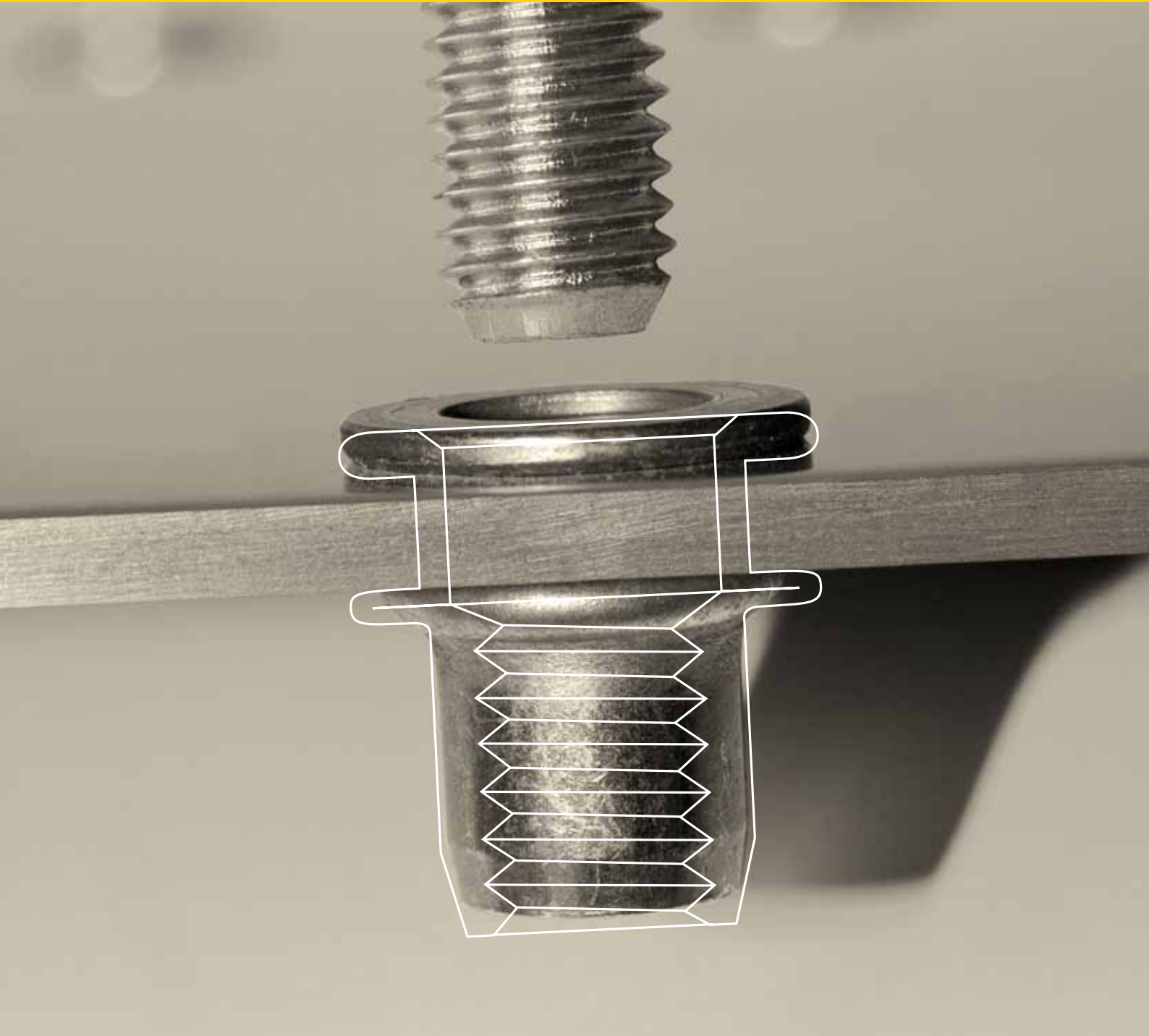


**STANLEY**<sup>®</sup>  
Engineered Fastening

**Rivetwise**



## Blind Rivet Nuts

**POP**  **Avdel**<sup>®</sup>

## Blind Rivet Nuts

Easily adaptable for your materials and production processes.



## Performance Fasteners For Versatile Assembly

Everywhere that you need to join components reliably and efficiently the POPAvdel product range offers innovative fastening systems and the most suitable installation tools and assembly stations.

Wherever you need high quality, load bearing threads in thin materials, POPAvdel Blind Rivet Nut Systems offer the ideal solution.

## Installation

Quickly and reliably installed without rework or damage to the parent application, even with painted sheet materials and tubes where there is no blind side access.

## Applications

Our blind rivet nuts are most commonly used in the automotive, vehicle, electronics chassis manufacturing, equipment manufacturing and shipbuilding industries. The wide variety of POPAvdel blind rivet nuts provides perfect engineering results and economic solutions in every application.

## Mission

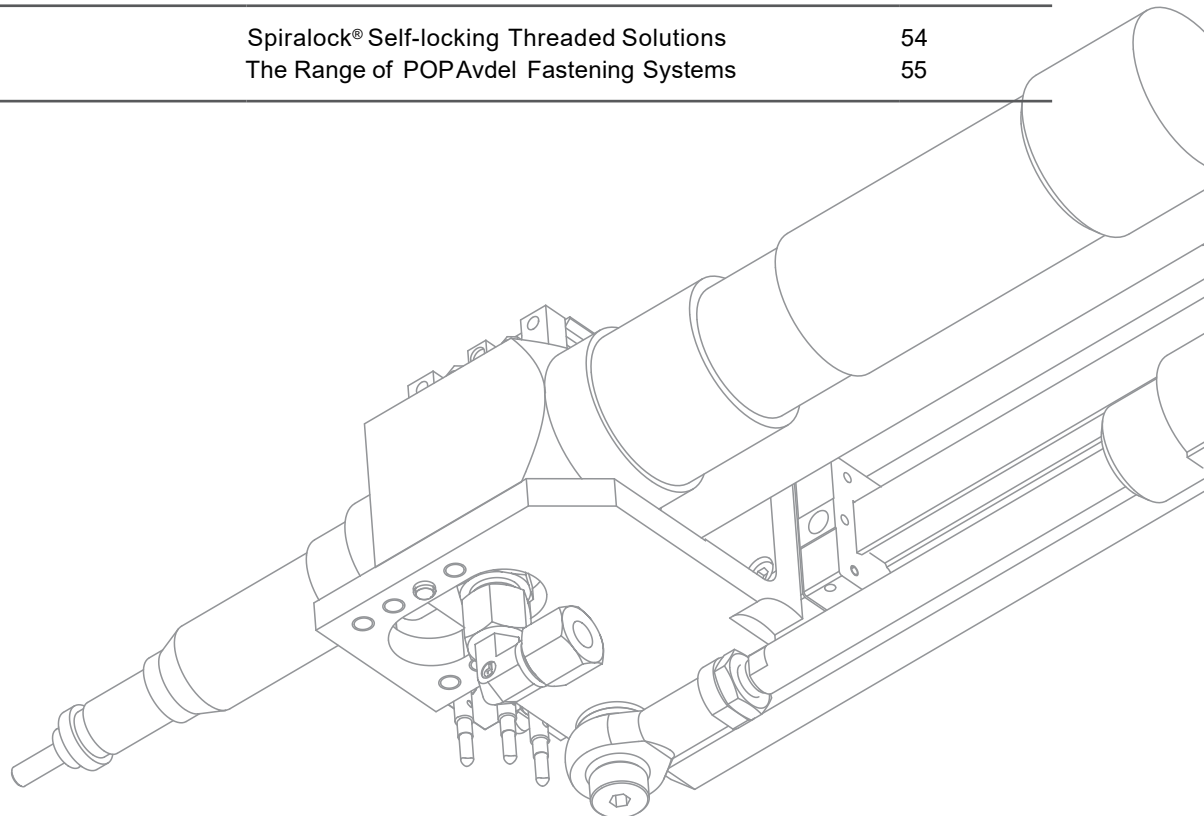
STANLEY Engineered Fastening provides assembly systems that simplify your production process and improve the quality of your products. We are not just a provider of fasteners and equipment, together we are a design and development partner for our customers engineering teams.



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# Blind Rivet Nuts

POPAVdel blind rivet nuts and installation tools provide a quick, reliable and low cost system of inserting high quality, load bearing threads in thin gauge materials. Our rivet nuts offer many benefits over nuts and bolts, weld nuts, self-tapping screws and pressed inserts.

## Benefits of Assembly

### Blind sided assembly

Access is needed to only one side of the workpiece. This results in increased speed of assembly, lower assembly costs, reduced operator error and is ideal for assembly of box or closed sections.

### Purely mechanical fastening

POPAVdel blind rivet nuts can be used to join dissimilar materials. They avoid damage of surface coatings and thus can be installed in pre- as well as in post finished applications. The workpiece is not affected by a welding process.

### Designed for rapid rate of installation

The typical assembly cycle of 3 seconds reduces assembly time and costs.

### Forms a permanent fixture in material

POPAVdel rivet nuts deliver a vibration resistant joint without requiring maintenance.

### Multi-functional fastener

POPAVdel rivet nuts feature multi functions: they provide a female thread in sheet while giving the opportunity to clamp two or more sheets at the same time; can act as a spacer – resulting in fewer components required.

### Suitable for a wide range of installation tools

The possibilities for installation range from hand tools for small batch and repair work and pneumatic tools for medium volume up to full automation for in-line assembly.

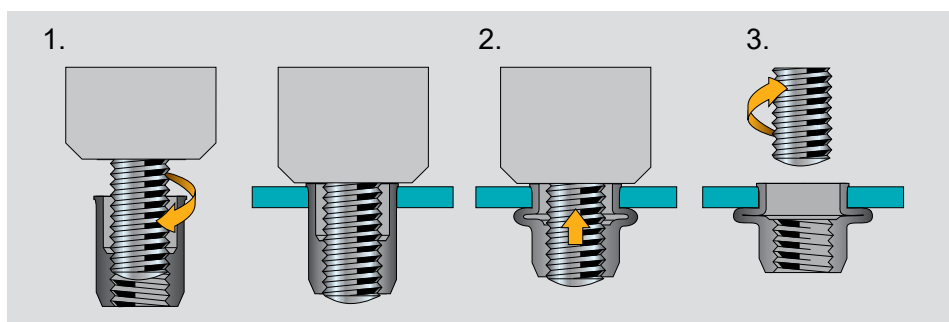
### Designed for automation

POPAVdel blind rivet nuts can be installed fully automatically resulting in a high speed and precision assembly. The set up costs are lower compared to welding equipment.

## The benefits of 'spin-pull' technology

STANLEY Engineered Fastening offers a highly cost effective and flexible range of hand operated power tools for placing blind rivet nuts. The range is designed to meet the needs of different applications and assembly environments as well as different types of rivet nuts. POPAVdel Blind Rivet Nut Power Tools use the 'spin-pull' technology with these benefits:

- Generates high pull forces required to place large diameter and thick wall rivet nuts
- Reduces wear on the drive screw resulting in lower maintenance and longer tool lifetime
- Compact, ergonomically designed tools which can be suspended or hand held
- Allows placement of lubricated and unlubricated rivet nuts



1. The rivet nut is automatically threaded onto the drive screw.
2. On activating the tool, the rivet nut is pulled towards the tool, forming the body radially outward to clench tightly against the workpiece.
3. The drive screw of the tool reverses and is disengaged from the thread leaving the rivet nut securely in position.

# Benefits of Assembly

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## The benefits of 'pull-to-force' technology

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Some of the POPAvdel power installation tools feature the pull-to-force technology which means that the tools always use the appropriate stroke required, allowing the operator to set the same insert in varying material thicknesses. Key benefits include:

- Improves cycle time as optimum stroke is always delivered
- Achieves consistent setting every time in varying application conditions



## Ground Transportation

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- Clamps securely into parent material giving high resistance to vibration and attendant loosening of joint
- Ideal for joining dissimilar materials (e.g. aluminium to plastic sections) in addition to providing a female thread
- Particularly suitable for installing threads into closed sections where there is no access to blind side
- Available in high corrosion resistant coatings such as zinc-nickel to conform to increasing corrosion warranty periods
- Lower cost and less hazardous alternative to weld nuts, with far less damage to parent material
- Can easily be installed after paint finish is applied to avoid clogging threads, unlike weld nuts
- Quick and flexible placement possible in confined areas using hand tools
- Will not deform, distort or damage parent material, even if this is painted prior to installation
- Colour of rivet nut can be modified to match parent material or improve appearance of assembly














## Electronic and Electrical Equipment

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- Closed end rivet nuts prevent ingress of water and foreign bodies into electrical circuits
- No risk of nuts coming loose or falling on to circuitry
- Rivet nuts can act as an earthing point
- Forms permanent fixing in parent material allowing easier panel removal and replacement compared to nut and bolt fixings
- Multi-functionality of thread, rivet and flange-spacer combined, offers space and weight advantages over other attachment methods



# Design Features and Benefits

| Design Feature   | Design Benefits  | Typical Applications   |
|--|--|--|
| Splined Body<br>                | <ul style="list-style-type: none"> <li>Improves torque-to-turn resistance in softer materials such as aluminium when compared to plain body rivet nuts</li> <li>Improved electrical continuity in sheet metal fixings</li> </ul>   | <ul style="list-style-type: none"> <li>Soft materials such as aluminium, magnesium, plastics, composites and wood</li> <li>Earthing points in electrical assemblies</li> </ul>   |
| Hexagonal Body<br>              | <ul style="list-style-type: none"> <li>Hexagonal section and bore improves torque-to-turn in components via form lock when compared to round and splined rivet nuts</li> </ul>   | <ul style="list-style-type: none"> <li>Automotive chassis components requiring high resistance to turning under vibrating loads</li> <li>Where high bolt removal torque is required during servicing (e.g. switchgear cabinets)</li> <li>Thermal applications prone to high expansion and contraction in parent material</li> </ul>        |
| Square Body<br>                 | <ul style="list-style-type: none"> <li>Square section and bore improves torque-to-turn in components via form lock due to even greater contact surface compared to round and splined rivet nuts</li> <li>Increased hole punch life compared to hexagonal geometries</li> </ul>   | <ul style="list-style-type: none"> <li>Automotive body mountings requiring maximum turning resistance</li> <li>Soft material constructions, particularly for plastics, composites and soft sheet metals</li> </ul>   |
| Large Flange<br>                | <ul style="list-style-type: none"> <li>Provides large load bearing surface</li> <li>Reinforces hole, preventing push through</li> <li>Potential to use flange as a spacer</li> <li>Can be used with underhead seal (e.g. Rimlex®)</li> </ul>   | <ul style="list-style-type: none"> <li>Load bearing applications in thin sheet and soft material applications</li> <li>Mountings where high push-out resistance is required (e.g. adjustable foot mountings)</li> </ul>  |
| Low Profile<br>               | <ul style="list-style-type: none"> <li>Near flush installation and clamp up</li> </ul>   | <ul style="list-style-type: none"> <li>Flush fitting, thin sheet, low load bearing applications (e.g. domestic appliances and coach building)</li> </ul>   |
| Countersunk<br>               | <ul style="list-style-type: none"> <li>Flush installation and secure clamp up</li> </ul>   | <ul style="list-style-type: none"> <li>Flush fitting, thin sheet, low load bearing applications (e.g. domestic appliances and coach building)</li> </ul>   |
| Closed End<br>                | <ul style="list-style-type: none"> <li>Prevents ingress of dirt and fluids into thread</li> <li>Prevents ingress of water and foreign bodies into electrical circuits</li> </ul>   | <ul style="list-style-type: none"> <li>Electrical assemblies to prevent foreign bodies being inserted through open thread</li> <li>Load bearing sections to avoid thread exposure</li> <li>With underhead seal (Rimlex®) to prevent ingress of fluids and dirt into protected environment (e.g. fuel tank)</li> </ul>                      |
| Reduced Tail End Diameter<br> | <ul style="list-style-type: none"> <li>Ease of hole entry</li> <li>Particularly suited for automation</li> </ul>   | <ul style="list-style-type: none"> <li>Automated feed systems</li> <li>Rapid manual assembly</li> </ul>  |
| Increased Thread Strength<br> | <ul style="list-style-type: none"> <li>Improves the maximum torque capability by typically 100% compared to standard Hexsert®</li> <li>No risk of thread-stripping insert, avoiding expensive and time consuming re-work</li> <li>Potential to downsize rivet nut and screw diameter for a given joint clamp load</li> </ul> | <ul style="list-style-type: none"> <li>Structural automotive fixings into closed aluminium extrusions and hydro-formed steel tubes</li> <li>High strength threads into thin, hardened steel pressings unsuited to welding</li> <li>Any application where routine screw removal and rethreading without torque control is likely</li> </ul> |
| Slotted Body<br>              | <ul style="list-style-type: none"> <li>Forms four folded legs providing an extra large blind side bearing area</li> </ul>  | <ul style="list-style-type: none"> <li>Use with composites and plastics, reducing risk of cracking around the hole</li> </ul>  |
| Neoprene Body<br>             | <ul style="list-style-type: none"> <li>Provides an excellent vibration-isolating effect to absorb vibration and noise</li> <li>Ability to seal liquids and gases</li> <li>Exhibits excellent electrical insulation properties</li> </ul>   | <ul style="list-style-type: none"> <li>Automotive</li> <li>Agriculture machinery</li> <li>Recreational vehicles</li> <li>Electronic components</li> </ul>  |



# Customised Designs

## Modified Feature

## Typical Uses and Benefits

Flange Diameter



- Greater diameter increases push-out force and hole reinforcement in soft and thin gauge metals

Flange Thickness



- Thicker flange acts as a spacer and provides a slight increase in push-out force

Nut Length



- Greater length acts as a blind side spacer and increases thread strength

Body Diameter



- Greater body diameter increases thread strength, torque-to-turn and push-out force
- Particularly suitable where the designer wishes to retain a large hole size for a small thread

Grip Range



- Increase in grip is required to accommodate thick wall constructions such as those using aluminium, magnesium, plastics and composites

Special Cold Formed Products



- In high volumes, these can offer significant cost savings compared to equivalent machined components
- Design possible to very high tolerances for use with your own tooling

Coatings



- Special finishes can improve corrosion resistance, appearance and colour match with parent materials

