



DOME HEAD MULTI-GRIP ALUMINUM BODY/STEEL MANDREL BLIND RIVETS											Avdel*
Part Number	Rivet Diameter	B Length		C Head Diameter		D Head Height		E Grip Range	Recom- mended Hole Size	Shear Strength	Tensile Strength
		Max	Min	Max	Min	Max	Min				
D-0410	1/8	.410	.350	.217	.193	.045	.033	.031-.187	.136	165	230
D-0412	1/8	.470	.420	.217	.193	.045	.033	.062-.250	.136	165	230
D-0414	1/8	.530	.480	.217	.193	.045	.033	.125-.312	.136	165	230
D-0512	5/32	.480	.430	.257	.233	.058	.046	.046-.250	.166	255	375
D-0516	5/32	.610	.550	.257	.233	.058	.046	.156-.375	.166	255	375
D-0613	3/16	.550	.470	.351	.327	.071	.059	.062-.250	.199	350	530
D-0619	3/16	.730	.660	.351	.327	.071	.059	.187-.437	.199	350	530
D-0621	3/16	.780	.720	.351	.327	.071	.059	.250-.500	.199	350	530
D-0631	3/16	1.09	1.03	.351	.327	.071	.059	.500-.781	.199	350	530

<b>Description</b>	An aluminum blind fastener with a self-contained steel mandrel. The multi-grip rivet design differs from a standard blind rivet two ways: (1) a section of the body shank has a slightly reduced outside diameter, and (2) the stem of the mandrel is pinched at a point above the mandrel head. The head of the rivet body is slightly rounded, similar to a pan head screw.
<b>Applications/ Advantages</b>	Multi-grip rivets provide maximum clamping action over a full range of material thicknesses while using the same rivet length. This allows flexibility in design, cuts production costs and reduces inventories. Dome heads are used in standard applications which call for maximum clamp-up and hole fill. They should be used when fastening materials with mechanical and physical properties similar to aluminum.
<b>Material</b>	<i>Rivet:</i> Aluminum Alloy 5251 or equivalent alloy. <i>Mandrel:</i> Low carbon steel with a choice of coating: black phosphate or zinc with yellow chromate.
<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.

PART NUMBER COMPARISON - DOME HEAD MULTI-GRIP RIVETS				
Kanebridge- Zinc yellow mandrel	Avdel Avex® Zinc yellow mandrel	Kanebridge- Black phos mandrel	Avdel Avex® Black phos mandrel	Pop® - Plain Steel mandrel
D-0410Y	1693-0410	D-0410B	1601-0410	-
D-0412Y	1693-0412	-	1601-0412	-
D-0414Y	1693-0414	D-0414B	1601-0414	-
D-0512Y	1693-0512	D-0512B	1601-0512	-
D-0516Y	1693-0516	D-0516B	1601-0516	-
D-0613Y	1693-0613	D-0613B	1601-0613	-
D-0619Y	1693-0619	D-0619B	1601-0619	-
D-0621Y	1693-0621	-	1601-0621	-
D-0631Y	1693-0631	D-0631B	1601-0631	-

\*Avdel Cherry Textron is the original writer of the multi-grip dimensions.