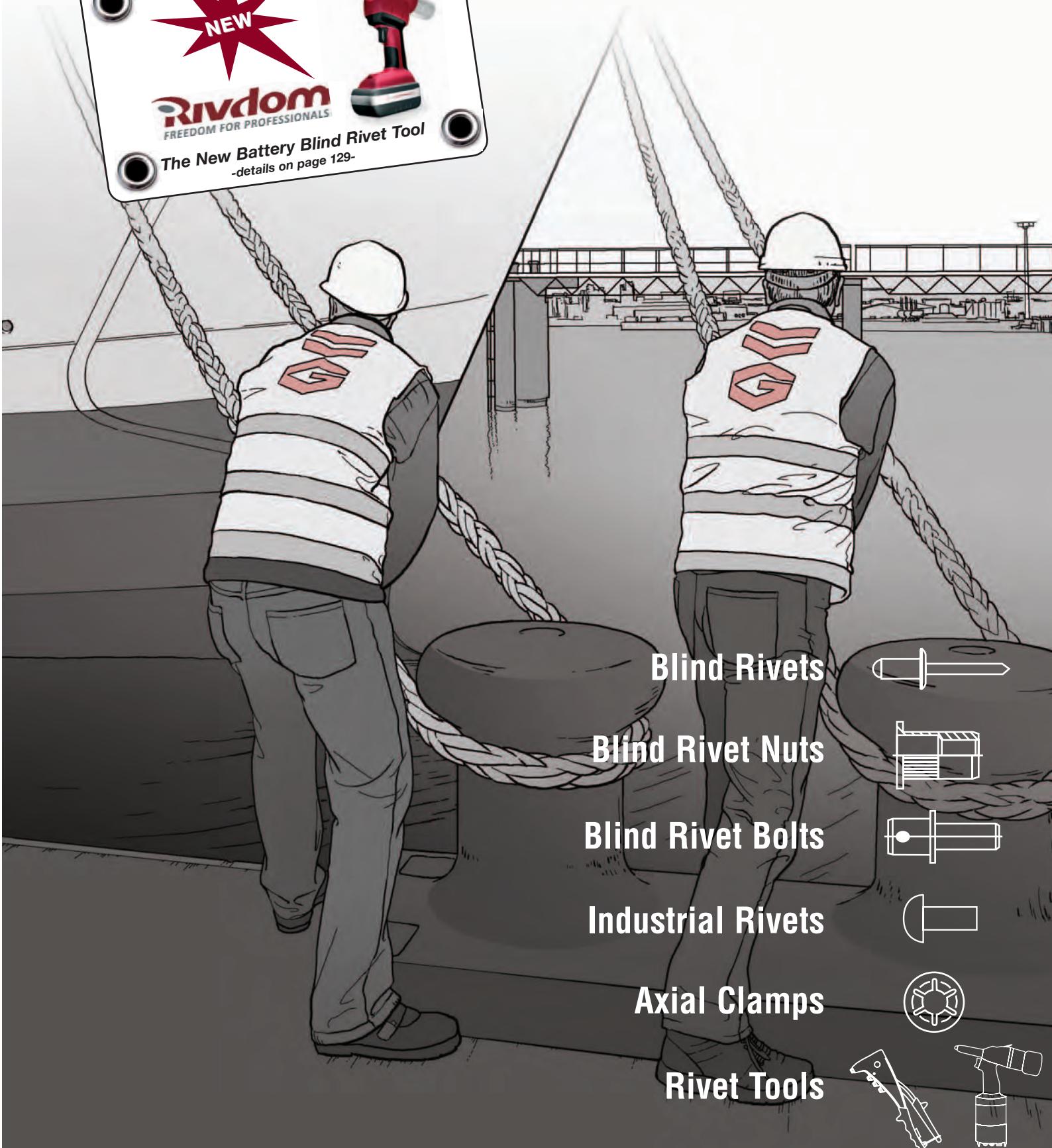




VVG Befestigungstechnik

...a company of the Honsel-Group



The Initiation

Alfred Honsel Nieten- und Metallwarenfabrik GmbH & Co was founded by Alfred Honsel in 1930 in the city of Fröndenberg an der Ruhr.

When the company first started production, it manufactured pots and pans from aluminium **with rivet-fastened handles**.

Then in 1945 the production of household goods was discontinued and the development of rivet-manufacturing became the sole focus.

By the 1960's the company had already become one of the largest European manufacturers of brake covering and clutch lining rivets. The production of blind rivets and blind riveting tools began concurrently.

During the 1980's, blind rivet nuts and blind rivet bolts as well as pneumatic-hydraulic blind riveters were developed. VVG-Befestigungstechnik GmbH & Co was founded in 1994 in Neumünster, Germany, as a specialized business enterprise.



The first production buildings in Fröndenberg



Manufacturing in 1959



Today...

... the Honsel group offers the whole range of rivet technology from standard industrial rivets or blind rivets to fully automated process monitored setting tools.

Honsel Umformtechnik GmbH in Fröndenberg is the manufacturing plant and sales department for specialized parts and machines, whereas **VVG-Befestigungstechnik GmbH & Co.** focuses on the standard items in the catalogue. The group works in conjunction with a **distribution company in France** as well as various partners worldwide.



Service - Consulting - Logistics - Quality

With the relocation to our new headquarter building in the city of Neumünster nearby Hamburg, we now have optimal conditions for a continuous development of assortment and supply of services. The new plant offers more than 3,000 sqm of storage area, including a pallet storage area with space for 1,000 pallets as well as packing machines with a capacity of up to 5 million items daily. Our modern offices allow our dedicated team of experts a quick reaction and perfect carry out our customers' requests.



Service

extensive and flexible

In addition to our high quality and innovative products, we offer comprehensive service within the rivet- and fastening technology.

To achieve the best availability for our clients, our sales personnel are at customers disposal daily from Monday through Thursday from 7 a.m. to 6 p.m. (Friday until 4 p.m.).

Fast delivery is one of our main focus. The majority of all orders are shipped in short terms, frequently within the same day.

The requested goods arrive at their destination by standard shipping within a few days.

When placing blanket orders, we manufacture and stock the goods for you. They can be shipped according to a previously

agreed schedule to arrive "just in time" to the site of operation.

For preventive maintenance and repair of our VVG/Honsel tools our service center is available for you (▶ see page 134).

To accomodate both high volume and one time applications, we offer a multitude of rental tools which can be rented on a daily basis.

We offer our business partners sales support through catalogues, flyers, and shop equipment which can be specially ordered upon request.





Consulting

friendly and competent

Know-how is very important to us. Our staff reflects **80 years of experience**. Through continual on-the-job and external professional development, you will always find a well-trained and motivated staff to answer all of your questions pertaining to rivets.

Together, we will find a suitable solution for every request.

Our clients are supported even on site by our sales team according to individual agreement.

Detailed consultations are the basis for a successful cooperative relationship with our customers.

Through various trade shows and fairs we are able to inform our commercial partners about our new and standard products and receive suggestions and ideas for further product developments.



Logistics

fast and reliable

Fast and reliable shipment of ordered goods is one of our main trademarks.

As well as the ability to reach us and place orders late in the day, our long-time partner UPS guarantees smooth deliveries of all orders.

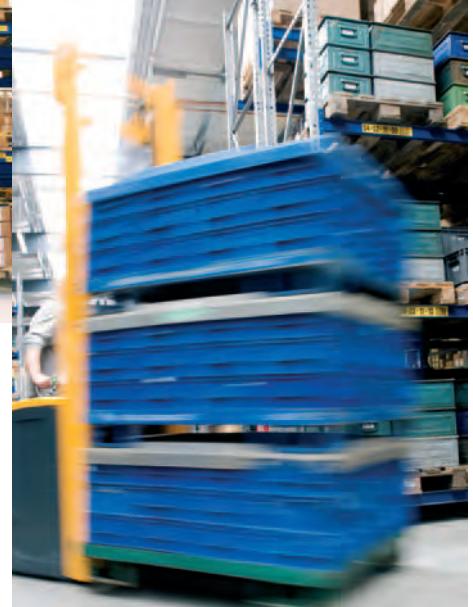
Shipment of pallets by forwarders - no problem for us, we cooperate with partners who have many years of experience in shipping goods in time.

Your orders leave our warehouse safely packed and clearly labeled to reach their destination without any damage.

Our modern packing machinery offers with large capacity all options of individual special packing in much different sizes.

We have more than 150 million parts, 98% of our goods, available to sell at all times.

Our distribution center delivers approximately 40,000 parcels and more than 4,000 pallets yearly throughout the world.



Quality

Quality - first class and certified

Quality is the most significant aspect of our daily business.

Our manufacturing plant in Fröndenberg is certified according to ISO/TS 16949:2002 and DIN EN ISO 14001:2005 and complies to today's production standards.



Our products are continually being developed , improved, and documented.

Besides standard testing methods as the check of shear- and tensile strength, we control for example the press-out-strength and the locking of the remaining mandrel part. We use the latest measuring equipment and testing method like automatic 100% sorting machines or the well known self developed and constructed process-control-system "DMSD" (► details see page 132) to guarantee the **highest level of production**.

The examination and documentation of every single production lot in all phases of the manufacturing process ensures the complete tracing back to the used basic material.

You can trust in us. Guaranteed.





WHAT JOINS US WITH OUR CLIENTS?

Of course our clients demand the highest quality standards.

The standards of Honsel Umformtechnik have always been based upon the highest accuracy. To combine all these aspects, we see ourselves as **development partner** of our clients.

Our long-time professional experience and our consolidated practical know-how offer **ground-breaking and economic solutions** – for your corporate advantage. Solid and efficient fasteners and specific cold formed parts according to customer requirement with the highest quality standards are an incentive for us.

The result unites.

Over the years we had been able to establish and to cement a solid partnership with a lot of important partners of the automotive industry and other industries. Thus also companies of the agricultural industry, the electrical industry, the domestic industry or the railcar industry are among our clients.

All about the automotive, our products connect seats, doors, roof racks, bodies, clutches, brakes or even airbags, to name only a few of various applications.

Our aim is to increase our value added chain with an efficient mechanical treatment and installation and to improve it for you. This results in a clear expansion of the development experience and technologies to obtain a higher profitability and efficiency.

COLD FORMING AS CORE COMPETENCE

Wire based cold forming for all current materials is our know-how!

Our knowledge concerning cold forming goes beyond pure pressing - we see ourselves as developers and analysers of your application.

This is achieved by:

- 4-, 5- and 6-stage presses
- cold-forming tap and heat treatment
- selecting machines for a 100% control
- development of new and efficient cold formed parts
- tool design in our tool manufacturing
- development and production of semi-automatic and fully automatic installations with process monitoring for an individual adjustment of your processes

This is combined with a material optimised manufacturing, to benefit efficiently from the cost advantage of the cold forming in times of increasing commodity prices.

The results are:

- blind rivet nuts and blind rivet bolts
- special blind rivets
- guide bushes and distance bushes
- collar stud and stud bolt
- brake pad rivet and clutch lining rivet
- cable lug blanks
- specific special parts according to customer requirement





BLIND RIVET NUTS



Efficient and process capable inserting of stable threats into metallic and ceramic materials as well as plastics.

BLIND RIVET BOLTS



Inserting of stud bolt into thin-walled units of different materials.

BLIND RIVETS



- to rivet together the units even with different holes
- used as a distance bolt
- profile blind rivet with additional fastening possibilities
- special blind rivet for security-relevant fastenings

BRAKE PAD RIVETS AND CLUTCH LINING RIVETS



Elements for security-relevant units like brake, clutch and gear.

SOCKETS, GUIDE BUSHES AND DISTANCE BUSHES



Cable bushings, distance bushings, decoupling elements, absorption for elastomer.

SPECIAL PARTS ACCORDING TO CUSTOMERS DESIGN



TUBULAR PARTS

- tubular parts with complex sub land holes
- asymmetrical geometries around the hole
- with dog collar and multiple collar
- threaded sleeve
- bushes with straight-knurled shank
- inductive annealed versions
- tubular rivet according to DIN



SEMI-TUBULAR PARTS

- bolts and laterals for wobble clinch sealing
- threaded sleeves with closed head type
- collar stud with multiple holes
- metal-plastics-combinations
- optionally with elastomer sealings
- semi-tubular parts according to DIN



TUBULAR PARTS

- collar stud and shoulder bolt
- asymmetrical bolt and collar forms
- tread parts
- knurl bolt
- burred and trimmed head forms
- tubular parts according to DIN
- inductive tempered versions
- low material input



LIGHTWEIGHT CONSTRUCTION

The use of light metals becomes more and more important in all fields of technology and therefore demands also connections adapted to the material.

By developing an aluminium blind rivet screw, Honsel Umformtechnik has bridged another gap in the field of thread supports which so far has only been available as a steel version on the market.

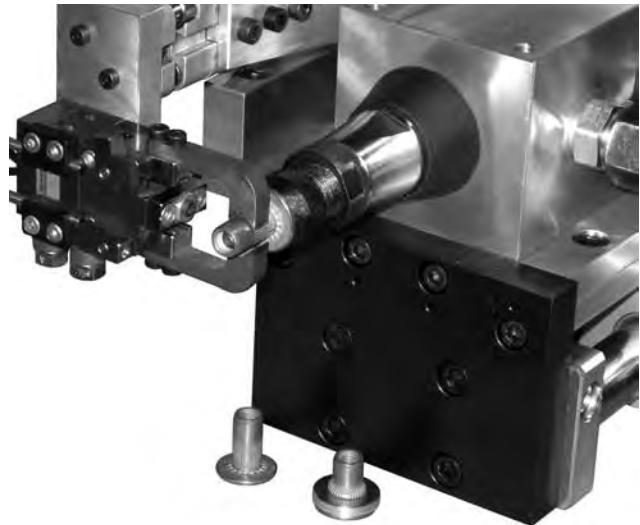
Besides the advantages of the blind rivet nuts, this blind rivet screw offers important weight advantages.

In combination with aluminium and magnesium units it is possible to renounce additional corrosion protection measures.

Moreover, a homogeneous recycling is ensured.



► Additional information about blind rivet bolts [on pages 87/88](#).



AUTOMATIC TREATMENT

In the meantime, fully automatic treatment, fully automatic rivet feeding, process automation and process monitoring has become the focus of Honsel Umformtechnik. It concerns the treatment of blind rivets, rivet nuts, blind rivet bolts and seal plugs.

During process monitoring solutions regarding counting the number of riveted rivets up to recording and evaluation of the load v. displacement flow are realised. The solutions of the process result range from a bi-colour LED in the setting device to the visualisation on a PC or a colour touch-panel.

For many years we have been providing solutions for multiple clinch sealing and safety-relevant components for OEMs and the supplying industry.

► Take a look [on pages 128 and 129](#) to learn more about our possibilities of automation.

HIGH-STRENGTH...

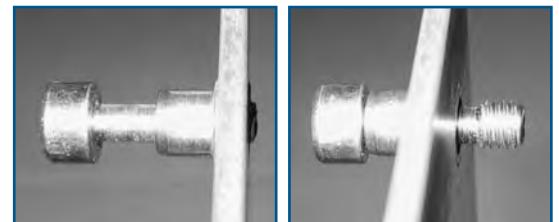


...PRESSURE TIGHT ...



...VARIABLE GRIP RANGE

► Details on this innovative blind rivet nut products [on page 62](#).



CAPTIVE

NEW developed system to realize the specifications of the machinery directive 2006/42/EG, which requires that fastening systems must stay in connection with the protection device after opening.

The combination of blind rivet nuts and screws with reduced shank is well suited for construction and backfitting.



DAIMLER

VOLVO

RENAULT

PSA PEUGEOT CITROËN

Mercedes-Benz

faurecia

**MAGNA STEYR
ENGINEERING**

WABCO

**LEAR
CORPORATION**

b&m



DELPHI

SCHMITZ Cargobull

POLYTEC GROUP

BENTELER

KAMAX

elringklinger

**CADENCE
INNOVATION**

plastal

ALCAN

**ISE
AUTOMOTIVE GROUP**

**LINDE +
WIEMANN**

ALCOA

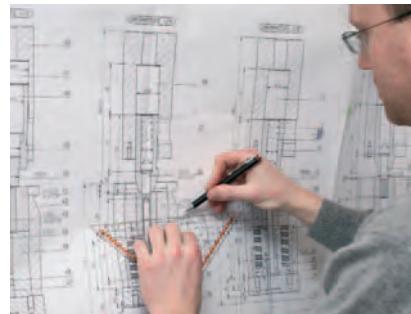
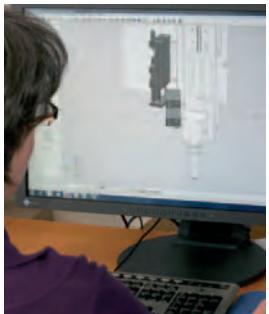


To satisfy the high and fast moving requirements of OEMs and their suppliers with special rivet technology and individual cold formed parts is the target of Honsel for a long time.

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

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

Additionally an integrated ecological and quality policy is a MUST as well as the technical support and assistance on location.





Important information and explanation of symbols for using this catalogue

Item number / tool classification:

Difference between **standard** and **special parts, tools or spare parts**

Main item number

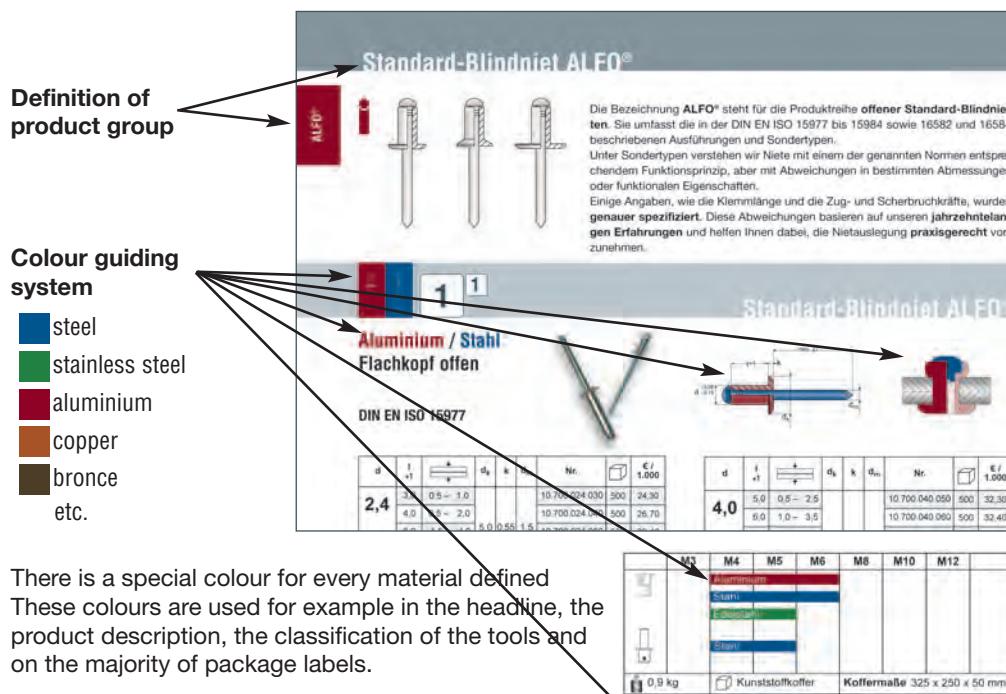
10.700.040.100/0-1

Blind rivets :

- Rivet diameter** (+ difference between dome-head and countersunkhead);
- Blind rivet nuts : **Thread size**

Options (e.g. colours) and packaging

Length of blind rivets
Blind rivet nuts:
max. clamping range



General product information



Beneficial advices for additional dimensions or types



Link to products on other pages



Please note, that marked items do not belong to our regular range and a **minimum quantity may be required**.

Please ask our sales staff **in any case**, who will check the current availability or possible alternatives.



Shear strength

Further information ► Page 19



Tensile strength

Further information ► Page 20



Tightening torque

Further information ► Page 60



Axial tensile force

Further information ► Page 61



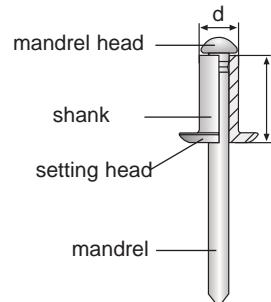
Drill hole diameter

ORDER FACILITIES

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

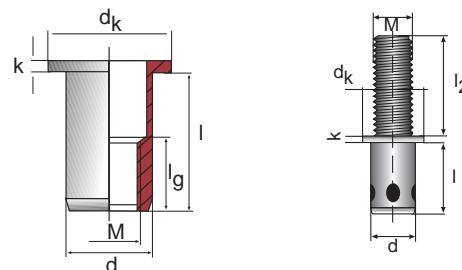
Blind rivets

- > **Combination of materials** (shank and mandrel)
- > **diameter of shank / drill hole (d)**
- > **length of shank / grip range (l)**
- > **version of shank** (open, closed, grooved etc.)
- > **version of head** (dome, countersunk, large)



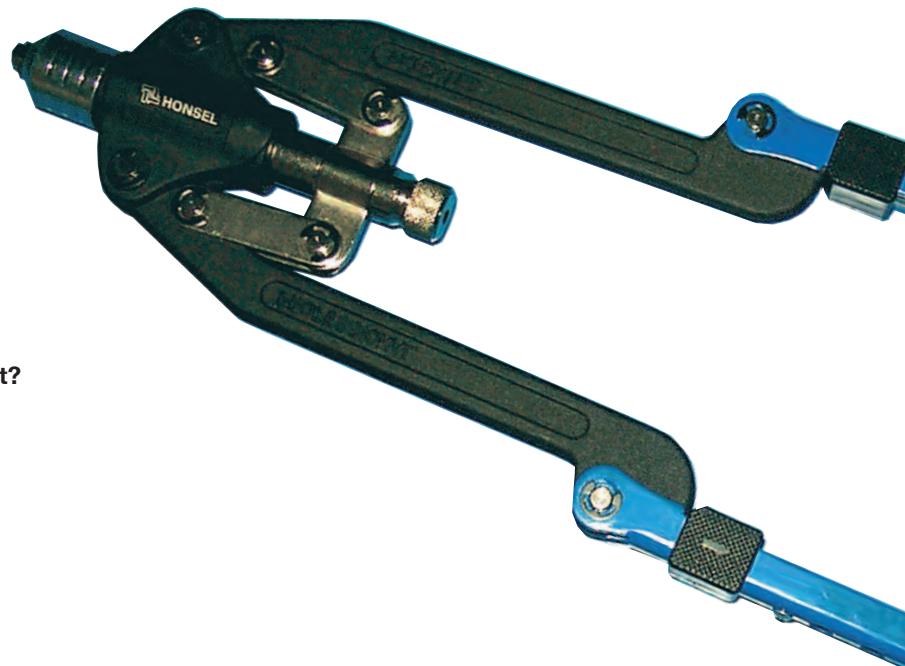
Blind rivet nuts / -bolts

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



Tools

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



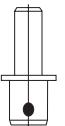
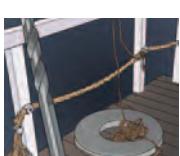
! Please note

that there are a lot of factors influencing the process of riveting. Therefore **a test should be done generally**.

