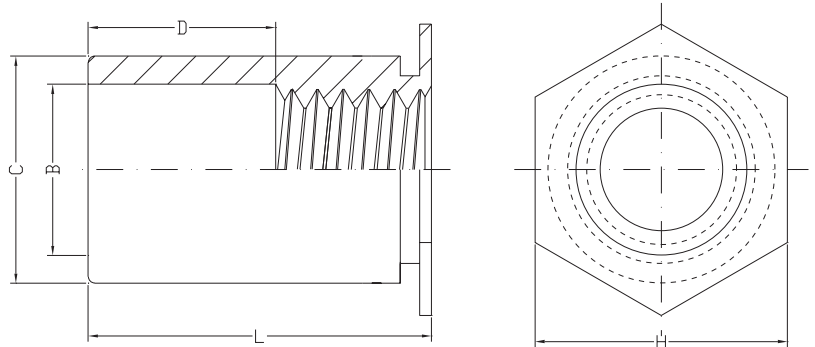
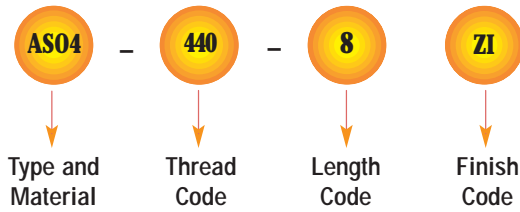


# SELF-CLINCHING STANDOFFS



## TYPE ASO4 THRU-HOLE THREADED STANDOFFS FOR INSTALLATION INTO STAINLESS STEEL

### Part Number Designation



### GENERAL DIMENSIONAL DATA

UNIFIED (inch)	Thread Code	Min. Sheet Thickness	Hole Size In Sheet +.003 -.000	B Counter-Bore Dia. ±.005	C +.000 -.005	H Nom.	Min. Dist. Hole C/L To Edge
6440	.040	.213	.125	.212	.250	.28	
632	.040	.213	.156	.212	.250	.28	
8632	.050	.281	.156	.280	.312	.33	
832	.050	.281	.188	.280	.312	.33	
032	.050	.281	.203	.280	.312	.33	

METRIC (mm)	Thread Code	Min. Sheet Thickness	Hole Size In Sheet +0.08	B Counter-Bore Dia. ±0.13	C -0.13	H Nom.	Min. Dist. Hole C/L To Edge
3.5M3	1.02	5.41	3.25	5.39	6.4	7.1	
M3.5	1.02	5.41	3.9	5.39	6.4	7.1	
M4	1.27	7.14	4.8	7.12	7.9	8.4	
M5	1.27	7.14	5.35	7.12	7.9	8.4	

### THREAD SIZE AND LENGTH SELECTION DATA

UNIFIED (inch)	Thread Size	Type	Thread Code	Length "L" +.002 -.005 (Length Code in 32nds of an inch)															
				.125	.187	.250	.312	.375	.437	.500	.562	.625	.687	.750	.812	.875	.937	1.00	1.062
.112-40 (#4-40)	ASO4		440	4	6	8	10	12	14	16	18	20	22	24	N/A	N/A	N/A	N/A	N/A
			6440 <sup>(1)</sup>	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
.138-32 (#6-32)	ASO4		632	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
			8632 <sup>(1)</sup>	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
.164-32 (#8-32)	ASO4		832	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
			032	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
D Dimension ±.010				None			.187			.312			.437						

METRIC (mm)	Thread Size x Pitch	Type	Thread Code	Length "L" +0.05 -0.13 (Length Code in millimeters)														
				3	4	6	8	10	12	14	16	18	20	22	25			
M3 X 0.5	ASO4		M3	3	4	6	8	10	12	14	16	18	N/A	N/A	N/A			
			3.5M3 <sup>(1)</sup>	3	4	6	8	10	12	14	16	18	20	22	25			
M3.5 X 0.6	ASO4		M3.5	3	4	6	8	10	12	14	16	18	20	22	25			
M4 X 0.7			M4	3	4	6	8	10	12	14	16	18	20	22	25			
M5 X 0.8			M5	3	4	6	8	10	12	14	16	18	20	22	25			
D Dimension ±0.25				None			4			8			11					

(1) Standoffs with thread codes 6440, 8632, and 3.5M3 offer greater wall thickness for thread sizes 440, 632, and M3 respectively

N/A Not Available.

