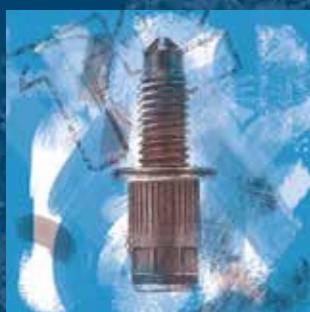
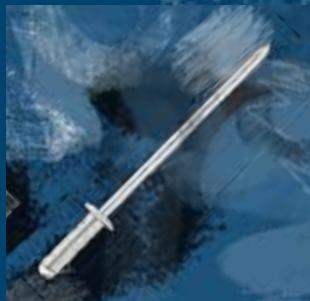


HONSEL

The Art of **Fastening**

90
YEARS
1930-2020



Catalogue 2021/2022
Blind Rivet Fasteners

90 YEARS OF HONSEL



HONSEL **90 years of experience** in the development, production and sales of high-quality fastener elements and setting solutions.



HONSEL 1930

Production of cookware with riveted handles.

HONSEL today

One of the oldest and leading full-line suppliers of riveting and fastener technology in Europe and worldwide.

HONSEL The products

From the simple standard rivet to complex automation with process monitoring.

HONSEL The success story of an owner-managed industrial company with a long-term, sustainable perspective and today more than 300 excellently trained employees at four sites.

HONSEL invests in the company, in machines and in its staff, and is synonymous with innovative products, the highest quality, the latest production facilities and partnership-based service always geared to the needs of our customers.



WE ARE JOINING **FORCES**



VVG Befestigungstechnik
Ein Unternehmen der HONSEL-Gruppe

**Under a common brand name.
VVG is now HONSEL.**

VVG and **HONSEL** were closely linked even in the past, and used many resources together. This cooperation will be documented in the future with a common brand image – under the motto

HONSEL. The art of fastening.

We are your strong partner when it comes to fastening technology. 90 years of development, production and sale of high-quality fasteners and processing solutions, combined with a high supply capability and the renowned fast and comprehensive service.

HONSEL. Everything from a single source.



HONSEL benefits.

Optimised processes

for even shorter order routes and reaction times.

Individual support

from specialist teams at your side.

Flexible and personal.

Direct access to the manufacturer know-how of the whole HONSEL Group.

Proven range – familiar faces.



THE ART OF FASTENING



HONSEL

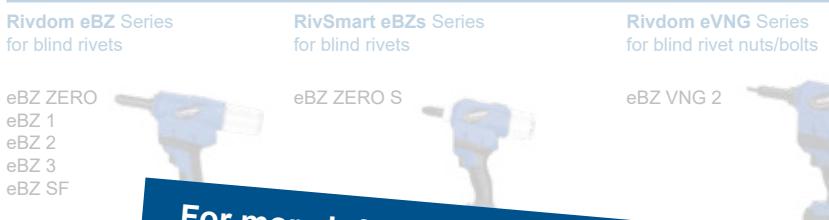
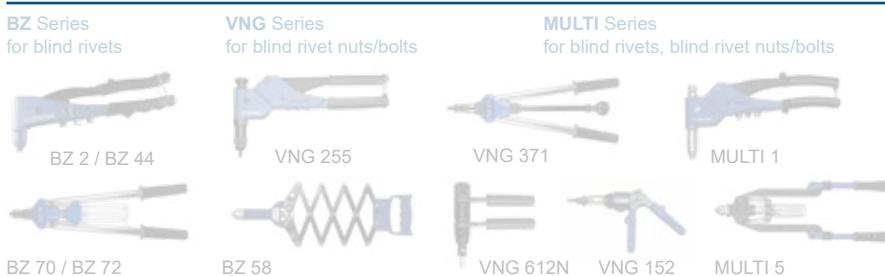
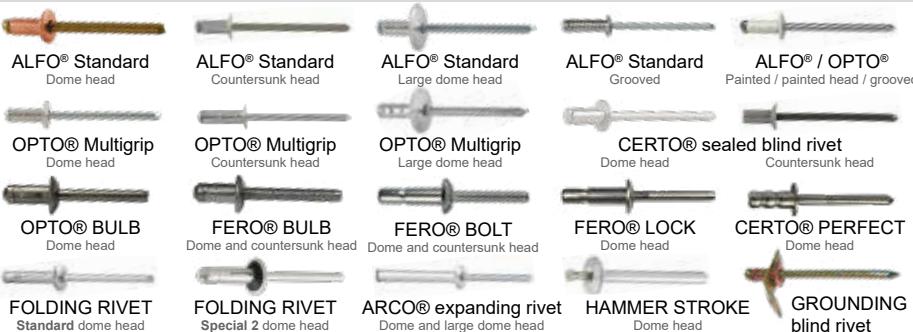
The **Art** of Fastening

90
YEARS
1930-2020

Information on other products, such as our industrial fasteners and automation solutions or coil threaded inserts can be found on our website, www.honsel.de, or send for the separate catalogues or data sheets.

Blind rivets**Detailed directory**

Page 31



For more information about these product groups see our separate catalogues or visit our website www.honsel.de/en

Please note that we reserve the right to charge alloy surcharges based on the spot price at the time of ordering.

General and technical Information

THE HONSEL GROUP

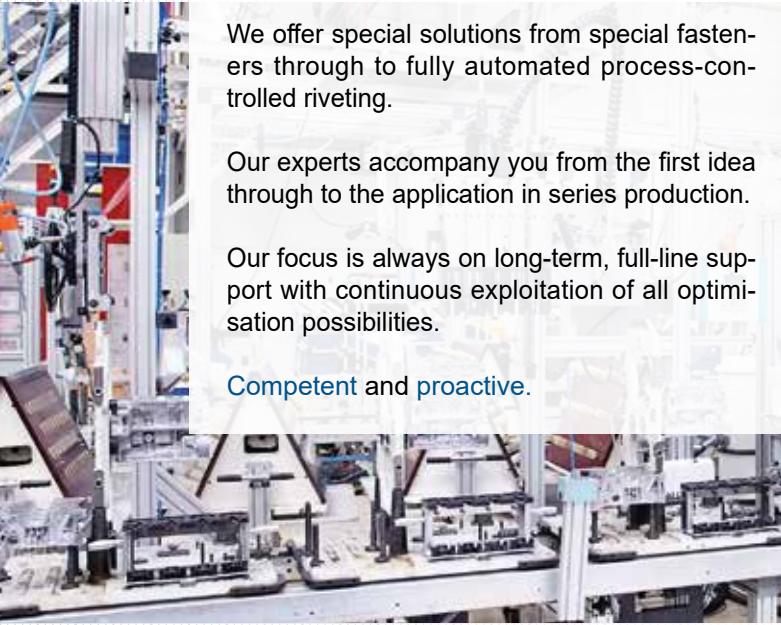
HONSEL. Individual.

We offer special solutions from special fasteners through to fully automated process-controlled riveting.

Our experts accompany you from the first idea through to the application in series production.

Our focus is always on long-term, full-line support with continuous exploitation of all optimisation possibilities.

Competent and proactive.



INDUSTRY



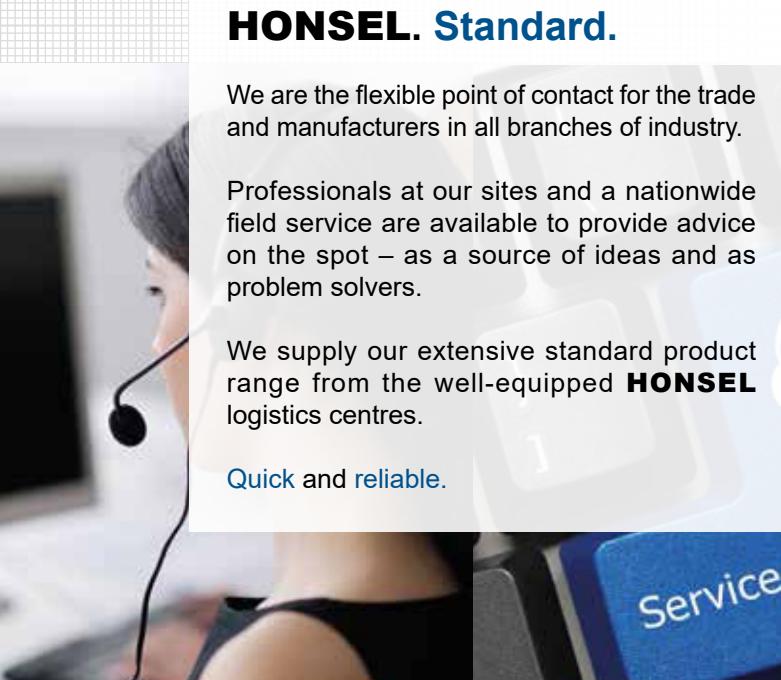
HONSEL. Standard.

We are the flexible point of contact for the trade and manufacturers in all branches of industry.

Professionals at our sites and a nationwide field service are available to provide advice on the spot – as a source of ideas and as problem solvers.

We supply our extensive standard product range from the well-equipped **HONSEL** logistics centres.

Quick and reliable.



TRADE + MANUFACTURING



SPECIALISTS

FROM A SINGLE SOURCE

DIVISIONS

AUTOMOTIVE



HONSEL. Mobile.

The decades of experience in the complex support for and supply to almost all major automotive manufacturers and their suppliers is one of our core competences.

We successfully face new challenges such as in the field of e-mobility and develop efficient concepts with and for our partners.

Pioneering and cost-effective.



TOOLS + PROCESSING



HONSEL. Innovative.

Perfect processing for every fastener and every application is our goal.

We develop and produce hand-held tools such as battery riveters as well as automation and component solutions or process monitoring systems.

We also support you with comprehensive service during operation.

Dependable and networked.



HONSEL SITES

HONSEL. Neumünster.

After being successful on the market for 25 years as VVG-Befestigungstechnik, **HONSEL Distribution** will continue to be responsible with the familiar team for the delivery of the catalogue range of standard and norm parts – in many cases adapted to the customer's requirements.

The new and further development of hand-held setting and riveting tools and their maintenance and repair are also carried out at the site.



HONSEL. China.

A large number of standard fasteners are manufactured to **HONSEL** specifications by **HONSEL Fasteners** and tested in their own quality assurance centre in Wuxi/China.

The site is also home to the Group's logistics centre in Asia and delivers directly to the Chinese market.



WORLDWIDE

AVAILABILITY

HONSEL. Fröndenberg.



HONSEL Umformtechnik is the heart of the Group and its main manufacturing site.

The latest machinery and continuously expanded production capacities guarantee the reliable production of individual custom parts and automation solutions for large-scale industry and automotive customers. A sophisticated logistics concept with fully automated warehouse ensures fast and dependable availability.



HONSEL. France.



HONSEL France is responsible for the French-speaking market.

With a flexible local presence, well-stocked warehouse and comprehensive field service network, HONSEL France has been a competent partner for trade and industry for decades.

HONSEL is represented by a large number of trading partners on every continent, whether in the USA, Mexico, Brazil or India, and in practically every European country, Switzerland and Turkey.

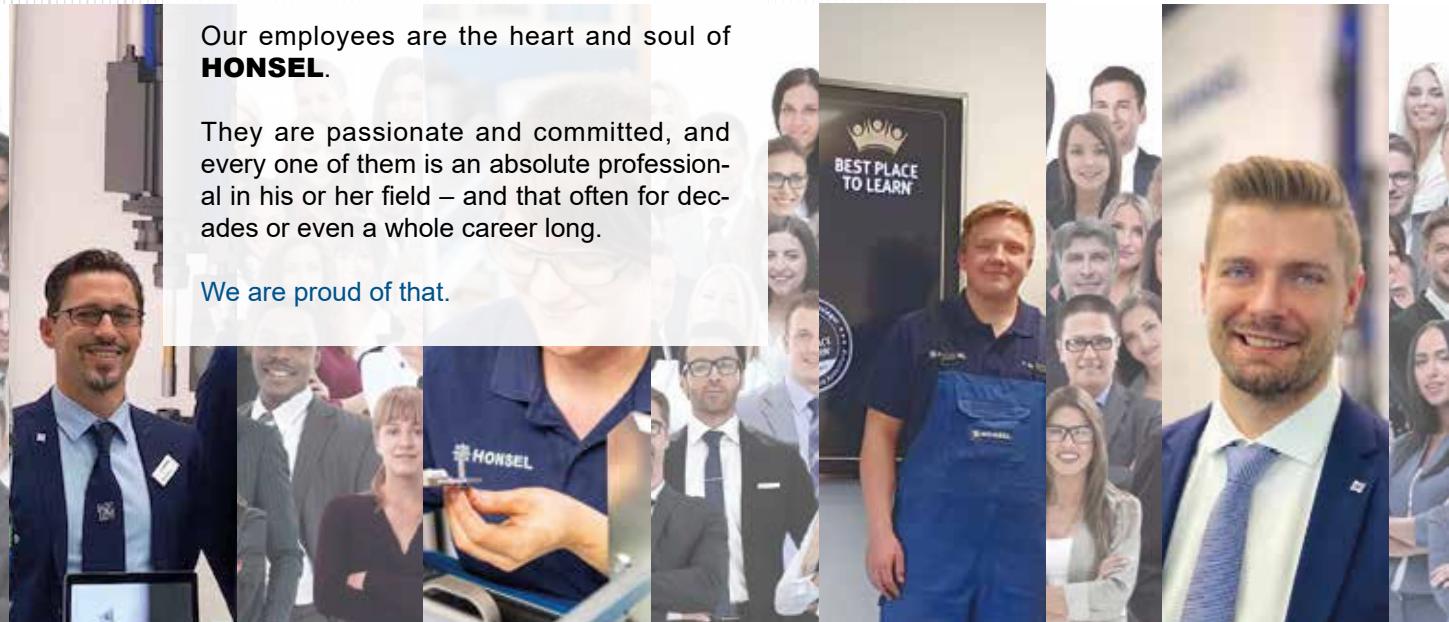
WE ARE HONSEL

HONSEL. The team.

Our employees are the heart and soul of **HONSEL**.

They are passionate and committed, and every one of them is an absolute professional in his or her field – and that often for decades or even a whole career long.

We are proud of that.



HONSEL. Career.

HONSEL is an employer with a tradition and a future.

The continuous integration of the latest technologies and the experience of our company history form the basis for challenging commercial, industrial and technical jobs.

We train our own apprentices and provide ongoing internal and external training for our staff.



PEOPLE

and VALUES

RESPONSIBILITY

HONSEL. Guidelines.



We keep our promises. Dependability – both internally and externally – is a matter of course for us.

We work for our customers. Optimum technical support, the highest productivity and punctual deliveries are our top priority.

We are one team. Only together can we achieve our goals.

HONSEL. Environment.



For us, progress also means **sustainable management** in all areas.

For example, our production facilities are equipped with solar panels, and the plant in Fröndenberg – directly on the Ruhr river – meets the highest environmental standards. We have significantly reduced the use of printed media.

We demand an awareness in these issues also from our suppliers and partners, and evaluate the results on an ongoing basis.



HONSEL AT A GLANCE.

- Manufacturer for 90 years with more than 400 employees at four sites
- Over 10,000 m² of production area
- In the heart of Germany – in the heart of Europe – near you worldwide
- High manufacturing depth for solid and hollow parts with complex bores and close tolerances
- Wide range of customer-oriented services
- Ongoing further development of resources and investments throughout the Group

Our production facilities – 80 % new investments in recent years.

- More than thirty five and six-stage headers for cold forming up to 20 mm wire diameter and 60 mm length
- Optoelectric sorting machines for 100 % inspection of all custom products
- Screw conveyor washing facilities and belt conveyor furnace
- Turning and milling centres
- EDM machines, automatic grinders and thread formers

Development, logistics and service

- The latest CAD workstations for design engineering and product development
- Packaging machines of the latest generation for bags, disposable boxes and KLTs
- Automated high-bay warehouse
- New office building on four floors
- Repair and maintenance centres for setting tools
- Vast know-how in all areas – from development through production up to sales

In-house processes

- Finite elements simulations
- Induction hardening and annealing
- Recrystallisation annealing
- Crimping and laser welding
- Application of various seals
- Finishing operations such as barrel finishing, drilling, turning and milling, rolling and pointing
- Assembly of component elements
- 100 % inspection
- Length and roughness tests
- Metallurgical examinations
- Microscopy up to 1,000x magnification
- Profile projection
- Eddy current testing
- HV & HB hardness tests
- Universal testing machines up to 50 kN

- In-house toolmaking shop for fast prototype production
- Certification to ISO 14001 and ISO/TS 16949

FACTS and REFERENCES

HONSEL CUSTOMERS

HONSEL has been working successfully and in close partnership with a large number of leading companies from the automotive industry and their suppliers, and with manufacturers from other branches of industry – and that for decades.

Sophisticated special solutions are developed together and brought to series production maturity.

Furthermore, we are supported by over 2,000 trading partners in the sale of our products worldwide – from A for Australia to Z for Zimbabwe.



Please contact us for a current overview of selected references.



WIRE PRODUCTS



HONSEL

The art of **cold forming**

It all began with wire.

From the very beginning, we have manufactured our fastener elements from wire up to 20 mm in diameter and have vast know-how, a great manufacturing depth and the ability to achieve even the most complex deformation ratios with very close tolerances.

During cold forming, the wire is subjected to very large forces in several steps to bring it to the desired shape.

The task during production is to achieve very high deformation ratios using headers.

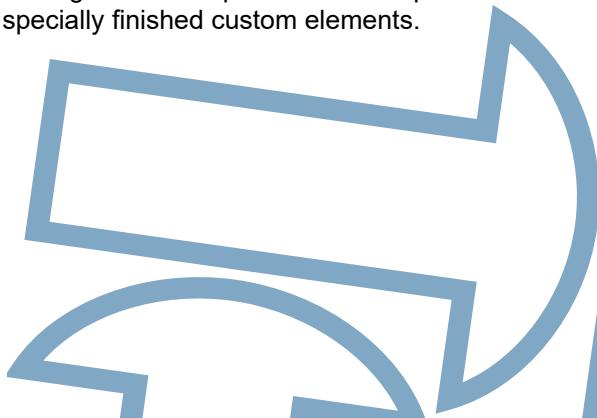
HONSEL has constantly refined this production principle over the 90 years of the company history and can today offer high-precision customised products made of a wide range of materials that meet all the demands of the latest quality standards.

Perfect and uncompromisingly individual with the highest precision

In some cases, the experience in the **HONSEL** team is passed down from generation to generation. A combination of the courage to explore new ideas and the latest technology results in new production concepts – always with the goal of creating the optimum product for every customer.

Today **HONSEL** is a sought-after supplier for sophisticated custom solutions or standard products that can be produced inexpensively in large series.

The portfolio ranges from simple cold formed parts through to specially finished custom elements.



DEVELOPMENT AND ENGINEERING

HONSEL and the eye for something new.

The basis for our success is the continuous search for new possibilities, always looking out for perfect solutions. We recognise the potentials for fastener and processing concepts, put these into practice and optimise them continuously.

NEW DEVELOPMENT

HONSEL sees itself as a development partner for its customers who not seldom provide the stimulus for innovative and cost-efficient results. On this basis, our engineers together with the product management team constantly come up with **sophisticated ideas for new products**.

In doing so, we also divert from familiar paths in order to meet even the most individual demands. After evaluation of the feasibility, implementation is carried out by experienced design engineers at modern CAD workstations, in prototype production and in-house 24/7 endurance tests. The latest processes, such as finite element simulations, are also available for validation.

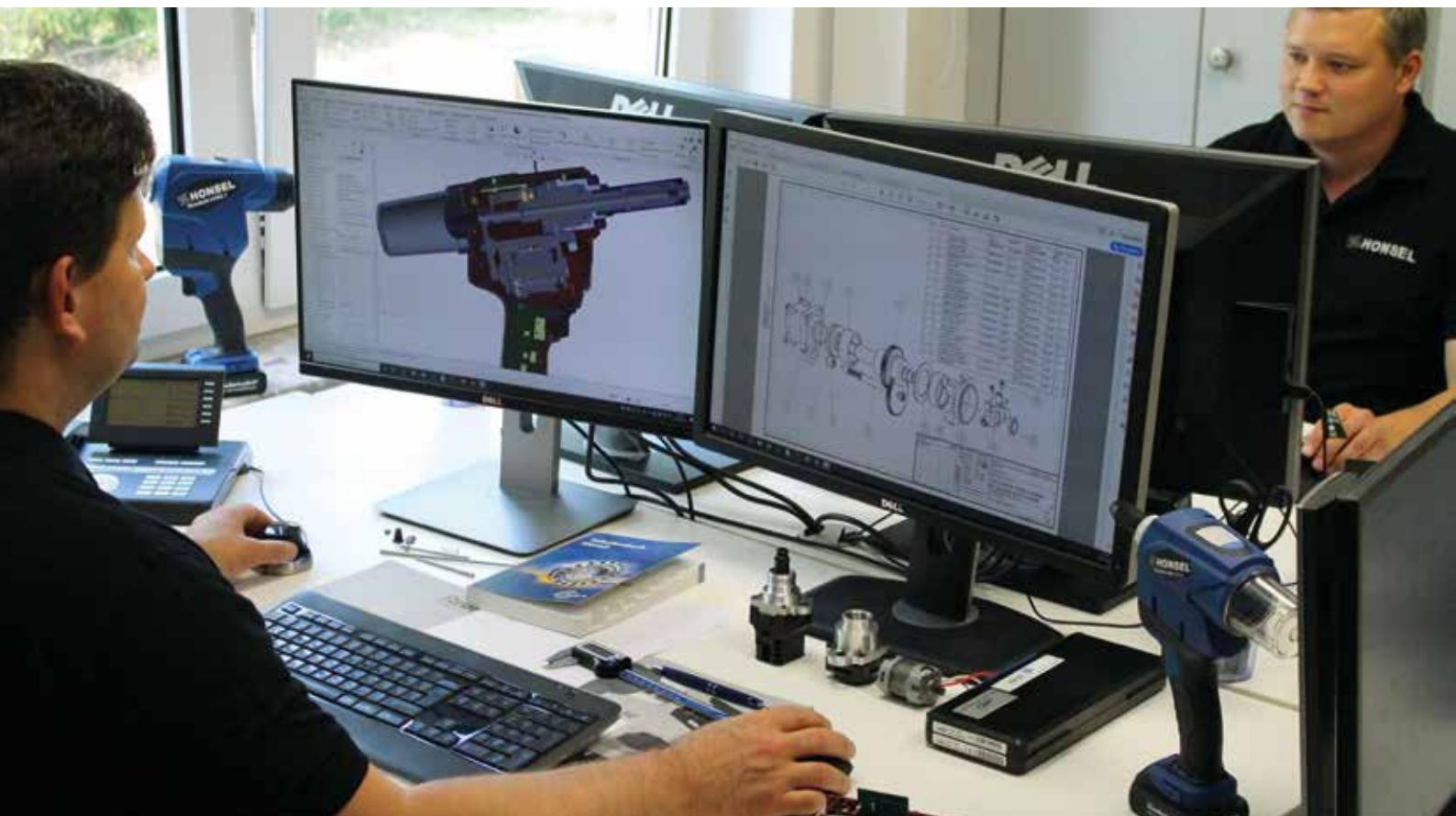
FURTHER DEVELOPMENT

On the other hand, our application technicians are permanently engaged in the **optimisation of the existing product range**.

This is where tests and analyses are carried out, customer feedback is evaluated and the know-how from the sales and service team is taken into consideration, reviewed and verified.

The results then go directly into the production at the various production sites.

Pioneers in blind riveting technology.



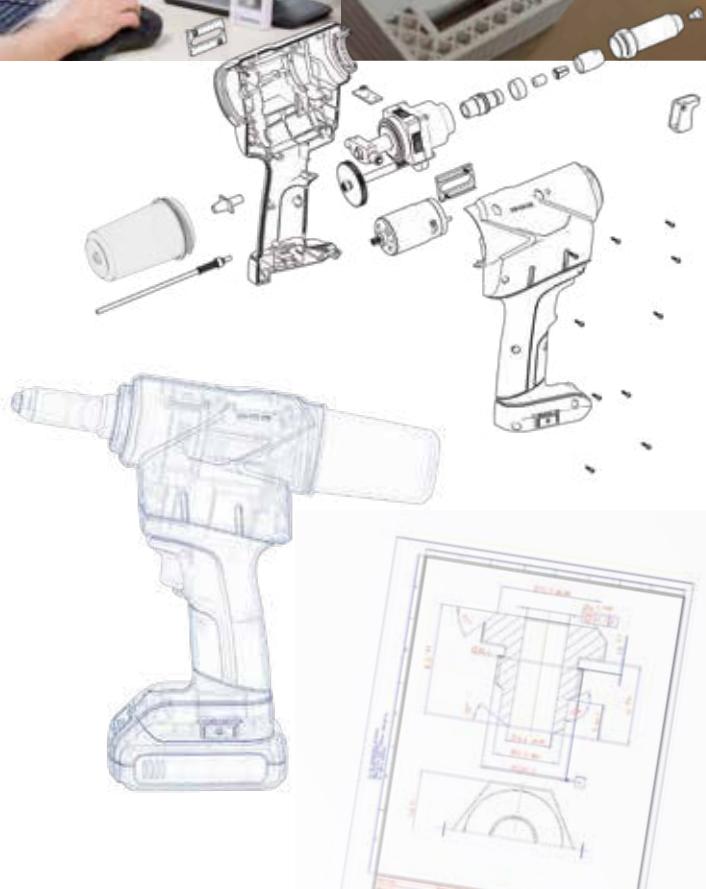


FASTENERS and FASTENING

A wide range of fasteners for the extensive standard product range with over 1000 sizes or customised fastener elements for large-scale series production?

Hand-held tools, such as the successful **Rivdom®** and **RivSmart®** battery riveters with a vast array of accessory options or complex, fully automated systems and components with process monitoring for industry?

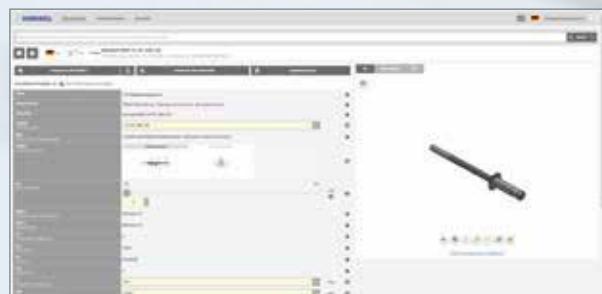
HONSEL will work with you and the experts in our central and local offices to develop the most individual, efficient and cost-effective – in short ... **the perfect solution for your application.**



CAD DATA SERVICE

We offer design engineers and product developers the possibility of downloading each of our standard sizes from the latest catalogue range for direct integration into their applications – in **over 100 different formats** as native 3D CAD models for all common CAD systems.

Simple, quick and free of charge.



The right models for every **CAD system**.

You can thus eliminate the need for time-consuming product searches or for requesting necessary data material and can concentrate fully on your own development work.

Just find the required fastener as normal in the product section of our Internet website under www.honsel.de/produkte/standardverbinder and then click on the CAD symbol behind the required size.

Log in directly to the **CADENAS PARTcommunity** or quickly and easily create an account once only. In the portal you then have the possibility of adapting the product to your needs again before the download and of selecting, for example, between delivery condition and finished rivet product.

 **PARTcommunity**

 CAD
DATEN
ONLINE

 CCAD

PRODUCTION

HONSEL fastens.

For decades now, our core business has been and still is our manufacturing competence for the **complex cold forming of wire** in all common materials such as steel, aluminium, stainless steel, copper and brass – and many others.

HONSEL production sites are among the most modern production facilities for fasteners. Short routes and a large number of in-house further processing and finishing options are your **guarantee for maximum flexibility**.

On more than thirty ultra-modern 5 or 6-stage headers, we bring wire of up to 20 mm in diameter into shape.

All the multi-stage headers at **HONSEL** have full process control and are designed with redundancy. This gives us sufficient freedom to be able to react to production demands even at short notice.

The production capacities are all designed for 3-shift operation. Transport and material supply routes are optimised and just as (partly) automated as the in-house transportation and delivery to the customer.

Another elementary factor for smooth production is access to a well-filled starting material and wire stock at the site at all times.

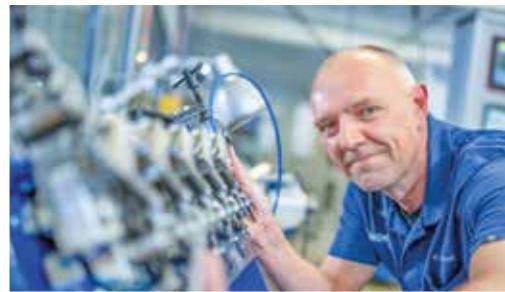


PRODUCTION



The most important component, however, is highly motivated employees who are able to intuitively control the enormous forces involved in forming on the press with the highest precision.

Regular training combined with know-how passed down from generation to generation form **the DNA of our production**.



SECONDARY PROCESSING

HONSEL goes FURTHER.

Pressing is often followed by a large number of further work steps. Most these can be carried out in-house thanks to the continuous expansion of our possibilities. Together with the in-house toolmaking shop for production equipment, this contributes significantly to shortening the processes, both in reaching production maturity for custom parts and for the expanding of the standard product range.

Pressed, washed, annealed

– that is the sequence in the cold forming process for our products. For most of the **HONSEL** parts, however, the production route is still far from over at this point.

Proactive, regular investments in **future-oriented new technologies** are directly integrated into existing routines and thus become a common part of the wide variety of in-house processes.

Tolerance practically zero.

In many branches of industry, very close tolerances are demanded that the supplier has to constantly ensure. For custom parts, **HONSEL** achieves a concentricity tolerance of less than 0.07 mm and deviations e.g. in the coil length of +/- 0.05 mm. Absolute top values!



HONSEL possibilities.

- **Barrel finishing** to reduce friction and prolong service lives.
- **Drilling, turning and milling.** Machining operation to modify shank forms and contours.
- **Rolling and pointing** for production of different bolt versions.
- **Thread forming** (inside or outside)
- **Laser welding** of blind rivet bolts in our own laser chamber.
- **Crimping** of blind rivet bolts to create an inseparable captive sleeve/bolt system with perfect corrosion protection.
- **Application of certified sealants.** Mechanical or hybrid components with plastic sheathing of metal parts.
- **Application of partial scratch protection.**
- **Assembly of component elements**, e.g. bolt/sleeve combinations.
- **Heat treatment.** Partial annealing and hardening of component areas to increase strength.
- **Surface coating** in a local partner network for the highest demands on corrosion protection.



PROTOTYPING AND TOOLMAKING



Particular attention has been paid for many years to our [in-house toolmaking shop](#).

The independent production of the necessary production tools guarantees shorter delivery times even during prototype production and vast possibilities for meeting even the most unusual wishes of our customers.

The complex tool kits often comprising several hundred parts are stored in a perfectly organised and fully automated system, and are therefore quickly available for use on the machines at any time.

It is therefore not unusual even with completely new custom parts for **HONSEL** to be able to deliver a series production part to the customer, including production of the prototype, within just a few weeks of receiving the concrete enquiry.



QUALITY



HONSEL From the first part to the last: consistently flawless and good!

The highest quality in every form has the greatest importance in our day-to-day business activities. Uncompromising in every area.

The HONSEL Group has developed exemplary **quality assurance processes** at all its sites. This is underlined by our certification to ISO 9001:2008, ISO 14001 and ISO/TS 16949.

In addition to standard test methods for checking shear and tensile forces, the riveting mandrel breaking forces and push-out forces and the locking of the mandrel inside the head, the latest measuring instruments and testing facilities ensure the highest level of production even with very large quantities.

Here we use **process monitoring systems** and **optoelectronic testing machines** for the **100 % inspection** of individual customised parts. This and **0 ppm strategies** are criteria that companies have to meet today when it comes to defining targets in quality assurance.



By **already testing every individual batch at all phases of the running production process** and its documentation by means of a CAQ software integrated into our modern IT system, continuous tracking of all shipped products is assured back to the starting material used.

Measuring equipment is also available for length and roughness tests, metallurgical tests, microscopy, profile projection, eddy current and hardness tests.



APPROVALS AND CERTIFICATES

National technical approvals

General national technical approvals are required for many types of construction and construction products where no defined rules and standards exist, or where extreme deviations from these exist.

These serve as proof of their safe use in the intended applications and describe the necessary technical requirements for a construction.

In the field of blind rivet technology, for example, these are:

- General fasteners for steel and aluminium substructures
- Aluminium substructures for solar energy installations
- Longitudinal butt joints of corrugated sheets
- Longitudinal butt joints of metal and corrugated plastic sheets
- Production of sliding points on aluminium substructures

The blind rivets currently approved or undergoing approval from the product groups **ALFO®**, **OPTO®**, **CERTO®** and for **folding blind rivets with neoprene seal** are marked with the symbol opposite.



For necessary documents and further information, please contact the specialists from our technical sales team directly.



Certificates



From January 1st, 2021 **HONSEL** Distribution GmbH & Co.

You can rely on us. Guaranteed.

Please ask for possible updated versions of the certificates issued during the life of the catalogue.

LOGISTICS

HONSEL Securely packed – quickly dispatched.

Even the best goods are only worth half as much if they are not available in sufficient quantities at the right time. That is why we attach the greatest importance to the reliable delivery of the ordered products – whether straight from production or from the constantly well-filled warehouses at all the sites of the **HONSEL** Group!

15,000 m²
warehousing and logistics area

70,000
Parcel shipments per year

10,000
Pallet transports per year

In recent years, **HONSEL** has invested in a broad packaging and logistics infrastructure.

The most recent example is the newly built Works III with a further 2500 m² of space at the Fröndenberg site. A new warehouse management system with synchronised communication between stock management and ERP system was introduced there, together with the “goods-to-person” principle in order picking.

Backed up by a narrow-aisle stacker system designed for semi-automatic positioning, the finished products are buffer-stored there and prepared for dispatch according to the order requirements. In addition to greatly improved inventory and process reliability in day-to-day operation, a high order picking performance was achieved with reduced labour.

Thanks to modern packaging capacities at all the sites, **HONSEL** is able to provide practically any packaging required – from the simple standard packaging up to **customised special packaging**.

Even for very high volumes in the shortest of time!

- **Cardboard packagings** in any form.
Small packagings with Euro hole, various standard sizes, large packagings for loose bulk goods.
- **Customer packagings**
We also fill cardboard boxes with the customer's design.
- **Small load carriers (KLTs)**
Standardised plastic transport and storage boxes specified or supplied by the customer.
- **Small load carriers (KLTs)**
Standardised plastic transport and storage boxes specified or supplied by the customer.
- **Bag packaging**
e.g. as product enclosures or service kits
- **Kanban systems**
Together with our trading partners, we deliver to a wide range of different Kanban systems in industry





Logistics means more to us.

- Long contact hours every day, late last dispatch and short organisational and travel distance guarantee short reaction times.
- Long-standing logistics partners for parcel and pallet goods for punctual and smooth handling during transport of the shipments – of course with delivery next day, if necessary.
- Clear identification.
- High delivery availability thanks to perfectly planned warehouse stocks and supply chain organisation.
- EDI and other data interfaces for smooth communication with customers and service providers.
- Just-in-time. Long-term delivery schedules with automatic delivery.



SPECIALIST TRADE

HONSEL

Partner of the specialist trade

We support the specialist trade and associations in the successful distribution of **HONSEL** products. In Germany. In Europe. Worldwide.

- Long contact hours, highest availability of the catalogue product range and fast delivery guarantee high flexibility
- We have a local presence and provide support in all questions concerning riveting and fastener technology and give valuable tips for sales
- We carry out special projects for the trade partner's customers together and on a basis of trust, as well as providing technical support
- Printed and digital sales support

- We train the dealer's staff and thus provide security for the resale
- We present the **HONSEL** products in an attractive and informative manner at in-house exhibitions or individual customer events
- Individual and attractive solutions for successful presentation in the retail business



ONLINE SUPPORT



On our new website, www.honsel.de, you will find not only information about the **HONSEL** Group, but also a number of useful tips to simplify your day-to-day work in rivet and fastener technology

- Product search. Overview of all HONSEL products – in many cases backed up with illustrations, drawings, film or animation, data sheets and CAD data for the design engineering.
- Download centre with a wide range of material, such as flyers or pictures for sales activities
- ProductViewer for finding tool spare parts
- Live-Chat for direct, quick contact with our team

We have a large number of videos available on YouTube, many of which can be called up via the QR codes in this catalogue.

You can receive up-to-date information on our social media channels or with the regular **HONSEL** newsletter.



ADVICE AND SERVICE

Service, Service, Service. More than just good products.

We have an open ear for your needs and wish to make cooperation with our companies as **smooth and uncomplicated** as possible.

Product know-how and application experience are part of our DNA.

Thanks to our continuous internal and external further training, outstandingly qualified staff are at your disposal with **friendly and competent** information, a passion for our products and always a pragmatic, quick solution to the big and small problems of your day-to-day business.

We accompany major projects from the first idea through to the regular supply with experts from all the necessary departments who work closely together to **guarantee optimum support**.



We are **HONSEL**.



REPAIRS AND MAINTENANCE

Tool downtimes have to be kept **as short as possible**.

To ensure that the repair of your tool can be carried out **even faster**, we have further **optimised and simplified** the processes for users and our trade partners.

In future, on receipt of the tools, a **direct repair** will be carried out **without cost estimate** but within a maximum cost framework by the **experienced experts** in our service team.

And to ensure that you can continue to work during the repair, we have an adequate number of **hire tools** in stock.

Regular maintenance is also playing an increasingly important role. Talk to our sales team about the possibilities of **extended guarantees, maintenance plans and service packages**.

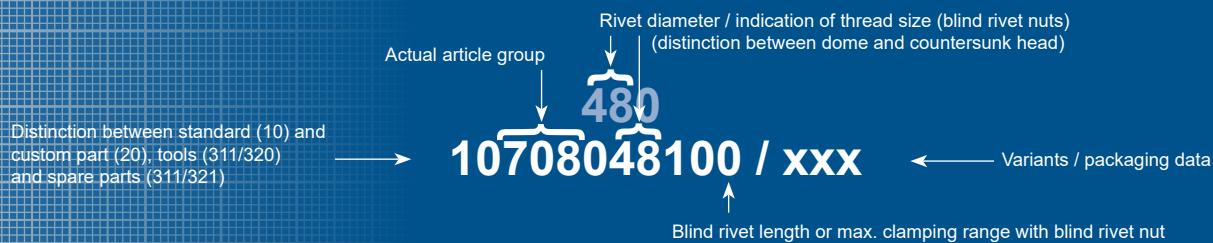
You can also use our **ONLINE SERVICE CHECK-IN** tried-and-tested for years in order to **expedite the handling of your repair** by registering with all the necessary data.



HONSEL CATALOGUE GUIDE

Information and explanation of symbols

Article numbers / allocation to tools:



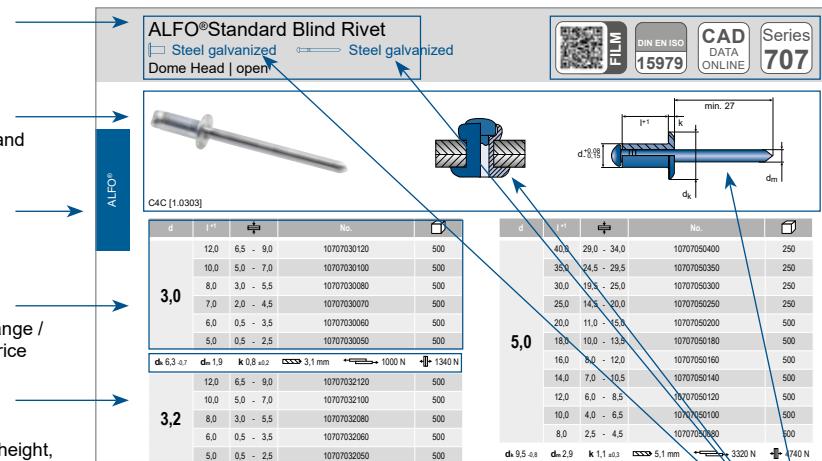
Article group designation
with materials and version

Figures
with product photo, drawings and material details

Tabs
for better orientation when the catalogue is closed

Table – basic data
diameter / length / clamping range / article no. / packaging size / price

Table – additional information
head + shank diameter, head height, bore diameter, various force data



Info block
with additional information / icons

Colour coding system

An unambiguous colour is assigned to each material that can be found also in both the navigation bar and the production designations and drawings as an aid to orientation. Furthermore, the colours are also integrated into the representation of the processing possibilities of all the tools. In addition, you will find the colour coding on a large proportion of our labels.

