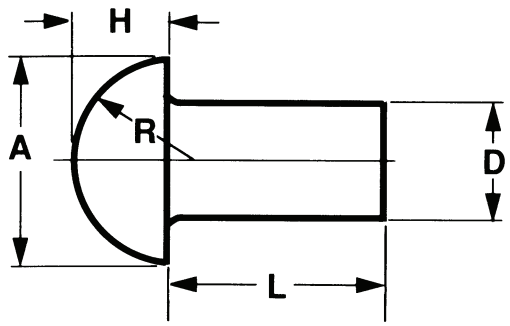
# SOLID SMALL RIVETS UNDER 7/16" INCH DIAMETER

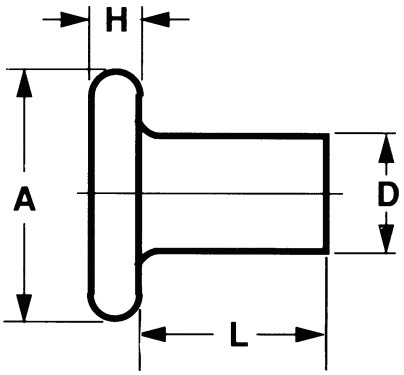



## ROUND HEAD RIVETS

| Nominal Size or Basic Shank Diameter | | D Shank Diameter | | A Head Diameter | | H Head Height | | R Head Radius |
|---|---|---|---|---|---|---|---|---|
| | | Max | Min | Max | Min | Max | Min | Approx |
| 1/16 | 0.062 | 0.064 | 0.059 | 0.122 | 0.102 | 0.052 | 0.042 | 0.055 |
| 3/32 | 0.094 | 0.096 | 0.090 | 0.182 | 0.162 | 0.077 | 0.065 | 0.084 |
| 1/8 | 0.125 | 0.127 | 0.121 | 0.235 | 0.215 | 0.100 | 0.088 | 0.111 |
| 5/32 | 0.156 | 0.158 | 0.152 | 0.290 | 0.268 | 0.124 | 0.110 | 0.138 |
| 3/16 | 0.188 | 0.191 | 0.182 | 0.348 | 0.322 | 0.147 | 0.133 | 0.166 |
| 7/32 | 0.219 | 0.222 | 0.213 | 0.405 | 0.379 | 0.172 | 0.158 | 0.195 |
| 1/4 | 0.250 | 0.253 | 0.244 | 0.460 | 0.430 | 0.196 | 0.180 | 0.221 |
| 9/32 | 0.281 | 0.285 | 0.273 | 0.518 | 0.484 | 0.220 | 0.202 | 0.249 |
| 5/16 | 0.312 | 0.316 | 0.304 | 0.572 | 0.538 | 0.243 | 0.225 | 0.276 |
| 11/32 | 0.344 | 0.348 | 0.336 | 0.630 | 0.592 | 0.267 | 0.247 | 0.304 |
| 3/8 | 0.375 | 0.380 | 0.365 | 0.684 | 0.646 | 0.291 | 0.271 | 0.332 |
| 13/32 | 0.406 | 0.411 | 0.396 | 0.743 | 0.699 | 0.316 | 0.294 | 0.358 |
| 7/16 | 0.438 | 0.443 | 0.428 | 0.798 | 0.754 | 0.339 | 0.317 | 0.387 |

