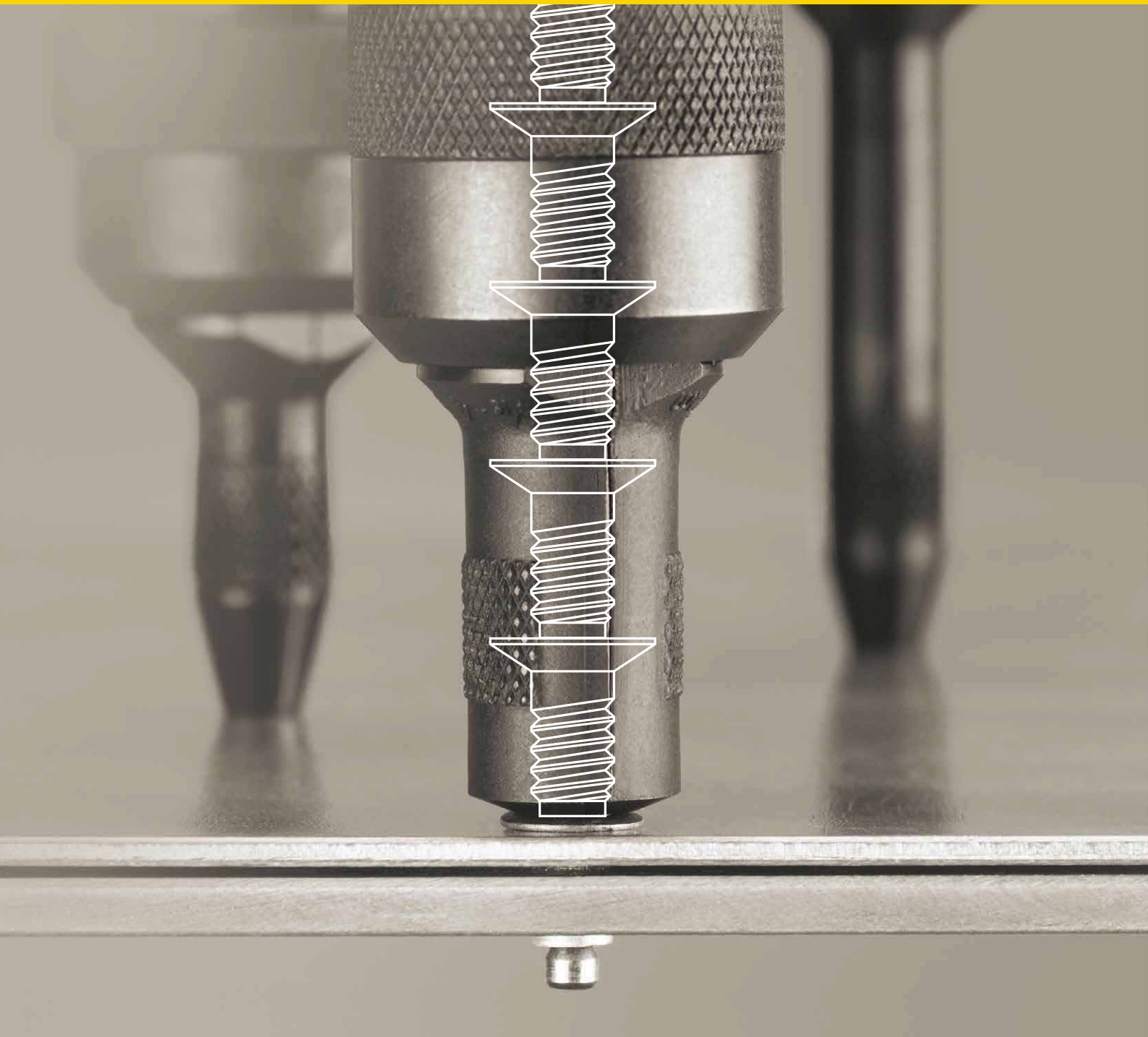


**STANLEY**<sup>®</sup>  
Engineered Fastening



Speed Fastening<sup>®</sup> Systems



# POP® Avdel®

**Speed Fastening® Systems**  
Reduce Assembly Costs with the most effective blind fastening technology.

**Holding your world together®**



## Speed fasteners

**High precision, system-compatible function, ease of operation and quick processes are guaranteed because you can fasten continuously from magazine or bowl fed fasteners and place up to 60 fasteners per minute. For fast and reliable assembly processes.**

Speed Fastening Systems can reduce assembly costs, shorten cycle times, increase productivity and reduce rework and other quality costs. Speed Fastening Systems are well suited for use in small, medium and large batch processes as well as continuous production lines.

## Installation

For smaller batches, we offer a choice of power tools and simple assembly workstations. For larger batches, multihead systems offer a cost effective solution. For continuous flow lines, we have the technology to develop fully automated assembly systems.

## Applications

Speed Fastening Systems can be used to assemble metal and plastics, composite material and electronic components. With an average cycle time of less than two seconds, these systems provide a fast installation from one side (blind).

## Mission

Together with our customers, we develop blind fastening systems that simplify your production process and improve the quality of your products. In every case, we not only see ourselves as a provider of fasteners, tools and machines but as a development and system partner with the objective of helping our customers improve their assembly performance.





# Table of Contents

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Systems Range Overview	Speed Fastening® Systems	4	
	Range Overview	5	
	Specifying a Speed Fastening® System	6 - 7	
	Selection Guide	8 - 10	
The Range of Speed Fasteners	NeoSpeed®	11	
	Briv®	12	
	Chobert®	13	
	Double Flush Chobert®	14	
	Grovit®	15	
	Rivscrew®	16	
	Rivscrew® PL	17	
	Avtronic®	18	
	Avsert®	19	
	Avlug®	20	
Customised Designs	21		
Installation Equipment	Installation Systems	22	
	Power Tools	23 - 24	
	Workstations	25 - 26	
	Assembly Workstations	27	
Data Sheets	NeoSpeed®	Fastener	28 - 33
		Equipment	34 - 35
	Briv®	Fastener	36 - 44
		Equipment	60 - 62
	Chobert®	Fastener	45 - 63
		Equipment	60 - 61, 63
	Double Flush Chobert®	Fastener	57
		Equipment	60 - 61, 63
	Grovit®	Fastener	58 - 59
		Equipment	60 - 61, 63
	Rivscrew®	Fastener	64 - 67
		Equipment	69 - 71
	Rivscrew® PL	Fastener	68
		Equipment	69 - 71
	Avtronic®	Fastener	72 - 73
		Equipment	74 - 75
	Avsert®	Fastener	76 - 77
		Equipment	78
	Avlug®	Fastener	79
		Equipment	80 - 81

# Speed Fastening<sup>®</sup> Systems

Speed Fastening is a unique assembly system designed for rapid and reliable fastening in medium and high volume applications. Originally designed for the aviation industry, Speed Fastening Systems are now used by many of the world's foremost manufacturing companies in sectors as diverse as household goods, lighting, electronic sub-assemblies, light metal fabrication and automotive. Speed fasteners are available in a wide range of materials, finishes, lengths and diameters and are ideal for fastening metals, plastics, composites and electronic components.

Speed fasteners are single piece fasteners which are either magazine fed or fed via a vibrating bowl to a wide choice of installation equipment. This ranges from the ultra-lightweight 753 power tool to fully automated, state of the art assembly systems.

## Benefits of assembly

### Increased manufacturing throughput

A Speed Fastening System can be fully optimised to give cycle times of less than two seconds. This rapid, blind sided process delivers a throughput up to four times greater than a traditional threaded or riveted solution.

### Reduced component handling

The fasteners are fed via a magazine or into a bowl feeder. This eliminates the need for individual component handling, saves time and reduces the potential for operator injury.

### No component spillage

Because the fasteners are captively held they will not be dropped onto the floor or into the application. This avoids wasted time and improves product quality while improving the work environment.

### No stem loss

Traditional breakstem fasteners all too often suffer from stem loss once installed. This can lead to application rattle, electrical short circuits or worse. Speed fasteners have no stems.

### Improved joint quality

Speed installation technology provides a consistent, repeatable joint. What's more, unlike threaded fasteners, there is no requirement for torque control – no more problems of stripped holes or loose joints.

### Improved joint performance

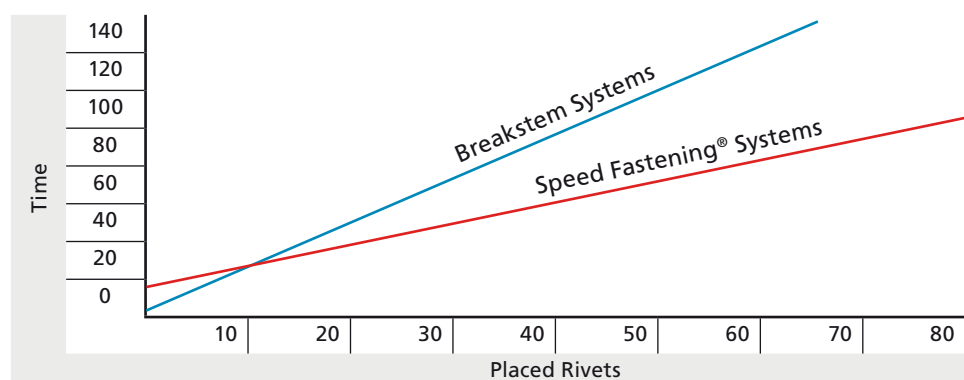
Once installed speed fasteners give excellent clamp up, shear and tension performance. They are also virtually immune from vibration loosening.

### Process flexibility

Speed Fastening Systems can be used for low volume, off-line batch or jobbing shop work through to flow line processes. From hand held power tools to multi-headed modular workstations, we can design a Speed Fastening System to suit your assembly requirements. A wide variety of products in many industries are assembled with these systems including automotive, electronics, domestic appliance and general industrial.










## Time Analysis

Speed Fastening is the more efficient system after only 10 placed rivets.





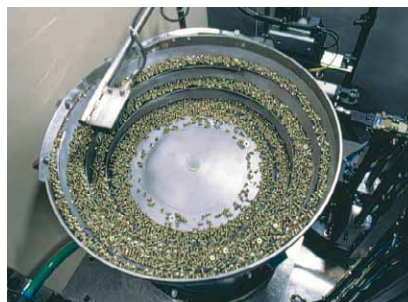
# Range Overview

Brand	Material	Key features
NeoSpeed® 	Aluminium Alloy Steel Stainless Steel A4	Wide grip range High joint clamp Hole filling Very high strength
Briv® 	Aluminium Alloy Steel Stainless Steel A2 Brass	Bulbed tail form Large headform High joint clamp Good joint gap closure
Rivscrew® 	Steel	Threaded fastener Removable with hex key and reusable Fastens into materials up to Vickers hardness 105 Hv5
Chobert® 	Aluminium Alloy Steel Brass	Internal tapered bore Controlled clamp High shear Ideal for soft and brittle materials
Double Flush Chobert® 	Steel	Flush surface on both sides of the joint Reduces excess space requirements within the chassis
Grovit® 	Aluminium Alloy Steel	Designed for blind hole applications Annular grooves on body For use in wood, plastics, fibreglass and aluminium
Avtronic® 	Brass Aluminium Alloy	Attaches DIN 41612 connectors and other components to PCBs Annular grooves on body
Avsert® 	Brass	Threaded stand-off pillars for PCBs Internally threaded bore Many stand-off heights
Avlug® 	Brass	Solderable terminal posts for PCBs Rolled/knurlled shank

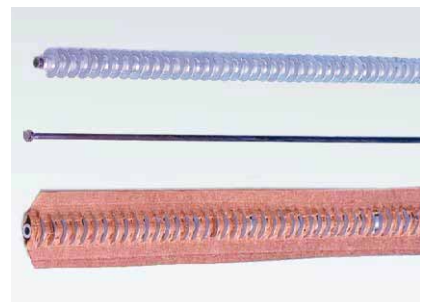
Assembly with standard tool



Fasteners fed via a vibrating bowl



Magazine fed fasteners





# Specifying a Speed Fastening<sup>®</sup> System

To optimise the performance of your Speed Fastening System, it is important to select the correct combination of fastener, nose equipment, mandrel and follower spring. It is also critical to ensure that the combination selected is suited for use with your choice of installation process. If you need any help in specifying the required components, do not hesitate to contact us. Further information on corrosion, safety and RoHS can be found on our website .

## Fastener Selection

### Standard Fasteners

#### Removability

Rivscrew<sup>®</sup> fasteners are ideal for applications requiring disassembly for repair or rework. They can simply be unscrewed using a standard hexagonal allen key.

#### Clamp

Briv<sup>®</sup> fasteners should be specified in applications requiring high clamp loads. NeoSpeed<sup>®</sup> fasteners combine high clamp throughout a wide grip range. Chobert<sup>®</sup> fasteners provide a lighter, controlled clamp making them ideal for softer or low strength materials.

#### Head Style

Fasteners are available with dome head. NeoSpeed<sup>®</sup>, Briv<sup>®</sup> and Chobert<sup>®</sup> are also available with countersunk head style. Other head diameters may also be available as specials – please contact us.

### Specialist Fasteners

#### Avtronic<sup>®</sup>

Designed for attaching DIN and other connectors, card ejectors and heatsinks to printed circuit boards.

#### Avsert<sup>®</sup>

Cost effective stand-off pillars for printed circuit boards.

#### Avlug<sup>®</sup>

Cost effective terminal posts for printed circuit boards.

### Fastener Material & Surface Finish

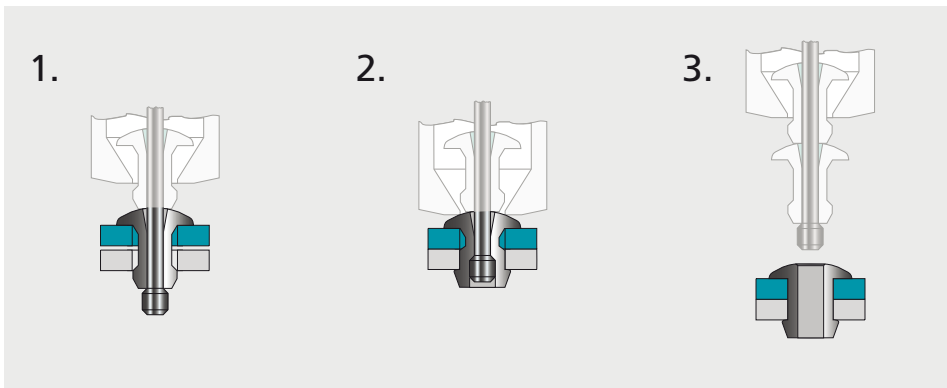
Speed fasteners are available in Stainless Steel, Steel, Aluminium and Brass. The choice of material should be made on the basis of performance (shear and tensile strength), suitability for use with the parent material and corrosion resistance. For performance data please see the relevant technical data sheets.







## Typical placing sequence



1. The mandrel with pre-loaded fastener is located in the hole.

2. Tool activation pulls the mandrel through the fastener, expanding it within the hole to provide high clamp and secure joints.

3. At the end of the installation cycle, the next fastener is automatically delivered to the nose of the tool, ready to repeat the assembly process.

Please visit our website for fastener placing animations.

## The surface finishes for our speed fasteners are as follows:

### Steel

Zinc plate and clear passivation

Option:

Epoxy paint

Zinc-nickel (with clear or black passivation)

Organic coatings

### Aluminium Alloy

Natural

Option:

Anodising (clear or colour dyed)

Epoxy paint

### Stainless Steel

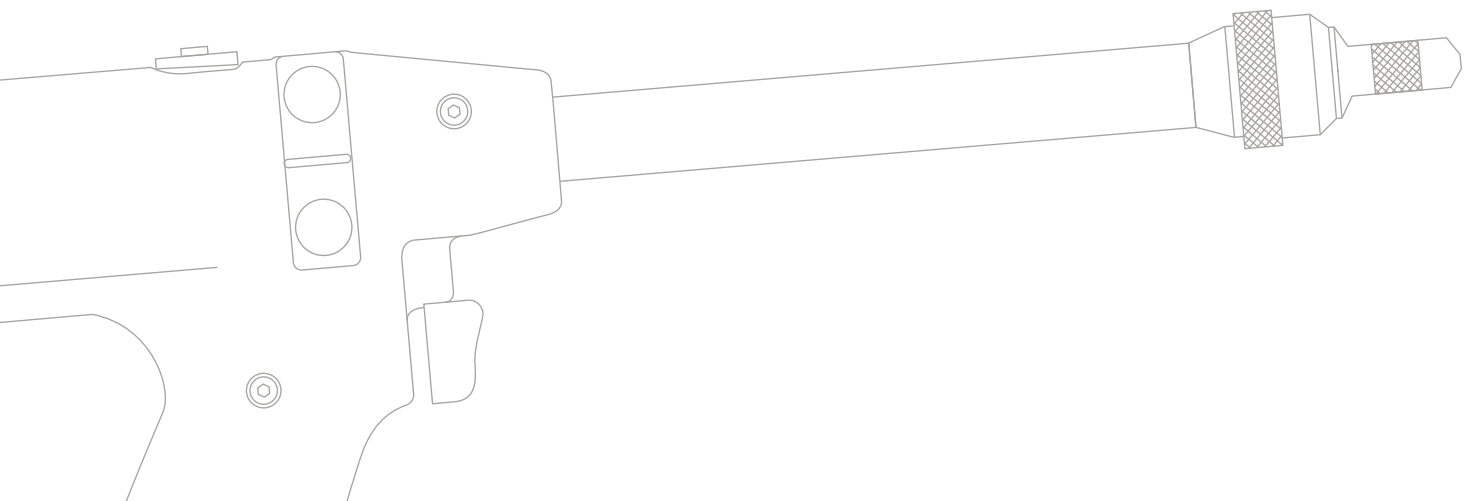
Passivated

### Brass

Brightened

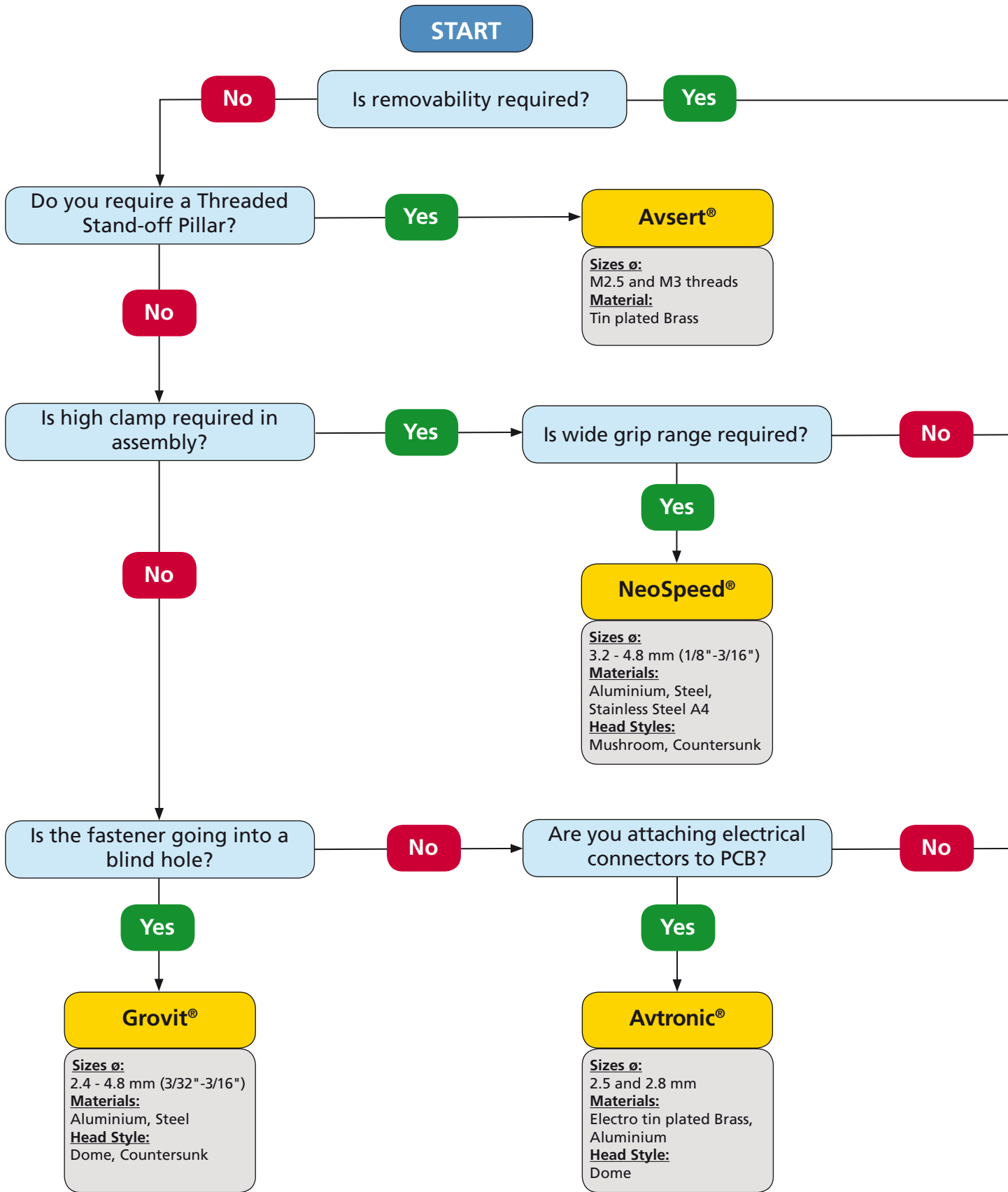
Tin plated (for solderability)

Almost all our fastener families may be specified with alternative surface finishes to provide increased corrosion resistance or a specific colour to suit your special application.



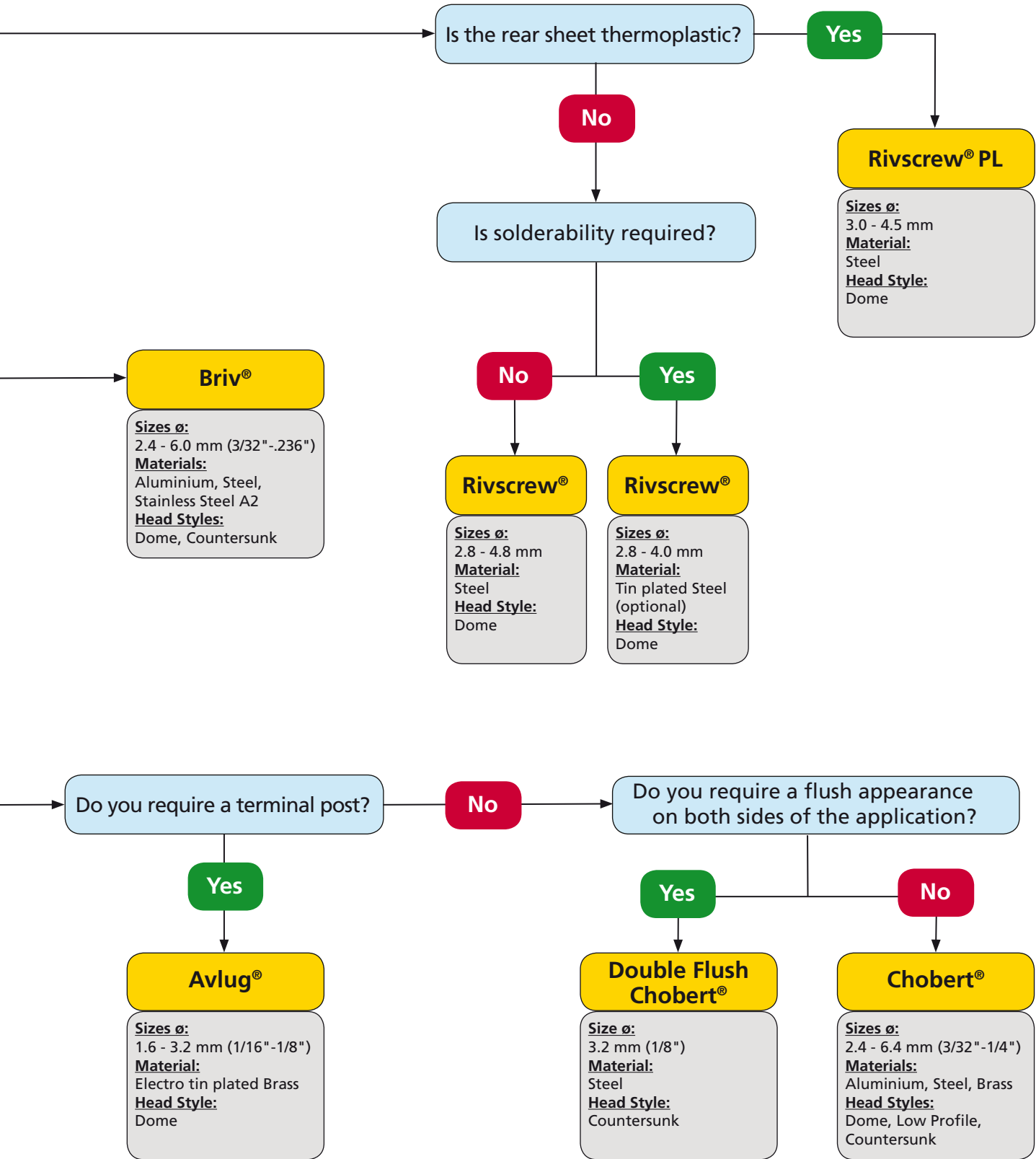
# POP® Avdel®

# Speed Fastening® Systems





This selection guide is designed to illustrate which fasteners may be the most suitable for your application. This guide does not include the full range of POP Avdel products; 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 speed fastener for your particular application. Full technical and performance data for each speed fastener can also be found on our website or contact your local representative.