Steel	
Stainless steel	
Aluminium	
Copper	
Bronze	



ICON



General product information
Useful information on further dimensions, variants or special features and cross-references



Page references



HONSEL Serial No.



CAD data available online



DIN EN ISO



QR code with content information



Grip range



Shear Strength



Tensile strength



Tightening torque



Axial tensile force



Drill hole diameter

PURCHASE ORDER AND ENQUIRY

Necessary information

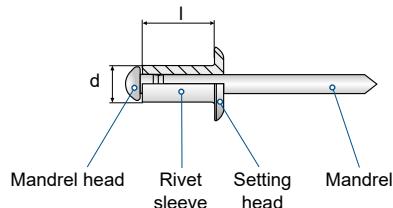
Please note

that a very large number of individual factors have an influence on a riveted joint. For this reason, riveting tests should always be performed (we can provide samples for these on request).

The standard range presented in this catalogue shows only a small proportion of all the products available. Should you not find an article or size – we'll find an alternative!

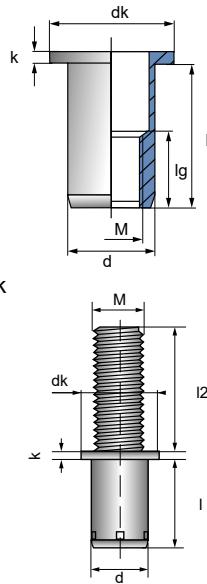
Blind rivets

- Material combination (sleeve / mandrel)
- Shank / bore diameter (d)
- Shank length / clamping range (l)
- Head form (dome, countersunk, large dome head)



Blind rivet nuts / bolts

- Material
- Thread size (M)
- Shank / bore diameter (d)
- Shank length / clamping range (l)
- Shank form (open / closed)
- Head form (dome, countersunk, small countersunk head)
- Twist lock (knurling / (partial) hexagonal shank)
- Bolt length in set condition (l2)



Tools

- How often is the tool used?
No. of rivets
- Where is the tool used?
Production / workshop / construction site, etc.
- What max. dimensions / materials are processed?
- Are special rivet types to be processed? e.g. high-strength blind rivets



Special nosepiece required



Pivoting tool head



Sound emissions in dB(A)



Hexagonal product



Weight in kg



Air consumption in litres



Closed shank



Tensile force at 7 bar



Connection possibilities



Knurled



Pressure in bar



Scope of supply



Imperial dimensions



Stroke in mm



Type of packaging



Stainless steel A4 grade



Maximum stud diameter



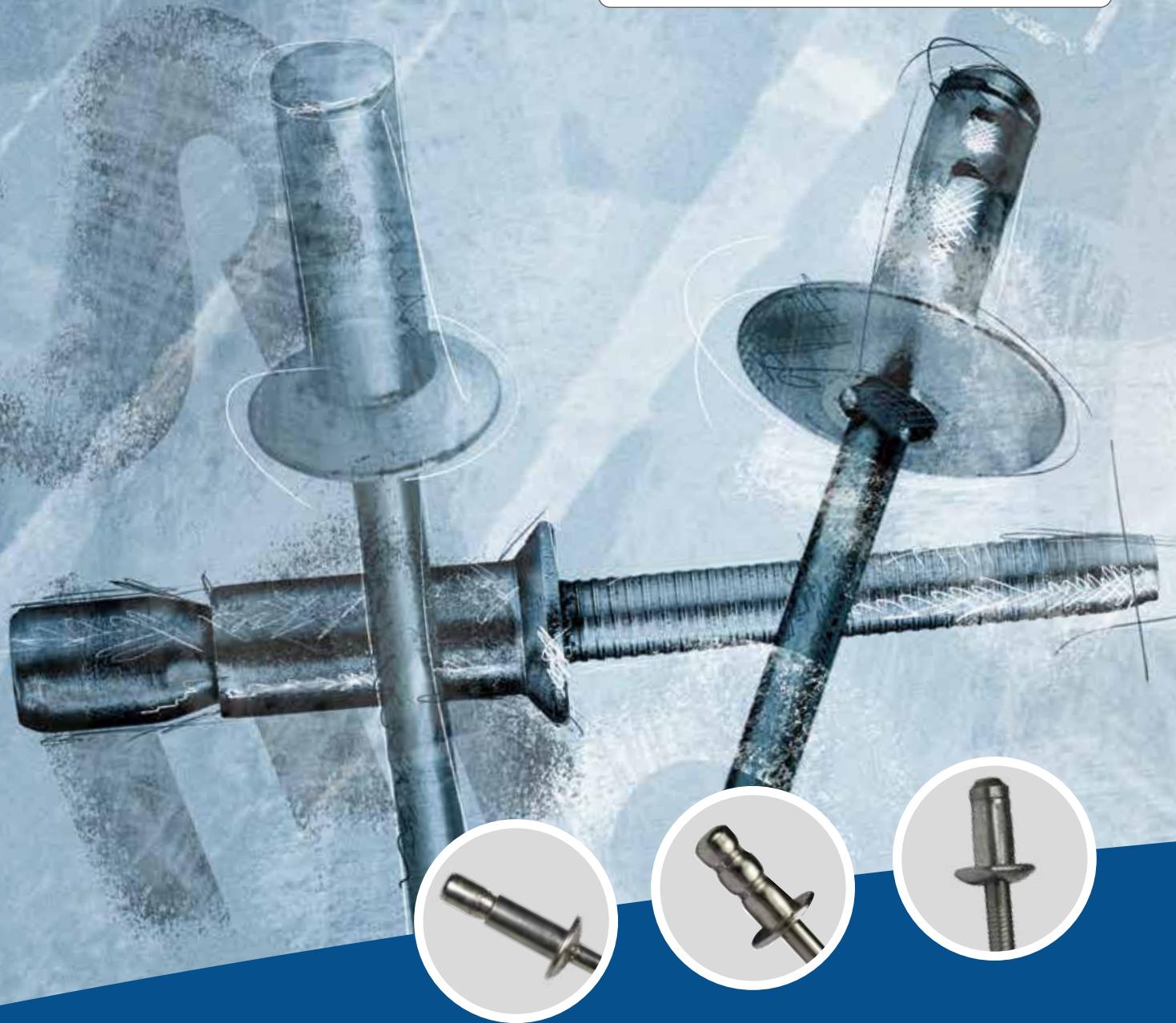
Packaging with hole for hanging

Blind rivets

Blind rivets



Information on **individual customisations** can be found in the **HONSEL** catalogue for **Industrial and automotive solutions**.



Indispensable in industry and trade.

The two-piece blind rivet consists of a **rivet sleeve** mounted on a **mandrel**.

The rivet is set **from one side** of the parts to be joined.

After inserting the rivet into the part, the mandrel is pulled back by the tool, deforming the rivet sleeve and forming the closing head.

The mandrel shears at a specially predetermined breaking point.

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

Our production facilities certified in accordance with the automotive industry standards guarantee a **consistently high quality with respect to geometric dimensions, mechanical values** and function.

Many features have significantly closer tolerances than specified in the DIN standards, others not specified there are optimised in detail.

Special tools are required for the setting of blind rivets. The tools are designed to suit the rivet type, the application and the number of rivets to be set.

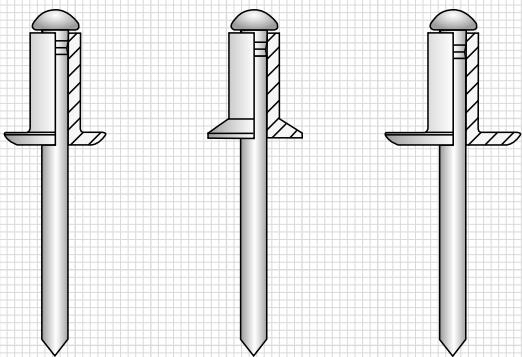
The scope ranges here from the **manual riveting tool** through lever-type riveters for manual setting, modern **battery riveters** right up to **pneumatic tools** or **process-monitored automatic tools** for industrial applications.



General information on **blind rivets** can be found in the **technical appendix** from [page 116](#).

Rivet	Material												Setting head	Page	
	Rivet sleeve						Mandrel								
	Aluminium	Steel	Stainless steel A2	Stainless steel A4	Nickel/copper	Copper	Brass	Aluminium	Steel	Stainless steel A2	Stainless steel A4	Nickel/copper	Copper	Bronze	
ALFO® standard blind rivets	x							x						Dome head	32/33
	x							x						Countersunk head	34
	x							x						Large dome head	35
	x							x						Dome head, grooved	36
	x							x						Dome head	38
	x							x						Countersunk head	39
	x							x						Large dome head	40
	x						x							Dome head	41
	x						x	x						Dome head	42
	x						x	x						Countersunk head	43
	x						x	x						Large dome head	43
	x				x		x	x						Dome head	44
	x			x			x	x						Countersunk head	45
	x			x			x	x						Large dome head	45
	x			x			x	x						Dome head	46
	x			x			x	x						Countersunk head	46
	x			x			x	x						Dome head	47
	x			x			x	x					x	Dome head	48
OPTO® multigrip blind rivets	x							x						Dome head, painted	50
	x							x						Dome head, painted	51
	x							x						Dome head	53
	x							x						Countersunk head	54
	x							x						Large dome head	54
	x							x						Dome head	55
	x							x						Countersunk head	55
	x							x						Large dome head	55
	x							x						Dome head, extended mandrel	56
	x						x	x						Dome head	57
	x						x	x						Countersunk head	57
	x						x	x						Large dome head	57
	x			x			x	x						Dome head	58
CERTO® sealed blind rivets	x							x						Dome head	60
	x							x						Countersunk head	60
	x							x						Dome head	61
	x							x						Countersunk head	61
	x						x	x						Dome head	62
	x				x		x	x						Dome head	62
	x			x			x	x						Dome head	63
CERTO® PERFECT		x						x						Dome head	63
		x						x						Dome head	64
		x					x	x						Dome head	64
		x					x	x						Dome head	66
OPTO® BULB multigrip blind rivets	x							x						Dome head	66
	x							x						Dome head	66
FERO® BULB structural blind rivets	x							x						Dome head	67
	x							x						Dome head	68
	x							x						Countersunk head	68
	x						x	x						Dome head	69
	x						x	x						Dome head	70
FERO® BOLT structural blind rivets	x							x						Countersunk head	70
	x							x						Dome head	71
	x						x	x						Countersunk head	71
	x						x	x						Dome head	73
FERO® LOCK structural blind rivets	x							x						Dome head	73
	x							x						Dome head	73
Folding blind rivets	x							x						Dome head, standard	75
	x							x						Dome head, special-2	75
ARCO® body-bound blind rivets	x							x						Dome head	76
	x							x						Large dome head	76
Hammer stroke blind rivets	x							x						Dome head	77
	x							x						1 earthing conductor	78
Grounding blind rivets							x	x						2 earthing conductors	78
							x	x						Dome head, knurled	78

ALFO® standard blind rivet



The classic model.

The designation ALFO® stands for the product range of **HONSEL open standard blind rivets** that are available with dome, countersunk or large dome head.

It covers the versions and special types described in DIN EN ISO 15977 to 15984 as well as 16582 and 16584.

“Special types” by our definition are rivets with a function as described in the above standards, but with differences in certain dimensions, functional properties or material combinations.

ALFO® Standard Blind Rivet

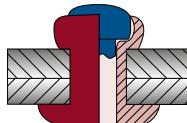
Aluminium Steel galvanized
Dome Head | open



DIN EN ISO
15977

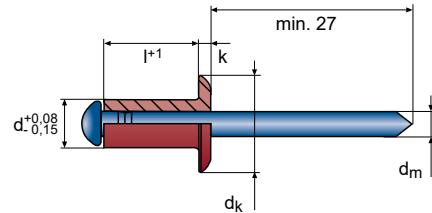
CAD
DATA
ONLINE

Series
700



2,0 - 3,2 mm EN AW-5019 [AlMg5]

4,0 - 7,8 mm EN AW-5754 [AlMg3]



d	+1		No.	
2,4	12,0	8,0 - 10,0	10700024120	500
	10,0	6,0 - 8,0	10700024100	500
	8,0	3,5 - 6,0	10700024080	500
	6,0	1,5 - 4,0	10700024060	500
	4,0	0,5 - 2,0	10700024040	500
	3,0	0,5 - 1,0	10700024030	500

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

d	+1		No.	
3,0	25,0	16,0 - 21,5	10700030250	500
	20,0	13,0 - 16,5	10700030200	500
	18,0	12,0 - 14,5	10700030180	500
	16,0	9,0 - 12,5	10700030160	500
	12,0	7,0 - 9,0	10700030120	500
	10,0	5,0 - 7,5	10700030100	500

dk 6,3 - 0,7 **d_m 1,7** **k 0,8 ± 0,2** 3,1 mm 740 N 1000 N

ALFO® can do more.

A large number of values, such as grip length, tensile strength and shear breaking forces or the geometries have been **specified in more detail**. These optimised variations are based on our **decades of experience** and help you in making a **practice-oriented** joint design.

d	+1		No.	
3,2	18,0	10,0 - 14,5	10700032180	500
	16,0	9,0 - 13,0	10700032160	500
	14,0	8,5 - 10,5	10700032140	500
	12,0	7,0 - 9,0	10700032120	500
	10,0	5,0 - 7,5	10700032100	500
	8,0	3,0 - 5,5	10700032080	500

d	+1		No.	
4,0	35,0	25,5 - 31,0	10700040350	500
	30,0	20,5 - 26,0	10700040300	500
	25,0	15,5 - 21,0	10700040250	500
	20,0	12,5 - 16,5	10700040200	500
	18,0	12,0 - 14,5	10700040180	500
	16,0	8,5 - 12,5	10700040160	500

dk 8,0 - 1,0 **d_m 2,0** **k 1,0 ± 0,3** 4,1 mm 1250 N 1800 N

Small packages



ALFO® Standard Blind Rivet
■ Aluminium ■ Steel galvanized
 Dome Head | open

d	+1		No.	
3,0	6,0	1,5 - 4,0	10700030060/31	100
	8,0	3,0 - 6,0	10700030080/31	100
	10,0	5,0 - 7,5	10700030100/31	100
	12,0	7,0 - 9,0	10700030120/31	100
4,0	6,0	1,0 - 3,5	10700040060/31	100
	8,0	3,0 - 5,5	10700040080/31	100
	10,0	5,0 - 7,0	10700040100/31	100
	12,0	6,5 - 9,0	10700040120/31	100

**Series
700**

**CAD
DATA
ONLINE**

**DIN EN ISO
15977**



MOVIE

d	+1		No.	
5,0	8,0	2,5 - 5,0	10700050080/31	100
	10,0	4,0 - 6,5	10700050100/31	100
	12,0	6,0 - 8,0	10700050120/31	100

Further sizes available from stock. Minimum order quantities
 for all small packages:
 10 units per size!
 New appearance available in 2021.



ALFO®

ALFO® Standard Blind Rivet
■ Aluminium ■ Steel galvanized
 Dome Head | open

d	+1		No.	
4,8	40,0	29,0 - 34,5	10700048400	250
	35,0	24,5 - 29,5	10700048350	250
	30,0	20,0 - 25,0	10700048300	500
	25,0	15,0 - 20,5	10700048250	500
	20,0	12,0 - 15,5	10700048200	500
	18,0	11,5 - 13,5	10700048180	500
	16,0	8,0 - 12,0	10700048160	500
	14,0	7,5 - 10,0	10700048140	500
	12,0	6,0 - 8,0	10700048120	500
	10,0	4,0 - 6,5	10700048100	500
	9,0	2,5 - 6,0	10700048090	500
	8,0	2,5 - 5,0	10700048080	500
	6,0	1,0 - 3,0	10700048060	500
d_k 9,5 -1,0	d_m 2,7	k 1,1 ±0,3	4,9 mm	1640 N 2200 N
5,0	50,0	39,5 - 45,0	10700050500	250
	45,0	34,5 - 40,0	10700050450	250
	40,0	29,0 - 35,0	10700050400	250
	35,0	24,5 - 30,0	10700050350	250
	30,0	20,0 - 25,0	10700050300	500
	25,0	15,0 - 20,5	10700050250	500
	20,0	12,0 - 15,5	10700050200	500
	18,0	11,5 - 13,5	10700050180	500
	16,0	8,0 - 12,0	10700050160	500
	14,0	7,5 - 10,0	10700050140	500
	12,0	6,0 - 8,0	10700050120	500
	10,0	4,0 - 6,5	10700050100	500
	8,0	2,5 - 5,0	10700050080	500
	6,0	1,0 - 3,0	10700050060	500
d_k 9,5 -0,8	d_m 2,7	k 1,1 ±0,3	5,1 mm	1820 N 2400 N

d	+1		No.	
6,0	50,0	38,0 - 43,0	10700060500	250
	30,0	20,0 - 25,0	10700060300	250
	28,0	19,5 - 22,5	10700060280	250
	25,0	15,0 - 20,0	10700060250	250
	22,0	14,5 - 17,0	10700060220	500
	20,0	11,0 - 15,0	10700060200	500
	18,0	10,5 - 13,0	10700060180	500
	16,0	7,0 - 11,0	10700060160	500
	12,0	5,0 - 7,5	10700060120	500
	10,0	3,0 - 5,5	10700060100	500
	8,0	1,0 - 3,5	10700060080	500
d_k 12,0 -1,2	d_m 3,2	k 1,5 ±0,4	6,1 mm	2660 N 3500 N
30,0	18,0 - 24,0	10700064300	250	
25,0	14,0 - 19,0	10700064250	250	
6,4	20,0	10,0 - 14,5	10700064200	250
	18,0	10,0 - 13,0	10700064180	250
	16,0	6,0 - 11,0	10700064160	250
	12,0	2,5 - 7,0	10700064120	250
d_k 13,0 -1,4	d_m 3,6	k 1,8 ±0,4	6,5 mm	2880 N 4600 N
7,8	26,0	16,5 - 20,5	10700078260	250
	22,0	12,5 - 16,5	10700078220	250
	18,0	9,5 - 12,5	10700078180	250
	15,0	4,0 - 9,5	10700078150	250
d_k 14,0	d_m 3,7	k 2,0	8,0 mm	6600 N 9550 N

Many sizes of the **ALFO®** standard ranges are available on request – with the corresponding minimum order quantities – also as a **FERO®** version with **higher shear values of the breakstem remaining in the sleeve**.



ALFO® Standard Blind Rivet

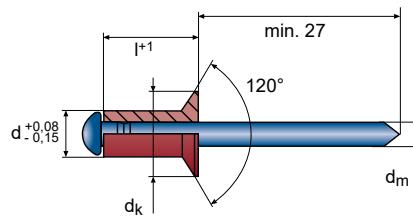
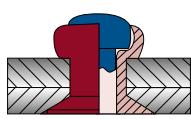
Aluminium Steel galvanized
Countersunk Head | open



DIN EN ISO
15978

CAD
DATA
ONLINE

Series
700

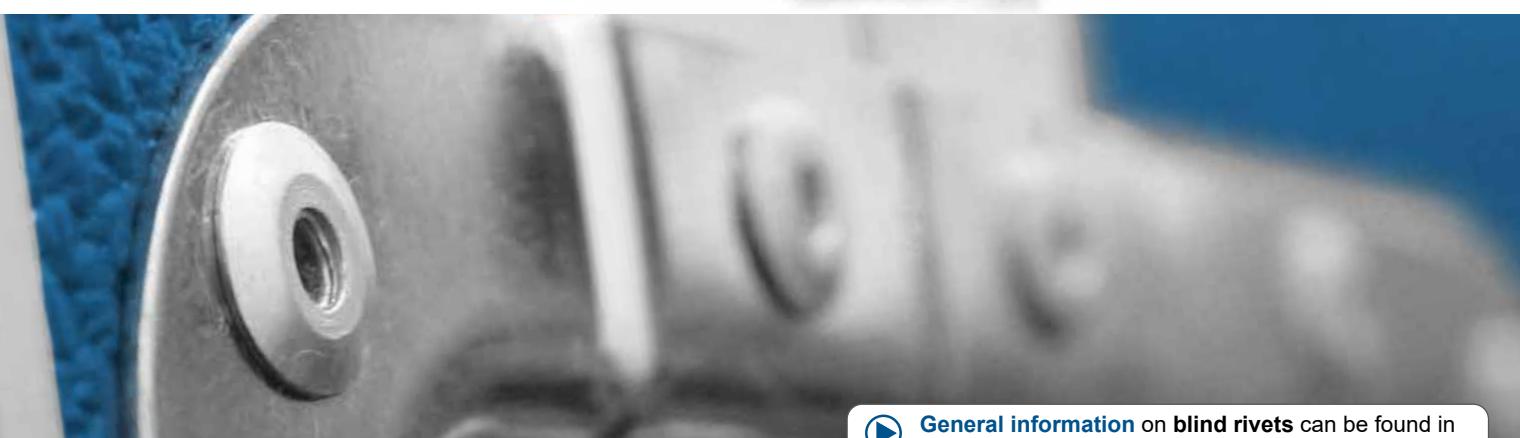


3,0 - 3,2 mm EN AW-5019 [AlMg5]

4,0 - 5,0 mm EN AW-5754 [AlMg3]

	d	+1		No.	
3,0	10,0	5,0 - 7,5		10700300100	500
	8,0	3,5 - 6,0		10700300080	500
	6,0	2,0 - 4,0		10700300060	500
	5,0	1,5 - 3,0		10700300050	500
d_k 6,0 - 0,4		d_m 1,7	3,1 mm	740 N	1000 N
3,2	10,0	5,0 - 7,5		10700320100	500
	8,0	3,0 - 5,5		10700320080	500
	6,0	1,5 - 3,5		10700320060	500
	10,0	7,0 - 9,0		10700320120	500
d_k 6,2 - 0,4		d_m 1,9	3,3 mm	750 N	1220 N
4,0	20,0	12,5 - 16,5		10700400200	500
	18,0	12,0 - 14,5		10700400180	500
	16,0	8,5 - 12,5		10700400160	500
	12,0	6,5 - 9,0		10700400120	500
	10,0	5,0 - 7,0		10700400100	500
	8,0	2,0 - 5,5		10700400080	500
	6,0	1,5 - 3,5		10700400060	500
d_k 7,5 - 0,5		d_m 2,0	4,1 mm	1250 N	1580 N

	d	+1		No.	
4,8	25,0	15,0 - 20,5		10700480250	500
	20,0	12,0 - 15,5		10700480200	500
	16,0	8,0 - 12,0		10700480160	500
	12,0	6,0 - 8,0		10700480120	500
d_k 9,0 - 0,5		d_m 2,7	4,9 mm	1640 N	2200 N
5,0	35,0	25,0 - 30,0		10700500350	250
	30,0	20,0 - 25,5		10700500300	500
	25,0	15,0 - 20,5		10700500250	500
	20,0	12,0 - 15,5		10700500200	500
	16,0	8,0 - 12,0		10700500160	500
	12,0	6,0 - 8,0		10700500120	500
	10,0	4,0 - 6,5		10700500100	500
	8,0	2,0 - 5,0		10700500080	500
d_k 9,3 - 0,5		d_m 2,7	5,1 mm	1820 N	2400 N



General information on blind rivets can be found in the technical appendix from page 116.

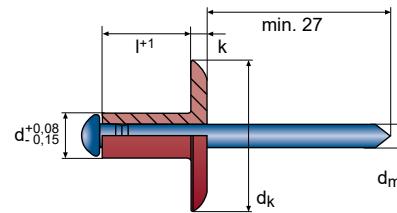
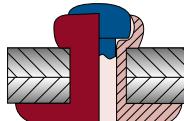
Series
730/740
750/760
770

CAD
DATA
ONLINE



MOVIE

ALFO® Standard Blind Rivet
■ Aluminium ■ Steel galvanized
 Large Dome Head | open



EN AW-5754 [AlMg3]

	d	$ +1$	$\frac{d}{k}$	No.	
3,2	16,0	9,0 - 13,0		10730032160	500
	12,0	7,0 - 9,0		10730032120	500
	10,0	5,0 - 7,5		10730032100	500
	8,0	3,0 - 5,5		10730032080	500
	6,0	1,5 - 3,5		10730032060	500

$d_k \text{ 9,5 } -0,3$ $d_m \text{ 1,9}$ $k \text{ 1,2 } +0,5$ $\rightarrow\!\!\!-\!\!\!-\!\!\!-\!\!\!-\!$ 3,3 mm $\leftarrow\!\!\!-\!\!\!-\!\!\!-\!\!\!-\!$ 580 N $\rightarrow\!\!\!-\!\!\!-\!\!\!-\!\!\!-\!$ 1000 N

	d	$ +1$	$\frac{d}{k}$	No.	
4,0	20,0	14,0 - 16,0		10750040200	500
	18,0	12,0 - 14,5		10750040180	500
	16,0	8,5 - 12,5		10750040160	500
	12,0	6,5 - 9,0		10750040120	500
	10,0	5,0 - 7,0		10750040100	500
	8,0	3,0 - 5,5		10750040080	500
	6,0	1,0 - 3,5		10750040060	500

$d_k \text{ 12,0 } -0,3$ $d_m \text{ 2,2}$ $k \text{ 1,5 } +0,5$ $\rightarrow\!\!\!-\!\!\!-\!\!\!-\!\!\!-\!$ 4,1 mm $\leftarrow\!\!\!-\!\!\!-\!\!\!-\!\!\!-\!$ 1250 N $\rightarrow\!\!\!-\!\!\!-\!\!\!-\!\!\!-\!$ 2000 N

	d	$ +1$	$\frac{d}{k}$	No.	
4,8	30,0	20,0 - 25,0		10770048300	250
	25,0	15,0 - 20,5		10770048250	250
	20,0	12,0 - 15,5		10770048200	250
	18,0	11,5 - 13,5		10770048180	500
	16,0	7,5 - 12,0		10770048160	500
	12,0	6,0 - 8,0		10770048120	500
	10,0	4,0 - 6,5		10770048100	500
	8,0	2,0 - 5,0		10770048080	500

$d_k \text{ 16,0 } -0,3$ $d_m \text{ 2,7}$ $k \text{ 1,8 } +0,5$ $\rightarrow\!\!\!-\!\!\!-\!\!\!-\!\!\!-\!$ 4,9 mm $\leftarrow\!\!\!-\!\!\!-\!\!\!-\!\!\!-\!$ 1640 N $\rightarrow\!\!\!-\!\!\!-\!\!\!-\!\!\!-\!$ 2600 N

	d	$ +1$	$\frac{d}{k}$	No.	
5,0	30,0	20,0 - 25,0		10740050300	500
	25,0	15,0 - 20,5		10740050250	500
	20,0	12,0 - 15,5		10740050200	500
	16,0	8,0 - 12,0		10740050160	500
	14,0	7,5 - 10,0		10740050140	500
	12,0	6,0 - 8,0		10740050120	500
	10,0	4,0 - 6,5		10740050100	500
	8,0	2,0 - 5,0		10740050080	500

$d_k \text{ 11,0 } -0,3$ $d_m \text{ 2,7}$ $k \text{ 1,5 } \pm 0,5$ $\rightarrow\!\!\!-\!\!\!-\!\!\!-\!\!\!-\!$ 5,1 mm $\leftarrow\!\!\!-\!\!\!-\!\!\!-\!\!\!-\!$ 1820 N $\rightarrow\!\!\!-\!\!\!-\!\!\!-\!\!\!-\!$ 2800 N

	d	$ +1$	$\frac{d}{k}$	No.	
5,0	30,0	20,0 - 25,0		10760050300	250
	25,0	15,0 - 20,5		10760050250	250
	20,0	12,0 - 15,5		10760050200	500
	18,0	11,5 - 13,5		10760050180	500
	16,0	8,0 - 12,0		10760050160	500
	14,0	7,5 - 10,0		10760050140	500
	12,0	6,0 - 8,0		10760050120	500
	10,0	4,0 - 6,5		10760050100	500
	8,0	2,5 - 5,0		10760050080	500

$d_k \text{ 14,0 } -0,3$ $d_m \text{ 2,7}$ $k \text{ 1,5 } \pm 0,5$ $\rightarrow\!\!\!-\!\!\!-\!\!\!-\!\!\!-\!$ 5,1 mm $\leftarrow\!\!\!-\!\!\!-\!\!\!-\!\!\!-\!$ 1820 N $\rightarrow\!\!\!-\!\!\!-\!\!\!-\!\!\!-\!$ 2800 N

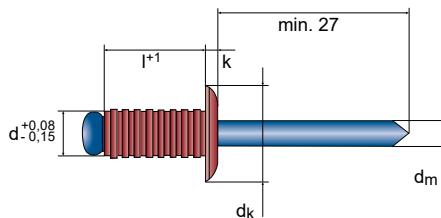
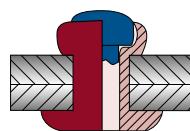
	d	$ +1$	$\frac{d}{k}$	No.	
5,0	33,0	20,0 - 28,0		10770050330	250
	25,0	15,0 - 20,5		10770050250	250
	20,0	12,0 - 15,5		10770050200	250
	16,0	8,0 - 12,0		10770050160	500
	10,0	4,0 - 6,5		10770050100	500

$d_k \text{ 16,0 } -0,3$ $d_m \text{ 2,7}$ $k \text{ 1,8 } +0,5$ $\rightarrow\!\!\!-\!\!\!-\!\!\!-\!\!\!-\!$ 5,1 mm $\leftarrow\!\!\!-\!\!\!-\!\!\!-\!\!\!-\!$ 1820 N $\rightarrow\!\!\!-\!\!\!-\!\!\!-\!\!\!-\!$ 2800 N

	d	$ +1$	$\frac{d}{k}$	No.	
6,0	20,0	11,0 - 15,0		10770060200	250
	16,0	7,0 - 11,0		10770060160	250
	16,0	3,0 - 5,5		10770060100	250

$d_k \text{ 16,0 } -0,3$ $d_m \text{ 3,2}$ $k \text{ 1,8 } +0,5$ $\rightarrow\!\!\!-\!\!\!-\!\!\!-\!\!\!-\!$ 6,1 mm $\leftarrow\!\!\!-\!\!\!-\!\!\!-\!\!\!-\!$ 2660 N $\rightarrow\!\!\!-\!\!\!-\!\!\!-\!\!\!-\!$ 3500 N





EN AW-5754 [AlMg3]

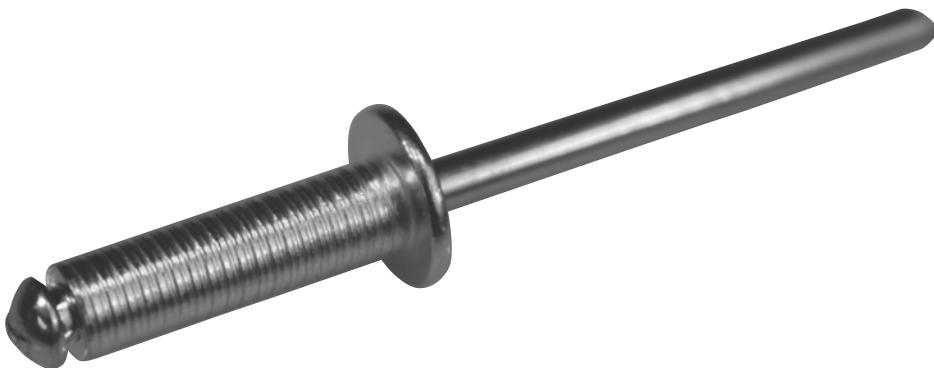
d	t+1	min. bore depth	No.	
3,2	10,0	13,0	10712032100	500
4,0	12,0	15,0	10712040120	500
	8,0	11,0	10712040080	500
4,8	16,0	20,0	10712048160	500
	10,0	14,0	10712048100	500

3,2 $d_k \text{ 6,5 -0,7}$ $d_m \text{ 1,7}$ $k \text{ 0,8 } \pm 0,15$ 3,3 mm 600 N 1000 N

4,0 $d_k \text{ 8,0 -0,7}$ $d_m \text{ 2,0}$ $k \text{ 1,0 } \pm 0,15$ 4,1 mm 1000 N 1350 N

d	t+1	min. bore depth	No.	
4,8	16,0	20,0	10712048160	500
	10,0	14,0	10712048100	500

4,8 $d_k \text{ 9,5 -0,7}$ $d_m \text{ 2,7}$ $k \text{ 1,1 } \pm 0,15$ 4,9 mm 1350 N 1820 N

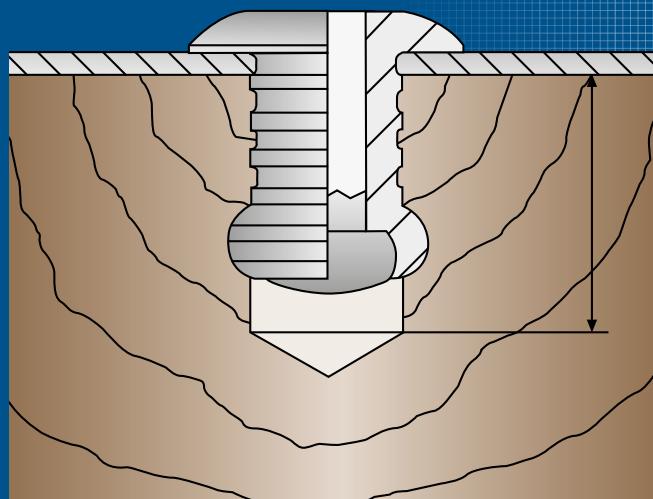


Firm grip in closed bores

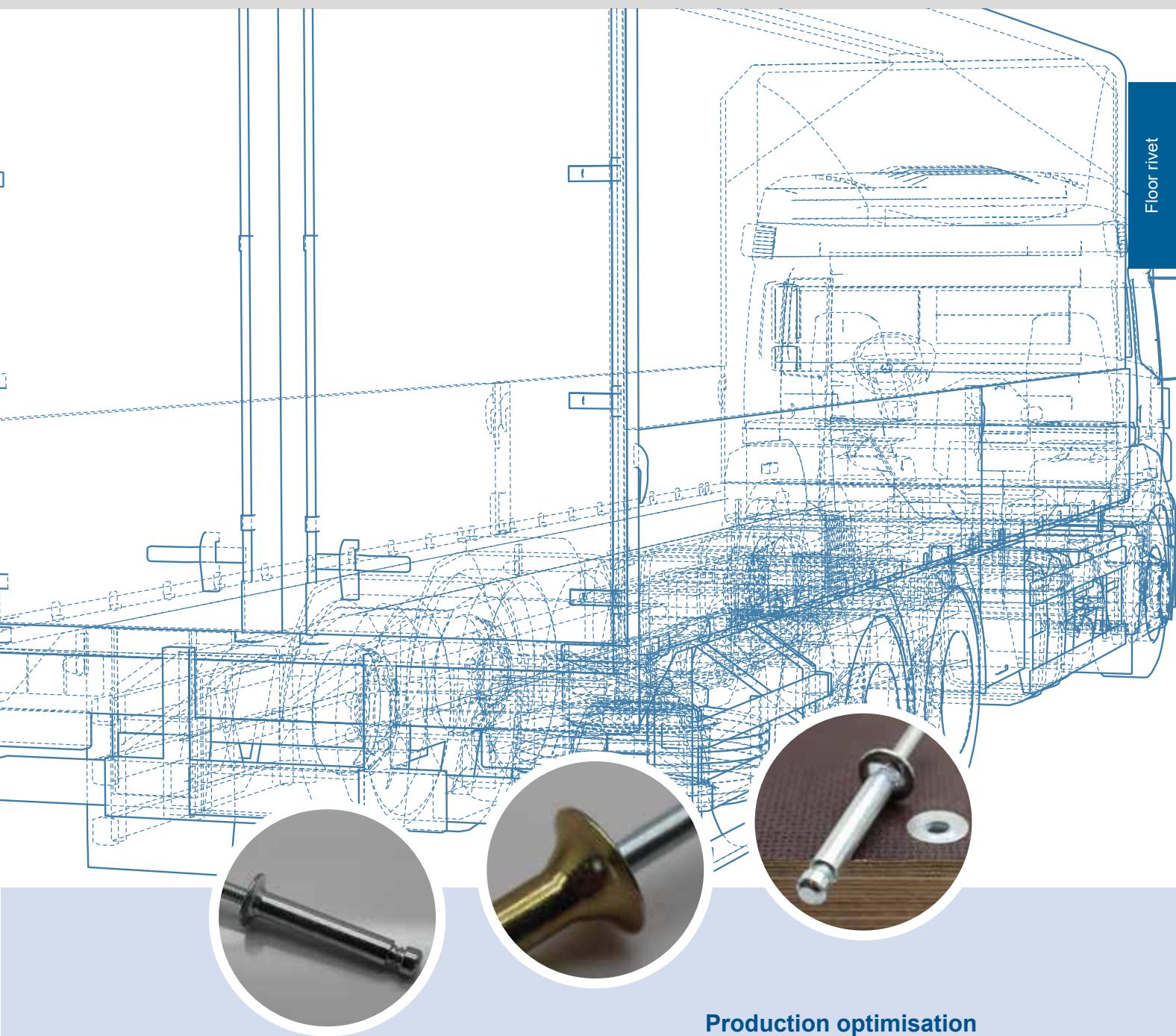
The ALFO version with grooved rivet sleeve claws into the walls of the material surrounding the bore.

Please be sure to observe the following instructions for correct setting:

- Determine the optimum bore diameter in a trial.
- Min. bore depth $t =$ rivet length including mandrel head minus part thickness.
- Indicated forces refer to the rivet; the load-bearing strength of the joint has to be determined in the part.



The floor rivet



Production optimisation through application-oriented solutions.

Wooden or plastic floorboards are joined to a metal substructure **in all areas of commercial vehicle production**, from trailer building through to the production of omnibuses.

An important aspect in addition to the **high strength** of the joint is the **absolutely flush surface without projections**.

A special head form ensures that it is **drawn independently into the part** during setting of the rivet – countersinking of the bore and hence a further work step is eliminated and simplifies the production process considerably.

High shear and tensile strengths and the **breakstem that remains in the joint** guarantee a **permanently strong and vibration-resistant joint** that, depending on the form, is also **splash water-tight** and thus prevents corrosion.