Surface Hardening



- Treatments such as nitriding increase thread torque strength

Closed Ends and Underhead Seals



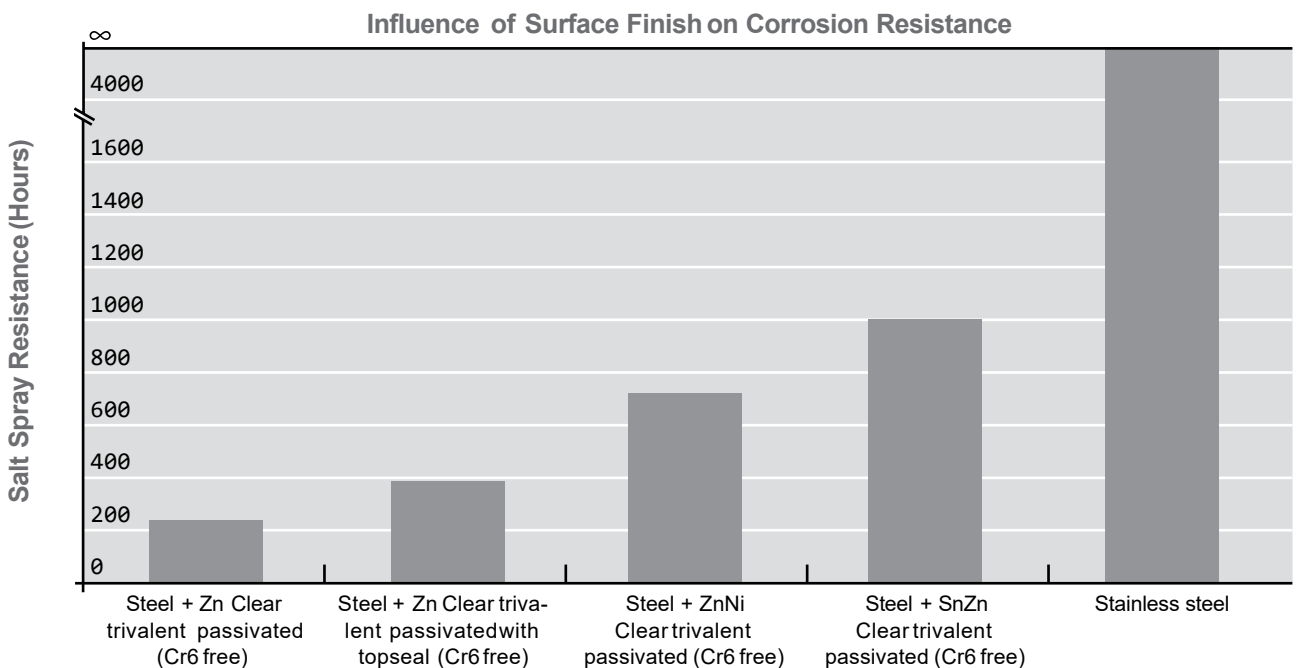
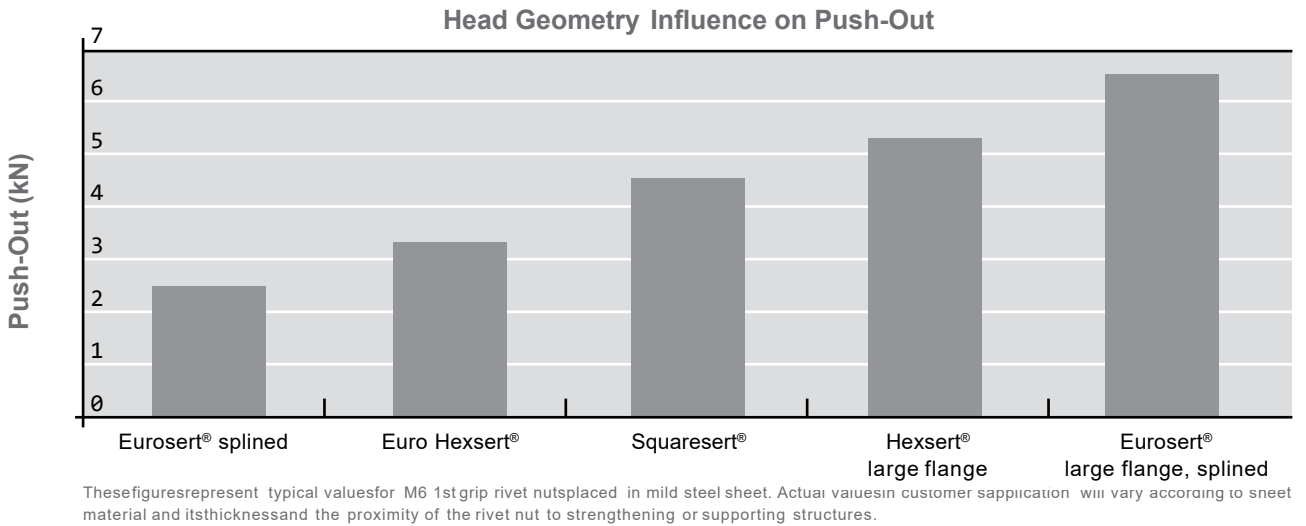
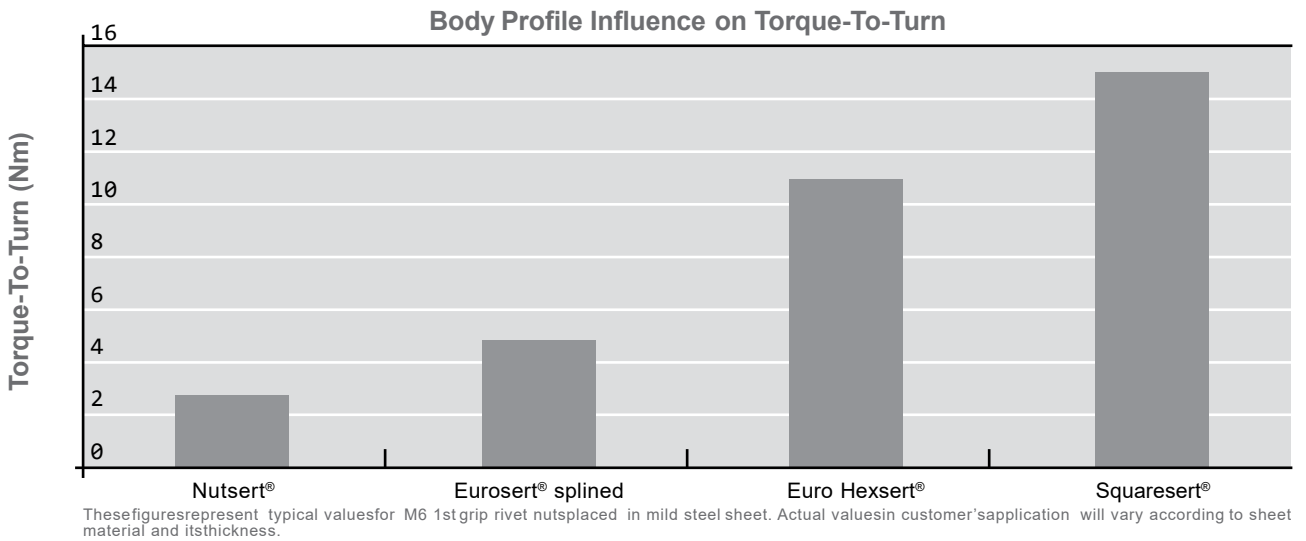
- Provides maximum protection against the ingress of moisture and dirt

Pipe POPNut®



- Designed to be installed in a pipe with the curved surface of a rear flange, creating a horizontal surface for subsequent component assembly
- Available in steel M6 thread size

# Design Parameters



The above table is based on data derived from Salt Spray tests in accordance with ASTM B 117 using 5% sodium chloride fog. The ranking of surface finishes shown in the above table has been obtained from these tests. These are carried out under standard conditions using sodium chloride solution fog as a means of comparing the potential corrosion resistance. The conditions in all other applications are often different and could affect the comparative ranking. In particular, if dissimilar metals are involved the subsequent galvanic action can influence the rate and nature of corrosion. The ranking shown is based on the time of appearance of red rust but the same overall pattern is true for time of onset of white rust. Salt Spray tests are less applicable to stainless steel, but its inclusion in the table serves to illustrate its increased inherent corrosion resistance. We would be happy to discuss the requirements for your particular application and to assist you in selecting the most appropriate finish.



# Selecting a Blind Rivet Nut

Selecting a blind rivet nut is a simple process. The six factors detailed below are designed to help you identify a rivet nut suitable for your application:

## Thread size

POPAvel rivet nuts range from M3 to M12 thread sizes dependent upon the rivet nut.

## Grip range

The blind rivet nut should be selected to ensure that the thicknesses of the parent material(s) falls within the grip range.

## Hole size

This is specified on the relevant technical data page for the rivet nut. Allowance for coating the parent material should be made to avoid an undersized hole.

## Torque-to-turn

Resistance is dependent upon the body shape and increases in the series: round, splined, hexagonal and square. Please refer to page 8 for further information.

## Special features

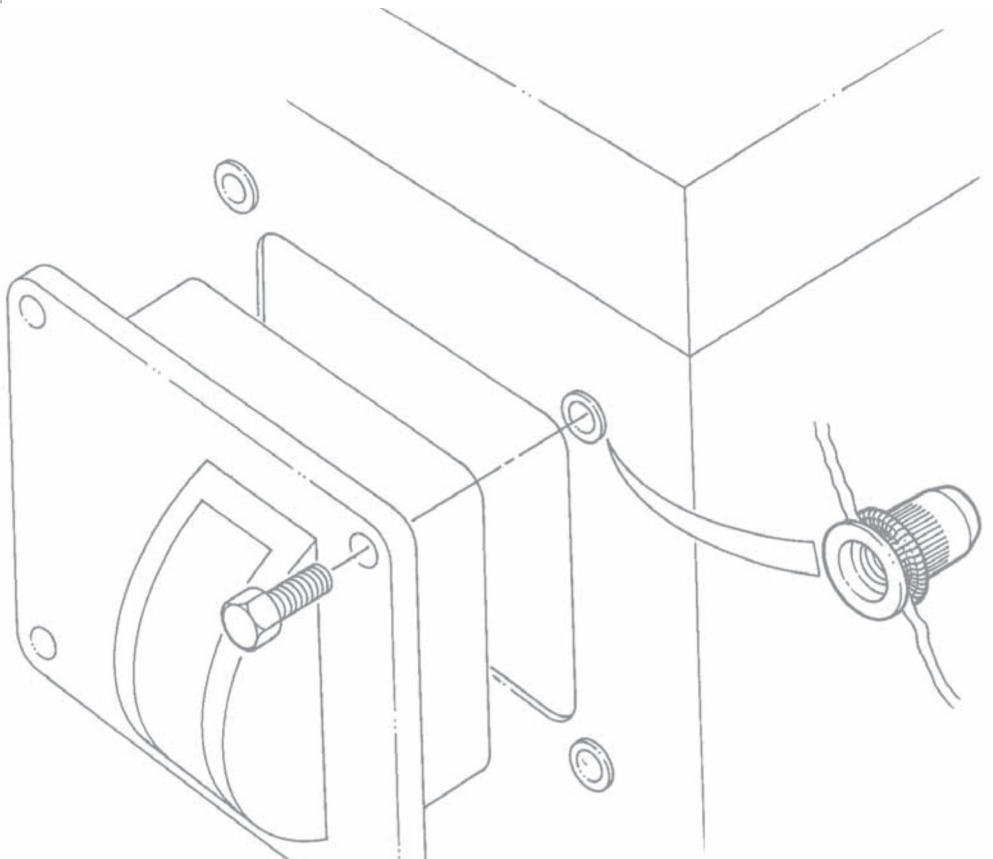
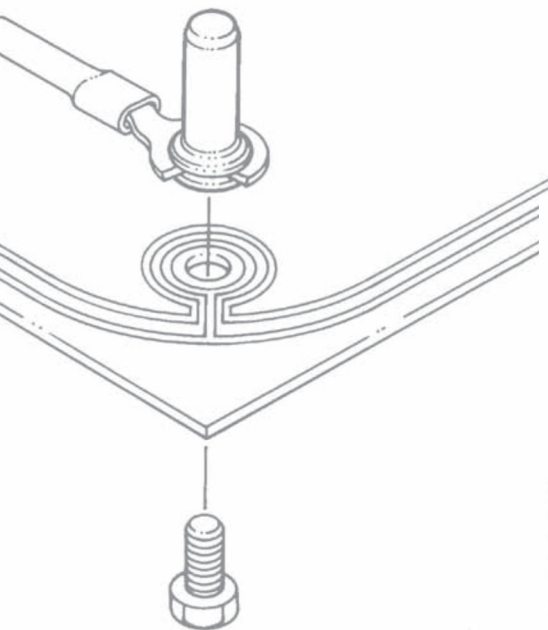
Additional features such as low profile, large flange, closed end and countersunk are available within the standard range of products. Please refer to page 7 for details on special features and finishes.

## Corrosion resistance

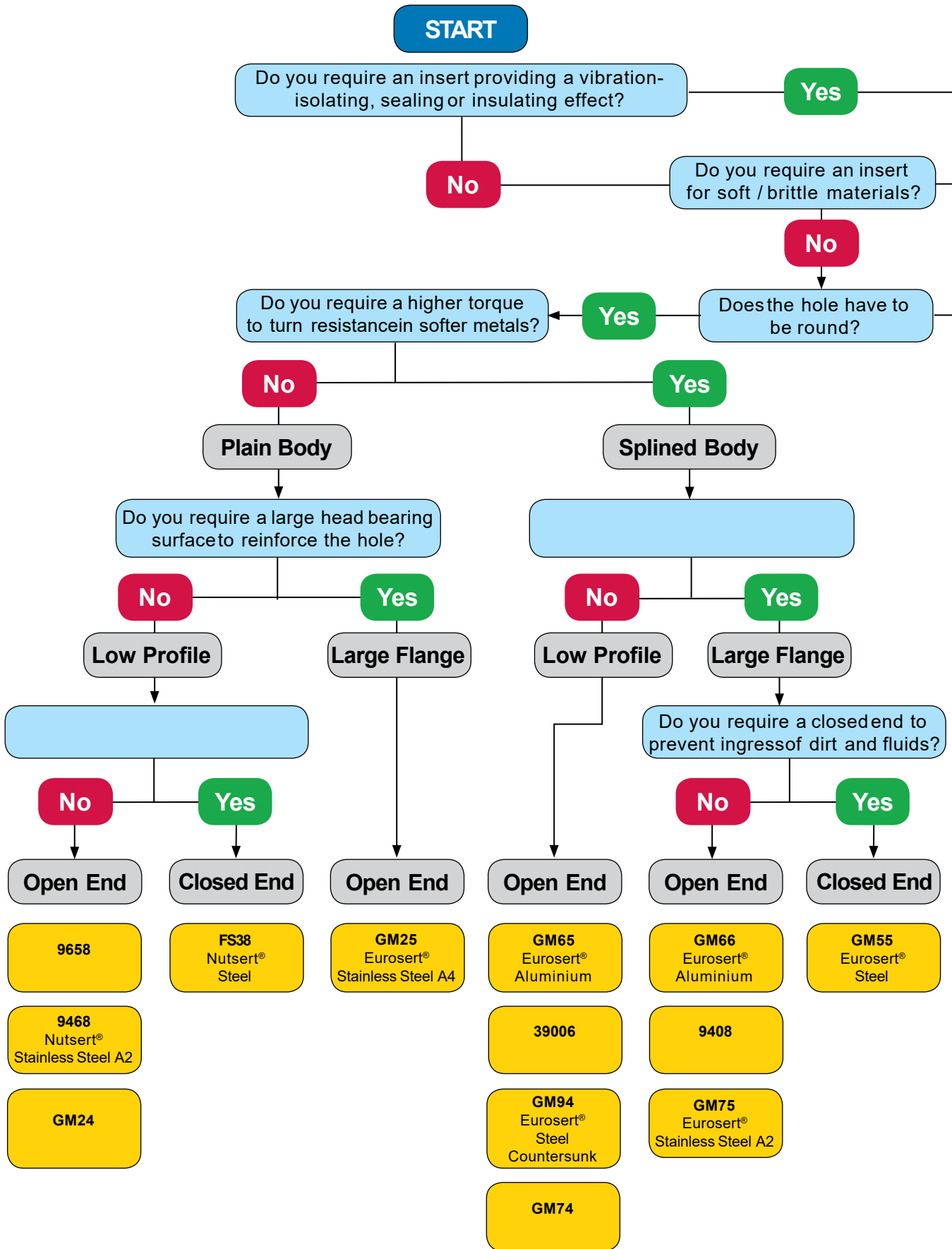
The selection of the material type and coating of the rivet nut should be made on the basis of the corrosion resistance required.

## Important Information

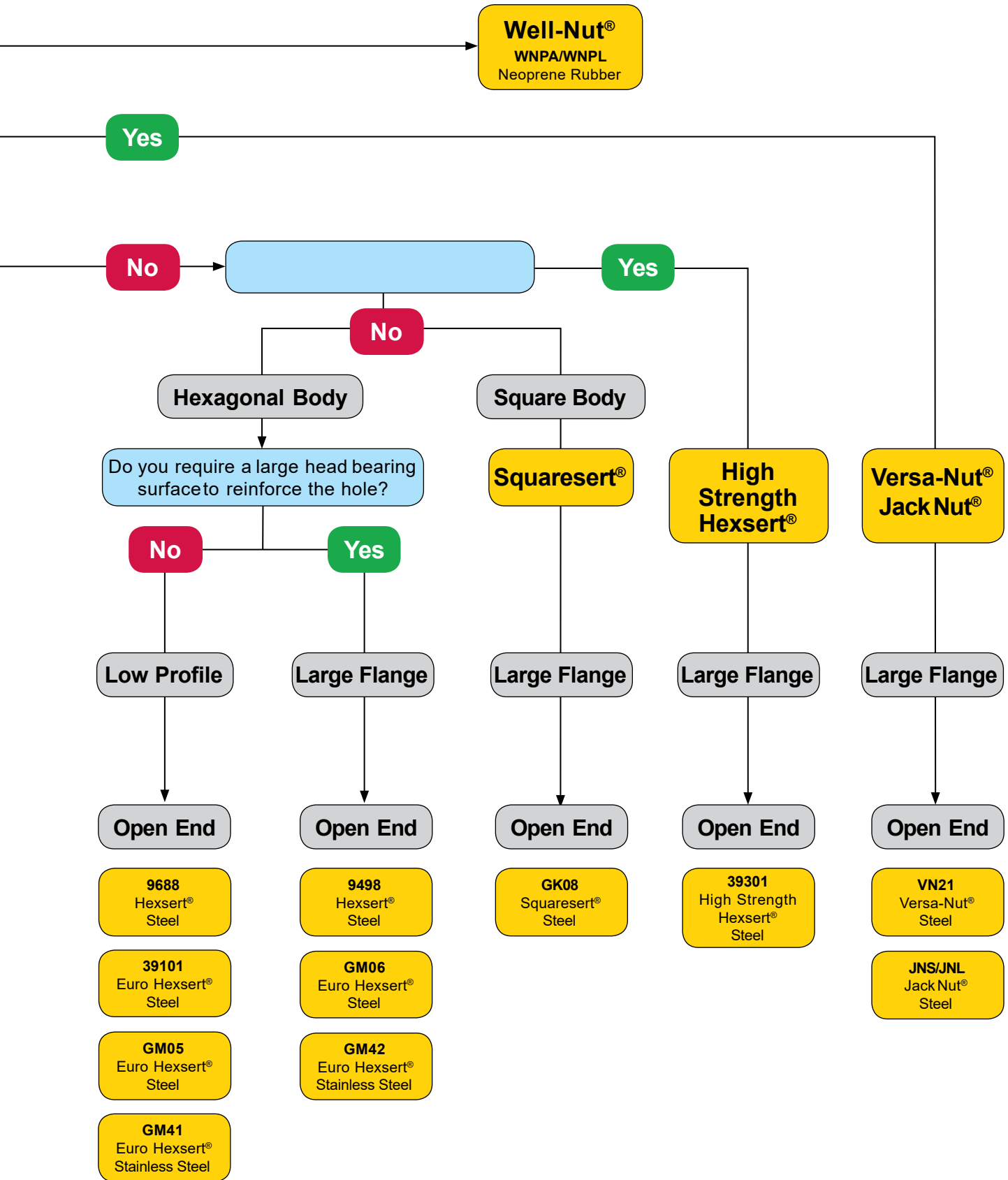
The information on this page should be used in conjunction with the technical data. On our website you can also find additional information about corrosion, safety and RoHS.



# Blind Rivet Nuts



This selection guide is designed to illustrate which blind rivet nut may be the most suitable for your application. This guide does not include the full range of POPAVdel blind rivet nuts; our Applications Engineers are available to advise as to the best solution for your specific application needs.



# Selection Guide

This table is designed as a guide to help you select the most suitable POPAvdel rivet nut for your specific application. Full technical and performance data for each rivet nut can also be found on our website or contact your local STANLEYEngineered Fastening representative.

| Product Range              | Body Shape | Material  |       |                 |          | Design Features |          |              |             | Hole Size   |        | Thread Size |    |    |    |    |    | Page No. |         |            |             |            |
|----------------------------|------------|-----------|-------|-----------------|----------|-----------------|----------|--------------|-------------|-------------|--------|-------------|----|----|----|----|----|----------|---------|------------|-------------|------------|
|                            |            | Aluminium | Steel | Stainless Steel | Neoprene | Closed End      | Open End | Large Flange | Low Profile | Countersunk | Metric | Imperial    | M3 | M4 | M5 | M6 | M8 | M10      | M12     | Series No. | Description | Data Sheet |
| Eurosert®                  |            | •         |       |                 |          |                 | •        |              | •           |             |        |             | •  | •  | •  | •  |    |          | GM65    | 13         | 27          |            |
|                            |            | •         |       |                 |          |                 | •        | •            |             |             |        |             |    | •  | •  | •  | •  |          |         |            | GM66        | 28         |
|                            |            |           | •     |                 |          |                 |          | •            |             |             |        |             |    | •  | •  | •  | •  |          |         |            | 39006       | 29         |
|                            |            |           | •     |                 |          |                 |          | •            |             | •           |        |             |    |    | •  | •  | •  |          |         |            | GM94        | 30         |
|                            |            |           | •     |                 |          |                 |          | •            | •           |             |        |             | •  | •  | •  | •  | •  |          |         |            | 9408        | 31         |
|                            |            |           | •     |                 |          |                 | •        |              | •           |             |        |             |    | •  | •  | •  | •  |          |         |            | GM55        | 32         |
|                            |            |           |       | A2              |          |                 |          | •            |             | •           |        |             |    | •  | •  | •  | •  |          |         |            | GM74        | 33         |
|                            |            |           |       | A2              |          |                 |          | •            | •           |             |        |             |    | •  | •  | •  | •  |          |         |            | GM75        | 34         |
| Eurosert®                  |            |           | A4    |                 |          |                 | •        |              | •           |             |        |             | •  | •  | •  | •  |    |          | GM24    | 35         |             |            |
|                            |            |           | A4    |                 |          |                 | •        | •            |             |             |        |             |    | •  | •  | •  |    |          | GM25    | 36         |             |            |
| Nutsert®                   |            |           | •     |                 |          |                 | •        |              | •           |             | •      | •           | •  | •  | •  | •  |    |          | 9658    | 14         | 37          |            |
|                            |            |           | •     |                 |          | •               |          |              | •           |             |        | •           | •  | •  | •  | •  |    |          | FS38    |            | 38          |            |
|                            |            |           |       | •               |          |                 | •        |              | •           |             |        | •           | •  | •  | •  | •  |    |          | 9468    |            | 39          |            |
| Hexsert®/<br>Euro Hexsert® |            |           | •     |                 |          |                 | •        |              | •           |             | •      | •           | •  | •  | •  |    |    |          | 9688    | 15         | 40          |            |
|                            |            |           | •     |                 |          |                 | •        | •            |             |             |        | •           | •  | •  | •  | •  | •  |          |         |            | 9498        | 41         |
|                            |            |           | •     |                 |          |                 |          | •            |             | •           |        |             | •  | •  | •  | •  | •  |          |         |            | 39101       | 42         |
|                            |            |           | •     |                 |          |                 |          | •            |             | •           |        |             | •  | •  | •  | •  | •  |          |         |            | GM05        | 43         |
|                            |            |           | •     |                 |          |                 |          | •            | •           |             |        |             | •  | •  | •  | •  | •  |          |         |            | GM06        | 44         |
|                            |            |           |       | •               |          |                 |          | •            |             | •           |        |             | •  | •  | •  | •  | •  |          |         |            | GM41        | 45         |
| Hexsert®/<br>Euro Hexsert® |            |           | •     |                 |          |                 | •        |              | •           |             |        | •           | •  | •  | •  | •  |    |          | GM42    | 46         |             |            |
|                            |            |           |       | •               |          |                 |          | •            | •           |             |        | •           | •  | •  | •  | •  |    |          |         |            |             |            |
| High Strength Hexsert®     |            |           | •     |                 |          |                 | •        | •            |             |             |        |             |    | •  | •  | •  | •  |          | 39301   | 16         | 47          |            |
| Squaresert®                |            |           | •     |                 |          |                 | •        | •            |             |             |        |             |    | •  | •  | •  |    |          | GK08    | 17         | 48          |            |
| Versa-Nut®                 |            |           | •     |                 |          |                 | •        | •            |             |             | •      |             |    | •  | •  | •  |    |          | VN21    | 18         | 49          |            |
| Jack Nut®                  |            |           | •     |                 |          |                 | •        | •            |             |             |        | •           | •  | •  |    |    |    |          | JNS/JNL | 19         | 50          |            |
| Well-Nut®                  |            |           |       |                 | •        |                 | •        | •            |             |             |        | •           | •  | •  | •  | •  |    |          | WNPA    | 20         | 51          |            |
|                            |            |           |       |                 | •        |                 | •        | •            |             |             |        | •           | •  | •  | •  |    |    |          | WNPL    |            | 52          |            |

Our policy is one of continuous product development and improvement and we reserve the right to change the specification of any product without prior notice.