Product Range	Material					Finish					Head Style			Fastener Size (nom)								Series	Page										
	Aluminium 2.5 % Mg	Aluminium 3.5 % Mg	Aluminium 5 % Mg	Steel	Stainless Steel	Brass	Natural	Zinc plated	Polished/bright	Passivated	Tin plated	Nickel plated	Anodised red	Dome	Low profile	Countersunk	1.6 mm (1/16")	2.4 mm (3/32")	2.5 mm	2.8 mm	3.0 mm		3.2 mm (1/8")	3.5 mm	4.0 mm (5/32")	4.5 mm	4.8 mm (3/16")	6.0 mm	6.4 mm (1/4")	M2.5	M3	Description	Data Sheet
NeoSpeed®				•			•							•								•									57101	11	28
				•			•							•								•									57121	11	30
				•						•				•								•									57141	11	32
				•										•								•									57221	11	33
Briv®				•			•							•								•									1801	12	36
				•			•							•								•									1802	12	38
				•										•								•									1804	12	36
				•										•								•									1821	12	39
				•										•								•									1822	12	41
				•										•								•									1831	12	42
				•										•								•									1833	12	42
				•										•								•									1841	12	44
Chobert® Double Flush Chobert®				•			•							•								•									1861	12	36
				•			•							•								•									1121	13	45
				•			•							•								•									1122	13	47
				•			•							•								•									1124	13	51
				•			•							•								•									1125	13	49
				•			•							•								•									1131	13	49
				•			•							•								•									1132	13	51
				•			•							•								•									1135	13	49
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				•			•							•								•									1147	13	53
			•			•							•								•									1148	13	53	
Grovit®				•			•							•								•									1162	13	55
				•			•							•								•									1164	13	56
				•			•							•								•									1110	14	57
				•			•							•								•									1101	15	58
RivscREW® PL RivscREW® PL				•			•							•								•									1103	15	59
				•			•							•								•									1104	15	59
				•			•							•								•									1722	16	64
				•			•							•								•									1723	16	64
				•			•							•								•									1733	16	66
Avtronic® Avtronic®				•			•							•								•									1772	16	67
				•			•							•								•									1742	17	68
				•			•							•								•									1188	18	72
Avsert® Avsert®				•			•							•								•									1189	18	73
				•			•							•								•									1117	19	76
Avlug® Avlug®				•			•							•								•									1118	19	77
				•			•							•								•									1107	20	79

# NeoSpeed<sup>®</sup> Wide Grip Range

Speed fasteners with a unique splined rivet design combine high clamp throughout a wide grip range - simply the strongest, most versatile speed riveting system in the world.



## Key features and benefits

- The NeoSpeed fastening process delivers a throughput up to four times greater than traditional threaded or breakstem fasteners
- Multi-grip capability accommodates wide variations in material thickness
- One rivet can be used to replace several standard grip fasteners
- External splines fill rear sheet and oversize front sheet holes
- 3x greater hole size tolerance than standard breakstem rivets
- Far less sensitive to application variations
- Easier specification due to one-rivet x one mandrel solution
- Typically half the installed weight versus an equivalent breakstem rivet
- Supply options: paper magazine of fasteners or pre-loaded disposable mandrel (Cartridge)

## Specifications

Sizes:

3.2 mm to 4.8 mm  
(1/8" to 3/16")

Materials:

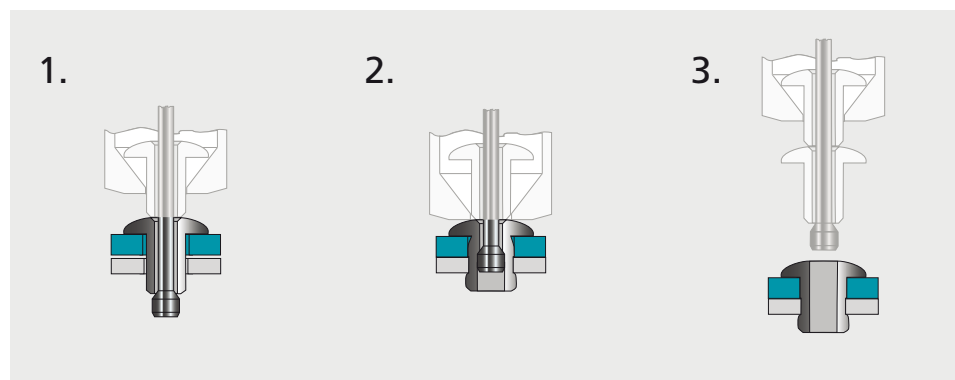
Aluminium Alloy, Steel,  
Stainless Steel A4

Head Styles:

Mushroom , Countersunk

Avdel Patent protected.

## Typical placing sequence



Please visit our website for fastener placing animations.

## Assembly applications

- Automotive
- Electronics
- Domestic appliances
- Electrical equipment
- General light fabrication

Airbags



Interior



Seat & trim



Heating



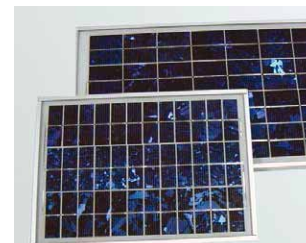
Rapid action door



Computer cabinet



Solar panel





# Briv<sup>®</sup> High Shear, High Clamp Fasteners

Speed fasteners with a bulbed tail provide consistent high clamp and shear. Can be used to assemble many materials including metal, plastic and aluminium alloy.



## Key features and benefits

- Bulbed tail and foreshortening of the fastener during installation ensures high clamp
- Bulbed tail and large head style provide a large bearing area for soft materials
- Tapered tail for ease of hole entry
- Expands radially during installation to ensure maximum hole fill
- Lower in-place costs than welding or nail rivets
- Bright tin plated brass option for ease of soldering and good electrical conductivity
- Stainless steel option for applications subject to high temperature or corrosion
- Can be bowl fed for larger volume applications using automated equipment

## Specifications

Sizes:

2.4 mm (3/32") to 6 mm

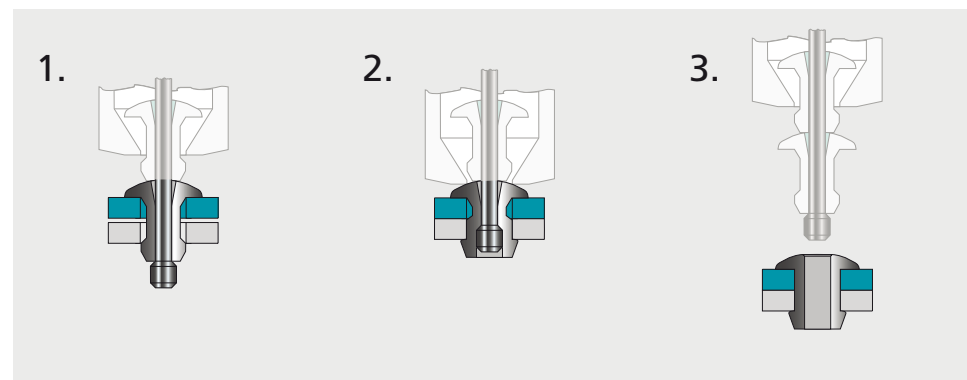
Materials:

Aluminium Alloy, Steel,  
Stainless Steel A2, Brass

Head Styles:

Dome, Countersunk

## Typical placing sequence



Please visit our website for fastener placing animations.

## Assembly applications

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

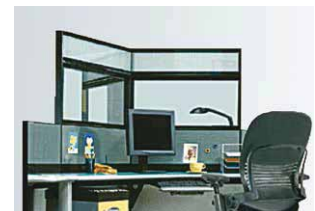
Vacuum pump for diesel engines



Domestic heating systems



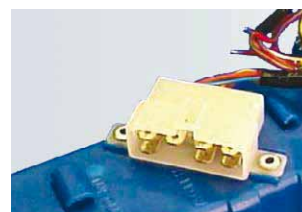
Office furniture



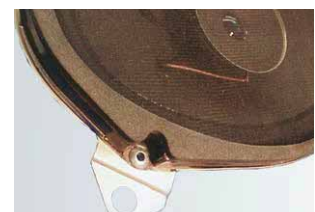
Computer cabinet



Automotive plastic connector  
to moulded chassis



Automotive stereo speaker



# Chobert<sup>®</sup> For Soft and Brittle Materials

Speed fasteners which provide consistent controlled clamp, ideal for soft or brittle materials.



## Key features and benefits

- Internally tapered bore ensures consistent light clamp to reduce potential damage to materials
- Expands radially during installation to ensure maximum hole fill
- Lower in-place costs than welding or nail rivets
- Ideal pivot pin or hose tail
- Bright tin plated brass option for ease of soldering and good electrical conductivity
- Can be bowl fed for larger volume applications using automated equipment

## Specifications

Sizes:

2.4 mm to 6.4 mm  
(3/32" to 1/4")

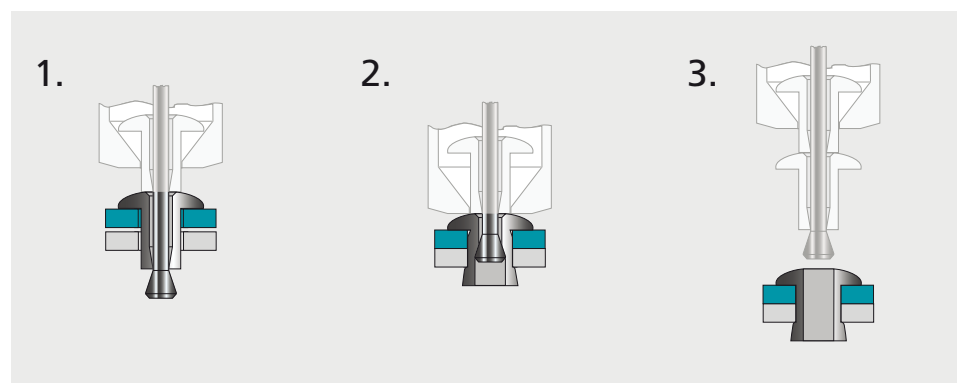
Materials:

Aluminium Alloy,  
Steel and Brass

Head Styles:

Dome, Low Profile,  
Countersunk

## Typical placing sequence



Please visit our website for fastener placing animations.

## Assembly applications

- Automotive
- Electronic components
- Sheet metal
- Electrical engineering
- Injection moulded components
- Switchgear
- Domestic appliances
- General sheet metal
- General light fabrication

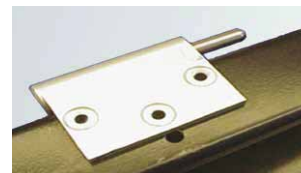
Window hinge



Alloy tube with nylon bush



Computer rack glass door hinge



Housing for car alarm



Composite material latch for wheel cover



Cooler





# Double Flush Chobert®

Speed Fastening® rivet with countersunk head for use in exceptionally thin sheet materials. Based on the Chobert design, it is an ideal solution for fastening in the electronics industry and other applications where rear protrusion and rivet stem loosening are undesirable.



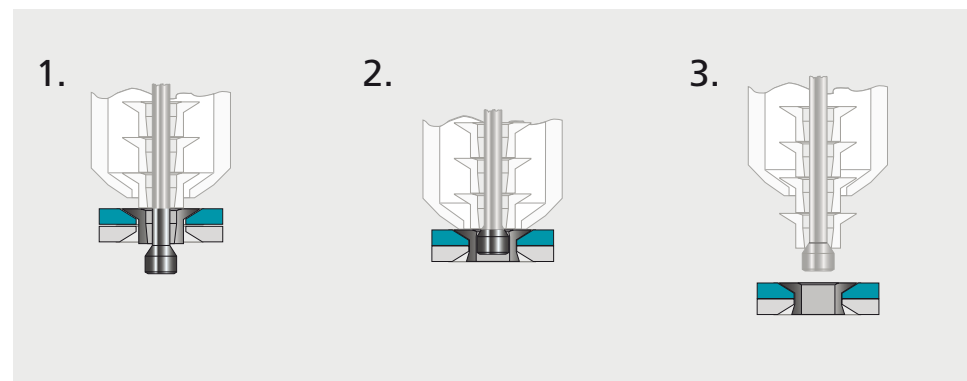
## Key features and benefits

- Flush surface on both sides of the joint\*
  - Reduces excess space requirements within the chassis
  - Common hole form can be used throughout the chassis design to reduce complexity
  - Expands radially in the material during installation
  - Can be installed from either direction if accessible
  - Provides superior joint strength when compared to competitive technologies
  - One-piece fastener eliminates potential stem fall out that can cause electrical problems
- \* Rear sheet tail protrusion of installed fastener up to 0.5 mm is permissible

## Specifications

Size:  
3.2 mm (1/8")  
Material:  
Steel  
Head Style:  
Countersunk

## Typical placing sequence

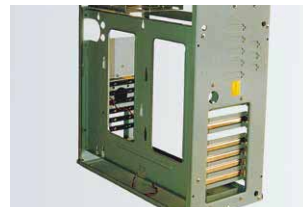


Please visit our website for fastener placing animations.

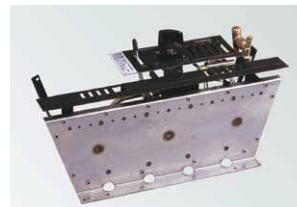
## Assembly applications

- Computer chassis
- Electronic devices and components
- Automotive applications
- Domestic appliances
- HVAC
- General thin sheet fabrications where material cost and blindside space is at a premium

Computer chassis



Gas firing







# Grovit<sup>®</sup> For Blind Hole Applications

Designed for blind hole applications in wood, plastics, fibre-glass and aluminium. Can also be used in harder substrates.



## Key features and benefits

- Annular grooves on the body expand radially during installation
- Provide a vibration resistant joint and increased pull-out resistance

## Specifications

Sizes:

2.4 mm to 4.8 mm  
(3/32" to 3/16")

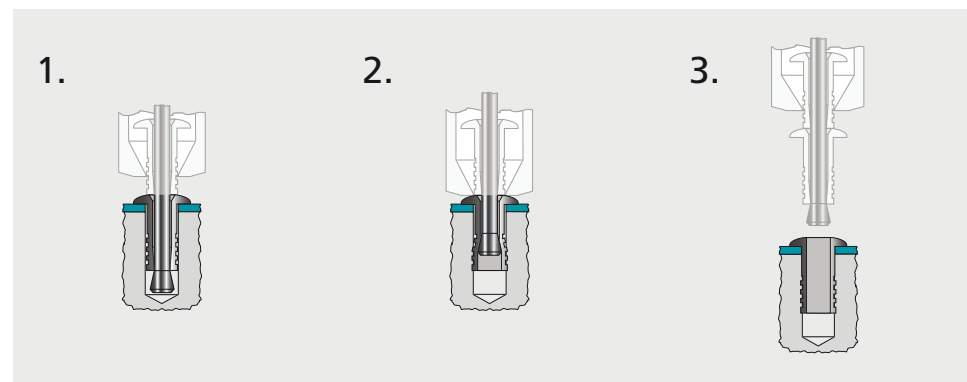
Materials:

Zinc plated Steel and  
Aluminium Alloy

Head Style:

Dome, Countersunk

## Typical placing sequence



Please visit our website for fastener placing animations.

## Assembly applications

- Automotive
- Domestic appliances
- Electrical equipment
- Injection moulded components

Grovit<sup>®</sup> fastener in timber



Trouser press



Trouser press (detail)



PVC connector block in air conditioning unit



Grovit<sup>®</sup> fastener used as a quick connect low pressure bleed hose



PVC strip connector







# Rivcrew® Threaded, Removable Fasteners

Threaded, removable speed fasteners that combine the speed of rivet placement with the removability of a screw.



## Key features and benefits

- Expands radially during installation to form a thread in host material, eliminating the risk of over torquing and strip-out
- Placed using a hexagon mandrel which expands the threaded diameter radially, adjacent to its six corners
- Removable for servicing with a hex key and reusable
- Providing a higher vibration resistant "thread lock" in the parent material compared to standard screws
- Can be used to fasten most materials up to Vickers hardness 105 Hv5
- Eliminates the need for costly tapping or thread-forming operations
- Bright tin plated steel option for ease of soldering and good electrical conductivity
- Can be bowl fed for larger volume applications using automated equipment

## Specifications

Sizes:

2.8 mm to 4.8 mm

Materials:

Zinc plated steel

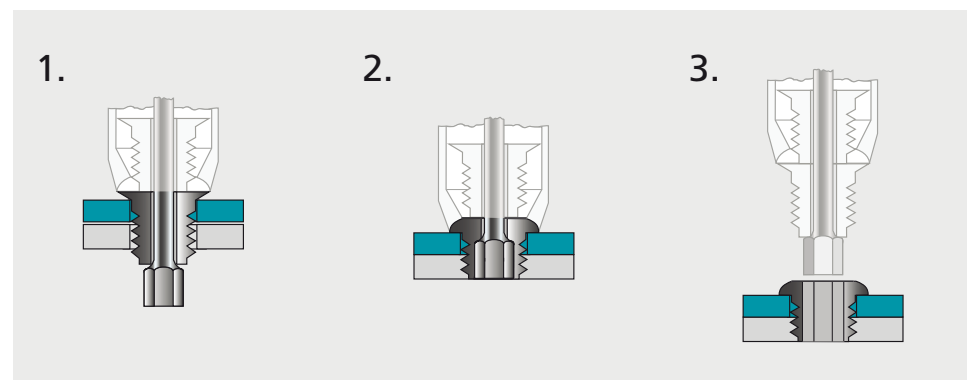
Optional: tin plated

Head Style:

Dome\*

\*The placed head style depends on the nose equipment used, standard Rivcrew nose equipment gives a dome head style.

## Typical placing sequence



Please visit our website for fastener placing animations.

## Assembly applications

- Aluminium die-cast boxes
- Cast magnesium
- Semi-conductors to thin wall and extruded heatsinks
- Semi-conductors to PCBs
- PCBs to chassis assemblies
- Fastening into injection moulded plastic bosses
- General engineering involving plastics, nylon, polycarbonate etc.

Rivcrew® is removable and reusable



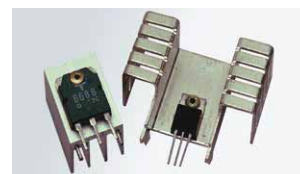
Alternator diode plate to nylon moulding



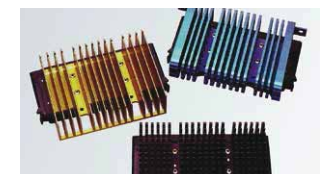
Automotive die-cast chassis with PCB



Semi-conductors to heatsinks and printed circuit boards



Heatsinks to processor cartridges



Seat belt tensioner



# Rivcrew<sup>®</sup> PL For Plastics

Threaded, removable speed fasteners that combine the speed of rivet placement with the removability of a screw.



## Key features and benefits

Rivcrew PL fasteners have the same features and benefits as the standard Rivcrew fastener plus:

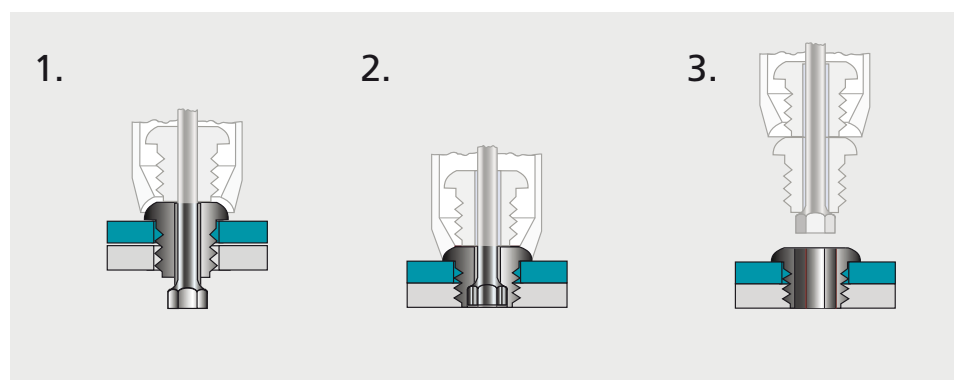
- Especially designed for soft and hard plastics
- Special thread design for a wide range of plastics with a flexural modulus between 340,000 and 1,400,000 p.s.i (2,000 to 10,000 N/mm<sup>2</sup>)
- Wide grip range from 3.0 to 11.8 mm covered by one fastener

## Specifications

Sizes:  
3.0 mm to 4.5 mm  
Material:  
Zinc plated steel  
Head Style:  
Dome

Avdel Patent Protected

## Typical placing sequence



Please visit our website for fastener placing animations.

## Assembly applications

- Automotive components
- Lighting
- Plastic trim
- Home electronics
- Domestic appliances
- Toys
- Plastic enclosures

Removable and reusable



Electric components



Head lamps



Printer & copiers



Dust cleaner



Fender attachment



# Avtronic® For Attaching Connectors to PCBs

Initially designed to attach DIN 41612 connectors to PCBs but can also be used to attach a wide range of other connectors and components.



## Key features and benefits

- Annular grooves on the body expand radially during installation
- Provide a vibration resistant joint, increased pull-out resistance and good residual clamp
- Various body lengths provide a wide grip range to accommodate most combinations of connector and PC board thickness
- Ideal tack rivet
- Can be used in blind hole applications

## Specifications

Sizes:

2.5 mm and 2.8 mm

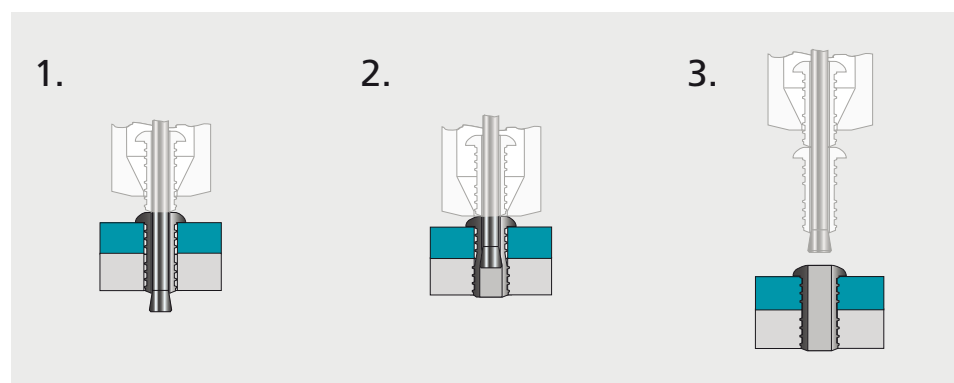
Materials:

Electro tin plated Brass and Aluminium Alloy

Head Style:

Dome

## Typical placing sequence

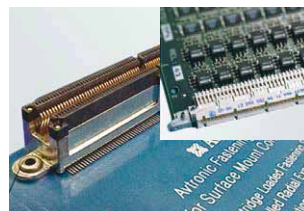


Please visit our website for fastener placing animations.

## Assembly applications

- DIN and other connectors
- Heatsinks
- Card ejectors
- Brackets and stiffener bars

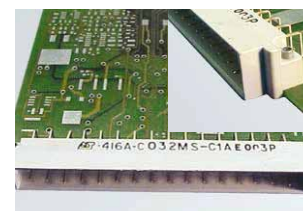
Surface mounted connectors to PCBs



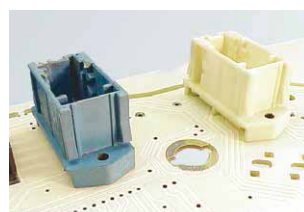
Electronic component attachment



DIN 41612 male edge connector



Automotive vertical mounted connectors



Traffic light reflector and contact point





# Avsert® Threaded Stand-off Pillars for PCBs

Threaded stand-off pillars for PCBs in a range of metric internal threads and many stand-off heights.



## Key features and benefits

- Internally threaded bore takes a threaded part e.g. D-subminiature connectors
- Available in many stand-off heights to accommodate a wide variety of components
- Can be used for board thicknesses of 0.8–2.0 mm (short spigot) or 0.8–2.4 mm max (long spigot).
- Suitable as a female mating bush for D-subminiature connectors

## Specifications

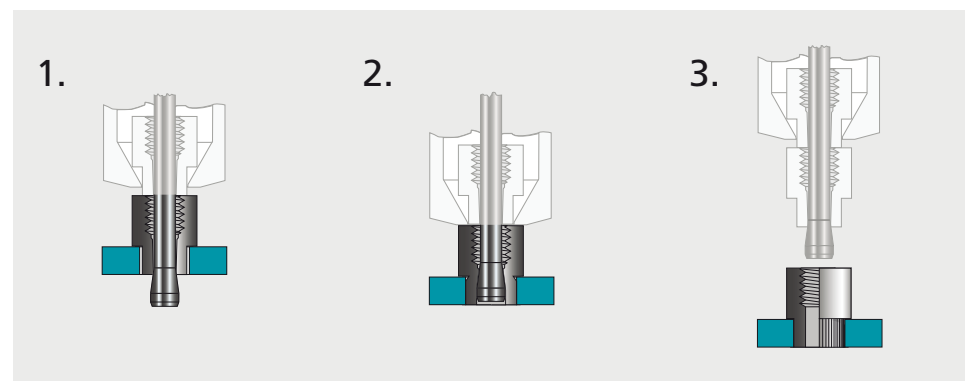
Sizes:

M2.5 x 0.45 and  
M3 x 0.5 threads

Materials:

Tin plated Brass

## Typical placing sequence

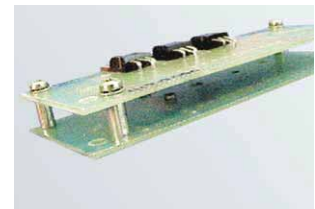
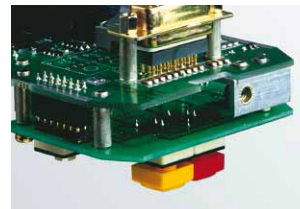


Please visit our website for fastener placing animations.

## Assembly applications

- Aluminium geartrays and extrusions
- D-connectors
- PCBs
- Telecommunications equipment

Stand-off pillar



DB25 subminiature connector  
4.40 UNC female



Female mounting bush



# Avlug<sup>®</sup> Solderable Terminal Posts

Secure, easy-to-solder terminal posts for PCBs.