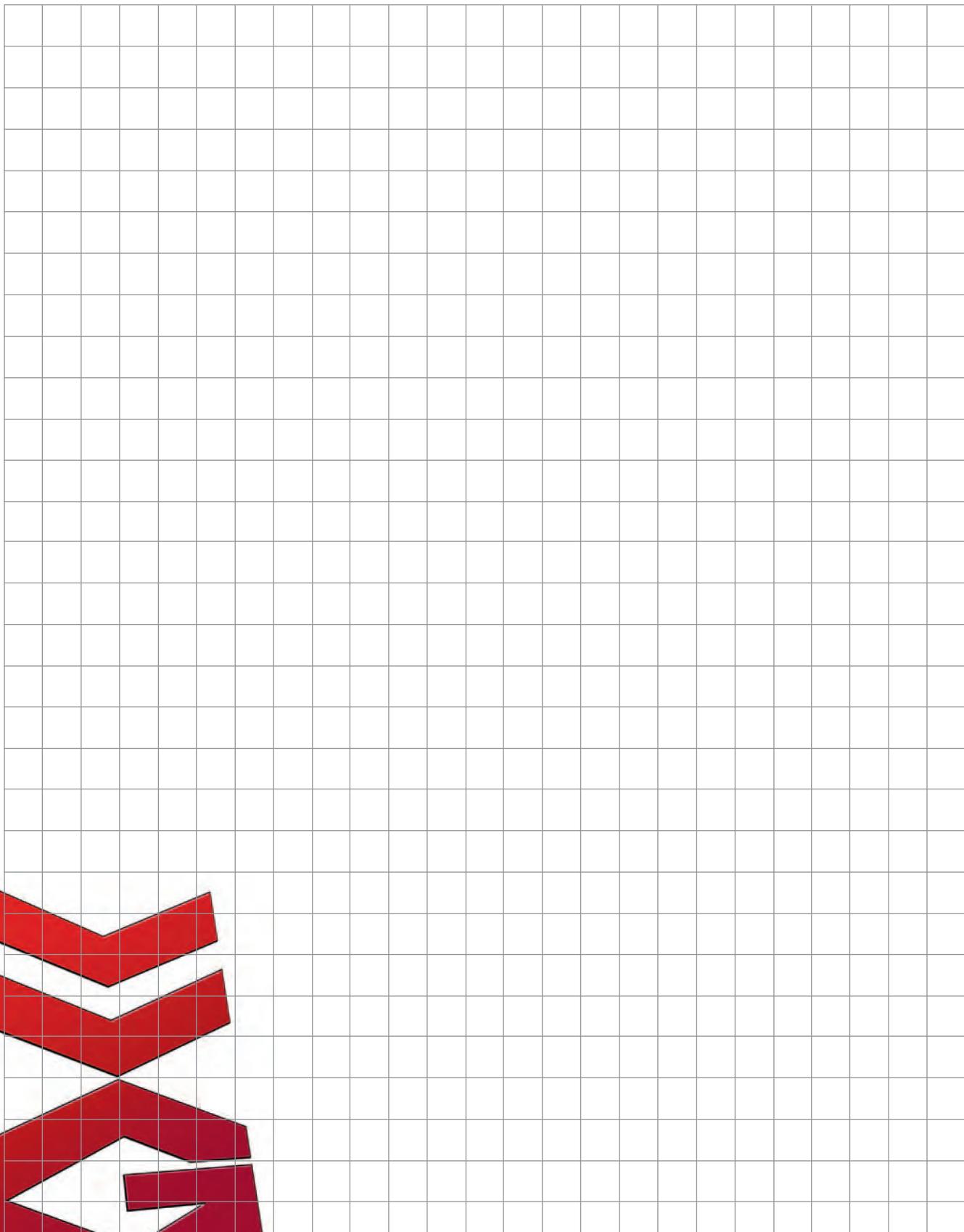
The content of this catalogue is only a small part of available products, types and dimensions.
We are looking for an alternative, if you will not find a suitable item.

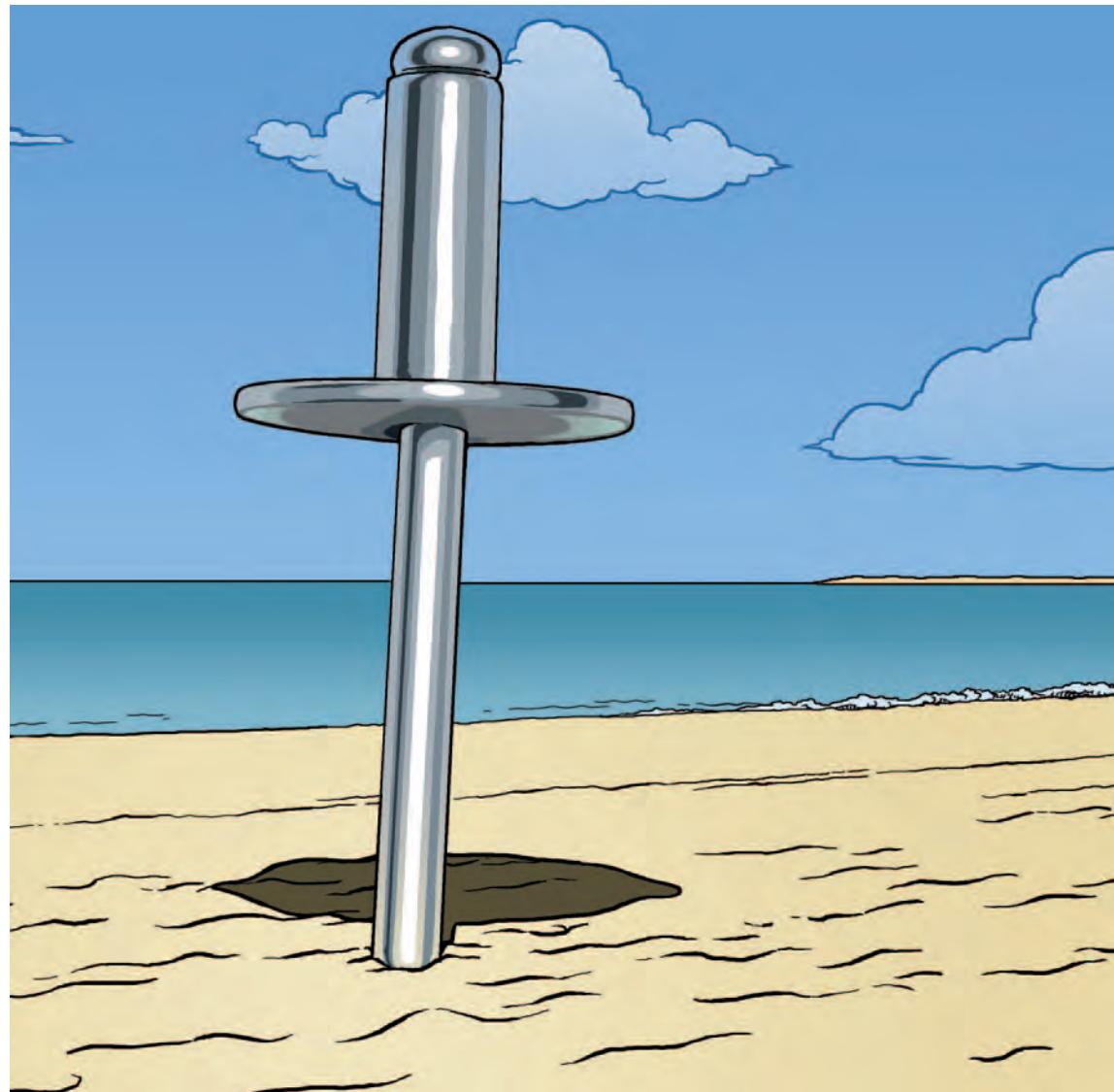


DIRECTORY

- | | | |
|---|--|---|
| 
page 17 | BLIND RIVETS |  1 |
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page 57 | BLIND RIVET NUTS |  2 |
| 
page 87 | BLIND RIVET BOLTS |  3 |
| 
page 91 | INDUSTRIAL RIVETS
ACCORDING TO DIN |  4 |
| 
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AND SMALL PACKS |  6 |
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page 125 | PNEUMATIC-HYDRAULIC TOOLS
BATTERY TOOLS |  9 |
| 
page 135 | COMPONENTS
AND SPARE PARTS |  10 |

YOUR NOTES



**i**

The blind rivet consists of a shank assembled to a mandrel. After inserting the rivet to the drill hole, the mandrel will be extracted by the tool, so that the shank forms a closing head until the mandrel breaks at the defined position.

There is an almost unlimited variety of different types and dimensions for nearly every application.

Special tools are required for installing blind rivets. These tools have to be selected according to the type of blind rivet, the application and the quantity of fasteners.

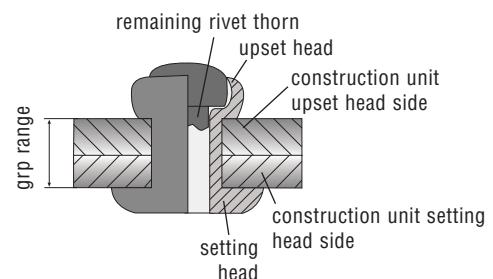
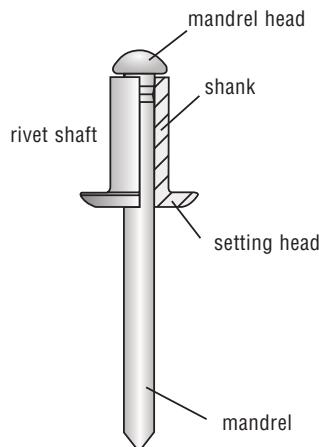


Blind rivets are a highly efficient fastening technology for the implementation of permanent, positive connection points. Awhile a host of different blind rivet types are available, their layout and function is always based on one and the same basic principle.

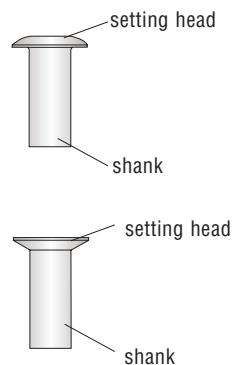
The blind rivet consists of a **rivet shaft** which is fixed to a **rivet mandrel**. Once the rivet has been inserted into the component that needs to be connected, pulling the rivet mandrel creates the locking head and the mandrel remains in rivet shaft after reaching its predetermined break point. The connection is thus completed.

Special tools are needed for processing blind rivets. The tool has to be chosen on the basis of the rivet type, the field of application and the processing volume.

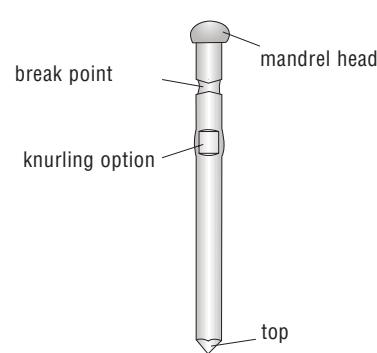
The **rivet shaft** is the element which makes the connection. The shaft is formed by the rivet mandrel and remains in the component permanently. The shaft type selection is made on the basis of the expected mechanical stress, the required anti-corrosion performance, the component layout, the temperature stress and partly also on the grounds of the visual impact. The **rivet mandrel** is needed for shaping the rivet shaft. The mandrel selection is based on the shaft type and on the requirements with regard to processing and operating properties. In order to enhance the rivet's shearing force, some rivet types use a captive mandrel which remains in place after the connection has been made.



Rivet shaft

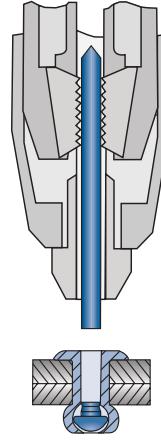
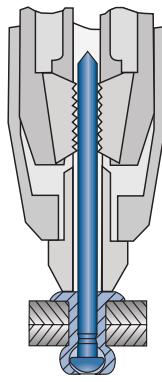
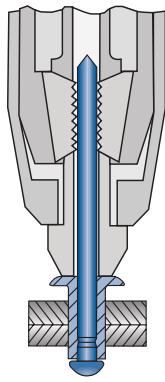


Rivet mandrel



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

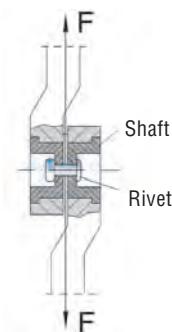
Basically, the setting process can be broken down into the following stages:



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

By triggering the stroke, the rivet mandrel is pulled. The mandrel head then reshapes the lower end of the rivet shaft. Once the rivet head is flush with the component surface, the process is completed.

Once this position has been reached, there is a sharp increase in the forces and after the predetermined break point, the excess mandrel fractures. The spent part of the mandrel is removed and the captive mandrel remains in the shaft.

SHEAR STRENGTH**EXPERIMENTAL SETUP**

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

Depending on the rivet principle, the forces are determined either with or without the captive mandrel covering the shearing zone. Statical measurements use the testing device covered by **DIN EN ISO14589** (Exception: FERO®-BOLT).

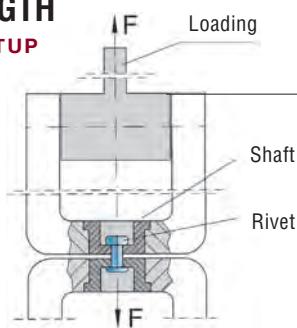
The minimum shear strength parameter is listed on the pages below the following symbol:



Shear strength – measured data [N]

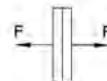
	Type	Dimension	Seite	2,4	3,0	3,2	3,8	4,0	4,8	5,0/ 5,2 ¹	6,0	6,4/ 6,3 ¹	7,8	8,0
ALFO®	Aluminium / Steel dome head	26	380	660	660	-	1120	1480	1650	2520	2850	6600	-	-
	Aluminium / Steel countersunk head	27	-	660	660	-	1120	1480	1650	-	-	-	-	-
	Aluminium / Steel large dome head	28	-	-	580	-	1120	1480	1650	-	-	-	-	-
	Aluminium / Steel dome head painted	29	-	320	-	-	610	-	-	-	-	-	-	-
	Aluminium / Stahl dome head anodized	29	-	-	-	-	610	-	-	-	-	-	-	-
	Aluminium / Steel dh extended mandrel	30	-	320	-	-	610	-	1650	-	-	-	-	-
	Aluminium / Steel dh grooved shank	30	-	-	600	-	1000	1350	-	-	-	-	-	-
	Aluminium / Stainless steel dome head	31	380	660	660	-	1120	1480	1650	2520	-	-	-	-
	Alum. / Stainless steel countersunk head	32	480	660	-	-	1120	-	1650	-	2880	-	-	-
	Alum. / Stainless steel large dome head	32	-	-	-	-	-	-	1650	-	-	-	-	-
	Alum. / Stainless steel large d.h. painted	33	-	-	-	-	-	-	1650	-	-	-	-	-
	Aluminium / Aluminium dome head	33	-	-	380	-	740	1140	-	-	-	-	-	-
	Steel / Steel dome head	34	-	900	1060	-	1900	2900	3000	4000	4500	-	8600	-
	Steel / Steel countersunk head	35	-	900	1060	-	1900	2900	3000	-	4500	-	-	-
	Stainless steel / Stainless steel dome head	36	1000	2050	2050	-	2750	4250	4700	5700	6500	-	-	-
	Stainl.steel / Stainl.steel countersunk head	36	-	-	1800	-	2750	4250	4700	-	-	-	-	-
	Stainl.steel / Stainl.steel large dome head	37	-	-	1900	-	2700	4200	-	-	-	-	-	-
	Stainless steel / Stainless steel dome head	37	-	1760	-	-	3220	-	4800	-	-	-	-	-
FERO®	Nickel-copper / Stainless steel dome head	38	-	-	1600	-	2300	3400	-	-	5400	-	-	-
	Copper / Steel dome head	39	-	760	800	-	1500	2000	-	-	-	-	-	-
	Copper / Bronze dome head	39	-	760	800	-	1500	-	-	-	-	-	-	-
	Aluminium / Aluminium dome head	40	-	-	-	-	-	-	-	-	4200	-	-	-
	Steel / Steel dome head ²	40	-	-	1200- 2500	-	2400- 4100	3600- 5600	-	-	10000- 15000	-	-	-
	Stainless steel/Stainless steel dome head ²	41	-	-	1600- 3200	-	5200	5500	-	-	11000- 15000	-	-	-
FERO® -BOLT	Steel / Steel dome head	43	-	-	-	-	-	5800	-	-	10500	-	-	-
	Steel / Steel countersunk head	43	-	-	-	-	-	-	-	-	5600	-	-	-
	Stainless st. / Stainless st. dome head	43	-	-	-	-	-	6000	-	-	10500	-	-	-
OPTO®	Aluminium / Steel dome head	44	-	-	720	-	1120	1530	-	-	-	-	-	-
	Aluminium / Steel large dome head	44	-	-	720	-	1120	1530	-	-	-	-	-	-
	Aluminium / Steel countersunk head	45	-	-	670	-	980	-	-	-	-	-	-	-
	Aluminium / Stainless steel dome head	45	-	-	670	-	980	1530	-	-	-	-	-	-
	Aluminium/Stainless steel large dome head	45	-	-	670	-	980	1530	-	-	-	-	-	-
	Steel / Steel dome head	46	-	-	1500	-	1950	3600	-	-	-	-	-	-
	Steel / Steel large dome head	46	-	-	-	-	-	2050	-	-	-	-	-	-
	Stainless steel / Stainless steel dome head	46	-	-	1600	-	2700	3900	-	-	-	-	-	-
CERTO®	Aluminium / Steel dome head	47	-	-	1100	-	1650	2400	-	-	3620	-	-	-
	Aluminium / Steel countersunk head	47	-	-	1100	-	1650	2400	-	-	-	-	-	-
	Aluminium / Stainless steel dome head	48	-	-	1000	-	1650	2400	-	-	-	-	-	-
	Aluminium / Stainless st.countersunk head	48	-	-	-	-	1650	-	-	-	-	-	-	-
	Aluminium / Aluminium dome head	48	-	-	520	-	720	1000	-	-	-	-	-	-
	Steel / Steel dome head	49	-	-	1150	-	1700	2400	-	-	-	-	-	-
	Stainless steel / Stainless steel dome head	49	-	-	2000	-	3000	4500	-	-	6500	-	-	-
	Copper / Steel dome head	50	-	-	950	-	1400	2150	-	-	-	-	-	-
ARCO®	Copper / Stainless steel dome head	50	-	-	950	-	1400	2150	-	-	-	-	-	-
	Aluminium / Steel dome head	52	-	-	850	-	1330	2100	-	-	-	-	-	-
Folding Rivet	Aluminium / Alum. dome head "Standard"	51	-	-	-	-	500	900	-	-	-	-	-	-
	Aluminium / Alum. dome head "Special-2"	51	-	-	-	-	-	-	3000	-	4900	-	-	-
	Copper / Steel dome head	55	-	-	-	1400	-	-	-	-	-	-	-	-
Grounding OPTO	Aluminium / Steel dome head	55	-	-	-	-	1140	-	-	-	-	-	-	-
	Nylon dome head	56	-	-	200	-	250	400	-	-	-	-	-	-

¹Folding blind rivet "Special2" ² depending on the length

TENSILE STRENGTH**EXPERIMENTAL SETUP**

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

For the statical measurement, the testing device presented under DIN EN ISO 14589 is used. The value for the tensile force is listed on the pages below the following symbol:



Tensile strength – measured data [N]

Type	Dimension	page	2,4	3,0	3,2	3,8	4,0	4,8	5,0/ 5,2 ¹	6,0	6,4/ 6,3 ¹	7,8	8,0
			26	600	900	1100	-	1420	1950	2000	2850	4250	9550
ALFO®													
Aluminium / Steel dome head		26	600	900	1100	-	1420	1950	2000	2850	4250	9550	-
Aluminium / Steel countersunk head		27	-	900	1100	-	1420	1950	2000	-	-	-	-
Aluminium / Steel large dome head		28	-	-	850	-	1900	2200	2500	-	-	-	-
Aluminium / Steel dome head painted		29	-	430	-	-	870	-	-	-	-	-	-
Aluminium / Stahl dome head anodized		29	-	-	-	-	870	-	-	-	-	-	-
Aluminium / Steel dh extended mandrel		30	-	430	-	-	870	-	2050	-	-	-	-
Aluminium / Steel dh grooved shank		30	-	-	1000	-	1350	1820	-	-	-	-	-
Aluminium / Stainless steel dome head		31	600	900	660	-	1420	1950	2000	2820	-	-	-
Alum. / Stainless steel countersunk head		32	600	900	-	-	1420	-	2000	-	4600	-	-
Alum. / Stainless steel large dome head		32	-	-	-	-	-	-	2500	-	-	-	-
Alum. / Stainless steel large d.h. painted		33	-	-	-	-	-	-	2500	-	-	-	-
Aluminium / Aluminium dome head		33	-	-	670	-	1240	1600	-	-	-	-	-
Steel / Steel dome head		34	-	1210	1550	-	2600	3850	4300	5500	6300	-	12000
Steel / Steel countersunk head		35	-	1210	1550	-	2600	3850	4300	-	6300	-	-
Stainless steel / Stainless steel dome head		36	1500	2600	2600	-	3550	5400	5800	7500	8850	-	-
Stainl.steel / Stainl.steel countersunk head		36	-	-	2500	-	3550	5400	4700	-	-	-	-
Stainl.steel / Stainl.steel large dome head		37	-	-	2500	-	3500	5300	-	-	-	-	-
Stainless steel / Stainless steel dome head		37	-	2270	-	-	4250	-	6600	-	-	-	-
Nickel-copper / Stainless steel dome head		38	-	-	2400	-	3450	5000	-	-	8200	-	-
Copper / Steel dome head		39	-	950	1000	-	1800	2500	-	-	-	-	-
Copper / Bronze dome head		39	-	950	1000	-	1800	-	-	-	-	-	-
FERO®													
Aluminium / Aluminium dome head		40	-	-	-	-	-	-	-	-	3100	-	-
Steel / Steel dome head ²		40	-	-	1300	-	2800	3800	-	-	7800	-	-
Stainless steel/Stainless steel dome head ²		41	-	-	2000	-	4000	5000	-	-	8800	-	-
FERO®													
Steel / Steel dome head		43	-	-	-	-	-	4100	-	-	8000	-	-
Steel / Steel countersunk head		43	-	-	-	-	-	-	-	-	4900	-	-
Stainless.st. / Stainl.st. dome head		43	-	-	-	-	-	4500	-	-	8200	-	-
OPTO®													
Aluminium / Steel dome head		44	-	-	1000	-	1650	2300	-	-	-	-	-
Aluminium / Steel large dome head		46	-	-	1000	-	1650	2300	-	-	-	-	-
Aluminium / Steel countersunk head		45	-	-	900	-	1320	-	-	-	-	-	-
Aluminium / Stainless steel dome head		45	-	-	900	-	1320	2300	-	-	-	-	-
Aluminium/Stainless steel large dome head		45	-	-	900	-	130	2300	-	-	-	-	-
Steel / Steel dome head		46	-	-	1700	-	2350	3300	-	-	-	-	-
Steel / Steel large dome head		46	-	-	-	-	-	2940	-	-	-	-	-
Stainless steel / Stainless steel dome head		46	-	-	2000	-	3500	5000	-	-	-	-	-
CERTO®													
Aluminium / Steel dome head		47	-	-	1450	-	2500	3400	-	-	49550	-	-
Aluminium / Steel countersunk head		47	-	-	1450	-	2500	3400	-	-	-	-	-
Aluminium / Stainless steel dome head		48	-	-	1350	-	2500	3400	-	-	-	-	-
Aluminium / Stainless st. countersunk head		48	-	-	-	-	2500	-	-	-	-	-	-
Aluminium / Aluminium dome head		48	-	-	540	-	760	1400	-	-	-	-	-
Steel / Steel dome head		49	-	-	1200	-	1850	2800	-	-	-	-	-
Stainless steel / Stainless steel dome head		49	-	-	2400	-	4000	5500	-	-	8000	-	-
Copper / Steel dome head		50	-	-	1250	-	2100	3200	-	-	-	-	-
Copper / Stainless steel dome head		50	-	-	1250	-	2100	3200	-	-	-	-	-
ARCO®													
Aluminium / Steel dome head		52	-	-	720	-	1300	1950	-	-	-	-	-
Aluminium / Alum. dome head "Standard"		51	-	-	-	-	800	1100	-	-	-	-	-
Aluminium / Alum. dome head "Special-2"		51	-	-	-	-	-	-	2000	-	3000	-	-
Grounding Rivet													
Copper / Steel dome head		55	-	-	-	2000	-	-	-	-	-	-	-
Grounding OPTO													
Aluminium / Steel dome head		55	-	-	-	-	1670	-	-	-	-	-	-
Plastic Rivet													
Nylon dome head		56	-	-	120	-	180	280	-	-	-	-	-

¹Folding blind rivet "Special-2"

CORROSION RESISTANCE AND PROTECTION

Whilst it is basically impossible to prevent corrosion, the corrosion process can be delayed by suitable measures. In terms of dimensions and complexity, when designing the rivet connections, the following types of corrosion have to be borne in mind:

Surface corrosion

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

Suitable protective measures include:

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

Contact corrosion

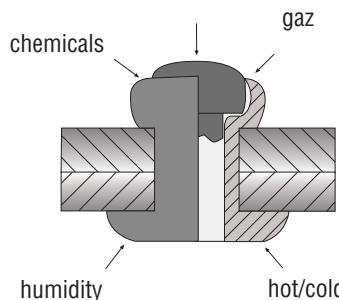
Due to the potential difference between electrodes, contact corrosion leads to surface damage in the area where the different metal materials mate in the presence of an electroly-

te. The abrasion always takes place on the base metal (anode).

Suitable protective measures include:

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

Force / load



SURFACE TREATMENTS

Electro galvanizing

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

Zinc-nickel coating

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

Anodic oxidation

Anodic oxidation or eloxyl coating is one further method for aluminium rivet coating. This coat which is applied through an electrochemical process is used for colour and in order to enhance corrosion resistance of the surface and for colour purposes. Whilst the surface bond is high, the colour range provides but a limited choice.