Blind rivet nuts in various materials designed to provide load bearing threads in thin sheet materials. For hard metric hole sizes.



## Key features and benefits

- Can be used in very thin sheet materials from 0.25mm (0.01")
- Double diameter body and lead-in chamfer provide easy insertion into hole
- Various platings available to increase corrosion resistance
- Splined body improves torque-to-turn resistance in softer materials such as aluminium when compared to plain body rivet nuts and improves electrical continuity in sheet metal fixings
- Low profile head allows near flush fit to application
- Large flange head provides a load bearing surface and reinforces the hole to prevent push-out. Can be used as a spacer and can be supplied with an under-head seal.
- Closed end prevents the ingress of dirt and fluids into thread and electrical circuits
- Can be used with hand tools, pneumatic tools and fully automated machines to suit a wide range of assembly methods

## Specifications

Thread Sizes:

M3 – M10

Material:

Aluminium, steel, stainless steel A2 & A4

Head Styles:

Low profile, countersunk, large flange

Body:

Round, with and without splines

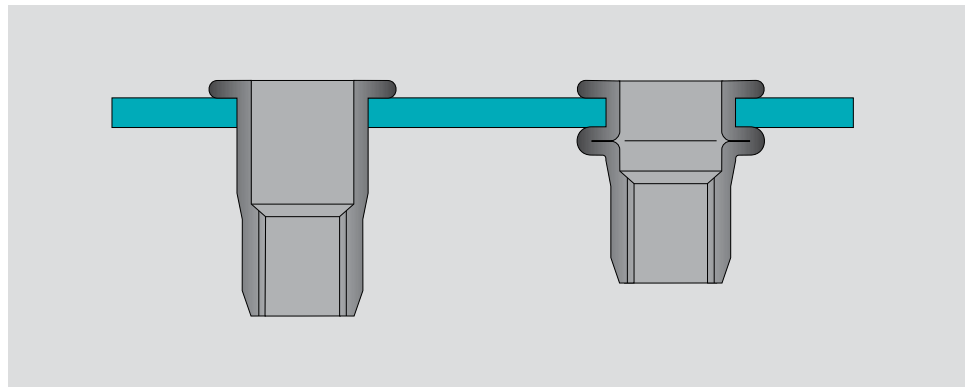
Option:

Closed end

Hole Size:

Metric

## Typical placing sequence



Please visit our website [www.StanleyEngineeredFastening.com](http://www.StanleyEngineeredFastening.com) for fastener placing animations.

## Assembly applications

- Automotive
- Electrical engineering
- Electronic components
- Sheet metal
- Domestic appliances
- General light fabrication



# Nutsert<sup>®</sup>



Steel and stainless steel rivet nuts designed to provide load bearing threads in thin sheet materials.



- Can be used in very thin sheet materials from 0.50mm (0.02")
- Various platings available to increase the corrosion resistance
- Low profile head allows near flush fit to application
- Closed end prevents the ingress of dirt and fluids into thread and electrical circuits
- Can be used with hand tools, pneumatic tools and fully automated machines to suit a wide range of assembly methods

## Specifications

Thread Sizes:

M3 – M10

Materials:

Steel, stainless steel

Head Style:

Low profile

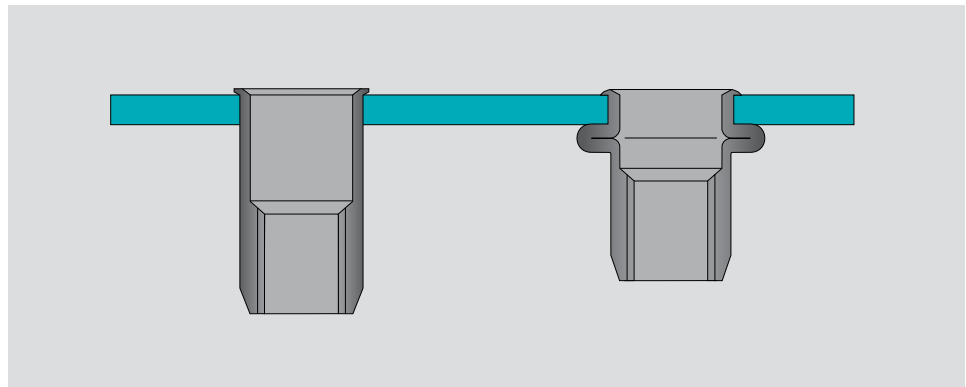
Option:

Closed end

Hole Size:

Imperial

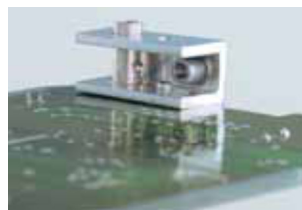
## Typical placing sequence



Please visit our website [www.StanleyEngineeredFastening.com](http://www.StanleyEngineeredFastening.com) for fastener placing animations.

## Assembly applications

- Automotive
- Electrical engineering
- Electronic components
- Sheet metal
- Domestic appliances
- General light fabrication



# Hexsert® / Euro Hexsert®



Blind rivet nuts with hexagonal body, providing high torque-to-turn and pull-out performance, particularly in soft metals.



## Key features and benefits

- Hexagonal section and bore improves torque-to-turn in components via form lock when compared to round and splined rivet nuts
- Superior pull-out performance
- Can be used for very thin sheet materials from 0.50 mm (0.02")
- Double diameter body and lead-in chamfer provide easy insertion into hole
- Access needed from only one side of the application, for high speed assembly
- Various platings available to increase corrosion resistance
- Low profile head allows near flush fit to application
- Large flange head provides a load bearing surface and reinforces the hole to prevent push-out. Can be used as a spacer and can be supplied with an under-head seal.
- Can be used with hand tools, pneumatic tools and fully automated machines to suit a wide range of assembly methods

## Specifications

Thread Sizes:

M3 – M12

Materials:

Steel, stainless steel

Head Styles:

Low profile, large flange

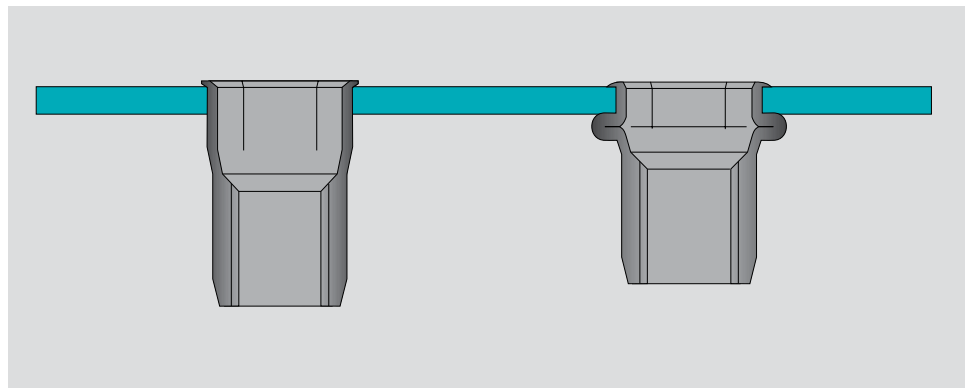
Body:

Hexagonal

Hole Size:

Metric and imperial options

## Typical placing sequence



Please visit our website [www.StanleyEngineeredFastening.com](http://www.StanleyEngineeredFastening.com) for fastener placing animations.

- Automotive chassis components
- Electrical engineering
- Sheet metal
- Domestic appliances
- Switchgear cabinets
- Thermal applications





# High Strength Hexsert®



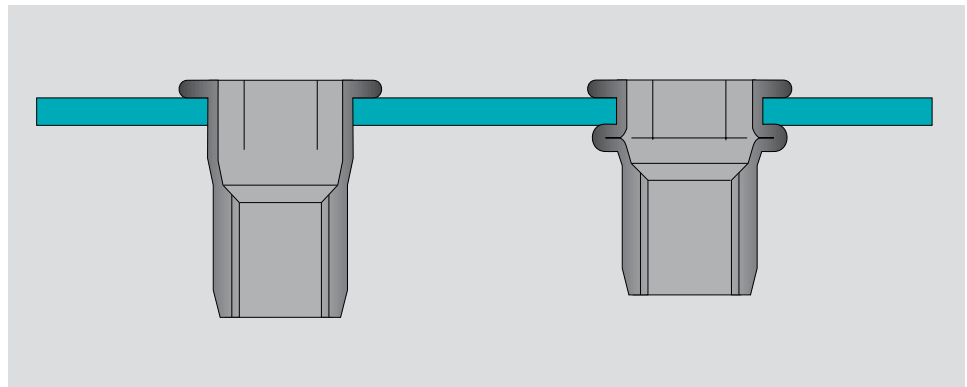
High Strength Hexsert® provides clamp force comparable to weld nuts and clinch nuts in high torque applications. They offer equivalent thread proof load strength to ISO898 Property Class10 weld nuts and clinch nuts, and can handle tightening torques commonly applied to Property Class10.9 and 12.9 screws and bolts.



## Key features and benefits

- Exceptional torque capability
- High speed assembly
- Provides high-strength threads in thin materials starting at 0.5mm
- Increased thread strength
- If excessive torque is applied, the screw shank should fail before the rivet nut, avoiding over-tightening problems such as thread stripping and expensive rework
- Installed with standard handtools, as well as multi-head and auto-feed robotic systems

## Typical placing sequence



Please visit our website [www.StanleyEngineeredFastening.com](http://www.StanleyEngineeredFastening.com) for fastener placing animations.

## Assembly applications

- Tubular steel
- Hydroformed parts
- Magnesium castings
- Aluminum extrusions





## Key features and benefits

- Square section and bore improves torque-to-turn in components via form lock due to even greater contact surface compared to round and splined rivet nuts
- Increases hole punch life compared to hexagonal geometries
- Superior pull-out performance
- Can be used for very thin sheet materials from 0.50mm (0.02")
- Various platings available to increase corrosion resistance
- Large flange head provides a load bearing surface and reinforces the hole to prevent push-out
- Can be used as a spacer and can be supplied with an underhead seal
- Can be used with hand tools, pneumatic tools and fully automated machinery to suit a wide range of assembly methods

## Specifications

Thread Sizes:

M5 – M8

Material:

Steel

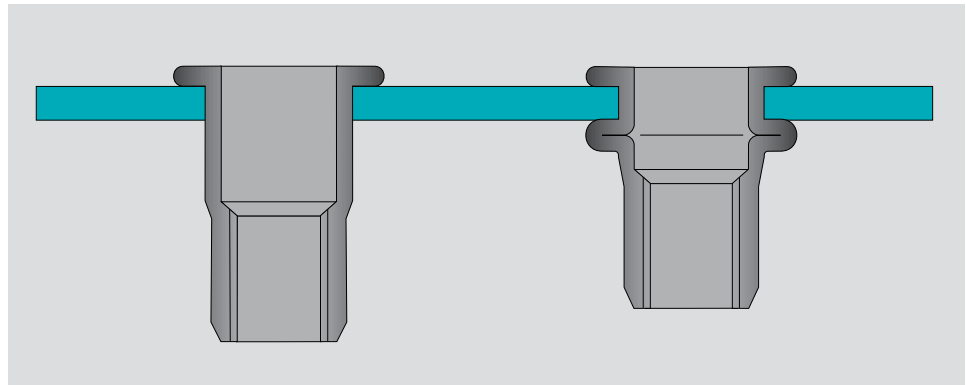
Head Style:

Large flange

Hole Size:

Metric

## Typical placing sequence



Please visit our website [www.StanleyEngineeredFastening.com](http://www.StanleyEngineeredFastening.com) for fastener placing animations.

## Assembly applications

- Automotive body mountings
- Electrical enclosures
- Soft sheet metal
- Plastics & composites
- Domestic appliances
- General light fabrication



# Versa-Nut®



Versa-Nut rivet nuts are designed for blind-sided use in soft materials, plastics and composites. Versa-Nut rivet nuts have a higher pull out and torque-to-turn resistance than most alternative blind rivet nuts. The rivet nut's higher strength allows designers to reduce the size or number of fasteners in an assembly and because it features a grip range far greater than that of a standard rivet nut, it suits a wide number of applications.



## Key features and benefits

- Specially designed for use in soft or weak materials, plastics, composites, or very thin panels
- Large head sizes spread clamp load of assembled joint

Additional benefits against conventional rivet nuts:

- Extra large blind side bearing area after placing offers:
  - Higher pull-out and torque-to-turn resistance
  - Less radial loading of holes in brittle materials
  - Less risk of cracking and de-lamination of composites
- Up to twice the grip range of standard blind rivet nuts:
  - Enables a designer to reduce the size or number of fasteners in an assembly
  - Covers large variations of thicknesses

## Specifications

Thread Sizes:

M5 – M8

Material:

Steel

Head Style:

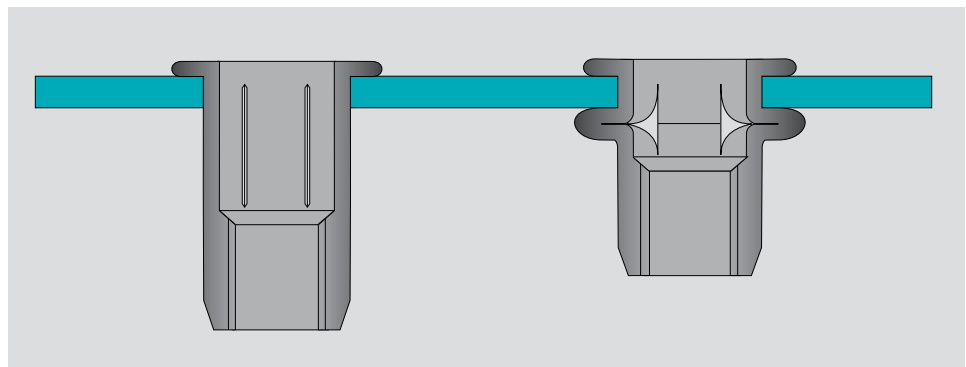
Large flange

Body:

Round

Hole Size:

Imperial



Please visit our website [www.StanleyEngineeredFastening.com](http://www.StanleyEngineeredFastening.com) for fastener placing animations.

## Assembly applications

- Blow-molded automotive parts and trim fixings
- Sandwiched sections, and composite panels in truck, bus, caravan and marine interiors
- General composite and plastic sections for toys
- Small domestic appliances
- Containers
- Display panels
- Plastic furniture
- Fiberboard and plywood assemblies



# Jack Nut<sup>®</sup>



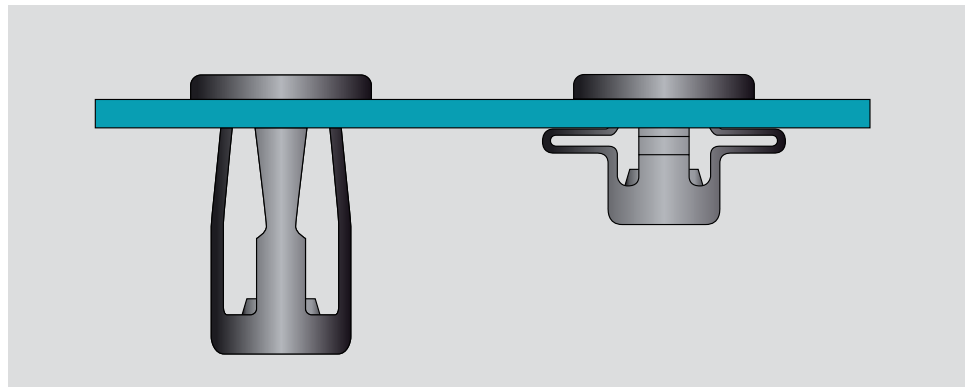
The JackNut fastener is a flat head slotted body blind rivet nut designed to be installed in soft or brittle materials such as plastic, paper or glass. Its four legs expand behind the parent material providing excellent pull out resistance especially in soft materials.



## Specifications

Thread Sizes:  
M4 – M6  
Material:  
Steel  
Head Style:  
Standard flange

## Typical placing sequence



## Assembly applications

- Automotive
- Plastic furniture
- General composites
- Containers





## Key features and benefits

- Provides an excellent vibration-isolating effect to absorb vibration and noise
- Ability to seal liquids and gases. Particularly suited for use in low pressure environments
- Exhibits excellent electrical insulation properties
- Large flange feature increases the bearing surface for weaker/thinner materials
- Multiple base materials can be fastened effectively
- Stable fastening strength can be achieved even in a blind hole or deep hole
- Available in a neoprene-rubber as standard or EPDM. Neoprene-rubber offers stable strength and exhibits average levels of all beneficial properties. EPDM is particularly suitable in an outdoor environment where the nut must provide weather resistance, ozone resistance etc.
- Installed when the mating screw is tightened using a screwdriver to recommended torque

## Specifications

Thread Sizes:

M3 – M8

Materials:

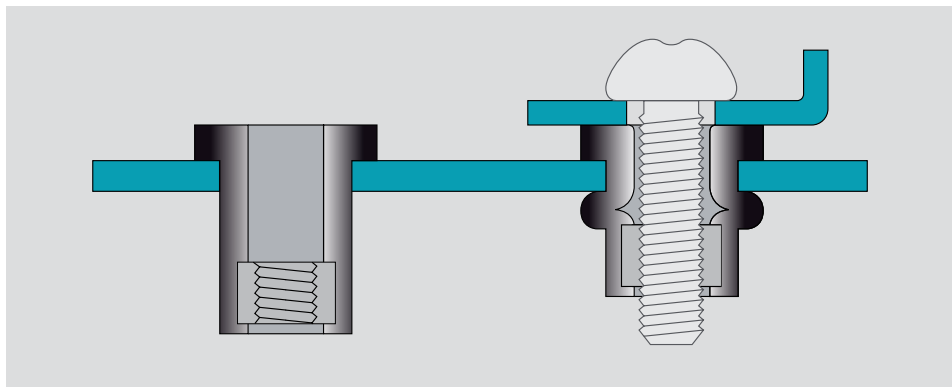
Neoprene-rubber,

EPDM option

Head Styles:

Standard flange, large flange

## Typical placing sequence



## Assembly applications

- Automotive
- Agriculture machinery
- Recreational vehicles
- Electronic components



# Installation Tools

## Tool Selection Guide

This table is designed as a guide to help you select the most suitable tool for your particular rivet nut.

Please note that all tools require fastener specific nose assemblies.

