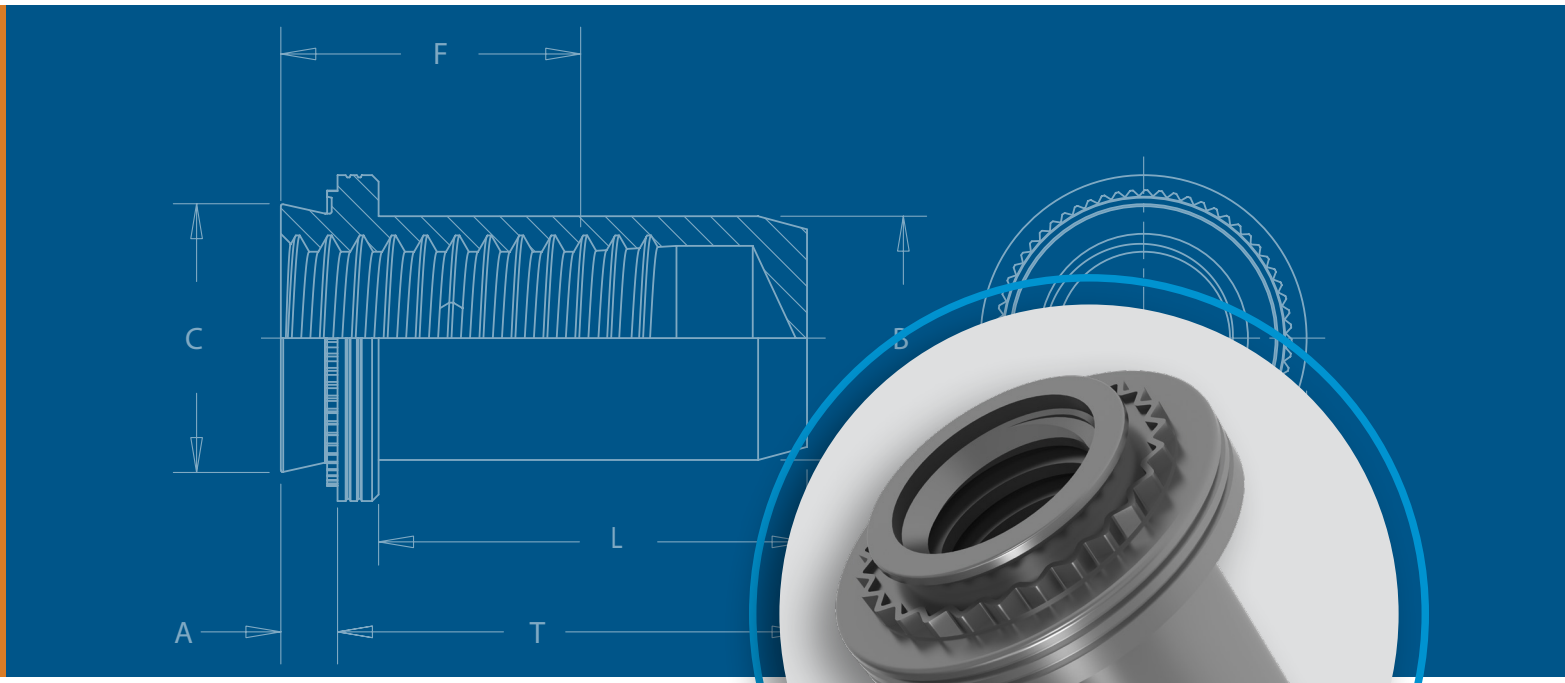
B™

SELF-CLINCHING BLIND FASTENERS



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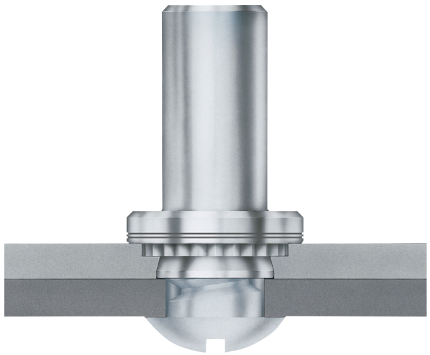
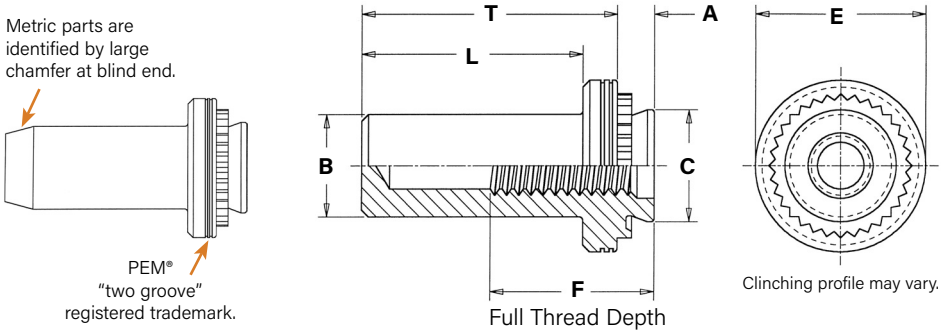


- Provides barrier to protect threads against foreign matter.
- Limits screw penetration, protecting internal components from potential damage.
- Available on special order with free-running locking thread feature.