Microlayer corrosion protection systems (MKS)

Microlayer corrosion protection systems stands for state of the art procedures in material surface coating. They allow combining excellent corrosion protection with additional properties like, for instance, colour schemes and the implementation of predefined coefficients of friction. MKS systems are selected on the basis of the specific requirements and are customised with a view to the components that need to be coated. They contain neither heavy metals nor environmentally harmful

chemicals. MKS systems are widely used in the automotive industry - the MKS systems we use are free from hexavalent chromium.

Chromating of electroplated layers

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

Lacquer coating

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

CONTACT CORROSION PERFORMANCE IN THE CASE OF DIFFERENT MATERIAL COMBINATIONS

Shaft material \	Aluminium	Steel	Stainless Steel	Copper	Nickel-Copper
Aluminium	++	+	+	-	-
Steel – galvanized	+	++	+	-	+
Stainless steel	+	++	++	-	+
Copper	+	+	+	++	++
Nickel-Copper – galvanized	+	+	+	++	++

++ Combination well suited

+ Combination suitable

- Combination unsuitable

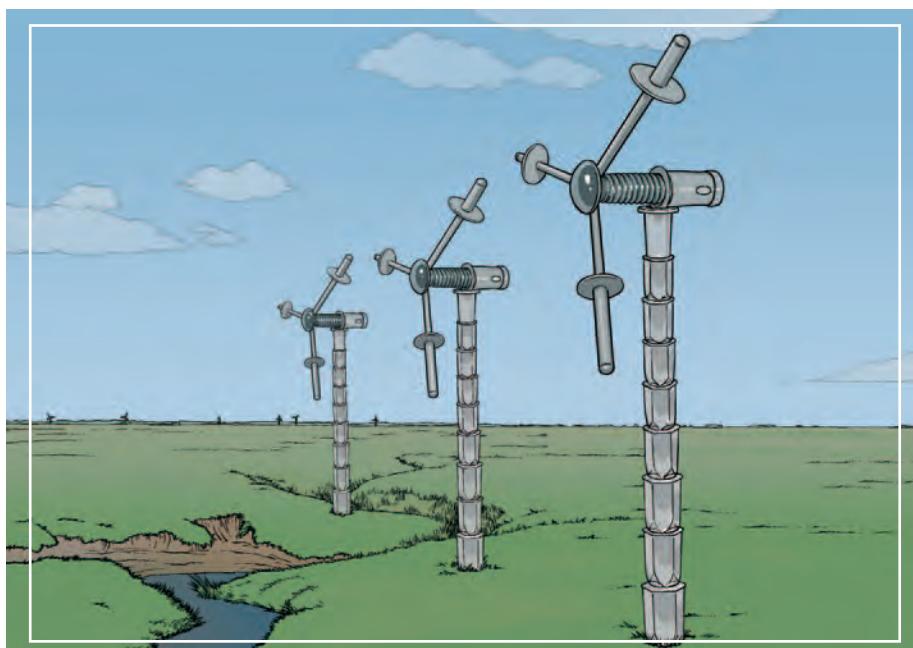
This table merely serves
for orientation purposes!

DO YOU NEED A SPECIAL TYPE OF BLIND RIVET FOR YOUR APPLICATION?

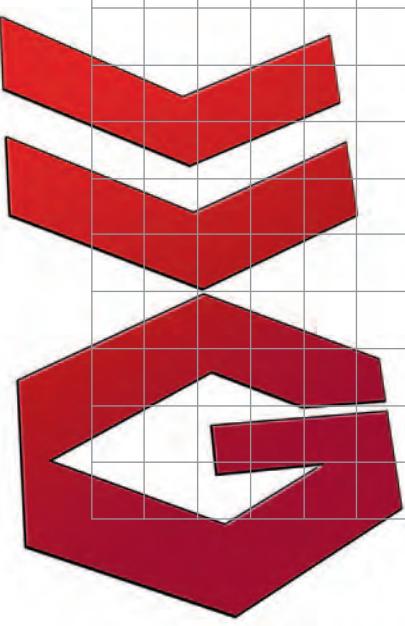
Our experienced technicians will be glad to develop an **individual solution** for your special need.

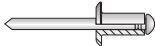
Development, consulting, tool making, manufacturing and delivery – **all from one source**, based on a company history of 80 years.

We realize projects for different industries - for example automotive industry and their suppliers, container and tank construction, electric cabinets or all kinds of “renewable energy“-applications.



YOUR NOTES



1 1 Standard Blind Rivet ALFO® 

 Aluminium /	 Stainless Steel A2 /
Steel Dome Head 26	Stainless Steel A2 Dome Head 35
Steel Countersunk Head 27	Stainless Steel A2 Countersunk Head 36
Steel Large Dome Head 28	Stainless Steel A2 Large Dome Head 37
Steel Dome Head <i>painted</i> 29	
Steel Dome Head <i>anodized</i> 29	 Stainless Steel A4
Steel Dome Head <i>grooved</i> 30	 Stainless Steel A4/A5 Dome Head 37
Steel Dome Head <i>extended mandrel</i> 30	
Stainless Steel A2 Dome Head 31	 Nickel-Copper /
Stainless Steel A2 Countersunk Head 32	 Stainless Steel A4/A5 Dome Head 38
Stainless Steel A2 Large Dome Head 32	
Stainless Steel A2 <i>painted</i> Large Dome Head 33	 Copper /
Aluminium Dome Head 33	Steel Dome Head 39
 Steel /	Bronze Dome Head 39
Steel Dome Head 34	
Steel Countersunk Head 35	

1 2 Structural Blind Rivets FERO®-BULB 

 Aluminium /	 Steel /
Aluminium Dome Head 40	Steel Dome Head 40
 Stainless Steel A2 /	
	Stainless Steel A2 Dome Head 41

1 3 Structural Blind Rivets FERO®-BOLT 

 Steel /	 Stainless Steel A2 /
Steel Dome Head 43	Stainless Steel A2 Dome Head 43
Steel Countersunk Head 43	

1 4 Multigrip Blind Rivets OPTO® 

 Aluminium /	 Steel /
Steel Dome Head 44	Steel Dome Head 46
Steel Dome Head <i>painted</i> 44	Steel Large Dome Head 46
Steel Large Dome Head 44	
Steel Countersunk Head 45	 Stainless Steel A2 /
Stainless Steel A2 Dome Head 45	Stainless Steel A2 Dome Head 46
Stainless Steel A2 Large Dome Head 45	

Rivet shafts and mandrels made from
steel always have a CR VI-free surface.

1 5 Sealed Blind Rivets CERTO®



□ Aluminium /	
■ Steel Dome Head -closed-	47
■ Steel Countersunk Head -closed-	47
■ Stainless Steel A2 Dome Head -closed-	48
■ Stainless Steel A2 Countersunk Head -closed-	48
■ Aluminium Dome Head -closed-	48
□ Steel /	
■ Steel Dome Head -closed-	49

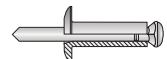
□ Stainless Steel A2 /	
■ Stainless Steel A2 Dome Head -closed-	49
□ Copper /	
■ Steel Dome Head -closed-	50
■ Stainless Steel A2 Dome Head -closed-	50

1 6 Folding Blind Rivets



□ Aluminium /	
■ Aluminium Dome Head "Standard"	51
■ Aluminium Dome Head "Special-2"	51

1 7 Body-Bound Blind Rivets ARCO®



□ Aluminium /	
■ Steel Dome Head	52

1 8 Hammer Stroke Blind Rivets



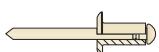
□ Aluminium /	
■ Stainless Steel A2 Dome Head	54

1 9 Grounding Blind Rivets



□ Copper /	
■ Steel Dome Head	55
□ Brass /	
■ Steel (Copper Plated) 1/2 Earthing Conductors	55
□ Aluminium /	
■ Steel Dome Head Knurled	55

1 10 Plastic Blind Rivets

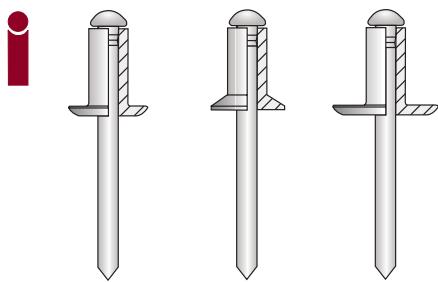


■ Nylon	
■ Nylon Blind Rivet Dome Head	56
■ Nylon Split Blind Rivet Dome Head	56



Standard Blind Rivet ALFO®

ALFO®



The ALFO® series contains any kind of HONSEL/VVG **standard open type blind rivets**.

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

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

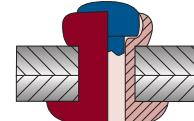
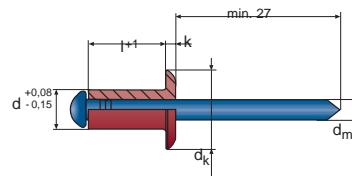
These modifications based on our **long term experience** and assist you in implementing a rivet design according to **practical purposes**.



Standard Blind Rivet ALFO®

Aluminium / Steel Dome Head -open-

DIN EN ISO 15977



d	I +1		d_k	k	d_m	No.	
2,4	3,0	0,5 – 1,0	5,0 -0,7 ± 0,15	1,5	10.700.024.030	500	
	4,0	0,5 – 2,0			10.700.024.040	500	
	6,0	1,5 – 4,0			10.700.024.060	500	
	8,0	3,5 – 6,0			10.700.024.080	500	
	10,0	6,0 – 8,0			10.700.024.100	500	

EN AW - 5019 [AlMg5] 2,5 mm 380 N 600 N

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

EN AW - 57519 [AlMg5] 3,1 mm 660 N 900 N

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

EN AW - 5019 [AlMg5] 3,3 mm 660 N 1100 N

d	I +1		d_k	k	d_m	No.	
4,0	5,0	0,5 – 2,5	8,0 -1,0 ± 0,3	1,0 ± 0,3	2,0	10.700.040.050	500
	6,0	1,0 – 3,5				10.700.040.060	500
	7,0	3,0 – 4,5				10.700.040.070	500
	8,0	3,0 – 5,5				10.700.040.080	500
	10,0	5,0 – 7,0				10.700.040.100	500
	12,0	6,5 – 9,0				10.700.040.120	500
	16,0	8,5 – 12,5				10.700.040.160	500
	18,0	12,0 – 14,5				10.700.040.180	500
	20,0	12,5 – 16,5				10.700.040.200	500
	25,0	15,5 – 21,0				10.700.040.250	500

EN AW - 5754 [AlMg3] 4,1 mm 1120 N 1420 N

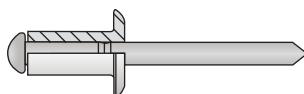
d	I +1		d_k	k	d_m	No.	
4,8	6,0	1,0 – 3,0	9,5 -1,0 ± 0,3	1,1 ± 0,3	2,7	10.700.048.060	500
	7,0	1,0 – 4,0				10.700.048.070	500
	8,0	2,5 – 5,0				10.700.048.080	500
	10,0	4,0 – 6,5				10.700.048.100	500
	12,0	6,0 – 8,0				10.700.048.120	500
	14,0	7,5 – 10,0				10.700.048.140	500
	16,0	8,0 – 12,0				10.700.048.160	500
	18,0	11,5 – 13,5				10.700.048.180	500
	20,0	12,0 – 15,5				10.700.048.200	500
	25,0	15,0 – 20,5				10.700.048.250	500

EN AW - 5754 [AlMg3] 4,9 mm 1480 N 1950 N

d	I +1		d_k	k	d_m	No.	
5,0	6,0	1,0 – 3,0	9,5 -0,8	1,1 $\pm 0,3$	2,7	10.700.050.060	500
	8,0	2,5 – 5,0				10.700.050.080	500
	10,0	4,0 – 6,5				10.700.050.100	500
	12,0	6,0 – 8,0				10.700.050.120	500
	14,0	7,5 – 10,0				10.700.050.140	500
	16,0	8,0 – 12,0				10.700.050.160	500
	18,0	11,5 – 13,5				10.700.050.180	500
	20,0	12,0 – 15,5				10.700.050.200	500
	25,0	15,0 – 20,5				10.700.050.250	500
	30,0	20,0 – 25,0				10.700.050.300	500
	35,0	24,5 – 30,0				10.700.050.350	250
	40,0	29,0 – 35,0				10.700.050.400	250
	45,0	34,5 – 40,0				10.700.050.450	250
	50,0	39,5 – 45,0				10.700.050.500	250

EN AW - 5754 [AlMg3] 5,1 mm 1650 N 2000 N

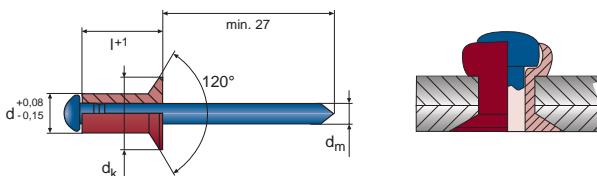
Many ALFO® dimensions are available as FERO® version. In this HONSEL/VVG speciality the major part of the **mandrel** remains in the shank to increase the shear strength.



Diameter 7,8 is not standardized.



Please note our manifold range of **assortments** and **small packs** on pages 104/105 and 106-108!



Aluminium / Steel Countersunk Head -open-

DIN EN ISO 15978

d	I +1		d_k	d_m	No.	
3,0	5,0	1,5 – 3,0	6,0 -0,4	1,7	10.700.300.050	500
	6,0	2,0 – 4,0			10.700.300.060	500
	8,0	3,5 – 6,0			10.700.300.080	500
	10,0	5,0 – 7,5			10.700.300.100	500
	12,0	7,0 – 9,0			10.700.300.120	500

EN AW - 5719 [AlMg5] 3,1 mm 660 N 900 N

d	I +1		d_k	d_m	No.	
3,2	6,0	1,5 – 3,5	6,2 -0,4	1,9	10.700.320.060	500
	8,0	3,0 – 5,5			10.700.320.080	500
	10,0	5,0 – 7,5			10.700.320.100	500
	12,0	7,0 – 9,0			10.700.320.120	500

EN AW - 5719 [AlMg5] 3,3 mm 660 N 1100 N

d	I +1		d_k	k	d_m	No.	
6,0	8,0	1,0 – 3,5	12,0 -1,2	1,5 $\pm 0,4$	3,2	10.700.060.080	500
	10,0	3,0 – 5,5				10.700.060.100	500
	12,0	5,0 – 7,5				10.700.060.120	500
	16,0	7,0 – 11,0				10.700.060.160	500
	18,0	10,5 – 13,0				10.700.060.180	500
	20,0	11,0 – 15,0				10.700.060.200	500
	22,0	14,5 – 17,0				10.700.060.220	500
	25,0	15,0 – 20,0				10.700.060.250	250
	28,0	19,5 – 22,5				10.700.060.280	250
	30,0	20,0 – 25,0				10.700.060.300	250

EN AW - 5754 [AlMg3] 6,1 mm 2520 N 2850 N

d	I +1		d_k	k	d_m	No.	
6,4	12,0	2,5 – 7,0	13,0 -1,4	1,8 $\pm 0,4$	3,6	10.700.064.120	250
	16,0	6,0 – 11,0				10.700.064.160	250
	18,0	10,0 – 13,0				10.700.064.180	250
	20,0	10,0 – 14,5				10.700.064.200	250
	25,0	14,0 – 19,0				10.700.064.250	250
	30,0	18,0 – 24,0				10.700.064.300	250

EN AW - 5754 [AlMg3] 6,5 mm 2850 N 4250 N

d	I +1		d_k	k	d_m	No.	
7,8	15,0	4,0 – 9,5	14,0	2,0	3,7	10.700.078.150	250
	18,0	9,5 – 12,5				10.700.078.180	250
	22,0	12,5 – 16,5				10.700.078.220	250
	26,0	16,5 – 20,5				10.700.078.260	250
	30,0	20,5 – 24,5				10.700.078.300	250
	35,0	24,5 – 29,5				10.700.078.350	250

EN AW - 5754 [AlMg3] 8,0 mm 6600 N 9550 N

d	I +1		d_k	d_m	No.	
4,0	6,0	1,5 – 3,5	7,5 -0,5	2,0	10.700.400.060	500
	8,0	2,0 – 5,5			10.700.400.080	500
	10,0	5,0 – 7,0			10.700.400.100	500
	12,0	6,5 – 9,0			10.700.400.120	500
	16,0	8,5 – 12,5			10.700.400.160	500
	18,0	12,0 – 14,5			10.700.400.180	500

EN AW - 5754 [AlMg3] 4,1 mm 1120 N 1420 N

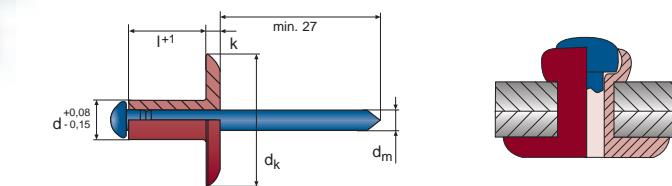
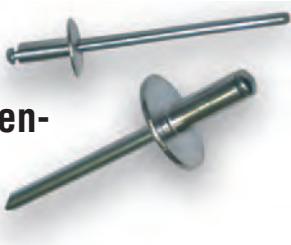
► Further dimensions on the **following page!**

d	I +1		d_k	d_m	No.	
4,8	10,0	4,0 – 6,5	9,0 -0,5	2,7	10.700.480.100	500
	12,0	6,0 – 8,0			10.700.480.120	500
	14,0	7,5 – 10,0			10.700.480.140	500
	16,0	8,0 – 12,0			10.700.480.160	500
	20,0	12,0 – 15,5			10.700.480.200	500

EN AW - 5754 [AlMg3] 4,9 mm 1480 N 1950 N

d	I +1		d_k	d_m	No.	
5,0	8,0	2,0 – 5,0	9,3 -0,5	2,7	10.700.500.080	500
	10,0	4,0 – 6,5			10.700.500.100	500
	12,0	6,0 – 8,0			10.700.500.120	500
	14,0	7,5 – 10,0			10.700.500.140	500
	16,0	8,0 – 12,0			10.700.500.160	500
	18,0	11,5 – 13,5			10.700.500.180	500
	20,0	12,0 – 15,5			10.700.500.200	500
	25,0	15,0 – 20,5			10.700.500.250	500
	30,0	20,0 – 25,5			10.700.500.300	500

EN AW - 5754 [AlMg3] 5,1 mm 1650 N 2000 N

Aluminium / Steel**Large Dome Head -open-**

d	I +1		d_k	k	d_m	No.	
3,2	6,0	1,5 – 3,5	9,5 ± 0,3	1,2 + 0,5	1,9	10.730.032.060	500
	8,0	3,0 – 5,5				10.730.032.080	500
	10,0	5,0 – 7,5				10.730.032.100	500
	12,0	7,0 – 9,0				10.730.032.120	500

EN AW - 5754 [AlMg3] 3,3 mm 580 N 850 N

d	I +1		d_k	k	d_m	No.	
4,0	6,0	1,0 – 3,5	12,0 ± 0,3	1,5 ± 0,5	2,0	10.750.040.060	500
	8,0	3,0 – 5,5				10.750.040.080	500
	10,0	5,0 – 7,0				10.750.040.100	500
	12,0	6,5 – 9,0				10.750.040.120	500
	16,0	8,5 – 12,5				10.750.040.160	500
	18,0	12,0 – 14,5				10.750.040.180	500

EN AW - 5754 [AlMg3] 4,1 mm 1120 N 1900 N

d	I +1		d_k	k	d_m	No.	
4,8	8,0	2,0 – 5,0	16,0 ± 0,3	1,8 ± 0,5	2,7	10.770.048.080	500
	10,0	4,0 – 6,5				10.770.048.100	500
	12,0	6,0 – 8,0				10.770.048.120	500
	16,0	7,5 – 12,0				10.770.048.160	500
	18,0	11,5 – 13,5				10.770.048.180	500
	20,0	12,0 – 15,5				10.770.048.200	250

EN AW - 5754 [AlMg3] 4,9 mm 1480 N 2200 N

d	I +1		d_k	k	d_m	No.	
5,0	8,0	2,0 – 5,0	11,0 ± 0,3	1,5 + 0,5	2,7	10.740.050.080	500
	10,0	4,0 – 6,5				10.740.050.100	500
	12,0	6,0 – 8,0				10.740.050.120	500
	14,0	7,5 – 10,0				10.740.050.140	500
	16,0	8,0 – 12,0				10.740.050.160	500
	18,0	11,5 – 13,5				10.740.050.180	500
	20,0	12,0 – 15,5				10.740.050.200	500
	25,0	15,0 – 20,5				10.740.050.250	500
	30,0	20,0 – 25,0				10.740.050.300	500

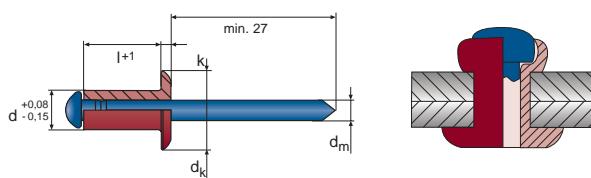
EN AW - 5754 [AlMg3] 5,1 mm 1650 N 2500 N

d	I +1		d_k	k	d_m	No.	
5,0	8,0	2,0 – 5,0	14,0 ± 0,3	1,5 + 0,5	2,7	10.760.050.080	500
	10,0	4,0 – 6,5				10.760.050.100	500
	12,0	6,0 – 8,0				10.760.050.120	500
	14,0	7,5 – 10,0				10.760.050.140	500
	16,0	8,0 – 12,0				10.760.050.160	500
	18,0	11,5 – 13,5				10.760.050.180	500
	20,0	12,0 – 15,5				10.760.050.200	500
	25,0	15,0 – 20,5				10.760.050.250	250
	30,0	20,0 – 25,0				10.760.050.300	250

EN AW - 5754 [AlMg3] 5,1 mm 1650 N 2500 N

d	I +1		d_k	k	d_m	No.	
5,0	10,0	2,0 – 6,5	16,0 ± 0,3	1,8 + 0,5	2,7	10.770.050.100	500
	16,0	6,0 – 12,0				10.770.050.160	500
	20,0	11,5 – 15,5				10.770.050.200	250
	25,0	15,0 – 20,5				10.770.050.250	250
	33,0	20,0 – 28,0				10.770.050.330	250

EN AW - 5754 [AlMg3] 5,1 mm 1650 N 2500 N



d	l_{+1}		dk	k	dm	No.	RAL-No. Colour	
3,0	6,0	2,5 – 3,5	6,3	0,8	1,7	10.700.030.060/2	□ 9010	500
	6,0	2,5 – 3,5				10.700.030.060/9	■ 9005	500
	8,0	3,0 – 5,5				10.700.030.080/9	□ 9010	500
	8,0	3,0 – 5,5				10.700.030.080/12	■ 9005	500
	10,0	5,0 – 7,5				10.700.030.100/5	□ 9010	500
	10,0	5,0 – 7,5				10.700.030.100/6	■ 9005	500

EN AW - 6060 [AlMgSi] 3,1 mm 320 N 430 N



Aluminium / Steel Dome Head -open- painted

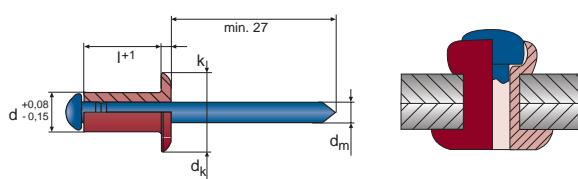
according to DIN EN ISO 15977

d	l_{+1}		dk	k	dm	No.	RAL-No. Colour	
4,0	6,0	1,5 – 3,0	8,0	1,0	2,0	10.700.040.060/8	□ 9010	500
	8,0	2,5 – 5,0				10.700.040.080/20	□ 9010	500
	8,0	2,5 – 5,0				10.700.040.080/21	■ 9005	500
	10,0	4,5 – 7,0				10.700.040.100/14	□ 9010	500
	10,0	4,5 – 7,0				10.700.040.100/39	■ 9005	500
	12,0	6,5 – 8,5				10.700.040.120/17	□ 9010	500
	12,0	6,5 – 8,5				10.700.040.120/30	■ 9005	500

EN AW - 6060 [AlMgSi] 4,1 mm 610 N 870 N

Other colours and dimensions available on request with minimum quantities!

► You can find **further painted blind rivets** as multigrip version on page 44!



