



BLIND

SELF-CLINCHING

FASTENERS

BULLETIN



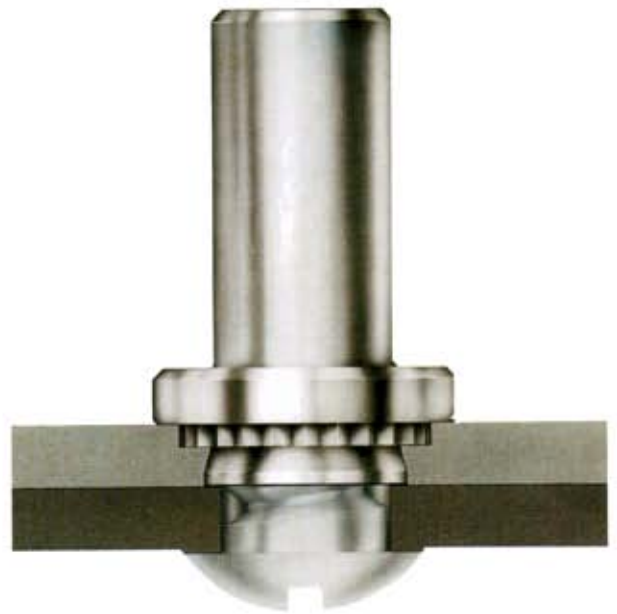
SELF-CLINCHING BLIND FASTENERS

PEM® brand self-clinching blind fasteners provide permanently mounted blind threads in metal sheets as thin as .040" / 1 mm.

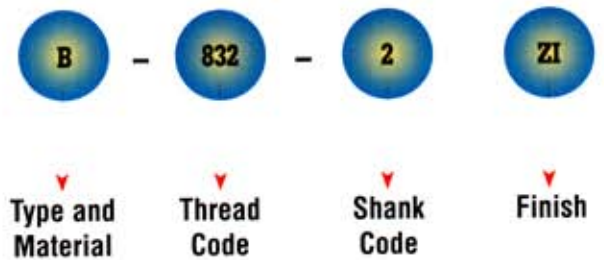
- Provides barrier to protect threads against foreign matter.
- Protects circuits from intrusion of extra long screws.

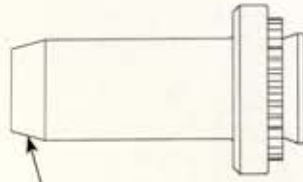
PEM blind fasteners employ the proved PEM self-clinching design and are easily installed in drilled or punched holes. Shanks of PEM fasteners act as their own pilots. PEM blind fasteners can be installed with any standard press applying squeezing forces between parallel surfaces. Installation is inexpensive and requires no previous skills or experience.

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. PEM blind fasteners in each thread size are available in two different shank lengths to meet the specifications of design engineers who want panel holes refilled as much as possible.

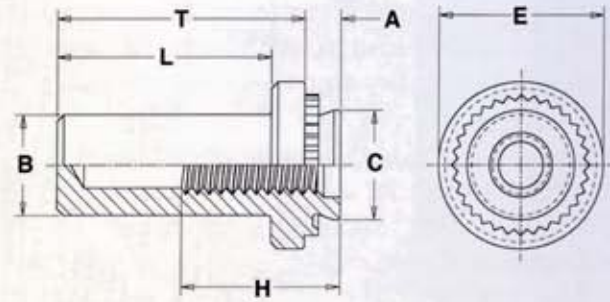


Part Number Designation





Metric parts are identified by large chamfer at blind end.



All dimensions are in inches.

UNIFIED	Thread Size	Type		Thread Code	Shank Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size in Sheet +.003 - .000	Barrel Diameter B Max.	Shank Diameter C Max.	E ± .010	Min. Depth Full Threads H	L Max.	T ± .010	Min. Dist. Hole C/L to Edge
		Fastener Material													
		Steel	Stainless Steel												
.112-40 (#4-40)	B ^{NS}	BS	440	1	.038	.040	166	150	165	25	.21	.335	.38	.19	
				2	.054	.056									
138-32 (#6-32)	B	BS	632	1	.038	.040	1875	169	187	.28	23	335	.38	22	
				2	.054	.056									
164-32 (#8-32)	B	BS	832	1	.038	.040	213	204	212	31	28	.385	.44	.27	
				2	.054	.056									
190-32 (#10-32)	B	BS	032	1	.038	.040	250	235	249	34	28	.385	.44	28	
				2	.054	.056									
.250-20 (1/4-20)	B	BS	0420	1	.054	.056	344	305	343	43	.31	.500	.56	.34	
				2	.087	.090									

All dimensions are in millimeters.