PEM® blind fasteners employ the proven PEM® self-clinching design and are easily installed into properly sized holes. Shanks of PEM® fasteners act as their own pilots. PEM® blind fasteners can be installed with any standard press applying squeezing forces between parallel surfaces.

PEM® self-clinching blind fasteners are available in thread sizes from #4-40 through 1/4-20 / M3 through M6 in carbon or stainless steel.

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



Part Number Designation

B		-	832	-	2	ZI
B	S	-	832	-	2	
↓ Type	↓ Material Code		↓ Thread Size Code		↓ Shank Code	↓ Finish

All dimensions are in inches.

	Thread Size	Type: Fastener Material: Steel	Type: Fastener Material: Stainless Steel	Thread Code (1)	Shank Code	A (Shank) Max	Min. Sheet Thickness	Hole Size in Sheet +.003 -.000	B Max.	C Max.	E ± .010	F Min.	L Max.	T ±.010	Min. Dist. Hole C/L to Edge (2)
Unified	.112-40 (#4-40)	B	BS	440	1	.038	.040	.166	.150	.165	.250	.210	.335	.380	.19
					2	.054	.056								
	.138-32 (#6-32)	B	BS	632	1	.038	.040	.1875	.169	.187	.280	.230	.335	.380	.22
					2	.054	.056								
	.164-32 (#8-32)	B	BS	832	1	.038	.040	.213	.204	.212	.310	.280	.385	.440	.27
					2	.054	.056								
	.190-32 (#10-32)	B	BS	032	1	.038	.040	.250	.235	.249	.340	.280	.385	.440	.28
					2	.054	.056								
	.250-20 (1/4-20)	B	BS	0420	1	.054	.056	.344	.305	.343	.430	.310	.500	.560	.34
					2	.087	.090								

All dimensions are in millimeters.

	Thread Size x Pitch	Type: Fastener Material: Steel	Type: Fastener Material: Stainless Steel	Thread Code (1)	Shank Code	A (Shank) Max	Min. Sheet Thickness	Hole Size in Sheet +0.08	B Max.	C Max.	E ± 0.25	F Min.	L Max.	T ± 0.25	Min. Dist. Hole C/L to Edge (2)
Metric	M3 x 0.5	B	BS	M3	1	0.97	1	4.22	3.84	4.2	6.35	5.3	8.5	9.6	4.8
					2	1.38	1.4								
	M4 x 0.7	B	BS	M4	1	0.97	1	5.41	5.2	5.38	7.95	7.1	9.8	11.2	6.9
					2	1.38	1.4								
	M5 x 0.8	B	BS	M5	1	0.97	1	6.35	6.02	6.33	8.75	7.1	9.8	11.2	7.1
					2	1.38	1.4								
	M6 x 1	B	BS	M6	1	1.38	1.4	8.75	7.8	8.73	11.1	7.8	12.7	14.3	8.6
					2	2.21	2.29								

(1) PEM® B™ nuts are available on special order with a free-running locking thread feature allowing mating screw to turn freely until clamp load is applied. For more information, contact PEM® Technical Support.

(2) For more information on proximity to bends and distance to other clinch hardware, see PEM® Tech Sheet C/L To Edge.

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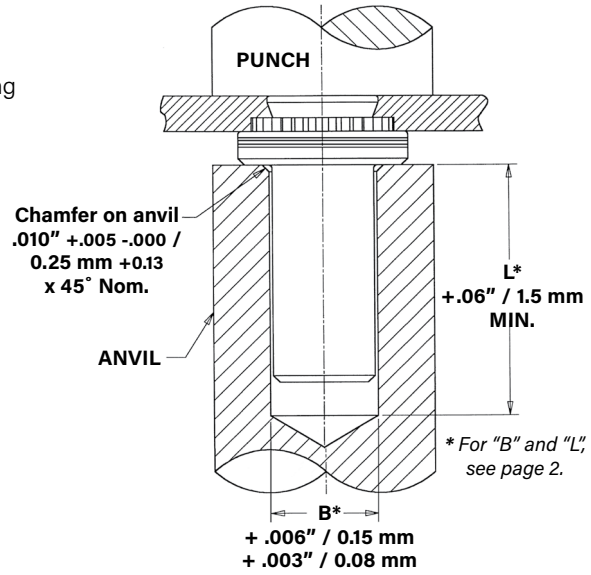
Installation

1. Prepare properly sized mounting hole in the sheet. Do not perform any secondary operations such as deburring.
2. Place the barrel of the fastener into the anvil hole and place the mounting hole (preferably the punch side) over the shank of the fastener.
3. With the installation punch and anvil surfaces parallel, apply squeezing force until the flange contacts the mounting sheet. The sketch at the right indicates suggested tooling for applying these forces.



