



VVG FASTENERS

A COMPANY OF THE  **HONSEL-GROUP**

We fix it. Blind rivet technology and more.



MAIN CATALOGUE

We fix it.

More than 80 years of successful development and production of high-quality riveting and fastening technology combined with customer oriented service, fast delivery and a dedicated team of experts stand for reliable solutions in every application.

This new catalogue reflects the passion for our products and invites you to our **world of rivet technology** with its almost endless possibilities of the **perfect riveting connection**.



This is new

>> A lot of energy has been devoted to designing the assortment in recent months. We have analysed intensively, evaluated the daily business, talked to the customers, discussed the products and optimized them; we have also contributed all of this knowledge to the production.

The result is a well rounded but nevertheless compact range of established and proven products containing

more than 200 new articles and supplementary dimensions

that enables you to choose the best fastening solution - and which is **available on stock on short notice**. Furthermore, we keep up to **30.000 more articles** in our warehouse in Neumuenster - send us your inquiries!

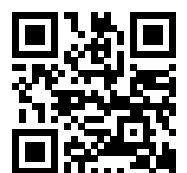
>> From 2015 onwards, **Rivdom TWO²** will be the next member of our popular battery-powered riveter family. Newly developed electronics and a brushless motor makes it a convenient cordless tool for working with blind rivets of up to 6.4 mm in diameter, even for high-strength applications!

>> According to the motto **"digital word of rivets"** a QR code will merge printed data with online media. This way you can call up lots of additional information on VVG products on your smart phone and tablet PC. More details on **► pages 22/23**.

>> All in all, we have redesigned the presentation of the entire catalogue in a more modern and structured way. I.e., now you will find all necessary spare parts and accessories directly next to the respective tool. In addition to a lot of general information and tips concerning rivet technology, our sister company **HONSEL UMFORMTECHNIK** introduces herself with her products and also the new **competence center for the use of rivets**.



Rivdom TWO²
THE CORDLESS BATTERY RIVETER



From the VVG product world ...

OPTO® multigrip blind rivet nut

A genuine in-house development. The patented OPTO® blind rivet nut for multiple areas is an established part of the VVG standard assortment. More and more users are convinced of the multitude of its advantages.

► Page 98/99



High-strength. Powerfull.

Due to growing demand we provide a great variety of blind rivets with diameters of 6.4 mm and 7.8 mm and up to 9.8 mm in the **high-strength area**.



VVG handheld riveting tools

Update. All classic handheld pliers in our assortment of tools are presented in a new, modern look.

Do you need a tool in your design? Please turn to ► page 172 for more information!



RIFBOLT® blind rivet bolts

Insider's tip. Equipped with the triple usage of the blind rivet nut (inserting the thread - connecting parts - assembling additional components), more and more partners in the field of industrial serial manufacture rely on the advantages of this process secure and economic assembling and the know-how for decades of the Honsel Group. ► Pages 120 - 125

Resistant.

Added are **high-quality surfaces and materials** like our successful Monel* blind rivet with an A4 stainless steel mandrel and the A4 stainless steel blind rivet nuts - available directly from stock.

* Trademark of
INCO Alloys International



VNG 703 power-controlled setting tool for blind rivet nuts and bolts.

Individual adjustment of the necessary setting force guarantees an optimum and material conserving setting operation.

► Pages 206/207





HONSEL coils

New in Honsel's assortment.

Threaded inserts create heavy-duty connections in metallic materials of low strength and they have been proven in practice for decades.

HONSEL coils threaded inserts are available in different versions and excel as highly resistant to abrasion, low thread friction in tight tolerances, a high-quality surface and outstanding resistance to corrosion and heat.

► Page 166

HONSEL HIGH-STRENGTH nuts

HONSEL "HIGH-STRENGTH" nuts are a further development of the well-known **HONSEL nuts**.

The **HONSEL "HIGH-STRENGTH"** technology enables a significant increase of the thread's load-bearing capacity for greater reliability on all applications where increased mechanical requirements are necessary.

An outstanding example of the Honsel's **innovative ability** for product development, from idea to production.

► Page 162



HONSEL fix



Screw-sleeve-connections from HONSEL: The experts for sleeves.

Screw-sleeve connections are indispensable for modern connecting technology nowadays.

This product's advantage is that the sleeve and the screw are connected in a special way which prevents one of the two components from being "lost". Up to now, special screws were always necessary for this purpose.

► Page 165

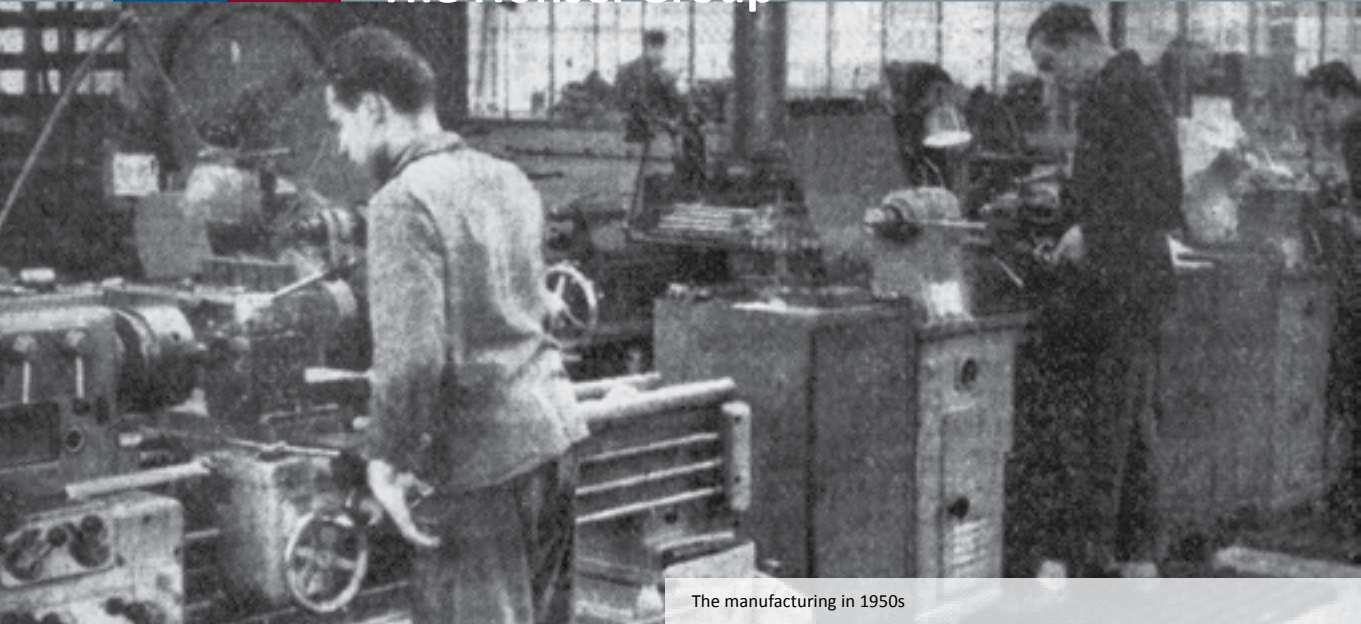
in preparation

HONSEL fix is the economical version

- use of standard screws with HONSEL process
- cold-formed sleeves, therefore higher load-bearing capacity
- additional heat treatment inapplicable in most cases
- creating prototypes at short notice through own toolmaking

Please note the RINCAS captive screw on ► page 117 as well.





The manufacturing in 1950s



The Froendenberg factory in 2010



Honsel in 1965

The beginning

In 1930, Alfred Honsel founded “Alfred Honsel Nieten- und Metallwarenfabrik GmbH & Co.” in Froendenberg-an-der-Ruhr, which started with producing plant pots and frying pans made from aluminium with handles and grips fastened with rivets.

The great potential was soon obvious. In **1945**, the production of household goods was stopped completely for concentrating exclusively on developing and producing the riveting technology.

Already in the **1960s** Honsel became one of the largest manufacturers of rivets for brakes and coupling linings in Europe and at the same time started the production of blind rivets and respective tools.

In the **1980s**, the development of blind rivet nuts, blind rivet bolts and pneumatic-hydraulic blind rivet tools, as well as production of the same began.

1994, the company VVG Befestigungstechnik in Neumuenster was founded as a special trading company for rivet technology in order to supply customers daily from a well sorted stock quickly and reliable and at the same time to provide the longterm know-how in development and production.

A concept that proved to be right. After several relocations, the buildings at the present location were bought in **2007**, offering perfect conditions for further growth.

Honsel itself has been producing annually more than one billion parts in a new factory in Froendenberg since **2003** and has been continuously modernizing the complete machinery in the following years.

In **2014** the next enhancement of the production area by 3500 m² has taken place, as well as a new office complex to be well equipped for upcoming requirements.





VVG Befestigungstechnik Neumuenster



Honsel Fasteners in Wuxi, China



VVG France in Frasné, France

Nowadays

... Honsel Group offers **the entire product line of rivet technology from one source**. From a standard industrial or blind rivet via individually adapted special production according to customer requirements to fully automated and process controlled setting machines.

The companies are also successfully active in new product fields like Honsel coil threaded inserts or selfclinchng fasteners.

Honsel Umformtechnik GmbH is the production plant and development and sales location for special parts and automation.

The catalogue's assortment of standard parts is handled by **VVG Befestigungstechnik** in Neumuenster.

The large French market is covered by **VVG France** in Frasné, France.

The activities of the group are complemented by **Honsel Fasteners** in Wuxi/China, where next to other production plants a multitude of standard connectors are produced according to Honsel-VVG-standards and reviewed in our own quality control center. Besides, this location is a logistics center in Asia and supplies the Chinese market on site.

Furthermore, the group has a **huge number of long-time relationships with sales and cooperating partners** in USA, Asia, India, Australia, Brazil, as well as in many European countries like BeNeLux, Scandinavia, Poland, Italy, Switzerland or Turkey. This way it reaches customers around the world.

Plant extension in Fröndenberg 2014





Development

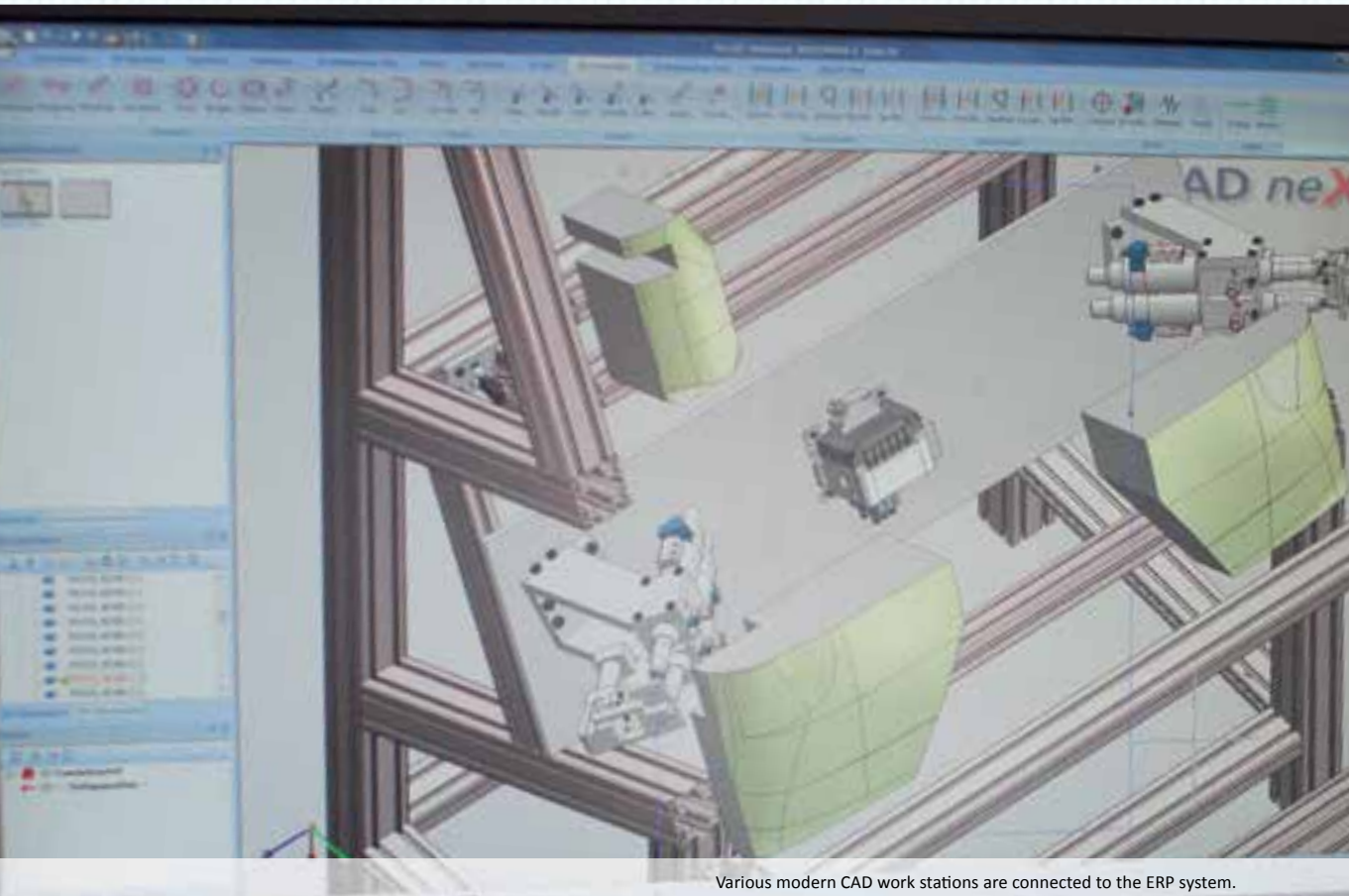
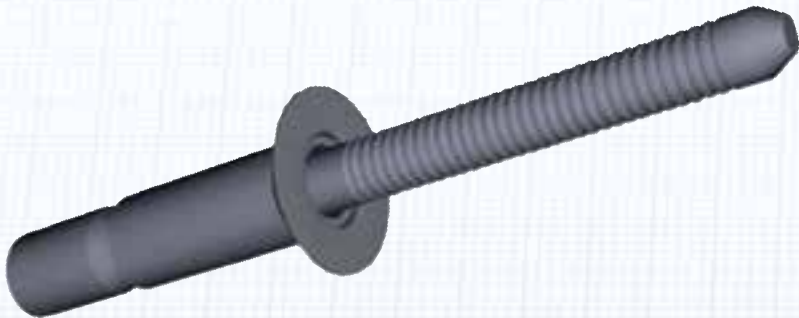
Since the foundation of our group continuous new developments and advancements of our products play a central role with manifold fields of activities.

On one hand, our application technicians and our engineers are permanently busy **optimizing the existing assortment**. They test, analyse, evaluate customer's experiences, correct, control and plan the contribution into the manufacturing of the various production plants.

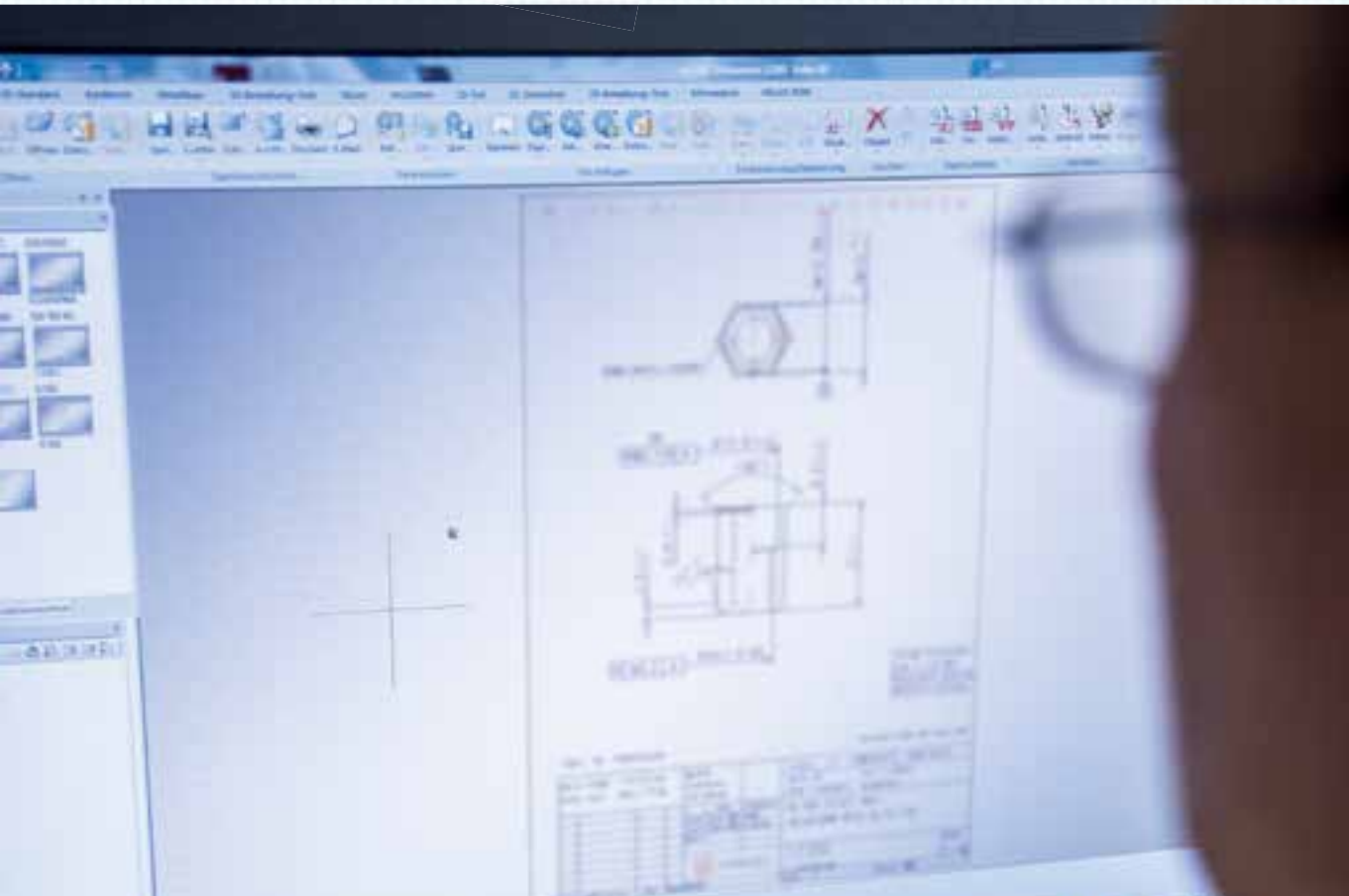
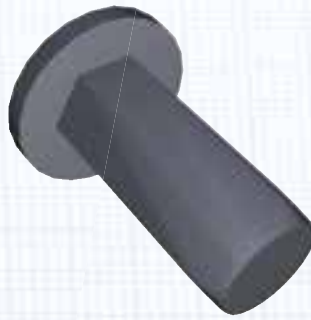
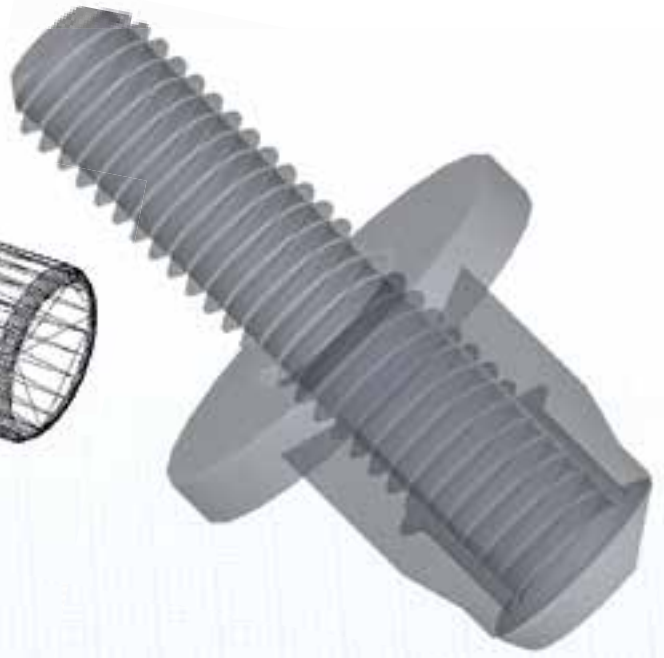
All of these activities happen against the background of an almost unlimited basis of sound, practical expertise of several decades, during which Honsel was among the pioneers in developing many products, especially the blind-rivet technology.

On the other hand, our developing engineers are constantly creating **new ideas for new products**. We consider ourselves development partner for our customers, who not seldom initiate innovative, efficient and economic results.

Whether connectors, hand-operated tools or stationary automation - **challenge us** - together with you and experienced technical advisors we will establish an individual, efficient, economic, in short: **the perfect riveting solution for your application**.



Various modern CAD work stations are connected to the ERP system.





Production

The heart of our company. Our manufacturing competence is the **cold forming of wire** in all current materials like steel, aluminium, stainless steel, copper and brass - **and a lot more.**

In pressing wire on **most modern 5 to 6 multistage presses**, pieces of **wire up to a diameter of 20 mm** are brought into shape.

All presses are process-controlled and set up as redundant. This guarantees adequate flexibility to be able to meet short-term production inquiries. However, the most important basis of Honsel's expertise consists of highly motivated employees who are trained to be able to solve any task successfully.

The pressing procedure is most of the time followed by many further worksteps:

Individual components are **welded together by laser** or **crimped mechanically**. **Threads in all conceivable formats** are formed (internally or externally), or sealants are applied (mechanically or by overmoulding).

Specific contours can be modified by means of machining, and even applying special, **partial protection against scratches** is possible.

For years, special attention has been given to substantial investments in forward-looking technologies and to the machinery, especially our **own toolmaking** (centres for lathes and milling). Manufacturing the required tools for production in our own company enables us to **reduce the leadtime until maturity phase** and to **realize even unusual customer requests** in many ways. The complex sets of tools, which often contain several hundred pieces, are stored perfectly organized in a very sophisticated and fully automatic system, which makes them quickly available at any time for useage on the machines.

Following the requirement to keep the central production processes in-house, HONSEL has gained essential knowledge of **various heat treatment technologies** over the years. "High-strength" is the name of the production line which implies that HONSEL is able to modify soft materials in a way that their partial strength is significantly higher than usual. This way considerably higher mechanical requirements can be fulfilled, exploiting lower weights and lower costs at the same time. ► Page 6



Thread-forming machines





View of a six-stage press



Storing the sets of tools



The starting product. Wire coils.



Washing machine for the product



Quality

Quality in every sense plays an important role in our corporate routine.

100% control and **0-ppm-strategies** are topics that companies face nowadays when defining the goals of quality assurance.

The Honsel Group has made enormous investments in this area in the past years and has **developed quality assurance processes which are exemplary**: the certifications according to ISO 9001:2008, ISO 14001 and ISO/TS 16949 illustrate this.

Next to standardized testing methods for monitoring shear and tensile forces, the rivet mandrel's breaking and compressive strength as well as the locking of the remaining mandrel, most modern measuring instruments and testing possibilities - from **process controls** developed in-house to several **optoelectronic testing machines** for individual 100% control - secure highest level of production even at high quantity production processes.

By **tests of all phases of the ongoing production process for each single batch** and the documentation through CAQ-software integrated into our modern EDP-system the tracability of all despatched products back to the used raw material is possible without interruption.



Shredding machine





Optoelectronic testing



You can rely on us. Guaranteed.

Consulting

Product knowledge and application experience is considered very important by us.

Our employees in all departments lean on extensive knowledge of **more than 80 years** of company history.

Thus and because of permanent internal and external workshops a team of excellently trained and motivated employees stand by in a friendly and competend way to help you with any question concerning rivet technology.

We see through special projects from the first idea to the final delivery with experts from all involved departments to **guarantee an ideal transaction** through close internal coordination.

On site, our colleagues in the field service throughout Germany give you support quickly and flexibly. **Detailed demonstrations** and **intensive concil** as well as **extended trainings** is an indispensable foundation for a sucessful collaboration with our customers.



Partial view of the inhouse marketing service in Neumuenster

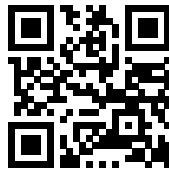


We visit you.

At **in-house exhibitions** or during special information days in the scope of our campaign “Rivet-Technology on tour” at our sales partners all over Germany our professionals present all products of our assortment.

Furthermore, you can meet us regularly at a variety of trade fairs at home and abroad.

There, we inform you of new innovations as well as our classics. Frequently, discussions with our customers on these events lead to interesting ideas and suggestions from the practical view that finds access to our assortment.



Current trade-fair date



Logistics

Quick, reliable delivery of the ordered goods is one of our company's trademarks.

Next to long reachability, late pick-up time and short handling and territorial ways our long-term logistics partner UPS guarantees a smooth transaction during transport of the shipments - if necessary with next-day delivery.

Shipment of palletized goods is no problem either: Here as well we cooperate with experienced carriers that guarantee an on-time delivery.

The goods leave our company securely packed and clearly labelled to arrive correctly and undamaged at your premises.

In this way, our logistics center dispatches annually almost 50.000 parcels and more than 4500 pallets throughout the world.

Nowadays, only the size of the available logistic space is not enough to describe the efficiency of a company.

HONSEL Group has no need to hide: far more than 10.000 m² of logistics and storage space at all locations gives room to articles in sales packaging, bulk goods, wire coils for manufacturing and thousands of pallet spots, as well as separate commissioning areas and covered loading zones.



Team Logistics VVG



In addition to our current catalogue products we keep tens of thousands of further articles and varieties available for you in our warehouse and reach this way a delivery capability of at least 98%.

Our modern packaging system offers the capacity for a variety of packaging, also for extensive volumes, in a short time. Whether cardboard boxes of all sizes, individual customer packaging, bag packaging or industrially used small-load-carriers - there is almost no way of packaging that has not been used before.

The entire logistical process is supported by IT. Scanners and tablet PCs are part of the daily business in commissioning, as is the electronic data-processing interfaces and data-transmission interfaces for smooth communication with customers and service-providers.



UPS TRACKING



Service

Besides our high quality and innovative products we as system supplier of rivet and fastening technology offer an **extensive service**.

To achieve **best possible reachability** for our customers our customer service personnel is available from **Mondays to Thursdays between 7 a.m. and 6 p.m. and on Fridays between 7 a.m. and 4 p.m..**

Orders that are handed over to our Export department are always handled on short notice. Upon request your order will be delivered same-day through UPS or any nominated courier service within our logistics opening times (except third country orders above the customs clearance limit value).

When placing call off orders, we manufacture and store the goods for you. We will ship them according to an agreed-upon delivery schedule automatically and reliably to the place of action.

With VVG, advice is written with a capital A!



NEW!
<http://www.vvg.info>



NEW!
<http://www.honsel.de>





For maintenance and repairs of all VVG- / Honsel tools we like to introduce our new competence center for rivet usage (► pages 170/171).

Here, our employees take care of your tools to be available at your disposal in the shortest possible time.

To avoid production downtimes we can provide **free of charge rental tools** if needed.

For our sales partners we offer a multitude of various sales supports like catalogues, leaflets or shop displays (► page 148), that can be designed individually at your request.

Our popular web site

www.vvg.info

will be renewed completely in the beginning of 2015 and will contain additional contact options as well as helpful tools for daily usage.



Selection of rental tools

World of riveting in motion:
[https://www.youtube.com/
user/NIETWELTDIGITAL](https://www.youtube.com/user/NIETWELTDIGITAL)



Current news and background informations:
[https://www.facebook.com/
VVG.BEFESTIGUNGSTECHNIK](https://www.facebook.com/VVG.BEFESTIGUNGSTECHNIK)



EXTRA information about VVG.

Our catalogue in motion.

In the future by using QR codes with your smart phone or tablet PC and the respective software you will be able to receive additional information in many spots of this catalogue, like:

- >> supplementary texts
- >> direct links to our web site
- >> data sheets
- >> graphic animations
- >> explanatory films

This gives you the opportunity to revert to extensive data on our products - always and everywhere.

The contents of displayed through the QR codes can also be found on our YouTube channel

www.youtube.com/user/NIETWELTDIGITAL



Please note:

It might be possible that scanning a QR code you will find a place holder. Here, the content is being updated or in planning stage.

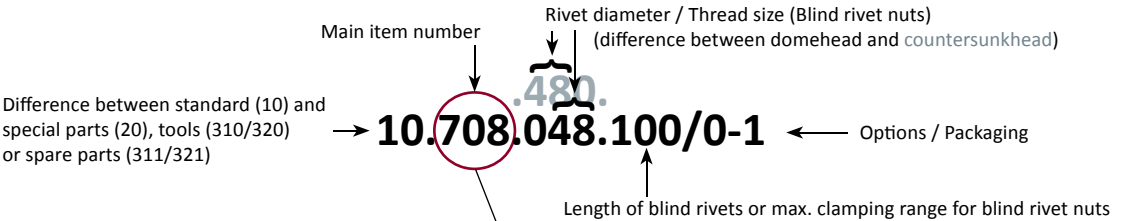
You have the possibility to send us a message on this on qr@vvg.info. We will either inform you as soon as new content is uploaded or send you available additional material beforehand.





Information and explanations about symbols for this catalogue

Item number / tool classification:



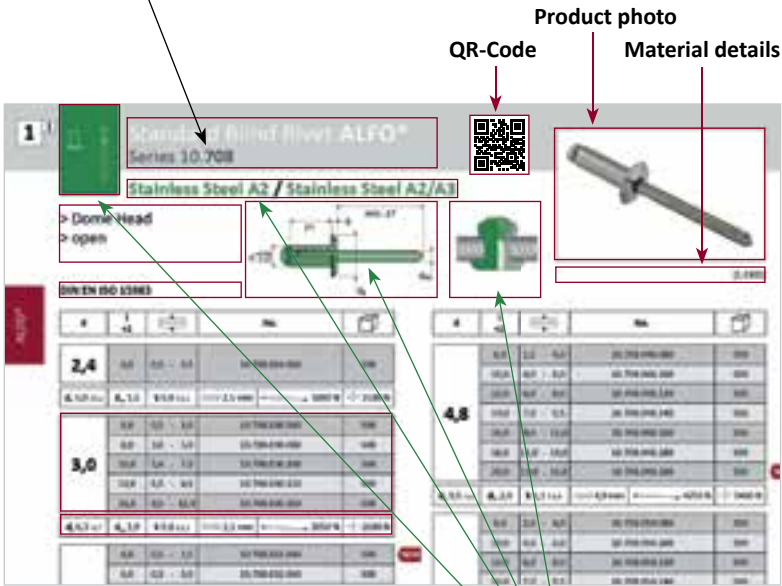
Product group name
with serial numbers / materials

Info block
with additional information
and drawings

Register
for better orientation in the
closed catalogue

Table - Basic information
diameter / length / grip range /
item number / packing unit

Table - Supplements
head and shank diameter, head height,
drilling diameter, information about
forces and strengths



Colour guiding system A clear colour is assigned to every material, which is not only found again in the navigation bar but also in the descriptions and drawings of the products and which simplifies the orientation in this way. The colours are also integrated into the explanations of processing possibilities for all of the tools, as a supplement for this purpose. Apart from that, you can find the colouring on most of our labels.

- steel
- stainless steel
- aluminium
- copper
- bronze

MS	MS	MS	MS	MS	MS	MS
MS	MS	MS	MS	MS	MS	MS
MS	MS	MS	MS	MS	MS	MS
MS	MS	MS	MS	MS	MS	MS
MS	MS	MS	MS	MS	MS	MS
MS	MS	MS	MS	MS	MS	MS
MS	MS	MS	MS	MS	MS	MS



- General product information
- Beneficial advices for additional dimensions or types
- Link to products on other pages
- Please note, that marked items do not belong to our regular range and a **minimum quantity may be required**. Please ask our sales staff in **any case**, who will check the current availability or possible alternatives.



Shear strength
Further information Page 32



Tensile strength
Further information Page 33



Tightening torque
Further information Page 88



Axial tensile force
Further information Page 89

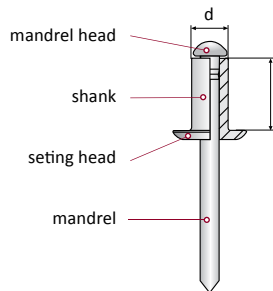


Drill hole diameter

Essential information for a fast and proper handling of your order or inquiry

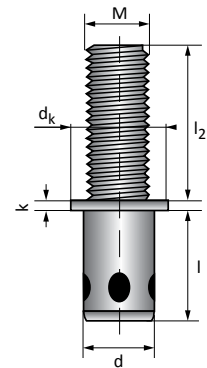
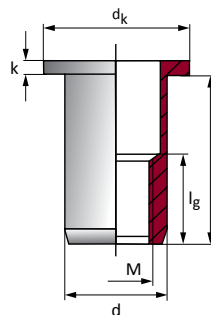
Blind rivets

- combination of materials (shank and mandrel)
- diameter of shank / drill hole (d)
- length of shank / grip range (l)
- version of head (dome, countersunk, large)



Blind rivet nuts / -bolts

- material
- thread size (M)
- diameter of shaft / drill hole (d)
- length of shaft / grip range (l)
- version of shaft (open / closed)
- version of head (dome, countersunk, small countersunk)
- anti-twist protection (knurled shaft / (partial) hexagon head)
- length of bolt (in installed status) (l_2)



Tools

- **How often will the tool be used?**
Quantity of rivets
- **Where will the tool be used?**
Production / repair shop / construction site
- **Which dimensions / materials will be handled?**
- **Are there any special requirements to the rivet?**
High strength etc.



Please note,

that many individual factors have influence on a riveted connection. For this reason we recommended to carry out a riveting test in principle (therefore we supply samples, if recommended).

The shown standard range in this catalogue is only a small part of all available products. If you can not find an article or a dimension - we'll find an alternative!

Directory



Dome head



Countersunk head



Large Dome head



grooved



painted/anodized



Multigrip



closed



Folding/
Body bound



Dome head



Countersunk head



small counter-
sunk head



closed



knurled



Multigrip



Folding blind
rivets



Dome head



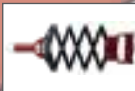
BZ 2



BZ 44



BZ 70/72



BZ 58



VNG 255



VNG 371



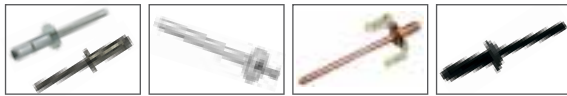
VNG 152



BZ 103 A



BZ123 A



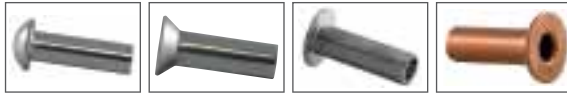
High strength Hammer stroke Grounding Plastic



Hexagonal Partial hexagonal Neopren Nylon



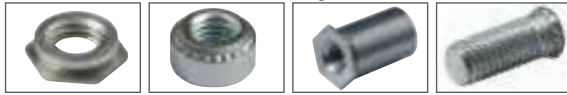
Countersunk head knurled Patial hexagonal Small countersunk head



DIN 660 DIN 661 DIN 7338 B DIN 7338 C 1



Axial Clamp Rings Axial Clamp Caps



Self-clinch nuts Self-clinch nuts Self-clinch standoffs Self-clinch studs



Assortment boxes Assortments with hand rivet tools Small packs



Blind Rivets

Detailled Directory Pages 38/39



Blind Rivet Nuts

Detailled Directory Pages 92/93



Blind Rivet Bolts



Industrial Rivets according to DIN



Axial Clamps



Sheet metal fasteners



Assortments and small packs



Honsel



Processing in general



VNG 612 MULTI 1 MULTI 5 Axial Hand Tool



Rivdom ONE Rivdom TWO



BZ 133 A VNG 703 VNG 903 VNG 753



Blind Rivets Blind Rivet Nuts and Studs Thread inserts/Coils Plug seals



Tips + Tricks

1 28

2 84

3 120

4 126

5 136

6 140

7 148

8 158

9 168

10 176

11 190

12 198

13 212

14 220





i The blind rivet consists of a **shank** assembled to the **rivet mandrel**.

The handling of blind rivets occurs from one side of the construction elements.

After inserting the rivet into the components bore holes, the rivet mandrel is pulled back by the tool and forms the closing head. The mandrel or parts of it can remain in the shaft after reaching the predetermined break point.

Open, closed or high strength versions, multigrip or expanding blind rivets, with dome head, countersunk head or large head - the variety of available dimensions and types is almost **unlimited**.

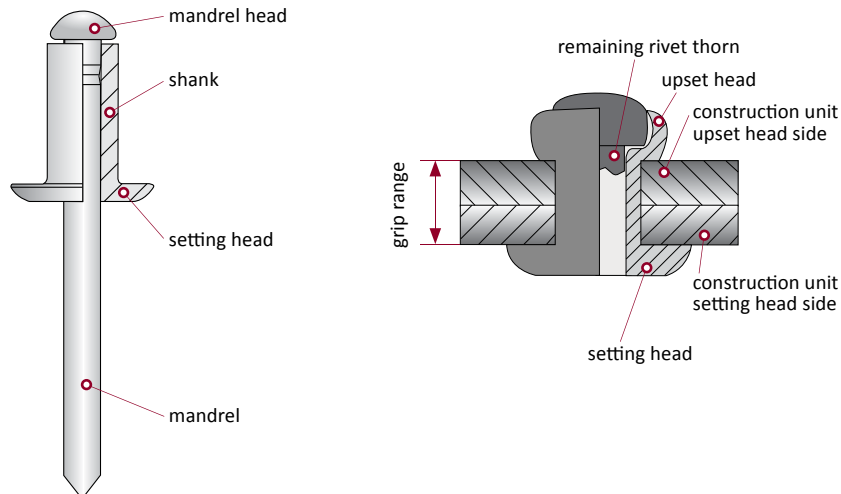
Special tools are needed for processing blind rivets.

These tools have to be chosen on the basis of the rivet type, the field of application and the processing volume. The scope ranges from **manual pliers** and **lever tools**, to modern cordless **battery riveters** to **pneumatic-hydraulic tools** and **fully automated applications** for industrial volume productions.

The rivet shaft is the element which makes the connection.

The rivet shaft is formed by the rivet mandrel and remains in the component on a permanent basis. The shaft type selection is made on the basis of the grounds of

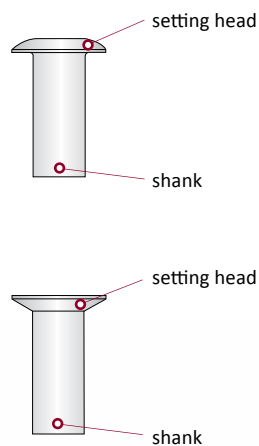
- the expected **mechanical stress**,
- the required anti-corrosion performance,
- the component layout,
- the temperature stress and partly also on
- the visual impact.



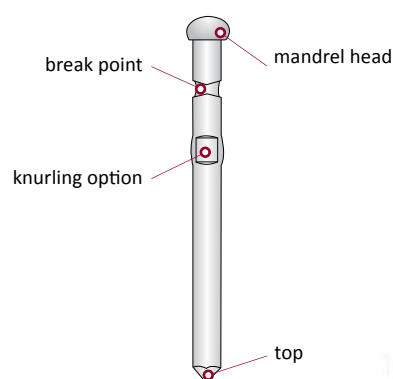
The rivet mandrel is needed for shaping the rivet shaft.

The mandrel selection is based on the shaft type and on the requirements with regard to processing and operating properties. In order to enhance the rivet's shearing force, some rivet types use a captive mandrel which remains in place after the connection has been made.

rivet shaft



mandrel



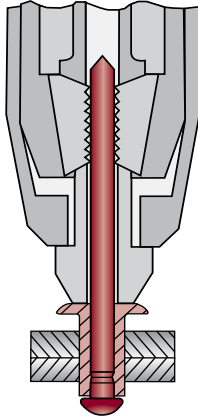
The principle of the setting process

In order to process the blind rivet a setting tool is required. This can either be operated by muscle power (hand tools) or through external power (e.g. pneumatic-hydraulic or battery tools). The devices are chosen on the basis of the blind rivet type and on the basis of throughput volume.

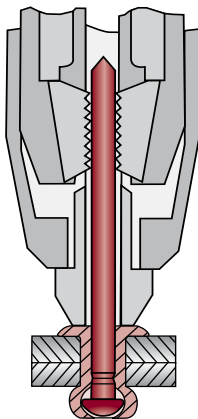
Basically, the setting process can be broken down into the following stages:



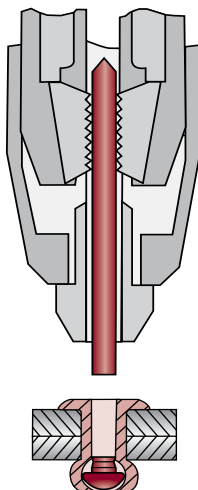
animation blind rivet



Together with the mandrel, the blind rivet is inserted into the setting device and introduced into the rivet hole.



The rivet mandrel is pulled by triggering the stroke with the help of the clamping jaws. The mandrel head reshapes the end of the rivet shaft. When the rivet head is flush with the component surface, the process is completed.

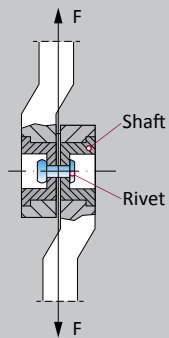


In this position the forces increase and the mandrel fractures on the predetermined break point. The spent part of the mandrel is removed and the captive mandrel remains in the shaft.



Shear strength

EXPERIMENTAL SETUP

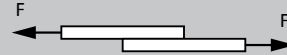


The shear strength is the maximum radial force which a rivet can absorb before fracture occurs.












Depending on the rivet principle, the forces are determined either with or without the captive mandrel covering the shearing zone.

Static measurements use the testing device covered by **DIN EN ISO 14589** (Exception: FERO®-BOLT).

The **minimum shear strength parameter** is listed on the pages with the following symbol:



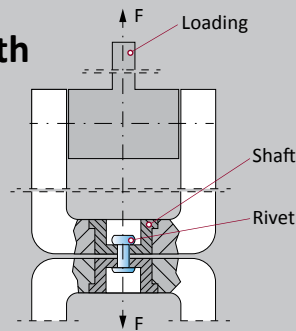
Shear strength - measured data [N]

	Type	Dimension	Page	2,4	3,0	3,2	3,8	4,0	4,8	5,0/ 5,2 ¹	6,0	6,3 ¹ / 6,4	7,8	8,0
ALFO® 	Alu / Steel Dome Head		40	380	660	660	–	1120	1480	1650	2520	2850	6600	–
	Alu / Steel Countersunk Head		42	–	660	660	–	1120	1480	1650	–	–	–	–
	Alu / Steel Large Dome Head		43	–	–	580	–	1120	1480	1650	2650	–	–	–
	Alu / Steel Dome Head grooved		44	–	–	600	–	1000	1350	–	–	–	–	–
	Alu / Stainless Steel Dome Head		46	380	660	660	–	1120	1480	1650	2520	2850	–	–
	Alu / Stainless Steel Countersunk Head		47	420	660	–	–	1120	–	1650	–	–	–	–
	Alu / Stainless Steel Large Dome Head		48	–	–	–	–	–	–	1650	–	–	–	–
	Alu / Alu Dome Head		49	–	–	380	–	740	1140	–	–	–	–	–
	Steel / Steel Dome Head		50	–	900	1060	–	1900	2900	3000	4000	4500	–	8600
	Steel / Steel Countersunk Head		51	–	900	1060	–	1900	2900	3000	–	4900	–	–
	Steel / Steel Large Dome Head		51	–	–	–	–	–	2900	–	–	–	–	–
	Stainless Steel / Stainless Steel Dome Head		52	1000	2050	2050	–	2750	4250	4700	5700	6500	–	–
	Stainless Steel / Stainless Steel Countersunk Head		53	–	–	1800	–	2750	4250	4700	–	–	–	–
	Stainless Steel / Stainless Steel Large Dome Head		53	–	–	1900	–	2700	4200	–	–	–	–	–
	Stainless Steel / Stainless Steel Dome Head		54	–	1760	–	–	3220	–	4800	–	–	–	–
Opto® 	Nickel-Copper / Stainless Steel Dome Head		55	–	–	1600	–	2300	3400	–	–	5400	–	–
	Copper / Steel Dome Head		56	–	760	800	–	1500	–	–	–	–	–	–
	Copper / Bronze Dome Head		56	–	760	800	–	1500	–	–	–	–	–	–
	Alu / Steel Dome Head		57	–	–	720	–	1120	1530	–	–	2000	–	–
	Alu / Steel Dome Head painted		58	–	–	720	–	1120	1530	–	–	–	–	–
	Alu / Steel Countersunk Head		59	–	–	670	–	980	1500	–	–	–	–	–
	Alu / Steel Large Dome Head		59	–	–	720	–	1120	1530	–	–	–	–	–
	Alu / Stainless Steel Dome Head		60	–	–	670	–	980	1530	–	–	–	–	–
	Alu / Stainless Steel Countersunk Head		60	–	–	–	–	950	–	–	–	–	–	–
	Alu / Stainless Steel Large Dome Head		60	–	–	670	–	980	1530	–	–	–	–	–
	Steel / Steel Dome Head		61	–	–	1500	–	1950	2700	–	–	6500	–	–
	Steel / Steel Large Dome Head		61	–	–	–	–	–	2050	–	–	–	–	–
Opto®-BULB 	Stainless Steel / Stainless Steel Dome Head		61	–	–	1600	–	2700	3900	–	–	12500	–	–
	Steel / Steel Dome Head		62	–	–	–	–	–	–	–	–	11500	–	–
Certo® 	Stainless Steel / Stainless Steel Dome Head		62	–	–	–	–	–	–	–	–	14000	–	–
	Alu / Steel Dome Head		63	–	–	1100	–	1650	2400	–	–	3620	–	–
	Alu / Steel Countersunk Head		64	–	–	1100	–	1650	2400	–	–	–	–	–
	Alu / Stainless Steel Dome Head		65	–	–	1000	–	1650	2400	–	–	–	–	–
	Alu / Stainless Steel Countersunk Head		65	–	–	–	–	1650	–	–	–	–	–	–
	Alu / Alu Dome Head		66	–	–	520	–	720	1000	–	–	–	–	–
	Steel / Steel Dome Head		66	–	–	1150	–	1700	2400	–	–	–	–	–
	Stainless Steel / Stainless Steel Dome Head		67	–	–	2000	–	3000	4500	–	–	6500	–	–
	Copper / Steel Dome Head		68	–	–	950	–	1400	2150	–	–	–	–	–
Certo®-PERFECT 	Copper / Stainless Steel Dome Head		68	–	–	950	–	1400	2150	–	–	–	–	–
	Stainless Steel / Stainless Steel Dome Head		69	–	–	–	–	–	4500	–	–	–	–	–
Fero®-BULB 	Alu / Alu Dome Head ¹		70	–	–	–	–	–	–	–	–	4200-5000	–	–
	Steel / Steel Dome Head ¹		71	–	–	–	–	2400-4100	3600-5600	–	–	10000-16500	–	–
	Stainless Steel / Stainless Steel Dome Head ¹		72	–	–	–	–	5200	5500	–	–	11000-15000	–	–
Fero®-BOLT 	Alu / Alu Dome Head		74	–	–	–	–	–	2200	–	–	4200	–	–
	Alu / Alu Countersunk Head		74	–	–	–	–	–	–	–	–	4700	–	–
	Steel / Steel Dome Head		75	–	–	–	–	–	5800	–	–	10500	–	–
	Steel / Steel Countersunk Head		75	–	–	–	–	–	5800	–	–	11000	–	–
	Stainless Steel / Stainless Steel Dome Head		75	–	–	–	–	–	6000	–	–	10500	–	–
Folding 	Alu / Alu Dome Head Standard		76	–	–	–	–	500	900	–	–	–	–	–
	Alu / Alu Dome Head Spezial-2		77	–	–	–	–	–	–	3000	–	4900	–	–
Arco® 	Alu / Steel Dome Head		78	–	–	850	–	1330	2100	–	–	–	–	–
Grounding 	Copper / Steel Dome Head		80	–	–	–	1400	–	–	–	–	–	–	–
Grounding OPTO 	Alu / Steel Dome Head		81	–	–	–	–	1140	–	–	–	–	–	–

¹ depending on the length

Tensile strength

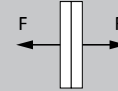
EXPERIMENTAL SETUP



The tensile strength is the maximum axial force which a rivet can absorb before fracture occurs.

For the statical measurement, the testing device presented under DIN EN ISO 14589 is used.

The value for the tensile force is listed on the pages below the following symbol:



Tensile Strength - measured data [N]

	Type	Dimension	Page	2,4	3,0	3,2	3,8	4,0	4,8	5,0/ 5,2 ¹	6,0	6,3 ¹ / 6,4	7,8	8,0
ALFO®		Alu / Steel Dome Head	40	600	900	1100	—	1420	1950	2000	2850	4250	9550	—
		Alu / Steel Countersunk Head	42	—	900	1100	—	1420	1950	2000	—	—	—	—
		Alu / Steel Large Dome Head	43	—	—	850	—	1900	2200	2500	3500	—	—	—
		Alu / Steel Dome Head grooved	44	—	—	1000	—	1350	1820	—	—	—	—	—
		Alu / Stainless Steel Dome Head	46	600	900	1100	—	1420	1950	2000	2850	—	—	—
		Alu / Stainless Steel Countersunk Head	47	660	900	—	—	1420	—	2000	—	4600	—	—
		Alu / Stainless Steel Large Dome Head	48	—	—	—	—	—	—	2500	—	—	—	—
		Alu / Alu Dome Head	49	—	—	670	—	1240	1600	—	—	—	—	—
		Steel / Steel Dome Head	50	—	1210	1550	—	2600	3850	4300	5500	6300	—	12000
		Steel / Steel Countersunk Head	51	—	1210	1550	—	2600	3850	4300	—	5700	—	—
		Steel / Steel Large Dome Head	51	—	—	—	—	—	—	—	—	—	—	—
		Stainless Steel / Stainless Steel Dome Head	52	1500	2600	2600	—	3550	5400	5800	7500	8850	—	—
		Stainless Steel / Stainless Steel Countersunk Head	53	—	—	2500	—	3550	5400	5800	—	—	—	—
		Stainless Steel / Stainless Steel Large Dome Head	53	—	—	2500	—	3500	5300	—	—	—	—	—
		Stainless Steel / Stainless Steel Dome Head	54	—	2270	—	—	4250	—	6600	—	—	—	—
Opto®		Nickel-Copper / Stainless Steel Dome Head	55	—	—	2400	—	3450	5000	—	—	8200	—	—
		Copper / Steel Dome Head	56	—	950	1000	—	1800	—	—	—	—	—	—
		Copper / Bronze Dome Head	56	—	950	1000	—	1800	—	—	—	—	—	—
		Alu / Steel Dome Head	57	—	—	1000	—	1650	2300	—	—	2500	—	—
		Alu / Steel Dome Head painted	58	—	—	—	—	—	—	—	—	—	—	—
		Alu / Steel Countersunk Head	59	—	—	900	—	1320	2300	—	—	—	—	—
		Alu / Steel Large Dome Head	59	—	—	1000	—	1650	2300	—	—	—	—	—
		Alu / Stainless Steel Dome Head	60	—	—	900	—	1320	2300	—	—	—	—	—
		Alu / Stainless Steel Countersunk Head	60	—	—	—	—	—	—	—	—	—	—	—
		Alu / Stainless Steel Large Dome Head	60	—	—	900	—	1320	2300	—	—	—	—	—
Opto®-BULB		Steel / Steel Dome Head	61	—	—	1700	—	2350	3300	—	—	4200	—	—
		Steel / Steel Large Dome Head	61	—	—	—	—	—	2940	—	—	—	—	—
Certo®		Stainless Steel / Stainless Steel Dome Head	61	—	—	2000	—	3500	5000	—	—	7000	—	—
		Steel / Steel Dome Head	62	—	—	—	—	—	—	—	—	7800	—	—
		Stainless Steel / Stainless Steel Dome Head	62	—	—	—	—	—	—	—	—	8000	—	—
		Alu / Steel Dome Head	63	—	—	1450	—	2500	3400	—	—	4950	—	—
		Alu / Steel Countersunk Head	64	—	—	1450	—	2500	3400	—	—	—	—	—
		Alu / Stainless Steel Dome Head	65	—	—	1350	—	2500	3400	—	—	—	—	—
		Alu / Stainless Steel Countersunk Head	65	—	—	—	—	2500	—	—	—	—	—	—
		Alu / Alu Dome Head	66	—	—	540	—	760	1400	—	—	—	—	—
		Steel / Steel Dome Head	66	—	—	1200	—	1850	2800	—	—	—	—	—
		Stainless Steel / Stainless Steel Dome Head	67	—	—	2400	—	4000	5500	—	—	8000	—	—
Certo®-PERFECT		Copper / Steel Dome Head	68	—	—	1250	—	2100	3200	—	—	—	—	—
		Copper / Stainless Steel Dome Head	68	—	—	1250	—	2100	3200	—	—	—	—	—
Fero®-BULB		Stainless Steel / Stainless Steel Dome Head	69	—	—	—	—	—	5500	—	—	—	—	—
		Alu / Alu Dome Head ¹	70	—	—	—	—	—	—	—	—	3100	—	—
		Steel / Steel Dome Head ¹	71	—	—	—	—	2800	3800	—	—	7800	—	—
Fero®-BOLT		Stainless Steel / Stainless Steel Dome Head ¹	72	—	—	—	—	4000	5000	—	—	8800	—	—
		Alu / Alu Dome Head	74	—	—	—	—	—	1800	—	—	3000	—	—
		Alu / Alu Countersunk Head	74	—	—	—	—	—	—	—	—	4500	—	—
		Steel / Steel Dome Head	75	—	—	—	—	—	4100	—	—	8000	—	—
		Steel / Steel Countersunk Head	75	—	—	—	—	—	4100	—	—	9500	—	—
Folding		Stainless Steel / Stainless Steel Dome Head	75	—	—	—	—	—	4500	—	—	8200	—	—
		Alu / Alu Dome Head Standard	76	—	—	—	—	800	1100	—	—	—	—	—
Arco®		Alu / Alu Dome Head Spezial-2	77	—	—	—	—	—	—	2000	—	3000	—	—
		Alu / Steel Dome Head	78	—	—	720	—	1300	1950	—	—	—	—	—
Grounding		Copper / Steel Dome Head	80	—	—	—	2000	—	—	—	—	—	—	—
Grounding OPTO		Alu / Steel Dome Head	81	—	—	—	—	1670	—	—	—	—	—	—

¹ depending on the length

Corrosion resistance and protection

Surface corrosion

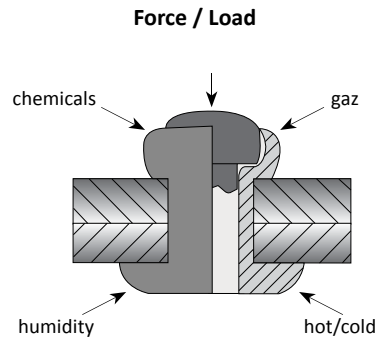
Surface corrosion is the abrasion of surfaces and the conversion of the material into oxidation products (e.g. rust).

Suitable protective measures include:

- Application of a surface coating (passive corrosion proofing)
- Use of corrosion-proof materials (stainless steel, copper, aluminium and aluminium alloy) (active corrosion proofing)

Contact corrosion

Due to the potential difference between electrodes, contact corrosion leads to surface damage in the area where the



different metal materials meet in the presence of an electrolyte. The abrasion always takes place on the base metal (anode).

Suitable protective measures include:

- When deploying different material types, use of identical or near identical material combinations;
- Choice of a material combination with a potential difference that is as low as possible
- rivet material should be higher grade than the component material
- Choosing suitable surface coatings as electrical insulation layer.

Surface treatments

Electro galvanizing

Through galvanic processes, the zinc coat is applied to rivets made from steel, CuNi and NiCu alloys. The thickness of the layer should be at least 3 µm, but it should not exceed 20 µm. Whilst the main reason for galvanizing steel rivets consists in protection of the rivet body against rust formation, it is also applied for the purposes of reducing contact erosion e.g. when there is assembly in aluminium components. Copper-nickel rivets and rivets made from nickel-copper alloys are primarily coated in order to improve their contact corrosion performance.

Lacquer coating

In order to provide colour, rivets may also be coated with organic lacquers. This process is primarily carried out on aluminium materials; whilst already the choice from RAL and NCS colours is virtually unlimited, and it is even possible to select from a wider array of colour shades.

Zinc-nickel coating

Zinc-nickel coats that are applied by means of galvanization are primarily used when there are extremely high demands with regard to the corrosion resistance of a steel rivet. Whilst the layer thickness itself remains the same, the corrosion resistance reaches 500% of the value that would be achieved for conventional galvanization.

Chromating of electroplated layers

Chromating of electroplated parts further enhances corrosion resistance. Depending on the chromating process, resistance performance can be almost doubled.

Anodic oxidation

Anodic oxidation or eloxy coating is one further method for aluminium rivet coating. This coat which is applied through an electrochemical process is used for colour and in order to enhance corrosion resistance of the surface and for colour

purposes. Whilst the surface bond is high, the colour range provides but a limited choice.

Microlayer corrosion protection systems (MKS)

Microlayer corrosion protection systems stand for state of the art procedures in material surface coating. They allow combining excellent corrosion protection with additional properties like, for instance, colour schemes and the implementation of predefined coefficients of frictions. MKS systems are selected on the basis of the specific requirements and they are customised with a view to the components that need to be coated. They contain neither heavy metals nor environmentally harmful chemicals. MKS systems are widely used in the automotive industry - the MKS systems we use are free from hexavalent chromium.

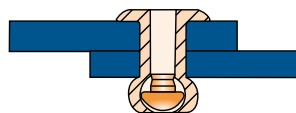
Active corrosion protection



Anode (Steel)

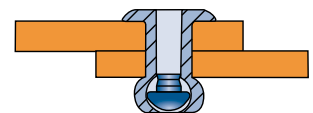
Cathode (Copper)

Anoden current = Cathode current



Large anode sector

- small current density
- low corrosion



Small anode sector

- large current density
- fast corrosion

Contact corrosion performance in the case of different material combinations

Components Shaft material	Aluminium	Steel	Stainless Steel	Copper	Copper-Nickel Nickel-Copper
Aluminium	++	+	+	—	—
Steel - galvanized	+	++	+	—	+
Stainless Steel	+	++	++	—	+
Copper	+	+	+	++	++
Copper-Nickel / Nickel-Copper -galvanized	+	+	+	++	++

++ Combination well suited
+ Combination suitable
— Combination unsuitable

This table merely serves for orientation purposes.

Corrosion behavior of nickel-copper blind rivets (Ni Cu 30 FE)

Tap water

NiCu30Fe has excellent corrosion resistance in distilled, hard or soft water.

Salt water

NiCu30Fe is a great seawater resistant material. In stationary seawater it may come to slight surface corrosion due to collection of oxygen-forming marine organisms.

Neutral an alkaline salts

High corrosion resistance when in use of neutral and alkaline saline solutions.

Acids salts

NiCu30Fe has good corrosion resistance to salt solutions such as zinc chloride, ammonium sulfate, aluminum sulfate, zinc chloride, ammonium sulfate, aluminum sulfate, aluminum chloride etc..

Oxidising acid salts

NiCu30Fe is not very resistant to most oxidizing action acid salts such as ferric chloride, with oxidizing constituents, silver nitrate, mercuric chloride and acids.

Oxidising alkaline salts

Hypochlorites are the only common alkaline salts with a corrosive effect on NiCu30Fe.

Mineral acids

NiCu30Fe has good corrosion resistance to all acids with the exception of strong oxidizing acids. In air-free acid a temperature increase is of no importance. In aerated acid is the corrosion strongest effect at about 85 ° C. Good resistance is therefore against sulfuric acid, hydrochloric acid, hydrofluoric acid, etc. to be expected. Also acid and hydrogen sulfide have no corrosion effect under the above conditions.

Oxidising acids

NiCu30Fe is only in limited dimensions useable with strong oxidizing acids. For example in 1% nitric acid considerable corrosion can occur caused through motion.

Organic acids and compounds

NiCu30Fe has a good corrosion resistance to all common organic acids. There is also virtually no corrosion by neutral and alkaline organic compounds. These acids are e.g. acetic acid, fruit or food acids, fatty acids etc..

Alkalies

NiCu30Fe is resistant to most of the alkaline solutions. The result e.g. by caustic soda concentrations up to 50% virtually is almost no corrosion. In a caustic soda evaporator the NiCu30Fe components stood. Ten years without significant corrosion, whereas the same components made from steel had to be exchanged after one year.

Moist and dry gases

NiCu30Fe is corrosion-resistant to all the usual dry gases. Dry chlorine gas has e.g. no effect on NiCu30Fe. These metal alloy is resistant against the corrosion and erosive action of steam at temperatures up to 400 ° C. In contrast to many other alloys NiCu30Fe showed neither fatigue yet it was brittle when it overheated long time.

Do **YOU** need a special type of blind rivet for your application?

Our experienced technicians will develop an **individual solution** for your special need:

- >> Consulting,
- >> Construction and design,
- >> Tool making,
- >> Prototyping,
- >> Manufacturing and
- >> Delivery schedules

are available from one source.

We realize projects in all dimensions for different industrial sectors, for example:

- >> Automotive industries and vehicle constructors and their suppliers,
- >> Sheet metal forming,
- >> Ventilation systems and air-conditioning plants,
- >> Furniture industry,
- >> Container and tank construction,
- >> Electric cabinets,
- >> Lightning industry and
- >> Solar- and photovoltaics suppliers

The VVG team is looking forward to your ideas! - **Send your request!**

We will find the solution.



1

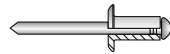
1¹ Standard Blind Rivet ALFO®

Aluminium /

Steel	.....Dome Head	40
Steel	.....Countersunk Head	42
Steel	.....Large Dome Head	43
Steel	.....Dome Head grooved	44
Stainless Steel A2	.....Dome Head	46
Stainless Steel A2	.....Countersunk Head	47
Stainless Steel A2	.....Large Dome Head	48
Aluminium	.....Dome Head	49

Steel /

Steel	.....Dome Head	50
Steel	.....Countersunk Head	51
Steel	.....Large Dome Head	51



Stainless Steel A2 /

Stainless Steel A2	.....Dome Head	52
Stainless Steel A2	.....Countersunk Head	53
Stainless Steel A2	.....Large Dome Head	53

Stainless Steel A4 /

Stainless Steel A4Dome Head	54
--------------------	----------------	----

Nickel / Copper

Stainless Steel A4Dome Head	55
--------------------	----------------	----

Copper /

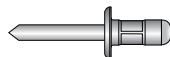
Steel	.....Dome Head	56
Bronze	.....Dome Head	56

1

1² Multigrip Blind Rivets OPTO®

Aluminium /

Steel	.....Dome Head	57
Steel	.....Dome Head painted	58
Steel	.....Countersunk Head	59
Steel	.....Large Dome Head	59
Stainless Steel A2	.....Dome Head	60
Stainless Steel A2	.....Countersunk Head	60
Stainless Steel A2	.....Large Dome Head	60



Steel /

Steel	.....Dome Head	61
Steel	.....Large Dome Head	61

Stainless Steel /

Stainless Steel A2Dome Head	61
--------------------	----------------	----

1

1³ Multigrip Blind Rivets OPTO®-BULB

Steel /

SteelDome Head	62
-------	----------------	----



Stainless Steel /

Stainless Steel A2Dome Head	62
--------------------	----------------	----

1

1⁴ Sealed Blind Rivets CERTO®

Aluminium /

Steel	.....Dome Head	63
Steel	.....Countersunk Head	64
Stainless Steel A2	.....Dome Head	65
Stainless Steel A2	.....Countersunk Head	65
Aluminium	.....Dome Head	66

Steel /

SteelDome Head	66
-------	----------------	----



Stainless Steel A2 /

Stainless Steel C1Dome Head	67
--------------------	----------------	----

Copper /

Steel	.....Dome Head	68
Stainless Steel A2	.....Dome Head	68

1⁵ Sealed Blind Rivets CERTO®-PERFECT



 Stainless Steel A2 /

Stainless Steel C1 . . . Dome Head 69

1⁶ Structural Blind Rivets FERO®-BULB



 Aluminium /

Aluminium Dome Head 70

 Steel /

Steel Dome Head 71

 Stainless Steel /

Stainless Steel A2 . . . Dome Head 72

1⁷ Structural Blind Rivets FERO®-BOLT



 Aluminium /

Aluminium Dome Head 74

Aluminium Countersunk Head 74

 Steel /

Steel Dome Head 75

Steel Countersunk Head 75

 Stainless Steel /

Stainless Steel A2 . . . Dome Head 75

1⁸ Folding Blind Rivets

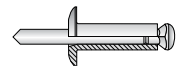


 Aluminium /

Aluminium Dome Head standard 76

Aluminium Dome Head special-2 77

1⁹ Body-Bound Blind Rivets ARCO®



 Aluminium /

Steel Dome Head 78

Steel Large Dome Head 78

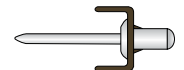
1¹⁰ Hammer Stroke Blind Rivets



 Aluminium /

Stainless Steel A2 . . . Dome Head 79

1¹¹ Grounding Blind Rivets



 Copper /

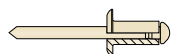
Steel Dome Head 80


 Brass /

Steel (Copper Plated) 1 Earthing Conductors 81

Steel (Copper Plated) 2 Earthing Conductors 81

1¹² Plastic Blind Rivets



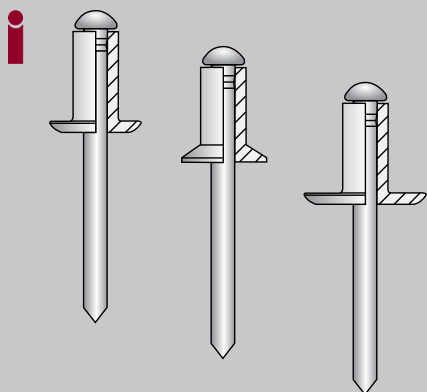
 Plastic

Blind Rivet Dome Head 82

 Aluminium /

Steel OPTO®-Dome Head *Knurled* 81

Standard Blind Rivet ALFO®

**A true classic.**

The description ALFO® specifies several lines of open type standard blind rivets, available with dome head, countersunk head or large dome head.

It covers the designs and special types described in DIN EN ISO 15977 – 15984, as well as 16582 und 16584. By special types we define rivets whose functional principle is identical with described versions, but with feature differences as far as certain dimensions or functional properties or materials are concerned.

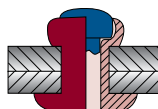
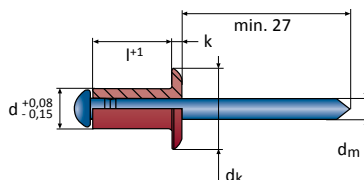
ALFO® offers more. We have specified some parameters **more detailed** such as grip range, tensile strength as well as the shear strength more detailed.

These modifications based on our **long term experience** and assist you in implementing a rivet design according to **practical purposes**.