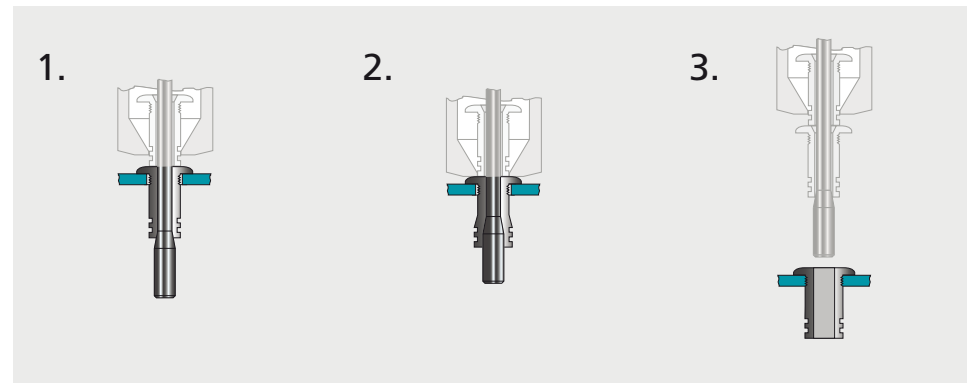
## Key features and benefits

- Rolled/knurled shank ensures secure placement in the PCB
- Suitable for wire wrapping or a test point for CRO tubes
- Available with diameters as small as 1.6 mm for assembly of smaller components

## Specifications

Sizes:  
1.6 mm to 3.2 mm  
(1/16" – 1/8")  
Material:  
Electro tin plated Brass  
Head Style:  
Dome

## Typical placing sequence

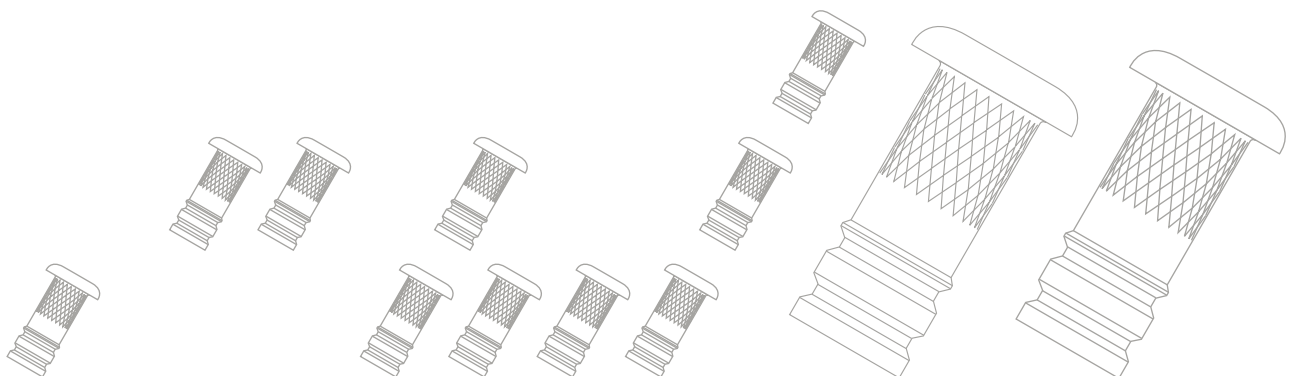
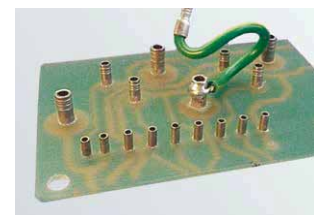
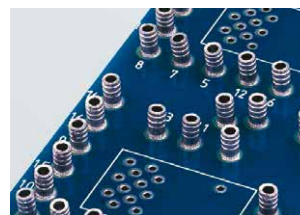


Please visit our website for fastener placing animations.

## Assembly applications

- Terminal posts
- Wire wrap

Terminal post - wire wrap





# Customised Designs

As you would expect from a leader in fastening solutions, we can design and manufacture Speed Fasteners with a wide variety of forms and finishes to meet your unique assembly requirements. Shown below are just a few examples of our customised capabilities. Whether you require custom fastener geometry, a particular finish, different fastener material, limited access tooling, or anything else not offered as standard product, please contact us to discuss your special requirements.



### NeoSpeed® Speed Fastener - Black Anodised Finish

- Aluminium, black anodised
- More wear & corrosive resistant part



### Briv® Speed Fastener - Customer specific painted finish

- Aluminium
- Custom painted finish



### Briv® Speed Fastener - Anodised to Customer Colour & Head Marking

- Aluminium - blue anodised
- Customer logo on part for tamper resistance



### Chobert® Speed Fastener - Stand-off Rivet

- Aluminium, natural
- Very large flange shouldered stand-off rivet



### Speed Fasteners - Hose Barb

- Aluminium, natural
- For use on compressed air tubes



### Avplas® Speed Fastener - Removable

- Aluminium, natural
- Removable fastener for plastics



### Avlug® Miniature Speed Fastener - Solderable Terminal Post

- Brass, Tin plated
- Solderable Terminal Posts
- Diameter 1.6 mm (1/16")



### Miniature Speed Fastener

- Aluminium, natural
- For use in electronic applications
- Diameters 1.6 - 2.0 mm (1/16" - .078")

# Installation Systems

From cost-effective power tools to custom assembly systems, Speed Fastening® equipment offers rapid and reliable assembly to meet your specific requirements. The equipment is an integral part of the Speed Fastening System and offers the following benefits:

- High speed, reliable fastener feed
- Assembly cycle times within two seconds
- Single side assembly
- Simple operation
- Quick reload
- Low maintenance costs
- Ideal for low volume batch work through to fully automated assembly lines

## Power Tools

For low volume production up to 500,000 fastener p.a.

Power tools



753 Standard tool



7537 Power tool



## Workstations

For medium volume production from 250,000 up to 1,000,000 fastener p.a.

Workstations



7535 Pantograph workstation



Mini-MAS



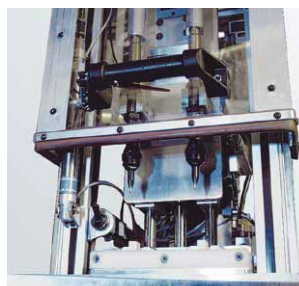
## Assembly Workstations

For high volume production > 1,000,000 fastener p.a.

Bespoke systems



Twin head fixed pitch workstation



23 placing heads to assemble a computer chassis





# Power Tools

## 7530 Power Tool

High performance, hydro-pneumatic power tool in heavy duty plastic, designed for rapid, blind side installation of speed fasteners. The intensifier is separated from the power tool. One tool places all speed fasteners except  $\varnothing$  1.6 mm (1/16") Avlug®. For  $\varnothing$  1.6 mm Avlug use the 7536 power tool.

- Average cycle time of less than 2 seconds to increase productivity – up to 1500 fasteners per hour
- High capacity, magazine fed fasteners reduces component handling and subsequent spillage
- Robust & durable construction makes it suitable for most industrial environments
- Lightweight construction (split handtool and intensifier) and low actuation recoil reduces operator fatigue
- Available with in-line handle or bottom hose configuration
- Low maintenance handtool maximises productive time – no requirement for specialist maintenance training
- Long life, self priming intensifier provides consistent actuation and hence joint formation
- Long reach barrel for use in many difficult access applications

753 Standard tool



Suspended



7536



Autoload



A suspended version is available that can be supported on a balancer to be quickly and easily moved or discarded – reducing downtime and operator fatigue.

The Autoload system is ideal for high volume production > 5,000,000 fasteners per year. Autoload provides bowl fed fasteners to minimise reloading downtime and maximise productivity. The fasteners are automatically loaded onto the mandrel. When fasteners on one mandrel are spent, the tool is placed in the nest, and the system inserts a fully-loaded replacement into the modified 753 tool. The system features an operator interface board that displays real-time reports on machine cycles and fault diagnostics. The data also can be linked to a network allowing off-site monitoring and maintenance.



# Power Tools

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## 7537 Power Tool

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Lightweight, hydro-pneumatic power tool with integrated intensifier places all speed fasteners except  $\varnothing$  1.6 mm (1/16") Avlug® fastener.

- Average cycle time of approx. 1 second increases productivity
- No need for long umbilical makes it flexible to use in different production environment
- Specially toughened plastic body and heavy duty rubber base increase the impact resistance and durability
- Can place the same range of fasteners and uses the same nose equipment as 7530 powertool
- Ease of maintenance due to integral cycle counter
- Patent Protected features

7537





# Workstations Single-head

These single-head workstations can place the entire range of Speed Fastening® Systems and stand out for their ergonomic design. Rapid assembly makes them cost-effective, even with small batch sizes. Simple to operate, high mobility and easy integration into the production process are the main features. Time-consuming training of an operator is not necessary. The hydraulic riveting units provide a smooth and shock-free riveting, ideal for sensitive components. All tools only require compressed-air supply.

## Pantograph Workstation

- Tool supported on an extendable arm
- Wide arm reach to over 0.8 m
- Single hand operation
- The arm can be moved around the worktop to make space for other tasks
- Intensifier can be bench or floor mounted

## Fixed Arm Workstation

- Tool supported on a fixed arm
- Foot pedal control, leaving both hands free to position the workpiece
- Easy alignment of workpiece
- Height adjustable arm to meet the operator's precise ergonomic needs

## Underbench Workstation

- Cost-effective workstation, requiring minimum space
- Mounted below the worktop leaving a free work surface
- Foot pedal control, leaving both hands free to position the workpiece
- Easy alignment and precision assembly of small components
- Integral safety guard

70510 Underbench workstation



70510 Underbench workstation



7535 Pantograph workstation



7535 Fixed arm workstation



# Workstations Multi-head

## Mini-MAS

The Mini-MAS is a twin-head assembly station for fast, parallel assembly with compact and ergonomic design making it very easy to integrate into existing assembly lines.

- Double-head parallel riveting optimizes your assembly and increases the quality of the joining
- The rivets are presented in pairs and provide practical jig points for your components
- Possible linear positioning of one riveting module provides progressive adjustment of the riveting pitch from 29 mm up to 120 mm (close pitch version 17 mm – 108 mm)
- Suitable for many applications
- Hydraulic riveting modules provide smooth and shock-free riveting
- Activation by a foot pedal, leaving the hands free for component handling
- Seated workstation (stand version optional available)
- ESD construction as an option

Mini-MAS



Standard nose equipment



Close pitch version



## Multi-head Assembly Workstations

Multi-head assembly workstations are designed for the synchronous placement of multiple fasteners. Systems can be simple fixed, two head workstations or complex systems where as many as 60 fasteners can be placed at the same time. Most multi headed systems are customised to some extent which means that the user can enjoy the benefits of an assembly solution designed to their own specific requirements.

- Synchronous fastener placement maximises productivity and throughput
- In built fixturing reduces assembly time
- Modular assembly technology reduces maintenance costs
- Diagnostics capability improves quality control; preventive maintenance regimes can be implemented
- These workstations can be readily integrated into existing production facilities

# Assembly Workstations

## Automated Assembly Systems

Automated assembly systems are designed for integration within production lines and offer a complete operator free assembly solution for highest levels of productivity.

- Bowl fed fasteners for continuous fastening
- In line integration
- Diagnostic capability through operator interface
- Modular design with simple equipment access for simple maintenance processes

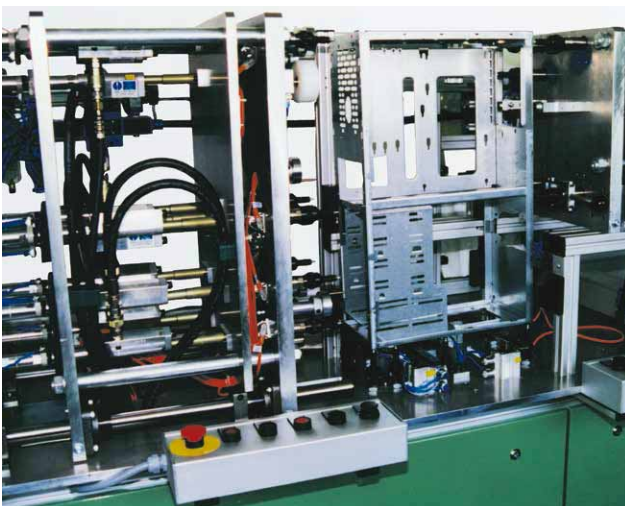
MIRS System to assemble vacuum pump



PMP System



29 placing heads to assemble computer chassis



10 placing heads to assemble automotive sealing strips

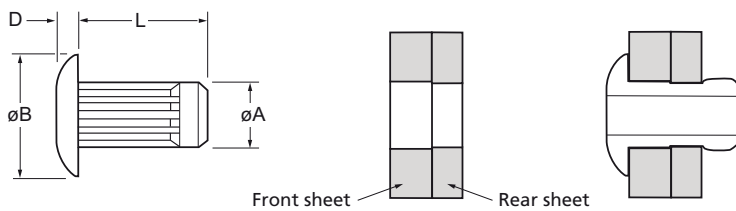





**POP**  **Avdel**®

**NeoSpeed® 57101 Series**  
 Aluminium


English	Français	Deutsch	Italiano	Español
Mushroom head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Aluminium Alloy* (5% Mg)	Alliage d'aluminium* (5% Mg)	Aluminium* (5% Mg)	Lega di alluminio* (5% Mg)	Aluminio* (5% Mg)
Natural	Brut	Blank	Nessuna finitura	Natural

\* : BS 1473 5056A DIN 1725 AlMg5 Werkstoff 3.3555



ø	Front sheet		Rear sheet		øB	D	L	øA			Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga	Part No/ref		
	min.	max.	min.	max.									min.	max.
3.2 (1/8")	0.4	2.0	3.35	3.62	3.26	3.42	6.53	1.10	4.8	3.17	0.76	1.25	52	57101-03204
	0.4	4.5											37	57101-03207
	0.4	8.6											24	57101-03211
4.0 (5/32")	0.5	2.2	4.10	4.43	3.97	4.18	8.18	1.25	5.4	3.90	1.19	1.90	47	57101-04005
	0.5	5.0											33	57101-04007
	0.5	9.1											23	57101-04011
4.8 (3/16")	0.6	2.4	5.00	5.40	4.85	5.10	9.71	1.50	5.8	4.79	1.66	2.90	44	57101-04805
	0.6	5.2											30	57101-04808
	0.6	9.2											22	57101-04812

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

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos



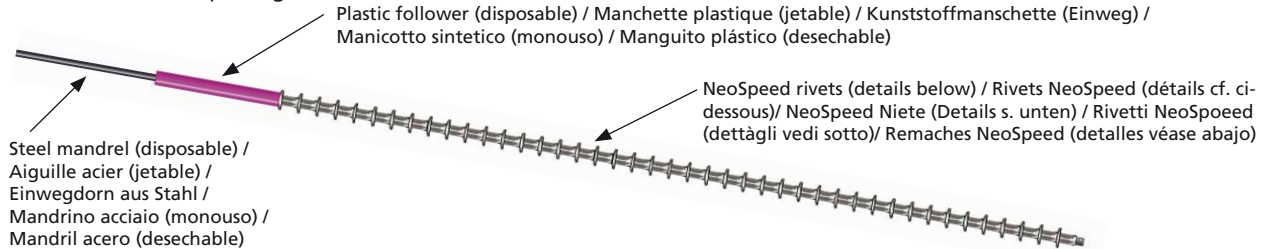
**POP® Avdel®**

## NeoSpeed® 57101 "Cartridge" Series Aluminium



### NeoSpeed® "Cartridge":

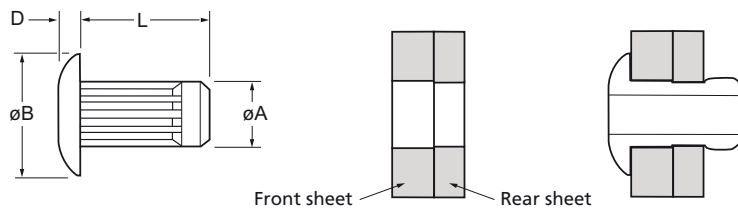
Pre-loaded disposable mandrel / Aiguille pré-chargée jetable / Vormagaziniert auf Einwegdorn / Precaricato su mandrino monouso / Mandril desechable precargado



### NeoSpeed® Rivets:

English	Français	Deutsch	Italiano	Español
Mushroom head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Aluminium Alloy* (5% Mg)	Alliage d'aluminium* (5% Mg)	Aluminium* (5% Mg)	Lega di alluminio* (5% Mg)	Aluminio* (5% Mg)
Natural	Brut	Blank	Nessuna finitura	Natural

\* : BS 1473 5056A DIN 1725 AlMg5 Werkstoff 3.3555



ø	Front sheet / Pièce avant / oberes Bauteil / lamiera anteriore / pieza delantera		Rear sheet / Pièce arriere / unteres Bauteil / lamiera posteriore / pieza trasera		øB	D	L	øA	kN <sup>1)</sup>	kN <sup>1)</sup>	Fasteners per cartridge / Nombre de rivets par aiguille / Niete pro Dorn / Rivetti per mandrino / Uds./mandril ± 1	Cartridge Part No/ref		
	min.	max.	min.	max.									min.	max.
3.2 (1/8")	0.4	2.0	3.35	3.62	3.26	3.42	6.53	1.10	4.8	3.17	0.76	1.25	52	57101-13204
	0.4	4.5							7.3				37	57101-13207
	0.4	8.6							11.5				24	57101-13211
4.0 (5/32")	0.5	2.2	4.10	4.43	3.97	4.18	8.18	1.25	5.4	3.90	1.19	1.90	47	57101-14005
	0.5	5.0							8.0				33	57101-14007
	0.5	9.1							11.7				23	57101-14011
4.8 (3/16")	0.6	2.4	5.00	5.40	4.85	5.10	9.71	1.50	5.8	4.79	1.66	2.90	44	57101-14805
	0.6	5.2							8.9				31	57101-14808
	0.6	9.2							12.7				22	57101-14812

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

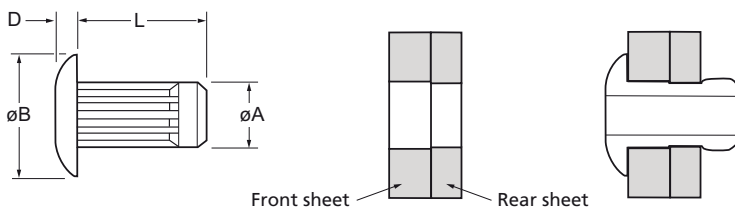
1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos




**POP**  **Avdel**
**NeoSpeed® 57121 Series**  
 Steel


English	Français	Deutsch	Italiano	Español
Mushroom head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Steel*	Acier*	Stahl*	Acciaio*	Acero*
Zinc plated	Revêtement zingué	Verzinkt	Zincato	Zincado
Clear trivalent passivated	Passivation claire trivalente	Klar chromatiert, Cr6-frei	Passivazione chiara trivalente	Pasivado claro trivalente

\* : EN 10263-2 C8C SAE 1008 DIN 1654 QSt34-3



ø	Front sheet		Rear sheet		øB	D	L	øA	kN <sup>1)</sup>	kN <sup>1)</sup>	Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga ± 1	Part No/ref		
	min.	max.	min.	max.									min.	max.
3.2 (1/8")	0.4	2.0	3.35	3.62	3.26	3.42	6.53	1.10	4.8	3.17	1.16	1.87	52	57121-03204
	0.4	4.5											37	57121-03207
	0.4	8.6											24	57121-03211
4.0 (5/32")	0.5	2.2	4.10	4.43	3.97	4.18	8.18	1.25	5.4	3.90	1.80	3.00	47	57121-04005
	0.5	5.0											33	57121-04007
	0.5	9.1											23	57121-04011
4.8 (3/16")	0.6	2.4	5.00	5.40	4.85	5.10	9.71	1.50	5.8	4.79	2.60	4.20	44	57121-04805
	0.6	5.2											30	57121-04808
	0.6	9.2											22	57121-04812

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

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

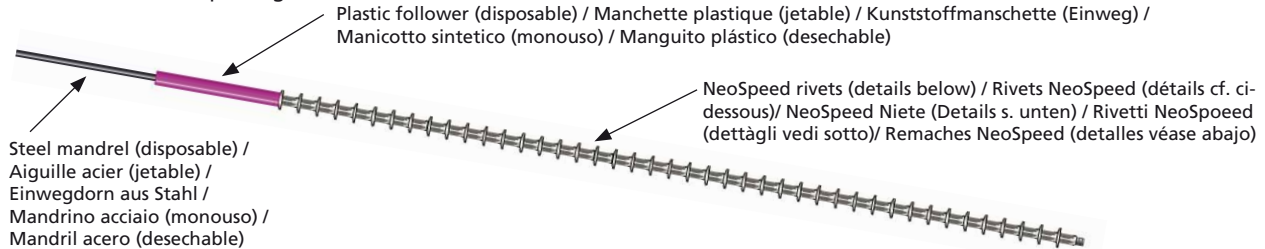
**POP<sup>®</sup> X Avdel<sup>®</sup>**

## NeoSpeed<sup>®</sup> 57121 "Cartridge" Series Steel



### NeoSpeed<sup>®</sup> "Cartridge":

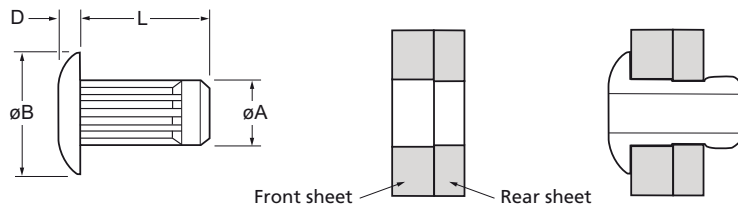
Pre-loaded disposable mandrel / Aiguille pré-chargée jetable / Vormagaziniert auf Einwegdorn / Precaricato su mandrino monouso / Mandril desechable precargado



### NeoSpeed<sup>®</sup> Rivets:

English	Français	Deutsch	Italiano	Español
Mushroom head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Steel*	Acier*	Stahl*	Acciaio*	Acero*
Zinc plated	Revêtement zingué	Verzinkt	Zincato	Zincado
Clear trivalent passivated	Passivation claire trivalente	Klar chromatiert, Cr6-frei	Passivazione chiara trivalente	Pasivado claro trivalente

\* : EN 10263-2 C8C SAE 1008 DIN 1654 QSt34-3



nom.	Ø		Front sheet / Pièce avant / oberes Bauteil / lamiera anteriore / pieza delantera		Rear sheet / Pièce arrière / unteres Bauteil / lamiera postérieure / pieza trasera		ØB	D	L	ØA	kN <sup>1)</sup>	kN <sup>1)</sup>	Fasteners per cartridge / Nombre de rivets par aiguille / Niete pro Dorn / Rivetti per mandrino / Uds./mandril ± 1	Cartridge Part No/ref
	min.	max.	min.	max.	min.	max.								
3.2 (1/8")	0.4	2.0	3.35	3.62	3.26	3.42	6.53	1.10	4.8	3.17	1.16	1.87	52	57121-13204
	0.4	4.5							7.3				37	57121-13207
	0.4	8.6							11.5				24	57121-13211
4.0 (5/32")	0.5	2.2	4.10	4.43	3.97	4.18	8.18	1.25	5.4	3.90	1.80	3.00	47	57121-14005
	0.5	5.0							8.0				33	57121-14007
	0.5	9.1							11.7				23	57121-14011
4.8 (3/16")	0.6	2.4	5.00	5.40	4.85	5.10	9.71	1.50	5.8	4.79	2.60	4.20	44	57121-14805
	0.6	5.2							8.9				31	57121-14808
	0.6	9.2							12.7				22	57121-14812

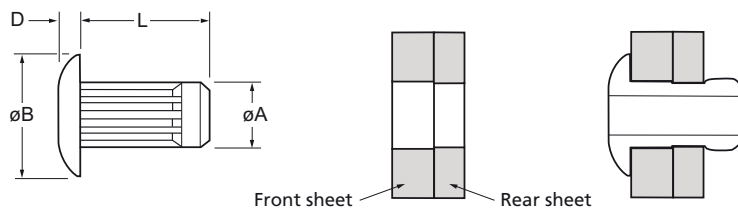
all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

**POP** **Avdel**
**NeoSpeed® 57141 Series**  
 Stainless Steel A4


English	Français	Deutsch	Italiano	Español
Mushroom head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
A4 Stainless Steel* Passivated	A4 Inox* Passivation	A4 Edelstahl* Passiviert	A4 Acciaio inox* Passivazione	A4 Acero inoxidable* Pasivado

\*: EN 10263-5 / X3CrNiCuMo17-11-3-2 / Werkstoff 1.4578 / AISI 316Cu



ø	Front sheet		Rear sheet		øB	D	L	øA	kN <sup>1)</sup>	kN <sup>1)</sup>	Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga ± 1	Part No/ref		
	min.	max.	min.	max.										
3.2 (1/8")	0.4	2.0	3.35	3.62	3.26	3.42	6.27	1.12	4.8	3.17	1.85	2.75	52	57141-03204
		4.5											37	57141-03207
		6.6											29	57141-03209
4.0 (5/32")	0.5	2.2	4.10	4.43	3.97	4.18	7.93	1.25	5.4	3.84	2.80	4.30	47	57141-04005
		5.0											33	57141-04007
		7.1											28	57141-04009
4.8 (3/16")	0.6	2.4	5.00	5.30	4.85	5.10	9.45	1.50	5.8	4.82	4.40	6.50	44	57141-04805
		5.2											30	57141-04808
		7.2											25	57141-04810

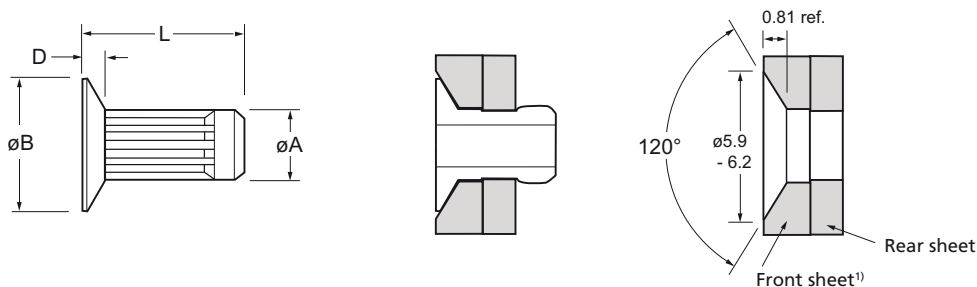
all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

**POP** **Avdel**
**NeoSpeed® 57221 Series**  
**Steel**


English	Français	Deutsch	Italiano	Español
120° Countersunk head	120° Tête fraisée	120° Senkkopf	120° Testa svasata	120° Cabeza avellanada
Steel*	Acier*	Stahl*	Acciaio*	Acero*
Zinc plated	Revêtement zingué	Verzinkt	Zincato	Zincado
Clear trivalent passivated	Passivation claire trivalente	Klar chromatiert, Cr6-frei	Passivazione chiara trivalente	Pasivado claro trivalente

\* : EN 10263-2 C8C SAE 1008 DIN 1654 QSt34-3



ø	Front sheet Pièce avant / oberes Bauteil / lamiera anteriore / pieza delantera		Rear sheet Pièce arrière / unteres Bauteil / lamiera posteriore / pieza trasera		øB	D	L	øA			Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga	Part No/ref		
	min.	max.	min.	max.									min.	max.
3.2 (1/8")	1.0	2.0	3.26	3.34	3.26	3.42	5.84	0.80	4.8	3.17	0.94	1.92	64	57221-03204
		4.5									1.15	1.76	42	57221-03207
		8.6									1.15	1.68	27	57221-03211

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

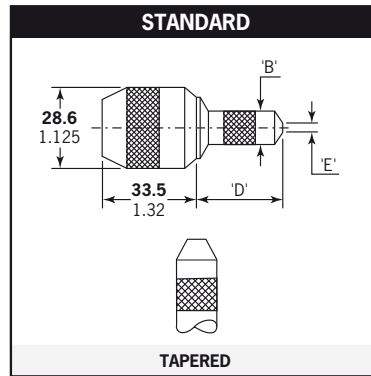
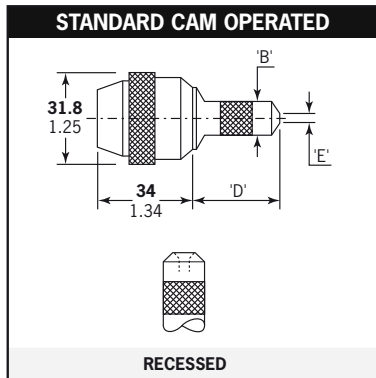
1) Front sheet thickness must exceed the full depth of countersink. / L'épaisseur de la pièce recevant la tête fraisée doit être plus importante que la profondeur de fraisage. / Die Materialstärke des oberen Bauteils muss die volle Tiefe der Senkung überschreiten. / Spessore della lamiera anteriore deve superare la profondità di svasatura. / El espesor de la pieza delantera debe superar la profundidad de avellanado.

2) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

**POP** **Avdel**

## NeoSpeed® Nose Equipment

Ensembles de nez / Mundstücke / Equipaggiamento /  
Equipos de colocación



Nose equipment with addition of a twist cam to ease and speed up the nose jaw opening thus the pod reloading procedure.

Ensembles de nez avec, en plus, une came facilitant et accélérant l'ouverture du nez de pose, et donc le rechargement en fixations. Zum leichteren Magazinieren haben diese Mundstücke durch einen Drehring zu öffnende Mundstückschnäbel.

Equipaggiamento con l'aggiunta di una camma per facilitare e rendere più veloce l'apertura della testata e pertanto la procedura di ricarica dell'astuccio portarivetti.

Boquillas que incorporan una leva para facilitar y hacer más rápida la apertura de la boquilla y el procedimiento de carga.

Applications with no or little access restrictions.

Pour applications ne présentant que peu ou pas de contraintes d'accès.

Für alle gut zugänglichen Nietpunkte.

Adatta per applicazioni senza restrizioni di accesso o con restrizioni di accesso limitate.

Apta para aquellas aplicaciones sin ninguna o pocas restricciones de acceso.

ø nom.	HeadStyle Forme de tête Kopfform Forma della testa Forma de cabeza	Nose Equipment Nez de pose Mundstück Testata Boquilla	Part No/ref	Dimensions Dimension / Abmessungen / Dimensioni / Dimensiones		
				B	D	E
3.2 (1/8")	Mushroom <sup>1)</sup>	Standard cam operated	07530-03200	10.41	29.97	5.08
	Countersunk <sup>2)</sup>	Standard	07170-03104	9.14	33.02	4.06
4.0 (5/32")	Mushroom <sup>1)</sup>	Standard cam operated	07530-03300	12.90	33.02	6.10
4.8 (3/16")	Mushroom <sup>1)</sup>	Standard cam operated	07530-03400	14.22	29.97	8.38

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

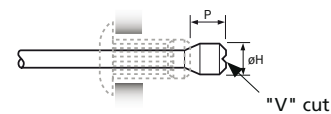
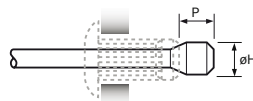
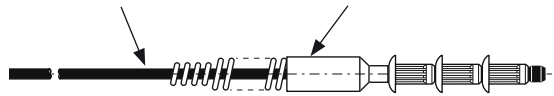
<sup>1)</sup> Tête plate / Flachrundkopf / testa a fungo / cabeza alomada

<sup>2)</sup> Tête fraisée / Senkkopf / testa svasata / cabeza avellanada

## NeoSpeed® Mandrel and Spring Information

Aiguilles et Ressorts d'aiguille / Nietdorne und -federn /  
Mandrini e Molle / Mandriles y Muelles

Mandrel / Aiguille / Nietdorn / Spring / Ressort d'aiguille / Nietdornfeder /  
Mandrino / Mandril Molla / Muelle



Mandrel for stainless steel NeoSpeed

ø nom.	Material Matériaux Material Materiale Material	Description Description Beschreibung Descrizione Descripción	ø H nom.	P max.	Mandrel <sup>1)</sup> Part No/ref	Spring <sup>1)</sup> Part No/ref
3.2 (1/8")	Aluminium <sup>2)</sup> , Steel <sup>3)</sup>	Standard	2.30	3.05	07530-06014	07150-06814
	Stainless Steel <sup>4)</sup>	Standard	2.39	3.05	07530-06804	
4.0 (5/32")	Aluminium <sup>2)</sup> , Steel <sup>3)</sup>	Standard	2.67	3.45	07530-06015	07170-06875
	Stainless Steel <sup>4)</sup>	Standard	2.93	3.50	07530-06805	
4.8 (3/16")	Aluminium <sup>2)</sup> , Steel <sup>3)</sup>	Standard	3.53	3.99	07530-06016	07170-06876
	Stainless Steel <sup>4)</sup>	Standard	3.43	3.96	07530-06806	

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

1) for use with paper magazine / pour utilisation avec chargeur papier / für Verarbeitung mit Papiermagazin / da usare con caricatori blister di carta / sólo para remaches en tiras de papel

2) Aluminium / Aluminium / Alluminio / Aluminio

3) Acier / Stahl / Acciaio / Acero

4) Inox / Edelstahl / Acciaio inox / Acero inoxidable

**POP** **Avdel**
**Briv® 1801/ (1804 / 1861) Series**  
 Aluminium

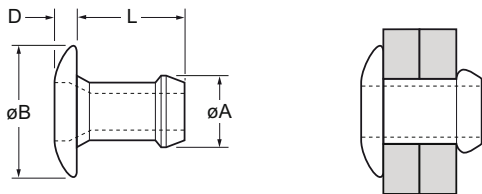

English	Français	Deutsch	Italiano	Español
Dome head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Aluminium alloy* (5 % Mg)	Alliage d'aluminium* (5% Mg)	Aluminium* (5 % Mg)	Lega di alluminio* (5% Mg)	Aluminio* (5% Mg)
Natural	Brut	Blank	Nessuna finitura	Natural

\*: BS 1473 5056A DIN 1725 AlMg5 Werkstoff 3.3555

Optional on request / sur demande / auf Anfrage / su richiesta / bajo petición:

For anodized, dyed red replace part no. 01801 with 01804 / pour anodisé rouge remplacer la série 01801 par 01804 / für eloxiert ersetzen Sie 01801 durch 01804 / per anodizzato rosso sostituire 01801 con 01804 / para anodizado rojo cambiar 01801 por 01804

For 2.5 % Mg aluminium alloy replace part no. 01801 with 01861 / pour 2.5 % Mg alliage d'aluminium remplacer la série 01801 par 01861 / für 2.5 % Mg Aluminium-Legierung ersetzen Sie 01801 durch 01861 / per 2.5 % Mg lega di alluminio sostituire 01801 con 01861 / para Aluminio (2,5 % de Mg) cambiar 01801 por 01861

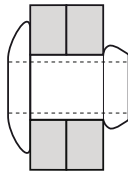
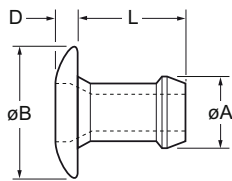


ø					øB	D	L	øA			Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga	Part No/ref
	nom.	min.	max.	min.								
2.4 (3/32")	1.14	2.42	2.36	2.44	4.11	0.89	3.98	2.35	0.27	0.44	64	01801-00304
	2.15	3.43					5.00				52	01801-00306
	3.17	4.45					6.02				44	01801-00308
	4.19	5.47					7.04				38	01801-00310
	5.20	6.48					8.05				34	01801-00312
	6.22	7.50					9.07				30	01801-00314
	6.73	8.00					9.57				28	01801-00315
	7.24	8.51					10.08				27	01801-00316
	7.75	9.02					10.59				26	01801-00317
3.2 (1/8")	0.64	1.91	3.26	3.34	6.53	0.99	3.86	3.14	0.76	1.31	59	01801-00403
	1.14	2.42					4.37				58	01801-00404
	1.65	2.87					4.87				50	01801-00405
	2.15	3.43					5.39				48	01801-00406
	3.17	4.45					6.41				42	01801-00408
	4.19	5.47					7.42				37	01801-00410
	5.20	6.48					8.44				33	01801-00412
	6.22	7.50					9.45				29	01801-00414
	7.24	8.51					10.46				26	01801-00416

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

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos



**POP<sup>®</sup> X Avdel<sup>®</sup>**
**Briv<sup>®</sup> 1801 / (1804 / 1861) Series**  
 Aluminium


ø					øB	D	L	øA			Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga ± 1	Part No/ref	
	min.	max.	min.	max.									max.
4.0 (5/32")	1.57	2.93	3.97	4.04	8.18	0.99	4.91	3.88	1.14	1.74	52	01801-00505	
	2.15	3.43					5.41					49	01801-00506
	2.66	3.94					5.92					44	01801-00507
	3.68	4.96					6.94					39	01801-00509
	4.69	5.97					7.95					34	01801-00511
	5.71	6.99					8.97					31	01801-00513
	6.73	8.00					9.98					26	01801-00515
	7.75	9.02					11.00					24	01801-00517
4.8 (3/16")	1.65	3.30	4.85	4.93	9.71	1.17	5.39	4.77	1.51	2.74	46	01801-00606	
	2.03	3.94					6.10					42	01801-00607
	3.68	5.21					7.37					35	01801-00609
	4.95	6.48					8.64					31	01801-00611
	6.22	7.75					9.91					27	01801-00613
	7.49	9.02					11.18					24	01801-00615
	8.76	10.29					12.45					22	01801-00617
	10.03	11.56					13.46					20	01801-00619
6.0	2.66	3.94	5.94	6.02	11.55	1.35	6.93	5.90	1.69	3.29	37	01801-06007	
	3.68	4.95					7.94					33	01801-06009
	4.70	5.96					8.96					29	01801-06011
	5.71	6.98					9.98					26	01801-06013
	6.73	7.99					10.99					24	01801-06015
	7.74	9.01					12.00					23	01801-06017

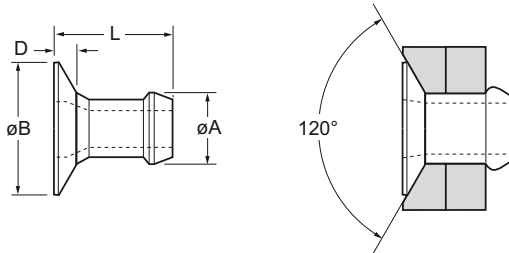
all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

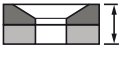



1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos


**POP**  **Avdel**
**Briv® 1802 Series**  
 Aluminium


English	Français	Deutsch	Italiano	Español
120° Countersunk	120° Tête fraisée	120° Senkkopf	120° Testa svasata	120° Cabeza avellanada
Aluminium alloy* (5 % Mg)	Alliage d'aluminium* (5% Mg)	Aluminium* (5 % Mg)	Lega di alluminio* (5% Mg)	Aluminio* (5% Mg)
Natural	Brut	Blank	Nessuna finitura	Natural

\*: BS 1473 5056A DIN 1725 AlMg5 Werkstoff 3.3555



ø					øB	D	L	øA			Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga	Part No/ref																								
	nom.	min.	max.	min.									max.	max.	max.	max.	kN <sup>1)</sup>	kN <sup>1)</sup>	± 1																	
3.2 (1/8")	1.52	2.79	3.26	3.34	5.84	0.76	4.77	3.17	0.76	1.31	64	01802-00406																								
	2.54	3.81											4.77	3.17	1.31	64	01802-00407																			
	3.56	4.83																7.82	3.17	1.31	44	01802-00408														
	4.57	5.84																					8.84	3.17	1.31	38	01802-00410									
	5.59	6.86																										8.84	3.17	1.31	33	01802-00411				
4,0 (5/32")	1.57	2.93	3.97	4.04	6.98	1.02	5.18	3.90	1.13	1.73	59	01802-00505																								
	2.15	3.43											5.18	3.90	1.13	1.73	54	01802-00506																		
	2.66	3.94																	7.21	3.90	1.13	1.73	49	01802-00507												
	3.68	4.96																							8.22	3.90	1.13	1.73	42	01802-00509						
	4.69	5.97																													9.24	3.90	1.13	1.73	36	01802-00511
	5.71	6.99																																		

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

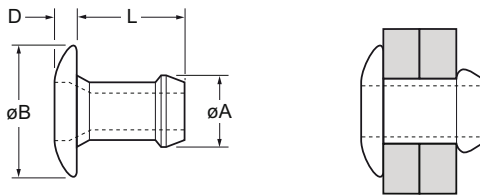
1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos


**POP**  **Avdel**®

**Briv® 1821 Series**  
 Steel


English	Français	Deutsch	Italiano	Español
Dome head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Low carbon steel*	Acier bas carbone*	Stahl*	Acciaio a basso tenore 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

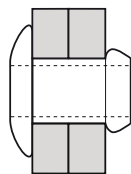
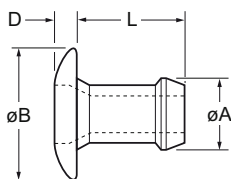
\*: SAE 1008 / EN 10263-2 C8C (DIN 10263-2 C8C, Qst 34-3)



ø	Ø		Ø		øB	D	L	øA	kN <sup>1)</sup>	kN <sup>1)</sup>	Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga ± 1	Part No/ref
	min.	max.	min.	max.								
3.2 (1/8")	0.64	1.91	3.26	3.34	6.53	0.99	3.86	3.17	1.13	1.82	59	01821-00403
	1.14	2.42					4.37				58	01821-00404
	1.65	2.87					4.87				50	01821-00405
	2.15	3.43					5.39				48	01821-00406
	3.17	4.45					6.41				42	01821-00408
	4.19	5.47					7.42				37	01821-00410
	5.20	6.48					8.44				33	01821-00412
	6.22	7.50					9.45				29	01821-00414
	7.24	8.51					10.46				26	01821-00416
4.0 (5/32")	1.57	2.93	3.97	4.04	8.18	0.99	4.91	3.90	1.65	2.80	52	01821-00505
	2.15	3.43					5.41				49	01821-00506
	2.66	3.94					5.92				44	01821-00507
	3.68	4.96					6.94				39	01821-00509
	4.69	5.97					7.95				34	01821-00511
	5.71	6.99					8.97				31	01821-00513
	6.73	8.00					9.98				26	01821-00515
	7.75	9.02					11.00				24	01821-00517

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

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

**POP<sup>®</sup> X Avdel<sup>®</sup>**
**Briv<sup>®</sup> 1821 Series**  
 Steel


ø					øB	D	L	øA			Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga	Part No/ref	
	min.	max.	min.	max.									max.
4.8 (3/16")	1.65	3.30	4.85	4.93	9.71	1.17	5.39	4.79	2.25	3.71		46	01821-00606
	2.03	3.94					6.10					42	01821-00607
	3.68	5.21					7.37					35	01821-00609
	4.95	6.48					8.64					31	01821-00611
	6.22	7.75					9.91					27	01821-00613
	7.49	9.02					11.18					24	01821-00615
	8.76	10.29					12.45					22	01821-00617
6.0	2.66	3.94	5.94	6.02	11.55	1.35	6.93	5.93	2.58	4.22		37	01821-06007
	3.68	4.95					7.94					33	01821-06009
	4.70	5.96					8.96					29	01821-06011
	5.71	6.98					9.98					26	01821-06013
	6.73	7.99					10.99					24	01821-06015
	7.74	9.01					12.00					23	01821-06017

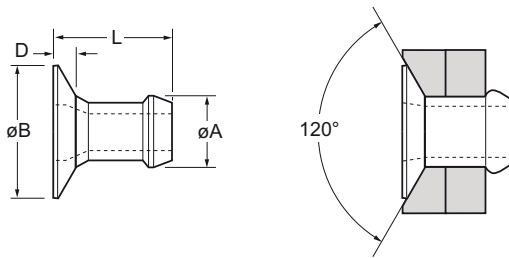
all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

**POP** **Avdel**
**Briv® 1822 Series**  
**Steel**


English	Français	Deutsch	Italiano	Español
120° Countersunk	120° Tête fraisée	120° Senkkopf	120° Testa svasata	120° Cabeza avellanada
Low carbon steel*	Acier bas carbone*	Stahl*	Acciaio a basso tenore 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

\*: SAE 1008 / EN 10263-2 C8C (DIN 10263-2 C8C, Qst 34-3)



ø					øB	D	L	øA			Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga	Part No/ref		
	min.	max.	min.	max.									max.	max.
3.2 (1/8")	1.52	2.79	3.26	3.34	5.84	0.76	4.77	3.17	0.95	1.65	64	01822-00406		
	2.54	3.81					5.79						52	01822-00407
	3.56	4.83					6.81						44	01822-00408
	4.57	5.84					7.82						38	01822-00410
	5.59	6.86					8.84						33	01822-00411
4.0 (5/32")	1.57	2.93	3.97	4.04	6.98	1.02	5.18	3.90	1.65	2.80	59	01822-00505		
	2.15	3.43					5.69						54	01822-00506
	2.66	3.94					6.19						49	01822-00507
	3.68	4.96					7.21						42	01822-00509
	4.69	5.97					8.22						36	01822-00511
	5.71	6.99					9.24						32	01822-00513

Special Option: designed for thin sheet applications / Conçu pour des applications de faible épaisseur / für geringe Materialstärken / Progettato per applicazioni in spessori sottili/ Diseñado para aplicaciones de chapa fina

3.2 (1/8")	1.27	2.29	3.26	3.34	5.84	0.74	4.32	3.17	0.95	1.65	72	01810-06480
	1.45	1.70				0.69	4.19					

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

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

**POP** **Avdel**®

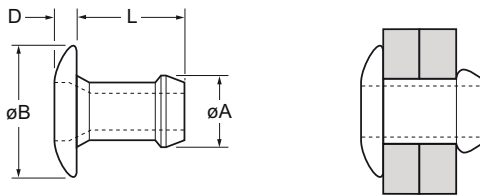
**Briv® 1833 / (1831) Series**  
 Brass


English	Français	Deutsch	Italiano	Español
Dome head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Brass*	Laiton*	Kupfer-Zink Legierung*	Ottone*	Latón*
Electro tin plated**	Etamage électrolytique**	verzinkt**	Stagnato**	Estañado electrolítico**

\*: BS EN 12166 CW 508L DIN 17660 CuZn37

 \*\*: We recommend tin plated parts 1833 Series are installed within 9 months from the date they were produced.  
 Nous conseillons d'utiliser les pièces en laiton étamé du série 1833 sous un délai de 9 mois après la date de production.  
 Wir empfehlen, verzinkte Niete der Serie 1833 innerhalb 9 Monaten nach Produktionsdatum zu verarbeiten.  
 Raccomandare di utilizzare i prodotti stagnati serie 1833 entro 9 mesi a decorrere dalla data di fabbricazione.  
 Recomendamos utilizar sus piezas estañadas serie 1833 antes de 9 meses desde la fecha de su fabricación.

Optional on request / sur demande / auf Anfrage / su richiesta / bajo petición:

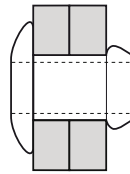
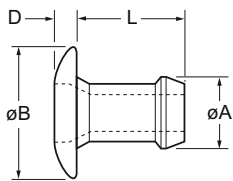
 For brightened Brass finish replace 01833 with 01831 / Pour finition brillante remplacer la série 01833 par 01831 /  
 Für Oberfläche blank ersetzen Sie 01833 durch 01831 / Per finitura brillante sostituire 01833 con 01831 /  
 Para acabado brillante cambiar 01833 por 01831


ø					øB	D	L	øA			Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga ± 1	Part No/ref
	nom.	min.	max.	min.								
2.4 (3/32")	1.14	2.42	2.36	2.44	4.11	0.89	3.99	2.35	0.44	0.89	64	01833-00304
	2.15	3.43					5.01				52	01833-00306
	3.17	4.45					6.02				44	01833-00308
	4.19	5.47					7.04				38	01833-00310
	5.20	6.48					8.06				34	01833-00312
	6.22	7.50					9.07				30	01833-00314
	6.73	8.00					9.57				28	01833-00315
	7.24	8.51					10.08				27	01833-00316
	7.75	9.02					10.59				26	01833-00317
3.2 (1/8")	0.64	1.91	3.26	3.34	6.53	0.99	3.86	3.16	1.11	1.91	64	01833-00403
	1.14	2.42					4.37				58	01833-00404
	2.15	3.43					5.39				50	01833-00406
	3.17	4.45					6.41				42	01833-00408
	4.19	5.47					7.42				37	01833-00410
	5.20	6.48					8.44				33	01833-00412
	6.22	7.50					9.45				29	01833-00414
	7.24	8.51					10.46				26	01833-00416

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

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos



**POP<sup>®</sup> X Avdel<sup>®</sup>**
**Briv<sup>®</sup> 1833 / (1831) Series**  
 Brass


ø					øB	D	L	øA			Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga ± 1	Part No/ref	
	nom.	min.	max.	min.									max.
4.0 (5/32")	1.57	2.93	3.97	4.04	8.18	0.99	4.91	3.90	1.87	2.75	52	01833-00505	
	2.15	3.43										48	01833-00506
	2.66	3.94										44	01833-00507
	3.68	4.96										38	01833-00509
	4.69	5.97										34	01833-00511
	5.71	6.99										30	01833-00513
	6.73	8.00										27	01833-00515
	7.75	9.02										25	01833-00517
4.8 (3/16")	1.65	3.30	4.85	4.93	9.71	1.17	5.39	4.79	2.31	3.60	46	01833-00606	
	2.03	3.94					6.10					42	01833-00607
	3.68	5.21					7.37					35	01833-00609
	4.95	6.48					8.64					31	01833-00611
	6.22	7.75					9.91					27	01833-00613
	7.49	9.02					11.18					24	01833-00615
	8.76	10.29					12.45					22	01833-00617
	10.03	11.56					13.46					20	01833-00619

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

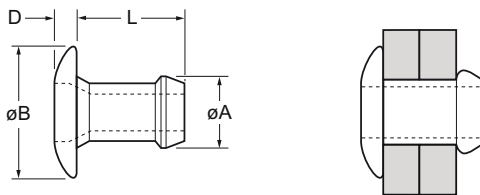
1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

**POP** **Avdel**®

**Briv® 1841 Series**  
 Stainless Steel A2


English	Français	Deutsch	Italiano	Español
Dome head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
A2 Stainless Steel* Polished	A2 Inox* Poli	A2 Edelstahl* Blank	A2 Acciaio inox* Lucido	A2 Acero inoxidable* Pulido

\*: BS 3111 394517 Werkstoff 1.4567



ø					øB	D	L	øA			Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga ± 1	Part No/ref												
	nom.	min.	max.	min.									max.	max.	max.	max.	kN <sup>1)</sup>	kN <sup>1)</sup>						
3.2 (1/8")	1.14	2.42	3.26	3.34	6.53	0.99	4.37	3.16	1.33	1.96	58	01841-00404												
	2.15	3.43					5.39						50	01841-00406										
	3.17	4.45					6.41								42	01841-00408								
4.0 (5/32")	1.57	2.93	3.97	4.04	8.18	0.99	4.91	3.87	2.45	3.6	52	01841-00505												
	2.15	3.43					5.41						49	01841-00506										
	2.66	3.94					5.92								44	01841-00507								
	3.68	4.96					6.94										38	01841-00509						
	4.69	5.97					7.95												34	01841-00511				
	5.71	6.99					8.97														30	01841-00513		
4.8 (3/16")	1.65	3.30	4.85	4.93	9.71	1.17	5.39	4.77	3.56	5.12	46	01841-00606												
	2.03	3.94					6.10						42	01841-00607										
	3.68	5.21					7.37								35	01841-00609								
	4.32	5.84					8.00										32	01841-00610						
	4.95	6.48					8.64												31	01841-00611				
	6.22	7.75					9.91														27	01841-00613		
	7.49	9.02					11.18																24	01841-00615
	8.76	10.29					12.45																	

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

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

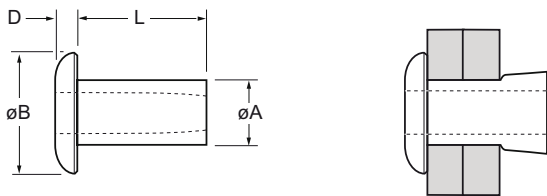
POP® X Avdel®

## Chobert® 1121 Series Steel



English	Français	Deutsch	Italiano	Español
Dome head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Low carbon steel*	Acier bas carbone*	Stahl*	Acciaio a basso tenore 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

\*: SAE 1008 / EN 10263-2 C8C DIN 10263-2 C8C Qst 34-3

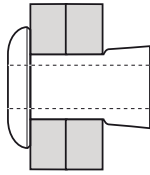
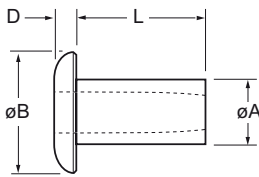





ø					øB	D	L	øA		Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore/ Uds./carga	Part No/ref	
	nom.	min.	max.	min.								max.
3.2 (1/8")			1.57		3.26	3.34	5.47	1.12	3.25	1.42	71	01121-00404
		0.79	2.36								57	01121-00405
		1.57	3.18								51	01121-00406
		3.18	4.75								39	01121-00408
		4.75	6.35								32	01121-00410
		6.35	7.92								27	01121-00412
4.0 (5/32")		1.57	3.18	4.09	4.17	6.48	1.45	4.04	2.44	47	01121-00506	
		3.18	4.75							38	01121-00508	
		4.75	6.35							31	01121-00510	
		6.35	7.92							27	01121-00512	
		7.92	9.52							23	01121-00514	
		9.52	11.10							21	01121-00516	