ALFO® Standard Blind Rivet

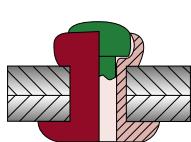
Aluminium Stainless Steel A2
Dome Head | open



In accordance with
DIN EN ISO
15977

CAD
DATA
ONLINE

Series
702



2,4 - 3,2 mm EN AW-5019 [AlMg5]

4,0 - 6,0 mm EN AW-5754 [AlMg3]

	d	+1		No.	
2,4	8,0	3,5 - 6,0		10702024080	500
	6,0	1,5 - 4,0		10702024060	500
	4,0	0,5 - 2,0		10702024040	500
dk 5,0 - 0,7	dm 1,5	k 0,55 ± 0,15	2,5 mm	420 N	660 N
3,0	12,0	7,0 - 9,0		10702030120	500
	10,0	5,0 - 7,5		10702030100	500
	8,0	3,0 - 6,0		10702030080	500
	6,0	1,5 - 4,0		10702030060	500
	5,0	1,0 - 3,0		10702030050	500
	4,0	0,5 - 2,0		10702030040	500
dk 6,3 - 0,7	dm 1,7	k 0,8 ± 0,2	3,1 mm	740 N	1000 N
3,2	12,0	7,0 - 9,0		10702032120	500
	10,0	5,0 - 7,5		10702032100	500
	8,0	3,0 - 5,5		10702032080	500
	6,0	1,0 - 3,5		10702032060	500
dk 6,5 - 0,7	dm 1,9	k 0,8 ± 0,2	3,3 mm	750 N	1220 N
4,0	25,0	15,5 - 21,0		10702040250	500
	20,0	12,5 - 16,5		10702040200	500
	18,0	12,0 - 14,5		10702040180	500
	16,0	8,5 - 12,5		10702040160	500
	12,0	6,5 - 9,0		10702040120	500
	10,0	5,0 - 7,0		10702040100	500
	8,0	3,0 - 5,5		10702040080	500
	7,0	3,0 - 4,5		10702040070	500
	6,0	1,0 - 3,5		10702040060	500
	5,0	0,5 - 2,5		10702040050	500
dk 8,0 - 1,0	dm 2,0	k 1,0 ± 0,3	4,1 mm	1250 N	1800 N

	d	+1		No.	
4,8	16,0	8,0 - 12,0		10702048160	500
	14,0	7,0 - 10,0		10702048140	500
	12,0	5,5 - 8,0		10702048120	500
	10,0	4,0 - 6,5		10702048100	500
	8,0	2,0 - 5,0		10702048080	500
	6,0	1,0 - 3,0		10702048060	500
dk 9,5 - 1,0	dm 2,7	k 1,1 ± 0,3	4,9 mm	1640 N	2200 N
5,0	40,0	29,5 - 35,0		10702050400	250
	35,0	24,5 - 30,0		10702050350	250
	30,0	20,0 - 25,0		10702050300	500
	25,0	15,0 - 20,5		10702050250	500
	20,0	12,0 - 15,5		10702050200	500
	18,0	11,5 - 13,5		10702050180	500
dk 9,5 - 0,8	dm 2,7	k 1,1 ± 0,3	5,1 mm	1820 N	2400 N
6,0	18,0	10,5 - 13,0		10702060180	500
	16,0	7,0 - 11,0		10702060160	500
	12,0	5,0 - 7,5		10702060120	500
	10,0	3,0 - 5,5		10702060100	500
dk 12,0 - 1,2	dm 3,2	k 1,5 ± 0,4	6,1 mm	2660 N	3500 N
6,4	16,0	6,0 - 11,0		10702064160	250
	12,0	2,5 - 7,0		10702064120	250
dk 12,7 - 0,3	dm 3,6	k 2,3 ± 0,2	6,5 mm	2880 N	4600 N

For outdoor applications, be sure to use aluminium blind rivets with stainless steel mandrel to prevent rust marks!

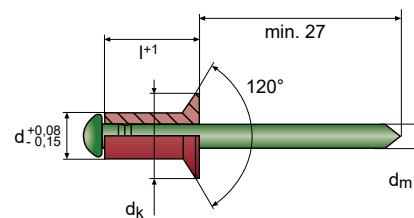
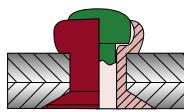


Series
702**CAD**
DATA
ONLINEin accordance
with
DIN EN ISO
15978**MOVIE****ALFO® Standard Blind Rivet**

Aluminium

Stainless Steel A2

Countersunk Head | open



2,4 - 3,2 mm EN AW-5019 [AlMg5]

4,0 - 5,0 mm EN AW-5754 [AlMg3]

d	+1	+	No.	
2,4	6,0	1,5 - 4,0	10702240060	500
d_k 4,5 - 0,2	d_m 1,5	➡➡➡ 2,5 mm	➡➡➡ 420 N	➡➡ 660 N
	10,0	5,0 - 7,5	10702300100	500
3,0	8,0	3,5 - 6,0	10702300080	500
	6,0	1,5 - 4,0	10702300060	500
d_k 6,0 - 0,4	d_m 1,7	➡➡➡ 3,1 mm	➡➡➡ 740 N	➡➡ 1000 N

d	+1	+	No.	
4,0	16,0	8,5 - 12,5	10702400160	500
	12,0	6,5 - 9,0	10702400120	500
	10,0	5,0 - 7,0	10702400100	500
	8,0	2,0 - 5,5	10702400080	500
5,0	7,0	2,0 - 4,5	10702400070	500
	d_k 7,5 - 0,5	d_m 2,0	➡➡➡ 4,1 mm	➡➡➡ 1250 N ➡➡ 1580 N
	20,0	12,0 - 15,5	10702500200	500
	16,0	8,0 - 12,0	10702500160	500
	12,0	6,0 - 8,0	10702500120	500
	10,0	2,0 - 6,5	10702500100	500
	d_k 9,3 - 0,5	d_m 2,7	➡➡➡ 5,1 mm	➡➡➡ 1820 N ➡➡ 2100 N



General information on blind rivets can be found in the technical appendix from page 116.

ALFO® Standard Blind Rivet

Aluminium | Large Dome Head | open

Stainless Steel A2

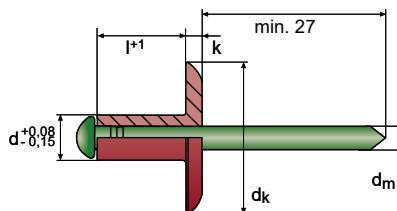
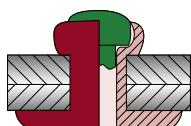


CAD

DATA
ONLINE

Series

742/772
762



EN AW-5754 [AlMg3]

	d	$ +1$	$\frac{1}{4}$	No.	
5,0	16,0	8,0 - 12,0		10742050160	500
	14,0	7,5 - 10,0		10742050140	500
	12,0	6,0 - 8,0		10742050120	500
	10,0	4,0 - 6,5		10742050100	500
	8,0	2,0 - 5,0		10742050080	500

$d_k \text{ 11,0 } -0,5$ $d_m \text{ 2,7}$ $k \text{ 1,5 } +0,4$ 5,1 mm 1820 N 2500 N



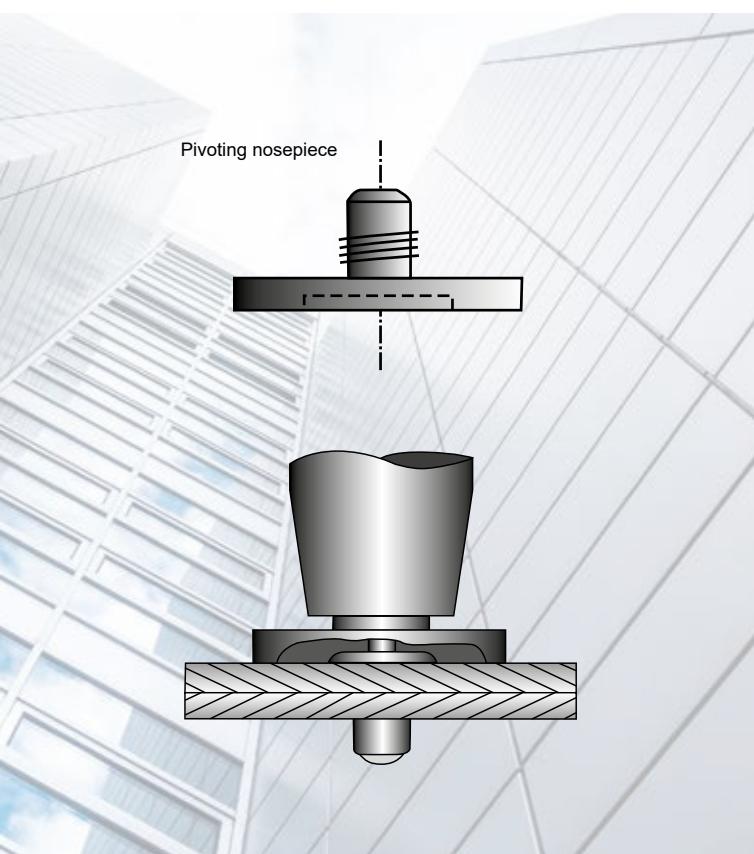
	d	$ +1$	$\frac{1}{4}$	No.	
5,0	20,0	12,0 - 15,5		10772050200	250
	16,0	8,0 - 12,0		10772050160	500
	12,0	6,0 - 8,5		10772050120	500

$d_k \text{ 16,0 } -0,3$ $d_m \text{ 2,7}$ $k \text{ 1,5 } +0,4$ 5,1 mm 1820 N 2500 N

	d	$ +1$	$\frac{1}{4}$	No.	
5,0	30,0	20,0 - 25,0		10762050300	250
	25,0	15,0 - 20,5		10762050250	250
	20,0	12,0 - 15,5		10762050200	500
	18,0	11,5 - 13,5		10762050180	500
	16,0	9,5 - 12,0		10762050160	500
	14,0	7,5 - 10,0		10762050140	500
	12,0	6,0 - 8,0		10762050120	500
	10,0	4,0 - 6,5		10762050100	500

$d_k \text{ 14,0 } -0,3$ $d_m \text{ 2,7}$ $k \text{ 1,5 } +0,4$ 5,1 mm 1820 N 2500 N

ALFO®



Riveting of façade panels

In order to take into account the thermal expansion of the façade panels, ensure that the hole clearance in the panel is as large as the expected thermal expansion.

- With pivoting nosepieces, the blind rivets are set with a rivet clearance of 0.3 mm. Rivet and nosepiece used should be from the same manufacturer, as the setting head height according to DIN ISO can differ.
- The grip thickness results from the thickness of the material to be riveted plus 2 mm to ensure a well-formed closing head.
- As many factors can have an influence during riveting (e.g. rivet head tolerance), a **riveting test** is recommended in advance.



The appropriate façade nosepieces can be found with the respective setting tools.



Series
701

CAD
DATA
ONLINE

DIN EN ISO
15981



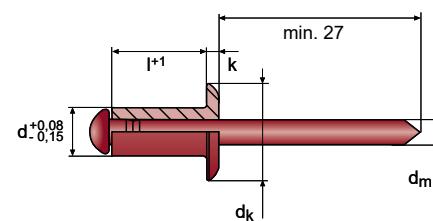
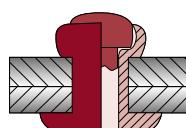
MOVIE

ALFO® Standard Blind Rivet

Aluminium

Aluminium

Dome Head | open



EN AW-5251 [AlMg2]

d	+1	+	No.	
3,2	12,0	7,0 - 9,0	10701032120	500
	10,0	5,0 - 8,0	10701032100	500
	8,0	3,5 - 6,0	10701032080	500
	6,0	0,5 - 4,0	10701032060	500

$d_k \text{ 6,5 - 0,7}$ $d_m \text{ 2,0}$ $k \text{ 0,8} \pm 0,2$ $\rightarrow 3,3 \text{ mm}$ $\leftrightarrow 380 \text{ N}$ $\uparrow \downarrow 670 \text{ N}$

4,0	16,0	8,5 - 12,5	10701040160	500
	12,0	6,5 - 9,0	10701040120	500
	10,0	5,0 - 7,0	10701040100	500
	8,0	3,0 - 5,5	10701040080	500
	6,0	1,0 - 3,5	10701040060	500

$d_k \text{ 8,0 - 1,0}$ $d_m \text{ 2,5}$ $k \text{ 1,0} \pm 0,3$ $\rightarrow 4,1 \text{ mm}$ $\leftrightarrow 740 \text{ N}$ $\uparrow \downarrow 1240 \text{ N}$

d	+1	+	No.	
4,8	16,0	8,0 - 12,0	10701048160	500
	14,0	8,0 - 10,5	10701048140	500
	12,0	6,0 - 8,5	10701048120	500
	10,0	4,0 - 7,0	10701048100	500
	8,0	1,0 - 5,0	10701048080	500

$d_k \text{ 9,5 - 1,0}$ $d_m \text{ 2,9}$ $k \text{ 1,1} \pm 0,3$ $\rightarrow 4,9 \text{ mm}$ $\leftrightarrow 1140 \text{ N}$ $\uparrow \downarrow 1600 \text{ N}$



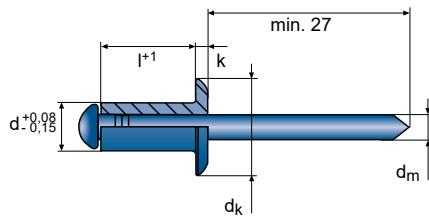
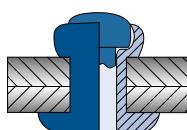
Rivdom eBZ 1

BATTERY RIVETER FOR BLIND RIVETS

small + **powerful**
THE new standard tool
for blind rivets up to 5 mm



The latest **HONSEL** battery riveters for blind rivets and blind rivet nuts/studs can be found in the **HONSEL** blind rivet processing catalogue.



C4C [1.0303]

	d	+1		No.	
3,0	12,0	6,5 - 9,0		10707030120	500
	10,0	5,0 - 7,0		10707030100	500
	8,0	3,0 - 5,5		10707030080	500
	7,0	2,0 - 4,5		10707030070	500
	6,0	0,5 - 3,5		10707030060	500
	5,0	0,5 - 2,5		10707030050	500
d_k 6,3 - 0,7		d_m 1,9	k 0,8 ±0,2	3,1 mm	1000 N 1340 N
3,2	12,0	6,5 - 9,0		10707032120	500
	10,0	5,0 - 7,0		10707032100	500
	8,0	3,0 - 5,5		10707032080	500
	6,0	0,5 - 3,5		10707032060	500
	5,0	0,5 - 2,5		10707032050	500
d_k 6,5 - 0,7		d_m 2,0	k 0,8 ±0,2	3,3 mm	1180 N 1560 N
4,0	20,0	12,0 - 16,5		10707040200	500
	18,0	12,0 - 14,5		10707040180	500
	16,0	9,0 - 12,5		10707040160	500
	14,0	8,0 - 11,0		10707040140	500
	12,0	6,0 - 9,0		10707040120	500
	10,0	5,0 - 7,0		10707040100	500
	9,0	4,0 - 6,5		10707040090	500
	8,0	3,0 - 5,5		10707040080	500
	7,0	2,0 - 4,5		10707040070	500
	6,0	0,5 - 3,5		10707040060	500
d_k 8,0 - 1,0		d_m 2,3	k 1,0 ±0,3	4,1 mm	2100 N 2800 N
4,8	30,0	19,5 - 24,5		10707048300	500
	25,0	15,0 - 20,0		10707048250	500
	22,0	13,0 - 17,0		10707048220	500
	20,0	11,0 - 15,5		10707048200	500
	18,0	9,0 - 13,5		10707048180	500
	16,0	8,0 - 12,0		10707048160	500
	14,0	7,0 - 10,0		10707048140	500
	12,0	6,0 - 8,5		10707048120	500
	10,0	4,0 - 6,5		10707048100	500
	9,0	3,0 - 5,5		10707048090	500
d_k 9,5 - 1,0		d_m 2,7	k 1,1 ±0,3	4,9 mm	3180 N 4220 N

Diameter 8.0 mm not standardised.

Large-head versions as OPTO® multigrip blind rivets on page 57.

Further steel blind rivets can be found in the section on the high-strength series

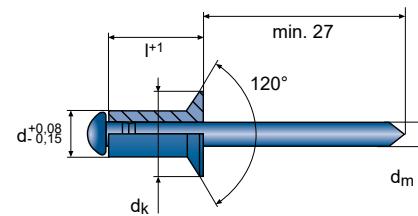
- OPTO® BULB (page 66)
- FERO® BULB (page 67)
- FERO® BOLT (page 70)
- FERO®-LOCK (page 72)

Series
707**CAD**
DATA
ONLINEDIN EN ISO
15980**ALFO® Standard Blind Rivet**

Steel galvanized

Steel galvanized

Countersunk Head | open



C4C [1.0303]

	d	l + 1	No.	
3,0	10,0	5,0 - 7,0	10707300100	500
	8,0	3,0 - 5,5	10707300080	500
	6,0	1,5 - 3,5	10707300060	500
d_k 6,0 - 0,4	d_m 1,9	3,1 mm	↔ 1000 N	→ 1340 N
3,2	8,0	3,0 - 5,5	10707320080	500
	6,0	1,5 - 3,5	10707320060	500
d_k 6,2 - 0,4	d_m 2,0	3,3 mm	↔ 1180 N	→ 1560 N
4,0	16,0	8,0 - 12,5	10707400160	500
	12,0	6,5 - 9,0	10707400120	500
	10,0	5,0 - 7,0	10707400100	500
	8,0	3,0 - 5,5	10707400080	500
	7,0	2,0 - 4,5	10707400070	500
	6,0	1,5 - 3,5	10707400060	500
d_k 7,5 - 0,5	d_m 2,3	4,1 mm	↔ 2100 N	→ 2800 N

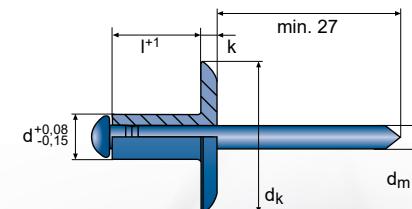
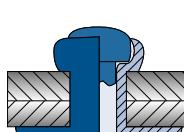
	d	l + 1	No.	
4,8	18,0	9,5 - 13,5	10707480180	500
	16,0	8,0 - 12,0	10707480160	500
	14,0	6,5 - 10,0	10707480140	500
5,0	12,0	5,0 - 8,5	10707480120	500
	10,0	3,0 - 6,5	10707480100	500
	8,0	2,0 - 4,5	10707480080	500
d_k 9,0 - 0,5	d_m 2,7	4,9 mm	↔ 3180 N	→ 4220 N
6,4	30,0	19,5 - 25,0	10707500300	250
	25,0	15,0 - 20,0	10707500250	250
	20,0	11,0 - 15,5	10707500200	500
	16,0	8,0 - 12,0	10707500160	500
	12,0	6,0 - 8,5	10707500120	500
	10,0	4,0 - 6,5	10707500100	500
d_k 9,3 - 0,5	d_m 2,9	5,1 mm	↔ 3320 N	→ 4740 N
d_k 13,4 - 1,8	d_m 3,8	6,5 mm	↔ 4920 N	→ 5700 N

ALFO® Standard Blind Rivet

Steel galvanized

Steel galvanized

Large Dome Head | open

Series
767**CAD**
DATA
ONLINE

C4C [1.0303]

	d	l + 1	No.	
4,8	25,0	16,0 - 21,0	10767048250	500
	20,0	14,0 - 16,0	10767048200	500
	16,0	10,0 - 12,0	10767048160	500
	12,7	6,0 - 8,5	10767048127	500
	10,0	4,0 - 6,0	10767048100	500
d_k 14,0 - 0,4	d_m 2,9	k 1,5	↔ 4,9 mm	→ 2900 N
				→ 3850 N

d_k 14,0 - 0,4 d_m 2,9 k 1,5 ↔ 4,9 mm → 2900 N → 3850 N

General information on blind rivets can be found in the technical appendix from page 116.

ALFO® Standard Blind Rivet

 Stainless Steel A2

 Stainless Steel A2

Dome Head | open

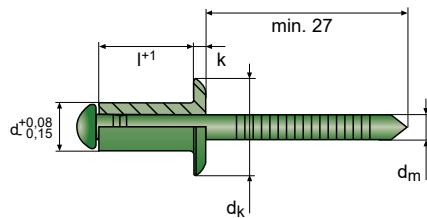
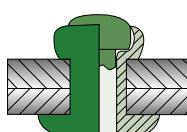
DIN EN ISO

15983

CAD
DATA
ONLINE

Series

708



[1.4301]

	d	+1		No.	
2,4	6,0	0,5 - 3,5		10708024060	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	16,0	8,5 - 12,0		10708030160	500
	12,0	6,5 - 8,5		10708030120	500
	10,0	5,0 - 7,0		10708030100	500
	8,0	3,0 - 5,0		10708030080	500
	6,0	0,5 - 3,0		10708030060	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	18,0	12,0 - 14,0		10708032180	500
	16,0	8,5 - 12,0		10708032160	500
	12,0	6,5 - 8,5		10708032120	500
	10,0	5,0 - 7,0		10708032100	500
	8,0	3,0 - 5,0		10708032080	500
	6,0	0,5 - 3,0		10708032060	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	25,0	16,0 - 21,0		10708040250	500
	20,0	14,0 - 16,0		10708040200	500
	18,0	12,0 - 14,0		10708040180	500
	16,0	10,0 - 12,0		10708040160	500
	14,0	8,5 - 10,5		10708040140	500
	12,0	6,5 - 8,5		10708040120	500
	10,0	4,5 - 6,5		10708040100	500
	8,0	2,5 - 4,5		10708040080	500
	6,0	1,0 - 2,5		10708040060	500
d_k 8,0 - 1,0	d_m 2,5	k 1,0 ±0,3	 4,1 mm	 2750 N	 3550 N

	d	+1		No.	
4,8	20,0	13,0 - 16,0		10708048200	500
	18,0	11,0 - 13,0		10708048180	500
	16,0	8,0 - 11,0		10708048160	500
	14,0	7,0 - 9,5		10708048140	500
	12,0	6,0 - 8,0		10708048120	500
	10,0	4,0 - 6,0		10708048100	500
	8,0	1,5 - 4,0		10708048080	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	40,0	30,0 - 35,0		10708050400	250
	35,0	25,0 - 30,0		10708050350	250
	30,0	20,0 - 25,0		10708050300	250
	25,0	15,0 - 20,0		10708050250	250
	20,0	13,0 - 15,0		10708050200	500
	18,0	11,0 - 13,0		10708050180	500
	16,0	8,0 - 11,0		10708050160	500
	14,0	7,0 - 9,5		10708050140	500
	12,0	6,0 - 8,0		10708050120	500
	10,0	4,0 - 6,0		10708050100	500
	8,0	2,0 - 4,0		10708050080	500
d_k 9,5 - 0,8	d_m 2,9	k 1,1 ±0,3	 5,1 mm	 5000 N	 6400 N
6,0	16,0	7,5 - 11,0		10708060160	250
	12,0	5,5 - 7,5		10708060120	250
	10,0	2,0 - 5,5		10708060100	250
d_k 12,0 - 1,2	d_m 3,8	k 1,5 ±0,4	 6,1 mm	 6300 N	 8250 N
6,4	30,0	19,0 - 23,0		10708064300	250
	25,0	15,5 - 19,5		10708064250	250
	20,0	10,5 - 14,5		10708064200	250
	18,0	9,0 - 13,0		10708064180	250
	16,0	7,5 - 11,5		10708064160	250
	14,0	6,0 - 9,5		10708064140	250
	12,0	4,0 - 7,5		10708064120	250
	10,0	2,5 - 6,0		10708064100	250
d_k 13,0 - 1,5	d_m 3,8	k 1,8 ±0,4	 6,5 mm	 7250 N	 9335 N

! The hammer-shaped form of the mandrel head guarantees **optimum forming of the closing head**.

! Diameters 6.0 and 6.4 are not standardised.



Series
708

CAD
DATA
ONLINE

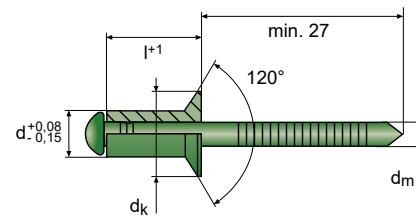
DIN EN ISO
15984

ALFO® Standard Blind Rivet

Stainless Steel A2

Stainless Steel A2

Countersunk Head | open



[1.4301]

d	+1	No.	
3,2	12,0	6,5 - 8,5	10708320120
	10,0	5,0 - 7,0	10708320100
	8,0	3,0 - 5,0	10708320080
	6,0	1,5 - 3,0	10708320060

$d_k \text{ 6,0 - 0,4}$	$d_m \text{ 1,9}$	$\rightarrow\!\!\!-\!\!\!-\!\!\!-\!\!\! \rightarrow 3,3 \text{ mm}$	$\leftarrow\!\!\!-\!\!\!-\!\!\!-\!\!\! \rightarrow 1900 \text{ N}$	$\uparrow\!\!\!-\!\!\!-\!\!\! \rightarrow 2500 \text{ N}$
4,0	20,0	13,5 - 16,0	10708400200	500
	18,0	11,5 - 14,0	10708400180	500
	16,0	10,0 - 12,0	10708400160	500
	14,0	8,5 - 10,5	10708400140	500
	12,0	6,5 - 8,5	10708400120	500
	10,0	4,5 - 6,5	10708400100	500
	8,0	2,5 - 4,5	10708400080	500
	6,0	1,0 - 2,5	10708400060	500

$d_k \text{ 7,5 - 0,5}$ $d_m \text{ 2,5}$ $\rightarrow\!\!\!-\!\!\!-\!\!\!-\!\!\! \rightarrow 4,1 \text{ mm}$ $\leftarrow\!\!\!-\!\!\!-\!\!\!-\!\!\! \rightarrow 2750 \text{ N}$ $\uparrow\!\!\!-\!\!\!-\!\!\! \rightarrow 3550 \text{ N}$

d	+1	No.	
4,8	16,0	8,0 - 11,0	10708480160
	12,0	6,0 - 8,5	10708480120
	10,0	4,0 - 6,0	10708480100
	8,0	2,0 - 4,0	10708480080

$d_k \text{ 9,0 - 0,5}$	$d_m \text{ 2,9}$	$\rightarrow\!\!\!-\!\!\!-\!\!\!-\!\!\! \rightarrow 4,9 \text{ mm}$	$\leftarrow\!\!\!-\!\!\!-\!\!\!-\!\!\! \rightarrow 4250 \text{ N}$	$\uparrow\!\!\!-\!\!\!-\!\!\! \rightarrow 5400 \text{ N}$
5,0	16,0	8,0 - 11,0	10708500160	500
	12,0	6,0 - 8,5	10708500120	500
	10,0	4,0 - 6,0	10708500100	500
	8,0	2,0 - 4,0	10708500080	500

$d_k \text{ 9,3 - 0,5}$ $d_m \text{ 2,9}$ $\rightarrow\!\!\!-\!\!\!-\!\!\!-\!\!\! \rightarrow 5,1 \text{ mm}$ $\leftarrow\!\!\!-\!\!\!-\!\!\!-\!\!\! \rightarrow 5000 \text{ N}$ $\uparrow\!\!\!-\!\!\!-\!\!\! \rightarrow 6400 \text{ N}$

ALFO® Standard Blind Rivet

Stainless Steel A2

Stainless Steel A2

Large Dome Head | open

Series
738/758
778

CAD
DATA
ONLINE

[1.4301]

d	+1	No.	
3,2	10,0	5,0 - 7,0	10738032100
	8,0	3,0 - 5,0	10738032080
	6,0	0,5 - 3,0	10738032060

$d_k \text{ 9,5 - 0,3}$	$d_m \text{ 1,9}$	$k \text{ 1,1 } \pm 0,3$	$\rightarrow\!\!\!-\!\!\!-\!\!\!-\!\!\! \rightarrow 3,3 \text{ mm}$	$\leftarrow\!\!\!-\!\!\!-\!\!\!-\!\!\! \rightarrow 1900 \text{ N}$	$\uparrow\!\!\!-\!\!\!-\!\!\! \rightarrow 2500 \text{ N}$
4,0	12,0	6,5 - 8,5	10758040120	500	
	10,0	4,5 - 6,5	10758040100	500	
	8,0	2,5 - 4,5	10758040080	500	

$d_k \text{ 11,5 - 0,3}$ $d_m \text{ 2,5}$ $k \text{ 1,9 } \pm 0,3$ $\rightarrow\!\!\!-\!\!\!-\!\!\!-\!\!\! \rightarrow 4,1 \text{ mm}$ $\leftarrow\!\!\!-\!\!\!-\!\!\!-\!\!\! \rightarrow 2700 \text{ N}$ $\uparrow\!\!\!-\!\!\!-\!\!\! \rightarrow 3500 \text{ N}$

d	+1	No.	
4,8	25,0	16,5 - 19,5	10778048250
	20,0	12,5 - 15,5	10778048200
	18,0	10,5 - 12,5	10778048180
	16,0	7,5 - 10,5	10778048160
	14,0	6,5 - 9,0	10778048140
	12,0	5,5 - 7,5	10778048120
	10,0	3,5 - 5,5	10778048100

$d_k \text{ 15,3 - 0,2}$ $d_m \text{ 2,9}$ $k \text{ 2,3 } \pm 0,4$ $\rightarrow\!\!\!-\!\!\!-\!\!\!-\!\!\! \rightarrow 4,9 \text{ mm}$ $\leftarrow\!\!\!-\!\!\!-\!\!\!-\!\!\! \rightarrow 4220 \text{ N}$ $\uparrow\!\!\!-\!\!\!-\!\!\! \rightarrow 5330 \text{ N}$

ALFO® Standard Blind Rivet

 Stainless Steel A2

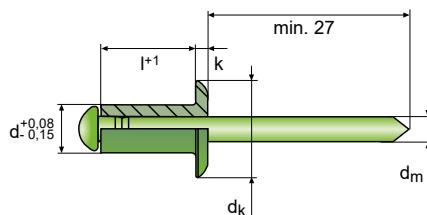
 Stainless Steel A4

Dome Head | open

In accordance with
DIN EN ISO
15983

CAD
DATA
ONLINE

Series
713



[1.4404]

	d	+1		No.	
3,0	6,0	0,5 - 3,0		10713030060	500
	8,0	3,0 - 5,0		10713030080	500
	10,0	5,0 - 7,0		10713030100	500
	12,0	6,5 - 8,5		10713030120	500
dk 6,3 - 0,7	d_m 1,9	k 0,8 ±0,2	 3,1 mm	 1760 N	 2270 N
3,2	6,0	0,5 - 3,0		10713032060	500
	8,0	3,0 - 5,0		10713032080	500
	10,0	5,0 - 7,0		10713032100	500
dk 6,3 - 0,7	d_m 2,0	k 0,8 ±0,2	 3,3 mm	 1900 N	 2500 N
4,0	6,0	1,0 - 2,5		10713040060	500
	8,0	2,5 - 4,5		10713040080	500
	10,0	4,5 - 6,5		10713040100	500
	12,0	6,5 - 8,5		10713040120	500
dk 8,0 - 1,0	d_m 2,5	k 1,0 ±0,3	 4,1 mm	 3500 N	 4650 N

	d	+1		No.	
4,8	8,0	1,5 - 4,0		10713048080	500
	10,0	4,0 - 6,0		10713048100	500
	12,0	6,0 - 8,0		10713048120	500
	16,0	8,0 - 11,0		10713048160	500
dk 9,0 - 0,8	d_m 3,0	k 1,1 ±0,3	 4,9 mm	 4230 N	 5250 N
5,0	8,0	2,0 - 4,0		10713050080	500
	10,0	4,0 - 6,0		10713050100	500
	12,0	6,0 - 8,0		10713050120	500
	16,0	9,5 - 11,0		10713050160	500
	18,0	11,0 - 13,0		10713050180	500
	20,0	13,0 - 15,0		10713050200	500
	25,0	15,0 - 20,0		10713050250	250
dk 9,5 - 0,8	d_m 3,2	k 1,1 ±0,3	 5,1 mm	 4800 N	 6600 N

ALFO® Standard Blind Rivet

 Stainless Steel A2

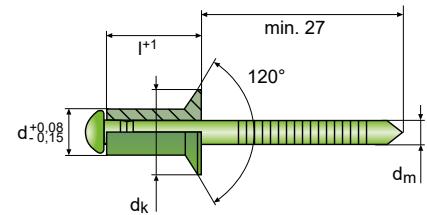
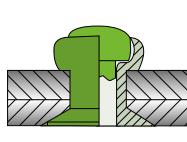
 Stainless Steel A4

Countersunk Head | open

In accordance with
DIN EN ISO
15984

CAD
DATA
ONLINE

Series
713



[1.4404]

	d	+1		No.	
4,0	8,0	2,5 - 4,5		10713400080	500
	10,0	4,5 - 6,5		10713400100	500
	12,0	6,5 - 8,5		10713400120	500
dk 7,5 - 0,5	d_m 2,5		 4,1 mm	 3500 N	 4650 N

Corrosion-resistant

The higher percentage of molybdenum makes A4 blind rivets **significantly more corrosion-resistant** than the A2 versions.

Typical fields of application are container construction, food supply industry, ship and boat-building or other applications in the marine sector that are in permanent contact with seawater.

A great deal of further detailed information on the subject of corrosion can be found on ► pages 125 - 126.

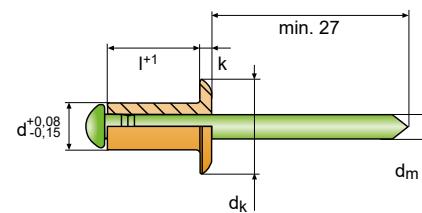
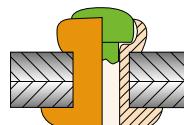
Please note also our blind rivets nuts in stainless steel A4 on ► page 110.

Series
720**CAD**
DATA
ONLINEDIN EN ISO
16584**MOVIE****ALFO®Standard Blind Rivet**

Nickel-Copper

Stainless Steel A4

Dome Head | open



[2.4360]

	d	+1		No.	
3,2	10,0	5,0 - 7,0		10720032100	500
	8,0	3,0 - 5,0		10720032080	500
	6,0	1,0 - 3,0		10720032060	500
dk 6,5 -0,7	d_m 1,9	k 0,8 ±0,2	3,3 mm	1600 N	2400 N
4,0	12,0	7,0 - 9,0		10720040120	500
	10,0	5,0 - 7,0		10720040100	500
	8,0	3,0 - 5,0		10720040080	500
	6,0	1,0 - 3,0		10720040060	500
dk 8,0 -1,0	d_m 2,3	k 1,0 ±0,3	4,1 mm	2300 N	3450 N



	d	+1		No.	
4,8	16,0	10,0 - 12,0		10720048160	500
	12,0	6,0 - 8,0		10720048120	500
	10,0	4,0 - 6,0		10720048100	500
dk 9,5 -1,0	d_m 2,9	k 1,1 ±0,3	4,9 mm	3400 N	5000 N
6,4	18,0	9,0 - 12,0		10720064180	250
	16,0	7,0 - 10,0		10720064160	250
	12,0	4,0 - 6,0		10720064120	250
dk 13,0 -1,5	d_m 3,8	k 1,8 ±0,4	6,5 mm	5400 N	8200 N



Please note: The rivet sleeve is **additionally galvanised** for optimum corrosion resistance!



A perfect rivet in all respects.

Nickel-copper, also known as Monel [1] or Nicorros [2], is a material offering the **best possible strength and corrosion resistance properties**.

Thanks to its outstanding resistance to salts and acids and similar strength to stainless steel, NiCu is often used for equipment in the **offshore, chemical and food industry**.

Corrosion properties

Tap water	✓✓✓
Neutral and alkaline salts	✓✓✓
Oxidising salts	✓✓✓
Moist and dry gases	✓✓✓
Salt water (sea water)	✓✓
Acid salts	✓✓
Mineral acid	✓✓
Organic acid	✓✓
Alkalines	✓

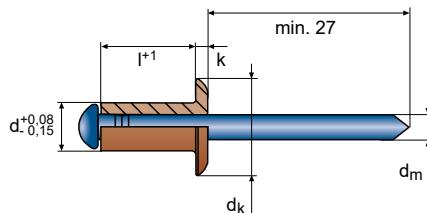
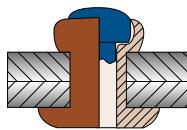
very good ✓✓✓
good ✓✓
suitable ✓

HONSEL NiCu blind rivets are not drawn from strip in the normal manner, but are **extruded from wire** and thus achieve a **higher strength** and at the same time a **captive breakstem** that is made of high-quality **stainless steel A4**.

[1] Trademark of INCO Alloys International

[2] Trademark of KRUPP





[2.0040]

d	+1		No.	
3,0	10,0	5,0 - 7,0	10705030100	500
	8,0	3,0 - 5,0	10705030080	500
	6,0	2,0 - 3,0	10705030060	500

d_k 6,3 -0,7 **d_m** 1,7 **k** 0,8 ±0,2 3,1 mm 760 N 950 N

d	+1		No.	
4,0	10,0	5,0 - 7,0	10705040100	500
	8,0	3,5 - 5,0	10705040080	500
	6,0	2,5 - 3,5	10705040060	500

d_k 8,0 -1,0 **d_m** 2,0 **k** 1,0 ±0,3 4,1 mm 1500 N 1800 N

ALFO® Standard Blind Rivet

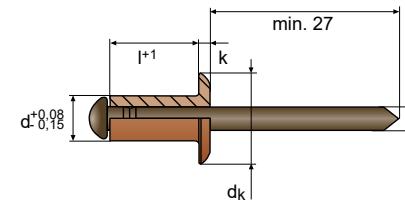
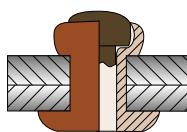
Copper Bronze
 Dome Head | open



in accordance with
 DIN EN ISO
16582

CAD
 DATA
 ONLINE

Series
709



[2.0040]

d	+1		No.	
3,0	10,0	5,0 - 7,0	10709030100	500
	8,0	3,0 - 5,0	10709030080	500
	6,0	2,0 - 3,0	10709030060	500
	5,0	0,5 - 2,5	10709030050	500

d_k 6,3 -0,7 **d_m** 1,7 **k** 0,8 ±0,2 3,1 mm 760 N 950 N

d	+1		No.	
4,0	12,0	6,5 - 8,5	10709040120	500
	10,0	5,0 - 7,0	10709040100	500
	8,0	3,0 - 5,0	10709040080	500
	6,0	2,0 - 3,5	10709040060	500

d_k 8,0 -1,0 **d_m** 2,0 **k** 1,0 ±0,3 4,1 mm 1500 N 1800 N

d	+1		No.	
3,2	10,0	5,0 - 7,0	10709032100	500
	8,0	3,0 - 5,5	10709032080	500
	6,0	1,5 - 3,5	10709032060	500
	5,0	0,5 - 2,5	10709032050	500

d_k 6,4 -0,5 **d_m** 1,9 **k** 0,8 ±0,2 3,3 mm 800 N 1000 N



General information on blind rivets can be found in the technical appendix from page 116.

Painted and anodised blind rivets

We bring colour to your world.

The individual colouration for visible surfaces is playing a more and more important role in many areas of industry today. Typical examples are in façade construction or the production of high-quality roller shutters and sunshading systems.

HONSEL offers different solutions and produces exactly the colour shade you require from all common colour scales.

Furthermore, a large number of painted or anodised products in a wide range of sizes are available for immediate delivery from stock.

Our standards

In WHITE (RAL 9010) and BLACK (RAL 9005) on
► pages 50 - 51.

Please note that for a new construction, minimum order quantities have to be observed!

Talk to our sales team who will check the availability of offer suitable alternatives!

Painted ALFO® blind rivets

In this version especially suitable for larger volumes, the whole rivet sleeve is given a high-performance surface before assembly with the mandrel.



Painted OPTO® multigrip blind rivets

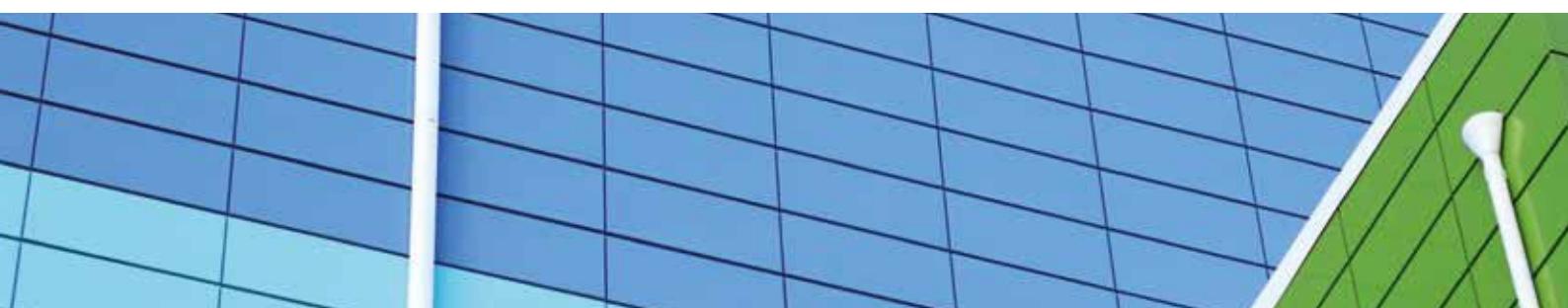
Available immediately from stock with the typical large grip ranges.

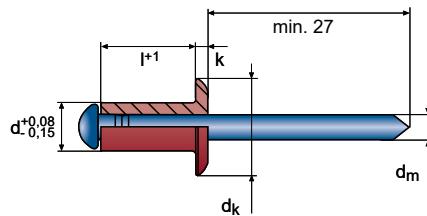
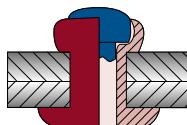


Individual colours matched exactly to the specific application.