Aluminium / Steel Dome Head -open- anodized

according to DIN EN ISO 15977

d	l_{+1}		dk	k	dm	No.	Colour	
4,0	8,0	2,5 – 5,0	8,0	1,0	2,0	10.700.040.080/11	black	500
	8,0	2,5 – 5,0				10.700.040.080/9	dark bronze	500
	10,0	4,5 – 7,0				10.700.040.100/12	black	500

EN AW - 6060 [AlMgSi] 4,1 mm 610 N 870 N

d	l_{+1}		dk	k	dm	No.	Colour	
4,0	10,0	4,5 – 7,0	8,0	1,0	2,0	10.700.040.100/10	dark bronze	500
	12,0	6,5 – 8,5				10.700.040.120/12	black	500
						10.700.040.120/11	dark bronze	500

EN AW - 6060 [AlMgSi] 4,1 mm 610 N 870 N



1

1

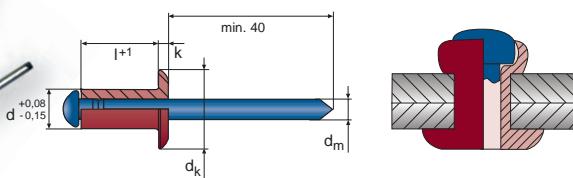
Standard Blind Rivet ALFO®

ALFO®

Aluminium / Steel

Dome Head -open-

*reduced mandrel breaking strength
and extended mandrel length*



d	l +1		dk	k	dm	No.	
3,0	10,0	5,0 – 7,5	6,3	0,8	1,7	10.700.030.100/8	500
	12,0	7,0 – 9,0	-0,7	$\pm 0,2$		10.700.030.120/2	500

EN AW - 6060 [AlMgSi] 3,1 mm 320 N 430 N

d	l +1		dk	k	dm	No.	
5,0	12,0	6,0 – 8,5	9,5	1,1	2,7	10.700.050.120/6	500
	16,0	8,0 – 11,5	-0,8	$\pm 0,3$		10.700.050.160/3	500

EN AW - 6060 [AlMgSi] 5,1 mm 1650 N 2050 N

4,0	8,0	3,0 – 5,0	8,0 -1,0	1,0 $\pm 0,3$	2,0	10.700.040.080/5	500
	10,0	4,5 – 7,0				10.700.040.100/5	500
	12,0	6,5 – 8,5				10.700.040.120/4	500
	16,0	8,0 – 12,0				10.700.040.160/4	500
	20,0	11,5 – 15,5				10.700.040.200/6	500

EN AW - 6060 [AlMgSi] 4,1 mm 610 N 870 N

- The reduced mandrel breaking strength allows the handling of fragile materials.
- Due to the longer mandrel of more than 40mm it is possible to place rivets in areas difficult to access.

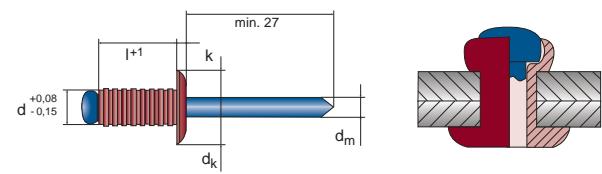
► For necessary extended nosepieces please turn to [page 138](#).



Aluminium / Steel

Dome Head -open-

with grooved shank



d	l +1	Minimum hole depth	dk	k	dm	No.	
3,2	10,0	13	6,5 -0,7	0,8 $\pm 0,2$	1,7	10.700.032.100/3	500

EN AW - 5019 [AlMg5] min. 3,3 mm 600 N 1000 N

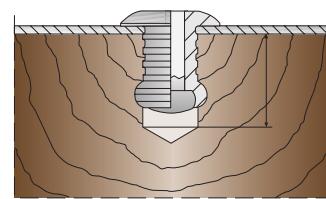
4,0	8,0	11	8,0 -1,0	1,0 $\pm 0,3$	2,0	10.700.040.080/3	500
	12,0	15				10.700.040.120/3	500
	18,0	21				10.700.040.180/2	500

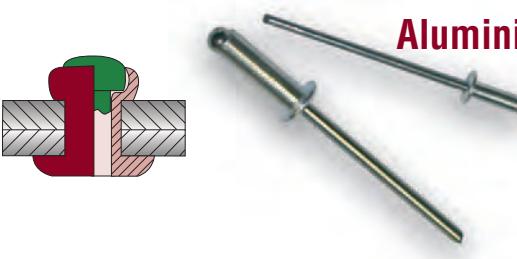
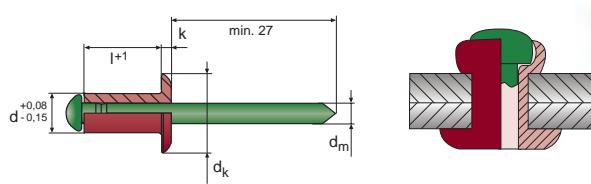
EN AW - 5754 [AlMg3] min. 4,15 mm 1000 N 1350 N

4,8	10,0	14	9,5 -1,0	1,1 $\pm 0,3$	2,7	10.700.048.100/3	500
	16,0	20				10.700.048.160/2	500

EN AW - 5754 [AlMg3] min. 4,95 mm 1350 N 1820 N

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





Aluminium / Stainless Steel A2/A3 Dome Head -open-

according to DIN EN ISO 15977

d	l_{+1}		d_k	k	d_m	No.	
2,4	4,0	0,5 – 2,0	5,0 – 0,7	0,55 ± 0,15	1,5	10.702.024.040	500
	6,0	1,5 – 4,0				10.702.024.060	500
	8,0	3,5 – 6,0				10.702.024.080	500

EN AW - 5019 [AlMg5] 2,5 mm 380 N 600 N

3,0	4,0	0,5 – 2,0	6,3 – 0,7	0,8 ± 0,2	1,7	10.702.030.040	500
	6,0	1,5 – 4,0				10.702.030.060	500
	8,0	3,0 – 6,0				10.702.030.080	500
	10,0	5,0 – 7,5				10.702.030.100	500
	12,0	7,0 – 9,0				10.702.030.120	500

EN AW - 5019 [AlMg5] 3,1 mm 660 N 900 N

3,2	6,0	1,5 – 3,5	6,5 – 0,7	0,8 ± 0,2	1,9	10.702.032.060	500
	8,0	3,0 – 5,5				10.702.032.080	500
	10,0	5,0 – 7,5				10.702.032.100	500
	12,0	7,0 – 9,0				10.702.032.120	500

EN AW - 5019 [AlMg5] 3,3 mm 660 N 1100 N

4,0	5,0	0,5 – 2,5	8,0 – 1,0	1,0 ± 0,3	2,0	10.702.040.050	500
	6,0	1,0 – 3,5				10.702.040.060	500
	7,0	3,0 – 4,5				10.702.040.070	500
	8,0	3,0 – 5,5				10.702.040.080	500
	10,0	5,0 – 7,0				10.702.040.100	500
	12,0	6,5 – 9,0				10.702.040.120	500
	16,0	8,5 – 12,5				10.702.040.160	500
	18,0	12,0 – 14,5				10.702.040.180	500
	20,0	12,5 – 16,5				10.702.040.200	500

EN AW - 5057 [AlMg3] 4,1 mm 1120 N 1420 N

d	l_{+1}		d_k	k	d_m	No.	
4,8	6,0	1,0 – 3,0	9,5 – 1,0	1,1 ± 0,3	2,7	10.702.048.060	500
	8,0	1,0 – 5,0				10.702.048.080	500
	10,0	4,0 – 6,5				10.702.048.100	500
	12,0	6,0 – 8,0				10.702.048.120	500
	14,0	7,5 – 10,0				10.702.048.140	500
	16,0	8,0 – 12,0				10.702.048.160	500

EN AW - 5754 [AlMg3] 4,9 mm 1480 N 1950 N

d	l_{+1}		d_k	k	d_m	No.	
5,0	6,0	1,0 – 3,0	9,5 – 0,8	1,1 ± 0,3	2,7	10.702.050.060	500
	8,0	2,5 – 5,0				10.702.050.080	500
	10,0	4,0 – 6,5				10.702.050.100	500
	12,0	6,0 – 8,0				10.702.050.120	500
	14,0	7,5 – 10,0				10.702.050.140	500
	16,0	8,0 – 12,0				10.702.050.160	500
	18,0	11,5 – 13,5				10.702.050.180	500
	20,0	12,0 – 15,5				10.702.050.200	500
	25,0	15,0 – 20,5				10.702.050.250	500
	30,0	20,0 – 25,0				10.702.050.300	500

EN AW - 5754 [AlMg3] 5,1 mm 1650 N 2000 N

d	l_{+1}		d_k	k	d_m	No.	
6,0	10,0	3,0 – 5,5	12,0 – 1,2	1,5 ± 0,4	3,2	10.702.060.100	500
	12,0	5,0 – 7,5				10.702.060.120	500
	16,0	7,0 – 11,0				10.702.060.160	500
	18,0	10,5 – 13,0				10.702.060.180	500

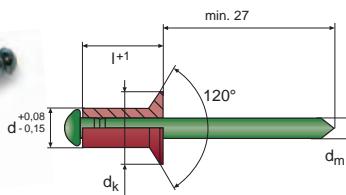
EN AW - 5754 [AlMg3] 6,1 mm 2520 N 2850 N



Aluminium / Stainless Steel A2/A3 Coutersunk Head -open-



according to DIN EN ISO 15978



d	l_{+1}		d_k	d_m	No.	
2,4	6,0	1,5 – 4,0	$4,5_{+0,2}$	1,45	10.702.240.060	500

EN AW - 5719 [AlMg5] 3,1 mm 420 N 660 N

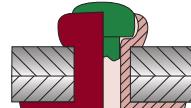
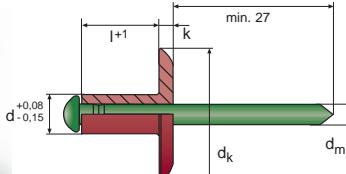
3,0	6,0	1,5 – 4,0	$6,0_{-0,4}$	1,7	10.702.300.060	500
	8,0	3,5 – 6,0			10.702.300.080	500
	10,0	5,0 – 7,5			10.702.300.100	500

EN AW - 5719 [AlMg5] 3,1 mm 660 N 900 N

4,0	6,0	1,5 – 3,5	$7,5_{-0,5}$	2,0	10.702.400.060	500
	8,0	2,0 – 5,5			10.702.400.080	500
	10,0	5,0 – 7,0			10.702.400.100	500
	12,0	6,5 – 9,0			10.702.400.120	500
	16,0	8,5 – 12,5			10.702.400.160	500

EN AW - 5754 [AlMg3] 4,1 mm 1120 N 1420 N

Aluminium / Stainless Steel A2/A3 Large Dome Head -open-



d	l_{+1}		d_k	k	d_m	No.	
5,0	8,0	2,0 – 5,0	$11,0_{\pm 0,5}^{+0,4}$	2,7	10.742.050.080	500	
	10,0	4,0 – 6,5			10.742.050.100	500	
	12,0	6,0 – 8,0			10.742.050.120	500	
	14,0	7,5 – 10,0			10.742.050.140	500	
	16,0	8,0 – 12,0			10.742.050.160	500	
	18,0	11,5 – 13,5			10.742.050.180	500	
	20,0	12,0 – 15,5			10.742.050.200	500	

EN AW - 5754 [AlMg3] 5,1 mm 1650 N 2500 N

To avoid traces of corrosion blind rivets made from aluminium with stainless steel mandrels are used in the outside area.

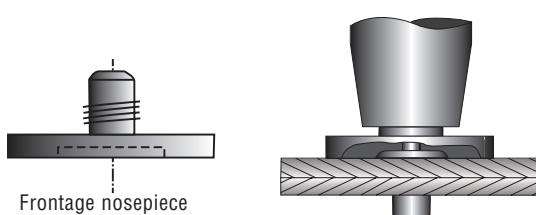
- Take care, that the tolerance of the hole is as large as the thermal expansion of the storefront plates.

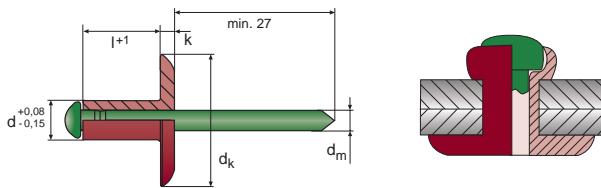
d	l_{+1}		d_k	k	d_m	No.	
5,0	10,0	4,0 – 6,5	$14,0_{\pm 0,3}^{+0,4}$	1,5	2,7	10.762.050.100	500
	12,0	6,0 – 8,0				10.762.050.120	500
	14,0	7,5 – 10,0				10.762.050.140	500
	16,0	8,0 – 12,0				10.762.050.160	500
	18,0	11,5 – 13,5				10.762.050.180	500
	20,0	12,0 – 15,5				10.762.050.200	500
	25,0	15,0 – 20,5				10.762.050.250	250

EN AW - 5754 [AlMg3] 5,1 mm 1650 N 2500 N

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

We recommend to try out the riveting process in advance!





Aluminium / Stainless Steel Large Dome Head -open -painted head



d	l_{+1}		dk	k	dm	No.	
5,0	8,0	2,0 – 5,0	11,0 $\pm 0,5$	1,5 $+ 0,4$	2,7	10.742.050.080/k	500
	10,0	4,0 – 6,5				10.742.050.100/k	500
	12,0	6,0 – 8,0				10.742.050.120/k	500
	14,0	7,5 – 10,0				10.742.050.140/k	500
	16,0	8,0 – 12,0				10.742.050.160/k	500
	18,0	11,5 – 13,5				10.742.050.180/k	500
	20,0	12,0 – 15,5				10.742.050.200/k	500

EN AW - 5754 [AlMg3] 5,1 mm 1650 N 2500 N

d	l_{+1}		dk	k	dm	No.	
5,0	10,0	4,0 – 6,5	14,0 $\pm 0,3$	1,5 $+ 0,4$	2,7	10.762.050.100/k	500
	12,0	6,0 – 8,0				10.762.050.120/k	500
	14,0	7,5 – 10,0				10.762.050.140/k	500
	16,0	8,0 – 12,0				10.762.050.160/k	500
	18,0	11,5 – 13,5				10.762.050.180/k	500
	20,0	12,0 – 15,5				10.762.050.200/k	500
	25,0	15,0 – 20,5				10.762.050.250/k	250

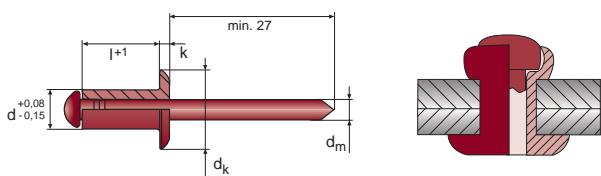
EN AW - 5754 [AlMg3] 5,1 mm 1650 N 2500 N

The individual premium painting available even in smaller quantities.

- Minimum quantity only 1.000 pieces
- Short delivery times
- **Mandrel remains unpainted to avoid contamination of the tool.**
- Precise definition of colour is required
- Alternative plastic cover caps on ► page 112
- Special storefront nosepieces on ► page 138



Standard Blind Rivet ALFO®



Aluminium / Aluminium Dome Head -open-

DIN EN ISO 15981



d	l_{+1}		dk	k	dm	No.	
3,2	6,0	0,5 – 4,0	6,5 $- 0,7$	0,8 $\pm 0,2$	2,0	10.701.032.060	500
	8,0	3,5 – 6,0				10.701.032.080	500
	10,0	5,0 – 8,0				10.701.032.100	500

EN AW - 5251 [AlMg2] 4,9 mm 380 N 670 N

d	l_{+1}		dk	k	dm	No.	
4,0	6,0	1,0 – 3,5	8,0 $- 1,0$	1,0 $\pm 0,3$	2,5	10.701.040.060	500
	8,0	3,0 – 5,5				10.701.040.080	500
	10,0	5,0 – 7,0				10.701.040.100	500
	12,0	6,5 – 9,0				10.701.040.120	500
	16,0	8,5 – 12,5				10.701.040.160	500

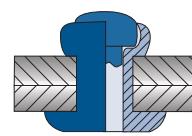
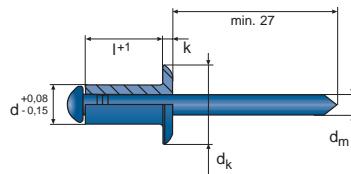
EN AW - 5251 [AlMg2] 4,1 mm 740 N 1240 N

d	l_{+1}		dk	k	dm	No.	
4,8	8,0	1,0 – 5,0	9,5 $- 1,0$	1,1 $\pm 0,3$	2,9	10.701.048.080	500
	10,0	4,0 – 7,0				10.701.048.100	500
	12,0	6,0 – 8,5				10.701.048.120	500
	14,0	8,0 – 10,5				10.701.048.140	500
	16,0	8,0 – 12,0				10.701.048.160	500
	18,0	11,5 – 13,0				10.701.048.180	500
	20,0	13,0 – 15,0				10.701.048.200	500

EN AW - 5251 [AlMg2] 4,9 mm 1140 N 1600 N

Steel / Steel Dome Head -open-

DIN EN ISO 15979



d	l_{+1}		d_k	k	d_m	No.	
3,0	5,0	0,5 – 2,5	6,3 -0,7	0,8 ± 0,2	1,9	10.707.030.050	500
	6,0	0,5 – 3,5				10.707.030.060	500
	8,0	3,0 – 5,5				10.707.030.080	500
	10,0	5,0 – 7,0				10.707.030.100	500
	12,0	6,5 – 9,0				10.707.030.120	500

QSt 32-3 [1.0303] 3,1 mm 900 N 1210 N

3,2	5,0	0,5 – 2,5	6,5 -0,7	0,8 ± 0,2	2,0	10.707.032.050	500
	6,0	0,5 – 3,5				10.707.032.060	500
	8,0	3,0 – 5,5				10.707.032.080	500
	10,0	5,0 – 7,0				10.707.032.100	500
	12,0	6,5 – 9,0				10.707.032.120	500
	14,0	8,5 – 11,0				10.707.032.140	500
	16,0	11,0 – 13,0				10.707.032.160	500

QSt 32-3 [1.0303] 3,3 mm 1060 N 1550 N

4,0	6,0	0,5 – 3,5	8,0 -1,0	1,0 ± 0,3	2,3	10.707.040.060	500
	7,0	2,0 – 4,5				10.707.040.070	500
	8,0	3,0 – 5,5				10.707.040.080	500
	10,0	5,0 – 7,0				10.707.040.100	500
	12,0	6,5 – 9,0				10.707.040.120	500
	14,0	8,0 – 10,5				10.707.040.140	500
	16,0	9,0 – 12,5				10.707.040.160	500
	18,0	12,0 – 14,0				10.707.040.180	500
	20,0	12,5 – 16,0				10.707.040.200	500

QSt 32-3 [1.0303] 4,1 mm 1900 N 2600 N

4,8	6,0	1,0 – 2,5	9,5 -1,0	1,1 ± 0,3	2,7	10.707.048.060	500
	8,0	2,5 – 4,5				10.707.048.080	500
	10,0	4,0 – 6,5				10.707.048.100	500
	12,0	6,0 – 8,5				10.707.048.120	500
	16,0	8,0 – 12,0				10.707.048.160	500
	18,0	10,0 – 13,5				10.707.048.180	500
	20,0	11,0 – 15,0				10.707.048.200	500
	25,0	14,5 – 20,0				10.707.048.250	500

QSt 32-3 [1.0303] 4,9 mm 2900 N 3850 N

- ▶ Types with large dome head available as multi-grip blind rivet OPTO® on [page 46](#)
- ▶ Further blind rivets made of steel are available as high strength type FERO®-BULB ([pages 40/41](#)) or FERO®-BOLT ([pages 42/43](#)).

d	l_{+1}		d_k	k	d_m	No.	
5,0	8,0	2,5 – 4,5	9,5 -0,8	1,1 ± 0,3	2,9	10.707.050.080	500
	10,0	4,0 – 6,5				10.707.050.100	500
	12,0	6,0 – 8,5				10.707.050.120	500
	16,0	8,0 – 12,0				10.707.050.160	500
	18,0	10,0 – 13,5				10.707.050.180	500
	20,0	11,0 – 15,0				10.707.050.200	500
	25,0	14,5 – 20,0				10.707.050.250	500
	30,0	19,5 – 25,0				10.707.050.300	250

QSt 32-3 [1.0303] 5,1 mm 3000 N 4300 N

Lengths up to 55,0 mm available on request!

6,0	10,0	2,0 – 5,5	12,0 -1,2	1,5 ± 0,4	3,6	10.707.060.100	250
	12,0	4,0 – 7,5				10.707.060.120	250
	16,0	7,0 – 11,5				10.707.060.160	250
	20,0	11,0 – 15,0				10.707.060.200	250

QSt 32-3 [1.0303] 6,1 mm 4000 N 5500 N

6,4	8,0	1,0 – 4,0	13,0 -1,4	1,8 ± 0,4	3,8	10.707.064.080	250
	10,0	3,0 – 6,0				10.707.064.100	250
	12,0	5,5 – 7,5				10.707.064.120	250
	16,0	6,0 – 11,5				10.707.064.160	250
	18,0	10,0 – 13,0				10.707.064.180	250
	20,0	12,0 – 14,5				10.707.064.200	250
	25,0	13,0 – 19,5				10.707.064.250	250
	30,0	19,0 – 24,5				10.707.064.300	250

QSt 32-3 [1.0303] 6,5 mm 4500 N 6300 N

8,0	14,0	3,0 – 8,5	20,0 ± 0,7	2,5 + 0,5	4,0	10.707.080.140	250
	16,0	5,0 – 10,5				10.707.080.160	250
	18,0	8,0 – 12,0				10.707.080.180	250

QSt 32-3 [1.0303] 8,1 mm 8600 N 12000 N

Diameter 8,0 mm not standardsized.



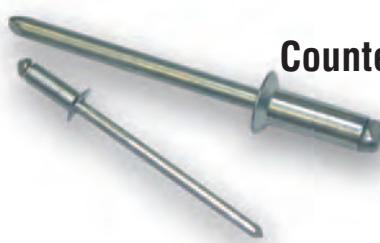
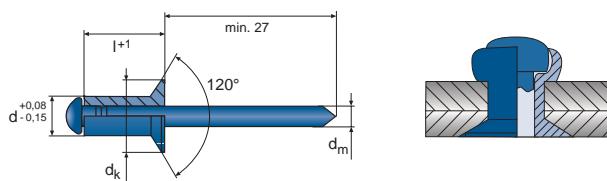
▶ For the perfect tool take a look into chapters 8 and 9 on pages 117 and 125!