Notes: 1. Approximate proportions: A = 1.750 x D
H = 0.750 x D
R = 0.885 x D

2. Length tolerance for rivets shall be plus or minus 0.016 in.

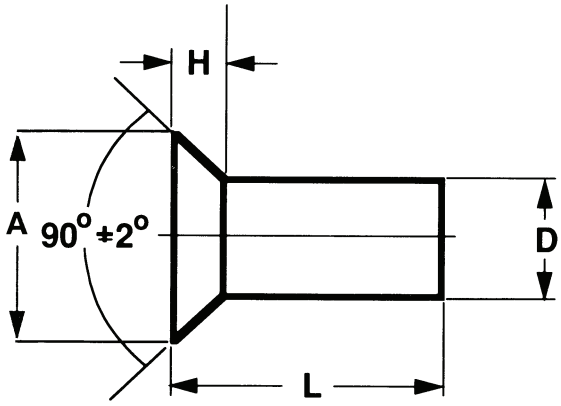



## FLAT HEAD RIVETS

| Nominal Size or Basic Shank Diameter | | D Shank Diameter | | A Head Diameter | | H Head Height | |
|---|---|---|---|---|---|---|---|
| | | Max | Min | Max | Min | Max | Min |
| 1/16 | 0.062 | 0.064 | 0.059 | 0.140 | 0.120 | 0.027 | 0.017 |
| 3/32 | 0.094 | 0.096 | 0.090 | 0.200 | 0.180 | 0.038 | 0.026 |
| 1/8 | 0.125 | 0.127 | 0.121 | 0.260 | 0.240 | 0.048 | 0.036 |
| 5/32 | 0.156 | 0.158 | 0.152 | 0.323 | 0.301 | 0.059 | 0.045 |
| 3/16 | 0.188 | 0.191 | 0.182 | 0.387 | 0.361 | 0.069 | 0.055 |
| 7/32 | 0.219 | 0.222 | 0.213 | 0.453 | 0.427 | 0.080 | 0.065 |
| 1/4 | 0.250 | 0.253 | 0.244 | 0.515 | 0.485 | 0.091 | 0.075 |
| 9/32 | 0.281 | 0.285 | 0.273 | 0.579 | 0.545 | 0.103 | 0.085 |
| 5/16 | 0.312 | 0.316 | 0.304 | 0.641 | 0.607 | 0.113 | 0.095 |
| 11/32 | 0.344 | 0.348 | 0.336 | 0.705 | 0.667 | 0.124 | 0.104 |
| 3/8 | 0.375 | 0.380 | 0.365 | 0.769 | 0.731 | 0.135 | 0.115 |
| 13/32 | 0.406 | 0.411 | 0.396 | 0.834 | 0.790 | 0.146 | 0.124 |
| 7/16 | 0.438 | 0.443 | 0.428 | 0.896 | 0.852 | 0.157 | 0.135 |

Notes: 1. Approximate proportions: A = 2.00 x D
H = 0.33 x D

2. Length tolerance for rivets shall be plus or minus 0.016 in.




## COUNTERSUNK HEAD RIVETS

| Nominal Size or Basic Shank Diameter | | D Shank Diameter | | A Head Diameter | | H Head Height |
|---|---|---|---|---|---|---|
| | | Max | Min | Max | Min | Ref |
| 1/16 | 0.062 | 0.064 | 0.059 | 0.118 | 0.110 | 0.027 |
| 3/32 | 0.094 | 0.096 | 0.090 | 0.176 | 0.163 | 0.040 |
| 1/8 | 0.125 | 0.127 | 0.121 | 0.235 | 0.217 | 0.053 |
| 5/32 | 0.156 | 0.158 | 0.152 | 0.293 | 0.272 | 0.066 |
| 3/16 | 0.188 | 0.191 | 0.182 | 0.351 | 0.326 | 0.079 |
| 7/32 | 0.219 | 0.222 | 0.213 | 0.413 | 0.384 | 0.094 |
| 1/4 | 0.250 | 0.253 | 0.244 | 0.469 | 0.437 | 0.106 |
| 9/32 | 0.281 | 0.285 | 0.273 | 0.528 | 0.491 | 0.119 |
| 5/16 | 0.312 | 0.316 | 0.304 | 0.588 | 0.547 | 0.133 |
| 11/32 | 0.344 | 0.348 | 0.336 | 0.646 | 0.602 | 0.146 |
| 3/8 | 0.375 | 0.380 | 0.365 | 0.704 | 0.656 | 0.159 |
| 13/32 | 0.406 | 0.411 | 0.396 | 0.763 | 0.710 | 0.172 |
| 7/16 | 0.438 | 0.443 | 0.428 | 0.823 | 0.765 | 0.186 |
| See Notes | | | | 1 | | 2 |

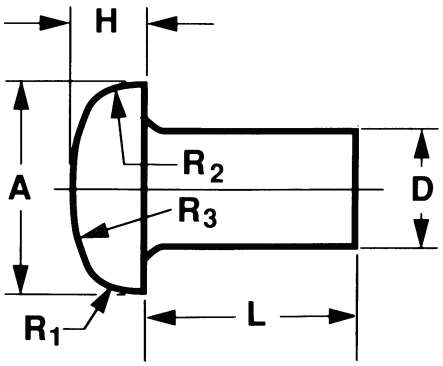
Notes: 1. Calculated on basic diameter of rivet and 90 deg included angle extended to a sharp corner.