Anodised ALFO® blind rivets

With corresponding order requirements, we produce blind rivets with anodised sleeves in black or dark bronze.

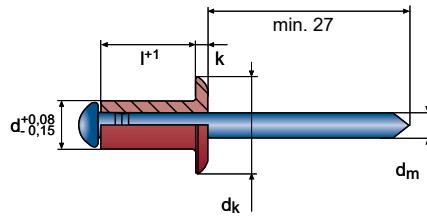
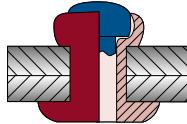




EN AW-5754 [AlMg3]

d	+1		No.	
4,0	12,0	6,5 - 9,0	10700040120/9010	500
	8,0	3,0 - 5,5	10700040080/9010	500
	6,0	1,0 - 3,5	10700040060/9010	500
	10,0	5,0 - 7,0	10700040100/9010	500

dk 8,0 -1,0 **dm** 2,0 **k** 1,0 ±0,3 4,1 mm 1250 N 1800 N



EN AW-5754 [AlMg3]

d	+1		No.	
4,0	12,0	6,5 - 9,0	10700040120/9005	500
	10,0	5,0 - 7,0	10700040100/9005	500
	8,0	3,0 - 5,5	10700040080/9005	500
	6,0	1,0 - 3,5	10700040060/9005	500

dk 8,0 -1,0 **dm** 2,0 **k** 1,0 ±0,3 4,1 mm 1250 N 1800 N

Unlimited possibilities.

On the previous page you will find information on the **practically unlimited colour possibilities** for blind rivets for practically all applications.

The products shown here are just a small selection – we stock a large number of other sizes and colours.

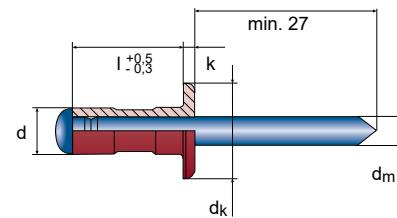
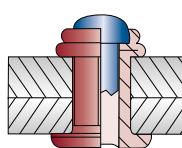
Please note that for a new construction, minimum order quantities have to be observed!

Contact us!

**Series
600****CAD
DATA
ONLINE****RAL
9010**

OPTO® Multigrip Blind Rivet -painted-

Aluminium Steel galvanized
Dome Head | open



EN AW-5052 [AlMg2,5]

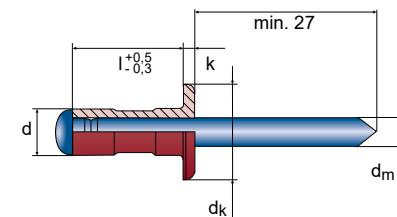
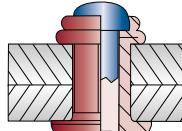
	d	+1		No.	
3,2	11,0	4,0 - 7,9		10600032110/9010	500
	9,5	1,2 - 6,4		10600032095/9010	500
	8,0	0,8 - 4,8		10600032080/9010	500
	6,8	0,8 - 3,4		10600032068/9010	500
dk 6,4		dm 1,8	k 1,0	3,3 mm	720 N 1000 N
4,0	16,9	6,4 - 12,7		10600040169/9010	500
	12,7	4,0 - 9,5		10600040127/9010	500
	9,5	1,2 - 6,4		10600040095/9010	500
	6,0	0,5 - 3,0		10600040060/9010	500
dk 7,9		dm 2,3	k 1,2	4,1 mm	1120 N 1650 N

	d	+1		No.	
4,8	24,8	12,7 - 19,8		10600048248/9010	500
	16,9	6,4 - 12,7		10600048169/9010	500
	15,1	4,8 - 11,1		10600048151/9010	500
	10,3	1,6 - 6,4		10600048103/9010	500
dk 9,8		dm 2,8	k 1,5	4,9 mm	1530 N 2300 N

**Series
600****CAD
DATA
ONLINE****RAL
9005**

OPTO® Multigrip Blind Rivet -painted-

Aluminium Steel galvanized
Dome Head | open



EN AW-5052 [AlMg2,5]

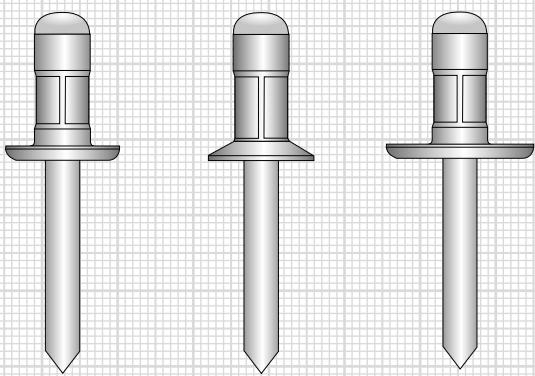
	d	+1		No.	
3,2	11,0	4,0 - 7,9		10600032110/9005	500
	9,5	1,2 - 6,4		10600032095/9005	500
	8,0	0,8 - 4,8		10600032080/9005	500
	6,8	0,8 - 3,4		10600032068/9005	500
dk 6,4		dm 1,8	k 1,0	3,3 mm	720 N 1000 N
4,0	16,9	6,4 - 12,7		10600040169/9005	500
	12,7	4,0 - 9,5		10600040127/9005	500
	9,5	1,2 - 6,4		10600040095/9005	500
	6,0	0,5 - 3,0		10600040060/9005	500
dk 7,9		dm 2,3	k 1,2	4,1 mm	1120 N 1650 N

	d	+1		No.	
4,8	24,8	12,7 - 19,8		10600048248/9005	500
	16,9	6,4 - 12,7		10600048169/9005	500
	15,1	4,8 - 11,1		10600048151/9005	500
	10,3	1,6 - 6,4		10600048103/9005	500
dk 9,8		dm 2,8	k 1,5	4,9 mm	1530 N 2300 N



OPTO® multigrip blind rivet

OPTO®



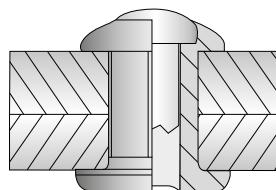
Thanks to its special design, the **HONSEL OPTO®** guarantees a wide range of **outstanding functional characteristics**:

- Excellent bore filling properties
- Positive locking of the mandrel inside the head
- Free from rattling noises
- Dust and splash water-tight

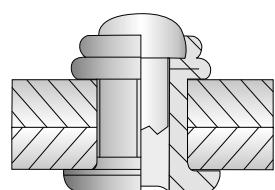
The all-rounder.

The **OPTO® multigrip blind rivet** can be easily distinguished from a standard blind rivet by its specially formed rivet shank.

The main characteristic is the large clamping range that eliminates the need for several standard blind rivet sizes, thus simplifying work planning and reducing stocks.



Large grip range



Small grip range



OPTO® = adaptable + flexible



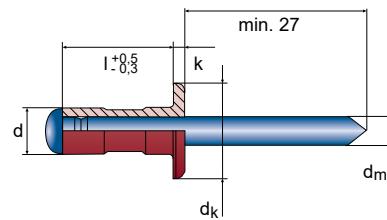
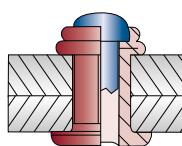
Applications for **OPTO®** multigrip blind rivets are to be found today in practically every branch of industry, for example in vehicle construction, in AC technology or in container and housing construction.

Furthermore, the **OPTO®** is outstandingly suitable as a **repair rivet**.

HONSEL has also successfully developed this blind rivet type into **special variants for industrial series production**, for example with diameters up to 8.0 mm!



General information on blind rivets can be found in the technical appendix from page 116.

Series
600**CAD**
DATA
ONLINE
OPTO® Multigrip Blind Rivet
■ Aluminium ■ Steel galvanized
 Dome Head | open


EN AW-5052 [AlMg2,5]

	d	+1		No.	
3,2	6,8	0,8 - 3,4		10600032068	500
	8,0	0,8 - 4,8		10600032080	500
	9,5	1,2 - 6,4		10600032095	500
	11,0	4,0 - 7,9		10600032110	500

dk 6,4 **dm** 1,8 **k** 1,0 3,3 mm 720 N 1000 N

	d	+1		No.	
4,0	6,0	0,5 - 3,0		10600040060	500
	9,5	1,2 - 6,4		10600040095	500
	12,7	4,0 - 9,5		10600040127	500
	16,9	6,4 - 12,7		10600040169	500

dk 7,9 **dm** 2,3 **k** 1,2 4,1 mm 1120 N 1650 N

	d	+1		No.	
4,8	10,3	1,6 - 6,4		10600048103	500
	15,1	4,8 - 11,1		10600048151	500
	16,9	6,4 - 12,7		10600048169	500
	20,0	10,0 - 16,0		10600048200	500
	24,8	12,7 - 19,8		10600048248	500
	30,0	19,0 - 24,0		10600048300	500

dk 9,8 **dm** 2,8 **k** 1,5 4,9 mm 1530 N 2300 N

We can do MORE multigrips.

The experience from the development and optimisation of the OPTO® multigrip blind rivet was quickly incorporated into the patented **OPTO® multigrip blind rivet nuts**.

These can be found on ► pages 84 - 85.



Size 4.0 x 9.5 with **knurled sleeve** as grounding blind rivet on ► page 78.

OPTO®

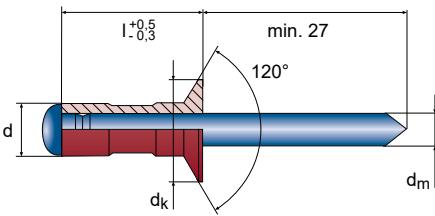
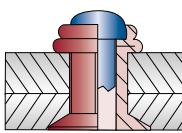
OPTO® Multigrip Blind Rivet

Aluminium Steel galvanized
Countersunk Head | open



CAD
DATA
ONLINE

Series
600



EN AW-5052 [AlMg2,5]

d	+1		No.	
3,2	9,7	2,4 - 6,4	10600320097	500
dk 5,4	dm 1,8	3,3 mm	670 N	900 N
4,0	11,3	2,9 - 7,9	10600400113	500
dk 7,0	dm 2,3	4,1 mm	980 N	1320 N

d	+1		No.	
4,8	16,9	6,4 - 12,7	10600480169	500
dk 9,0	dm 2,7	4,9 mm	1500 N	2300 N

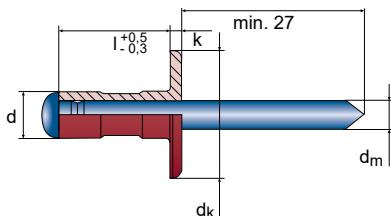
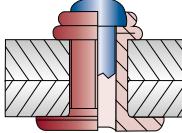
OPTO® Multigrip Blind Rivet

Aluminium Steel galvanized
Large Dome Head | open



CAD
DATA
ONLINE

Series
650/670



EN AW-5052 [AlMg2,5]

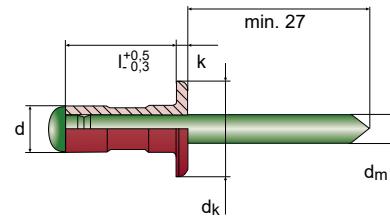
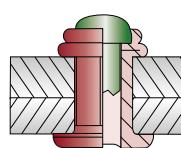
d	+1		No.	
4,0	6,0	1,0 - 3,0	10650040060	500
	9,5	1,2 - 6,4	10650040095	500
	12,7	4,0 - 9,5	10650040127	500

d	+1		No.	
4,8	30,0	19,0 - 24,0	10670048300	250
	24,8	12,7 - 19,8	10670048248	250
	16,9	6,4 - 12,7	10670048169	500
	10,3	1,6 - 6,4	10670048103	500

dk 12,0 **dm 2,3** **k 1,8** 4,1 mm 1120 N 1650 N **dk 16,0** **dm 2,8** **k 2,1** 4,9 mm 1530 N 2300 N

HONSEL Produktion. Mehr als 30 Fünf- und Sechsstufen-Pressen.



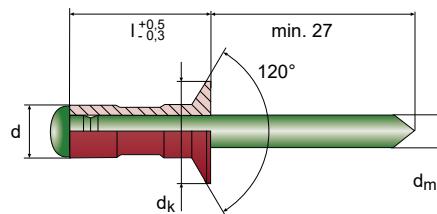
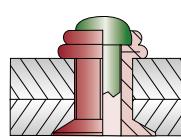
**Series
612****CAD
DATA
ONLINE****CERT**
OPTO® Multigrip Blind Rivet
□ Aluminium ■ Stainless Steel A2
Dome Head | open


EN AW-5052 [AlMg2,5]

d	+1	⊖	No.	
3,2	8,0	0,8 - 4,8	10612032080	500
	11,0	4,0 - 7,9	10612032110	500
4,0	d_k 6,4	d_m 1,8 k 1,0	3,3 mm	670 N ↪ 900 N
	9,5	1,2 - 6,4	10612040095	500
	12,7	4,0 - 9,5	10612040127	500
4,8	16,9	6,4 - 12,7	10612040169	500
7,9	d_m 2,3	k 1,2	4,1 mm	980 N ↪ 1320 N

d	+1	⊖	No.	
4,8	10,3	1,6 - 6,4	10612048103	500
	15,1	4,8 - 11,1	10612048151	500
	16,9	6,4 - 12,7	10612048169	500
	24,8	12,7 - 19,8	10612048248	500
9,8	d_m 2,8	k 1,5	4,9 mm	1530 N ↪ 2300 N

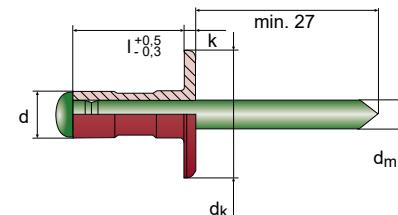
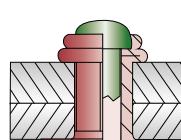
OPTO®

**Series
612****CAD
DATA
ONLINE**
OPTO® Multigrip Blind Rivet
□ Aluminium ■ Stainless Steel A2
Countersunk Head | open


EN AW-5052 [AlMg2,5]

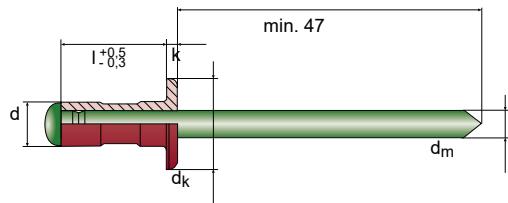
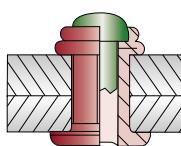
d	+1	⊖	No.	
4,0	9,7	1,2 - 6,4	10612400097	500
	12,7	4,3 - 9,5	10612400127	500
7,5	d_m 2,1	4,1 mm	950 N	1500 N

d	+1	⊖	No.	
4,8	12,1	4,0 - 8,0	10612480121	500

**Series
672****CAD
DATA
ONLINE**
OPTO® Multigrip Blind Rivet
□ Aluminium ■ Stainless Steel A2
Large Dome Head | open


EN AW-5052 [AlMg2,5]

d	+1	⊖	No.	
4,8	10,3	1,6 - 6,4	10672048103	500
	16,9	6,4 - 12,7	10672048169	500
	24,8	12,7 - 19,8	10672048248	250
16,0	d_m 2,8	k 1,8	4,9 mm	1530 N ↪ 2300 N



EN AW-5052 [AlMg2,5]

d	+1		No.	
3,2	8,0	0,8 - 4,8	10622032080	500
	11,1	4,0 - 7,9	10622032111	500
4,0	9,5	1,2 - 6,4	10622040095	500
4,8	16,9	4,0 - 9,5	10622040169	500
	7,9	d_m 2,3	k 1,2	4,1 mm 980 N 1320 N

d	+1		No.	
4,8	10,3	1,5 - 6,0	10622048103	500
	16,9	4,8 - 11,1	10622048169	500
9,8	d_m 2,8	k 1,5	4,9 mm 1530 N 2300 N	

Extended nosepieces 20 mm (diameter 7 mm)

BZ 103 A (and predecessors) / Battery riveter RivdomONE

Blind rivet 3,0/3,2 mm	321103932200
Blind rivet 4,0 mm	321103940200
Blind rivet 4,8/5,0 mm	321103950200

BZ 123 A (and predecessors)

Blind rivet 4,0 mm	321123940200
Blind rivet 4,8/5,0 mm	321123950200
Blind rivet 6,0 mm	321123960200
Blind rivet 6,4 mm	321123964200

Battery riveter Rivdom eBZ ZERO / RivSmart eBZ ZERO s

321200932200	Extended nosepiece (20 mm) 3,0/3,2 mm
321200940200	Extended nosepiece (20 mm) 4,0 mm

Battery riveter Rivdom eBZ 1

321420924200	Extended nosepiece (20 mm) 2,4 mm
321420932200	Extended nosepiece (20 mm) 3,0/3,2 mm
321420940200	Extended nosepiece (20 mm) 4,0 mm
321420950200	Extended nosepiece (20 mm) 4,8/5,0 mm



The universal OPTO®

for extended nosepieces for easy access to deep-seated riveting points using standard tools without changing the clamping mechanism.

Other blind rivet types with extended mandrel are available on request.

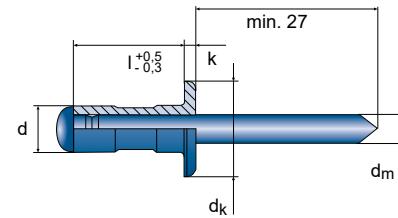
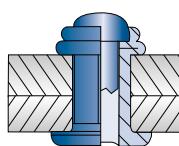


Series
607

CAD
DATA
ONLINE

OPTO® Multigrip Blind Rivet

Steel galvanized Steel galvanized
Dome Head | open



d	l ⁺¹	+	No.	
3,2	9,0	1,1 - 4,0	10607032090	500
	13,0	1,0 - 9,0	10607032130	500
dk 6,2	dm 2,1	k 0,9	3,3 mm	1500 N ↘ 1700 N
4,0	11,0	2,0 - 6,5	10607040110	500
	14,5	4,5 - 9,0	10607040145	500
dk 8,1	dm 2,7	k 1,2	4,1 mm	1950 N ↘ 2350 N

d	l ⁺¹	+	No.	
4,8	10,3	1,2 - 4,8	10607048103	500
	14,5	4,0 - 9,0	10607048145	500
dk 9,8	dm 2,9	k 1,8	4,9 mm	2700 N ↘ 3300 N

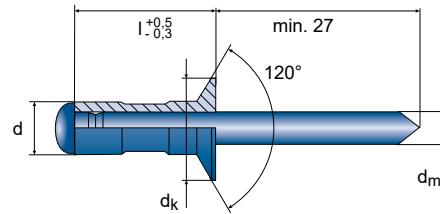
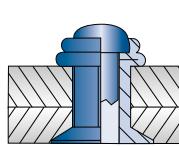
▶ Further sizes in diameter 6.4 mm can be found from page 65 in section "High-strength blind rivets".

Series
607

CAD
DATA
ONLINE

OPTO® Multigrip Blind Rivet

Steel galvanized Steel galvanized
Countersunk Head | open



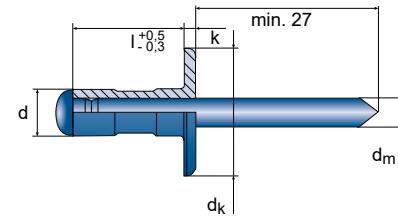
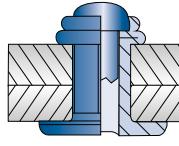
d	l ⁺¹	+	No.	
4,8	17,0	6,5 - 11,5	10607480170	500
	14,0	4,5 - 7,5	10607480140	500
	11,0	3,0 - 6,0	10607480110	500
dk 9,0	dm 2,9	4,9 mm	2000 N	2900 N ↘

Series
677

CAD
DATA
ONLINE

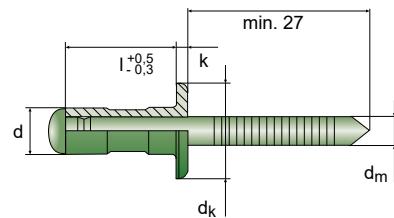
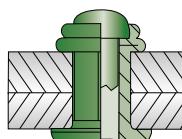
OPTO® Multigrip Blind Rivet

Steel galvanized Steel galvanized
Large Dome Head | open



d	l ⁺¹	+	No.	
4,8	11,0	1,0 - 6,0	10677048110	500
	16,9	3,0 - 12,0	10677048169	500
dk 16,0	dm 3,4	k 1,6	4,9 mm	2050 N ↘ 2940 N

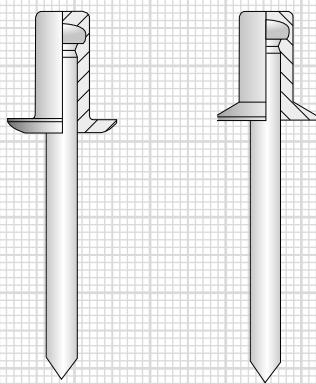
▶ General information on blind rivets can be found in the technical appendix from page 116.



d	+1		No.	
3,2	8,0	1,0 - 4,0	10618032080	500
	12,0	1,0 - 7,0	10618032120	500
dk 7,3	dm 2,1	k 0,9	3,3 mm	1600 N 2000 N
4,0	10,0	1,0 - 4,5	10618040100	500
	12,0	2,5 - 6,5	10618040120	500
	15,0	4,5 - 9,5	10618040150	500
dk 7,9	dm 2,8	k 1,3	4,1 mm	2700 N 3500 N

d	+1		No.	
4,8	10,3	1,5 - 6,0	10618048103	500
	12,7	2,5 - 7,5	10618048127	500
	15,0	6,5 - 10,5	10618048150	500
	17,5	7,5 - 12,5	10618048175	500
dk 9,8	dm 3,4	k 1,8	4,9 mm	3900 N 5000 N





The special properties mentioned above make the **HONSEL CERTO®** sealed blind rivet a preferred fastener for the automotive industry, e.g. in airbag production.

Further fields of application can be found

- in tank and container manufacturing,
- in the construction industry, and
- in air conditioning and ventilation technology.



On request, larger quantities of **CERTO®** sealed blind rivets and other closed blind rivet products can be provided with additional sealants.

In view of the steadily growing demand for **optimum leak-tightness**, we offer various solutions.

We supply neoprene rings either loose or pre-assembled by machine, or produce the required fasteners with directly moulded and certified sealants.

The sealed rivet.

Thanks to their cup-shaped rivet sleeve, **CERTO®** sealed blind rivets are the specialists when it comes to **liquid-tight riveting**. Thanks to this special design, the **breakstem is also captive**. In addition, the rivet forms a **smooth, burr-free closing head** and is therefore very well suited to **automatic riveting**.

CERTO®



Options of additional sealing for closed blind rivet products

Various trials have shown that **CERTO®** fasteners feature excellent **splash water-tightness** in practice.

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.



General information on blind rivets can be found in the **technical appendix** from **page 116**.

CERTO® Sealed Blind Rivet

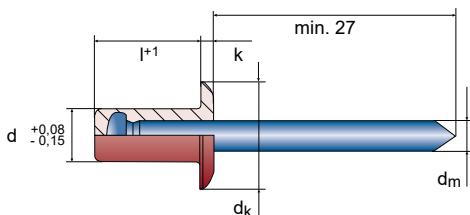
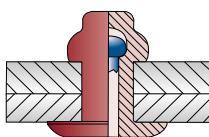
Aluminium Steel galvanized
Dome Head | closed



DIN EN ISO
15973

CAD
DATA
ONLINE

Series
900



EN AW-5019 [AlMg5]

	d	+1		No.	
3,2	6,5	0,5 - 2,0		10900032065	500
	8,0	1,5 - 3,5		10900032080	500
	9,5	3,0 - 5,0		10900032095	500
	11,0	4,5 - 6,5		10900032110	500
	12,5	6,0 - 8,0		10900032125	500

dk 6,0 - 0,3 **dm** 1,7 **k** 1,1 ± 0,15 3,3 mm 1100 N 1450 N

	d	+1		No.	
4,8	8,5	0,5 - 3,5		10900048085	500
	9,5	3,0 - 5,0		10900048095	500
	11,0	4,5 - 6,5		10900048110	500
	13,0	6,0 - 8,0		10900048130	500
	14,5	7,5 - 9,5		10900048145	500

dk 9,5 - 0,4 **dm** 2,7 **k** 1,5 ± 0,2 4,9 mm 2480 N 3540 N

CERTO® Sealed Blind Rivet

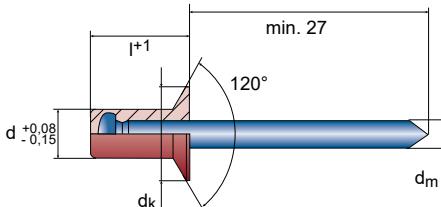
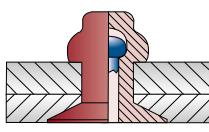
Aluminium Steel galvanized
Countersunk Head | closed



DIN EN ISO
15974

CAD
DATA
ONLINE

Series
900



EN AW-5019 [AlMg5]

	d	+1		No.	
3,2	8,0	1,0 - 3,5		10900320080	500
	9,5	2,5 - 5,0		10900320095	500
	11,0	4,0 - 6,5		10900320110	500

dk 6,0 - 0,3 **dm** 1,7 3,3 mm 1100 N 1450 N

	d	+1		No.	
4,8	9,5	1,5 - 5,0		10900480095	500
	11,0	4,0 - 6,5		10900480110	500
	13,0	6,0 - 8,0		10900480130	500
	14,5	7,5 - 9,5		10900480145	500
	16,0	9,0 - 11,0		10900480160	500

dk 8,0 - 0,4 **dm** 2,2 4,1 mm 1700 N 2700 N



Series
902

CAD
DATA
ONLINE

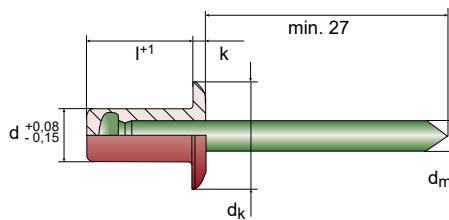
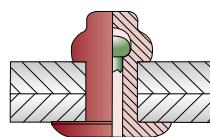
in accordance
with
DIN EN ISO
15973

CERTO® Sealed Blind Rivet

Aluminium

Stainless Steel A2

Dome Head | closed



EN AW-5019 [AlMg5]

d	I +1		No.	
3,2	6,5	0,5 - 2,0	10902032065	500
	8,0	1,5 - 3,5	10902032080	500
	9,5	3,0 - 5,0	10902032095	500
	11,0	4,5 - 6,5	10902032110	500
	12,5	6,0 - 8,0	10902032125	500

dk 6,0 - 0,3 **d_m** 1,7 **k** 1,1 ± 0,15 3,3 mm 1100 N 1450 N

d	I +1		No.	
4,0	8,0	0,5 - 3,5	10902040080	500
	9,5	3,0 - 5,0	10902040095	500
	11,0	4,5 - 6,5	10902040110	500
	12,5	6,0 - 8,0	10902040125	500

dk 8,0 - 0,4 **d_m** 2,2 **k** 1,3 ± 0,2 4,1 mm 1700 N 2700 N

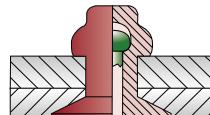
CERT

d	I +1		No.	
4,8	8,0	0,5 - 3,5	10902048080	500
	9,5	3,0 - 5,0	10902048095	500
	11,0	4,5 - 6,5	10902048110	500
	12,5	6,0 - 8,0	10902048125	500
	14,0	7,5 - 9,5	10902048140	500
	16,0	9,0 - 11,0	10902048160	500
	18,0	10,5 - 13,0	10902048180	500
	21,0	12,5 - 16,0	10902048210	500
dk 9,5 - 0,4	d_m 2,7	k 1,5 ± 0,2	4,9 mm 2480 N 3540 N	

Series
902

CAD
DATA
ONLINE

in accordance
with
DIN EN ISO
15974

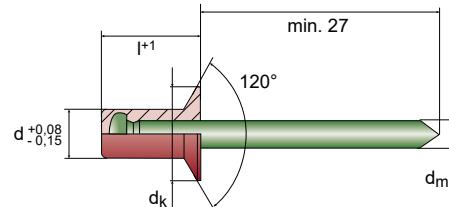


CERTO® Sealed Blind Rivet

Aluminium

Stainless Steel A2

Countersunk Head | closed



EN AW-5019 [AlMg5]

d	I +1		No.	
4,0	9,5	1,5 - 5,0	10902400095	500
	11,0	4,0 - 6,5	10902400110	500
	12,5	6,0 - 8,0	10902400125	500

dk 8,0 - 0,3 **d_m** 2,2 4,1 mm 1700 N 2700 N



CERTO® dome-head blind rivets
in ventilation engineering.



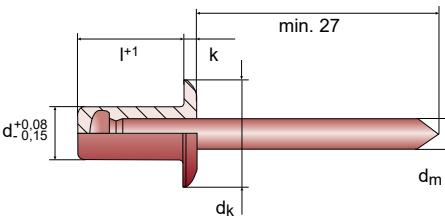
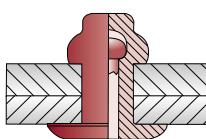
CERTO® Sealed Blind Rivet

Aluminium Aluminium
Dome Head | closed

DIN EN ISO
15975

CAD
DATA
ONLINE

Series
901



EN AW-1050A [Al99,5]

d	+1		No.	
3,2	8,0	0,5 - 3,5	10901032080	500
	9,5	3,5 - 5,0	10901032095	500

d_k 6,0 -0,3 d_m 1,9 k 1,1 ±0,15 $\square\!\square\!\square$ 3,3 mm $\leftarrow\!\!\!-\!\!\rightleftharpoons$ 520 N $\leftarrow\!\!\!-\!\!\rightleftharpoons$ 540 N

d	+1		No.	
4,0	9,5	0,5 - 5,0	10901040095	500

d_k 8,0 -0,4 d_m 2,2 k 1,3 ±0,2 $\square\!\square\!\square$ 4,1 mm $\leftarrow\!\!\!-\!\!\rightleftharpoons$ 720 N $\leftarrow\!\!\!-\!\!\rightleftharpoons$ 760 N

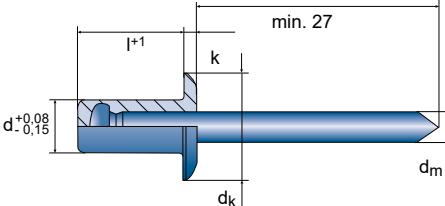
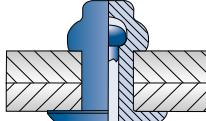
CERTO® Sealed Blind Rivet

Steel galvanized Steel galvanized
Dome Head | closed

DIN EN ISO
15976

CAD
DATA
ONLINE

Series
907



d	+1		No.	
3,2	6,0	0,5 - 1,5	10907032060	500
	8,0	1,0 - 3,0	10907032080	500
	9,5	2,5 - 5,0	10907032095	500

d_k 6,0 -0,3 d_m 1,9 k 1,0 ±0,3 $\square\!\square\!\square$ 3,3 mm $\leftarrow\!\!\!-\!\!\rightleftharpoons$ 1150 N $\leftarrow\!\!\!-\!\!\rightleftharpoons$ 1300 N

d	+1		No.	
4,0	8,0	0,5 - 1,5	10907040060	500
	8,0	1,0 - 3,0	10907040080	500
	9,5	2,5 - 5,0	10907040095	500
	12,0	4,5 - 6,5	10907040120	500

d_k 9,5 -0,3 d_m 2,9 k 1,7 ±0,3 $\square\!\square\!\square$ 4,9 mm $\leftarrow\!\!\!-\!\!\rightleftharpoons$ 2400 N $\leftarrow\!\!\!-\!\!\rightleftharpoons$ 2800 N

d	+1		No.	
4,8	6,0	0,5 - 1,5	10907048080	500
	8,0	1,0 - 3,0	10907048095	500
	12,0	4,5 - 6,5	10907048120	500
	16,0	6,0 - 10,5	10907048160	500

d_k 8,0 -0,3 d_m 2,3 k 1,4 ±0,3 $\square\!\square\!\square$ 4,1 mm $\leftarrow\!\!\!-\!\!\rightleftharpoons$ 1730 N $\leftarrow\!\!\!-\!\!\rightleftharpoons$ 1860 N



CERTO® steel blind rivets with thick-film passivation.

Thanks to the use of a thick-film passivation common in the automotive industry adapted to the properties of the sealed blind rivet, CERTO® steel sealed blind rivets have **very high corrosion resistance**.



General information on blind rivets can be found in the technical appendix from page 116.

Series
908

CAD
DATA
ONLINE

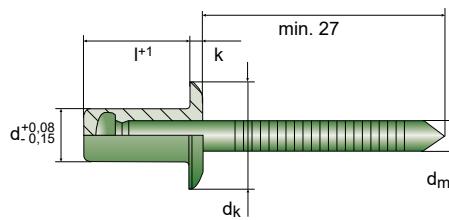
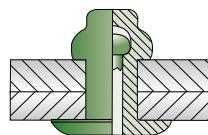
DIN EN ISO
16585

CERTO® Sealed Blind Rivet

Stainless Steel A2

Stainless Steel C1

Dome Head | closed



[1.4301]

	d	+1		No.	
3,2	6,0	0,5 - 1,5		10908032060	500
	8,0	1,0 - 3,5		10908032080	500
	9,5	2,5 - 5,0		10908032095	500
	12,0	4,5 - 7,0		10908032120	500

d_k 6,0 - 0,3 d_m 1,9 k 1,0 ± 0,3 $\rightarrow\!\!\!-\!\!\!$ 3,3 mm $\leftarrow\!\!\!-\!\!\!$ 2000 N $\uparrow\!\!\!\downarrow$ 2500 N

	d	+1		No.	
4,0	6,0	0,5 - 1,5		10908040060	500
	8,0	1,0 - 3,0		10908040080	500
	9,5	2,5 - 4,5		10908040095	500
	12,0	4,5 - 7,0		10908040120	500
	16,0	8,0 - 11,0		10908040160	500

d_k 8,0 - 0,3 d_m 2,3 k 1,4 ± 0,3 $\rightarrow\!\!\!-\!\!\!$ 4,1 mm $\leftarrow\!\!\!-\!\!\!$ 3000 N $\uparrow\!\!\!\downarrow$ 4000 N

	d	+1		No.	
4,8	8,0	0,5 - 4,0		10908048080	500
	9,5	2,5 - 5,0		10908048095	500
	12,0	4,5 - 7,5		10908048120	500
	16,0	6,0 - 11,0		10908048160	500
	20,0	9,0 - 14,5		10908048200	500

d_k 9,5 - 0,3 d_m 2,9 k 1,7 ± 0,3 $\rightarrow\!\!\!-\!\!\!$ 4,9 mm $\leftarrow\!\!\!-\!\!\!$ 4500 N $\uparrow\!\!\!\downarrow$ 5500 N

	d	+1		No.	
6,4	10,0	2,5 - 5,0		10908064100	250
	12,0	4,5 - 6,5		10908064120	250
	16,0	6,0 - 10,5		10908064160	250
	18,0	7,5 - 11,5		10908064180	250
	20,0	9,0 - 14,5		10908064200	250

d_k 12,5 - 0,3 d_m 3,8 k 2,0 ± 0,3 $\rightarrow\!\!\!-\!\!\!$ 6,5 mm $\leftarrow\!\!\!-\!\!\!$ 6500 N $\uparrow\!\!\!\downarrow$ 8000 N

Series
908

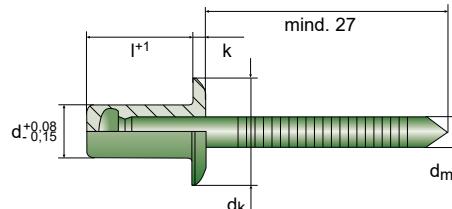
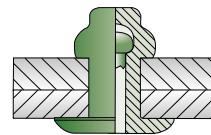
CAD
DATA
ONLINE

CERTO® PERFECT Special Sealed Blind Rivet

Stainless Steel A2

Stainless Steel C1

Dome Head | closed



	d	+1		No.	
4,8	12,0	0,5 - 4,5		10908048120/10301	500
	13,7	3,5 - 6,0		10908048137/10301	500

d_k 9,5 - 0,3 d_m 2,9 k 1,3 ± 0,15 $\rightarrow\!\!\!-\!\!\!$ 4,9 mm $\leftarrow\!\!\!-\!\!\!$ 4500 N $\uparrow\!\!\!\downarrow$ 5500 N



The sealed blind rivet for special demands.

Thanks to its special clamping of the rivet sleeve, the powerful CERTO® PERFECT sealed blind rivet forms a **large, uniform closing head**.

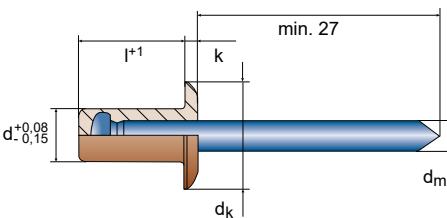
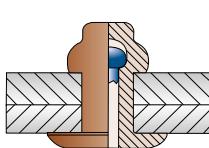
This greatly reduces the risk of the rivet being pulled through if the holes in the part are drilled too large, and **increases the process reliability**.

In addition, the **leak-tightness even with standing water** is considerably improved.

HONSEL - CERTO® in stainless steel A4

In line with the trend to more and more high-grade materials and surfaces, we also produce the **CERTO® sealed blind rivet** in stainless steel quality A4 on request. Particularly in plant and container construction, but also in the field of seawater-related applications, in shipyards or in safety-relevant areas of power stations, the A4 **CERTO®** is an outstanding fastener solution.

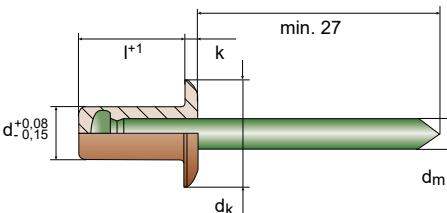
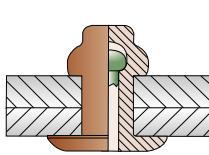




[2.0040]

d	+1		No.	
3,2	6,5	0,5 - 2,0	10905032065	500
	8,0	1,5 - 3,5	10905032080	500
	9,5	3,0 - 5,0	10905032095	500
	12,5	4,5 - 8,0	10905032125	500

dk 6,0-0,3 d_m 1,7 k 1,1 ±0,15 3,3 mm 970 N 1270 N



[2.0040]

d	+1		No.	
3,2	6,5	0,5 - 2,0	10906032065	500
	8,0	1,5 - 3,5	10906032080	500
	9,5	3,0 - 5,0	10906032095	500
	12,5	4,5 - 8,0	10906032125	500

dk 6,0-0,3 d_m 1,7 k 1,1 ±0,15 3,3 mm 1050 N 1350 N

d	+1		No.	
4,0	8,0	0,5 - 3,5	10906040080	500

dk 8,0-0,4 d_m 2,2 k 1,3 ±0,2 4,1 mm 1450 N 2300 N

CE nosepieces

CERTO® sealed blind rivets can be processed with most standard nosepieces. In order to prevent the formation of burrs even on versions without head recess, however, we also offer the corresponding CE nosepieces. These can be found alongside the corresponding setting tools.



HIGH-STRENGTH blind rivets

High-strength blind rivets play **a key role** wherever safety, high shear forces and large clamping strengths are important.

HONSEL supplies four different series and can thus cover practically every requirement.

OPTO® BULB The flexible solution.

FERO® BULB The powerful solution.

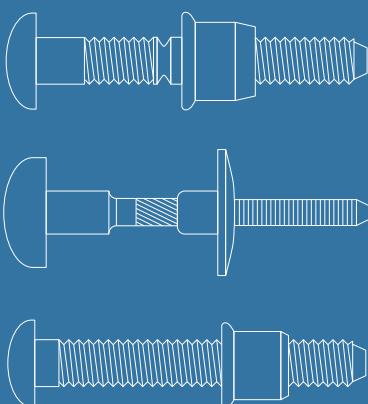
FERO® BOLT The secure solution.

FERO® LOCK The universal solution.

