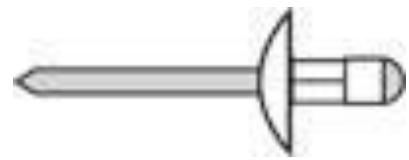


MULTI-GRIP LARGE FLANGE ALUMINUM RIVET/ STEEL MANDREL



Part Number	A	B		C		D		E	Recommended Hole Size	Shear Strength	Tensile
	Rivet Diameter	Length		Head Diameter		Head Height		Grip Range			
		Max	Min	Max	Min	Max	Min			Pounds	Pounds
X-0410	1/8	.410	.350	.337	.313	.045	.033	.031-.037	.136	165	230
X-0414	1/8	.530	.480	.337	.313	.045	.033	.125-.312	.136	165	230
X-0416	1/8	.590	.540	.337	.313	.045	.033	.216-.236	.136	165	230
X-0514	5/32	.540	.490	.387	.363	.058	.046	.125-.145	.166	255	375
X-0516	5/32	.610	.550	.387	.363	.058	.046	156-375	.166	255	375
X-0521	5/32	.760	.715	.387	.363	.058	.046	250-.500	.166	235	375
X-0613	3/16	.550	.470	.637	.613	.075	.063	.062-250	.199	350	530
X-0621	3/16	.780	.720	.637	.613	.075	.063	.250-.500	.199	350	530
X-0631	3/16	1.09	1.03	.637	.613	.075	.063	.500-.781	.199	350	530

Description	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 large flange rivet is approximately 50% wider than the dome head.
Applications/Advantages	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. The large flange style is preferred when the rivet is seated in soft material to prevent it from pulling through. They should be used when fastening materials with mechanical and physical properties similar to aluminum.
Material	<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.
Shear Strength	Rivets shall have ultimate shear loads not less than the minimum ultimate shear loads specified for the applicable size given in the above table.
Tensile Strength	Rivets shall have ultimate tensile loads not less than the minimum ultimate tensile loads specified for the applicable size given in the above table.

Kanebridge-Zinc yellow mandrel	Avdel Avex® - Zinc yellow mandrel	Kanebridge - Black phos mandrel	Avdel Avex® - Black phos mandrel	Pop® - Plain steel mandrel
X-0410Y	1692-0410	X-04108	1641-0410	AD41-43BSLF
X-0414Y	1692-0414	X-04148	1641-0414	-
X-0514Y	1692-0514	X-0514B	1641-0514	-
	1692-0516	X-05168	1641-0516	
	1692-0521	X-05218	1641-0521	-
X-0613Y	1692-0613	X-0613B	1641-0613	AD62-64BSLF
X-0621Y	1692-0621	X-0621B	1641-0621	AD66-68BSLF
X-0631Y	1692-0631	X-0631B	1641-0631	