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

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

**POP**  **Avdel**®

**Chobert® 1121 Series**  
 Steel


ø					øB	D	L	øA		Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore/ Uds./carga ± 1	Part No/ref								
	nom.	min.	max.	min.								max.	max.	max.	nom.	max.	kN <sup>1)</sup>		
4.8 (3/16")					4.85	4.93	8.87	1.78	4.85	3.20	50	01121-00605							
		1.57	3.18														38	01121-00607	
		3.18	4.75														33	01121-00609	
		4.75	6.35														28	01121-00611	
		6.35	7.92														24	01121-00613	
		7.92	9.52														21	01121-00615	
		9.52	11.10														19	01121-00617	
		11.10	12.70														17	01121-00619	
6.4 (1/4")		3.18	4.75	6.35	6.43	10.44	2.11	6.35	4.40	4.40	32	01121-00809							
		4.75	6.35															27	01121-00811
		6.35	7.92															24	01121-00813
		7.92	9.52															21	01121-00815
		9.52	11.10															19	01121-00817
		11.10	12.70															17	01121-00819

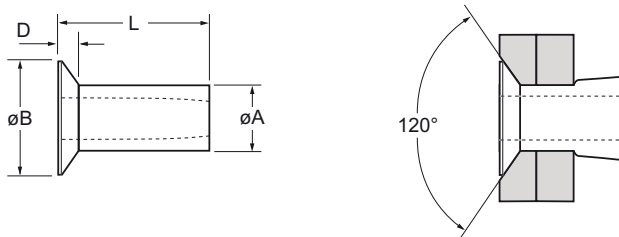
all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos


**POP<sup>®</sup> X Avdel<sup>®</sup>**
**Chobert<sup>®</sup> 1122 Series  
Steel**


English	Français	Deutsch	Italiano	Español
Countersunk head	Tête fraisée	Senkkopf	Testa svasata	Cabeza avellanada
Low carbon steel*	Acier bas carbone*	Stahl*	Acciaio a basso tenore 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

\*: BS 3111 Type 0 SAE 1008 DIN 1654 Qst 34-3

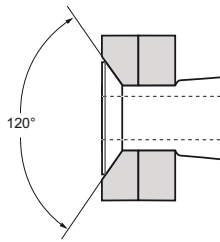
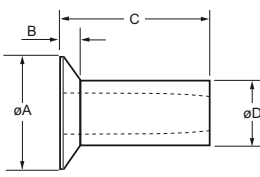


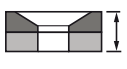
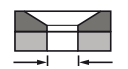
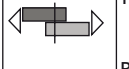
ø					øB	D	L	øA		Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin/ Rivetti per caricatore/ Uds./carga	Part No/ref
	min.	max.	min.	max.							
3.2 (1/8")	0.91	1.57	3.26	3.34	5.20	0.92	3.4	3.25	1.40	90	01122-00404
	0.91	2.36					4.1			72	01122-00405
	1.57	3.17					4.9			61	01122-00406
	3.17	4.75					6.5			46	01122-00408
	4.75	6.35					8.1			37	01122-00410
	6.35	7.92					9.7			31	01122-00412
4.0 (5/32")	1.57	3.17	4.09	4.17	6.22	0.97	4.9	4.04	2.40	61	01122-00506
	3.17	4.75					6.5			46	01122-00508
	4.75	6.35					8.1			37	01122-00510
	6.35	7.92					9.7			31	01122-00512
	7.92	9.52					11.3			26	01122-00514
	9.52	11.10					12.9			23	01122-00516

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

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

**POP**  **Avdel**®

**Chobert® 1122 Series**  
 Steel


ø					øB	D	L	øA		Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin/ Rivetti per caricatore/ Uds./carga	Part No/ref	
	nom.	min.	max.	min.								max.
4.8 (3/16")	1.57	3.17	4.85	4.93	8.61	1.43	5.7	4.85	3.20	3.20	52	01122-00607
	3.17	4.75					7.3				41	01122-00609
	4.75	6.35					8.9				33	01122-00611
	6.35	7.92					10.5				28	01122-00613
	7.92	9.52					12.1				25	01122-00615
	9.52	11.10					13.7				22	01122-00617
	11.10	12.70					15.3				19	01122-00619
6.4 (1/4")	6.35	7.92	6.35	6.43	10.19	145	10.5	6.35	4.40	4.40	28	01122-00813
	7.92	9.52					12.1				25	01122-00815
	9.52	11.10					13.7				22	01122-00817
	11.10	12.70					15.3				19	01122-00819
	12.70	14.27					16.8				18	01122-00821
	14.27	15.87					18.4				16	01122-00823
	15.87	17.45					20.0				15	01122-00825

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

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

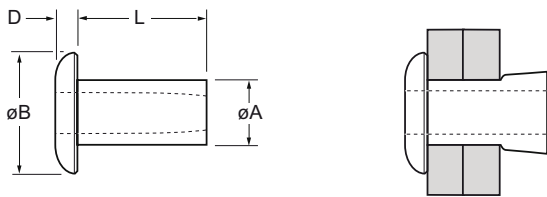


**POP** **Avdel**
**Chobert® 1125 / 1131 / (1135) Series**  
 Aluminium


English	Français	Deutsch	Italiano	Español
Dome head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Aluminium alloy Natural	Alliage d'aluminium Brut	Aluminium Blank	Lega di alluminio Nessuna finitura	Aluminio Natural

Optional on request / sur demande / auf Anfrage / su richiesta / bajo petición:

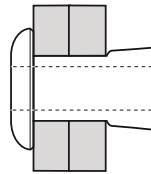
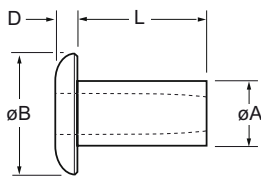
For 5 % Mg BS 1473 5056A DIN 1725 AlMg5 Werkstoff 3.3555 Aluminium alloy replace part no. 01125 with 01135 /  
 pour 5 % Mg BS 1473 5056A DIN 1725 AlMg5 Werkstoff 3.3555 alliage d'aluminium remplacer la série 01125 par 01135 /  
 für 5 % Mg BS 1473 5056A DIN 1725 AlMg5 Werkstoff 3.3555 Aluminium-Legierung ersetzen Sie 01125 durch 01135 /  
 per 5 % Mg BS 1473 5056A DIN 1725 AlMg5 Werkstoff 3.3555 lega di alluminio sostituire 01125 con 01135 /  
 para 5 % Mg BS 1473 5056A DIN 1725 AlMg5 Werkstoff 3.3555 Aluminio cambiar 01125 por 01135



ø	2.5 % Mg AA 5052 DIN 1725 AlMg2.5 Werkstoff 3.3523		3.5 % Mg BS 1473 5154A DIN 1725 AlMg3.5 Werkstoff 3.3535		øB	D	L	øA	Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga	Aluminium		
	min.	max.	min.	max.						Part No/ref	Part No/ref	
nom.					max.	max.	± 0.18	max.	± 1			
2.4 (3/32")		1.57	2.49	2.55	4.14	0.94	3.17	2.48	73	01125-00304	01131-00304	
		1.57					3.17		4.75	52	01125-00306	01131-00306
		3.17					4.75		6.35	41	01125-00308	01131-00308
		4.75					6.35		7.92	33	01125-00310	01131-00310
		6.35					7.92		9.52	28		01131-00312
		7.92					9.52		11.10	24		01131-00314
		9.52					11.10		12.70	22		01131-00316
3.2 (1/8")	0.00	1.57	3.26	3.34	5.52	1.15	3.17	3.25	71	01125-00404	01131-00404	
		1.57					3.17		4.75	51	01125-00406	01131-00406
		3.17					4.75		6.35	39	01125-00408	01131-00408
		4.75					6.35		7.92	32	01125-00410	01131-00410
		6.35					7.92		9.52	27	01125-00412	01131-00412
		7.92					9.52		11.10	23	01125-00414	
4.0 (5/32")	1.57	3.17	4.09	4.17	6.53	1.48	4.75	4.06	47	01125-00506	01131-00506	
		3.17					4.75		6.35	38	01125-00508	01131-00508
		4.75					6.35		7.92	31	01125-00510	01131-00510
		6.35					7.92		9.52	27	01125-00512	01131-00512
		7.92					9.52		11.10	23	01125-00514	01131-00514
		9.52					11.10		12.70	21	01125-00516	01131-00516
		11.10					12.70		14.40		01125-00518	01131-00518
		12.70					14.27		16.00		01125-00520	01131-00520

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

**POP** **Avdel**®

**Chobert® 1125 / 1131 / (1135) Series**  
 Aluminium


ø					øB	D	L	øA	Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga ± 1	Aluminium		
	nom.	min.	max.	min.						max.	max.	max.
4.8 (3/16")			1.57					3.96		50		01131-00605
			1.57					5.56		38	01125-00607	01131-00607
			3.17					7.14		33	01125-00609	01131-00609
			4.75					8.74		28	01125-00611	01131-00611
			6.35	4.85	4.93	8.92	1.81	10.31		24	01125-00613	01131-00613
			7.92					11.91		21	01125-00615	01131-00615
			9.52					13.49		19	01125-00617	01131-00617
			11.10					15.09		17	01125-00619	01131-00619
	6.4 (1/4")			3.17					7.14		32	
			4.75					8.74		27		01131-00811
			6.35					10.31		24		01131-00813
			7.92					11.91		21		01131-00815
			9.52	6.35	6.43	10.49	2.14	13.49		19		01131-00817
			11.10					15.09		17		01131-00819
			12.70					16.66		16		01131-00821
			14.27					18.26		14		01131-00823
			15.87					19.84		13		01131-00825

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

ø		
	1125 Series kN <sup>1)</sup>	1131 Series kN <sup>1)</sup>
2.4 mm (3/32")	0.30	0.50
3.2 mm (1/8")	0.60	0.80
4.0 mm (5/32")	1.00	1.60
4.8 mm (3/16")	1.50	2.00
6.4 mm (1/4")		2.70

 1) typical values / valeurs moyennes / typische Werte /  
 Valori tipici / valores típicos

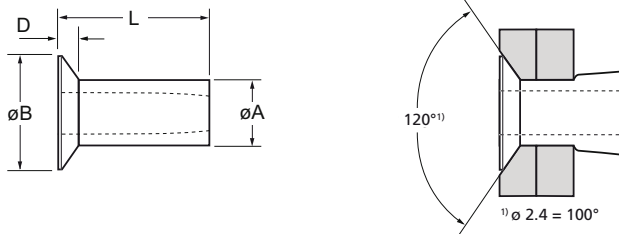
**POP** **Avdel**
**Chobert® 1132 / (1124 / 1136) Series**  
 Aluminium


English	Français	Deutsch	Italiano	Español
Countersunk head	Tête fraisée	Senkkopf	Testa svasata	Cabeza avellanada
Aluminium alloy* Natural	Alliage d'aluminium* Brut	Aluminium* Blank	Lega di alluminio* Nessuna finitura	Aluminio* Natural

\*: 3.5 % Mg BS 1473 5154A DIN 1725 Werkstoff 3.3535

Optional on request / sur demande / auf Anfrage / su richiesta / bajo petición:

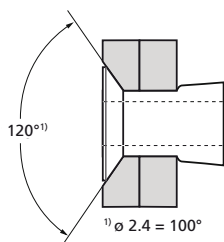
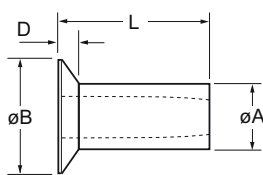
 For 2.5 % Mg AA 5052 DIN 1725 AlMg2.5 Werkstoff 3.3523 Aluminium alloy replace part no. 01132 with 01124 /  
 pour 2.5 % Mg AA 5052 DIN 1725 AlMg2.5 Werkstoff 3.3523 alliage d'aluminium remplacer la série 01132 par 01124 /  
 für 2.5 % Mg AA 5052 DIN 1725 AlMg2.5 Werkstoff 3.3523 Aluminium-Legierung ersetzen Sie 01132 durch 01124 /  
 per 2.5 % Mg AA 5052 DIN 1725 AlMg2.5 Werkstoff 3.3523 lega di alluminio sostituire 01132 con 01124 /  
 para 2.5 % Mg AA 5052 DIN 1725 AlMg2.5 Werkstoff 3.3523 Aluminio cambiar 01132 por 01124

 For 5 % Mg BS 1473 5056A DIN 1725 AlMg5 Werkstoff 3.3555 Aluminium alloy replace part no. 01132 with 01136 /  
 pour 5 % Mg BS 1473 5056A DIN 1725 AlMg5 Werkstoff 3.3555 alliage d'aluminium remplacer la série 01132 par 01136 /  
 für 5 % Mg BS 1473 5056A DIN 1725 AlMg5 Werkstoff 3.3555 Aluminium-Legierung ersetzen Sie 01132 durch 01136 /  
 per 5 % Mg BS 1473 5056A DIN 1725 AlMg5 Werkstoff 3.3555 lega di alluminio sostituire 01132 con 01136 /  
 para 5 % Mg BS 1473 5056A DIN 1725 AlMg5 Werkstoff 3.3555 Aluminio cambiar 01132 por 01136


ø					øB	D	L	øA		Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga	Part No/ref	
	nom.	min.	max.	min.								max.
2.4 (3/32")			1.57		2.49	2.55	4.16	0.89	2.46	0.50	90	01132-00304
		1.57	3.17								61	01132-00306
		3.17	4.75								46	01132-00308
		4.75	6.35								37	01132-00310
		6.35	7.92								31	01132-00312
3.2 (1/8")			1.57		3.26	3.34	5.20	0.92	3.25	0.90	90	01132-00404
		1.57	3.17								61	01132-00406
		3.17	4.75								46	01132-00408
		4.75	6.35								37	01132-00410
		6.35	7.92								31	01132-00412
4.0 (5/32")			1.57		4.09	4.17	6.22	0.97	4.04	1.60	61	01132-00506
		3.17	4.75								46	01132-00508
		4.75	6.35								37	01132-00510
		6.35	7.92								31	01132-00512
		7.92	9.52								26	01132-00514
		9.52	11.10								23	01132-00516

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

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

**POP<sup>®</sup> X Avdel<sup>®</sup>**
**Chobert<sup>®</sup> 1132 / (1124 / 1136) Series**  
 Aluminium


ø					øB	D	L	øA		Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga	Part No/ref							
	nom.	min.	max.	min.								max.	min.	max.	max.	kN <sup>1)</sup>	± 1	
4.8 (3/16")		1.57	3.17	4.85	4.93	8.61	1.43	4.80	2.00	52	01132-00607							
		3.17	4.75														41	01132-00609
		4.75	6.35														33	01132-00611
		6.35	7.92														28	01132-00613
		7.92	9.52														25	01132-00615
		9.52	11.10														22	01132-00617
		11.10	12.70														19	01132-00619
6.4 (1/4")		3.17	4.75	6.35	6.43	10.19	1.45	6.30	2.70	41	01132-00809							
		4.75	6.35														33	01132-00811
		6.35	7.92														28	01132-00813
		7.92	9.52														25	01132-00815
		9.52	11.10														22	01132-00817
		11.10	12.70														19	01132-00819

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

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

**POP** **Avdel**®

## Chobert® 1143 Series (1141 / 1142 / 1144 / 1147 / 1148) Brass

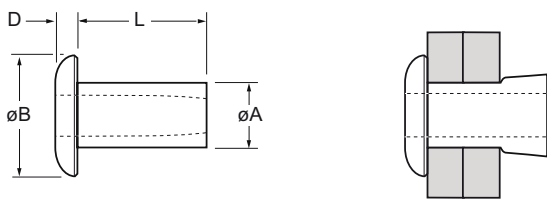


English	Français	Deutsch	Italiano	Español
Dome head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Brass*	Laiton*	Kupfer-Zink-Legierung*	Ottone*	Latón*
Electro tin plated**	Etamage électrolytique**	verzinkt**	Stagnato**	Estañado electrolítico**

\*: EN 12166 CW 508L DIN 17660 CuZn37

\*\* : We recommend tin plated parts 1143 and 1144 Series are installed within 9 months from the date they were produced.  
 Nous conseillons d'utiliser les pièces en laiton étamé du séries 1143 et 1144 sous un délai de 9 mois après la date de production.  
 Wir empfehlen, verzinnte Niete der Serien 1143 und 1144 innerhalb 9 Monaten nach Produktionsdatum zu verarbeiten.  
 Raccomandare di utilizzare i prodotti stagnati serie 1143 e 1144 entro 9 mesi a decorrere dalla data di fabbricazione.  
 Recomendamos utilizar sus piezas estañadas serie 1143 y 1144 antes de 9 meses desde la fecha de su fabricación.

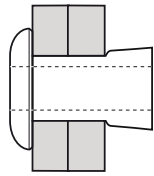
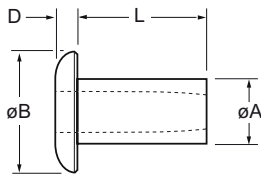
Options on request - see next page / Option sur demande - voir page suivant / Optionen auf Anfrage - siehe nächste Seite /  
 Opzioni su richiesta - vedi pagina successiva / Opciones bajo petición - ver la página siguiente



ø					øB	D	L	øA		Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga	Part No/ref			
	nom.	min.	max.	min.								max.	max.	max.
2.4 (3/32")					4.09	0.92	3.17	2.47	0.60	73	01143-00304			
		1.57	3.17	2.49			2.55					4.75	52	01143-00306
		3.17	4.75									6.35	41	01143-00308
		4.75	6.35									7.92	33	01143-00310
		6.35	7.92									9.52	28	01143-00312
3.2 (1/8")				3.26	3.34	5.46	1.12	3.25	1.10	71	01143-00404			
		1.57	3.17									4.75	51	01143-00406
		3.17	4.75									6.35	39	01143-00408
		4.75	6.35									7.92	32	01143-00410
4.0 (5/32")				4.09	4.17	6.47	1.45	4.04	1.80	47	01143-00506			
		1.57	3.17									6.35	38	01143-00508
		3.17	4.75									7.92	31	01143-00510
		4.75	6.35									9.52	27	01143-00512
		6.35	7.92									11.10	23	01143-00514
		7.92	9.52									12.70	21	01143-00516

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

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

**POP®** **Avdel®**
**Chobert® 1143 Series**  
**(1141 / 1142 / 1144 / 1147 / 1148)**  
 Brass


ø					øB	D	L	øA		Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga	Part No/ref	
	nom.	min.	max.	min.								max.
4.8 (3/16")	1.57	3.17	4.85	4.93	8.86	1.78	5.56	4.85	2.50	± 1	38	01143-00607
	3.17	4.75					7.14				33	01143-00609
	4.75	6.35					8.74				28	01143-00611
	6.35	7.92					10.31				24	01143-00613
	7.92	9.52					11.91				21	01143-00615
	9.52	11.10					13.49				19	01143-00617

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

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

Optional on request / sur demande / auf Anfrage / su richiesta / bajo petición:

Dome head bright Brass: replace part no. 01143 with 01141. Details on request.

Tête plate Laiton brillante: remplacer la série 01143 par 01141. Détails sur demande.

Flachrundkopf Kupfer-Zink-Legierung blank: ersetzen Sie 01143 durch 01141. Details auf Anfrage.

Testa tonda Ottone brillante: sostituire 01143 con 01141. Dettagli su richiesta.

Cabeza alomada Latón brillante: cambiar 01143 por 01141. Más información bajo petición.

Dome head nickel plated Brass: replace part no. 01143 with 01147. Details on request.

Tête plate Laiton nickelé: remplacer la série 01143 par 01147. Détails sur demande.

Flachrundkopf Kupfer-Zink-Legierung vernickelt: ersetzen Sie 01143 durch 01147. Details auf Anfrage.

Testa tonda Ottone nichelato: sostituire 01143 con 01147. Dettagli su richiesta.

Cabeza alomada Latón niquelado: cambiar 01143 por 01147. Más información bajo petición.

Countersunk head bright Brass: replace part no. 01143 with 01142. Details on request.

Tête fraisée Laiton brillante: remplacer la série 01143 par 01142. Détails sur demande.

Senkkopf Kupfer-Zink-Legierung blank: ersetzen Sie 01143 durch 01142. Details auf Anfrage.

Testa svasata Ottone brillante: sostituire 01143 con 01142. Dettagli su richiesta.

Cabeza avellanada Latón brillante: cambiar 01143 por 01142. Más información bajo petición.

Countersunk head electro tin plated Brass\*\*: replace part no. 01143 with 01144. Details on request.

Tête fraisée Laiton étamage électrolytique\*\*: remplacer la série 01143 par 01144. Détails sur demande.

Senkkopf Kupfer-Zink-Legierung verzinkt\*\*: ersetzen Sie 01143 durch 01144. Details auf Anfrage.

Testa svasata Ottone stagnato\*\*: sostituire 01143 con 01144. Dettagli su richiesta.

Cabeza avellanada Latón estañado electrolítico\*\*: cambiar 01143 por 01144. Más información bajo petición.

Countersunk head nickel plated Brass: replace part no. 01143 with 01148. Details on request.

Tête fraisée Laiton nickelé: remplacer la série 01143 par 01148. Détails sur demande.

Senkkopf Kupfer-Zink-Legierung vernickelt: ersetzen Sie 01143 durch 01148. Details auf Anfrage.

Testa svasata Ottone nichelato: sostituire 01143 con 01148. Dettagli su richiesta.

Cabeza avellanada Latón niquelado: cambiar 01143 por 01148. Más información bajo petición.



POP® X Avdel®

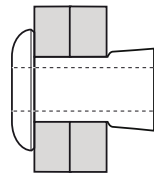
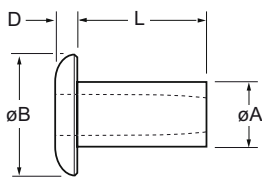
## Chobert® 1162 Series

### Aluminium



English	Français	Deutsch	Italiano	Español
Low profile head	Tête profil bas	Flachkopf	Testa basso profilo	Cabeza perfil bajo
Aluminium alloy* (2.5 % Mg)	Alliage d'aluminium* (2.5% Mg)	Aluminium* (2.5 % Mg)	Lega di alluminio* (2.5% Mg)	Aluminio* (2.5% Mg)
Natural	Brut	Blank	Nessuna finitura	Natural

\*: AA 5052 DIN 1725 AlMg2.5 Werkstoff 3.3523



ø					øB	D	L	øA		Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin/ Rivetti per caricatore/ Uds./carga ± 1	Part No/ref									
	nom.	min.	max.	min.								max.	max.	max.	max.	kN <sup>1)</sup>				
3.2 (1/8")					3.26	3.34	6.66	1.05	3.24	0.60		71	01162-00404							
		1.57	3.17														51	01162-00406		
		3.17	4.75														39	01162-00408		
		4.75	6.35														32	01162-00410		
		6.35	7.92														27	01162-00412		
		7.92	9.52														23	01162-00414		
		9.52	11.10														21	01162-00416		
4.0 (5/32)					4.09	4.17	8.16	1.30	4.05	1.00			47	01162-00506						
		1.57	3.17																	
		2.36	3.93																	
		3.17	4.75																38	01162-00508
		4.75	6.35																31	01162-00510
		6.35	7.92																27	01162-00512
		7.92	9.52																23	01162-00514
		9.52	11.10																21	01162-00516
4.8 (3/16")					4.85	4.93	10.06	1.55	4.82	1.50			50	01162-00605						
		1.57	3.17																	
		3.17	4.75																	
		4.75	6.35																38	01162-00607
		6.35	7.92																33	01162-00609
		7.92	9.52																28	01162-00611
		9.52	11.10																24	01162-00613
		11.10	12.70																21	01162-00615
												19	01162-00617							
												17	01162-00619							

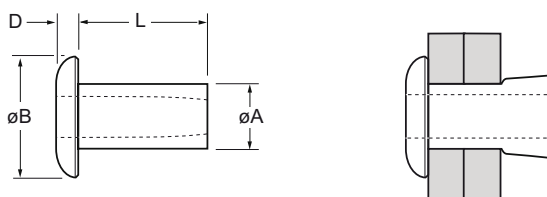
all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

**POP®** **Avdel®**
**Chobert® 1164 Series**  
 Aluminium


English	Français	Deutsch	Italiano	Español
Dome head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Aluminium alloy* (2.5 % Mg)	Alliage d'aluminium* (2.5% Mg)	Aluminium* (2.5 % Mg)	Lega di alluminio* (2.5% Mg)	Aluminio* (2.5% Mg)
Natural	Brut	Blank	Nessuna finitura	Natural

\*: AA 5052 DIN 1725 AlMg2.5 Werkstoff 3.3523



ø				øB	D	L	øA	Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin/ Rivetti per caricatore/ Uds./carga	Part No/ref
	nom.	min.							
3.2 undersized <sup>2)</sup> (1/8")			1.60	3.05	5.12	1.15	3.01	71	01164-00404
		1.60	3.17					51	01164-00406
		3.17	4.77					39	01164-00408
		4.77	6.35					32	01164-00410
		6.35	7.92					27	01164-00412
		7.92	9.50					23	01164-00414
		9.50	11.07					21	01164-00416

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

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

2) undersized / dimension inférieure / Untermaß / misura inferiore / dimensión inferior

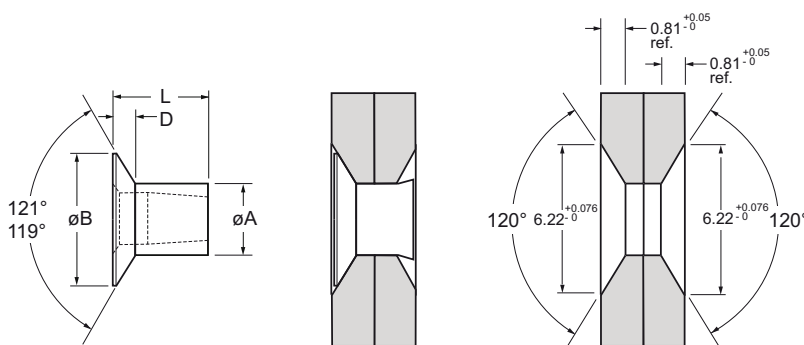
**POP<sup>®</sup> X Avdel<sup>®</sup>**

## Double Flush Chobert<sup>®</sup> 1110 Series Steel



English	Français	Deutsch	Italiano	Español
120° Countersunk	120° Tête fraisée	120° Senkkopf	120° Testa svasata	120° Cabeza avellanada
Low carbon steel*	Acier bas carbone*	Stahl*	Acciaio a basso tenore 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

\*: EN 10263-2 C8C DIN 10263-2 C8C Qst 34-3



Rear sheet tail protrusion of installed fastener is application dependent - up to 0.5 mm is permissible.