2. Head height (H) is given for reference purposes only. Variations in this dimension are controlled by the diameters (A) and (D) and the included angle of the head.

3. Approximate proportions: A = 1.850 x D
H = 0.425 x D

4. Length tolerance for rivets shall be plus or minus 0.016 in.

# SOLID SMALL RIVETS UNDER 7/16" INCH DIAMETER

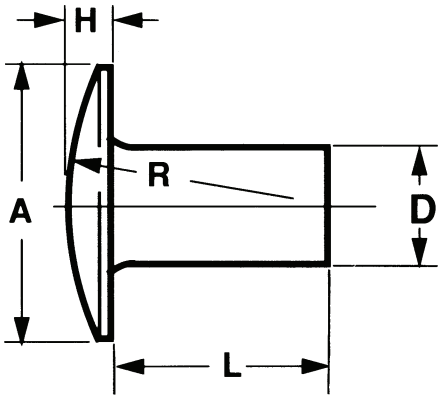



## PAN HEAD RIVETS

| Nominal Size or Basic Shank Diameter | | D Shank Diameter Max | D Shank Diameter Min | A Head Diameter Max | A Head Diameter Min | H Head Height Max | H Head Height Min | $R_1$ Head Radius Approx | $R_2$ Head Radius Approx | $R_3$ Head Radius Approx |
|---|---|---|---|---|---|---|---|---|---|---|
| 1/16 | 0.062 | 0.064 | 0.059 | 0.118 | 0.098 | 0.040 | 0.030 | 0.019 | 0.052 | 0.217 |
| 3/32 | 0.094 | 0.096 | 0.090 | 0.173 | 0.153 | 0.060 | 0.048 | 0.030 | 0.080 | 0.326 |
| 1/8 | 0.125 | 0.127 | 0.121 | 0.225 | 0.205 | 0.078 | 0.066 | 0.039 | 0.106 | 0.429 |
| 5/32 | 0.156 | 0.158 | 0.152 | 0.279 | 0.257 | 0.096 | 0.082 | 0.049 | 0.133 | 0.535 |
| 3/16 | 0.188 | 0.191 | 0.182 | 0.334 | 0.308 | 0.114 | 0.100 | 0.059 | 0.159 | 0.641 |
| 7/32 | 0.219 | 0.222 | 0.213 | 0.391 | 0.365 | 0.133 | 0.119 | 0.069 | 0.186 | 0.754 |
| 1/4 | 0.250 | 0.253 | 0.244 | 0.444 | 0.414 | 0.151 | 0.135 | 0.079 | 0.213 | 0.858 |
| 9/32 | 0.281 | 0.285 | 0.273 | 0.499 | 0.465 | 0.170 | 0.152 | 0.088 | 0.239 | 0.963 |
| 5/16 | 0.312 | 0.316 | 0.304 | 0.552 | 0.518 | 0.187 | 0.169 | 0.098 | 0.266 | 1.070 |
| 11/32 | 0.344 | 0.348 | 0.336 | 0.608 | 0.570 | 0.206 | 0.186 | 0.108 | 0.292 | 1.176 |
| 3/8 | 0.375 | 0.380 | 0.365 | 0.663 | 0.625 | 0.225 | 0.205 | 0.118 | 0.319 | 1.286 |
| 13/32 | 0.406 | 0.411 | 0.396 | 0.719 | 0.675 | 0.243 | 0.221 | 0.127 | 0.345 | 1.392 |
| 7/16 | 0.438 | 0.443 | 0.428 | 0.772 | 0.728 | 0.261 | 0.239 | 0.137 | 0.372 | 1.500 |

Notes: 1. Approximate proportions: A = 1.750 x D
H = 0.570 x D
$R_1$ = 0.314 x D
$R_2$ = 0.850 x D
$R_3$ = 3.430 x D