Standard Blind Rivet ALFO®
Series 10.700

Aluminium / Steel

- > Dome Head
- > open



2,4 - 3,2 mm EN AW - 5019 [AlMg5]
4,0 - 7,8 mm EN AW - 5754 [AlMg3]

DIN EN ISO 15977

d	l +1		No.	
---	---------	--	-----	--

2,4	3,0	0,5 - 1,0	10.700.024.030	500
	4,0	0,5 - 2,0	10.700.024.040	500
	6,0	1,5 - 4,0	10.700.024.060	500
	8,0	3,5 - 6,0	10.700.024.080	500
	10,0	6,0 - 8,0	10.700.024.100	500
	12,0	8,0 - 10,0	10.700.024.120	500

dk 5,0 -0,7	dm 1,5	k 0,55 ±0,15		2,5 mm		380 N		600 N
-------------	--------	--------------	--	--------	--	-------	--	-------

3,0	4,0	0,5 - 2,0	10.700.030.040	500
	5,0	1,0 - 3,0	10.700.030.050	500
	6,0	1,5 - 4,0	10.700.030.060	500
	7,0	3,0 - 5,0	10.700.030.070	500
	8,0	3,0 - 6,0	10.700.030.080	500
	10,0	5,0 - 7,5	10.700.030.100	500
	12,0	7,0 - 9,0	10.700.030.120	500
	16,0	9,0 - 12,5	10.700.030.160	500
	18,0	12,0 - 14,5	10.700.030.180	500
	20,0	13,0 - 16,5	10.700.030.200	500
	25,0	16,0 - 21,5	10.700.030.250	500

dk 6,3 -0,7	dm 1,7	k 0,8 ±0,2		3,1 mm		660 N		900 N
-------------	--------	------------	--	--------	--	-------	--	-------

NEW

d	l +1		No.	
---	---------	--	-----	--

3,2	4,0	0,5 - 1,5	10.700.032.040	500
	5,0	1,0 - 2,5	10.700.032.050	500
	6,0	1,5 - 3,5	10.700.032.060	500
	8,0	3,0 - 5,5	10.700.032.080	500
	10,0	5,0 - 7,5	10.700.032.100	500
	12,0	7,0 - 9,0	10.700.032.120	500
	14,0	8,5 - 10,5	10.700.032.140	500
	16,0	9,0 - 13,0	10.700.032.160	500
	18,0	10,0 - 14,5	10.700.032.180	500
	20,0	13,0 - 17,0	10.700.032.200	500
	25,0	16,0 - 21,5	10.700.032.250	500

dk 6,5 -0,7	dm 1,9	k 0,8 ±0,2		3,3 mm		660 N		1100 N
-------------	--------	------------	--	--------	--	-------	--	--------

NEW

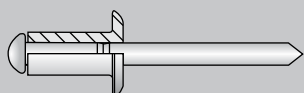
4,0	4,0	0,5 - 1,5	10.700.040.040	500
	5,0	1,0 - 2,5	10.700.040.050	500
	6,0	1,0 - 3,5	10.700.040.060	500
	7,0	3,0 - 4,5	10.700.040.070	500
	8,0	3,0 - 5,5	10.700.040.080	500
	10,0	5,0 - 7,0	10.700.040.100	500
	12,0	6,5 - 9,0	10.700.040.120	500
	14,0	8,5 - 11,0	10.700.040.140	500
	16,0	8,5 - 12,5	10.700.040.160	500
	18,0	12,0 - 14,5	10.700.040.180	500
	20,0	12,5 - 16,5	10.700.040.200	500
	25,0	15,5 - 21,0	10.700.040.250	500
	30,0	20,5 - 26,0	10.700.040.300	500
	35,0	25,5 - 31,0	10.700.040.350	500







dk 8,0 -1,0	dm 2,0	k 1,0 ±0,3		4,1 mm		1120 N		1420 N
-------------	--------	------------	--	--------	--	--------	--	--------

NEW

NEW

Many **ALFO®** dimensions are available as **FERO®** version.
In this speciality the major part of the mandrel remains
in the shank to increase the shear strength.



d	l +1		No.	
4,8	6,0	1,0 - 3,0	10.700.048.060	500
	7,0	1,0 - 4,0	10.700.048.070	500
	8,0	2,5 - 5,0	10.700.048.080	500
	9,0	2,5 - 6,0	10.700.048.090	500
	10,0	4,0 - 6,5	10.700.048.100	500
	12,0	6,0 - 8,0	10.700.048.120	500
	14,0	7,5 - 10,0	10.700.048.140	500
	16,0	8,0 - 12,0	10.700.048.160	500
	18,0	11,5 - 13,5	10.700.048.180	500
	20,0	12,0 - 15,5	10.700.048.200	500
	25,0	15,0 - 20,5	10.700.048.250	500
	30,0	20,0 - 25,0	10.700.048.300	500
	35,0	24,5 - 29,5	10.700.048.350	250
	40,0	29,0 - 34,5	10.700.048.400	250
	45,0	34,0 - 39,5	10.700.048.450	100
	50,0	39,0 - 44,5	10.700.048.500	100
	55,0	44,0 - 49,5	10.700.048.550	100
	60,0	49,0 - 54,5	10.700.048.600	100
	65,0	54,0 - 59,5	10.700.048.650	100
	70,0	59,0 - 64,5	10.700.048.700	100
d_k 9,5 -1,0	d_m 2,7	k 1,1 ±0,3	 4,9 mm	 1480 N
5,0	6,0	1,0 - 3,0	10.700.050.060	500
	8,0	2,5 - 5,0	10.700.050.080	500
	10,0	4,0 - 6,5	10.700.050.100	500
	12,0	6,0 - 8,0	10.700.050.120	500
	14,0	7,5 - 10,0	10.700.050.140	500
	16,0	8,0 - 12,0	10.700.050.160	500
	18,0	11,5 - 13,5	10.700.050.180	500
	20,0	12,0 - 15,5	10.700.050.200	500
	25,0	15,0 - 20,5	10.700.050.250	500
	30,0	20,0 - 25,0	10.700.050.300	500
	35,0	24,5 - 30,0	10.700.050.350	250
	40,0	29,0 - 35,0	10.700.050.400	250
d_k 9,5 -0,8	d_m 2,7	k 1,1 ±0,3	 5,1 mm	 1650 N

NEW

NEW









NEW

NEW

NEW

NEW

NEW

d	l +1		No.	
6,0	8,0	1,0 - 3,5	10.700.060.080	500
	10,0	3,0 - 5,5	10.700.060.100	500
	12,0	5,0 - 7,5	10.700.060.120	500
	16,0	7,0 - 11,0	10.700.060.160	500
	18,0	10,5 - 13,0	10.700.060.180	500
	20,0	11,0 - 15,0	10.700.060.200	500
	22,0	14,5 - 17,0	10.700.060.220	500
	25,0	15,0 - 20,0	10.700.060.250	250
	28,0	19,5 - 22,5	10.700.060.280	250
	30,0	20,0 - 25,0	10.700.060.300	250
d_k 12,0 -1,2	d_m 3,2	k 1,5 ±0,4	 6,1 mm	 2520 N
6,4	12,0	2,5 - 7,0	10.700.064.120	250
	16,0	6,0 - 11,0	10.700.064.160	250
	18,0	10,0 - 13,0	10.700.064.180	250
	20,0	10,0 - 14,5	10.700.064.200	250
	25,0	14,0 - 19,0	10.700.064.250	250
	30,0	18,0 - 24,0	10.700.064.300	250
	35,0	26,5 - 28,5	10.700.064.350	100
	40,0	31,5 - 33,5	10.700.064.400	100
	45,0	36,5 - 38,5	10.700.064.450	100
d_k 13,0 -1,4	d_m 3,6	k 1,8 ±0,4	 6,5 mm	 2850 N
7,8	15,0	4,0 - 9,5	10.700.078.150	250
	18,0	9,5 - 12,5	10.700.078.180	250
	22,0	12,5 - 16,5	10.700.078.220	250
	26,0	16,5 - 20,5	10.700.078.260	250
	30,0	20,5 - 24,5	10.700.078.300	100
	35,0	24,5 - 29,5	10.700.078.350	100
	40,0	29,5 - 34,5	10.700.078.400	100
d_k 14,0	d_m 3,7	k 2,0	 8,0 mm	 6600 N



Diameter 7,8 is not standardized.

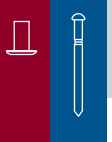
NEW

NEW

NEW

NEW

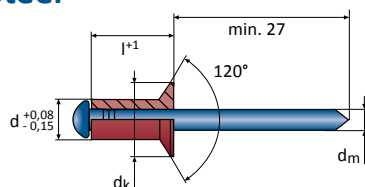




Aluminium / Steel



> Countersunk Head
> open



3,0 - 3,2 mm EN AW - 5719 [AlMg5]
4,0 mm EN AW - 5754 [AlMg3]

DIN EN ISO 15978

d	l +1		No.	
3,0	5,0	1,5 - 3,0	10.700.300.050	500
	6,0	2,0 - 4,0	10.700.300.060	500
	8,0	3,5 - 6,0	10.700.300.080	500
	10,0	5,0 - 7,5	10.700.300.100	500
	12,0	7,0 - 9,0	10.700.300.120	500
d_k 6,0 -0,4	d_m 1,7	3,1 mm	660 N	900 N
3,2	6,0	1,5 - 3,5	10.700.320.060	500
	8,0	3,0 - 5,5	10.700.320.080	500
	10,0	5,0 - 7,5	10.700.320.100	500
	12,0	7,0 - 9,0	10.700.320.120	500
	16,0	9,0 - 13,0	10.700.320.160	500
d_k 6,2 -0,4	d_m 1,9	3,3 mm	660 N	1100 N
4,0	6,0	1,5 - 3,5	10.700.400.060	500
	8,0	2,0 - 5,5	10.700.400.080	500
	10,0	5,0 - 7,0	10.700.400.100	500
	12,0	6,5 - 9,0	10.700.400.120	500
	16,0	8,5 - 12,5	10.700.400.160	500
	18,0	12,0 - 14,5	10.700.400.180	500
d_k 7,5 -0,5	d_m 2,0	4,1 mm	1120 N	1420 N

d	l +1		No.	
4,8	10,0	4,0 - 6,5	10.700.480.100	500
	12,0	6,0 - 8,0	10.700.480.120	500
	16,0	8,0 - 12,0	10.700.480.160	500
	20,0	12,0 - 15,5	10.700.480.200	500
d_k 9,0 -0,5	d_m 2,7	4,9 mm	1480 N	1950 N
5,0	8,0	2,0 - 5,0	10.700.500.080	500
	10,0	4,0 - 6,5	10.700.500.100	500
	12,0	6,0 - 8,0	10.700.500.120	500
	14,0	7,5 - 10,0	10.700.500.140	500
	16,0	8,0 - 12,0	10.700.500.160	500
	18,0	11,5 - 13,5	10.700.500.180	500
	20,0	12,0 - 15,5	10.700.500.200	500
	25,0	15,0 - 20,5	10.700.500.250	500
	30,0	20,0 - 25,5	10.700.500.300	500
	35,0	25,0 - 30,0	10.700.500.350	250
d_k 9,3 -0,5	d_m 2,7	5,1 mm	1650 N	2000 N

NEW

NEW

► In Chapter 7 on [pages 148-157](#), you will find a wide range of our **assortments and small packs**



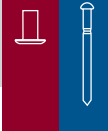


EN AW - 5754 [AlMg3]



Standard Blind Rivet ALFO®

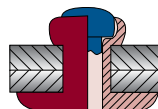
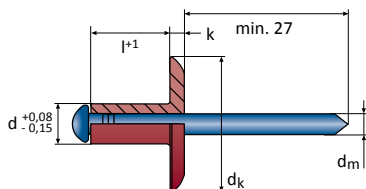
Series 10.700 /730/740/750/760/770



1 1

Aluminium / Steel

Large Dome Head <
open <



ALFO®

d	l +1		No.	
3,2	6,0	1,5 - 3,5	10.730.032.060	500
	8,0	3,0 - 5,5	10.730.032.080	500
	10,0	5,0 - 7,5	10.730.032.100	500
dk 9,5±0,3	dm 1,9	k 1,2 ±0,5	3,3 mm	580 N 850 N
4,0	6,0	1,0 - 3,5	10.750.040.060	500
	8,0	3,0 - 5,5	10.750.040.080	500
	10,0	5,0 - 7,0	10.750.040.100	500
	12,0	6,5 - 9,0	10.750.040.120	500
	16,0	8,5 - 12,5	10.750.040.160	500
	18,0	12,0 - 14,5	10.750.040.180	500
	20,0	14,0 - 16,0	10.750.040.200	500
dk 12,0±0,3	dm 2,0	k 1,5 ±0,5	4,1 mm	1120 N 1900 N
4,8	8,0	2,0 - 5,0	10.770.048.080	500
	10,0	4,0 - 6,5	10.770.048.100	500
	12,0	6,0 - 8,0	10.770.048.120	500
	16,0	7,5 - 12,0	10.770.048.160	500
	18,0	11,5 - 13,5	10.770.048.180	500
	20,0	12,0 - 15,5	10.770.048.200	250
	25,0	15,0 - 20,5	10.770.048.250	250
	30,0	20,0 - 25,0	10.770.048.300	250
dk 16,0±0,3	dm 2,7	k 1,8 ±0,5	4,9 mm	1480 N 2200 N

NEW

NEW

NEW

► All fasteners are available in different packaging units like for example big packs for industrial use.



d	l +1		No.	
5,0	8,0	2,0 - 5,0	10.740.050.080	500
	10,0	4,0 - 6,5	10.740.050.100	500
	12,0	6,0 - 8,0	10.740.050.120	500
	14,0	7,5 - 10,0	10.740.050.140	500
	16,0	8,0 - 12,0	10.740.050.160	500
	18,0	11,5 - 13,5	10.740.050.180	500
	20,0	12,0 - 15,5	10.740.050.200	500
	25,0	15,0 - 20,5	10.740.050.250	500
dk 11,0±0,3	dm 2,7	k 1,5 ±0,5	5,1 mm	1650 N 2500 N
5,0	8,0	2,5 - 5,0	10.760.050.080	500
	10,0	4,0 - 6,5	10.760.050.100	500
	12,0	6,0 - 8,0	10.760.050.120	500
	14,0	7,5 - 10,0	10.760.050.140	500
	16,0	8,0 - 12,0	10.760.050.160	500
	18,0	11,5 - 13,5	10.760.050.180	500
	20,0	12,0 - 15,5	10.760.050.200	500
	25,0	15,0 - 20,5	10.760.050.250	250
dk 14,0±0,3	dm 2,7	k 1,5 ±0,5	5,1 mm	1650 N 2500 N
5,0	10,0	4,0 - 6,5	10.770.050.100	500
	16,0	8,0 - 12,0	10.770.050.160	500
	20,0	12,0 - 15,5	10.770.050.200	250
	25,0	15,0 - 20,5	10.770.050.250	250
	33,0	20,0 - 28,0	10.770.050.330	250
dk 16,0±0,3	dm 2,7	k 1,8 ±0,5	5,1 mm	1650 N 2500 N
6,0	10,0	3,0 - 5,5	10.770.060.100	250
	16,0	7,0 - 11,0	10.770.060.160	250
	20,0	11,0 - 15,0	10.770.060.200	250
dk 16,0±0,3	dm 3,2	k 1,8 ±0,5	6,1 mm	2650 3500

NEW

NEW

NEW



CERVOTEC Bicycle garages





Standard Blind Rivet ALFO® Series 10.712

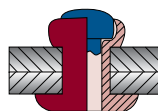
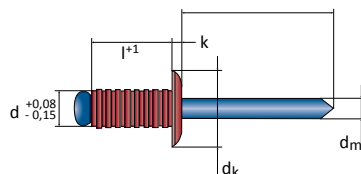


Aluminium / Steel



EN AW - 5754 [AlMg3]

- > Dome Head
- > open
- > grooved rivet shank

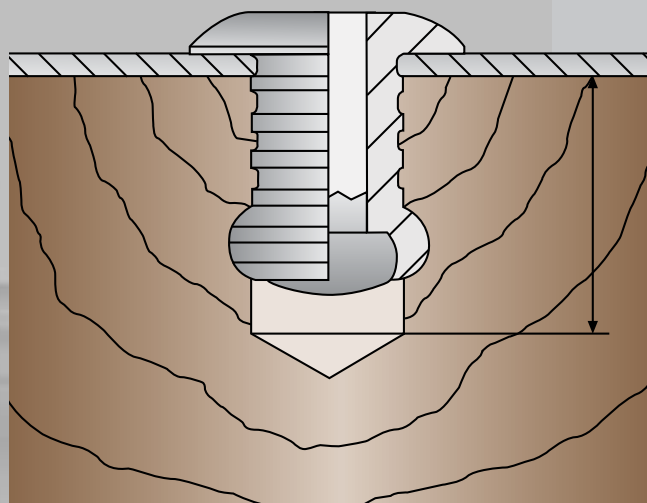


d	l+1	Minimum depth of borehole	No.	
3,2	10,0	13,0	10.712.032.100	500
d_k 6,5 -0,7	d_m 1,7	k 0,8 ±0,7	min. 3,93 mm	600 N 1000 N
4,0	8,0	11,0	10.712.040.080	500
	12,0	15,0	10.712.040.120	500
	18,0	21,0	10.712.040.180	500
d_k 8,0 -1,0	d_m 2,0	k 1,0 ±0,3	min. 4,15 mm	1000 N 1350 N
4,8	10,0	14,0	10.712.048.100	500
	16,0	20,0	10.712.048.160	500
d_k 9,5 -1,0	d_m 2,7	k 1,1 ±0,3	min. 4,95 mm	1350 N 1820 N



The ALFO® version with grooved rivet shank is perfectly suitable for blind holes. In this case the grooves claw into the environmental material of the bore hole. Please take care of the following instructions:

- Determination of the drilling diameter by trial
- Min. hole depth t = rivet length including mandrel head minus assembly part
- Indicated forces refer to the rivet forces have to be determined by trial.





Painted and anodized blind rivets

We bring colour to your world.

The design in terms of colour in visual ranges is more and more important nowadays.

Typical samples are applications curtain fronts, rolling shutters or awning systems.

We offer different types of solutions and produce **exactly the required shade of colour** according to all established scales.

Furthermore we store several hundreds of different types, colours and dimensions of painted or anodized rivets **immediately available** for delivery.

Please ask our sales team that will find the perfect alternative.

ALFO®

Painted ALFO® blind rivets

In this version especially suitable for larger amounts the rivet sleeve is painted with a high-performance surface before assembling with the mandrel.



ALFO® blind rivets with painted large head

The perfect solution even for smaller lot sizes with short production periods.

A special painting procedure guarantees a surface of highest quality.



Anodized ALFO® blind rivets

Corresponding to individual requirements we produce anodized rivet sleeves in black or dark bronze colour.



Painted OPTO® multi grip blind rivets

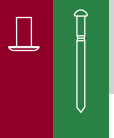
Our standard. We provide two series of OPTO® multi grip blind rivets with large grip ranges in WHITE (RAL 9010) or BLACK (RAL 9005) - available directly from stock. ► [Seite 58](#).



Plastic cover caps

For minimum order quantities of 20.000 pieces each colour plastic cover caps made from polyethylen are available on request for large heads with diameters 11, 14 and 16 mm.

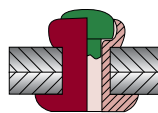
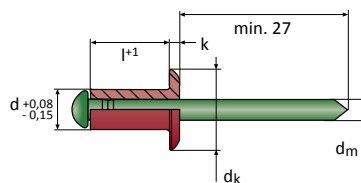




Standard Blind Rivet ALFO® Series 10.702

Aluminium / Stainless Steel A2/A3

> Dome Head
> open



2,4 - 3,2 mm EN AW - 5019 [AlMg5]
4,0 - 6,4 mm EN AW - 5754 [AlMg3]

according to DIN EN ISO 15977

d	l +1		No.	
2,4	4,0	0,5 - 2,0	10.702.024.040	500
	6,0	1,5 - 4,0	10.702.024.060	500
	8,0	3,5 - 6,0	10.702.024.080	500
dk 5,0 -0,7	dm 1,5	k 0,55±0,15	2,5 mm	380 N 600 N
3,0	4,0	0,5 - 2,0	10.702.030.040	500
	6,0	1,5 - 4,0	10.702.030.060	500
	8,0	3,0 - 6,0	10.702.030.080	500
	10,0	5,0 - 7,5	10.702.030.100	500
	12,0	7,0 - 9,0	10.702.030.120	500
dk 6,3 -0,7	dm 1,7	k 0,8±0,2	3,1 mm	660 N 900 N
3,2	6,0	1,0 - 3,5	10.702.032.060	500
	8,0	3,0 - 5,5	10.702.032.080	500
	10,0	5,0 - 7,5	10.702.032.100	500
	12,0	7,0 - 9,0	10.702.032.120	500
dk 6,5 -0,7	dm 1,9	k 0,8±0,2	3,3 mm	660 N 1100 N
4,0	5,0	0,5 - 2,5	10.702.040.050	500
	6,0	1,0 - 3,5	10.702.040.060	500
	7,0	3,0 - 4,5	10.702.040.070	500
	8,0	3,0 - 5,5	10.702.040.080	500
	10,0	5,0 - 7,0	10.702.040.100	500
	12,0	6,5 - 9,0	10.702.040.120	500
	16,0	8,5 - 12,5	10.702.040.160	500
	18,0	12,0 - 14,5	10.702.040.180	500
	20,0	12,5 - 16,5	10.702.040.200	500
	25,0	15,5 - 21,0	10.702.040.250	500
dk 8,0 -1,0	dm 2,0	k 1,0±0,3	4,1 mm	1120 N 1420 N

d	l +1		No.	
4,8	6,0	1,0 - 3,0	10.702.048.060	500
	8,0	2,5 - 4,5	10.702.048.080	500
	10,0	4,0 - 6,5	10.702.048.100	500
	12,0	5,5 - 8,0	10.702.048.120	500
	14,0	7,0 - 10,0	10.702.048.140	500
	16,0	8,0 - 12,0	10.702.048.160	500
	20,0	11,5 - 15,5	10.702.048.200	500
dk 9,5 -1,0	dm 2,7	k 1,1±0,3	4,9 mm	1480 N 1950 N
5,0	6,0	1,0 - 3,0	10.702.050.060	500
	8,0	2,5 - 5,0	10.702.050.080	500
	10,0	4,0 - 6,5	10.702.050.100	500
	12,0	6,0 - 8,0	10.702.050.120	500
	14,0	7,5 - 10,0	10.702.050.140	500
	16,0	8,0 - 12,0	10.702.050.160	500
	18,0	11,5 - 13,5	10.702.050.180	500
	20,0	12,0 - 15,5	10.702.050.200	500
	25,0	15,0 - 20,5	10.702.050.250	500
	30,0	20,0 - 25,0	10.702.050.300	500
	35,0	24,5 - 30,0	10.702.050.350	250
	40,0	29,5 - 35,0	10.702.050.400	250
dk 9,5 -0,8	dm 2,7	k 1,1±0,3	5,1 mm	1650 N 2000 N
6,0	10,0	3,0 - 5,5	10.702.060.100	500
	12,0	5,0 - 7,5	10.702.060.120	500
	16,0	7,0 - 11,0	10.702.060.160	500
	18,0	10,5 - 13,0	10.702.060.180	500
	20,0	11,0 - 15,0	10.702.060.200	500
dk 12,0 -1,2	dm 3,2	k 1,5±0,4	6,1 mm	2520 N 2850 N
6,4	12,0	2,5 - 7,0	10.702.064.120	500
	16,0	6,0 - 11,0	10.702.064.160	500
dk 12,7±0,3	dm 3,6	k 2,3±0,2	6,5 mm	2850 N 4600 N

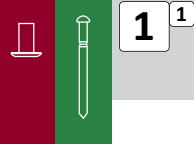


Best to be ordered right away:

Smoothed drills for the requested precise bore holes - available for all common blind rivet or blind rivet nut diameters.

Standard Blind Rivet ALFO®

Series 10.702



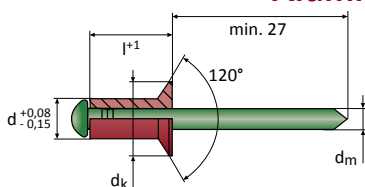
Aluminium / Stainless Steel A2/A3

Countersunk Head <
open <

according to DIN EN ISO 15978



2,4 - 3,0 mm EN AW - 5719 [AlMg5]
3,0 - 5,0 mm EN AW - 5754 [AlMg3]



d	l +1		No.	
2,4	6,0	1,5 - 4,0	10.702.240.060	500
d_k 4,5 +0,2	d_m 1,45	2,5 mm	420 N	660 N
3,0	5,0	1,5 - 3,0	10.702.300.050	500
	6,0	1,5 - 4,0	10.702.300.060	500
	8,0	3,5 - 6,0	10.702.300.080	500
	10,0	5,0 - 7,5	10.702.300.100	500
d_k 6,0 -0,4	d_m 1,7	3,1 mm	660 N	900 N
4,0	6,0	1,5 - 3,5	10.702.400.060	500
	7,0	2,0 - 4,5	10.702.400.070	500
	8,0	2,0 - 5,5	10.702.400.080	500
	10,0	5,0 - 7,0	10.702.400.100	500
	12,0	6,5 - 9,0	10.702.400.120	500
	16,0	8,5 - 12,5	10.702.400.160	500
d_k 7,5 -0,5	d_m 2,0	4,1 mm	1120 N	1420 N

d	l +1		No.	
5,0	10,0	2,0 - 6,5	10.702.500.100	500
	12,0	6,0 - 8,0	10.702.500.120	500
	16,0	8,0 - 12,0	10.702.500.160	500
	20,0	12,0 - 15,5	10.702.500.200	500
d_k 9,3 -0,5	d_m 2,7	5,1 mm	1650 N	2000 N

NEW

NEW

NEW

Tradition and modernity. EAN code on a robust production box.



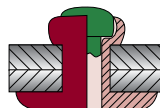
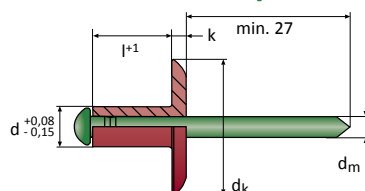


Standard Blind Rivet ALFO®

Seriesn 10.742/762/772

Aluminium / Stainless Steel A2/A3

> Large Dome Head
> open



EN AW - 5754 [AlMg3]

d	l +1		No.	
5,0	8,0	2,0 - 5,0	10.742.050.080	500
	10,0	4,0 - 6,5	10.742.050.100	500
	12,0	6,0 - 8,0	10.742.050.120	500
	14,0	7,5 - 10,0	10.742.050.140	500
	16,0	8,0 - 12,0	10.742.050.160	500
	18,0	11,5 - 13,5	10.742.050.180	500
	20,0	12,0 - 15,5	10.742.050.200	500
	25,0	15,0 - 20,5	10.742.050.250	500
	30,0	20,0 - 25,0	10.742.050.300	250

d_k 11,0 ±0,5	d_m 2,7	k 1,5 +0,4	5,1 mm	1650 N	2500 N
--------------------------------	--------------------------	-------------------	--------	--------	--------

5,0	10,0	4,0 - 6,5	10.772.050.100	500	NEW
	16,0	8,0 - 12,0	10.772.050.160	500	NEW
	20,0	12,0 - 15,5	10.772.050.200	250	NEW
	25,0	15,0 - 20,0	10.772.050.250	250	NEW
	33,0	20,0 - 28,0	10.772.050.330	100	NEW

d_k 16,0 ±0,3	d_m 2,7	k 1,5 +0,4	5,1 mm	1650 N	2500 N
--------------------------------	--------------------------	-------------------	--------	--------	--------

d	l +1		No.	
5,0	8,0	2,0 - 5,0	10.762.050.080	500
	10,0	4,0 - 6,5	10.762.050.100	500
	12,0	6,0 - 8,0	10.762.050.120	500
	14,0	7,5 - 10,0	10.762.050.140	500
	16,0	9,5 - 12,0	10.762.050.160	500
	18,0	11,5 - 13,5	10.762.050.180	500
	20,0	12,0 - 15,5	10.762.050.200	500
	25,0	15,0 - 20,5	10.762.050.250	250
	30,0	20,0 - 25,0	10.762.050.300	250

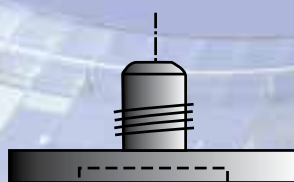
d_k 14,0 ±0,3	d_m 2,7	k 1,5 +0,4	5,1 mm	1650 N	2500 N
--------------------------------	--------------------------	-------------------	--------	--------	--------



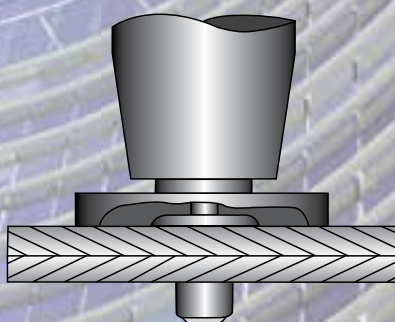
To avoid traces of corrosion blind rivets made from aluminium with stainless steel mandrels are used in the outside area. Take care, that the tolerance of the hole is as large as the thermal expansion of the storefront plates.

- With special facade nosepieces it is guaranteed that the rivet is placed with a tolerance of 0,3 mm. Rivet and nosepiece should be from one manufacturer.
- The grip range results from the thickness of material plus 2,0 mm to secure a well done closing head.

We recommend to **try out the riveting process** in advance!



Frontage nosepiece



Suitable nose pieces you can find on ► [page 205](#).

Standard Blind Rivet ALFO® Series 10.701



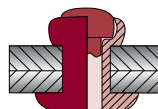
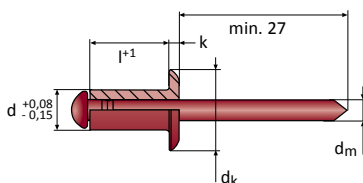
Aluminium / Aluminium

Dome Head <
open <

DIN EN ISO 15981



EN AW - 5251 [AlMg2]



d	l +1		No.	
3,2	6,0	0,5 - 4,0	10.701.032.060	500
	8,0	3,5 - 6,0	10.701.032.080	500
	10,0	5,5 - 7,5	10.701.032.100	500
	12,0	7,0 - 9,0	10.701.032.120	500
d_k 6,5 -0,7	d_m 2,0	k 0,8 ±0,2	3,3 mm	380 N 670 N
4,0	6,0	1,0 - 3,5	10.701.040.060	500
	8,0	3,0 - 5,5	10.701.040.080	500
	10,0	5,0 - 7,0	10.701.040.100	500
	12,0	6,5 - 9,0	10.701.040.120	500
	16,0	8,5 - 12,5	10.701.040.160	500
d_k 8,0 -1,0	d_m 2,5	k 1,0 ±0,3	4,1 mm	740 N 1240 N

NEW

d	l +1		No.	
4,8	8,0	1,0 - 5,0	10.701.048.080	500
	10,0	4,0 - 7,0	10.701.048.100	500
	12,0	6,0 - 8,5	10.701.048.120	500
	14,0	8,0 - 10,5	10.701.048.140	500
	16,0	8,0 - 12,0	10.701.048.160	500
	18,0	12,5 - 14,5	10.701.048.180	500
	20,0	14,5 - 16,5	10.701.048.200	500
d_k 9,5 -1,0	d_m 2,9	k 1,1 ±0,3	4,9 mm	1140 N 1600 N

RivdomONE¹

THE CORDLESS BATTERY RIVETER

Our up-to-date cordless battery rivet tool with plenty of interesting options and accessories. Detailed information from ► [page 192](#).





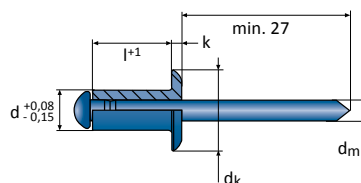
Standard Blind Rivet ALFO® Series 10.707

Steel / Steel



C4C [1.0303]

> Dome Head
> open



DIN EN ISO 15979

d	l +1		No.	
3,0	5,0	0,5 - 2,5	10.707.030.050	500
	6,0	0,5 - 3,5	10.707.030.060	500
	7,0	2,0 - 4,5	10.707.030.070	500
	8,0	3,0 - 5,5	10.707.030.080	500
	10,0	5,0 - 7,0	10.707.030.100	500
	12,0	6,5 - 9,0	10.707.030.120	500
d_k 6,3 -0,7	d_m 1,9	k 0,8 ±0,2	3,1 mm	900 N 1210 N
3,2	5,0	0,5 - 2,5	10.707.032.050	500
	6,0	0,5 - 3,5	10.707.032.060	500
	8,0	3,0 - 5,5	10.707.032.080	500
	10,0	5,0 - 7,0	10.707.032.100	500
	12,0	6,5 - 9,0	10.707.032.120	500
	14,0	8,5 - 11,0	10.707.032.140	500
	16,0	10,5 - 13,0	10.707.032.160	500
d_k 6,5 -0,7	d_m 2,0	k 0,8 ±0,2	3,3 mm	1060 N 1550 N
4,0	6,0	0,5 - 3,5	10.707.040.060	500
	7,0	2,0 - 4,5	10.707.040.070	500
	8,0	3,0 - 5,5	10.707.040.080	500
	9,0	4,0 - 6,5	10.707.040.090	500
	10,0	5,0 - 7,0	10.707.040.100	500
	12,0	6,0 - 9,0	10.707.040.120	500
	14,0	8,0 - 11,0	10.707.040.140	500
	16,0	9,0 - 12,5	10.707.040.160	500
	18,0	12,0 - 14,5	10.707.040.180	500
	20,0	12,0 - 16,5	10.707.040.200	500
	25,0	16,0 - 21,0	10.707.040.250	500
d_k 8,0 -1,0	d_m 2,3	k 1,0 ±0,3	4,1 mm	1900 N 2600 N
4,8	6,0	1,0 - 2,5	10.707.048.060	500
	7,0	1,0 - 3,5	10.707.048.070	500
	8,0	2,5 - 4,5	10.707.048.080	500
	9,0	3,0 - 5,5	10.707.048.090	500
	10,0	4,0 - 6,5	10.707.048.100	500
	12,0	6,0 - 8,5	10.707.048.120	500
	14,0	7,0 - 10,0	10.707.048.140	500
	16,0	8,0 - 12,0	10.707.048.160	500
	18,0	9,0 - 13,5	10.707.048.180	500
	20,0	11,0 - 15,5	10.707.048.200	500
	22,0	13,0 - 17,0	10.707.048.220	500
	25,0	15,0 - 20,0	10.707.048.250	500
	30,0	19,5 - 24,5	10.707.048.300	500
d_k 9,5 -1,0	d_m 2,7	k 1,1 ±0,3	4,9 mm	2900 N 3850 N

d	l +1		No.	
5,0	8,0	2,5 - 4,5	10.707.050.080	500
	10,0	4,0 - 6,5	10.707.050.100	500
	12,0	6,0 - 8,5	10.707.050.120	500
	14,0	7,0 - 10,5	10.707.050.140	500
	16,0	8,0 - 12,0	10.707.050.160	500
	18,0	10,0 - 13,5	10.707.050.180	500
	20,0	11,0 - 15,0	10.707.050.200	500
	25,0	14,5 - 20,0	10.707.050.250	250
	30,0	19,5 - 25,0	10.707.050.300	250
	35,0	24,5 - 29,5	10.707.050.350	250
5,0	40,0	29,0 - 34,0	10.707.050.400	250
	45,0	33,5 - 39,0	10.707.050.450	100
	50,0	38,5 - 44,0	10.707.050.500	100
d_k 9,5 -0,8	d_m 2,9	k 1,1 ±0,3	5,1 mm	3000 N 4300 N
6,0	10,0	2,0 - 5,5	10.707.060.100	250
	12,0	4,0 - 7,5	10.707.060.120	250
	16,0	7,0 - 11,5	10.707.060.160	250
	20,0	11,0 - 15,0	10.707.060.200	250
	25,0	14,5 - 20,0	10.707.060.250	250
d_k 12,0 -1,2	d_m 3,6	k 1,5 ±0,4	6,1 mm	4000 N 5500 N
6,4	8,0	1,0 - 4,0	10.707.064.080	250
	10,0	3,0 - 6,0	10.707.064.100	250
	12,0	3,5 - 7,5	10.707.064.120	250
	16,0	6,0 - 11,5	10.707.064.160	250
	18,0	8,0 - 13,0	10.707.064.180	250
	20,0	9,0 - 14,5	10.707.064.200	250
	25,0	13,0 - 19,5	10.707.064.250	250
	30,0	19,0 - 24,5	10.707.064.300	250
d_k 13,0 -1,4	d_m 3,8	k 1,8 ±0,4	6,5 mm	4500 N 6300 N
8,0	14,0	3,0 - 8,5	10.707.080.140	250
	16,0	5,0 - 10,5	10.707.080.160	250
	18,0	8,0 - 12,0	10.707.080.180	250
	20,0	11,5 - 14,0	10.707.080.200	250
d_k 20,0 ±0,7	d_m 4,0	k 2,5 ±0,5	8,1 mm	8600 N 12000 N



Diameter 8,0 mm not standardized.



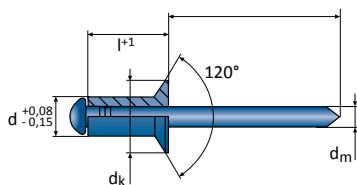
Types with large dome head available as multigrip blind rivet OPTO® on page 61.



Further blind rivets made of steel are available as high strength type OPTO®-BULB (page 62), FERRO®-BULB (page 71) or FERRO®-BOLT (page 75).

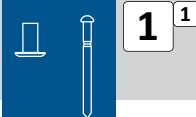


C4C [1.0303]



Standard Blind Rivet ALFO®

Series 10.707



Steel / Steel

Countersunk Head <
open <

DIN EN ISO 15980

d	l +1		No.	
3,0	6,0	1,5 - 3,5	10.707.300.060	500
	8,0	3,0 - 5,5	10.707.300.080	500
	10,0	5,0 - 7,0	10.707.300.100	500
	12,0	6,5 - 9,0	10.707.300.120	500
dk 6,0 -0,4	dm 1,9			
3,2	6,0	1,5 - 3,5	10.707.320.060	500
	8,0	3,0 - 5,5	10.707.320.080	500
	10,0	5,0 - 7,0	10.707.320.100	500
	12,0	6,5 - 9,0	10.707.320.120	500
dk 6,2 -0,4	dm 2,0			
4,0	6,0	2,0 - 3,5	10.707.400.060	500
	7,0	2,0 - 4,5	10.707.400.070	500
	8,0	3,0 - 5,5	10.707.400.080	500
	10,0	5,0 - 7,0	10.707.400.100	500
	12,0	6,5 - 9,0	10.707.400.120	500
	16,0	8,0 - 12,5	10.707.400.160	500
dk 7,5 -0,5	dm 2,3			

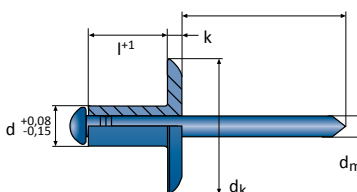
NEW

d	l +1		No.	
4,8	8,0	2,0 - 4,5	10.707.480.080	500
	10,0	3,0 - 6,5	10.707.480.100	500
	12,0	5,0 - 8,5	10.707.480.120	500
	14,0	6,5 - 10,0	10.707.480.140	500
	16,0	8,0 - 12,0	10.707.480.160	500
	18,0	11,5 - 13,5	10.707.480.180	500
dk 9,0 -0,5	dm 2,7			
5,0	8,0	2,0 - 4,5	10.707.500.080	500
	10,0	4,0 - 6,5	10.707.500.100	500
	12,0	6,0 - 8,5	10.707.500.120	500
	16,0	8,0 - 12,0	10.707.500.160	500
	20,0	11,0 - 15,5	10.707.500.200	500
	25,0	15,0 - 20,0	10.707.500.250	250
	30,0	19,5 - 25,0	10.707.500.300	250
dk 9,0 -0,5	dm 2,9			
6,4	10,0	3,0 - 5,0	10.707.640.100	250
	12,0	3,0 - 6,0	10.707.640.120	250
dk 13,4 -1,8	dm 3,8 ±1,8			

NEW

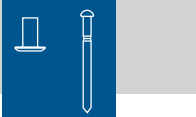


C4C [1.0303]



Standard Blind Rivet ALFO®

Series 10.767



Steel / Steel

Large Dome Head <
open <

d	l +1		No.	
4,8	10,0	4,0 - 6,0	10.767.048.100	500
	12,7	6,0 - 8,0	10.767.048.127	500
	16,0	10,0 - 12,0	10.767.048.160	500
	20,0	14,0 - 16,0	10.767.048.200	500
	25,0	16,0 - 21,0	10.767.048.250	500
dk 14,0 ±0,4	dm 2,9	k 1,5		

NEW

NEW

NEW

NEW

NEW



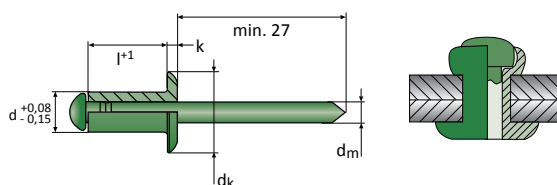
Standard Blind Rivet ALFO® Series 10.708

Stainless Steel A2 / Stainless Steel A2/A3



[1.4301]

- > Dome Head
- > open



DIN EN ISO 15983

d	l +1		No.	
2,4	6,0	0,5 - 3,5	10.708.024.060	500
d_k 5,0 ± 0,2	d_m 1,5	k 0,8 ± 0,1	2,5 mm 1000 N 1500 N	
3,0	6,0	0,5 - 3,0	10.708.030.060	500
	8,0	3,0 - 5,0	10.708.030.080	500
	10,0	5,0 - 7,0	10.708.030.100	500
	12,0	6,5 - 8,5	10.708.030.120	500
	16,0	8,5 - 12,0	10.708.030.160	500
d_k 6,3 - 0,7	d_m 1,9	k 0,8 ± 0,2	3,1 mm 2050 N 2600 N	
3,2	4,0	0,5 - 1,5	10.708.032.040	500
	6,0	0,5 - 3,0	10.708.032.060	500
	8,0	3,0 - 5,0	10.708.032.080	500
	10,0	5,0 - 7,0	10.708.032.100	500
	12,0	6,5 - 8,5	10.708.032.120	500
	16,0	8,5 - 12,0	10.708.032.160	500
d_k 6,5 - 0,7	d_m 1,9	k 0,8 ± 0,2	3,3 mm 2050 N 2600 N	
4,0	6,0	1,0 - 2,5	10.708.040.060	500
	8,0	2,5 - 4,5	10.708.040.080	500
	10,0	4,5 - 6,5	10.708.040.100	500
	12,0	6,5 - 8,5	10.708.040.120	500
	14,0	8,5 - 10,5	10.708.040.140	500
	16,0	10,0 - 12,0	10.708.040.160	500
	18,0	12,0 - 14,0	10.708.040.180	500
	20,0	14,0 - 16,0	10.708.040.200	500
d_k 8,0 - 1,0	d_m 2,5	k 1,0 ± 0,3	4,1 mm 2750 N 3550 N	

The hammer shaped specification of the mandrels head guarantees a perfect forming of the closing head.



- Further blind rivets made of stainless steel are available as high strength type OPTO®-BULB (page 62), FERO®-BULB (page 71) oder FERO®-BOLT (page 75).

d	l +1		No.	
4,8	8,0	1,5 - 4,0	10.708.048.080	500
	10,0	4,0 - 6,0	10.708.048.100	500
	12,0	6,0 - 8,0	10.708.048.120	500
	14,0	7,0 - 9,5	10.708.048.140	500
	16,0	8,0 - 11,0	10.708.048.160	500
	18,0	11,0 - 13,0	10.708.048.180	500
d_k 9,5 - 1,0	d_m 2,9	k 1,1 ± 0,3	4,9 mm 4250 N 5400 N	
5,0	8,0	2,0 - 4,0	10.708.050.080	500
	10,0	4,0 - 6,0	10.708.050.100	500
	12,0	6,0 - 8,0	10.708.050.120	500
	14,0	7,0 - 9,5	10.708.050.140	500
	16,0	8,0 - 11,0	10.708.050.160	500
	18,0	11,0 - 13,0	10.708.050.180	500
	20,0	13,0 - 15,0	10.708.050.200	500
	25,0	15,0 - 20,0	10.708.050.250	250
	30,0	20,0 - 25,0	10.708.050.300	250
	35,0	25,0 - 30,0	10.708.050.350	250
	40,0	30,0 - 35,0	10.708.050.400	250
d_k 9,5 - 0,8	d_m 2,9	k 1,1 ± 0,3	5,1 mm 4700 N 5800 N	
6,0	10,0	2,0 - 5,5	10.708.060.100	250
	12,0	5,5 - 7,5	10.708.060.120	250
	16,0	7,5 - 11,0	10.708.060.160	250
d_k 12,0 - 1,2	d_m 3,8	k 1,5 ± 0,4	6,1 mm 5700 N 7500 N	
6,4	10,0	2,5 - 6,0	10.708.064.100	250
	12,0	4,0 - 7,5	10.708.064.120	250
	14,0	6,0 - 9,5	10.708.064.140	250
	16,0	7,5 - 11,5	10.708.064.160	250
	18,0	9,0 - 13,0	10.708.064.180	250
	20,0	12,0 - 14,0	10.708.064.200	250
	25,0	14,0 - 19,0	10.708.064.250	250
	30,0	22,0 - 24,0	10.708.064.300	250
d_k 13,0 - 1,5	d_m 3,8	k 1,8 ± 0,4	6,5 mm 6500 N 8850 N	

! Diameters 6,0 and 6,4 are not standardized.



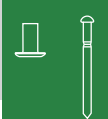
Garbage can box Diakonie Ruhr



[1.4301]

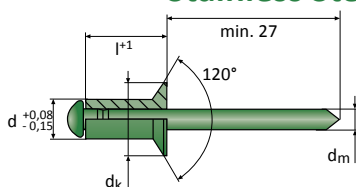
Standard Blind Rivet ALFO®

Series 10.708



1 1

Stainless Steel A2 / Stainless Steel A2/A3



Countersunk Head <
open <

DIN EN ISO 15984

d	l +1		No.	
3,2	6,0	1,5 - 3,0	10.708.320.060	500
	8,0	3,0 - 5,0	10.708.320.080	500
	10,0	5,0 - 7,0	10.708.320.100	500
	12,0	6,5 - 8,5	10.708.320.120	500
dk 6,0 -0,4	dm 1,9			
4,0	6,0	1,0 - 2,5	10.708.400.060	500
	8,0	2,5 - 4,5	10.708.400.080	500
	10,0	4,5 - 6,5	10.708.400.100	500
	12,0	6,5 - 8,5	10.708.400.120	500
	14,0	8,5 - 10,5	10.708.400.140	500
	16,0	10,0 - 12,0	10.708.400.160	500
	18,0	11,5 - 14,0	10.708.400.180	500
	20,0	13,5 - 16,0	10.708.400.200	500
dk 7,5 -0,5	dm 2,5			

d	l +1		No.	
4,8	8,0	2,0 - 4,0	10.708.480.080	500
	10,0	4,0 - 6,0	10.708.480.100	500
	12,0	6,0 - 8,5	10.708.480.120	500
	16,0	8,0 - 11,0	10.708.480.160	500
dk 9,0 -0,5	dm 2,9			
5,0	8,0	2,0 - 4,0	10.708.500.080	500
	10,0	4,0 - 6,0	10.708.500.100	500
	12,0	6,0 - 8,5	10.708.500.120	500
	16,0	8,0 - 11,0	10.708.500.160	500
dk 9,3 -0,5	dm 2,9			

NEW

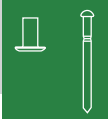
NEW



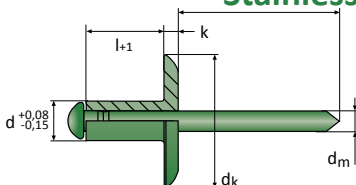
[1.4301]

Standard Blind Rivet ALFO®

Series 10.738/758/778



Stainless Steel A2 / Stainless Steel A2



Large Dome Head <
open <

d	l +1		No.	
3,2	6,0	0,5 - 3,0	10.738.032.060	500
	8,0	3,0 - 5,0	10.738.032.080	500
	10,0	5,0 - 7,0	10.738.032.100	500
	12,0	6,5 - 8,5	10.738.032.120	500
	14,0	8,5 - 10,5	10.738.032.140	500
	16,0	10,0 - 12,0	10.738.032.160	500
dk 9,5 ±0,05	dm 1,9	k 1,1 ±0,3		
4,0	6,0	1,0 - 2,5	10.758.040.060	500
	8,0	2,5 - 4,5	10.758.040.080	500
	10,0	4,5 - 6,5	10.758.040.100	500
	12,0	6,5 - 8,5	10.758.040.120	500
	14,0	8,5 - 10,5	10.758.040.140	500
	16,0	10,0 - 12,0	10.758.040.160	500
dk 11,5 ±0,03	dm 2,5	k 1,9 ±0,03		

d	l +1		No.	
4,8	10,0	3,5 - 5,5	10.778.048.100	500
	12,0	5,5 - 7,5	10.778.048.120	500
	14,0	6,5 - 9,0	10.778.048.140	500
	16,0	7,5 - 10,5	10.778.048.160	500
	18,0	10,5 - 12,5	10.778.048.180	500
	20,0	12,5 - 15,5	10.778.048.200	250
	25,0	16,5 - 19,5	10.778.048.250	250
dk 15,3 ±0,2	dm 2,9	k 2,3 -0,4		

NEW

NEW



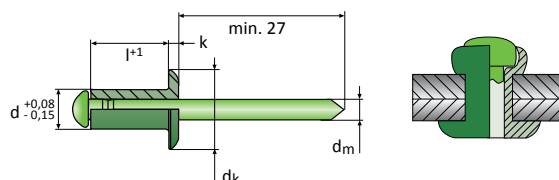
Standard Blind Rivet ALFO® Series 10.713

Stainless Steel A4 / Stainless Steel A4/A5



[1.4404]

- > Dome Head
- > open



according to DIN EN ISO 15983

d	l +1		No.	
3,0	6,0	0,5 - 3,0	10.713.030.060	500
	8,0	3,0 - 5,0	10.713.030.080	500
	10,0	5,0 - 7,0	10.713.030.100	500
	12,0	6,5 - 8,5	10.713.030.120	500
d_k 6,3 -0,7	d_m 1,9	k 0,8 ± 0,2	3,1 mm	1760 N 2270 N
4,0	6,0	1,0 - 2,5	10.713.040.060	500
	8,0	2,5 - 4,5	10.713.040.080	500
	10,0	4,5 - 6,5	10.713.040.100	500
	12,0	6,5 - 8,5	10.713.040.120	500
	16,0	8,5 - 12,0	10.713.040.160	500
d_k 8,0 -1,0	d_m 2,5	k 1,0 ± 0,3	4,1 mm	3220 N 4250 N

d	l +1		No.	
5,0	8,0	2,0 - 4,0	10.713.050.080	500
	10,0	4,0 - 6,0	10.713.050.100	500
	12,0	6,0 - 8,0	10.713.050.120	500
	16,0	9,5 - 11,0	10.713.050.160	500
	18,0	11,0 - 13,0	10.713.050.180	500
	20,0	13,0 - 15,0	10.713.050.200	500
	25,0	15,0 - 20,0	10.713.050.250	250
	30,0	20,0 - 25,0	10.713.050.300	250
d_k 9,5 -0,8	d_m 3,2	k 1,1 ± 0,3	5,1 mm	4800 N 6600 N

NEW

NEW

NEW

Stainless Steel V4A

According to the higher percentage of molybdenum A4 blind rivets are **more corrosion resistant** than A2 types. Typical fields of application are container construction, food component sub-suppliers, ship- and boat-building or ocean side and off-shore industries.

- ▶ Many additional details about corrosion can be found on [pages 34/35](#).
- ▶ Please note our new blind rivet nuts in A4 on [page 116](#).





[2.4360]

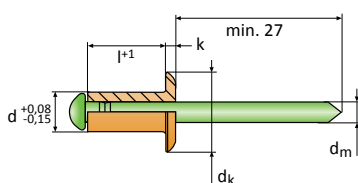


Standard Blind Rivet ALFO® Series 10.720



1 1

Nickel-Copper / Stainless Steel A4



Dome Head <
open <

DIN EN ISO 16584

d	l +1		No.	
3,2	6,0	1,0 - 3,0	10.720.032.060	500
	8,0	3,0 - 5,0	10.720.032.080	500
	10,0	5,0 - 7,0	10.720.032.100	500
d _k 6,5 -0,7	d _m 1,9	k 0,8 ± 0,2	3,3 mm	1600 N 2400 N
4,0	6,0	1,0 - 3,0	10.720.040.060	500
	8,0	3,0 - 5,0	10.720.040.080	500
	10,0	5,0 - 7,0	10.720.040.100	500
	12,0	7,0 - 9,0	10.720.040.120	500
d _k 8,0 -1,0	d _m 2,3	k 1,0 ± 0,3	3,3 mm	2300 N 3450 N

Please note: The rivet shank is zinc plated!

d	l +1		No.	
4,8	8,0	2,0 - 4,0	10.720.048.080	500
	10,0	4,0 - 6,0	10.720.048.100	500
	12,0	6,0 - 8,0	10.720.048.120	500
	16,0	10,0 - 12,0	10.720.048.160	500
	20,0	14,0 - 16,0	10.720.048.200	250
d _k 9,5 -1,0	d _m 2,9	k 1,1 ± 0,3	4,9 mm	3400 N 5000 N
6,4	12,0	4,0 - 6,0	10.720.064.120	250
	16,0	7,0 - 10,0	10.720.064.160	250
	18,0	9,0 - 12,0	10.720.064.180	250
d _k 13,0 -1,5	d _m 3,8	k 1,8 ± 0,4	6,5 mm	5400 N 8200 N

Nickel-Copper/Stainless Steel (Ni Cu 30 Fe)

Nickel-copper (named as "Monel"(1) or "Nicrocor"(2) too) features the **best performance to strength and corrosion resistance** for fastening technology.

Because of this outstanding property against salts and acids and similar strength as stainless steel it is often used in off-shore, chemical and food industry. Blind rivets from this material are generally deep drawn from strip. HONSEL/VVG produces these rivets **from wire** thus achieving **higher strength** and realizing an **undetachably rivet mandrel**.

This allows us to meet the strong increase in quality requirements that has taken place in this sector of riveting. **A perfect rivet in all aspects.**

Good corrosion properties:

- Tap water
- Neutral and alkaline salts
- Oxidizing salts
- Humid and dry gases
- Saltwater (sea water)
- Acidic salts
- Mineral acid
- Organic acid
- Alkalies

very well suited well suited suited

[1] Trademark of INCO Alloys International [2] Trademark of KRUPP



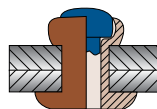
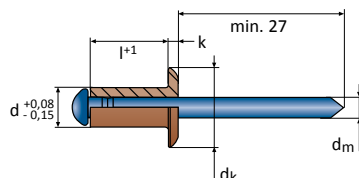


Standard Blind Rivet ALFO®

Series 10.705

Copper / Steel

- > Dome Head
- > open



[2.0040]

DIN EN ISO 16582

d	l +1		No.	
3,0	6,0	2,0 - 3,0	10.705.030.060	500
	8,0	3,0 - 5,0	10.705.030.080	500
d_k 6,3 -0,7	d_m 1,7	k 0,8 ± 0,2	3,1 mm 760 N 950 N	
3,2	5,0	0,5 - 2,5	10.705.032.050	500
	6,0	1,5 - 3,5	10.705.032.060	500
	8,0	3,0 - 5,5	10.705.032.080	500
	10,0	5,0 - 7,0	10.705.032.100	500
d_k 6,4 -0,5	d_m 1,9	k 0,8 ± 0,2	3,3 mm 800 N 1000 N	

d	l +1		No.	
4,0	6,0	2,5 - 3,5	10.705.040.060	500
	8,0	3,5 - 5,0	10.705.040.080	500
	10,0	5,0 - 7,0	10.705.040.100	500
d_k 8,0 -1,0	d_m 2,0	k 1,0 ± 0,3	4,1 mm 1500 N 1800 N	

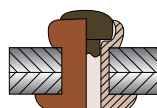
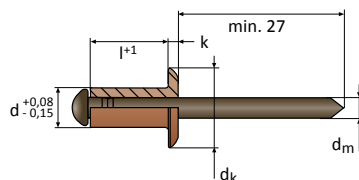


Standard Blind Rivet ALFO®

Series 10.709

Copper / Bronze

- > Dome Head
- > open



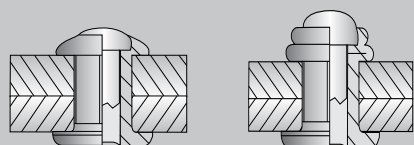
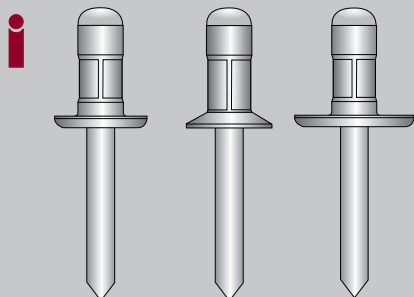
[2.0040]

according to DIN EN ISO 16582

d	l +1		No.	
3,0	4,0	0,5 - 1,5	10.709.030.040	500
	5,0	0,5 - 2,5	10.709.030.050	500
	6,0	2,0 - 3,5	10.709.030.060	500
	8,0	3,0 - 5,5	10.709.030.080	500
	10,0	5,0 - 7,0	10.709.030.100	500
d_k 6,3 -0,7	d_m 1,7	k 0,8 ± 0,2	3,1 mm 760 N 950 N	
3,2	5,0	0,5 - 2,5	10.709.032.050	500
	6,0	1,5 - 3,5	10.709.032.060	500
	8,0	3,0 - 5,5	10.709.032.080	500
	10,0	5,0 - 7,0	10.709.032.100	500
d_k 6,4 -0,5	d_m 1,9	k 0,8 ± 0,2	3,3 mm 800 N 1000 N	

NEW

d	l +1		No.	
4,0	6,0	2,0 - 3,5	10.709.040.060	500
	8,0	3,0 - 5,5	10.709.040.080	500
	10,0	5,0 - 7,0	10.709.040.100	500
	12,0	6,5 - 8,5	10.709.040.120	500
	16,0	8,0 - 11,5	10.709.040.160	500
d_k 8,0 -1,0	d_m 2,0	k 1,0 ± 0,3	4,1 mm 1500 N 1800 N	



large grip range

low grip range

The all-rounder

The **OPTO®** multigrip blind rivet with his especially embossed rivet shaft, is distinctly different to a standard blind rivet.

Due to his constructive structural, the rivet guarantees **lots of excellent performance characteristics**:

- large grip range (simplified scheduling, reduced warehouse stock and dimension variety)
- good filling capacity of the borehole
- non-positive locking of the captive mandrel without clearance
- no rattling sounds
- dustproof and splash water-tight

Preferred applications for **OPTO®** multigrip blind rivets can be found in the field of vehicle manufacturing, in air conditioning technology as well as in the field of tank and container manufacturing. Furthermore, this rivet type is excellently suited for use as a **repair rivet**.

VVG develops for this blind rivet type **special variants for the serial production**, too, e. g. with a diameter up to 8,0 mm!



► We can do **MULTIPLE** multigrip. The patented OPTO® multigrip blind rivet can be found on ► [page 96-97](#).

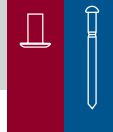


EN AW - 5052 [AlMg2,5]

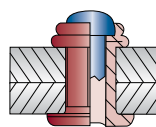
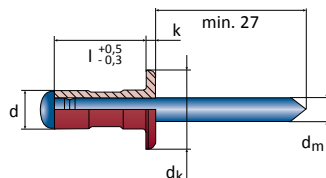










Multigrip Blind Rivet OPTO® Series 10.600

Aluminium / Steel











Dome Head <
open <



d	l +1		No.		
3,2	6,8	0,8 - 3,4	10.600.032.068	500	
	8,0	0,8 - 4,8	10.600.032.080	500	
	9,0	1,2 - 6,4	10.600.032.095	500	
	11,0	4,0 - 7,9	10.600.032.110	500	
	14,0	5,0 - 11,0	10.600.032.140	500	
d _k 6,4	d _m 1,8	k 1,0	 3,3 mm	 720 N	 1000 N
4,0	6,0	1,0 - 3,0	10.600.040.060	500	
	9,5	1,2 - 6,4	10.600.040.095	500	
	12,7	4,0 - 9,5	10.600.040.127	500	
	16,9	6,0 - 12,5	10.600.040.169	500	
d _k 7,9	d _m 2,3	k 1,2	 4,1 mm	 1120 N	 1650 N

NEW

d	l +1		No.		
4,8	10,3	1,5 - 6,0	10.600.048.103	500	
	15,1	4,8 - 11,1	10.600.048.151	500	
	16,9	6,4 - 12,7	10.600.048.169	500	
	24,8	12,7 - 19,8	10.600.048.248	500	
d _k 9,8	d _m 2,8	k 1,5	 4,9 mm	 1530 N	 2300 N
6,4	15,0	2,0 - 8,0	10.600.064.150	250	
	20,0	7,0 - 13,0	10.600.064.200	250	
	25,0	12,0 - 18,0	10.600.064.250	250	
d _k 12,7	d _m 3,7	k 1,9	 6,5 mm	 2000 N	 2500 N

NEW

NEW

NEW

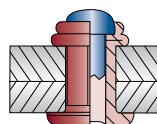
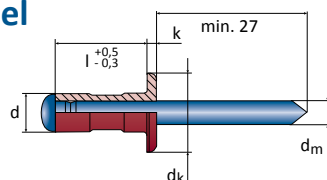
! Dimension 4,0 x 9,5 available as grounding rivet with knurled shaft on ► [page 81](#).



Multigrip Blind Rivet OPTO® Series 10.600

Aluminium / Steel

- > Dome Head
- > open
















> painted white RAL 9010

NEW



EN AW - 5052 [AlMg2,5]

d	l +1		No.		
3,2	6,8	0,8 - 3,4	10.600.032.068 -9010	500	
	8,0	0,8 - 4,8	10.600.032.080 -9010	500	
	9,5	1,2 - 6,4	10.600.032.095 -9010	500	
	11,0	4,0 - 7,9	10.600.032.110 -9010	500	
d _k 6,4	d _m 1,8	k 1,0	 3,3 mm	 720 N	 1000 N
4,0	6,0	0,5 - 3,0	10.600.040.060 -9010	500	
	9,5	1,2 - 6,4	10.600.040.095 -9010	500	
	12,7	4,0 - 9,5	10.600.040.127 -9010	500	
	16,9	6,4 - 12,7	10.600.040.169 -9010	500	
d _k 7,9	d _m 2,3	k 1,2	 4,1 mm	 1120 N	 1650 N









d	l +1		No.		
4,8	10,3	1,6 - 6,4	10.600.048.103 -9010	500	
	15,1	4,8 - 11,1	10.600.048.151 -9010	500	
	16,9	6,4 - 12,7	10.600.048.169 -9010	500	
	24,8	12,7 - 19,8	10.600.048.248 -9010	500	
d _k 9,8	d _m 2,8	k 1,5	 4,9 mm	 1530 N	 2300 N






> painted black RAL 9005

NEW



EN AW - 5052 [AlMg2,5]

d	l +1		No.		
3,2	6,8	0,8 - 3,4	10.600.032.068 -9005	500	
	8,0	0,8 - 4,8	10.600.032.080 -9005	500	
	9,5	1,2 - 6,4	10.600.032.095 -9005	500	
	11,0	4,0 - 7,9	10.600.032.110 -9005	500	
d _k 6,4	d _m 1,8	k 1,0	 3,3 mm	 720 N	 1000 N
4,0	6,0	0,5 - 3,0	10.600.040.060 -9005	500	
	9,5	1,2 - 6,4	10.600.040.095 -9005	500	
	12,7	4,0 - 9,5	10.600.040.127 -9005	500	
	16,9	6,4 - 12,7	10.600.040.169 -9005	500	
d _k 7,9	d _m 2,3	k 1,2	 4,1 mm	 1120 N	 1650 N

d	l +1		No.		
4,8	10,3	1,6 - 6,4	10.600.048.103 -9005	500	
	15,1	4,8 - 11,1	10.600.048.151 -9005	500	
	16,9	6,4 - 12,7	10.600.048.169 -9005	500	
	24,8	12,7 - 19,8	10.600.048.248 -9005	500	
d _k 9,8	d _m 2,8	k 1,5	 4,9 mm	 1530 N	 2300 N

Everything is possible.

