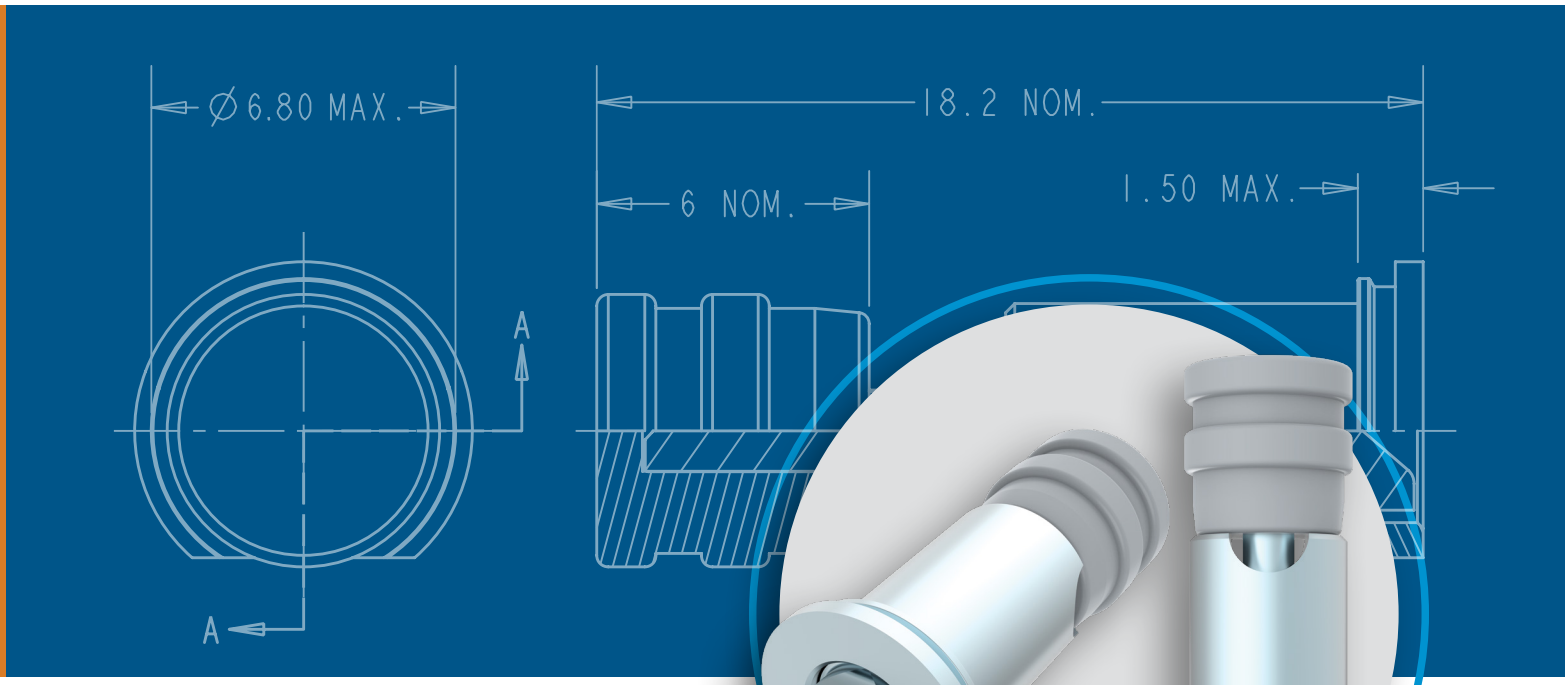
PFAP™

PEM® SELF-CLINCHING AUTO-LOCK PLUNGER ASSEMBLY



Features a spring-driven automatic locking mechanism with a special beveled guide that provides secure positioning with simple push-pull operation.

PEM® PFAP™ AUTO-LOCKING PLUNGER ASSEMBLY

Automatic locking mechanism for limited access application.

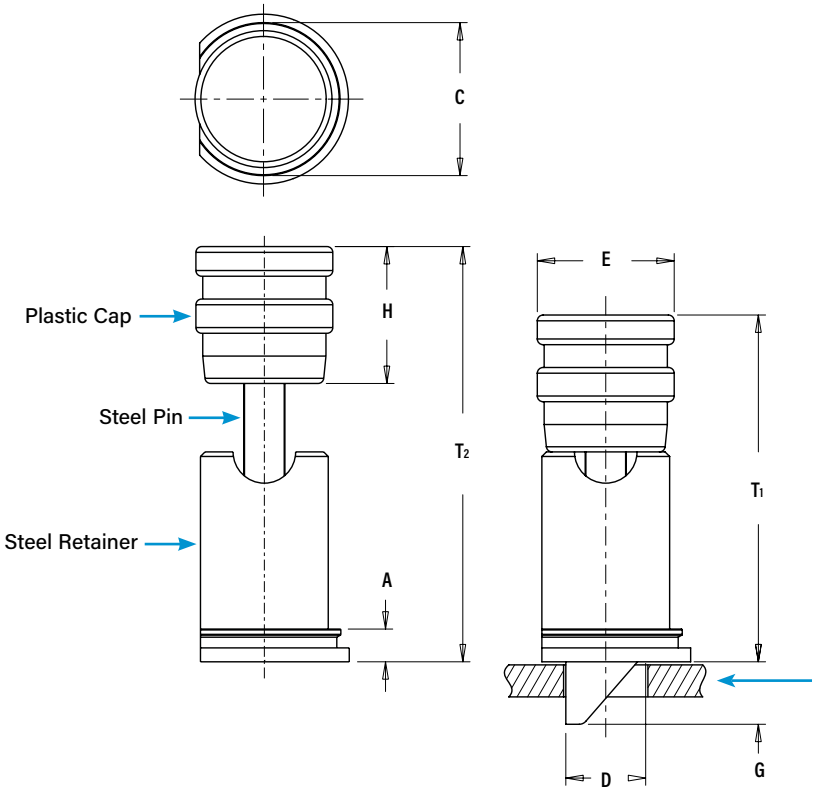
The PFAP™ panel fastener excels in applications requiring frequent access with limited clearance, which makes it ideal for compact equipment designs. The automatic locking mechanism eliminates the risk of accidental disengagement while the spring compliance enhances vibration resistance – ensuring reliable performance in dynamic environments.