High strength
Blind Rivet

Please note on the following pages **the matching tool solutions** with clamping mechanism optimally geared to the respective rivet!

High-strength blind rivets are used, for example, in the **production of a wide variety of means of transport** such as trucks and semi-trailers, trailers, caravans and mobile homes, as well as in rail-bound systems such as locomotives, wagons and trams, but also in the manufacture of cable cars.



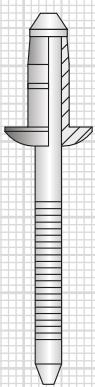
Lockbolt pins

For a large number of these different two-piece fastener elements, we offer reliable solutions for riveting in parts accessible from both sides.

Lockbolt pins are characterised by particularly high tensile and pretensioning forces and very large clamping ranges.



OPTO® BULB multigrip blind rivet



The flexible solution.

Large clamping ranges and high tensile and shear strengths – the universal rivet for tough applications.

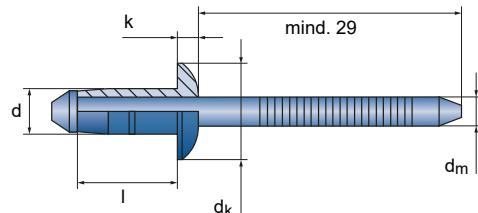
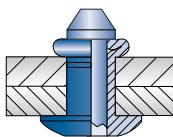
The OPTO® BULB combines the flexibility of a multigrip rivet with the excellent power of the high-strength FERO® BULB series and offers **secure locking** of the breakstem and a **uniformly shaped closing head**.

OPTO®-BULB Multigrip Blind Rivet -high strength-

Steel galvanized Steel galvanized
Dome Head | open

CAD
DATA
ONLINE

Series
692



d	+1	+	No.	
6,4	13,0	1,5 - 5,5	10692064130	250
	17,0	5,0 - 9,0	10692064170	250

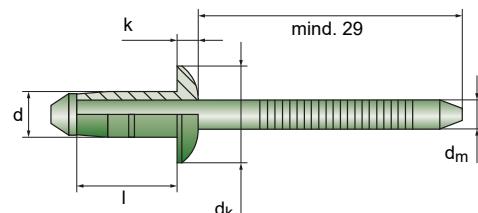
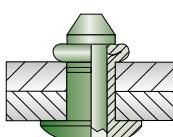
dk 13,4 dm 4,1 k 3,1 6,7 - 6,9 mm 11000 N 7800 N

OPTO®-BULB Multigrip Blind Rivet -high strength-

Stainless Steel A2 Stainless Steel A2
Dome Head | open

CAD
DATA
ONLINE

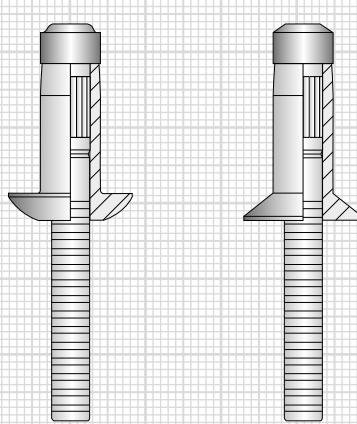
Series
691



d	+1	+	No.	
6,4	13,0	1,5 - 5,5	10691064130	250
	17,0	5,0 - 9,0	10691064170	250

dk 13,4 dm 4,1 k 3,1 6,7 - 6,9 mm 14000 N 8000 N

FERO® BULB long shank breakage blind rivet



The powerful solution.

High-strength FERO® BULB blind rivets are used in large quantities, for example, in vehicle and container construction and are characterised by the combination of a number of outstanding properties.

- **Very high shear breaking strength** thanks to load-bearing breakstem
- Positive locking of the mandrel inside the head
- Large closing head
- Free from rattling noises
- Dust and splash water-tight
- High tensile force on the parts

FERO®-BULB

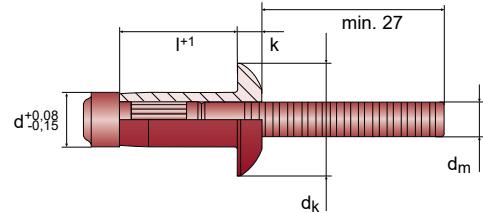
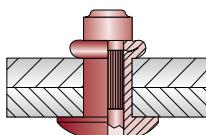


Series
790

CAD
DATA
ONLINE

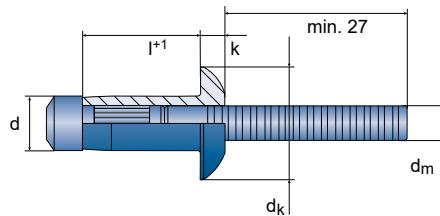
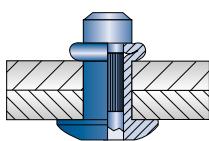
FERO®-BULB Structural Blind Rivet

Aluminium | Aluminium
Dome Head | open



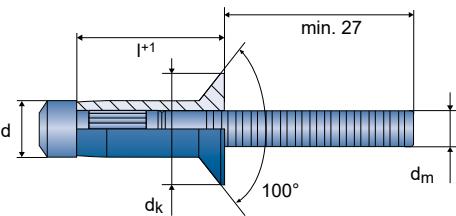
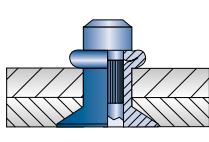
d	I +1	$\frac{d}{4}$	No.	
6,4	10,5	2,8 - 4,8	10790064105	250
d _k 13,0	d _m 4,2	k 3,0 $\square \square \square$ 6,7 - 6,9 mm	4200 N	3100 N
6,4	12,5	4,8 - 6,8	10790064125	250
d _k 13,0	d _m 4,2	k 3,0 $\square \square \square$ 6,7 - 6,9 mm	4500 N	3100 N
6,4	14,5	6,8 - 8,8	10790064145	250
d _k 13,0	d _m 4,2	k 3,0 $\square \square \square$ 6,7 - 6,9 mm	4600 N	3100 N

d	I +1	$\frac{d}{4}$	No.	
6,4	16,5	8,8 - 10,8	10790064165	250
d _k 13,0	d _m 4,2	k 3,0 $\square \square \square$ 6,7 - 6,9 mm	5000 N	3100 N
6,4	18,5	10,8 - 12,8	10790064185	250
d _k 13,0	d _m 4,2	k 3,0 $\square \square \square$ 6,7 - 6,9 mm	5400 N	3100 N
6,4	20,5	12,8 - 14,8	10790064205	250
d _k 13,0	d _m 4,2	k 3,0 $\square \square \square$ 6,7 - 6,9 mm	5600 N	3100 N



d	+1		No.	
4,8	9,0	1,5 - 3,5	10792048090	500
dk 9,6	dm 3,1	dk 1,5 4,9 - 5,1 mm	3600 N 3800 N	
4,8	11,5	3,5 - 6,0	10792048115	500
dk 9,6	dm 3,1	dk 1,5 4,9 - 5,1 mm	4200 N 3800 N	
4,8	14,5	6,0 - 8,5	10792048145	250
dk 9,6	dm 3,1	dk 1,5 4,9 - 5,1 mm	5600 N 3800 N	
6,4	9,0	1,5 - 3,5	10792064090	250
dk 13,4	dm 4,2	dk 2,7 6,7 - 6,9 mm	10000 N 7800 N	
6,4	10,5	2,8 - 4,8	10792064105	250
dk 13,4	dm 4,2	dk 2,7 6,7 - 6,9 mm	11000 N 7800 N	
6,4	12,5	4,8 - 6,8	10792064125	250
dk 13,4	dm 4,2	dk 2,7 6,7 - 6,9 mm	12500 N 7800 N	

d	+1		No.	
6,4	14,5	6,8 - 8,8	10792064145	250
dk 13,4	dm 4,2	dk 2,7 6,7 - 6,9 mm	13000 N 7800 N	
6,4	16,5	8,8 - 10,8	10792064165	250
dk 13,4	dm 4,2	dk 2,7 6,7 - 6,9 mm	14500 N 7800 N	
6,4	18,5	10,8 - 12,8	10792064185	250
dk 13,4	dm 4,2	dk 2,7 6,7 - 6,9 mm	15000 N 7800 N	
6,4	20,5	12,8 - 14,8	10792064205	250
dk 13,4	dm 4,2	dk 2,7 6,7 - 6,9 mm	16500 N 7800 N	
7,8	13,5	4,0 - 7,0	10792078135	100
dk 16,0	dm 5,1	dk 3,7 8,0 - 8,3 mm	13800 N 9100 N	
7,8	16,5	7,0 - 10,0	10792078165	100
	19,5	10,0 - 13,0	10792078195	100
	22,5	13,0 - 16,0	10792078225	100
dk 16,0	dm 5,1	dk 3,7 8,0 - 8,3 mm	15700 N 9100 N	



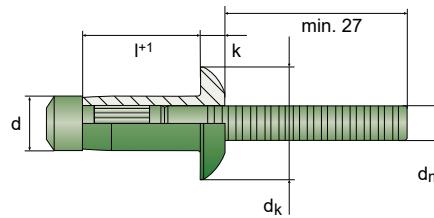
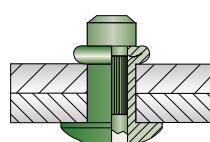
d	+1		No.	
6,4	11,5	3,8 - 5,8	10792640115	250
dk 10,0	dm 4,2	6,7 - 6,9 mm	5300 N 5400 N	
6,4	13,5	5,8 - 7,8	10792640135	250
dk 10,0	dm 4,2	6,7 - 6,9 mm	7300 N 5400 N	

d	+1		No.	
6,4	15,5	7,8 - 9,8	10792640155	250
dk 10,0	dm 4,2	6,7 - 6,9 mm	9300 N 5400 N	
6,4	17,5	9,8 - 11,8	10792640175	250
	19,5	11,8 - 13,8	10792640195	250
6,4	21,5	13,8 - 15,8	10792640215	250
	23,5	15,8 - 17,8	10792640235	250
dk 10,0	dm 4,2	6,7 - 6,9 mm	10300 N 5400 N	

Series
791

CAD
DATA
ONLINE

FERO®-BULB Structural Blind Rivet
 Stainless Steel A2 Stainless Steel A2
 Dome Head | open



	d	+1		No.	
4,0	7,5	1,0 - 3,0		10791040075	500
	10,0	3,0 - 5,0		10791040100	500
	12,5	5,0 - 7,0		10791040125	500
	d_k 8,0	d_m 2,6	k 1,5 4,1 - 4,3 mm	5200 N	4000 N

4,8	10,0	1,5 - 3,5		10791048100	500
	12,5	3,5 - 6,0		10791048125	500
	15,5	6,0 - 8,5		10791048155	250
	d_k 9,6	d_m 3,2	k 1,5 4,9 - 5,1 mm	5500 N	5000 N

	d	+1		No.	
6,4	10,5	2,8 - 4,8		10791064105	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		10791064125	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		10791064145	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		10791064165	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		10791064185	250
	d_k 13,4	d_m 3,9	k 2,7 6,7 - 6,9 mm	15000 N	8800 N

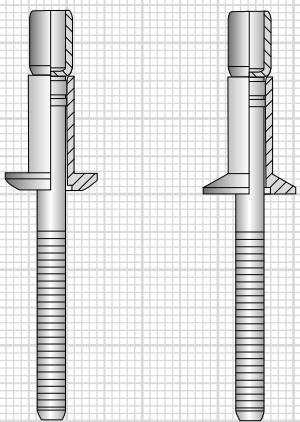


General information on blind rivets can be found in the technical appendix from page 116.

FERO®-BULB

FERO® BOLT structural blind rivet

FERO®-BOLT



Available up to 9.8 mm diameter!



The secure solution.

FERO® BOLT blind rivets are the high-quality fastener element for industrial applications where particular attention is paid to the factor **safety**. The use of the special nosepieces required also allows the **locking of the mandrel to be checked visually**! A big bonus in terms of process reliability!

Thanks to its design, the rivet is able to take on a **load-bearing** function. Characteristic for the structural blind rivet is the **guaranteed flush shearing** in the area of the setting head.

- Good visual control and positive **locking of the mandrel inside the head**
- **Very high shear breaking strength** thanks to load-bearing breakstem
- **Very large clamping range**
- **Vibration-resistant and splash water-proof**
- **Very good bore filling properties and outstanding compensation of bore tolerances**

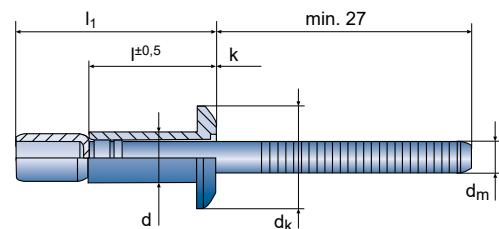
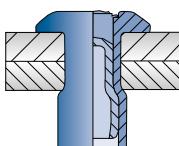
FERO®-BOLT Structural Blind Rivet

Steel galvanized Steel galvanized
Dome Head | open



CAD
DATA
ONLINE

Series
797



d	l	l ₁	k	No.	
4,8	10,0	18,2	1,6 - 6,9	10797048100	500
	14,0	24,4	1,6 - 11,1	10797048140	500

dk 10,1 dm 2,9 k 2,1 4,9 - 5,1 mm 5800 N 4100 N

d	l	l ₁	k	No.	
6,4	14,0	23,7	2,0 - 9,5	10797064140	250
	19,0	32,9	2,0 - 15,9	10797064190	250

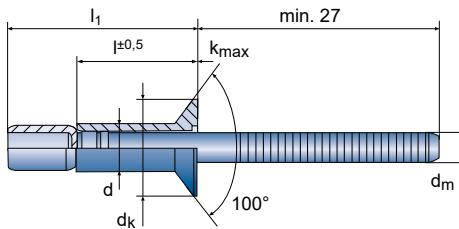
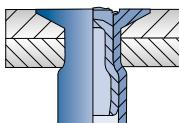
dk 13,3 dm 3,9 k 2,9 6,6 - 7,0 mm 10500 N 8000 N

FERO®-BOLT Structural Blind Rivet

Steel galvanized Steel galvanized
Countersunk Head | open

CAD
DATA
ONLINE

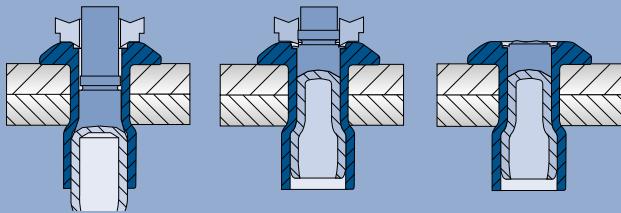
Series
797



d	l	l ₁	k	No.	
6,4	16,5	27,0	3,2 - 12,1	10797640165	250

dk 10,0 dm 3,9 k 2,4 6,6 - 7,0 mm 11000 N 9500 N

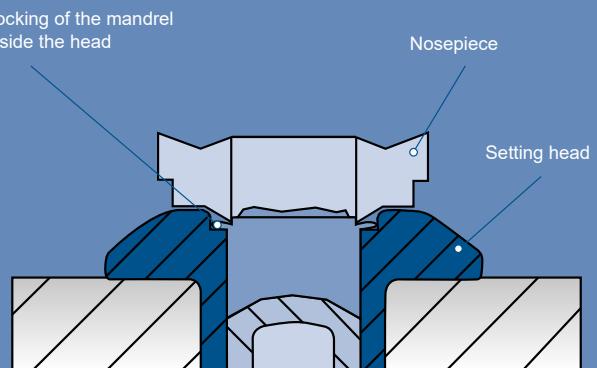
Setting sequence



When the mandrel is pulled back, the head is deformed so that the rivet is adapted perfectly to the parts to be riveted by the wall pressure.

The special nosepiece required ensures the functionally safe locking of the mandrel inside the head.

Setting principle



Please note that the tool used must be equipped with the **special nosepiece** shown!

These can be found together with the corresponding tool.

**Series
798**

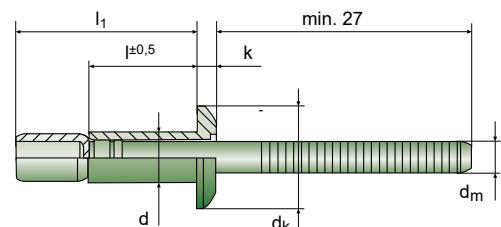
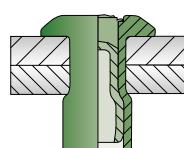
**CAD
DATA
ONLINE**

FERO®-BOLT Structural Blind Rivet

■ Stainless Steel A2

■ Stainless Steel A2

Dome Head | open



d	l	l ₁	+	No.	
4,8	10,0	18,2	1,6 - 6,9	10798048100	500
	14,0	24,4	1,6 - 11,1	10798048140	500

dk 10,1 dm 2,9 k 2,1 4,9 - 5,1 mm 6000 N 4500 N

d	l	l ₁	+	No.	
6,4	14,0	23,7	2,0 - 9,5	10798064140	250
	19,0	32,9	2,0 - 15,9	10798064190	250

dk 13,3 dm 3,9 k 2,9 6,6 - 7,0 mm 10500 N 8200 N

**Series
798**

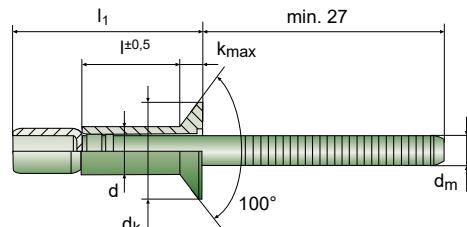
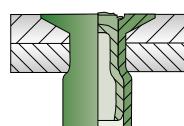
**CAD
DATA
ONLINE**

FERO®-BOLT Structural Blind Rivet

■ Stainless Steel A2

■ Stainless Steel A2

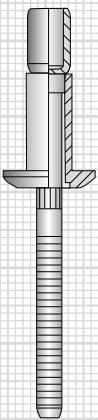
Countersunk Head | open



d	l	l ₁	+	No.	
6,4	16,7	27,0	4,1 - 12,1	10798640167	250

dk 10,0 dm 3,9 k 2,9 6,6 - 7,0 mm 11200 N 8900 N

FERO® LOCK structural blind rivet

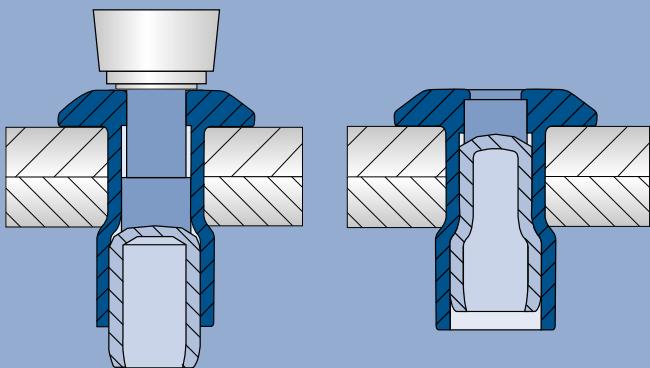


The universal solution.

With the **large clamping ranges** of a multigrip blind rivet and **secure mechanical locking** of the load-bearing breakstem for **high shear fracture forces**, **HONSEL FERO® LOCK** blind rivets can be used wherever **high strength** in combination with **splash water-tightness** and **absolute vibration resistance** are demanded.

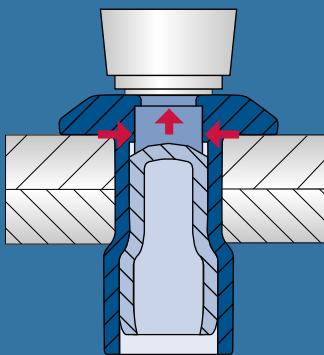
Due to its type, the rivet is well able to compensate tolerances of the drill hole.

The rivet is set **without a special nosepiece**.

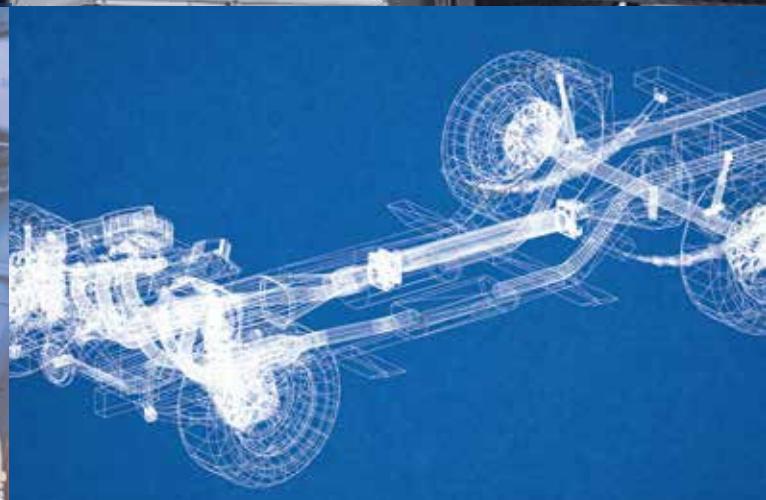


The specially formed head of the **FERO® LOCK** slides into the sleeve of the rivet and presses it firmly into the hole.

Setting principle



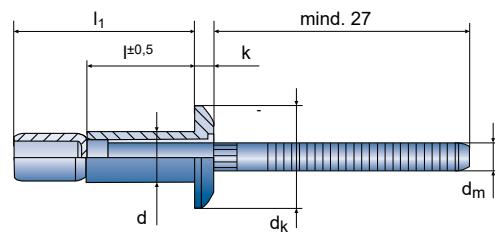
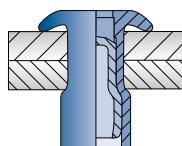
The stud is locked mechanically by a step pressed in under the rivet head.



Series
795

CAD
DATA
ONLINE

FERO®-LOCK Structural Blind Rivet
Steel galvanized Steel galvanized
Dome Head | open



d	l	l ₁		No.	
6,4	15,6	25,3	2,0 - 9,5	10795064140	250
	21,7	35,6	2,0 - 15,9	10795064190	250

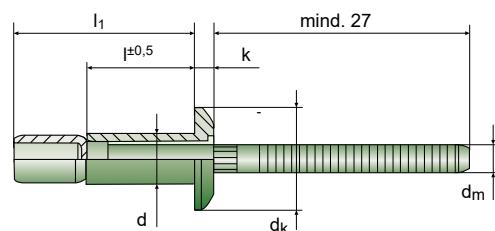
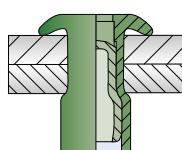
dk 13,5 **dm** 4,1 **k** 2,9  6,6 - 7,0 mm  10500 N  8200 N

FERO®-LOCK

Series
796

CAD
DATA
ONLINE

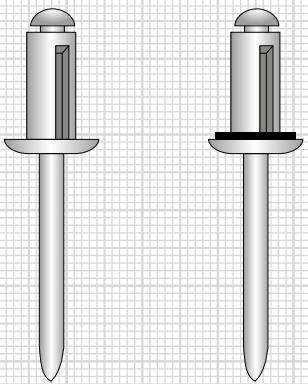
FERO®-LOCK Structural Blind Rivet
Stainless Steel A2 Stainless Steel A2
Dome Head | open



d	l	l ₁		No.	
6,4	15,6	25,3	2,0 - 9,5	10796064140	250
	21,7	35,6	2,0 - 15,9	10796064190	250

dk 13,5 **dm** 4,1 **k** 2,9  6,6 - 7,0 mm  10500 N  8200 N

Folding blind rivet



The wide spreading of the closing head of folding blind rivets ensures a **uniform distribution of the forces involved** similar to that of the **ARCO®** body-bound blind rivet to be seen on ► page 76 so that soft or brittle parts, in particular, are burdened less and the surfaces are protected. They can also be used on parts that are not flat, as the tabs of the closing head adapt to the contours.

Individually painted sizes also available on demand with sufficiently large orders.



Folding blind rivets are used, for example, in **industrial lightweight and façade construction**. **HONSEL** offers two different versions. The standard folding blind rivet and a **higher strength version with mounted neoprene washer**.

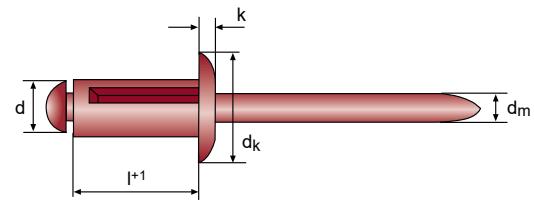
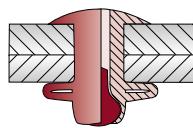


Series
716**CAD**
DATA
ONLINE**Folding Blind Rivet STANDARD**

Aluminium

Aluminium

Dome Head | open



	d	l +1		No.	
4,0	13,6	1,0 - 3,0		10716040136	500
	18,8	3,0 - 7,0		10716040188	500
	24,5	5,0 - 12,0		10716040245	500

dk 8,0 **dm** 2,5 **k** 1,4 4,2 mm 500 N 800 N

	d	l +1		No.	
4,8	15,3	1,0 - 4,0		10716048153	500
	20,5	1,0 - 9,0		10716048205	500
	24,5	4,0 - 12,0		10716048245	500

dk 9,6 **dm** 2,9 **k** 1,6 5,0 mm 900 N 1100 N



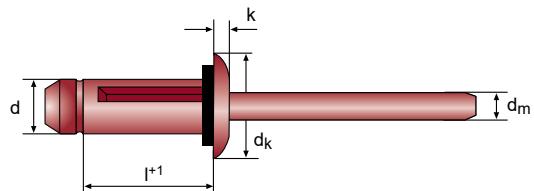
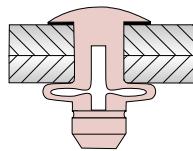
Versions with 16 mm large dome head available.

Series
716**CAD**
DATA
ONLINE**CERT****Folding Blind Rivet SPEZIAL-2 with neoprene sealing**

Aluminium

Aluminium

Dome Head | open



	d	l		No.	
5,2	17,5	0,5 - 4,8		10716052175	500
	19,1	1,5 - 6,4		10716052191	500
	22,2	4,7 - 9,6		10716052222	500
	25,4	7,9 - 12,7		10716052254	500
	28,6	11,1 - 15,9		10716052286	500

dk 11,5 **dm** 2,9 **k** 2,5 5,3 - 5,6 mm 3000 N 2000 N

	d	l		No.	
6,3	20,0	1,5 - 6,4		10716063200	500
	27,0	6,4 - 12,7		10716063270	250

dk 14,4 **dm** 3,9 **k** 3,0 6,4 - 6,7 mm 4900 N 3000 N

Thanks to the locking of the breakstem, the joint is also **splash water-proof**.

Further benefits

- Good load-bearing strength thanks to high tensile and shear values
- Large clamping range
- Universal applications

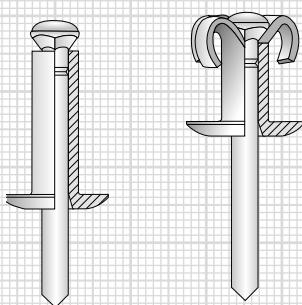
Please note that the tool used must be equipped with a **special nosepiece!****Nosepieces for folding blind rivets**

Folding blind rivets 5,2 BZ 103 A* / RivdomONE	321103716052
Folding blind rivets 5,2 BZ 123 A* / RivdomTWO	321123716052
Folding blind rivets 6,3 BZ 123 A* / RivdomTWO	321123716063

* (and predecessors)

ARCO® body-bound blind rivet

Body Bound
Blind Rivet ARCO®



With the ARCO® body-bound blind rivet, edges on the mandrel head ensure that the rivet sleeve is cut into four segments during setting. They then unfold on the component surface and form a **large-diameter closing head**. This enables **soft or porous parts** to be joined and to transmit high tensile forces.

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



ARCO® Body Bound Blind Rivet

Aluminium Steel galvanized
Dome Head | open



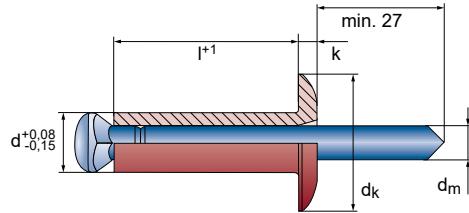
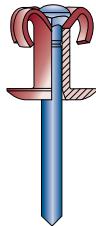
CAD
DATA
ONLINE

Series
710



EN AW-5019 [AlMg5]

d	+1		No.	
3,2	10,0	1,5 - 5,0	10710032100	500
	16,0	4,0 - 11,0	10710032160	500
	18,0	6,0 - 13,0	10710032180	500
d_k 6,5	d_m 1,7	k 0,8	3,6 mm 850 N 720 N	
4,0	10,0	1,5 - 5,0	10710040100	500
	16,0	4,0 - 11,0	10710040160	500
	18,0	6,0 - 13,0	10710040180	500
d_k 7,7	d_m 2,4	k 1,5	4,4 mm 1330 N 1300 N	



d	+1		No.	
4,8	10,0	1,5 - 4,0	10710048100	500
	15,0	3,0 - 9,0	10710048150	500
	21,0	8,0 - 15,0	10710048210	500
	26,0	14,0 - 20,0	10710048260	250
	35,0	20,0 - 28,0	10710048350	250
d_k 11,0	d_m 2,8	k 1,5	5,2 mm 2100 N 1950 N	

ARCO® Body Bound Blind Rivet

Aluminium Steel galvanized
Large Dome Head | open

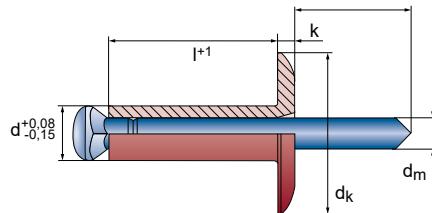
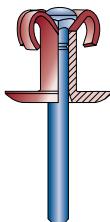
CAD
DATA
ONLINE

Series
718

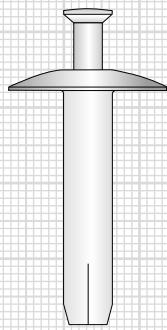


EN AW-5019 [AlMg5]

d	+1		No.	
4,8	15,0	3,0 - 9,0	10718048150	500
	21,0	8,0 - 15,0	10718048210	250
d_k 16,0	d_m 2,8	k 2,0	5,2 mm 1700 N 1700 N	



Hammer drive blind rivet



Hammer drive blind rivets are set simply by driving the rivet mandrel into the rivet sleeve.

Parts with through-hole or blind-end borehole can thus be riveted.

A wide range of material combinations are possible.

Typical applications are to be found in the construction industry for fastening, for example, claddings or insulation, profile strips, sheets and angle brackets.

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

Hammer drive
blind rivet

Series
602

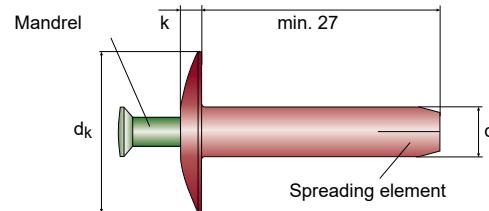
CAD
DATA
ONLINE

HAMMERDRIVE Blind Rivet

Aluminium

Stainless Steel A2

Dome Head | open

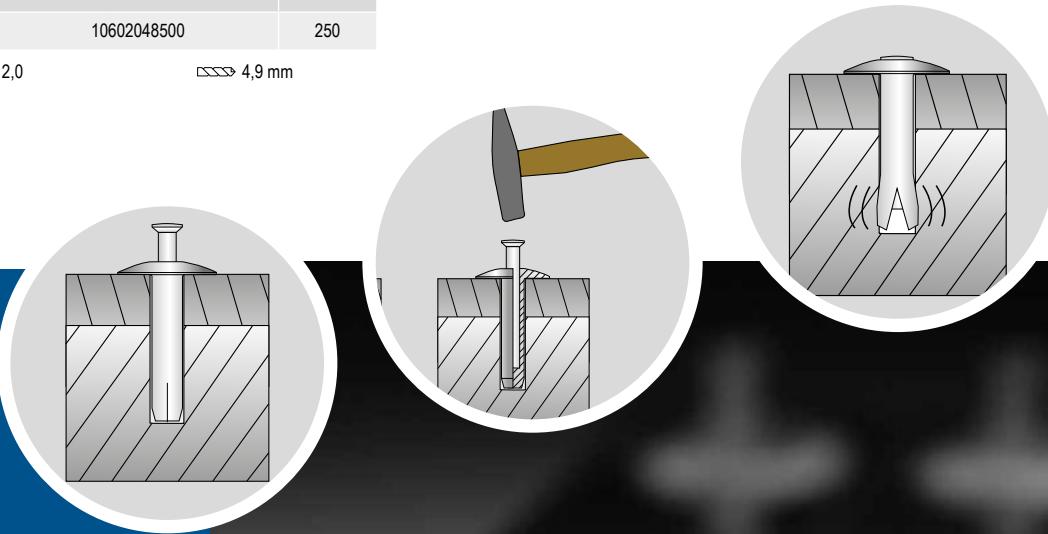


d	+1		No.	
4,8	26,0	20,0 - 22,0	10602048260	500
	30,0	25,0 - 26,5	10602048300	500
	36,0	29,0 - 31,0	10602048360	500
	40,0	33,0 - 35,5	10602048400	500
	50,0	43,5 - 46,0	10602048500	250

dk 15,5 -0,7

k 2,0

4,9 mm



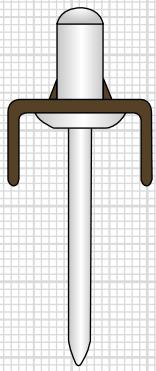
The setting of hammer drive blind rivets requires **NO special tools** – a hammer is all that is needed!

The sleeve spreads in the lower half due to the mandrel being hammered in and clamps reliably against the walls of the hole.



Grounding blind rivet

Grounding
Blind Rivet



Grounding blind rivets offer a simple and reliable possibility of creating a ground connection with your products.
Grounding is achieved by pressing the serrations on the conductors into the material of the part.

All standard cable shoes can be installed on these grounding conductors.

Grounding blind rivets can be set using all kinds of standard blind riveting tools.



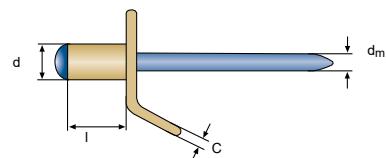
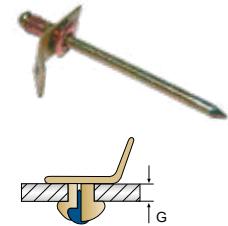
Grounding Blind Rivet

Messing Steel galvanized
Dome Head | open



CAD
DATA
ONLINE

Series
705

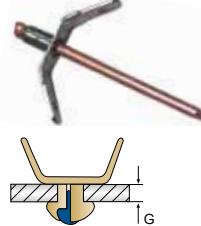


d	+1		No.	
4,0	7,0	0,0 - 4,0	10705040070/1030	500

dm 2,4

c 0,8

4,1 mm



d	+1		No.	
4,0	7,0	0,0 - 4,0	10705040070/1031	500

dm 2,4

c 0,8

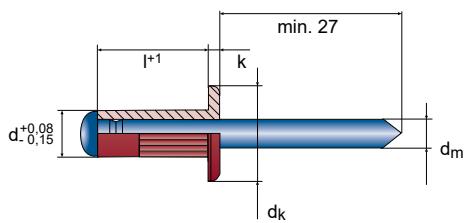
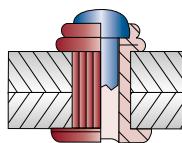
4,1 mm

OPTO® Multigrip Blind Rivet -grooved-

Aluminium Steel galvanized
Dome Head | open

CAD
DATA
ONLINE

Series
600



EN AW-5052 [AlMg2,5]

d	+1		No.	
4,0	9,5	1,2 - 6,4	10600040095/1020	500

dk 7,9

dm 2,3

k 1,2

4,1 mm

1140 N

1670 N

Thanks to the knurling of the sleeve, this special version of the OPTO multigrip blind rivet is suitable for grounding.



In addition to a large number of social and local activities, **HONSEL** also continuously supports various projects with products or technical assistance. Whether fastener or setting tool, our sales teams and application consultants are passionately committed to finding the best solutions even in the non-profit sector.



The Kiel-based three-mast schooner, "Thor Heyerdahl", was launched in the Netherlands in 1930 as a freight motorsailer and was converted into a sailing ship with the rigging of a topsail schooner between 1979 and 1983. Since then it has served as a floating educational facility for teenagers and young adults.

During a later general overhaul and maintenance, VVG/**HONSEL** supported the under-deck outfitting with stainless steel blind rivets.

The team of the Kiel University of Applied Sciences with students from the faculties of Electrical Engineering, Machine Engineering, Mechatronics, IT, Public Relations and Corporate Communications, Multimedia Production, Media Engineering, Economics, Business Administration, Industrial Engineering successfully develops, produces and operates modern racing cars for the FORMULA STUDENT.

We provide support, for example, by supplying tools and blind rivet nuts for the production of the cars.



At the Institute for Aerospace Technology at the University of Bremen, the Aquasonic II sounding rocket was developed as part of a student experimental rocket programme of the German Aerospace Centre and manufactured using **HONSEL** blind rivets. The hybrid-powered missile that is over five metres in length and weighs 91 kg, was successfully launched in Kiruna, Sweden in March 2020 with a speed of Mach 1.2.

The local Stealth Motorsport Team is currently making a name for itself in sprint racing with a cult e36 Series BMW. **HONSEL** riveting technology has made it possible here to significantly reduce weight and service time – true to the motto "riveting rather than bolting".



Blind rivet nuts

Blind rivet nuts



Information on **individual customisations** can be found in the **HONSEL** catalogue for **Industrial and automotive solutions**.



As early as the **1980s**, **HONSEL** began the development and production of blind rivet nuts and bolts together with pneumatic-hydraulic setting tools.

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

- threads of different types to be set into ...
 - ... thin parts or parts with low strength,
 - ... hollow profiles or other parts not accessible from both sides,
 - ... parts which already have a coated surface,
- and at the same time to allow the parts to be joined and additional parts to be attached.

More and more new forms, types and sizes are developed together with our customers and document the **practically unlimited application possibilities** in all areas of industry and trade.

On the following pages you will find a large number of interesting examples, such as the **patented OPTO® multigrip blind rivet nuts** (► pages 84 - 85) or blind rivet nuts of **stainless steel A4** (► page 110).

Whether as open or closed versions, with twist resistance through knurling, (partial) hexagonal shanks or under-head serrations, with dome, countersunk or small countersunk head – you will find here one of the most comprehensive ranges of products available immediately from stock.



General information on **blind rivet nuts** can be found in the **technical appendix** from **page 120**.