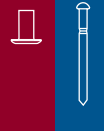
Further information on several different possibilities of colour design are shown on ► **page 45.**



EN AW - 5052 [AlMg2,5]



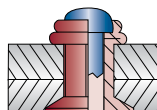
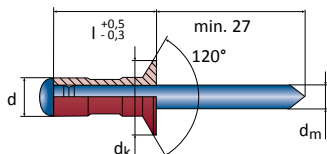
Multigrip Blind Rivet OPTO® Series 10.600



1 2

Aluminium / Steel

Countersunk Head <
open <



OPTO®

d	l +1		No.	
3,2	9,7	2,4 - 6,4	10.600.320.097	500
d_k 5,4	d_m 1,8	3,3 mm	670 N	900 N
4,0	11,3	2,9 - 7,9	10.600.400.113	500
d_k 6,5	d_m 2,3	4,1 mm	980 N	1320 N

d	l +1		No.	
4,8	12,0	4,0 - 8,0	10.600.480.120	500
	16,9	6,4 - 12,7	10.600.480.169	500
d_k 9,0	d_m 2,7	4,9 mm	1500 N	2300 N

NEW

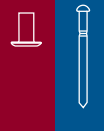
NEW



EN AW - 5052 [AlMg2,5]

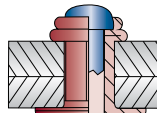
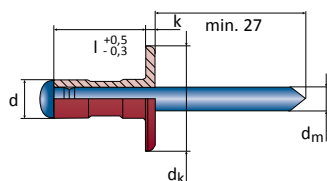


Multigrip Blind Rivet OPTO® Series 10.630/650/670



Aluminium / Steel

Large Dome Head <
open <



d	l +1		No.	
3,2	8,0	0,8 - 4,8	10.630.032.080	500
	11,0	4,0 - 7,9	10.630.032.110	500
d_k 9,5	d_m 1,8	k 1,2 3,3 mm	720 N	1000 N
4,0	6,0	1,0 - 3,0	10.650.040.060	500
	9,5	1,2 - 6,4	10.650.040.095	500
	12,7	4,0 - 9,5	10.650.040.127	500
	16,9	6,4 - 12,7	10.650.040.169	500
d_k 12,0	d_m 2,3	k 1,5 4,1 mm	1120 N	1650 N

NEW

NEW

d	l +1		No.	
4,8	10,3	1,6 - 6,4	10.670.048.103	500
	16,9	6,4 - 12,7	10.670.048.169	500
	24,8	12,7 - 19,8	10.670.048.248	500
d_k 16,0	d_m 2,8	k 1,8 4,9 mm	1530 N	2300 N

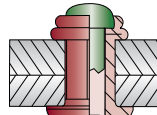
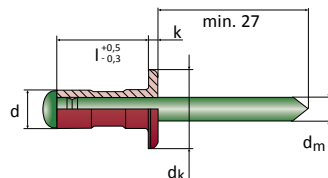


1²

Multigrip Blind Rivet OPTO® Series 10.612

Aluminium / Stainless Steel

- > Dome Head
- > open



EN AW - 5052 [AlMg2,5]

d	l +1		No.	
3,2	8,0	0,8 - 4,8	10.612.032.080	500
	11,1	3,5 - 8,0	10.612.032.110	500
d_k 6,4	d_m 1,8	k 1,0	3,3 mm 670 N 900 N	
4,0	9,5	1,2 - 6,4	10.612.040.095	500
	12,7	4,0 - 9,5	10.612.040.127	500
	16,9	6,4 - 12,7	10.612.040.169	500
d_k 7,9	d_m 2,3	k 1,2	4,1 mm 980 N 1320 N	

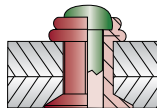
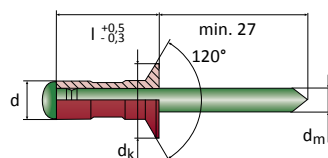
d	l +1		No.	
4,8	10,3	1,5 - 6,0	10.612.048.103	500
	15,1	4,8 - 11,1	10.612.048.151	500
	16,9	6,4 - 12,7	10.612.048.169	500
	24,8	12,7 - 19,8	10.612.048.248	500
d_k 9,8	d_m 2,8	k 1,5	4,9 mm 1530 N 2300 N	



Multigrip Blind Rivet OPTO® Series 10.612

Aluminium / Stainless Steel

- > Countersunk Head
- > open



EN AW - 5052 [AlMg2,5]

d	l +1		No.	
4,0	9,7	1,2 - 6,4	10.612.400.097	500
	12,7	4,3 - 9,5	10.612.400.127	500
d_k 7,5	d_m 2,1	4,1 mm 950 N 1500 N		

NEW

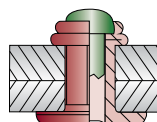
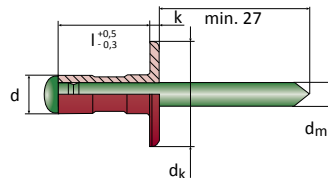
NEW



Multigrip Blind Rivet OPTO® Series 10.632/652/672

Aluminium / Stainless Steel

- > Large Dome Head
- > open



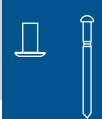
EN AW - 5052 [AlMg2,5]

d	l +1		No.	
3,2	8,0	0,5 - 5,0	10.632.032.080	500
	11,0	4,0 - 7,9	10.632.032.110	500
d_k 9,5	d_m 1,8	k 1,2	3,3 mm 670 N 900 N	
4,0	9,5	1,2 - 6,4	10.652.040.095	500
	12,7	4,0 - 9,5	10.652.040.127	500
d_k 12,0	d_m 2,3	k 1,5	4,1 mm 980 N 1320 N	

d	l +1		No.	
4,8	10,3	1,6 - 6,4	10.672.048.103	500
	16,9	6,4 - 12,7	10.672.048.169	500
	24,8	12,7 - 19,8	10.672.048.248	250
d_k 16,0	d_m 2,8	k 1,8	4,9 mm 1530 N 2300 N	

Multigrip Blind Rivet OPTO®

Series 10.607

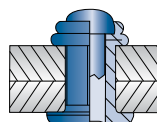
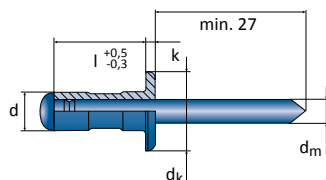


1 2

Steel / Steel

Dome Head <
open <

OPTO®



d	l +1		No.	
3,2	9,0	1,1 - 4,0	10.607.032.090	500
	13,0	4,0 - 8,0	10.607.032.130	500
d_k 7,2	d_m 2,1	k 0,9	3,3 mm 1500 N 1700 N	
4,0	11,0	2,0 - 6,5	10.607.040.110	500
	d_k 8,1	d_m 2,7	k 1,2	4,1 mm 1950 N 2350 N

NEW

d	l +1		No.	
4,8	10,3	1,2 - 4,8	10.607.048.103	500
	14,5	4,0 - 9,0	10.607.048.145	500
	17,5	7,5 - 12,5	10.607.048.175	500
d_k 9,8	d_m 2,9	k 1,8	4,9 mm 2700 N 3300 N	
6,4	14,5	1,5 - 7,0	10.607.064.145	500
	20,0	7,0 - 12,5	10.607.064.200	250
	25,0	12,0 - 17,5	10.607.064.250	250
d_k 12,7	d_m 3,8	k 2,2	6,5 mm 6500 N 4200 N	

NEW

NEW

NEW

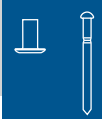
NEW

NEW

Countersunk head versions available on request.

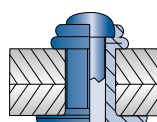
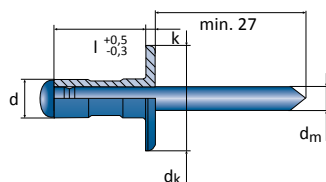
Multigrip Blind Rivet OPTO®

Series 10.677



Steel / Steel

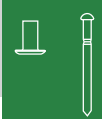
Large Dome Head <
open <



d	l +1		No.	
4,8	11,0	1,0 - 6,0	10.677.048.110	500
	17,0	3,0 - 12,0	10.677.048.169	500
d_k 16,0	d_m 3,4	k 1,6	4,9 mm 2050 N 2940 N	

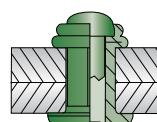
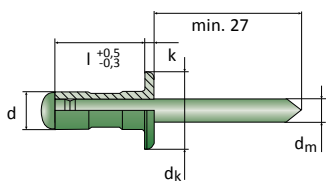
Multigrip Blind Rivet OPTO®

Series 10.618



Stainless Steel / Stainless Steel

Dome Head <
open <



d	l +1		No.	
3,2	8,0	1,0 - 4,0	10.618.032.080	500
	d_k 6,3	d_m 2,1	k 0,9	3,3 mm 1600 N 2000 N
4,0	10,0	1,0 - 4,5	10.618.040.100	500
	12,0	2,5 - 6,5	10.618.040.120	500
	15,0	4,5 - 9,5	10.618.040.150	500
d_k 7,9	d_m 2,8	k 1,3	4,1 mm 2700 N 3500 N	

d	l +1		No.	
4,8	10,3	1,5 - 6,0	10.618.048.103	500
	12,7	2,5 - 7,5	10.618.048.127	500
	17,5	7,5 - 12,5	10.618.048.175	500
d_k 9,8	d_m 3,4	k 1,8	3,3 mm 3900 N 5000 N	
6,4	15,0	1,5 - 7,0	10.618.064.150	250
	20,0	7,0 - 12,5	10.618.064.200	250
	25,0	12,0 - 17,5	10.618.064.250	250
d_k 12,7	d_m 4,0	k 2,7	6,5 mm 12500 N 7000 N	

NEW

NEW

NEW

NEW

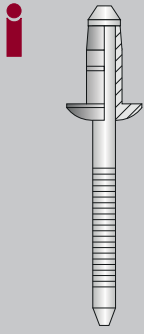
1

3

Multigrip Blind Rivet OPTO®-BULB

NEW

OPTO®-BULB



The high-strength OPTO®-version

Large grip ranges and higher shear and tensile forces

- OPTO®-Bulb is the universal rivet for difficult jobs.

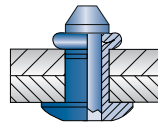
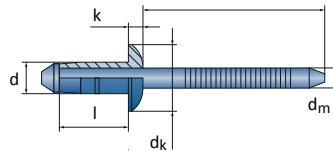
The OPTO®-Bulb is combining the flexibility of multigrip rivets with the excellent strength of the FERRO®-Bulb series. It offers a secure locking of the remaining mandrel as well as a smooth formed closing head.



Multigrip Blind Rivet OPTO®-BULB Series 10.692

Steel / Steel

- > Dome Head
- > open



d	l +1		No.	
6,4	13,0	1,5 - 5,5	10.692.064.130	250
	17,0	5,0 - 9,0	10.692.064.170	250
d _k 13,4	d _m 4,1	k 3,1	6,5 mm 11000 N 7800 N	

NEW

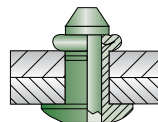
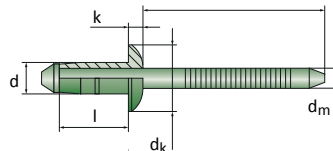
NEW



Multigrip Blind Rivet OPTO®-BULB Series 10.691

Stainless Steel / Stainless Steel

- > Dome Head
- > open

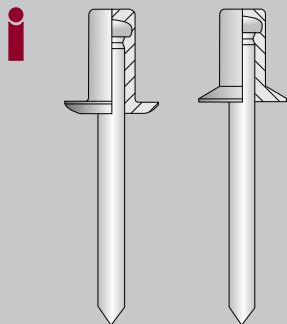


d	l +1		No.	
6,4	13,0	1,5 - 5,5	10.691.064.130	250
	17,0	5,0 - 9,0	10.691.064.170	250
d _k 13,4	d _m 4,1	k 3,1	6,5 mm 14000 N 8000 N	

NEW

NEW





Due to its closed rivet body the **CERTO®** sealed blind rivets are experts for **liquid tight processing**. The rivets characteristic guarantees a **captive remaining mandrel** and a **smooth, burr-free closing head**, which is perfect for **automated handling**.

The properties mentioned above are the reasons why **CERTO®** sealed blind rivets are the fastening element of choice for the automotive industry, like, e.g. for the purposes of AIRBAG production. Further fields of application can be found in tank and container manufacturing as well as in the construction sector.

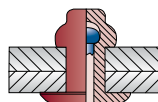
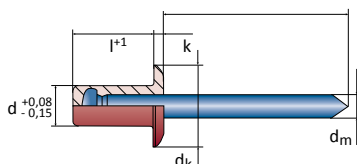
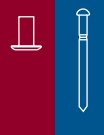


EN AW - 5019 (AlMg5)











Sealed Blind Rivet CERTO® Series 10.900









Aluminium / Steel



Dome Head <
closed <

DIN EN ISO 15973

d	l +1		No.		
3,2	6,5	0,5 - 2,0	10.900.032.065		500
	8,0	1,5 - 3,5	10.900.032.080		500
	9,5	3,0 - 5,0	10.900.032.095		500
	11,0	4,5 - 6,5	10.900.032.110		500
	12,5	6,0 - 8,0	10.900.032.125		500
d _k 6,0±0,3	d _m 1,7	k 1,1±0,15	 3,3 mm	 1100 N	 1450 N
4,0	8,0	0,5 - 3,5	10.900.040.080		500
	9,5	3,0 - 5,0	10.900.040.095		500
	11,0	4,5 - 6,5	10.900.040.110		500
	12,5	6,0 - 8,0	10.900.040.125		500
	14,5	7,5 - 10,0	10.900.040.145		500
d _k 8,0±0,4	d _m 2,2	k 1,3±0,2	 4,1 mm	 1650 N	 2500 N

d	l +1		No.		
4,8	8,5	0,5 - 3,5	10.900.048.085	500	
	9,5	3,0 - 5,0	10.900.048.095	500	
	11,0	4,5 - 6,5	10.900.048.110	500	
	13,0	6,0 - 8,0	10.900.048.130	500	
	14,5	7,5 - 9,5	10.900.048.145	500	
	16,0	9,0 - 11,0	10.900.048.160	500	
	18,0	10,5 - 13,0	10.900.048.180	500	
	21,0	12,5 - 16,0	10.900.048.210	500	
	25,0	15,5 - 20,0	10.900.048.250	500	
d _k 9,5 ± 0,4	d _m 2,7	k 1,5 ± 0,2	 4,9 mm	 2400 N	 3400 N
6,4	12,5	1,5 - 6,5	10.900.064.125	500	
	15,5	3,5 - 9,5	10.900.064.155	500	
d _k 13,0 ± 0,4	d _m 3,7	k 2,0 ± 0,03	 6,5 mm	 3620 N	 4950 N

NEW





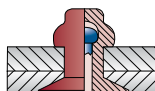
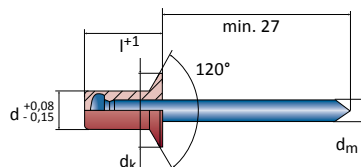
Sealed Blind Rivet CERTO® Series 10.900



EN AW - 5019 [AlMg5]

Aluminium / Steel

> Countersunk Head
> closed



DIN EN ISO 15974

d	l +1		No.	
3,2	8,0	1,0 - 3,5	10.900.320.080	500
	9,5	2,5 - 5,0	10.900.320.095	500
	11,0	4,0 - 6,5	10.900.320.110	500
	12,5	5,5 - 8,0	10.900.320.125	500
	13,5	7,0 - 9,0	10.900.320.135	500
dk 6,0 ± 0,3	dm 1,7	3,3 mm	1100 N	1450 N
4,0	9,5	1,5 - 5,0	10.900.400.095	500
	11,0	4,0 - 6,5	10.900.400.110	500
	12,5	6,0 - 8,0	10.900.400.125	500
dk 8,0 ± 0,4	dm 2,2	4,1 mm	1650 N	2500 N

d	l +1		No.	
4,8	9,5	1,5 - 5,0	10.900.480.095	500
	11,0	4,0 - 6,5	10.900.480.110	500
	13,0	6,0 - 8,0	10.900.480.130	500
	14,5	7,5 - 9,5	10.900.480.145	500
	16,0	9,0 - 11,0	10.900.480.160	500
	18,0	10,0 - 13,0	10.900.480.180	500
	19,5	11,5 - 14,5	10.900.480.195	500
	21,0	12,5 - 16,0	10.900.480.210	500
dk 9,5 ± 0,4	dm 2,7	4,9 mm	2400 N	3400 N

Options of additional sealings for closed blind rivet products

Various trials have shown that, during practical deployment, **CERTO®** connections feature excellent **splash water-tightness**. If you need a hydraulic seal or if there is a build up of certain media (e.g. in drainage pipes), an additional seal between the rivet body and component borehole is necessary.

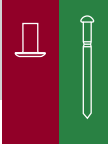
Upon request, **CERTO®** sealed blind rivets can be provided with an additional seal (Neopren® washer).

As a result of the increasing demand for **improved possibilities of sealing** closed end blind rivets and blind rivet nuts, we offer a variety of sealing rings – automatically assembled, not fixed enclosed or with directly applied and certified compounds.



Sealed Blind Rivet CERTO®

Series 10.902



1 4

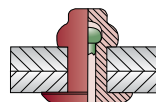
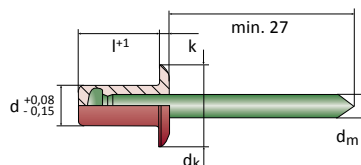
Aluminium / Stainless Steel

Dome Head <
closed <

DIN EN ISO 15973



EN AW - 5019 [AlMg5]

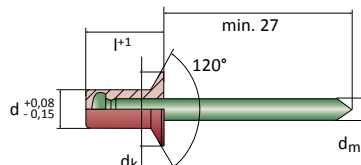


d	l +1		No.	
3,2	6,5	0,5 - 2,0	10.902.032.065	500
	8,0	1,5 - 3,5	10.902.032.080	500
	9,5	3,0 - 5,0	10.902.032.095	500
	11,0	4,5 - 6,5	10.902.032.110	500
	12,5	6,0 - 8,0	10.902.032.125	500
d_k 6,0 ± 0,3	d_m 1,7	k 1,1 ± 0,15		
4,0	8,0	0,5 - 3,5	10.902.040.080	500
	9,5	3,0 - 5,0	10.902.040.095	500
	11,0	4,5 - 6,5	10.902.040.110	500
	12,5	6,0 - 8,0	10.902.040.125	500
d_k 8,0 ± 0,4	d_m 2,2	k 1,3 ± 0,2		

d	l +1		No.	
4,8	8,0	0,5 - 3,5	10.902.048.080	500
	9,5	3,0 - 5,0	10.902.048.095	500
	11,0	4,5 - 6,5	10.902.048.110	500
	12,5	6,0 - 8,0	10.902.048.125	500
	14,0	7,5 - 9,5	10.902.048.140	500
	16,0	9,0 - 11,0	10.902.048.160	500
	18,0	10,5 - 13,0	10.902.048.180	500
	21,0	12,5 - 16,0	10.902.048.210	500
d_k 9,5 ± 0,4	d_m 2,7	k 1,5 ± 0,2		



EN AW - 5019 [AlMg5]



Aluminium / Stainless Steel

Countersunk Head <
closed <

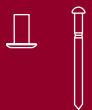
according to DIN EN ISO 15974

d	l +1		No.	
4,0	9,5	1,5 - 5,0	10.902.400.095	500
	11,0	4,0 - 6,5	10.902.400.110	500
	12,5	6,0 - 8,0	10.902.400.125	500
	14,5	7,5 - 10,0	10.902.400.145	500
d_k 8,0 ± 0,3	d_m 2,2	k 1,3 ± 0,2		

NEU

Partial view of the wire coil warehouse at the Froendenberg plant.

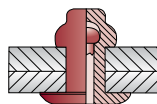
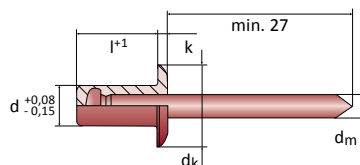




Sealed Blind Rivet CERTO® Series 10.901

Aluminium / Aluminium

> Dome Head
> closed



EN AW - 1050 A [Al 99,5]

DIN EN ISO 15975

d	l +1		No.	
3,2	8,0	0,5 - 3,5	10.901.032.080	500
	9,5	3,5 - 5,0	10.901.032.095	500
dk 6,0 ± 0,3	dm 1,9	k 1,1 ± 0,15	3,3 mm 520 N 540 N	
4,0	9,5	0,5 - 5,0	10.901.040.095	500
	12,5	4,5 - 8,0	10.901.040.125	500
dk 8,0 ± 0,4	dm 2,2	k 1,3 ± 0,2	4,1 mm 720 N 760 N	

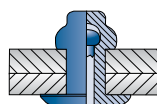
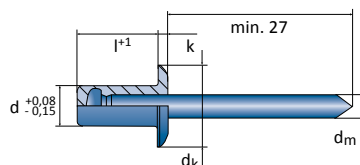
d	l +1		No.	
4,8	9,5	1,0 - 4,5	10.901.048.095	500
	11,5	4,0 - 6,5	10.901.048.115	500
	14,5	6,5 - 9,5	10.901.048.145	500
	18,0	9,0 - 13,0	10.901.048.180	500
dk 9,5 ± 0,4	dm 2,7	k 1,5 ± 0,2	4,9 mm 1000 N 1400 N	



Sealed Blind Rivet CERTO® Series 10.907

Steel / Steel

> Dome Head
> closed



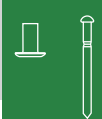
DIN EN ISO 15976

d	l +1		No.	
3,2	6,0	0,5 - 1,5	10.907.032.060	500
	8,0	1,0 - 3,0	10.907.032.080	500
	9,5	2,5 - 5,0	10.907.032.095	500
	12,0	3,0 - 7,0	10.907.032.120	500
dk 6,0 ± 0,3	dm 1,9	k 1,0 ± 0,3	3,3 mm 1150 N 1200 N	
4,0	6,0	0,5 - 1,5	10.907.040.060	500
	8,0	1,0 - 3,0	10.907.040.080	500
	9,5	2,5 - 5,0	10.907.040.095	500
	12,0	4,5 - 6,5	10.907.040.120	500
dk 8,0 ± 0,3	dm 2,3	k 1,4 ± 0,3	4,1 mm 1700 N 1850 N	

d	l +1		No.	
4,8	8,0	0,5 - 3,0	10.907.048.080	500
	9,5	2,5 - 5,0	10.907.048.095	500
	12,0	4,5 - 6,5	10.907.048.120	500
	16,0	6,0 - 10,5	10.907.048.160	500
dk 9,5 ± 0,3	dm 2,9	k 1,7 ± 0,3	4,9 mm 2400 N 2800 N	

Premium class. Certo® sealed blind rivets made of steel covered with a thick-film passivation.

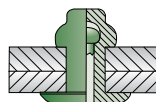
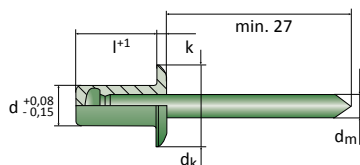
By the use of an adapted thick-film passivation accepted in automotive industries, CERTO® sealed blind rivets made of steel feature an **out-standing corrosion conformity**.



Stainless Steel A2 / Stainless Steel C1



















[1.4301]



Dome Head <
closed <

DIN EN ISO 16585

d	l +1		No.		
3,2	6,0	0,5 - 1,5	10.908.032.060	500	
	8,0	1,0 - 3,5	10.908.032.080	500	
	9,5	2,5 - 5,0	10.908.032.095	500	
	12,0	4,5 - 7,0	10.908.032.120	500	
d _k 6,0 _{±0,3}	d _m 1,9	k 1,0 _{±0,3}	 3,3 mm	 2000 N	 2400 N
4,0	6,0	0,5 - 1,5	10.908.040.060	500	
	8,0	1,0 - 3,0	10.908.040.080	500	
	9,5	2,5 - 4,5	10.908.040.095	500	
	12,0	4,5 - 7,0	10.908.040.120	500	
	16,0	8,0 - 11,0	10.908.040.160	500	
d _k 8,0 _{±0,3}	d _m 2,3	k 1,4 _{±0,3}	 4,1 mm	 3000 N	 4000 N

d	l +1		No.		
4,8	8,0	0,5 - 4,0	10.908.048.080	500	
	9,5	2,5 - 5,0	10.908.048.095	500	
	12,0	4,5 - 7,5	10.908.048.120	500	
	16,0	6,0 - 11,0	10.908.048.160	500	
	20,0	9,0 - 14,5	10.908.048.200	500	
d _k 9,5 ±0,3	d _m 2,9	k 1,7 ±0,3	 4,9 mm	 4500 N	 5500 N
6,4	10,0	2,5 - 5,0	10.908.064.100	250	
	12,0	4,5 - 6,5	10.908.064.120	250	
	16,0	6,0 - 10,5	10.908.064.160	250	
	18,0	7,5 - 11,5	10.908.064.180	250	
d _k 12,5 ±0,3	d _m 3,8 ±0,05	k 2,7	 6,5 mm	 6500 N	 8000 N

CERTO® sealed blind rivets made of stainless steel A4

Following the trend to more and more high-grade materials and surfaces, CERTO® sealed blind rivets can be produced in stainless steel quality A4 on request.

Especially in plant and container constructions and all seawater related applications, but even safety-related functions for example in power stations the CERTO® A4 is an excellent fastener solution.

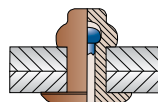
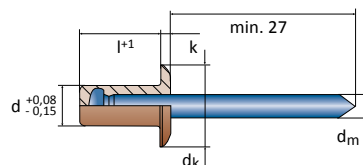




Sealed Blind Rivet CERTO® Series 10.905

Copper / Steel

> Dome Head
> closed



[2.0040]

d	l +1		No.	
3,2	6,5	0,5 - 2,0	10.905.032.065	500
	8,0	1,5 - 3,5	10.905.032.080	500
	9,5	3,0 - 5,0	10.905.032.095	500
	12,5	4,5 - 8,0	10.905.032.125	500
d_k 6,0 ±0,3	d_m 1,7	k 1,1 ±0,15	3,3 mm	950 N 1250 N
4,0	8,0	0,5 - 3,5	10.905.040.080	500
	10,0	3,0 - 5,0	10.905.040.100	500
d_k 8,0 ±0,4	d_m 2,2	k 1,3 ±0,2	4,1 mm	1400 N 2100 N

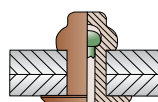
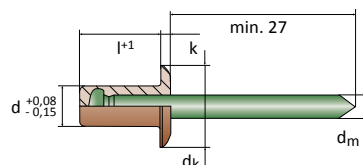
d	l +1		No.	
4,8	9,5	1,0 - 5,0	10.905.048.095	500
	11,5	4,5 - 6,5	10.905.048.115	500
d_k 9,5 ±0,4	d_m 2,7	k 1,7 ±0,2	4,9 mm	2150 N 3200 N



Sealed Blind Rivet CERTO® Series 10.906

Copper / Stainless Steel A2/A3

> Dome Head
> closed



[2.0040]

d	l +1		No.	
3,2	6,5	0,5 - 2,0	10.906.032.065	500
	8,0	1,5 - 3,5	10.906.032.080	500
	9,5	3,0 - 5,0	10.906.032.095	500
	12,5	4,5 - 8,0	10.906.032.125	500
d_k 6,0 ±0,3	d_m 1,7	k 1,1 ±0,15	3,3 mm	950 N 1250 N

d	l +1		No.	
4,0	8,0	0,5 - 3,5	10.906.040.080	500
	10,0	3,0 - 5,0	10.906.040.100	500
d_k 8,0 ±0,4	d_m 2,2	k 1,3 ±0,2	4,1 mm	1400 N 2100 N
4,8	9,5	1,0 - 5,0	10.906.048.095	500
	11,5	4,5 - 6,5	10.906.048.115	500
d_k 9,5 ±0,4	d_m 2,7	k 1,5 ±0,2	4,9 mm	2150 N 3200 N

CE-nose pieces

You can handle CERTO® sealed blind rivets with standard nose pieces. To avoid burr formation while using types without head pit, we offer special CE-nose pieces. These can be found on [page 205](#).



CERTO®-PERFECT. The sealed blind rivet for special needs.

The strong CERTO®-PERFECT sealed blind rivet forms a large and smooth closing head by its special clamped rivet sleeve.

This head makes sure that the danger of pull through in case of oversized bore holes can be reduced to a minimum. Additionally the tightness in standing water is increased significant.



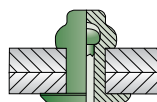
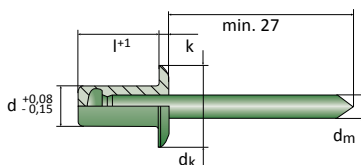
Sealed Blind Rivet CERTO®-PERFECT Series 10.908/103



Stainless Steel A2 / Stainless Steel C1



[1.4301]



Dome Head <
closed <

d	l +1		No.	
4,8	12,0	0,5 - 4,5	10.908.048.120/103	500
	13,7	3,5 - 6,0	10.908.048.137/103	500
	15,3	5,0 - 7,5	10.908.048.153/103	500
$d_k 9,5 \pm 0,3$	$d_m 2,9$	$k 1,25$	4,9 mm	4500 N 5500 N

NEW

NEW

NEW

Structural Blind Rivet FERO®-BULB



The **FERO®-BULB** series are used in large quantities in various industrial appliances for a long time. Particularly in the field of vehicle and tank construction, this type of rivet is an excellent choice. **FERO®-BULB** blind rivets feature the following characteristics:

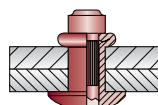
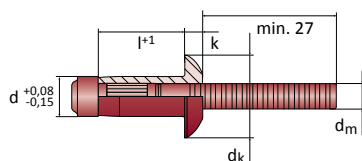
- very high shear strength through a captive mandrel
- large setting head which folds during the setting process
- captive mandrel locks vibration proof inside the rivet
- dust proof and splash waterproof
- high clamping force onto components



Structural Blind Rivet FERO®-BULB Series 10.790

Aluminium / Aluminium

> Dome Head
> open



d	l +1		No.	
6,4	10,5	2,8 - 4,8	10.790.064.105	250
d _k 13,5	d _m 4,2	k 3,3	6,6 mm 4200 N 3100 N	
6,4	14,5	6,8 - 8,8	10.790.064.145	250
d _k 13,5	d _m 4,2	k 3,3	6,6 mm 4600 N 3100 N	

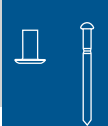
d	l +1		No.	
6,4	16,5	8,8 - 10,8	10.790.064.165	250
d _k 13,5	d _m 4,2	k 3,3	6,6 mm 5000 N 3100 N	

NEW



Series 10.792

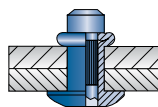
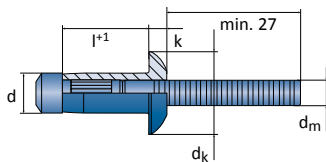
Structural Blind Rivet FERO®-BULB





1 6



Steel / Steel



Dome Head <
open <



FERO®-BULB

d	l +1		No.	
4,0	7,5	1,0 - 3,0	10.792.040.075	500
d _k 8,0	d _m 2,6	k 1,5	4,1 - 4,3 mm	2400 N
4,0	9,6	3,0 - 5,0	10.792.040.095	500
d _k 8,0	d _m 2,6	k 1,5	4,1 - 4,3 mm	3500 N
4,0	12,5	5,0 - 7,0	10.792.040.125	500
d _k 8,0	d _m 2,6	k 1,5	4,1 - 4,3 mm	4100 N

d	l +1		No.	
4,8	9,0	1,5 - 3,5	10.792.048.090	500
d _k 9,6	d _m 3,1	k 1,5	4,9 - 5,1 mm	3600 N
4,8	11,5	3,5 - 6,0	10.792.048.115	500
d _k 9,6	d _m 3,1	k 1,5	4,9 - 5,1 mm	4200 N
4,8	14,5	6,0 - 8,5	10.792.048.145	250
d _k 9,6	d _m 3,1	k 1,5	4,9 - 5,1 mm	5600 N

d	l +1		No.	
6,4	9,0	1,5 - 3,5	10.792.064.090	250
d _k 13,4	d _m 3,9	k 2,7	6,7 - 6,9 mm	10000 N
6,4	10,5	2,8 - 4,8	10.792.064.105	250
d _k 13,4	d _m 3,9	k 2,7	6,7 - 6,9 mm	11000 N
6,4	12,5	4,8 - 6,8	10.792.064.125	250
d _k 13,4	d _m 3,9	k 2,7	6,7 - 6,9 mm	12500 N
6,4	14,5	6,8 - 8,8	10.792.064.145	250
d _k 13,4	d _m 3,9	k 2,7	6,7 - 6,9 mm	13000 N
6,4	16,5	8,8 - 10,8	10.792.064.165	250
d _k 13,4	d _m 3,9	k 2,7	6,7 - 6,9 mm	14500 N
6,4	18,5	10,8 - 12,8	10.792.064.185	250
d _k 13,4	d _m 3,9	k 2,7	6,7 - 6,9 mm	15000 N
6,4	20,5	12,8 - 14,8	10.792.064.205	250
d _k 13,4	d _m 3,9	k 2,7	6,7 - 6,9 mm	16500 N

NEW

Countersunk head available too!



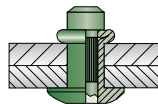
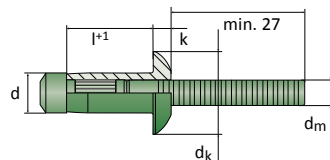


Structural Blind Rivet FERO®-BULB

Series 10.791

Stainless Steel / Stainless Steel

> Dome Head
> open



d	l +1		No.	
4,0	7,5	1,0 - 3,0	10.791.040.075	500
	10,0	3,0 - 5,0	10.791.040.100	500
	12,5	5,0 - 7,0	10.791.040.125	500
d _k 8,0	d _m 2,6	k 1,5	4,1 - 4,3 mm 5200 N 4000 N	

d	l +1		No.	
4,8	10,0	1,5 - 3,5	10.791.048.100	500
	12,5	3,5 - 6,0	10.791.048.125	500
	15,5	6,0 - 8,5	10.791.048.155	250
d _k 9,6	d _m 3,2	k 1,5	4,9 - 5,1 mm 5500 N 5000 N	

d	l +1		No.	
6,4	9,0	1,5 - 3,5	10.791.064.090	250
d _k 13,4	d _m 3,9	k 2,7	6,7 - 6,9 mm 11000 N 8800 N	

6,4	10,5	2,8 - 4,8	10.791.064.105	250
d _k 13,4	d _m 3,9	k 2,7	6,7 - 6,9 mm 11500 N 8800 N	

6,4	12,5	4,8 - 6,8	10.791.064.125	250
d _k 13,4	d _m 3,9	k 2,7	6,7 - 6,9 mm 12500 N 8800 N	

6,4	14,5	6,8 - 8,8	10.791.064.145	250
d _k 13,4	d _m 3,9	k 2,7	6,7 - 6,9 mm 13000 N 8800 N	

6,4	16,5	8,8 - 10,8	10.791.064.165	250
d _k 13,4	d _m 3,9	k 2,7	6,7 - 6,9 mm 14000 N 8800 N	

6,4	18,5	10,8 - 12,8	10.791.064.185	250
d _k 13,4	d _m 3,9	k 2,7	6,7 - 6,9 mm 15000 N 8800 N	



NEW. RivdomTWO - the strong battery rivet tool for blind rivets up to diameter 6,4 mm for all materials - even high-strength versions!

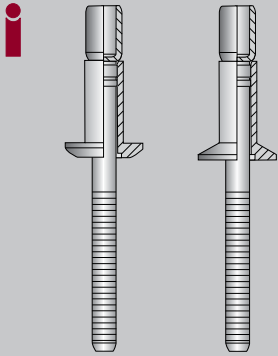
Large stroke (30mm) and a working power of 20.000 N combined with the mobility of a cordless rivet tool. ► [Page 196](#).

For an optimized processing of our structural **FERO®-BULB** blind rivets the pneumatic-hydraulic tool **BZ 133A** is available.

This tool offers a perfect adjustment of the stroke (18 mm) and the working power (24.000 N) combined with adapted clamping jaws to the grooves of the mandrel. This guarantees powerful handling with reduced abrasion.

Details can be found on ► [page 204](#).





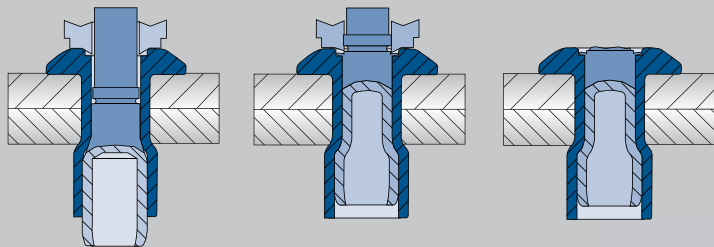
FERO®-BOLT high-strength blind rivets are **first-class** fasteners for industrial applications, especially in those with the attention to the **safety factor**.

Due to its special construction method, this rivet is able to take over **load-bearing functions**. Typical is the **guaranteed flush break** with the setting head.

Advantages:

- very high shear strength with captive mandrel that absorbs parts of the forces
- large grip ranges
- visually checkable interlocking of the mandrel
- vibration resistant
- splash waterproof
- very good capability of filling the bore hole

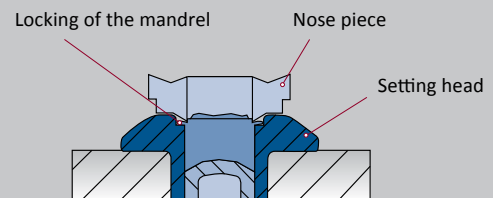
Processing:



The head will be deformed by pulling back the mandrel so that the rivet squeezes perfectly against the wall of drill hole.

The necessary special **FERO®-BOLT** nose piece assures that the mandrel is locked failsafe in the connection.

Principle:



Available up to 9.8 mm diameter!!

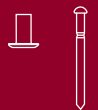


! Please note that the tool has to be prepared with the **special nose piece** shown beside!

361.121.008.401 4,8 mm Nose piece
361.121.008.601 6,4 mm Nose piece

For the handling of **FERO®-BOLT** high-strength blind rivets **BZ 123 A** is available. More details on ► [page 202](#).



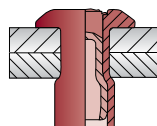
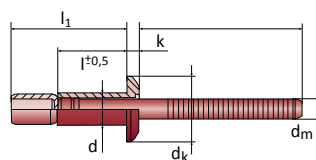


Structural Blind Rivet FERO®-BOLT

Series 10.793 **NEW**

Aluminium / Aluminium

- > Dome Head
- > open



d	l / l ₁		No.	
4,8	10,0 / 18,2	1,6 - 6,9	10.793.048.100	500
	14,0 / 24,4	1,6 - 11,1	10.793.048.140	500
dk 10,1	dm 2,9	k 2,1	4,9 - 5,1 mm	← 2200 N →

NEW

NEW

d	l / l ₁		No.	
6,4	14,0 / 23,7	2,0 - 9,5	10.793.064.140	250
	19,0 / 32,9	2,0 - 15,8	10.793.064.200	250
dk 13,3	dm 3,9	k 2,9	6,6 - 7,0 mm	← 4200 N →

NEW

NEW

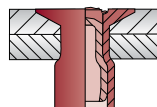
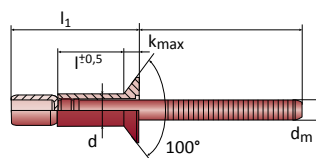


Structural Blind Rivet FERO®-BOLT

Series 10.793 **NEW**

Aluminium / Aluminium

- > Countersunk Head
- > open



d	l / l ₁		No.	
6,4	16,5 / 27,0	3,2 - 12,1	10.793.640.165	250
dk 10,0	dm 3,9	k 2,4	6,6 - 7,0 mm	← 4700 N →

NEW



Truck lashing rails fixed with FERO®-BOLT blind rivets. Further information on the BZ123 A tool on [page 202](#).



Series 10.797

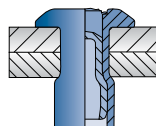
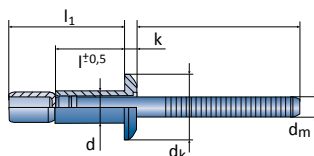
Structural Blind Rivet
FERO®-BOLT

17

Steel / Steel

Dome Head <
open <

FERO®-BOLT



d	l / l1		No.	
4,8	10,0 / 18,2	1,6 - 6,9	10.797.048.100	500
	14,0 / 24,4	1,6 - 11,1	10.797.048.140	500
	14,0 / 24,4	1,6 - 11,1	10.797.048.140	500
dk 10,1	dm 2,9	k 2,1	4,9 - 5,1 mm	5800 N

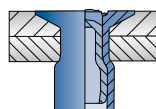
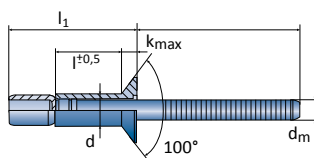
d	l / l1		No.	
6,4	14,0 / 23,7	2,0 - 9,5	10.797.064.140	250
	19,0 / 32,9	2,0 - 15,9	10.797.064.190	250
	19,0 / 32,9	2,0 - 15,9	10.797.064.190	250
dk 13,3	dm 3,9	k 2,9	6,6 - 7,0 mm	10500 N



Series 10.797

Structural Blind Rivet
FERO®-BOLT

Steel / Steel

Countersunk Head <
open <

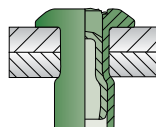
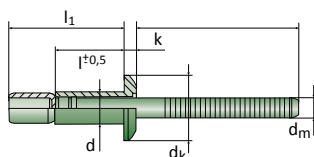
d	l / l1		No.	
4,8	12,0 / 20,0	3,2 - 8,4	10.797.480.125	500
	16,0 / 26,2	3,2 - 12,2	10.797.480.165	250
	16,0 / 26,2	3,2 - 12,2	10.797.480.165	250
dk 8,5	dm 2,9	k 2,2	4,9 - 5,1 mm	5800 N

NEW
NEW

d	l / l1		No.	
6,4	16,5 / 27,0	3,2 - 12,1	10.797.640.165	250
	16,5 / 27,0	3,2 - 12,1	10.797.640.165	250
	16,5 / 27,0	3,2 - 12,1	10.797.640.165	250
dk 10,0	dm 3,9	k 2,4	6,6 - 7,0 mm	11000 N

Structural Blind Rivet FERO®-BOLT
Series 10.798

Stainless Steel / Stainless Steel

Dome Head <
open <

d	l / l1		No.	
4,8	10,0 / 18,2	1,6 - 6,9	10.798.048.100	500
	14,0 / 24,4	1,6 - 11,1	10.798.048.140	500
	14,0 / 24,4	1,6 - 11,1	10.798.048.140	500
dk 10,1	dm 2,9	k 2,1	4,9 - 5,1 mm	6000 N

d	l / l1		No.	
6,4	14,0 / 23,7	2,0 - 9,5	10.798.064.140	250
	19,0 / 32,9	2,0 - 15,9	10.798.064.190	250
	19,0 / 32,9	2,0 - 15,9	10.798.064.190	250
dk 13,3	dm 3,9	k 2,9	6,6 - 7,0 mm	10500 N

Folding Blind Rivet



According to the **ARCO®** body-bound rivet on ► [page 78](#) this folding rivet forms a large upset head too. This guarantees an **equal distribution of forces**, so that especially plastics and other soft or vulnerable materials resist against cracking or pullthrough.

Typically this rivet is used in all areas of **industrial light weight constructions**. As a result of the locked mandrel in the connection, the spread rivet is splash water resistant. VVG offers two different types – the standard split rivet and a **high strength version with neoprene washer**.



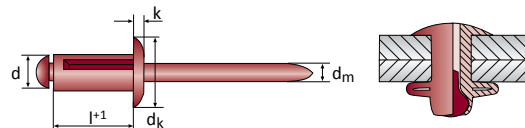
Folding Blind Rivet (Standard) Series 10.716



Aluminium / Aluminium



>Dome Head
>open



d	l +1		No.	
4,0	13,6	1,0 - 3,0	10.716.040.136	500
	18,8	1,0 - 7,0	10.716.040.188	500
	24,5	5,0 - 12,0	10.716.040.245	500
d_k 8,0	d_m 2,5	k 1,4	4,2 mm	500 N 800 N

NEW

d	l +1		No.	
4,8	15,3	1,0 - 3,0	10.716.048.153	500
	20,5	1,0 - 9,0	10.716.048.205	500
	24,5	4,0 - 12,0	10.716.048.245	500
	28,0	6,0 - 16,0	10.716.048.280	500
d_k 9,6	d_m 2,9	k 1,6	5,0 mm	900 N 1100 N

NEW

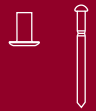


Large head diameter 16 mm available!

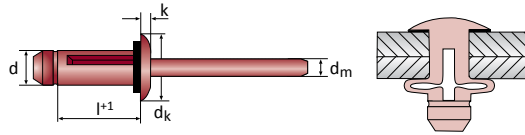




Folding Blind Rivet (Spezial-2) Series 10.716

**1** ⁸**Aluminium / Aluminium**

Dome Head <
open <
with neoprene washer <

Folding Blind Rivet

d	l +1		No.	
5,2	17,5	1,2 - 4,8	10.716.052.175	500
	19,1	1,5 - 6,4	10.716.052.191	500
	22,2	4,7 - 9,6	10.716.052.222	500
	25,4	7,9 - 12,7	10.716.052.254	500
	28,6	11,1 - 15,9	10.716.052.286	500
d _k 11,5 - 0,5	d _m 2,9	k 2,5 - 0,25	5,3 - 5,6 mm	3000 N 2000 N

d	l +1		No.	
6,3	20,0	1,5 - 6,4	10.716.063.200	500
	27,0	6,3 - 12,7	10.716.063.270	250
d _k 14,4 - 0,3	d _m 3,9	k 3,0 - 0,25	6,3 - 6,7 mm	4900 N 3000 N

- increased shear and tensile strength
- splash water proof
- large grip range
- universal applicable

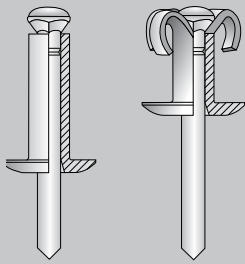


Nose pieces for folding blind rivets

Folding blind rivets 5,2 M8 for BZ 103 A (and precursors) / RivdomONE	321.103.716.052-0-1
Folding blind rivets 5,2 M10 for BZ 123 A (and precursors) / RivdomTWO	321.123.716.052-0-1
Folding blind rivets 6,3 M10 for BZ 123 A (and precursors) / RivdomTWO	321.123.716.063-0-1



Body-Bound Blind Rivet ARCO®



During the setting process, edges on the mandrel head cut the rivet shaft into four segments. These four segments then unfold on the component surface thus forming the **large locking head**. Once the mandrel reaches its predetermined breakload, the mandrel head falls out of the rivet body. The large locking head allows **connecting soft or brittle components** and helps transfer high tensile forces.

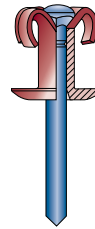
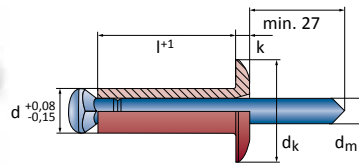
ARCO® body-bound blind rivets are preferably used for plastic or wood element assembly, caravan manufacturing and fastening of cladings.



Body-Bound Blind Rivet ARCO® Series 10.710

Aluminium / Steel

- > Dome Head
- > open



EN AW - 5019 [AlMg5]

d	l +1		No.	
3,2	10,0	1,5 - 5,0	10.710.032.100	500
	16,0	4,0 - 11,0	10.710.032.160	500
	18,0	5,0 - 13,0	10.710.032.180	500
dk 6,5	dm 1,7	k 0,8	 3,55 + 0,1 mm	 850 N 720 N
4,0	10,0	1,5 - 5,0	10.710.040.100	500
	16,0	4,0 - 11,0	10.710.040.160	500
	18,0	5,0 - 13,0	10.710.040.180	500
dk 7,7	dm 2,4	k 1,5	 4,35 + 0,1 mm	 1330 N 1300 N

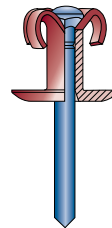
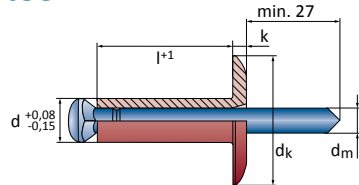
d	l +1		No.	
4,8	10,0	1,5 - 4,0	10.710.048.100	500
	15,0	3,0 - 9,0	10.710.048.150	500
	21,0	8,0 - 15,0	10.710.048.210	500
	26,0	14,0 - 20,0	10.710.048.260	250
	35,0	19,0 - 28,0	10.710.048.350	250
dk 11,0	dm 2,8	k 1,5	 5,15 + 0,1 mm	 2100 N 1950 N



Body-Bound Blind Rivet ARCO® Series 10.718 **NEW**

Aluminium / Steel

- > Large Dome Head
- > open



EN AW - 5019 [AlMg5]

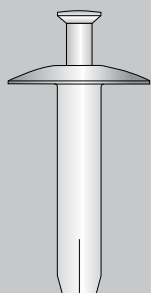
d	l +1		No.	
4,8	15,0	5,0 - 8,0	10.718.048.150	500
	21,0	11,0 - 15,0	10.718.048.210	250
dk 16,0	dm 2,8	k 2,0	 5,15 + 0,1 mm	 1700 N 1700 N

NEW

NEW

Hammer Stroke Blind Rivet

1¹⁰



Hammer stroke or drive rivets are set by driving the mandrel into the rivet body (e.g. by means of a hammer). This causes the lower end of the rivet body to expand and allows riveting components with open-end boreholes and also riveting of blind-end boreholes.

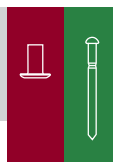
This riveting technology is suitable for the most diverse material combinations.

For blind-end boreholes, a trial is necessary in order to establish the optimum rivet length based on the component characteristics and the firmness requirements.

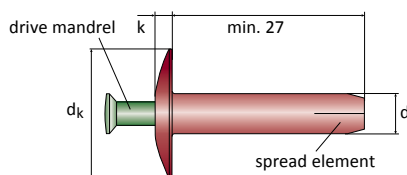
Hammer
Stroke Rivet



Hammer Stroke Blind Rivet Series 10.602



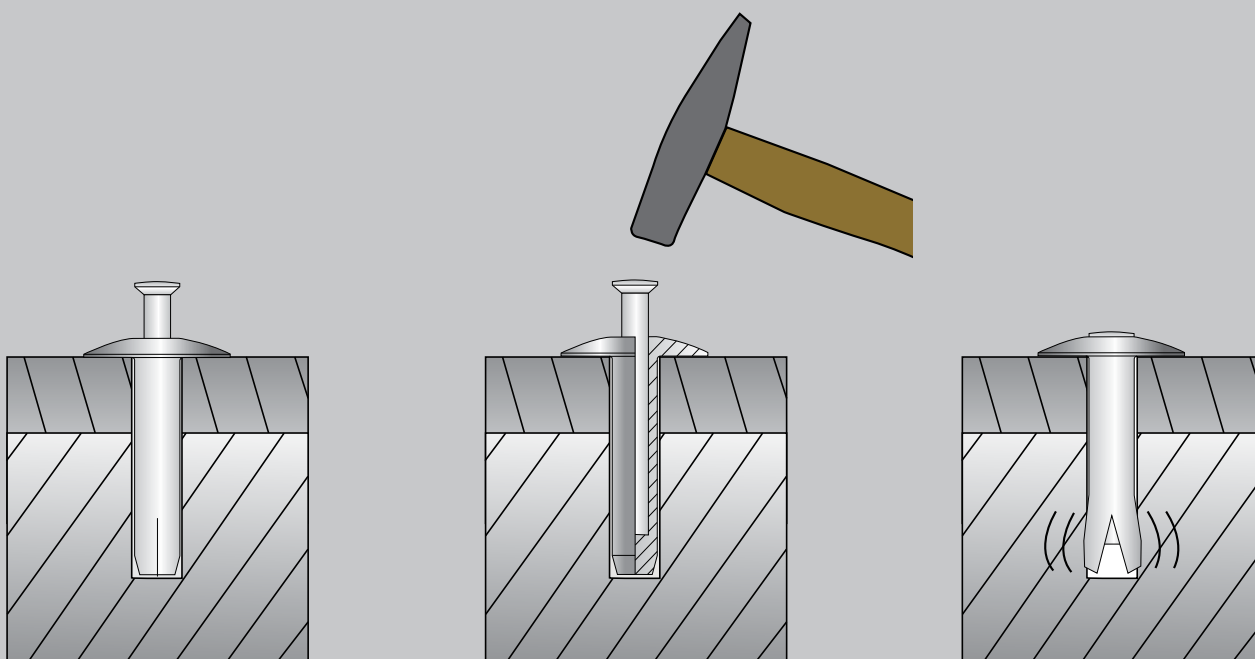
Aluminium / Stainless Steel



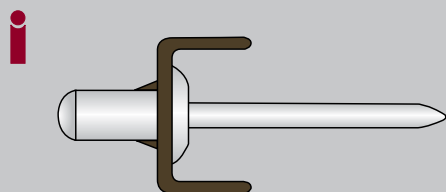
Dome Head <
open <

d	l +1		No.	
4,8	16,0	9,5 - 12,0	10.602.048.160	500
	18,0	12,0 - 14,5	10.602.048.180	500
	20,0	14,5 - 16,5	10.602.048.200	500
d_k 14,0 +0,5		k 2,0	4,9 mm	

d	l +1		No.	
4,8	26,0	20,0 - 22,0	10.602.048.260	500
	30,0	25,0 - 26,5	10.602.048.300	500
	36,0	29,0 - 31,0	10.602.048.360	500
	40,0	33,0 - 35,5	10.602.048.400	500
	50,0	43,5 - 46,0	10.602.048.500	250
d_k 15,5		k 2,0	4,9 mm	



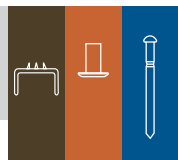
Grounding Blind Rivet



Grounding rivets offer a simple and reliable opportunity to create a ground connection with your products.

The grounding is achieved by pressing the toothing on the conductor into the material. The grounding conductor can be used with standard cable sockets.

The processing of grounding blind rivets can be done with all kinds of standard type blind rivet tools.



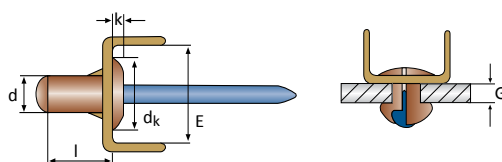
Grounding Blind Rivet Series 10.705



Copper / Steel (copper plated)



- > Dome Head
- > open
- > Earthing Conductor
Brass (2x)

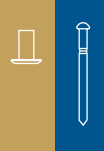


d	l		No.	
3,8	8,0	0,0 - 1,2	10.705.038.080	500
d _k 8,0	k 1,4	E 14,0	3,9 mm	1400 N



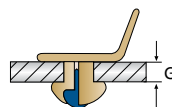
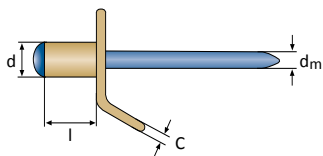


Grounding Blind Rivet Series 10.705



1¹¹

Messing / Steel (copper plated)



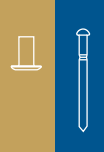
Dome Head <
open <
1x Earthing Conductor <

Grounding
Blind Rivet

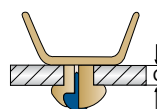
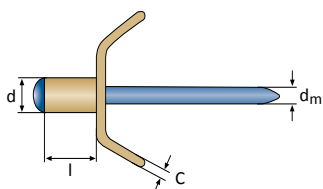
d	l		No.	
4,0	7,0	0,0 - 4,0	10.705.040.070/715	500
d _m 2,4	c 0,8	⌀ 4,1 mm		



Grounding Blind Rivet Series 10.705



Messing / Steel (copper plated)

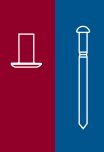


Dome Head <
open <
2x Earthing Conductor <

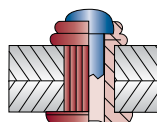
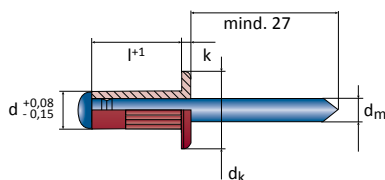
d	l		No.	
4,0	7,0	0,0 - 4,0	10.705.040.070/716	500
d _m 2,4	c 0,8	⌀ 4,1 mm		



Grounding Multigrip Blind Rivet OPTO® Series 10.600



Aluminium / Steel



Dome Head <
open <
grooved shank <

d	l		No.	
4,0	9,5	1,2 - 6,4	10.600.040.095/2	500
d _k 7,9	d _m 2,3	k 1,2	⌀ 4,1 mm	1140 N
1670 N				



Qualified for grounding by grooved shaft.

Blind- and split blind rivets made from plastic can be used e.g. in many fields of electric, automotive or computer hardware industries.

Plastic blind rivets are non-power conducting and independent from corrosion. The weight is very low and the components are spared while processing.

Plastic blind rivets can be operated by standard blind rivet tools.



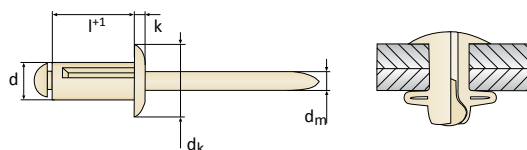
Plastic Split Blind Rivet Series 10.719

Nylon / Polycarbonate



[PA 6.6.POM]

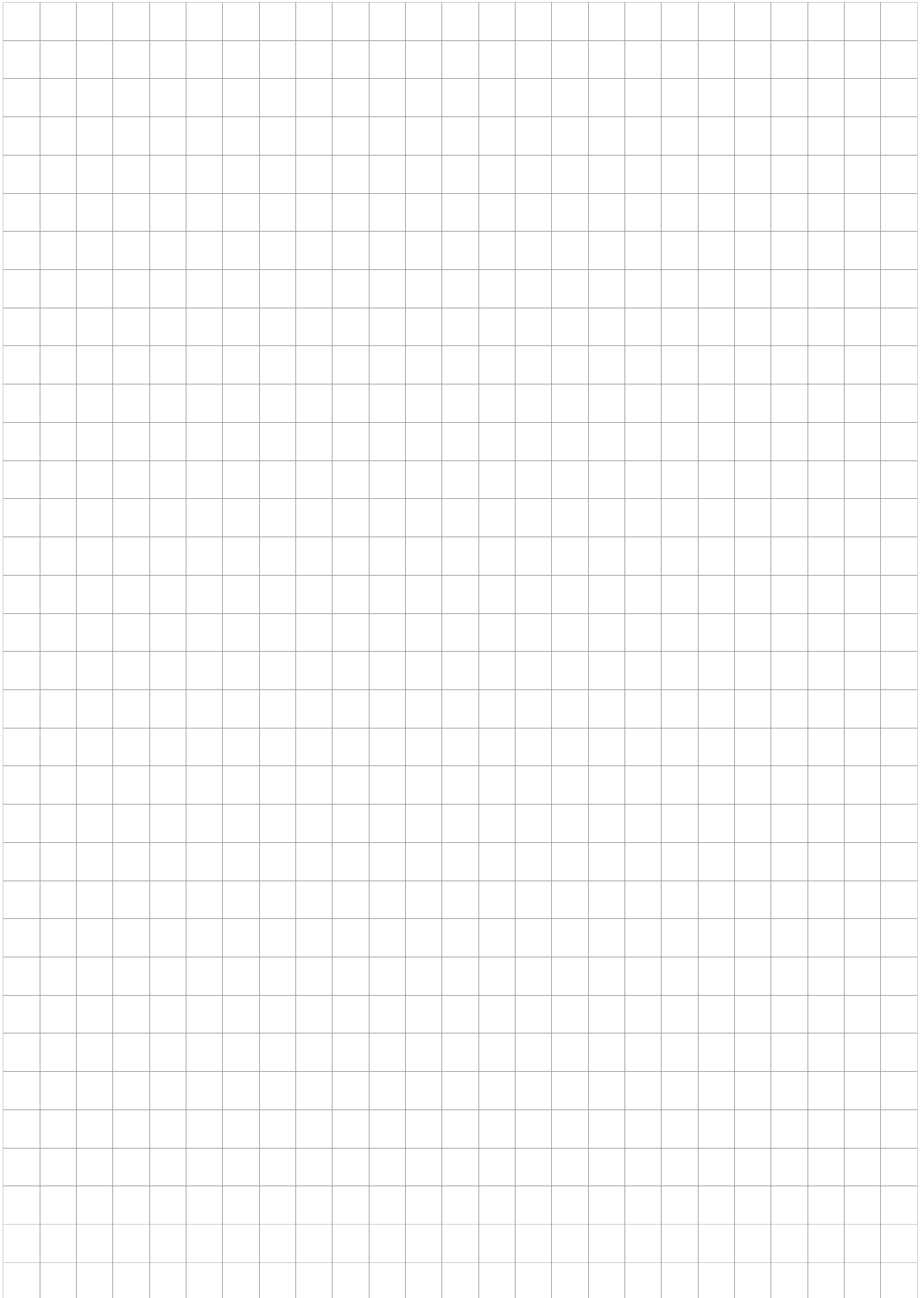
- > Dome Head
- > open
- > black



d	l +1		No.	
4,9	18,5	1,5 - 4,5	10.719.049.185*	500
	20,0	3,0 - 6,0	10.719.049.200	500
	25,0	6,0 - 10,0	10.719.049.250	500
d _k 12,0	d _m 2,9	k 3,3* / 1,8	5,0 mm	

We can offer further non-mentioned plastic fasteners on request.









Blind rivet nuts have become an **indispensable part modern installation engineering**. They allow to

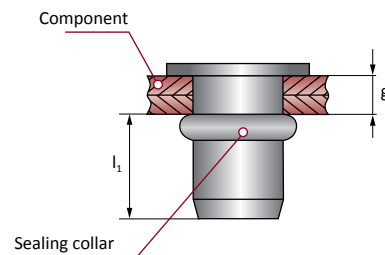
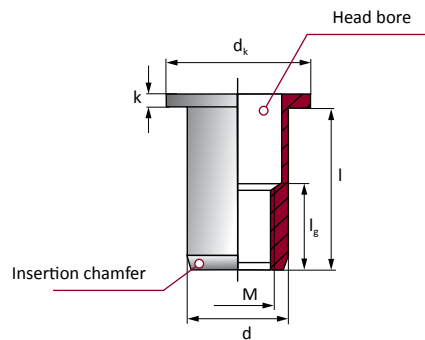
- install bolt threads of different types into ...
 - ... thin or low rigidity components
 - ... hollow sections or other components not accessible from both sides
 - ... components which already have a coated surface,
- connect different components to each other at the same time and
- attach additional parts.

The continuous development of new types, forms and dimensions documents the **nearly unlimited fields of applications**. The **Honsel-Group** has been one of the leading companies in this progress for decades.

On the following pages we present several interesting examples like the **patented OPTO® multigrip blind rivet nut** (► [page 98/99](#)), **high-strength HONSELmuttern** made from aluminium or steel (► [page 91](#)) or blind rivet nuts made from **stainless steel A4** (► [page 116](#)).

Open and closed versions, possibilities to avoid rotating (knurling, (partial) hexagon shafts or downhead toothing) and flat, countersunk or small countersunk heads - the VVG range is one of the most compact and complete programmes available immediately from stock.

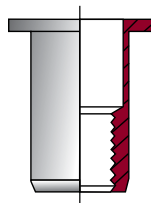
- d - shaft diameter
- dk - setting head diameter
- k - setting head height
- lg - thread length min. 1 x M
- l - shaft length
- l1 - projection length
- M - thread diameter
- g - grip length



Head design

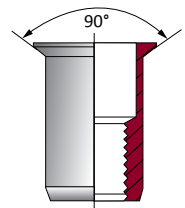
Flat head

- universally useable type of nut with a high level of availability and a wide material spectrum
- used with dry and grease-free components



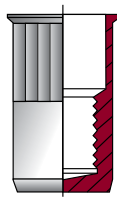
Countersunk head

For the machining of blind rivet nuts with countersunk head, the component is only to be countersunk to a depth at which the countersunk head protrudes by min. 0,1 mm after setting.



Small countersunk head

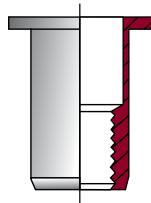
The countersinking of the borehole is not normally necessary when machining blind rivet nuts. If technically necessary, the countersinking is to be carried out so that the countersunk head protrudes by min. 0,1 mm after setting.



Shank designs

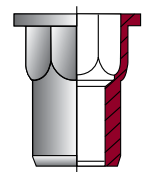
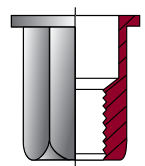
Round shaft blind rivet nuts

- universal nut type with high availability and broad material spectrum
- use with dry and grease-free components



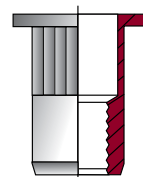
Blind rivet nuts with hexagonal shaft (Hexatop / Hexaform)

- shaft design with positive locking antirotation device
- preferred use with coated components
- high rotation resistance even with insufficient setting device height
- suitable for multiple screwing



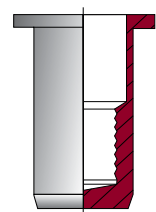
Blind rivet nuts with knurled shaft

- shaft design with positive locking antirotation device
- preferred use in components with low rigidity (component material less "hard" than the material of the blind rivet nut)

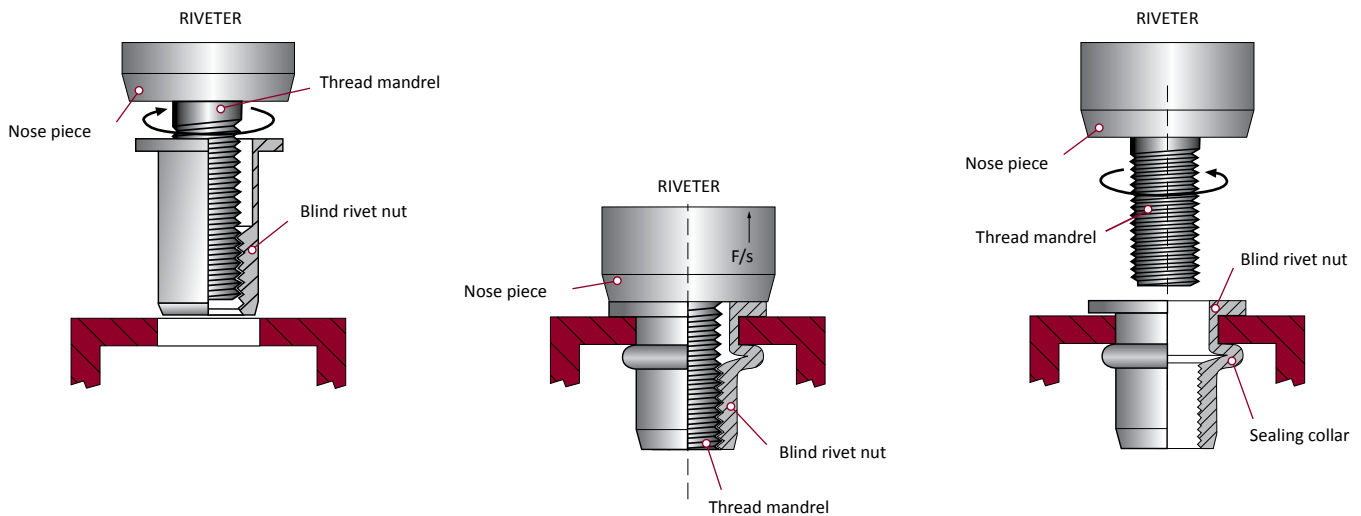


Blind rivet nuts with closed shaft

- closed nut shaft hinders the entrance of liquid and gas through the nut
- additional sealing possible between the nut shaft and the component borehole
- mechanical properties identical to comparable design with open shaft



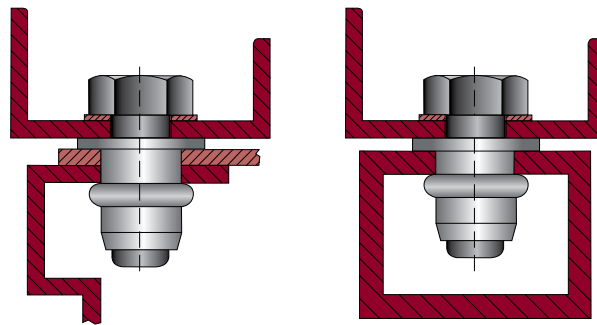
Installation



Blind rivet nuts are distinguished by simple and rapid installation. To set the nut, it is screwed onto the threaded mandrel of the setting tool, inserted into the component borehole, and set through the tool stroke. This causes the closing bead of the nut to form. After the threaded mandrel is removed, the components can be screwed tight.

For installing the nut, various tools are available with which the procedure can be carried out carefully. Setting tools operated by muscle power or by pneumatic hydraulics which can be selected.