The slender design of the PFAP™ plunger saves valuable space in compact assemblies, and the effortless one-hand operation reduces service time and improves ergonomics for technicians working in areas with limited access.

- **Automatic Lock Design**
  Spring-driven mechanism with beveled guide plunger provides secure engagement without manual locking steps
- **One-Hand Operation**
  Simple push-pull action enables rapid installation and removal even in areas with limited access
- **Miniaturized Profile**
  Compact design maximizes space efficiency while maintaining full functionality
- **Custom Colors**
  Available with customizable plastic knobs for product identification and enhanced aesthetics
- **Self Clinching Installation**
  Permanent installation creates strong, integrated attachment points using standard arbor press

Fastener drawings and models are available at www.pemnet.com.
Custom sizes are available on special order. Contact us for more information.

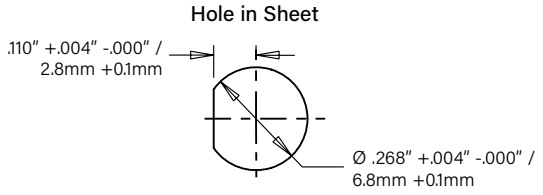
Dimensional Data



Part Number Designation

PFAP - 3.5 - 3 A

- PFAP: Type
- 3.5: Diameter Code
- 3: Length Code
- A: Color Code (Pantone 429C)



Type	Plunger Dia. Code	Plunger Length Code	A (Shank) Max.		Min. Sheet Thickness		Hole Size in Sheet +.003" -.000" / +0.08mm (1)		Hole Size in Mating Part Ref.		C Max.		D Pin Dia. ±.003" / ±0.08mm		E ±.010" / ±0.25mm		G ±.025" / ± 0.64mm		H Nom.		T_1 Nom.		T_2 Nom.		Min. Dist. Hole C/L to Edge (2)	
			in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
PFAP	3.5	3	.059	1.5	.059	1.5	.268	6.8	.146	3.7	.267	6.78	.138	3.5	.236	6	.118	3	.236	6	.598	15.2	.717	18.2	.250	6.35

Material and Finish Specifications

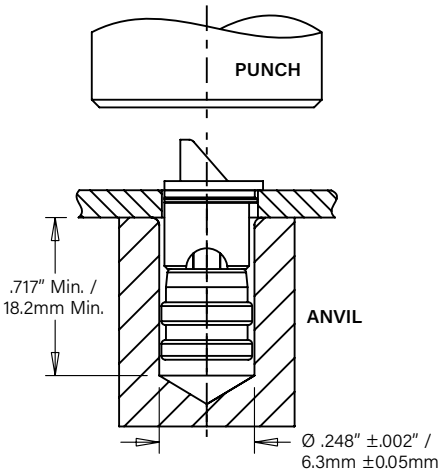
	Fastener Materials			Standard Finishes/Color			For Use in Sheet Hardness: (3)
Component	Hardened Carbon Steel	300 Series Stainless Steel	Polycarbonate (UL 94V-0, Halogen Free) (4)	Pantone 429C (Grey)	Zinc plated per ASTM B633, SC1 (5µm), Type III, Colorless (5)	Natural Finish	HRB 80 / HB 150 or less
Cap			▪	▪			
Pin	▪				▪		
Spring		▪				▪	
Retainer	▪				▪		▪

(1) The mounting hole is D-shaped to ensure correct orientation of the plunger during installation.
(2) For more information on proximity to bends and distance to other clinch hardware, see PEM® Tech Sheet C/L To Edge.
(3) HRB - Hardness Rockwell "B" Scale. HB - Hardness Brinell.
(4) Temperature Limit: 210° F (99° C). Additional cap colors available on special order.
(5) See PEM Technical Support section of our web site for related plating standards and specifications.

Installation

1. Prepare properly sized mounting hole in sheet. Do not perform any secondary operations such as deburring.
2. Orient the plunger assembly in the D shaped mounting hole and insert fastener through mounting hole (punch side) of sheet and into anvil hole.
3. With punch and anvil surfaces parallel, apply squeezing force to embed the retainer flush in the sheet.

Type	HAEGER® Part Number	
	Anvil	Punch
PFAP	H-103-04L	H-108-0020L



Performance Data(1)

Type	Diameter Code	Test Sheet Material	Installation		Retainer Pushout	
			lbs.	N	lbs.	N
PFAP	3.5	.060" / 1.5mm Cold-rolled Steel	3372	15000	292	1300

(1) Published installation forces are for general reference. Actual set-up and confirmation of complete installation should be made by observing proper seating of fastener as described in the installation steps. Other performance values reported are averages when all proper installation parameters and procedures are followed. Variations in mounting hole size, sheet material, and installation procedure may affect performance. Performance testing this product in your application is recommended. We will be happy to provide technical assistance and/or samples for this purpose.

All PEM® products meet our stringent quality standards. If you require additional industry or other specific quality certifications, special procedures and/or part numbers are required. Please contact your local sales office or representative for further information.

Regulatory compliance information is available in Technical Support section of our website. Specifications subject to change without notice. See our website for the most current version of this bulletin.

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