

# ALUMINUM RIVET/ ALUMINUM MANDREL

Nominal Rivet Diameter	Rivet Shank Diameter		H		E	Mandrel Diameter	P	F	Ultimate Shear Load	Ultimate Tensile Load	Mandrel Break Load	
	Max	Min	Max	Min	Max	Nom	Mandrel Protrusion	Blind Side Protrusion			Min, lb.	Min, lb.
									Min	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	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.