Animation
blind rivet nut



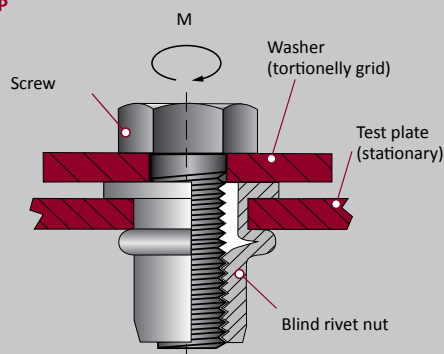
General assembly instructions

In order to guarantee correct functioning of the blind rivet nut, the points listed in the following should be noted:

- set blind rivet nut until complete formation of the closing head
- threaded mandrel must be easy to unscrew after setting
- installation at correct angle to the component surface
- blind rivet nuts with standard countersunk head should be sunk with a slight protrusion
- when using blind rivet nuts with small countersunk head (e.g. FLATSERT) it is not necessary to sink the borehole
- for blind rivet nuts without an additional positive locking anti-rotational device, the component surfaces must be dry, clean and grease-free
- specified component bore holes must be maintained: overlarge boreholes lead to problems with torque and load capacity

Tightening torque

TEST-SETUP



To measure the screwing torque, the nut is to be tested while setting into a test plate, a torsionally secured steel underlay plate superimposed, and the screw tightened. The following conditions apply for the test:

- Test / inspection plate of construction steel:
Uncoated, dry, grease-free, thickness c. max. grip length of the nut
- Component bore hole:
Nominal dimension of the nut shaft + 0.2 mm
- Machine screw:
Oiled, rigidity class min. 8.8

Under the defined conditions, the result will be the **minimum value** measured before failure of the nut. Rotation of the nut counts as failure, as does recognisable plastic deformation of the blind rivet nut. In practical use, partially different usage conditions may apply which can lead to an alteration on the tightening torques. **In general we recommend an examination of each specific individual case.**

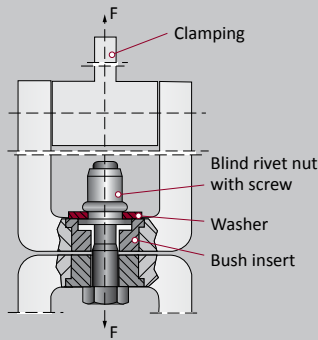
Maximum tightening torque - measured values [Nm]

Type	Dimensions	Page	M 3	M 4	M 5	M 6	M 8	M 10	M 12
AFM		94	1	3	4	6	18	28	45
AFM-G		94	–	3	4	6	18	28	–
AFM-R		95	*						
ASM		96	1	3	4	6	18	28	45
ASM-G		96	–	–	4	6	18	–	–
ASM-KLSK		97	–	2	4	6	18	–	–
ASM-R		97	*						
OPTO® AFM		98	–	3	4	6	18	–	–
OPTO® ASM		98	–	3	4	6	18	–	–
OPTO® SFM		99	–	4	6	11	24	–	–
OPTO® SSM		99	–	4	6	11	24	–	–
SFM		100	1,2	4	6	11	24	50	82
SFM-G		100	–	–	6	11	24	50	–
SFM-R		101	*						
SFM-PL		101	–	–	–	12	21	–	–
SSM		102	–	4	6	11	24	50	–
SSM-G		102	–	–	6	11	24	50	–
SSM-R		102	*						
SSM-KLSK		103	–	3	5	10	20	–	–
SSM-R-KLSK		103	*						
UNIVERSAL		104	–	3	5	10	20	40	–
UNIVERSAL-R		104	*						
UNIVERSAL-R-G		104	*						
FLATSERT		105	2	3	5	10	20	40	–
FLATSERT-R		105	*						
HEXAFORM®-FK		106	–	5	7	13	25	55	85
HEXAFORM®-KLSK		106	1,2	5	7	13	25	55	85
HEXAFORM®-KLSK-G		106/7	–	5	7	13	25	55	–
HEXATOP®-FK		107	–	4	6	11	24	50	–
HEXATOP®-KLSK		107	–	4	6	11	24	50	–
EFM		108	2	4	6	11	24	50	85
EFM-G		108	–	4	6	11	24	50	–
EFM-R		109	*						
ESM		110	–	4	6	11	24	50	85
ESM-R		110	*						
ESM-KLSK		111	–	4	6	11	24	50	–
ESM-KLSK-G		111	–	4	6	11	24	50	–
ESM-KLSK-R		112	*						
UNIVERSAL		113	–	3	5	10	20	–	–
UNIVERSAL-R		113	*						
HEXATOP®-E-FK		114	2	5	7	13	25	55	–
HEXATOP®-E-FK-G		114	–	5	7	13	25	–	–
HEXATOP®-E-KLSK		115	2	5	7	13	25	55	85
HEXATOP®-E-KLSK-G		115	–	5	7	13	25	–	–
EFM A4		116	–	5	8	15	26	–	–
ESM KLSK A4		116	–	3	6	11	20	–	–
HEXATOP®-E-KLSK A4		116	–	5	8	15	26	–	–

* Knurled blind rivet nuts are designed for use with less solid materials or in components with a dense surface coating. For this reason, there are no general torque information. In individual cases, the test is carried out on the original component.

Axial tensile force

TEST-SETUP



The axial tensile force is determined with the testing device stipulated in DIN EN ISO 14589.

Unlike the blind rivet test, the nut is riveted into a steel washer. This is placed on the bush insert and the two parts of the device are screwed together.

The following conditions have validity during the test:

- Testing device in accordance with DIN EN ISO 14589
- Forming speed approx. 10 mm/min.
- Min. property class of the screw 8.8
- Direction of traction against the closing head of the nut

The **minimum values** measured under the stipulated conditions until the nut fails. Failure are deemed to be the tearing out of the thread or the tearing off of the closing head of the nut.

The stated values are to be seen as being standard values for the design of the splice. In practical use, it is normally the case that there are deviating conditions of use which can result in changes being made to the type of failure and the forces. **We therefore generally recommend that a bearing test be carried out in certain individual cases.**

Axial tensile force - measured values [Nm]

Thread dimensions	Page	M 3	M 4	M 5	M 6	M 8	M 10	M 12
Type								
AFM	94	1500	2600	4300	6700	11000	17500	28000
AFM-G	94	–	2600	4300	6700	11000	17500	–
AFM-R	95	1300	2400	4000	6000	10500	17000	–
ASM	96	1500	2600	4300	6700	11000	17500	28000
ASM-G	96	–	–	4300	6700	11000	–	–
ASM-KLSK	97	–	2400	4000	6000	10500	–	–
ASM-R	97	–	2400	4000	6000	10500	17000	–
OPTO® AFM	98	–	3000	4200	6500	10500	–	–
OPTO® ASM	98	–	3000	4200	6500	10500	–	–
OPTO® SFM	99	–	5200	9500	15500	21500	–	–
OPTO® SSM	99	–	5200	9500	15500	21500	–	–
SFM	100	4000	5200	9500	16500	23500	37000	54000
SFM-G	100	–	–	9500	16500	23500	37000	–
SFM-R	101	–	5000	9000	13500	20000	28000	45000
SFM-PL	101	–	–	–	–	15000	27000	–
SSM	102	–	5200	9500	16500	23500	37000	–
SSM-G	102	–	–	9500	16500	23500	37000	–
SSM-R	102	–	5000	9000	15000	20000	28000	45000
SSM-KLSK	103	–	5000	9000	15000	20000	–	–
SSM-R-KLSK	103	4000	4800	8000	12000	18000	25000	40000
UNIVERSAL	104	–	6500	8000	11500	14500	22000	–
UNIVERSAL-R	104	–	6000	7500	10000	14000	17500	–
UNIVERSAL-R-G	104	–	6000	7500	10000	14000	–	–
FLATSERT	105	3000	6000	9500	13000	16000	19500	–
FLATSERT-R	105	–	5500	9000	12000	15000	–	–
HEXAFORM®-FK	106	–	5200	9500	16500	23500	37000	56000
HEXAFORM®-KLSK	106	3500	5000	9000	16000	23000	36500	55000
HEXAFORM®-KLSK-G	106/7	–	5200	9500	16500	23500	37000	–
HEXATOP®-FK	107	–	3800	6000	9500	12500	37000	–
HEXATOP®-KLSK	107	–	3800	6000	9500	12500	37000	–
EFM	108	4500	7000	11000	18000	27000	40000	57000
EFM-G	108	–	7000	11000	18000	27000	40000	–
EFM-R	109	4000	6500	10000	17000	25000	38000	–
ESM	110	–	7000	11000	16000	27000	40000	57000
ESM-R	110	3700	6500	10000	15000	25000	38000	–
ESM-KLSK	111	–	6500	10000	15000	25000	38000	–
ESM-KLSK-G	111	–	7000	11000	18000	27000	40000	–
ESM-KLSK-R	112	3500	6500	10000	15000	25000	38000	50000
UNIVERSAL	113	–	7000	11000	18000	27000	–	–
UNIVERSAL-R	113	–	6800	10000	14000	25000	37000	–
HEXATOP®-E-FK	114	4000	6500	10000	17000	27000	39000	–
HEXATOP®-E-FK-G	114	–	6500	10000	17000	27000	–	–
HEXATOP®-E-KLSK	115	3800	6000	9500	16000	26000	39000	55000
HEXATOP®-E-KLSK-G	115	–	6000	9500	16000	26000	–	–
EFM A4	116	–	7000	11000	18000	27000	–	–
ESM KLSK A4	116	–	6500	10000	15000	25000	–	–
HEXATOP®-E-KLSK A4	116	–	6500	10000	15000	25000	–	–

How to find the correct length of the shaft?

Length of shaft =
size of component +
shaft diameter



More than standard



Our long-term experience and modern manufacturing plants enables us to create individual custom made products to complete the standard range of this catalogue.

Challenge us - we develop and produce YOUR special blind rivet nut. Professional and reliable.

Many expertises out of these projects have direct influence on the standard product range and support the continuous improvement.



Blind rivet nut with adjustable grip range

HONSEL provides the possibility to create an individual adjustable grip range according to customer special needs.

This version of blind rivet nuts and -bolts was created especially for brittle or soft plastic components.

Advantages:

- no pull-through
- no damage of assembly parts
- low turning forces while fixing



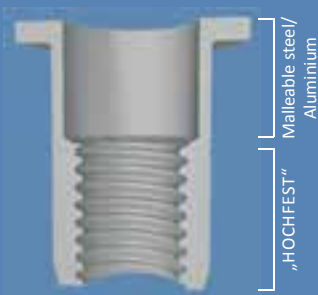


Pressure tight - blind rivet nut with sprayed seal

Based on the increasing demand of gas- and waterproofed fasteners with threads, HONSEL developed a closed end blind rivet nut with an additional seal made of automotive certified material that combined these requirements with the advantages of an economic and process secure machining.

The sprayed and embedded seal on the bottom of the head guarantees a much better form closure than conventional o-rings.

The hexagon shaft avoids any risk of rotation and offers higher clamping forces. An additional large head with a great bearing allocates of the forces on soft materials equally.



HONSEL's "HOCHFEST" technology enables the carrying capacity of the thread to be increased greatly. This facility ensures that when mechanical overload occurs, a 12.9 strength class screw ("HOCHFEST" steel) or an 8.8 strength class screw ("HOCHFEST" aluminium) fails much sooner than the HONSEL nut. This provides greater security in all applications where heightened mechanical specifications are required.

We supply the following embodiments

Shaft shapes::

- Fully and Partially hexagonal
- Round Shank
- Closed embodiments

Heads:

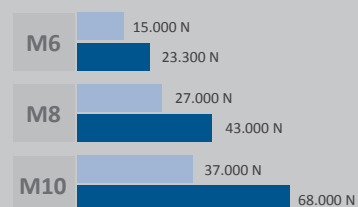
- Flat head
- Small countersunk head
- Countersunk head
- Large head

Advantages

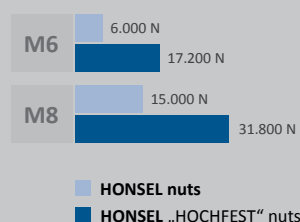
- An alternative to welded and punched nuts
- Withstands high moments of torque
- Allows for smaller dimensions to be used
- Rational machining
- Saves on weight
- Correctly sorted recycling (especially in the case of aluminium)
- Resistant to corrosion

Test load (N)

„HOCHFEST“ steel



„HOCHFEST“ alu



■ HONSEL nuts
■ HONSEL „HOCHFEST“ nuts

2¹

Blind Rivet Nuts Aluminium



AFM

Flat Head	Round Shank	open	94
Flat Head	Round Shank	closed	94
Flat Head	Round Shank	open/ <i>knurled</i>	95



ASM

Countersunk Head	Round Shank	open	96
Countersunk Head	Round Shank	closed	96
Countersunk Head	Round Shank	open/ <i>knurled</i>	97
Small Countersunk Head	Round Shank	open	97

2²

OPTO® Multigrip Blind Rivet Nuts



Flat Head	Round Shank	open	98
Countersunk Head	Round Shank	open	98



Flat Head	Round Shank	open	99
Countersunk Head	Round Shank	open	99

2³

Blind Rivet Nuts Steel



SFM

Flat Head	Round Shank	open	100
Flat Head	Round Shank	closed	100
Flat Head	Round Shank	open/ <i>knurled</i>	101

SFM-PL (Folding Blind Rivet Nut)

Flat Head	Round Shank	open/ <i>slotted</i>	101
-----------	-------------	----------------------	-----

SSM

Countersunk Head	Round Shank	open	102
Countersunk Head	Round Shank	closed	102
Countersunk Head	Round Shank	open/ <i>knurled</i>	102
Small Countersunk Head	Round Shank	open	103
Small Countersunk Head	Round Shank	open/ <i>knurled</i>	103

UNIVERSAL

Small Countersunk Head	Round Shank	open	104
Small Countersunk Head	Round Shank	open/ <i>knurled</i>	104
Small Countersunk Head	Round Shank	closed/ <i>knurled</i>	104



FLATSERT

Small Countersunk Head	Round Shank	open	105
Small Countersunk Head	Round Shank	open/ <i>knurled</i>	105

HEXAFORM®

Flat Head	Hexagonal Shank	open	106
Small Countersunk Head	Hexagonal Shank	open	106
Small Countersunk Head	Hexagonal Shank	closed	106/7

HEXATOP®

Flat Head	Partial Hexagonal S.	open	107
Small Countersunk Head	Partial Hexagonal S.	open	107



Blind rivet nuts out of brass producible on request.



2⁴

Blind Rivet Nuts Stainless Steel A2



Stainless Steel

EFM

Flat Head	Round Shank	open	108
Flat Head	Round Shank	closed	108
Flat Head	Round Shank	closed/ <i>knurled</i>	109

ESM

Countersunk Head	Round Shank	open	110
Countersunk Head	Round Shank	open/ <i>knurled</i>	110
Small Countersunk Head	Round Shank	open	111
Small Countersunk Head	Round Shank	closed	111
Small Countersunk Head	Round Shank	open/ <i>knurled</i>	112

2⁵

Blind Rivet Nuts Stainless Steel A4



Stainless Steel

EFM

Flat Head	Round Shank	open	116
-----------	-------------	------	-----

ESM

Small Countersunk Head	Round Shank	open	116
------------------------	-------------	------	-----

2⁶

Rivet Nut Captive Screw



Steel

Rincas

			117
--	--	--	-----

2⁷

Nylon Blind Rivet Nut



Nylon

with thread insert made of brass			118
----------------------------------	--	--	-----



Stainless Steel

UNIVERSAL

Small Countersunk Head	Round Shank	open	113
Small Countersunk Head	Round Shank	open/ <i>knurled</i>	113

HEXATOP®

Flat Head	Partial Hexagonal S.	open	114
Flat Head	Partial Hexagonal S.	closed	114
Small Countersunk Head	Partial Hexagonal S.	open	115
Small Countersunk Head	Partial Hexagonal S.	closed	115



Stainless Steel

HEXATOP®

Flat Head	Partial Hexagonal S.	open	116
-----------	----------------------	------	-----

2⁸

Neoprene Blind Rivet Nut



Neopren

Flat Head	Round Shank	open	119
-----------	-------------	------	-----





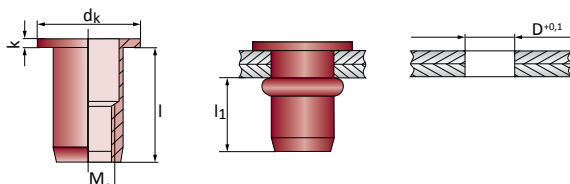
Blind Rivet Nut AFM

Series 10.850



Aluminium

- > Flat Head
- > Round Shank
- > Open



EN AW - 5754 [AlMg3]

M		I	No.	
M3	0,3 - 1,0	7,5	10.850.030.100	500
	0,3 - 2,0	8,5	10.850.030.200	500
	2,0 - 3,5	12,0	10.850.030.350	500
D 5,0	k 0,8	dk 7,0	li max. 6,0	1 Nm 1500 N
M4	0,5 - 3,0	11,0	10.850.040.300	500
	2,5 - 4,0	12,0	10.850.040.400	500
	3,0 - 5,0	14,0	10.850.040.500	500
D 6,0	k 0,8	dk 10,0	li max. 8,0	3 Nm 2600 N
M5	0,5 - 3,0	12,0	10.850.050.300	500
	3,0 - 4,0	13,0	10.850.050.400	500
	2,5 - 4,5	14,5	10.850.050.450	500
	4,0 - 6,0	16,0	10.850.050.600	500
D 7,0	k 1,0	dk 11,0	li max. 9,0	4 Nm 4300 N

Note the OPTO®multigrip blind rivet nut on ► page 98.

M		I	No.	
M6	0,5 - 3,0	14,5	10.850.060.300	500
	3,0 - 4,5	16,0	10.850.060.450	500
D 9,0	k 1,5	dk 13,0	li max. 11,0	6 Nm 6700 N
M8	0,5 - 3,0	17,0	10.850.080.300	500
	3,0 - 5,5	19,5	10.850.080.550	500
	5,5 - 7,5	21,5	10.850.080.750	500
D 11,0	k 1,5	dk 16,0	li max. 13,5	18 Nm 11000 N
M10	0,5 - 3,0	17,0	10.850.100.300	250
	2,0 - 4,5	22,0	10.850.100.450	250
	3,0 - 6,0	26,0	10.850.100.600	250
D 13,0	k 2,0	dk 19,0	li max. 16,5	28 Nm 17500 N
M12	1,0 - 4,0	26,0	10.850.120.400	250
	3,5 - 7,0	29,0	10.850.120.700	100
D 16,0	k 2,0	dk 23,0	li max. 18,5	45 Nm 28000 N

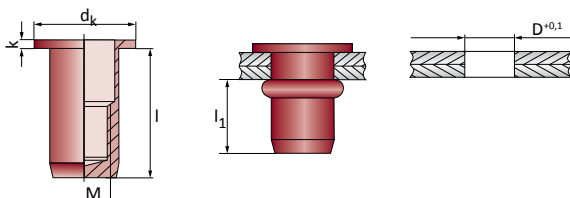


Blind Rivet Nut AFM-G

Series 10.854

Aluminium

- > Flat Head
- > Round Shank
- > Closed



EN AW - 5754 [AlMg3]

M		I	No.	
M4	0,3 - 2,0	22,0	10.854.040.200	500
	2,0 - 3,0	23,5	10.854.040.300	500
D 6,0	k 0,8	dk 10,0	li max. 13,5	3 Nm 2600 N
M5	0,3 - 3,0	18,5	10.854.050.300	500
	3,0 - 4,0	19,5	10.854.050.400	500
D 7,0	k 1,0	dk 11,0	li max. 15,5	4 Nm 4300 N
M6	0,5 - 3,0	22,0	10.854.060.300	500
	3,0 - 4,5	23,5	10.854.060.450	500
D 9,0	k 1,5	dk 13,0	li max. 18,5	6 Nm 6700 N

M		I	No.	
M8	0,5 - 3,0	26,5	10.854.080.300	250
	3,0 - 5,5	29,0	10.854.080.550	250
D 11,0	k 1,5	dk 16,0	li max. 23,0	18 Nm 11000 N
M10	1,0 - 3,0	32,5	10.854.100.300	250
	3,0 - 4,5	34,0	10.854.100.450	250
D 13,0	k 2,0	dk 19,0	li max. 28,5	28 Nm 17500 N

► Information about additional sealing possibilities for closed blind rivet nuts in chapter 1 on page 64.



You can use the classic brief description of our blind rivet nuts for your inquiries or orders:

Serial name: AFM
 + Thread size: M6
 + Maximum grip range: 3,0 mm
 = Brief description: AFM 6-30

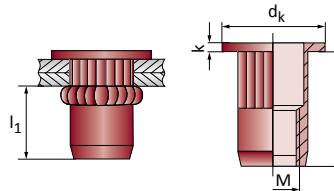
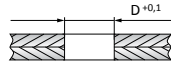


Aluminium

Flat Head <
Round Shank <
Open <
Knurled <



EN AW - 5754 [AlMg3]



M		I	No.	
M3	0,5 - 2,5	8,0	10.863.030.250	500
D 5,0	k 0,8	dk 7,0	li max. 4,5	↑ 1300 N
M4	0,5 - 3,0	10,0	10.863.040.300	500
	3,0 - 4,5	12,0	10.863.040.450	500
D 6,0	k 0,8	dk 9,0	li max. 6,0	↑ 2400 N
M5	0,5 - 3,0	12,0	10.863.050.300	500
	3,0 - 5,5	15,0	10.863.050.550	500
D 7,0	k 1,0	dk 10,0	li max. 7,0	↑ 4000 N

NEW

NEW

NEW

NEW

NEW

M		I	No.	
M6	0,5 - 3,0	13,5	10.863.060.300	500
	3,0 - 5,5	16,0	10.863.060.550	500
D 9,0	k 1,5	dk 13,0	li max. 8,5	↑ 6000 N
M8	0,5 - 3,0	16,5	10.863.080.300	500
	3,0 - 5,5	18,5	10.863.080.550	500
D 11,0	k 1,5	dk 15,0	li max. 11,0	↑ 10500 N
M10	0,5 - 3,0	18,5	10.863.100.300	250
	3,0 - 6,0	22,0	10.863.100.600	250
D 13,0	k 1,8	dk 17,0	li max. 16,0	↑ 17000 N

NEW

NEW

NEW

NEW

NEW

NEW

AFM

► All fasteners are available in other package sizes like big packs.





Blind Rivet Nut ASM

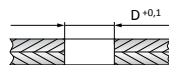
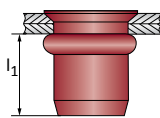
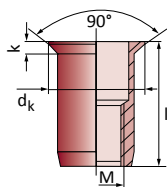
Series 10.851



EN AW - 5754 [AlMg3]

Aluminium

- > Countersunk Head
- > Round Shank
- > Open



M		I	No.	
M3	1,5 - 3,5	11,0	10.851.030.350	500
D 5,0	k 1,5	d_k 7,3	l_1 max. 7,0	1 Nm
M4	1,5 - 3,5 3,5 - 5,0	11,5 13,0	10.851.040.350 10.851.040.500	500 500
D 6,0	k 1,5	d_k 8,3	l_1 max. 8,0	3 Nm
M5	2,0 - 4,0 3,5 - 5,5	13,0 14,5	10.851.050.400 10.851.050.550	500 500
D 7,0	k 1,5	d_k 9,3	l_1 max. 9,0	4 Nm
M6	1,5 - 4,5 4,0 - 6,0	16,0 17,5	10.851.060.450 10.851.060.600	500 500
D 9,0	k 1,5	d_k 11,3	l_1 max. 11,0	6 Nm

NEW

M		I	No.	
M8	1,5 - 4,5 4,0 - 6,0	18,5 20,0	10.851.080.450 10.851.080.600	500 500
D 11,0	k 1,5	d_k 13,3	l_1 max. 13,5	18 Nm
M10	1,5 - 3,0 3,0 - 4,5 3,5 - 6,5	20,5 22,0 24,0	10.851.100.300 10.851.100.450 10.851.100.650	250 250 250
D 13,0	k 1,5	d_k 15,5	l_1 max. 16,5	28 Nm
M12	1,7 - 4,5 4,0 - 7,5	26,0 29,0	10.851.120.450 10.851.120.750	250 200
D 16,0	k 1,9	d_k 19,0	l_1 max. 17,5	45 Nm

Note the OPTO® multigrip blind rivet nuts on ► page 98.

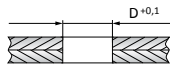
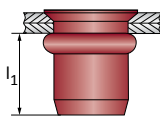
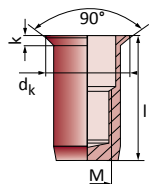


Blind Rivet Nut ASM-G

Series 10.855

Aluminium

- > Countersunk Head
- > Round Shank
- > Closed



EN AW - 5754 [AlMg3]

M		I	No.	
M5	1,5 - 4,0	19,5	10.855.050.400	500
D 7,0	k 1,5	d_k 9,3	l_1 max. 15,5	4 Nm
M6	1,5 - 4,5	23,5	10.855.060.450	500
D 9,0	k 1,5	d_k 11,3	l_1 max. 18,5	6 Nm

M		I	No.	
M8	1,5 - 4,5 4,5 - 6,0	28,0 29,5	10.855.080.450 10.855.080.600	500 500
D 11,0	k 1,5	d_k 13,3	l_1 max. 23,0	18 Nm

Blind Rivet Nut ASM-R

NEW Series 10.864



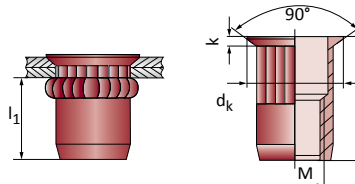
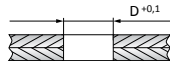
2 1

Aluminium

Countersunk Head <
Round Shank <
Open <
Knurled <



EN AW - 5754 [AlMg3]



M		I	No.	
M4	1,5 - 4,0	11,0	10.864.040.400	500
	4,0 - 5,5	13,0	10.864.040.550	500
D 6,0	k 1,5	dk 9,0	l1 max. 6,0	↑ 2400 N
M5	1,5 - 4,0	14,0	10.864.050.400	500
	4,0 - 6,5	16,5	10.864.050.650	500
D 7,0	k 1,5	dk 10,0	l1 max. 8,0	↑ 4000 N

NEW
NEW

M		I	No.	
M6	1,5 - 4,0	15,0	10.864.060.400	500
	4,0 - 6,5	17,5	10.864.060.650	500
D 9,0	k 1,5	dk 12,0	l1 max. 9,0	↑ 6000 N
M8	1,5 - 4,0	16,5	10.864.080.400	500
	4,0 - 6,5	19,5	10.864.080.650	500
D 11,0	k 1,5	dk 14,0	l1 max. 10,0	↑ 10500 N
M10	2,0 - 4,5	19,0	10.864.100.450	250
	4,5 - 7,5	22,0	10.864.100.750	250
D 13,0	k 1,7	dk 16,0	l1 max. 11,0	↑ 17000 N

NEW
NEW

NEW
NEW

ASM

Blind Rivet Nut ASM-KLSK

Series 10.851/10

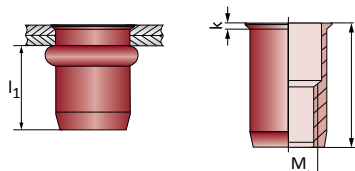
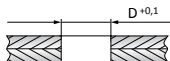


Aluminium

Small Countersunk Head <
Round Shank <
Open <



EN AW - 5754 [AlMg3]



M		I	No.	
M4	0,3 - 2,0	10,5	10.851.040.200/10	500
	D 6,0	k 0,5	dk 6,8	l1 max. 6,5
M5	0,5 - 3,0	11,5	10.821.050.300/10	500
	D 7,0	k 0,5	dk 8,0	l1 max. 7,5

M		I	No.	
M6	0,5 - 3,0	15,0	10.851.060.300/10	500
	D 9,0	k 0,6	dk 10,0	l1 max. 9,0
M8	0,5 - 3,0	15,5	10.851.080.300/10	500
	D 10,0	k 0,6	dk 12,0	l1 max. 11,5

ONE Blind Rivet Nut FOR ALL Grip Ranges



One blind rivet nut for all grip ranges. The innovative and patented development of the Honsel-Group was in 2007 the first mass-production multigrip blind rivet nut.

The product has a lot of advantages over the common standard types:

- no mixing of different grip ranges
- reduction of storage and failure costs
- reduction of delivery times
- reduction of item diversity

Closed end versions, size M10 or hexagonal shaft producible on request.

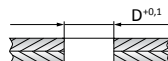
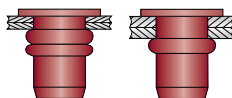
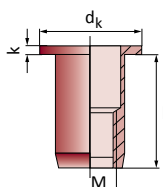


OPTO® Blind Rivet Nut AFM

Series 10.894

Aluminium

- > Flat Head
- > Round Shank
- > Open



EN AW - 5754 [AlMg3]

M		I	No.	
M4	0,5 - 6,0	14,0	10.894.040.600	500
D 6,0	k 0,8	d_k 10,0	3 Nm	3000 N
M5	0,5 - 6,0	15,0	10.894.050.600	500
D 7,0	k 1,0	d_k 11,0	4 Nm	4200 N

M		I	No.	
M6	0,5 - 6,0	17,5	10.894.060.600	500
D 9,0	k 1,5	d_k 13,0	6 Nm	6500 N
M8	0,5 - 7,5	21,5	10.894.080.750	500
D 11,0	k 1,5	d_k 16,0	18 Nm	10500 N

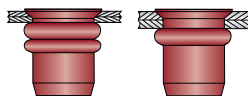
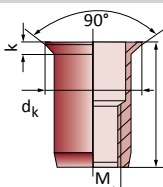


OPTO® Blind Rivet Nut ASM

Series 10.894

Aluminium

- > Countersunk Head
- > Round Shank
- > Open



EN AW - 5754 [AlMg3]

M		I	No.	
M4	1,5 - 6,0	14,0	10.894.400.600	500
D 6,0	k 1,5	d_k 10,0	3 Nm	3000 N
M5	1,5 - 6,0	15,0	10.894.500.600	500
D 7,0	k 1,5	d_k 11,0	4 Nm	4200 N

M		I	No.	
M6	1,5 - 6,0	17,5	10.894.600.600	500
D 9,0	k 1,5	d_k 13,0	6 Nm	6500 N
M8	1,5 - 7,5	21,5	10.894.800.750	500
D 11,0	k 1,5	d_k 16,0	18 Nm	10500 N



For the perfect handling of OPTO® multigrip blind rivet nuts: The **strength controlled** pneumatic-hydraulic tool **VNG 703**. Details on [page 206!](#)

OPTO® Blind Rivet Nut SFM

Series 10.895

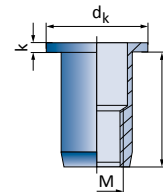
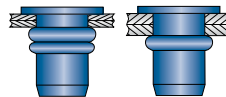
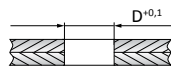


Steel

Flat Head <
Round Shank <
Open <



C4C [1.0303]



M		I	No.	
M4	0,5 - 6,0	14,0	10.895.040.600	500
D 6,0	k 0,8	d_k 10,0	4 Nm	5200 N
M5	0,5 - 6,0	15,0	10.895.050.600	500
D 7,0	k 1,0	d_k 11,0	6 Nm	9500 N

M		I	No.	
M6	0,5 - 6,0	17,5	10.895.060.600	500
D 9,0	k 1,5	d_k 13,0	11 Nm	15500 N
M8	0,5 - 7,5	21,5	10.895.080.750	500
D 11,0	k 1,5	d_k 16,0	24 Nm	21500 N

OPTO® Blind Rivet Nut SSM

Series 10.895

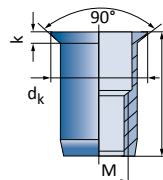
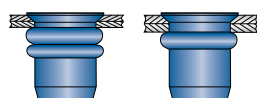
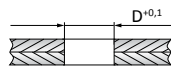


Steel

Countersunk Head <
Round Shank <
Open <



C4C [1.0303]



M		I	No.	
M4	1,5 - 6,0	14,0	10.895.400.600	500
D 6,0	k 1,5	d_k 10,0	4 Nm	5200 N
M5	1,5 - 6,0	15,0	10.895.500.600	500
D 7,0	k 1,5	d_k 11,0	6 Nm	9500 N

M		I	No.	
M6	1,5 - 6,0	17,5	10.895.600.600	500
D 9,0	k 1,5	d_k 13,0	11 Nm	15500 N
M8	1,5 - 7,5	21,5	10.895.800.750	500
D 11,0	k 1,5	d_k 16,0	24 Nm	21500 N

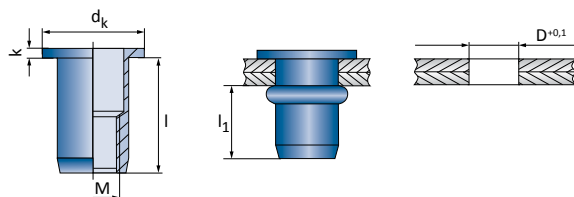


Blind Rivet Nut SFM

Series 10.852

Steel

- > Flat Head
- > Round Shank
- > Open



C4C [1.0303]

M		I	No.	
M3	0,5 - 2,0	9,8	10.852.030.200	500
	2,0 - 3,5	11,5	10.852.030.350	500
D 5,0	k 0,8	dk 7,0	l1 max. 7,0	1,2 Nm 4000 N
M4	1,5 - 3,0	11,0	10.852.040.300	500
	2,0 - 4,0	12,0	10.852.040.400	500
	2,5 - 5,0	14,0	10.852.040.500	500
D 6,0	k 0,8	dk 10,0	l1 max. 8,0	4 Nm 5200 N
M5	0,5 - 3,0	12,0	10.852.050.300	500
	3,0 - 5,0	15,0	10.852.050.500	500
D 7,0	k 1,0	dk 11,0	l1 max. 9,0	6 Nm 9500 N
M6	0,5 - 3,0	14,5	10.852.060.300	500
	3,0 - 5,0	16,0	10.852.060.500	500
	4,5 - 6,0	17,5	10.852.060.600	500
D 9,0	k 1,5	dk 13,0	l1 max. 11,0	11 Nm 16500 N

NEW
NEW

NEW

M		I	No.	
M8	0,5 - 3,0	17,0	10.852.080.300	250
	3,0 - 5,5	19,5	10.852.080.550	250
	5,5 - 7,5	21,5	10.852.080.750	250
	7,0 - 9,0	24,5	10.852.080.900	250
D 11,0	k 1,5	dk 16,0	l1 max. 13,5	24 Nm 23500 N
M10	1,0 - 3,0	20,5	10.852.100.300	250
	3,0 - 4,5	22,0	10.852.100.450	250
	3,5 - 6,0	23,5	10.852.100.600	250
D 13,0	k 2,0	dk 19,0	l1 max. 16,5	50 Nm 37000 N
M12	1,0 - 4,0	25,0	10.852.120.400	100
	3,5 - 7,0	30,0	10.852.120.700	100
D 16,0	k 2,0	dk 23,0	l1 max. 16,5	82 Nm 54000 N

NEW

Note the OPTO® multigrip blind rivet nuts on the ► page 99.

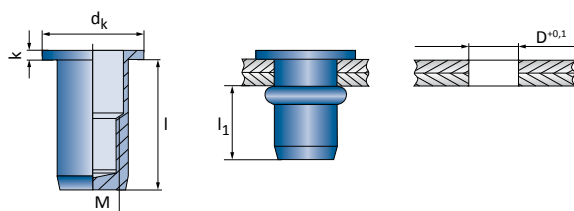


Blind Rivet Nut SFM-G

Series 10.856

Steel

- > Flat Head
- > Round Shank
- > Closed



C4C [1.0303]

M		I	No.	
M5	0,5 - 3,0	18,5	10.856.050.300	500
	3,0 - 5,5	21,0	10.856.050.550	500
D 7,0	k 1,0	dk 11,0	l1 max. 15,5	6 Nm 9500 N
M6	0,5 - 3,0	22,5	10.856.060.300	500
D 9,0	k 1,2	dk 12,0	l1 max. 16,0	11 Nm 16500 N

M		I	No.	
M8	0,5 - 3,5	26,5	10.856.080.350	250
	3,5 - 6,0	29,5	10.856.080.600	250
D 11,0	k 1,3	dk 14,0	l1 max. 17,5	24 Nm 23500 N
M10	1,0 - 3,0	33,0	10.856.100.300	250
D 13,0	k 2,0	dk 19,0	l1 max. 28,5	50 Nm 37000 N



Blind Rivet Nut SFM-R

Series 10.842



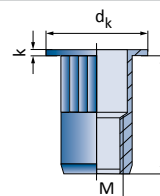
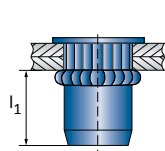
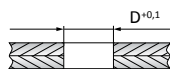
2 3

Steel

Flat Head <
Round Shank <
Open <
Knurled <



C4C [1.0303]



M		I	No.	
M4	0,5 - 2,5	9,5	10.842.040.250	500
	2,5 - 4,5	13,8	10.842.040.450	500
D 6,0	k 0,8	dk 9,0	l1 max. 8,0	↑ 5000 N
M5	0,5 - 3,0	12,0	10.842.050.300	500
	2,5 - 5,0	15,0	10.842.050.500	500
D 7,0	k 1,0	dk 10,0	l1 max. 9,0	↑ 9000 N
M6	0,5 - 3,0	14,5	10.842.060.300	500
	3,5 - 5,5	19,0	10.842.060.550	500
D 9,0	k 1,5	dk 13,0	l1 max. 11,0	↑ 13500 N

NEW

M		I	No.	
M8	0,5 - 3,0	16,0	10.842.080.300	250
	3,0 - 5,5	18,5	10.842.080.550	250
D 11,0	k 1,5	dk 16,0	l1 max. 13,5	↑ 20000 N
M10	1,0 - 3,0	22,5	10.842.100.300	250
	3,0 - 4,5	24,0	10.842.100.450	250
D 13,0	k 2,0	dk 19,0	l1 max. 16,5	↑ 28000 N
M12	1,0 - 4,0	27,0	10.842.120.400	100
D 16,0	k 2,0	dk 23,0	l1 max. 18,5	↑ 45000 N

NEW

NEW

SFM



C4C [1.0303]



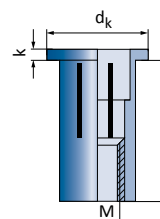
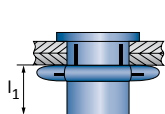
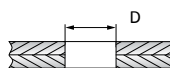
Folding Blind Rivet Nut SFM-PL

Series 10.816



Steel

Flat Head <
Round Shank <
Open <
Slotted <



M			I	No.	
M6	0,5 - 7,1	10,0 - 10,15	25,8 -0,8	10.816.060.710	500
D 9,8 -0,45	k 1,6 -0,25	dk 16,4 -0,1	l1 max. 11,7	↻ 12 Nm	↑ 15000 N
M8	0,5 - 7,1	12,7 - 12,85	29,6 -1,0	10.816.080.710	250
D 12,6 -0,1	k 1,7 -0,25	dk 19,6 -0,8	l1 max. 13,6	↻ 21 Nm	↑ 27000 N



SFM-PL folding blind rivet nuts are constructed for those applications where a **high pull-out strength** is requested. The slotted shaft makes the rivet nut split into four straps with a **wide contact surface** that guarantee an **equal distribution of forces** especially on plastics and other vulnerable materials. Furthermore this type offers a **very big grip range**! SFM-PL folding blind rivet nuts are for example used in all fields of vehicle manufacturing.



For handling SFM-PL blind rivet nuts a **big stroke** is necessary. HONSEL/VVG offer the special pneumatic-hydraulic tool **VNG 753** for this application. For details please ask our sales team and take a look on **page 210**.

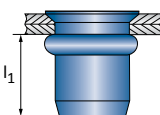
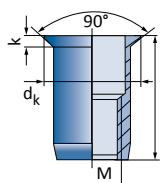


Blind Rivet Nut SSM

Series 10.853

Steel

- > Countersunk Head
- > Round Shank
- > Open



C4C [1.0303]

M		I	No.	
M4	1,5 - 3,5	11,5	10.853.040.350	500
	3,0 - 5,0	13,0	10.853.040.500	500
D 6,0	k 1,5	d_k 8,3	l_1 max. 8,0	↻ 4 Nm
M5	1,5 - 4,0	13,0	10.853.050.400	500
	4,0 - 5,5	14,5	10.853.050.550	500
D 7,0	k 1,5	d_k 9,3	l_1 max. 9,0	↻ 6 Nm
M6	1,5 - 4,5	16,0	10.853.060.450	500
	4,5 - 6,0	17,5	10.853.060.600	500
D 9,0	k 1,5	d_k 11,3	l_1 max. 11,0	↻ 11 Nm

NEW

M		I	No.	
M8	1,5 - 4,5	18,5	10.853.080.450	250
	4,5 - 6,0	20,0	10.853.080.600	250
D 11,0	k 1,5	d_k 13,3	l_1 max. 13,5	↻ 24 Nm
M10	1,5 - 4,5	22,0	10.853.100.450 ¹	250
	4,0 - 6,0	25,0	10.853.100.600 ¹	250
	6,0 - 9,0	28,0	10.853.100.900 ²	250
D 13,0	k 1,5	d_k ¹14,9/²15,7	l_1 max. 16,5	↻ 50 Nm

Note the OPTO® multigrip blind rivet nuts on the ► page 99.

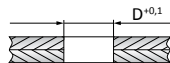
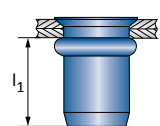
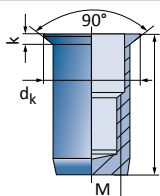


Blind Rivet Nut SSM-G

Series 10.857

Steel

- > Countersunk Head
- > Round Shank
- > Closed



C4C [1.0303]

M		I	No.	
M5	1,5 - 4,0	19,5	10.857.050.400	500
D 7,0	k 1,5	d_k 9,3	l_1 max. 15,5	↻ 6 Nm
M6	1,5 - 4,5	23,5	10.857.060.450	500
	4,5 - 6,0	25,0	10.857.060.600	500
D 9,0	k 1,5	d_k 11,3	l_1 max. 18,5	↻ 11 Nm

M		I	No.	
M8	1,5 - 4,5	28,0	10.857.080.450	250
	4,5 - 6,0	29,5	10.857.080.600	250
D 11,0	k 1,5	d_k 13,3	l_1 max. 23,0	↻ 24 Nm
M10	1,5 - 3,0	30,5	10.857.100.300	250
D 13,0	k 1,5	d_k 14,9	l_1 max. 28,5	↻ 50 Nm

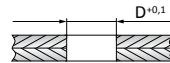
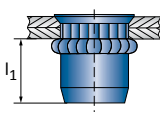
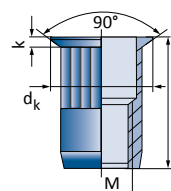


Blind Rivet Nut SSM-R

Series 10.845

Steel

- > Countersunk Head
- > Round Shank
- > Open, Knurled



C4C [1.0303]

M		I	No.	
M4	1,5 - 3,5	11,5	10.845.040.350	500
	3,0 - 5,0	13,0	10.845.040.500	500
D 6,0	k 1,5	d_k ¹8,3/²9,0	l_1 max. 8,0	↻ 5000 N
M5	1,5 - 4,0	13,5	10.845.050.400	500
	4,0 - 6,0	15,0	10.845.050.600	500
D 7,0	k 1,5	d_k 9,3	l_1 max. 9,0	↻ 9000 N
M6	1,5 - 4,5	16,0	10.845.060.450	500
	4,5 - 6,5	19,0	10.845.060.650	500
D 9,0	k 1,5	d_k 11,3	l_1 max. 11,0	↻ 15000 N

M		I	No.	
M8	1,5 - 4,5	19,0	10.845.080.450	500
	3,5 - 6,5	21,0	10.845.080.650	500
D 11,0	k 1,5	d_k 13,3	l_1 max. 13,5	↻ 20000 N
M10	1,5 - 4,5	22,0	10.845.100.450	250
	3,5 - 6,5	25,0	10.845.100.650	250
D 13,0	k 1,6	d_k 15,7	l_1 max. 14,5	↻ 28000 N
M12	1,7 - 4,5	26,0	10.845.120.450	100
	4,0 - 7,5	29,0	10.845.120.750	100
D 16,0	k 1,9	d_k 19,0	l_1 max. 17,5	↻ 45000 N



Blind Rivet Nut SSM-KLSK

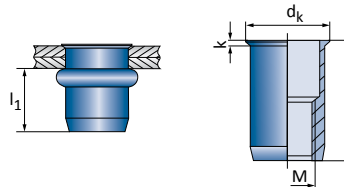
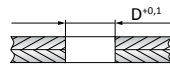
Series 10.841



2 3

Steel

Small Countersunk Head <
Round Shank <
Open <



C4C [1.0303]

M		I	No.	
M4	0,5 - 2,0	10,0	10.841.040.200	500
D 6,0	k 0,5	dk 7,0	l1 max. 8,0	3 Nm 5000 N
M5	0,5 - 3,0	12,0	10.841.050.300	500
D 7,0	k 0,5	dk 8,0	l1 max. 9,0	5 Nm 9000 N

M		I	No.	
M6	0,5 - 3,0	15,0	10.841.060.300	500
D 9,0	k 0,5	dk 10,0	l1 max. 14,5	10 Nm 15000 N
M8	0,5 - 3,0	16,0	10.841.080.300	500
D 11,0	k 0,5	dk 12,0	l1 max. 16,0	20 Nm 20000 N

SSM

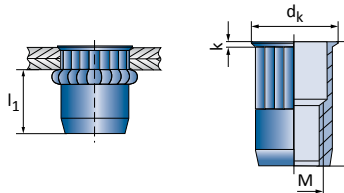
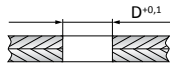
Blind Rivet Nut SSM-R-KLSK

Series 10.843



Steel

Small Countersunk Head <
Round Shank <
Open <
knurled <



C4C [1.0303]

M		I	No.	
M3	0,3 - 1,5 1,0 - 3,5	8,5 10,5	10.843.030.150 10.843.030.350	500 500
D 5,0	k 0,4	dk 6,0	l1 max. 5,5	4000 N
M4	1,0 - 2,0 2,0 - 4,0	10,0 12,0	10.843.040.200 10.843.040.400	500 500
D 6,0	k 0,4	dk 7,0	l1 max. 8,0	4800 N
M5	0,5 - 3,0 2,5 - 4,5	12,0 13,0	10.843.050.300 10.843.050.450	500 500
D 7,0	k 0,5	dk 8,0	l1 max. 9,0	8000 N

NEW

NEW

M		I	No.	
M6	0,5 - 3,0 3,5 - 6,0	13,5 17,5	10.843.060.300 10.843.060.600	500 500
D 9,0	k 0,5	dk 10,0	l1 max. 14,5	12000 N
M8	0,7 - 4,0 3,5 - 6,0	16,0 18,0	10.843.080.400 10.843.080.600	500 500
D 11,0	k 0,5	dk 12,0	l1 max. 16,0	18000 N
M10	1,5 - 4,5 3,0 - 6,0	21,5 23,0	10.843.100.450 10.843.100.600	250 250
D 13,0	k 0,5	dk 14,0	l1 max. 18,5	25000 N
M12	1,0 - 4,0	24,0	10.843.120.400	100
D 16,0	k 0,6	dk 17,0	l1 max. 20,0	40000 N



► Please note our manifold range of assortments and small packs on page 148 - 157!

You can use the classic brief description of our blind rivet nuts for your inquiries or orders:

Serial name: SSM-G
+ Thread size: M5
+ Maximum grip range: 4,0 mm
= Brief description: SSM 5-40 G

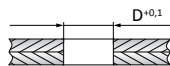
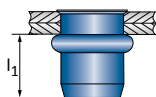
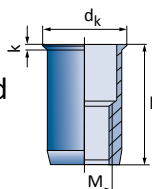


Blind Rivet Nut UNIVERSAL

Series 10.870

Steel

- > Small Countersunk Head
- > Round Shank
- > Open



C4C [1.0303]

M		I	No.	
M4	0,5 - 3,0	10,5	10.870.400.000	500
D 7,0	k 0,4	d_k 8,0	l_1 max. 7,0	3 Nm 6500 N
M5	0,5 - 3,0	11,5	10.870.500.000	500
D 7,0	k 0,4	d_k 8,0	l_1 max. 8,0	5 Nm 8000 N
M6	0,5 - 3,0	13,0	10.870.600.000	500
D 8,0	k 0,4	d_k 9,0	l_1 max. 10,0	10 Nm 11500 N

M		I	No.	
M8	0,5 - 3,0	15,5	10.870.800.000	500
D 10,0	k 0,4	d_k 11,0	l_1 max. 11,5	20 Nm 14500 N
M10	0,5 - 3,0	17,5	10.870.100.000	250
D 12,0	k 0,4	d_k 13,0	l_1 max. 13,0	40 Nm 22000 N

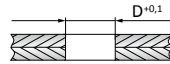
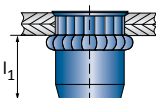
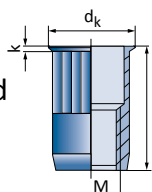


Blind Rivet Nut UNIVERSAL-R

Series 10.871

Steel

- > Small Countersunk Head
- > Round Shank
- > Open
- > Knurled



C4C [1.0303]

M		I	No.	
M4	0,5 - 3,0	10,5	10.871.400.000	500
D 7,0	k 0,4	d_k 8,0	l_1 max. 7,0	6000 N
M5	0,5 - 3,0	11,5	10.871.500.000	500
D 7,0	k 0,4	d_k 8,0	l_1 max. 8,0	7500 N
M6	0,5 - 3,0	13,0	10.871.600.000	500
D 8,0	k 0,4	d_k 9,0	l_1 max. 10,0	10000 N

M		I	No.	
M8	0,5 - 3,0	15,5	10.871.800.000	500
D 10,0	k 0,4	d_k 11,5	l_1 max. 11,5	14000 N
M10	0,5 - 3,0	17,5	10.871.100.000	250
D 12,0	k 0,4	d_k 13,0	l_1 max. 13,0	17500 N

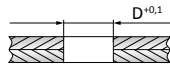
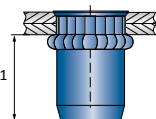
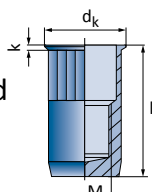


Blind Rivet Nut UNIVERSAL-R-G

Series 10.872

Steel

- > Small Countersunk Head
- > Round Shank
- > Closed
- > Knurled



C4C [1.0303]

M		I	No.	
M4	0,5 - 2,5	16,5	10.872.400.000	500
D 7,0	k 0,4	d_k 8,0	l_1 max. 13,0	6000 N
M5	0,5 - 2,5	18,5	10.872.500.000	500
D 7,0	k 0,4	d_k 8,0	l_1 max. 14,5	7500 N

M		I	No.	
M6	0,5 - 3,0	20,5	10.872.600.000	500
D 8,0	k 0,4	d_k 9,0	l_1 max. 16,0	10000 N
M8	0,5 - 3,0	22,5	10.872.800.000	250
D 10,0	k 0,4	d_k 11,5	l_1 max. 19,0	14000 N

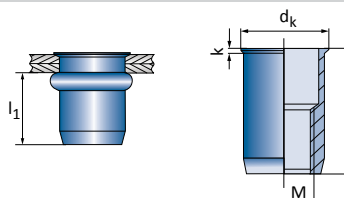
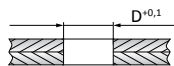
NEW

Blind Rivet Nut FLATSERT

Series 10.874


Steel


For components with
INCH-product
imperial holes



Small Countersunk Head <
Round Shank <
Open <

C4C [1.0303]

M		I	No.	
M3	0,5 - 2,0	8,7	10.874.300.000	500
D 4,9	k 0,3	dk 5,3	l1 max. 6,0	2 Nm 3000 N
M4	0,5 - 2,0	10,4	10.874.400.000	500
D 6,4	k 0,4	dk 7,2	l1 max. 8,0	3 Nm 6000 N
M5	0,5 - 3,2	12,0	10.874.500.000	500
D 7,2	k 0,5	dk 8,1	l1 max. 9,0	5 Nm 9500 N

M		I	No.	
M6	0,8 - 4,0	15,0	10.874.600.000	500
D 9,6	k 0,5	dk 10,5	l1 max. 11,0	10 Nm 13000 N
M8	1,0 - 4,0	16,0	10.874.800.000	500
D 10,6	k 0,6	dk 11,5	l1 max. 13,5	20 Nm 16000 N
M10	1,0 - 5,0	22,5	10.874.100.000	250
D 12,7	k 0,6	dk 13,9	l1 max. 16,5	40 Nm 19500 N

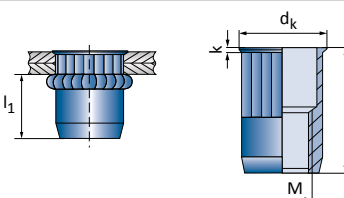
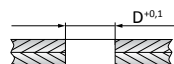
FLATSERT

Blind Rivet Nut FLATSERT-R

Series 10.844


Steel


For components with
INCH-product
imperial holes



Small Countersunk Head <
Round Shank <
Open <
Knurled <

C4C [1.0303]

M		I	No.	
M4	0,5 - 2,0	10,0	10.844.400.000	500
D 6,4	k 0,4	dk 7,2	l1 max. 8,0	5500 N
M5	0,5 - 3,2	12,0	10.844.500.000	500
D 7,2	k 0,5	dk 8,1	l1 max. 9,0	9000 N

M		I	No.	
M6	0,7 - 3,2	15,0	10.844.600.000	500
D 9,6	k 0,5	dk 10,4	l1 max. 11,0	12000 N
M8	0,7 - 4,0	16,0	10.844.800.000	500
D 10,6	k 0,5	dk 11,5	l1 max. 13,5	15000 N





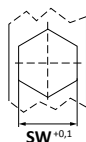
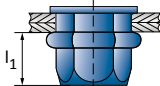
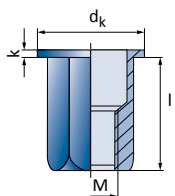
Blind Rivet Nut HEXAFORM® FK

Series 10.868



Steel

- > Flat Head
- > Hexagonal Shank
- > Open



C4C [1.0303]

M		I	No.	
M4	0,5 - 2,0	10,0	10.868.040.200	500
SW 6,0	k 1,0	d_k 9,0	I_1 max. 7,5	↻ 5 Nm
M5	0,5 - 3,0	12,5	10.868.500.000	500
SW 7,0	k 1,0	d_k 10,0	I_1 max. 8,5	↻ 7 Nm
M6	0,5 - 3,0 3,0 - 5,5	14,5 17,0	10.868.600.000 10.868.060.550	500
SW 9,0	k 1,5	d_k 13,0	I_1 max. 10,5	↻ 13 Nm

NEW

M		I	No.	
M8	0,5 - 3,0 3,0 - 6,0	17,5 20,5	10.868.800.000 10.868.080.600	250
SW 11,0	k 1,5	d_k 15,0|16,0	I_1 max. 13,0	↻ 25 Nm
M10	1,0 - 4,5	22,0	10.868.100.450	250
SW 13,0	k 2,0	d_k 19,0	I_1 max. 16,5	↻ 55 Nm
M12	1,5 - 5,0	25,0	10.868.120.500	100
SW 16,0	k 2,0	d_k 23,0	I_1 max. 19,0	↻ 85 Nm

NEW

NEW



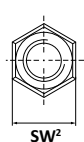
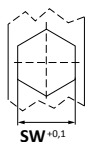
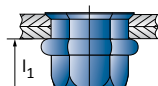
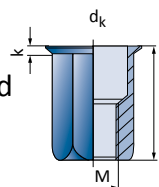
Blind Rivet Nut HEXAFORM® KLSK

Series 10.892



Steel

- > Small Countersunk Head
- > Hexagonal Shank
- > Open



C4C [1.0303]

M		I	No.	
M3	2,0 - 3,0	9,7	10.892.030.250	500
SW 5,0	SW^2 6,0	k 0,5	I_1 max. 4,5	↻ 1,2 Nm
M4	0,6 - 2,0	11,0	10.892.040.200	500
SW 6,0	SW^2 6,6	k 0,6	I_1 max. 7,5	↻ 5 Nm
M5	0,5 - 3,0	13,5	10.892.050.300	500
SW 7,0	SW^2 7,7	k 0,7	I_1 max. 8,5	↻ 7 Nm
M6	0,8 - 3,0 3,0 - 5,5	15,5 18,0	10.892.060.300 10.892.060.550	500
SW 9,0	SW^2 9,8	k 0,8	I_1 max. 10,5	↻ 13 Nm

NEW

M		I	No.	
M8	0,8 - 3,0 3,0 - 6,0	18,5 21,5	10.892.080.300 10.892.080.600	250
SW 11,0	SW^2 11,8	k 0,8	I_1 max. 13,0	↻ 25 Nm
M10	1,0 - 3,5 3,0 - 6,0	22,5 23,5	10.892.100.350 10.892.100.600	250
SW 13,0	SW^2 14,3	k 0,9	I_1 max. 16,5	↻ 55 Nm
M12	1,0 - 4,0	24,5	10.892.120.400	100
SW 16,0	SW^2 17,3	k 0,9	I_1 max. 17,5	↻ 85 Nm

NEW



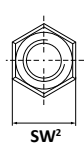
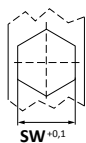
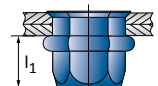
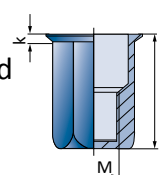
Blind Rivet Nut HEXAFORM® KLSK-G

Series 10.887











Steel

- > Small Countersunk Head
- > Hexagonal Shank
- > Closed










C4C [1.0303]

► Data at the top of the following page.

M		I	No.		
M4	0,5 - 2,5	16,0	10.887.040.250		500
SW 6,0	SW² 6,6	k 0,5	I ₁ max. 10,0	 5 Nm	 5200 N
M5	0,5 - 3,0	20,0	10.887.050.300		500
SW 7,0	SW² 7,7	k 0,6	I ₁ max. 12,5	 7 Nm	 9500 N
M6	0,5 - 3,0	22,0	10.887.060.300		500
SW 9,0	SW² 9,8	k 0,7	I ₁ max. 16,0	 13 Nm	 16500 N

NEW

M		I	No.		
M8	0,5 - 3,5	25,5	10.887.080.350		250
	3,0 - 6,0	28,0	10.887.080.600		250
SW 11,0	SW ² 11,8	k 0,7	l ₁ max. 17,5	 25 Nm	 23500 N
M10	1,0 - 3,5	28,0	10.887.100.350		250 
SW 13,0	SW ² 14,3	k 0,9	l ₁ max. 20,0	 55 Nm	 37000 N

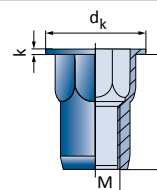
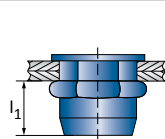
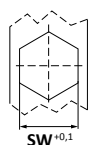
NEW

NEW

HEXATOP®



For components with
INCH-product
imperial holes



Blind Rivet Nut HEXATOP® FK









Series 10.867







Steel



Flat Head <
Partial Hexagonal Shank <
Open <

C4C [1.0303]

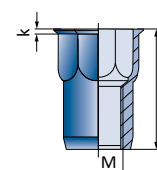
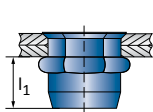
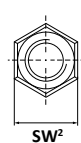
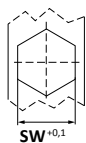
M		I	No.		
M4	0,5 - 2,0	10,0	10.867.400.000		500
SW 6,3	k 0,6	d _k 8,0	I ₁ max. 7,5	 4 Nm	 3800 N
M5	0,5 - 3,0	12,5	10.867.500.000		500
SW 7,2	k 0,7	d _k 9,0	I ₁ max. 9,0	 6 Nm	 6000 N
M6	0,5 - 3,0	14,5	10.867.600.000		500
SW 9,6	k 0,8	d _k 12,0	I ₁ max. 11,5	 11 Nm	 9500 N

M		I	No.		
M8	0,5 - 3,0	17,5	10.867.800.000		500
SW 10,6	k 0,8	d _k 13,0	l ₁ max. 14,0	 24 Nm	 12500 N
M10	0,5 - 3,0	19,0	10.867.100.000		250
SW 12,7	k 2,0	d _k 16,5	l ₁ max. 16,0	 50 Nm	 37000 N

NEW



For components with
INCH-product
imperial holes



Blind Rivet Nut HEXATOP® KLSK









Series 10.893

Steel









Small Countersunk Head <
Partial Hexagonal Shank <
Open <

C4C [1.0303]

M		I	No.		
M4	0,5 - 2,0	10,0	10.893.040.200		500
SW 6,3	SW² 7,0	k 0,4	I ₁ max. 7,5	 4 Nm	 3800 N
M5	0,6 - 3,0	12,5	10.893.050.300		500
SW 7,2	SW² 8,0	k 0,5	I ₁ max. 9,0	 6 Nm	 6000 N
M6	0,5 - 3,0	15,5	10.893.060.300		500
	1,5 - 4,0	15,5	10.893.060.400		500
SW 9,6	SW² 10,5	k 0,5	I ₁ max. 11,5	 11 Nm	 9500 N

NEW

M		I	No.		
M8	0,5 - 3,0	18,0	10.893.080.300	250	
SW 10,6	SW² 11,5	k 0,6	l ₁ max. 14,0	 24 Nm	 12500 N
M10	1,0 - 4,0	22,5	10.893.100.400	250	
SW 12,7	SW² 14,4	k 0,8	l ₁ max. 16,0	 50 Nm	 37000 N

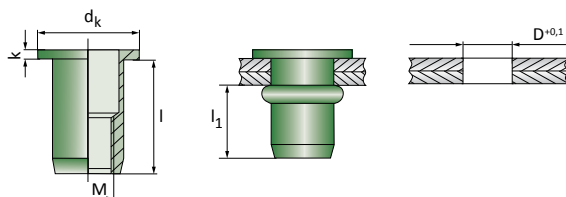


Blind Rivet Nut EFM

Series 10.858

Stainless Steel A2

- > Flat Head
- > Round Shank
- > Open



[1.4567]

M		I	No.	
M3	0,5 - 2,0	9,0	10.858.030.200	500
D 5,0	k 0,8	d_k 8,0	l_1 max. 7,0	2 Nm
M4	0,5 - 2,5 2,5 - 4,0	11,0 12,5	10.858.040.250 10.858.040.400	500
D 6,0	k 1,0	d_k 9,0	l_1 max. 8,0	4 Nm
M5	0,5 - 3,0 3,0 - 4,5	12,0 13,5	10.858.050.300 10.858.050.450	500
D 7,0	k 1,5	d_k 10,0	l_1 max. 8,5	6 Nm
M6	0,5 - 3,0 3,0 - 5,0	14,0 16,0	10.858.060.300 10.858.060.500	500
D 9,0	k 1,5	d_k 12,0	l_1 max. 10,0	11 Nm

NEW

NEW

NEW

M		I	No.	
M8	0,5 - 3,0 3,0 - 5,5	16,0 18,5	10.858.080.300 10.858.080.550	500
D 11,0	k 1,5	d_k 15,0	l_1 max. 11,5	24 Nm
M10	1,0 - 3,5	19,0	10.858.100.350	250
D 13,0	k 2,0	d_k 17,0	l_1 max. 14,0	50 Nm
M12	1,0 - 4,0	26,0	10.858.120.400	100
D 16,0	k 2,0	d_k 23,0	l_1 max. 16,5	85 Nm

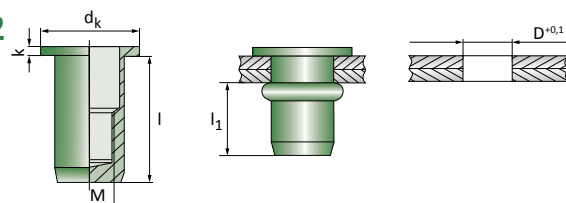


Blind Rivet Nut EFM-G

Series 10.860

Stainless Steel A2

- > Flat Head
- > Round Shank
- > Closed



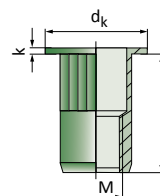
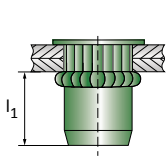
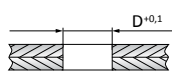
[1.4567]

M		I	No.	
M4	0,5 - 2,5	16,0	10.860.040.250	500
D 6,0	k 1,0	d_k 9,0	l_1 max. 13,0	4 Nm
M5	0,5 - 3,0	18,0	10.860.050.300	500
D 7,0	k 1,0	d_k 10,0	l_1 max. 14,5	6 Nm
M6	0,5 - 3,0	21,0	10.860.060.300	500
D 9,0	k 1,5	d_k 12,0	l_1 max. 16,0	11 Nm

M		I	No.	
M8	0,5 - 3,0	23,5	10.860.080.300	250
D 11,0	k 1,5	d_k 15,0	l_1 max. 19,0	24 Nm
M10	1,0 - 3,5	26,5	10.860.100.350	100
D 13,0	k 2,0	d_k 17,0	l_1 max. 21,0	50 Nm

NEW

Larger grip ranges, closed end versions or threads measured in inches?
 A large number of products not included in this catalogue are available from stock. Ask for minimum quantities for production of blind rivet nuts according to your specification.