2. Length tolerance for rivets shall be plus or minus 0.016 in.



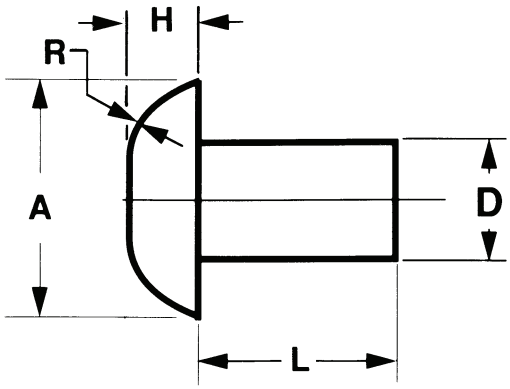

## TRUSS HEAD RIVETS

| Nominal Size or Basic Shank Diameter | | D Shank Diameter Max | D Shank Diameter Min | A Head Diameter Max | A Head Diameter Min | H Head Height Max | H Head Height Min | R Head Radius Approx |
|---|---|---|---|---|---|---|---|---|
| 3/32 | 0.094 | 0.096 | 0.090 | 0.226 | 0.206 | 0.038 | 0.026 | 0.239 |
| 1/8 | 0.125 | 0.127 | 0.121 | 0.297 | 0.277 | 0.048 | 0.036 | 0.314 |
| 5/32 | 0.156 | 0.158 | 0.152 | 0.368 | 0.348 | 0.059 | 0.045 | 0.392 |
| 3/16 | 0.188 | 0.191 | 0.182 | 0.442 | 0.422 | 0.069 | 0.055 | 0.470 |
| 7/32 | 0.219 | 0.222 | 0.213 | 0.515 | 0.495 | 0.080 | 0.066 | 0.555 |
| 1/4 | 0.250 | 0.253 | 0.244 | 0.590 | 0.560 | 0.091 | 0.075 | 0.628 |
| 9/32 | 0.281 | 0.285 | 0.273 | 0.661 | 0.631 | 0.103 | 0.085 | 0.706 |
| 5/16 | 0.312 | 0.316 | 0.304 | 0.732 | 0.702 | 0.113 | 0.095 | 0.784 |
| 11/32 | 0.344 | 0.348 | 0.336 | 0.806 | 0.776 | 0.124 | 0.104 | 0.862 |
| 3/8 | 0.375 | 0.380 | 0.365 | 0.878 | 0.848 | 0.135 | 0.115 | 0.942 |
| 13/32 | 0.406 | 0.411 | 0.396 | 0.949 | 0.919 | 0.145 | 0.123 | 1.028 |
| 7/16 | 0.438 | 0.443 | 0.428 | 1.020 | 0.990 | 0.157 | 0.135 | 1.098 |

Notes: 1. This rivet was previously designated as a wagon box rivet in addition to the present truss head designation.

2. Approximate proportions: A = 2.300 x D
H = 0.330 x D
R = 2.512 x D

3. Length tolerance for rivets shall be plus or minus 0.016 in.




## UNIVERSAL HEAD RIVETS

| Nominal Size or Basic Shank Diameter | | D Shank Diameter Max | D Shank Diameter Min | A Head Diameter Max | A Head Diameter Min | H Head Height Max | H Head Height Min | R Head Radius Approx |
|---|---|---|---|---|---|---|---|---|
| 1/16 | .062 | 0.064 | 0.059 | 0.135 | 0.115 | 0.037 | 0.027 | 0.054 |
| 3/32 | .093 | 0.096 | 0.090 | 0.197 | 0.177 | 0.051 | 0.039 | 0.082 |
| 1/8 | .125 | 0.127 | 0.121 | 0.260 | 0.240 | 0.065 | 0.053 | 0.108 |
| 5/32 | .156 | 0.158 | 0.152 | 0.323 | 0.301 | 0.079 | 0.065 | 0.135 |
| 3/16 | .187 | 0.191 | 0.182 | 0.387 | 0.361 | 0.092 | 0.078 | 0.164 |
| 1/4 | .250 | 0.253 | 0.244 | 0.515 | 0.485 | 0.120 | 0.104 | 0.217 |
| 5/16 | .312 | 0.316 | 0.304 | 0.641 | 0.607 | 0.147 | 0.129 | 0.272 |
| 3/8 | .375 | 0.380 | 0.365 | 0.769 | 0.731 | 0.176 | 0.156 | 0.328 |

Notes: 1. Approximate proportions: A = 2.00 x D
H = 0.465 x D
R = 0.872 x D

2. Length tolerance for rivets shall be plus or minus 0.016 in.