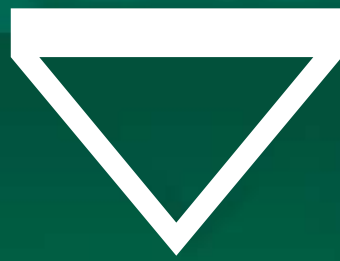


PEM[®]



NEW!

SPINNING

CLINCH BOLT

BULLETIN



SCB

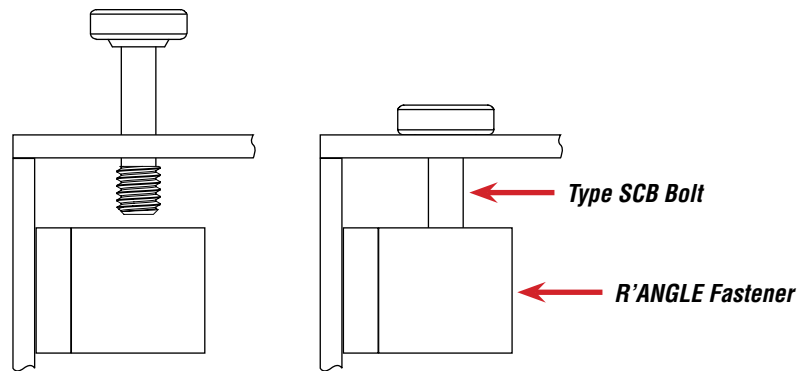
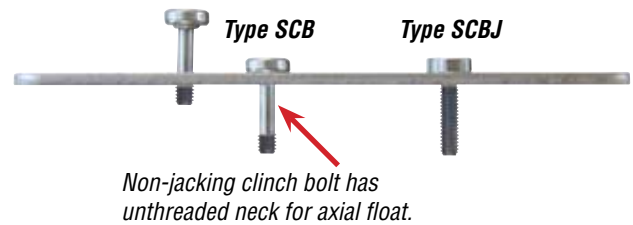
907

SPINNING CLINCH BOLT

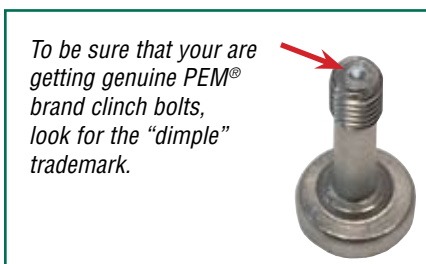
- > Permanently captivates into sheets as thin as .040" / 1.02 mm and greater.
- > Replaces loose hardware.
- > Available with jacking feature or axial float feature.
- > Appropriate for close centerline-to-edge applications.
- > RoHS compliant.

Type SCB™ Spinning Clinch Bolt is a one piece fastener that installs by simply pressing it into a properly sized hole. The controlled clinching action permanently captivates the screw in the panel yet still leaves it to spin freely in the sheet. This allows quick attachment of mating hardware, eliminating much of the need for loose fasteners, such as screws and retaining clips or washers, or expensive multi-component fastener assemblies.

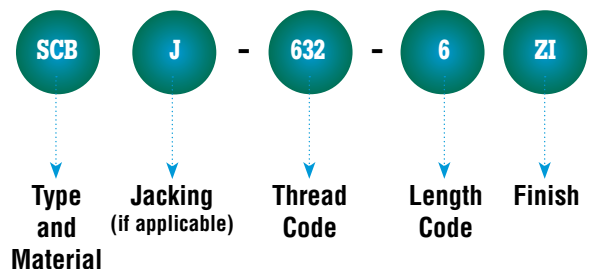
The Spinning Clinch Bolt can also be used with the PEM Type N10 receptacle nut (see PEM Bulletin PF) and with the PEM Type RAS R'ANGLE® fastener (see PEM Bulletin RA).

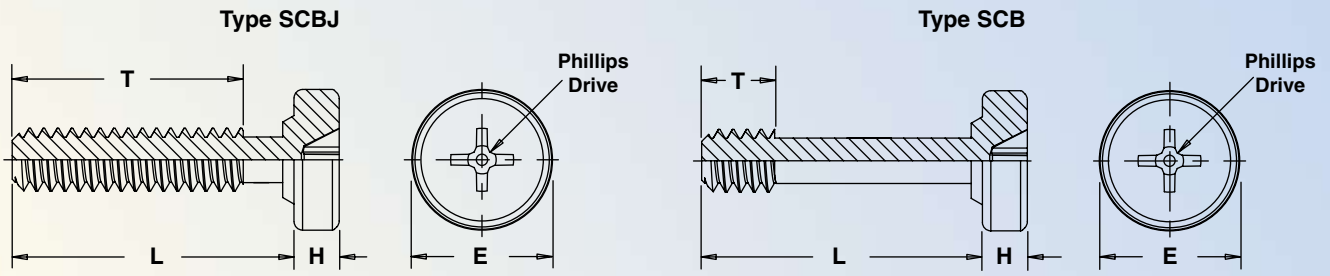


As shown here, Type SCB bolt can be used with a PEM R'ANGLE fastener.



Part Number Designation





All dimensions are in inches.