Blind rivet nuts

Blind rivet nut	Material				Setting head	Shank form	Shank design	Page
	Aluminium	Galvanised steel	Stainless steel A2	Stainless steel A4				
AFM	x				Dome head	Round shank	Open	82
	x				Dome head	Round shank	Closed	82
ASM	x				Countersunk head	Round shank	Open	83
	x				Countersunk head	Round shank	Closed	83
	x				Small countersunk head	Round shank	Open	83
OPTO® (multigrip blind rivet nut)	x				Dome head	Round shank	Open	84
	x				Countersunk head	Round shank	Open	84
		x			Dome head	Round shank	Open	85
		x			Countersunk head	Round shank	Open	85
SFM		x			Dome head	Round shank	Open	86
		x			Dome head	Round shank	Closed	86
		x			Dome head	Round shank	Open / knurled	87
SFM-PL (folding blind rivet nut)		x			Dome head	Round shank	Open / slotted	88
SFM-H (hollow blind rivet nut)		x			Dome head	Round shank	Open / slotted	89
SSM		x			Countersunk head	Round shank	Open	90
		x			Countersunk head	Round shank	Closed	90
		x			Countersunk head	Round shank	Open / knurled	91
		x			Small countersunk head	Round shank	Open	92
		x			Small countersunk head	Round shank	Closed / knurled	92
		x			Small countersunk head	Round shank	Open / knurled	93
UNIVERSAL		x			Small countersunk head	Round shank	Open	94
		x			Small countersunk head	Round shank	Open / knurled	94
		x			Small countersunk head	Round shank	Closed / knurled	94
FLATINSERT		x			Small countersunk head	Round shank	Open	95
		x			Small countersunk head	Round shank	Open / knurled	95
HEXAFORM®		x			Dome head	Hexagonal shank	Open	96
		x			Small countersunk head	Hexagonal shank	Open	96
		x			Small countersunk head	Hexagonal shank	Closed	97
HEXATOP®		x			Dome head	Partial hexagonal shank	Open	98
		x			Small countersunk head	Partial hexagonal shank	Open	98
EFM		x	x		Dome head	Round shank	Open	100
			x		Dome head	Round shank	Closed	100
			x		Dome head	Round shank	Open / knurled	101
ESM			x		Countersunk head	Round shank	Open	102
			x		Countersunk head	Round shank	Open / knurled	103
			x		Small countersunk head	Round shank	Open	104
			x		Small countersunk head	Round shank	Closed	104
			x		Small countersunk head	Round shank	Open / knurled	105
UNIVERSAL			x		Small countersunk head	Round shank	Open	106
			x		Small countersunk head	Round shank	Open / knurled	106
HEXATOP®			x		Dome head	Partial hexagonal shank	Open	108
			x		Small countersunk head	Partial hexagonal shank	Open	109
			x		Small countersunk head	Partial hexagonal shank	Closed	109
EFM			x		Dome head	Round shank	Open	110
ESM			x	x	Small countersunk head	Round shank	Open	110
HEXATOP®			x	x	Small countersunk head	Partial hexagonal shank	Open	110

Blind rivet nuts

Rivdom eVNG 2
THE NEW BATTERY RIVETER FOR BLIND RIVET NUTS



Blind rivet nut AFM

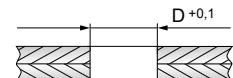
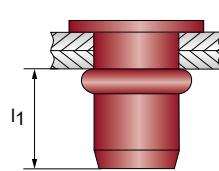
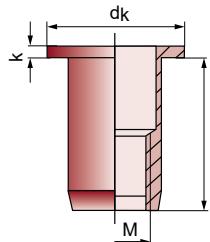
Aluminium

Dome head | Round shank | open



CAD
DATA
ONLINE

Series
850



EN AW-5754 [AlMg3]

M		I	No.	
M3	0,3 - 2,0	8,5	10850030200	500
D 5,0	k 0,8	d _k 7,0	l₁ max. 6,0	↘ 1 Nm ↗ 1500 N
M4	0,5 - 3,0	11,0	10850040300	500
2,5 - 4,0	12,0		10850040400	500
D 6,0	k 0,8	d _k 10,0	l₁ max. 8,0	↘ 3 Nm ↗ 2600 N
M5	0,5 - 3,0	12,0	10850050300	500
2,5 - 4,5	13,5		10850050450	500
4,0 - 6,0	15,0		10850050600	500
D 7,0	k 1,0	d _k 11,0	l₁ max. 9,0	↘ 4 Nm ↗ 4300 N
M6	0,5 - 3,0	14,5	10850060300	500
3,0 - 4,5	16,0		10850060450	500
D 9,0	k 1,5	d _k 13,0	l₁ max. 11,0	↘ 6 Nm ↗ 6700 N

M		I	No.	
0,5 - 3,0	17,0		10850080300	500
3,0 - 5,5	19,5		10850080550	500
5,5 - 7,5	21,5		10850080750	500
D 11,0	k 1,5	d _k 16,0	l₁ max. 13,5	↘ 18 Nm ↗ 11000 N
M10	1,0 - 4,0	22,0	10850100400	250
3,0 - 6,0	24,0		10850100600	250
D 13,0	k 2,0	d _k 19,0	l₁ max. 16,5	↘ 28 Nm ↗ 17500 N
M12	1,0 - 4,0	24,0	10850120400	100
D 16,0	k 2,0	d _k 23,0	l₁ max. 18,5	↘ 45 Nm ↗ 28000 N

Note also the OPTO® multigrip blind rivet nuts on ► page 84.

Blind rivet nut AFM-G

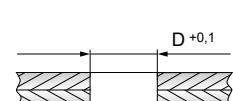
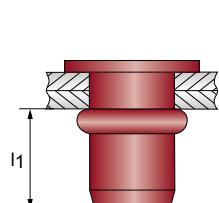
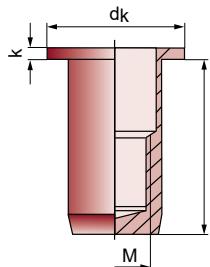
Aluminium

Dome head | Round shank | closed



CAD
DATA
ONLINE

Series
854



EN AW-5754 [AlMg3]

M		I	No.	
M4	0,3 - 2,0	15,5	10854040200	500
D 6,0	k 0,8	d _k 10,0	l₁ max. 13,5	↘ 3 Nm ↗ 2600 N
M5	0,3 - 3,0	18,5	10854050300	500
D 7,0	k 1,0	d _k 11,0	l₁ max. 15,5	↘ 4 Nm ↗ 4300 N
M6	0,5 - 3,0	22,0	10854060300	500
3,0 - 4,5	23,0		10854060450	500
D 9,0	k 1,5	d _k 13,0	l₁ max. 18,5	↘ 6 Nm ↗ 6700 N

M		I	No.	
0,5 - 3,0	26,5		10854080300	250
D 11,0	k 1,5	d _k 16,0	l₁ max. 23,0	↘ 18 Nm ↗ 11000 N
M10	1,0 - 3,0	32,5	10854100300	250
D 13,0	k 2,0	d _k 19,0	l₁ max. 28,5	↘ 28 Nm ↗ 17500 N

Information about additional sealing possibilities for closed blind rivet nuts can be found in section "Blind rivets" on ► page 59 and on page 97.

For your enquiries or orders, you can also use the classic short designation of our blind rivet nuts that is structured as shown opposite:

Series name: AFM
+ thread size: M6
+ maximum grip range: 3.0 mm
= short designation: AFM 6-30

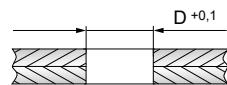
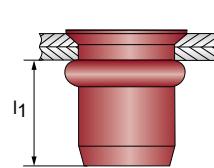
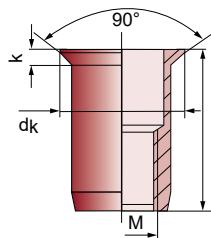
**Series
851****CAD
DATA
ONLINE****MOVIE****Blind rivet nut ASM**

Aluminium

Countersunk head | Round shank | open



EN AW-5754 [AlMg3]



M		I	No.	
M4	1,5 - 3,5	11,5	10851040350	500
D 6,0	k 1,5	dk 8,3	I₁ max. 8,0	3 Nm 2600 N
M5	1,5 - 4,0	13,0	10851050400	500
D 7,0	k 1,5	dk 9,3	I₁ max. 9,0	4 Nm 4300 N
M6	1,5 - 4,5	16,0	10851060450	500
D 9,0	k 1,5	dk 11,3	I₁ max. 11,0	6 Nm 6700 N

M		I	No.	
M8	1,5 - 4,5	18,5	10851080450	500
D 11,0	k 1,5	dk 13,3	I₁ max. 13,5	18 Nm 11000 N
M10	1,5 - 3,0	20,5	10851100300	250
3,0 - 4,5	22,0	10851100450	250	
3,5 - 6,5	24,0	10851100650	250	
D 13,0	k 1,5	dk 15,5	I₁ max. 16,5	28 Nm 17500 N
M12	1,7 - 4,5	26,0	10851120450	100
D 16,0	k 1,9	dk 19,0	I₁ max. 17,5	45 Nm 28000 N

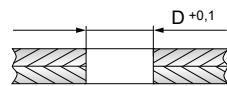
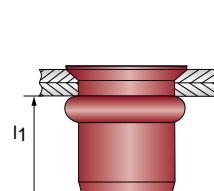
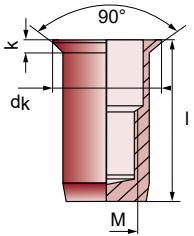
Note also the OPTO® multigrip blind rivet nuts on ► page 84.

ASM

**Series
855****CAD
DATA
ONLINE****Blind rivet nut ASM-G**

Aluminium

Countersunk head | Round shank | closed



EN AW-5754 [AlMg3]

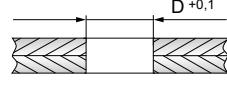
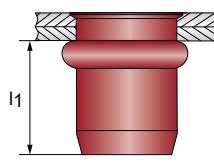
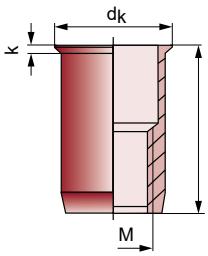
M		I	No.	
M5	1,5 - 4,0	19,5	10855050400	500
D 7,0	k 1,5	dk 9,3	I₁ max. 15,5	4 Nm 4300 N
M6	1,5 - 4,5	23,0	10855060450	500
D 9,0	k 1,5	dk 11,3	I₁ max. 18,5	6 Nm 6700 N

M		I	No.	
M8	1,5 - 4,5	28,0	10855080450	500
D 11,0	k 1,5	dk 13,3	I₁ max. 23,0	18 Nm 11000 N

**Series
851****CAD
DATA
ONLINE****Blind rivet nut ASM-KLSK**

Aluminium

Small countersunk head | Round shank | open

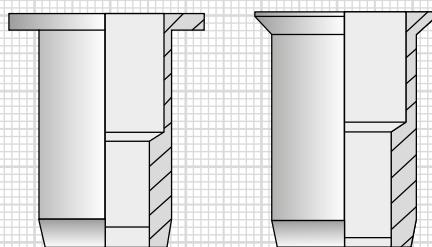


EN AW-5754 [AlMg3]

M		I	No.	
M4	0,5 - 2,0	10,0	10851040200/00010	500
D 6,0	k 0,5	dk 6,8	I₁ max. 6,5	2 Nm 2400 N
M5	0,5 - 3,0	12,0	10851050300/00010	500
D 7,0	k 0,5	dk 8,0	I₁ max. 7,5	4 Nm 4000 N

M		I	No.	
M6	0,5 - 3,0	15,0	10851060300/00010	500
D 9,0	k 0,6	dk 10,0	I₁ max. 10,0	6 Nm 6000 N

OPTO® multigrip blind rivet nut



ONE blind rivet nut FOR ALL grip ranges

In 2007, the patented **HONSEL** development was already the first mass-produced blind rivet nut with multi-grip properties.

It offers **numerous advantages** over the classic blind rivet nut with closely defined grip ranges:

- No mixing of different grip ranges
- Reduction of storage and error costs
- Reduction of delivery times
- Reduction of item variety



Production in M10, with under-head serrations or hexagonal shank and as a closed version, is possible on request and with sufficient order volumes.

Multigrip blind rivet nut OPTO®-AFM

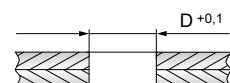
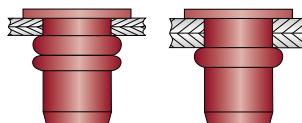
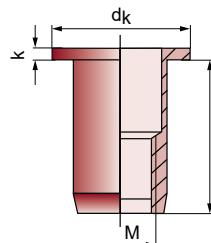
Aluminium

Dome head | open



CAD
DATA
ONLINE

Series
894



EN AW-5754 [AlMg3]

M		I	No.	
M4	0,5 - 6,0	14,0	10894040600	500
D 6,0	k 0,8	d _k 10,0	3 Nm	3000 N
M5	0,5 - 6,0	15,0	10894050600	500

M		I	No.	
M6	0,5 - 6,0	17,5	10894060600	500
D 9,0	k 1,5	d _k 13,0	6 Nm	6500 N
M8	0,5 - 7,5	21,5	10894080750	500

Multigrip blind rivet nut OPTO®-ASM

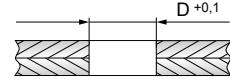
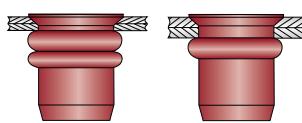
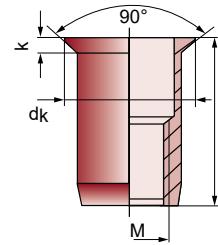
Aluminium

Countersunk head | open



CAD
DATA
ONLINE

Series
894



EN AW-5754 [AlMg3]

M		I	No.	
M4	1,5 - 6,0	14,0	10894400600	500
D 6,0	k 1,5	d _k 10,0	3 Nm	3000 N

M		I	No.	
M6	1,5 - 6,0	17,5	10894600600	500
D 9,0	k 1,5	d _k 13,0	6 Nm	6500 N

OPTO® multigrip blind rivet nut



For the optimum setting of OPTO® multigrip blind rivet nuts:
The **VNG 703 FORCE-CONTROLLED** pneumatic-hydraulic setting tool.
Details in our **HONSEL** catalog
Blind rivet processing.



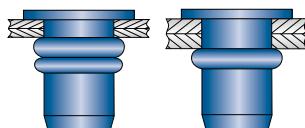
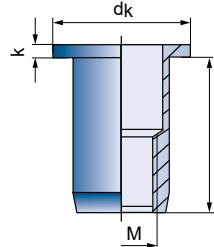
Series
895

CAD
DATA
ONLINE



MOVIE

Multigrip blind rivet nut OPTO®-SFM
Steel galvanized | Dome head | open



C4C [1.0303]

M		I	No.	
M4	0,5 - 6,0	14,0	10895040600	500
D 6,0	k 0,8	d _k 10,0	⌚ 4 Nm	↑ 5200 N
M5	0,5 - 6,0	15,0	10895050600	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	10895060600	500
D 9,0	k 1,5	d _k 13,0	⌚ 11 Nm	↑ 15500 N
M8	0,5 - 7,5	21,5	10895080750	500
D 11,0	k 1,5	d _k 16,0	⌚ 24 Nm	↑ 21500 N

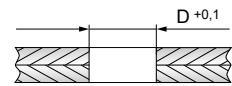
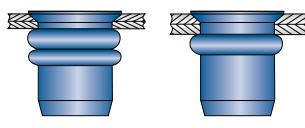
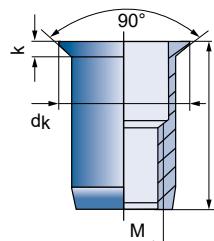
Series
895

CAD
DATA
ONLINE



MOVIE

Multigrip blind rivet nut OPTO®-SSM
Steel galvanized | Countersunk head | open



C4C [1.0303]

M		I	No.	
M4	1,5 - 6,0	14,0	10895400600	500
D 6,0	k 1,5	d _k 10,0	⌚ 4 Nm	↑ 5200 N
M5	1,5 - 6,0	15,0	10895500600	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	10895600600	500
D 9,0	k 1,5	d _k 13,0	⌚ 11 Nm	↑ 15500 N
M8	1,5 - 7,5	21,5	10895800750	500
D 11,0	k 1,5	d _k 16,0	⌚ 24 Nm	↑ 21500 N

Blind rivet nut SFM

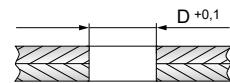
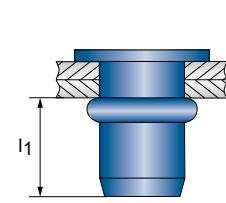
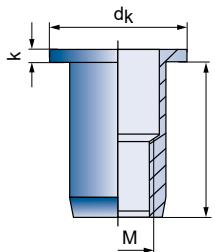
Steel galvanized

Dome head | Round shank | open



CAD
DATA
ONLINE

Series
852



C4C [1.0303]

M		I	No.	
M3	0,5 - 2,0	9,0	10852030200	500
	2,0 - 3,5	10,7	10852030350	500
D 5,0	k 0,8	d_k 7,0	I₁ max. 7,0	1.2 Nm 4000 N
M4	0,5 - 3,0	11,0	10852040300	500
	2,5 - 5,0	13,2	10852040500	500
D 6,0	k 0,8	d_k 10,0	I₁ max. 8,0	4 Nm 5200 N
M5	0,5 - 3,0	12,0	10852050300	500
D 7,0	k 1,0	d_k 11,0	I₁ max. 9,0	6 Nm 9500 N
M6	0,5 - 3,0	14,5	10852060300	500
	3,0 - 4,5	16,0	10852060450	500
	4,5 - 6,0	17,5	10852060600	500
D 9,0	k 1,5	d_k 13,0	I₁ max. 11,0	11 Nm 16500 N

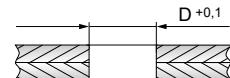
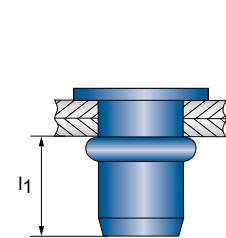
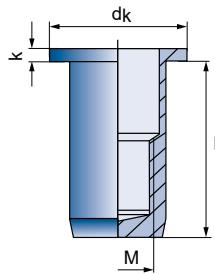
M		I	No.	
M8	0,5 - 3,0	17,0	10852080300	250
	3,0 - 5,5	19,5	10852080550	250
	5,5 - 7,5	21,5	10852080750	250
	7,0 - 9,0	23,0	10852080900	250
D 11,0	k 1,5	d_k 16,0	I₁ max. 13,5	24 Nm 23500 N
M10	1,0 - 3,0	20,5	10852100300	250
	4,5 - 6,0	23,5	10852100600	250
D 13,0	k 2,0	d_k 19,0	I₁ max. 16,5	50 Nm 37000 N
M12	1,0 - 4,0	25,0	10852120400	100
	3,5 - 7,0	28,0	10852120700	100
D 16,0	k 2,0	d_k 23,0	I₁ max. 16,5	82 Nm 54000 N

Note also the OPTO® multigrip blind rivet nuts on ► page 84.

Blind rivet nut SFM-G

Steel galvanized

Dome head | Round shank | closed



C4C [1.0303]

M		I	No.	
M5	0,5 - 3,0	17,0	10856050300	500
D 7,0	k 1,0	d_k 11,0	I₁ max. 15,5	6 Nm 9500 N
M6	0,5 - 3,0	21,5	10856060300	500
D 9,0	k 1,2	d_k 12,0	I₁ max. 16,0	11 Nm 16500 N

M		I	No.	
M8	0,5 - 3,5	25,2	10856080350	250
D 11,0	k 1,3	d_k 14,0	I₁ max. 17,5	24 Nm 23500 N



General information on blind rivet nuts can be found in the technical appendix from page 120.

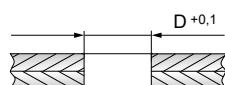
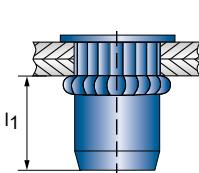
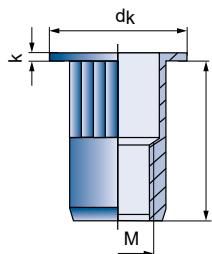
Series
842**CAD**
DATA
ONLINE**MOVIE****Blind rivet nut SFM-R**

Steel galvanized

Dome head | Round shank knurled | open



C4C [1.0303]



M		I	No.	
M4	0,5 - 2,5	9,5	10842040250	500
D 6,0	k 0,8	d _k 9,0	I ₁ , max. 8,0	↙ 5000 N
M5	2,5 - 5,0	14,0	10842050500	500
	0,5 - 3,0	12,0	10842050300	500
D 7,0	k 1,0	d _k 10,0	I ₁ , max. 9,0	↙ 9000 N
M6	3,5 - 5,5	17,5	10842060550	500
	0,5 - 3,0	14,5	10842060300	500
D 9,0	k 1,5	d _k 13,0	I ₁ , max. 11,0	↙ 13500 N

M		I	No.	
M8	3,0 - 5,5	18,5	10842080550	250
	0,5 - 3,0	16,0	10842080300	250
D 11,0	k 1,5	d _k 16,0	I ₁ , max. 13,5	↙ 20000 N
M10	3,0 - 4,5	22,0	10842100450	250
	1,0 - 3,0	20,5	10842100300	250
D 13,0	k 2,0	d _k 19,0	I ₁ , max. 16,5	↙ 28000 N
M12	1,0 - 4,0	25,0	10842120400	100
	D 16,0	k 2,0	d _k 23,0	I ₁ , max. 18,5
				↙ 45000 N

**Small packages****Small
packages****Blind rivet nut SFM-R**
Steel galvanized

Dome head | Round shank knurled | open



M		I	No.	
M4	0,5 - 2,5	9,5	10842040250/31	100
M5	0,5 - 3,0	12,0	10842050300/31	100
M6	0,5 - 3,0	14,5	10842060300/31	100
M8	0,5 - 3,0	16,0	10842080300/42	50

**Small
packages****Blind rivet nut UNIVERSAL**
Steel galvanized

Small countersunk head | Round shank | open



M		I	No.	
M4	0,5 - 2,5	10,5	10870400000/31	100
M5	0,5 - 3,0	11,5	10870500000/31	100
M6	0,5 - 3,0	13,0	10870600000/31	100
M8	0,5 - 3,0	15,5	10870800000/31	100

Further sizes available from stock. Minimum order quantities for all small packages:
10 units per size!
New appearance available in 2021.

SFM-PL folding blind rivet nuts



HONSEL folding blind rivet nuts were developed for applications requiring **high tightening forces**.

During setting, the slotted shank fans out into four tabs which contact the part **uniformly and over a large area for uniform distribution of the forces**. Plastic and thin-walled sheet metal and other brittle or easily broken materials can thus be reliably joined.

Furthermore, folding blind rivet nuts offer a **very large grip range**.

SFM

Folding blind rivet nut SFM-PL

■ Steel galvanized

Dome head | open



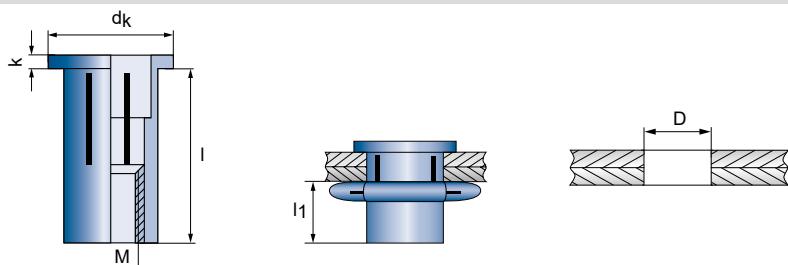
CAD
DATA
ONLINE

Series
816



C4C [1.0303]

M		I	No.	
M6	0,5 - 7,1	25,7	10816060710	250
D 8,8	k 1,6	d _k 16,4	I _t , max. 11,7	12 Nm 15000 N



M		I	No.	
M8	0,5 - 7,1	28,9	10816080710	250
D 11,1	k 1,6	d _k 19,6	I _t , max. 13,6	21 Nm 27000 N



A **tool with large stroke** is required for the optimum setting of **HONSEL** folding blind rivet nuts.

Here **HONSEL** offers a special pneumatic-hydraulic setting tool with the **VNG 753**. Details can be found in the **HONSEL** catalogue blind rivet processing .

Ask your local dealer or our sales team for further information or a demonstration!



Please note: Special mandrels are required for setting the folding blind rivet nuts.

SFM-H hollow blind rivet nut



Slotted blind rivet nut with threaded insert specially for use in brittle or soft materials such as plastic or perspex.

Particularly on uneven surfaces, these blind rivet nuts offer **outstanding twist resistance**.

Thanks to the **large grip range**, they can be used flexibly with differing material thicknesses.



Series
817

CAD
DATA
ONLINE



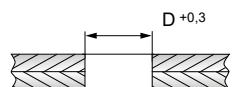
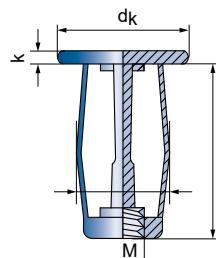
MOVIE

Hollow blind rivet nut SFM-H
Steel galvanized
Dome head | open



C4C [1.0303]

M		I	No.	
M4	0,1 - 5,0	15,2	10817040500	500
D 8,0	k 1,6	d _k 12,2	1.1 Nm	↑ 245 N
M5	0,1 - 5,0	16,8	10817050500	500



M		I	No.	
M6	0,1 - 5,0	17,0	10817060500	500

D 12,0 k 1,6 d_k 16,0 2.2 Nm ↑ 390 N



Blind rivet nut SSM

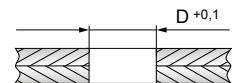
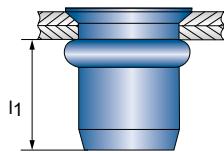
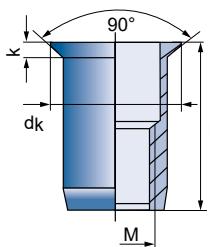
Steel galvanized

Countersunk head | Round shank | open



CAD
DATA
ONLINE

Series
853



C4C [1.0303]

M		I	No.	
M4	1,5 - 3,5	11,5	10853040350	500
D 6,0	k 1,5	d _k 8,3	l_t max. 8,0	↶ 4 Nm ↘ 5200 N
M5	1,5 - 4,0	13,0	10853050400	500
D 7,0	k 1,5	d _k 9,3	l_t max. 9,0	↶ 6 Nm ↘ 9500 N
M6	1,5 - 4,5	16,0	10853060450	500
	4,5 - 6,0	17,5	10853060600	500
D 9,0	k 1,5	d _k 11,3	l_t max. 11,0	↶ 11 Nm ↘ 16500 N

M		I	No.	
M8	1,5 - 4,5	18,5	10853080450	250
	4,5 - 6,0	20,0	10853080600	250
D 11,0	k 1,5	d _k 13,3	l_t max. 13,5	↶ 24 Nm ↘ 23500 N
M10	3,0 - 4,5	22,0	10853100450	250
	4,5 - 6,0	23,5	10853100600	250
	6,0 - 9,0	26,5	10853100900	250
D 13,0	k 1,5	d _k 15,2	l_t max. 16,5	↶ 50 Nm ↘ 37000 N

Note also the OPTO multigrip blind rivet nuts on ▶ page <AE>.

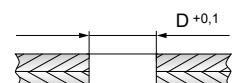
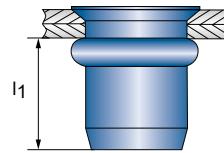
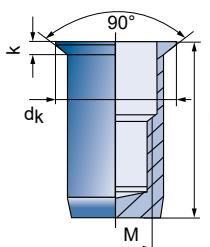
Blind rivet nut SSM-G

Steel galvanized

Countersunk head | Round shank | closed



Series
857



C4C [1.0303]

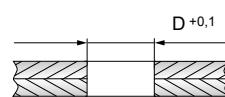
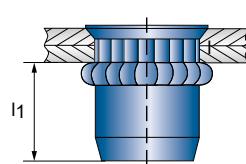
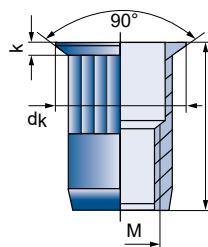
M		I	No.	
M5	1,5 - 4,0	19,5	10857050400	500
D 7,0	k 1,5	d _k 9,3	l_t max. 15,5	↶ 6 Nm ↘ 9500 N
M6	1,5 - 4,5	23,5	10857060450	500
D 9,0	k 1,5	d _k 11,3	l_t max. 18,5	↶ 11 Nm ↘ 16500 N

M		I	No.	
M8	1,5 - 4,5	28,0	10857080450	250
D 11,0	k 1,5	d _k 13,3	l_t max. 23,0	↶ 24 Nm ↘ 23500 N
M10	1,5 - 3,0	30,5	10857100300	250
D 13,0	k 1,5	d _k 14,9	l_t max. 28,5	↶ 50 Nm ↘ 37000 N



C4C [1.0303]

M		I	No.	
M4	1,5 - 3,5	11,5	10845040350	500
	3,0 - 5,0	13,0	10845040500	500
D 6,0	k 1,5	d _k 8,3	I ₁ , max. 8,0	↙ 5000 N
M5	1,5 - 4,0	13,5	10845050400	500
	4,0 - 6,5	16,0	10845050650	500
D 7,0	k 1,5	d _k 9,3	I ₁ , max. 9,0	↙ 9000 N
M6	1,5 - 4,5	16,0	10845060450	500
	4,5 - 6,5	18,0	10845060650	500
D 9,0	k 1,5	d _k 11,3	I ₁ , max. 11,0	↙ 15000 N



M		I	No.	
M8	1,5 - 4,5	19,0	10845080450	500
	3,5 - 6,5	21,0	10845080650	500
D 11,0	k 1,5	d _k 13,3	I ₁ , max. 13,5	↙ 20000 N
M10	1,5 - 4,5	22,0	10845100450	250
	3,5 - 6,5	25,0	10845100650	250
D 13,0	k 1,6	d _k 15,7	I ₁ , max. 14,5	↙ 28000 N
M12	2,0 - 4,5	24,5	10845120450	100
	4,5 - 7,5	27,5	10845120750	100
D 16,0	k 1,9	d _k 19,0	I ₁ , max. 17,5	↙ 45000 N



General information on blind rivet nuts can be found in the technical appendix from page 120.



Knurled and more.

Special versions available directly from stock.

In addition to the standard products with twist resistance available in all areas, a large number of article variants for example with **special surfaces**, **larger head diameters** or additional **serrations on or under the setting head** are also immediately available.



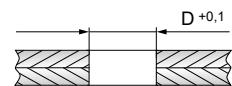
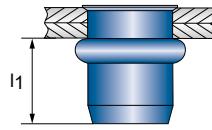
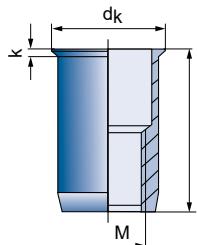
Blind rivet nut SSM-KLSK

Steel galvanized

Small countersunk head | Round shank | open

CAD
DATA
ONLINE

Series
841



C4C [1.0303]

M		I	No.	
M4	0,5 - 2,0	10,0	10841040200	500
D 6,0	k 0,5	d _k 7,0	I ₁ max. 8,0	↶ 3 Nm ↘ 5000 N
M5	0,5 - 3,0	12,0	10841050300	500
D 7,0	k 0,5	d _k 8,0	I ₁ max. 9,0	↶ 5 Nm ↘ 9000 N

M		I	No.	
M6	0,5 - 3,0	15,0	10841060300	500
D 9,0	k 0,5	d _k 10,0	I ₁ max. 12,0	↶ 10 Nm ↘ 15000 N
M8	0,5 - 3,0	16,0	10841080300	500
D 11,0	k 0,5	d _k 12,0	I ₁ max. 13,5	↶ 20 Nm ↘ 20000 N

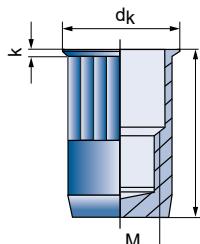
Blind rivet nut SSM-R-KLSK-G

Steel galvanized

Small countersunk head | Round shank knurled | closed

CAD
DATA
ONLINE

Series
847



C4C [1.0303]

M		I	No.	
M5	0,5 - 3,0	18,5	10847050300	500
D 7,0	k 0,5	d _k 8,0	I ₁ max. 14,5	↖ 10000 N
M6	0,5 - 3,0	21,0	10847060300	500
D 9,0	k 0,5	d _k 10,0	I ₁ max. 17,0	↖ 15000 N

M		I	No.	
M8	0,7 - 4,0	24,0	10847080400	500
D 11,0	k 0,5	d _k 12,0	I ₁ max. 19,0	↖ 27000 N

For your enquiries or orders, you can also use the classic short designation of our blind rivet nuts that is structured as shown opposite:

Series name: SSM-G
+ thread size: M5
+ maximum grip range: 4.0 mm
= short designation: SSM 5-40 G

Series
843

CAD
DATA
ONLINE



MOVIE



Blind rivet nut SSM-R-KLSK

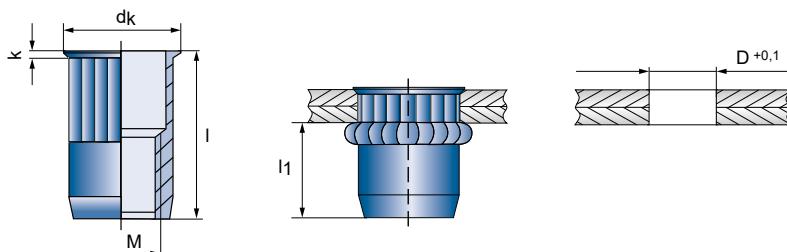
Steel galvanized

Small countersunk head | Round shank knurled | open



C4C [1.0303]

M		I	No.	
M3	0,5 - 2,0	9,0	10843030200	500
	2,0 - 3,5	10,5	10843030350	500
D 5,0	k 0,4	d _k 6,0	I _t max. 5,5	↙ 4000 N
M4	1,0 - 2,0	10,0	10843040200	500
	2,0 - 4,0	12,0	10843040400	500
D 6,0	k 0,4	d _k 7,0	I _t max. 8,0	↙ 4800 N
M5	0,5 - 3,0	12,0	10843050300	500
	2,0 - 4,5	14,0	10843050450	500
D 7,0	k 0,5	d _k 8,0	I _t max. 9,0	↙ 8000 N



M		I	No.	
M6	0,5 - 3,0	13,5	10843060300	500
	3,5 - 6,0	17,5	10843060600	500
D 9,0	k 0,5	d _k 10,0	I _t max. 14,5	↙ 12000 N
M8	0,7 - 4,0	16,0	10843080400	500
	3,5 - 6,0	18,0	10843080600	500
D 11,0	k 0,5	d _k 12,0	I _t max. 16,0	↙ 18000 N
M10	1,0 - 4,5	20,5	10843100450	250
	3,0 - 6,0	23,5	10843100600	250
D 13,0	k 0,5	d _k 14,0	I _t max. 18,5	↙ 25000 N
M12	1,0 - 4,0	24,0	10843120400	100
D 16,0	k 0,6	d _k 17,0	I _t max. 20,0	↙ 40000 N

SSM

Rivdom eVNG 2

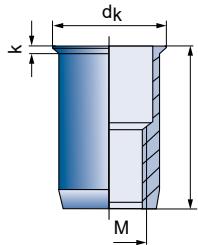
THE NEW BATTERY RIVETER FOR BLIND RIVET NUTS



Blind rivet nut UNIVERSAL

Steel galvanized

Small countersunk head | Round shank | open



CAD
DATA
ONLINE

Series
870

C4C [1.0303]

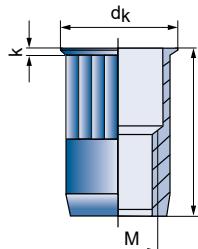
M		I	No.	
M4	0,5 - 2,5	10,5	10870400000	500
D 7,0	k 0,4	d _k 8,0	l₁ max. 7,0	3 Nm 6500 N
M5	0,5 - 3,0	11,5	10870500000	500
D 7,0	k 0,4	d _k 8,0	l₁ max. 8,0	5 Nm 8000 N
M6	0,5 - 3,0	13,0	10870600000	500
D 8,0	k 0,4	d _k 9,0	l₁ max. 10,0	10 Nm 11500 N

M		I	No.	
M8	0,5 - 3,0	15,5	10870800000	500
D 10,0	k 0,4	d _k 11,0	l₁ max. 11,5	20 Nm 14500 N
M10	0,5 - 3,0	17,5	10870100000	250
D 12,0	k 0,4	d _k 13,0	l₁ max. 13,0	40 Nm 22000 N

Blind rivet nut UNIVERSAL-R

Steel galvanized

Small countersunk head | Round shank knurled | open



CAD
DATA
ONLINE

Series
871

C4C [1.0303]

M		I	No.	
M4	0,5 - 3,0	10,5	10871400000	500
D 7,0	k 0,4	d _k 8,0	l₁ max. 7,0	6000 N
M5	0,5 - 3,0	11,5	10871500000	500
D 7,0	k 0,4	d _k 8,0	l₁ max. 8,0	7500 N
M6	0,5 - 3,0	13,0	10871600000	500
D 8,0	k 0,4	d _k 9,0	l₁ max. 10,0	10000 N

M		I	No.	
M8	0,5 - 3,0	15,5	10871800000	500
D 10,0	k 0,4	d _k 11,5	l₁ max. 11,5	14000 N
M10	0,5 - 3,0	17,5	10871100000	250
D 12,0	k 0,4	d _k 13,0	l₁ max. 13,0	17500 N

Blind rivet nut UNIVERSAL-R-G

Steel galvanized

Small countersunk head | Round shank knurled | closed



CAD
DATA
ONLINE

Series
872

C4C [1.0303]

M		I	No.	
M4	0,5 - 2,5	16,5	10872400000	500
D 7,0	k 0,4	d _k 8,0	l₁ max. 13,0	6000 N
M5	0,5 - 2,5	18,5	10872500000	500
D 7,0	k 0,4	d _k 8,0	l₁ max. 14,5	7500 N

M		I	No.	
M6	0,5 - 3,0	20,5	10872600000	500
D 8,0	k 0,4	d _k 9,0	l₁ max. 16,0	10000 N

Series
874

CAD
DATA
ONLINE

For
imperial
Drilling
INCH

Blind rivet nut FLATSERT

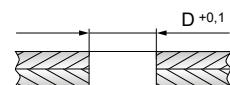
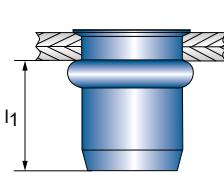
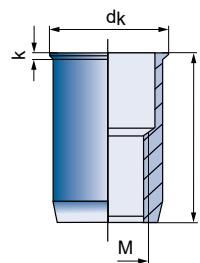
Steel galvanized 

Small countersunk head | Round shank | open



C4C [1.0303]

M		I	No.	
M3	0,5 - 1,5	8,8	10874300000	500
D 4,7	k 0,3	d _k 5,3	I ₁ max. 6,0	↘ 2 Nm ↗ 3000 N
M4	0,5 - 2,0	10,4	10874400000	500
D 6,4	k 0,4	d _k 7,2	I ₁ max. 8,0	↘ 3 Nm ↗ 6000 N
M5	0,5 - 3,0	12,0	10874500000	500
D 7,1	k 0,5	d _k 8,1	I ₁ max. 9,0	↘ 5 Nm ↗ 9500 N



Series
844

CAD
DATA
ONLINE



For
imperial
Drilling
INCH

Blind rivet nut FLATSERT-R

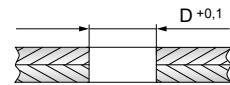
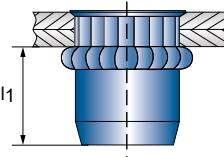
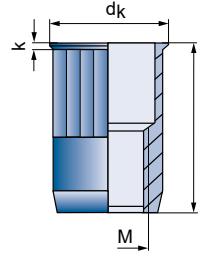
Steel galvanized 

Small countersunk head | Round shank knurled | open



C4C [1.0303]

M		I	No.	
M4	0,5 - 2,0	10,0	10844400000	500
D 6,4	k 0,4	d _k 7,2	I ₁ max. 8,0	↗ 5500 N
M5	0,5 - 3,2	12,0	10844500000	500
D 7,1	k 0,5	d _k 8,1	I ₁ max. 9,0	↗ 9000 N



M		I	No.	
M6	0,7 - 3,2	15,0	10844600000	500
D 9,5	k 0,5	d _k 10,4	I ₁ max. 11,0	↗ 12000 N
M8	0,5 - 3,0	16,0	10844800000	500
D 10,5	k 0,5	d _k 11,5	I ₁ max. 13,5	↗ 15000 N



Blind rivet nut HEXAFORM-FK

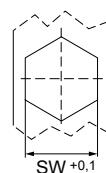
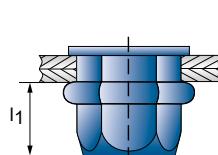
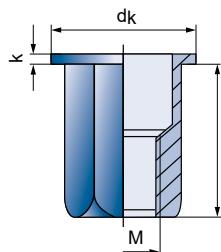
Steel galvanized

Dome head | Hexagonal shank | open



CAD
DATA
ONLINE

Series
868



C4C [1.0303]

M		I	No.	
M4	0,5 - 2,0	10,0	10868040200	500
SW 6,0	k 1,0	dk 9,0	l₁ max. 7,5	5 Nm 5200 N
M5	0,5 - 3,0	13,0	10868050300	500
SW 7,0	k 1,0	dk 10,0	l₁ max. 8,5	7 Nm 9500 N
M6	3,0 - 5,0	16,5	10868060500	500
	0,5 - 3,0	14,5	10868060300	500
SW 9,0	k 1,5	dk 13,0	l₁ max. 10,0	12 Nm 16500 N

M		I	No.	
M8	3,0 - 6,0	20,5	10868080600	250
	0,5 - 3,0	17,5	10868080300	250
SW 11,0	k 1,5	dk 16,0	l₁ max. 13,0	25 Nm 23500 N
M10	4,0 - 6,0	23,5	10868100600	250
	1,0 - 4,5	22,0	10868100450	250
SW 13,0	k 2,0	dk 19,0	l₁ max. 16,5	55 Nm 37000 N
M12	1,5 - 5,0	25,0	10868120500	100
SW 16,0	k 2,0	dk 23,0	l₁ max. 19,0	85 Nm 56000 N

Blind rivet nut HEXAFORM-KLSK

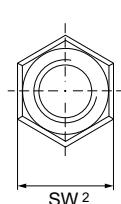
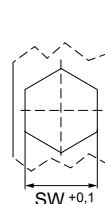
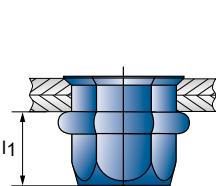
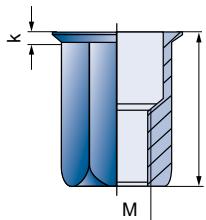
Steel galvanized

Small countersunk head | Hexagonal shank | open



CAD
DATA
ONLINE

Series
892



C4C [1.0303]

M		I	No.	
M4	0,6 - 2,0	11,0	10892040200	500
	2,0 - 4,0	13,0	10892040400	500
SW 6,0	SW² 6,6	k 0,6	l₁ max. 7,5	5 Nm 5000 N
M5	0,7 - 3,0	13,5	10892050300	500
	3,0 - 5,5	16,0	10892050550	500
SW 7,0	SW² 7,7	k 0,7	l₁ max. 8,5	7 Nm 9000 N
M6	0,8 - 3,0	15,5	10892060300	500
	3,0 - 5,5	18,0	10892060550	500
SW 9,0	SW² 9,8	k 0,8	l₁ max. 10,5	13 Nm 16000 N

M		I	No.	
M8	0,8 - 3,0	18,5	10892080300	250
	3,0 - 6,0	21,5	10892080600	250
SW 11,0	SW² 11,8	k 0,8	l₁ max. 13,0	25 Nm 23000 N
M10	1,0 - 3,5	22,5	10892100350	250
	3,0 - 6,0	23,5	10892100600	250
SW 13,0	SW² 14,3	k 0,9	l₁ max. 16,5	55 Nm 36500 N
M12	1,0 - 4,0	24,5	10892120400	100
SW 16,0	SW² 17,3	k 0,9	l₁ max. 17,5	85 Nm 55000 N



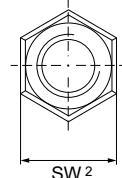
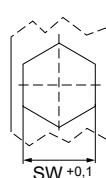
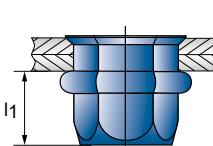
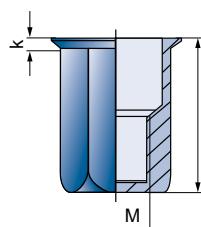
General information on blind rivet nuts can be found in the technical appendix from page 120.

