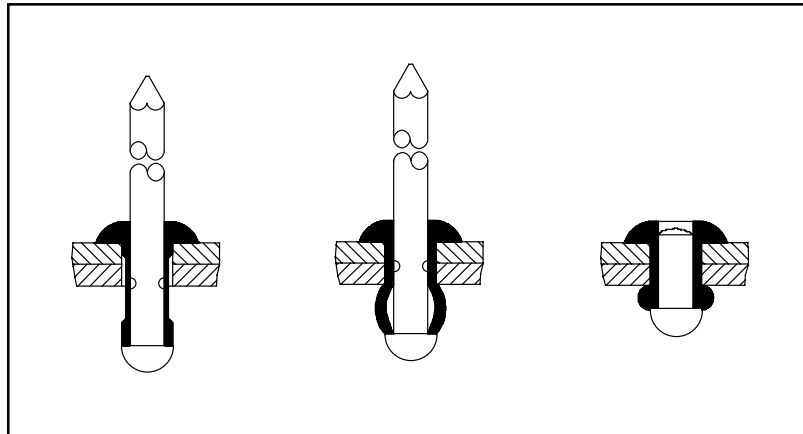


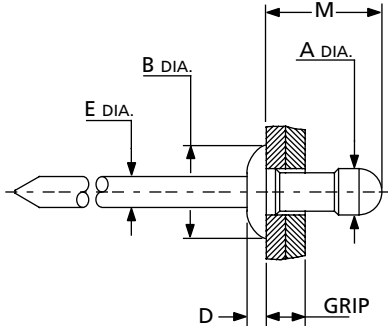
The original multi-grip blind breakstem rivet. Positive stem retention, complete hole fill and wide grip range are some of the unique benefits offered.



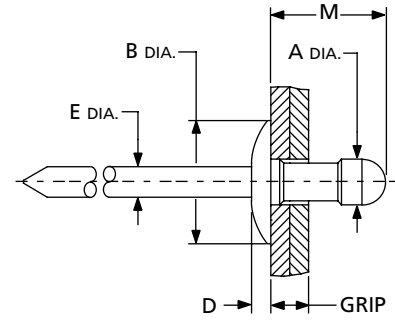
Benefits:

- **Wide Grip Range**
One rivet can be used in multiple material thicknesses. This reduces inventories and eliminates operator error.
- **Mechanically Locked Stem**
Stem is locked in shell, eliminating the risk of mandrel head vibrating loose while providing a weather resistant joint.
- **Complete Hole Fill**
The bulbing formation of the Avex® will fill slightly oversized or irregular holes, providing increased strength and vibration resistance.

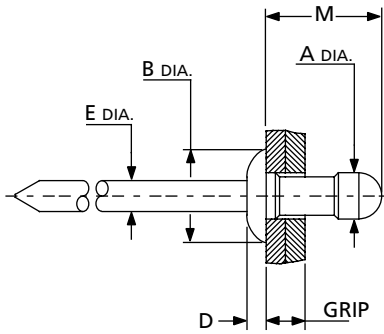




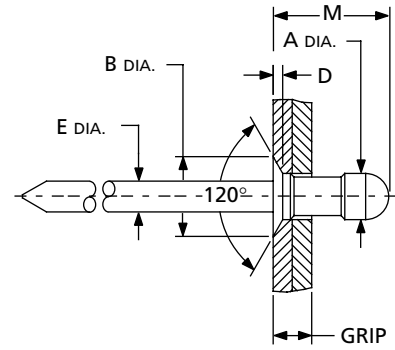
Lo-Profile Head



Large Flange Head



Brazier Head



Countersunk Head

Nom. Rivet Diam.	Hole Size	E Max.	Lo-Profile Head			Large-Flange Head			Brazier Head			Countersunk Head		
			A Rivet Diam.	B Nom. Head Diam.	D Max. Head Ht.	A Rivet Diam.	B Nom. Head Diam.	D Max. Head Ht.	A Rivet Diam.	B Nom. Head Diam.	D Max. Head Ht.	A Rivet Diam.	B Nom. Head Diam.	D Max. Head Ht.
1/8" (3,2mm)	.132-.138 (3,35-3,51)	.074 (1,87)	.121-.125 (3,07-3,17)	.252 (6,40)	.051 (1,30)	.125-.120 (3,17-3,23)	.325 (8,25)	.045 (1,14)	.121-.125 (3,07-3,17)			.121-.125 (3,07-3,17)	.207 (5,27)	.050 (1,27)
5/32" (4,0mm)	.161-.166 (4,09-4,22)	.090 (2,27)	.155-.160 (3,95-4,06)	.311 (7,90)	.061 (1,55)	.155-.160 (3,95-4,06)	.375 (9,52)	.058 (1,47)	.155-.160 (3,95-4,06)			.155-.160 (3,95-4,06)	.247 (6,28)	.052 (1,32)
3/16" (4,8mm)	.194-.201 (4,93-5,05)	.112 (2,83)	.185-.190 (4,71-4,83)	.387 (9,80)	.071 (1,80)	.185-.190 (4,71-4,83)	.625 (15,88)	.075 (1,90)	.185-.190 (4,71-4,83)	.472 (12,00)	.098 (2,49)	.185-.190 (4,71-4,83)	.347 (8,81)	.069 (1,75)
1/4" (6,3mm)	.261-.275 (6,63-6,99)	.158 (4,01)	.250-.260 (6,35-6,60)	.515 (13,1)	.105 (2,67)	.250-.260 (6,35-6,60)			.250-.260 (6,35-6,60)			.250-.260 (6,35-6,60)		