Standard Blind Rivet ALFO®

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Steel / Steel Countersunk Head -open-

DIN EN ISO 15980

ALFO®

d	l_{+1}		dk	dm	No.	
3,0	6,0	1,5 – 3,5	6,0 - 0,4	1,9	10.707.300.060	500
	8,0	3,0 – 5,5			10.707.300.080	500
	10,0	5,0 – 7,0			10.707.300.100	500
	12,0	6,5 – 9,0			10.707.300.120	500

QSt 32-3 [1.0303] 3,1 mm 900 N 1210 N

3,2	6,0	1,5 – 3,5	6,2 - 0,4	2,0	10.707.320.060	500
	8,0	3,0 – 5,5			10.707.320.080	500
	10,0	5,0 – 7,0			10.707.320.100	500
	12,0	6,5 – 9,0			10.707.320.120	500

QSt 32-3 [1.0303] 3,3 mm 1060 N 1550 N

4,0	6,0	1,5 – 3,5	7,5 - 0,5	2,3	10.707.400.060	500
	8,0	3,0 – 5,5			10.707.400.080	500
	10,0	5,0 – 7,0			10.707.400.100	500
	12,0	6,5 – 9,0			10.707.400.120	500
	16,0	8,0 – 12,5			10.707.400.160	500

QSt 32-3 [1.0303] 4,1 mm 1900 N 2600 N

d	l_{+1}		dk	dm	No.	
4,8	8,0	2,0 – 4,5	9,0 - 0,5	2,7	10.707.480.080	500
	10,0	4,0 – 6,5			10.707.480.100	500
	12,0	6,0 – 8,5			10.707.480.120	500
	16,0	8,0 – 12,0			10.707.480.160	500
	18,0	11,5 – 13,5			10.707.480.180	500

QSt 32-3 [1.0303] 4,9 mm 2900 N 3850 N

5,0	8,0	2,0 – 4,5	9,0 - 0,5	2,9	10.707.500.080	500
	10,0	4,0 – 6,5			10.707.500.100	500
	12,0	6,0 – 8,5			10.707.500.120	500
	16,0	8,0 – 12,0			10.707.500.160	500
	20,0	11,0 – 15,5			10.707.500.200	500
	25,0	15,0 – 20,0			10.707.500.250	500
	30,0	19,5 – 25,0			10.707.500.300	500

QSt 32-3 [1.0303] 5,1 mm 3000 N 4300 N

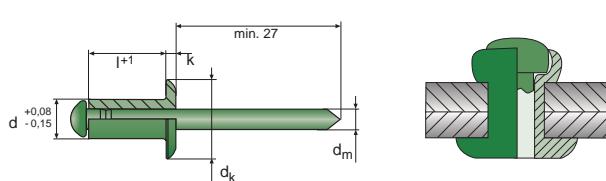
6,4	10,0	3,0 – 5,0	13,4	3,8	10.707.640.100	500
	12,0	4,0 – 7,0	- 1,8	$\pm 0,1$	10.707.640.120	500

QSt 32-3 [1.0303] 6,5 mm 4900 N 5700 N

Standard Blind Rivet ALFO®

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Stainless Steel A2 / Stainless Steel A2/A3 Dome Head -open-

DIN EN ISO 15983

d	l_{+1}		dk	k	dm	No.	
2,4	6,0	0,5 – 3,5	5,0 $\pm 0,2$	0,8 $\pm 0,1$	1,5	10.708.024.060	500

[1.4301] 3,1 mm 1000 N 1500 N

3,0	6,0	0,5 – 3,0	6,3 - 0,7	0,8 $\pm 0,2$	1,9	10.708.030.060	500
	8,0	3,0 – 5,0				10.708.030.080	500
	10,0	5,0 – 7,0				10.708.030.100	500
	12,0	6,5 – 8,5				10.708.030.120	500
	16,0	8,5 – 12,0				10.708.030.160	500

[1.4301] 3,1 mm 2050 N 2600 N

d	l_{+1}		dk	k	dm	No.	
3,2	6,0	0,5 – 3,0	6,5 - 0,7	0,8 $\pm 0,2$	1,9	10.708.032.060	500
	8,0	3,0 – 5,0				10.708.032.080	500
	10,0	5,0 – 7,0				10.708.032.100	500
	12,0	6,5 – 8,5				10.708.032.120	500
	16,0	8,5 – 12,0				10.708.032.160	500

[1.4301] 3,3 mm 2050 N 2600 N

► Further dimensions on the following page!

d	I +1		d _k	k	d _m	Nr.	
4,0	6,0	1,0 – 2,5	8,0 -1,0 ± 0,3	1,0 2,5	10,708.040.060	500	
	8,0	2,5 – 4,5			10,708.040.080	500	
	10,0	4,5 – 6,5			10,708.040.100	500	
	12,0	6,5 – 8,5			10,708.040.120	500	
	14,0	8,5 – 10,5			10,708.040.140	500	
	16,0	10,0 – 12,0			10,708.040.160	500	
	18,0	12,0 – 14,0			10,708.040.180	500	
	20,0	14,0 – 16,0			10,708.040.200	500	
	25,0	16,0 – 20,0			10,708.040.250	500	

[1.4301] 4,1 mm 2750 N 3550 N

4,8	8,0	1,5 – 4,0	9,5 -1,0 ± 0,3	1,1 2,9	10,708.048.080	500	
	10,0	4,0 – 6,0			10,708.048.100	500	
	12,0	6,0 – 8,0			10,708.048.120	500	
	14,0	7,0 – 9,5			10,708.048.140	500	
	16,0	8,0 – 11,0			10,708.048.160	500	
	18,0	11,0 – 13,0			10,708.048.180	500	

[1.4301] 4,9 mm 4250 N 5400 N

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

► Further blind rivets made of stainless steel are available as high strength type FERO®-BULB (pages 40/41) or FERO®-BOLT (pages 42/43).

d	I +1		d _k	k	d _m	Nr.	
5,0	8,0	2,0 – 4,0	9,5 -0,8 ± 0,3	1,1 2,9	10,708.050.080	500	
	10,0	4,0 – 6,0			10,708.050.100	500	
	12,0	6,0 – 8,0			10,708.050.120	500	
	14,0	7,0 – 9,5			10,708.050.140	500	
	16,0	8,0 – 11,0			10,708.050.160	500	
	18,0	11,0 – 13,0			10,708.050.180	500	
	20,0	13,0 – 15,0			10,708.050.200	500	
	25,0	15,0 – 20,0			10,708.050.250	250	
	30,0	21,0 – 25,0			10,708.050.300	250	
	35,0	25,0 – 30,0			10,708.050.350	250	

[1.4301] 5,1 mm 4700 N 5800 N

6,0	10,0	2,0 – 5,5	12,0 -1,2 +0,4	1,5 3,8	10,708.060.100	250	
	12,0	5,5 – 7,5			10,708.060.120	250	
	16,0	7,5 – 11,0			10,708.060.160	250	

[1.4301] 6,1 mm 5700 N 7500 N

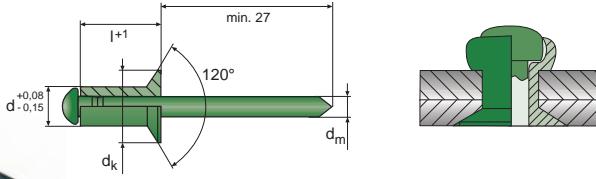
6,4	10,0	2,5 – 6,0	13,0 -1,5 ± 0,4	1,8 3,8	10,708.064.100	250	
	12,0	4,0 – 7,5			10,708.064.120	250	
	14,0	6,0 – 9,5			10,708.064.140	250	
	16,0	7,5 – 11,5			10,708.064.160	250	
	18,0	9,0 – 13,0			10,708.064.180	250	

[1.4301] 6,5 mm 6500 N 8850 N

Stainless Steel A2 / Stainless Steel A2/A3 Countersunk Head -open-



DIN EN ISO 15984



d	I +1		d _k	d _m	No.	
3,2	6,0	1,0 – 3,0	6,0 -0,4	1,9	10,708.320.060	500
	8,0	1,0 – 3,0			10,708.320.080	500
	10,0	3,0 – 5,0			10,708.320.100	500
	12,0	5,0 – 7,0			10,708.320.120	500

[1.4301] 3,3 mm 1800 N 2500 N

4,0	6,0	1,0 – 2,5	7,5 -0,5	2,5	10,708.400.060	500
	8,0	2,0 – 4,5			10,708.400.080	500
	10,0	4,5 – 6,5			10,708.400.100	500
	12,0	6,5 – 8,5			10,708.400.120	500
	16,0	8,5 – 12,0			10,708.400.160	500
	18,0	11,5 – 14,0			10,708.400.180	500

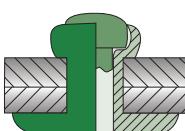
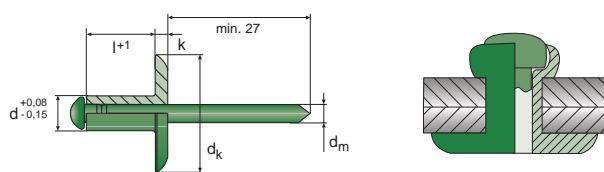
[1.4301] 4,1 mm 2750 N 3550 N

d	I +1		d _k	d _m	No.	
4,8	8,0	1,5 – 3,0	9,0 -0,5	2,9	10,708.480.080	500
	10,0	3,0 – 5,0			10,708.480.100	500
	12,0	6,0 – 8,0			10,708.480.120	500
	16,0	8,0 – 9,5			10,708.480.160	500

[1.4301] 4,9 mm 4250 N 5400 N

5,0	8,0	2,0 – 4,0	9,3 -0,5	2,9	10,708.500.080	500
	10,0	4,0 – 6,0			10,708.500.100	500
	12,0	6,0 – 8,5			10,708.500.120	500
	16,0	8,0 – 11,0			10,708.500.160	500

[1.4301] 5,1 mm 4700 N 5800 N



d	I +1		d_k	k	d_m	No.	
3,2	6,0	0,5 – 3,0	9,5 ± 0,05	1,1 + 0,3	1,9	10.738.032.060	500
	8,0	3,0 – 5,0				10.738.032.080	500
	10,0	5,0 – 7,0				10.738.032.100	500
	12,0	6,5 – 8,0				10.738.032.120	500
	14,0	8,5 – 10,5				10.738.032.140	500
	16,0	10,0 – 12,0				10.738.032.160	500

[1.4301] 3,3 mm 1900 N 2500 N

4,0	6,0	1,0 – 2,5	11,5 ± 0,03	1,9 ± 0,03	2,5	10.758.040.060	500
	8,0	2,5 – 4,5				10.758.040.080	500
	10,0	4,5 – 6,5				10.758.040.100	500
	12,0	6,5 – 8,5				10.758.040.120	500
	14,0	8,5 – 10,5				10.758.040.140	500
	16,0	10,0 – 12,0				10.758.040.160	500

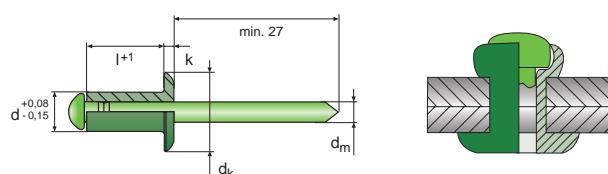
[1.4301] 4,1 mm 2700 N 3500 N

Stainless Steel A2 / Stainless Steel A2 Large Dome Head -open-



d	I +1		d_k	k	d_m	No.	
4,8	12,0	5,5 – 7,5	15,3 ± 0,2	2,3 - 0,4	2,9	10.778.048.120	500
	14,0	6,5 – 9,0				10.778.048.140	500
	16,0	7,5 – 10,5				10.778.048.160	500
	18,0	10,5 – 12,5				10.778.048.180	500
	20,0	12,5 – 15,5				10.778.048.200	250

[1.4301] 4,9 mm 4200 N 5300 N



Stainless Steel A4 / Stainless Steel A4/A5 Dome Head -open-



according to DIN EN ISO 15983

d	I +1		d_k	k	d_m	No.	
3,0	6,0	0,5 – 3,0	6,3 - 0,7	0,8 ± 0,2	1,9	10.713.030.060	500
	8,0	3,0 – 5,0				10.713.030.080	500
	10,0	5,0 – 7,0				10.713.030.100	500
	12,0	6,5 – 3,5				10.713.030.120	500

[1.4404] 3,1 mm 1760 N 2270 N

4,0	6,0	1,0 – 2,5	8,0 - 1,0	1,0 ± 0,3	2,5	10.713.040.060	500
	8,0	2,5 – 4,5				10.713.040.080	500
	10,0	4,5 – 6,5				10.713.040.100	500
	12,0	6,5 – 8,5				10.713.040.120	500
	16,0	8,5 – 12,0				10.713.040.160	500

[1.4404] 4,1 mm 3220 N 4250 N

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

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

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

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

This allows us to meet the strong increase in quality requirements that has taken place in this sector of riveting.

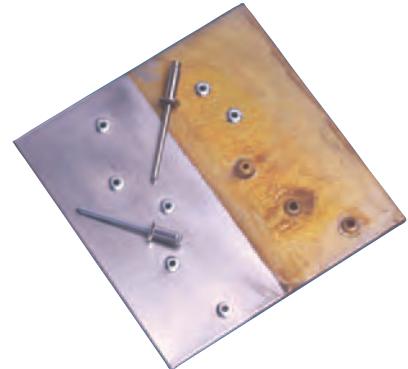
Good corrosion properties:

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

very well suited ♦♦♦
well suited ♦♦
suited ♦



Material number and DIN designation:
2.4360 as per DIN 17743



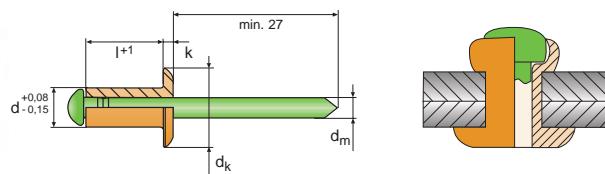
[1] Trademark of INCO Alloys International
[2] Trademark of KRUPP



Standard Blind Rivet ALFO®

Nickel-Copper / Stainless Steel A4/A5 Dome Head -open-

DIN EN ISO 16584



d	I +1	+	dk	k	dm	No.	Box
3,2	6,0	1,0 – 3,5	6,5 -0,7	0,8 ± 0,2	1,9	10.720.032.060	500
	8,0	3,0 – 5,5				10.720.032.080	500
	10,0	5,0 – 7,0				10.720.032.100	500

[2.4360] 3,3 mm 1600 N 2400 N

d	I +1	+	dk	k	dm	No.	Box
4,0	6,0	1,0 – 3,5	8,0 -1,0	1,0 ± 0,3	2,3	10.720.040.060	500
	8,0	3,0 – 5,5				10.720.040.080	500
	10,0	5,0 – 7,0				10.720.040.100	500
	12,0	6,5 – 9,0				10.720.040.120	500

[2.4360] 4,1mm 2300 N 3450 N

The rivet shank is zinc plated!

d	I +1	+	dk	k	dm	No.	Box
4,8	8,0	1,5 – 4,5	9,5 -1,0	1,1 ± 0,3	2,9	10.720.048.080	500
	10,0	4,0 – 6,5				10.720.048.100	500
	12,0	6,0 – 8,5				10.720.048.120	500
	16,0	8,0 – 11,5				10.720.048.160	500
	20,0	10,5 – 15,0				10.720.048.200	500

[2.4360] 4,9 mm 3400 N 5000 N

d	I +1	+	dk	k	dm	No.	Box
6,4	12,0	3,5 – 7,5	13,0 -1,5	1,8 ± 0,4	3,8	10.720.064.120	250
	16,0	7,0 – 11,5				10.720.064.160	250
	18,0	10,0 – 13,0				10.720.064.180	250

[2.4360] 6,5 mm 5400 N 8200 N

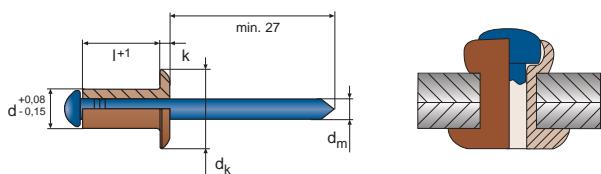
Standard Blind Rivet ALFO®

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ALFO®

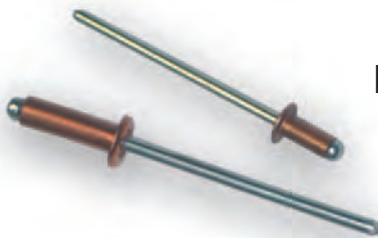


d	l_{+1}		d_k	k	d_m	No.	
3,0	5,0	0,5 – 2,5	6,3 -0,7	$0,8 \pm 0,2$	1,9	10.705.030.050	500
	6,0	2,0 – 3,0				10.705.030.060	500
	8,0	3,0 – 5,0				10.705.030.080	500
	10,0	5,0 – 7,0				10.705.030.100	500
	12,0	7,0 – 9,0				10.705.030.120	500

[2.0040] 3,1 mm 760 N 950 N

3,2	5,0	0,5 – 2,5	6,4 -0,5	$0,8 \pm 0,2$	1,9	10.705.032.050	500
	6,0	2,0 – 3,5				10.705.032.060	500
	8,0	3,0 – 5,5				10.705.032.080	500
	10,0	5,0 – 7,0				10.705.032.100	500

[2.0040] 3,3 mm 800 N 1000 N



Copper / Steel
Dome Head -open-

DIN EN ISO 16582

d	l_{+1}		d_k	k	d_m	No.	
4,0	6,0	2,5 – 3,5	8,0 -1,0	$1,0 \pm 0,3$	2,0	10.705.040.060	500
	8,0	3,5 – 5,0				10.705.040.080	500
	10,0	5,0 – 7,0				10.705.040.100	500
	12,0	7,0 – 8,5				10.705.040.120	500
	16,0	8,0 – 12,5				10.705.040.160	500

[2.0040] 4,1 mm 1500 N 1800 N

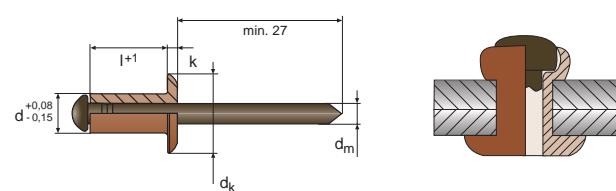
4,8	8,0	2,0 – 4,0	9,5 -1,0	$1,1 \pm 0,3$	2,7	10.705.048.080	500
	10,0	4,0 – 6,0				10.705.048.100	500
	12,0	6,0 – 8,0				10.705.048.120	500
	14,0	8,0 – 10,0				10.705.048.140	500
	16,0	10,0 – 12,0				10.705.048.160	500

[2.0040] 4,9 mm 2000 N 2500 N

Standard Blind Rivet ALFO®

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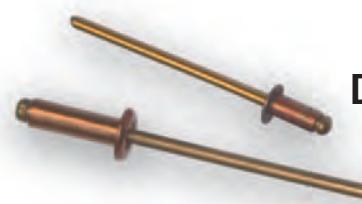


d	l_{+1}		d_k	k	d_m	No.	
3,0	5,0	0,5 – 2,5	6,3 -0,7	$0,8 \pm 0,2$	1,7	10.709.030.050	500
	6,0	2,0 – 3,5				10.709.030.060	500
	8,0	3,0 – 5,5				10.709.030.080	500
	10,0	5,0 – 7,0				10.709.030.100	500

[2.0040] 3,1 mm 760 N 950 N

3,2	5,0	0,5 – 2,5	6,4 -0,5	$0,8 \pm 0,2$	1,9	10.709.032.050	500
	6,0	2,0 – 3,5				10.709.032.060	500
	8,0	3,0 – 5,5				10.709.032.080	500
	10,0	5,0 – 7,0				10.709.032.100	500

[2.0040] 3,3 mm 800 N 1000 N



Copper / Bronze
Dome Head -open-

DIN EN ISO 16582

d	l_{+1}		d_k	k	d_m	No.	
4,0	6,0	2,0 – 3,5	8,0 -1,0	$1,0 \pm 0,3$	2,0	10.709.040.060	500
	8,0	3,0 – 5,5				10.709.040.080	500
	10,0	5,0 – 7,0				10.709.040.100	500
	12,0	6,5 – 8,5				10.709.040.120	500
	16,0	8,0 – 11,5				10.709.040.160	500

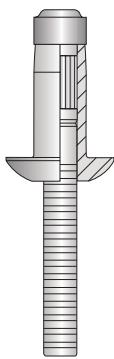
[2.0040] 4,1 mm 1500 N 1800 N

► Please note our manifold range of assortments and small packs on pages 104/105 and 106-108!



Structural Blind Rivet FERO®-BULB

FERO®-BULB



By the combination of the following properties the HONSEL-/VVG **FERO®-BULB** rivets are recommended as a high grade joint element for a host of industrial applications. Particularly in the field of vehicle and tank construction, this type of rivet is an excellent choice.

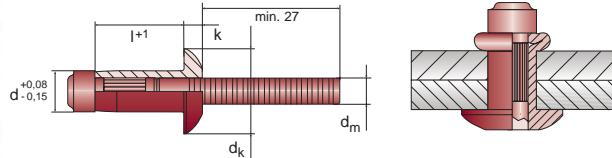
FERO®-BULB blind rivets feature the following characteristics:

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



Structural Blind Rivet FERO®-BULB

Aluminium / Aluminium Dome Head -open-



d	l_{+1}		d_k	k	d_m	No.	
6,4	10,5	2,8 – 4,8	13,5	3,3	4,2	10.790.064.105	250

→ 6,6 mm → 4200 N ← 3100 N

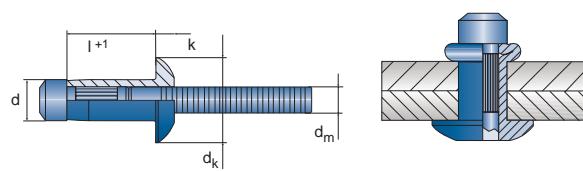
d	l_{+1}		d_k	k	d_m	No.	
6,4	14,5	6,8 – 8,8	13,5	3,3	4,2	10.790.064.145	250

→ 6,6 mm → 4600 N ← 3100 N



Structural Blind Rivet FERO®-BULB

Steel / Steel Dome Head -open-



d	l_{+1}		d_k	k	d_m	No.	
3,2	7,0	1,0 – 3,0	6,8	1,4	2,1	10.792.032.070	500
		→ 3,3 - 3,4 mm	→ 1200 N	← 1300 N			
3,2	9,5	3,0 – 5,0	6,8	1,4	2,1	10.792.032.095	500
		→ 3,3 - 3,4 mm	→ 1700 N	← 1300 N			
3,2	11,5	5,0 – 7,0	6,8	1,4	2,1	10.792.032.115	500
		→ 3,3 - 3,4 mm	→ 2500 N	← 1300 N			

d	l_{+1}		d_k	k	d_m	No.	
4,0	7,5	1,0 – 3,0	8,0	1,5	2,6	10.792.040.075	500
		→ 4,1 - 4,3 mm	→ 2400 N	← 2800 N			
4,0	9,5	3,0 – 5,0	8,0	1,5	2,6	10.792.040.095	500
		→ 4,1 - 4,3 mm	→ 3500 N	← 2800 N			
4,0	12,5	5,0 – 7,0	8,0	1,5	2,6	10.792.040.125	500
		→ 4,1 - 4,3 mm	→ 4100 N	← 2800 N			

Structural Blind Rivet FERO®-BULB

1

2



FERO®-BULB

d	I _{max}		d _k	k	d _m	No.	
4,8	9,0	1,5 – 3,5	9,6	1,5	3,1	10.792.048.090	500

4,9 - 5,1 mm 3600 N 3800 N

4,8	11,5	3,5 – 6,0	9,6	1,5	3,1	10.792.048.115	500
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4,9 - 5,1 mm 4200 N 3800 N

4,8	14,5	6,0 – 8,5	9,6	1,5	3,1	10.792.048.145	250
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4,9 - 5,1 mm 5600 N 3800 N

6,4	9,0	1,5 – 3,5	13,4	2,7	3,9	10.792.064.090	250
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6,7 - 6,9 mm 10000 N 7800 N

6,4	10,5	2,8 – 4,8	13,4	2,7	3,9	10.792.064.105	250
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6,7 - 6,9 mm 11000 N 7800 N

d	I ₊₁		d _k	k	d _m	No.	
6,4	12,5	4,8 – 6,8	13,4	2,7	3,9	10.792.064.125	250

6,7 - 6,9 mm 12500 N 7800 N

6,4	14,5	6,8 – 8,8	13,4	2,7	3,9	10.792.064.145	250
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6,7 - 6,9 mm 13000 N 7800 N

6,4	16,5	8,8 – 10,8	13,4	2,7	3,9	10.792.064.165	250
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6,7 - 6,9 mm 14500 N 7800 N

6,4	18,5	10,8 – 12,8	13,4	2,7	3,9	10.792.064.185	250
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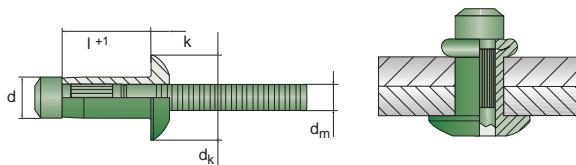
6,7 - 6,9 mm 15000 N 7800 N

Countersunk head available on request from stock.

Structural Blind Rivet FERO®-BULB

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2



d	I ₊₁		d _k	k	d _m	No.	
3,2	7,0	1,0 – 3,0	6,6	1,1	2,1	10.791.032.070	500

3,3 - 3,4 mm 1600 N 2000 N

3,2	9,5	3,0 – 5,0	6,6	1,1	2,1	10.791.032.095	500
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3,3 - 3,4 mm 1700 N 2000 N

3,2	11,5	5,0 – 7,0	6,6	1,1	2,1	10.791.032.115	500
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3,3 - 3,4 mm 3200 N 2000 N

4,0	7,5	1,0 – 3,0	8,0	1,5	2,6	10.791.040.075	500
	10,0	3,0 – 5,0				10.791.040.100	500
	12,5	5,0 – 7,0				10.791.040.125	500

4,1 - 4,3 mm 5200 N 4000 N

4,8	10,0	1,5 – 3,5	9,6	1,5	3,2	10.791.048.100	500
	12,5	3,5 – 6,0				10.791.048.125	500
	15,5	6,0 – 8,5				10.791.048.155	250

4,9 - 5,1 mm 5500 N 5000 N

Stainless Steel / Stainless Steel Dome Head -open-



d	I ₊₁		d _k	k	d _m	No.	
6,4	9,0	1,5 – 3,5	13,4	2,7	3,9	10.791.064.090	250

6,7 - 6,9 mm 11000 N 8800 N

6,4	10,5	2,8 – 4,8	13,4	2,7	3,9	10.791.064.105	250
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6,7 - 6,9 mm 11500 N 8800 N

6,4	12,5	4,8 – 6,8	13,4	2,7	3,9	10.791.064.125	250
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6,7 - 6,9 mm 12500 N 8800 N

6,4	14,5	6,8 – 8,8	13,4	2,7	3,9	10.791.064.145	250
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6,7 - 6,9 mm 13000 N 8800 N

6,4	16,5	8,8 – 10,8	13,4	2,7	3,9	10.791.064.165	250
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6,7 - 6,9 mm 14000 N 8800 N

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

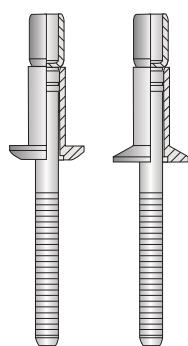


For an optimized processing of our structural FERO®-BULB blind rivets the pneumatic-hydraulic tool BZ 133A is available on request.