Series
887**CAD**
DATA
ONLINE**MOVIE**

Blind rivet nut HEXAFORM-KLSK-G

Steel galvanized

Small countersunk head | Hexagonal shank | closed



C4C [1.0303]

M		I	No.	
M4	0,5 - 2,5	16,0	10887040250	500
SW 6,0	SW² 6,6	k 0,5	I_t max. 10,0	5 Nm 5200 N
M5	0,5 - 3,0	20,0	10887050300	500
SW 7,0	SW² 7,7	k 0,6	I_t max. 12,5	7 Nm 9500 N
M6	0,8 - 3,0	22,0	10887060300	500
SW 9,0	SW² 9,8	k 0,7	I_t max. 16,0	13 Nm 16500 N

M		I	No.	
M8	0,5 - 3,5	25,5	10887080350	250
	3,0 - 6,0	28,0	10887080600	250
SW 11,0	SW² 11,8	k 0,7	I_t max. 17,5	25 Nm 23500 N
M10	1,0 - 3,5	28,0	10887100350	250
SW 13,0	SW² 14,3	k 0,9	I_t max. 20,0	55 Nm 37000 N

Optimum leak tightness

With sufficient order volumes, we supply neoprene rings either loose or machine-fitted and produce the required **fasteners with directly moulded and certified sealants**.

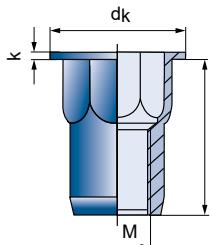


HEXAFORM

Blind rivet nut HEXATOP-FK

Steel galvanized

Dome head | Partial hexagonal shank | open



INCH



Series
867

C4C [1.0303]

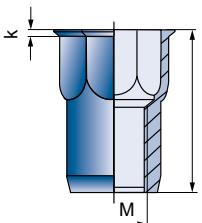
M		I	No.	
M4	0,5 - 2,0	10,0	10867040200	500
SW 6,4	k 0,6	d _k 8,0	I _t max. 7,5	↶ 4 Nm ↘ 3800 N
M5	0,5 - 3,0	12,5	10867050300	500
SW 7,2	k 0,7	d _k 9,0	I _t max. 9,0	↶ 6 Nm ↘ 6000 N
M6	0,5 - 3,0	14,5	10867060300	500
SW 9,6	k 0,8	d _k 12,0	I _t max. 11,5	↶ 11 Nm ↘ 9500 N

M		I	No.	
M8	0,5 - 3,0	16,5	10867080300	250
SW 10,6	k 1,5	d _k 16,0	I _t max. 13,0	↶ 24 Nm ↘ 12500 N
M10	0,5 - 3,0	19,0	10867100300	250
SW 12,7	k 2,0	d _k 16,5	I _t max. 16,5	↶ 50 Nm ↘ 37000 N

Blind rivet nut HEXATOP-KLSK

Steel galvanized

Small countersunk head | Partial hexagonal shank | open



Series
893

C4C [1.0303]

M		I	No.	
M4	0,5 - 2,0	10,0	10893040200	500
SW 6,4	SW ² 7,0	k 0,4	I _t max. 7,5	↶ 4 Nm ↘ 3800 N
M5	0,6 - 3,0	12,5	10893050300	500
SW 7,2	SW ² 8,0	k 0,5	I _t max. 9,0	↶ 6 Nm ↘ 6000 N
M6	0,5 - 3,0	15,5	10893060300	500
SW 9,6	SW ² 10,5	k 0,5	I _t max. 11,5	↶ 11 Nm ↘ 9500 N

M		I	No.	
M8	0,5 - 3,0	18,0	10893080300	250
SW 10,6	SW ² 11,5	k 0,6	I _t max. 14,0	↶ 24 Nm ↘ 12500 N
M10	1,0 - 4,0	22,5	10893100400	250
SW 12,7	SW ² 14,4	k 0,8	I _t max. 16,0	↶ 50 Nm ↘ 37000 N



Hexagons and more.

Special versions available directly from stock.

In addition to the standard products with twist resistance available in all areas, a large number of article variants for example with **special surfaces** or **larger head diameters** or **heights** are often available at short notice.



Information on **individual customisations** can be found in the **HONSEL** catalogue for **Industrial and automotive solutions**.



- Blind rivet nuts up to M10
(optionally up to M12!)

- Blind rivet bolts up to M10

- Stroke-controlled

- 29,000 N setting force!

- Now in L-Boxx®



Details of pneumatic-hydraulic setting tools can be found [in our HONSEL catalog blind rivet processing](#).

For example

- **HEXAFORM M6-45 K 18 x 2.5** blind rivet nut with M6 hexagonal shank, steel, large dome head (diameter 18.0 x height 2.5 mm), grip range 3.0 - 4.5 mm 20868060450-1

- **HEXAFORM M8-30 K 20 x 1.5** blind rivet nut with M8 hexagonal shank, steel, large dome head (diameter 20.0 x height 1.5 mm), grip range 0.5 - 3.0 mm 20868800000-4



Blind rivet nut EFM

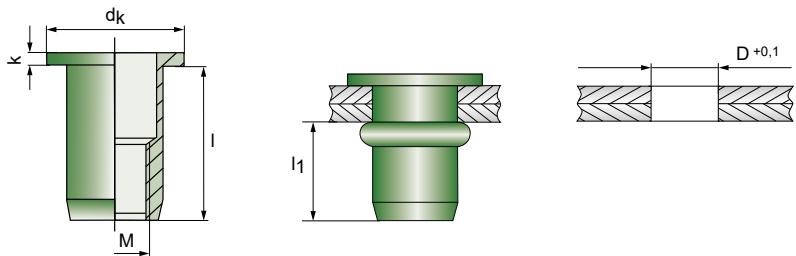
Stainless steel A2

Dome head | Round shank | open



CAD
DATA
ONLINE

Series
858



[1.4567]

M		I	No.	
M4	0,5 - 2,5	11,0	10858040250	500
D 6,0	k 1,0	d _k 9,0	I _t max. 8,0	↶ 4 Nm ↘ 7000 N
M5	0,5 - 3,0	12,0	10858050300	500
D 7,0	k 1,5	d _k 10,0	I _t max. 8,5	↶ 6 Nm ↘ 11000 N
M6	0,5 - 3,0	14,0	10858060300	500
D 9,0	k 1,5	d _k 12,0	I _t max. 10,0	↶ 11 Nm ↘ 18000 N

M		I	No.	
M8	0,5 - 3,0	16,0	10858080300	500
	3,0 - 5,5	18,5	10858080550	250
D 11,0	k 1,5	d _k 15,0	I _t max. 11,5	↶ 24 Nm ↘ 27000 N
M10	1,0 - 3,5	19,0	10858100350	250
D 13,0	k 2,0	d _k 17,0	I _t max. 14,0	↶ 50 Nm ↘ 40000 N

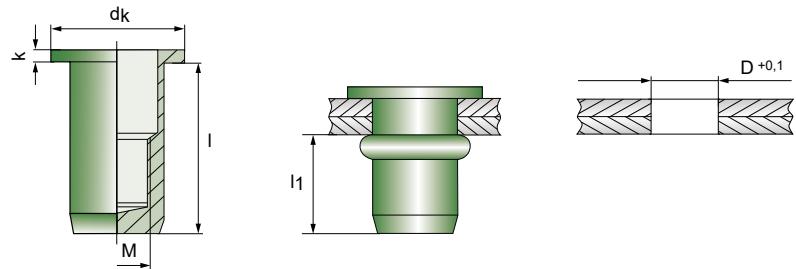
Blind rivet nut EFM-G

Stainless steel A2

Dome head | Round shank | closed



Series
860



[1.4567]

M		I	No.	
M4	0,5 - 2,5	16,0	10860040250	500
D 6,0	k 1,0	d _k 9,0	I _t max. 13,0	↶ 4 Nm ↘ 7000 N
M5	0,5 - 3,0	18,0	10860050300	500
D 7,0	k 1,0	d _k 10,0	I _t max. 14,5	↶ 6 Nm ↘ 11000 N

M		I	No.	
M6	0,5 - 3,0	21,0	10860060300	500
D 9,0	k 1,5	d _k 12,0	I _t max. 16,0	↶ 11 Nm ↘ 18000 N
M8	0,5 - 3,0	23,5	10860080300	250
D 11,0	k 1,5	d _k 15,0	I _t max. 19,0	↶ 24 Nm ↘ 27000 N

Larger grip ranges?
Closed shank?
Twist resistance or Imperial thread?

HONSEL has many other products not shown in the catalogue available from stock or, on request and with sufficiently high order volumes, produces the blind rivet nuts required according to your specifications.

Series
848**CAD**
DATA
ONLINE

Blind rivet nut EFM-R

Stainless steel A2

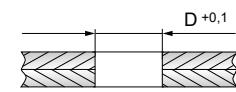
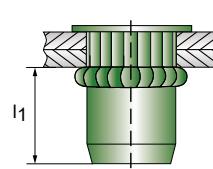
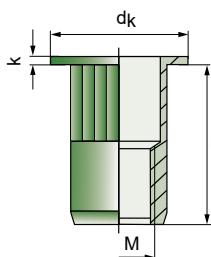


Dome head | Round shank knurled | open



[1.4567]

M		I	No.	
M3	0,5 - 2,0	10,0	10848030200	500
D 5,0	k 0,8	d _k 8,0	I _t , max. 7,0	↙ 4000 N
M4	0,5 - 2,5	11,0	10848040250	500
	2,5 - 4,0	12,5	10848040400	500
D 6,0	k 0,8	d _k 9,0	I _t , max. 8,0	↙ 6500 N
M5	0,5 - 3,0	12,0	10848050300	500
	3,0 - 4,5	13,5	10848050450	500
D 7,0	k 1,0	d _k 10,0	I _t , max. 8,5	↙ 10000 N



M		I	No.	
M6	0,5 - 3,0	14,5	10848060300	500
	3,0 - 5,0	16,0	10848060500	500
D 9,0	k 1,5	d _k 12,0	I _t , max. 10,0	↙ 17000 N
M8	0,5 - 3,0	16,0	10848080300	500
	3,0 - 5,5	18,5	10848080550	250
D 11,0	k 1,5	d _k 15,0	I _t , max. 12,0	↙ 25000 N
M10	1,0 - 3,5	19,0	10848100350	250
	3,5 - 6,0	21,5	10848100600	250
D 13,0	k 2,0	d _k 17,0	I _t , max. 14,0	↙ 38000 N

EFM

Blind rivet nut ESM

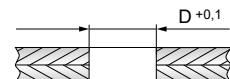
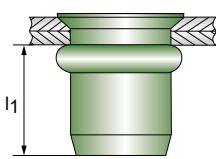
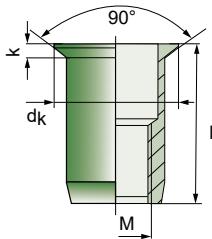
Stainless steel A2

Countersunk head | Round shank | open



CAD
DATA
ONLINE

Series
859



[1.4567]

M		I	No.	
M5	1,5 - 4,5	13,5	10859050450	500
D 7,0	k 1,5	dk 10,0	I _t max. 8,5	↶ 6 Nm ↴ 11000 N
M6	1,5 - 4,5	16,0	10859060450	500
D 9,0	k 1,5	dk 12,0	I _t max. 10,0	↶ 11 Nm ↴ 16000 N

M		I	No.	
M8	1,5 - 4,5	18,0	10859080450	500
	4,5 - 6,5	20,0	10859080650	250
D 11,0	k 1,5	dk 14,0	I _t max. 11,5	↶ 24 Nm ↴ 27000 N

HONSEL production. Partial view of thread production.



Series
865**CAD**
DATA
ONLINE

Blind rivet nut ESM-R

Stainless steel A2

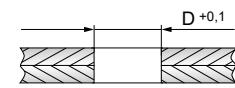
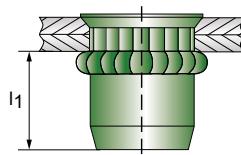
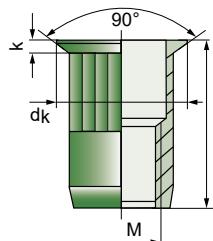


Countersunk head | Round shank knurled | open



[1.4567]

M		I	No.	
M4	2,0 - 4,0	12,0	10865040400	500
D 6,0	k 1,5	d _k 9,0	I ₁ , max. 8,0	↙ 6500 N
M5	1,5 - 4,5	13,0	10865050450	500
D 7,0	k 1,5	d _k 10,0	I ₁ , max. 8,5	↙ 10000 N
M6	1,5 - 4,5	16,0	10865060450	500
	4,5 - 6,5	18,0	10865060650	500
D 9,0	k 1,5	d _k 12,0	I ₁ , max. 10,0	↙ 15000 N



M		I	No.	
M8	1,5 - 4,5	18,0	10865080450	500
	4,0 - 6,5	21,0	10865080650	250
D 11,0	k 1,5	d _k 14,0	I ₁ , max. 12,0	↙ 25000 N
M10	2,0 - 4,5	21,0	10865100450	250
D 13,0	k 1,6	d _k 16,0	I ₁ , max. 14,5	↙ 38000 N

ESM



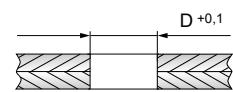
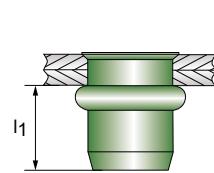
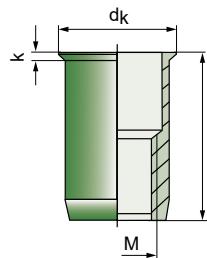
Blind rivet nut ESM-KLSK

Stainless steel A2

Small countersunk head | Round shank | open

CAD
DATA
ONLINE

Series
802



[1.4567]

M		I	No.	
M4	0,5 - 2,5	11,0	10802040250	500
D 6,0	k 0,5	d _k 7,0	I _t max. 8,0	↶ 4 Nm ↘ 6500 N
M5	0,5 - 3,0	12,0	10802050300	500
D 7,0	k 0,5	d _k 8,0	I _t max. 8,5	↶ 6 Nm ↘ 10000 N
M6	0,5 - 3,0	14,0	10802060300	500
D 9,0	k 0,5	d _k 10,0	I _t max. 10,0	↶ 11 Nm ↘ 15000 N

M		I	No.	
M8	0,5 - 3,0	16,0	10802080300	500
D 11,0	k 0,5	d _k 12,0	I _t max. 11,5	↶ 24 Nm ↘ 25000 N
M10	1,0 - 3,5	19,2	10802100350	250
D 13,0	k 0,7	d _k 14,0	I _t max. 14,0	↶ 50 Nm ↘ 38000 N

Blind rivet nut ESM-KLSK-G

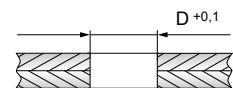
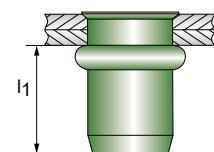
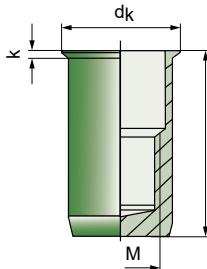
Stainless steel A2

Small countersunk head | Round shank | closed



CAD
DATA
ONLINE

Series
840



[1.4567]

M		I	No.	
M4	0,5 - 2,5	16,0	10840040250	500
D 6,0	k 0,5	d _k 7,0	I _t max. 13,0	↶ 4 Nm ↘ 7000 N
M5	0,5 - 3,0	18,0	10840050300	500
D 7,0	k 0,5	d _k 8,0	I _t max. 14,5	↶ 6 Nm ↘ 11000 N
M6	0,5 - 3,0	21,0	10840060300	500
D 9,0	k 0,5	d _k 10,0	I _t max. 16,0	↶ 11 Nm ↘ 18000 N

M		I	No.	
M8	0,5 - 3,0	23,5	10840080300	500
D 11,0	k 0,5	d _k 12,0	I _t max. 19,0	↶ 24 Nm ↘ 27000 N
M10	1,0 - 3,5	26,5	10840100350	100
D 13,0	k 0,7	d _k 14,0	I _t max. 22,0	↶ 50 Nm ↘ 40000 N

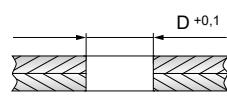
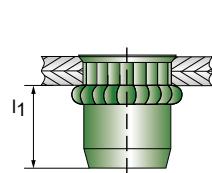
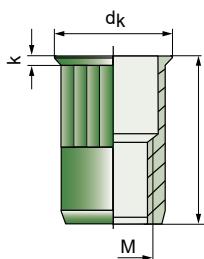


Please ask for our extensive possibilities for **stainless steel blind rivet nuts in turned quality**.

Series
849**CAD**
DATA
ONLINE**MOVIE****Blind rivet nut ESM-R-KLSK**

Stainless steel A2

Small countersunk head | Round shank knurled | open



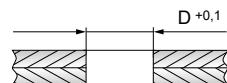
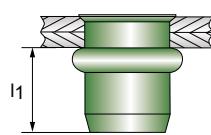
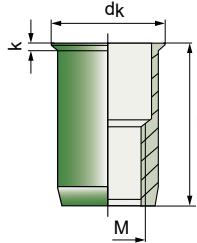
[1.4567]

M		I	No.	
M3	0,5 - 1,5	9,0	10849030200	500
D 5,0	k 0,4	d _k 6,0	I₁, max. 7,0	↓ 3500 N
M4	0,5 - 3,0	10,0	10849040300	500
D 6,0	k 0,4	d _k 7,0	I₁, max. 8,0	↓ 6500 N
M5	0,5 - 3,0	11,5	10849050300	500
	3,0 - 4,5	13,5	10849050450	500
D 7,0	k 0,5	d _k 8,0	I₁, max. 8,5	↓ 10000 N
M6	0,5 - 3,0	14,0	10849060300	500
	3,0 - 5,0	16,0	10849060500	500
D 9,0	k 0,5	d _k 10,0	I₁, max. 10,0	↓ 15000 N

M		I	No.	
M8	0,5 - 3,0	16,0	10849080300	500
	4,0 - 6,0	19,5	10849080600	500
D 11,0	k 0,5	d _k 12,0	I₁, max. 11,5	↓ 25000 N
M10	1,0 - 3,5	19,2	10849100350	250
D 13,0	k 0,7	d _k 14,0	I₁, max. 14,0	↓ 38000 N
M12	1,0 - 4,0	24,0	10849120400	100
D 16,0	k 0,7	d _k 17,0	I₁, max. 16,0	↓ 50000 N

HONSEL

HONSEL quality. Automatic inspection machines for optional 100 % inspection.



[1.4567]

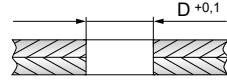
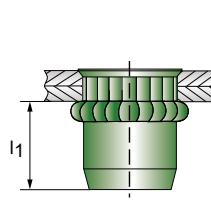
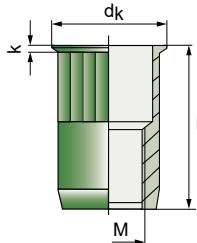
M		I	No.	
M5	0,5 - 3,0	11,5	10873500000	500
D 7,0	k 0,4	d _k 8,0	I _t max. 8,5	↶ 5 Nm ↘ 11000 N
M4	0,5 - 3,0	10,5	10873400000	500
D 7,0	k 0,4	d _k 8,0	I _t max. 8,0	↶ 3 Nm ↘ 7000 N

M		I	No.	
M6	0,5 - 3,0	13,0	10873600000	500
D 8,0	k 0,4	d _k 9,0	I _t max. 10,0	↶ 10 Nm ↘ 18000 N
M8	0,5 - 3,0	15,5	10873800000	500
D 10,0	k 0,4	d _k 11,0	I _t max. 11,5	↶ 20 Nm ↘ 27000 N

Blind rivet nut UNIVERSAL-E-R

■ Stainless steel A2

Small countersunk head | Round shank knurled | open



[1.4567]

M		I	No.	
M5	0,5 - 3,0	11,5	10891500000	500
D 7,0	k 0,4	d _k 8,0	I _t max. 8,5	↘ 10000 N
M4	0,5 - 3,0	10,5	10891400000	500
D 7,0	k 0,4	d _k 8,0	I _t max. 8,0	↘ 6800 N
M6	0,5 - 3,0	13,0	10891600000	500

M		I	No.	
D 8,0	k 0,4	d _k 9,0	I _t max. 10,0	↘ 14000 N
M8	0,5 - 3,0	15,5	10891800000	500
D 10,0	k 0,4	d _k 11,0	I _t max. 11,5	↘ 25000 N
M10	0,5 - 3,0	17,5	10891100000	250
D 12,0	k 0,5	d _k 13,0	I _t max. 14,0	↘ 37000 N

For your enquiries or orders, you can also use the classic short designation of our blind rivet nuts that is structured as shown opposite:

Series name:

+ thread size:

+ maximum grip range:

= short designation:

Universal-E-R

M8

3.0 mm

Universal E-R 8-30

Rivdom eVNG 2

**THE NEW BATTERY RIVETER
FOR BLIND RIVET NUTS**

**Mobile, flexible,
unrestricted setting of
BLIND RIVET NUTS
UP TO M12 ?**

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and **modern** solution
is now available with the
Rivdom eVNG 2!

NEW
Second
quarter
2021

Rivdom eVNG 2
combines decades of
experience in the indus-
trial setting of blind rivet
nuts with today's proven
technology of **HONSEL**
battery riveters.

Rivdom
Made by HONSEL.



Arrange a demonstration visit to your dealer or with our technical sales advisors
in the nationwide team.

We will impress you with the **Rivdom eVNG 2**

Blind rivet nut HEXATOP-E-FK

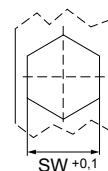
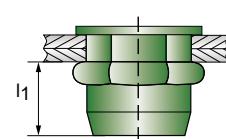
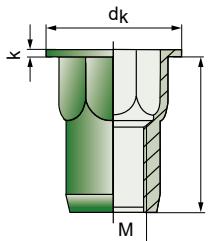
 Stainless steel A2

Dome head | Partial hexagonal shank | open



CAD
DATA
ONLINE

Series
877



[1.4567]

M		I	No.	
M4	0,5 - 2,5	12,0	10877040250	500
SW 6,0	k 1,0	d _k 9,5	I_t max. 8,5	↶ 5 Nm ↴ 6500 N
M5	0,5 - 3,0	13,5	10877050300	500
SW 7,0	k 1,0	d _k 10,5	I_t max. 9,0	↶ 7 Nm ↴ 10000 N
M6	0,5 - 3,0	15,5	10877060300	500
SW 9,0	k 1,5	d _k 12,5	I_t max. 10,0	↶ 13 Nm ↴ 17000 N

M		I	No.	
M8	0,5 - 3,0	17,5	10877080300	250
SW 11,0	k 1,5	d _k 14,5	I_t max. 11,5	↶ 25 Nm ↴ 27000 N
M10	1,0 - 3,5	19,0	10877100350	250
SW 13,0	k 2,0	d _k 16,5	I_t max. 13,5	↶ 55 Nm ↴ 39000 N

HONSEL production. Induction annealing.

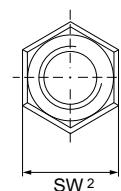
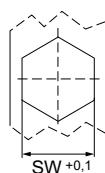
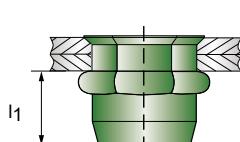
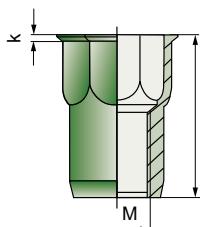


Series
879**CAD**
DATA
ONLINE**MOVIE**

Blind rivet nut HEXATOP-E-KLSK

Stainless steel A2

Small countersunk head | Partial hexagonal shank | open



[1.4567]

M		I	No.	
M4	0,5 - 2,5	11,0	10879040250	500
	2,0 - 4,0	12,5	10879040400	500
SW 6,0	SW² 6,8	k 0,5	I_t max. 8,5	↶ 5 Nm ↗ 6000 N
M5	0,5 - 3,0	12,0	10879050300	500
	3,0 - 4,5	13,5	10879050450	500
SW 7,0	SW² 8,0	k 0,5	I_t max. 9,0	↶ 7 Nm ↗ 9500 N
M6	0,5 - 3,0	14,0	10879060300	500
	3,0 - 5,0	16,0	10879060500	500
SW 9,0	SW² 10,0	k 0,5	I_t max. 10,0	↶ 13 Nm ↗ 16000 N

M		I	No.	
M8	0,5 - 3,0	16,0	10879080300	250
	3,0 - 5,5	18,5	10879080550	250
SW 11,0	SW² 12,0	k 0,5	I_t max. 11,5	↶ 25 Nm ↗ 26000 N
M10	1,0 - 3,5	19,0	10879100350	250
	SW 13,0	SW² 14,4	k 0,7	I_t max. 14,0
M12	1,0 - 4,0	24,0	10879120400	100
	SW 16,0	SW² 17,3	k 0,7	I_t max. 19,0
			↶ 85 Nm ↗ 55000 N	

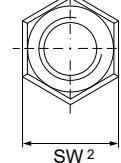
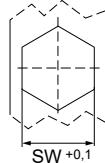
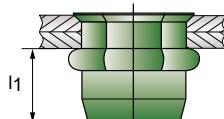
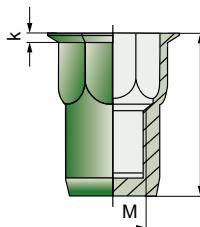
HEXATOP

Series
805**CAD**
DATA
ONLINE

Blind rivet nut HEXATOP-E-KLSK-G

Stainless steel A2

Small countersunk head | Partial hexagonal shank | closed



[1.4567]

M		I	No.	
M4	0,5 - 2,5	16,0	10805040250	500
	SW 6,0	SW² 6,8	k 0,5	I_t max. 10,5
M5	0,5 - 3,0	18,0	10805050300	500
	SW 7,0	SW² 7,8	k 0,5	I_t max. 12,5
			↶ 7 Nm ↗ 9500 N	

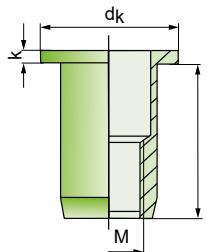
M		I	No.	
M6	0,5 - 3,0	21,0	10805060300	500
	SW 9,0	SW² 9,8	k 0,7	I_t max. 16,0
M8	0,5 - 3,0	23,5	10805080300	250
	SW 11,0	SW² 11,8	k 0,7	I_t max. 17,5
			↶ 25 Nm ↗ 26000 N	



Blind rivet nut EFM A4

Stainless steel A4

Dome head | Partial hexagonal shank | open



Stainless

A4

CAD
DATA
ONLINE

Series

858

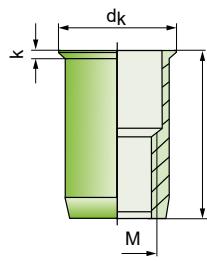
M		I	No.	
M4	0,5 - 2,0	10,2	10858040200/79	500
D 6,0	k 0,8	dk 9,0	I ₁ max. 8,0	↶ 5 Nm ↘ 7000 N
M5	0,5 - 3,0	12,0	10858050300/79	500
D 7,0	k 1,0	dk 10,0	I ₁ max. 8,0	↶ 8 Nm ↘ 11000 N

M		I	No.	
M6	0,5 - 3,0	14,5	10858060300/79	500
D 9,0	k 1,5	dk 12,0	I ₁ max. 10,0	↶ 15 Nm ↘ 18000 N
M8	0,5 - 3,0	16,0	10858080300/79	250
D 11,0	k 1,5	dk 15,0	I ₁ max. 11,5	↶ 26 Nm ↘ 27000 N

Blind rivet nut ESM-KLSK A4

Stainless steel A4

Small countersunk head | Partial hexagonal shank | open



Stainless

A4

CAD
DATA
ONLINE

Series
802

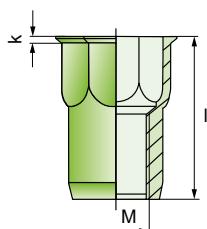
M		I	No.	
M4	0,5 - 2,0	10,0	10802040200/79	500
D 6,0	k 0,5	dk 6,8	I ₁ max. 8,0	↶ 3 Nm ↘ 6500 N
M5	0,5 - 3,0	12,5	10802050300/79	500
D 7,0	k 0,5	dk 8,0	I ₁ max. 8,5	↶ 6 Nm ↘ 10000 N

M		I	No.	
M6	0,5 - 3,0	14,0	10802060300/79	500
D 9,0	k 0,5	dk 10,0	I ₁ max. 10,0	↶ 11 Nm ↘ 15000 N
M8	1,0 - 4,0	16,5	10802080400/79	250
D 11,0	k 0,6	dk 12,0	I ₁ max. 11,5	↶ 20 Nm ↘ 25000 N

Blind rivet nut HEXATOP A4

Stainless steel A4

Small countersunk head | Partial hexagonal shank | open



Stainless

A4

CAD
DATA
ONLINE

Series
879

M		I	No.	
M4	0,5 - 2,0	10,0	10879040200/79	500
SW 6,0	SW ² 6,8	k 0,5	I ₁ max. 8,5	↶ 5 Nm ↘ 6500 N
M5	0,5 - 2,0	12,0	10879050200/79	500
SW 7,0	SW ² 8,0	k 0,6	I ₁ max. 9,0	↶ 8 Nm ↘ 10000 N

M		I	No.	
M6	0,5 - 3,0	14,5	10879060300/79	500
SW 9,0	SW ² 10,0	k 0,6	I ₁ max. 10,0	↶ 15 Nm ↘ 15000 N
M8	0,5 - 3,5	16,5	10879080350/79	250
SW 11,0	SW ² 12,0	k 0,6	I ₁ max. 11,5	↶ 26 Nm ↘ 25000 N



Seawater-proof and more.

High-quality materials such as stainless steel A4 or nickel-copper are rapidly growing in importance. Added to these are various surface finishes, such as zinc-nickel coatings that give our connecting elements the best possible resistance to corrosion, salts or acids. A large number of sizes are available from stock – please ask us.

Our experts will be happy to advise you.



Blind rivet studs

Blind rivet studs



Information on **individual customisations** can be found in the **HONSEL** catalogue for **Industrial** and **automotive** solutions.



RIFBOLT® blind rivet studs – a by-word for over 25 years.

HONSEL is one of the pioneers in the development of the blind rivet stud and has built up vast know-how during the handling of a large number of industrial projects.

Heavy-duty 360° laser-welded versions or version with partial scratch protection to avoid damage to delicate surfaces on the part are just a few of the many innovations in this field.

A blind rivet stud is a combination of a **blind rivet nut** and a stud that are joined by laser welding or crimping.

HONSEL manufactures both parts in-house and can thus guarantee quick and flexible implementation of **individual solutions**.

Parameters such as stud length, thread type (coarse thread, etc.), sleeve designs (knurled, hexagonal) or head form (dome, countersunk and large dome head, small countersunk head) and deviating surfaces can be modified, where necessary.



General information on blind rivet studs can be found in the technical appendix from [page 124](#).



Fitted or injection moulded seals are available for perfect sealing.

Blind rivet studs allow you

- to reliably join different parts together,
- to produce thread carriers in thin-walled components
- to attach further components

Blind rivet studs are an outstanding **alternative to the classic welded stud** and are being increasingly used accordingly (also as a later substitution).

NEW IN 2021

RIFBOLT® blind rivet studs with the standard diameters of the HONSEL blind rivet nuts.

High-quality crimping!

Twist-proof thanks to knurling!

Blind rivet stud RIFBOLT®-R-FK

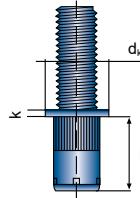
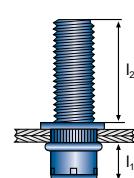
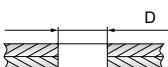
Steel galvanized

Dome head | Round shank knurled



CAD
DATA
ONLINE

Series
884



M		I	l ₂	No.	
M5	0,5 - 3,0	11,0	15	10884053015	500
				I ₁ max. 5,5 D 7,0 d _k 10,0 k 1,0 6 Nm 10000 N	
M6	0,5 - 3,0	12,5	15	10884063015	250
	3,0 - 5,5	15,0	15	10884065015	250
				I ₁ max. 7,5 D 9,0 d _k 13,0 k 1,5 10 Nm 15000 N	

M		I	l ₂	No.	
M8	0,5 - 3,0	14,4	15	10884083015	100
	3,0 - 5,5	16,5	15	10884085015	100
				I ₁ max. 8,5 D 11,0 d _k 16,0 k 1,5 24 Nm 21000 N	

l₂ = min. bolt length in set condition. This varies, depending on the grip range and tool setting.

Blind rivet stud RIFBOLT®-R-KLSK

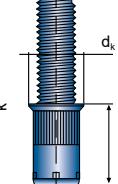
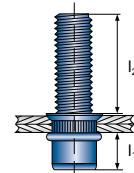
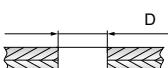
Steel galvanized

Small countersunk head | Round shank knurled



CAD
DATA
ONLINE

Series
883



M		I	l ₂	No.	
M5	0,5 - 3,0	11,0	15	10883053015	500
				I ₁ max. 5,5 D 7,0 6 Nm 10000 N	
M6	0,5 - 3,0	13,0	15	10883063015	250
				I ₁ max. 7,5 D 9,0 10 Nm 15000 N	

M		I	l ₂	No.	
M8	0,5 - 3,0	14,0	15	10883083015	100
				I ₁ max. 8,5 D 11,0 24 Nm 21000 N	

l₂ = min. bolt length in set condition. This varies, depending on the grip range and tool setting.

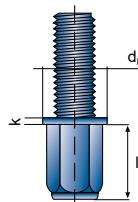
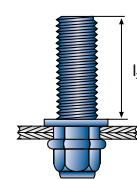
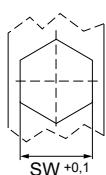


Series
885**CAD**
DATA
ONLINE

Blind rivet stud RIFBOLT® -HEXAFORM FK

Steel galvanized 

Dome head | Hexagonal



M		l	l ₂	No.	
M5	0,5 - 3,0	11,0	15	10885053015	500

SW 7,0 d_k 10,0 k 1,0 ↗ 7 Nm ⚡ 7000 N

M6	0,5 - 3,0	13,0	15	10885063015	250
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SW 9,0 d_k 13,0 k 1,5 ↗ 10 Nm ⚡ 10000 N

M		l	l ₂	No.	
M8	0,5 - 3,0	14,0	20	10885083020	100

SW 11,0 d_k 16,0 k 1,5 ↗ 30 Nm ⚡ 28000 Nl₂ = min. bolt length in set condition. This varies, depending on the grip range and tool setting.**HONSEL** Rivbolt® crimped

“Crimping” is a joining method in which two components are joined together by plastic deformation – in this case squeezing.

Advantages compared with the welded blind rivet stud are:

- Splash-proof sealing
- Complete corrosion protection, even under the sleeve
- High mechanical forces
- Same shaft diameter as the blind rivet nuts

Rivdom eVNG 2

Rivdom
Made by **HONSEL**.

Rivdom eVNG 2

combines decades of experience in the industrial setting of blind rivet studs with today's proven technology of **HONSEL** battery riveters.



Blind rivet Studs can be set using all **HONSEL** tools from the VNG range – from manual riveting tools (including the MULTI series!), through pneumatic and battery riveters right up to components for special machine construction. The corresponding conversion kits are available from stock.

Technical explanations

On the following pages you will find condensed

- **general technical information** on the functioning of blind rivets, self-clinching elements, blind rivet nuts and bolts,
- **reference values** such as tensile and shear strengths, tightening torques and axial tensile forces for the correct choice of product and reliable processing,
- data on the subjects of corrosion and corrosion protection



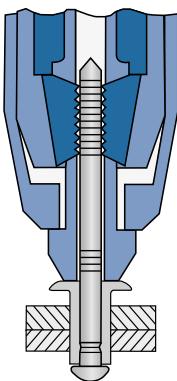
Technical explanations – blind rivets

The setting process

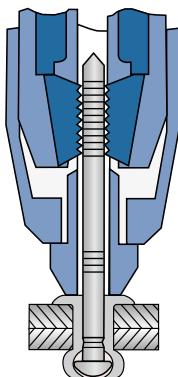


A matching riveting tool is required for processing of the blind rivet. This can be actuated by muscle force (hand-held tools) or external force (e.g. pneumatic or hydraulic settings tools or battery riveters).

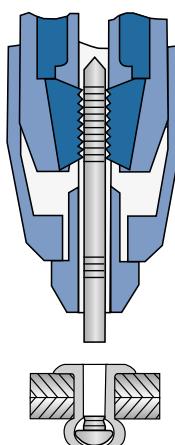
The setting process always takes place in the following steps:



The blind rivet is inserted with the mandrel into the setting tool and positioned in the rivet hole.



When the setting tool stroke is triggered, the mandrel is gripped by the clamping jaws and pulled. The mandrel head reshapes the end of the rivet sleeve. The process is completed when the mandrel head reaches the height of the part surface.



This position is signalled by a significant increase in force with which the mandrel breaks off at its predetermined breaking point. The sheared mandrel is removed and the breakstem remains in the rivet.