Le dépassement en face arrière après pose dépend de l'application - possible jusqu'à 0,5 mm.

Der Bauteilüberstand des gesetzten Verbinders auf der Blindseite ist applikationsabhängig - bis zu 0,5 mm ist zulässig.

L'entità della sporgenza posteriore del rivetto installato è dipendente dall'applicazione. Fino a 0,5 mm è ammessa.

El remache una vez colocado, sobresale por la parte trasera de la chapa hasta un máximo de 0,5mm permitidos.

ø					øB	D	L	øA			Fasteners per pod Nombre de rivets par chargeur/ Niete pro Magazin/ Rivetti per caricatore/ Uds./carga typ.	Part No/ref
	nom.	min.	max.	min.								
3.2 (1/8")	2.00	2.67	3.26	3.34	5.46	0.76	2.49	3.25	1.02	1.52	120	01110-11708
	2.41	2.92					2.79				112	01110-11294

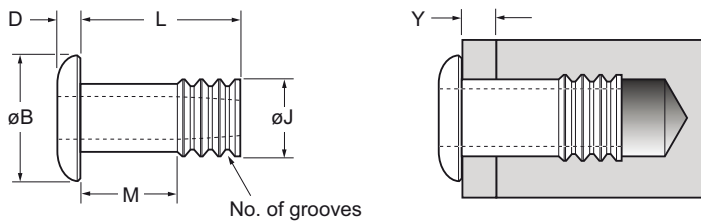
all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos


**POP®**  **Avdel®**
**Grovit® 1101 Series**  
**Steel**


English	Français	Deutsch	Italiano	Español
Dome head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Low carbon steel*	Acier bas carbone*	Stahl*	Acciaio a basso tenore 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

\*: SAE 1008 / EN 10263-2 C8C DIN 10263-2 C8C Qst 34-3



ø	Y	No. of grooves		øB	D	L	øJ	M	No. of grooves / cannelures / Rillen / rigature / aros	kN <sup>1)</sup>	Fasteners per pod / Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga	Part No/ref
		min.	max.									
3.2 (1/8")	3.6	3.45	3.55	5.6	1.0	8.8	3.43	3.2	3	1.20	± 1	01101-00410
4.0 (5/32")	2.8	4.40	4.50	6.6	1.3	7.2	4.37	1.6	3	2.20	36	01101-00508
	4.4					10.4		3.2	4		25	01101-00512
	5.2					11.9		4.8	4		22	01101-00514
4.8 (3/16")	3.2	5.08	5.18	9.0	1.7	8.0	5.05	2.4	3	3.50	31	01101-00609
	7.2					15.9		8.8	4		17	01101-00619

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

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos


**POP<sup>®</sup> X Avdel<sup>®</sup>**
**Grovit<sup>®</sup> 1103 / (1104) Series**  
 Aluminium


English	Français	Deutsch	Italiano	Español
Dome head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Aluminium alloy* (2.5 % Mg)	Alliage d'aluminium* (2.5% Mg)	Aluminium* (2.5 % Mg)	Lega di alluminio* (2.5% Mg)	Aluminio* (2.5% Mg)
Natural	Brut	Blank	Nessuna finitura	Natural

\*: AA 5052, DIN 1725 AlMg2.5 Werkstoff 3.3523

Optional on request / sur demande / auf Anfrage / su richiesta / bajo petición:

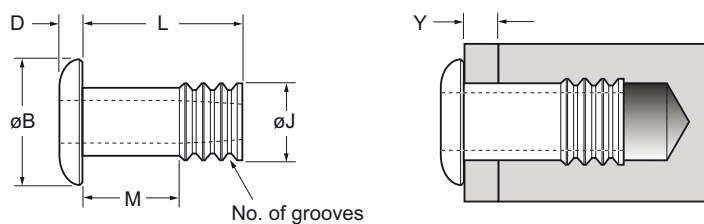
120° countersunk head: replace part no. 01103 with 01104. Details on request.

120° tête fraisée: remplacer la série 01103 par 01104. Détails sur demande.

120° Senkkopf: ersetzen Sie 01103 durch 01104. Details auf Anfrage.

120° testa svasata: sostituire 01103 con 01104. Dettagli su richiesta.

120° cabeza avellanada: cambiar 01103 por 01104. Más información bajo petición.

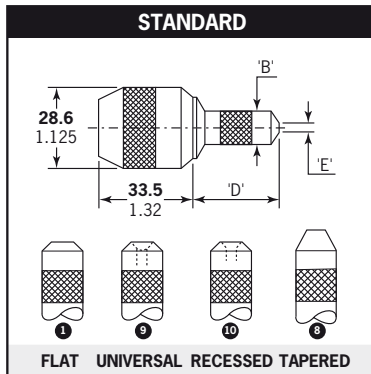


ø	Y	No. of grooves / cannelures/ Rillen / rigature / aros		øB	D	L	øJ	M	kN <sup>1)</sup>	Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin/ Rivetti per carica- tore / Uds./carga	Part No/ref	
		min.	max.									
nom.	max.	min.	max.	max.	max.	max.	max.	max.		± 1		
2.4 (3/32")	2.0	2.56	2.66	4.2	1.0	5.6	2.54	2.0	2	0.28	46	01103-00306
3.2 (1/8")	3.6	3.45	3.53	5.6	1.2	8.8	3.43	3.2	3	0.50	32	01103-00410
4.0 (5/32")	2.8	4.40	4.50	6.6	1.4	7.2	4.37	1.6	3	0.82	36	01103-00508
	5.2					11.9		4.8			4	22
4.8 (3/16")	3.2	5.08	5.18	9.0	1.7	8.0	5.05	2.4	3	1.16	31	01103-00609
	7.2					15.9		8.8			4	17

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

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

**POP® X Avdel®**
**Briv®, Chobert® & Grovit® Nose Equipment**

 Ensembles de nez / Mundstücke / Equipaggiamento /  
 Equipos de colocación


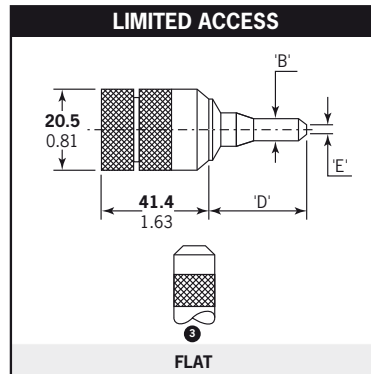
Applications with no or little access restrictions.

Pour applications ne présentant que peu ou pas de contraintes d'accès.

Für alle gut zugänglichen Nietpunkte.

Adatta per applicazioni senza restrizioni di accesso o con restrizioni di accesso limitate.

Apta para aquellas aplicaciones sin ninguna o pocas restricciones de acceso.



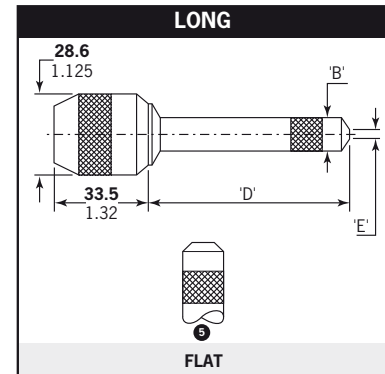
Allows access into very restrictive applications.

Permet d'accéder à des applications à accès très limité.

Für eng an den Bauteilseiten anliegende Nietpunkte.

Consente l'accesso ad applicazioni con serie restrizioni di accesso.

Permite el acceso en aplicaciones de acceso extremadamente limitado.



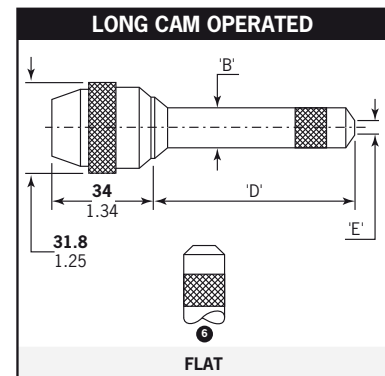
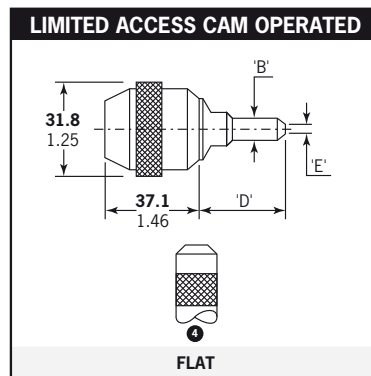
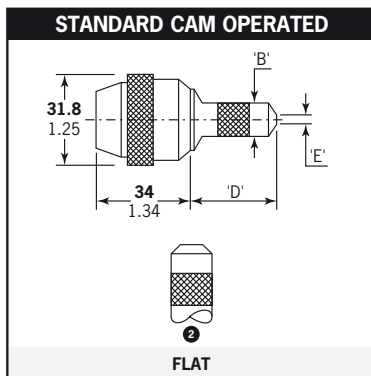
Allows more penetration into applications.

Permet une pénétration supérieure dans les applications sans autres contraintes d'accès.

Für tiefsitzende und eng an den Bauteilseiten anliegende Nietpunkte.

Consente una penetrazione maggiore nell'applicazione senza altre restrizioni di accesso.

Permite una mayor profundidad de acceso en aquellas aplicaciones sin restricción de acceso en anchura.



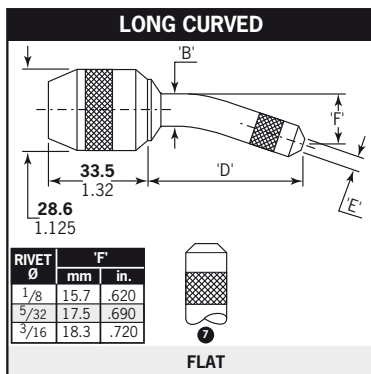
Nose equipment with addition of a twist cam to ease and speed up the nose jaw opening thus the pod reloading procedure.

Ensembles de nez avec, en plus, une came facilitant et accélérant l'ouverture du nez de pose, et donc le rechargement en fixations.

Zum leichteren Magazinieren haben diese Mundstücke durch einen Drehring zu öffnende Mundstückschnäbel.

Equipaggiamento con l'aggiunta di una camma per facilitare e rendere più veloce l'apertura della testata e pertanto la procedura di ricarica dell'astuccio portarivetti.

Boquillas que incorporan una leva para facilitar y hacer más rápida la apertura de la boquilla y el procedimiento de carga.


**Type**

- ① - ⑦ Flat / Plat / Flach / Piatta / Plana
- ⑧ Tapered / Biseauté / Spitz / A punta / Conica
- ⑨ Universal / Universel / Für erhöhte Klammerkraft / Universale / concava
- ⑩ Recessed / En retrait / Spezial / Incassata / Apriete

Allows more penetration into applications.

Permet une pénétration supérieure dans les applications à accès limité.

Für tiefsitzende und eng an den Bauteilseiten anliegende Nietpunkte.

Consente una penetrazione maggiore nelle applicazioni con restrizioni di accesso.

Permite una mayor penetración en las aplicaciones con acceso limitado.



**POP** **Avdel**
**Briv®, Chobert® & Grovit® Nose Equipment**

 Ensembles de nez / Mundstücke / Equipaggiamento /  
 Equipos de colocación

ø nom.	Fastener Rivets / Niettyp / Rivetti / Remaches	Nose Equipment Nez de pose / Mundstück / Testata / Boquilla	Type	Part No/ref	Dimensions Dimension / Abmessungen / Dimensioni / Dimensiones		
					B	D	E
2.4 (3/32")	Briv® / Chobert® / Grovit®	Standard	①	07150-03003	9.14	33.02	4.06
		Standard cam operated	②	07170-04500	9.14	33.02	
		Limited access	③	07274-01000	5.59	27.18	
		Limited access cam operated	④	07177-03003	5.08	29.97	
		Standard tapered	⑤	07170-03103	9.14	33.02	
3.2 (1/8")	Briv® / Chobert® / Grovit®	Standard	①	07150-03004	10.41	29.97	5.08
		Standard cam operated	②	07170-04600		29.97	
		Long	⑤	07150-04004		55.37	
		Long cam operated	⑥	07170-05000		55.37	
		Long curved	⑦	07150-05004		53.85	
		Standard tapered	⑧	07170-03104		30.23	
	Double Flush Chobert®	Standard cam operated	②	07537-03100	29.07	5.95	
4.0 (5/32")	Briv® / Chobert® / Grovit®	Standard	①	07150-03005	12.19	33.02	6.10
		Standard cam operated	②	07170-04700		33.02	
		Long	⑤	07150-04005		58.42	
		Long cam operated	⑥	07170-05100		58.42	
		Long curved	⑦	07150-05005		56.64	
	Chobert® / Grovit®	Standard tapered	⑧	07150-03105	11.18	33.02	
4.8 (3/16")	Briv® / Chobert® / Grovit®	Standard	①	07150-03006	14.22	29.97	8.38
		Standard cam operated	②	07170-04800		29.97	
		Long	⑤	07150-04006		58.42	
		Long cam operated	⑥	07170-05200		58.42	
		Long curved	⑦	07150-05006		56.13	
	Chobert® / Grovit®	Standard tapered	⑧	07150-03106	29.97		
6.0	Briv®	Standard	①	07170-05800	16.33	30.65	13.14
		Standard cam operated	②	07170-05600		30.65	
		Long	⑤	07170-05900		55.65	
		Long cam operated	⑥	07170-05700		55.65	
6.4 (1/4")	Chobert®	Standard	①	07150-03008	16.26	29.97	9.91
		Standard cam operated	②	07170-04900		29.97	
		Long	⑤	07150-04008		55.37	
		Long cam operated	⑥	07170-05300		55.37	

**Head forming Nose Equipment / a formage de tête / kopfformend / a formatura di testa / tipo de boquilla**

2.4 (3/32")	Briv® 1)	Standard	⑨	07150-03203	9.14	33.78	6.60
3.2 (1/8")			⑩	07170-03004	10.41	30.48	7.62
4.0 (5/32")			⑨	07150-03204		30.99	7.69
4.8 (3/16")			⑩	07170-03005	12.19	33.53	10.41
			⑨	07150-03205		34.29	
4.8 (3/16")					⑩	07170-03006	14.22
	⑨	07150-03206			31.50		

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

1) except stainless steel and countersunk / sauf inox et tête fraisée / außer Edelstahl und Senkkopf / eccetto acciaio inox e testa svasata / excepto acero inoxidable y cabeza avellanada

⑨ maximises clench but reduces grip range by approx. 0.4 mm / obtenir le plus fort serrage possible, mais la prise maximum se trouve réduite d'environ 0,4 mm / maximierte Klammerkraft bei Verringerung des Klemmbereiches um ca. 0,4 mm / ottiene la ribaditura più alta possibile, ma la distanza massima tra i centri dei rivetti viene ridotta di circa 0,4 mm / se alcanza un máximo apriete en la fijación, pero el espesor máximo se reduce en aproximadamente 0,4 mm

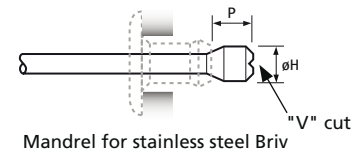
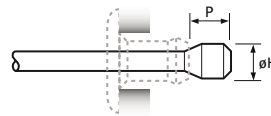
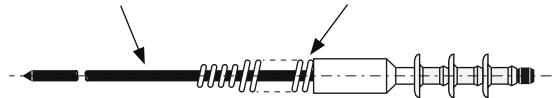
⑩ increases clench without affecting grip range / Augmente le sertissage sans influencer l'épaisseur / erhöhte Klammerkraft bei gleichem Klemmbereich / aumenta la ribaditura (la presa di rivettatura) senza compromettere lo spessore / incrementa el apriete sin afectar al rango de espesores a remachar

**POP** **Avdel**

## Briv® Mandrel & Spring Information

Aiguilles et Ressorts d'aiguille / Nietdorne und -federn /  
Mandrini e Molle / Mandriles y Muelles

Mandrel / Aiguille / Nietdorn / Spring / Ressort d'aiguille / Nietdornfeder /  
Mandrino / Mandril Molla / Muelle



Mandrel for stainless steel Briv "V" cut

ø nom.		Description Description Beschreibung Descrizione Descripción	ø H	P max.	Standard Nose Equipment Nez de pose Standard Standard-Mundstück Testata Standard Boquilla Estándar		Long Nose Equipment Nez de pose Long Langes Mundstück Testata Lunga Boquilla Larga	
					Mandrel Part No/ref	Spring Part No/ref	Mandrel Part No/ref	Spring Part No/ref
2.4 (3/32") Aluminium, Brass	as rec.	Standard green	1.83	3.02	07150-06013	07150-06803 <sup>1)</sup>	N/A	N/A
	+ 0.10	1. oversize yellow	1.93	3.12	07150-06113			
	+ 0.20	2. oversize blue	2.01	3.20	07150-06213			
3.2 (1/8") Aluminium, Steel, Brass	as rec.	Standard green	2.34	3.05	07271-06414	07150-06814	07271-07414	07150-07814
	+ 0.13	1. oversize yellow	2.46	3.20	07271-06514		07271-07514	
	+ 0.25	2. oversize blue	2.59	3.38	07271-06614		07271-07614	
3.2 (1/8") Stainless Steel	as rec.	Standard green	2.53	3.07	07170-06804	07150-06814	07170-07804	07150-07814
	+ 0.13	1. oversize yellow	2.65	3.25	07170-06824		07170-07824	
4.0 (5/32") Aluminium, Steel, Brass	as rec.	Standard green	2.79	3.45	07150-06015	07170-06875	07150-07015	07170-07875
	+ 0.13	1. oversize yellow	2.92	3.61	07150-06115		07150-07115	
	+ 0.25	2. oversize blue	3.05	3.78	07150-06215		07150-07215	
4.0 (5/32") Stainless Steel	as rec.	Standard green	3.05	3.20	07170-06805	07170-06875	07170-07805	07170-07875
	+ 0.13	1. oversize yellow	3.15	3.35	07170-06825		07170-07825	
4.8 (3/16") Aluminium, Steel, Brass	as rec.	Standard green	3.58	3.99	07150-06016	07170-06876	07150-07016	07170-07876
	+ 0.13	1. oversize yellow	3.71	4.17	07150-06116		07150-07116	
	+ 0.25	2. oversize blue	3.84	4.32	07150-06216		07150-07216	
	+ 0.30	3. oversize red	3.85	4.39	07150-06316		07150-07316	
4.8 (3/16") Stainless Steel	as rec.	Standard green	3.81	3.81	07170-06806	07170-06876	07170-07806	07170-07876
	+ 0.13	1. oversize yellow	3.90	3.96	07170-06826		07170-07826	
6.0 Aluminium, Steel	as rec.	Standard green	4.54	4.18	07150-06018	07150-06846	07150-07018	07150-07846
	+ 0.13	1. oversize yellow	4.65	4.34	07150-06118		07150-07118	
	+ 0.25	2. oversize blue	4.79	4.49	07150-06218		07150-07218	

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

1) For use with standard flat nosepiece. For tapered nosepiece use spring 07170-06873 and for limited access nosepiece use 07170-06903.

Pour utilisation avec nez de pose standard. Avec le nez de pose biseauté utilisez le ressort d'aiguille 07170-06873 et avec le nez de pose en retrait utilisez le 07170-06903.

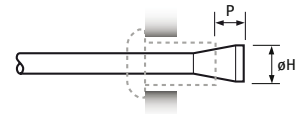
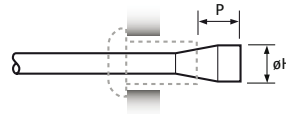
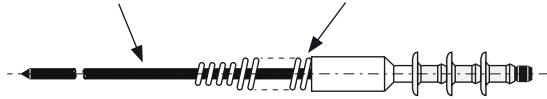
Für Verwendung mit Standard Mundstück flach. Bei spitzem Mundstück verwenden Sie Feder 07170-06873 und bei abgesetztem Mundstück Feder 07170-06903.

Per uso con nasello standard a filo. Con nasello a punta usate molle 07170-06873 e con nasello incassata usate molle 07170-06903. Para uso con boquilla estándar plana. Con boquilla cónica utilizar muelle 07170-06873 y con boquilla de acceso limitado utilizar 07170-06903.

English	Français	Deutsch	Italiano	Español
Aluminium	Aluminium	Aluminium	Alluminio	Aluminio
Brass	Laiton	Kupfer-Zink Leg.	Ottone	Latón
Steel	Acier	Stahl	Acciaio	Acero
Stainless Steel	Inox	Edelstahl	Acciaio inox	Acero inoxidable
Standard green	Standard verte	Standard grün	Standard verde	Estándar verde
1. oversize yellow	1. surdimensionnée jaune	1. Übermaß gelb	1. maggiorazione giallo	1. sobremedida amarillo
2. oversize blue	2. surdimensionnée bleue	2. Übermaß blau	2. maggiorazione blu	2. sobremedida azul
3. oversize red	3. surdimensionnée rouge	3. Übermaß rot	3. maggiorazione rosso	3. sobremedida rojo

**POP® X Avdel®**
**Chobert® & Grovit® Mandrel & Spring Information**

 Aiguilles et Ressorts d'aiguille / Nietdorne und -federn /  
 Mandrini e Molle / Mandriles y Muelles

 Mandrel / Aiguille / Nietdorn / Spring / Ressort d'aiguille / Nietdornfeder /  
 Mandrino / Mandril Molla / Muelle


Short Reach (S/R) mandrel

ø nom.		Description Description Beschreibung Descrizione Descripción	ø H	P max.	P S/R max.	Standard Nose Equipment Nez de pose Standard Standard-Mundstück Testata Standard Boquilla Estándar		Long Nose Equipment Nez de pose Long Langes Mundstück Testata Lunga Boquilla Larga	
						Mandrel <sup>1)</sup> Part No/ref	Spring Part No/ref	Mandrel <sup>3)</sup> Part No/ref	Spring Part No/ref
2.4 (3/32") Brass, Aluminium	as rec.	Standard green	1.84	4.22	1.80	07150-06003	07150-06803 <sup>2)</sup>	07150-07003	07150-07803
	+ 0.04	1. oversize yellow	1.88	4.42	1.98	07150-06303 <sup>1)</sup>		S/R only =07150-09103	
	+ 0.09	2. oversize blue	1.93	4.70	N/A	07150-06103		07150-07103	
3.2 (1/8") Aluminium Steel, Brass Chobert® / Grovit®	as rec.	Standard green	2.24	5.49	2.29	07150-06004	07150-06804	07150-07004	07150-07804
	+ 0.10	1. oversize yellow	2.34	6.02	2.49	07150-06104		07150-07104	
	+ 0.25	2. oversize blue	2.49	6.81	2.79	07150-06204		07150-07204	
	+ 0.35	3. oversize red	2.59	7.32	3.00	07150-06304		07150-07304	
3.2 (1/8") Double Flush Chobert®	as rec.	Standard green	2.24	N/A	2.29	07150-08004	07271-06630	N/A	N/A
	+ 0.10	1. oversize yellow	2.34	N/A	2.49	07150-08104			
	+ 0.25	2. oversize blue	2.49	N/A	2.79	07150-08204			
4.0 (5/32") Aluminium, Steel, Brass	as rec.	Standard green	2.72	6.20	2.54	07150-06005	07170-06875	07150-07005	07170-07875
	+ 0.20	1. oversize yellow	2.92	7.21	2.95	07150-06105		07150-07105	
	+ 0.38	2. oversize blue	3.10	8.13	3.30	07150-06205		07150-07205	
	+ 0.63	3. oversize red	3.35	9.45	3.81	07150-06305		07150-07305	
4.8 (3/16") Aluminium, Steel, Brass	as rec.	Standard green	3.35	6.27	2.59	07150-06006	07170-06876	07150-07006	07170-07876
	+ 0.35	1. oversize yellow	3.71	8.13	3.30	07150-06106		07150-07106	
	+ 0.60	2. oversize blue	3.96	9.45	3.81	07150-06206		07150-07206	
6.4 (1/4") Alum., Steel	as rec.	Standard green	4.67	6.81	2.79	07150-06008	07150-06808	07150-07008	07150-07808
	+ 0.30	1. oversize yellow	4.98	8.38	3.40	07150-06108		07150-07108	

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

- 1) For S/R mandrel substitute 6 with 8 (07150-06xxx => 07150-08xxx), exception: 07150-06303 becomes 07150-08103.  
 Pour aiguille S/R remplacer 6 par 8 (07150-06xxx => 07150-08xxx), exception: 07150-06303 change à 07150-08103.  
 Für S/R Nietdorn ersetzen Sie 6 durch 8 (07150-06xxx => 07150-08xxx), Ausnahme: 07150-06303 wird zu 07150-08103.  
 Per mandrino S/R sostituire 6 con 8 (07150-06xxx => 07150-08xxx), eccezione: 07150-06303 cambia 07150-08103.  
 Con mandril cono corto S/R cambiar 6 por 8 (07150-06xxx => 07150-08xxx), excepción: 07150-06303 cambia a 07150-08103.
- 2) For use with standard flat nose piece. Tapered nose piece uses spring 07170-06873 and limited access nose piece uses 07170-06903.  
 Pour utilisation avec nez de pose standard. Avec le nez de pose biseauté utilisez le ressort d'aiguille 07170-06873 et avec le nez de pose en retrait utilisez le 07170-06903.  
 Für Verwendung mit Standard Mundstück flach. Bei spitzem Mundstück verwenden Sie Feder 07170-06873, bei abgesetztem Mundstück Feder 07170-06903.  
 Per uso con nasello standard a filo. Con nasello a punta usate molle 07170-06873 e con nasello incassata usate molle 07170-06903.  
 Para uso con boquilla estándar plana. Con boquilla cónica utilizar muelle 07170-06873 y con boquilla de acceso limitado utilizar 07170-06903.
- 3) For S/R mandrel substitute 7 with 9 (07150-07xxx => 07150-09xxx)  
 Pour aiguille S/R remplacer 7 par 9 (07150-07xxx => 07150-09xxx)  
 Für S/R Nietdorn ersetzen Sie 7 durch 9 (07150-07xxx => 07150-09xxx)  
 Per mandrino S/R sostituire 7 con 9 (07150-07xxx => 07150-09xxx)  
 Con mandril cono corto S/R cambiar 7 por 9 (07150-07xxx => 07150-09xxx)

English	Français	Deutsch	Italiano	Español
Aluminium	Aluminium	Aluminium	Alluminio	Aluminio
Brass	Laiton	Kupfer-Zink Leg.	Ottone	Latón
Steel	Acier	Stahl	Acciaio	Acero
Stainless Steel	Inox	Edelstahl	Acciaio inox	Acero inoxidable
Standard green	Standard verte	Standard grün	Standard verde	Estándar verde
1. oversize yellow	1. surdimensionnée jaune	1. Übermaß gelb	1. maggiorazione giallo	1. sobremedida amarillo
2. oversize blue	2. surdimensionnée bleue	2. Übermaß blau	2. maggiorazione blu	2. sobremedida azul
3. oversize red	3. surdimensionnée rouge	3. Übermaß rot	3. maggiorazione rosso	3. sobremedida rojo

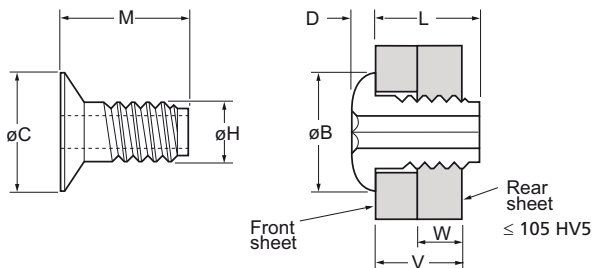
**POP<sup>®</sup> X Avdel<sup>®</sup>**
**Rivscrow<sup>®</sup> 1722 / (1723) Series**  
 Steel


English	Français	Deutsch	Italiano	Español
Dome head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Low carbon steel*	Acier à faible teneur en carbone*	Stahl*	Acciaio a basso tenore 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

\* : BS 3111 Type 0, SAE 1008, DIN 1654 Qst 34-3

Optional on request / sur demande / auf Anfrage / su richiesta / bajo petición:

Tin plated: replace part no. 01722 with 01723. / Etamé: remplacer la série 01722 par 01723. / Verzinkt: ersetzen Sie 01722 durch 01723. Stagnato: sostituire 01722 con 01723. / Estañado: cambiar 01722 por 01723.