Full technical data can also be found on our website or contact your STANLEY Engineered Fastening representative.

| Rivet Nut Type           | Thread Size | Power Tools     |                 |                 |                 |       | Hand Tools      |         |                 |                 |
|--------------------------|-------------|-----------------|-----------------|-----------------|-----------------|-------|-----------------|---------|-----------------|-----------------|
|                          |             | ProSert® XTN20  | 74200           | PNT1000L PC     | 74401           | 74405 | PNT110          | PNT210  | PNT310          | PNT410          |
| Eurosert®                | M3          | •               | • <sup>1)</sup> |                 | • <sup>1)</sup> |       | •               |         |                 |                 |
|                          | M4          | •               | • <sup>1)</sup> |                 | • <sup>1)</sup> |       | •               | •       | •               |                 |
|                          | M5          | •               | • <sup>1)</sup> |                 | • <sup>1)</sup> |       | •               | •       | •               | •               |
|                          | M6          | •               | • <sup>1)</sup> | • <sup>1)</sup> | • <sup>1)</sup> |       | • <sup>3)</sup> | •       | •               | •               |
|                          | M8          | •               | • <sup>1)</sup> | •               | •               |       |                 | •       | •               | •               |
|                          | M10         | •               | •               | •               | •               |       |                 | •       | • <sup>3)</sup> | •               |
| Nutsert®                 | M3          | •               | • <sup>1)</sup> |                 | • <sup>1)</sup> |       | •               |         |                 |                 |
|                          | M4          | •               | • <sup>1)</sup> |                 | • <sup>1)</sup> |       | •               | •       | •               |                 |
|                          | M5          | •               | • <sup>1)</sup> |                 | • <sup>1)</sup> |       | •               | •       | •               | •               |
|                          | M6          | •               | • <sup>1)</sup> | • <sup>1)</sup> | • <sup>1)</sup> |       |                 | •       | •               | •               |
|                          | M8          | •               | • <sup>1)</sup> | •               | •               |       |                 | •       | •               | •               |
|                          | M10         | •               | •               | •               | •               |       |                 | •       | • <sup>3)</sup> | •               |
| Hexsert® / Euro Hexsert® | M3          | •               | • <sup>1)</sup> |                 | • <sup>1)</sup> |       | •               |         |                 |                 |
|                          | M4          | •               | • <sup>1)</sup> |                 | • <sup>1)</sup> |       | •               | •       | •               |                 |
|                          | M5          | •               | • <sup>1)</sup> |                 | • <sup>1)</sup> |       | •               | •       | •               | •               |
|                          | M6          | •               | • <sup>1)</sup> | • <sup>1)</sup> | • <sup>1)</sup> |       |                 | •       | •               | •               |
|                          | M8          | •               | • <sup>1)</sup> | •               | •               |       |                 | •       | •               | •               |
|                          | M10         |                 | •               | •               | •               |       |                 | •       | • <sup>3)</sup> | •               |
|                          | M12         |                 | •               | •               |                 |       |                 | •       |                 | • <sup>3)</sup> |
| High Strength Hexsert®   | M6          | •               | • <sup>1)</sup> | • <sup>1)</sup> | • <sup>1)</sup> |       |                 |         |                 |                 |
|                          | M8          | •               | • <sup>1)</sup> | •               | •               |       |                 |         |                 |                 |
|                          | M10         |                 | •               | •               | •               |       |                 |         |                 |                 |
|                          | M12         |                 | •               | •               |                 |       |                 |         |                 |                 |
| Squaresert®              | M5          | •               | • <sup>1)</sup> |                 | • <sup>1)</sup> |       |                 | •       | •               | •               |
|                          | M6          | •               | • <sup>1)</sup> | • <sup>1)</sup> | • <sup>1)</sup> |       |                 | •       | •               | •               |
|                          | M8          | •               | • <sup>1)</sup> | •               | • <sup>1)</sup> |       |                 | •       | •               | •               |
| Versa-Nut®               | M5          | • <sup>2)</sup> |                 |                 |                 | •     |                 |         |                 |                 |
|                          | M6          | • <sup>2)</sup> |                 | • <sup>1)</sup> |                 | •     |                 |         |                 |                 |
|                          | M8          | • <sup>2)</sup> |                 | •               |                 | •     |                 |         |                 |                 |
|                          |             |                 |                 |                 |                 |       | JNT2200         | JNT2400 |                 |                 |
| JackNut®                 | M4          |                 |                 |                 |                 |       | •               | •       |                 |                 |
|                          | M5          |                 |                 |                 |                 |       | •               | •       |                 |                 |
|                          | M6          |                 |                 |                 |                 |       | •               | •       |                 |                 |

<sup>1)</sup> This model is not preferred for the installation of this thread size

<sup>2)</sup> Two tool actuations may be needed to fully place the insert

<sup>3)</sup> No stainless steel

# Power Tools

## ProSert® XTN20 model

The combined world-class innovations from POP& Avdel created a high speed, lightweight tool with great strength, endurance, excellent ergonomics and optimal flexibility – responding to the latest and highest standards in tool manufacturing. Dual operating mode technology (pull-to-force & pull-to-stroke) ensures enhanced productivity, improving your return on investment with the lowest installation cost per fastener.

- Placing capability: recommended for blind rivet nuts from M3 up to M10
- Flexible operation in both pull-to-force or pull-to-stroke modes
- High force-to-weight ratio of 11.1 kN/kg
- Less than 1.5 sec. per complete setting
- Long lasting hydraulic lip seals maximise re-priming intervals
- Convenient reverse spin-out button
- Easy to use tool free, quick installation mandrel system - patent applied for<sup>#</sup>
- Can be modified to be mounted on a pantograph arm

<sup>#</sup> UK Patent application number - 1418586.2  
Community design registration number - 1423230



### Specifications

|                             |           |
|-----------------------------|-----------|
| Weight incl. nose equipment | 1.59 kg   |
| Stroke                      | 3 - 7 mm  |
| Pull force @5.0bar          | 17.65 kN  |
| Air supply pressure         | 5 - 7 bar |

## 74200 model

A high performance hydro-pneumatic power tool in heavy duty plastic, with pulling stroke adjustment, designed for rapid, blind sided installation of larger blind rivet nuts.

- Placing capability: recommended for blind rivet nuts from M10 up to M12
- Heavy duty plastic tool body and long-life components provide a durable and robust construction for a long working life. Ideal for demanding production environments
- The ergonomic design provides for reduced operator fatigue and increased productivity
- Latest 'spin-pull' technology ensures accurate and secure thread installation and reduces wear on the drive screw
- Lightweight design makes it portable and easy to handle
- Tool uses pull-to-stroke technology



### Specifications

|                               |           |
|-------------------------------|-----------|
| Weight without nose equipment | 2.2 kg    |
| Height                        | 280 mm    |
| Stroke                        | 7 mm      |
| Pull force @5.0bar            | 19.1 kN   |
| Air supply pressure           | 5 - 7 bar |



# Power Tools

## PNT1000L-PCmodel

High capacity Pneumatic Control (PC) blind rivet nut tool. The POPNut® Pneumatic Control function selects the appropriate stroke required, allowing the operator to set the same insert in a range of application thicknesses without pausing to adjust stroke manually.

- Designed to place blind rivet nuts from M6 up to M12
- Tool uses pull-to-force technology
- Automatic stroke adjustment suits various thicknesses within a grip range
- Consistent setting achieved in varying application conditions
- Fast cycle time with single trigger action for setting and spin-off
- Quick-change mandrel and nosepiece design
- Eliminates potential application and nut damage due to double stroking
- Lightweight, compact structure for operator comfort



### Specifications

|                     |               |
|---------------------|---------------|
| Weight              | 2.77 kg       |
| Height              | 295 mm        |
| Stroke              | 1.3 - 10.5 mm |
| Pull force @5.0bar  | 24.3 kN       |
| Air supply pressure | 4.9 - 5.9 bar |

## 74401 split tool

A hydro-pneumatic power tool with separated intensifier creating a high pull force enabling the fitting of a variety of rivet nuts. The 74401's compact and ergonomic design has a long life span with low maintenance requirements.

- Split tool offering a lightweight placing head
- Designed to place rivet nuts up to M12
- The ergonomic design provides for reduced operator fatigue
- Generates high pull forces
- Longer tool life and lower maintenance



### Specifications

|   |           |
|---|-----------|
| Weight of tool without nose equipment or hose | 2.0 kg    |
| Stroke  | 12 mm     |
| Pull force @5.0bar                            | 35.9 kN   |
| Air supply pressure                           | 4 - 7 bar |
| Intensification ratio                         | 5:1       |

# Power Tools

## 74405 split tool

A high performance hydro-pneumatic power tool designed for installing rivet nuts requiring more setting stroke. This tool offers a greater amount of stroke, whilst maintaining lightweight and ergonomic features as a result of the split intensifier.

- Split tool offering a lightweight placing head
- Designed to place Versa-Nut® blind rivet nuts up to M10
- High placement speed for increased productivity
- The ergonomic design provides for reduced operator fatigue
- Robust tool with ease to maintenance



### Specifications

|   |           |
|---|-----------|
| Weight of tool without nose equipment or hose | 2.0 kg    |
| Stroke  | 16 mm     |
| Pull force @5.5bar                            | 13.84 kN  |
| Air supply pressure                           | 5 - 7 bar |

## 74290 tool for hexagonal hole production

The 74290 tool compliments and extends the range of our hand tools for installing rivet nuts, by offering the capability of producing hexagonal holes for Hexsert® rivet nuts into materials where access is only possible from one side. The 74290 tool allows customers to benefit from the non-rotational properties of hexagonal rivet nuts compared with round rivet nuts. This is achieved by drilling a round hole, then inserting the 74290 tool and forming a hex hole.



### Specifications

|                               |           |
|-------------------------------|-----------|
| Weight without nose equipment | 2.2 kg    |
| Height                        | 300 mm    |
| Stroke                        | 6.5 mm    |
| Pull force @5.0bar            | 23.5 kN   |
| Air supply pressure           | 5 - 7 bar |

# Hand Tools

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The POPAvdel range of hand tools have been designed to offer the user the best features available in the market today. The range of professional hand tools, including hand plier and lever tools, are lightweight, robust and easy to use. They are ideal for light engineering work, maintenance and repair. All tools feature a quick change mandrel and nosepiece design, and adjustable mandrel protrusion.

## PNT110- Professional Hand Plier

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Professional standard tool, robust cast aluminium and steel design. Ideal for maintenance, repair and site work.

- Placing capacity: M3 up to M6 aluminium, M5 steel and stainless steel
- Contoured handle grips for comfort
- Weight: 0.8 kg | Length: 240 mm
- Supplied with mandrel and nosepiece sizes M3 - M6



## PNT210- Ratchet Tool

---

Heavy duty high capacity tool with placing capacity up to M12 stainless steel.

- Placing capacity: M4 up to M12
- Heavy duty steel construction
- Weight: 1.3 kg | Length: 210 mm
- Supplied with mandrel and nosepiece sizes M6 - M12



## PNT310- Spindle Lever Tool

---

Professional lever tool in heavy duty steel construction provides optimum pulling force.

- Placing capacity: M4 up to M12 aluminium, M10 steel & M8 stainless steel
- Quick-reverse spin arm for fast withdrawal from set rivet nuts
- Stroke adjustment with scaled display
- Weight: 2.4 kg | Length: 555 mm
- Supplied with mandrel and nosepiece sizes M5 - M10



## PNT410- Lever Tool

---

Long lever tool with optimum pulling force for placing up to M12 Steel and M10 Stainless Steel.

- Placing capacity: M5 up to M12 steel, M10 stainless steel
- Professional standard, heavy duty steel construction
- Stroke adjustment with scaled display
- Weight: 2.1 kg | Length: 580 mm
- Supplied with mandrel and nosepiece sizes M5 - M12



## JackNut Tools

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### JNT2200

A hand operated tool with simple 2 handle setting mechanism that can install the full range of JackNut products.



### JNT2400

A stroke controlled tool that installs the full range of JackNut products.



# Assembly Workstations

## ProSert® XTN20 Vertical or Pantograph Workstation Kit

The ergonomic Remote Handle Kit for the ProSertXTN20 power tool enables it to be used pantograph mounted.

- Vertical orientated riveting axis
- Riveting cycle initiated by low force forefinger triggering
- Rotating handle along riveting axis allowing to follow the assembly sequence with one hand
- Short-cycle trigger air supply connected to the original setting tool pneumatic part
- Can be mounted on linear or articulated arm



## Vertical Rivet Nut Hydraulic Module

This hydraulic module has been specifically designed for vertical down applications. The pneumatic control and the pneumatic-hydraulic intensifier are installed in a separate switchbox. The trigger is integrated in the ergonomic handle at the module barrel.

- Ergonomic handling for vertical installation positions
- Gentle and reliable installation
- Simple positioning of the module
- Quick and easy handling
- Can be mounted on a pantograph arm
- Placing capability ranges from M3 to M10



Vertical tool mounted on a pantograph arm (optional).

## Customised Assembly Systems

### Multi-head Workstation (semi automated)

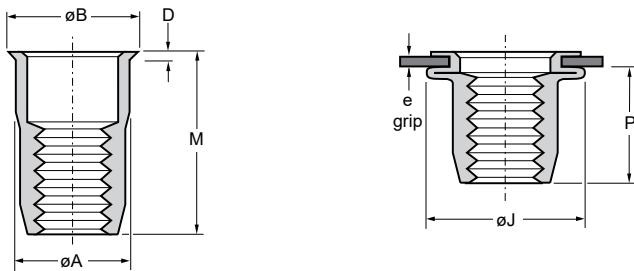
Designed for multiple and synchronous placement of rivet nuts. The example shows a station for placing 6 x M5 Hexsert® rivet nuts for different applications, including process monitoring of part and rivet nut presence and rivet nut placed diagnostic. These customised multi-head workstations can dramatically reduce assembly time and cost at improved quality.






| English      | Français         | Deutsch            | Italiano        | Español         |
|--------------|------------------|--------------------|-----------------|-----------------|
| Low profile  | Auto-affleurante | Extra kleiner Kopf | Testa a fila    | Sin ala         |
| Splined body | Fût cannelé      | Gerändelter Schaft | Corpo zigrinato | Cuerpo estriado |
| Aluminium*   | Aluminium*       | Aluminium*         | Alluminio*      | Aluminio*       |

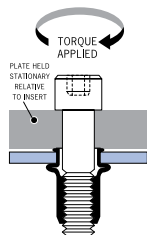
\* : AA5056



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |      |  | øA<br>max. | øB<br>max. | D<br>±0.20 | øJ<br>max. | M<br>nom. | P<br>max. | Part No/ref |
|--|----------|------|--|------------|------------|------------|------------|-----------|-----------|-------------|
|  | min.     | max. |  |            |            |            |            |           |           |             |
| M4 x 0.7   | 0.5      | 3.0  | 6.0  | 5.95       | 7.1        | 0.6        | 8.7        | 10.3      | 6.3       | 0GM65-24030 |
| M5 x 0.8   | 0.5      | 3.0  | 7.0  | 6.95       | 8.1        | 0.6        | 10.1       | 11.8      | 7.5       | 0GM65-25030 |
| M6 x 1.0   | 0.5      | 3.0  | 9.0  | 8.95       | 10.1       | 0.6        | 12.5       | 14.3      | 9.2       | 0GM65-26030 |
| M8 x 1.25  | 0.5      | 3.0  | 11.0   | 10.95      | 12.1       | 0.6        | 14.9       | 15.8      | 10.3      | 0GM65-28030 |

all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

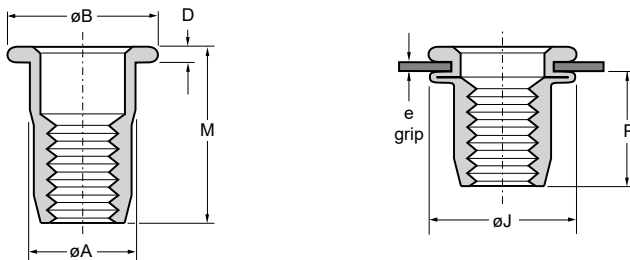
| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | Recommended max.<br>torque<br>Nm max. |
|--|---------------------------------------|
| M4 x 0.7   | 4.0                                   |
| M5 x 0.8   | 5.0                                   |
| M6 x 1.0   | 10.0                                  |
| M8 x 1.25  | 14.0                                  |






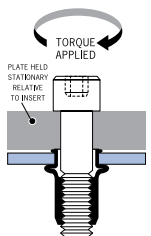
| English      | Français     | Deutsch            | Italiano        | Español         |
|--------------|--------------|--------------------|-----------------|-----------------|
| Large flange | A collerette | Flachkopf          | Flangiato       | Ala ancha       |
| Splined body | Fût cannelé  | Gerändelter Schaft | Corpo zigrinato | Cuerpo estriado |
| Aluminium*   | Aluminium*   | Aluminium*         | Alluminio*      | Aluminio*       |

\* : AA5056



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |      | <br>+0.1/-0 | øA<br>max. | øB<br>max. | D<br>±0.13 | øJ<br>max. | M<br>nom. | P<br>max. | Part No/ref |
|--|----------|------|---|------------|------------|------------|------------|-----------|-----------|-------------|
|  | min.     | max. |   |            |            |            |            |           |           |             |
| M4 x 0.7   | 0.5      | 3.0  | 6.0   | 5.95       | 9.1        | 1.0        | 8.6        | 11.3      | 6.8       | 0GM66-24030 |
| M5 x 0.8   | 0.5      | 3.0  | 7.0   | 6.95       | 10.1       | 1.0        | 10.0       | 13.3      | 8.3       | 0GM66-25030 |
| M6 x 1.0   | 0.5      | 3.0  | 9.0   | 8.95       | 12.1       | 1.5        | 12.5       | 16.3      | 10.5      | 0GM66-26030 |
| M8 x 1.25  | 0.5      | 3.0  | 11.0  | 10.95      | 15.1       | 1.5        | 15.1       | 17.8      | 10.7      | 0GM66-28030 |
| M10 x 1.5  | 0.5      | 3.0  | 12.0  | 11.95      | 16.1       | 2.0        | 16.9       | 19.3      | 11.7      | 0GM66-20030 |

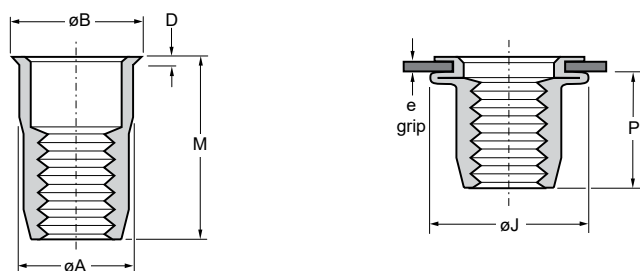
all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros


| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | <br>Recommended max.<br>torque<br>Nm max. |
|--|--|
| M4 x 0.7   | 4.0  |
| M5 x 0.8   | 5.0  |
| M6 x 1.0   | 10.0   |
| M8 x 1.25  | 14.0   |
| M10 x 1.5  | 19.0   |



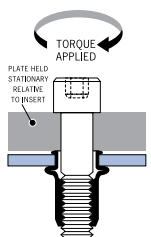
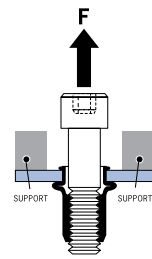
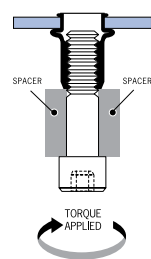
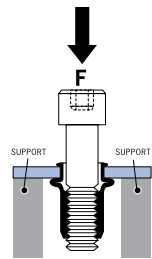
| English                    | Français                      | Deutsch                    | Italiano                            | Español                  |
|----------------------------|-------------------------------|----------------------------|-------------------------------------|--------------------------|
| Low profile                | Auto-affleurante              | Extra kleiner Kopf         | Testa a fila                        | Sin ala                  |
| Splined body               | Fût cannelé                   | Gerändelter Schaft         | Corpo zigrinato                     | Cuerpo estriado          |
| Low carbon steel*          | Acier bas carbone*            | Stahl*                     | Acciaio a bassoteneore di carbonio* | Acero bajo en carbono*   |
| Zinc plated                | Revêtement zingué             | Verzinkt                   | Zincato                             | Zincado                  |
| Clear trivalent passivated | Passivation claire trivalente | Klar chromatiert, Cr6-frei | Passivazione chiara trivalente      | Pasivadoclaro trivalente |

\* : DIN EN 10263-2 Qst 34-3, BSEN/DIN 10263-2 C8C, Werkstoff 1.0213, SAE 1008



| Thread filetage / Gewinde / filetto / rosca | e (grip) |      |  +0.1/-0 | øA max. | øB max. | D ±0.13 | øJ max. | M nom. | P max. | Part No/ref |
|---|----------|------|--|---------|---------|---------|---------|--------|--------|-------------|
|   | min.     | max. |  |         |         |         |         |        |        |             |
| M4 x 0.7                                    | 0.25     | 2.00 | 6.0  | 5.97    | 6.7     | 0.46    | 8.8     | 11.3   | 7.1    | 39006-74020 |
| M5 x 0.8                                    | 0.25     | 3.00 | 7.0  | 6.97    | 7.8     | 0.46    | 10.2    | 12.7   | 7.9    | 39006-75030 |
| M6 x 1.0                                    | 0.50     | 3.00 | 9.0  | 8.97    | 10.2    | 0.50    | 12.7    | 15.3   | 9.4    | 39006-76030 |
|   | 3.00     | 5.50 |  |         |         |         |         | 17.8   |        | 39006-76055 |
| M8 x 1.25                                   | 0.50     | 3.50 | 11.0   | 10.97   | 12.2    | 0.63    | 15.0    | 17.3   | 11.0   | 39006-78035 |
|   | 3.50     | 6.00 |  |         |         |         |         | 19.8   |        | 39006-78060 |
| M10 x 1.5                                   | 1.00     | 3.50 | 13.0   | 12.97   | 14.2    | 0.63    | 17.5    | 20.4   | 14.5   | 39006-70035 |

all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

| Thread filetage / Gewinde / filetto / rosca | <br>Recommended max. torque<br>Nm max. | <br>Pull-out*<br>kN | <br>Torque-to-turn*<br>Nm min. | <br>Push-out*<br>kN |
|---|---|--|---|--|
| M4 x 0.7                                    | 5.1   | 3.6  | 2.0   | 1.2  |
| M5 x 0.8                                    | 7.9   | 7.8  | 2.8   | 1.4  |
| M6 x 1.0                                    | 12.4  | 15.8   | 5.0   | 2.6  |
| M8 x 1.25                                   | 32.0  | 18.1   | 9.1   | 3.5  |
| M10 x 1.5                                   | 45.0  | 20.8   | 16.7  | 3.9  |