IDENTIFICATION CODE:

Prefix is rivet style and material

For example, 01691 is aluminum rivet, steel mandrel with a low profile head

The second and third digits of suffix denote diameter in 32nds of an inch

For example, 006 is 3/16" diameter

Last two digits of suffix denote approximate rivet length to end of body in 32nds of an inch

01691-006-13

Series	Head Style	Material		Finish	
		Rivet	Mandrel	Rivet	Mandrel
01691	Lo Profile	Aluminum	Steel	Plain	Zinc Yellow Dichromate
01692	Large Flange	Aluminum	Steel	Plain	Zinc Yellow Dichromate
01610	Brazier	Aluminum	Steel	Plain	Zinc Yellow Dichromate
01682	Countersunk	Aluminum	Steel	Plain	Zinc Yellow Dichromate
01624	Lo Profile	Steel	Steel	Zinc Plated	Zinc Coated

* 01610-04506 is same parameter as Series 01691, Series 01682 replaces Series 01604, Series 01693 replaces Series 01601, Series 01691 replaces Series 01661, Series 01692 replaces Series 01641

Typical Rivet Shear and Tensile Strength—lbf (N) AVEX® Fasteners								
Rivet Diam.	Series 01691/01692 Aluminum		Series 01610 Aluminum		Series 01682 Aluminum		Series 01624 Steel	
	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.
1/8" (3.2mm)	165 (735)	230 (1025)			155 (690)	205 (910)	300 (1334)	385 (1710)
5/32" (4.0mm)	255 (1135)	375 (1670)			225 (1000)	300 (1335)	440 (1955)	530 (2355)
3/16" (4.8mm)	350 (1535)		340 (1512)	505 (2246)	350 (1555)	530 (2355)	01624-00612 810 (3605)	750 (3335)
							01624-00616 1025 (4560)	780 (3470)
1/4" (6.5mm)	Stem in Shear Plane 700 (3110)	Stem Outside Plane 400 (1780)	560 (2490)					

			Low-Profile Head		Large Flange Head		Brazier Head
Rivet Diam.	G Grip Range	M Length Max.	Series 01691/01610 Alum. Rivet Steel Mandrel	Series 01663 Alum. Rivet St. Steel Mandrel	Series 01692 Alum. Rivet Steel Mandrel	Series 01643 Alum. Rivet St. Steel Mandrel	Series 01610 Alum. Rivet Steel Mandrel
1/8" (3,2mm)	.031-.187 (,790-4,75)	.410 (10,41)	01691-00410		01692-00410		
	.125-.312 (3,10-7,92)	.530 (13,46)	01691-00414		01692-00414		
	.187-.375 (4,75-9,53)	.590 (14,99)	01691-00416				
5/32" (4,0mm)	.046-.250 (1,17-6,35)	.480 (12,19)	01691-00512				
	.125-.312 (3,18-7,92)	.540 (13,72)	01691-00514		01692-00514		
	.156-.375 (4,00-9,53)	.610 (15,49)	01691-00516				
3/16" (4,8mm)	.062-.250 (1,57-6,35)	.550 (13,97)	01691-00613	01663-00613	01692-00613	01643-00613	01610-03722
	.187-.437 (4,75-11,10)	.730 (18,54)	01691-00619	01663-00619			01610-03716
	.250-.500 (6,35-12,70)	.780 (19,81)	01691-00621	01663-00621	01692-00621	01643-00621	
	.500-.781 (12,70-19,84)	1.09 (27,69)	01691-00631	01663-00631	01692-00631	01643-00631	
1/4" (6,5mm)	.080-.325 (2,03-8,26)	.660 (16,76)	01610-04506				

Countersunk Head Styles				
Rivet Diam.	G Grip Range	M Length Max.	Series 01682 Alum. Rivet Steel Mandrel	Series 01667 Alum. Rivet St. Steel Mandrel
1/8" (3,2mm)	.093-2.50 (2,36-6,35)	.470 (11,94)	01682-00412	
	.155-.312 (3,94-7,92)	.530 (13,46)	01682-00414	
	.217-.375 (5,51-9,53)	.600 (15,24)	01682-00416	
5/32" (4,0mm)	.109-.312 (2,77-7,92)	.550 (13,97)	01682-00514	
	.171-.375 (4,34-9,53)	.610 (15,49)	01682-00516	
3/16" (4,8mm)	.125-.312 (3,18-7,72)	.610 (15,49)	01682-00615	
	.250-.500 (6,35-12,7)	.800 (20,32)	01682-00621	01667-00621

Steel AVEX® Fasteners							
Nom. Rivet Diam.	A Rivet Diam.	B Nom. Head Diameter	D Max. Head Height	E Diameter Max.	G Grip Range	M Length Max.	Series 01624 Lo Profile Steel Rivet Steel Mandrel
1/8" (3,2mm)	.124-.128 (3,15-3,25)	.285 (7,22)	.047 (1,19)	.0835	.044-.156 (1,10-4,00)	.450 (11,40)	01624-00411
5/32" (4,0mm)	.160-.157 (4,07-3,99)	.320 (8,31)	.062 (1,57)	.1088	.056-.196 (1,40-5,00)	.540 (13,60)	01624-00514
3/16" (4,8mm)	.191-.188 (4,86-4,78)	.385 (9,78)	.084 (2,13)	.1345	.047-.187 (1,20-4,80)	.550 (13,80)	01624-00612
					.156-.250 (4,00-6,30)	.640 (16,20)	01624-00616