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

Structural Blind Rivet FERO®-BOLT

FERO®-BOLT



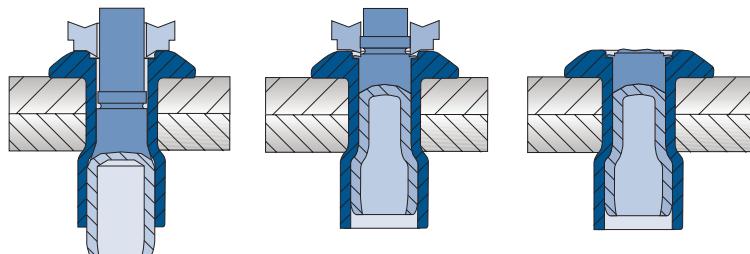
The flush break with the setting head is typical for the high-strength blind rivet **FERO®-BOLT**, which is often used in various industrial applications, especially in those with the attention to the factor **safety**. Due to its special construction method, this rivet is able to take over load-bearing functions too.

Properties of the FERO®-BOLT:

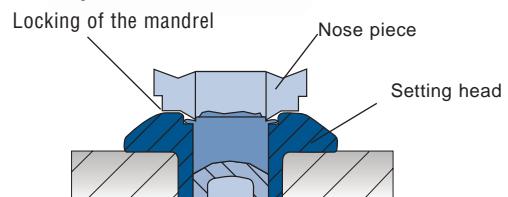
- very high shear strength through a captive mandrel that absorbs part of the forces
- very large grip range
- form-locking rest of the mandrel
- vibration resistant
- splash waterproof
- very good filling of the drill hole



Processing:



Principle:



The head will be deformed by pulling back the mandrel so that the rivet squeezes perfectly against the wall of drill hole. The necessary special **FERO®-BOLT** nosepiece assures that the mandrel is locked failsafe in the connection.



i For the handling of FERO-BOLT high-strength blind rivets the new tool **BZ 123 A** (► more details on [page 127](#)) is available.

i The tool has to be prepared with the **special nosepiece** shown below!



361.121.008.401 **Nosepiece 4,8 mm**
361.121.008.601 **Nosepiece 6,4 mm**

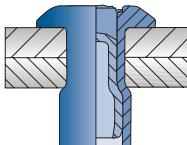
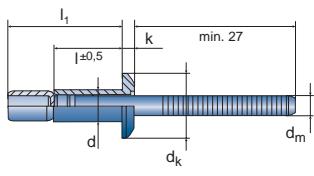
Structural Blind Rivet FERO®-BOLT

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FERO®-BOLT



Steel / Steel
Dome Head -open-

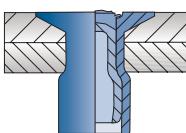
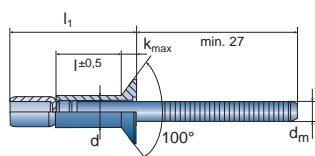


d	I / I ₁	+	d _k	k	d _m	Nr.	
4,8	10,0		1,6 – 6,8	10,1	2,1	2,9	10.797.048.100 500
	18,2		1,6 – 11,1				10.797.048.140 500

4,9 - 5,1 mm 5800 N 4100 N

d	I / I ₁	+	d _k	k	d _m	Nr.	
6,4	14,0		2,0 – 9,5	13,3	2,9	3,9	10.797.064.140 250
	23,7		2,0 – 15,8				10.797.064.190 250

6,6 - 7,0 mm 10500 N 8000 N

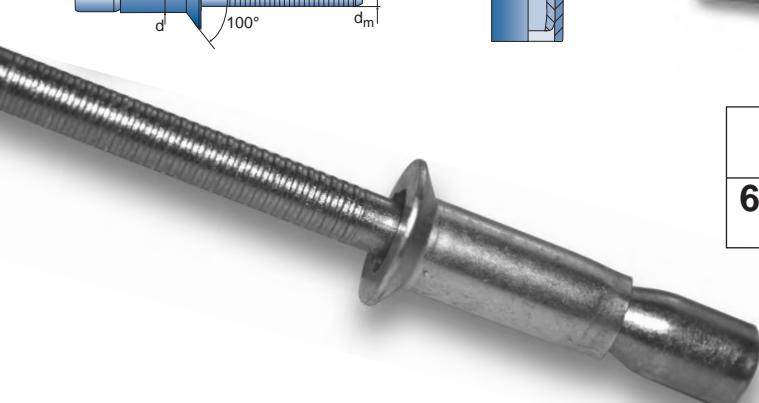


Steel / Steel
Countersunk Head -open-



d	I / I ₁	+	d _k	k	d _m	Nr.	
6,4	16,5		3,2 – 12,1	10,0	2,4	3,9	10.797.640.165 250
	27,0						

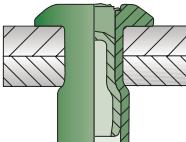
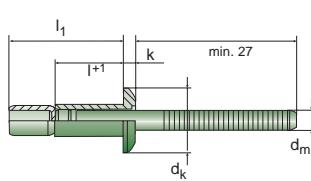
6,6 - 7,0 mm 11000 N 9500 N



Structural Blind Rivet FERO®-BOLT

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3



Stainless Steel / Stainless Steel
Dome Head -open-



d	I / I ₁	+	d _k	k	d _m	Nr.	
4,8	10,0		1,6 – 6,8	10,1	2,1	2,9	10.798.048.100 500
	18,2		1,6 – 11,1				10.798.048.140 500

4,9 - 5,1 mm 6000 N 4500 N

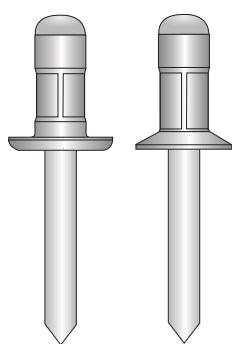
d	I / I ₁	+	d _k	k	d _m	Nr.	
6,4	14,0		2,0 – 9,5	13,3	2,9	3,9	10.798.064.140 250
	23,7		2,0 – 15,8				10.798.064.190 250

6,6 - 7,0 mm 10500 N 8200 N

Aluminium types available on request.

Multigrip Blind Rivet OPTO®

OPTO®

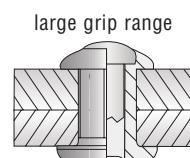


Compared to a standard blind rivet, the clear hallmark of the OPTO® multigrip blind rivet is its distinct, especially embossed rivet shaft. Due to the rivet's structural features, the following functional properties result:

- large grip range
- good filling capacity of the borehole
- non-positive locking of the captive mandrel without clearance
- vibration proof
- dustproof and splash-watertight
- no rattling sounds

Preferred applications for OPTO® multigrip blind rivets can be found in the field of vehicle manufacturing, in air conditioning technology as well as in the field of tank and container manufacturing.

Furthermore, this rivet type is excellently suited for use as a repair rivet.



1 4

Multigrip Blind Rivet OPTO®

Aluminium / Steel Dome Head -open-



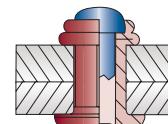
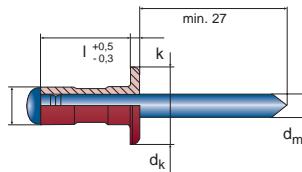
d	I		d_k	k	d_m	No.	
3,2	6,8	0,8 – 3,4	6,4	1,0	1,8	10.600.032.068	500
	8,0	0,8 – 4,8				10.600.032.080	500
	9,5	1,2 – 6,4				10.600.032.095	500
	11,0	4,0 – 7,9				10.600.032.110	500

EN AW - 5052 [AlMg2,5] 3,3 mm 720 N 1000 N

4,0	6,0	0,5 – 3,0	7,9	1,2	2,3	10.600.040.060	500
	9,5	1,2 – 6,4				10.600.040.095	500
	12,7	4,0 – 9,5				10.600.040.127	500
	16,9	6,4 – 12,7				10.600.040.169	500

EN AW - 5052 [AlMg2,5] 4,1 mm 1120 N 1650 N

Dimension 4,0 x 9,5 available as grounding rivet with knurled shaft on ► page 55.



d	I		d_k	k	d_m	No.	
4,8	10,3	1,6 – 6,4	9,8	1,5	2,8	10.600.048.103	500
	15,1	4,8 – 11,1				10.600.048.151	500
	16,9	6,4 – 12,7				10.600.048.169	500
	24,8	12,7 – 19,8				10.600.048.248	500

EN AW - 5052 [AlMg2,5] 4,9 mm 1530 N 2300 N

Aluminium / Steel Dome Head -open- painted

RAL-No.
colour

4,0	6,0	0,5 – 3,0	7,9	1,2	2,3	10.600.040.060/001	9010	500
	6,0	0,5 – 3,0				10.600.040.060/002	■ 9005	500
	9,5	1,2 – 6,4				10.600.040.095/001	□ 9010	500
	9,5	1,2 – 6,4				10.600.040.095/002	■ 9005	500
	12,7	4,0 – 9,5				10.600.040.127/001	9010	500
	12,7	4,0 – 9,5				10.600.040.127/002	■ 9005	500

EN AW - 5052 [AlMg2,5] 4,1 mm 1120 N 1650 N

Aluminium / Steel Large Dome Head -open-

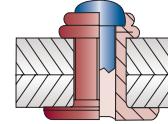
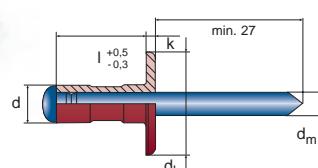


d	I		d_k	k	d_m	No.	
3,2	8,0	0,8 – 4,8	9,5	1,2	1,8	10.630.032.080	500
	11,0	4,0 – 7,9				10.630.032.110	500

EN AW - 5052 [AlMg2,5] 3,3 mm 720 N 1000 N

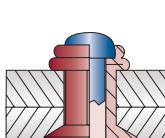
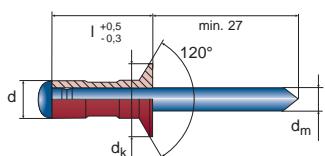
4,0	9,5	1,2 – 6,4	12,0	1,5	2,3	10.650.040.095	500
	12,7	4,0 – 9,5				10.650.040.127	500

EN AW - 5052 [AlMg2,5] 4,1 mm 1120 N 1650 N



d	I		d_k	k	d_m	No.	
4,8	10,3	1,6 – 6,4	16,0	1,8	2,8	10.670.048.103	500
	16,9	6,4 – 12,7				10.670.048.169	500
	24,8	12,7 – 19,8				10.670.048.248	500

EN AW - 5052 [AlMg2,5] 4,9 mm 1530 N 2300 N



**Aluminium / Steel
Countersunk Head -open-**

OPTO®

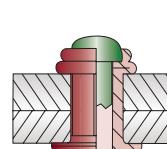
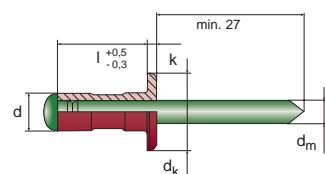
d	I		dk	dm	No.	
3,2	9,7	2,4 – 6,4	5,4	1,8	10.600.320.097	500

EN AW - 5052 [AlMg2,5] 3,3 mm 670 N 900 N

d	I		dk	dm	No.	
4,0	11,3	2,9 – 7,9	6,5	2,3	10.600.400.113	500

EN AW - 5052 [AlMg2,5] 4,1 mm 980 N 1320 N

Multigrip Blind Rivet OPTO®



**Aluminium / Stainless Steel
Dome Head -open-**

d	I		dk	k	dm	No.	
3,2	8,0	0,8 – 4,8	6,4	1,0	1,8	10.612.032.080	500
	11,0	4,0 – 7,9				10.612.032.110	500

EN AW - 5052 [AlMg2,5] 3,3 mm 670 N 900 N

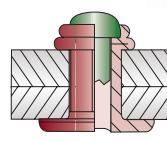
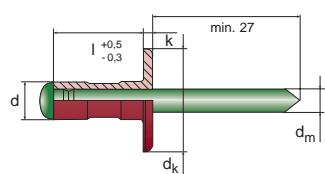
4,0	9,5	1,2 – 6,4	7,9	1,2	2,3	10.612.040.095	500
12,7	4,0 – 9,5	10.612.040.127				500	
16,9	6,4 – 12,7	10.612.040.169				500	

EN AW - 5052 [AlMg2,5] 4,1 mm 980 N 1320 N

d	I		dk	k	dm	No.	
4,8	10,3	1,6 – 6,4	9,8	1,5	2,8	10.612.048.103	500
	15,1	4,8 – 11,1				10.612.048.151	500
	16,9	6,4 – 12,7				10.612.048.169	500
	24,8	12,7 – 19,8				10.612.048.248	500

EN AW - 5052 [AlMg2,5] 4,9 mm 1530 N 2300 N

Diameter 4,0 mm available as countersunk head too.



**Aluminium / Stainless Steel
Large Dome Head -open-**

d	I		dk	k	dm	No.	
3,2	8,0	0,8 – 4,8	9,5	1,2	1,8	10.632.032.080	500
	11,0	4,0 – 7,9				10.632.032.110	500

EN AW - 5052 [AlMg2,5] 3,3 mm 670 N 900 N

4,0	9,5	1,2 – 6,4	12,0	1,5	2,3	10.652.040.095	500
12,7	4,0 – 9,5	10.652.040.127				500	

EN AW - 5052 [AlMg2,5] 4,1 mm 980 N 1320 N

d	I		dk	k	dm	No.	
4,8	10,3	1,6 – 6,4	16,0	1,8	2,8	10.672.048.103	500
	16,9	6,4 – 12,7				10.672.048.169	500
	24,8	12,7 – 19,8				10.672.048.248	250

EN AW - 5052 [AlMg2,5] 4,9 mm 1530 N 2300 N

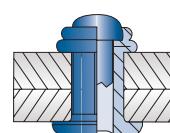
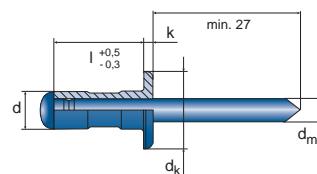


Steel / Steel Dome Head -open-



d	I		d_k	k	d_m	No.	
3,2	9,0	1,1 – 4,0	7,2	0,9	2,1	10.607.032.090	500

➡ 3,3 mm ➡ 1500 N ➡ 1700 N



Steel / Steel Large Dome Head -open-



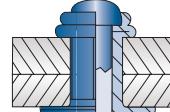
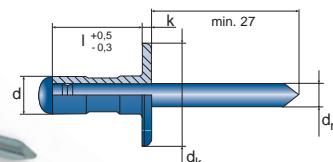
d	I		d_k	k	d_m	No.	
4,8	10,3	1,0 – 5,0	16,1	1,6	3,4	10.677.048.103	500
	16,9	5,0 – 10,0				10.677.048.169	500

➡ 4,9 mm ➡ 2050 N ➡ 2940 N

d	I		d_k	k	d_m	No.	
4,0	11,0	1,4 – 5,0	8,1	1,2	2,7	10.607.040.110	500

➡ 4,1 mm ➡ 1950 N ➡ 2350 N

Countersunk types available on request.

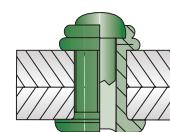
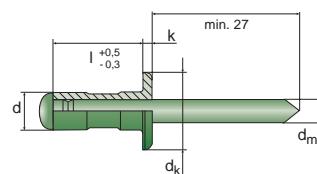


Stainless Steel / Stainless Steel Dome Head -open-



d	I		d_k	k	d_m	No.	
3,2	8,0	1,0 – 4,0	6,3	0,9	2,1	10.618.032.080	500

➡ 3,3 mm ➡ 1600 N ➡ 2000 N



4,0	10,0	1,5 – 4,5	7,9	1,3	2,8	10.618.040.100	500
	12,0	2,5 – 6,5				10.618.040.120	500
	15,0	4,5 – 9,5				10.618.040.150	500

➡ 4,1 mm ➡ 2700 N ➡ 3500 N

d	I		d_k	k	d_m	No.	
4,8	10,3	1,5 – 6,0	9,8	1,8	3,4	10.618.048.103	500
	12,7	2,5 – 7,5				10.618.048.127	500

➡ 4,9 mm ➡ 3900 N ➡ 5000 N

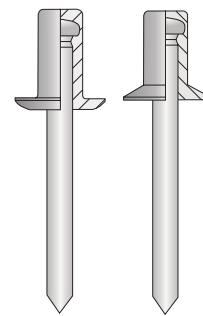
► Further blind rivets with large grip ranges made from stainless steel in diameter 6,4 mm you can find as high strength version FERO®-BOLT on page 43.

Due to its closed end rivet body, CERTO® sealed blind rivets are gasproofed and do not allow any liquid to penetrate. Further characteristic properties of this rivet type include:

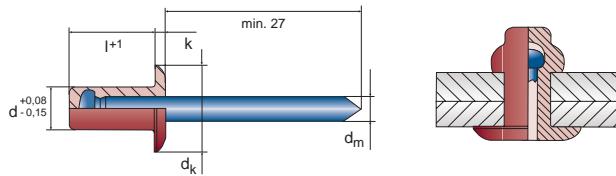
- flush, burr-free locking head
- captive mandrel due to closed end rivet shaft
- well suited for automated assembling

The properties mentioned above are the reasons why CERTO® sealed blind rivets are the fastening element of choice for the automotive industry, like, e.g. for the purposes of AIRBAG production.

Further fields of application can be found in tank and container manufacturing as well as in the construction sector.



Sealed Blind Rivet CERTO®



1 5

**Aluminium / Steel
Dome Head -closed -**

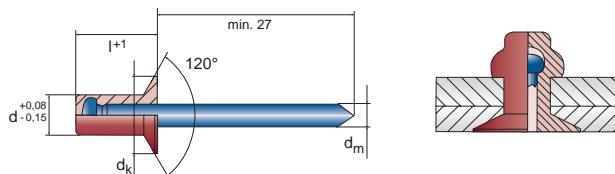
DIN EN ISO 15973

d	I +1		d _k	k	d _m	No.	
3,2	6,5	0,5 – 2,0	6,0 ± 0,3	1,1 ± 0,15	1,7	10.900.032.065	500
	8,0	1,5 – 3,5				10.900.032.080	500
	9,5	3,0 – 5,0				10.900.032.095	500
	11,0	4,5 – 6,5				10.900.032.110	500
	12,5	6,0 – 8,0				10.900.032.125	500

EN AW - 5019 [AlMg5] 3,3 mm 1100 N 1450 N

d	I +1		d _k	k	d _m	No.	
4,0	8,0	0,5 – 3,5	8,0 ± 0,4	1,3 ± 0,2	2,2	10.900.040.080	500
	9,5	3,0 – 5,0				10.900.040.095	500
	11,0	4,5 – 6,5				10.900.040.110	500
	12,5	6,0 – 8,0				10.900.040.125	500
	14,5	7,5 – 10,0				10.900.040.145	500

EN AW - 5019 [AlMg5] 4,1 mm 1650 N 2500 N



d	I +1		d _k	k	d _m	No.	
4,8	8,5	0,5 – 3,5	9,5 ± 0,4	1,5 ± 0,2	2,7	10.900.048.085	500
	9,5	3,0 – 5,0				10.900.048.095	500
	11,0	4,5 – 6,5				10.900.048.110	500
	13,0	6,0 – 8,0				10.900.048.130	500
	14,5	7,5 – 9,5				10.900.048.145	500
	16,0	9,0 – 11,0				10.900.048.160	500
	18,0	10,5 – 13,0				10.900.048.180	500
	21,0	12,5 – 16,0				10.900.048.210	500

EN AW - 5019 [AlMg5] 4,9 mm 2400 N 3400 N

d	I +1		d _k	k	d _m	No.	
6,4	12,5	1,5 – 6,5	13,0 ± 0,4	2,0 ± 0,03	3,7	10.900.064.125	500
	15,5	3,5 – 9,5				10.900.064.155	500

EN AW - 5019 [AlMg5] 6,5 mm 3620 N 4950 N

d	I +1		d _k	k	d _m	No.	
3,2	8,0	1,0 – 3,5	6,0 ± 0,3	1,7	1,7	10.900.320.080	500
	9,5	2,5 – 5,0				10.900.320.095	500
	11,0	4,0 – 6,5				10.900.320.110	500
	12,5	5,5 – 8,0				10.900.320.125	500
	13,5	7,0 – 9,0				10.900.320.135	500

EN AW - 5019 [AlMg5] 3,3 mm 1100 N 1450 N

d	I +1		d _k	k	d _m	No.	
4,0	9,5	1,5 – 5,0	8,0 ± 0,4	2,2	2,2	10.900.400.095	500
	11,0	4,0 – 6,5				10.900.400.110	500
	12,5	6,0 – 8,0				10.900.400.125	500
	14,5	7,5 – 10,0				10.900.400.145	500

EN AW - 5019 [AlMg5] 4,1 mm 1650 N 2500 N

d	I +1		d _k	k	d _m	No.	
4,8	9,5	1,5 – 5,0	9,5 ± 0,4	2,7	2,7	10.900.480.095	500
	11,0	4,0 – 6,5				10.900.480.110	500
	13,0	6,0 – 8,0				10.900.480.130	500
	14,5	7,5 – 9,5				10.900.480.145	500
	16,0	9,0 – 11,0				10.900.480.160	500
	18,0	10,0 – 13,0				10.900.480.180	500
	19,5	10,5 – 14,5				10.900.480.195	500
	21,0	12,5 – 16,0				10.900.480.210	500

EN AW - 5019 [AlMg5] 4,9 mm 2400 N 3400 N

**Aluminium / Steel
Countersunk Head -closed-**

DIN EN ISO 15974

d	I +1		d _k	k	d _m	No.	
4,8	9,5	1,5 – 5,0	9,5 ± 0,4	2,7	2,7	10.900.480.095	500
	11,0	4,0 – 6,5				10.900.480.110	500
	13,0	6,0 – 8,0				10.900.480.130	500
	14,5	7,5 – 9,5				10.900.480.145	500
	16,0	9,0 – 11,0				10.900.480.160	500
	18,0	10,0 – 13,0				10.900.480.180	500
	19,5	10,5 – 14,5				10.900.480.195	500
	21,0	12,5 – 16,0				10.900.480.210	500

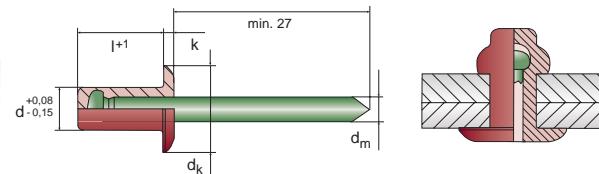
Aluminium / Stainless steel Dome Head -closed-



according to DIN EN ISO 15973

d	I +1		d_k	k	d_m	No.	
3,2	6,5	0,5 – 2,0	6,0 ± 0,3	1,1 ± 0,15	1,7	10.902.032.065	500
	8,0	1,5 – 3,5				10.902.032.080	500
	9,5	3,0 – 5,0				10.902.032.095	500
	11,0	4,5 – 6,5				10.902.032.110	500
	12,5	6,0 – 8,0				10.902.032.125	500

EN AW - 5019 [AlMg5] 3,3 mm 1000 N 1350 N



d	I +1		d_k	k	d_m	No.	
4,0	8,0	0,5 – 3,5	8,0 ± 0,4	1,3 ± 0,2	2,2	10.902.040.080	500
	9,5	3,0 – 5,0				10.902.040.095	500
	11,0	4,5 – 6,5				10.902.040.110	500
	12,5	6,0 – 8,0				10.902.040.125	500

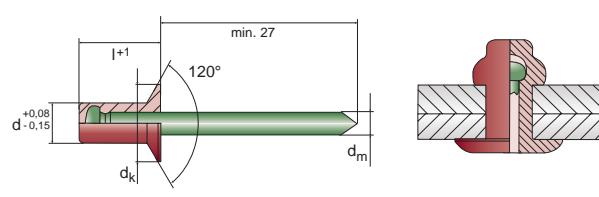
EN AW - 5019 [AlMg5] 4,1 mm 1650 N 2500 N

Aluminium / Stainless Steel Countersunk Head -closed-



according to DIN EN ISO 15974

d	I +1		d_k	d_m	No.	
4,0	9,5	1,5 – 5,0	8,0 ± 0,3	2,2	10.902.400.095	500
	11,0	4,0 – 6,5			10.902.400.110	500



d	I +1		d_k	d_m	No.	
4,0	12,5	6,0 – 8,0	8,0 ± 0,3	2,2	10.902.400.125	500

EN AW - 5019 [AlMg5] 4,1 mm 1650 N 2500 N

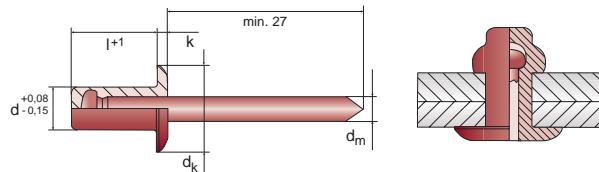
Aluminium / Aluminium Dome Head -closed-