# SELF-CLINCHING STANDOFFS



## TYPE ASO4 THRU-HOLE THREADED STANDOFFS FOR INSTALLATION INTO STAINLESS STEEL

### MATERIAL & FINISH SPECIFICATIONS

Type	Threads <sup>(1)</sup>	Fastener Materials					Standard Finishes			For Use In Sheet Hardness:				
	Internal, ANSI B1.1 2B ANSI/ASME B1.13M, 6H	Heat-treated Carbon Steel	Non-heat Treated Carbon Steel	7075-T6 Aluminum	303 Stainless Steel	400 Series Stainless Steel	Zinc Per ASTM B 633 SC1 (5µm) Type III, Colorless	Passivated and/or Tested Per ASTM A380	None	88 or less on the Rockwell "B" Scale	80 or less on the Rockwell "B" Scale	70 or less on the Rockwell "B" Scale	60 or less on the Rockwell "B" Scale	50 or less on the Rockwell "B" Scale
ASO4	•							•		•				
Part Number Codes For Finishes							ZI	None	None					

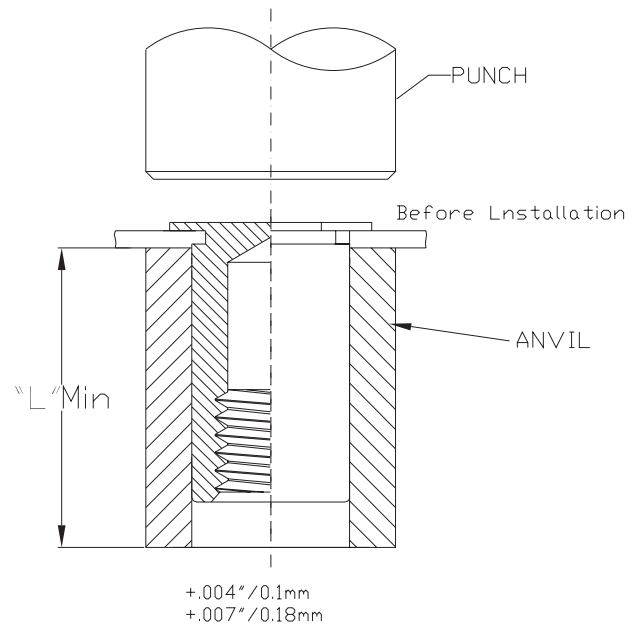
(1) Where applicable.

\*Available on special order only.

### INSTALLATION

#### Types ASO4

1. Punch or drill properly sized mounting hole in sheet. Do not perform any secondary operation such as deburring.
2. Insert standoff through mounting hole of sheet and into anvil as shown in drawing.
3. With punch and anvil surfaces parallel, apply only enough squeezing force to embed the standoff's head flush in the sheet. Drawing at right shows suggested tooling for applying these forces.



### PERFORMANCE DATA<sup>(1)</sup>

#### Types ASO4 and ABSO4

UNIFIED (inch)	Thread Code	Max. Rec. Tightening Torque For Mating Screw (in. lbs.)	Test Sheet Material			
			.050" 300 Series Stainless Steel			
			Installation (lbs.)	Pushout (lbs.)	Torque-out (in. lbs.)	Pull-thru (lbs.)
440	4.75	5500	336	17	600	
6440	4.75	9500	647	17	680	
632	8.75	9500	647	30	680	
8632	8.75	10500	900	30	1392	
832	18	10500	900	53	1517	
032	32	10500	900	71	1368	

METRIC (mm)	Thread Code	Max. Rec. Tightening Torque For Mating Screw (N • m)	Test Sheet Material			
			1.3 mm 300 Series Stainless Steel			
			Installation (kN)	Pushout (N)	Torque-out (N • m)	Pull-thru (N)
M3	0.55	24.5	1493	2.36	2650	
3.5M3	0.55	42.3	2877	2.36	3025	
M3.5	0.91	42.3	2877	3.06	3025	
M4	2	46.7	4003	6.34	6458	
M5	3.6	46.7	4003	8.89	6226	

- (1) The installation, pushout, torque-out and pull-thru 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.
- (2) Standoffs installed in sheets thinner than .060" / 1.5 mm will have pull-thru, pushout, and torque-out values at 80% of tabulated values.
- (3) Not recommended.