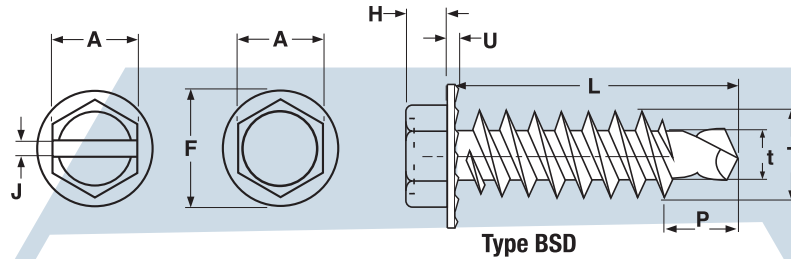


SELF-DRILLING

Serrated Hex Washer, SPACED Thread



Type BSD

SERRATED HEX WASHER SELF-DRILLING SCREWS, SPACED THREAD

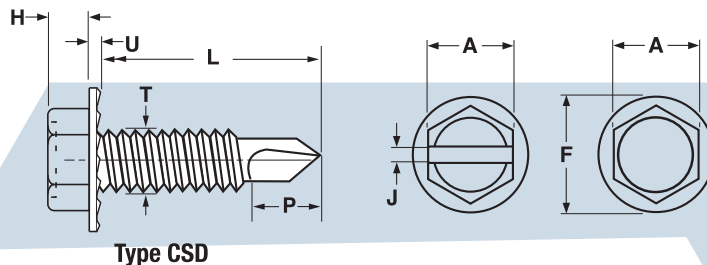
| Nominal Screw Size & Threads per Inch | A | | H | | F | | U | | T | | t | | Drill Point Size | P | Drilling Thickness | | Recommended Screw Gun Speed |
|--|----------------------|------|-------------|------|--------------------|------|---------------------|------|-------------------|------|-------------------|------|------------------------|-------------------------|-----------------------|------|-----------------------------------|
| | Width Across Head | | Head Height | | Washer Diameter | | Washer Thickness | | Major Diameter | | Minor Diameter | | | Protrusion Allowance | | | |
| | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | | | | | |
| 6-20 | .250 | .244 | .093 | .080 | .328 | .302 | .030 | .019 | .139 | .135 | .104 | .099 | 2 | .190 | .090 | .035 | 2500 |
| 8-18 | .250 | .244 | .110 | .096 | .348 | .322 | .036 | .024 | .166 | .161 | .122 | .116 | 2 | .211 | .100 | .035 | 2500 |
| 10-16 | .312 | .305 | .120 | .105 | .414 | .384 | .036 | .024 | .189 | .183 | .141 | .135 | 2 | .235 | .110 | .035 | 2500 |
| 12-14 | .312 | .305 | .155 | .139 | .432 | .398 | .039 | .022 | .215 | .209 | .164 | .157 | 3 | .353 | .210 | .110 | 2500 |
| 1/4-14 | .375 | .367 | .190 | .172 | .590 | .551 | .050 | .029 | .246 | .240 | .192 | .185 | 3 | .393 | .220 | .110 | 2000 |
| 1/4-14 | .438 | .428 | .190 | .172 | .590 | .560 | .063 | .037 | .246 | .240 | .192 | .185 | 3 | .393 | .220 | .110 | 2000 |
| 5/16-12 | .438 | .428 | .230 | .208 | .610 | .580 | .063 | .037 | .315 | .307 | .272 | .263 | 4 | .510 | .312 | .110 | 2000 |
| 5/16-12 | .500 | .489 | .230 | .208 | .676 | .624 | .055 | .035 | .315 | .307 | .272 | .263 | 3 | - | .312 | .110 | 2000 |

1/4 & 5/16" diameters are available with multiple head dimension configurations.