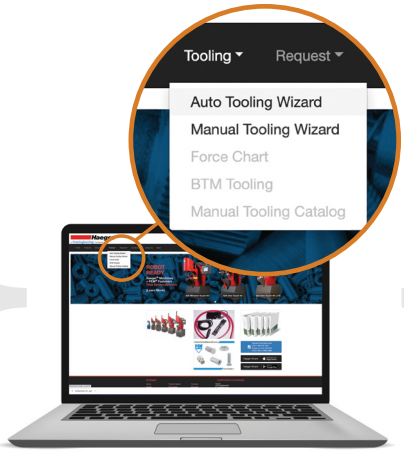
Installation Tooling - B and BS Nuts

Thread Code	HAEGER® Part Number		PEMSERTER® Part Number	
	Anvil	Punch	Anvil	Punch
440 & M3	H-137-440L	H-108-0020L	975200001	975200048
632	H-137-632L	H-108-0020L	975200002	975200048
832 & M4	H-137-832L	H-108-0020L	975200003	975200048
032 & M5	H-137-1032L	H-108-0020L	975200004	975200048
0420 & M6	H-137-0420L	H-108-0020L	975200005	975200048

Installation Notes

- For best results we recommend using a HAEGER® or PEMSERTER® machine for installation of PEM® self-clinching fasteners. See our website for more information.
- Visit the Animation Library on our website to view the installation process.

For Additional HAEGER® and PEMSERTER® Tooling Information / Part Numbers



Go to haeger.com to access the Auto and Manual Tooling Wizards

HAEGER® MANUAL TOOLING CATALOG

HAEGER® AUTO TOOLING CATALOG

Or download the HAEGER WIZARD Phone App

PEMSERTER® MANUAL TOOLING CATALOG

PEMSERTER® AUTO TOOLING CATALOG

Material and Finish Specifications

	Threads	Fastener Materials		Standard Finishes		For Use in Sheet Hardness: (2)	
Type	Internal, ASME B1.1, 2B / ASME B1.13M, 6H	Hardened Carbon Steel	300 Series Stainless Steel	Passivated and/or Tested per ASTM A360	Zinc Plated per ASTM B633, SCI (5µm), Type III, Colorless (1)	HRB 80 / HB 150 or less	HRB 70 / HB 125 or less
B	•	•			•	•	
BS	•		•	•			•
Part Number Code for Finishes				None	ZI		

(1) See PEM Technical Support section of our web site for related plating standards and specifications.

(2) HRB - Hardness Rockwell "B" Scale. HB - Hardness Brinell.

Performance Data(1)

	Thread Code	Shank Code	Sheet Thickness (in.)	Test Sheet Material: 5052-H34 Aluminum Install. (lbs.)	5052-H34 Aluminum Pushout (lbs.)	5052-H34 Aluminum Torque-out (in. lbs.)	Cold-Rolled Steel Install. (lbs.)	Cold-Rolled Steel Push-out (lbs.)	Cold-Rolled Steel Torque-out (in. lbs.)
Unified	440	1	.040	1600	90	10	2500	125	13
		2	.056	2000	170	13	3500	230	18
	632	1	.040	1800	95	17	3000	130	18
		2	.056	2800	190	22	4000	260	28
	832	1	.040	2000	105	23	3500	135	30
		2	.056	3000	220	35	5000	285	45
	032	1	.040	2100	110	32	4000	140	35
		2	.056	3500	190	50	5000	250	60
	0420	1	.056	4000	315	90	6000	400	105
		2	.090						

	Thread Code	Shank Code	Sheet Thickness (mm)	Test Sheet Material: 5052-H34 Aluminum Install. (kN)	5052-H34 Aluminum Pushout (N)	5052-H34 Aluminum Torque-out (N•m)	Cold-Rolled Steel Install. (kN)	Cold-Rolled Steel Push-out (N)	Cold-Rolled Steel Torque-out (N•m)
Metric	M3	1	1	7.1	400	1.15	11.1	550	1.5
		2	1.4	9	750	1.47	14	1010	2.05
	M4	1	1	8.9	470	2.6	15.6	600	3.4
		2	1.4	12.5	970	4	20	1250	5.1
	M5	1	1	9.3	480	3.6	17.8	620	4
		2	1.4	14	845	5.7	25	1112	6.8
	M6	1	1.4	17.8	1400	10.2	27.7	1760	11.9
		2	2.3						

(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.

Custom sizes are available on special order.
Contact us for more information.

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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