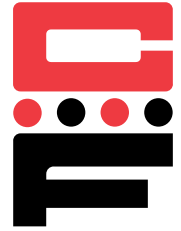


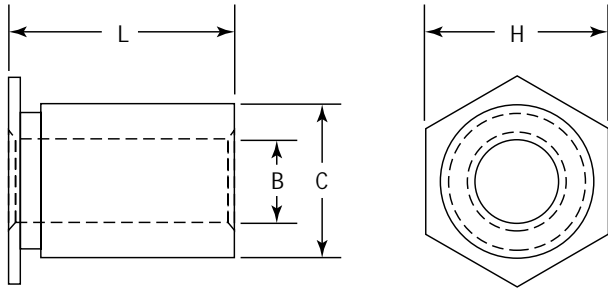


# Unthreaded Thru-Hole Standoffs

## Series CFSO, CFSOS & CFSOA



CFSO self-clinching standoffs are designed for quick, simple installation with any standard press into a drilled or punched hole, and become permanently attached to the thin sheet metal material. They are primarily used to provide spacing of multi-panel assemblies. The unthreaded hole allows threaded studs to pass directly through the spacer to lower areas.



Series	Material	Finish
CFSO	Heat-treated Carbon Steel	Zinc* Clear
CFSOS	303 Stainless Steel	Passivated ASTM A380
CFSOA	7075-T6 Aluminum	None

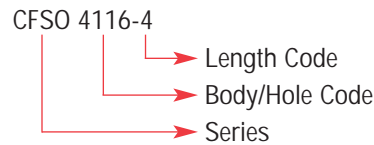
\*Spec. ASTM B633-85

Use in: CFSO for materials with Rockwell Hardness of B-80 or less.

CFSOS for materials with Rockwell Hardness of B-70 or less.

CFSOA for materials with Rockwell Hardness of B-50 or less.

Part Number Structure:



All Measurements In Inches

### Dimensions & Specifications

B +.004 -.003 Thru-Hole Diameter	Part Number	Lengths L +.002 -.005											C +.003 -.000	C +.000 -.005	H Hex Dim.	Min.	Min.
		.125	.1875	.250	.3125	.375	.4375	.500	.5625	.625	.6875	.750					
.116	CFSO CFSOS 4116 CFSOA	-4	-6	-8	-10	-12	-14	-16	-18	-20	-22	-24	.166	.165	.187	.23	.040
.116	CFSO CFSOS 6116 CFSOA	-4	-6	-8	-10	-12	-14	-16	-18	-20	-22	-24	.213	.212	.250	.27	.040
.143	CFSO CFSOS 6143 CFSOA	-4	-6	-8	-10	-12	-14	-16	-18	-20	-22	-24	.213	.212	.250	.27	.040
.143	CFSO CFSOS 8143 CFSOA	-4	-6	-8	-10	-12	-14	-16	-18	-20	-22	-24	.281	.280	.312	.31	.050
.169	CFSO CFSOS 8169 CFSOA	-4	-6	-8	-10	-12	-14	-16	-18	-20	-22	-24	.281	.280	.312	.31	.050
.194	CFSO CFSOS 8194 CFSOA	-4	-6	-8	-10	-12	-14	-16	-18	-20	-22	-24	.281	.280	.312	.31	.050

Continued on next page.

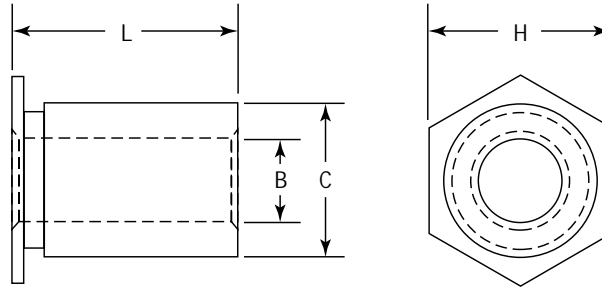


# Unthreaded Thru-Hole Standoffs

## Series CFSO, CFSOS & CFSOA



Continued from previous page.



All Measurements In Millimeters

### Dimensions & Specifications

B Thru-Hole Diameter	Part Number	Lengths L +0.05 -0.13										C +0.08 -0.000	H Hex Dim. +0.000 -0.013	Min.	Min.	
		3	4	6	8	10	12	14	16	18	20					
3.1	CFSO CFSOS 43.1 CFSOA	-3	-4	-6	-8	-10	-12	-14	-16	-18	-20	4.2	4.19	4.8	6	1
3.1	CFSO CFSOS 63.1 CFSOA	-3	-4	-6	-8	-10	-12	-14	-16	-18	-20	5.4	5.38	6.4	6.8	1
3.6	CFSO CFSOS 63.6 CFSOA	-3	-4	-6	-8	-10	-12	-14	-16	-18	-20	5.4	5.38	6.4	6.8	1
3.6	CFSO CFSOS 83.6 CFSOA	-3	-4	-6	-8	-10	-12	-14	-16	-18	-20	7.2	7.11	7.9	8	1.3
4.1	CFSO CFSOS 84.1 CFSOA	-3	-4	-6	-8	-10	-12	-14	-16	-18	-20	7.2	7.11	7.9	8	1.3
5.1	CFSO CFSOS 85.1 CFSOA	-3	-4	-6	-8	-10	-12	-14	-16	-18	-20	7.2	7.11	7.9	8	1.3