Stainless Steel A2

[1.4567]

Flat Head <
Round Shank <
Open <
Knurled <

M		I	No.	
M3	0,5 - 2,0	9,0	10.848.030.200	500
	2,0 - 3,5	9,0	10.848.030.350	500
D 5,0	k 0,8	dk 8,0	l1 max. 7,0	↑ 4000 N
M4	0,5 - 2,5	11,0	10.848.040.250	500
	2,5 - 4,0	12,5	10.848.040.400	500
D 6,0	k 0,8	dk 9,0	l1 max. 8,0	↑ 6500 N
M5	0,5 - 3,0	12,0	10.848.050.300	500
	3,0 - 4,5	13,5	10.848.050.450	500
D 7,0	k 1,0	dk 10,0	l1 max. 8,5	↑ 10000 N

NEW

NEW

NEW

M		I	No.	
M6	0,5 - 3,0	14,0	10.848.060.300	500
	3,0 - 5,0	16,0	10.848.060.500	500
D 9,0	k 1,5	dk 12,0	l1 max. 10,0	↑ 17000 N
M8	0,5 - 3,0	16,0	10.848.080.300	500
	3,0 - 5,5	18,5	10.848.080.550	250
D 11,0	k 1,5	dk 15,0	l1 max. 12,0	↑ 25000 N
M10	1,0 - 3,5	19,0	10.848.100.350	250
	3,5 - 6,0	21,5	10.848.100.600	250
D 13,0	k 2,0	dk 17,0	l1 max. 14,0	↑ 38000 N

EFM

NEW



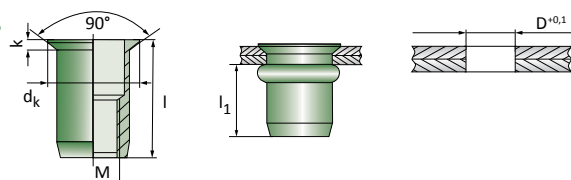


Blind Rivet Nut ESM

Series 10.859

Stainless Steel A2

- > Countersunk Head
- > Round Shank
- > Open



[1.4567]

M		I	No.	
M4	1,5 - 4,0	12,0	10.859.040.400	500
D 6,0	k 1,5	dk 9,0	l1 max. 8,0	4 Nm
M5	1,5 - 4,5 4,5 - 6,0	13,5 15,0	10.859.050.450 10.859.050.600	500
D 7,0	k 1,5	dk 10,0	l1 max. 8,5	6 Nm
M6	1,5 - 4,5 4,5 - 6,5	16,0 18,0	10.859.060.450 10.859.060.650	500
D 9,0	k 1,5	dk 12,0	l1 max. 10,0	11 Nm

NEW

NEW

M		I	No.	
M8	1,5 - 4,5 4,5 - 6,5	18,0 20,0	10.859.080.450 10.859.080.650	500 250
D 11,0	k 1,5	dk 14,0	l1 max. 11,5	24 Nm
M10	1,5 - 4,0	22,0	10.859.100.400	250
D 13,0	k 1,6	dk 16,0	l1 max. 14,5	50 Nm
M12	1,7 - 4,5	26,0	10.859.120.400	250
D 16,0	k 2,0	dk 19,0	l1 max. 18,0	85 Nm

NEW

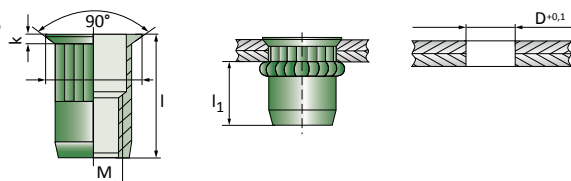


Blind Rivet Nut ESM-R

Series 10.865

Stainless Steel A2

- > Countersunk Head
- > Round Shank
- > Open
- > Knurled



[1.4567]

M		I	No.	
M3	2,0 - 3,5	10,5	10.865.030.350	500
D 5,0	k 1,0	dk 8,0	l1 max. 6,5	3700 N
M4	1,5 - 4,0	12,0	10.865.040.400	500
D 6,0	k 1,0	dk 9,0	l1 max. 8,0	6500 N
M5	1,5 - 4,5	13,5	10.865.050.450	500
D 7,0	k 1,0	dk 10,0	l1 max. 8,5	10000 N

M		I	No.	
M6	1,5 - 4,5 4,5 - 6,5	16,0 18,0	10.865.060.450 10.865.060.650	500 500
D 9,0	k 1,0	dk 12,0	l1 max. 10,0	15000 N
M8	1,5 - 4,5 4,5 - 6,5	18,0 20,0	10.865.080.450 10.865.080.650	500 250
D 11,0	k 1,5	dk 14,0	l1 max. 12,0	25000 N
M10	2,0 - 4,5	21,0	10.865.100.450	250
D 13,0	k 1,6	dk 16,0	l1 max. 14,5	38000 N



Blind Rivet Nut ESM-KLSK

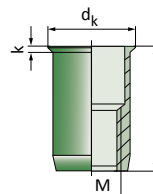
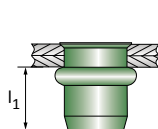
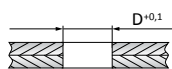
Series 10.802



2 4

















[1.4567]



Stainless Steel A2

Small Countersunk Head <
Round Shank <
Open <

M		I	No.		
M4	0,5 - 2,5	11,0	10.802.040.250		500
D 6,0	k 0,5	d _k 7,0	I ₁ max. 8,0	 4 Nm	 6500 N
M5	0,5 - 3,0	12,0	10.802.050.300		500
D 7,0	k 0,5	d _k 8,0	I ₁ max. 8,5	 6 Nm	 10000 N
M6	0,5 - 3,0	14,0	10.802.060.300		500
D 9,0	k 0,5	d _k 10,0	I ₁ max. 10,0	 11 Nm	 15000 N

M		I	No.		
M8	0,5 - 3,0	16,0	10.802.080.300		500
D 11,0	k 0,5	d _k 12,0	l ₁ max. 11,5	 24 Nm	 25000 N
M10	1,0 - 3,5	19,2	10.802.100.350		250
D 13,0	k 0,7	d _k 14,0	l ₁ max. 14,0	 50 Nm	 38000 N

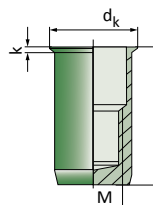
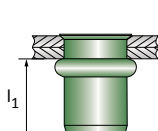
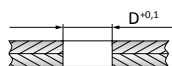
ESM

Blind Rivet Nut ESM-KLSK-G

Series 10.840

















[1.4567]



Stainless Steel A2

Small Countersunk Head <
Round Shank <
Closed <

M		I	No.		
M4	0,5 - 2,5	16,0	10.840.040.250		500
D 6,0	k 0,5	d _k 7,0	l ₁ max. 13,0	 4 Nm	 7000 N
M5	0,5 - 3,0	18,0	10.840.050.300		500
D 7,0	k 0,5	d _k 8,0	l ₁ max. 14,5	 6 Nm	 11000 N
M6	0,5 - 3,0	21,0	10.840.060.300		500
D 9,0	k 0,5	d _k 10,0	l ₁ max. 16,0	 11 Nm	 18000 N

M		I	No.		
M8	0,5 - 3,0	23,5	10.840.080.300		500
D 11,0	k 0,5	d _k 12,0	l ₁ max. 19,0	 24 Nm	 27000 N
M10	1,0 - 3,5	26,5	10.840.100.350		200
D 13,0	k 0,7	d _k 14,0	l ₁ max. 22,0	 50 Nm	 40000 N



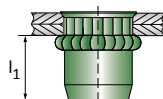
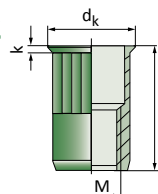


Blind Rivet Nut ESM-KLSK-R

Series 10.849

Stainless Steel A2

- > Small Countersunk Head
- > Round Shank
- > Open
- > Knurled



[1.4567]

M		I	No.	
M3	0,5 - 2,0	9,0	10.849.030.200	500
	2,0 - 3,5	10,5	10.849.030.350	500
D 5,0	k 0,4	d_k 6,0	l₁ max. 7,0	↑ 3500 N
M4	0,5 - 2,5	11,0	10.849.040.250	500
	2,5 - 4,0	12,5	10.849.040.400	500
D 6,0	k 0,4	d_k 7,0	l₁ max. 8,0	↑ 6500 N
M5	0,5 - 3,0	12,0	10.849.050.300	500
	3,0 - 4,5	13,5	10.849.050.450	500
D 7,0	k 0,5	d_k 8,0	l₁ max. 8,5	↑ 10000 N
M6	0,5 - 3,0	14,0	10.849.060.300	500
	3,0 - 5,0	16,0	10.849.060.500	500
D 9,0	k 0,5	d_k 10,0	l₁ max. 10,0	↑ 15000 N

NEW

NEW

NEW

M		I	No.	
M8	0,5 - 3,0	16,0	10.849.080.300	500
	3,0 - 6,0	19,5	10.849.080.600	500
D 11,0	k 0,5	d_k 12,0	l₁ max. 11,5	↑ 25000 N
M10	1,0 - 3,5	19,2	10.849.100.350	250
D 13,0	k 0,7	d_k 14,0	l₁ max. 14,0	↑ 38000 N
M12	1,0 - 4,0	24,0	10.849.120.400	100
D 16,0	k 0,7	d_k 17,2	l₁ max. 16,0	↑ 50000 N



Please ask for our extensive possibilities of **stainless steel blind rivet nuts** in turned quality.



Thousands of finished- or semi-manufactured products guarantee a maximum flexibility in production and delivery.

Blind Rivet Nut UNIVERSAL

Series 10.873



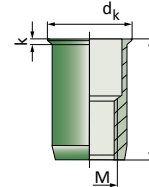
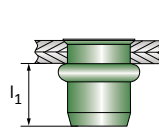
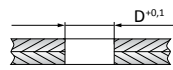
2 4

Stainless Steel A2

Small Countersunk Head <
Round Shank <
Open <



[1.4567]



M		I	No.	
M4	0,5 - 3,0	10,5	10.873.400.000	500
D 7,0	k 0,4	dk 8,0	l1 max. 8,0	3 Nm 7000 N
M5	0,5 - 3,0	11,5	10.873.500.000	500
D 7,0	k 0,4	dk 8,0	l1 max. 8,5	5 Nm 11000 N

M		I	No.	
M6	0,5 - 3,0	13,0	10.873.600.000	500
D 8,0	k 0,4	dk 9,0	l1 max. 10,0	10 Nm 18000 N
M8	0,5 - 3,0	15,5	10.873.800.000	500
D 10,0	k 0,4	dk 11,0	l1 max. 11,5	20 Nm 27000 N

UNIVERSAL

Blind Rivet Nut UNIVERSAL-R

Series 10.891

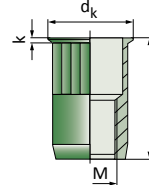
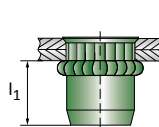
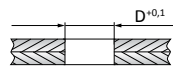


Stainless Steel A2

Small Countersunk Head <
Round Shank <
Open <
Knurled <



[1.4567]



M		I	No.	
M4	0,5 - 3,0	10,5	10.891.400.000	500
D 7,0	k 0,4	dk 8,0	l1 max. 8,0	6800 N
M5	0,5 - 3,0	11,5	10.891.500.000	500
D 7,0	k 0,4	dk 8,0	l1 max. 8,5	10000 N
M6	0,5 - 3,0	13,0	10.891.600.000	500
D 8,0	k 0,4	dk 9,0	l1 max. 10,0	14000 N

M		I	No.	
M8	0,5 - 3,0	15,5	10.891.800.000	500
D 10,0	k 0,4	dk 11,0	l1 max. 11,5	25000 N
M10	0,5 - 3,0	17,5	10.891.100.000	250
D 12,0	k 0,5	dk 13,0	l1 max. 14,0	37000 N





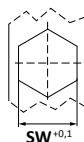
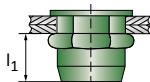
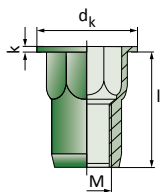
Blind Rivet Nut HEXATOP®-E-FK

Series 10.877



Stainless Steel A2

- > Flat Head
- > Partial Hexagonal Shank
- > Open



[1.4567]

M		I	No.	
M3	0,5 - 2,0	9,0	10.877.030.200	500
SW 5,0	k 0,8	d _k 8,0	l ₁ max. 6,5	↻ 2 Nm
M4	0,5 - 2,5	11,0	10.877.040.250	500
SW 6,0	k 1,0	d _k 9,0	l ₁ max. 8,5	↻ 5 Nm
M5	0,5 - 3,0	12,0	10.877.050.300	500
SW 7,0	k 1,0	d _k 10,0	l ₁ max. 9,0	↻ 7 Nm

M		I	No.	
M6	0,5 - 3,0	14,0	10.877.060.300	500
SW 9,0	k 1,5	d _k 12,0	l ₁ max. 10,0	↻ 13 Nm
M8	0,5 - 3,0	16,0	10.877.080.300	250
SW 11,0	k 1,5	d _k 14,5	l ₁ max. 11,5	↻ 25 Nm
M10	1,0 - 3,5	19,0	10.877.100.350	250
SW 13,0	k 2,0	d _k 16,5	l ₁ max. 13,5	↻ 55 Nm

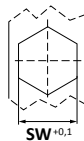
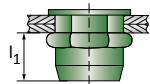
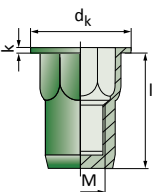


Blind Rivet Nut HEXATOP®-E-FK-G

Series 10.804 NEW

Stainless Steel A2

- > Flat Head
- > Partial Hexagonal Shank
- > Closed



[1.4567]

M		I	No.	
M4	0,5 - 2,5	16,0	10.804.040.250	500
SW 6,0	k 1,0	d _k 9,0	l ₁ max. 13,5	↻ 5 Nm
M5	0,5 - 3,0	18,0	10.804.050.300	500
SW 7,0	k 1,0	d _k 10,0	l ₁ max. 15,0	↻ 7 Nm

M		I	No.	
M6	0,5 - 3,0	21,0	10.804.060.300	500
SW 9,0	k 1,5	d _k 12,0	l ₁ max. 17,0	↻ 13 Nm
M8	0,5 - 3,0	23,5	10.804.080.300	250
SW 11,0	k 1,5	d _k 14,5	l ₁ max. 19,0	↻ 25 Nm



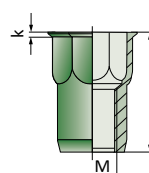
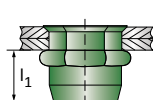
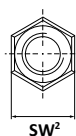
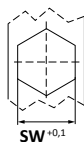


Blind Rivet Nut HEXATOP®-E-KLSK

Series 10.879









24



Stainless Steel A2

Small Countersunk Head <
Partial Hexagonal Shank <
Open <

[1.4567]







M		I	No.		
M3	0,5 - 2,0	9,0	10.879.030.200		500
SW 5,0	SW² 6,0	k 0,5	l ₁ max. 5,5	 2 Nm	↑ 3800 N
M4	0,5 - 2,5	11,0	10.879.040.250		500
	2,5 - 4,0	12,5	10.879.040.400		500
SW 6,0	SW² 6,8	k 0,5	l ₁ max. 8,5	 5 Nm	↑ 6000 N
M5	0,5 - 3,0	12,0	10.879.050.300		500
	3,0 - 4,5	13,5	10.879.050.450		500
SW 7,0	SW² 8,0	k 0,5	l ₁ max. 9,0	 7 Nm	↑ 9500 N
M6	0,5 - 3,0	14,0	10.879.060.300		500
	3,0 - 5,0	16,0	10.879.060.500		500
SW 9,0	SW² 10,0	k 0,5	l ₁ max. 10,0	 13 Nm	↑ 16000 N

NEW

NEW

NEW

NEW

M		I	No.		
M8	0,5 - 3,0	16,0	10.879.080.300		250
	3,0 - 5,5	18,5	10.879.080.550		250 
SW 11,0	SW² 12,0	k 0,5	l _I max. 11,5	 25 Nm	↑ 26000 N
M10	1,0 - 3,5	19,0	10.879.100.350		250
SW 13,0	SW² 14,4	k 0,7	l _I max. 14,0	 55 Nm	↑ 39000 N
M12	1,0 - 4,0	24,0	10.879.120.400		100
SW 16,0	SW² 17,3	k 0,7	l _I max. 19,0	 85 Nm	↑ 55000 N

NEW

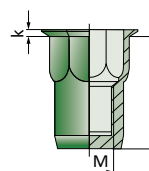
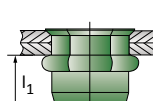
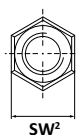
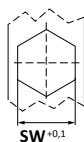
HEXAFORM®



[1.4567]







Blind Rivet Nut HEXATOP®-E-KLSK-G

Series 10.805









Stainless Steel A2

Small Countersunk Head <
Partial Hexagonal Shank <
Closed <

M		I	No.		
M4	0,5 - 2,5	16,0	10.805.040.250		500
SW 6,0	SW² 6,8	k 0,5	l ₁ max. 10,5	 5 Nm	 6000 N
M5	0,5 - 3,0	18,0	10.805.050.300		500
SW 7,0	SW² 7,8	k 0,6	l ₁ max. 12,5	 7 Nm	 9500 N

NEW

M		I	No.		
M6	0,5 - 3,0	21,0	10.805.060.300		500
SW 9,0	SW² 9,8	k 0,7	l ₁ max. 16,0	 13 Nm	 16000 N
M8	0,5 - 3,0	23,5	10.805.080.300		250
SW 11,0	SW² 11,8	k 0,7	l ₁ max. 17,5	 25 Nm	 26000 N



You can use the classic brief description of our blind rivet nuts for your inquiries or orders:

Serial name:
+ Thread size:
+ Maximum grip range:
= Brief description:

ESM-KLSK-G
M8
3,0 mm
ESM-KLSK 8-30 G

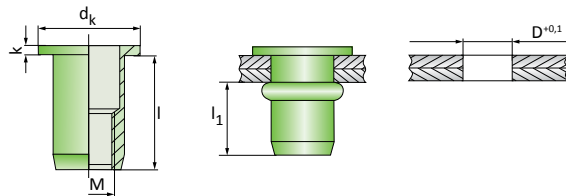
2⁵ Blind Rivet Nut EFM A4



Series 10.858/79 **NEW**

Stainless Steel A4

- > Flat Head
- > Round Shank
- > Open



M		I	No.	
M4	0,5 - 2,0	11,0	10.858.040.200/79	500
D 6,0	k 0,8	dk 9,0	l1 max. 8,0	5 Nm 7000 N
M5	0,5 - 2,0	13,0	10.858.050.200/79	500
D 7,0	k 1,0	dk 10,0	l1 max. 8,0	8 Nm 11000 N

M		I	No.	
M6	0,5 - 2,5	15,0	10.858.060.250/79	500
D 9,0	k 1,3	dk 12,0	l1 max. 10,0	15 Nm 18000 N
M8	0,5 - 3,5	20,0	10.858.080.350/79	500
D 11,0	k 1,5	dk 15,0	l1 max. 11,5	26 Nm 27000 N

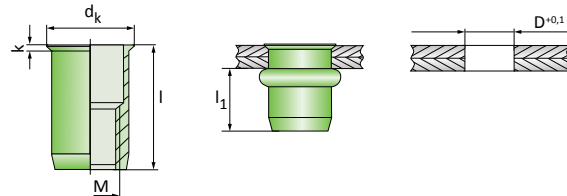


Blind Rivet Nut ESM KLSK A4

Series 10.802/79 **NEW**

Stainless Steel A4

- > Small Countersunk Head
- > Round Shank
- > Open



M		I	No.	
M4	0,5 - 2,0	10,0	10.802.040.200/79	500
D 6,0	k 0,5	dk 6,8	l1 max. 8,0	3 Nm 6500 N
M5	0,5 - 2,5	12,0	10.802.050.250/79	500
D 7,0	k 0,6	dk 8,0	l1 max. 8,5	6 Nm 10000 N

M		I	No.	
M6	0,5 - 3,0	10,0	10.802.060.300/79	500
D 9,0	k 0,6	dk 10,0	l1 max. 10,0	11 Nm 15000 N
M8	1,0 - 4,0	16,5	10.802.080.400/79	500
D 11,0	k 0,6	dk 12,0	l1 max. 11,5	20 Nm 25000 N

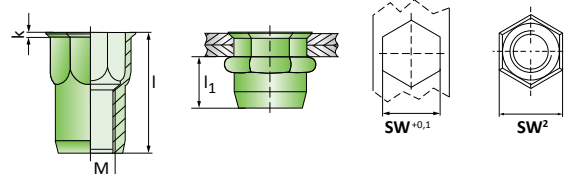


Blind Rivet Nut HEXATOP®-E-KLSK A4

Series 10.879/79 **NEW**

Stainless Steel A4

- > Small Countersunk Head
- > Partial Hexagonal Shank
- > Open



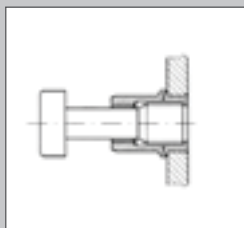
M		I	No.	
M4	0,5 - 2,0	10,0	10.879.040.200/79	500
SW 6,0	SW² 6,8	k 0,5	l1 max. 8,5	5 Nm 6500 N
M5	0,5 - 2,0	12,0	10.879.050.200/79	500
SW 7,0	SW² 8,0	k 0,6	l1 max. 9,0	8 Nm 10000 N

M		I	No.	
M6	0,5 - 2,5	14,0	10.879.060.250/79	500
SW 9,0	SW² 10,0	k 0,6	l1 max. 10,0	15 Nm 15000 N
M8	0,5 - 3,5	16,5	10.879.080.350/79	500
SW 11,0	SW² 12,0	k 0,6	l1 max. 11,5	26 Nm 25000 N



RINCAS Rivet Nut Captive Screw

2⁶

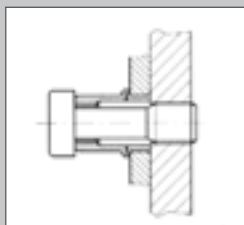


The Machinery Directive 2006/42/EC has impact on fasteners across the EU and has to be respected by manufacturers, buyers, operators and maintainers of all kinds of machinery and equipment.

It must be ensured, that protective equipment remain in place and is provided by fastening systems, which can be removed with tools only.

After releasing the fastening system must stay connected with the protective device.

The RINCAS system starts at this point.



The blind rivet nut is collecting the screw with a thin shaft and makes this screw stay connected with the housing after the release. The blind rivet nut can be handled with standard type blind rivet nut tools.

The system is perfectly suitable for refitting existing systems too.

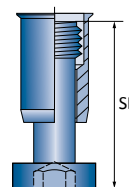
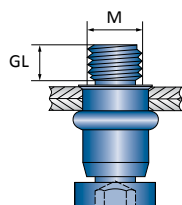
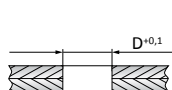
RINCAS



RINCAS Steel
NEW Series 20.000



Steel



Small Countersunk Head <
Round Shank <
Open <

M		No.	
M5	1,0 - 3,0	20.000.050.150	100
D 7,0		SL 15,0	GL 5,0
M6	1,0 - 3,0	20.000.060.160	100
D 8,0		SL 16,0	GL 5,0

NEW

M		No.	
M8	1,0 - 3,0	20.000.080.200	100
D 10,0		SL 20,0	GL 6,0

NEW



NYLON blind nuts are especially suitable for connecting **thin-walled components**.

There are **no special tools** necessary.

The connection can be released and the nut **be used again**.

Further properties:

- corrosion-resistant
- good mechanic characteristics
- multifunctional capabilities (in metal, plastic etc.)
- good chemical resistance
- good thermal insulation
- straight seat by high pressing forces

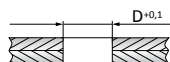
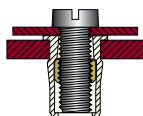
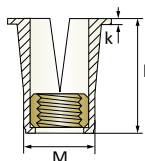


NYLON Blind Nut Series 10.890



Nylon

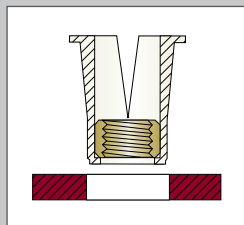
> with thread insert
made of brass



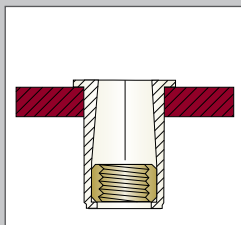
M		I	No.	
M3	1,3 - 2,0	9,6	10.890.030.000	500
D 8,0		k 0,75		
M4	2,1 - 2,4	12,7	10.890.040.000	500
D 10,2		k 0,75		

M		I	No.	
M5	2,1 - 2,4	12,7	10.890.050.000	500
D 10,2		k 0,75		
M6	2,5 - 3,2	15,9	10.890.060.000	500
D 12,5		k 0,75		
M8	3,3 - 4,0	19,0	10.890.080.000	500
D 14,0		k 0,75		

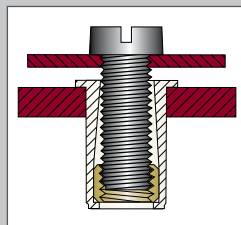
Mode of operation



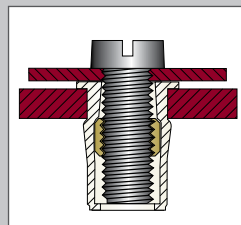
Drill a hole ...



... insert the nut ...

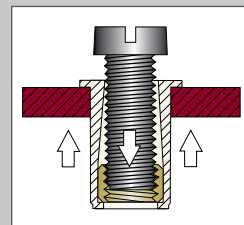


... fix the nut in position by applying pressure to the head of the blind nut with the assistance of the component (in order to prevent the nylon part from turning through) ...



... and tighten the screw.

Disassembly:
You can remove the component at all times by simply removing the screw.



If you want to remove the blind nut again, turn in an appropriate screw into the threaded brass sleeve and thereby push the brass insert through to the end of the shank.

The flexible NEOPRENE blind nuts offer a lot of advantages for different kinds of applications.

These fasteners are used for example in automotive, furniture or electronic industries in large quantities.

Further properties:

- no special tool necessary
- vibration-isolating
- suitable for connections between different kinds of materials
- non-conductive
- corrosion- and ozone resistant
- detachable
- noise repressing

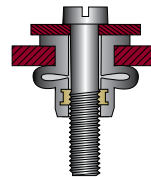
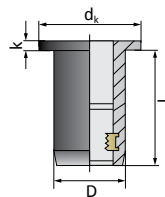


NEOPREN BLIND NUT Series 10.890



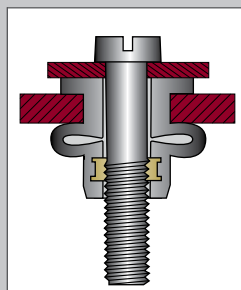
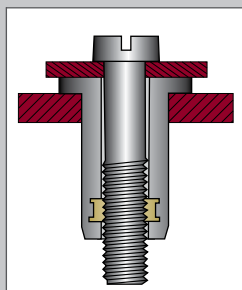
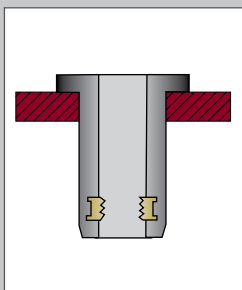
Neoprene

with thread insert <
made of brass

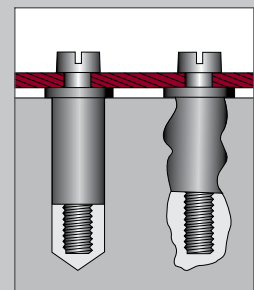


M		D	dk	I	k	Nm	mm	Shore A	No.	
M3	0,4 - 4,0	7,9	11,0	12,6	1,2	0,25 - 0,5	8,0	60	10.890.030.400	500
M4	0,4 - 4,0	7,9	11,0	12,6	1,2	0,25 - 0,5	8,0	70	10.890.040.400	500
M5	0,4 - 4,9	9,6	12,7	14,1	0,9	0,35 - 0,5	9,7	70	10.890.050.500	500
	4,0 - 11,6	9,6	14,0	21,5	0,9	0,3 - 0,9	9,7	70	10.890.050.116	500
	7,9 - 16,0	9,6	14,0	26,5	1,3	0,3 - 0,7	9,7	70	10.890.050.160	500
	20,5 - 30,0	9,6	14,0	39,0	1,3	0,6 - 1,0	9,7	70	10.890.050.300	500
M6	0,4 - 2,8	12,7	16,0	16,0	1,3	0,6 - 1,0	12,8	60	10.890.060.300	500
	0,8 - 4,7	12,7	19,0	21,1	4,75	0,8 - 1,0	12,8	70	10.890.060.500	500
	6,4 - 11,5	12,7	16,3	26,7	2,0	0,8 - 1,0	12,8	70	10.890.060.115	500
M8	0,4 - 4,0	15,9	22,1	18,3	3,2	1,0 - 1,5	16,0	60	10.890.080.400	250
	3,0 - 9,5	15,9	22,1	27,9	5,7	1,0 - 1,5	16,0	60	10.890.080.950	100

Capabilities



Low-vibration and detachable connections.



Assembly in irregular blind holes.





i The HONSEL-Group is one of the **leading developers** of blind rivet bolts. RIFBOLT® blind rivet bolts are working with the same principle of operation as blind rivet nuts. High-strength and splash water protected types and laser welded versions are only two of many innovative design ideas.

RIFBOLT blind rivet bolts consist of a **sleeve** and a **screw**, which are joined together by welding or crimping. As special production components we can use different lengths and types of screws can be used as well as almost every rivet nut sleeve.

Blind rivet bolts offer a **multiple use**. They can

- >> connect different working pieces,
- >> install a thread into components and
- >> fix additional parts to the screw.

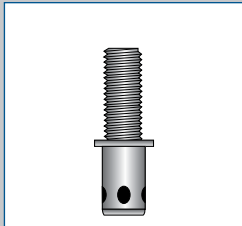
We have extended our catalogue product range on the following pages due to the increasing demand for this process secure, reliable and cost-efficient assembly in industrial volume production.

i Blind rivet threaded bolts principally work in the same way as blind rivet nuts. It is only necessary to replace the threaded mandrels of the setting device with threaded sleeves (interior threads).

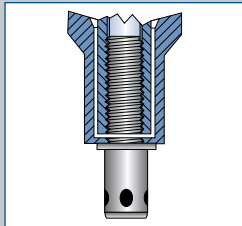
The sleeve of the blind rivet bolt is inserted into the prepared borehole and deformed by the stroke of the tool. Knurled types or versions with (partial) hexagonal shaft are available to decrease the danger of the fasteners rotation in the hole.



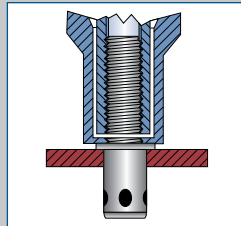
SETTING PROCESS



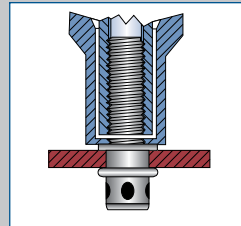
1. RiFBOLT®-Blind rivet bolt



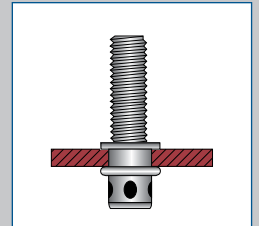
2. Screwing into the device nose piece



3. Insertion into the take-up hole of the workpiece



4. Riveting by tightening



5. Lowering the installed RiFBOLT® blind rivet nut.

Special Blind Rivet Bolts



Special manufactured products according to customers request are possible here too.

All parameter like the length of the screws, type of the thread, layout of the sleeve (knurled, hexagonal), head shape (flat head, countersunk and small countersunk head) can be adapted according to your individual needs.

The blind rivet bolts can be made from steel, stainless steel and aluminium.

The perfect tightening can be reached by additional sealings.

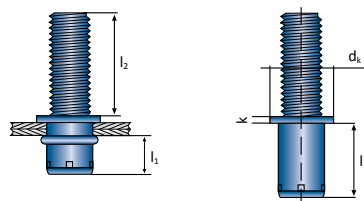
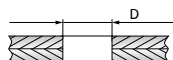










Blind Rivet Bolt RIFBOLT® Series 10.880









Steel

Flat Head <
Round Shank <



M		I	l ₂	N°	
M4	0,3 - 2,0	8,5	10,0	10.880.042.010	500
	2,0 - 3,0	10,0	15,0	10.880.043.015	500
l ₁ max. 5,0 D 5,5 d _k 8,0 k 0,5  7000 N  4 Nm  5000 N					
M5	0,5 - 2,0	9,4	10,0	10.880.052.010	500
	2,0 - 3,5	10,9	10,0	10.880.053.510	500
			15,0	10.880.053.515	500
l ₁ max. 6,0 D 6,6 d _k 9,0 k 0,8  9500 N  6 Nm  8000 N					

l₂ = length of the screw after setting; it depends on grip range and tool adjustment

M		l	l ₂	N°	
M6	0,5 - 2,5	10,9	10,0	10.880.062.510	500
			15,0	10.880.062.515	500
	2,5 - 4,0	12,4	10,0	10.880.064.010	500
			15,0	10.880.064.015	500
l ₁ max. 7,0 D 7,8 d _k 10,0 k 1,0  12000N  11Nm ↑ 9500 N					
M8	1,0 - 3,0	14,0	15,0	10.880.083.015	250
			15,0	10.880.085.015	250
	3,0 - 5,0	16,0	20,0	10.880.085.020	250
l ₁ max. 9,0 D 9,9 d _k 12,0 k 1,5  23500N  24Nm ↑ 12000N					

Property class of the screw: 8.8

RIFBOLT®

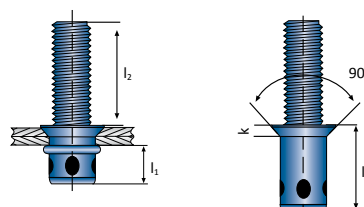
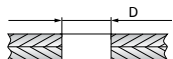










Blind Rivet Bolt RIFBOLT® Series 10.881











Steel

Countersunk Head <
Round Shank <



M		I	l ₂	N°	
M4	1,5 - 2,4	9,0	10,0	10.881.042.610	500
l ₁ max. 5,0 D 5,5 k 1,1  7000 N  4 Nm  5000 N					
M5	1,5 - 2,9	10,5	10,0	10.881.053.110	500
			15,0	10.881.053.115	500
l ₁ max. 6,0 D 6,6 k 1,1  9500 N  6 Nm  8000 N					

l₂ = length of the screw after setting; it depends on grip range and tool adjustment

M		I	l ₂	N°	
M6	1,5 - 3,4	12,0	10,0	10.881.063.610	500
			15,0	10.881.063.615	500
l ₁ max. 7,0 D 7,8 k 1,1  12000N  11Nm  9500N					
M8	1,5 - 3,9	15,0	10,0	10.881.084.115	250
			20,0	10.881.084.120	200
l ₁ max. 9,0 D 9,9 k 1,2  23500N  24Nm  12000N					

Property class of the screw: 8.8

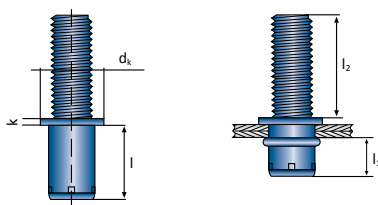


Blind Rivet Bolt RIFBOLT®

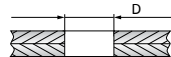
Series 10.884 **NEW**

Steel

- > Flat Head
- > Round Shank



From winter 2014/15



M		I	l ₂	N°	
---	--	---	----------------	----	--

M5	0,5 - 2,0	13,0	15,0	10.884.053.015	500
-----------	-----------	------	------	----------------	-----

l₁ max.	6,0	D	7,0	d_k	10,0	k	1,0		10000 N		8,5 Nm		9500 N
---------------------------	-----	----------	-----	----------------------	------	----------	-----	--	---------	--	--------	--	--------

M6	0,5 - 2,5	15,0	20,0	10.884.063.020	500
-----------	-----------	------	------	----------------	-----

l₁ max.	7,0	D	9,0	d_k	12,0	k	1,2		14000 N		15 Nm		12000 N
---------------------------	-----	----------	-----	----------------------	------	----------	-----	--	---------	--	-------	--	---------

M		I	l ₂	N°	
---	--	---	----------------	----	--

M8	0,5 - 3,0	18,0	20,0	10.884.083.020	250
-----------	-----------	------	------	----------------	-----

l₁ max.	9,0	D	11,0	d_k	15,0	k	1,5		24000 N		26 Nm		15000 N
---------------------------	-----	----------	------	----------------------	------	----------	-----	--	---------	--	-------	--	---------

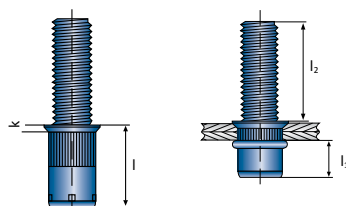
l₂ = length of the screw after setting; it depends on grip range and tool adjustment

Blind Rivet Bolt RIFBOLT®

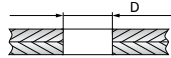
Series 10.883 **NEW**

Steel

- > Small Countersunk Head
- > Round Shank
- > knurled



From winter 2014/15



M		I	l ₂	N°	
---	--	---	----------------	----	--

M4	0,5 - 2,0	10,5	10,0	10.883.043.010	500
-----------	-----------	------	------	----------------	-----

l₁ max.	5,0	D	6,0	d_k	6,8	k	0,5		8000 N		7000 N
---------------------------	-----	----------	-----	----------------------	-----	----------	-----	--	--------	--	--------

M5	0,5 - 2,0	12,5	15,0	10.883.053.015	500
-----------	-----------	------	------	----------------	-----

l₁ max.	6,0	D	7,0	d_k	8,0	k	0,6		10000 N		9500 N
---------------------------	-----	----------	-----	----------------------	-----	----------	-----	--	---------	--	--------

M		I	l ₂	N°	
---	--	---	----------------	----	--

M6	0,5 - 3,0	14,5	20,0	10.883.063.020	500
-----------	-----------	------	------	----------------	-----

l₁ max.	7,0	D	9,0	d_k	10,0	k	0,6		14000 N		12000 N
---------------------------	-----	----------	-----	----------------------	------	----------	-----	--	---------	--	---------

M8	1,0 - 3,0	17,5	20,0	10.883.083.020	250
-----------	-----------	------	------	----------------	-----

l₁ max.	9,0	D	11,0	d_k	12,0	k	0,6		24000 N		15000 N
---------------------------	-----	----------	------	----------------------	------	----------	-----	--	---------	--	---------

l₂ = length of the screw after setting; it depends on grip range and tool adjustment



Blind Rivet Bolt RIFBOLT®

NEW

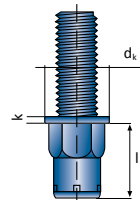
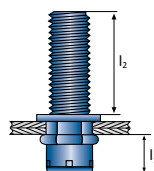
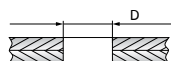
Series 10.885



Steel

 Flat Head <
 Hexagonal <


From winter 2014/15



M		I	l ₂	N°	
M5	0,5 - 2,0	13,0	15,0	10.885.053.015	500
l ₁ max. 6,0 SW 7,0 d _k 10,0 k 1,0 10000 N 8,5 Nm 9500 N					
M6	0,5 - 2,5	15,0	20,0	10.885.063.020	500
l ₁ max. 7,0 SW 9,0 d _k 12,0 k 1,2 14000 N 15 Nm 12000 N					

NEW

M		I	l ₂	N°	
M8	1,0 - 3,0	18	20,0	10.885.083.020	250
l ₁ max. 9,0 SW11,0 d _k 15,0 k 1,5 24000 N 26 Nm 15000 N					

NEW

 l₂ = length of the screw after setting; it depends on grip
 range and tool adjustment

RIFBOLT®

Blind Rivet Bolt RIFBOLT®

NEW

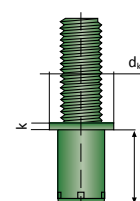
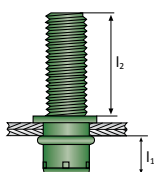
Series 10.882



Stainless steel

 Flat Head <
 Round Shank <


From winter 2014/15



M		I	l ₂	N°	
M5	0,5 - 2,0	13,0	15,0	10.882.053.020	500
l ₁ max. 6,0 D 7,0 d _k 10,0 k 1,0 10000 N 8,5 Nm 12000 N					
M6	0,5 - 2,5	14,0	20,0	10.882.063.020	500
l ₁ max. 7,0 D 9,0 d _k 12,0 k 1,2 14000 N 15 Nm 15000 N					

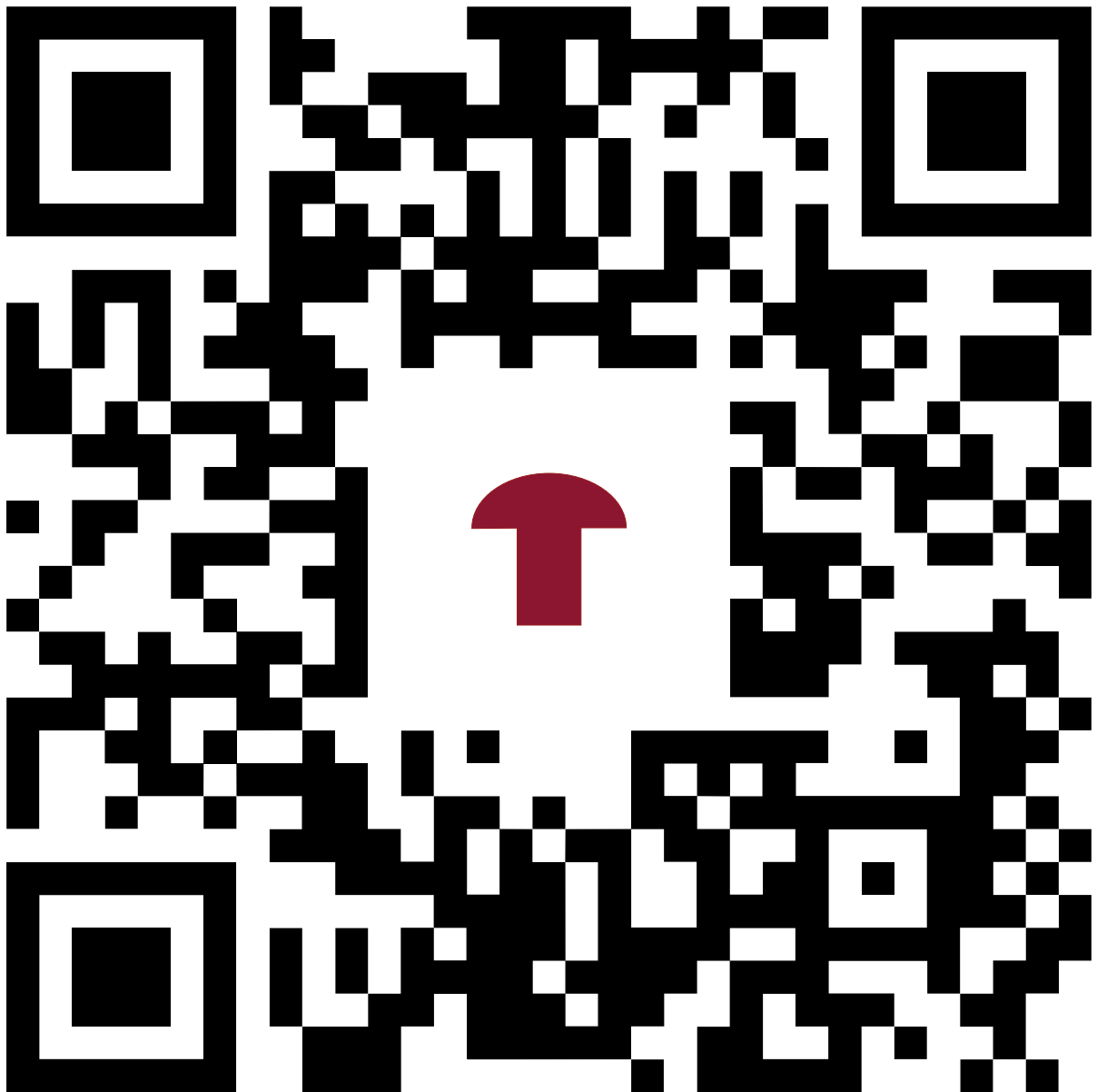
NEW

M		I	l ₂	N°	
M8	1,0 - 3,0	18	20,0	10.882.083.020	250
l ₁ max. 9,0 D 11,0 d _k 15,0 k 1,5 24000 N 26 Nm 19000 N					

NEW

 l₂ = length of the screw after setting; it depends on grip
 range and tool adjustment



"Industrial rivets according to DIN" are the **classical one-piece type of rivets** that are handled **both-sided** of the component.

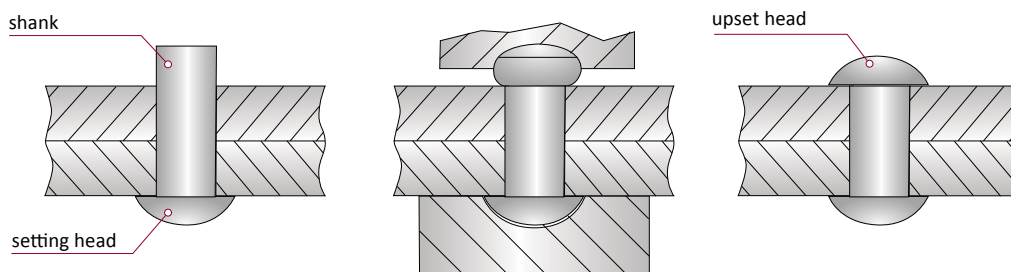
The connection is realised by forming the shank with axial pressure on its end. The production of all types mentioned on page ► 129 is possible from aluminium, steel, copper, brass and stainless steel in general.

VVG carries a comprehensive stock range.

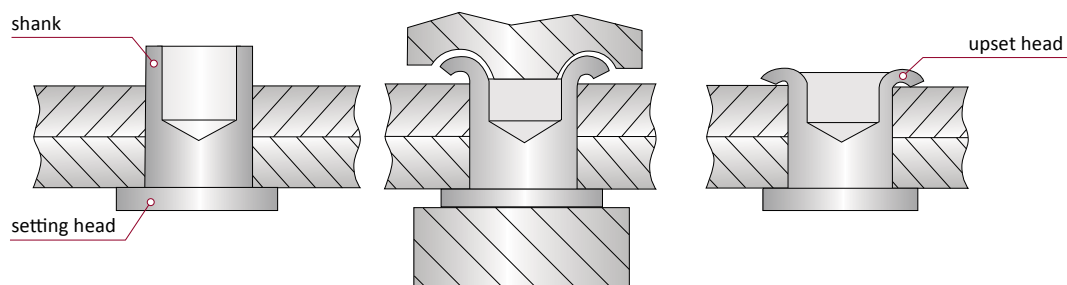
Please ask our sales team for current prices/availabilities or possibilities of production and individual fabrications.

There are basically three different types of industrial rivets according to DIN:

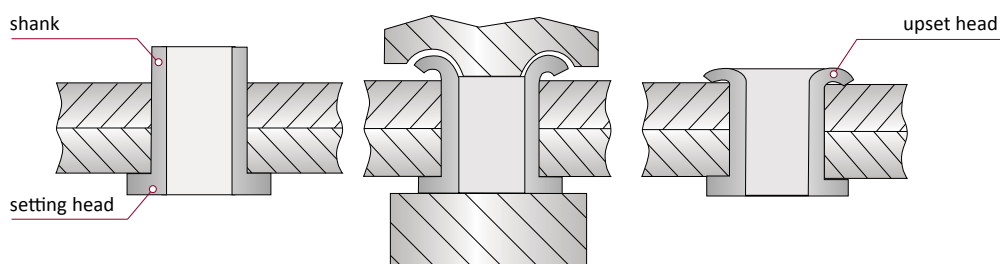
SOLID RIVETS - Rivets with solid shank



SEMI-TUBULAR RIVETS - shank with partial bore hole



TUBULAR RIVETS - shank with persistent bore hole



Available on Request

DIN 7340 B



DIN 662



From Stock

Most dimensions of these versions are **available from stock** or reproduceable within short terms in general.

Please ask for inventory and current prices.

Solid Rivets	Semi-Tubular Rivets	Tubular Rivets
DIN 660 Round head rivet Aluminium and steel	DIN 7338 B Steel and copper	DIN 7338 C 1 Tubular Rivet Steel and copper
DIN 661 Countersunk rivet Aluminium and steel		Tubular rivet DB-type Steel

On Request

Contact our sales team for possible stocks.

If minimum order quantities are reached, we can manufacture these products.

Solid Rivets	Semi-Tubular Rivets	Tubular Rivets
DIN 660 Round head rivet Other materials	DIN 7338 B Other materials	DIN 7338 C 1 Rohrniete Other materials
DIN 661 Countersunk rivet Other materials		
DIN 662 Raised head rivet	DIN 6791	DIN 7340 A
DIN 7338 A Cylinder head rivet	DIN 6792	DIN 7340 B

Special Parts

In addition to the mentioned product groups a multitude of special forms and types are available - **partly from stock**.

Please send your inquiry and we will check immediately the warehouse stock, the producibility or possibilities for alternatives and prepare a suitable offer.

Flat countersunk rivet MAN-type	Covering rivet		
Flat countersunk rivet US-type			

Producible sizes

DIN 660

Shank-ø 1 - 12 mm
Max. length of shank 100 mm

DIN 661

Shank-ø 2 - 10 mm
Max. length of shank 60 mm

DIN 7338 C 1

Shank-ø 3 - 10 mm
Max. length of shank 250 mm

DIN 7340

Shank-ø 0,8 - 20 mm
Max. length of shank 400 mm

Information about grip ranges and excess lengths of the shank on the next page.



DIN 674



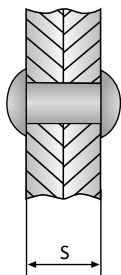
DIN 675



DIN 6791

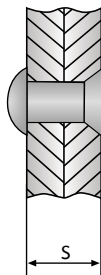
DIN 660

Reference values for grip ranges of solid rivets subject to the diameter of the shank and type of the upset-head according to DIN 660.



Type A

Round head as upset-head



Type B

Countersunk head as upset-head

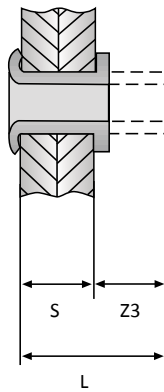
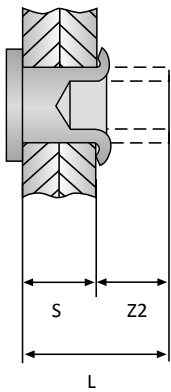


Nominal length (mm)	ø 3 mm		ø 4 mm		ø 5 mm		ø 6 mm		ø 8 mm	
	A	Type B	A	Type B	A	Type B	A	Type B	A	Type B
	max. grip range (mm)		max. grip range (mm)		max. grip range (mm)		max. grip range (mm)		max. grip range (mm)	
5	1,5	3	—	2	—	1,5	—	—	—	—
6	2	4	1	3	—	2,5	—	2	—	—
8	4	5,5	3	5	2	4,5	0,5	4	—	3
10	5,5	7,5	4,5	7	4	6,5	2,5	6	—	5
12	7,5	9	6	9	5,5	8,5	4,5	8	2,5	7
14	9,5	10,5	7,5	10	7	10	6,5	9,5	4	8,5
16	11	12	9	11	9	11,5	8	11	6	10
18	13	14	11	13	11	13	9,5	13	8	12
20	14	16	13	15	12	15	11	15	9,5	14
22	16	18	15	17	14	17	13	17	11	15
25	18	20	17	19	17	19	16	19	14	18
28	21	23	20	22	19	22	18	22	16	21
30	23	25	22	24	21	24	20	23	18	22
32	—	—	23	26	23	26	22	25	20	24
35	—	—	26	28	25	28	24	28	22	27
38	—	—	29	31	28	31	27	30	25	29
40	—	—	30	32	30	32	28	32	27	31

Individual tests recommended!



DIN 7338 Reference values for the excess length of the shaft for forming the upset-head subject to the diameter and length of the shaft according to DIN 7338.



Nominal diameter (mm)	Excess length Z2 (mm)	Excess length Z3 (mm)
3	approx. 2	approx. 2,5
4	approx. 2	approx. 3
5	approx. 2,5	approx. 3,5
6	up to L = 20 mm approx. 3 from L = 22 mm approx. 3,5	approx. 4
8	up to L = 20 mm approx. 4 from L = 22 mm approx. 4,5	approx. 4,5

Individual tests recommended!





Industrial Rivet DIN 660

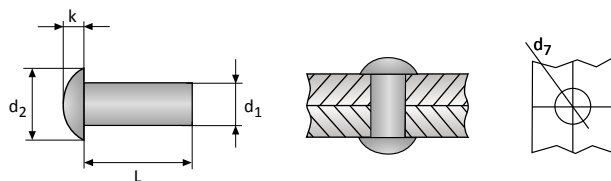
Series 10.000/001/002/003



Aluminium, Steel, Copper, Brass



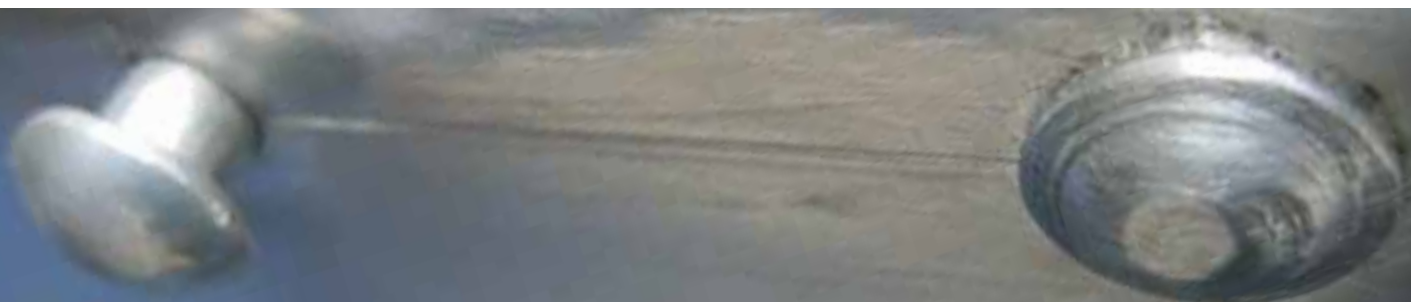
- > Solid Rivet
- > Round Head

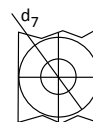
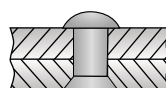
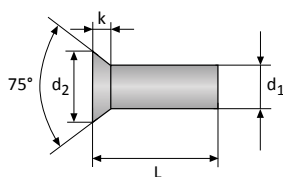


d ₁	L	Article numbers				
		Aluminium	Steel	Copper	Brass	
3,0	5	10.003.030.050	10.000.030.050	10.001.030.050	10.002.030.050	2000
	6	10.003.030.060	10.000.030.060	10.001.030.060	10.002.030.060	2000
	8	10.003.030.080	10.000.030.080	10.001.030.080	10.002.030.080	2000
	10	10.003.030.100	10.000.030.100	10.001.030.100	10.002.030.100	2000
	12	10.003.030.120	10.000.030.120	10.001.030.120	10.002.030.120	1000
	16	10.003.030.160	10.000.030.160	10.001.030.160	10.002.030.160	1000
	20	10.003.030.200	10.000.030.200	10.001.030.200	10.002.030.200	1000
	25	10.003.030.250	10.000.030.250	10.001.030.250	10.002.030.250	1000
d ₇ 3,1 +0,12 mm		d ₂ 5,2 mm			k 1,8 mm	
4,0	6	10.003.040.060	10.000.040.060	10.001.040.060	10.002.040.060	1000
	8	10.003.040.080	10.000.040.080	10.001.040.080	10.002.040.080	1000
	10	10.003.040.100	10.000.040.100	10.001.040.100	10.002.040.100	1000
	12	10.003.040.120	10.000.040.120	10.001.040.120	10.002.040.120	1000
	16	10.003.040.160	10.000.040.160	10.001.040.160	10.002.040.160	1000
	18	10.003.040.180	10.000.040.180	10.001.040.180	10.002.040.180	1000
	20	10.003.040.200	10.000.040.200	10.001.040.200	10.002.040.200	1000
	22	10.003.040.220	10.000.040.220	10.001.040.220	10.002.040.220	1000
	25	10.003.040.250	10.000.040.250	10.001.040.250	10.002.040.250	1000
	30	10.003.040.300	10.000.040.300	10.001.040.300	10.002.040.300	1000
d ₇ 4,2 +0,12 mm		d ₂ 7,0 mm			k 2,4 mm	
5,0	6	10.003.050.060	10.000.050.060	10.001.050.060	10.002.050.060	1000
	8	10.003.050.080	10.000.050.080	10.001.050.080	10.002.050.080	1000
	10	10.003.050.100	10.000.050.100	10.001.050.100	10.002.050.100	1000
	12	10.003.050.120	10.000.050.120	10.001.050.120	10.002.050.120	1000
	16	10.003.050.160	10.000.050.160	10.001.050.160	10.002.050.160	1000
	20	10.003.050.200	10.000.050.200	10.001.050.200	10.002.050.200	1000
	25	10.003.050.250	10.000.050.250	10.001.050.250	10.002.050.250	1000
	30	10.003.050.300	10.000.050.300	10.001.050.300	10.002.050.300	500
d ₇ 5,2 +0,12 mm		d ₂ 8,8 mm			k 3,0 mm	
6,0	8	10.003.060.080	10.000.060.080	10.001.060.080	10.002.060.080	1000
	10	10.003.060.100	10.000.060.100	10.001.060.100	10.002.060.100	1000
	12	10.003.060.120	10.000.060.120	10.001.060.120	10.002.060.120	500
	16	10.003.060.160	10.000.060.160	10.001.060.160	10.002.060.160	500
	20	10.003.060.200	10.000.060.200	10.001.060.200	10.002.060.200	500
	25	10.003.060.250	10.000.060.250	10.001.060.250	10.002.060.250	500
	30	10.003.060.300	10.000.060.300	10.001.060.300	10.002.060.300	250
d ₇ 6,3 +0,15 mm		d ₂ 10,5 mm			k 3,6 mm	

On request further ...

>> lengths, >> intermedia sizes, >> shank diameter 8 mm, >> shank diameter 10-16 mm (according to DIN 124), >> special surface treat-





d ₁	L	Article numbers				
		Aluminium	Steel	Copper	Brass	
3,0	5	10.023.030.050	10.020.030.050	10.021.030.050	10.022.030.050	2000
	6	10.023.030.060	10.020.030.060	10.021.030.060	10.022.030.060	2000
	8	10.023.030.080	10.020.030.080	10.021.030.080	10.022.030.080	2000
	10	10.023.030.100	10.020.030.100	10.021.030.100	10.022.030.100	2000
	12	10.023.030.120	10.020.030.120	10.021.030.120	10.022.030.120	1000
	16	10.023.030.160	10.020.030.160	10.021.030.160	10.022.030.160	1000
	20	10.023.030.200	10.020.030.200	10.021.030.200	10.022.030.200	1000
	25	10.023.030.250	10.020.030.250	10.021.030.250	10.022.030.250	1000
d ₇ 3,1 +0,12 mm		d ₂ 5,2 mm			k 1,4 mm	
4,0	6	10.023.040.060	10.020.040.060	10.021.040.060	10.022.040.060	1000
	8	10.023.040.080	10.020.040.080	10.021.040.080	10.022.040.080	1000
	10	10.023.040.100	10.020.040.100	10.021.040.100	10.022.040.100	1000
	12	10.023.040.120	10.020.040.120	10.021.040.120	10.022.040.120	1000
	16	10.023.040.160	10.020.040.160	10.021.040.160	10.022.040.160	1000
	18	10.023.040.180	10.020.040.180	10.021.040.180	10.022.040.180	1000
	20	10.023.040.200	10.020.040.200	10.021.040.200	10.022.040.200	1000
	22	10.023.040.220	10.020.040.220	10.021.040.220	10.022.040.220	1000
	25	10.023.040.250	10.020.040.250	10.021.040.250	10.022.040.250	1000
	30	10.023.040.300	10.020.040.300	10.021.040.300	10.022.040.300	1000
d ₇ 4,2 +0,12 mm		d ₂ 7,0 mm			k 2,0 mm	
5,0	6	10.023.050.060	10.020.050.060	10.021.050.060	10.022.050.060	1000
	8	10.023.050.080	10.020.050.080	10.021.050.080	10.022.050.080	1000
	10	10.023.050.100	10.020.050.100	10.021.050.100	10.022.050.100	1000
	12	10.023.050.120	10.020.050.120	10.021.050.120	10.022.050.120	1000
	16	10.023.050.160	10.020.050.160	10.021.050.160	10.022.050.160	1000
	20	10.023.050.200	10.020.050.200	10.021.050.200	10.022.050.200	1000
	25	10.023.050.250	10.020.050.250	10.021.050.250	10.022.050.250	1000
d ₇ 5,2 +0,12 mm		d ₂ 8,8 mm			k 2,5 mm	
6,0	8	10.023.060.080	10.020.060.080	10.021.060.080	10.022.060.080	1000
	10	10.023.060.100	10.020.060.100	10.021.060.100	10.022.060.100	1000
	12	10.023.060.120	10.020.060.120	10.021.060.120	10.022.060.120	500
	16	10.023.060.160	10.020.060.160	10.021.060.160	10.022.060.160	500
	20	10.023.060.200	10.020.060.200	10.021.060.200	10.022.060.200	500
	22	10.023.060.220	10.020.060.220	10.021.060.220	10.022.060.220	500
	25	10.023.060.250	10.020.060.250	10.021.060.250	10.022.060.250	250
	28	10.023.060.280	10.020.060.280	10.021.060.280	10.022.060.280	250
d ₇ 6,3 +0,15 mm		d ₂ 10,5 mm			k 3,0 mm	

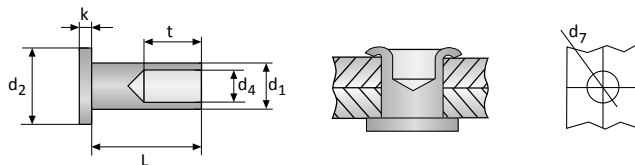




Aluminium, Steel, Copper, Brass



- > Semi-Tubular Rivet
- > Cylinder Head



d ₁	L	Article numbers				
		Aluminium	Steel	Copper	Brass	
3,0	4	10.163.030.040	10.160.030.040	10.161.030.040	10.162.030.040	1000
	5	10.163.030.050	10.160.030.050	10.161.030.050	10.162.030.050	1000
	6	10.163.030.060	10.160.030.060	10.161.030.060	10.162.030.060	1000
	8	10.163.030.080	10.160.030.080	10.161.030.080	10.162.030.080	1000
	10	10.163.030.100	10.160.030.100	10.161.030.100	10.162.030.100	1000
	12	10.163.030.120	10.160.030.120	10.161.030.120	10.162.030.120	1000
	18	10.163.030.180	10.160.030.180	10.161.030.180	10.162.030.180	1000
d ₇ 3,1 +0,12 mm		d ₄ 1,7	d ₂ 5,5 mm	k 0,8 mm	t 4,0 mm	
4,0	6*	10.163.040.060	10.160.040.060	10.161.040.060	10.162.040.060	1000
	8	10.163.040.080	10.160.040.080	10.161.040.080	10.162.040.080	1000
	10	10.163.040.100	10.160.040.100	10.161.040.100	10.162.040.100	1000
	12	10.163.040.120	10.160.040.120	10.161.040.120	10.162.040.120	1000
	15	10.163.040.150	10.160.040.150	10.161.040.150	10.162.040.150	1000
d ₇ 4,2 +0,12 mm		d ₄ 2,7	d ₂ 7,5 mm	k 1,0 mm	t 5,0 mm (*4,0 mm)	
5,0	8*	10.163.050.080	10.160.050.080	10.161.050.080	10.162.050.080	1000
	10	10.163.050.100	10.160.050.100	10.161.050.100	10.162.050.100	1000
	12	10.163.050.120	10.160.050.120	10.161.050.120	10.162.050.120	1000
	15	10.163.050.150	10.160.050.150	10.161.050.150	10.162.050.150	1000
	18	10.163.050.180	10.160.050.180	10.161.050.180	10.162.050.180	1000
	20	10.163.050.200	10.160.050.200	10.161.050.200	10.162.050.200	1000
d ₇ 5,2 +0,12 mm		d ₄ 3,5	d ₂ 9,5 mm	k 1,0 mm	t 6,0 mm (*4,0 mm)	
6,0	10	10.163.060.100	10.160.060.100	10.161.060.100	10.162.060.100	1000
	12	10.163.060.120	10.160.060.120	10.161.060.120	10.162.060.120	1000
	15	10.163.060.150	10.160.060.150	10.161.060.150	10.162.060.150	1000
	18	10.163.060.180	10.160.060.180	10.161.060.180	10.162.060.180	1000
	20	10.163.060.200	10.160.060.200	10.161.060.200	10.162.060.200	1000
	22	10.163.060.220	10.160.060.220	10.161.060.220	10.162.060.220	1000
	25	10.163.060.250	10.160.060.250	10.161.060.250	10.162.060.250	1000
	30	10.163.060.300	10.160.060.300	10.161.060.300	10.162.060.300	1000
d ₇ 6,3 +0,15 mm		d ₄ 4,2	d ₂ 11,5 mm	k 1,2 mm	t 8,0 mm	
8,0	12	10.163.080.120	10.160.080.120	10.161.080.120	10.162.080.120	1000
	15	10.163.080.150	10.160.080.150	10.161.080.150	10.162.080.150	1000
	18	10.163.080.180	10.160.080.180	10.161.080.180	10.162.080.180	1000
	20	10.163.080.200	10.160.080.200	10.161.080.200	10.162.080.200	1000
	22	10.163.080.220	10.160.080.220	10.161.080.220	10.162.080.220	1000
	25	10.163.080.250	10.160.080.250	10.161.080.250	10.162.080.250	1000
d ₇ 8,4 +0,15 mm		d ₄ 6,0	d ₂ 15,5 mm	k 1,2 mm	t 10,0 mm	
10,0	16	10.163.100.160	10.160.100.160	10.161.100.160	10.162.100.160	1000
	18	10.163.100.180	10.160.100.180	10.161.100.180	10.162.100.180	1000
	20	10.163.100.200	10.160.100.200	10.161.100.200	10.162.100.200	1000
	22	10.163.100.220	10.160.100.220	10.161.100.220	10.162.100.220	1000
	25	10.163.100.250	10.160.100.250	10.161.100.250	10.162.100.250	1000
d ₇ 10,5 +0,15 mm		d ₄ 7,5	d ₂ 18,0 mm	k 1,2 mm	t 12,0 mm	

► Reference values for grip ranges and shaft overlaps on [pages 130/131](#).



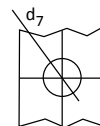
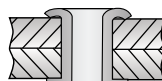
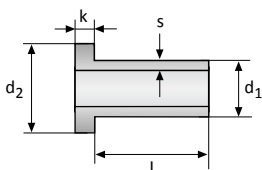
Packed in bags of 100 pcs.

Industrial Rivet DIN 7338 C 1


Series 10.180/181/182/183

Aluminium, Steel, Copper, Brass

Tubular Rivet <
Cylinder Head <



d ₁	L	Article numbers				
		Aluminium	Steel	Copper	Brass	
3,0	6	10.183.030.060	10.180.030.060	10.181.030.060	10.182.030.060	1000
	8	10.183.030.080	10.180.030.080	10.181.030.080	10.182.030.080	1000
	10	10.183.030.100	10.180.030.100	10.181.030.100	10.182.030.100	1000
	12	10.183.030.120	10.180.030.120	10.181.030.120	10.182.030.120	1000
d ₇ 3,1 +0,12 mm		s 0,5	d ₂ 5,5 mm		k 0,8 mm	
4,0	6	10.183.040.060	10.180.040.060	10.181.040.060	10.182.040.060	1000
	8	10.183.040.080	10.180.040.080	10.181.040.080	10.182.040.080	1000
	10	10.183.040.100	10.180.040.100	10.181.040.100	10.182.040.100	1000
	12	10.183.040.120	10.180.040.120	10.181.040.120	10.182.040.120	1000
	15	10.183.040.150	10.180.040.150	10.181.040.150	10.182.040.150	1000
d ₇ 4,2 +0,12 mm		s 0,5	d ₂ 7,5 mm		k 1,0 mm	
5,0	8	10.183.050.080	10.180.050.080	10.181.050.080	10.182.050.080	1000
	10	10.183.050.100	10.180.050.100	10.181.050.100	10.182.050.100	1000
	12	10.183.050.120	10.180.050.120	10.181.050.120	10.182.050.120	1000
	15	10.183.050.150	10.180.050.150	10.181.050.150	10.182.050.150	1000
d ₇ 5,1 +0,12 mm		s 0,5	d ₂ 9,5 mm		k 1,0 mm	
6,0	10	10.183.060.100	10.180.060.100	10.181.060.100	10.182.060.100	1000
	12	10.183.060.120	10.180.060.120	10.181.060.120	10.182.060.120	1000
	15	10.183.060.150	10.180.060.150	10.181.060.150	10.182.060.150	1000
	18	10.183.060.180	10.180.060.180	10.181.060.180	10.182.060.180	1000
	20	10.183.060.200	10.180.060.200	10.181.060.200	10.182.060.200	1000
	25	10.183.060.250	10.180.060.250	10.181.060.250	10.182.060.250	1000
d ₇ 6,1 +0,15 mm		s 0,75	d ₂ 11,5 mm		k 1,2 mm	
8,0	12	10.183.080.120	10.180.080.120	10.181.080.120	10.182.080.120	1000
	15	10.183.080.150	10.180.080.150	10.181.080.150	10.182.080.150	1000
	18	10.183.080.180	10.180.080.180	10.181.080.180	10.182.080.180	1000
	20	10.183.080.200	10.180.080.200	10.181.080.200	10.182.080.200	1000
	22	10.183.080.220	10.180.080.220	10.181.080.220	10.182.080.220	1000
	25	10.183.080.250	10.180.080.250	10.181.080.250	10.182.080.250	1000
d ₇ 8,4 +0,15 mm		s 1,2	d ₂ 15,5 mm		k 1,2 mm	
10,0	15	10.183.100.150	10.180.100.150	10.181.100.150	10.182.100.150	1000
	18	10.183.100.180	10.180.100.180	10.181.100.180	10.182.100.180	1000
	20	10.183.100.200	10.180.100.200	10.181.100.200	10.182.100.200	1000
d ₇ 10,5 +0,15 mm		s 1,2	d ₂ 18,0 mm		k 1,2 mm	

 Packed in bags of 100 pcs.







i Axial clamps are a simple, safe and **fast solution** to realize hard to detach axial connections. They can be used with axials, tubes, wires cones, rivets, screws or pins. Typical applications can be found in the automotive and electrical industries or for example on gardening tools or children toys.