| | | |
|--|--|---|
| Description | An integrally formed hex washer head screw with serrations on the bearing surface side of the washer face and a drill point. Serrations extend from outer edge of washer face to the screw shank. Thread design is spaced (like a type-BSD drill screw). | |
| Applications/ Advantages | Used to attach plywood, soft wood or metal to metal. Serrated washer design adds greater holding power to components subject to vibrations caused by repeated movements. The 1/4-inch diameter screws, for instance, are commonly used to attach reinforcing strut or L-angle to garage doors. | The 18-8 stainless drill screw offers superior corrosion resistance but is a significantly softer metal than case-hardened carbon steel. The serrations can help create a fastening more resistant to loosening. The hardness of the material to be drilled should be a minimum of 10-20 Rockwell hardness points less than the screw's hardness. |
| Material | AISI 1016 - 1024 or equivalent steel | 18-8 Stainless Steel |
| Heat Treatment | Fasteners are heat treated in a carbonitriding or gas-carburizing system at a minimum temperature of 625°F, or in a cyaniding system (with consent of the buyer) at a minimum temperature of 450°F. | - |
| Case Hardness | Rockwell C 52 - 58 | - |
| Case Depth | #8 thru #12 Diameters: .004 - .009 1/4" Diameter & larger: .005 - .011 | - |
| Core Hardness | Rockwell C32 - 40 | - |
| Minimum Tor- sional Strength for ZINC-plated screws | #8 diameter: 41 lb.-in. #10 diameter: 55 lb.-in. 1/4" diameter: 132 lb.-in. 5/16" diameter: (no industry standard) | - |
| Plating | Serrated hex washer self-drilling screws are usually supplied with a clear zinc finish. | Stainless self-drilling screws are usually supplied without additional finish. |

Serrated Hex Washer, MACHINE SCREW Thread

SELF-DRILLING



SERRATED HEX WASHER SELF-DRILLING SCREWS, MACHINE SCREW THREAD

| Nominal Screw Size & Threads per Inch | A | | H | | F | | U | | T | | Drill Point Size | P | Drilling Thickness (Steel screws) | | Recommended Screw Gun Speed |
|--|----------------------|------|-------------|------|--------------------|------|---------------------|------|-------------------|------|------------------------|-------------------------|---|------|-----------------------------------|
| | Width Across Head | | Head Height | | Washer Diameter | | Washer Thickness | | Major Diameter | | | Protrusion Allowance | Max | Min | |
| | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | | | | | |
| 8-32 | .250 | .244 | .110 | .096 | .348 | .322 | .036 | .024 | .163 | .157 | 2 | .162 | .100 | | 2500 |
| 10-24 | .312 | .305 | .120 | .105 | .414 | .384 | .036 | .024 | .189 | .181 | 2 | .193 | .110 | | 2500 |
| | | | | | | | | | | | 3 | .258 | .175 | .110 | |
| 10-32 | .312 | .305 | .120 | .105 | .414 | .384 | .036 | .024 | .189 | .183 | 3 | .258 | .175 | .110 | 2500 |
| 12-24 | .312 | .305 | .155 | .139 | .432 | .398 | .029 | .022 | .215 | .207 | 3 | .293 | .210 | .110 | 2500 |
| 1/4-20 | .375 | .367 | .190 | .172 | .590 | .551 | .063 | .029 | .250 | .242 | 3 | .350 | .220 | .110 | 2000 |
| 1/4-20 | .438 | .428 | .190 | .172 | .590 | .551 | .063 | .029 | .250 | .242 | 2 | .275 | .175 | .035 | 2000 |
| 5/16-18 | .438 | .428 | .229 | .208 | .610 | .580 | .063 | .037 | .315 | .307 | 3 | .421 | | | |

| | | |
|--|--|---|
| Description | An integrally formed hex washer head screw with serrations on the bearing surface side of the washer face and a drill point. Serrations extend from outer edge of washer face to the screw shank. Thread design is unified (type-CSD). | |
| Applications/ Advantages | Used to attach plywood, soft wood or metal to metal. Serrated washer design adds greater holding power to components subject to vibrations caused by repeated movements. The 1/4-inch diameter screws, for instance, are commonly used to attach reinforcing strut or L-angle to garage doors. | The 18-8 stainless drill screw offers superior corrosion resistance but is a significantly softer metal than case-hardened carbon steel. The serrations can help create a fastening more resistant to loosening. The hardness of the material to be drilled should be a minimum of 10-20 Rockwell hardness points less than the screw's hardness. |
| Material | AISI 1016 - 1024 or equivalent steel | 18-8 Stainless |
| Heat Treatment | Fasteners are heat treated in a carbonitriding or gas-carburizing system at a minimum temperature of 625°F, or in a cyaniding system (with consent of the buyer) at a minimum temperature of 450°F. | - |
| Case Hardness | Rockwell C 52 - 58 | - |
| Case Depth | #8 thru #12 Diameters: .004 - .009 1/4" Diameter & larger: .005 - .011 | - |
| Core Hardness | Rockwell C32 - 40 | - |
| Minimum Tor- sional Strength for ZINC-plated screws | #8 diameter: 41 lb.-in. #10 diameter: 55 lb.-in. 1/4" diameter: 132 lb.-in. | - |
| Plating | Serrated hex washer self-drilling screws are usually supplied with a clear zinc finish. | Stainless self-drilling screws are usually supplied without additional finish. |