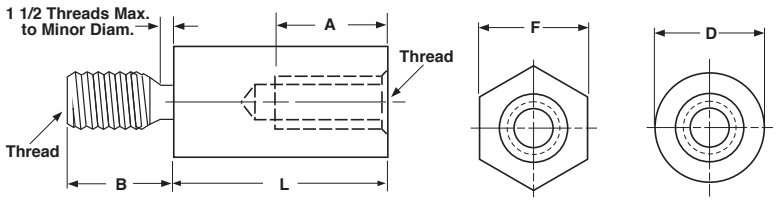
HEX & ROUNDED, MALE-FEMALE STANDOFFS



Hexagon and Round Male-Female Standoffs

F	D	Thread Size	B	A
Hex Standoffs	Round Standoffs		Male Thread Length	Full Thread Depth*
Width Across the Flats (± 1/64)	Nominal Diameter (± 1/64)			Nom
3/16	3/16	2-56	5/32	3/16
3/16	3/16	4-40	3/16	1/4
1/4	1/4	4-40	3/16	1/4
1/4	1/4	6-32	1/4	3/8
1/4	1/4	8-32	3/8	7/16
5/16	5/16	4-40	3/16	1/4
5/16	5/16	6-32	1/4	3/8
5/16	5/16	8-32	3/8	7/16
5/16	5/16	10-32	3/8	1/2
3/8	3/8	6-32	1/4	3/8
3/8	3/8	8-32	3/8	7/16
3/8	3/8	10-32	3/8	1/2
1/2	1/2	10-32	3/8	1/2
1/2	1/2	1/4-20	1/2	5/8
*For Minimum Thread Depths (A) for shorter Body Lengths (L), see chart below.				
Tolerance on Length (up to 4 in.)		Nylon parts: ±.015		All other materials: ±.005

Body Length (L)	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8
Thread	Minimum Depth (A)							
2-56	.077	.140						
4-40	.070	.133	.195					
6-32		.105	.166	.229	.291			
8-32		.090	.152	.215	.277	.340	.402	
10-32		.078	.140	.203	.265	.328	.434	.452

Description	A hex or round shaped, mechanical device which has an opening with a partial internal thread at one end, and an externally threaded post at the opposite end. It is used to hold two components at a given distance from each other.
Applications/ Advantages	Male-female standoffs are used when one of the components is internally threaded. Aluminum is popular for its light weight/ strength compromise. It is non-magnetic, performs well in severe temperatures, and has insulating properties. Nylon is a good insulator and has a surface smoothness which will not fray the insulation of wires that rub against it. Its threads will withstand torque without stripping. Brass is used in making high-quality standoffs. It is conductive, resists corrosion, and is non-magnetic. It is costlier and heavier than aluminum and is usually plated zinc or nickel. Stainless has the advantages of brass but has superior resistance to corrosion and chemical fumes. Steel is used for its greater strength, but it is heavier than aluminum and does not resist corrosion like aluminum or brass.
Material	***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%) ***Nylon:*** Nylon 6/6 ***Brass:*** C36000 Brass (*Copper*: 60.00-63.00%; *Lead*: 2.50-3.70%; *Iron*: .35% maximum) ***Stainless:*** Type 303 stainless ***Steel:*** 12L14 Steel-Leaded Grade A (*Carbon*: .15% maximum; *Manganese*: .85-1.15%; *Phosphorus*: .04-.09%; *Sulphur*: .26-.35%)