Two types are disposable:
Open axial clamp rings and closed axial clamp caps.

In addition to the shown catalogue items further products with different surface (e.g. DELTA-Tone) or inter-media sizes for axle diameters up to 25 mm are receivable - adventitious several external diameters.

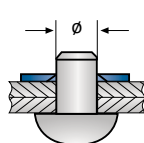
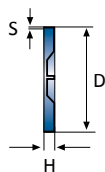
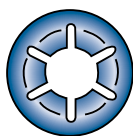
The caps can be coated with individual colours for example according to RAL or other scales.



Axial Clamp Ring Series 10.810

Steel

> Browning



ø	D	H	S	Teeth	Pull off force (N)	No.	
3,0	11,0	1,3	0,2	4	200	10.810.030.110	1000
4,0	11,0	1,3	0,2	5	400	10.810.040.110	1000
5,0	11,0	1,3	0,2	6	600	10.810.050.110	1000
6,0	15,0	1,6	0,25	6	800	10.810.060.150	1000
7,0	15,0	1,6	0,25	6	800	10.810.070.150	1000
8,0	15,0	1,6	0,25	6	800	10.810.080.150	1000
9,0	18,0	2,1	0,25	6	1000	10.810.090.180	1000

ø	D	H	S	Teeth	Pull off force (N)	No.	
10,0	18,0	2,1	0,3	6	1100	10.810.100.180	1000
12,0	25,0	3,0	0,4	6	2500	10.810.120.250	1000
15,0	28,0	2,8	0,4	6	2500	10.810.150.280	500
20,0	36,0	3,0	0,4	8	3500	10.810.200.360	500
25,0	41,0	3,3	0,5	8	5000	10.810.250.410	500
30,0	50,0	4,3	0,5	10	6000	10.810.300.500	500

NEW

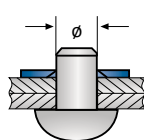
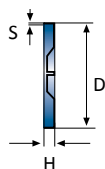
NEW



Axial Clamp Ring Series 10.820

Steel

> Zinc Plated



ø	D	H	S	Teeth	Pull off force (N)	No.	
3,0	11,0	1,3	0,2	4	200	10.820.030.110	1000
4,0	11,0	1,3	0,2	5	400	10.820.040.110	1000
5,0	11,0	1,3	0,2	6	600	10.820.050.110	1000
6,0	15,0	1,6	0,25	6	800	10.820.060.150	1000
7,0	15,0	1,6	0,25	6	800	10.820.070.150	1000
8,0	15,0	1,6	0,25	6	800	10.820.080.150	1000
9,0	18,0	2,1	0,25	6	1000	10.820.090.180	1000

ø	D	H	S	Teeth	Pull off force (N)	No.	
10,0	18,0	2,1	0,3	6	1100	10.820.100.180	1000
12,0	25,0	3,0	0,4	6	2500	10.820.120.250	1000
15,0	28,0	2,8	0,4	6	2500	10.820.150.280	500
20,0	36,0	3,0	0,4	8	3500	10.820.200.360	500
25,0	41,0	3,3	0,5	8	5000	10.820.250.410	500
30,0	50,0	4,3	0,5	10	6000	10.820.300.500	500

NEW

NEW

NEW

NEW

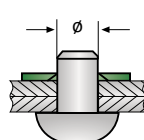
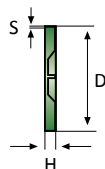
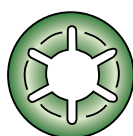
NEW



Axial Clamp Ring Series 10.828

NEW

Stainless Steel



[1.4310]

ø	D	H	S	Teeth	Pull off force (N)	No.	
4,0	11,0	1,3	0,2	5	100	10.828.040.110	1000
5,0	11,0	1,3	0,2	6	300	10.828.050.110	1000
6,0	15,0	1,6	0,25	6	400	10.828.060.150	1000

NEW

NEW

NEW

ø	D	H	S	Teeth	Pull off force (N)	No.	
8,0	15,0	1,6	0,25	6	600	10.828.080.150	1000
10,0	18,0	2,1	0,3	6	800	10.828.100.180	1000

NEW

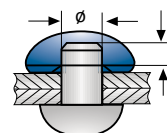
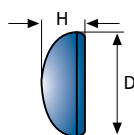
NEW

Axial Clamp Cap

Series 10.830


Steel

Nickel Plated Cap <
Zinc Plated Ring <



Ø	D	H	I	Pull off force (N)	No.	
3,0	12,0	4,2	3,0	200	10.830.030.120	1000
4,0	12,0	4,2	3,0	400	10.830.040.120	1000
5,0	12,0	4,2	3,0	500	10.830.050.120	1000
6,0	16,0	5,7	4,0	600	10.830.060.160	1000
7,0	16,0	5,7	4,0	900	10.830.070.160	1000
8,0	16,0	5,7	4,0	1000	10.830.080.160	1000
9,0	20,0	7,1	4,5	1000	10.830.090.200	1000
10,0	20,0	7,1	4,5	1100	10.830.100.200	500

Ø	D	H	I	Pull off force (N)	No.	
12	27,0	9,4	6,0	2500	10.830.120.270	500
15	30,0	9,7	6,0	2500	10.830.150.300	500
16	30,0	9,7	6,0	2500	10.830.160.300	500
18	30,0	9,7	6,0	3500	10.830.180.300	500
20	39,0	10,0	6,0	3500	10.830.200.390	500
22	39,0	10,0	6,0	3700	10.830.220.390	500
25	43,0	12,8	7,0	5000	10.830.250.430	500

NEW

NEW

NEW

NEW

NEW

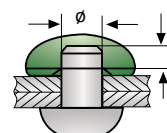
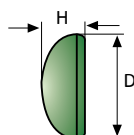
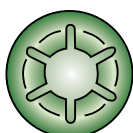
Axial Clamp Cap

Series 10.838

NEW


Stainless Steel

Axial Clamp
Cap



[1.4310]

Ø	D	H	I	Pull off force (N)	No.	
4,0	12,0	4,2	3,0	400	10.838.040.120	1000
5,0	12,0	4,2	3,0	500	10.838.050.120	1000
6,0	16,0	5,7	4,0	600	10.838.060.160	1000

NEW

NEW

NEW

Ø	D	H	I	Pull off force (N)	No.	
8	16,0	5,7	4,0	1000	10.838.080.160	500
10	20,0	7,1	4,5	1100	10.838.100.200	500

NEW

NEW

- Suitable manual tools on [page 189](#).
- Automated solutions for large number of pieces on request
- MultiSYS assortment box on [page 153](#).



Smoothing and beveling of sharp edges on the axle makes the assembly of the fasteners easier and more secure!





i Sheet metal fasteners with internal and external threads are especially suitable for **working with thin metal sheets** starting with 0.5 mm thickness. This reduces the thickness of the elements in general in favour of lower weight and less material. After processing they are **permanently connected to the base material**. The screwed connections can be removed afterwards without risking displacement of the fastener. Through this **the production processes are rationalized and secured**. Mechanical insertion **prevent the surface from damage** and enables the usage also in prefabricated materials.

A typical application nowadays for example is the production of communication media (smart phones, computers, notebooks) or the automotive industry.

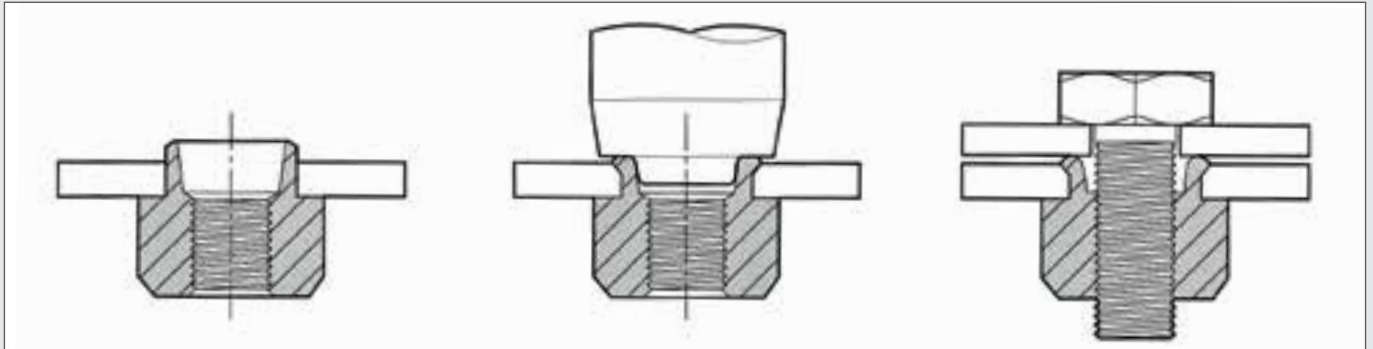
VVG Befestigungstechnik keeps a large assortment of high-quality sheet metal fasteners and rivets for steel sheets as a **perfect addition to the well-proven blind rivet products** of HONSEL Group on stock.

A diversity of thousands of versions and the habitual VVG delivery service guarantees optimal and reliable support - also for individual adjustments.

The products shown here are only a small excerpt from all available products. For further information, please contact our sales team.

Two basic groups are differentiated:

Riveted versions



A shaft is pushed through a pre-punched hole in the component and riveted on the opposite side. The base material here is not deformed. These fastening elements with thread serrated shaft, which cuts into the metal sheet surface ensures a **high resistance to torsion and torque capacity**.

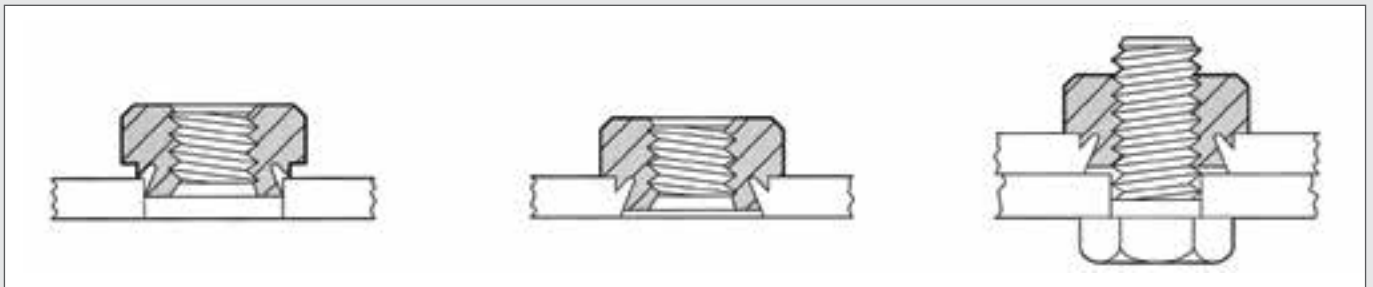
Besides treatment through presses these models can also be used with hand tools.

There is a **huge variety of dimensions** with countersunk shafts and serration available on stock, in room-saving small versions or with integrated self-lock. The materials can be **steel, stainless steel**.

Please ask for further details!



Pressed-in versions



During compression the base material is pressed through a knurl / hexagonal platform into a designated notch. Knurl and notch of the fastener are coordinated to limit the deforming of the element to the immediate area. A onesided flush finish is accomplished, and a special heat treatment provide a high thread stability at a compact size range. The insertion can be made with the highest accuracy - the surfaces on both sides of the component will not be damaged. The following pages give an overview of the available basic forms:

self-clinch nuts



self-clinch studs



self-clinch standoffs



Guide values

Further details on determining the guides value are available upon request. Please note, that before use in your applications suitable tests with original components should be made. For this we will provide samples as well.

Article description, Article number				Tested in steel (cold-rolled)			Tested in aluminium (5052-H34 grade)		
				Force fitting pressure (kN)	Extracting forces (N)	Torsional strength (Nm)	Force fitting pressure (kN)	Extracting forces (N)	Torsional strength (Nm)
10.413	M2,5 10.413.025.000	10.414	M2,5 10.414.025.000	11,0 - 15,5	500	1,70	7,0 - 9,0	280	0,95
	M2,5 10.413.025.001		M2,5 10.414.025.001	11,0 - 15,5	600	1,90	7,0 - 9,0	420	1,15
	M3 10.413.030.000		M3 10.414.030.000	14,0 - 22,0	550	2,00	11,0 - 14,0	350	1,70
	M3 10.413.030.001		M3 10.414.030.001	14,0 - 22,0	720	2,45	11,0 - 14,0	480	1,85
	M4 10.413.040.000		M4 10.414.040.000	17,0 - 27,0	600	2,95	12,0 - 15,0	400	2,20
	M4 10.413.040.001		M4 10.414.040.001	17,0 - 27,0	750	4,60	12,0 - 15,0	550	2,70
	M5 10.413.050.001		M5 10.414.050.000	19,0 - 33,0	670	4,10	13,0 - 17,0	460	3,20
	M5 10.413.050.002		M5 10.414.050.001	19,0 - 33,0	950	5,45	13,0 - 17,0	620	4,10
	M6 10.413.060.001		M6 10.414.060.001	25,0 - 36,0	1820	15,5	17,0 - 29,0	950	8,10
10.407	M3 10.407.030.010	10.405	M3 10.405.030.010	10,0	1200	2,2	5,5	820	1,4
	M4 10.407.040.010		M4 10.405.040.010	18,0	2550	8,8	11,0	1850	5,65
	M5 10.407.050.010		M5 10.405.050.010	18,0	2550	8,8	11,0	1850	5,65
	M5 10.407.050.013			18,0	2550	8,8	11,0	1850	5,65
				Force fitting pressure (kN)	Extracting forces (N)	Max. tightening torque (Nm)	Force fitting pressure (kN)	Extracting forces (N)	Max. tightening torque (Nm)
10.404	M3 10.404.030.001			15,0	1000	0,35	10,0	850	0,35
	M4 10.404.040.001			19,0	1450	0,60	13,0	1200	0,60
	M5 10.404.050.001			20,0	1600	1,00	14,0	1300	1,00
				Force fitting pressure (kN)	Extracting forces (N)	Max. tightening torque / Torsional strength (Nm)	Force fitting pressure (kN)	Extracting forces (N)	Max. tightening torque / Torsional strength (Nm)
10.409	M3 10.409.030.010 / 030.015 / 030.020			17,0	900	8,85 / 1,9	14,0	600	0,85 / 1,7
	M4 10.409.040.010 / 040.012 / 040.15 / 040.020			26,0	1800	1,9 / 4,0	20,0	1050	1,9 / 3,0
	M5 10.409.050.008 / 050.010 / 050.012. / 050.015 10.409.050.020 / 050.025			30,0	2300	3,8 / 7,0	25,0	1300	3,8 / 4,0
	M6 10.409.060.012			40,0	2800	8,0 / 12,0	30,0	1700	8,0 / 7,0



i Self-clinch nuts of the 10.404 series form a **thread within the metal sheet's thickness** with a **flush finish on both sides**. The hexagon head is simply pressed into the metal sheet in a way that the metal places itself evenly around the element's conical shaft and secures it reliably in its position.

Advantages:

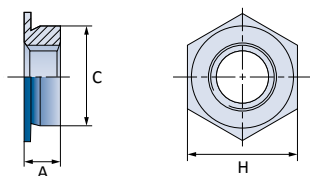
- enables the use of captive nuts also in metal sheets, in which due to limited space no conventional fasteners can be used
- easy mounting in **round holes**
- **high resistance to extracting forces**
- **high torque strain**



Self-clinch Nut Series 10.404

Steel

> open



M		H	A max.	C max.		minimum distance hole center / steel sheet edge	No
M3	1,5 - 2,3	4,8	1,5	4,35	4,37 -0,00 +0,08	6,0	10.404.030.001
M4	1,5 - 2,3	7,9	1,5	7,35	7,37 -0,00 +0,08	7,2	10.404.040.001
M5	1,5 - 2,3	8,9	1,5	7,90	7,92 -0,00 +0,08	8,0	10.404.050.001



Mounting must be carried out with a **compression press** under continuous pressure - never by palpitation!



The self-clinch nut is a threaded fastener that has a knurl and a notch. The knurl ensures while embedding into the metal sheet the displaced material to spread evenly in the notch. This ensures an especially good stability.

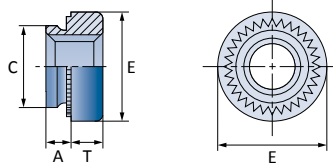
Advantages:

- high resistance to torque strain
- absolutely flush sheet metal backsides
- compact and clean - ideal for example for use in electronic and light engineering

Self-clinch Nut
Series 10.413

Hardened steel

open <



M		E	H	A max.	C max.		minimum distance hole center / steel sheet edge	No
M2,5	0,8 - 1,0	6,3	1,5	0,76	4,22	4,25 -0,00 +0,08	4,8	10.413.025.000
	1,0			0,97				10.413.025.001
M3	0,8 - 1,0	6,3	1,5	0,76	4,22	4,25 -0,00 +0,08	4,8	10.413.030.000
	1,0			0,97				10.413.030.001
M4	0,8 - 1,0	7,9	2,0	0,76	5,38	5,40 -0,00 +0,08	6,7	10.413.040.000
	1,0			0,97				10.413.040.001

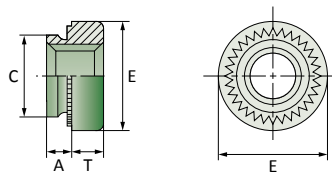
M		E	H	A max.	C max.		minimum distance hole center / steel sheet edge	No
M5	1,0	8,7	2,0	0,97	6,38	6,40 -0,00 +0,08	7,0	10.413.050.001
	1,4			1,37				10.413.050.002
M6	1,4	11,05	4,08	1,37	8,72	8,75 -0,00 +0,08	8,7	10.413.060.001

Mounting must be carried out with a **compression press** under continuous pressure - never by palpitation!

Self-clinch
NutsSelf-clinch Nut
Series 10.414

Stainless steel

open <



M		E	H	A max.	C max.		minimum distance hole center / steel sheet edge	No
M2,5	0,8 - 1,0	6,3	1,5	0,76	4,22	4,25 -0,00 +0,08	4,8	10.414.025.000
	1,0			0,97				10.414.025.001
M3	0,8 - 1,0	6,3	1,5	0,76	4,22	4,25 -0,00 +0,08	4,8	10.414.030.000
	1,0			0,97				10.414.030.001
M4	0,8 - 1,0	7,9	2,0	0,76	5,38	5,40 -0,00 +0,08	6,7	10.414.040.000
	1,0			0,97				10.414.040.001

M		E	H	A max.	C max.		minimum distance hole center / steel sheet edge	No
M5	1,0	8,7	2,0	0,97	6,38	6,40 -0,00 +0,08	7,0	10.414.050.001
	1,4			1,37				10.414.050.002
M6	1,4	11,05	4,08	1,37	8,72	8,75 -0,00 +0,08	8,7	10.414.060.001

Mounting must be carried out with a **compression press** under continuous pressure - never by palpitation!

Self-clinch standoffs can serve as **spacers** or **distance pieces**.

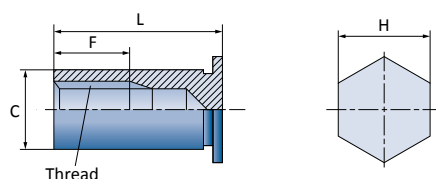
The hexagon head is simply pressed into the metal sheet, that the material will compress in the nut. The pressing in at the head finishes completely flush.

A wide selection of **open or closed versions** is available. For applications with high strain versions with larger heads and higher compressive tensile strengths can be produced.

Self-clinch Standoff Series 10.407

steel

> closed



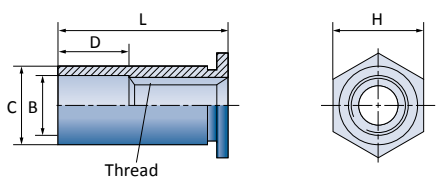
M	for sheet metal thicknesses	L	C	minimum length thread F	H		minimum distance hole center / steel sheet edge	No
M3	> 1,0	10,0	4,19	4,0	4,8	4,20 -0,00 +0,08	6,0	10.407.030.010
M4	> 1,3	10,0	7,12	4,0	7,9	7,20 -0,00 +0,08	8,0	10.407.040.010
M5	> 1,3	10,0	7,12	4,0	7,9	7,20 -0,00 +0,08	8,0	10.407.040.010
		18,0		9,5				10.407.050.018

- A **wide selection of lengths** up to 26 mm is available!
- All dimensions are also available as **STAINLESS STEEL** version in the 10.408 series upon request.

Self-clinch Standoff Series 10.405

steel

> open



M	for sheet metal thicknesses	L	B	C	drilling depth D	H		minimum distance hole center / steel sheet edge	Nr.
M3	> 1,0	10,0	3,2	4,19	4,0	4,8	4,20 -0,00 +0,08	6,0	10.405.030.010
M4	> 1,3	10,0	4,8	7,12	4,0	7,9	7,20 -0,00 +0,08 -0,00 +0,08	8,0	10.405.040.010
M5	> 1,3	10,0	5,3	7,12	4,0	7,9	7,20	8,0	10.405.050.010

- A **wide selection of lengths** up to 26 mm is available!
- All dimensions are also available as **STAINLESS STEEL** version in the 10.406 series upon request.

i Self-clinch studs are fasteners that have a serration under the head. At inserting into the metal sheet it presses the displaced material into the rivet ring to secure the fastener.

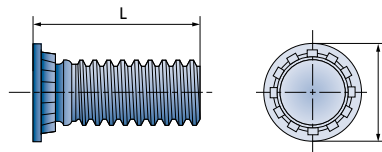
Advantages:

- **high resistance to torque strain**
- **no damage of coated surfaces** - ideal for sheet panels
- **always vertical to the sheet**
- **head is flush on the metal sheet after insertion**





Self-clinch Studs Series 10.409

Hardened steel



open <

M	min. steel sheet thickness	L	E		minimum distance hole center / steel sheet edge	maximum hole for the assembled part	max. recommended tightening torque of the nut (Nm)	No
M3	1,0	10,0	4,7	2,97 -0,00 +0,08	5,5	3,6	0,84	10.409.030.010
		15,0						10.409.030.015
		20,0						10.409.030.020
M4	1,0	10,0	6,0	3,96 -0,00 +0,08	7,0	4,6	1,92	10.409.040.010
		12,0						10.409.040.012
		15,0						10.409.040.015
		20,0						10.409.040.020

M	min. steel sheet thickness	L	E		minimum distance hole center / steel sheet edge	maximum hole for the assembled part	max. recommended tightening torque of the nut (Nm)	No
M5	1,0	8,0	6,7	4,98 -0,00 +0,08	7,0	5,6	3,84	10.409.050.008
		10,0						10.409.050.010
		12,0						10.409.050.012
		15,0						10.409.050.015
		20,0						10.409.050.020
		25,0						10.409.050.025

M6	1,5	12,0	8,20	5,97 -0,00 +0,08	8,0	6,6	8,02	10.409.060.012

Self-clinch
Studs

i Avoid excessive pressure to enable the bolt's head to be flush with sheet metal.

! All dimensions are also available as **STAINLESS STEEL** version in the 10.410 series upon request.

Special sheet metal threaded bolts are available from stock for applications that do not require a flush finish.

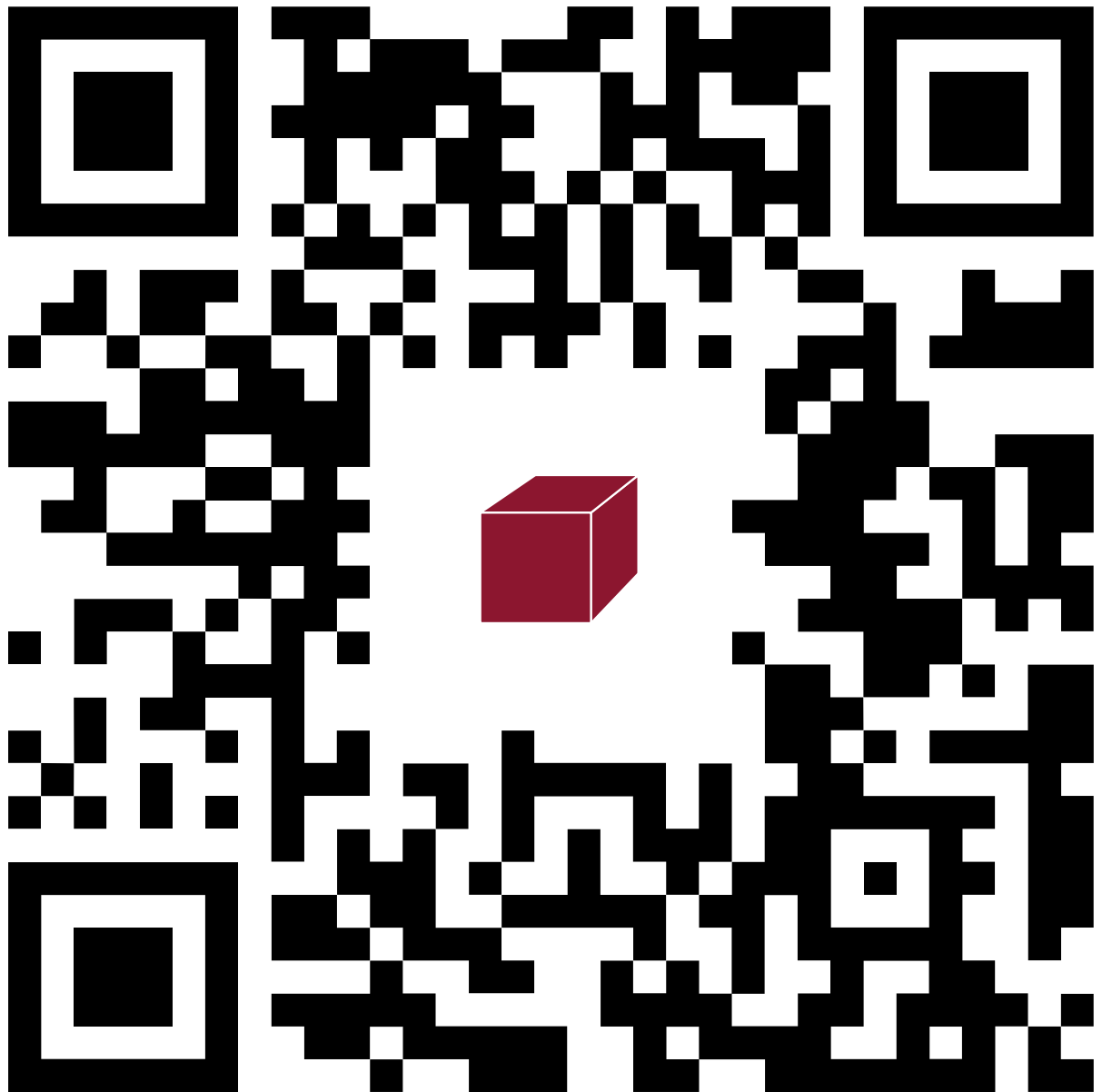
- **high resistance to torque strain as well**
- **particularly strong thread stability**



We support selling. Gladly we give assistance to our trading partners on the point of sale to present the VVG products.

Several compact sales displays stands, rack signboards made from aluminium or backlit displays, information panels, supplemented by individual flyers and sales folders draw your customers attention to the VVG products.





i Our robust small packs with perforation and different products out of the whole VVG range as well as the flexible and popular Kombi- and MultiSYS assortment boxes, offer a great variety of resale activities.

You need not mentioned products in small packs, other special packaging or individual assortments matching to your particular need?

No problem – ask our sales team for more details!



Welcome to the world of VVG assortment boxes.

We supply two series packed in flexible top-quality plastic boxes:

- **KombiSYS** - assortment box with fasteners and hand tool
- **MultiSYS** - assortment box with fasteners in various combinations (blind rivets + blind rivet nuts, blind rivets + blind rivet nuts + blind rivet bolts, as well as axial clamps)





No.	Item	Content
35.044.700.000	KombiSYS Blind Rivets ALFO Aluminium/Steel Dome Head with Hand Rivet Tool BZ 44	<ul style="list-style-type: none"> each 100 pcs. ALFO blind rivets aluminium/steel dome head 3,0 x 6,0 / 3,0 x 8,0 / 3,0 x 10,0 / 4,0 x 6,0 / 4,0 x 8,0 / 4,0 x 10,0 / 4,0 x 12,0 1 pc. hand tool BZ 44 with additional clamping jaws each 1 pc. drill 3,1 mm and 4,1 mm
35.002.700.000	KombiSYS Blind Rivets ALFO Aluminium/Steel Dome Head with Hand Rivet Tool BZ 2	<ul style="list-style-type: none"> each 100 pcs. ALFO blind rivets aluminium/steel dome head 3,0 x 6,0 / 3,0 x 8,0 / 3,0 x 10,0 / 4,0 x 6,0 / 4,0 x 8,0 / 4,0 x 10,0 / 4,0 x 12,0 1 pc. hand tool BZ 2 with additional clamping jaws each 1 pc. drill 3,1 mm and 4,1 mm
35.002.708.000	KombiSYS Blind Rivets ALFO Stainless Steel/Stainless Steel Dome Head with Hand Rivet Tool BZ 2	<ul style="list-style-type: none"> each 100 pcs. ALFO blind rivets stainless steel/stainless steel dome head 3,0 x 6,0 / 3,0 x 8,0 / 3,0 x 10,0 / 3,0 x 12,0 / 4,0 x 6,0 / 4,0 x 8,0 / 4,0 x 10,0 / 4,0 x 12,0 1 pc. hand tool BZ 2 with additional clamping jaws each 1 pc. drill 3,1 mm and 4,1 mm
35.044.906.000	KombiSYS „Roofer“ with Hand Rivet Tool BZ 44	<ul style="list-style-type: none"> each 200 pcs. CERTO sealed blind rivet copper/stainless steel dome head 3,2 x 6,5 each 100 pcs. CERTO sealed blind rivet copper/stainless steel dome head 3,2 x 8,0 / 3,2 x 9,5 / 4,0 x 8,0 each 100 pcs. ALFO blind rivets steel/steel dome head 3,2 x 6,0 / 3,0 x 8,0 1 pc. hand tool BZ 44 with additional clamping jaws each 1 pc. drill 3,1 mm and 4,1 mm
35.002.600.000	KombiSYS Multigrip Blind Rivets OPTO Aluminium/Steel Dome Head with Hand Rivet Tool BZ 2	<ul style="list-style-type: none"> each 100 pcs. OPTO Multigrip Blind Rivets aluminium/steel dome head 3,2 x 6,8 / 3,2 x 9,5 / 4,0 x 9,5 / 4,0 x 12,7 / 4,8 x 10,3 / 4,8 x 15,1 1 pc. hand tool BZ 2 with additional clamping jaws each 1 pc. drill 3,1 mm and 4,1 mm
35.002.900.000	KombiSYS Sealed Blind Rivets CERTO Aluminium/Steel Dome Head with Hand Rivet Tool BZ 2	<ul style="list-style-type: none"> each 100 pcs. CERTO sealed blind rivets aluminium/steel dome head 3,2 x 6,5 / 3,2 x 8,0 / 3,2 x 9,5 / 4,0 x 8,0 / 4,0 x 9,5 / 4,0 x 11,0 each 50 pcs. CERTO sealed blind rivets aluminium/steel dome head 4,8 x 8,5 / 4,8 x 9,5 1 pc. hand tool BZ 2 with additional clamping jaws each 1 pc. drill 3,1 mm and 4,1 mm



VNG 255. A real bestseller - ten thousandfold sold!

Including the well known high-quality manual plier for blind rivet nuts and blind rivet bolts as well as an assortment of fitting fasteners - at best price!

► Details on [page 182](#).

MULTISYS BLIND RIVETS

Assortment Box with Blind Rivets

Art.-No.	Item	Content
35.700.760.770	MultisYS Blind Rivets Aluminium	<ul style="list-style-type: none"> ALFO blind rivets aluminium/steel dome head <ul style="list-style-type: none"> > each 100 pcs. 3,0 x 6,0 / 3,0 x 8,0 / 3,0 x 10,0 / 4,0 x 6,0 / 4,0 x 8,0 / 4,0 x 10,0 > 75 pcs. 4,0 x 12,0 ALFO blind rivets aluminium/steel countersunk head <ul style="list-style-type: none"> > each 100 pcs. 4,0 x 6,0 / 4,0 x 8,0 / 4,0 x 10,0 ALFO blind rivets aluminium/steel large dome head <ul style="list-style-type: none"> > 50 pcs. 5,0 x 8,0 K14 > each 25 pcs. 5,0 x 10,0 K14 / 5,0 x 12,0 K14 / 5,0 x 10,0 K16 / 5,0 x 16,0 K16 each 1 pc. drill 3,1 mm, 4,1 mm and 5,1 mm
35.707.000.000	MultisYS Blind Rivets Steel	<ul style="list-style-type: none"> ALFO blind rivets steel/steel dome head <ul style="list-style-type: none"> > each 100 pcs. 3,0 x 6,0 / 3,0 x 8,0 / 3,0 x 10,0 / 4,0 x 6,0 / 4,0 x 8,0 / 4,0 x 10,0 > each 75 pcs. 4,0 x 12,0 / 5,0 x 8,0 / 5,0 x 10,0 > each 50 pcs. 5,0 x 12,0 / 5,0 x 16,0 ALFO blind rivets steel/steel countersunk head <ul style="list-style-type: none"> > each 100 pcs. 4,0 x 6,0 / 4,0 x 8,0 / 4,0 x 10,0 > 75 pcs. 4,0 x 12,0 each 1 pc. drill 3,1 mm, 4,1 mm and 5,1 mm
35.708.758.000	MultisYS Blind Rivets Stainless Steel	<ul style="list-style-type: none"> ALFO blind rivets stainless steel/stainless steel dome head <ul style="list-style-type: none"> > each 100 pcs. 3,0 x 6,0 / 3,0 x 8,0 / 3,0 x 10,0 / 4,0 x 6,0 / 4,0 x 8,0 / 4,0 x 10,0 / 4,0 x 12,0 > each 75 pcs. 5,0 x 8,0 / 5,0 x 10,0 > 50 pcs. 5,0 x 12,0 ALFO blind rivets stainless steel/stainless steel countersunk head <ul style="list-style-type: none"> > each 100 pcs. 4,0 x 8,0 / 4,0 x 10,0 ALFO blind rivets stainless steel/stainless steel large dome head <ul style="list-style-type: none"> > each 50 pcs. 4,0 x 12,0 K11,5 / 4,0 x 14,0 K11,5 / 4,0 x 16,0 K11,5 each 1 pc. drill 3,1 mm, 4,1 mm and 5,1 mm
35.701.710.716	MultisYS Blind Rivets „Lighthouse Construction“	<ul style="list-style-type: none"> ALFO blind rivets aluminium/aluminium dome head <ul style="list-style-type: none"> > each 100 pcs. 4,0 x 6,0 / 4,0 x 8,0 / 4,0 x 10,0 > 75 pcs. 4,0 x 12,0 ARCO body bound blind rivet aluminium/steel dome head <ul style="list-style-type: none"> > 100 pcs. 3,2 x 10 > each 75 pcs. 3,2 x 16,0 / 3,2 x 18,0 / 4,0 x 10,0 / 4,0 x 16,0 / 4,0 x 18,0 > each 50 pcs. 4,8 x 10,0 / 4,8 x 15,0 > each 25 pcs. 4,8 x 21,0 / 4,8 x 26,0 folding blind rivets “standard” aluminium/aluminium dome head <ul style="list-style-type: none"> > each 25 pcs. 4,0 x 13,6 / 4,0 x 18,8
35.742.762.000	MultisYS Blind Rivets „Facade“	<ul style="list-style-type: none"> ALFO blind rivets aluminium/steel large dome head <ul style="list-style-type: none"> > each 50 pcs. 5,0 x 8,0 K11 / 5,0 x 10,0 K11 / 5,0 x 12,0 K11 / 5,0 x 14,0 K11 / 5,0 x 16,0 K11 / 5,0 x 18,0 K11 / 5,0 x 10,0 K14 / 5,0 x 12,0 K14 > each 25 pcs. 5,0 x 20,0 K11 / 5,0 x 14,0 K14 / 5,0 x 16,0 K14 / 5,0 x 18,0 K14 / 5,0 x 20,0 K14 / 5,0 x 25,0 K14
35.720.000.000	MultisYS Blind Rivets „Maritime“	<ul style="list-style-type: none"> ALFO blind rivets nickel-copper/stainless steel dome head <ul style="list-style-type: none"> > each 100 pcs. 3,2 x 6,0 / 3,2 x 8,0 / 3,2 x 10,0 / 4,0 x 6,0 / 4,0 x 8,0 / 4,0 x 10,0 / 4,0 x 12,0 > each 50 pcs. 4,8 x 58,0 / 4,8 x 10,0 / 4,8 x 12,0 / 4,8 x 18,0 > each 30 pcs. 6,4 x 12,0 / 6,4 x 16,0 / 6,4 x 18,0 each 1 pc. drill 3,1 mm, 4,1 mm, 4,9 mm and 6,5 mm

MULTISYS BLIND RIVETS NUTS

Assortment Box with Blind Rivet Nuts

Art.-No.	Item	Content
35.850.851.000	MultisYS Blind Rivets Nuts Aluminium	<ul style="list-style-type: none"> blind rivet nuts AFM aluminium dome head <ul style="list-style-type: none"> > each 100 pcs. M3-20 / M4-30 / M5-30 > 50 pcs. M6-30 > each 25 pcs. M8-30 / M10-45 blind rivet nuts ASM aluminium countersunk head <ul style="list-style-type: none"> > each 100 pcs. M4-35 / M5-40 > 50 pcs. M6-45 > each 25 pcs. M8-45 / M10-45 > 10 pcs. M12-45 blind rivet nuts ASM-KLSK aluminium small countersunk head <ul style="list-style-type: none"> > each 100 pcs. M4-20 / M5-30 / M6-30 > 50 pcs. M8-30
35.842.843.845	MultisYS Blind Rivets Nuts -knurled Steel-R	<ul style="list-style-type: none"> blind rivet nuts SFM-R steel dome head <ul style="list-style-type: none"> > each 100 pcs. M4-35 / M5-30 / M6-30 > 50 pcs. M8-30 blind rivet nuts SSM-R steel countersunk head <ul style="list-style-type: none"> > each 100 pcs. M4-35 / M5-40 > 50 pcs. M6-45 / M8-45 blind rivet nuts SSM-R KLSK steel small countersunk head <ul style="list-style-type: none"> > each 100 pcs. M4-20 / M5-30 / M6-30 > 50 pcs. M8-40
35.894.895.000	MultisYS OPTO Multigrip Blind Rivet Nuts	<ul style="list-style-type: none"> blind rivet nuts OPTO-AFM aluminium dome head <ul style="list-style-type: none"> > each 100 pcs. M4-60 / M5-60 > 50 pcs. M6-60 > 25 pcs. M8-75 blind rivet nuts OPTO-ASM aluminium countersunk head <ul style="list-style-type: none"> > each 100 pcs. M4-60 / M5-60 > 50 pcs. M6-60 > 25 pcs. M8-75 blind rivet nuts OPTO-SFM steel dome head <ul style="list-style-type: none"> > each 100 pcs. M4-60 / M5-60 > 50 pcs. M6-60 > 25 pcs. M8-75 blind rivet nuts OPTO-SSM steel countersunk head <ul style="list-style-type: none"> > each 100 pcs. M4-60 / M5-60 > 50 pcs. M6-60 > 25 pcs. M8-75

Art-No.	Item	Content
35.612.000.000	MultiSYS-MIX VNG 612 NEW	<ul style="list-style-type: none"> blind rivet nuts AFM aluminium dome head > 50 pcs. M6-30 > each 25 pcs. M8-30 / M10-45 / M12-40 blind rivet nuts SFM-R steel dome head knurled > 50 pcs. M6-30 > each 25 pcs. M8-30 / M10-45 > 20 pcs. M12-40 blind rivet nuts EFM-R stainless steel dome head knurled > each 50 pcs. M6-30 / M10-35 > 25 pcs. M8-30
35.152.000.000	MultiSYS-MIX VNG 152 NEW	<ul style="list-style-type: none"> blind rivet nuts AFM aluminium dome head > each 100 pcs. M4-30 / M5-45 / M6-30 > 50 pcs. M8-30 blind rivet nuts SFM-R Stahl dome head knurled > each 100 pcs. M4-25 / M5-30 / M6-30 > 5 pcs. M8-30 blind rivet nuts EFM-R stainless steel dome head knurled > each 100 pcs. M4-25 / M5-30

MULTISYS MIX

Assortment Box with Blind Rivets, Blind Rivet Nuts and Blind Rivet Bolts

Art-No.	Item	Content
35.100.000.000	MultiSYS-MIX Multi 1 NEW	<ul style="list-style-type: none"> ALFO blind rivets aluminium/steel dome head > each 100 pcs. 3,0 x 6,0 / 4,0 x 8,0 > 50 pcs. 5,0 x 10,0 ALFO blind rivets steel/steel dome head > each 100 pcs. 3,0 x 6,0 / 4,0 x 8,0 ALFO blind rivets stainless steel/stainless steel dome head > each 100 pcs. 3,0 x 6,0 / 4,0 x 10,0 blind rivet nuts AFM aluminium dome head > each 100 pcs. M3-20 / M4-30 / M5-45 > 50 pcs. M6-30 blind rivet nuts AFM steel dome head > each 100 pcs. M3-20 / M4-30 / M5-30 blind rivet bolts RIFBOLT steel dome head > each 100 pcs. M4-2010 / M5-2010
35.500.000.000	MultiSYS-MIX Multi 5 NEW	<ul style="list-style-type: none"> ALFO blind rivets aluminium/steel dome head > 100 pcs. 4,0 x 8,0 > 50 pcs. 5,0 x 10,0 > 25 pcs. 6,0 x 12,0 ALFO blind rivets steel/steel dome head > 100 pcs. 4,0 x 8,0 > each 50 pcs. 5,0 x 8 / 6 x 10 ALFO blind rivets stainless steel/stainless steel dome head > each 50 pcs. 4,0 x 10 / 5 x 12 > 25 pcs. 6 x 12 blind rivet nuts AFM aluminium dome head > 50 pcs. M6-30 > 25 pcs. M8-30 > 20 pcs. M10-45 blind rivet nuts AFM steel dome head knurled > each 100 pcs. M4-45 / M5-30 > 50 pcs. M6-30 blind rivet bolts RIFBOLT steel dome head > 50 pcs. M6-2515
35.702.850.851	MultiSYS-MIX aluminium	<ul style="list-style-type: none"> ALFO blind rivets aluminium/steel dome head > each 100 pcs. 3,0 x 8,0 / 3,0 x 10,0 / 4,0 x 6,0 / 4,0 x 8,0 / 4,0 x 10,0 ALFO blind rivets aluminium/stainless steel dome head > each 100 pcs. 3,2 x 6,0 / 3,2 x 8,0 / 3,2 x 10,0 > each 50 pcs. 4,8 x 10,0 / 4,8 x 12,0 blind rivet nuts AFM aluminium dome head > each 100 pcs. M4-30 / M5-30 > 50 pcs. M6-30 blind rivet nuts ASM aluminium countersunk head > each 100 pcs. M4-35 / M5-40 > 50 pcs. M6-45
35.707.842.880	MultiSYS-MIX steel	<ul style="list-style-type: none"> ALFO blind rivets steel/steel dome head > each 100 pcs. 4,0 x 6,0 / 4,0 x 8,0 / 4,0 x 10,0 > each 75 pcs. 5,0 x 8,0 / 5,0 x 10,0 ALFO blind rivets steel/steel countersunk head > each 100 pcs. 4,0 x 6,0 / 4,0 x 8,0 / 4,0 x 10,0 blind rivet nuts SFM steel dome head > each 100 pcs. M4-30 / M5-30 > 50 pcs. M6-30 blind rivet nuts SFM-KLSK steel small countersunk head > each 100 pcs. M4-20 / M5-30 > 50 pcs. M6-30 blind rivet bolts RIFBOLT steel dome head > each 100 pcs. M5-2010 > 75 pcs. M6-2510

MULTISYS AXIAL CLAMPS

Assortment Box with Axial Clamp Caps and Rings

Art-No.	Item	Content
35.822.000.837	MultiSYS Axial Clamp	<ul style="list-style-type: none"> axial clamp caps steel nickel plated > 100 pcs. 4-12 > each 50 pcs. 6-16 / 8-16 / 10-20 > 25 pcs. 12-27 axial clamp rings steel browned > 200 pcs. 3-11 / 4-11 / 5-11 > each 100 pcs. 6-15 / 7-15 / 9-18 / 15-28 axial clamp rings steel zinc plated > 200 pcs. 4-11 > 100 pcs. 6-15 / 8-15 / 9-18



Standard Blind Rivet ALFO®

Aluminium / Steel

> Dome Head
> open



d	l		No.	
3,0	6,0	1,5 - 4,0	10.700.030.060/31	100
	8,0	3,0 - 6,0	10.700.030.080/31	100
	10,0	5,0 - 7,5	10.700.030.100/31	100
4,0	6,0	1,0 - 3,5	10.700.040.060/31	100
	8,0	3,0 - 5,5	10.700.040.080/31	100
	10,0	5,0 - 7,0	10.700.040.100/31	100
	12,0	6,5 - 9,0	10.700.040.120/31	100

d	l		No.	
5,0	8,0	2,5 - 5,0	10.700.050.080/31	100
	10,0	4,0 - 6,5	10.700.050.100/31	100
	12,0	6,0 - 8,0	10.700.050.120/31	50



Standard Blind Rivet ALFO®

Aluminium / Steel

> Countersunk Head
> open



d	l		No.	
3,0	6,0	2,0 - 4,0	10.700.300.060/31	100
	8,0	3,5 - 6,0	10.700.300.080/31	100
	10,0	5,0 - 7,5	10.700.300.100/31	100

d	l		No.	
4,0	6,0	1,5 - 3,5	10.700.400.060/31	100
	8,0	2,0 - 5,5	10.700.400.080/31	100
	10,0	5,0 - 7,0	10.700.400.100/31	100



Standard Blind Rivet ALFO®

Aluminium / Steel

> Large Dome Head
12 mm
> open



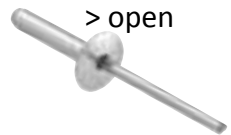
d	l		No.	
4,0	6,0	1,0 - 3,5	10.750.040.060/31	100
	8,0	3,0 - 5,5	10.750.040.080/31	100
	10,0	5,0 - 7,0	10.750.040.100/31	100
	12,0	6,5 - 9,0	10.750.040.120/31	100



Standard Blind Rivet ALFO®

Aluminium / Stainless Steel

> Large Dome Head
14 mm
> open



d	l		No.	
5,0	10,0	4,0 - 6,5	10.762.050.100/42	50
	12,0	6,0 - 8,0	10.762.050.120/42	50
	14,0	7,5 - 10,0	10.762.050.140/42	50



Standard Blind Rivet ALFO®

Steel / Steel

> Dome Head
> open



d	l		No.	
3,0	6,0	0,5 - 3,5	10.707.030.060/31	100
	8,0	3,0 - 5,5	10.707.030.080/31	100
	10,0	5,0 - 7,0	10.707.030.100/31	100
4,0	6,0	0,5 - 3,5	10.707.040.060/31	100
	8,0	3,0 - 5,5	10.707.040.080/31	100
	10,0	5,0 - 7,0	10.707.040.100/31	100
	12,0	6,0 - 9,0	10.707.040.120/31	100

d	l		No.	
5,0	8,0	2,5 - 4,5	10.707.050.080/31	100
	10,0	4,0 - 6,5	10.707.050.100/31	100
	12,0	6,0 - 8,5	10.707.050.120/31	100

Standard Blind Rivet ALFO®



Stainless Steel A2 / Stainless Steel A2/A3

Dome Head <
open <

d	l +1		No.	
3,0	6,0	0,5 - 3,0	10.708.030.060/31	100
	8,0	3,0 - 5,0	10.708.030.080/31	100
	10,0	5,0 - 7,0	10.708.030.100/31	100
4,0	6,0	1,0 - 2,5	10.708.040.060/31	100
	8,0	2,5 - 4,5	10.708.040.080/31	100
	10,0	4,5 - 6,5	10.708.040.100/31	100
	12,0	6,5 - 8,5	10.708.040.120/31	100

d	l +1		No.	
5,0	8,0	2,0 - 4,0	10.708.050.080/31	100
	10,0	4,0 - 6,0	10.708.050.100/31	100
	12,0	6,0 - 8,0	10.708.050.120/31	50



Standard Blind Rivet ALFO®



Copper / Bronze

Dome Head <
open <

d	l +1		No.	
3,0	6,0	2,0 - 3,5	10.709.030.060/31	100
	8,0	3,0 - 5,5	10.709.030.080/31	100
	10,0	5,0 - 7,0	10.709.030.100/31	100

d	l +1		No.	
4,0	6,0	2,0 - 3,5	10.709.040.060/31	100
	8,0	3,0 - 5,5	10.709.040.080/31	100
	10,0	5,0 - 7,0	10.709.040.100/31	100



Body-Bound Blind Rivet ARCO®



Aluminium / Steel

Dome Head <

Minimum purchase quantity for all small packs are 10 packing units of each dimension!

d	l +1		No.	
4,0	10,0	1,5 - 5,0	10.710.040.100/31	100
	16,0	4,0 - 11,0	10.710.040.160/31	100



Small Packs

Sealed Blind Rivet CERTO®



Aluminium / Steel

Dome Head <
closed <

d	l +1		No.	
4,0	8,0	0,5 - 3,5	10.900.040.080/31	100
	9,5	3,0 - 5,0	10.900.040.095/31	100
	11,0	4,5 - 6,5	10.900.040.110/31	100



Multigrip Blind Rivet OPTO®



Aluminium / Steel

Dome Head <
open <

d	l +1		No.	
4,0	9,5	1,2 - 6,4	10.600.040.095/31	100
	12,7	4,0 - 9,5	10.600.040.127/31	100





! **Minimum purchase quantity** for all small packs are 10 packing units of each dimension!



Blind Rivet Nut SFM-R

Steel

- > Dome Head
- > Round Shank
- > open, knurled



M	I		No.	
M4	9,5	0,5 - 2,5	10.842.040.250/31	100
M5	12,0	0,5 - 3,0	10.842.050.300/31	100

M	I		No.	
M6	14,5	0,5 - 3,0	10.842.060.300/31	100
M8	16,0	0,5 - 3,0	10.842.080.300/42	50



Blind Rivet Nut SSM-R

Steel

- > countersunk head
- > Round Shank
- > open, knurled



M	I		No.	
M4	11,5	1,5 - 3,5	10.845.040.350/31	100
M5	13,5	1,5 - 4,0	10.845.050.400/31	100

M	I		No.	
M6	16,0	1,5 - 4,5	10.845.060.450/31	100
M8	19,0	1,5 - 4,5	10.845.080.450/42	50



Blind Rivet Nut UNIVERSAL

Steel

- > small countersunk head
- > Round Shank
- > open



M	I		No.	
M4	10,5	0,5 - 3,0	10.870.400.000/31	100
M5	11,5	0,5 - 3,0	10.870.500.000/31	100

M	I		No.	
M6	16,0	1,5 - 4,5	10.870.600.000/31	100

Multigrip Blind Rivet Nut OPTO®-AFM



Aluminium

Dome Head <
Round Shank <
open <



M	I		No.	
M4	14,0	0,5 - 6,0	10.894.040.600/31	100
M5	15,0	0,5 - 6,0	10.894.050.600/31	100

M	I		No.	
M6	17,5	0,5 - 6,0	10.894.060.600/31	100
M8	21,5	0,5 - 7,5	10.894.080.750/31	50

Multigrip Blind Rivet Nut OPTO®-ASM



Aluminium

countersunk head <
Round Shank <
open <



M	I		No.	
M4	14,0	1,5 - 6,0	10.894.400.600/31	100
M5	15,0	1,5 - 6,0	10.894.500.600/31	100

M	I		No.	
M6	17,5	1,5 - 6,0	10.894.600.600/31	100
M8	21,5	1,5 - 7,5	10.894.800.750/31	50

Multigrip Blind Rivet Nut OPTO®-SFM



Stahl

Dome Head <
Round Shank <
open <



M	I		No.	
M4	14,0	0,5 - 6,0	10.895.040.600/31	100
M5	15,0	0,5 - 6,0	10.895.050.600/31	100

M	I		No.	
M6	17,5	0,5 - 6,0	10.895.060.600/31	100
M8	21,5	0,5 - 7,5	10.895.080.750/31	50

Multigrip Blind Rivet Nut OPTO®-SSM



Stahl

countersunk head <
Round Shank <
open <



M	I		No.	
M4	14,0	1,5 - 6,0	10.895.400.600/31	100
M5	15,0	1,5 - 6,0	10.895.500.600/31	100

M	I		No.	
M6	17,5	1,5 - 6,0	10.895.600.600/31	100
M8	21,5	1,5 - 7,5	10.895.800.750/31	50

Small Packs RIFBOLT® Blind Rivet Bolts



Stahl

Dome Head <
Round Shank <



M		I	I ₂	No.	
M4	0,3 - 2,0	8,5	10,0	10.880.042.010/31	100

M		I	I ₂	No.	
M5	0,5 - 2,0	9,4	10,0	10.880.052.010/31	100



High precision
wire products

M A D E



HONSEL today

The facts speak for themselves:

Manufacturer for more than 80 years, 140 members of staff and 5,500 square metres of production space, right in the middle of Germany - in the centre of Europe.

But this is not enough. HONSEL is growing further:

- A new multistage press has been bought each year since 2003.
- More than 70% of the production plant is new.
- Optical-electrical sorting machinery, eroding and threading machines

- a new continuous heat-treatment line – the list of new acquisitions can be extended in every conceivable way.
- Further expansion in 2014.

Production steps like inductive annealing and hardening can be carried out in-house.

Of course, **HONSEL** is certified: ISO 14001 and ISO/TS 16949.

Due to this, HONSEL has become a major constant in the automotive industry.

IN GERMANY



Everything started with wire.

And wire is still the material that is used to make our today's products.

Perfect. Precise. Uncompromisingly individual.



Today, **HONSEL** is better positioned and stronger than ever: This is all thanks to a foresighted management team and staff that have remained loyal to **HONSEL** – in many cases, many have worked for the company for their entire career.

„We are HONSEL!“

HONSEL has been managed by its owners since 1930. This is both to our benefit and it is also our greatest opportunity. Owner-managed companies are run differently: The prime motivation is not short-term profit, but long-term und sustainably invested perspectives – this is important to us and this is how we act and invest: In this company, in machinery and in our staff.

Tim Siepmann
Managing Director

HONSEL reference clients



To satisfy the high and fast moving requirements of OEMs and their suppliers with special rivet technology and individual cold formed parts is the target of Honsel for a long time.

The main focus lays on optimizing the processes by development, manufacturing and worldwide just-in-time delivery of new innovative products and modern solutions.

The "TEAM AUTOMOTIVE" is the central point in the company connecting all departments and people who are involved in your project. With this team our customers have a single contact to reach a fast coordination for a successful corporate development work.

Additionally an integrated ecological and quality policy is a MUST as well as the technical support and assistance on location.

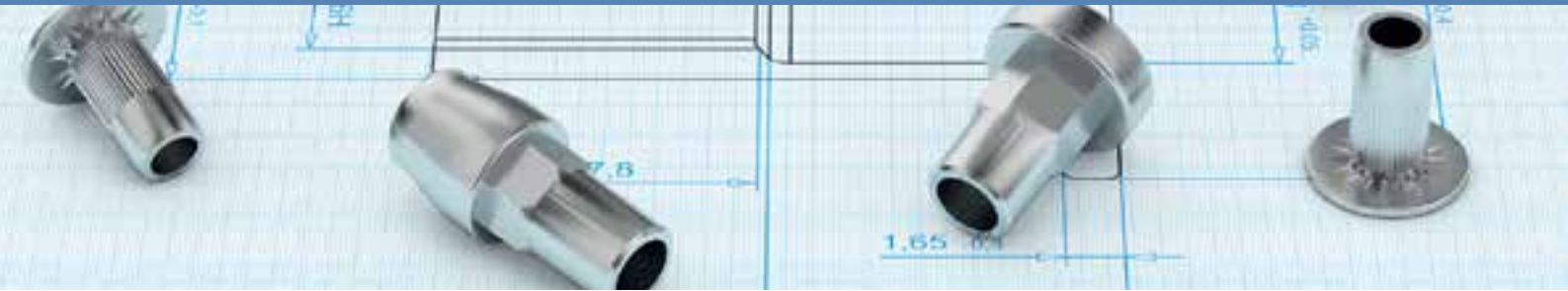


HONSEL nuts



HONSEL nuts - our core competence.

- we manufacture individual blind rivet nuts in aluminium, steel and stainless steel
- different shaft and head shapes as well as sub-head tooth meshing
- optional: Sealing elements are extruded on or snapped on
- **HONSEL hochfest** available for all design variants
- patented: **OPTO multigrip blind rivet nut** ▶ [pages 98/99](#)
- Blind rivet nuts with adjustable grip range



HONSEL screws



HONSEL screws - seminal and innovative

- Manufactured in aluminium, steel and stainless steel
- different shaft and head shapes
- Laser welded version for short component depths
- Crimped version for complete surface protection
- Optionally available with extruded on or snapped on sealing elements
- all types and lengths of screws available for example with coarse or special threads



HONSEL rivets



HONSEL rivets - still a classic

- Manufactured in aluminium, steel and stainless steel
- Multigrip blind rivets with different heads
- Special blind rivets for security relevant fastenings
- in all realizable shapes and types



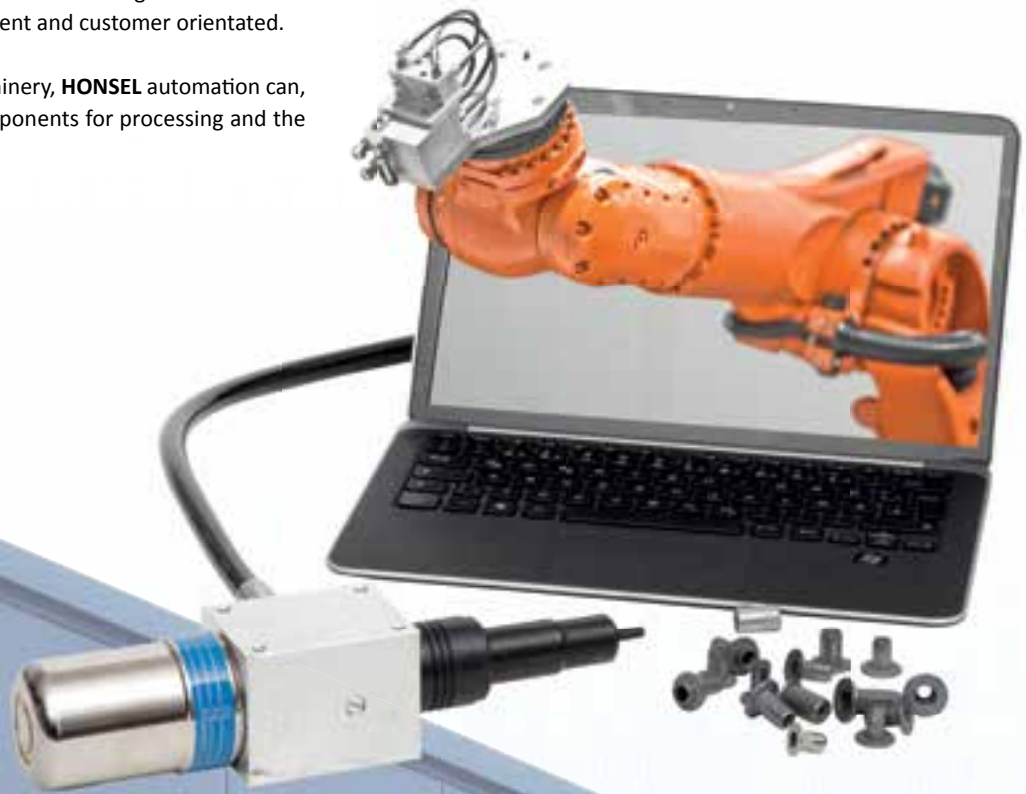
HONSEL automation

Everything from one source – this claim and guiding principle is clear to see in all of **HONSEL's** production departments, especially automation technology. Over 90% of **HONSEL's** products are made on the basis of customised drawings. It is an obvious consequence that **HONSEL** also uses and develops the corresponding solutions in the production process, as well as builds and supplies.

Fully-automatically and process monitored, semi-automatically or manually:

The in-house development and automation department is specialised in this work. Even the most demanding of tasks can be resolved in a way that is both efficient and customer orientated.

In addition to fully functional machinery, **HONSEL** automation can, upon request, just supply the components for processing and the feeding technology.



HONSEL bolts

The global automotive industry uses more than 1 billion bolts per year. The principal purpose for such cold-formed parts is the coupling of a vehicle, with 4 – 20 bolts installed per coupling, depending on the type of vehicle. A rather unimpressive product, you would think. However, HONSEL generates a great deal of their sales with it. When looking more precisely to the bolt, it soon turns out that there are essential differences – not only in the shape, but also in the way how bolts are manufactured by HONSEL.



Collar-type bolts

- Always riveted from both sides
- Shaft diameter up to 12 mm
- Variable shaft lengths
- Shaft with and without bore



Distance bolts

- Riveted from one side
- Head diameter up to 28 mm with 12 mm max. shaft diameter
- Shaft and head round as a standard
- Oval geometries possible
- Customized on customer request



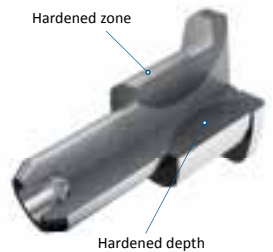
Asymmetric bolts

- Shaft diameter up to 12 mm
- Variable shaft lengths
- Asymmetric head geometries possible on customer request



Hardened to the point

The process of cold forming itself changes the primary material in such way that it becomes harder by itself. However, this normally is not sufficient. Strong forces tear at the bolts when these are mounted in a vehicle coupling. Therefore, bolts need to be additionally hardened and thus made more resistant.



But not everywhere, because a bolt will break during the installation if it is too hard. Partial hardening is the solution. Initially identified partial surfaces are hardened to a defined degree of hardness in a precisely specified material depth.

HONSEL is well versed in the art of “hardening to the point”, because this is an in-house process. The tremendous benefit for the customer is that jointly with the **HONSEL** development department, he can specify already in the project planning phase for a new bolt, where and how the hardening process is to be performed. In addition, the **HONSEL** in-house tool building department can provide prototypes for pilot-run series within a short time.

Almost zero tolerance

The automotive industry allows the smallest tolerances only. Suppliers must be able to consistently ensure that each product delivered will always comply with these strict requirements.

Less than 0.07 mm, this is the concentric run-out tolerance **HONSEL** can guarantee towards the automotive customers. Even for the collar length, **HONSEL** is intolerant: a collar may deviate only +/- 0.05 mm in length. **HONSEL** customers appreciate this.

Slide finishing



The hardening process results in “scaling” on the outside of the bolts, because the red-hot metal reacts with the oxygen from the air. These thin residues of the oxidation process can be slide-finished, so that the bolt then will properly “shine”.

At the same time, slide finishing minimises the friction coefficients (COF) of the bolts. This is a requirement for a long lifetime of the finished product. As for other process steps, **HONSEL** also attaches great importance to being able to perform in-house slide finishing.

HONSEL sleeves



Other alloys and surfaces on request.

Material

- Steel
- Aluminium
- Stainless Steel

Special features

- optimum fit size as a result of narrow tolerated shaft lengths and drill holes
- high axial forces through cold working



HONSEL coils



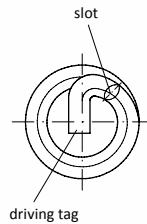
Idea

Tried and tested for decades, threaded inserts create heavy duty contacts in low strength metallic materials. Threaded inserts from **HONSEL** coils are supplied as different variants and are characterised by a high level of resistance to wear and tear, low levels of thread friction in narrow tolerances, a high quality surface and excellent resistance to corrosion and heat.



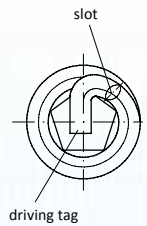
HONSEL coils „plus“

- a high quality surface
- robust mounting
- easy handling
- ⇒ A tried and tested system



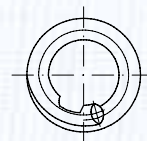
HONSEL coils „poly-lock“

- additional polygon-shaped coil
- ⇒ screw gripping area
- good friction connection
- ⇒ through this, unscrewing is prevented
- cost reduction
- ⇒ possibility of managing without additional screw locking devices



HONSEL coils „free“

- no studs
- ⇒ time-saving assembly
- installation is possible on both sides
- low wear and tear of the tool



Resistance to wear

- As a result of a high quality surface, we guarantee a heavy duty, wear resistant thread with an extremely low and constant thread friction torque.
- In the case of repeat screw fixtures, a higher and constant pre-tensioning force is achieved when the tightening torque remains the same. This leads to a better utilisation of the yield stress in highly secure screws.

Load capacity

- Even distribution of the load and tension.
- Different loads are distributed in a more balanced way over the individual screw threads.

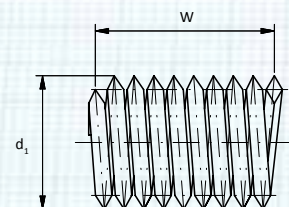
Less of a space requirement

- As a result of the even distribution of the load and tension, fewer connection points are needed between the nut thread and the screw/pin. This results in new design freedoms, possibilities for saving weight and a smaller space requirement.

Resistance to corrosion

- Threaded inserts from **HONSEL coils** are produced using high grade stainless steel (A2). As such, the usual 'seizing' of screws is prevented under normal conditions.
- Tin-plated surfaces are also available as an option. This minimises any contact corrosion that may arise.

Standard / Specification	According to HONSEL in-house standard, respectively specifications due individual projects.
Material	Stainless steel A2
Diameter	From M5
Length	Up to $3 \times d_1$, HONSEL coils „free“ to $2 \times d_1$
Surface	Adjusted to customers application
Standard surface	Without respectively tin coated



HONSEL fix



Screw-sleeve-connections from HONSEL - the expert in matter of sleeves

Screw-sleeve-connections are indispensably joined with modern fastening technology. The main advantage of these products is that screw and sleeve are connected in a special way, so that „losing“ of one of the two components is prevented. For this purpose special screws were necessary so far.

HONSELfix is the cost-efficient alternative.

- Possibility to use standard screws with **HONSEL fix**
- Cold-formed sleeves, therefore automatically higher load capacity
- additional heat treatment is not necessary in most cases
- short-term prototyping with inhouse tool design and construction



HONSEL fix „classic“

The most common version of the **HONSEL fix** products. The sleeve can be made from all current materials and is available from M5 to M12.

HONSEL fix „detached“

In this „free-standing“ **HONSEL fix** type the screw is fixed in the sleeve, so that the assembly process is facilitated. For an optimized processing the thread supernatant from the sleeve can be adapted to customers requirement.

