



## PennEngineering

### Corporate Headquarters - Danboro, PA

5190 Old Easton Rd.

Danboro, PA 18916

**Phone:** 215-766-8853

**Toll-Free Phone:** 1-800-237-4736 (U.S. only)

**Email:** [info@pemnet.com](mailto:info@pemnet.com)

**Website:** [www.pemnet.com](http://www.pemnet.com)

## Part # CLS-0820-1, Self-Clinching Nuts - Types S, SS, CLS, CLSS, SP - Unified

Type S, SS, CLS, and CLSS nuts provide load-bearing threads in thin sheets with high pushout and torque-out resistance.

Type SP, PEM 300® nuts provide strong load-bearing threads in stainless steel sheets as thin as .030”.

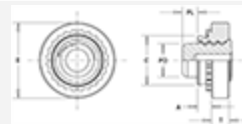
Types S / SS are recommended for use in steel or aluminum sheets HRB (Rockwell "B" scale) 80 or less and HB (Hardness Brinell) 150 or less.

Type SP is recommended for use in stainless steel sheets HRB (Rockwell "B" scale) 90 or less and HB (Hardness Brinell) 185 or less.



### Specifications

<b>Thread Size</b>	.500-20 (1/2-20)
<b>Thread Code</b>	0820
<b>Shank Code</b>	1
<b>A (Shank) Max.</b>	.120 in
<b>Rec. Min. Sheet Thickness<sup>1</sup></b>	.125 in
<b>Hole Size in Sheet + .003 - .000</b>	.656 in
<b>C Max.</b>	.655 in
<b>E ± .010</b>	.810 in
<b>T ± .010</b>	.360 in
<b>Min. Dist. Hole C/L to Edge<sup>2</sup></b>	.630 in



<b>For Use in Sheet Hardness<sup>3</sup></b>	HRB 70 / HB 125 or Less
<b>Thread Specification</b>	Internal, ASME B1.1, 2B
<b>Fastener Material</b>	300 Series Stainless Steel
<b>Standard Finish</b>	Passivated Per ASTM and/or Tested A380
<b>CAD Supplier</b>	PennEngineering® (PEM®)
<b>Thread Masking Plugs</b>	None

<sup>1</sup> For maximum performance, we recommend that you use the maximum shank length for your sheet thickness.

<sup>2</sup> To minimize sheet distortion and maximize product performance, use a centerline-to-edge value greater or equal to the value specified.

<sup>3</sup> HRB - Hardness Rockwell "B" Scale. HB - Hardness Brinell.