DIN EN ISO 15975

d	I +1		d_k	k	d_m	No.	
3,2	8,0	0,5 – 3,5	6,0 ± 0,3	1,1 ± 0,15	1,9	10.901.032.080	500
	9,5	3,0 – 5,0				10.901.032.095	500

EN AW - 1050 A [Al 99,5] 3,3 mm 520 N 540 N



d	I +1		d_k	k	d_m	No.	
4,0	9,5	0,5 – 5,0	8,0 ± 0,4	1,3 ± 0,2	2,2	10.901.040.095	500
	12,5	4,5 – 8,0				10.901.040.125	500

EN AW - 1050 A [Al 99,5] 4,1 mm 720 N 760 N

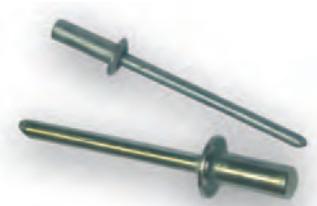
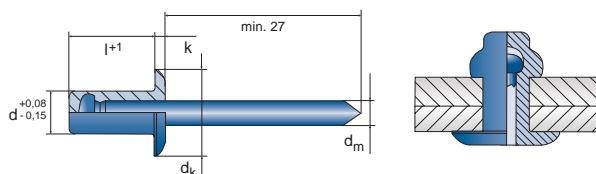
d	I +1		d_k	k	d_m	No.	
4,0	9,5	1,0 – 4,5	9,5 ± 0,4	1,5 ± 0,2	2,7	10.901.048.095	500
	11,5	4,0 – 6,5				10.901.048.115	500
	14,5	6,0 – 9,5				10.901.048.145	500
	18,0	9,0 – 13,0				10.901.048.180	500

EN AW - 1050 A [Al 99,5] 4,9 mm 1000 N 1400 N

Sealed Blind Rivet CERTO®

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Steel / Steel Dome Head -closed-

CERTO®

DIN EN ISO 15976

d	I +1		d_k	k	d_m	No.	
3,2	6,0	0,5 – 1,5	6,0 ± 0,3	1,0 ± 0,3	1,9	10.907.032.060	500
	8,0	1,0 – 3,0				10.907.032.080	500
	9,5	2,5 – 5,0				10.907.032.095	500
	12,0	4,5 – 7,0				10.907.032.120	500

3,3 mm 1150 N 1200 N

4,0	6,0	0,5 – 1,5	8,0 ± 0,3	1,4 ± 0,3	2,3	10.907.040.060	500
	8,0	1,0 – 3,0				10.907.040.080	500
	9,5	2,5 – 5,0				10.907.040.095	500
	12,0	4,5 – 6,5				10.907.040.120	500
	16,0	6,0 – 10,5				10.907.040.160	500

4,1 mm 1700 N 1850 N

d	I +1		d_k	k	d_m	No.	
4,8	8,0	0,5 – 3,0	9,5 ± 0,3	1,7 ± 0,3	2,9	10.907.048.080	500
	9,5	2,5 – 5,0				10.907.048.095	500
	12,0	4,5 – 6,5				10.907.048.120	500
	16,0	6,0 – 10,5				10.907.048.160	500

4,9 mm 2400 N 2800 N

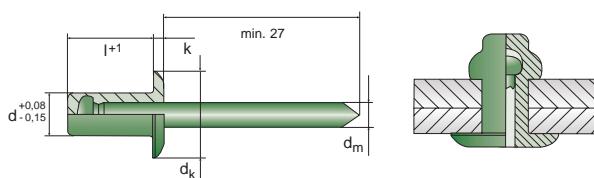
You can handle HONSEL/VVG sealed blind rivets with standard nose pieces.
To avoid burr formation while using types without head pit, we can offer special nose pieces ([► page 138](#)).



Sealed Blind Rivet CERTO®

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Stainless Steel A2 / Stainless Steel C1 Dome Head -closed-

CERTO®

DIN EN ISO 16585

d	I +1		d_k	k	d_m	No.	
3,2	6,0	0,5 – 1,5	6,0 ± 0,3	1,0 ± 0,3	1,9	10.908.032.060	500
	8,0	1,0 – 3,0				10.908.032.080	500
	9,5	2,5 – 5,0				10.908.032.095	500
	12,0	4,5 – 7,0				10.908.032.120	500

[1.4301] 3,3 mm 2000 N 2400 N

4,0	6,0	0,5 – 1,5	8,0 ± 0,3	1,4 ± 0,3	2,3	10.908.040.060	500
	8,0	1,0 – 3,0				10.908.040.080	500
	9,5	2,5 – 5,0				10.908.040.095	500
	12,0	4,5 – 6,5				10.908.040.120	500
	16,0	6,0 – 10,5				10.908.040.160	500

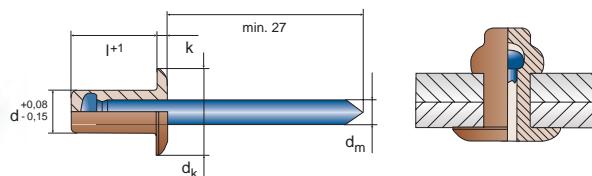
[1.4301] 4,1 mm 3000 N 4000 N

d	I +1		d_k	k	d_m	No.	
4,8	8,0	0,5 – 3,0	9,5 ± 0,3	1,7 ± 0,3	2,9	10.908.048.080	500
	9,5	2,5 – 5,0				10.908.048.095	500
	12,0	4,5 – 6,5				10.908.048.120	500
	16,0	6,0 – 10,5				10.908.048.160	500
	20,0	9,0 – 12,0				10.908.048.200	500

6,4	10,0	2,5 – 5,0	12,5 ± 0,3	2,7 ± 0,05	3,8	10.908.064.100	250
	12,0	4,5 – 6,5				10.908.064.120	250
	16,0	6,0 – 10,5				10.908.064.160	250
	18,0	7,5 – 11,5				10.908.064.180	250

[1.4301] 6,5 mm 6500 N 8000 N

Copper / Steel Dome Head -closed-



d	I ₊₁		dk	k	dm	No.	
3,2	6,5	0,5 – 2,0	6,0 ± 0,3	1,1 ± 0,15	1,7	10.905.032.065	500
	8,0	1,5 – 3,5				10.905.032.080	500
	9,5	3,0 – 5,0				10.905.032.095	500
	12,5	4,5 – 8,0				10.905.032.125	500

[2.0040] 3,3 mm 950 N 1250 N

4,0	8,0	0,5 – 3,5	8,0	1,3	2,2	10.905.040.080	500
	10,0	3,0 – 5,0	± 0,4	± 0,2		10.905.040.100	500

[2.0040] 4,1 mm 1400 N 2100 N

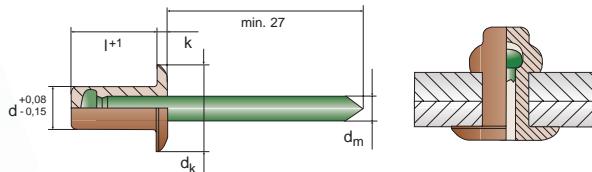
d	I ₊₁		dk	k	dm	No.	
4,8	9,5	1,0 – 5,0	9,5 ± 0,4	1,7 ± 0,2	2,7	10.905.048.095	500
	11,5	4,5 – 6,5				10.905.048.115	500

[2.0040] 4,9 mm 2150 N 3200 N

▶ Please note our manifold range of **assortments** and **small packs** on pages 104/105 and 106-108!



Copper / Stainless steel A2/A3 Dome Head -closed-



d	I ₊₁		dk	k	dm	No.	
3,2	6,5	0,5 – 2,0	6,0 ± 0,3	1,1 ± 0,15	1,7	10.906.032.065	500
	8,0	1,5 – 3,5				10.906.032.080	500
	9,5	3,0 – 5,0				10.906.032.095	500
	12,5	4,5 – 8,0				10.906.032.125	500

[2.0040] 3,3 mm 950 N 1250 N

d	I ₊₁		dk	k	dm	No.	
4,0	8,0	0,5 – 3,5	8,0 ± 0,4	1,3 ± 0,2	2,2	10.906.040.080	500
	10,0	3,0 – 5,0				10.906.040.100	500

[2.0040] 4,1 mm 200 N 2100 N

4,8	9,5	1,0 – 5,0	9,5 ± 0,4	1,5 ± 0,2	2,7	10.906.048.095	500
	11,5	4,5 – 6,5				10.906.048.115	500

[2.0040] 4,9 mm 50 N 3200 N

Common handling advice:

Various trials have shown that, during practical deployment, CERTO® connections feature excellent jet-proofness. 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 shall be necessary.

Upon request, CERTO® sealed blind rivets can be provided with an additional seal (Neopren® washer). Look at ▶page 112 for details.

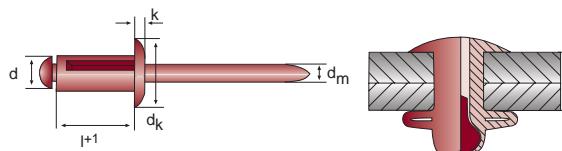




According to the ARCO body-bound rivet this folding rivet forms a large upset head too. This guarantees an **equal distribution of forces**, so that especially plastics and other soft or vulnerable materials resist against cracking or pull-through. Over-sized holes are tolerated. Typically this rivet is used in **industrial light weight constructions**.

As a result of the locked mandrel in the connection, the spread rivet is splash water resistant. VVG/HONSEL offers two different types – the standard split rivet and a **high strength version with neopren washer**.

Folding Blind Rivet (Standard)



d	I +1		dk	k	dm	No.	
4,0	13,6	1,0 – 3,0	8,0	1,4	2,5	10.716.040.136	500
	18,8	3,0 – 7,0				10.716.040.188	500

4,2 mm 500 N 800 N



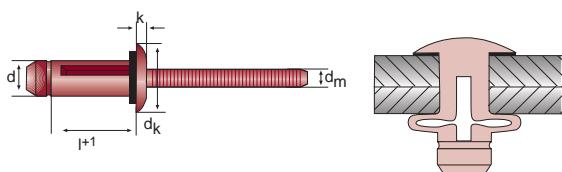
Aluminium / Aluminium Dome Head



d	I +1		dk	k	dm	No.	
4,8	15,3	1,0 – 3,0	9,6	1,6	2,9	10.716.048.153	500
	20,5	3,0 – 9,0				10.716.048.205	500
	24,5	5,0 – 12,0				10.716.048.245	500

5,0 mm 900 N 1100 N

Folding Blind Rivet (Special 2)



d	I +1		dk	k	dm	No.	
5,2	17,5	0,5 - 4,8	11,5 -0,5	2,5 -0,25	2,9	10.716.052.175	500
	19,1	1,5 - 6,4				10.716.052.191	500
	22,2	4,8 - 9,5				10.716.052.222	500
	25,4	7,9 - 12,7				10.716.052.254	500
	28,6	11,1 - 15,9				10.716.052.286	500

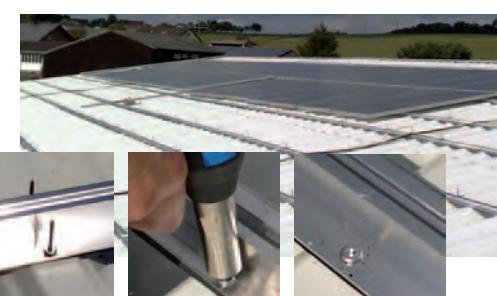
5,3 - 5,6 mm 3000 N 2000 N



Aluminium / Aluminium Dome Head with neoprenewasher

d	I +1		dk	k	dm	No.	
6,3	20,0	1,5 - 6,4	14,4 -0,3	3,0 -0,25	3,9	10.716.063.200	500
	27,0	6,3 - 12,7				10.716.063.270	500

6,3 - 6,7 mm 4900 N 3000 N

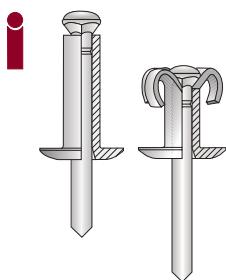


- increased shear and tensile strength
- splash water proof
- large grip range
- universal applicable



Body-Bound Blind Rivet ARCO®

ARCO®



During the setting process, edges on the mandrel head cut the rivet shaft into four segments. These four segments then petal out on the component surface thus forming the **large locking head**. Once the mandrel reaches its predetermined breakload, the mandrel head falls out of the rivet

body. The large locking head allows **connecting soft or brittle components** and helps **transfer high tensile forces**.

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

1 7

Body-Bound Blind Rivets ARCO®

Aluminium / Steel Dome Head

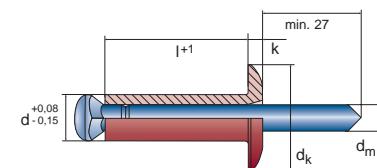
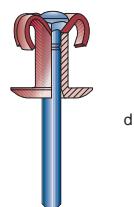


d	I +1		d_k	k	d_m	No.	
3,2	10,0	1,5 – 5,0	6,5	0,8	1,7	10.710.032.100	500
	16,0	4,0 – 11,0				10.710.032.160	500
	18,0	6,0 – 13,0				10.710.032.180	500

EN AW - 5019 [AlMg5] 3,55 + 0,1 mm 850 N 720 N

4,0	10,0	1,5 – 5,0	9,0	1,5	2,4	10.710.040.100	500
	16,0	4,0 – 11,0				10.710.040.160	500
	18,0	6,0 – 13,0				10.710.040.180	500

EN AW - 5019 [AlMg5] 4,35 + 0,1 mm 1330 N 1300 N



d	I +1		d_k	k	d_m	No.	
4,8	10,0	1,5 – 4,0	11,0	1,5	2,8	10.710.048.100	500
	15,0	3,0 – 9,0				10.710.048.150	500
	21,0	8,0 – 15,0				10.710.048.210	500
	26,0	14,0 – 20,0				10.710.048.260	250
	35,0	19,0 – 28,0				10.710.048.350	250

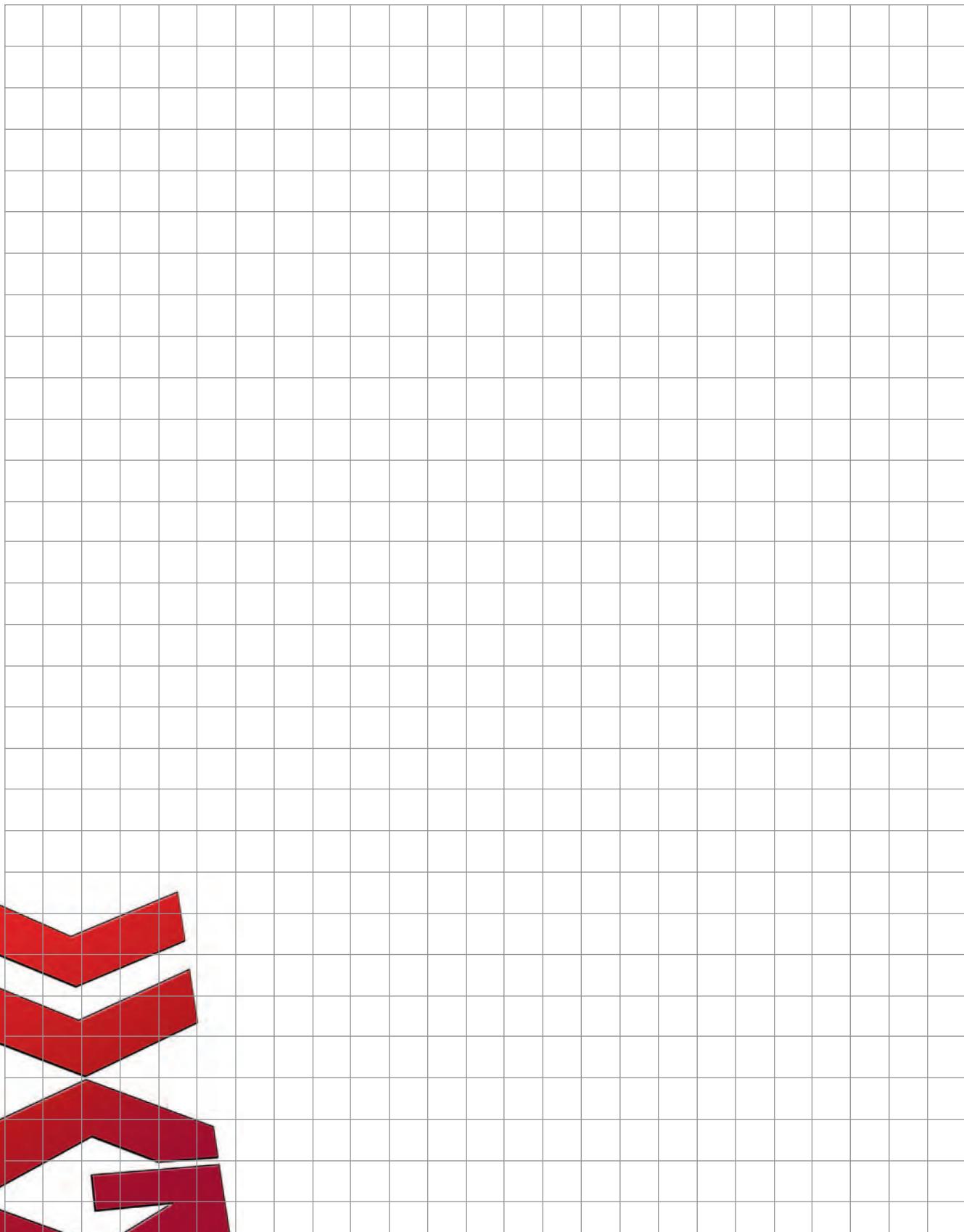
EN AW - 5019 [AlMg5] 5,15 + 0,1 mm 2100 N 1950 N



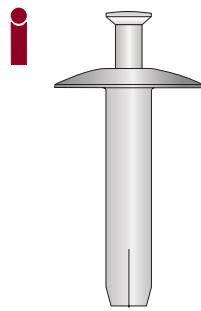
► For the perfect tool take a look into chapters 8 and 9 on pages 117 and 125!



YOUR NOTES



Hammer Stroke Blind Rivet

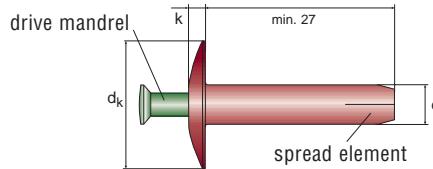


Hammer stroke or drive rivets are set by driving the mandrel into the rivet body (e.g. by means of a hammer). This causes the lower end of the rivet body to expand and allows riveting components with **open-end boreholes** and also riveting of **blind-end boreholes**. This riveting technology is suitable for the most diverse material combinations. For blind-end boreholes, a trial is necessary in order to establish the optimum rivet length based on the component characteristics and the firmness requirements.



Hammer Stroke Blind Rivet

Aluminium / Stainless Steel Dome Head



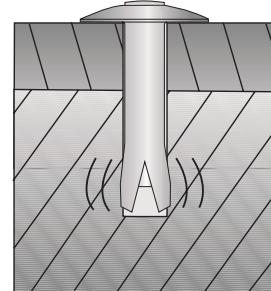
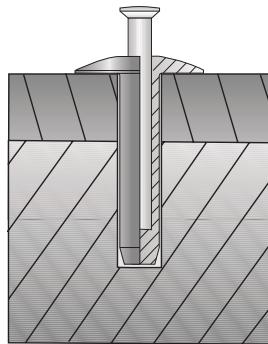
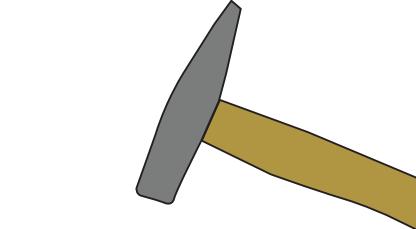
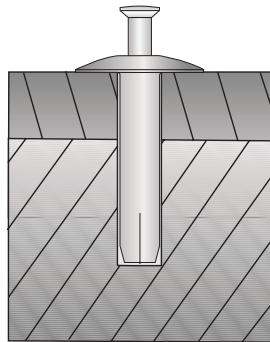
d	I		d _k	k	No.	
4,8	10,0	4,5 – 6,5	14,0 +0,5	2,0	10.602.048.100	500
	16,0	9,5 – 12,0			10.602.048.160	500
	18,0	12,0 – 14,5			10.602.048.180	500
	20,0	14,5 – 16,5			10.602.048.200	500

4,9 mm

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

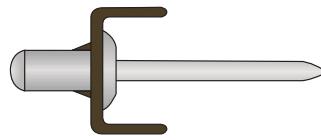
4,9 mm

- The blind rivets with grooved shank on [page 30](#) are suitable for operating in **blind-end boreholes** as well.



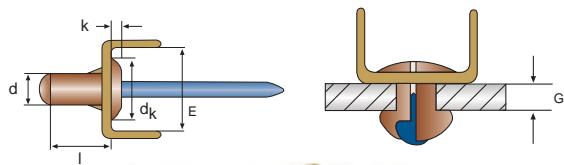
Grounding rivets offer a simple and reliable opportunity to create a ground connection with your products. The grounding conductor can be used with standard cable sockets.

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



Grounding Blind Rivet

1 9



Copper / Steel (copper plated)
Dome Head -open-
Earthing Conductor Brass (2x)

d	l		dk	k	E	No.
3,8	8,0	max. 1,2	8,0	1,4	14,0	10.705.038.080/2

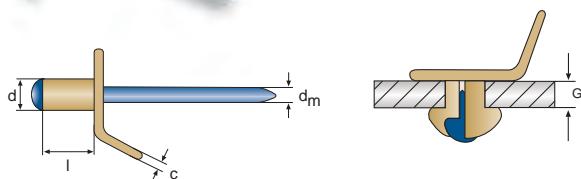
3,9 mm 1400 N 2000 N

Grounding Blind Rivet

1 9

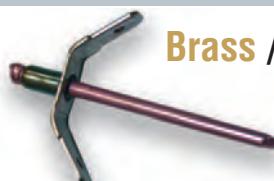


Brass / Steel (copper plated)
1x Earthing Conductor

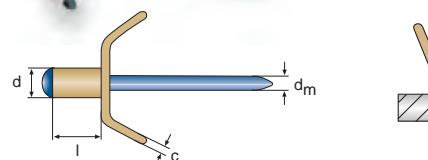


d	l		dm	c	No.	
4,0	7,0	max. 4,0	2,4	0,8	10.705.040.070/715	500

4,1 mm



Brass / Steel (copper plated)
2x Earthing Conductor

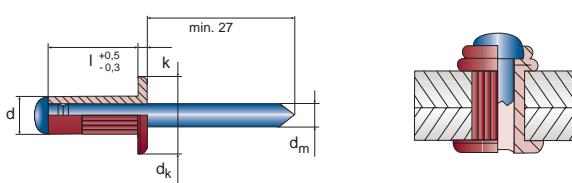


d	l		dm	c	No.	
4,0	7,0	max. 4,0	2,4	0,8	10.705.040.070/716	500

4,1 mm

Grounding Multiarip Blind Rivet OPTO®

1 9



d	l		dk	k	dm	No.	
4,0	9,5	1,2 – 6,4	7,9	1,2	2,3	10.600.040.095/2	500

EN AW - 5052 [AlMg2,5] 4,1 mm 1140 N 1670 N



Aluminium / Steel
Dome Head -open
-grooved shank

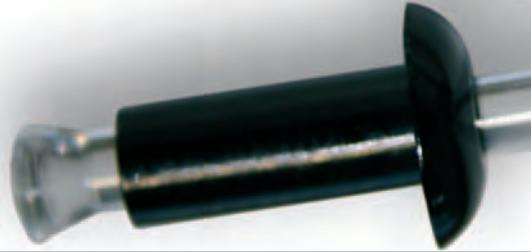
Qualified for grounding by grooved shaft.