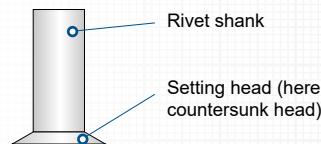
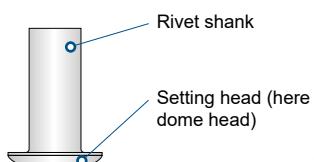
Technical explanations – blind rivets



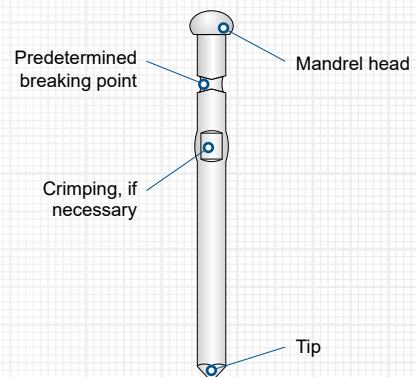
The mandrel is needed for shaping the rivet sleeve.

The mandrel is designed according to the sleeve type and to meet the requirements with regard to processing and operating properties. The breakstem that remains in the joint after setting is used with some special rivet types to increase the shear strength of the rivet.

Rivet sleeve



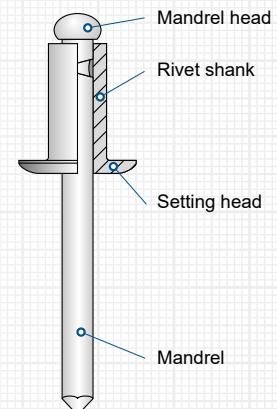
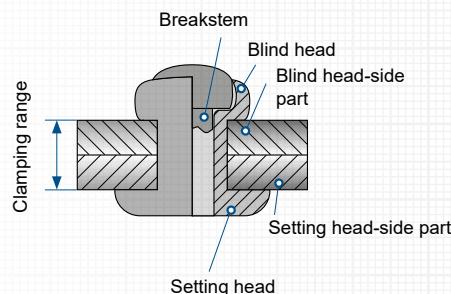
Mandrel



The rivet sleeve is the element that forms the joint.

The rivet sleeve is formed by the mandrel and remains inseparably in the part. The sleeve type is selected according to:

- the mechanical loads to be expected
- the corrosion requirements
- the shape of the parts
- the temperature loads and in some cases also the appearance

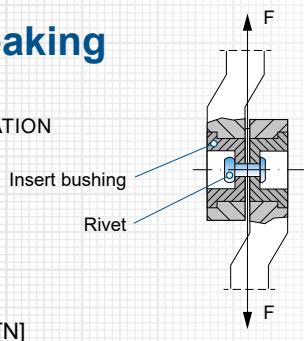


Extensive and constantly updated background information from all areas of riveting and fastening technology can be found on our website at www.honsel.de

Technical explanations – blind rivets

Shear breaking force

TEST CONFIGURATION



Measured values [N]

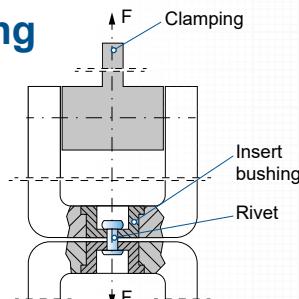
	Type	Dimensions	Page	2.4	3.0	3.2	3.8	4.0	4.8	5.0/ 5.2 ¹	6.0	6.3 ¹ / 6.4	7.8	8.0
ALFO®	Aluminium / steel Dome head	32/33	380	740	750	–	1250	1640	1820	2660	2880	6600	–	–
	Aluminium / steel Countersunk head	34	–	740	750	–	1250	1640	1820	–	–	–	–	–
	Aluminium / steel Large dome head	35	–	–	580	–	1250	1640	1820	2660	–	–	–	–
	Aluminium / steel Grooved dome head	36	–	–	600	–	1000	1350	–	–	–	–	–	–
	Aluminium / stainless steel Dome head	38	420	740	750	–	1250	1640	1820	2660	2880	–	–	–
	Aluminium / stainless steel Countersunk head	39	420	740	–	–	1250	–	1820	–	–	–	–	–
	Aluminium / stainless steel Large dome head	40	–	–	–	–	–	–	1820	–	–	–	–	–
	Aluminium / aluminium Dome head	41	–	–	380	–	740	1140	–	–	–	–	–	–
	Steel / steel Dome head	42	–	1000	1180	–	2100	3180	3320	4340	4920	–	9400	–
	Steel / steel Countersunk head	43	–	1000	1180	–	2100	3180	3320	–	4920	–	–	–
	Steel / steel Large dome head	43	–	–	–	–	–	2900	–	–	–	–	–	–
	Stainless steel / stainless steel Dome head	44	1000	2050	2050	–	2750	4250	5000	6300	7250	–	–	–
	Stainless steel / stainless steel Countersunk head	45	–	1800	1900	–	2750	4250	5000	–	–	–	–	–
	Stainless steel / stainless steel Large dome head	45	–	–	1900	–	2700	4220	–	–	–	–	–	–
	Stainless steel / stainless steel Dome head	46	–	1760	1900	–	3500	4230	4800	–	–	–	–	–
	Stainless steel / stainless steel Countersunk head	46	–	–	–	–	3500	–	–	–	–	–	–	–
	Nickel-copper / stainless steel Dome head	47	–	–	1600	–	2300	3400	–	–	5400	–	–	–
	Copper / steel Dome head	48	–	760	–	–	1500	–	–	–	–	–	–	–
	Copper / bronze Dome head	48	–	760	800	–	1500	–	–	–	–	–	–	–
OPTO®	Aluminium / steel Dome head	53	–	–	720	–	1120	1530	–	–	2000	–	–	–
	Aluminium / steel Countersunk head	54	–	–	670	–	980	1500	–	–	–	–	–	–
	Aluminium / steel Large dome head	54	–	–	720	–	1120	1530	–	–	–	–	–	–
	Aluminium / stainless steel Dome head	55	–	–	670	–	980	1530	–	–	–	–	–	–
	Aluminium / stainless steel Countersunk head	55	–	–	–	–	950	1200	–	–	–	–	–	–
	Aluminium / stainless steel Large dome head	55	–	–	–	–	980	1530	–	–	–	–	–	–
	Aluminium / stainless steel Dome head (extended mandrel)	56	–	–	670	–	980	1530	–	–	–	–	–	–
	Steel / steel Dome head	57	–	–	1500	–	1950	2700	–	–	6500	–	–	–
	Steel / steel Countersunk head	57	–	–	–	–	–	2000	–	–	–	–	–	–
	Steel / steel Large dome head	57	–	–	–	–	–	2050	–	–	–	–	–	–
CERTO®	Stainless steel / stainless steel Dome head	58	–	–	1600	–	2700	3900	–	–	–	–	–	–
	Aluminium / steel Dome head	60	–	–	1100	–	1700	2480	–	–	3760	–	–	–
	Aluminium / steel Countersunk head	60	–	–	1100	–	1700	2480	–	–	–	–	–	–
	Aluminium / stainless steel Dome head	61	–	–	1100	–	1700	2480	–	–	–	–	–	–
	Aluminium / stainless steel Countersunk head	61	–	–	–	–	1700	–	–	–	–	–	–	–
	Aluminium / aluminium Dome head	62	–	–	520	–	720	1020	–	–	–	–	–	–
	Steel / steel Dome head	62	–	–	1150	–	1730	2400	–	–	–	–	–	–
CERTO® PERFECT	Stainless steel / stainless steel Dome head	63	–	–	2000	–	3000	4500	–	–	6500	–	–	–
	Stainless steel / stainless steel Dome head	63	–	–	–	–	4500	–	–	–	–	–	–	–
	Copper / steel Dome head	64	–	–	970	–	1450	2190	–	–	–	–	–	–
	Copper / stainless steel Dome head	64	–	–	1050	–	1450	2190	–	–	–	–	–	–
OPTO® BULB	Steel / steel Dome head	66	–	–	–	–	–	–	–	–	11000	–	–	–
	Stainless steel / stainless steel Dome head	66	–	–	–	–	–	–	–	–	14000	–	–	–
FERO® BULB	Aluminium / aluminium Dome head ¹	67	–	–	–	–	–	–	–	–	4200 [–] 5600	–	–	–
	Steel / steel Dome head ¹	68	–	–	–	–	–	3600 [–] 5600	–	–	10000 [–] 16500	–	–	–
	Steel / steel Countersunk head	68	–	–	–	–	–	–	–	–	5300 [–] 10300	–	–	–
FERO® BOLT*	Stainless steel / stainless steel Dome head ¹	69	–	–	–	–	5200	5500	–	–	11500 [–] 15000	–	–	–
	Steel / steel Dome head	70	–	–	–	–	–	5800	–	–	10500	–	–	–
	Steel / steel Countersunk head	70	–	–	–	–	–	5800	–	–	11000	–	–	–
	Stainless steel / stainless steel Dome head	71	–	–	–	–	–	6000	–	–	10500	–	–	–
FERO® LOCK	Stainless steel / stainless steel Countersunk head	71	–	–	–	–	–	6000	–	–	11200	–	–	–
	Steel / steel Dome head	73												
Folding rivet	Stainless steel / stainless steel Dome head	73												
	Aluminium / aluminium Dome head, standard	75	–	–	–	–	500	900	–	–	–	–	–	–
ARCO®	Aluminium / aluminium Dome head Special 2	75	–	–	–	–	–	–	3000	–	4900	–	–	–
	Aluminium / steel Dome head	76	–	–	850	–	1330	2100	–	–	–	–	–	–
Grounding OPTO®	Aluminium / steel Large dome head	76	–	–	–	–	–	1700	–	–	–	–	–	–
	Aluminium / Steel Dome head with knurling	78	–	–	–	–	1140	–	–	–	–	–	–	–

¹Varies, depending on the length

Technical explanations – blind rivets

Tensile breaking force

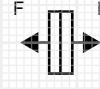
TEST CONFIGURATION



Measured values [N]

	Type	Dimensions	Page	2.4	3.0	3.2	3.8	4.0	4.8	5.0/ 5.2 ¹	6.0	6.3/ 6.4	7.8	8.0
ALFO®	Aluminium / steel Dome head	32/33	600	1000	1220	–	1800	2200	2400	3500	4600	9550	–	–
	Aluminium / steel Countersunk head	34	–	1000	1220	–	1580	2200	2400	–	–	–	–	–
	Aluminium / steel Large dome head	35	–	–	1000	–	2000	2600	2800	3500	–	–	–	–
	Aluminium / steel Grooved dome head	36	–	–	1000	–	1350	1820	–	–	–	–	–	–
	Aluminium / stainless steel Dome head	38	660	1000	1220	–	1800	2200	2400	3500	4600	–	–	–
	Aluminium / stainless steel Countersunk head	39	660	1000	–	–	1580	–	2100	–	–	–	–	–
	Aluminium / stainless steel Large dome head	40	–	–	–	–	–	–	2500	–	–	–	–	–
	Aluminium / aluminium Dome head	41	–	–	670	–	1240	1600	–	–	–	–	–	–
	Steel / steel Dome head	42	–	1340	1560	–	2800	4220	4740	6000	7000	–	13000	–
	Steel / steel Countersunk head	43	–	1340	1560	–	2800	4220	4740	–	5700	–	–	–
	Steel / steel Large dome head	43	–	–	–	–	–	3850	–	–	–	–	–	–
	Stainless steel / stainless steel Dome head	44	1500	2600	2600	–	3550	5400	6400	8250	9335	–	–	–
	Stainless steel / stainless steel Countersunk head	45	–	2200	2500	–	3550	5400	6400	–	–	–	–	–
	Stainless steel / stainless steel Large dome head	45	–	–	2500	–	3500	5330	–	–	–	–	–	–
	Stainless steel / stainless steel Dome head	46	–	2270	2500	–	4650	5250	6600	–	–	–	–	–
	Stainless steel / stainless steel Countersunk head	46	–	–	–	–	4650	–	–	–	–	–	–	–
	Nickel-copper / stainless steel Dome head	47	–	–	2400	–	3450	5000	–	–	8200	–	–	–
	Copper / steel Dome head	48	–	950	–	–	1800	–	–	–	–	–	–	–
	Copper / bronze Dome head	48	–	950	1000	–	1800	–	–	–	–	–	–	–
OPTO®	Aluminium / steel Dome head	53	–	–	1000	–	1650	2300	–	–	2500	–	–	–
	Aluminium / steel Countersunk head	54	–	–	900	–	1320	2300	–	–	–	–	–	–
	Aluminium / steel Large dome head	54	–	–	1000	–	1650	2300	–	–	–	–	–	–
	Aluminium / stainless steel Dome head	55	–	–	900	–	1320	2300	–	–	–	–	–	–
	Aluminium / stainless steel Countersunk head	55	–	–	–	–	1500	1700	–	–	–	–	–	–
	Aluminium / stainless steel Large dome head	55	–	–	–	–	1320	2300	–	–	–	–	–	–
	Aluminium / stainless steel Dome head (extended mandrel)	56	–	–	900	–	1320	2300	–	–	–	–	–	–
	Steel / steel Dome head	57	–	–	1700	–	2350	3300	–	–	4200	–	–	–
	Steel / steel Countersunk head	57	–	–	–	–	–	2900	–	–	–	–	–	–
	Steel / steel Large dome head	57	–	–	–	–	–	2940	–	–	–	–	–	–
CERTO®	Stainless steel / stainless steel Dome head	58	–	–	2000	–	3500	5000	–	–	–	–	–	–
	Aluminium / steel Dome head	60	–	–	1450	–	2700	3540	–	–	5460	–	–	–
	Aluminium / steel Countersunk head	60	–	–	1450	–	2700	3540	–	–	–	–	–	–
	Aluminium / stainless steel Dome head	61	–	–	1450	–	2700	3540	–	–	–	–	–	–
	Aluminium / stainless steel Countersunk head	61	–	–	–	–	2700	–	–	–	–	–	–	–
	Aluminium / aluminium Dome head	62	–	–	540	–	760	1420	–	–	–	–	–	–
CERTO® PERFECT	Steel / steel Dome head	62	–	–	1300	–	1860	2800	–	–	–	–	–	–
	Stainless steel / stainless steel Dome head	63	–	–	2500	–	4000	5500	–	–	8000	–	–	–
	Copper / steel Dome head	64	–	–	1270	–	2300	3280	–	–	–	–	–	–
OPTO® BULB	Copper / stainless steel Dome head	64	–	–	1350	–	2300	3280	–	–	–	–	–	–
	Steel / steel Dome head	66	–	–	–	–	–	–	–	–	7800	–	–	–
FERO® BULB	Stainless steel / stainless steel Dome head	66	–	–	–	–	–	–	–	–	8000	–	–	–
	Aluminium / aluminium Dome head ¹	67	–	–	–	–	–	–	–	–	3100	–	–	–
	Steel / steel Dome head ¹	68	–	–	–	–	–	3800	–	–	7800	–	–	–
	Steel / steel Countersunk head	68	–	–	–	–	–	–	–	–	5400	–	–	–
FERO® BOLT	Stainless steel / stainless steel Dome head ¹	69	–	–	–	–	4000	5000	–	–	8800	–	–	–
	Steel / steel Dome head	70	–	–	–	–	–	4100	–	–	8000	–	–	–
	Steel / steel Countersunk head	70	–	–	–	–	–	4100	–	–	9500	–	–	–
	Stainless steel / stainless steel Dome head	71	–	–	–	–	–	4500	–	–	8200	–	–	–
FERO® LOCK	Stainless steel / stainless steel Countersunk head	71	–	–	–	–	–	4500	–	–	8900	–	–	–
	Steel / steel Dome head	73												
Folding rivet	Stainless steel / stainless steel Dome head	73												
	Aluminium / aluminium Dome head, standard	75	–	–	–	–	800	1100	–	–	–	–	–	–
ARCO®	Aluminium / aluminium Dome head Special 2	75	–	–	–	–	–	–	–	2000	–	3000	–	–
	Aluminium / steel Dome head	76	–	–	720	–	1300	1950	–	–	–	–	–	–
Grounding OPTO®	Aluminium / steel Large dome head	76	–	–	–	–	–	1700	–	–	–	–	–	–
	Aluminium / steel Dome head	78	–	–	–	–	1670	–	–	–	–	–	–	–

The **tensile breaking force** is the force that a rivet can withstand in axial direction before it fails due to fracture. The test device presented in DIN EN ISO 14589 is generally used for the static measurement. The **minimum value** for the tensile breaking strength is indicated on the pages under the following symbol:



¹Varies, depending on the length

Technical explanations – blind rivet nuts

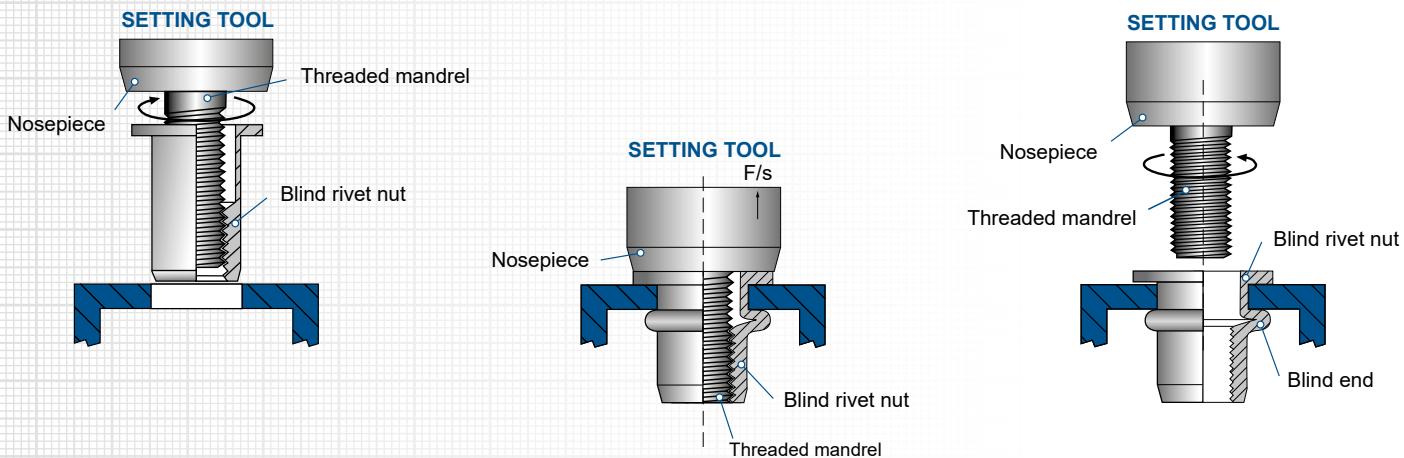
The setting process

Blind rivet nuts are characterised by very quick and simple installation.

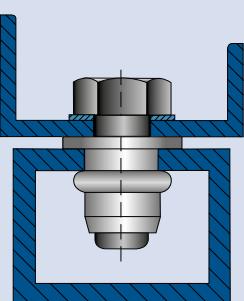
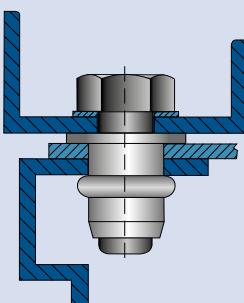
To set the nut, it is screwed onto the threaded mandrel of the setting tool, inserted into the part borehole, and set by the tool stroke.

This causes the closing bead of the nut to form. After the threaded mandrel is removed, the parts can be screwed tight.

Various tools are available for setting the nut which allow setting to be carried out efficiently. Setting tools can be manually operated or pneumatically/hydraulically operated.



General installation instructions



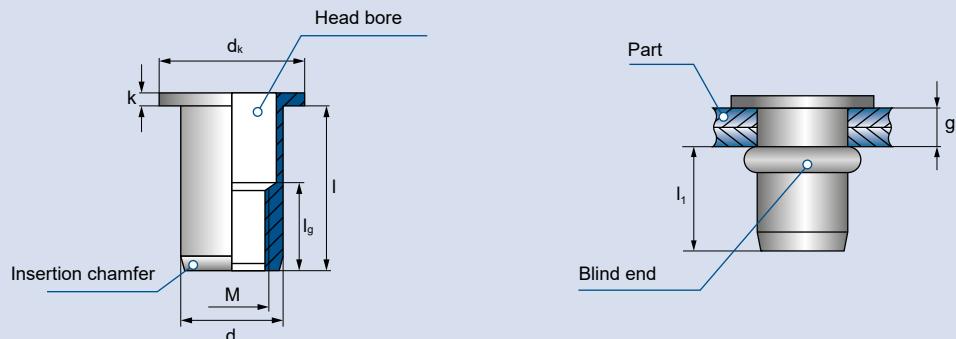
In order to guarantee the correct functioning of the blind rivet nuts, the following points should be observed:

- Set the blind rivet nuts up to complete formation of the blind head
- It must be easy to unscrew the threaded mandrel after setting
- Installation at right-angles to the part surface
- Countersink blind rivet nuts with standard countersunk head with a slight protrusion
- When using blind rivet nuts with small countersunk head (e.g. UNIVERSAL), it is not necessary to countersink the borehole
- For blind rivet nuts without an additional positive locking twist lock, the part surfaces must be dry, clean and grease-free
- The specified part bores must be observed; oversized bores result in problems with the torque and load-bearing strength

Technical explanations – blind rivet nuts

The blind rivet nut

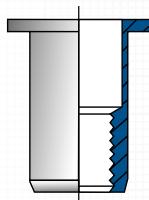
- d - shank diameter
- d_k - setting head diameter
- k - setting head height
- l_g - thread length min. $1 \times M$
- l - shank length
- l_1 - projection length
- M - thread diameter
- g - grip length



Head forms

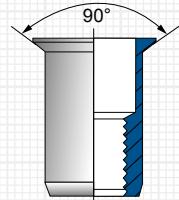
FK – dome head

- Universal nut type with a high level of availability and a wide material spectrum
- Use with dry and grease-free parts



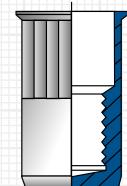
SK – countersunk head

For setting blind rivet nuts with countersunk head, the part must only be countersunk to a depth at which the countersunk head protrudes by min. 0.1 mm after setting.



KLSK – small countersunk head

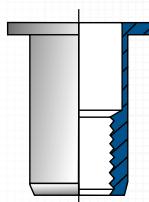
Countersinking of the bores is generally not necessary for setting blind rivet nuts with small countersunk head. If technically necessary, countersink so that the countersunk head protrudes by min. 0.1 mm after setting.



Shank forms

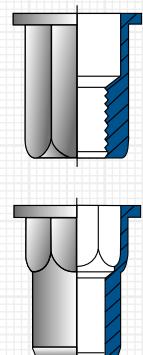
Round shank blind rivet nuts

- Universal nut type with a high level of availability and a wide material spectrum
- Use with dry and grease-free parts



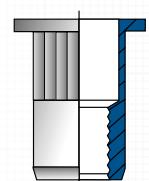
Blind rivet nuts with continuous hexagonal shank (HEXAFORM®) or partial hexagonal shank (HEXATOP®)

- Shank design with positive locking twist lock
- Preferred use with coated parts
- High twist resistance even with insufficient setting device stroke
- Suitable for multiple screwing



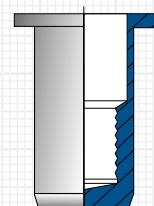
Blind rivet nuts with knurled shank

- Shank design with positive locking twist lock
- preferred use in parts with low strength (part material less "hard" than material of the blind rivet nut)



Blind rivet nuts with closed shank

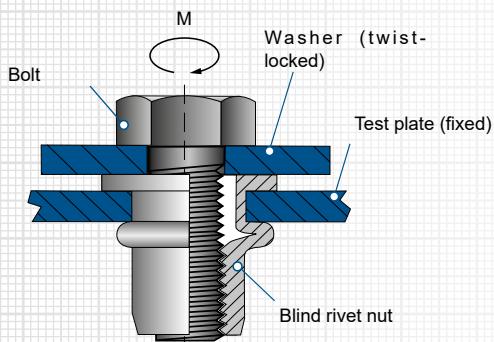
- Closed nut shank prevents liquid and gas passing through the nut
- Additional sealing possible between nut shank and part borehole
- Mechanical properties identical with comparable nut with open shank



Technical explanations – blind rivet nuts

Tightening torque

TEST CONFIGURATION



To measure the tightening torque, set the nut to be tested into a test plate, fit an anti-twist steel washer and tighten the screw.

The following conditions apply during the test:

Test plate: structural steel – uncoated, dry, grease-free, thickness approx. maximum clamping length of the nut

Part bore: nominal size of the nut shank + 0.2 mm

Machine screw: oiled, strength class min. 8.8

The **minimum value** at which failure of the nut can occur under the defined conditions is indicated.

Rotation of the nut and/or recognisable plastic deformation of the blind rivet nut is regarded as failure. In practical use, partially different operating conditions may apply which can lead to a change in the tightening torques. **We therefore generally recommend an examination of each specific individual case.**

The **minimum tightening torque** is indicated by the following symbol:



Maximum tightening torque – measured values [Nm]

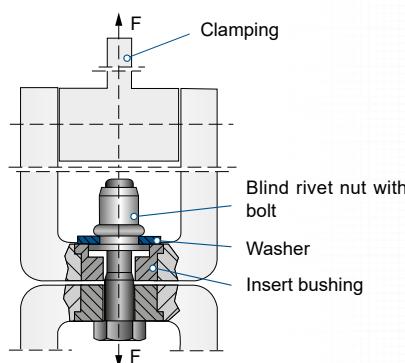
Type	Thread size	Page	M 3	M 4	M 5	M 6	M 8	M 10	M 12
AFM		82	1	3	4	6	18	28	45
AFM-G		82	–	3	4	6	18	28	–
ASM		83	1	3	4	6	18	28	45
ASM-G		83	–	–	4	6	18	–	–
ASM-KLSK		83	–	2	4	6	18	–	–
OPTO® AFM		84	–	3	4	6	18	–	–
OPTO® ASM		84	–	3	4	6	18	–	–
OPTO® SFM		85	–	4	6	11	24	–	–
OPTO® SSM		85	–	4	6	11	24	–	–
SFM		86	1.2	4	6	11	24	50	82
SFM-G		86	–	–	6	11	24	50	–
SFM-R		87				*			
SFM-PL		88	–	–	–	12	21	–	–
SFM-H		89	–	1.1	2.2	2.2	–	–	–
SSM		90	–	4	6	11	24	50	–
SSM-G		90	–	–	6	11	24	50	–
SSM-R		91				*			
SSM-KLSK		92	–	3	5	10	20	–	–
SSM-R-KLSK-G		92				*			
SSM-R-KLSK		93				*			
UNIVERSAL		94	–	3	5	10	20	40	–
UNIVERSAL-R		94				*			
UNIVERSAL-R-G		94				*			
FLATSERT		95	2	3	5	10	20	–	–
FLATSERT-R		95				*			
HEXAFORM®-FK		96	–	5	7	13	25	55	85
HEXAFORM®-KLSK		96	1.2	5	7	13	25	55	85
HEXAFORM®-KLSK-G		97	–	5	7	13	25	55	–
HEXATOP®-FK		98	–	4	6	11	24	50	–
HEXATOP®-KLSK		98	–	4	6	11	24	50	–
EFM		100	–	4	6	11	24	50	85
EFM-G		100	–	4	6	11	24	50	–
EFM-R		101				*			
ESM		102	–	4	6	11	24	50	85
ESM-R		103				*			
ESM-KLSK		104	–	4	6	11	24	50	–
ESM-KLSK-G		104	–	4	6	11	24	50	–
ESM-KLSK-R		105				*			
UNIVERSAL-E		106	–	3	5	10	20	–	–
UNIVERSAL-E-R		106				*			
HEXATOP®-E-FK		108	2	5	7	13	25	55	–
HEXATOP®-E-KLSK		109	2	5	7	13	25	55	85
HEXATOP®-E-KLSK-G		109	–	5	7	13	25	–	–
EFM A4		110	–	5	8	15	26	–	–
ESM KLSK A4		110	–	3	6	11	20	–	–
HEXATOP®-E-KLSK A4		110	–	5	8	15	26	–	–

* Knurled nuts are designed for use with low-strength materials or in parts with thick surface coating. For this reason, there is no general torque specification. The test is also carried out on the original part.

Technical explanations – blind rivet nuts

Axial tensile force

TEST CONFIGURATION



Tearing out of the thread or tearing off of the closing head of the nut is regarded as failure. The values shown should be regarded as indicative values for the design of the joint. In practice, different operating conditions generally prevail that can lead to a change in the failure mode and the forces. **We therefore generally recommend an examination of each specific individual case.**

The minimum tightening torque is indicated by the following symbol:



Axial tensile force – measured values [N]

Type	Thread size	Page	M 3	M 4	M 5	M 6	M 8	M 10	M 12
AFM		82	1500	2600	4300	6700	11000	17500	28000
AFM-G		82	–	2600	4300	6700	11000	17500	–
ASM		83	1500	2600	4300	6700	11000	17500	28000
ASM-G		83	–	–	4300	6700	11000	–	–
ASM-KLSK		83	–	2400	4000	6000	10500	–	–
OPTO® AFM		84	–	3000	4200	6500	10500	–	–
OPTO® ASM		84	–	3000	4200	6500	10500	–	–
OPTO® SFM		85	–	5200	9500	15500	21500	–	–
OPTO® SSM		85	–	5200	9500	15500	21500	–	–
SFM		86	4000	5200	9500	16500	23500	37000	54000
SFM-G		86	–	–	9500	16500	23500	37000	–
SFM-R		87	–	5000	9000	13500	20000	28000	45000
SFM-PL		88	–	–	–	15000	27000	–	–
SFM-H		89	–	245	290	390	–	–	–
SSM		90	–	5200	9500	16500	23500	37000	–
SSM-G		90	–	–	9500	16500	23500	37000	–
SSM-R		91	–	5000	9000	15000	20000	28000	45000
SSM-KLSK		92	–	5000	9000	15000	20000	–	–
SSM-R-KLSK-G		92	–	6800	10000	15000	27000	37000	–
SSM-R-KLSK		93	4000	4800	8000	12000	18000	25000	40000
UNIVERSAL		94	–	6500	8000	11500	14500	22000	–
UNIVERSAL-R		94	–	6000	7500	10000	14000	17500	–
UNIVERSAL-R-G		94	–	6000	7500	–	–	–	–
FLATINSERT		95	3000	6000	9500	13000	16000	–	–
FLATINSERT-R		95	–	5500	9000	12000	15000	–	–
HEXAFORM®-FK		96	–	5200	9500	16500	23500	37000	56000
HEXAFORM®-KLSK		96	3500	5000	9000	16000	23000	36500	55000
HEXAFORM®-KLSK-G		97	–	5200	9500	16500	23500	37000	–
HEXATOP®-FK		98	–	3800	6000	9500	12500	37000	–
HEXATOP®-KLSK		98	–	3800	6000	9500	12500	37000	–
EFM		100	–	7000	11000	18000	27000	40000	57000
EFM-G		100	–	7000	11000	18000	27000	40000	–
EFM-R		101	4000	6500	10000	17000	25000	38000	–
ESM		102	–	7000	11000	16000	27000	40000	57000
ESM-R		103	3700	6500	10000	15000	25000	38000	–
ESM-KLSK		104	–	6500	10000	15000	25000	38000	–
ESM-KLSK-G		104	–	7000	11000	18000	27000	40000	–
ESM-KLSK-R		105	3500	6500	10000	15000	25000	38000	50000
UNIVERSAL-E		106	–	7000	11000	18000	27000	–	–
UNIVERSAL-E-R		106	–	6800	10000	14000	25000	37000	–
HEXATOP®-E-FK		108	4000	6500	10000	17000	27000	39000	–
HEXATOP®-E-KLSK		109	3800	6000	9500	16000	26000	39000	55000
HEXATOP®-E-KLSK-G		109	–	6000	9500	16000	26000	–	–
EFM A4		110	–	7000	11000	18000	27000	–	–
ESM KLSK A4		110	–	6500	10000	15000	25000	–	–
HEXATOP®-E-KLSK A4		110	–	6500	10000	15000	25000	–	–

How to find the correct rivet shank length?

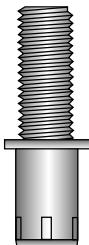
Rivet shank length =
material thickness to be joined +
rivet diameter

Technical explanations – blind rivet bolts

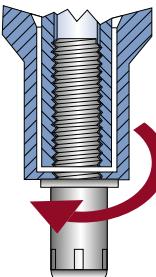
RIFBOLT® blind rivet bolts are essentially set using the identical setting principle as for the blind rivet nuts. The same tools can therefore be used. The threaded mandrels of the setting tools must be replaced with threaded sleeves having the matching inside thread.

The sleeve inserted into the prepared bore is deformed by the tool stroke and thus ensures a tight fit in the part. Knurled types or sleeves with hexagonal shank are available to decrease the risk of fastener rotation in the hole.

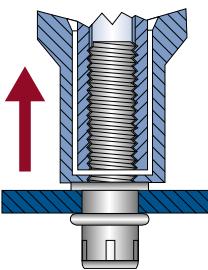
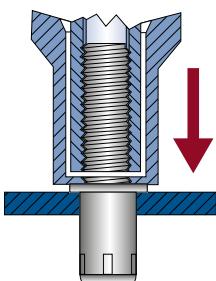
1. RIFBOLT® blind rivet bolt before setting



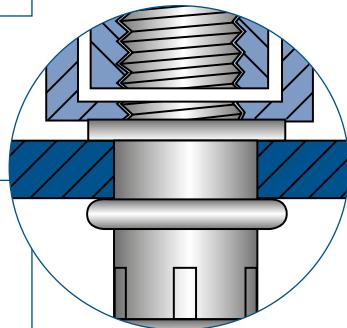
2. Screwing into the threaded sleeve of the setting tool



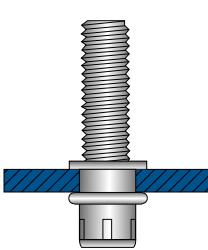
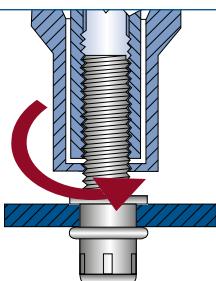
3. Insertion of the rivet sleeve into the hole in the part



4. Riveting by the stroke of the setting tool



5. Spindling of the blind rivet bolt



6. Fitted RIFBOLT® blind rivet bolt



Corrosion and corrosion protection

Although it is essentially not possible to prevent corrosion, the corrosion process can be delayed by suitable measures. The following types of corrosion are crucial and have to be considered in their complexity when designing the riveted joints.

Contact corrosion

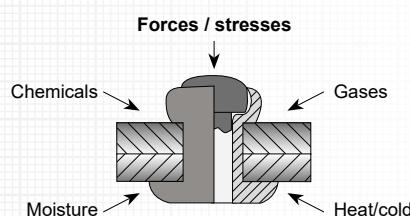
Contact corrosion causes surface damage in the area of a pairing of different metals in the presence of an electrolyte due to the difference in electrical potential. The material is always removed from the less noble metal (anode).

Appropriate protective measures are:

- Use of identical or near-identical material combinations with different material grades:
 - Choice of materials with the smallest possible difference in potential

- Rivet material more noble than the part material

- Choice of suitable surface coatings as an electrical insulation layer



Surface corrosion

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

Appropriate protective measures are:

- Application of a surface coating (passive corrosion protection)
- Use of corrosion-resistant materials (stainless steel, copper, aluminium and aluminium alloys) (active corrosion protection)

Passive corrosion protection

Electro-galvanizing

The zinc coat is applied to rivets made from steel, CuNi and NiCu alloy rivets by galvanic processes. The thickness of the coat should be at least 3 µm, but not more than 20 µm. Steel rivets are galvanized primarily to protect the rivet body from corrosion, but also to reduce contact corrosion when inserted in aluminium parts. Rivets of copper-nickel and nickel-copper alloys are primarily galvanized in order to improve their contact corrosion behaviour.

Zinc-nickel coating

Galvanised zinc-nickel coatings are applied when extremely high demands are made on the corrosion resistance of a steel rivet. With an identical coat thickness, galvanised zinc-nickel coatings provide an approx. 500 % higher corrosion resistance than with normal zinc coating.

Chromating of electroplated layers

Chromating of galvanically coated parts increases the corrosion resistance. Depending on the method of chromating, the resistance can be almost doubled.

Lacquer coating

In order to provide colour, rivets can also be coated with organic lacquers. This process is primarily carried out on aluminium materials; a practically unlimited choice of RAL and NCS colours is possible, and well as other colour shades.

Anodising

Anodising is a further method for coating aluminium rivets. This electrochemically applied coat is used to increase the corrosion resistance of the surface and for colouring. The surface adhesion is high, but only a limited range of colours are possible.

Microlayer corrosion protection systems (MCS)

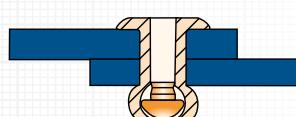
Microlayer corrosion protection systems are modern methods for the surface coating of materials. They allow excellent corrosion protection to be combined with additional properties such as colouring and the setting of defined friction coefficients. MCS systems are selected on the basis of the specific requirements and the parts to be coated.

They contain neither heavy metals nor environmentally harmful chemicals. MCS systems are widely used in the automotive industry – the MCS systems we use are free from hexavalent chromium.

Active corrosion protection

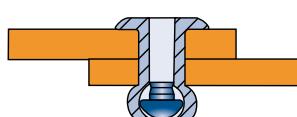
	Anode (iron/steel)
	Cathode (copper)

Anode current = cathode current



Large anode range

- Low current density at the anode
- Slow corrosion



Small anode range

- High current density at the anode
- Rapid corrosion

Technical explanations – corrosion

Contact corrosion behaviour with different material combinations

Sleeve material \ Part	Aluminium	Steel	Stainless steel	Copper
Aluminium	++	+	+	-
Steel - galvanised	+	++	+	-
Stainless steel	+	++	++	-
Copper	+	+	+	++
Nickel-copper- galvanised	+	+	+	++

++ Combination very suitable
+ Combination suitable
- Combination unsuitable

This table serves purely for orientation.

Corrosion behaviour of nickel/copper blind rivets (NiCu30Fe)

Tap water

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

Salt water

NiCu30Fe has very good resistance to seawater. In stationary seawater, slight surface corrosion may occur due to the accumulation of oxygen-forming marine organisms.

Neutral and alkaline salts

High corrosion resistance when used in neutral and alkaline salt solutions.

Acid salts

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

Oxidising acid salts

NiCu30Fe is not very resistant to most oxidizing acid salts such as iron(III) chloride, silver nitrate, mercuric chloride and acids with oxidizing constituents.

Oxidising alkaline salts

Hypochlorites are the only common alkaline salts with a strong 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 air-saturated acid, the corrosion effect is strongest at about 85 °C. Good resistance to sulphuric acid, hydrochloric acid, hydrofluoric acid, etc. can therefore be expected. Phosphoric acid and hydrogen sulphides have no corrosion effect under the above conditions.

Oxidising acids

NiCu30Fe has only limited suitability for contact with strong oxidizing acids. Considerable corrosion can already occur, for example, in 1 % nitric acid with strong movement of the acid.

Organic acids and compounds

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

Alkalines

NiCu30Fe is resistant to most alkaline solutions. Practically no corrosion is caused e.g. by caustic soda in concentrations up to 50 %. In a caustic soda evaporator the NiCu30Fe parts lasted ten years without significant corrosion, whereas the same parts made of steel had to be replaced after one year.

Moist and dry gases

NiCu30Fe is corrosion-resistant to all common dry gases. Dry chlorine gas, for example, has no corrosive effect on NiCu30Fe. This metal alloy is resistant to the corrosive and erosive effect of steam at temperatures up to 400 °C. In contrast to many other alloys, NiCu30Fe showed neither fatigue nor did it become brittle on prolonged exposure to superheated steam.





Blind rivets



Blind rivet nuts



Blind rivet studs



Coil threaded inserts*



Self-clinching elements



Manual riveters



Pneumatic riveters



Battery riveters



Clinching machines*



Automation components*



Process monitoring*

* Please request separate / additional documents.

All prices exclusive of VAT.
Subject to technical and editorial changes.