METRIC	Thread Size x Pitch	Type		Thread Code	Shank Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size in Sheet + 0.08	Barrel Diameter B Max.	Shank Diameter C Max.	E ± 0.25	Min. Depth Full Threads H	L Max.	T ± 0.25	Min. Dist. Hole C/L to Edge
		Fastener Material													
		Steel	Stainless Steel												
M3 x 0.5	B	BS	M3 ^{NS}	1	0.97	1	4.25	3.84	4.22	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	5.4	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	6.4	6.02	6.38	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	8.72	11.1	7.8	12.7	14.3	8.6	
				2	2.21	2.3									

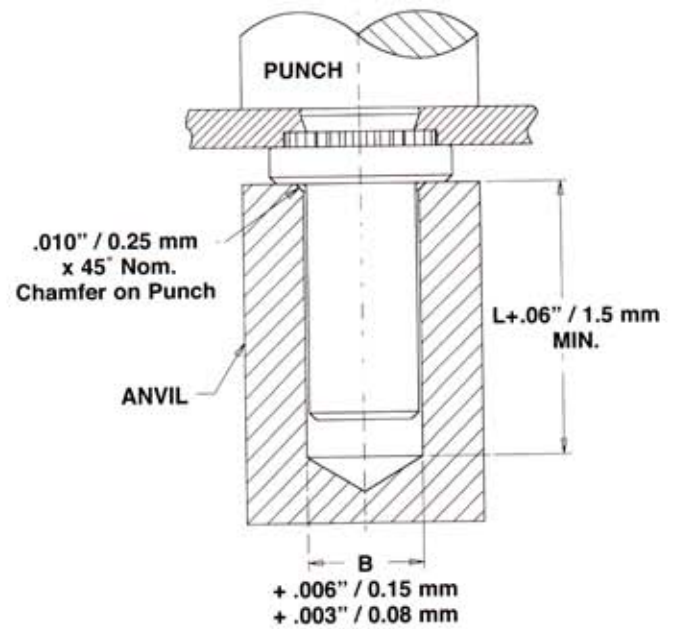
NS: Not Stocked. Available on special order.

MATERIAL & FINISH SPECIFICATIONS

Type	Threads	Fastener Materials		Standard Finishes		For Use in Sheet Hardness:	
	Internal, ANSI B1.1, 2B / ANSI / ASME B1.13M, 6H	Heat-Treated Carbon Steel	300 Series Stainless Steel	Passivated and/or Tested Per ASTM A380	Zinc Per ASTM B 633 SC1 (5µm), Type III, Colorless	80 or Less on the Rockwell "B" Scale	70 or Less on the Rockwell "B" Scale
B
BS
Part Number Code For Finishes				None	ZI		

INSTALLATION

1. Punch or drill 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 over the shank of the fastener.
3. With the punch and anvil surfaces parallel, apply squeezing force until the flange contacts the mounting sheet. Examples of installation forces are shown below. The sketch at the right indicates suggested tooling for applying these forces.



PEMSERTER® PRESSES

For best results we recommend using a PEMSERTER® press for installation of PEM Type B and BS fasteners. For more information on our line of presses call 1-800-523-5321 or check our web site

PERFORMANCE DATA⁽¹⁾

UNIFIED	Thread Code	Shank Code	Sheet Thickness (in.)	Test Sheet Material					
				5052-H34 Aluminum			Cold-Rolled Steel		
				Installation (lbs.) Approx.	Pushout (lbs.) Min.	Torque-out (in. lbs.) Min.	Installation (lbs.) Approx.	Pushout (lbs.) Min.	Torque-out (in. lbs.) Min.
440	1	040	1600	100	12	2500	125	13	
	2	.056	2000	170	13	3500	230	18	
632	1	040	1800	105	17	3000	130	18	
	2	056	2800	190	22	4000	260	28	
832	1	040	2000	110	25	3500	135	30	
	2	056	3000	220	35	5000	285	45	
032	1	040	2100	110	34	4000	140	35	
	2	056	3500	270	50	5000	320	60	
0420	1	056	4000	315	100	6000	400	105	
	2	090							

METRIC	Thread Code	Shank Code	Sheet Thickness (mm)	Test Sheet Material					
				5052-H34 Aluminum			Cold-Rolled Steel		
				Installation (kN) Approx.	Pushout (N) Min.	Torque-out (N•m) Min.	Installation (kN) Approx.	Pushout (N) Min.	Torque-out (N•m) Min.
M3	1	1	7.1	440	1.4	11.1	560	1.5	
	2	1.4	9	750	1.47	14	1010	2.13	
M4	1	1	8.9	490	2.8	15.6	600	3.4	
	2	1.4	12.5	970	4	20	1250	5.1	
M5	1	1	9.3	490	3.8	17.8	620	4	
	2	1.4	14	1190	5.7	25	1410	6.8	
M6	1	1.4	17.8	1400	11.3	25.7	1780	11.9	
	2	2.3							

(1) The installation, pushout and torque-out values reported are averages when all installation specifications and procedures are followed. Variations in mounting hole size, sheet material and installation procedure will affect this data. Performance testing of this product in your application is recommended. We will be happy to provide samples for this purpose.

RoHS compliance information can be found on our website.

Specifications subject to change without notice. Check our website for the most current version of this bulletin.

PennEngineering®



North America: Danboro, Pennsylvania 18916 USA • E-mail info@pemnet.com • Tel +1-215-766-8853 • Fax +1-215-766-0143
 U.K. And Europe: Doncaster, South Yorkshire, England • E-mail uk@pemnet.com Tel +44 (0)1302 893100 • Fax: +44 (0)1302 885341
 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

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