ø	øH	Front sheet pièce à fixer / oberes Bauteil / piastra frontale/ pieza anterior		Rear sheet pièce support/ unteres Bauteil/ piastra posteriore / pieza posterior		øC	M	W	V	øB <sup>1)</sup>	D <sup>1)</sup>	L	Fasteners per pod Nombre de rivets par chargeur/ Niete pro Magazin/ Rivetti per caricatore / Uds./carga ± 1	Part No/ref
		min.	max.	min.	max.									
2.8	2.6	2.95	3.02	2.62	2.70	5.9	5.2	1.62	2.85	6.1	1.4	4.0	62	01722-02806
							6.2		3.85			5.0	52	01722-02807
							7.2		4.83			6.0	43	01722-02809
							8.2		5.82			7.0	38	01722-02810
							10.1		7.80			9.0	30	01722-02812
3.0	2.8	3.07	3.15	2.82	2.89	5.9	5.2	1.62	2.85	6.1	1.4	4.0	62	01722-03006
							6.2		3.85			5.0	52	01722-03007
							7.2		4.83			6.0	43	01722-03009
							8.2		5.82			7.0	38	01722-03010
							9.2		6.81			8.0	34	01722-03011
							10.1		7.80			9.0	30	01722-03012
							13.1		10.72			11.9	23	01722-03016

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

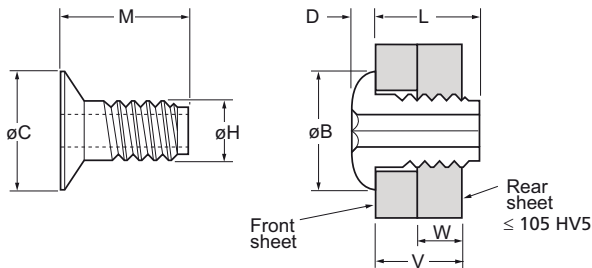
1) Dimensions B and D are generated during the installation process and should only be used as an indication of the minimum space required.

Les cotes B et D ne sont données qu'à titre et représentent l'encombrement maximal de la tête du Rivscrow après pose.

Maße B und D werden während der Verarbeitung erzeugt und sollten nur als Anhaltspunkt für den minimalen Platzbedarf verwendet werden.

Le dimensioni B e D sono generate durante il processo d'installazione e devono essere usate solo come un'indicazione del minimo spazio richiesto.

Las dimensiones B y D se conforman en el proceso de colocación y deben tomarse como orientativas para comprobar el espacio mínimo necesario.

**POP®** **Avdel®**
**Rivscrow® 1722 / (1723) Series**  
**Steel**


ø	øH	Front sheet		Rear sheet		øC	M	W	V	øB <sup>1)</sup>	D <sup>1)</sup>	L	Fasteners per pod Nombre de rivets par chargeur/ Niete pro Magazin/ Rivetti per caricatore / Uds./carga ± 1	Part No/ref
		min.	max.	min.	max.									
3.5	3.1	3.50	3.58	3.10	3.17	6.0	5.2	1.62	2.85	6.1	1.4	4.0	62	01722-03506
							6.2		3.85			5.0	52	01722-03507
							7.2		4.83			6.0	43	01722-03509
							8.2		5.82			7.0	38	01722-03510
							9.2		6.81			8.0	34	01722-03511
							10.1		7.80			9.0	30	01722-03512
							14.1		11.76			12.9	21	01722-03517
4.0	3.6	4.19	4.27	3.61	3.68	6.3	5.2	1.62	2.85	6.4	1.4	4.0	62	01722-04006
							6.2		3.85			5.0	52	01722-04007
							7.2		4.83			6.0	43	01722-04009
							8.2		5.82			7.0	38	01722-04010
							9.2		6.81			8.0	34	01722-04011
							10.1		7.80			9.0	30	01722-04012
							12.1		9.78			11.0	25	01722-04015

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

1) Dimensions B and D are generated during the installation process and should only be used as an indication of the minimum space required.

Les cotes B et D ne sont données qu'à titre et représentent l'encombrement maximal de la tête du Rivscrow après pose.

Maße B und D werden während der Verarbeitung erzeugt und sollten nur als Anhaltspunkt für den minimalen Platzbedarf verwendet werden.

Le dimensioni B e D sono generate durante il processo d'installazione e devono essere usate solo come un'indicazione del minimo spazio richiesto.

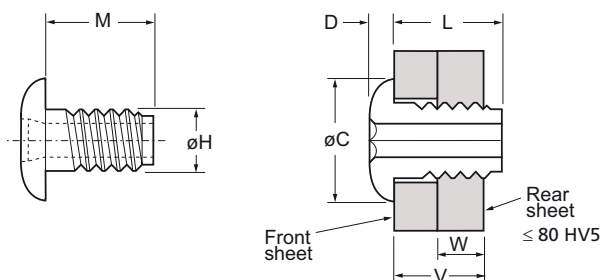
Las dimensiones B y D se conforman en el proceso de colocación y deben tomarse como orientativas para comprobar el espacio mínimo necesario.

ø			Hex Key Size Dim. clef 6 pans Sechskantgröße Dim. chiave esagonale llave Allen
nom.	kN	kN	
2.8	0.90	0.70	1.60 (1/16")
3.0	0.90	0.80	1.60 (1/16")
3.5	1.00	1.00	2.0 (5/64")
4.0	1.30	1.20	2.5

**POP** **Avdel**
**Rivscrew® 1733 Series**  
 Steel


English	Français	Deutsch	Italiano	Español
Dome head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Low carbon steel*	Acier à faible teneur en carbone*	Stahl*	Acciaio a basso tenore di carbonio*	Acero bajo en carbono*
Zinc plated	Revêtement zingué	Verzinkt	Zincatura	Zincado
Clear trivalent passivated	Passivation claire trivalente	Klar chromatiert, Cr6-frei	Passivazione chiara trivalente	Pasivado claro trivalente

\* : SAE 1008



ø	øH	Front sheet pièce à fixer / oberes Bauteil / piastra frontale / pieza anterior		Rear sheet pièce support / unteres Bauteil / piastra posteriore / pieza posterior		M	øC	D	W	V	L	Hex Key Size Dim. clef 6 pans / Sechskant- größe / Dim. chiave esagonale / llave Allen	Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga ± 1	Part No/ref
		min.	max.	min.	max.									
nom.	max.	min.	max.	min.	max.	max.	max.	max.	min.	max.	max.			
4.8	4.48	4.90	5.00	4.50	4.60	8.4 13.3	9.5	1.7	2.8	6.5 11.5	8.7 13.5	2.5	28 19	01733-04810 01733-04816

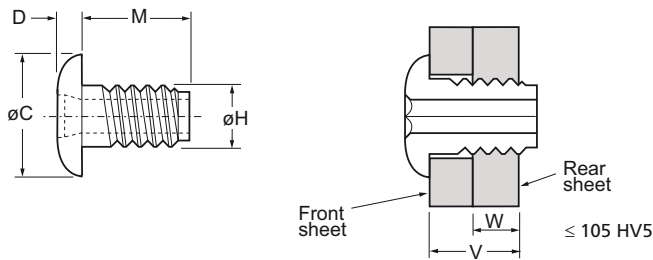
all dimensions in mm / en milimètres / alle Maße in mm / in millimetri / en milímetros



**POP® X Avdel®**
**Rivscrow® 1772 Series**  
 Steel


English	Français	Deutsch	Italiano	Español
Dome head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Low carbon steel*	Acier à faible teneur en carbone*	Stahl*	Acciaio a basso tenore di carbonio*	Acero bajo en carbono*
Zinc plated	Revêtement zingué	Verzinkt	Zincatura	Zincado
Clear trivalent passivated	Passivation claire trivalente	Klar chromatiert, Cr6-frei	Passivazione chiara trivalente	Pasivado claro trivalente

\* : BS 31110 Type 0, SAE 1008, DIN 1654 QSt 34-3



ø	øH	Front sheet pièce à fixer / oberes Bauteil/ piastra frontale/ pieza anterior		Rear sheet pièce support/ unteres Bauteil/ piastra posteriore / pieza posterior		M	øC	D	W	V	Hex Key Size Dim. clef 6 pans / Sechskant- größe / Dim. chiave esagonale / llave Allen	Torque-to- turn tenue au couple / Verdreh- moment / coppia di rotazione / resistencia al giro Nm	Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga ± 1	Part No/ref		
		nom.	max.	min.	max.										min.	max.
2.8	2.60	2.95	3.02	2.62	2.70	4.2	6.2	1.2	1.62	3.15	1.60 (1/16")	0.28	62	01772-02806		
						6.2				4.17					59	01772-02807
						7.2				5.18					43	01772-02809
						7.3				6.17					38	01772-02810
						9.8				8.79					30	01772-02812
3.0	2.82	3.07	3.15	2.82	2.89	4.2	6.2	1.2	1.62	3.15	1.60 (1/16")	0.28	62	01772-03006		
						5.2				4.17					52	01772-03007
						6.2				5.18					43	01772-03009
						7.3				6.17					38	01772-03010
						8.9				7.87					43	01772-03011
						9.8				8.79					30	01772-03012
3.5	3.09	3.50	3.58	3.10	3.17	4.2	6.2	1.2	1.62	3.15	2.0 (5/64")	0.56	62	01772-03506		
						5.2				4.17					52	01772-03507
						6.2				5.18					43	01772-03509
						7.3				6.17					38	01772-03510
						8.9				7.87					34	01772-03511
						9.8				8.79					30	01772-03512
4.0	3.60	4.19	4.27	3.61	3.68	4.2	6.2	1.2	1.62	2.85	2.50	0.62	62	01772-04006		
						5.2				3.85					52	01772-04007
						6.2				4.83					43	01772-04009
						7.3				5.82					38	01772-04010
						8.2				6.81					34	01772-04011
						9.2				7.80					30	01772-04012
						11.2				9.78		25	01772-04015			

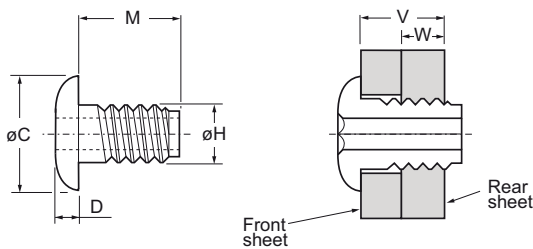
all dimensions in mm / en milimètres / alle Maße in mm / in millimetri / en milímetros



**POP® X Avdel®**
**Rivscrew® PL 1742 Series**  
 Steel


English	Français	Deutsch	Italiano	Español
Dome head	Tête bombée	Flachrundkopf	Testa tonda	Cabeza alomada
Low carbon steel*	Acier à faible teneur en carbone*	Stahl*	Acciaio a basso tenore di carbonio*	Acero bajo en carbono*
Zinc plated	Zingué	Verzinkt	Zincato	Zincado
Clear trivalent passivated	Passivation claire trivalente	Klar chromatiert, Cr6-frei	Passivazione chiara trivalente	Pasivado claro trivalente

\* : BS 3111 Type 0, SAE 1008, DIN 1654 Qst 34-3



ø	øH	Front sheet Pièce à fixer oberes Bauteil piastra frontale pieza anterior		Rear sheet Pièce support unteres Bauteil piastra posteriore pieza posterior		øC	D	M	W	V	Hex Key Size Dim. clef 6 pans/ Sechskantgröße/ Dim. chiave esagonale / llave Allen	Part No/ref
		min.	max.	min.	max.							
3.0	2.81	3.28	3.35	2.82	2.90	6.2	1.19	6.93	2.79	5.46	1.60 (1/16")	01742-03008
								10.11		8.64		01742-03012
								13.28		11.81		01742-03016
3.5	3.09	3.53	3.63	3.10	3.18	6.2		6.93	2.79	5.46	1.60 (1/16")	01742-03508
								10.11		8.64		01742-03512
								13.28		11.81		01742-03516
4.0	3.39	4.09	4.17	3.40	3.47	8.1		6.93	3.04	5.46	2.00 (5/64")	01742-04008
								10.11		8.64		01742-04012
								13.28		11.81		01742-04016
4.5	3.99	4.93	5.00	4.00	4.08	8.1		6.93	3.04	5.46	2.50	01742-04508
								10.11		8.64		01742-04512
								13.28		11.81		01742-04516

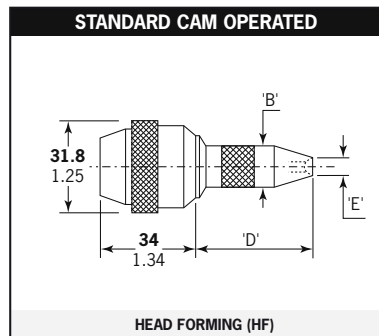
all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

**POP® X Avdel®**
**Rivscrow® & Rivscrow® PL Nose Equipment**

Ensembles de nez / Mundstücke / Equipaggiamento / Equipos de colocación

**Rivscrow® 1722 / 1723 Series**

Head forming / a formage de tête / kopfformend / a formatura di testa / Tipo de boquilla



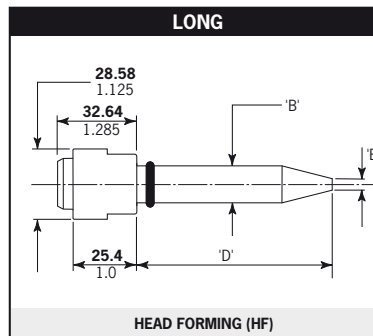
Applications with no or little access restrictions.

Pour applications ne présentant que peu ou pas de contraintes d'accès.

Für alle gut zugänglichen Nietpunkte.

Adatta per applicazioni senza restrizioni di accesso o con restrizioni di accesso limitate.

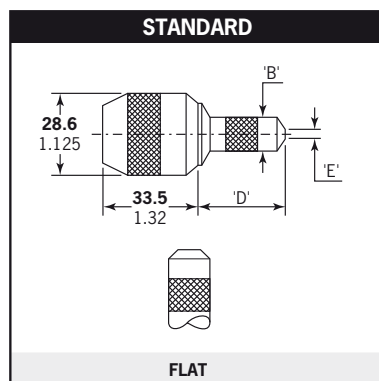
Apta para aquellas aplicaciones sin ninguna o pocas restricciones da acceso.



Allows more penetration into applications. Permet une pénétration supérieure dans les applications sans autres contraintes d'accès. Für tiefsitzende und eng an den Bauteilseiten anliegende Nietpunkte.

Consente una penetrazione maggiore nell'applicazione senza altre restrizioni di accesso.

Permite una mayor profundidad de acceso en aquellas aplicaciones sin restricción de acceso en anchura.

**Rivscrow® 1772 / 1733 Series & Rivscrow® PL**


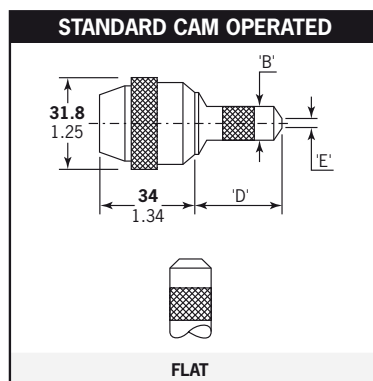
Applications with no or little access restrictions.

Pour applications ne présentant que peu ou pas de contraintes d'accès.

Für alle gut zugänglichen Nietpunkte.

Adatta per applicazioni senza restrizioni di accesso o con restrizioni di accesso limitate.

Apta para aquellas aplicaciones sin ninguna o pocas restricciones da acceso.

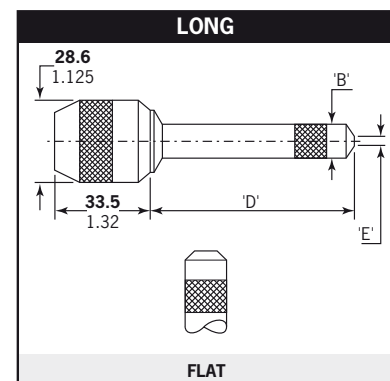


Nose equipment with addition of a twist cam to ease and speed up the nose jaw opening thus the pod reloading procedure. Ensembles de nez avec, en plus, une came facilitant et accélérant l'ouverture du nez de pose, et donc le rechargement en fixations.

Zum leichteren Magazinieren haben diese Mundstücke durch einen Drehring zu öffnende Mundstückschnäbel.

Equipaggiamento con l'aggiunta di una camma per facilitare e rendere più veloce l'apertura della testata e pertanto la procedura di ricarica dell'astuccio portarivetti.

Boquillas que incorporan una leva para facilitar y hacer más rápida la apertura de la boquilla y el procedimiento de carga.

**Rivscrow® 1733 Series**


Allows more penetration into applications. Permet une pénétration supérieure dans les applications sans autres contraintes d'accès. Für tiefsitzende und eng an den Bauteilseiten anliegende Nietpunkte.

Consente una penetrazione maggiore nell'applicazione senza altre restrizioni di accesso.

Permite una mayor profundidad de acceso en aquellas aplicaciones sin restricción de acceso en anchura.

## Rivscrow® & Rivscrow® PL Nose Equipment

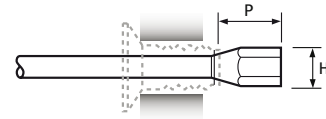
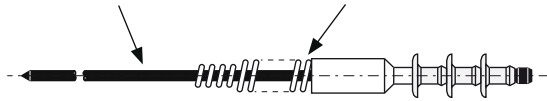
Ensembles de nez / Mundstücke / Equipaggiamento /  
Equipos de colocación

ø nom.	Fastener Rivets / Niettyp / Rivetti / Remaches	Nose Equipment / Nez de pose / Mundstück / Testata / Boquilla	Part No/ref	Dimensions Dimension / Abmessungen / Dimensioni / Dimensiones					
				B	D	E			
2.8 mm	Rivscrow® 1722 / 1723 Series	Standard cam operated	07271-03000	10.41	29.97	6.10			
		Long	07271-08600	15.50	67.10	6.35			
Standard cam operated		07271-03000	10.41	29.97	6.10				
Long		07271-08600	15.50	67.10	6.35				
Standard cam operated		07271-03500	10.41	29.97	6.10				
Long		07271-08700	15.50	67.10	6.35				
Standard cam operated		07271-04000	10.41	29.97	6.35				
Long		07271-08800	15.50	67.10	7.10				
2.8 mm		Rivscrow® 1772 Series (pre-formed head)	Standard	07150-03004	10.41	29.97	5.08		
3.0 mm			Standard cam operated	07170-04600					
	Standard		07150-03004						
3.5 mm	Standard cam operated		07170-04600						
	Standard		07150-03004						
4.0 mm	Standard cam operated		07170-04600	12.19				33.02	6.10
	Standard		07150-03005						
4.8 mm	Rivscrow® 1733 Series (preformed head)		Standard	07150-03006	14.22	29.97	8.38		
		Long	07150-04006	58.42					
3.0 mm	Rivscrow® PL (preformed head)	Standard cam operated	07170-04600	10.41	29.97	5.08			
3.5 mm									
4.0 mm		Standard	07150-03005				12.19	33.02	6.10
4.5 mm									

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

**POP® X Avdel®**
**Rivscrow® & Rivscrow® PL Mandrel & Spring Information**

 Aiguilles et Ressorts d'aiguille / Nietdorne und -federn /  
 Mandrini e Molle / Mandriles y Muelles

 Mandrel / Aiguille / Nietdorn / Spring / Ressort d'aiguille / Nietdornfeder /  
 Mandrino / Mandril Molla / Muelle


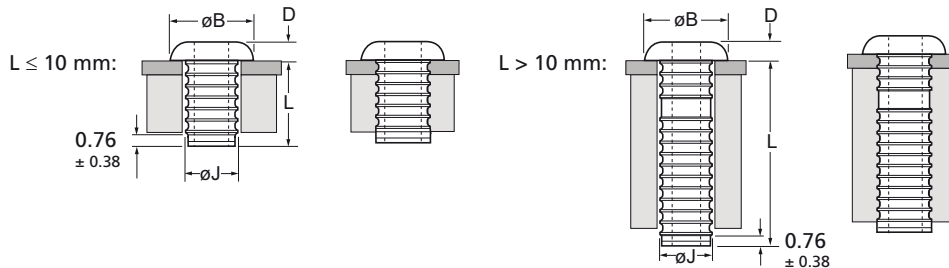
ø nom.	Nose Nez Mundstück Testata Boquilla Part No/ref.	Description Description Beschreibung Descrizione Descripción	H A/F	P	Mandrel Aiguille Nietdorn Mandrino Mandril Part No/ref	Spring Ressort d'aiguille Nietdornfeder Molla Muelle Part No/ref
<b>Rivscrow® 1722 / 1723</b>						
2.8	07271-03000	Standard cam operated	1.65	3.23	07271-06030	07271-06630
	07271-08600	Long			07271-07030	07271-07630
3.0	07271-03000	Standard cam operated	1.65	3.23	07271-06030	07271-06630
	07271-08600	Long			07271-07030	07271-07630
3.5	07271-03500	Standard cam operated	2.10	3.35	07271-06035	07271-06635
	07271-08700	Long			07271-07035	07271-07635
4.0	07271-04000	Standard cam operated	2.62	3.81	07271-06140	07271-06640
	07271-08800	Long			07271-07140	07271-07640
<b>Rivscrow® 1772/1733 Series (preformed head)</b>						
2.8	07150-03004	Standard	1.65	3.23	07271-06030	07271-06630
3.0						
3.5		Standard cam operated				
4.0	07150-03005	Standard	2.10	3.35	07271-06035	07271-06630
	07170-04700	Standard cam operated				
4.8	07150-03006	Standard	2.62	3.81	07271-06140	07271-06640
	07150-04006	Long			07271-07140	07271-07640
<b>Rivscrow® PL 1742 (preformed head)</b>						
3.0	07170-04600	Standard cam operated	1.65	3.75	07279-06429	07271-06630
3.5						
4.0	07150-03005	Standard	2.10	3.35	07271-06035	07271-06635
4.5			2.62	3.81	07271-06140	07271-06640

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

**POP** **Avdel**
**Avtronic® 1188 Series**  
 Brass


English	Français	Deutsch	Italiano	Español
Dome head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Brass*	Laiton*	Kupfer-Zink Legierung*	Ottone*	Latón*
Electro tin plated**	Etamage électrolytique**	verzinkt**	Stagnato**	Estañado electrolítico**

\*: BS EN 12166 CW 508L DIN 17660 CuZn37

 \*\*: We recommend tin plated parts 1188 Series are installed within 9 months from the date they were produced.  
 Nous conseillons d'utiliser les pièces en laiton étamé du série 1188 sous un délai de 9 mois après la date de production.  
 Wir empfehlen, verzinnte Niete der Serie 1188 innerhalb 9 Monaten nach Produktionsdatum zu verarbeiten.  
 Raccomandare di utilizzare i prodotti stagnati serie 1188 entro 9 mesi a decorrere dalla data di fabbricazione.  
 Recomendamos utilizar sus piezas estañadas serie 1188 antes de 9 meses desde la fecha de su fabricación.