HONSEL fix „elasto“

Impact sound occurs when vibrations from one component are transmitted via the connecting element on the other. **HONSEL fix** „elasto“ can prevent this reliably. An elastomeric ring separates the two parts from each other and degenerates the impact sound in proven **HONSEL** quality.


HONSEL fix „tight“

HONSEL fix „tight“ is the right choice, whenever additional seals should be avoided. An elastomeric ring is firmly splashed with the sleeve collar and ensures that the connection remains safely sealed against external influences.

In addition the ends of the screws thread can be provided with a scratch protection.

UNVERLIERBAR
von HONSEL



- 
- >> **Sturdy handriveting tools**
 - >> **Advanced and reliable pneumatic riveting tools**
 - >> **Battery-powered riveting tools of the latest generation**
 - >> **Individually constructed process controlled automations**



All from one source

DEVELOPMENT - CONSTRUCTION - PRODUCTION



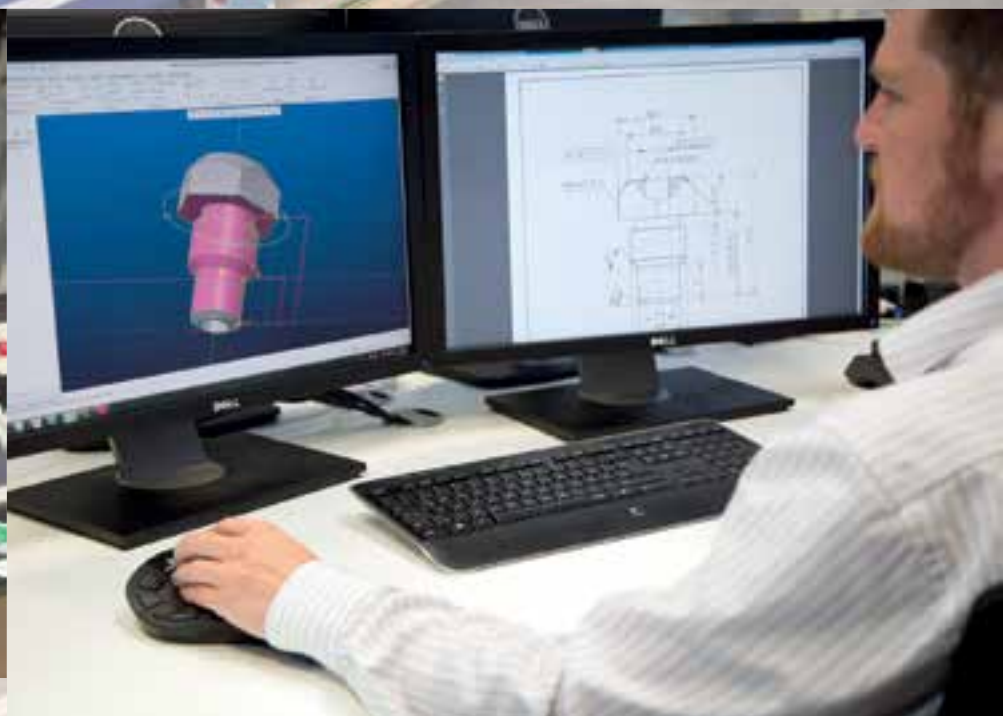
The perfect processing of our blind rivet products is one of our core competences **for decades**. For us this includes various aspects which we have concentrated in two divisions of our **competence center riveting** at our location in Neumuenster.

The first division attends day by day to **developing** new ideas. Creative, with great know-how, leaving well-known paths and at the same time taking into account the feedback of our customers as well as technical sales and our service team.

Checking feasibility is followed by the conversion through **experienced engineers** working at modern CAD-work stations, the building of prototypes and in-house endurance tests on several machines with various surrounding conditions. This ends in mounting or **production** and their permanent control and optimization. Current example is the successful **Rivdom® battery-riveter** with its extended corresponding accessory options.



24h long-term tests in the competence center riveting



MAINTENANCE - SERVICE - REPAIR

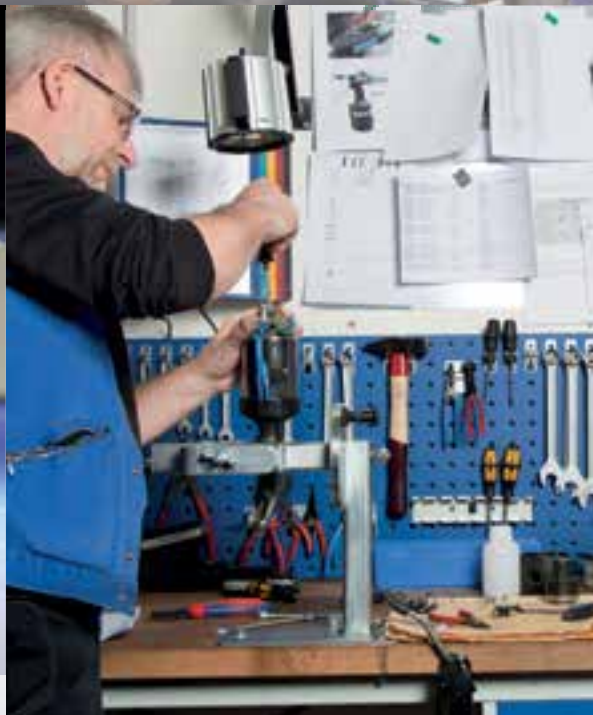
The second division is our new **service work shop**, in which our well-trained personnel attend to **fast repair of all tools** - from hand rivet tools via battery-powered riveters to pneumatic tools - no matter if they are **from our own assortment or from other manufacturers**.

Our excellently equipped and modern work stations and an extremely high stock of thousands of spare parts enable our repair professionals to deal with any complicated case to avoid any downtime in your work flow. If needed we can provide a sufficient number of **rental tools**.

Also a **preventive service** is increasingly important. Please check with our sales staff concerning the possibilities of enhanced warranty, maintenance plans and service packages.



Modern 3D printing technology for prototyping



Specific. Individual. YOU.

Use our quality tools completely designed in your company's corporate design. **Inspire your customers with your "own" tool** and increase the loyalty to your trademark and your sales volume.

You receive a **tool in your requested colour**, with **your company logo, your individual labels**, manual and design of the packaging.

We support you professionally. **Experienced project planning, design based on your guidelines**, samples, long-term delivery schedules and - on request - the maintenance and repair service makes the realization as easy as possible for you.

Contact us - we will inform you about minimum order quantities and basic conditions.

WE DESIGN YOUR RIVET TOOL WITH YOU!



The “Who-is-Who” of serial tools.

Do you only want to use blind rivets? Do you need the freedom of cordless riveting? Or shall your hand riveting tools be able to set all types of blind rivets?

Find the suitable tool for your application. We will briefly introduce to you what is included in the well-known serial descriptions of BZ, VNG, MULTI and RIVDOM.

The overview on the next two pages show you in detail for which rivet type, size and material you need which tool.

BZ



Blind rivets

BZ tools are all about the working of the classical blind rivet in all its varieties. The BZ series is available as hand, lever or lazy tong pliers, as well as pneumatic-hydraulic operated tools.

VNG



Blind rivet nuts and Blind rivet bolts

VNG tools can set blind rivet nuts as well as RIFBOLT blind rivet threaded bolts. They are available as hand or lever pliers, as well as pneumatic-hydraulic operated tools.

Multi



Blind rivets, Blind rivet nuts and Blind rivet threaded bolts

The MULTIS can do anything. All three blind rivet products are workable with only one tool! Multi-functional tools are exclusively available as hand or lever pliers in our program.

Rivdom

Battery-powered riveters for comfortable cordless freedom

Rivdom is modern. Rivdom is cordless. Rivdom stands for our product line of battery-powered riveters.



BZ blind rivet hand tools

Tool \ Dimension	Blind rivets										
	2,4	3,0	3,2	4,0	4,8	4,8 high strength	5,0	6,0	6,4	6,4 high strength	8,0
BZ 2	Aluminium										
	Steel										
	Stainless steel										
	Copper alloys										
BZ 44	Aluminium										
	Steel										
	Stainless steel										
	Copper alloys										
BZ 58	Aluminium										
	Steel										
	Stainless steel										
	Copper alloys										
BZ 70	Aluminium										
	Steel										
	Stainless steel										
	Copper alloys										
BZ 72	Aluminium										
	Steel										
	Stainless steel										
	Copper alloys										

MULTI hand tools

Tool \ Dimension	Blind rivets										
	2,4	3,0	3,2	4,0	4,8	4,8 high strength	5,0	6,0	6,4	6,4 high strength	8,0
Multi 1	Aluminium										
	Steel										
	Stainless steel										
	Copper alloys										
Multi 5	Aluminium										
	Steel										
	Stainless steel										
	Copper alloys										

BZ blind rivet tools (pneumatic-hydraulic)

Tool \ Dimension	Blind rivets										
	2,4	3,0	3,2	4,0	4,8	4,8 high strength	5,0	6,0	6,4	6,4 high strength	8,0
BZ 103A	Aluminium										
	Steel										
	Stainless steel										
	Copper alloys										
BZ 123A (standard blind rivets + high-strength FERRO®-BOLT rivets)	Aluminium										
	Steel										
	Stainless steel										
	Copper alloys										
BZ 133A (optimized for high-strength FERRO®-BULB rivets)	Aluminium										
	Steel										
	Stainless steel										
	Copper alloys										

RIVDOM blind rivet tool (battery-powered)

Tool \ Dimension	Blind rivets										
	2,4	3,0	3,2	4,0	4,8	4,8 high strength	5,0	6,0	6,4	6,4 high strength	8,0
RIVDOM ONE	Aluminium										
	Steel										
	Stainless steel										
	Copper alloys										
RIVDOM TWO	Aluminium										
	Steel										
	Stainless steel										
	Copper alloys										

VNG hand tools for blind rivet nuts / threaded bolts

Tool \ Dimension	Blind rivet nuts							Blind rivet threaded bolts			
	M3	M4	M5	M6	M8	M10	M12	M4	M5	M6	M8
VNG 152	Aluminium										
	Steel							Steel			
	Stainless steel										
VNG 255	optional Aluminium										
	optional Steel							Steel			
	optional Stainless steel										
VNG 371			Aluminium								
			Steel						Steel		
			Stainless steel								
VNG 612		optional Aluminium									
		optional Steel							Steel		
		optional Stainless steel									

MULTI hand tools

Tool \ Dimension	Blind rivet nuts							Blind rivet threaded bolts			
	M3	M4	M5	M6	M8	M10	M12	M4	M5	M6	M8
Multi 1	Aluminium										
	Steel							Steel			
Multi 5	optional Aluminium										
	optional Steel							Steel			

VNG blind rivet tools (pneumatic-hydraulic)

Tool \ Dimension	Blind rivet nuts							Blind rivet threaded bolts			
	M3	M4	M5	M6	M8	M10	M12	M4	M5	M6	M8
VNG 703		Aluminium									
	Steel							Steel			
	Stainless steel										
VNG 903		Aluminium					optional				
		Steel					optional	Steel			
		Stainless steel					optional				

VNG tool for folding blind rivet nuts (pneumatic-hydraulic)

Tool \ Dimension	Blind rivet nuts						
	M3	M4	M5	M6	M8	M10	M12
VNG 753				Steel			





For handling smaller quantities, hand riveting tools are still indispensable.





From sturdy hand pliers for do-it-yourself or repair works to universal MULTI-tools for all blind rivet types to powerful specialist with integrated hydraulic system - we present all different versions on the following pages. Many models are real classic - now revised in a new, modernized appearance!



> with opening spring

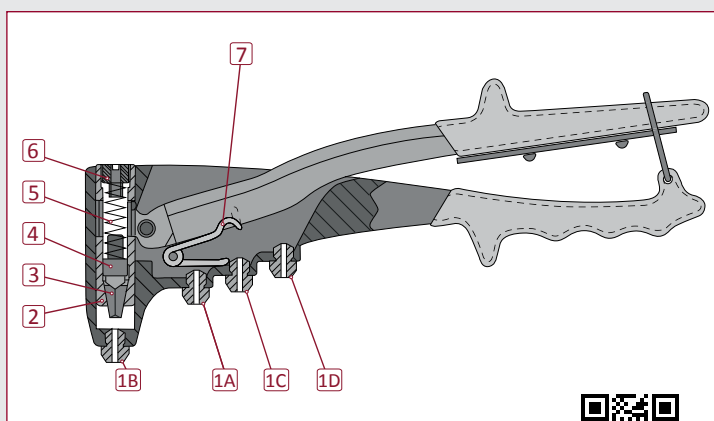


**Good ergonomics,
brilliant transformation**

	2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4	8,0
	Aluminium								
	Steel								
	Stainless steel								
	Copper alloys								
	0,56 kg		Stroke: 8 mm		 Blister		incl. 4 nose pieces		
 Special nose pieces ► page 205									
Item no.: 310.002.000.000									

Spare Parts for BZ 2

No.	Spare part	Item no.
1A	BZ 2 nose piece 2,4 mm	311.002.000.024
1B	BZ 2 nose piece 3,0/3,2 mm	311.002.000.123
1C	BZ 2 nose piece 4,0 mm	311.002.000.124
1D	BZ 2 nose piece 4,8/5,0 mm	311.002.000.125
2	BZ 2 clamping sleeve	311.002.000.040
3	BZ 2 clamping jaws	311.002.000.132
4	BZ 2 guide sleeve	311.002.000.006
5	BZ 2 pressure spring	311.002.000.007
6	BZ 2 clamping screw	311.002.000.008
7	BZ 2 leg spring	311.002.000.101







You can also use our interactive product viewer
for fast search for the correct spare part.





with opening spring <

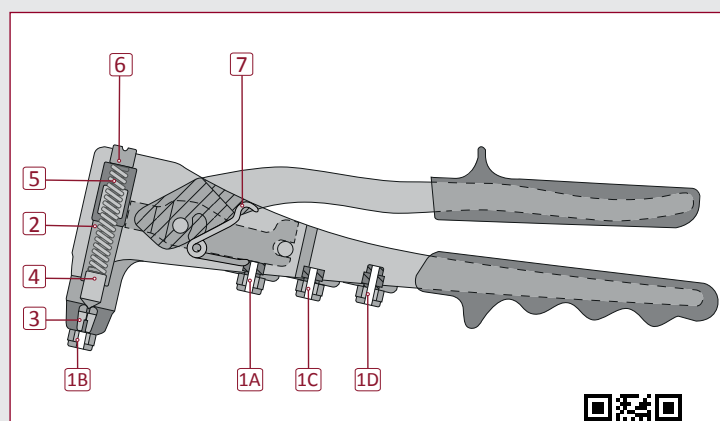
**Classic tool - Sturdy and reliable**

	2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4	8,0
	Aluminium								
		Steel							
		Stainless steel							
		Copper alloys							
	0,63 kg		Stroke: 9,5 mm			 Blister	Incl. 3 nose pieces		
 Special nose pieces ► page 205									
Item no.: 310.044.000.000									



- With retension mechanism for the rivet mandrel.
The mandrel stays in the tool in all phases of the riveting process, so that the tool can easily be handled with one hand, while the other hand fixes the working piece.

Spare Parts for BZ 44



No.	Spare part	Item no.
(1A)	BZ 44 nose piece 2,4 mm	311.002.000.024
1B	BZ 44 nose piece 3,0/3,2 mm	311.002.000.123
1C	BZ 44 nose piece 4,0 mm	311.002.000.124
1D	BZ 44 nose piece 4,8/5,0 mm	311.002.000.125
2	BZ 44 clamping sleeve	311.044.000.003
3	BZ 44 clamping jaws	311.002.000.132
4	BZ 44 guide sleeve	311.044.000.005
5	BZ 44 pressure spring	311.044.000.006
6	BZ 44 clamping screw	311.044.000.007
7	BZ 44 leg spring	311.044.000.102

You can also use our interactive product viewer
for fast search for the correct spare part.





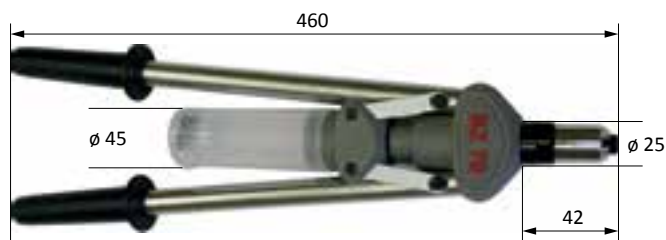
Lever tool BZ 70 in impact-resistant plastic case.







Replacement nose pieces in locked box (integrated) in the mandrel container.

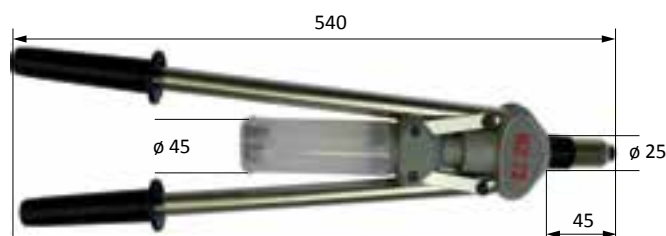


Manual handling of high strength rivets on request!







BZ 70

	2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4	8,0
		Aluminium							
		Steel							
		Stainless steel							
		Copper alloys							
	1,5 kg		Stroke: 14,5		 Case		incl. 4 nose pieces		
	Special nose pieces on request						max. mandrel-ø: 3,2 mm		
Item no.: 310.070.000.000									

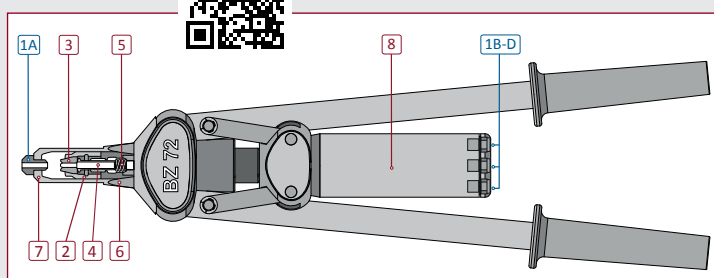
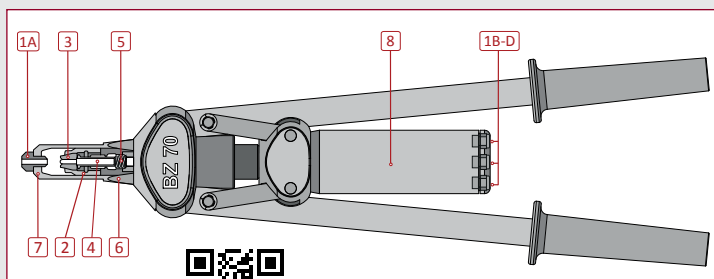


BZ 72





	2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4	8,0
				Aluminium					
				Steel					
				Stainless steel					
				Copper alloys					
	1,65 kg		Stroke: 14,5			Case		incl. 4 nose pieces	
	Special nose pieces on request						max. mandrel-ø: 4,0 mm		
Item no.: 310.072.000.000									

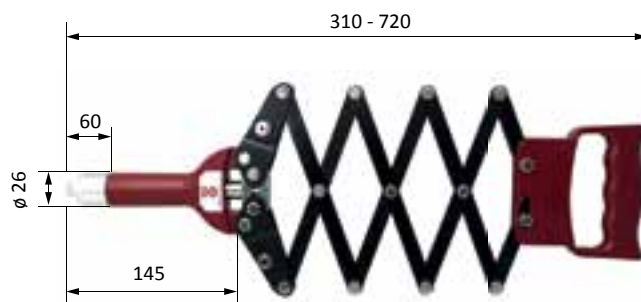
Spare Parts for BZ 70/72

No.	Spare part	Item no.
1A	BZ 70 nose piece 3,0/3,2 mm	311.070.000.001
1B/1A	BZ 70/72 nose piece 4,0 mm	311.070.000.002
1C/1B	BZ 70/72 nose piece 4,8/5,0 mm	311.070.000.003
1D/1C	BZ 70/72 nose piece 6,0 mm	311.070.000.004
1D	BZ 72 nose piece 6,4 mm	311.072.000.001
2	BZ 70/72 clamping sleeve	311.070.000.008
3	BZ 70/72 clamping jaws	311.070.000.006
4	BZ 70/72 guide sleeve	311.070.000.009
5	BZ 70/72 pressure spring	311.070.000.010
6	BZ 70/72 lock nut	311.070.000.011
7	BZ 70/72 front sleeve	311.070.000.005
8	BZ 70/72 mandrel collector	311.070.000.007





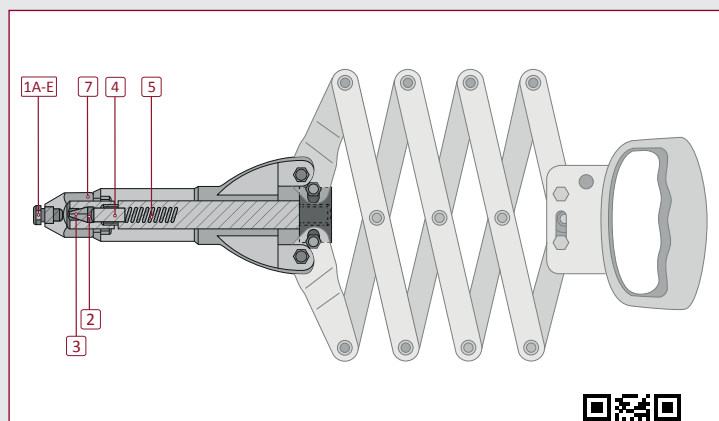
	2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4	8,0
		Aluminium							
		Steel							
		Stainless steel							
		Copper alloys							
	2,0 kg		Stroke: 11 mm			Carton		incl. 4 nose pieces	
	Special nose pieces on request						max. mandrel-ø: 3,8 mm		
Item no.: 310.058.000.000									



Nose pieces for changing inserted in the tool.



Spare Parts for BZ 58



You can also use our interactive product viewer for fast search for the correct spare part.



No.	Spare part	Item no.
1A	BZ 58 nose piece 3,0/3,2 mm	311.100.000.123
1B	BZ 58 nose piece 4,0 mm	311.002.000.124
1C	BZ 58 nose piece 4,8/5,0 mm	311.002.000.125
1D	BZ 58 nose piece 6,0 mm	311.500.000.126
1E	BZ 58 nose piece 6,4 mm	311.500.000.127
2	BZ 58 clamping sleeve	311.500.000.004
3	BZ 58 clamping jaws	311.500.000.005
4	BZ 58 guide sleeve	311.500.000.006
5	BZ 58 pressure spring	311.500.000.007
7	BZ 58 front sleeve	311.058.002.006

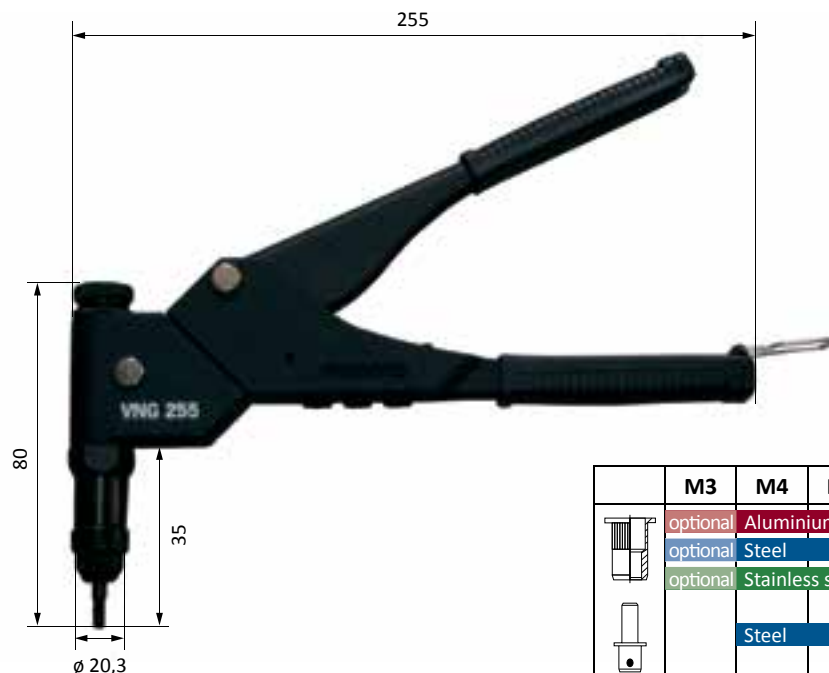


VNG 255

Hand Tool for Blind Rivet Nuts and Blind Rivet Bolts








- > with assortment
- > 360° rotating head



VNG 255 in impact-resistant plastic case.



Including set of blind rivets and blind rivet nuts.
100 pieces refill packs below.

	M3	M4	M5	M6	M8	M10	M12	
	optional	Aluminium						
	optional	Steel						
	optional	Stainless steel						
		Steel						
	0,9 kg		 Plastic case		Case dimensions 325 x 250 x 50 mm			
Content: <ul style="list-style-type: none">• each with 1 piece conversation kit for blind rivet nuts M4, M5, M6;• each with 1 piece threaded sleeve for blind rivet bolts M4, M5,• each with 1 piece jaw wrench AF 22, AF 24,• 1 piece hex head wrench AF 6					Assortment: <ul style="list-style-type: none">• each 25 Blind Rivet Nuts Universal M4, M5• 50 Blind Rivet Nuts Universal M6• each 25 RIFBOLT® Blind Rivet Bolts M4x2010 and M5x2010			
 continuous pivotable about 360°								
Item no.: 310.255.000.000								

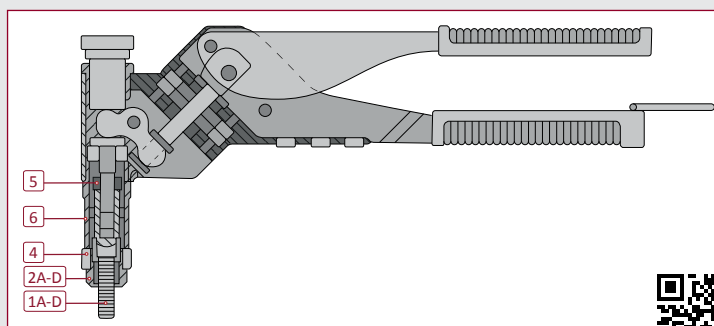
Possible positions to work:



Spare Parts for VNG 255

No.	Spare part	Item no.
1A	VNG 255 mandrel M3	311.800.000.030
1B	VNG 255 mandrel M4	311.800.000.040
1C	VNG 255 mandrel M5	311.800.000.050
1D	VNG 255 mandrel M6	311.800.000.060
2A	VNG 255 nose piece M3	311.800.000.203
2B	VNG 255 nose piece M4	311.800.000.204
2C	VNG 255 nose piece M5	311.800.000.205
2D	VNG 255 nose piece M6	311.800.000.206
4	VNG 255 lock nut M18x1	321.801.000.074
5	VNG 255 lock nut M8x1	321.801.000.075
6	VNG 255 front sleeve	311.255.000.020
3A*	VNG 255 threaded sleeve M4	321.800.001.004
3B*	VNG 255 threaded sleeve M5	321.800.001.005

* without illustration

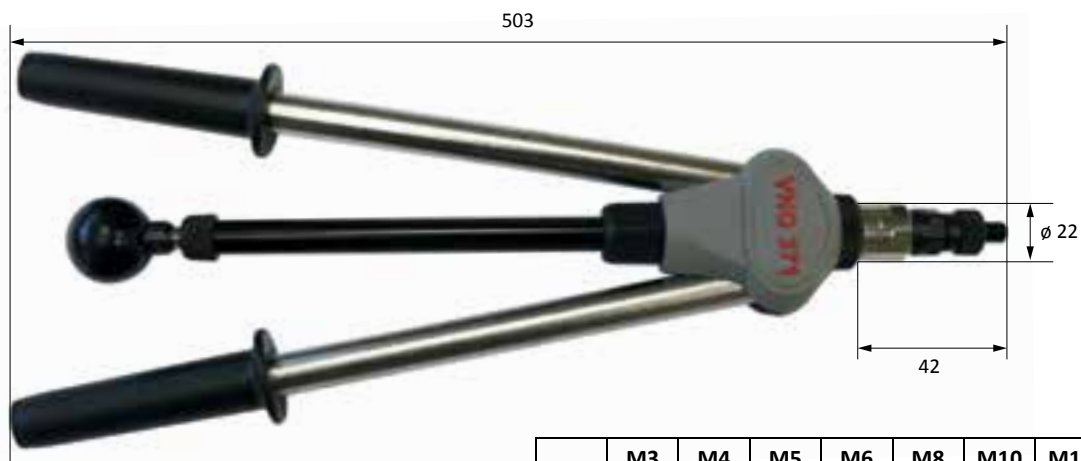


You can also use our interactive product viewer for fast search for the correct spare part.



100 pieces refill packs





Blind Rivet Nuts Universal small countersunk head Steel M4	10.870.400.000/31
Blind Rivet Nuts Universal small countersunk head Steel M5	10.870.500.000/31
Blind Rivet Nuts Universal small countersunk head Steel M6	10.870.600.000/31
Blind Rivet Bolts Steel dome head M4x2010	10.880.042.010/31
Blind Rivet Bolts Steel dome head M5x2010	10.880.052.010/31



VNG 371 in impact-resistant plastic case.



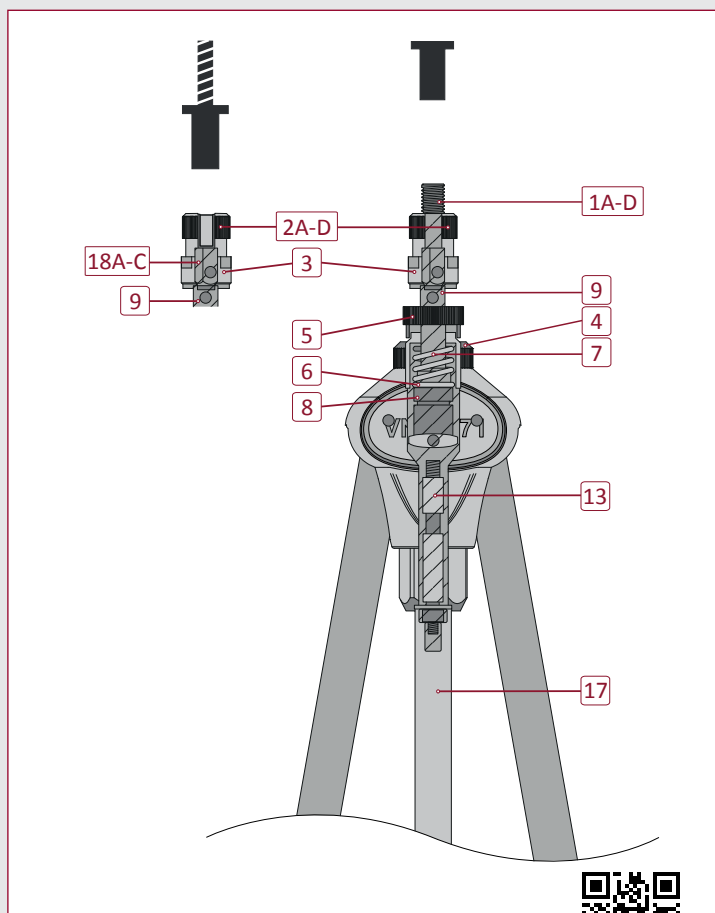
Quick change system for the mandrel.

	M3	M4	M5	M6	M8	M10	M12	
			Aluminium					
			Steel					
			Stainless steel					
			Steel					
	1,2 kg		 Plastic case		Case dimensions 595 x 270 x 60 mm			
Content: <ul style="list-style-type: none">• each with 1 piece conversation kit for blind rivet nuts M5, M6, M8, M10• each with 1 piece threaded sleeve for blind rivet bolts M5, M6, M8• each with 1 piece jaw wrench AF 10, AF 14• 1 piece hex head wrench AF 6								
Item no.: 310.371.000.000								

Spare Parts for VNG 371

No.	Spare part	Item no.
1A	VNG 371 mandrel M5	311.371.000.005
1B	VNG 371 mandrel M6	311.371.000.006
1C	VNG 371 mandrel M8	311.371.000.007
1D	VNG 371 mandrel M10	311.371.000.008
2A	VNG 371 nose piece M5	311.371.000.001
2B	VNG 371 nose piece M6	311.371.000.002
2C	VNG 371 nose piece M8	311.371.000.003
2D	VNG 371 nose piece M10	311.371.000.004
3	VNG 371 lock nut nose piece	311.371.000.012
4	VNG 371 stroke adjusting cap	311.371.000.013
5	VNG 371 plastic knurled nut	311.371.000.015
6	VNG 371 o-ring	311.371.000.014
7	VNG 371 pressure spring	311.371.000.016
8	VNG 371 housing tube	311.371.000.017
9	VNG 371 connection sleeve	311.371.000.025
13	VNG 371 feed rod	311.371.000.030
17	VNG 371 stranded rod	311.371.000.020
18A	VNG 371 threaded sleeve M5	311.371.000.009
18B	VNG 371 threaded sleeve M6	311.371.000.010
18C	VNG 371 threaded sleeve M8	311.371.000.011

Spare part	Item no.
Mandrel M6 Folding blind rivet nuts	311.371.000.040
Mandrel M8 Folding blind rivet nuts	311.371.000.041



You can also use our interactive product viewer for fast search for the correct spare part.

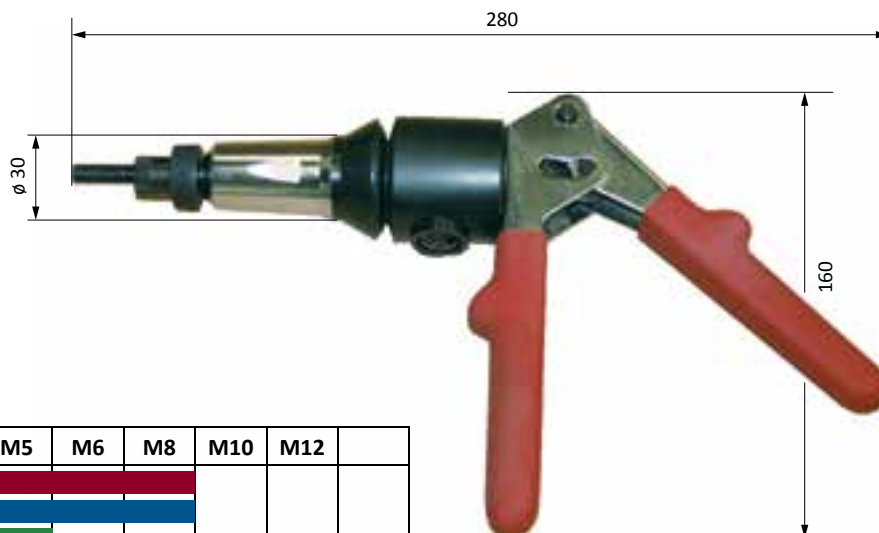









VNG 152

Hand Tool for Blind Rivet Nuts and Blind Rivet Bolts

> with hydraulic assistance



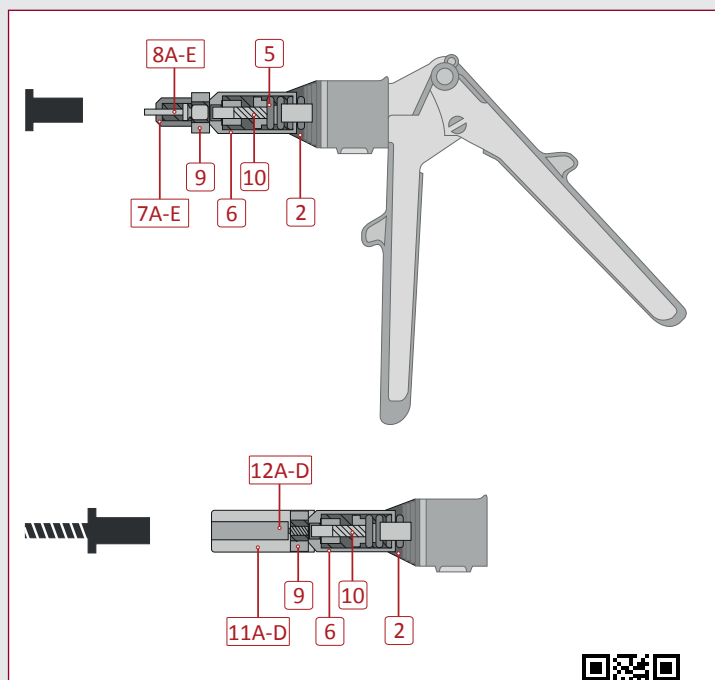
	M3	M4	M5	M6	M8	M10	M12	
	Aluminium							
	Steel							
	Stainless steel							
		Steel						
 Plastic case				Case dimensions 290 x 195 x 54 mm				
 0,6 kg				 with hydraulic component				
Content: <ul style="list-style-type: none">• each with 1 piece conversation kit for blind rivet nuts M3-M8• each with 1 piece conversation kit for blind rivet bolts M4-M8								
Item no.: 310.152.000.000								



VNG 152 in impact-resistant plastic case.

Spare Parts for VNG 152

No.	Spare part	Item no.
2	VNG 152 housing cover	311.151.000.009
5	VNG 152 pressure spring	311.151.000.010
6	VNG 152 front sleeve	311.151.000.001
7A	VNG 152 nose piece BNM M3	311.151.002.003
7B	VNG 152 nose piece BNM M4	311.151.002.004
7C	VNG 152 nose piece BNM M5	311.151.002.005
7D	VNG 152 nose piece BNM M6	311.151.002.006
7E	VNG 152 nose piece BNM M8	311.151.002.008
8A	VNG 152 mandrel M3	311.151.003.003
8B	VNG 152 mandrel M4	311.151.003.004
8C	VNG 152 mandrel M5	311.151.003.005
8D	VNG 152 mandrel M6	311.151.003.006
8E	VNG 152 mandrel M8	311.151.003.008
9	VNG 152 adapter for nose piece	311.151.000.008
10	VNG 152 adapter for mandrel	311.151.000.007
11A	VNG 152 nose piece Rifbolt M4	311.151.007.004
11B	VNG 152 nose piece Rifbolt M5	311.151.007.005
11C	VNG 152 nose piece Rifbolt M6	311.151.007.006
11D	VNG 152 nose piece Rifbolt M8	311.151.007.008
12A	VNG 152 threaded sleeve Rifbolt M4	311.151.004.004
12B	VNG 152 threaded sleeve Rifbolt M5	311.151.004.005
12C	VNG 152 threaded sleeve Rifbolt M6	311.151.004.006
12D	VNG 152 threaded sleeve Rifbolt M8	311.151.004.008







You can also use our interactive product viewer for fast search for the correct spare part.

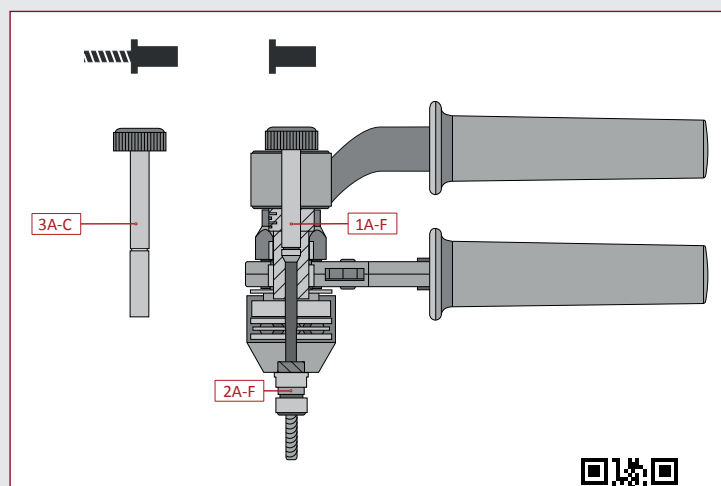




Case with aluminium appearance
incl. foam-pad inlay

	M3	M4	M5	M6	M8	M10	M12	
		optional	Aluminium					
		optional	Steel					
		optional	Stainless steel					
			Steel					
	1,1 kg		 Case in aluminium optics			Case dimensions 325 x 250 x 50 mm		
Content: <ul style="list-style-type: none">• each with 1 piece conversation kit for blind rivet nuts M5-M12• each with 1 piece threaded sleeve for blind rivet bolts M5- M8								
Item no.: 310.612.000.000								

Spare Parts for VNG 612



You can also use our interactive product viewer
for fast search for the correct spare part.



No.	Spare part	Item no.
1A	VNG 612 mandrel M4	311.612.000.040
1B	VNG 612 mandrel M5	311.612.000.050
1C	VNG 612 mandrel M6	311.612.000.060
1D	VNG 612 mandrel M8	311.612.000.080
1E	VNG 612 mandrel M10	311.612.000.100
1F	VNG 612 mandrel M12	311.612.000.120
2A	VNG 612 nose piece M4	311.800.000.204
2B	VNG 612 nose piece M5	311.800.000.205
2C	VNG 612 nose piece M6	311.800.000.206
2D	VNG 612 nose piece M8	311.800.000.208
2E	VNG 612 nose piece M10	311.800.000.210
2F	VNG 612 nose piece M12	311.800.000.212
3A	VNG 612 threaded sleeve M5	311.612.000.205
3B	VNG 612 threaded sleeve M6	311.612.000.206
3C	VNG 612 threaded sleeve M8	311.612.000.208



MULTI 1

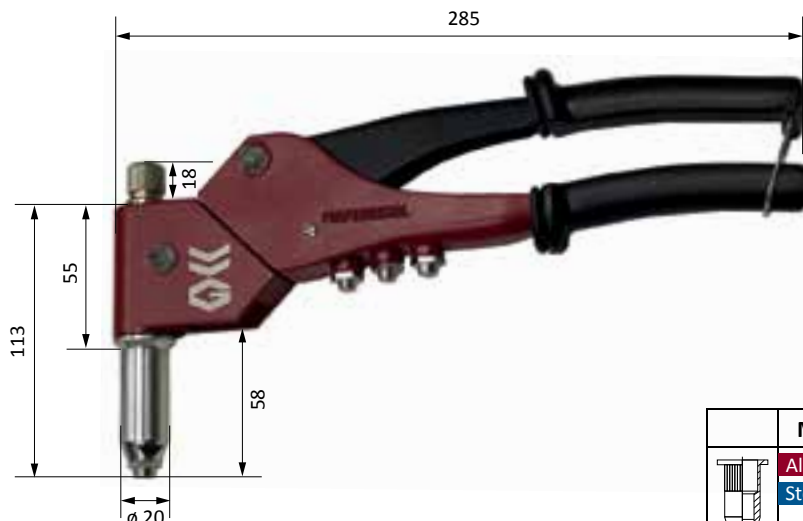
Hand Tool for Blind Rivets, Blind Rivet Nuts and Blind Rivet Bolts



> 360° rotating head








MULTI 1 in impact-resistant plastic case.



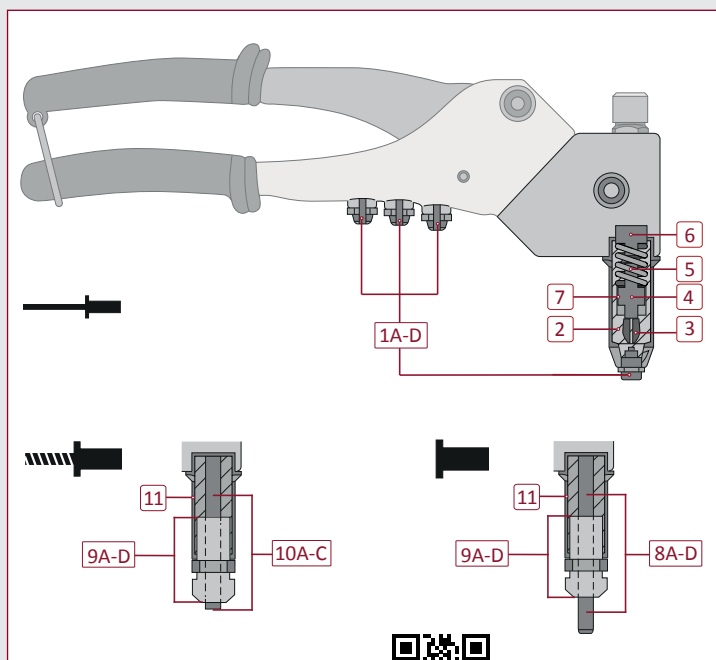
	2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4
	Aluminium							
	Steel							
	Stainless Steel							
	Copper alloys							



	M3	M4	M5	M6	M8	M10	M12	
	Aluminium							
	Steel							
		Steel						
 Plastic case					Case dimensions 360 x 185 x 50 mm			
 0,56 kg					 continuous pivotable about 360°			
Content: <ul style="list-style-type: none">• each with 1 nose piece for blind rivets 2,4; 3,0/3,2mm; 4,0 mm; 4,8/5,0mm• each with 1 piece conversation kit for blind rivet nuts M3-M6• each with 1 piece threaded sleeve for blind rivet bolts M4-M6,• each with 1 piece jaw wrench AF 15,/19, AF 21/17. AF 5/8								
Item No.: 310.100.000.000								

Spare Parts for MULTI 1

No.	Spare part	Item no.
1A	MULTI 1 nose piece 2,4mm	311.100.000.240
1B	MULTI 1 nose piece 3,0/3,2mm	311.100.000.123
1C	MULTI 1 nose piece 4,0mm	311.100.000.124
1D	MULTI 1 nose piece 4,8/5,0mm	311.100.000.125
2	MULTI 1 clamping sleeve	311.100.000.025
3	MULTI 1 clamping jaws	311.100.000.026
4	MULTI 1 guide sleeve	311.100.000.021
5	MULTI 1 pressure spring	311.100.000.022
6	MULTI 1 clamping screw	311.100.000.023
7	MULTI 1 front sleeve blind rivet	311.100.000.019
8A	MULTI 1 mandrel M3	311.100.003.003
8B	MULTI 1 mandrel M4	311.100.003.004
8C	MULTI 1 mandrel M5	311.100.003.005
8D	MULTI 1 mandrel M6	311.100.003.006
9A	MULTI 1 nose piece M3	311.100.002.003
9B	MULTI 1 nose piece M4	311.100.002.004
9C	MULTI 1 nose piece M5	311.100.002.005
9D	MULTI 1 nose piece M6	311.100.002.006
10A	MULTI 1 threaded sleeve M4	311.100.004.004
10B	MULTI 1 threaded sleeve M5	311.100.004.005
10C	MULTI 1 threaded sleeve M6	311.100.004.006
11	MULTI 1 front sleeve blind rivet nut	311.100.000.119



You can also use our interactive product viewer for fast search for the correct spare part.










Lever Tool for Blind Rivets, Blind Rivet Nuts and Blind Rivet Bolts

MULTI 5**10**

fold-away arms <



MULTI 5 with folded-in arms in impact-resistant plastic case.

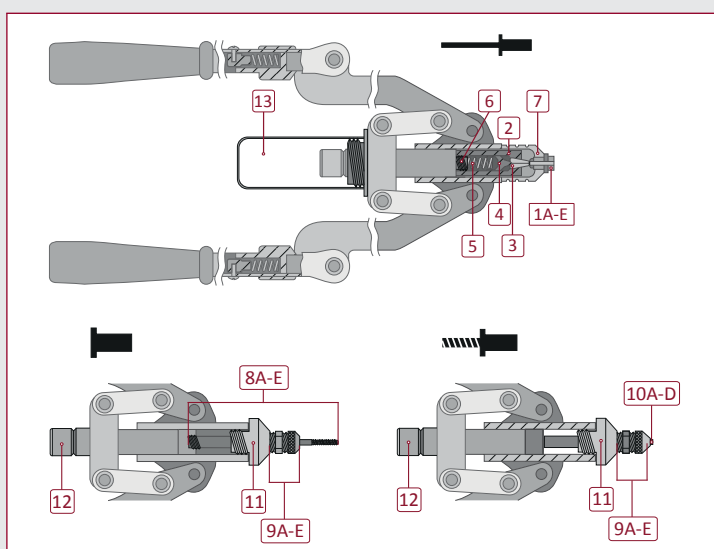
	M3	M4	M5	M6	M8	M10	M12	
		Aluminium						
		Steel						
		Steel						
 Plastic case				Case dimensions 385 x 240 x 55 mm				
 1,9 kg				 fold-away arms				
Content: <ul style="list-style-type: none">• each with 1 nose piece for blind rivets 3,0/3,2mm; 4,0mm; 4,8/5,0mm; 6,0mm; 6,4mm• each with 1 piece conversation kit for blind rivet nuts M4-M10• each with 1 piece threaded sleeve for blind rivet bolts M4-M8,								
Item No.: 310.500.000.000								

	2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4
		Aluminium						
		Steel						
		Stainless steel						
		Copper alloys						



Spare Parts for MULTI 5

No.	Spare part	Item no.
1A	MULTI 5 nose piece 3,0/3,2mm	311.100.000.123
1B	MULTI 5 nose piece 4,0mm	311.100.000.124
1C	MULTI 5 nose piece 4,8/5,0mm	311.100.000.125
1D	MULTI 5 nose piece 6,0mm	311.500.000.126
1E	MULTI 5 nose piece 6,4mm	311.500.000.127
2	MULTI 5 clamping sleeve	311.500.000.004
3	MULTI 5 clamping jaws	311.500.000.005
4	MULTI 5 guide sleeve	311.500.000.006
5	MULTI 5 pressure spring	311.500.000.007
6	MULTI 5 clamping screw	311.500.000.008
7	MULTI 5 front sleeve blind rivet	311.500.000.003
8A	MULTI 5 mandrel M4	311.100.003.004
8B	MULTI 5 mandrel M5	311.100.003.005
8C	MULTI 5 mandrel M6	311.100.003.006
8D	MULTI 5 mandrel M8	311.500.003.008
8E	MULTI 5 mandrel M10	311.500.003.010
9A	MULTI 5 nose piece M4	311.100.002.004
9B	MULTI 5 nose piece M5	311.100.002.005
9C	MULTI 5 nose piece M6	311.100.002.006
9D	MULTI 5 nose piece M8	311.500.002.008
9E	MULTI 5 nose piece M10	311.500.002.010
10A	MULTI 5 threaded sleeve M4	311.100.004.004
10B	MULTI 5 threaded sleeve M5	311.100.004.005



You can also use our interactive product viewer for fast search for the correct spare part.

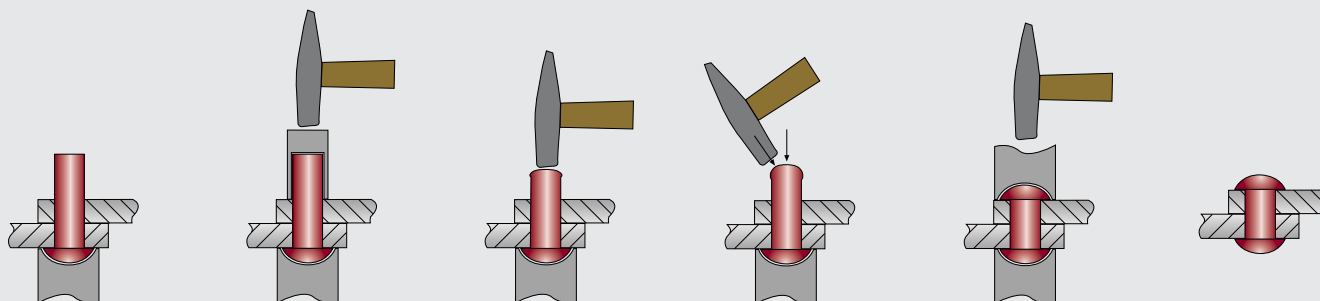
No.	Spare part	Item no.
10C	MULTI 5 threaded sleeve M6	311.100.004.006
10D	MULTI 5 threaded sleeve M8	311.500.004.008
11	Multi 5 front sleeve	311.500.000.025
12	Multi 5 feed rod	311.500.000.009
13	MULTI 5 mandrel collector	311.500.000.010

MULTI 5



Setting of industrial rivets according to DIN

i There are many different possibilities to handle industrial rivets. From manual deformation with simple **riveting dies** to **hand tools and toggle presses** to individually constructed **special machines**.



1. Joining the component

2. Positioning and fixing by rivet head

3. Compressing the shaft / pre-forming of the closing head

4. Final forming with rivet head setting-tool

DIN 6435 made from hexagon steel safety tempering, shaft equally hardened; delivered in plastic holder



Set for rivet head setting
Item No.: 18.509.000.002



Set for rivet head pulling
Item No.: 18.509.000.001



Scope of delivery each: 5 rivet-dies 2,0 - 3,0 - 4,0 - 5,0 and 6,0 mm ϕ



Axial Hand Tool



Setting of axial clamps

i Fix our axial clamp rings and caps quick and safe with this compatible tool.

It helps to avoid the damage of the fastener and guarantees the steady power transmission.

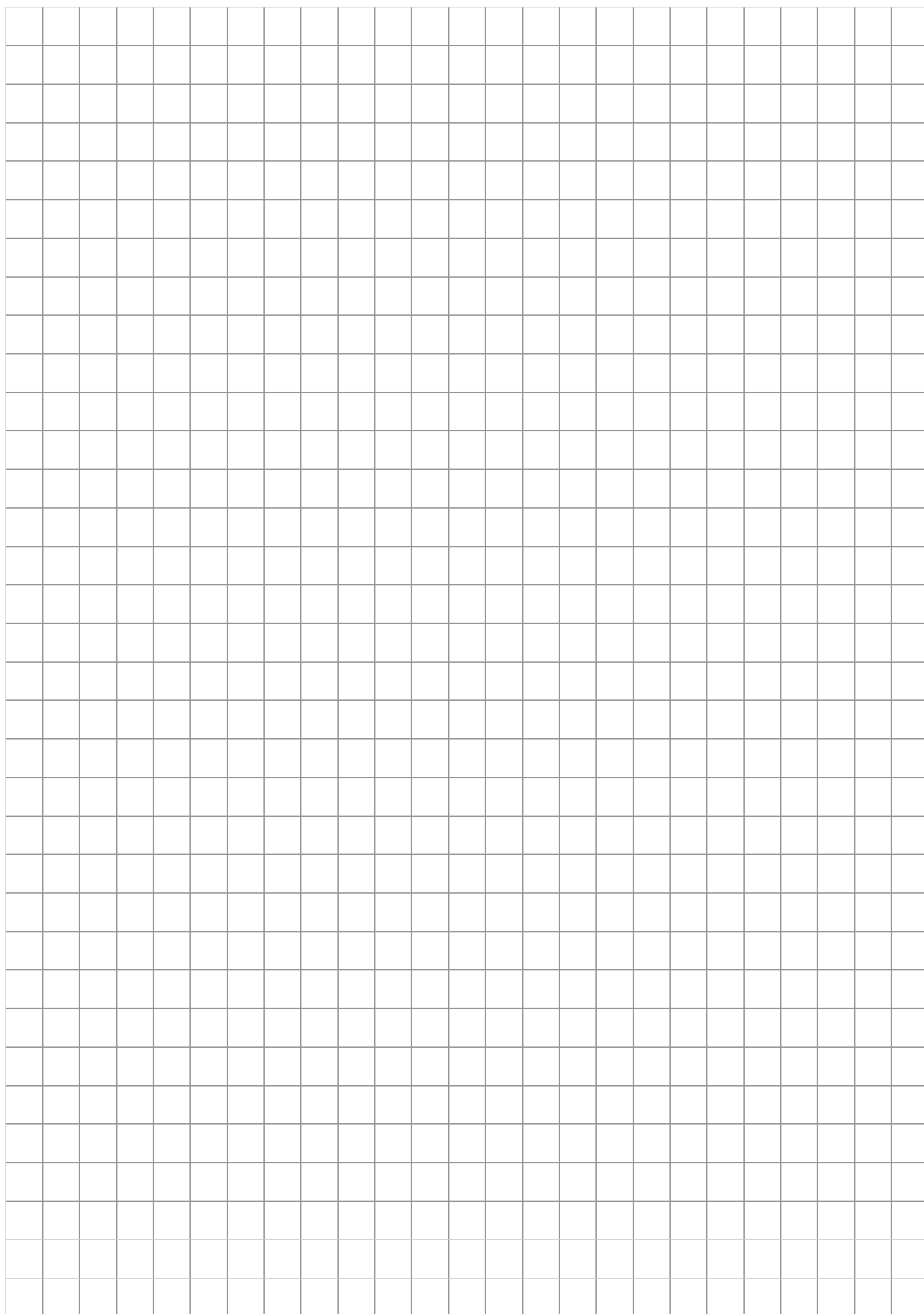
For axial Clamp Rings

Outside- ϕ	No.
15,0 mm	18.509.000.150
18,0 mm	18.509.000.180
25,0 mm	18.509.000.250

For axial Clamp Caps

Outside- ϕ	No.
12,0 mm	18.509.000.120
16,0 mm	18.509.000.160
20,0 mm	18.509.000.200
27,0 mm	18.509.000.270
30,0 mm	18.509.000.300









Rivdom. The cordless battery-powered riveter.

Since its successful launch in 2011, **Rivdom** is the **innovative and modern solution for independent blind rivet workmanship** - popular in craft and industry.

Rivdom convinces through outstanding performance values, its ergonomic design for comfortable daily handling, its large scope of delivery as well as interesting additional options and its extraordinary price-performance ratio. All batteries are supplied with a **comfortable display for charge** and a **12V/24V car charger** for entire portable usage, is optional available as well.

Rivdom contains our entire experience of development and production of hand rivet tools, pneumatic tools and automation solutions - designed by Honsel Germany.

NEW IN 2015 - RivdomTWO, the **POWERFUL battery-powered riveter** even for high-strength blind rivets up to 6.4 mm!!

RivdomONE¹

THE CORDLESS BATTERY RIVETER

For blind rivets up to
5,0 mm diameter



OPTIONAL

- Extended front sleeve
- Extended nose piece
- Facade nose pieces
- Special nose pieces
- Quick change nose piece



All standard nose
pieces included



Sturdy plastic case with
metal locks



OPTIONAL

Retension nose piece
avoids losing of the rivet
in an upright working position

LED illuminated
working area



Big, safe base



RIVDOM® provides unlimited freedom of mobility - everywhere.

transparent mandrel collector



brilliant ergonomics,
balance and low weight



Premium
quick-charger



gummed grip



OPTIONAL

Car charger 12V/ 24V

Powerful Li-Ion batteries
with comfort capacity indicator
(14,4 V/1,5 Ah or 14,4V/3,0 Ah)
-depending on version-





A constant in independent blind rivet handling

Get to know Rivdom and get excited!

Blind rivets up to 5 mm diameter of all materials are set dependable with the powerful motor and the optimal coordination. The modern Li-Ion batteries are of a great capacity and quickly ready for use again after being charged with the supplied charger. Useful details as the transparent collecting container, which enables the filling level of the torn-off pins to be always visible, or a LED lamp at the riveting point completes the strong appearance. Many satisfied customers are already convinced of the outstanding price/performance ratio. It is now available in different equipment versions.



Optical capacity indicator on each Rivdom battery



LED lighted drill hole



Designed by **HONSEL | Germany**



approx. 240 mm
(without battery)



Sturdy plastic case with metal locks and space for two batteries.



Attractive sales packaging

2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4	8,0
Aluminium								
	Steel							
	Stainless Steel							
	Copper alloys							
Scope of delivery standard version V1 <ul style="list-style-type: none">• 4 Nose pieces in a box• 1 Mandrel collector• 1 Li-Ion Battery 14,4V/1,5Ah*• 1 Quick-charger 220V• Installation wrench 				Stroke: 21 mm		Max. mandrel-ø: 3,4 mm		
				*Capacity: Up to 2,000 pcs. Blind Rivets depending on type and material		Working power: 10.000 N		
						Charging time 1,5Ah: <1 h		
						 1,54 kg plus Battery (0,33kg/0,53 kg)		

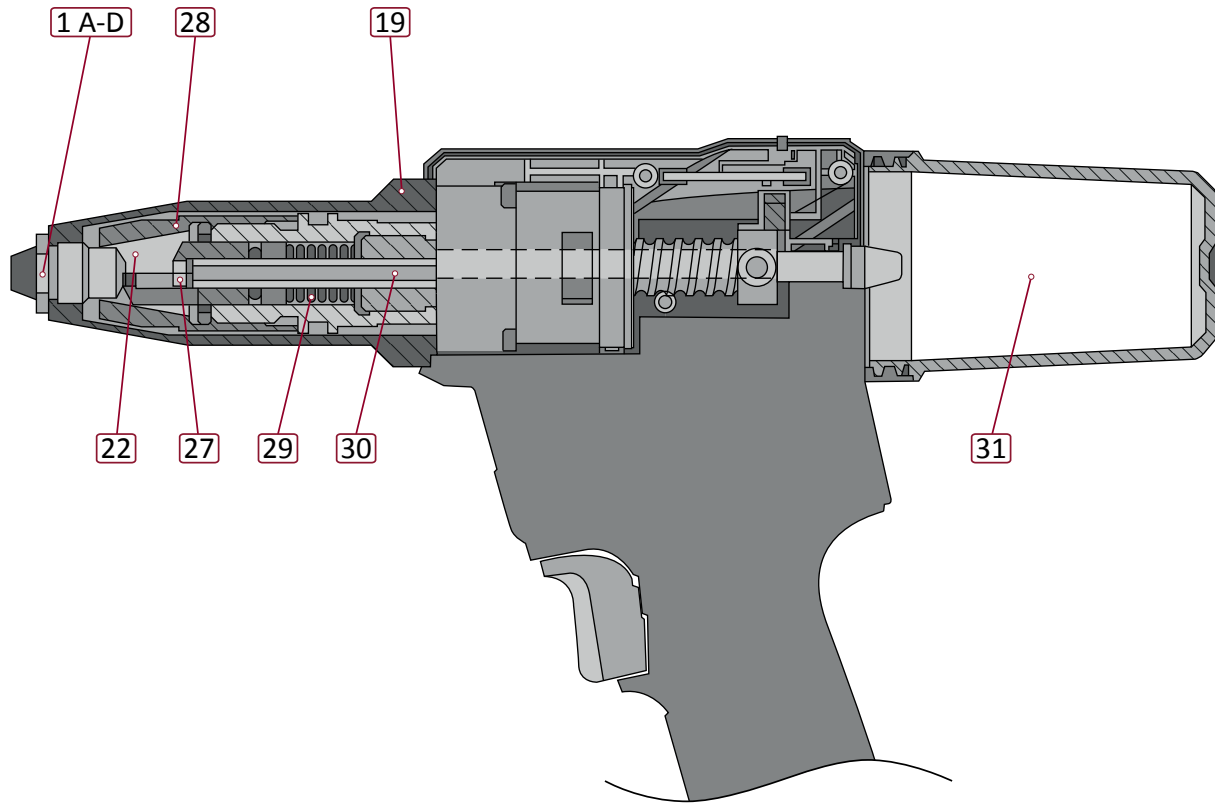
Standard version

Item No.: 320.400.000.000-001-10

NOW EVEN STRONGER!

No.	Alternative versions	Item No.
V2	Rivdom ONE in case, incl. a set of nose pieces, mandrel collector, 2 pcs. battery 14,4V/1,5Ah , quick-charger	320.400.000.000-00181-1
V3	Rivdom ONE in case, incl. a set of nose pieces, mandrel collector, 1 pc. battery 14,4V/3,0Ah , quick-charger	320.400.000.000-00182-1
V4	Rivdom ONE in case, incl. a set of nose pieces, mandrel collector, 1 pc. battery 14,4V/1,5Ah , 1 pc. battery 14,4V/3,0Ah , quick-charger	320.400.000.000-00183-1
V5	Rivdom ONE in case, incl. a set of nose pieces, mandrel collector, 1 pc. battery 14,4V/1,5Ah , charger 12V/24V	320.400.000.000-00184-1
V6	Rivdom ONE in case, incl. a set of nose pieces, mandrel collector, 2 pcs. battery 14,4V/3,0Ah , quick-charger	320.400.000.000-00186-1

Spare parts for Rivdom ONE



No.	Spare part	Item No.
1A	Nose piece 2,4 mm	321.300.100.022
1B	Nose piece 3,0/3,2 mm	321.300.100.023
1C	Nose piece 4,0 mm	321.300.100.024
1D	Nose piece 4,8/5,0 mm	321.300.100.025
19	Front sleeve NEW (suitable for retention nose pieces)	321.300.100.015-001.1
22	Clamping jaws (3 parts)	321.070.000.241
27	Guide sleeve	321.300.100.017
28	Clamping sleeve	321.300.100.016
29	Pressure Spring clamp mechanism	321.300.100.021
30	Mandrel discharge tube incl. O-ring	321.300.100.049
31	Mandrel collector transparent	321.300.100.031

Accessories without illustration	Item No.
Retention nose piece 3,0/3,2 mm	321.300.100.062
Retention nose piece 4,0 mm	321.300.100.063
Retention nose piece 4,8/5,0 mm	321.300.100.064
Facade nose piece 5,0 mm head 11	321.085.000.511
Facade nose piece 5,0 mm head 14	321.085.000.514
Box for nose pieces-empty-	321.300.100.070
Extended front sleeve (165 mm)	321.300.100.072
Vario nose piece	321.300.100.071

Li-Ion battery 14,4V/1,5Ah	321.400.000.022-0-1
Li-Ion battery 14,4V/3,0Ah	321.400.000.023-0-1
Quick Charger 220V	321.400.000.001-0-1
Charger 12V/24V	321.400.000.001-0-20



You can also use our interactive product viewer for fast search for the correct spare part.

ALL IN ONE. THE VARIO NOSE PIECE.

A nose piece with diameters of 2,4mm, 3,0/3,2mm, 4,0mm and 4,8/5,0 mm for a quick and easy replacement.





A POWERFUL unit for the BIG jobs.

RivdomTWO - the powerful battery-powered riveter for blind rivets up to 6.4 mm diameter of all materials - also for high-strength versions!

With a setting force of 20.000 N and a very big stroke of 30 mm not only standard blind rivets and high-strength versions like FERÖ®-Bulb and FERÖ®-Bolt can be set quickly, dependant and without re-setting as well as folding blind rivets or ring bolts.



The innovative overvalue packaging solution.

RivdomTWO is available in the widely spread SORTIMO L-BOXX system or only in a deep-drawn-part - fitting exactly into your already existing Sortimo boxes! Both versions are available with one or two 20 V Li-Ion batteries - wrapped by a solid cardboard.



Deep-drawn-part fitting

for SORTIMO L-BOXX Incl. RivdomTWO, alternatively with one (pictured) or two 20 V batteries, charger, nose pieces in box and wrench.





SORTIMO L-BOXX

Incl. RivdomTWO, alternatively with one or two 20 V batteries (pictured), charger, nose pieces in box and wrench.



Designed by **HONSEL | Germany**

2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4	8,0
			Aluminium					
			Steel					
			Stainless Steel					
			Copper alloys					
Scope of delivery standard version V1 in L-Boxx <ul style="list-style-type: none">• 4 Nose pieces in a box• 1 Mandrel collector• 1 Li-Ion Battery 20V/2,0Ah*• 1 Quick-charger 220V• Installation wrench 				Stroke: 30 mm		Max. mandrel-ø: 4,8 mm		
				*Capacity: Up to 2,000 pcs. Blind Rivets depending on type and material		Working power: 20.000		
						Charging time 2,0Ah: approx. 30 minutes		
						 2,0 kg with Battery		
Standard version Item No. 320.500.000.000.002-10								

No.	Alternative versions	Item No.
V2	Rivdom TWO in L-Boxx, incl. a set of nose pieces, mandrel collector, 2 pcs battery 20V/2,0Ah , quick charger	320.500.000.000-00281-1
V3	Rivdom TWO in deep-drawn-part, incl. a set of nose pieces, mandrel collector, 1 pcs battery 20V/2,0Ah , quick charger	320.500.000.000-001-10
V4	Rivdom TWO in deep-drawn-part, incl. a set of nose pieces, mandrel collector, 2 pcs battery 20V/2,0Ah , quick charger	320.500.000.000-00181-1

Accessories	Item No.
Li-Ion Battery 20V/2,0Ah	321.500.000.021-0-1
Quick-charger 220V	321.500.000.001-0-1

Rivdom TWO²

The most modern motor technology.

