



## PennEngineering

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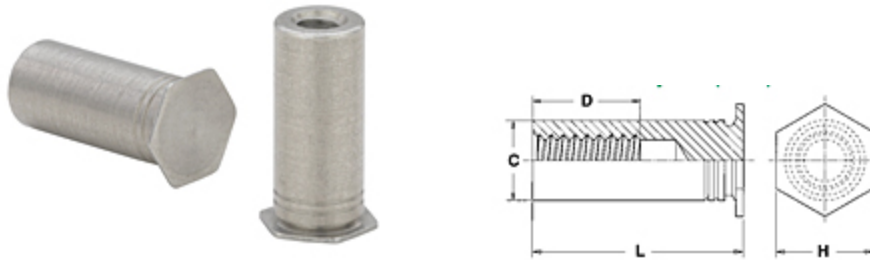
**Website:** [www.pemnet.com](http://www.pemnet.com)

## Part # TSOA-440-500, Threaded Standoffs for Sheets as Thin as .025" - Types TSO, TSOA, TSOS - Unified

These standoffs, which use the proven self-clinching design, install with a squeeze in properly sized round holes - and become permanently mounted in the thin sheet.

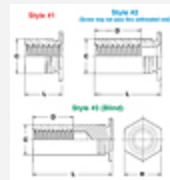
Types TSO, TSOS, and TSOA self-clinching threaded standoffs provide permanent threads in sheets as thin as .025".

If you require a standoff which we do not offer in this bulletin, please contact us. We will be happy to work with you to satisfy your special need.



### Specifications

<b>Thread Size</b>	.112-40 (#4-40)
<b>Thread Code</b>	440
<b>Length Code</b>	500
<b>Material Code</b>	A
<b>Style</b>	#3
<b>Min. Sheet Thickness</b>	.025 in
<b>Hole Size in Sheet + .003 - .000</b>	.166 in
	.165 in
<b>C + .000 - .005</b>	
<b>D - Min. Thread Depth</b>	.220 in
<b>H Nom.</b>	.187 in
<b>L - Length ± .003<sup>1</sup></b>	.500 in



<b>Min. Dist. Hole C/L to Edge</b>	.23 in
<b>For Use in Sheet Hardness<sup>2</sup></b>	HRB 50 / HB 82 or less
<b>Thread Specification</b>	Internal, ANSI B1.1, 2B
<b>Fastener Material</b>	Aluminum

<sup>1</sup> Available in other lengths on special order.

<sup>2</sup> HRB - Hardness Rockwell “B” Scale. HB - Hardness Brinell.