ø			øB	D	L	øJ		Fasteners per pod Nombre de rivets par chargeur/ Niete pro Magazin/ Rivetti per caricatore / Uds./carga	Part No/ref		
	nom.	min.								max.	max.
2.5	2.50	2.60	4.14	0.94	5.18	2.48	0.045	51	01188-02506		
					6.78					41	01188-02508
					8.36					33	01188-02510
					9.96					28	01188-02512
					11.53					24	01188-02514
					13.13					21	01188-02516
					14.71					19	01188-02518
					16.31					17	01188-02520
2.8	2.80	2.90	4.14	0.94	5.18	2.74	0.067	52	01188-02806		
					6.78					41	01188-02808
					8.36					33	01188-02810
					9.96					28	01188-02812
					11.53					24	01188-02814
					13.13					21	01188-02816
					14.71					19	01188-02818
					16.31					17	01188-02820
17.88	16	01188-02822									

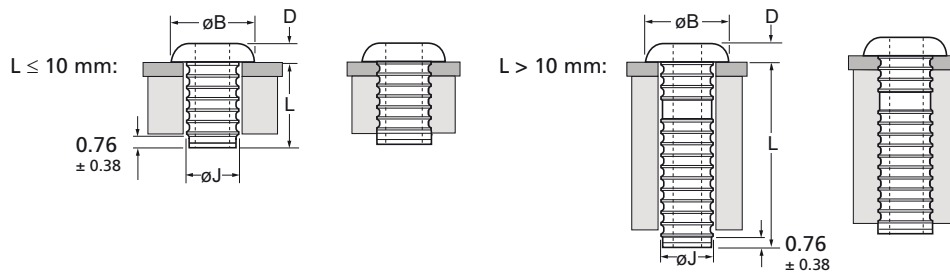
all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

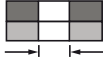
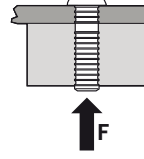
1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos


**POP**  **Avdel**
**Avtronic® 1189 Series**  
 Aluminium


English	Français	Deutsch	Italiano	Español
Dome head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Aluminium alloy* (5 % Mg)	Alliage d'aluminium* (5% Mg)	Aluminium* (5 % Mg)	Lega di alluminio* (5% Mg)	Aluminio* (5% Mg)
Natural	Brut	Blank	Nessuna finitura	Natural

\*: BS 1473 5056A DIN 1725 AlMg5 Werkstoff 3.3555



ø			øB	D	L	D		Fasteners per pod Nombre de rivets par chargeur/ Niete pro Magazin/ Rivetti per carica- tore / Uds./carga	Part No/ref
	nom.	min.							
2.5	2.50	2.60	4.14	0.94	5.18	2.48	0.03	± 1	01189-02506
					6.78			41	01189-02508
					8.36			33	01189-02510
					9.96			28	01189-02512
					11.53			24	01189-02514
					13.13			21	01189-02516
					14.71			19	01189-02518
					16.31			17	01189-02520
					17.88			16	01189-02522
2.8	2.80	2.90	4.14	0.94	5.18	2.74	0.04	± 1	01189-02806
					6.78			41	01189-02808
					8.36			33	01189-02810
					9.96			28	01189-02812
					11.53			24	01189-02814
					13.13			21	01189-02816
					14.71			19	01189-02818
					16.31			17	01189-02820
					17.88			16	01189-02822

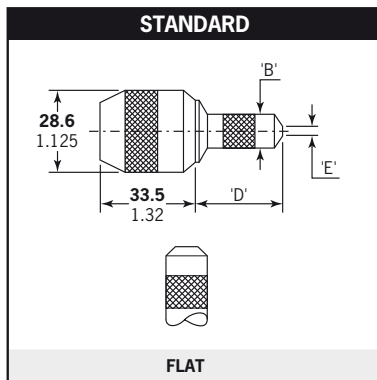
all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

1) typical values / valeurs moyennes / typische Werte / Valori tipici / valores típicos

**POP** **Avdel**

## Avtronic® Nose Equipment

Ensembles de nez / Mundstücke / Equipaggiamento /  
Equipos de colocación



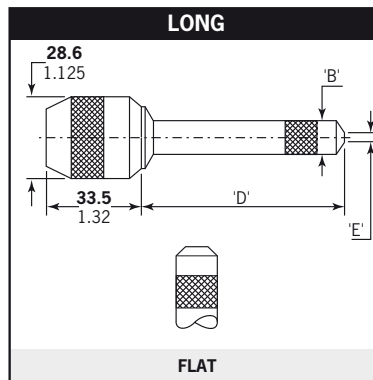
Applications with no or little access restrictions.

Pour applications ne présentant que peu ou pas de contraintes d'accès.

Für alle gut zugänglichen Nietpunkte.

Adatta per applicazioni senza restrizioni di accesso o con restrizioni di accesso limitate.

Apta para aquellas aplicaciones sin ninguna o pocas restricciones de acceso.



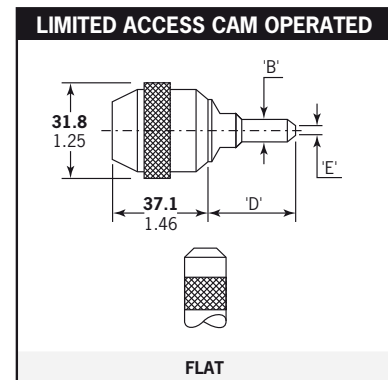
Allows more penetration into applications.

Permet une pénétration supérieure dans les applications sans autres contraintes d'accès.

Für tiefsitzende und eng an den Bauteilseiten anliegende Nietpunkte.

Consente una penetrazione maggiore nell'applicazione senza altre restrizioni di accesso.

Permite una mayor profundidad de acceso en aquellas aplicaciones sin restricción de acceso en anchura.



Allows access into very restrictive applications.

Permet d'accéder à des applications à accès très limité.

Für eng an den Bauteilseiten anliegende Nietpunkte.

Consente l'accesso ad applicazioni con serie restrizioni di accesso.

Permite el acceso en aplicaciones de acceso extremadamente limitado.

Ø nom.	Nose Equipment Nez de pose / Mundstück / Testata / Boquilla	Part No/ref	Dimensions Dimension / Abmessungen / Dimensioni / Dimensiones		
			B	D	E
2.5	Standard	07150-03003	9.14	33.02	4.06
	Long	07150-04003	10.41	58.42	
	Limited Access	07271-08000	10.41	29.97	
2.8	Standard	07271-05600	9.14	33.02	
	Long	07271-05900	10.41	58.42	
	Limited Access	07271-08100	10.16	29.97	

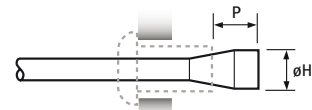
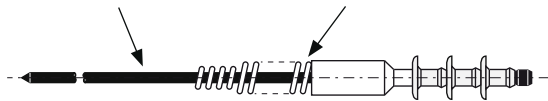
all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros



## Avtronic® Mandrel & Spring Information

Aiguilles et Ressorts d'aiguille / Nietdorne und -federn /  
Mandrini e Molle / Mandriles y Muelles

Mandrel / Aiguille / Nietdorn / Spring / Ressort d'aiguille / Nietdornfeder /  
Mandrino / Mandril Molla / Muelle



ø	nom.	Description Beschreibung Descrizione Descripción	ø H	P	Standard Nose Equipment Nez de pose Standard Standard-Mundstück Testata Standard Boquilla Estándar		Long Nose Equipment Nez de pose Long Langes Mundstück Testata Lunga Boquilla Larga		Limited Access Equipment Nez d'accès limité Mundstück abgesetzt Testata Acceso limitado Boquilla Acceso limitado	
					Mandrel Part No/ref	Spring Part No/ref	Mandrel Part No/ref	Spring Part No/ref	Mandrel Part No/ref	Spring Part No/ref
2.5	as rec.	Standard green	1.78	3.56	07170-06025		07170-07025		07170-06025	
	+ 0.07	1. oversize yellow	1.85	3.56	07170-06125	07150-06803	07170-07125	07150-07803	07170-06125	07150-06803
	+ 0.15	2. oversize blue	1.93	3.56	07170-06225		07170-07225		07170-06225	
2.8	as rec.	Standard green	2.01	3.81	07170-06028		07170-07028		07170-06028	
	+ 0.07	1. oversize yellow	2.08	3.81	07170-06128	07170-06528	07170-07128	07170-07528	07170-06128	07170-06873
	+ 0.15	2. oversize blue	2.16	3.81	07170-06228		07170-07228		07170-06228	

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

1) Standard green / Standard verte / Standard grün / Standard verde / Estándar verde

1. oversize yellow / 1. surdimensionnée jaune / 1. Übermaß gelb / 1. maggiorazione giallo / 1. sobremedida amarillo  
2. oversize blue / 2. surdimensionnée bleue / 2. Übermaß blau / 2. maggiorazione blu / 2. sobremedida azul

**POP** **Avdel**
**Avsert® 1117 Series**  
 Brass


English	Français	Deutsch	Italiano	Español
Short spigot	Pion court	Kurzer Schaft	Piedino corto	Espiga corta
Brass*	Laiton*	Kupfer-Zink Legierung*	Ottone*	Latón*
Tin plated**	Etamé**	verzinkt**	Stagnato**	Estañado**

\*: CuZn38Pb1.5 (ROHS conform)

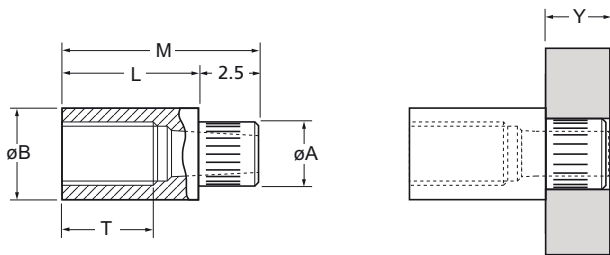
\*\*: ROHS conform; We recommend tin plated Avsert are installed within 24 months from the date they were produced.

Nous conseillons d'utiliser Avsert en laiton étamé sous un délai de 24 mois après la date de production.

Wir empfehlen, verzinnte Avsert innerhalb 24 Monaten nach Produktionsdatum zu verarbeiten.

Raccomandare di utilizzare i Avsert stagnati entro 24 mesi a decorrere dalla data di fabbricazione.

Recomendamos utilizar sus Avsert estañadas antes de 24 meses desde la fecha de su fabricación.



ø	Y				øB	L	øA	T	M		Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin/ Rivetti per carica-tore / Uds./carga	Part No/ref		
	nom.	min.	max.	min.									max.	max.
M2.5 x 0.45	0.8	2.0	2.70	2.80	4.05	5.5	2.69	3.4	8.0	0.85	36	01117-06555		
						6.0							3.9	8.5
						7.0							4.9	9.5
						8.0							5.9	10.5
						9.0							5.9	11.5
M3 x 0.5	0.8	2.0	3.30	3.40	4.83	5.5	3.28	3.4	8.0	1.38	36	01117-07055		
						6.0							3.9	8.5
						7.0							4.9	9.5
						8.0							5.9	10.5
						9.0							5.9	11.5

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

1) As tested in 1.5 mm thick glass fibre reinforced board to specification NEMA-L11-1971 Type FR4.

Testé dans circuit imprimé fibre / époxy 15/10 selon NEMA-L11-1971 type FR4.

Getestet in 1,5 mm starker glasfaserverstärkter Leiterplatte nach Spezifikation NEMA-L11-1971 Typ FR4.

Testato in un circuito rinforzato con fibra di vetro di 1,5 mm come da specifica NEMA-L11-1971 tipo FR4.

Testado en una tarjeta reforzada con fibra de vidrio de 1,5 mm.

**POP** **Avdel**
**Avsert® 1118 Series**  
 Brass


English	Français	Deutsch	Italiano	Español
Long spigot	Pion long	Langer Schaft	Piedino lungo	Espiga larga
Brass*	Laiton*	Kupfer-Zink Legierung*	Ottone*	Latón*
Tin plated**	Étamé**	verzinkt**	Stagnato**	Estañado**

\*: CuZn38Pb1.5 (ROHS conform)

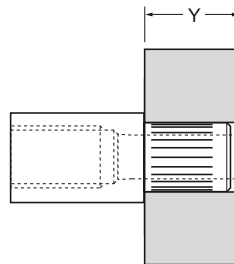
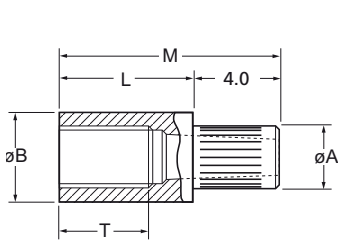
\*\*: ROHS conform; We recommend tin plated Avsert are installed within 24 months from the date they were produced.

Nous conseillons d'utiliser les Avsert en laiton étamé sous un délai de 24 mois après la date de production.

Wir empfehlen, verzinnte Avsert innerhalb 24 Monaten nach Produktionsdatum zu verarbeiten.

Raccomandare di utilizzare i Avsert stagnati entro 24 mesi a decorrere dalla data di fabbricazione.

Recomendamos utilizar sus Avsert estañadas antes de 24 meses desde la fecha de su fabricación.



ø	Y				øB	L	øA	T	M		Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin/ Rivetti per carica-tore / Uds./carga	Part No/ref		
	nom.	min.	max.	min.									max.	max.
M2.5 x 0.45	0.8	2.4	2.70	2.80	4.05	5.5	2.69	3.4	9.5	0.96	30	01118-06555		
						6.0		3.9	10.0				29	01118-06560
						7.0		4.9	11.0				26	01118-06570
						8.0		5.9	12.0				24	01118-06580
						9.0		5.9	13.0				22	01118-06590
M3 x 0.5	0.8	2.4	3.30	3.40	4.83	5.5	3.28	3.4	9.5	1.52	30	01118-07055		
						6.0		3.9	10.0				29	01118-07060
						7.0		4.9	11.0				26	01118-07070
						8.0		5.9	12.0				24	01118-07080
						9.0		5.9	13.0				22	01118-07090

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

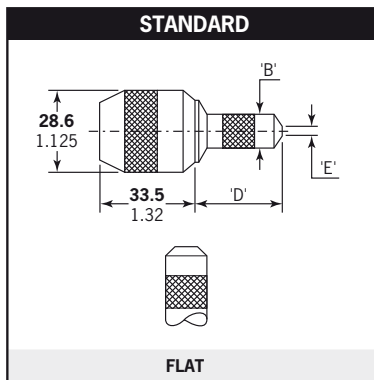
1) As tested in 1.5 mm thick glass fibre reinforced board to specification NEMA-L11-1971 Type FR4.

Testé dans circuit imprimé fibre / époxy 15/10 selon NEMA-L11-1971 type FR4.

Getestet in 1,5 mm starker glasfaserverstärkter Leiterplatte nach Spezifikation NEMA-L11-1971 Typ FR4.

Testato in un circuito rinforzato con fibra di vetro di 1,5 mm come da specifica NEMA-L11-1971 tipo FR4.

Testado en una tarjeta reforzada con fibra de vidrio de 1,5 mm.



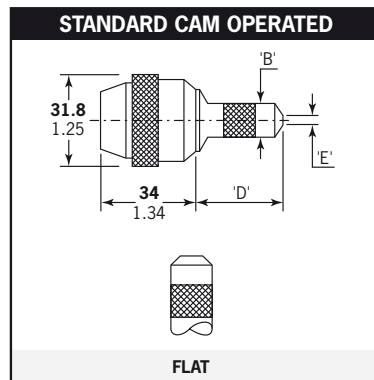
Applications with no or little access restrictions.

Pour applications ne présentant que peu ou pas de contraintes d'accès.

Für alle gut zugänglichen Nietpunkte.

Adatta per applicazioni senza restrizioni di accesso o con restrizioni di accesso limitate.

Apta para aquellas aplicaciones sin ninguna o pocas restricciones da acceso.



Nose equipment with addition of a twist cam to ease and speed up the nose jaw opening thus the pod reloading procedure.

Ensembles de nez avec, en plus, une came facilitant et accélérant l'ouverture du nez de pose, et donc le rechargement en fixations.

Zum leichteren Magazinieren haben diese Mundstücke durch einen Drehring zu öffnende Mundstückschnäbel.

Equipaggiamento con l'aggiunta di una camma per facilitare e rendere più veloce l'apertura della testata e pertanto la procedura di ricarica dell'astuccio portarivetti.

Boquillas que incorporan una leva para facilitar y hacer más rápida la apertura de la boquilla y el procedimiento de carga.

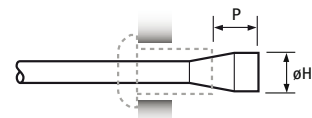
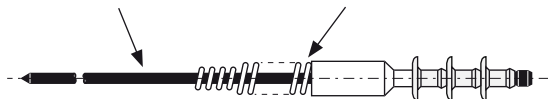
ø nom.	Nose Equipment Nez de pose / Mundstück Testata / Boquilla	Part No/ref	Dimensions Dimension / Abmessungen / Dimensioni / Dimensiones		
			B	D	E
M2.5 x 0.45	Standard	07150-03003	9.14	33.02	4.06
M3 x 0.5	Standard	07150-03004	10.41	29.97	5.08
	Standard cam operated	07170-04600			

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

## Avert® Mandrel & Spring Information

Aiguilles et Ressorts d'aiguille / Nietdorne und -federn / Mandrini e Molle / Mandriles y Muelles

Mandrel / Aiguille / Nietdorn / Spring / Ressort d'aiguille / Nietdornfeder /  
Mandrino / Mandril Molla / Muelle



ø nom.	Description Description / Beschreibung / Descrizione / Descripción	ø H	P max.	Mandrel Part No/ref	Spring Part No/ref
M2.5 x 0.45	Standard green	1.84	3.68	07150-06003	07150-06803
M3 x 0.5	Standard green	2.24	4.70	07150-06004	07150-06804

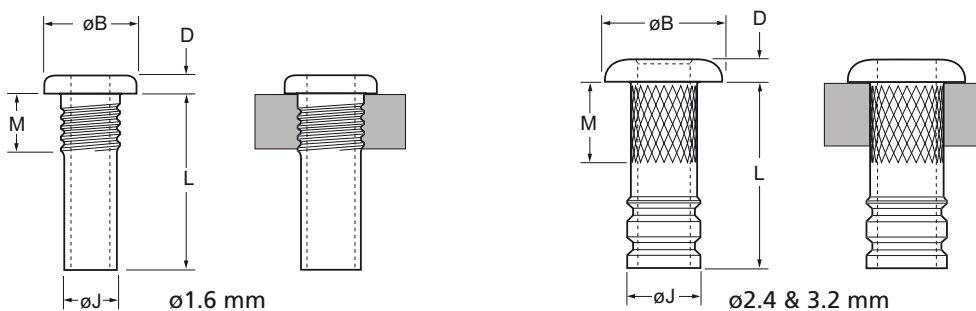
all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

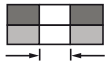

**POP**  **Avdel**®

**Avlug® 1107 Series**  
 Brass


English	Français	Deutsch	Italiano	Español
Dome head	Tête plate	Flachrundkopf	Testa tonda	Cabeza alomada
Brass*	Laiton*	Kupfer-Zink Legierung*	Ottone*	Latón*
Tin plated**	Etamé**	verzinkt**	Stagnato**	Estañado**

\*: BS EN 12166 CW 508L DIN 17660 CuZn37

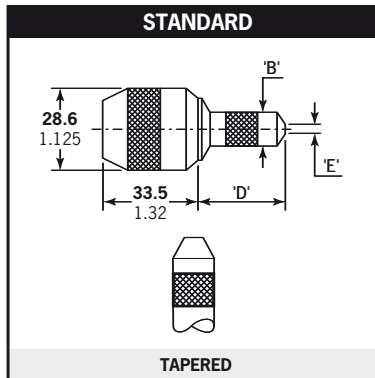
 \*\*: We recommend tin plated parts 1107 Series are installed within 9 months from the date they were produced.  
 Nous conseillons d'utiliser les pièces en laiton étamé du série 1107 sous un délai de 9 mois après la date de production.  
 Wir empfehlen, verzinkte Nieten der Serie 1107 innerhalb 9 Monaten nach Produktionsdatum zu verarbeiten.  
 Raccomandare di utilizzare i prodotti stagnati serie 1107 entro 9 mesi a decorrere dalla data di fabbricazione.  
 Recomendamos utilizar sus piezas estañadas serie 1107 antes de 9 meses desde la fecha de su fabricación.


Ø			ØB	D	L	ØJ	M	No. of grooves cannelures Rillen rigature aros	Fasteners per pod Nombre de rivets par chargeur / Niete pro Magazin / Rivetti per caricatore / Uds./carga ± 1	Part No/ref
	nom.	min.								
1.6 (1/16")	1.80	1.93	2.80	0.61	4.11	1.79	2.04	4	62	01107-00205
					6.51					
2.4 (3/32")	2.62	2.74	4.15	0.94	8.36	2.60	3.43	2	33	01107-00310
					9.96			3	28	01107-00312
3.2 (1/8")	3.38	3.51	5.52	1.15	9.96	3.36	3.43	3	26	01107-00412

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

**POP** **Avdel**

## Avlug® Nose Equipment

 Ensembles de nez / Mundstücke / Equipaggiamento /  
Equipos de colocación


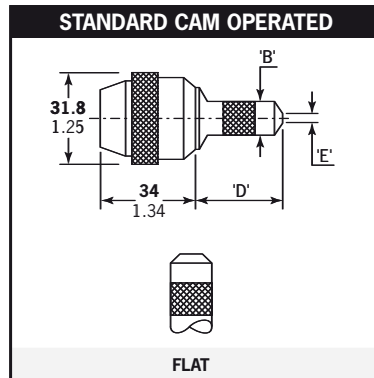
Applications with no or little access restrictions.

Pour applications ne présentant que peu ou pas de contraintes d'accès.

Für alle gut zugänglichen Nietpunkte.

Adatta per applicazioni senza restrizioni di accesso o con restrizioni di accesso limitate.

Apta para aquellas aplicaciones sin ninguna o pocas restricciones da acceso.



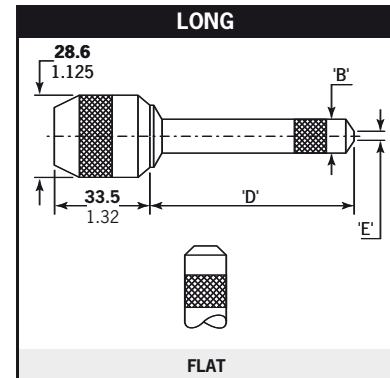
Nose equipment with addition of a twist cam to ease and speed up the nose jaw opening thus the pod reloading procedure.

Ensembles de nez avec, en plus, une came facilitant et accélérant l'ouverture du nez de pose, et donc le rechargement en fixations.

Zum leichteren Magazinieren haben diese Mundstücke durch einen Drehring zu öffnende Mundstückschnäbel.

Equipaggiamento con l'aggiunta di una camma per facilitare e rendere più veloce l'apertura della testata e pertanto la procedura di ricarica dell'astuccio portarivetti.

Boquillas que incorporan una leva para facilitar y hacer más rápida la apertura de la boquilla y el procedimiento de carga.



Allows more penetration into applications. Permet une pénétration supérieure dans les applications sans autres contraintes d'accès.

Für tiefsitzende und eng an den Bauteilseiten anliegende Nietpunkte.

Consente una penetrazione maggiore nell'applicazione senza altre restrizioni di accesso.

Permite una mayor profundidad de acceso en aquellas aplicaciones sin restricción de acceso en anchura.

Ø nom.	Nose Equipment Nez de pose / Mundstück / Testata / Boquilla	Part No/ref	Dimensions Dimension / Abmessungen / Dimensioni / Dimensiones		
			B	D	E
1.6 <sup>1)</sup> (1/16")	Standard	07154-03102	5.46	25.40	2.67
2.4 (3/32")	Standard	07150-03003	9.14	33.02	4.06
	Standard cam operated	07170-04500			
	Standard tapered	07150-03103			
3.2 (1/8")	Long	07150-04003	10.41	58.4	5.08
	Standard	07150-03004	10.41	29.97	
	Standard cam operated	07170-04600		30.23	
	Standard tapered	07170-03104		55.4	
	Long	07150-04004			

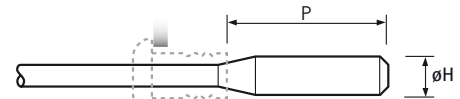
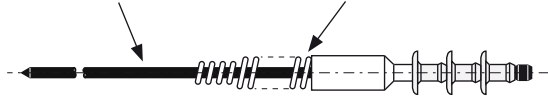
all dimensions in mm / en millimètres / alle Maße in mm / in millimetri / en milímetros

1) Installation only with handtool type 7536 / Outil de pose model 7536 seulement / Verarbeitung nur mit Druckluftgerät Typ 7536  
Piazzamento solo can attrezzo modello 7536 / Colocación solo con máquina modelo 7536

## Avlug® Mandrel & Spring Information

Aiguilles et Ressorts d'aiguille / Nietdorne und -federn /  
Mandrini e Molle / Mandriles y Muelles

Mandrel / Aiguille / Nietdorn      Spring / Ressort d'aiguille / Nietdornfeder  
Mandrino / Mandril                  Molla / Muelle



ø		Description Description Beschreibung Descrizione Descripción 2)	ø H	P	Standard Nose Equipment Nez de pose Standard Standard-Mundstück Testata Standard Boquilla Estándar		Long Nose Equipment Nez de pose Long Langes Mundstück Testata Lunga Boquilla Larga	
					Mandrel Part No/ref	Spring Part No/ref	Mandrel Part No/ref	Spring Part No/ref
1.6 <sup>1)</sup> (1/16")	as rec.	Standard green	1.30	9.01	07154-06602	07154-06802	N/A	N/A
	+ 0.10	1. oversize yellow	1.43	9.67	07155-06702			
2.4 (3/32")	as rec.	Standard green	1.93	8.97	07150-06603	07150-06803	07150-07603	07150-07803
	+ 0.10	1. oversize yellow	2.06	12.14	07150-06703		07150-07703	
3.2 (1/8")	as rec.	Standard green	2.49	15.06	07150-06604	07150-06804	07150-07604	07150-07804

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

1) Installation only with handtool type 7536 / Outil de pose model 7536 seulement / Verarbeitung nur mit Druckluftgerät Typ 7536  
Piazzamento solo con attrezzo modello 7536 / Colocación solo con máquina modelo 7536

2) Standard green / Standard verte / Standard grün / Standard verde / Estándar verde

1. oversize yellow / 1. surdimensionnée jaune / 1. Übermaß gelb / 1. maggiorazione giallo / 1. sobremedida amarillo





**POP®**  **Avdel®**

## Powerful Brands. Breakthrough Solutions.

At STANLEY Engineered Fastening we believe in seeking ways to serve our customers better. We create the future by anticipating our customers needs. Through diversifying our product lines, creating unique assembly technologies and offering a breadth of service to meet the demands of industry worldwide, STANLEY Engineered Fastening provides technological solutions to over 100 different industries.



### Avdel®

Avdel has been producing assembly systems since 1936 and offers a comprehensive range of fasteners and tooling.



### POP®

From 2mm micro rivets to 1/4" structural rivets, POP blind rivets meet the needs of multiple markets.



### Dodge®

With a focus on high-quality threaded inserts for plastics products, Dodge has been a leader in the fastening market since the 1950s.



### Spiralock®

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Gripco has been providing quality nut and threaded assembled products since 1904.



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### Warren®

Whether it's plastic, metal, or a combination of the two, Warren can design a product that will suit your environment.



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