The newly developed brushless BLDC direct current motor presents itself with an almost wearless, durable life cycle. Low power consumption and reduced heat build-up increase efficiency and effectiveness as well as batterie runtime besides prolonged operating intervals. High drives at quite running at the same time and the integration of the tool's entire electronics into the motor can be realized.

The resulting saving of weight paired with the well-known perfect ergonomics guarantees a very comfortable handling.

- Standard nose pieces included in a separate box
- Special nose pieces available for several applications

**20,000 N OF SETTING FORCE!
30 MM STROKE!
BRUSHLESS MOTOR!**

LED illuminated working area

Sturdy, approved and safe.
Clear mandrel collector and mandrel protection lock inside the tool.

- Low weight
- Brilliant ergonomics
- Gummed comfort grip
- Optimized tool position
- Safe base

Optical capacity indicator
on every battery - for checking the charging conditions while operating!



Further information and a review of spare parts

RIVDOM
TWO



Pioneering battery charging technology *plus*

A new developed electronic quick-charger which **identifies the utilized batteries automatically** is introduced with RivdomTWO² for the first time! 16 V, 18 V and 20 V batteries can be charged with the same charger in the future. The charging time of the new Rivdom batteries sets new standards too: The 2,0 Ah Li-Ion battery is **completely charged in about 30 minutes!**





i Reliable and durable. Many of our pneumatic tools, like the almost legendary BZ 1 on the left-hand side, have been performing successfully in daily operation until now.

Decades of experience as well as **permanent optimization and further development** make the successful tools in the BZ and VNG series reliable partners in the industrial serial manufacturing and likewise in workshops and handicrafts.

A **robust construction** and **full equipment** including all necessary conversion parts and **extended accessories** as well as extensions like axial versions or angular rivet heads do not leave any option open.

For special applications we construct and manufacture **automations** or **process controls** according to your specifications.



BZ 103 A

Setting tool for blind rivets

- > pneumatic-hydraulic
- > with permanent or intervalic suction

From Spring 2015

- Even faster setting process!
- Reduced air consumption!
- Optimized nose pieces!
- Optimizes gripping mechanism!





BZ 103 A. This is the current version of the thousandfold proven standard tool for reliable blind rivet working. **A real classic.** Low-noise, with **outstanding ergonomics**, **extensive package** including and necessary conversion parts in a **high-quality packaging**. Individually adjustable suction of the mandrel.



We adjust pneumatic tools according to your specifications. For example:
special model BZ 103 A AXIAL.



2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4	8,0
Aluminium								
	Steel							
	Stainless steel							
	Copper alloys							
Scope of delivery <ul style="list-style-type: none">• 4 nose pieces• 1 set of clamping jaws• 1 bottle hydraulic oil / incl. re-fill unit• 2 mandrel collectors <div></div>				Pressure: 5-7 bar		max.mandrel-ø: 3,2 mm		
				Stroke: 18 mm		Air consumption: 2,4 liter		
				Noise: < 75 dB(A) _(68,32)		Working power at 7 bar: 11700 N		
				<div> 1,8 kg</div>		Hose connection: G 1/4 inside, installation left or right side		
Item no.: 320.103.000.000								

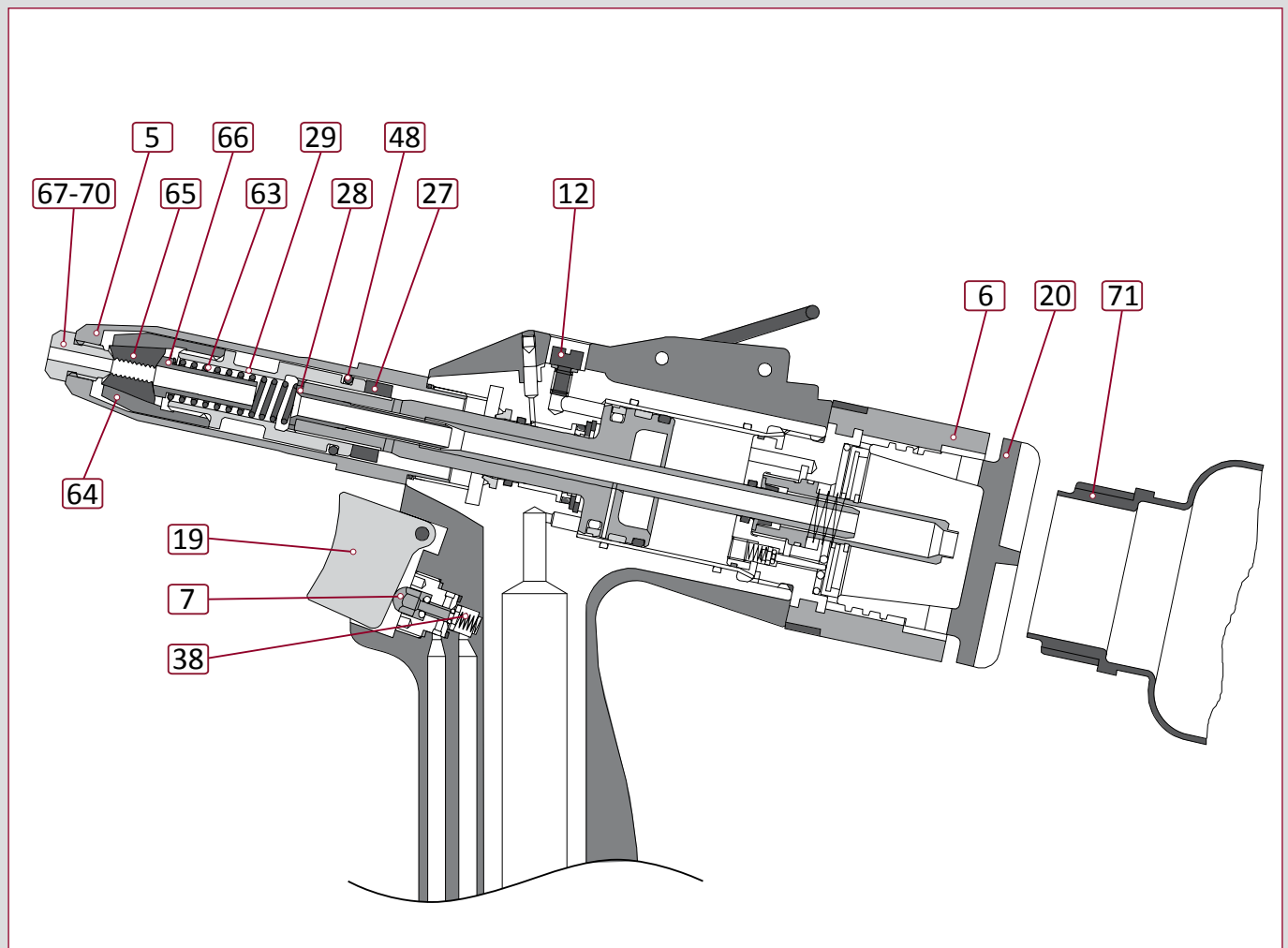


► Special accessories and nose pieces on [page 205](#).

► Suitable pneumatic accessories on [page 211](#).



Spare parts for BZ 103 A



You can also use our interactive product viewer
for fast search of further spare parts.



No.	Spare part	Item no.
5	Front sleeve long	321.101.000.016
6	Mandrel capture complete	321.102.000.006
7	Release valve	321.102.000.007
12	Oil drain plug including O ring	321.101.000.027
19	Trigger complete	321.102.000.016
20	Closing cap mandrel capture	321.102.000.017
27	M12 x 3 capture nut	321.102.000.023
28	Vacuum nozzle	321.121.000.121
29	Spacer	321.102.000.025
38	Pressure spring trigger	321.102.000.036

No.	Spare part	Item no.
48	O-ring 15.0 x 2.0 NBR 90° Shore	321.101.000.042
63	Pressure spring clamping mechanism	311.045.000.013
64	Clamping sleeve	311.045.000.010
65	Clamping jaws (3 parts)	321.070.000.241
66	Guide sleeve	321.055.000.020
67	Nose piece 2,4 mm	321.070.000.240
68	Nose piece 3,0/3,2 mm	321.085.000.123
69	Nose piece 4,0 mm	321.085.000.124
70	Nose piece 4,8/5,0 mm	321.085.000.125
71	Mandrel collector	321.082.000.010

**Wind deflector**

Deflecting the exhaustion air in a special direction.
For all BZ- tools with standard mandrel collector.

321.101.000.091

Special accessory for different possibilities to optimize the discharge of mandrels is available at a higher rivet emergence. Please ask for details on larger mandrel collectors, foot controlled trigger or discharge boosts.



BZ 123 A

Setting tool for blind rivets

- > pneumatic-hydraulic
- > with permanent or intervalic suction

From Spring 2015

- Even faster setting process!
- Reduced air consumption!
- Optimized nose pieces!
- Optimizes gripping mechanism!



BZ 123 A. The powerful tool for blind rivets up to 8 mm diameter! Perfectly suited for working high-strength FERRO-BOLT blind rivets because of **long stroke**. **Low-noise**, like all pneumatic-hydraulic Honsel-VVG-tools, with **outstanding ergonomics**, **extensive scope of supply**. Many special accessory parts available. Individual adjustments possible.





The BZ 123 A is excellently suited for working high-strength **FERRO®-BOLT** blind rivets. To enable a guaranteed fail-safe interlocking of the mandrel, you need to use the special nose pieces shown on ► [page 203](#)!



BZ 123 A with special front sleeve and nose piece for mounting of lashing rails with **FERRO®-BOLT** blind rivets.



2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4	8,0
			Aluminium					
			Steel					
			Stainless steel					
			Copper alloys					
Scope of delivery <ul style="list-style-type: none">• 4 nose pieces• 1 set of clamping jaws• 1 bottle hydraulic oil / incl. re-fill unit• 2 mandrel collectors <div></div>				Pressure: 5-7 bar		max.mandrel-ø: 4,8 mm		
				Stroke: 25 mm		Air consumption: 3,5 litre		
				Noise: < 75 dB(A) _(68,32)		Working power at 7 bar: 18700 N		
				<div> 2,34 kg</div>		Hose connection: G 1/4 inside, installation left or right side		
Item no.: 320.123.000.000								

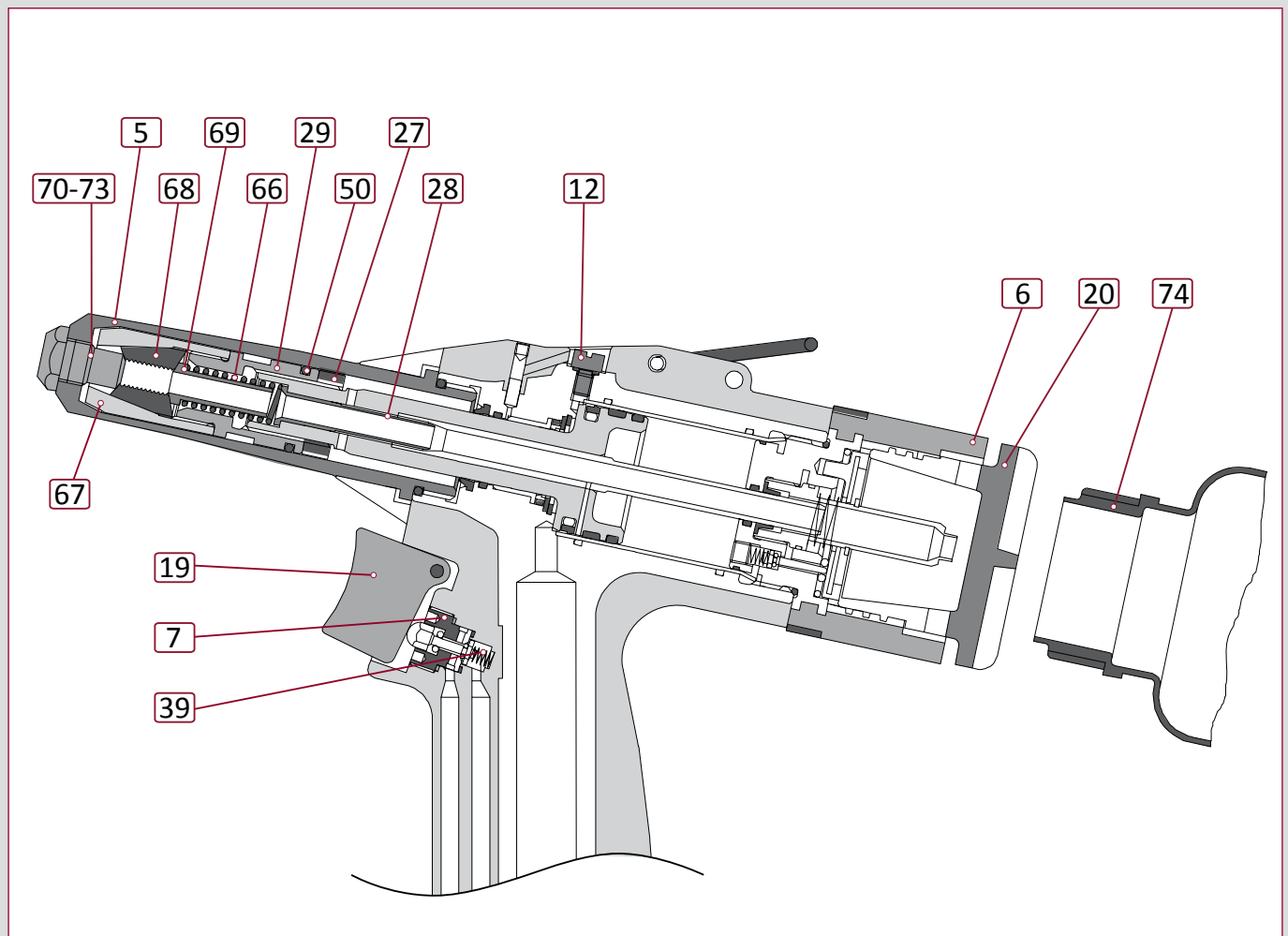


► Special accessories and nose pieces on [page 205](#).

► Suitable pneumatic accessories on [page 211](#).



Spare parts for BZ 123 A



You can also use our interactive product viewer
for fast search of further spare parts.



No.	Spare part	Item no.
5	Front sleeve long	321.121.000.016
6	Mandrel capture complete	321.102.000.006
7	Release valve	321.102.000.007
12	Oil drain plug including O-ring	321.101.000.027
19	Trigger complete	321.102.000.016
20	Closing cap mandrel capture	321.102.000.017
27	M14 x 1,5 capture nut	321.120.000.023
28	Vacuum nozzle	321.221.000.014
29	Spacer	321.122.000.025
39	Pressure spring trigger	321.102.000.036

No.	Spare part	Item no.
50	O-ring 16.0x2.0 NBR 70°Shore	321.120.000.014
66	Pressure Spring	311.045.000.013
67	Clamping sleeve	321.120.000.012
68	Clamping jaws (3 parts)	321.120.000.011
69	Guide sleeve	321.120.000.010
70	Nose piece 4,0 mm	321.120.000.124
71	Nose piece 4,8/5,0 mm	321.120.000.125
72	Nose piece 6,0 mm	321.120.000.126
73	Nose piece 6,4 mm	321.120.000.127
74	Mandrel collector	321.082.000.010

**Extended mandrel collector**

For the use with long blind rivets or blind rivets with an extended rivet mandrel.

321.221.000.065

Special accessory for different possibilities to optimize the discharge of mandrels is available at a higher rivet emergence. Please ask for details on larger mandrel containers, foot controlled trigger or discharge boosts.



BZ 133 A

Setting tool for blind rivets

- > pneumatic-hydraulic
- > with permanent or intervalic suction

From Spring 2015

- Even faster setting process!
- Reduced air consumption!
- Optimized nose pieces!
- Optimizes gripping mechanism!





BZ 123 A. The powerful specialist for high-strength blind rivets up to 8 mm diameter! High-strength FERO-BULB blind rivets are being set very comfortable and reliably through the combination of normal stroke, very high setting force (24.000 N) and clamping jaws that are optimized for the mandrel's grooving.



Made for **FERO®-BULB** blind rivets



2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4	8,0
			Aluminium					
			Steel					
			Stainless steel					
			Copper alloys					
Scope of delivery <ul style="list-style-type: none">• 4 nose pieces• 1 set of clamping jaws• 1 bottle hydraulic oil / incl. re-fill unit• 2 mandrel collectors <div></div>				Pressure: 5-7 bar		max. mandrel-ϕ: 4,8 mm		
				Stroke: 18 mm		Air consumption: 3,5 litre		
				Noise: < 75 dB(A)		Working power at 7 bar: 24.0000 N		
				<div> 2,34 kg</div>		Hose connection: G 1/4 inside, installation left or right sider		
Item no.: 320.133.000.000								

Spare part	Item no.
Nose piece 4,0 mm	321.120.000.124
Nose piece 4,8/5,0 mm	321.120.000.125
Nose piece 6,0 mm	321.120.000.126
Nose piece 6,4 / 8,0 mm	321.120.000.127
Clamping sleeve	361.122.000.022
Guide sleeve	321.055.000.020
Clamping jaws	361.122.000.020
O-ring-clamping mechanism	321.120.000.014
Pressure spring gripping mechanism	311.045.000.013



For handling various blind rivets like high-strength FERÖ®-BOLT blind rivets **special nose pieces** are needed which in this case ensure a **special interlocking of the mandrel**. We offer solutions also for **inside or deep-seated rivet joints** or **movable rivet connections**.

Next to the available from stock versions as shown below, we are able to produce special nose pieces for any blind rivet measurement and customer-related application due to high stock of blanks.

Nose pieces for FERÖ®-BOLT blind rivets



Extended nose pieces (17mm)



CE-Nose pieces for CERTO® blind rivets



Facade nose pieces for 5 mm large dome-head blind rivets



Extended front sleeves



Nose pieces FERÖ®-BOLT blind rivets

FERÖ®-BOLT Blind Rivets 4,8 mm	361.121.008.401
FERÖ®-BOLT Blind Rivets 6,4 mm	361.121.008.601

Extended nose pieces BZ 103 A (and precursors) / RivdomONE

Blind Rivets 3,0/3,2 mm	321.085.000.323
Blind Rivets 4,0 mm	321.085.000.324
Blind Rivets 4,8/5,0 mm	321.085.000.325

N.B. Blind rivets with extended mandrels are necessary for working with extended nose pieces!

Extended nose pieces BZ 123 A (and precursors)

Blind Rivets 4,0 mm	321.120.000.324
Blind Rivets 4,8/5,0 mm	321.120.000.325
Blind Rivets 6,0 mm	321.120.000.326
Blind Rivets 6,4 mm	321.120.000.327

N.B. Blind rivets with extended mandrels are necessary for working with extended nose pieces!

CE-Nose pieces for CERTO® blind rivets

CERTO®-Blind Rivets 3,2 mm	321.070.000.240
CERTO®-Blind Rivets 4,0 mm	321.085.009.124
CERTO®-Blind Rivets 4,8/5,0 mm	321.085.009.125

Facade nose pieces BZ 103 A (and precursors) / RivdomONE

Large domehead blind rivets - head 11mm	321.085.000.511
Large domehead blind rivets - head 14mm	321.085.000.514

Facade nose pieces BZ 123 A (and precursors) / BZ 70 / BZ 72

Large domehead blind rivets - head 11mm	321.120.000.511
Large domehead blind rivets - head 14mm	321.120.000.514
Large domehead blind rivets - head 16mm	321.120.000.516

Nose pieces for folding blind rivets

Folding blind rivets 5,2 M8 for BZ 103 A (and precursors) / RivdomONE	321.103.716.052-0-1
Folding blind rivets 5,2 M10 for BZ 123 A (and precursors) / RivdomTWO	321.123.716.052-0-1
Folding blind rivets 6,3 M10 for BZ 123 A (and precursors) / RivdomTWO	321.123.716.063-0-1

Extended front sleeves BZ 103 A (and precursors)

Conversion kit complete 130 mm	321.103.010.130
Conversion kit complete 170 mm	321.103.010.170
Conversion kit complete 210 mm	321.103.010.210

Extended front sleeves BZ 123 A (and precursors)

Conversion kit complete 130 mm	321.123.010.130
Conversion kit complete 170 mm	321.123.010.170
Conversion kit complete 210 mm	321.123.010.210

Around the corner.

To be able to set blind rivets at difficult-to-reach places various **angular rivet heads** for mounting onto the tools BZ 103 A are available.

These angular rivet heads use setting forces between 5.000 N und 9.200 N with stroke lengths between 11 and 17 mm.



VNG 703

Setting tool for blind rivet nuts and blind rivet bolts



- > pneumatic-hydraulic
- > force-controlled

VNG 703. The force-controlled tool for fast handling of large numbers in serial manufacture. The regulation through adjusting the necessary setting force guarantees that the blind rivet nut is always set in an **optimal and material-preserving** way. At the same time the VNG 703 features an **user-friendly conception** and **easy-to-use handling**. The switch from forward to backrun is extremely quick. Through light pressing on the mandrel the blind rivet nut is screwed on and after working screwed off automatically.



Easy, **stepless adjustment** of the individually required setting force.







Excellently suited for using **OPTO multi-grip blind rivet nuts** (► pages 98 - 99).



Special accessory angular adapter for keeping the needed rectangularity to the component.



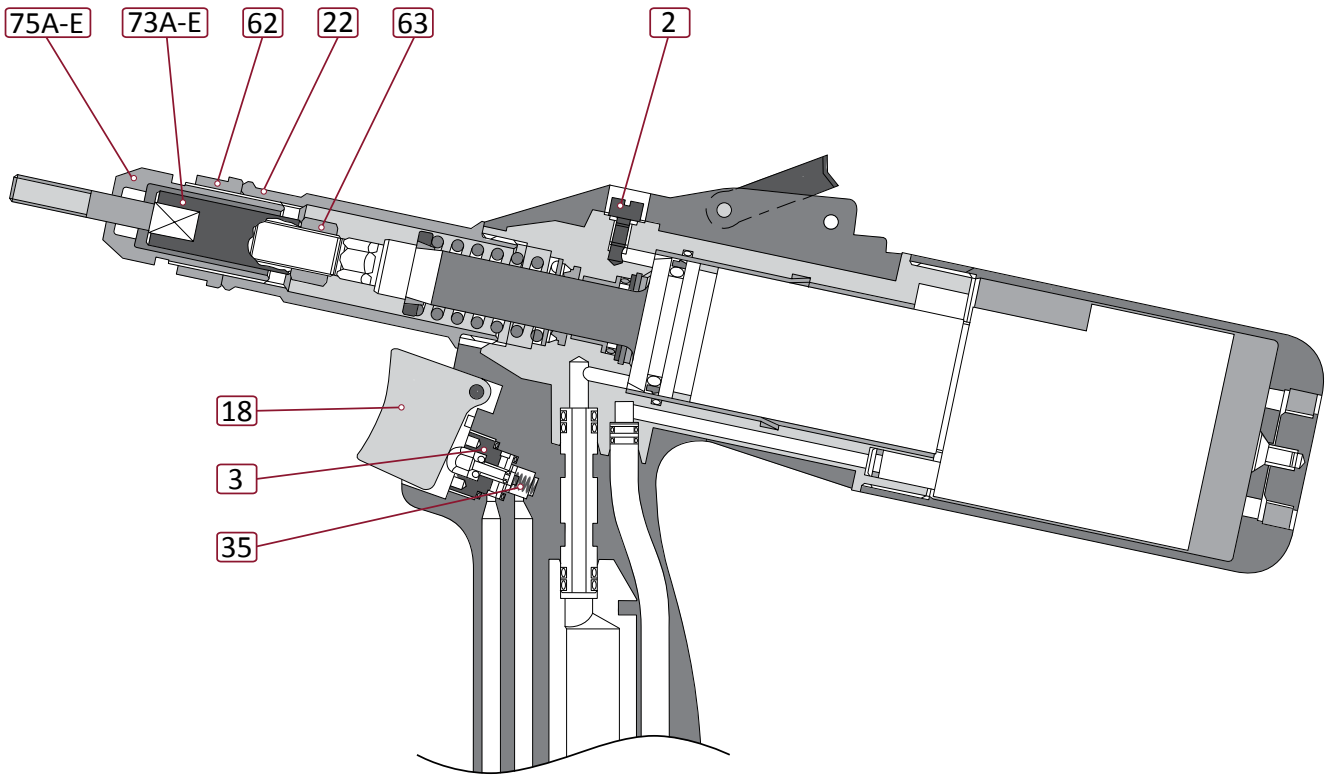
	M3	M4	M5	M6	M8	M10	M12
		Aluminium					
		Steel					
		Stainless steel					
		Steel					
Scope of delivery <ul style="list-style-type: none">• conversion kits for blind rivet nuts• 1 bottle hydraulic oil / incl. re-fill unit 			Pressure: 5-7 bar		Air consumption: 4,4 Liter		
			Stroke: 9 mm		Revolutions per minute: screwing 1800, removing 2500		
			Noise: < 75 dB(A) _(68,32)		Working power at 7 bar: 20000 N		
			 2,5 kg		Hose connection: G 1/4 inside, installation left or right side		
Item no.: 320.703.000.000							



- We produce individual special nose pieces, special mandrels and bushes on customers demand, e.g. extended versions, for coarse threads, UNC/ UNF or internal riveting positions.
- Suitable pneumatic accessory on page 211.



Spare parts for VNG 703



You can also use our interactive product viewer
for fast search of further spare parts.



No.	Spare part	Item no.
2	Cheese head bolt M 4 x 6 compl. with o-ring	321.101.000.027
3	Release valve BZ 102 A	321.102.000.007
18	trigger complete	321.102.000.016
22	Front sleeve VNG 703	321.703.000.024
35	Pressure spring trigger	321.102.000.036
62	Lock nut M18x1	321.801.000.074
63	Lock nut M 9x0,75	321.802.191.075
73A	Mandrel M3	321.800.008.030
73B	Mandrel M4	321.800.008.040
73C	Mandrel M5	321.800.008.050
73D	Mandrel M6	321.800.008.060
73E	Mandrel M8	321.800.008.080

No.	Spare part	Item no.
74B	Threaded sleeve Rifbolt M4	321.800.009.040
74C	Threaded sleeve Rifbolt M5	321.800.009.050
74D	Threaded sleeve Rifbolt M6	321.800.009.060
75A	Nose piece M3	311.800.000.203
75B	Nose piece M4	311.800.000.204
75C	Nose piece M5	311.800.000.205
75D	Nose piece M6	311.800.000.206
75E	Nose piece M8	311.800.000.208



- > pneumatic-hydraulic
- > stroke-controlled

VNG 903. The stroke-controlled solution for big challenges optional to M12.

The mature design and the possibilities of individual adjustment turns the VNG 903 into a perfect partner for powerful reliable handling of all well-established blind rivet nuts. These are **automatically beaded** onto the mandrel by light pressure. The beading stops automatically as well, the unstringing time is adjustable. **Comfortable, practical, easy.**







Exact adjustment of the setting stroke via scale on the adjustment cap.



VNG 903 in daily use. Process-stable working - powerful and reliable.



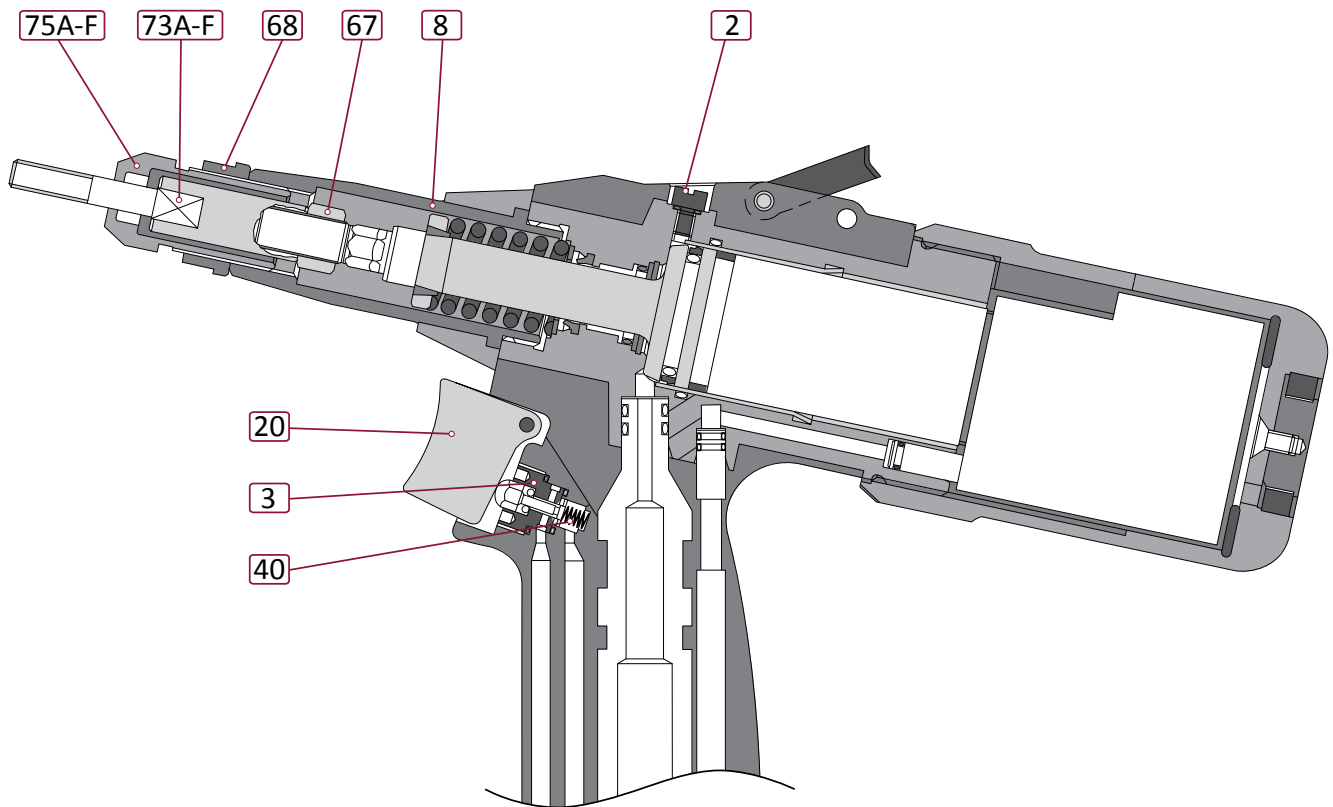
	M3	M4	M5	M6	M8	M10	M12
		Aluminium					optional
		Steel					optional
		Stainless steel					optional
		Steel					
Scope of delivery <ul style="list-style-type: none">• conversion kits for blind rivet nuts• 1 bottle hydraulic oil / incl. re-fill unit 			Pressure: 5-7 bar		Air consumption: 7,5 Liter		
			Stroke: 7 mm		Revolutions per minute:: screwing 1800, removing 2500		
			Noise: < 75 dB(A) _(68,32)		Working power at 7 bar: 29000 N		
			 2,7 kg		Hose connection: G 1/4 inside, installation left or right side		
Item no.: 320.903.000.000							



- We produce individual special nose pieces, special mandrels and bushes on customers demand, e.g. extended versions, for coarse threads, UNC/ UNF or internal riveting positions.
- Suitable pneumatic accessory on [page 211](#).



Spare parts for VNG 903



No.	Spare part	Item no.
2	Cheese head bolt M 4 x 6 compl. with o-ring	321.101.000.027
3	Release valve BZ 102 A	321.102.000.007
20	Trigger complete	321.102.000.016
8	Front sleeve VNG 903	321.903.000.016
40	Pressure spring trigger	321.102.000.036
67	Lock nut M 9x0,75	321.802.191.075
68	Lock nut M18x1	321.801.000.074
74A	Threaded sleeve Rifbolt M4	321.800.009.040
74B	Threaded sleeve Rifbolt M5	321.800.009.050
74C	Threaded sleeve Rifbolt M6	321.800.009.060
74D	Threaded sleeve Rifbolt M8	321.800.009.080

No.	Spare part	Item no.
73A	Mandrel M4	321.800.008.040
73B	Mandrel M5	321.800.008.050
73C	Mandrel M6	321.800.008.060
73D	Mandrel M8	321.800.008.080
73E	Mandrel M10	321.800.008.100
(73F)	Mandrel M12	321.800.008.120
75A	Nose piece M4	311.800.000.204
75B	Nose piece M5	311.800.000.205
75C	Nose piece M6	311.800.000.206
75D	Nose piece M8	311.800.000.208
75E	Nose piece M10	311.800.000.210
75F	Nose piece M12	311.800.000.212

**Stroke Locking Ring**

The stroke locking ring avoids unintentional shifting of the adjusted stroke

> for VNG 701/801/802/903 :
321.801.000.080

You can also use our interactive product viewer
for fast search of further spare parts.





VNG 753




Pneumatic-hydraulic tool for folding blind rivet nuts



- > pneumatic-hydraulic
- > stroke-controlled

VNG 753. The special tool for SFM-PL folding blind rivet nuts. Through the **very large stroke** of up to 15 mm and accordingly **extended mandrels** these can be handled perfectly and easy. Convince yourself from the capability of our pneumatic-hydraulic setting tools.



	M3	M4	M5	M6	M8	M10	M12
				Steel			
<div>Scope of delivery</div> <ul style="list-style-type: none">• conversion kits for folding blind rivet nuts M6 and M8• 1 bottle hydraulic oil / incl. re-fill unit <div></div>			Pressure: 5-7 bar		Air consumption: 7,5 litre		
			Stroke: 8 - 15 mm		Revolutions per minute: screwing 1800 removing 2500		
			 2,9 kg		Working power at 7 bar: 19000 N		
			Hose connection: G 1/4 inside, installation left or right side				
Item no.: 320.753.000.000							

Spare part	Item no.
Mandrel M6	361.800.008.613
Mandrel M8	361.800.008.813
Nose piece M6	311.800.000.206
Nose piece M8	311.800.000.208
Lock nut M18x1	321.801.000.074
Lock nut M9x0,75	361.802.191.075



Add to your order!

Have you considered the required pneumatic accessories? Save unnecessary expenditure and order the suitable accessories for the pneumatic tools of the BZ and VNG series with your tool purchase order!



No.	Description	Item no.
1	Angular pivoting fitting aluminium incl. hose with 1/4" outside thread and hose coupling	321.121.000.053-3-1
2	Pivoting threaded pipe angle, aluminium	321.121.000.053-1-1
3	Pivoting threaded pipe angle, stainless steel	321.121.000.053-2-1
4	Valve extension R1/8"	321.121.000.052
5	Screw-in hose connector -set- G 1/4" 6 mm	321.121.000.057
6	Screw-in hose connector -set- G 1/4" 9 mm	321.121.000.058
7a	Plug connection 7mm G 3/8 for compressed-air service unit	320.848.000.009
7b	Plug connection 7mm G 1/4 for pivoting threaded pipe angle	320.848.000.012
8	Coupling G 1/4"	320.848.000.010
9	Pressure controller 7 bar	320.848.000.004
10A	Compressed air spiral hose incl. coupling and plug connection -length 4m-	320.848.000.005
10B	Compressed air spiral hose incl. coupling and plug connection -length 6m-	320.848.000.006
10C	Compressed air spiral hose incl. coupling and plug connection -length 8m-	320.848.000.008
11	Oil re-fill unit for all tools of BZ- and VNG-series	321.101.006.467
12	Filter regulator G3/8 complete	320.848.000.001
13	Maintenance unit, 2-part, complete	320.848.000.002
---	Replacement filter for filter regulator	320.848.000.003
---	1 litre of pneumatic motor oil	320.848.000.011

For smooth operation of our pneumatic tools please note implicitly the information in our operating manuals! Important for preserving performance and to avoid damages are the **characteristics of the used compressed air**. Water condensation compromises the lubrication and causes corrosion inside the tool! The motors need to be greased continuously! **We recommend implicitly the use of maintenance units** for clean and greased air (VNG) or **filter-pressure reducers** for clean and dry air (BZ)!

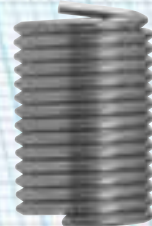
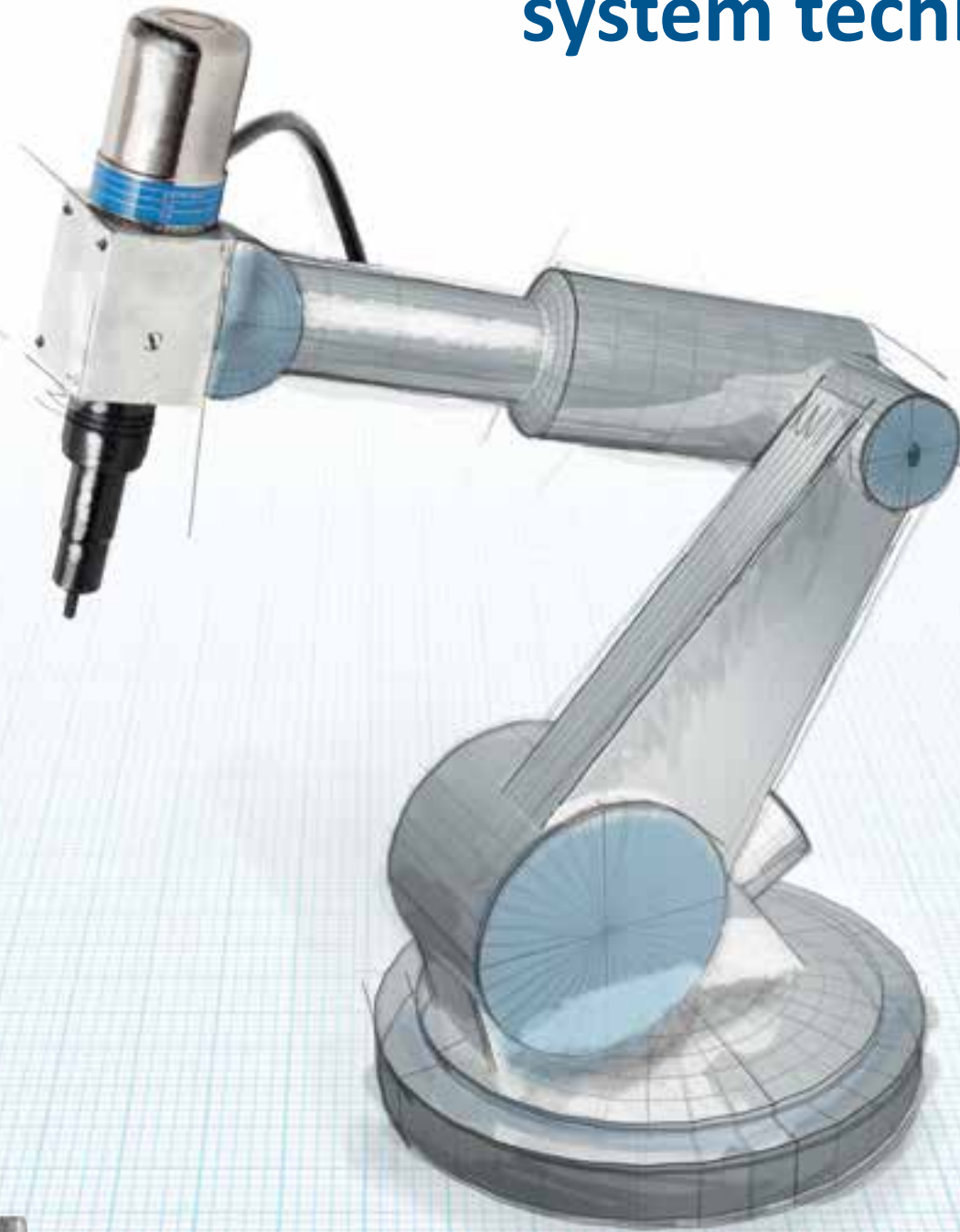


Filter regulator G3/8 with filter-pressure regulator, manometer, plastic protective cage, fastening angle, plug connection G3/8 and coupling.



Maintenance unit G3/8, 2-part, including plastic protective cage, fastening angle, plug connection G3/8, coupling and 1 litre of pneumatic motor oil.

Custom machinery and system technology





HONSEL is a well-known brand name with products that have been appreciated for decades. For a long time, the traditional company based in Froendenberg, Germany focused on manufacturing a range of riveting technology-related products. When automated production processes were becoming the norm, particularly in the automotive sector, **HONSEL** started receiving an increasing number of requests for automated processing support from customers experiencing problems.

HONSEL automation

HONSEL and rivet automation – two sides of the same coin



HONSEL was quick to recognise the signs of the times and, with '**HONSEL automation**', brought a business unit into being which, to date, has been one of the fastest growing parts of the business. Highly qualified engineers and application technicians form an efficient and solution-oriented team which, to date, has solved every seemingly difficult application with flying colours. At the same time, **HONSEL automation** has also focussed on being active in global markets, and the integration of third-party products in automation processes.

Today, as a result of the company's development, **HONSEL automation** is a leading force in the field of automation.



Reliable process control

Modern production processes are networked across all levels. Central servers provide variables and decentralised production units, which execute the production operations and deliver evaluated data in real-time. The elements of process control and process reliability are **HONSEL automation** operating framework. It simulates and optimises production-relevant processes before production commences to ensure that every customer gets the perfect solution.



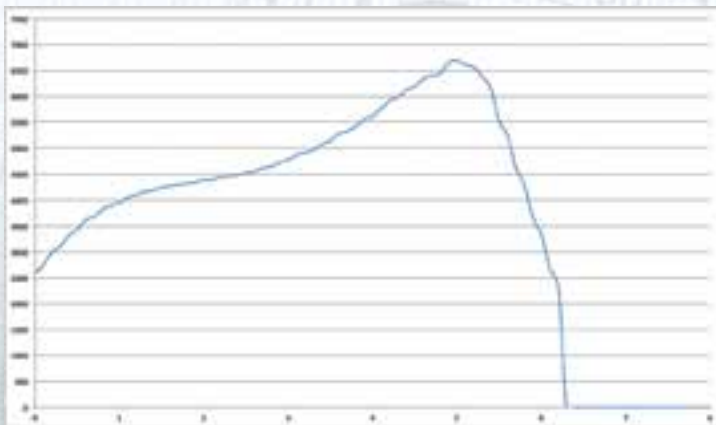
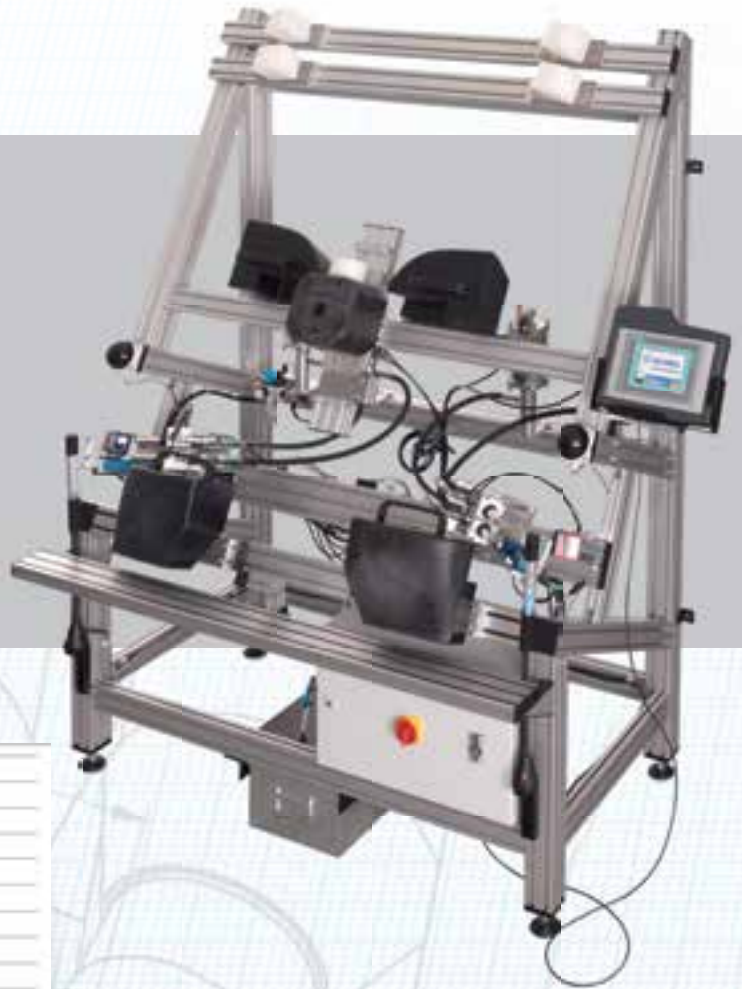
Customised – by HONSEL

HONSEL automation has development and production operations at its Froendenberg facility. Every single step of the production process, from the customer briefing to the initial CAD designs, the prototype for the pre-production series and the ready-to-manufacture product, are performed on an inhouse basis. The resulting short decision paths and direct communication channels make **HONSEL automation** the best choice for complex automation solutions.



Blind Rivets

Blind rivets are always used when thin materials have to be securely connected with one another. This is a proven technology that is used in all sectors of industry, which is why there are so many different kinds of blind rivets. In fact, there are practically no limits to blind rivet design in terms of diameter, geometry and material.



A typical **HONSEL automation** customer is a custom machinery builder that has been commissioned to design, build and supply production equipment for machining blind rivets. At the customer's request, **HONSEL automation** can provide an all-inclusive package including camera and process monitoring. Sometimes, however, customers may just need components. These are generally components for the multiple separation or multiple processing of blind rivets.

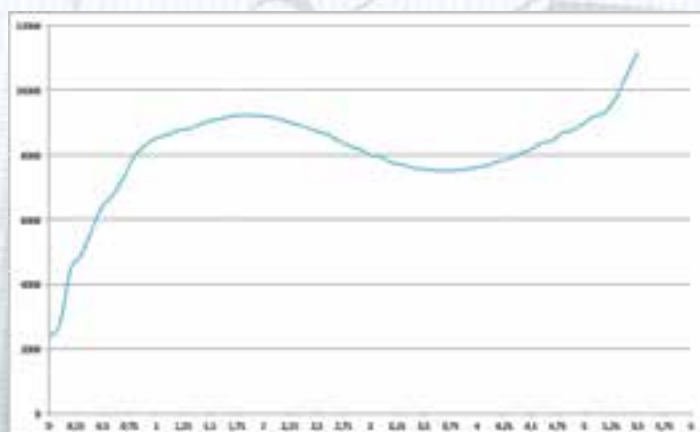
The most complex machine ever built for this kind of application to date was a 12 x separator for a shelving machine with a throughput of 360 rivets per minute.



Blind Rivet Nuts/ Blind Rivet Screws

HONSEL specialises in blind rivet nuts and screws. It manufactures and processes them by the million.

Today, blind rivets and nuts are rarely set manually. When vast numbers of rivets and nuts have to be set, automation and particularly feeder solutions are necessary.



The first step in the process of developing a **HONSEL** solution is often computer-based design and simulation. All product, material and processing variables can be defined in the CAD software prior to implementation. **HONSEL automation** has already implemented countless solutions and, over the years, it has developed a range of standard components. To the customer's advantage, this minimises costs.

In addition to a small and large generation of automated setting equipment, **HONSEL automation** is currently developing an innovative generation of machines to augment its portfolio with new processing options.



Helical Inserts/ Coils

Coils, which are also called helical inserts, have been around for a long time already. One of their applications is to repair threads. Sustained demand of inexpensive and lightweight design recently brought helical threads to the attention of custom machinery and automobile manufacturers because they can be used to create a very robust thread on a light material.

Today, helical inserts are used in the aviation and automotive industries as a practical and low-cost solution for high-strength connections.

From a feeder technology perspective, they are always a challenge because, like springs, coils tend to get caught in the feeder. The **HONSEL automation** engineers have managed to solve the problem of separation and are now able to feed any coil between M6 and M14 in an automated process.



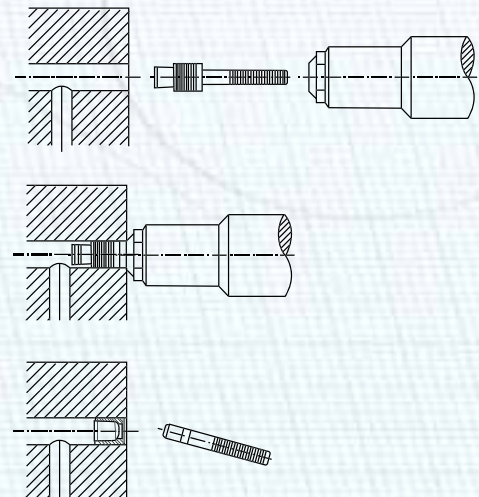
Sealing Plugs

Sealing plugs are used when existing auxiliary holes have to be reliably sealed and they are especially commonplace in the hydraulics and automotive sectors.

Sealing plugs are machined in a similar way to blind rivets, so their automation equipment design is also comparable.



Installation scenario



As a result, **HONSEL automation** is able to offer a comprehensive portfolio of solutions, extending from a modified manual setting device to fully automated machining equipment with integrated feeder and process monitoring. Special tensioning mechanisms developed by **HONSEL automation** ensure that even different diameters and complex geometries can be reliably machined.





Article number with production and packing information.

Production batch



We are glad to help you ...

... whenever you need support with using rivet products! A wide range of issues can be summarized from daily business, which can be checked quickly and easily by the user on site. Some of these tips and hints we have collected for you on the following pages.

In case a consultation is still needed, please contact our sales team.

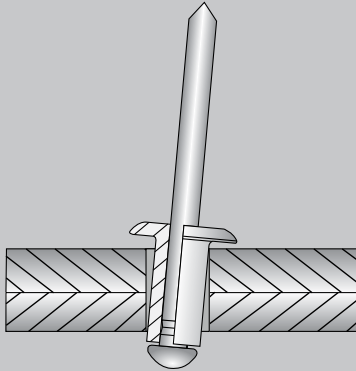
For quick advise please hold following information available:

- Customer number
- VVG order number
- Ship date
- Complete article number
- Batch number
(both on the left-hand side)
- Frequency of error
- Grip range
- The drill hole's diameter

Important for clarifying potential problems are details on the used tool as well:

- Which tools do you work with (manufacturer and type)?
- For which work fields has the tool been approved?
- Have the right nose pieces or mandrels been assembled?

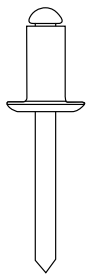
Make sure that the used tool and the rivet is always straight to drilling direction.






The components need to be fix and without interspace on top of each other.



Blind Rivets



Indication	Reason	Solution
The mandrel emerges from the set 	Drill hole too large Rivet „pulls through“ because the head of the mandrel pulls itself into the sleeve. The rivet works on bearing stress.	At least on the closing head's side the hole must be drilled precisely.
	Grip range too small If the specified grip range is underrun, the mandrel emerges from the sleeve because the rivet always breaks at the predetermined breaking point.	Check the grip range, if necessary, choose correct article.
Sleeve material is pulled out during setting	Nose piece too big Because of the big nose piece drill hole the sleeve material is being pulled into the mouth piece. This often happens with sealed blind rivets, as the diameter of the mandrels is smaller compared to the standard rivet.	Assemble the correct nose piece
Connection too loose	Clamping area too small 	Check the component and use a rivet with different diameter if necessary.
	Clamping area too large. Not enough rivet material available.	Check if components are correctly placed on top of each other. If necessary use different dimension.
	Drill hole too big 	Check and drill a new hole if necessary.
Mandrel pulls out of undeformed rivet entirely or partially	Drill hole too big	Check if components are correctly placed on top of each other. If necessary use different dimension.





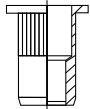
The exact setting of a rivet highly depends on a correct drill hole.
Make sure, that the drill hole...




- has the required diameter,
- is constant,
- is round,
- is not conical,
- is deburred.

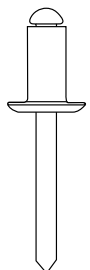




Blind Rivet Nuts



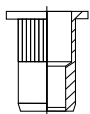
Indication	Reason	Solution
Thread of blind rivet nut is damaged or mandrel extremely worn.	Stroke too high	Reduce stroke on the tool or the pliers.
Blind rivet nut untightened. 	Insufficient stroke	Blind rivet nut does not form adequate upset ridge: increase the stroke on the tool or pliers. Caution! Use a stroke less than specified when re-setting the blind rivet nut.

Tools in general



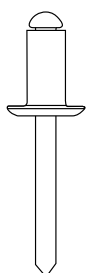
Indication	Reason	Solution
The rivet is not drawn.	Nose piece too big 	Change the nose piece. Nose pieces are differentiated by the drill hole and the length of the threaded pin. The longer the pin, the more the clamping jaws will be pressed backwards. Because of the clamping jaw running into the conically clamping sleeve, the clamping jaw opens even more and cannot grip the mandrel.
	Worn out clamping jaws 	Clamping jaws are consumables that need to be replaced regularly according to processed quantities and rivet type! As short-term solution the grooves can be cleaned with a wire brush.
Broken mandrels get jammed in the nose piece.	Nose piece too small	Change the nose piece. If it's possible to set a large rivet with a small nose piece, but when the clamping jaws come forward too far, after setting the rivet, they don't release the cut off rivet mandrel.

Hand Tools

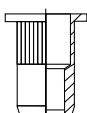


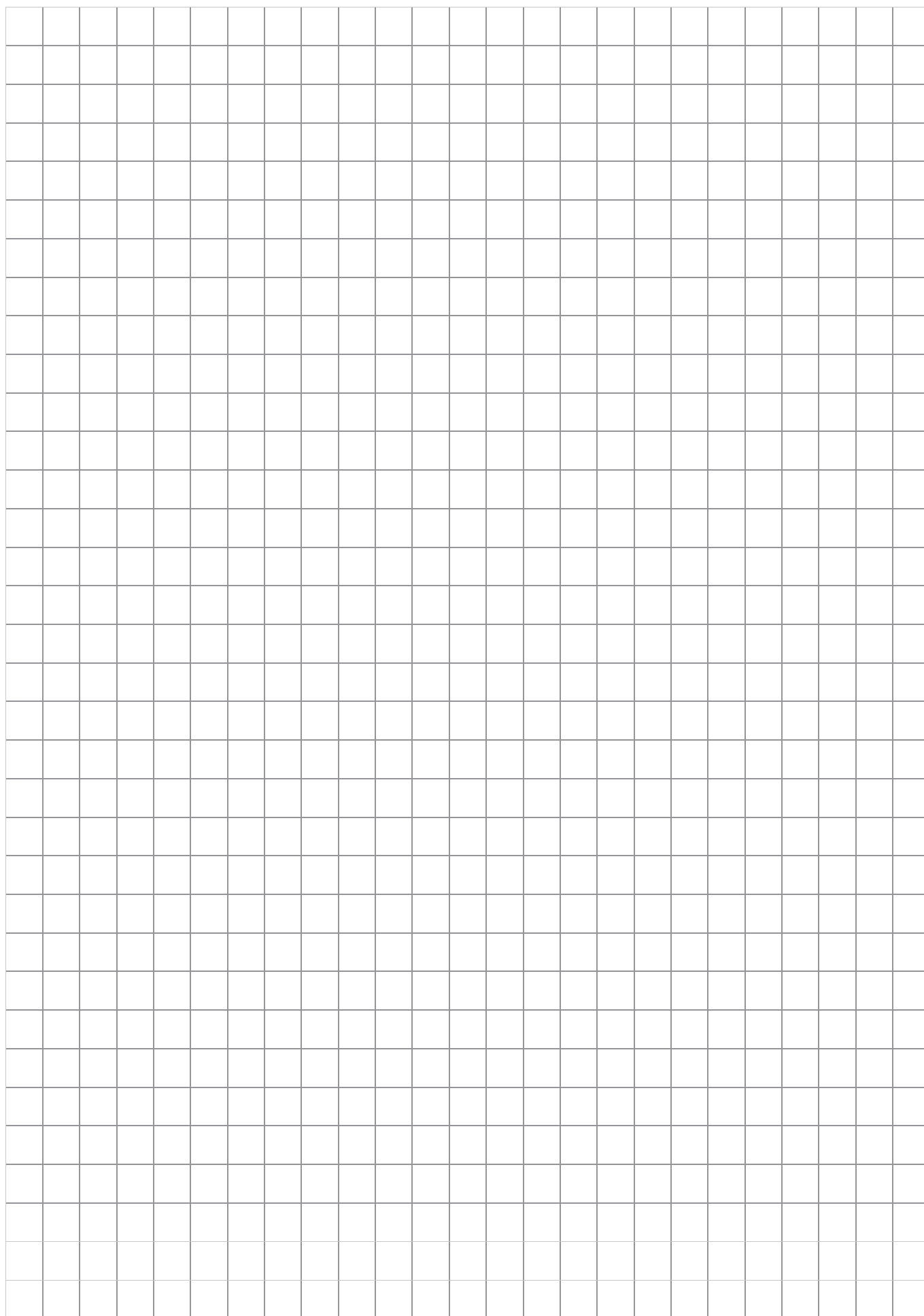
Indication	Reason	Solution
Rough-running.	Drawing spindle has insufficient play.	Uncscrew the lock nut M8 by 2-3 turns. This lock nut is screwed with the mandrel onto the drawing spindle.
Mandrel seems to be too short.	Mandrel has been screwed on too much.	Adjust the mandrel incl. counter nut to the requested length.

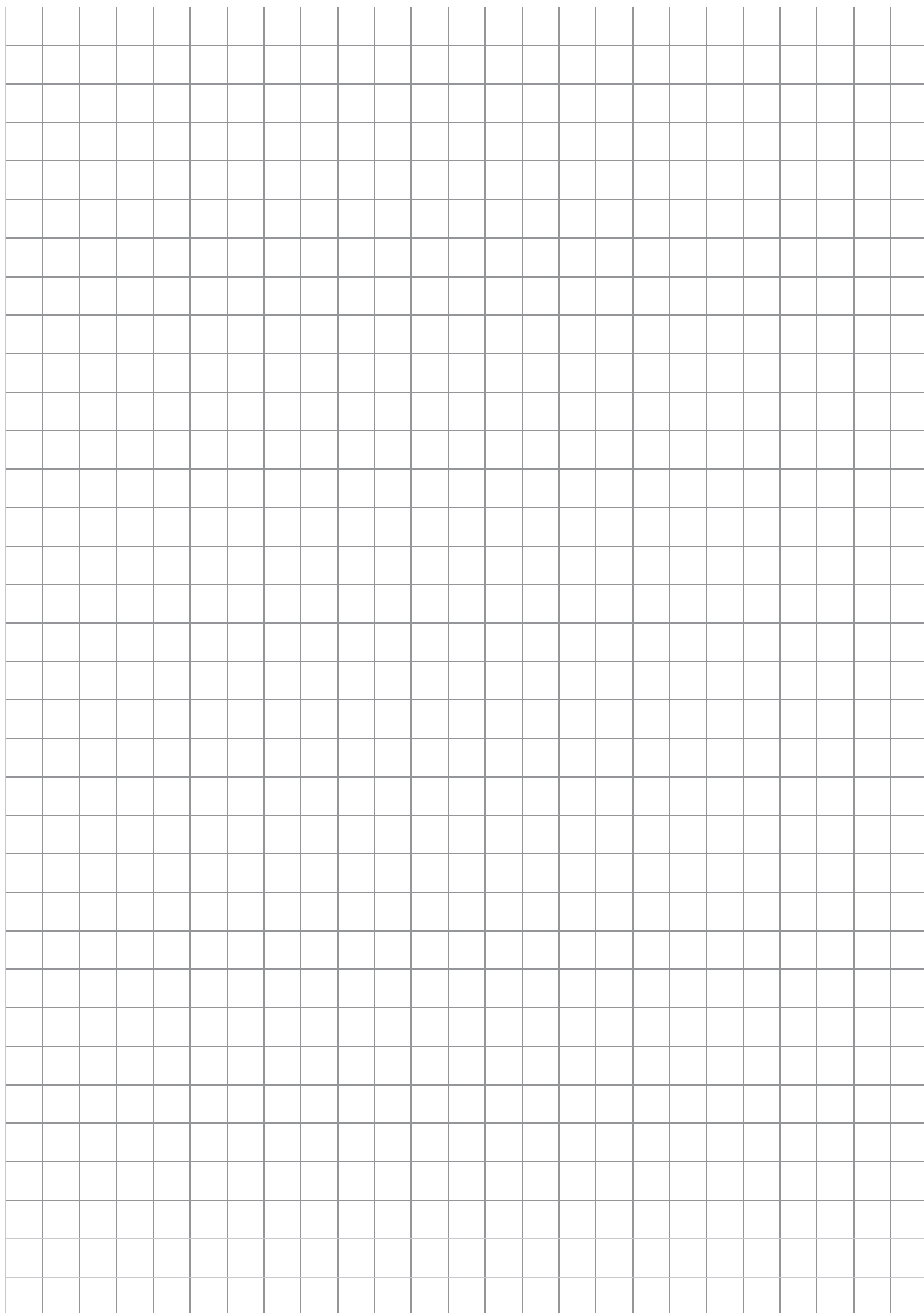
Pneumatic Tools

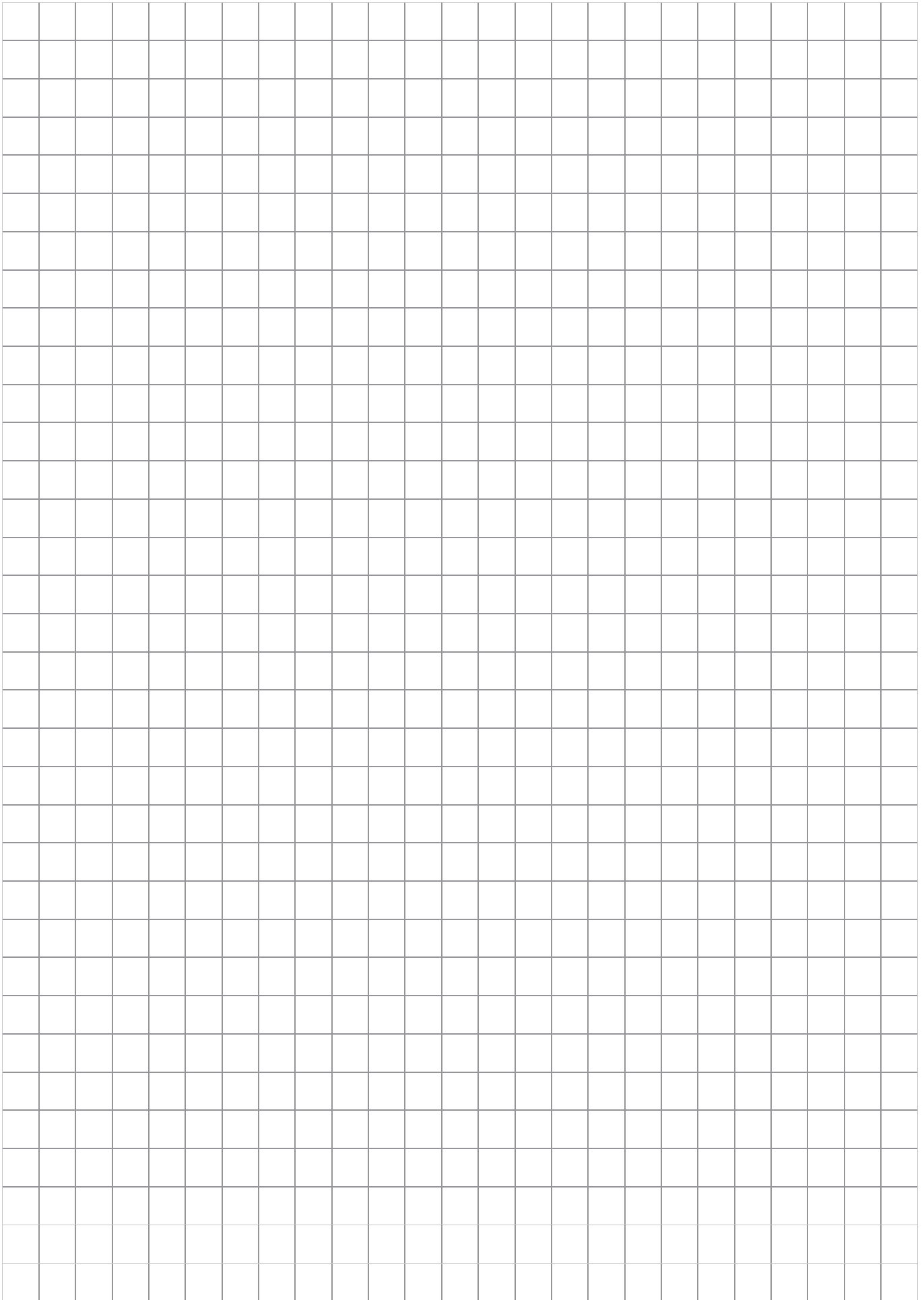


Indication	Reason	Solution
The rivet is not drawn.	No hydraulic oil in the tool	Change the oil (according to the instruction manual). Note that basically an oil change must be done regularly depending on the use of the tool.
Broken mandrels get jamed in the nose piece.	Adjustment dimension is incorrect (dimension between clamping mechanism and front sleeve with nose piece). Hydraulic piston blocks when only oil is added instead of changed completely.	Change the oil (according to the instruction manual). Attention: Oil can squirt while unscrewing the oil drain plug.
Broken mandrels get jammd in the vacuum nozzle.	The mandrel container was not emptied in time.	Remove the vacuum nozzle.
The tool blows out air through the nose piece.	Jammed mandrel	Remove mandrel from the vacuum nozzle.
	Vacuum nozzle defective	Vacuum nozzle has a phase in the rear. If this is damaged by jammed or repelled mandrel, no vacuum will be created.
	O-ring 101/42 defective	The floating O-ring is tightened on the clamping mechanism. It will be easily damaged by screwing on the front sleeve.
Permanent operation in anticlockwise rotation.	Reverser is stuck	Remove stroke-adjusting flap. Pull back the brass slider with long-nose pliers. Clean the running surface of the brass slider if necessary and lubricate it with grease or oil (VNG 701/801).
Reversing to anticlockwise rotation does not work.	Pneumatic pressure too low	Operating pressure of at least 6 bars
	Too little oil	Change the oil (according to the instruction manual).
Loss of stroke (the blind rivet nuts are not drawn).	The stroke is not adjusted correctly	Stroke adjustment by of turning the rear sealing cap.
	No hydraulic oil in the tool	Change the oil (according to the instruction manual).
Mandrel runs irregular and 'wob- bles'.	Mandrel not fixed by counter nut	Unscrew nose piece and front sleeve. Fix the mandrel with M8 counter nut seated on the drawing spindle.
Blind rivet nut is difficult to be screwed onto the mandrel.	Mandrel is worn or not greased	Change the mandrel or grease slightly.









Nominal charge 3,00 €

All prices are excluding the valid value added tax.

Technical and content modifications reserved.

