealant, compound, tape or washers. A special silicone O-Ring, pre-mounted in an asymmetrical groove embedded in the underside of the fastener head provide 360° metal-to-metal head contact. When torqued, the O-Ring compresses into a clearance hole, sealing the fastener and mounting hole threads. This proven sealing system (millions are in use throughout the world) is in daily use in the food processing, chemical processing, marine, medical, off-road construction equipment, hydraulic, electrical & electronic and a myriad of commercial, industrial and military equipment applications. See reverse side of this page for more details.

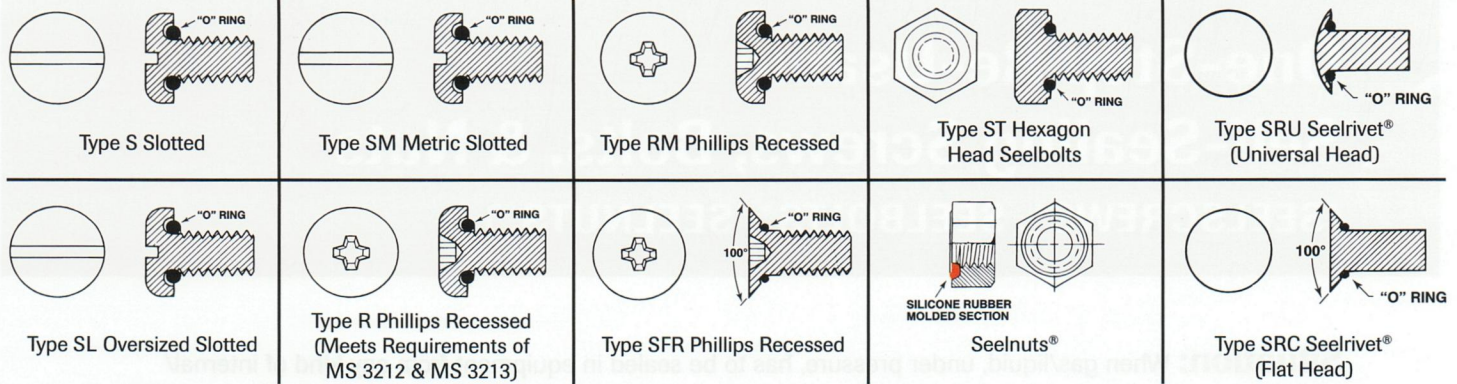
Embedded
Silicone O-Ring
(full 360° metal-
to-metal contact)



Full-Threaded
Molded In Silicone
Seal (as opposed to
crimped O-ring)

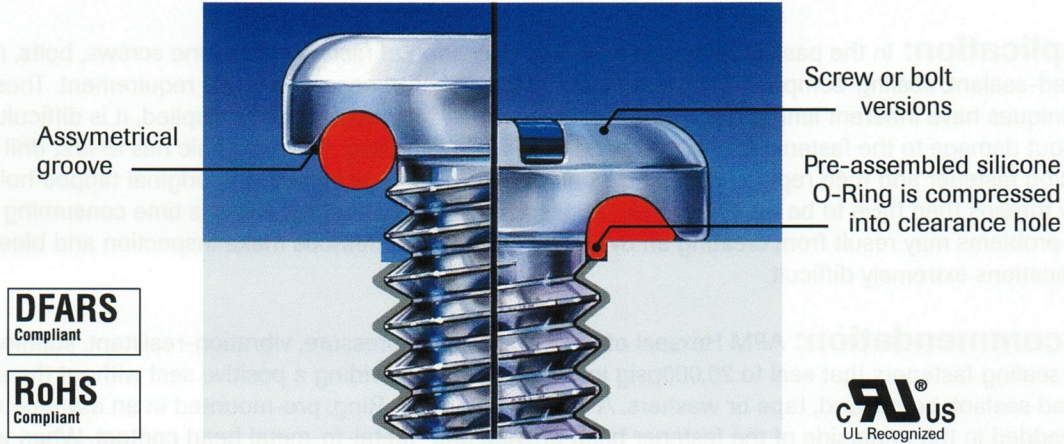
APM HEXSEAL®

When Just Fastening Isn't Enough®



Other head styles available including Tamper-Proof versions

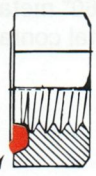
Product Features



- Hex Head Cap Screws & Pan Head Machine Screws
- Non-Magnetic Stainless Steel Class 1 (loose tolerance)
- To maximize reusability when there's sufficient hole depth available, we recommend creating a clearance hole of 2-3x pitch
- Pressure Range: Up to 20,000psig internal/external, subject to clearance hole dimensions
- Temperature Range: -160°F to +500°F (-106°C to +260°C)
- Other sealing compounds available
- Made in USA

Self-Sealing, High-Pressure Locking Nut – Designed to be used in conjunction with all types of adjusting screws, threaded studs, and machine bolts in applications where leakage may occur due to extreme pressures. Installed like an ordinary nut, a high-pressure seal is formed along the threads contact surface when torqued. Single piece design eliminates the need for gaskets, and sealing compounds. Fully adjustable and reusable, they resist vibration, provide metal-to-metal contact, and seal under vacuum or high pressure. Can be mounted on either front or back side of fastening surface.

- Brass nickel-plated
- Threads (class 1 loose tolerance)
- Temperature Range: -160°F to +500°F (-106°C to +260°C)
- Resistant to salt water, weather, dirt, sunlight, ozone and most acids



SILICONE RUBBER MOLDED SECTION

Printed in USA