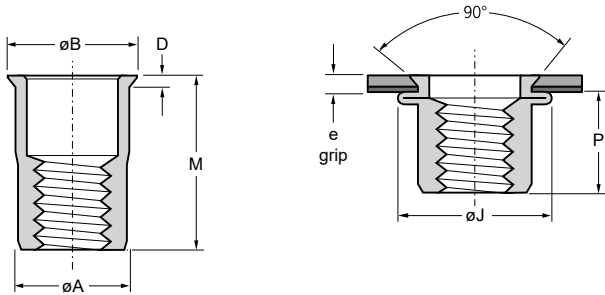
\* Values shown are typical and should be validated in the application / Les valeurs indiquées sont typiques et doivent être validées dans l'application / Die angegebenen Werte sind typisch und müssen in der Anwendung validiert werden / I valori riportati sono tipici e devono essere convalidati nella applicazione / Los valores mostrados son típicos y deben ser validados en la aplicación





| English                    | Français                      | Deutsch                    | Italiano                           | Español                  |
|----------------------------|-------------------------------|----------------------------|------------------------------------|--------------------------|
| 90° Countersunk            | 90° Tête fraisée              | 90° Senkkopf               | 90° Testa svasata                  | 90° Cabeza avellanada    |
| Splined body               | Fût cannelé                   | Gerändelter Schaft         | Corpo zigrinato                    | Cuerpo estriado          |
| Low carbon steel*          | Acier bas carbone*            | Stahl*                     | Acciaio a bassoteneur di carbonio* | Acero bajo en carbono*   |
| Zinc plated                | Revêtement zingué             | Verzinkt                   | Zincato                            | Zincado                  |
| Clear trivalent passivated | Passivation claire trivalente | Klar chromatiert, Cr6-frei | Passivazione chiara trivalente     | Pasivadoclaro trivalente |

\* : SAE 1008



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |      | <br>+0.1/-0 | øA<br>max. | øB<br>max. | D<br>±0.13 | øJ<br>max. | M<br>nom. | P<br>max. | Part No/ref |
|--|----------|------|-------------|------------|------------|------------|------------|-----------|-----------|-------------|
|  | min.     | max. |             |            |            |            |            |           |           |             |
| M4 x 0.7   | 1.5      | 4.0  | 6.0         | 5.95       | 8.5        | 1.4        | 8.9        | 12.8      | 8.1       | 0GM94-24040 |
| M5 x 0.8   | 1.5      | 4.0  | 7.0         | 6.95       | 9.5        | 1.4        | 9.9        | 13.8      | 8.9       | 0GM94-25040 |
| M6 x 1.0   | 1.5      | 4.0  | 9.0         | 8.95       | 11.5       | 1.4        | 12.4       | 15.8      | 10.3      | 0GM94-26040 |
| M8 x 1.25  | 1.5      | 4.0  | 11.0        | 10.95      | 13.5       | 1.4        | 14.9       | 18.8      | 12.9      | 0GM94-28040 |

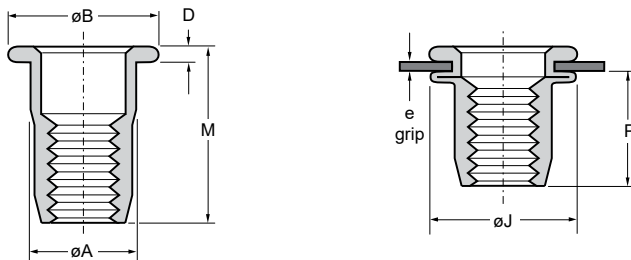
all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros


| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | <br>Recommended max.<br>torque<br>Nm max. |
|--|---|
| M4 x 0.7   | 4.2                                       |
| M5 x 0.8   | 6.0                                       |
| M6 x 1.0   | 12.4                                      |
| M8 x 1.25  | 25.0                                      |



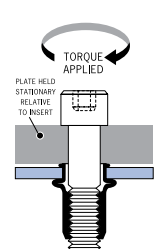
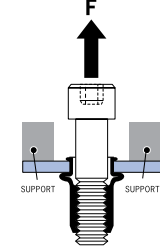
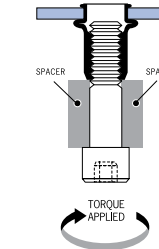
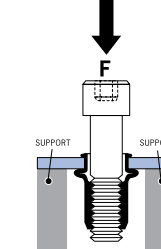
| English                    | Français                         | Deutsch                       | Italiano                              | Español                  |
|----------------------------|----------------------------------|-------------------------------|---------------------------------------|--------------------------|
| Large flange               | A collerette                     | Flachkopf                     | Flangiato                             | Ala ancha                |
| Splined body               | Fût cannelé                      | Gerändelter Schaft            | Corpo zigrinato                       | Cuerpo estriado          |
| Low carbon steel*          | Acier bas carbone*               | Stahl*                        | Acciaio a bassoteneur<br>di carbonio* | Acero bajo en carbono*   |
| Zinc plated                | Revêtement zingué                | Verzinkt                      | Zincato                               | Zincado                  |
| Clear trivalent passivated | Passivation claire<br>trivalente | Klar chromatiert,<br>Cr6-frei | Passivazione chiara<br>trivalente     | Pasivadoclaro trivalente |

\* : DIN EN 10263-2 Qst 34-3, BSEN/DIN 10263-2 C8C, Werkstoff 1.0213, SAE 1008



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |      | <br>+0.1/-0 | øA<br>max. | øB<br>max. | D<br>±0.13 | øJ<br>max. | M<br>nom. | P<br>max. | Part No/ref |
|--|----------|------|---|------------|------------|------------|------------|-----------|-----------|-------------|
|  | min.     | max. |   |            |            |            |            |           |           |             |
| M3 x 0.5   | 0.25     | 2.00 | 5.0   | 4.95       | 8.2        | 0.75       | 7.4        | 10.5      | 6.0       | 09408-72314 |
| M4 x 0.7   | 0.25     | 3.00 | 6.0   | 5.95       | 9.2        | 0.75       | 8.8        | 11.5      | 7.1       | 09408-72415 |
|  | 3.00     | 4.50 |   |            |            |            |            | 13.0      |           | 09408-72417 |
| M5 x 0.8   | 0.25     | 3.00 | 7.0   | 6.95       | 10.2       | 1.00       | 10.2       | 13.0      | 7.9       | 09408-72517 |
|  | 3.00     | 5.50 |   |            |            |            |            | 15.5      |           | 09408-72520 |
| M6 x 1.0   | 0.50     | 3.00 | 9.0   | 8.95       | 13.2       | 1.50       | 12.7       | 16.0      | 9.4       | 09408-72621 |
|  | 3.00     | 5.50 |   |            |            |            |            | 18.5      |           | 09408-72623 |
| M8 x 1.25  | 0.50     | 3.00 | 11.0  | 10.95      | 16.4       | 1.50       | 15.0       | 17.5      | 11.0      | 09408-72822 |
|  | 3.00     | 5.50 |   |            |            |            |            | 20.0      |           | 09408-72825 |
| M10 x 1.5  | 0.50     | 3.50 | 13.0  | 12.95      | 18.9       | 2.25       | 17.5       | 22.0      | 14.5      | 09408-72028 |
|  | 3.50     | 6.00 |   |            |            |            |            | 25.0      |           | 09408-72031 |

all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

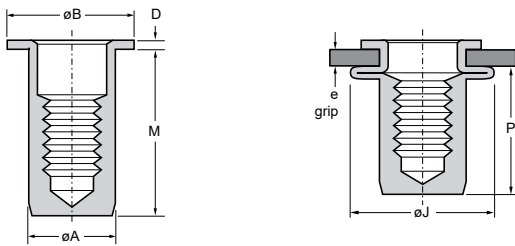
| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | <br>Recommended max.<br>torque<br>Nm max. | <br>Pull-out*<br>kN | <br>Torque-to-turn*<br>Nm min. | <br>Push-out*<br>kN |
|--|--|--|---|---|
| M3 x 0.5   | 1.5  | 4.2  | 1.1   | 1.8   |
| M4 x 0.7   | 5.1  | 5.5  | 2.2   | 2.9   |
| M5 x 0.8   | 7.9  | 8.0  | 3.4   | 4.2   |
| M6 x 1.0   | 12.4   | 10.8   | 4.7   | 6.5   |
| M8 x 1.25  | 32.0   | 12.5   | 6.8   | 7.9   |
| M10 x 1.5  | 45.0   | 17.3   | 16.7  | 10.7  |


\* Values shown are typical and should be validated in the application / Les valeurs indiquées sont typiques et doivent être validées dans l'application / Die angegebenen Werte sind typisch und müssen in der Anwendung validiert werden / I valori riportati sono tipici e devono essere convalidati nella applicazione / Los valores mostrados son típicos y deben ser validados en la aplicación



| English                    | Français                      | Deutsch                    | Italiano                            | Español                  |
|----------------------------|-------------------------------|----------------------------|-------------------------------------|--------------------------|
| Large flange               | A collerette                  | Flachkopf                  | Flangiato                           | Ala ancha                |
| Closed end                 | Borgne                        | Geschlossen                | Fondo cieco                         | Fondo cerrado            |
| Splined body               | Fût cannelé                   | Gerändelter Schaft         | Corpo zigrinato                     | Cuerpo estriado          |
| Low carbon steel*          | Acier bas carbone*            | Stahl*                     | Acciaio a bassoteneore di carbonio* | Acero bajo en carbono*   |
| Zinc plated                | Revêtement zingué             | Verzinkt                   | Zincato                             | Zincado                  |
| Clear trivalent passivated | Passivation claire trivalente | Klar chromatiert, Cr6-frei | Passivazione chiara trivalente      | Pasivadoclaro trivalente |

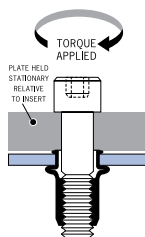
\* : SAE 1008



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |      | <br>+0.1/-0 | øA<br>max. | øB<br>max. | D<br>±0.13 | øJ<br>max. | M<br>nom. | P<br>max. | Part No/ref |
|--|----------|------|---|------------|------------|------------|------------|-----------|-----------|-------------|
|  | min.     | max. |   |            |            |            |            |           |           |             |
| M4 x 0.7   | 0.5      | 3.0  | 6.0   | 5.95       | 9.1        | 1.0        | 8.6        | 16.3      | 11.8      | 0GM55-24030 |
| M5 x 0.8   | 0.5      | 3.0  | 7.0   | 6.95       | 10.1       | 1.0        | 10.0       | 18.8      | 13.8      | 0GM55-25030 |
| M6 x 1.0   | 0.5      | 3.0  | 9.0   | 8.95       | 12.1       | 1.5        | 12.6       | 21.8      | 15.8      | 0GM55-26030 |
| M8 x 1.25  | 0.5      | 3.0  | 11.0  | 10.95      | 15.1       | 1.5        | 15.5       | 26.3      | 19.4      | 0GM55-28030 |

all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

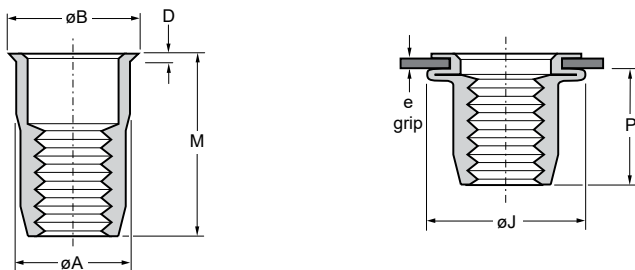
| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | Recommended max.<br>torque<br>Nm max. |
|--|---------------------------------------|
| M4   | 4.0                                   |
| M5   | 6.0                                   |
| M6   | 12.4                                  |
| M8   | 25.0                                  |

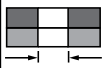




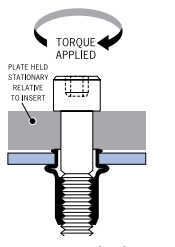
| English          | Français         | Deutsch            | Italiano        | Español           |
|------------------|------------------|--------------------|-----------------|-------------------|
| Low profile      | Auto-affleurante | Extra kleiner Kopf | Testa a fila    | Sin ala           |
| Splined body     | Fût cannelé      | Gerändelter Schaft | Corpo zigrinato | Cuerpo estriado   |
| Stainless steel* | Inox*            | Edelstahl*         | Acciaio inox*   | Acero inoxidable* |

\* : AISI 302



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |      |  | øA<br>max. | øB<br>max. | D<br>±0.2 | øJ<br>max. | M<br>nom. | P<br>max. | Part No/ref |
|--|----------|------|--|------------|------------|-----------|------------|-----------|-----------|-------------|
|  | min.     | max. |  |            |            |           |            |           |           |             |
| M4 x 0.7   | 0.5      | 3.0  | 6.0  | 5.95       | 7.1        | 0.75      | 8.6        | 10.3      | 6.6       | 0GM74-24030 |
| M5 x 0.8   | 0.5      | 3.0  | 7.0  | 6.95       | 8.1        | 0.75      | 9.9        | 11.8      | 7.2       | 0GM74-25030 |
| M6 x 1.0   | 0.5      | 3.0  | 9.0  | 8.95       | 10.1       | 0.75      | 12.6       | 14.3      | 9.0       | 0GM74-26030 |
| M8 x 1.25  | 0.5      | 3.0  | 11.0   | 10.95      | 12.1       | 0.75      | 15.1       | 15.8      | 9.9       | 0GM74-28030 |
| M10 x 1.5  | 0.8      | 3.5  | 13.0   | 12.95      | 14.6       | 0.95      | 17.6       | 19.8      | 13.1      | 0GM74-20035 |

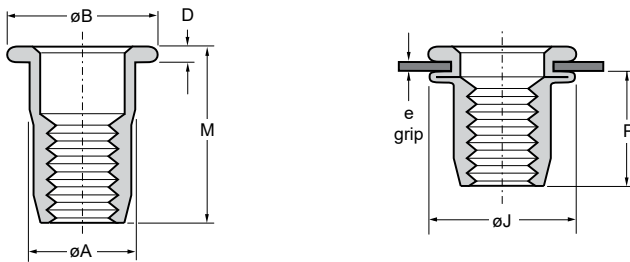
all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros


| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca |  |
|--|---|
| M4 x 0.7   | 5.6   |
| M5 x 0.8   | 10.0  |
| M6 x 1.0   | 15.0  |
| M8 x 1.25  | 30.0  |
| M10 x 1.5  | 35.0  |



| English          | Français     | Deutsch            | Italiano        | Español           |
|------------------|--------------|--------------------|-----------------|-------------------|
| Large flange     | A collerette | Flachkopf          | Flangiato       | Ala ancha         |
| Splined body     | Fût cannelé  | Gerändelter Schaft | Corpo zigrinato | Cuerpo estriado   |
| Stainless steel* | Inox*        | Edelstahl*         | Acciaio inox*   | Acero inoxidable* |

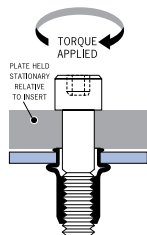
\* : AISI 302



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |      | <br>+0.1/-0 | øA<br>max. | øB<br>max. | D<br>±0.13 | øJ<br>max. | M<br>nom. | P<br>max. | Part No/ref |
|--|----------|------|---|------------|------------|------------|------------|-----------|-----------|-------------|
|  | min.     | max. |   |            |            |            |            |           |           |             |
| M4 x 0.7   | 0.5      | 3.0  | 6.0   | 5.95       | 9.1        | 1.0        | 8.5        | 11.3      | 6.8       | 0GM75-24030 |
| M5 x 0.8   | 0.5      | 3.0  | 7.0   | 6.95       | 10.1       | 1.0        | 10.1       | 13.3      | 8.3       | 0GM75-25030 |
| M6 x 1.0   | 0.5      | 3.0  | 9.0   | 8.95       | 12.1       | 1.5        | 12.5       | 16.3      | 10.6      | 0GM75-26030 |
| M8 x 1.25  | 0.5      | 3.0  | 11.0  | 10.95      | 15.1       | 1.5        | 15.0       | 17.8      | 11.2      | 0GM75-28030 |
|  | 3.0      | 5.5  |   |            |            |            |            | 20.3      |           |             |
| M10 x 1.5  | 0.5      | 3.0  | 13.0  | 12.95      | 16.1       | 2.0        | 17.4       | 19.3      | 11.8      | 0GM75-20030 |

all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

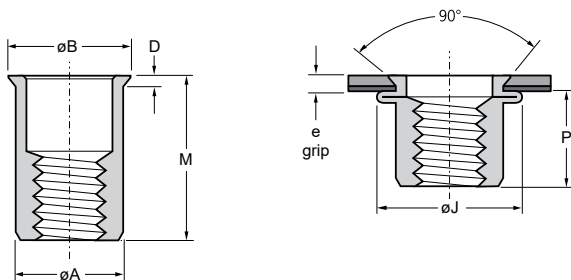
| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | Recommended max.<br>torque<br>Nm max. |
|--|---------------------------------------|
| M4 x 0.7   | 5.6                                   |
| M5 x 0.8   | 10.0                                  |
| M6 x 1.0   | 15.0                                  |
| M8 x 1.25  | 30.0                                  |
| M10 x 1.5  | 35.0                                  |






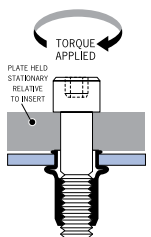
| English          | Français         | Deutsch      | Italiano          | Español               |
|------------------|------------------|--------------|-------------------|-----------------------|
| 90° Countersunk  | 90° Tête fraisée | 90° Senkkopf | 90° Testa svasata | 90° Cabeza avellanada |
| Stainless steel* | Inox*            | Edelstahl*   | Acciaio inox*     | Acero inoxidable*     |

\* : AISI 316



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |      | <br>+0.1/-0 | øA<br>max. | øB<br>max. | D<br>±0.13 | øJ<br>max. | M<br>nom. | P<br>max. | Part No/ref |
|--|----------|------|---|------------|------------|------------|------------|-----------|-----------|-------------|
|  | min.     | max. |   |            |            |            |            |           |           |             |
| M5 x 0.8   | 1.5      | 4.0  | 7.0   | 6.95       | 9.5        | 1.35       | 9.9        | 13.8      | 8.1       | 0GM24-25040 |
| M6 x 1.0   | 1.5      | 4.0  | 9.0   | 8.95       | 11.5       | 1.35       | 12.4       | 15.8      | 10.3      | 0GM24-26040 |
| M8 x 1.25  | 1.5      | 4.0  | 11.0  | 10.95      | 13.5       | 1.35       | 14.9       | 18.8      | 12.9      | 0GM24-28040 |

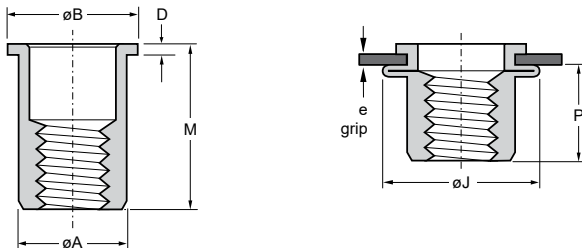
all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | <br>Recommended max.<br>torque<br>Nm max. |
|--|--|
| M5 x 0.8   | 10.0   |
| M6 x 1.0   | 15.0   |
| M8 x 1.25  | 30.0   |



| English          | Français     | Deutsch    | Italiano      | Español           |
|------------------|--------------|------------|---------------|-------------------|
| Large flange     | A collerette | Flachkopf  | Flangiato     | Ala ancha         |
| Stainless steel* | Inox*        | Edelstahl* | Acciaio inox* | Acero inoxidable* |

\* : AISI 316



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |      | <br>+0.1/-0 | øA<br>max. | øB<br>max. | D<br>±0.13 | øJ<br>max. | M<br>nom. | P<br>max. | Part No/ref |
|--|----------|------|-------------|------------|------------|------------|------------|-----------|-----------|-------------|
|  | min.     | max. |             |            |            |            |            |           |           |             |
| M5 x 0.8   | 0.5      | 3.0  | 7.0         | 6.95       | 10.1       | 1.0        | 10.2       | 13.3      | 8.3       | 0GM25-25030 |
| M6 x 1.0   | 0.5      | 3.0  | 9.0         | 8.95       | 12.1       | 1.5        | 12.5       | 16.3      | 10.6      | 0GM25-26030 |
| M8 x 1.25  | 0.5      | 3.0  | 11.0        | 10.95      | 15.1       | 1.5        | 15.0       | 17.8      | 11.2      | 0GM25-28030 |

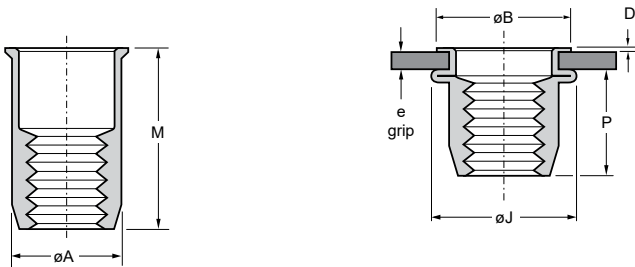
all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | <br>Recommended max.<br>torque<br>Nm max. |
|--|---|
| M5 x 0.8   | 10.0                                      |
| M6 x 1.0   | 15.0                                      |
| M8 x 1.25  | 30.0                                      |



| English                    | Français                      | Deutsch                    | Italiano                           | Español                  |
|----------------------------|-------------------------------|----------------------------|------------------------------------|--------------------------|
| Low profile                | Auto-affleurante              | Extra kleiner Kopf         | Testa a fila                       | Sin ala                  |
| Low carbon steel*          | Acier bas carbone*            | Stahl*                     | Acciaio a bassotenore di carbonio* | Acero bajo en carbono*   |
| Zinc plated                | Revêtement zingué,            | Verzinkt                   | Zincato                            | Zincado                  |
| Clear trivalent passivated | Passivation claire trivalente | Klar chromatiert, Cr6-frei | Passivazione chiara trivalente     | Pasivadoclaro trivalente |
| Lubricated                 | Lubrifié                      | Trockenfilmbeschichtet     | Lubrificato                        | Lubricado                |

