



| 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 | Recommen- ded 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 |

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|---------------------------------|--|
| 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 rivet body is slightly rounded, similar to a pan head screw. |
| 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. 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. |
| 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. |

| 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.