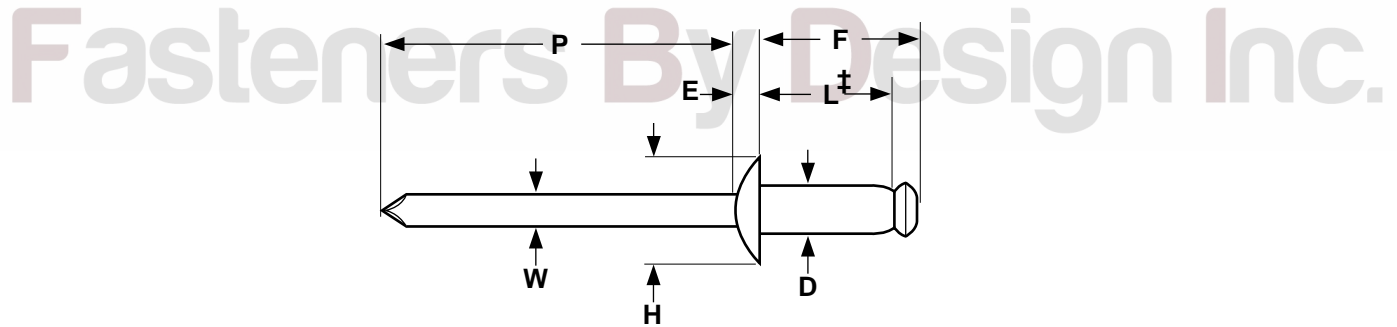


## Steel Rivet/ Steel Mandrel



STEEL BODY/STEEL 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	Min	Max	Min	Max	Nom	Min	Max	Min, lb.	Min, lb.		
3/32	0.096	0.090	0.198	0.178	0.032	0.057	1.00	L + 0.100	130	170	360	260
1/8	0.128	0.122	0.262	0.238	0.040	0.076	1.00	L + 0.120	260	310	800	600
5/32	0.159	0.153	0.328	0.296	0.050	0.095	1.06	L + 0.140	370	470	1000	750
3/16	0.191	0.183	0.394	0.356	0.060	0.114	1.06	L + 0.160	540	680	1450	1150
1/4	0.255	0.246	0.525	0.475	0.080	0.151	1.25	L + 0.180	1000	1240	2350	1950

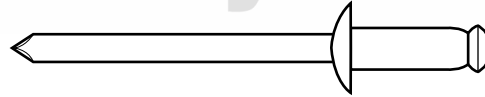
<b>Description</b>	A carbon steel blind fastener which has a self-contained carbon steel mandrel which permits the formation of an upset on the blind end of the rivet and expansion of the rivet shank during rivet setting to join the component parts of an assembly. The steel mandrel is pulled into or against the rivet body, breaking at or near the junction of the mandrel shank and its upset end. The head of the body 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. The all steel design gives this style rivet greater tensile and shear values than all varieties of aluminum rivets. They should be used when fastening materials similar to carbon steel.
<b>Material</b>	<i>Rivet:</i> Low carbon steel, plated zinc. <i>Mandrel:</i> Carbon steel 1006 or equivalent. May be furnished plain or with a protective coating, at the option of the manufacturer.
<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.

Dome Head  
Blind Rivet

# Steel Rivet/ Steel Mandrel

Rivets

# Fasteners By Design Inc.



PART NUMBER COMPARISON - DOME HEAD STEEL RIVET/STEEL MANDREL							
Kanebridge	Huck-Automatic	Pop®	Marson/ Creative	Star	Celus®	Cherry	Gesipa®
SDS41	SBS41	SD41BS	SB4-1	4-1SSD	S/S 41D	SSP-41	GSMD41S
SDS42	SBS42	SD42BS	SB4-2	4-2SSD	S/S 42D	SSP-42	GSMD42S
SDS43	SBS43	SD43BS	SB4-3	4-3SSD	S/S 43D	SSP-43	GSMD43S
SDS44	SBS44	SD44BS	SB4-4	4-4SSD	S/S 44D	SSP-44	GSMD44S
SDS45	SBS45	SD45BS	SB4-5	4-5SSD	S/S 45D	SSP-45	GSMD45S
SDS46	SBS46	SD46BS	SB4-6	4-6SSD	S/S 46D	SSP-46	GSMD46S
SDS48	SBS48	SD48BS	SB4-8	4-8SSD	S/S 48D	SSP-48	GSMD48S
SDS52	SBS52	SD52BS	SB5-2	5-2SSD	S/S 52D	SSP-52	GSMD52S
SDS53	SBS53	SD53BS	SB5-3	5-3SSD	S/S 53D	-	GSMD53
SDS54	SBS54	SD54BS	SB5-4	5-4SSD	S/S 54D	SSP-54	GSMD54
SDS56	SBS56	SD56BS	SB5-6	5-6SSD	S/S 56D	SSP-56	GSMD56
SDS58	SBS58	-	SB5-8	5-8SSD	S/S 58D	SSP-58	GSMD58
SDS62	SBS62	SD62BS	SB6-2	6-2SSD	S/S 62D	SSP-62	GSMD62
SDS64	SBS64	SD64BS	SB6-4	6-4SSD	S/S 64D	SSP-64	GSMD64
SDS66	SBS66	SD66BS	SB6-6	6-6SSD	S/S 66D	SSP-66	GSMD66
SDS68	SBS68	SD68BS	SB6-8	6-8SSD	S/S 68D	SSP-68	GSMD68
SDS610	SBS610	SD610BS	SB6-10	6-10SSD	S/S610D	SSP-610	GSMD610
SDS84	SBS84	SD84BS	SB8-4	-	S/S 84D	SSP-84	GSMD84
SDS86	SBS86	SD86BS	SB8-6	-	S/S 86D	SSP-86	GSMD86
SDS88	SBS88	SD88BS	SB8-8	-	S/S 88D	SSP-88	GSMD88
SDS810	SBS810	SD810BS	-	-	S/S810D	SSP-810	GSMD810
SDS812	SBS812	SD812BS	SB8-12	-	S/S812D	SSP-812	GSMD812
SDS816	-	SD816BS	-	-	S/S816D	SSP-816	GSMD816

®Celus is a registered trademark of Celus Fasteners Manufacturing Inc..

®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.

**Rivet Material:** A = Aluminum; S = Steel; SS = Stainless; K = Copper

**Mandrel Material:** A = Aluminum; S = Steel; SS = Stainless

**Grip Range:** In 16ths of an inch ( $4/16 = 1/4$ )

**\* ADS64L**

**L** - This "L" indicates that the dome head is the Large Flange style.

**Rivet Diameter:** In 32nd's of an inch ( $6/32 = 3/16$ )

**Head Style:** D = Dome

\*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.

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	68	.376-.500	.700			
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	610	.510-.625	.825	0.261	0.257	F
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									
						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			