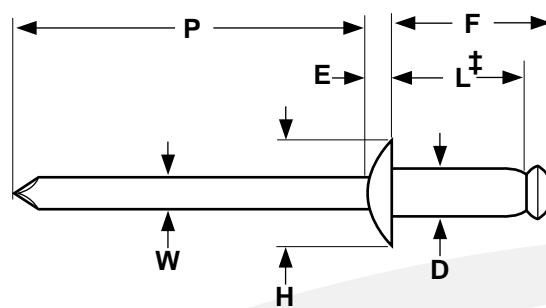
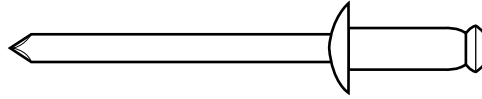


## Aluminum Rivet/ Aluminum Mandrel



ALUMINUM BODY/ALUMINUM MANDREL DOME HEAD BREAK-STEM BLIND RIVETS												SAE J-1200	
Nominal Rivet Diameter	D		H		E	W	P	F	Ultimate Shear Load	Ultimate Tensile Load	Mandrel Break Load		
	Rivet Shank Diameter		Head Diameter		Head Height	Mandrel Diameter	Mandrel Protrusion	Blind Side Protrusion			Min, lb.	Min, lb.	Max
	Max	Min	Max	Min	Max	Nom	Min	Max	Min, lb.	Min, lb.			Max
3/32	0.096	0.090	0.198	0.178	0.032	0.057	1.00	L + 0.100	70	80	240	140	
1/8	0.128	0.122	0.262	0.238	0.040	0.076	1.00	L + 0.120	120	150	400	250	
5/32	0.159	0.153	0.328	0.296	0.050	0.095	1.06	L + 0.140	190	230	600	425	
3/16	0.191	0.183	0.394	0.356	0.060	0.114	1.06	L + 0.160	260	320	825	625	
1/4	0.255	0.246	0.525	0.475	0.080	0.151	1.25	L + 0.180	460	560	1400	1100	

<b>Description</b>	An aluminum blind fastener which has a self-contained mechanical feature (a mandrel) which permits the formation of an upset on the blind end of the rivet and expansion of the rivet shank during rivet setting to join the component parts of an assembly. The aluminum mandrel is pulled into or against the rivet body, breaking at or near the junction of the mandrel shank and its upset end. The dome head is slightly rounded and twice as wide as the body diameter.
<b>Applications/Advantages</b>	Dome head is the most commonly specified head style because of its low profile and neat, finished appearance. Aluminum/aluminum rivets have the lowest tensile and shear values of all break mandrel rivets. They should be used when fastening materials with similar mechanical and physical properties.
<b>Material</b>	<i>Rivet:</i> Aluminum Alloy 5050 or 5052 or equivalent alloy. Rivets have no additional finish except for sizes #42 & 44 which are also available painted white. <i>Mandrel:</i> Aluminum Alloy 7178, 7075, 5056 or 2024 or equivalent alloy.
<b>Shear Strength</b>	Rivets shall have ultimate shear loads not less than the minimum ultimate shear loads specified for the applicable size given in the above table.
<b>Tensile Strength</b>	Rivets shall have ultimate tensile loads not less than the minimum ultimate tensile loads specified for the applicable size given in the above table.
<b>Mandrel Break Load</b>	While the rivet is being set, the axially applied load necessary to break the mandrel shall be within the limits specified for the applicable rivet size given in the above table.



