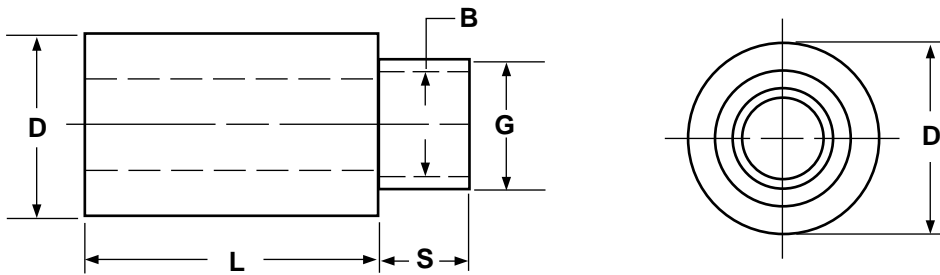


Spacers & Standoffs

Round Swage Spacers



ROUND SWAGE SPACERS																										
Nominal Diameter	Clearance Hole		Swage Length		Swage Diameter		Bore Diameter		Nominal Diameter	Clearance Hole		Swage Length		Swage Diameter		Bore Diameter										
	Max	Min	Max	Min	Max	Min	Max	Min		Max	Min	Max	Min	Max	Min	Max	Min									
1/4	.125	.115	.078	.072	.188	.185	.152	.149	5/16	.176	.166	.138	.132	.234	.231	.203	.200									
			.108	.102								.168	.162													
			.138	.132								.078	.072													
			.168	.162								.108	.102													
	.150	.140	.078	.072						.234	.231	.203	.200					3/8	.202	.192	.138	.132	.234	.231	.203	.200
			.108	.102																	.168	.162				
			.138	.132																	.078	.072				
			.168	.162																	.108	.102				
5/16	.125	.115	.078	.072	.234	.231	.203	.200	3/8					.150	.140	.108	.102		.234	.231	.203	.200				
			.108	.102												.138	.132									
			.138	.132												.168	.162									
			.168	.162												.078	.072									
	.150	.140	.078	.072						.234	.231	.203	.200	3/8	.176	.166	.108	.102					.234	.231	.203	.200
			.108	.102													.138	.132								
			.138	.132													.168	.162								
			.168	.162													.078	.072								
.176	.166	.078	.072	.234	.231	.203	.200	3/8	.202						.192	.108	.102	.234	.231	.203	.200					
		.108	.102													.138	.132									
		.138	.132													.168	.162									
		.168	.162													.078	.072									

Tolerance on Length

±.005

Description	A one-piece, cylindrical, unthreaded, mechanical device which has a protrusion at one end of the same shape but smaller in diameter.
Applications/ Advantages	Round swage spacers are mounted in circuit boards to keep the board at a given distance from another object. The spacer becomes an integral and permanently attached part of the board. Aluminum is popular for its light weight/ strength compromise. It is non-magnetic, performs well in severe temperatures, and has insulating properties. Brass is used in making high-quality swage spacers. It is conductive, resists corrosion, and is non-magnetic. It is costlier and heavier than aluminum and is usually plated zinc or nickel. Steel is used in applications requiring greater strength, but it is heavier than aluminum and does not resist corrosion like aluminum or brass.
Material	<p>Aluminum: 2011 Aluminum (Copper: 5.0-6.0%; Silicon: 0.4% maximum; Iron: 0.7% maximum; Zinc: 0.3% maximum; Bismuth: 0.2-0.6%; Lead: 0.2-0.6%)</p> <p>Brass: C36000 Brass (Copper: 60.00-63.00%; Lead: 2.50-3.70%; Iron: .35% maximum)</p> <p>Steel: 12L14 Steel-Leaded Grade A (Carbon: .15% maximum; Manganese: .85-1.15%; Phosphorus: .04-.09%; Sulphur: .26-.35%)</p>