\* : DIN EN 10263-2 Qst 34-3, BSEN/DIN 10263-2 C8C, Werkstoff 1.0213, SAE 1008



| Thread filetage / Gewinde / filetto / rosca | e (grip) |      | +0.1/-0 | øA max. | øB max. | D max. | øJ max. | M max. | P max. | Part No/ref |
|---|----------|------|---------|---------|---------|--------|---------|--------|--------|-------------|
|   | min.     | max. |         |         |         |        |         |        |        |             |
| M3 x 0.5                                    | 0.51     | 1.50 | 4.75    | 4.72    | 5.84    | 0.38   | 6.7     | 9.02   | 6.2    | 09658-70310 |
| M4 x 0.7                                    | 0.51     | 2.00 | 6.35    | 6.32    | 7.30    | 0.51   | 8.8     | 10.41  | 7.0    | 09658-70413 |
| M5 x 0.8                                    | 0.51     | 3.00 | 7.15    | 7.11    | 8.00    | 0.51   | 10.2    | 11.81  | 7.2    | 09658-70514 |
| M6 x 1.0                                    | 0.76     | 3.25 | 9.55    | 9.50    | 10.67   | 0.76   | 13.2    | 14.60  | 9.5    | 09658-70619 |
| M8 x 1.25                                   | 0.91     | 3.70 | 10.60   | 10.57   | 11.68   | 0.76   | 14.4    | 16.00  | 10.5   | 09658-75821 |
| M10 x 1.5                                   | 1.00     | 3.60 | 14.20   | 14.17   | 16.20   | 0.76   | 19.2    | 18.50  | 11.5   | 09658-72022 |

all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

| Thread filetage / Gewinde / filetto / rosca | <br>Recommended max. torque<br>Nm max. | <br>Pull-out*<br>kN | <br>Torque-to-turn*<br>Nm min. | <br>Push-out*<br>kN |
|---|--|---------------------|--------------------------------|---------------------|
|   |  |                     |                                |                     |
| M3 x 0.5                                    | 1.5                                    | 2.7                 | 0.4                            | 0.8                 |
| M4 x 0.7                                    | 5.1                                    | 6.6                 | 1.9                            | 1.5                 |
| M5 x 0.8                                    | 7.9                                    | 8.0                 | 2.6                            | 1.9                 |
| M6 x 1.0                                    | 12.4                                   | 11.4                | 3.4                            | 2.4                 |
| M8 x 1.25                                   | 16.4                                   | 15.7                | 3.6                            | 2.8                 |
| M10 x 1.5                                   | 33.9                                   | 18.7                | 4.2                            | 3.7                 |

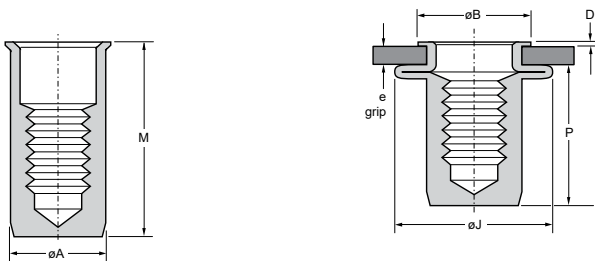
\* Values shown are typical and should be validated in the application / Les valeurs indiquées sont typiques et doivent être validées dans l'application / Die angegebenen Werte sind typisch und müssen in der Anwendung validiert werden / I valori riportati sono tipici e devono essere convalidati nella applicazione / Los valores mostrados son típicos y deben ser validados en la aplicación






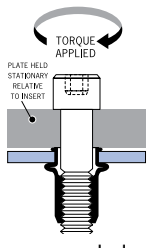
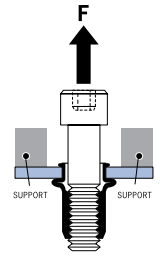
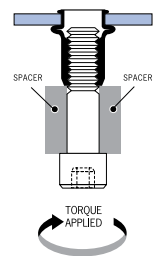
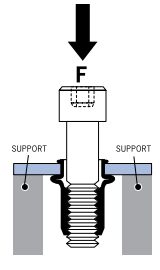
| English                    | Français                      | Deutsch                    | Italiano                             | Español                  |
|----------------------------|-------------------------------|----------------------------|--------------------------------------|--------------------------|
| Low profile                | Auto-affleurante              | Extra kleiner Kopf         | Testa a fila                         | Sin ala                  |
| Closed end                 | Borgne                        | Geschlossen                | Fondo cieco                          | Fondo cerrado            |
| Low carbon steel*          | Acier bas carbone*            | Stahl*                     | Acciaio a bassotenenore di carbonio* | Acero bajo en carbono*   |
| Zinc plated                | Revêtement zingué             | Verzinkt                   | Zincato                              | Zincado                  |
| Clear trivalent passivated | Passivation claire trivalente | Klar chromatiert, Cr6-frei | Passivazione chiara trivalente       | Pasivadoclaro trivalente |

\* : DIN EN 10263-2 Qst 34-3, BSEN/DIN 10263-2 C8C, Werkstoff 1.0213, SAE 1008



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |      | <br>+0.1/-0 | øA    | øB    | D    | øJ   | M     | P    | Part No/ref |
|--|----------|------|---|-------|-------|------|------|-------|------|-------------|
|  | min.     | max. |   | max.  | max.  | max. | max. | max.  | max. |             |
| M4 x 0.7   | 0.51     | 2.00 | 6.35  | 6.34  | 7.50  | 0.64 | 10.0 | 14.91 | 11.7 | 0FS38-70418 |
| M5 x 0.8   | 0.51     | 3.00 | 7.15  | 7.13  | 8.26  | 0.64 | 12.2 | 20.26 | 15.5 | 0FS38-70521 |
| M6 x 1.0   | 0.76     | 3.25 | 9.53  | 9.52  | 10.85 | 0.77 | 15.0 | 23.49 | 18.6 | 0FS38-70626 |
| M8 x 1.25  | 0.91     | 3.70 | 10.60   | 10.59 | 11.74 | 0.77 | 16.8 | 23.63 | 18.1 | 0FS38-70829 |

all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

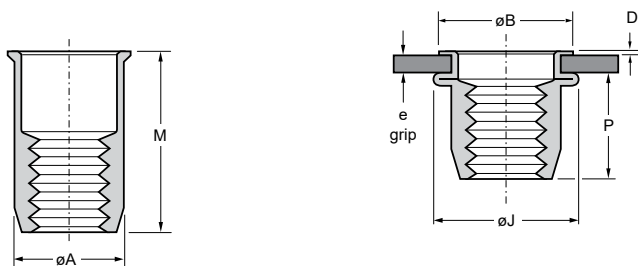
| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | <br>Recommended max.<br>torque<br>Nm max. | <br>Pull-out*<br>kN | <br>Torque-to-turn*<br>Nm min. | <br>Push-out*<br>kN |
|--|--|--|---|--|
| M4 x 0.7   | 5.1  | 6.6  | 1.9   | 1.5  |
| M5 x 0.8   | 7.9  | 8.0  | 2.6   | 1.9  |
| M6 x 1.0   | 12.4   | 11.4   | 3.4   | 2.4  |
| M8 x 1.25  | 16.4   | 15.7   | 3.6   | 2.8  |


\* Values shown are typical and should be validated in the application / Les valeurs indiquées sont typiques et doivent être validées dans l'application / Die angegebenen Werte sind typisch und müssen in der Anwendung validiert werden / I valori riportati sono tipici e devono essere convalidati nella applicazione / Los valores mostrados son típicos y deben ser validados en la aplicación



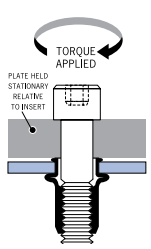
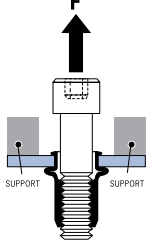
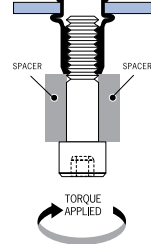
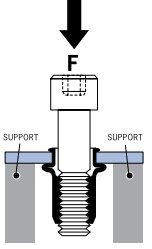
| English          | Français         | Deutsch            | Italiano        | Español           |
|------------------|------------------|--------------------|-----------------|-------------------|
| Low profile      | Auto-affleurante | Extra kleiner Kopf | Testa a fila    | Sin ala           |
| Stainless steel* | Inox*            | Edelstahl*         | Acciaio inox*   | Acero inoxidable* |
| Natural          | Brut             | Blank              | Nessunafinitura | Natural           |

\* : Werkstoff 1.4305



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |      | <br>+0.1/-0 | øA    | øB    | D    | øJ   | M     | P    | Part No/ref |
|--|----------|------|---|-------|-------|------|------|-------|------|-------------|
|  | min.     | max. |   | max.  | max.  | max. | max. | max.  | max. |             |
| M3 x 0.5   | 0.51     | 1.50 | 4.75  | 4.73  | 5.77  | 0.64 | 8.4  | 9.15  | 5.8  | 09468-00310 |
| M4 x 0.7   | 0.51     | 2.00 | 6.35  | 6.32  | 7.50  | 0.64 | 10.3 | 10.42 | 7.2  | 09468-00413 |
| M5 x 0.8   | 0.51     | 3.00 | 7.15  | 7.11  | 8.26  | 0.64 | 12.7 | 11.82 | 7.0  | 09468-00514 |
| M6 x 1.0   | 0.76     | 3.25 | 9.53  | 9.50  | 10.85 | 0.77 | 15.5 | 14.61 | 9.5  | 09468-00619 |
| M8 x 1.25  | 0.91     | 3.70 | 10.60   | 10.57 | 11.74 | 0.77 | 17.2 | 16.13 | 10.1 | 09468-05821 |
| M10 x 1.5  | 1.00     | 3.60 | 14.30   | 14.28 | 15.80 | 0.77 | 23.3 | 18.62 | 10.5 | 09468-01023 |

all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

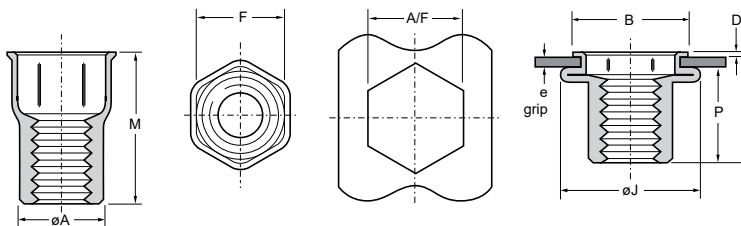
| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | <br>Recommended max.<br>torque<br>Nm max. | <br>Pull-out*<br>kN | <br>Torque-to-turn*<br>Nm min. | <br>Push-out*<br>kN |
|--|--|--|---|--|
|  | M3 x 0.5   | 4.0  | 8.2   | 0.4  |
| M4 x 0.7   | 5.6  | 9.2  | 1.9   | 2.0  |
| M5 x 0.8   | 11.3   | 12.0   | 2.6   | 2.7  |
| M6 x 1.0   | 16.9   | 18.3   | 3.4   | 2.9  |
| M8 x 1.25  | 22.6   | 24.2   | 3.6   | 3.2  |
| M10 x 1.5  | 33.8   | 33.9   | 4.2   | 4.2  |

\* Values shown are typical and should be validated in the application / Les valeurs indiquées sont typiques et doivent être validées dans l'application / Die angegebenen Werte sind typisch und müssen in der Anwendung validiert werden / I valori riportati sono tipici e devono essere convalidati nella applicazione / Los valores mostrados son típicos y deben ser validados en la aplicación



| English                    | Français             | Deutsch                    | Italiano                           | Español                  |
|----------------------------|----------------------|----------------------------|------------------------------------|--------------------------|
| Low profile                | Auto-affleurante     | Extra kleiner Kopf         | Testa a fila                       | Sin ala                  |
| Hexagonal body             | Hexagonal corps      | Hexagonaler Schaft         | Hexagonal corpo                    | Hexagonal cuerpo         |
| Low carbon steel*          | Acier bas carbone*   | Stahl*                     | Acciaio a bassotenore di carbonio* | Acero bajo en carbono*   |
| Zinc plated                | Revêtement zingué,   | Verzinkt                   | Zincato                            | Zincado                  |
| Clear trivalent passivated | Passivation claire   | Klar chromatiert, Cr6-frei | Passivazione chiara                | Pasivadoclaro trivalente |
| Lubricated                 | trivalente, Lubrifié | Trockenfilmbeschichtet     | trivalente, Lubrificato            | Lubricado                |

\* : DIN EN 10263-2 Qst 34-3, BSEN/DIN 10263-2 C8C, Werkstoff 1.0213, SAE 1008



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |      | A/F   |       | øA    | B     | D    | F     | øJ     |        | M     | P    | Part No/ref |
|--|----------|------|-------|-------|-------|-------|------|-------|--------|--------|-------|------|-------------|
|  | min.     | max. | min.  | max.  | max.  | max.  | max. | max.  | min. e | max. e | max.  | max. |             |
| M3 x 0.5   | 0.70     | 1.63 | 4.80  | 4.85  | 4.72  | 6.10  | 0.45 | 4.81  | 6.9    | 6.4    | 9.02  | 5.4  | 09688-70310 |
| M4 x 0.7   | 0.51     | 1.63 | 6.38  | 6.43  | 6.33  | 8.00  | 0.69 | 6.37  | 10.0   | 8.7    | 10.42 | 7.4  | 09688-70413 |
| M5 x 0.8   | 0.51     | 2.03 | 7.32  | 7.37  | 7.14  | 9.22  | 0.72 | 7.26  | 12.2   | 10.7   | 11.82 | 7.2  | 09688-70514 |
| M6 x 1.0   | 0.76     | 2.92 | 9.65  | 9.70  | 9.53  | 11.94 | 0.89 | 9.64  | 15.0   | 12.7   | 14.61 | 9.7  | 09688-70619 |
| M8 x 1.25  | 0.91     | 3.25 | 10.70 | 10.80 | 10.50 | 12.96 | 0.89 | 10.67 | 16.6   | 14.3   | 16.00 | 10.5 | 09688-70821 |

all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

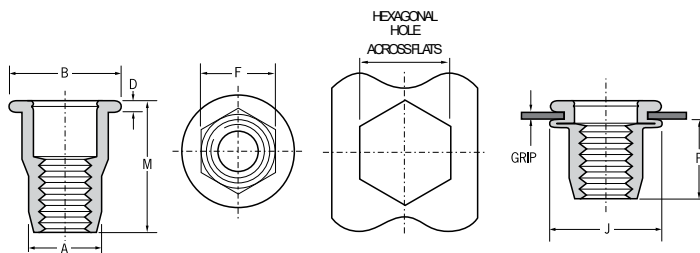
| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | <br>Recommended max.<br>torque<br>Nm max. | <br>Pull-out*<br>kN | <br>Torque-to-turn*<br>Nm min. | <br>Push-out*<br>kN |
|--|---|---------------------|--------------------------------|---------------------|
| M3 x 0.5   | 1.5                                       | 2.9                 | 1.0                            | 0.8                 |
| M4 x 0.7   | 5.1                                       | 4.2                 | 4.0                            | 1.3                 |
| M5 x 0.8   | 7.9                                       | 5.9                 | 6.6                            | 1.9                 |
| M6 x 1.0   | 12.4                                      | 6.9                 | 8.7                            | 2.4                 |
| M8 x 1.25  | 16.4                                      | 14.8                | 11.8                           | 2.8                 |

\* Values shown are typical and should be validated in the application / Les valeurs indiquées sont typiques et doivent être validées dans l'application / Die angegebenen Werte sind typisch und müssen in der Anwendung validiert werden / I valori riportati sono tipici e devono essere convalidati nella applicazione / Los valores mostrados son típicos y deben ser validados en la aplicación



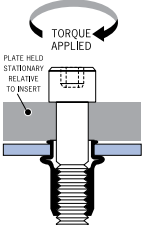
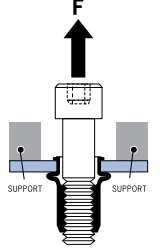
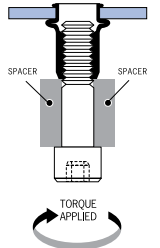
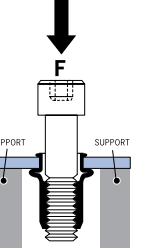
| English                    | Français                      | Deutsch                    | Italiano                           | Español                  |
|----------------------------|-------------------------------|----------------------------|------------------------------------|--------------------------|
| Large flange               | A collerette                  | Flachkopf                  | Flangiato                          | Ala ancha                |
| Hexagonal body             | Hexagonal corps               | Hexagonaler Schaft         | Hexagonal corpo                    | Hexagonal cuerpo         |
| Low carbon steel*          | Acier bas carbone*            | Stahl*                     | Acciaio a bassoteneur di carbonio* | Acero bajo en carbono*   |
| Zinc plated                | Revêtement zingué,            | Verzinkt                   | Zincato                            | Zincado                  |
| Clear trivalent passivated | Passivation claire trivalente | Klar chromatiert, Cr6-frei | Passivazione chiara trivalente     | Pasivadoclaro trivalente |

\* : DIN EN 10263-2 Qst 34-3, BSEN/DIN 10263-2 C8C, Werkstoff 1.0213, SAE 1008



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |      | A/F rec. | øA     | øB   | D      | F      | øJ   | M      | P    | Part No/ref |
|--|----------|------|----------|--------|------|--------|--------|------|--------|------|-------------|
|  | min.     | max. |          |        |      |        |        |      |        |      |             |
| M4 x 0.7   | 0.5      | 2.0  | 6.0      | ± 0.08 | max. | ± 0.13 | ± 0.08 | max. | ± 0.50 | max. | 09498-72415 |
| M5 x 0.8   | 0.5      | 3.0  | 7.0      | ± 0.08 | max. | ± 0.13 | ± 0.08 | max. | 13.2   | 7.5  | 09498-72516 |
|  | 3.0      | 5.5  |          |        |      |        |        |      | 15.7   |      | 09498-72520 |
| M6 x 1.0   | 0.5      | 3.0  | 9.0      | ± 0.08 | max. | ± 0.13 | ± 0.08 | max. | ± 0.50 | max. | 09498-72620 |
| M8 x 1.25  | 0.5      | 3.0  | 11.0     | ± 0.08 | max. | ± 0.13 | ± 0.08 | max. | 18.0   | 11.4 | 09498-72823 |
|  | 3.0      | 5.5  |          |        |      |        |        |      | 20.5   |      | 09498-72826 |
| M10 x 1.5  | 1.0      | 3.5  | 13.0     | ± 0.08 | max. | ± 0.13 | ± 0.08 | max. | ± 0.50 | max. | 09498-72026 |
| M12 x 1.75   | 1.5      | 4.5  | 16.0     | ± 0.08 | max. | ± 0.13 | ± 0.08 | max. | ± 0.50 | max. | 09498-72235 |

all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

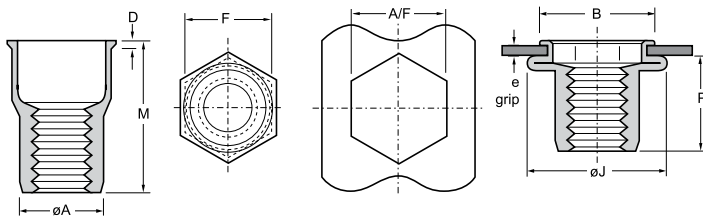
| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca |  |  |  |  |
|--|---|---|---|---|
|  | Recommended max. torque<br>Nm max.  | Pull-out*<br>kN   | Torque-to-turn*<br>Nm min.  | Push-out*<br>kN   |
| M4 x 0.7   | 5.1   | 6.3   | 4.5   | 2.2   |
| M5 x 0.8   | 7.9   | 8.8   | 8.6   | 3.6   |
| M6 x 1.0   | 12.4  | 14.4  | 11.9  | 5.3   |
| M8 x 1.25  | 32.0  | 15.0  | 25.0  | 8.0   |
| M10 x 1.5  | 45.0  | 19.7  | 45.2  | 9.2   |
| M12 x 1.75   | 60.0  | 21.3  | 58.0  | 10.2  |

\* Values shown are typical and should be validated in the application / Les valeurs indiquées sont typiques et doivent être validées dans l'application / Die angegebenen Werte sind typisch und müssen in der Anwendung validiert werden / I valori riportati sono tipici e devono essere convalidati nella applicazione / Los valores mostrados son típicos y deben ser validados en la aplicación