**PART NUMBER COMPARISON - DOME HEAD ALUMINUM RIVET/ALUMINUM MANDREL**

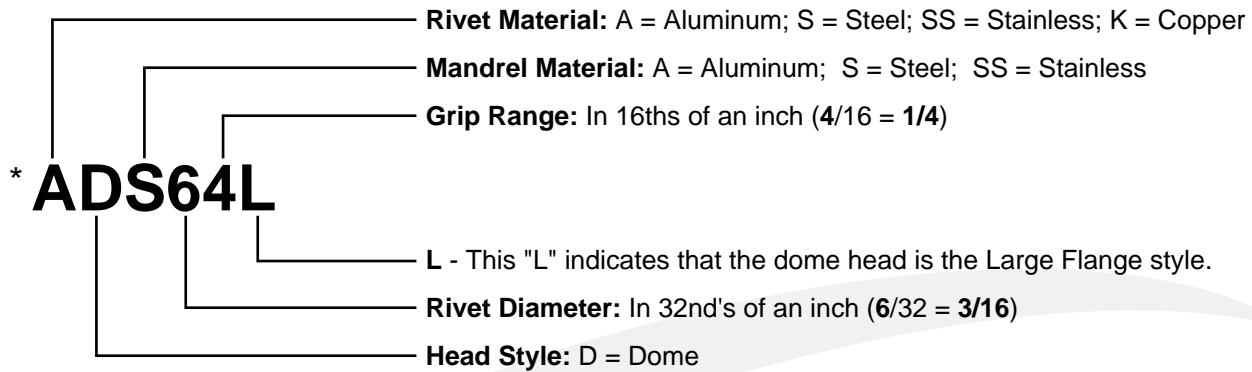
Kanebridge	Huck/ Automatic	Pop®	Marson/ Creative	Star	Celus®	Cherry	Gesipa®
ADA41	ABA41	AD41ABS	AB4-1A	4-1AAD	A/A 41D	AAP-41	GAMD41A
ADA42	ABA42	AD42ABS	AB4-2A	4-2AAD	A/A 42D	AAP-42	GAMD42A
ADA43	ABA43	AD43ABS	AB4-3A	4-3AAD	A/A 43D	AAP-43	GAMD43A
ADA44	ABA44	AD44ABS	AB4-4A	4-4AAD	A/A 44D	AAP-44	GAMD44A
ADA45	ABA45	AD45ABS	AB4-5A	4-5AAD	A/A 45D	AAP-45	GAMD45A
ADA46	ABA46	AD46ABS	AB4-6A	4-6AAD	A/A 46D	AAP-46	GAMD46A
ADA48	ABA48	AD48ABS	AB4-8A	4-8AAD	A/A 48D	AAP-48	GAMD48A
ADA52	ABA52	AD52ABS	AB5-2A	5-2AAD	A/A 52D	AAP-52	GAMD52A
ADA53	ABA53	AD53ABS	AB5-3A	5-3AAD	A/A 53D	-	GAMD53A
ADA54	ABA54	AD54ABS	AB5-4A	5-4AAD	A/A 54D	AAP-54	GAMD54A
ADA56	ABA56	AD56ABS	AB5-6A	5-6AAD	A/A 56D	AAP-56	GAMD56A
ADA58	ABA58	AD58ABS	AB5-8A	5-8AAD	A/A 58D	AAP-58	GAMD58A
ADA510	ABA510	-	-	-	A/A510D	AAP-510	-
ADA512	-	-	-	-	-	-	-
ADA62	ABA62	AD62ABS	AB6-2A	6-2AAD	A/A 62D	AAP-62	GAMD62A
ADA64	ABA64	AD64ABS	AB6-4A	6-4AAD	A/A 64D	AAP-64	GAMD64A
ADA66	ABA66	AD66ABS	AB6-6A	6-6AAD	A/A 66D	AAP-66	GAMD66A
ADA68	ABA68	AD68ABS	AB6-8A	6-8AAD	A/A 68D	AAP-68	GAMD68A
ADA610	ABA610	AD610ABS	AB6-10A	6-10AAD	A/A610D	AAP-610	GAMD610A
ADA612	ABA612	AD612ABS	AB6-12A	6-12AAD	A/A612D	AAP-612	GAMD612A
ADA614	ABA614	-	-	-	A/A614D	AAP-614	GAMD614A
ADA616	ABA616	AD616ABS	AB6-16A	-	A/A616D	AAP-616	GAMD616A
ADA618	ABA618	-	-	-	-	-	-

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®Gesipa is a registered trademark of Gesipa Fasteners USA Inc..

®Pop is a registered trademark of Pop Fastening Systems, Emhart Fastening Teknologies, a Black & Decker Company.

Kanebridge's rivets are not manufactured by or connected with the producers of Gesipa® or Pop® rivets.



\*Kanebridge Part Number

### Notes on Rivet Selection

**Strength-** The tensile and shear strengths required for an application must be determined and a rivet selected that meets those requirements.

**Materials-** Choose a rivet that is made of a metal with similar mechanical and physical properties as the materials being joined. This is especially critical in assemblies where higher temperatures and/or corrosive elements are present. Metal compatibility helps reduce the risks of galvanic corrosion and material fatigue.

**Grip Range-** Measure the total thickness of the materials being fastened. This is known as the "rivet grip". The grip ranges of the most commonly available rivets are listed in the table below. Sufficient rivet length is necessary for proper formation of the secondary head on the blind side of the assembly. Multi-grip rivets have wider grip ranges than standard break-stem blind rivets which are listed on pages 178-188.

APPLICATION DATA FOR STANDARD BREAK-STEM BLIND RIVETS										SAE J-1200				
Rivet Number	Grip Range	Barrel Length	Recommended Hole Size		Drill Size	Rivet Number	Grip Range	Barrel Length	Recommended Hole Size		Drill Size			
			Max	Min					Max	Min				
31	.020-.062	.187	0.100	0.097	#41	62	.020-.125	.325	0.196	0.192	#11			
32	.020-.125	.250												
33	.087-.187	.312												
34	.126-.250	.375												
41	.020-.062	.212	0.133	0.129	#30	66	.251-.375	.575						
42	.063-.125	.275												
43	.126-.187	.337												
44	.188-.250	.400												
45	.251-.312	.462												
46	.313-.375	.525												
48	.376-.500	.650												
52	.020-.125	.300				0.164	0.160	#20	68	.376-.500	.700			
53	.125-.187	.362												
54	.188-.250	.425												
56	.251-.375	.550												
58	.376-.500	.675												
510	.501-.625	.800												
512	.626-.750	.925												
516	.876-1.000	1.175												
									610	.510-.625	.825	0.261	0.257	F
									612	.626-.750	.950			
						614	.751-.875	1.075						
						616	.876-1.000	1.200						
						618	1.001-1.125	1.325						
						620	1.126-1.250	1.450						
						622	1.251-1.375	1.575						
						84	.126-.250	.500						
						86	.251-.375	.625						
						88	.376-.500	.750						
						810	.501-.625	.875						
						812	.626-.750	.990						
						816	.751-1.000	1.240						