UNIFIED	Thread Size	Type		Thread Code	Length Code "L" ± 0.15 Length Code in 16ths of an inch			Min. Sheet Thickness	Hole Size in Sheet $+0.003 -0.000$	E ± 0.10	H Nom.	T Nom.			Driver Size	Min. Dist. Hole C/L To Edge
		Jacking	Non-jacking		.250	.375	.500					-4	-6	-8		
	.112-40 (#4-40)	SCBJ	—	440	4	6	8	.040	.112	.250	.080	.160	.285	.410	#1	.130
		—	SCB		NA	NA	8					NA	NA	.130		
	.138-32 (#6-32)	SCBJ	—	632	4	6	8	.040	.138	.291	.080	.160	.285	.410	#2	.150
		—	SCB		NA	NA	8					NA	NA	.130		

All dimensions are in millimeters.

METRIC	Thread Size x Pitch	Type		Thread Code	Length Code "L" ± 0.4 Length Code in millimeters			Min. Sheet Thickness	Hole Size in Sheet $+0.08$	E ± 0.25	H Nom.	T Nom.			Driver Size	Min. Dist. Hole C/L To Edge
		Jacking	Non-jacking		-6	-10	-12									
	M3 x 0.5	SCBJ	—	M3	6	10	12	1.02	3	6.6	2.03	3.7	7.7	9.7	#1	3.3
		—	SCB		NA	NA	12					NA	NA	3.3		
	M4 x 0.7	SCBJ	—	M4	6	10	12	1.02	4	8.28	2.03	3.7	7.7	9.7	#2	5
		—	SCB		NA	NA	12					NA	NA	3.3		

(NA) Not Available.

MATERIAL & FINISH SPECIFICATIONS

MATERIAL: Heat-treated Carbon Steel

FINISH: Standard: Z1 - Zinc plus clear chromate per ASTM B633, SC1 (5 μ m), Type III, colorless

FOR USE IN SHEET HARDNESS: HRB 80 (Hardness Rockwell "B" Scale) / HB 150 (Hardness Brinell) or less

INSTALLATION

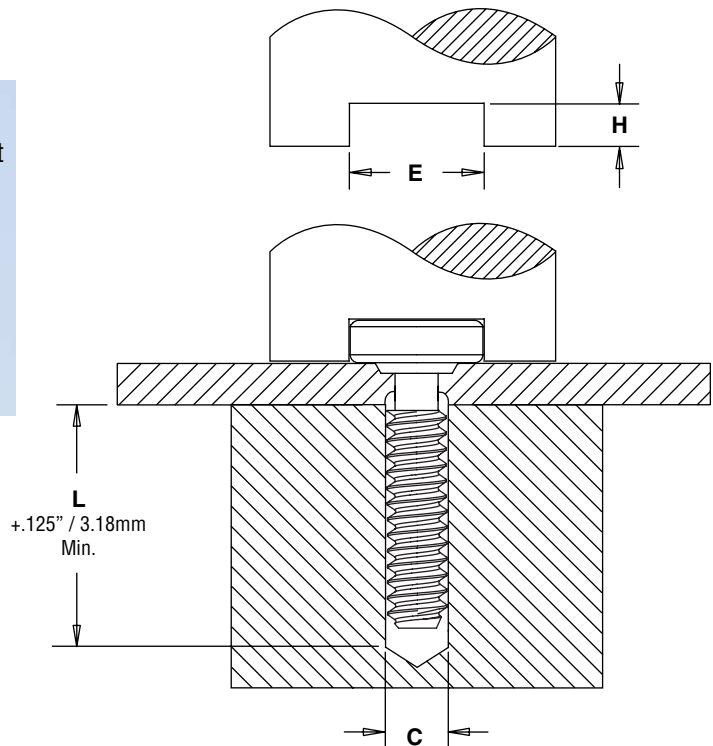
1. Punch or drill properly sized mounting hole in sheet.
2. Place the fastener through mounting hole and into anvil. A flat or recessed punch can be used.
3. With punch and anvil surfaces parallel, apply squeezing force to the top of the screw head and the underside of the sheet material. The squeezing action forces the shoulder of the screw into the sheet, displacing sheet material, causing it to fill the void under the head and shoulder of the screw.

All dimensions are in inches.

UNIFIED	Thread Code	Anvil Dimensions		
		C	E	H
	440	.113 - .116	.270 - .280	.073 - .074
	632	.139 - .142	.308 - .318	.073 - .074

All dimensions are in millimeters.

METRIC	Thread Code	Anvil Dimensions		
		C	E	H
	M3	3.03 - 3.11	6.86 - 7.11	1.85 - 1.88
	M4	4.03 - 4.11	8.53 - 8.79	1.85 - 1.88



PERFORMANCE DATA⁽¹⁾

UNIFIED	Thread Code	Max. Rec. Tightening Torque (in. lbs.)	Test Sheet Material			
			5052-H34 Aluminum		Cold-rolled Steel	
			Installation (lbs.)	Pushout (lbs.)	Installation (lbs.)	Pushout (lbs.)
	440	5	1900	130	2600	145
	632	9	2000	175	3500	200

METRIC	Thread Code	Max. Rec. Tightening Torque (N • m)	Test Sheet Material			
			5052-H34 Aluminum		Cold-rolled Steel	
			Installation (kN)	Pushout (N)	Installation (kN)	Pushout (N)
	M3	0.74	8	580	12	650
	M4	1.7	10	1000	17	1150

(1) Performance values reported are averages when all installation specifications and procedures are followed. Variations in mounting hole size, panel 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, PA 18916 USA • E-mail: info@pemnet.com • Tel: +1-215-766-8853 • Fax: +1-215-766-0143 • 800-237-4736 (USA Only)
U.K. And Europe: Doncaster, England • E-mail: uk@pemnet.com Tel: +44 (0)1302 765700 • Fax: +44 (0)1302 367580
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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