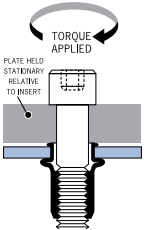
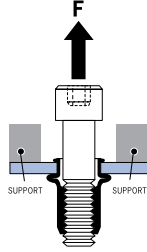
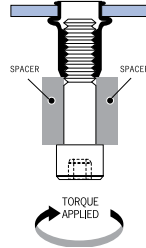
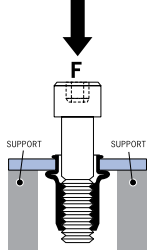
| English                    | Français                      | Deutsch                    | Italiano                             | Español                  |
|----------------------------|-------------------------------|----------------------------|--------------------------------------|--------------------------|
| Low profile                | Auto-affleurante              | Extra kleiner Kopf         | Testa a fila                         | Sin ala                  |
| Hexagonal body             | Hexagonal corps               | Hexagonaler Schaft         | Hexagonal corpo                      | Hexagonal cuerpo         |
| Low carbon steel*          | Acier bas carbone*            | Stahl*                     | Acciaio a bassotenenore di carbonio* | Acero bajo en carbono*   |
| Zinc plated                | Revêtement zingué             | Verzinkt                   | Zincato                              | Zincado                  |
| Clear trivalent passivated | Passivation claire trivalente | Klar chromatiert, Cr6-frei | Passivazione chiara trivalente       | Pasivadoclaro trivalente |

\* : DIN EN 10263-2 Qst 34-3, BSEN/DIN 10263-2 C8C, Werkstoff 1.0213, SAE 1008



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |      | A/F  | øA    | B    | D    | F     | øJ   | M    | P    | Part No/ref |
|--|----------|------|------|-------|------|------|-------|------|------|------|-------------|
|  | min.     | max. |      |       |      |      |       |      |      |      |             |
| M4 x 0.7   | 0.5      | 2.0  | 6.0  | 5.89  | 7.8  | 0.69 | 5.89  | 9.2  | 10.5 | 6.0  | 39101-74020 |
| M5 x 0.8   | 0.5      | 3.0  | 7.0  | 6.89  | 9.1  | 0.77 | 6.89  | 11.2 | 12.7 | 8.6  | 39101-75030 |
| M6 x 1.0   | 0.5      | 3.0  | 9.0  | 8.89  | 11.6 | 0.91 | 8.89  | 13.4 | 15.0 | 10.1 | 39101-76030 |
| M8 x 1.25  | 0.5      | 3.0  | 11.0 | 10.89 | 14.2 | 1.07 | 10.89 | 16.2 | 17.5 | 11.4 | 39101-78030 |
| M10 x 1.5  | 1.0      | 3.5  | 13.0 | 12.89 | 16.4 | 1.07 | 12.89 | 18.9 | 20.2 | 13.2 | 39101-70035 |

all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

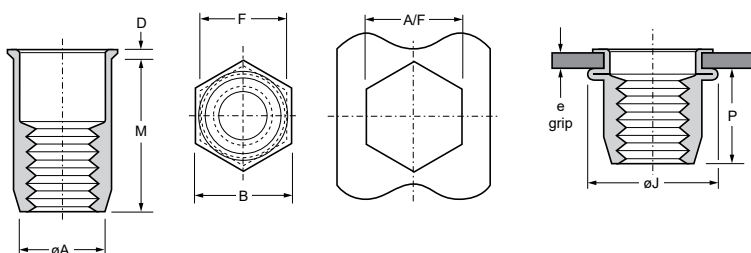
| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | <br>Recommended max.<br>torque<br>Nm max. | <br>Pull-out*<br>kN | <br>Torque-to-turn*<br>Nm min. | <br>Push-out*<br>kN |
|--|--|--|---|--|
|  | M4 x 0.7   | 5.1  | 6.3   | 4.2  |
| M5 x 0.8   | 7.9  | 8.8  | 7.5   | 2.6  |
| M6 x 1.0   | 12.4   | 14.4   | 10.7  | 3.2  |
| M8 x 1.25  | 32.0   | 15.0   | 22.7  | 4.1  |
| M10 x 1.5  | 45.0   | 19.7   | 38.5  | 5.2  |

\* Values shown are typical and should be validated in the application / Les valeurs indiquées sont typiques et doivent être validées dans l'application / Die angegebenen Werte sind typisch und müssen in der Anwendung validiert werden / I valori riportati sono tipici e devono essere convalidati nella applicazione / Los valores mostrados son típicos y deben ser validados en la aplicación



| English                    | Français                      | Deutsch                    | Italiano                           | Español                  |
|----------------------------|-------------------------------|----------------------------|------------------------------------|--------------------------|
| Low profile                | Auto-affleurante              | Extra kleiner Kopf         | Testa a fila                       | Sin ala                  |
| Hexagonal body             | Hexagonal corps               | Hexagonaler Schaft         | Hexagonal corpo                    | Hexagonal cuerpo         |
| Low carbon steel*          | Acier bas carbone*            | Stahl*                     | Acciaio a bassoteneur di carbonio* | Acero bajo en carbono*   |
| Zinc plated                | Revêtement zingué             | Verzinkt                   | Zincato                            | Zincado                  |
| Clear trivalent passivated | Passivation claire trivalente | Klar chromatiert, Cr6-frei | Passivazione chiara trivalente     | Pasivadoclaro trivalente |

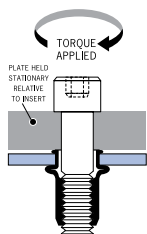
\* : SAE1008



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |      | A/F  | øA   | B    | D      | F      | øJ   | M    | P    | Part No/ref |
|--|----------|------|------|------|------|--------|--------|------|------|------|-------------|
|  | min.     | max. |      |      |      |        |        |      |      |      |             |
| M4 x 0.7   | 0.5      | 3.0  | 6.0  | 5.5  | 7.1  | ± 0.20 | ± 0.11 | 9.2  | 12.3 | 7.7  | 0GM05-24030 |
| M5 x 0.8   | 0.5      | 3.0  | 7.0  | 6.5  | 8.3  | ± 0.20 | ± 0.11 | 10.4 | 13.8 | 9.5  | 0GM05-25030 |
| M6 x 1.0   | 0.5      | 3.0  | 9.0  | 8.5  | 10.3 | ± 0.20 | ± 0.11 | 13.6 | 15.8 | 10.4 | 0GM05-26030 |
| M8 x 1.25  | 0.5      | 3.0  | 11.0 | 10.5 | 12.3 | ± 0.20 | ± 0.11 | 16.0 | 17.8 | 12.4 | 0GM05-28030 |
| M10 x 1.5  | 0.5      | 4.0  | 13.0 | 12.5 | 14.1 | ± 0.20 | ± 0.11 | 19.8 | 21.8 | 15.0 | 0GM05-20040 |

all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

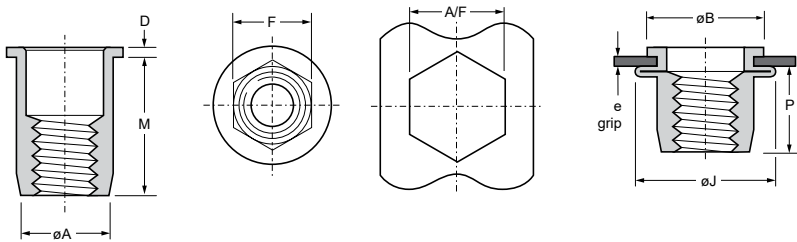
| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | Recommended max.<br>torque<br>Nm max. |
|--|---------------------------------------|
| M4   | 4.0                                   |
| M5   | 6.0                                   |
| M6   | 12.0                                  |
| M8   | 21.0                                  |
| M10  | 32.0                                  |





| English                    | Français                      | Deutsch                    | Italiano                           | Español                  |
|----------------------------|-------------------------------|----------------------------|------------------------------------|--------------------------|
| Large flange               | A collerette                  | Flachkopf                  | Flangiato                          | Ala ancha                |
| Hexagonal body             | Hexagonal corps               | Hexagonaler Schaft         | Hexagonal corpo                    | Hexagonal cuerpo         |
| Low carbon steel*          | Acier bas carbone*            | Stahl*                     | Acciaio a bassoteneur di carbonio* | Acero bajo en carbono*   |
| Zinc plated                | Revêtement zingué             | Verzinkt                   | Zincato                            | Zincado                  |
| Clear trivalent passivated | Passivation claire trivalente | Klar chromatiert, Cr6-frei | Passivazione chiara trivalente     | Pasivadoclaro trivalente |

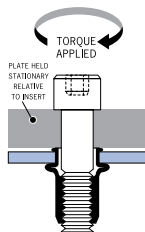
\* : SAE 1008



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |      | A/F<br>+0.1/-0 | øA<br>nom. | øB<br>max. | D<br>± 0.13 | F<br>± 0.11 | øJ<br>max. | M<br>nom. | P<br>max. | Part No/ref |
|--|----------|------|----------------|------------|------------|-------------|-------------|------------|-----------|-----------|-------------|
|  | min.     | max. |                |            |            |             |             |            |           |           |             |
| M4 x 0.7   | 0.5      | 3.0  | 6.0            | 5.5        | 9.6        | 1.0         | 5.89        | 9.5        | 12.5      | 7.4       | 0GM06-24030 |
| M5 x 0.8   | 0.5      | 3.0  | 7.0            | 6.5        | 10.6       | 1.0         | 6.89        | 10.6       | 14.5      | 9.5       | 0GM06-25030 |
| M6 x 1.0   | 0.5      | 3.0  | 9.0            | 8.5        | 12.6       | 1.5         | 8.89        | 13.6       | 17.0      | 10.9      | 0GM06-26030 |
| M8 x 1.25  | 0.5      | 3.0  | 11.0           | 10.4       | 14.6       | 1.5         | 10.89       | 16.3       | 19.0      | 12.4      | 0GM06-28030 |
| M10 x 1.5  | 1.0      | 4.0  | 13.0           | 12.5       | 16.6       | 2.0         | 12.89       | 18.9       | 24.0      | 16.1      | 0GM06-20040 |

all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

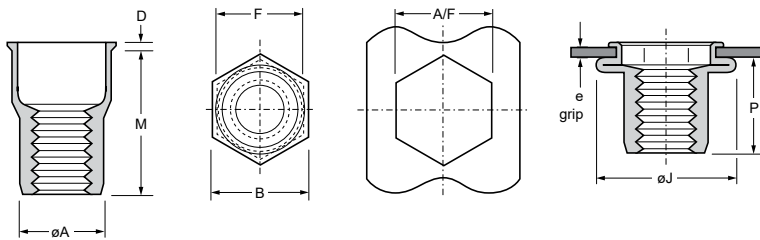
| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | Recommended max.<br>torque<br>Nm max. |
|--|---------------------------------------|
| M4   | 4.0                                   |
| M5   | 6.0                                   |
| M6   | 12.0                                  |
| M8   | 21.0                                  |
| M10  | 32.0                                  |





| English          | Français         | Deutsch            | Italiano        | Español           |
|------------------|------------------|--------------------|-----------------|-------------------|
| Low profile      | Auto-affleurante | Extra kleiner Kopf | Testa a fila    | Sin ala           |
| Hexagonal body   | Hexagonal corps  | Hexagonaler Schaft | Hexagonal corpo | Hexagonal cuerpo  |
| Stainless steel* | Inox*            | Edelstahl*         | Acciaio inox*   | Acero inoxidable* |
| Natural          | Brut             | Blank              | Nessunafinitura | Natural           |

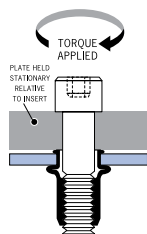
\* : AISI 302



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |      | A/F  | øA     | B         | D      | F      | øJ        | M         | P         | Part No/ref |
|--|----------|------|------|--------|-----------|--------|--------|-----------|-----------|-----------|-------------|
|  | min.     | max. |      |        |           |        |        |           |           |           |             |
| M4 x 0.7   | 0.5      | 3.0  | 6.0  | ± 0.11 | max. 7.1  | ± 0.20 | ± 0.11 | max. 9.4  | nom. 12.8 | max. 8.6  | 0GM41-24030 |
| M5 x 0.8   | 0.5      | 3.0  | 7.0  | ± 0.11 | max. 8.1  | ± 0.20 | ± 0.11 | max. 10.6 | nom. 14.3 | max. 9.1  | 0GM41-25030 |
| M6 x 1.0   | 0.5      | 3.0  | 9.0  | ± 0.11 | max. 10.1 | ± 0.20 | ± 0.11 | max. 13.1 | nom. 16.3 | max. 11.3 | 0GM41-26030 |
| M8 x 1.25  | 0.5      | 3.0  | 11.0 | ± 0.11 | max. 12.1 | ± 0.20 | ± 0.11 | max. 15.9 | nom. 17.3 | max. 11.9 | 0GM41-28030 |
| M10 x 1.5  | 0.8      | 4.0  | 13.0 | ± 0.11 | max. 14.5 | ± 0.20 | ± 0.11 | max. 18.5 | nom. 20.8 | max. 13.5 | 0GM41-20040 |

all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | Recommended max.<br>torque<br>Nm max. |
|--|---------------------------------------|
| M4 x 0.7   | 5.6                                   |
| M5 x 0.8   | 10.0                                  |
| M6 x 1.0   | 15.0                                  |
| M8 x 1.25  | 30.0                                  |
| M10 x 1.5  | 35.0                                  |

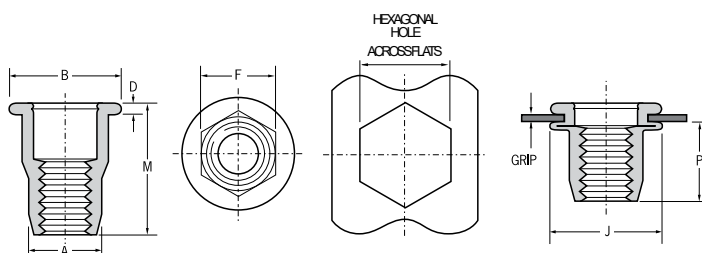






| English          | Français        | Deutsch            | Italiano        | Español           |
|------------------|-----------------|--------------------|-----------------|-------------------|
| Large flange     | A collerette    | Flachkopf          | Flangiato       | Ala ancha         |
| Hexagonal body   | Hexagonal corps | Hexagonaler Schaft | Hexagonal corpo | Hexagonal cuerpo  |
| Stainless steel* | Inox*           | Edelstahl*         | Acciaio inox*   | Acero inoxidable* |
| Natural          | Brut            | Blank              | Nessunafinitura | Natural           |

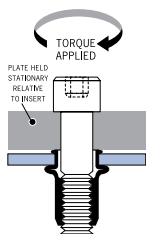
\* : AISI 302



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |      | A/F  | øA     | øB   | D      | F      | øJ   | M    | P    | Part No/ref |
|--|----------|------|------|--------|------|--------|--------|------|------|------|-------------|
|  | min.     | max. |      |        |      |        |        |      |      |      |             |
| M4 x 0.7   | 0.5      | 3.0  | 6.0  | ± 0.11 | max. | ± 0.13 | ± 0.11 | max. | nom. | max. | 0GM42-24030 |
| M5 x 0.8   | 0.5      | 3.0  | 7.0  | ± 0.11 | max. | ± 0.13 | ± 0.11 | max. | nom. | max. | 0GM42-25030 |
| M6 x 1.0   | 0.5      | 3.0  | 9.0  | ± 0.11 | max. | ± 0.13 | ± 0.11 | max. | nom. | max. | 0GM42-26030 |
| M8 x 1.25  | 0.5      | 3.0  | 11.0 | ± 0.11 | max. | ± 0.13 | ± 0.11 | max. | nom. | max. | 0GM42-28030 |
| M10 x 1.5  | 0.8      | 4.0  | 13.0 | ± 0.11 | max. | ± 0.13 | ± 0.11 | max. | nom. | max. | 0GM42-20040 |

all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | Recommended max.<br>torque<br>Nm max. |
|--|---------------------------------------|
| M4   | 5.6                                   |
| M5   | 10.0                                  |
| M6   | 15.0                                  |
| M8   | 30.0                                  |
| M10  | 35.0                                  |

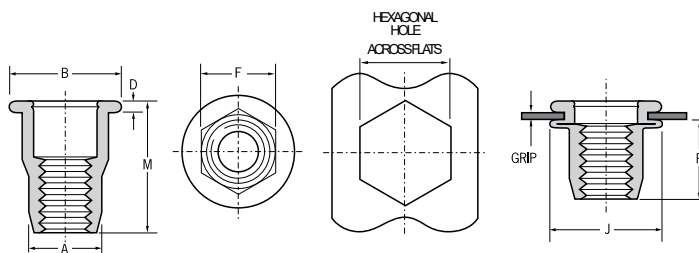




| English                                      | Français  | Deutsch                                   | Italiano                                     | Español                                 | ** |
|--|---|---|--|---|----|
| Large flange                                 | A collerette  | Flachkopf                                 | Flangiato                                    | Ala ancha                               |    |
| Hexagonal body                               | Hexagonal corps                                       | Hexagonaler Schaft                        | Hexagonal corpo                              | Hexagonal cuerpo                        |    |
| Low carbon steel*                            | Acier bas carbone*                                    | Stahl*                                    | Acciaio a basso tenore di carbonio*          | Acero bajo en carbono*                  |    |
| Zinc plated<br>Clear trivalent<br>passivated | Revêtement zingué<br>Passivation claire<br>trivalente | Verzinkt<br>Klar chromatiert,<br>Cr6-frei | Zincato<br>Passivazione chiara<br>trivalente | Zincado<br>Pasivado claro<br>trivalente |    |

\*: DIN EN 10263-2 Qst 34-3, BSEN/DIN 10263-2 C8C, Werkstoff 1.0213, SAE 1008

\*\* : to red rust / à la rouille rouge / bis Rotrost / alla ruggine rossa / al óxido rojo (ASTMB117)



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |      | A/F     | øA    | øB    |       | D     | F     | øJ   |      | M    | P    | Part No/ref |
|--|----------|------|---------|-------|-------|-------|-------|-------|------|------|------|------|-------------|
|  | min.     | max. | +0.1/-0 | ±0.08 | min.  | max.  | ±0.13 | ±0.08 | min. | max. | nom. | max. |             |
| M6 x 1.0   | 0.5      | 3.0  | 9.0     | 8.89  | 12.80 | 13.20 | 1.50  | 8.89  | 12.0 | 13.5 | 18.8 | 11.6 | 39301-26030 |
| M8 x 1.25  | 0.5      | 3.0  | 11.0    | 10.89 | 15.68 | 16.28 | 1.50  | 10.89 | 14.0 | 16.2 | 20.4 | 13.8 | 39301-28030 |
| M10 x 1.5  | 1.0      | 3.5  | 13.0    | 12.89 | 18.50 | 19.10 | 2.00  | 12.89 | 16.2 | 19.3 | 26.0 | 17.8 | 39301-20035 |
| M12 x 1.75   | 1.0      | 4.0  | 16.0    | 15.88 | 22.60 | 23.30 | 2.25  | 15.90 | 19.0 | 24.2 | 30.8 | 22.0 | 39301-22040 |

all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

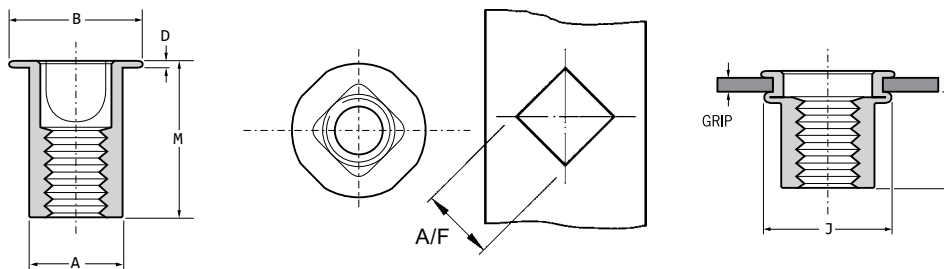
| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | <br>Recommended max. torque<br><br>Nm max. | <br>Pull-out*<br><br>e max.<br>kN | <br>Torque-to-turn*<br><br>e max. Nm      e min. Nm |      | <br>Push-out*<br><br>e max.<br>kN |
|--|--|-----------------------------------|---|------|-----------------------------------|
|  | M6 x 1.0                                   | 17.0                              | 20.6  | 24.7 | 14.4                              |
| M8 x 1.25  | 60.0                                       | 28.1                              | 34.6  | 15.6 | 10.7                              |
| M10 x 1.5  | 100.0                                      | 34.2                              | 62.0  | 60.8 | 12.5                              |
| M12 x 1.75   | 135.0                                      | 40.9                              | 135.0   | 62.0 | 18.3                              |

\* Values shown are typical and should be validated in the application / Les valeurs indiquées sont typiques et doivent être validées dans l'application / Die angegebenen Werte sind typisch und müssen in der Anwendung validiert werden / I valori riportati sono tipici e devono essere convalidate nella applicazione / Los valores mostrados son típicos y deben ser validados en la aplicación



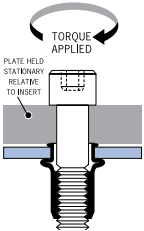
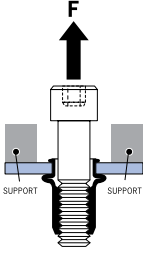
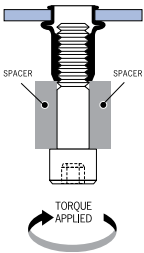
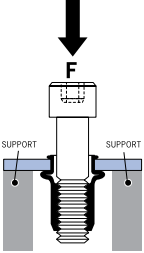
| English                    | Français                      | Deutsch                    | Italiano                                | Español                  |
|----------------------------|-------------------------------|----------------------------|---|--------------------------|
| Large flange               | A collerette                  | Flachkopf                  | Flangiato                               | Ala ancha                |
| Square section             | Corps carré                   | Vierkantschaft             | Corpo quadrati                          | Cuerpo cuadrado          |
| Low carbon steel*          | Acier bas carbone*            | Stahl*                     | Acciaio a bassoteneur                   | Acero bajo en carbono*   |
| Zinc plated                | Revêtement zingué             | Verzinkt                   | di carbonio*                            | Zincado                  |
| Clear trivalent passivated | Passivation claire trivalente | Klar chromatiert, Cr6-frei | Zincato, Passivazione chiara trivalente | Pasivadoclaro trivalente |

\* : DIN EN 10263-2 Qst 34-3, BSEN/DIN 10263-2 C8C, Werkstoff 1.0213, SAE 1008



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |      | A/F  | øA   | B    | D    | J    | M    | P    | Part No/ref |
|--|----------|------|------|------|------|------|------|------|------|-------------|
|  | min.     | max. |      |      |      |      |      |      |      |             |
| M5 x 0.8   | 0.50     | 1.50 | 7.3  | 7.1  | 10.9 | 0.65 | 10.4 | 11.4 | 8.2  | 0GK08-72514 |
|  | 1.50     | 3.00 |      |      |      |      |      | 13.0 |      | 0GK08-72516 |
| M6 x 1.0   | 0.50     | 2.00 | 9.3  | 9.1  | 13.5 | 0.95 | 13.5 | 15.5 | 9.9  | 0GK08-72619 |
|  | 2.00     | 4.00 |      |      |      |      |      | 17.5 |      | 0GK08-72622 |
| M8 x 1.25  | 0.65     | 3.00 | 11.3 | 11.1 | 18.0 | 1.65 | 16.4 | 18.9 | 11.8 | 0GK08-72823 |

all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

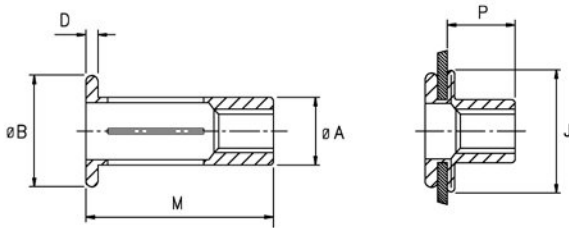
| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | <br>Recommended max.<br>torque<br>Nm max. | <br>Pull-out*<br>kN | <br>Torque-to-turn*<br>Nm min. | <br>Push-out*<br>kN |
|--|--|--|---|--|
| M5 x 0.8   | 7.9  | 5.5  | 10.2  | 2.4  |
| M6 x 1.0   | 12.4   | 7.3  | 15.4  | 4.6  |
| M8 x 1.25  | 32.0   | 10.5   | 34.0  | 6.5  |

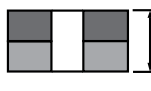
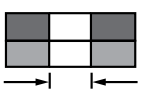
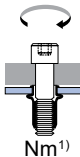
\* Values shown are typical and should be validated in the application / Les valeurs indiquées sont typiques et doivent être validées dans l'application / Die angegebenen Werte sind typisch und müssen in der Anwendung validiert werden / I valori riportati sono tipici e devono essere convalidati nella applicazione / Los valores mostrados son típicos y deben ser validados en la aplicación



| English                    | Français                          | Deutsch                    | Italiano                            | Español                   | ** / ***   |
|----------------------------|-----------------------------------|----------------------------|-------------------------------------|---------------------------|--|
| Large flange               | A collerette                      | Flachkopf                  | Flangiato                           | Ala ancha                 | <br>240 h**/<br>96 h*** |
| Slotted body               | Corps préfendu                    | Geschlitzte Hülse          | Corpo fessurato                     | Cuerpo ranurado           |  |
| Low carbon steel*          | Acier à faible teneur en carbone* | Stahl*                     | Acciaio a bassoteneore di carbonio* | Acero bajo en carbono*    |  |
| Zinc plated                | Revêtement zingué                 | Verzinkt                   | Zincato                             | Zincado                   |  |
| Clear trivalent passivated | Passivation claire trivalente     | Klar chromatiert, Cr6-frei | Passivazione chiara trivalente      | Pasivado claro trivalente |  |

\* : DIN EN 10263-2 Qst 34-3, BSEN/DIN 10263-2 C8C, Werkstoff 1.0213, SAE 1008  
 \*\*: to red rust / à la rouille rouge / bis Rotrost / alla ruggine rossa / al óxido rojo (ASTMB117)  
 \*\*\*: to white rust / à la rouille blanche / bis Weißrost / alla ruggine bianca / al óxido blanco



| Thread<br>filetage /<br>Gewinde /<br>filetto /<br>rosca |  |       |  |       | ø A   | ø B   | D    | J    | M     | P     | <br>Nm <sup>1)</sup> | Part No/ref |
|---|--|-------|--|-------|-------|-------|------|------|-------|-------|--|-------------|
|   | min.   | max.  | min.   | max.  |       |       |      |      |       |       |  |             |
| M5 x 0.8  | 0.50   | 4.45  | 7.48   | 7.62  | 7.47  | 12.95 | 1.09 | 18.0 | 22.39 | 9.90  | 7.9  | 0VN21-02528 |
|   | 4.45   | 8.10  |  |       |       |       |      |      | 25.16 |       |  | 0VN21-02531 |
| M6 x 1.0  | 0.50   | 7.10  | 8.80   | 8.93  | 8.79  | 16.12 | 1.63 | 22.0 | 27.30 | 12.80 | 12.4   | 0VN21-02634 |
|   | 7.10   | 12.70 |  |       |       |       |      |      | 33.22 |       |  | 0VN21-02641 |
| M8 x 1.25   | 0.50   | 7.10  | 11.11  | 11.50 | 11.10 | 19.29 | 1.70 | 26.0 | 30.92 | 14.47 | 32.0   | 0VN21-02838 |
|   | 7.10   | 12.70 |  |       |       |       |      |      | 36.87 |       |  | 0VN21-02846 |

all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

1) Recommended maximum torque as applied to a joint with a static top plate. Thread of rivet nut will not be damaged. However this torque value may exceed the strength of the screw or bolt in question. Always refer to the recommended tightening torque limits for the screw or bolt.

Couple maximum recommandé pour un assemblage avec plaque supérieure statique. Le filet de l'insert reste intact. Ce couple peut néanmoins dépasser la résistance de la vis ou du boulon en question. Veuillez toujours à vous référer aux limites de couple de serrage recommandées pour la vis ou le boulon.

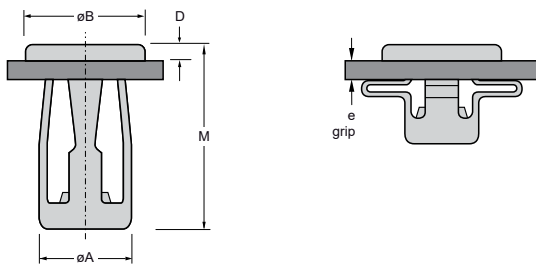
Empfohlenes maximales Drehmoment für eine Verbindung bei der das obere an die Mutter anzuschraubende Bauteil fest eingespannt ist. Das Gewinde wird nicht beschädigt. Möglicherweise übersteigt dieser Anzugswert die Festigkeit der Schraube. Beziehen Sie sich immer auf die max. Anzugswerte der Schraube.

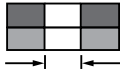
Coppia massima raccomandata applicata a una giuntura con piastra superiore statica. La filettatura dell'inserto non verrà danneggiata, comunque questa coppia può superare la resistenza della vite o del bullone impegnato. Verificare sempre le coppie di serraggio raccomandate della vite o bullone impegnato.

Par máximo recomendado aplicado a la unión con la placa superior estática. La rosca del inserto no queda dañada. Sin embargo este valor de par puede superar la resistencia del perno o tornillo en cuestión. Siempre consultar los límites de par de apriete recomendados para el perno o tornillo.



| English          | Français           | Deutsch           | Italiano            | Español         |
|------------------|--------------------|-------------------|---------------------|-----------------|
| Standard flange  | A collerette       | Flachkopf         | Flangiato           | Ala ancha       |
| Slotted body     | Corps préfendu     | Geschlitzte Hülse | Corpo fessurato     | Cuerpo ranurado |
| Steel            | Acier              | Stahl             | Acciaio             | Acero           |
| Zinc plated      | Revêtement zingué  | Verzinkt          | Zincato             | Zincado         |
| Clear passivated | Passivation claire | Klar chromatiert  | Passivazione chiara | Pasivado claro  |

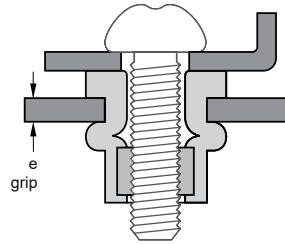
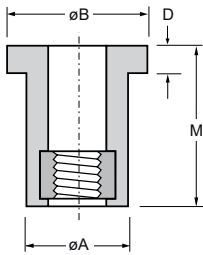



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |      |  | øA<br>max. | øB<br>max. | D<br>nom. | M<br>nom. | Part No/ref |
|--|----------|------|--|------------|------------|-----------|-----------|-------------|
|  | min.     | max. |  |            |            |           |           |             |
| M4 x 0.7   | 0.40     | 4.80 | 8.40   | 8.28       | 12.20      | 1.85      | 16.80     | JNS-04      |
|  | 4.80     | 9.50 |  |            | 12.20      |           | 21.40     | JNL-04      |
| M5 x 0.8   | 0.40     | 4.80 | 10.10  | 10.06      | 13.74      | 1.85      | 17.90     | JNS-05      |
|  | 4.80     | 9.50 |  |            | 13.74      |           | 22.20     | JNL-05      |
| M6 x 1.0   | 0.40     | 4.80 | 11.50  | 11.50      | 16.13      | 1.90      | 18.20     | JNS-06      |
|  | 4.80     | 9.50 |  |            |            |           | 23.00     | JNL-06      |

all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros



| English         | Français              | Deutsch               | Italiano           | Español        |
|-----------------|-----------------------|-----------------------|--------------------|----------------|
| Standard flange | A collerette standard | Standard Flachkopf    | Flangiato standard | Ala estándar   |
| Round body      | Corps rond            | Runder Schaft         | Corpo tondo        | Cuerpo redondo |
| Neoprene        | Néoprène              | Neopren               | Neoprene           | Neopreno       |
| Brass           | Laiton                | Kupfer-Zink Legierung | Ottone             | Latón          |



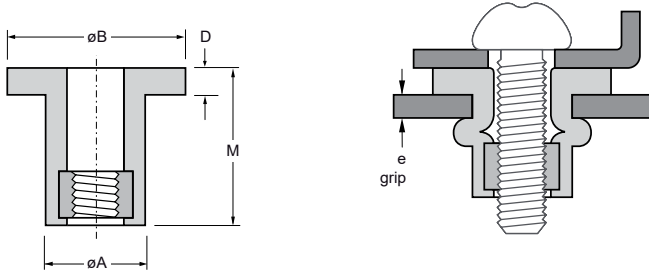
| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |       |  | øA    | øB    | D    | M     | Tightening<br>Torque <sup>1)</sup><br>Nm nom. | Part No/ref      |
|--|----------|-------|--|-------|-------|------|-------|---|------------------|
|  | min.     | max.  |  |       |       |      |       |   |                  |
| M3 x 0.5   | 0.40     | 4.00  | 8.10   | 7.90  | 11.00 | 1.20 | 12.60 | 0.40  | WNPA-0311-E632   |
| M4 x 0.7   | 0.40     | 4.00  | 8.10   | 7.90  | 11.00 | 1.20 | 12.60 | 0.30  | WNPA-0411-B832   |
| M5 x 0.8   | 0.40     | 4.90  | 9.80   | 9.60  | 12.70 | 0.90 | 14.10 | 0.40  | WNPA-0514-10S    |
|  | 0.90     | 5.90  |  |       |       | 1.00 | 17.00 | 0.50  | WNPA-0516-Q1032  |
|  | 4.00     | 10.00 |  |       | 14.00 | 0.90 | 21.50 | 0.60  | WNPA-0521-H1032  |
|  | 7.90     | 15.00 |  |       |       | 1.30 | 26.50 | 0.50  | WNPA-0525-10SL   |
| M6 x 1.0   | 0.40     | 4.00  | 12.90  | 12.70 | 16.00 | 1.30 | 16.00 | 0.80  | WNPA-0615-1/4S   |
|  | 4.70     | 8.70  |  |       |       |      | 20.30 | 0.80  | WNPA-0619-W1420  |
|  | 6.40     | 11.50 |  |       | 16.30 | 2.00 | 26.70 | 0.90  | WNPA-0625-J1420  |
| M8 x 1.25  | 0.40     | 4.00  | 16.10  | 15.90 | 21.50 | 3.20 | 18.30 | 1.20  | WNPA-0815-E51618 |


all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

1) couple de serrage / Anzugsdrehmoment / coppia di serraggio / par de apriete



| English      | Français           | Deutsch               | Italiano        | Español        |
|--------------|--------------------|-----------------------|-----------------|----------------|
| Large flange | A collerette large | Großer Flachkopf      | Flangiato largo | Ala larga      |
| Round body   | Corps rond         | Runder Schaft         | Corpo tondo     | Cuerpo redondo |
| Neoprene     | Néoprène           | Neopren               | Neoprene        | Neopreno       |
| Brass        | Laiton             | Kupfer-Zink Legierung | Ottone          | Latón          |



| Thread<br>filetage /<br>Gewinde /<br>filetto / rosca | e (grip) |       |  | øA<br>nom. | øB<br>nom. | D<br>nom. | M<br>nom. | Tightening<br>Torque <sup>1)</sup><br>Nm nom. | Part No/ref     |
|--|----------|-------|--|------------|------------|-----------|-----------|---|-----------------|
|  | min.     | max.  |  |            |            |           |           |   |                 |
| M3 x 0.5   | 9.50     | 13.00 | 6.30   | 6.10       | 14.00      | 0.90      | 24.90     | 0.40  | WNPL-0324-C632  |
| M4 x 0.7   | 0.40     | 4.40  | 8.10   | 7.90       | 19.10      | 1.50      | 14.20     | 0.30  | WNPL-0413-C832  |
| M5 x 0.8   | 0.80     | 5.80  | 9.80   | 9.60       | 19.00      | 4.70      | 21.00     | 0.50  | WNPL-0516-G1032 |
|  | 0.80     | 5.80  |  |            |            | 2.00      | 18.00     |   | WNPL-0516-J1032 |
| M6 x 1.0   | 0.80     | 4.70  | 12.90  | 12.70      | 19.10      | 4.80      | 21.10     | 0.90  | WNPL-0615-D1420 |

all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

1) couple de serrage / Anzugsdrehmoment / coppia di serraggio / par de apriete





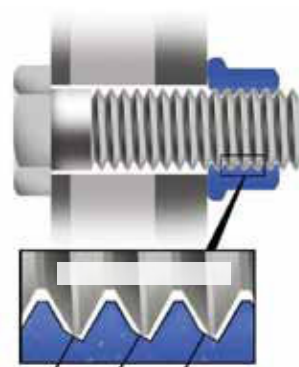
# Spirallock® Self-locking Threaded Solutions

Spirallock is a unique and proprietary preload locking internal (female) thread form that's exceptionally resistant to transverse vibration - the primary cause of thread loosening. Proven in thousands of applications, Spirallock threaded holes and nuts accept standard male fasteners, eliminate the need for other locking devices, and substantially reduce the potential for fatigue failure when compared to standard threads.



## Key features and benefits

- Exceptionally resistant to vibration loosening
- Eliminates need for other locking devices
- Accepts standard male fasteners
- Improves joint fatigue life
- Consistent reusability
- Eases assembly, reducing assembly time
- Reduces life cycle cost of threaded joints



Wedge ramp Spirallock® female thread

## Product Range

- Nuts
- Self-Clinching Nuts
- Threaded Inserts
- Taps
- Threading Inserts
- Thread Gages
- Thread Milling Cutters

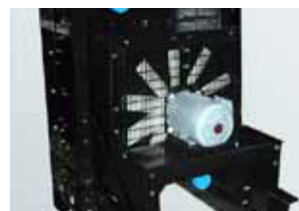
## Explainer Video

Please take a moment to watch this short explainer video about the Spirallock thread form on [www.StanleyEngineeredFastening.com/resource-center/video-gallery](http://www.StanleyEngineeredFastening.com/resource-center/video-gallery)



## Assembly applications

- Automotive body & powertrain
- Heavy trucks
- Recreational vehicles
- Aerospace & Spacecraft
- Medical equipment
- Agricultural & Construction equipment



POP® & Avdel® have been producing assembly systems since the 1930s and offer comprehensive ranges of innovative fasteners and installation systems to all market segments and applications. STANLEY Engineered Fastening offers POP Avdel products through Sales, Distribution and Manufacturing facilities in over 150 countries. Covered by the portfolio are:



**Breakstem Riveting Systems**

Various features from multi-grip capability to high strength stainless steel rivets.



**Lockbolt Systems**

High clamp force and vibration resistance for the highest strength joints.



**Speed Fastening® Systems**

Extra fast and reliable fastening from one side. Rivets are fed automatically.



**Sealing Plugs**

Engineered for both low-pressure and high-pressure hole sealing applications.



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Fast system for sustainable threads with high torque-to-turn.



**Customised Fastener Designs**

Bespoke designs and finishes to meet your unique assembly requirements.



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From manually operated power tools to customised semi and fully automated assembly workstations and repair tools.

**We can also provide you with:**



One-stop shopping for the blind riveting distributor market. MasterFix® owes its excellent reputation to the successful distribution of the broadest range of blind rivets and blind rivet nuts in the business.



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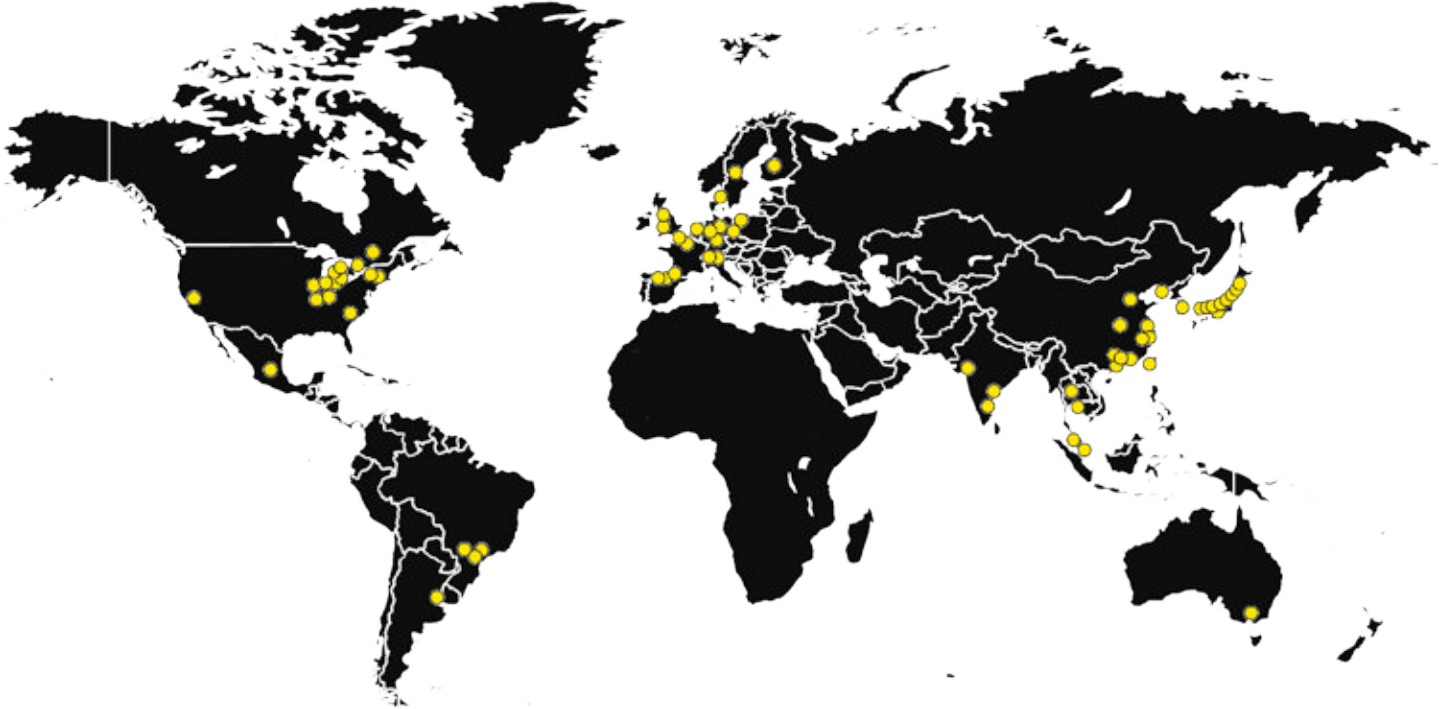


Spirallock® is a technologically superior fastening system ideally suited for threaded joint applications subjected to heavy shock and vibration.



# STANLEY®

Engineered Fastening



STANLEY Engineered Fastening, a Stanley Black & Decker Inc. Company has been revolutionising fastening and assembly technologies for a variety of industries for more than 40 years.

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