Plastic Blind Rivets

I Blind- and split blind rivets made from plastic can be used e.g. in many fields of **electric, automotive or computer hardware industries**. They can be operated by standard blind rivet tools. Advantages:

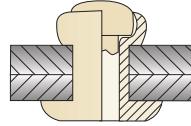
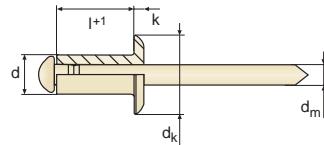
- non-conducting
- low weight
- independent from corrosion
- gentle treatment of the components surface


1 **10**

Plastic Blind Rivet

Nylon / Polycarbonate

Dome Head -open- black



d	I +1	↓ +	dk	k	dm	No.	Box
3,2	6,4	1,0 – 4,0	6,4	1,4	2,1	10.719.032.064	500
	9,6	4,0 – 7,0				10.719.032.096	500

Nylon 6 / RMS 107 3,3 mm 200 N 120 N

d	I +1	↓ +	dk	k	dm	No.	Box
4,8	8,0	1,5 – 5,0	9,6	2,0	2,8	10.719.048.080	500
	11,2	5,0 – 8,0				10.719.048.112	500

Nylon 6 / RMS 107 4,9 mm 400 N 280 N

4,0	6,4	1,0 – 4,0	8,0	1,8	2,4	10.719.040.064	500
	9,6	4,0 – 7,0				10.719.040.096	500

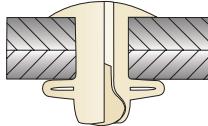
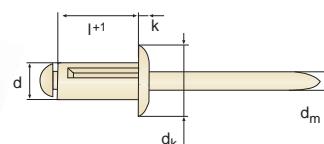
Nylon 6 / RMS 107 4,1 mm 250 N 180 N


1 **10**

Plastic Split Blind Rivet

Nylon / Polycarbonate

Dome Head -open- black



d	I +1	↓ +	dk	k	dm	No.	Box
4,9	18,5	1,5 – 4,5	12,0	3,3	2,9	10.719.049.185	500
	20,0	3,0 – 6,0				10.719.049.200	500
	25,0	6,0 – 10,0				10.719.049.250	500

PA.6.6.POM 5,0 mm



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



I
Blind rivet nuts have become an **indispensable component of modern installation engineering.**

They make it possible to install bolt threads of highly varied designs into

- thin or low rigidity components
- hollow sections, or other components not accessible from both sides
- components which already have a coated surface or to rivet components together and to attach additional parts firmly.

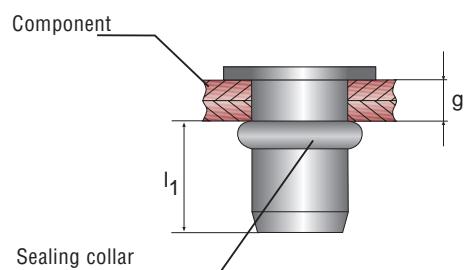
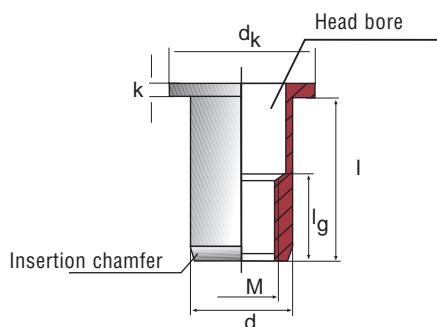
The continuous development of new types, forms and dimensions documents the **nearly unlimited fields of applications.**

The **HONSEL-GROUP** has been one of the leading companies in this progress for decades.

On ► [pages 68/69](#) you can find the **patented OPTO®-multigrip blind rivet nut**. This innovation became a permanent part of the VVG catalogue within a short time.

For additional information concerning possible individual adaptions ask our sales team and take a look on ► [page 62](#).

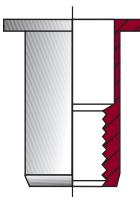
d - shaft diameter
 dk - setting head diameter
 k - setting head height
 lg - thread length min. $1 \times M$
 l - shaft length
 l1 - projection length
 M - thread diameter
 g - grip length



HEAD DESIGN

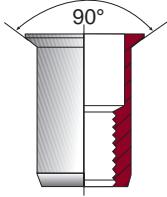
Flat head

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



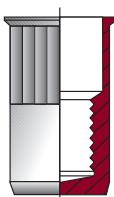
Countersunk head

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



Small countersunk head

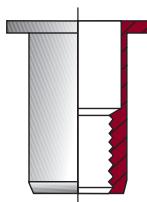
The countersinking of the borehole is not normally necessary when machining blind rivet nuts. If technically necessary, the countersinking is to be carried out so that the countersunk head protrudes by min. 0.1 mm after setting.



SHANK DESIGNS

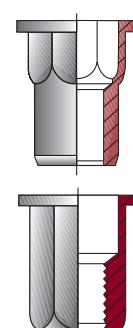
Round shaft blind rivet nuts

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



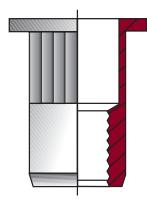
Blind rivet nuts with hexagonal shaft (Hexatop / Hexaform)

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



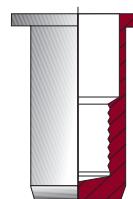
Blind rivet nuts with knurled shaft

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

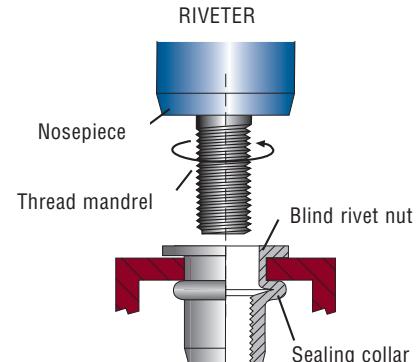
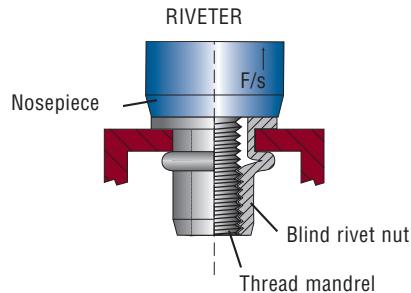
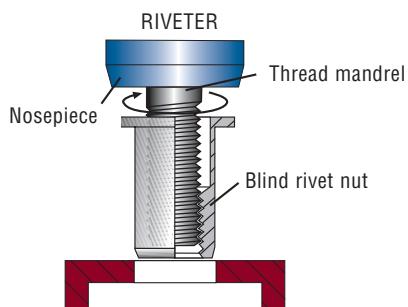


Blind rivet nuts with closed shaft

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



INSTALLATION

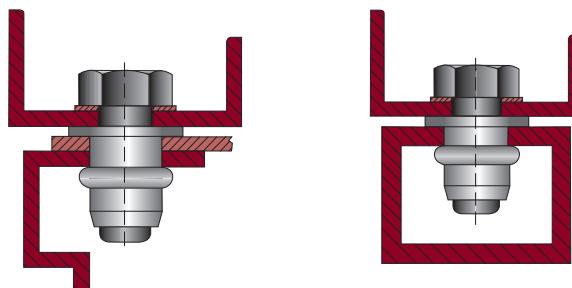


Blind rivet nuts are distinguished by simple and rapid installation.

To set the nut, it is screwed onto the threaded mandrel of the setting tool, inserted into the component borehole, and set through the device axis. This causes the closing bead of the nut to form. After the threaded mandrel is removed,

the components can be screwed tight.

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



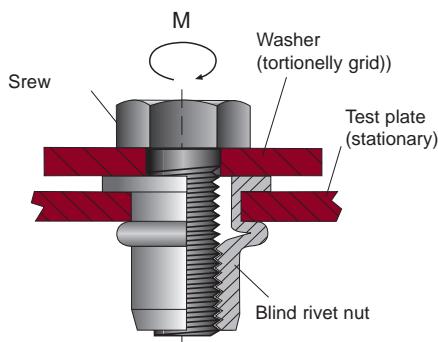
GENERAL ASSEMBLY INSTRUCTIONS

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

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



TIGHTENING TORQUE



To measure the screwing torque, the nut to be tested is set into a test plate, a torsionally secured steel underlay plate superimposed, and the screw tightened.

The following conditions apply for the test:

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

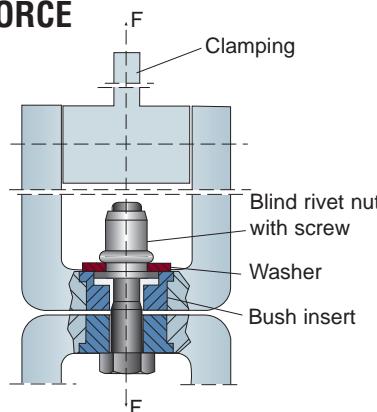
Under the defined conditions, the result will be the minimum value measured before failure of the nut. Rotation of the nut counts as failure, as does recognisable plastic deformation of the blind rivet nut. In practical use, partially different usage conditions may apply which can lead to an alteration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

Maximum tightening torque - measured values [Nm]

Typ	Gewindeabmessung	Seite	M 3	M 4	M 5	M 6	M 8	M 10	M 12
AFM	66	1	3	4	6	18	28	45	
AFM-G	66	-	3	4	6	18	28	-	
ASM	67	1	3	4	6	18	28	45	
ASM-G	67	-	-	4	6	18	-	-	
ASM-KLSK	67	-	2	4	6	15	-	-	
OPTO® AFM	68	-	3	4	6	18	-	-	
OPTO® ASM	68	-	3	4	6	18	-	-	
OPTO® SFM	69	-	4	6	11	24	-	-	
OPTO® SSM	69	-	4	6	11	24	-	-	
SFM	70	1,2	4	6	11	24	50	82	
SFM-G	70	-	4	6	11	24	50	-	
SFM-R	70				*				
SSM	73	-	4	6	11	24	50	-	
SSM-G	73	-	4	6	11	24	50	-	
SSM-R	73				*				
SSM-KLSK / (-R*)	74	-	3	5	10	20	-	-	
UNIVERSAL	75	-	3	5	10	20	40	-	
UNIVERSAL-R	75				*				
UNIVERSAL-R-G	75				*				
FLATsert	76	2	3	5	10	20	40	-	
FLATsert-R	76				*				
MICRO	76	-	2	4	8	12	-	-	
HEXAFORM®-FK	77	-	5	7	13	25	55	-	
HEXAFORM®-KLSK-G**	77	-	5	7**	13**	25**	-	-	
HEXATOP®-FK	78	-	4	6	11	24	-	-	
HEXATOP®-KLSK	78	-	4	6	11	24	50	-	
SFM-PL	71	-	-	-	12	21	-	-	
EFM	79	2	4	6	11	24	50	-	
EFM-G	79	-	4	6	11	24	-	-	
EFM-R	79				*				
ESM	80	-	4	6	11	24	50	-	
ESM-R	80				*				
ESM-KLSK	80	2	4	6	11	24	50	-	
ESM-KLSK-G	81	-	4	6	11	24	50	-	
ESM-R-KLSK	81				*				
UNIVERSAL-E	82	-	3	5	10	20	-	-	
UNIVERSAL-E-R	82				*				
HEXATOP®-E-FK/-KLSK	83	-	5	7	13	25	55	-	
HEXAFORM®-E-KLSK-G	83	-	-	7	13	25	-	-	

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

AXIAL TENSILE FORCE



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

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

The following conditions have validity during the test:

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

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

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

Axial tensile force - measured values [Nm]

Typ \ Gewindeabmessung	Seite	M 3	M 4	M 5	M 6	M 8	M 10	M 12
AFM	66	1500	2600	4300	6700	11000	17500	28000
AFM-G	66	-	2600	4300	6700	11000	17500	-
ASM	67	1500	2600	4300	6700	11000	17500	28000
ASM-G	67	-	-	4300	6700	11000	-	-
ASM-KLSK	67	-	4000	5500	8300	13000	-	-
OPTO® AFM	68	-	3000	4200	6500	10500	-	-
OPTO® ASM	68	-	3000	4200	6500	10500	-	-
OPTO® SFM	69	-	5200	9500	15000	21500	-	-
OPTO® SSM	69	-	5200	9500	15000	21500	-	-
SFM	70	4000	5200	9500	16500	23500	37000	54000
SFM-G	70	-	5200	9500	16500	23500	37000	-
SFM-R	70	-	5000	9000	13500	15000	28000	-
SSM	73	-	5200	9500	16500	23500	37000	-
SSM-G	73	-	5200	9500	16500	23500	37000	-
SSM-R	73	-	5000	9000	13500	15000	37000	56000
SSM-KLSK / -R*	74	4000*	6500* 6800	8000* 9000	12000* 15000	17000* 18000	37000*	54000*
UNIVERSAL	75	-	6500	8000	11500	14500	22000	-
UNIVERSAL-R	75	-	6000	7500	10000	14000	17500	-
UNIVERSAL-R-G	75	-	-	7500	10000	-	-	-
FLATsert	76	3000	6000	9500	13000	16000	19500	-
FLATsert-R	76	-	5500	9000	12000	15000	-	-
MICRO	76	-	5500	9000	12000	15000	-	-
HEXAFORM®-FK	77	-	5200	9500	16500	23500	37000	-
HEXAFORM®-KLSK/G**	77	-	5200	9500**	16500**	23500**	-	-
HEXATOP®-FK	78	-	3800	6000	9500	12500	-	-
HEXATOP®-KLSK	78	-	3800	6000	9500	12500	37000	-
SFM-PL	71	-	-	-	15000	27000	-	-
EFM	79	4500	7000	11000	18000	27000	40000	-
EFM-G	79	-	7000	11000	18000	27000	-	-
EFM-R	79	4000	6500	10000	17000	25000	38000	-
ESM	80	-	7000	11000	18000	27000	50000	-
ESM-R	80	-	6500	10000	17000	25000	-	-
ESM-KLSK	80	4500	7000	11000	18000	27000	40000	-
ESM-KLSK-G	81	-	7000	11000	18000	27000	40000	-
ESM-R-KLSK	81	4000	6500	10000	17000	25000	38000	-
UNIVERSAL-E	82	-	7000	11000	18000	27000	-	-
UNIVERSAL-E-R	82	-	6800	10000	14000	25000	37000	-
HEXATOP®-E-FK-KLSK	83	-	6500	10000	17000	27000	40000	-
HEXAFORM®-E-KLSK-G	83	-	-	10000	17000	27000	-	-

MORE THAN STANDARD.

Our long term experience and modern type manufacturing plants enables us to create **individual custom made products**. Many expertises out of these special projects have direct influence on the standard product range of this catalogue and support the **continous improvement**.



PRESSURE TIGHT - BLIND RIVET NUT WITH SPRAYED SEAL

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

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

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



HIGH STRENGTH BLIND RIVET NUTS

Among the new products of our product range there are steel blind rivet nuts with high-strength threads offering high torques for screws of strength category 10.9 and 12.9.

Due to the high thread strength **very high clamping forces are** achieved, so that in case of overstraining the screw might break before the thread of the blind rivet nut fails.

This blind rivet nut can be treated with the common Honsel setting devices as well as with our fully automatic system technology.

On your request, these high-strength blind rivet nuts can be implemented in all geometries.



BLIND RIVET NUT WITH ADJUSTABLE GRIP RANGE

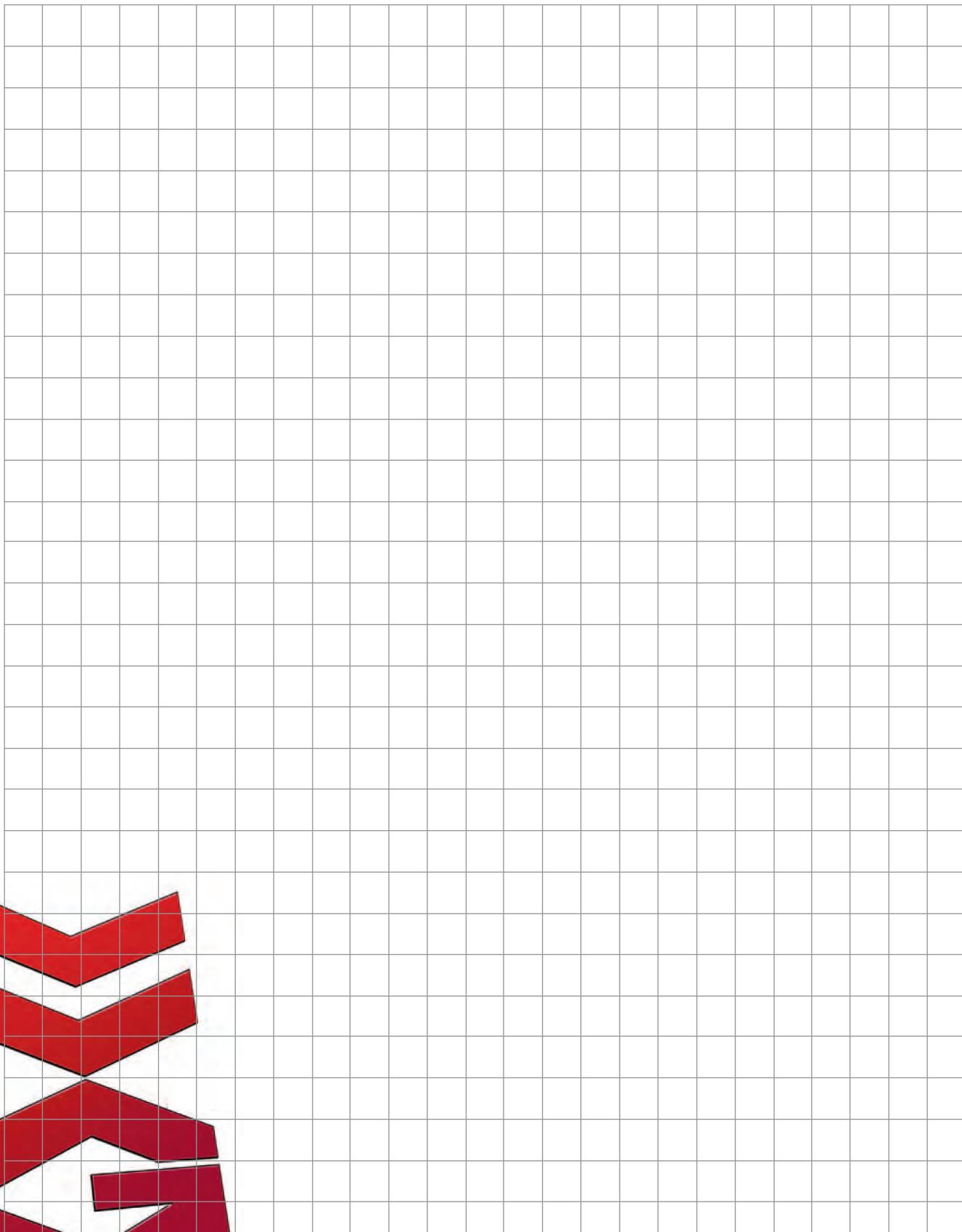
HONSEL provides the possibility to create an individual adjustable grip range according to customer special needs.

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

Advantages:

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

YOUR NOTES



2

 Aluminium**AFM**

Flat Head - Round Shank - open	66
Flat Head - Round Shank - closed	66

2

 Aluminium**OPTO® Multigrip Blind Rivet Nut**

Flat Head - Round Shank - open	68
Countersunk Head - Round Shank - open	68

2

 Steel**SFM**

Flat Head - Round Shank - open	70
Flat Head - Round Shank - closed	70
Flat Head - Round Shank - closed - <i>knurled</i>	70

SFM-PL (Folding Blind Rivet Nut)

Flat Head - Round Shank - open	71
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SSM

Countersunk Head - Round Shank - open	73
Countersunk Head - Round Shank - closed	73
Countersunk Head - Round Shank - open - <i>knurled</i>	73
Small Countersunk Head - Round Shank - open	74
Small Countersunk Head - Round Shank - open - <i>knurled</i>	74

UNIVERSAL

Small Countersunk Head - Round Shank - open	75
Small Countersunk Head - Round Shank - open - <i>knurled</i>	75
Small Countersunk Head - Round Shank - closed - <i>knurled</i>	75

 Aluminium**ASM**

Countersunk Head - Round Shank - open	67
Countersunk Head - Round Shank - closed	67
Small Countersunk Head - Round Shank - open	67

 Steel

Flat Head - Round Shank - open	69
Countersunk Head - Round Shank - open	69

 Steel**FLATINSERT**

Small Countersunk Head - Round Shank - open	76
Small Countersunk Head - Round Shank - open - <i>knurled</i>	76

MICRO®

Small Countersunk Head - Round Shank - open	76
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HEXAFORM®

Flat Head - Hexagonal Shank - open	77
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Small Countersunk Head - Hexagonal S. - open	77
Small Countersunk Head - Hexagonal S. - closed	77

HEXATOP®

Flat Head - Partial Hexagonal Shank - open	78
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Small Countersunk Head - Partial Hexagonal Shank - open	78
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 All blind rivet nuts made from steel do have a chrom-6-free surface.

2 4

 **Stainless Steel****EFM**

Flat Head - Round Shank - open	79
Flat Head - Round Shank - closed	79
Flat Head - Round Shank - open - <i>knurled</i>	79

ESM

Countersunk Head - Round Shank - open	80
Countersunk Head - Round Shank - open - <i>knurled</i>	80
Small Countersunk Head - Round shank - open ..	80
Small Countersunk Head - Round shank - closed ..	81
Small Countersunk Head - Round shank - open - <i>knurled</i>	81

 **Stainless Steel****UNIVERSAL**

Small Countersunk Head - Round Shank - open ..	82
Small Countersunk Head - Round Shank - open - <i>knurled</i> ..	82

HEXATOP®

Flat Head - Partial Hexagonal Shank - open	83
Small Countersunk Head - Partial Hexagonal Shank - open	83

HEXAFORM®

Small Countersunk Head - Hexagonal Shank - closed	83
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2 5

Nylon Blind Nut **Nylon**

with thread insert made of brass	84
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2 5

Neopren Blind Nut **Neopren**

Flat head - round shank- open	85
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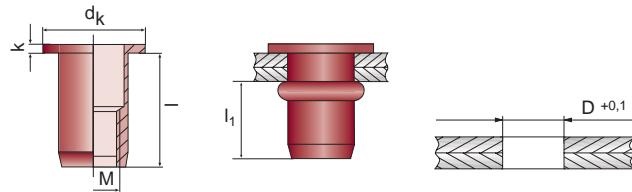




2

1

Aluminium Flat Head Round Shank -open- AFM



M		D	d _k	I	k	l ₁ max.	No.	
M3	0,3 – 1,0	5,0	7,0	7,5	0,8	6,0	10.850.030.100	500
	0,3 – 2,0			8,5			10.850.030.200	

EN AW - 5754 [AlMg3] 1 Nm 1500 N

M4	0,5 – 3,0	6,0	10,0	11,0	0,8	8,0	10.850.040.300	500
	1,5 – 4,0			12,0			10.850.040.400	

EN AW - 5754 [AlMg3] 3 Nm 2600 N

M5	0,5 – 3,0	7,0	11,0	12,0	1,0	9,0	10.850.050.300	500
	3,0 – 4,0			13,0			10.850.050.400	

EN AW - 5754 [AlMg3] 4 Nm 4300 N

- For larger grip ranges take a look at the patented OPTO® multigrip blind rivet nut on the following pages 68/69.

M		D	d _k	I	k	l ₁ max.	No.	
M6	0,5 – 3,0	9,0	13,0	14,5	1,5	11,0	10.850.060.300	500
	3,0 – 4,5			16,0			10.850.060.450	

EN AW - 5754 [AlMg3] 6 Nm 6700 N

M8	0,5 – 3,0			17,0			10.850.080.300	
	3,0 – 5,5	11,0	16,0	19,5	1,5	13,5	10.850.080.550	500
	5,5 – 7,5			21,5			10.850.080.750	

EN AW - 5754 [AlMg3] 18 Nm 11000 N

M10	1,0 – 3,0	13,0	19,0	20,5	2,0	16,5	10.850.100.300	250
	3,0 – 4,5			22,0			10.850.100.450	

EN AW - 5754 [AlMg3] 28 Nm 17500 N

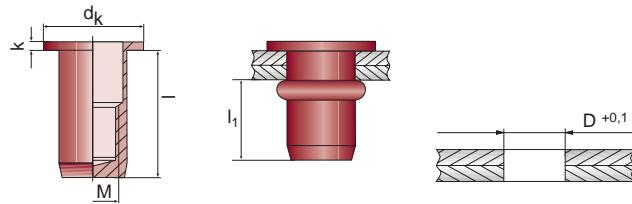
M12	1,0 – 4,0	16,0	23,0	24,0	2,0	18,5	10.850.120.400	250
	3,5 – 7,0			27,0			10.850.120.700	

EN AW - 5754 [AlMg3] 45 Nm 28000 N

- Please note our manifold range of **assortments** and **small packs** on pages 104/105 and 106-108!



Aluminium Flat Head Round Shank -closed- AFM-G



M		D	d _k	I	k	l ₁ max.	No.	
M4	0,3 – 2,0	6,0	10,0	15,5	0,8	13,5	10.854.040.200	500
	2,0 – 3,0			16,5			10.854.040.300	

EN AW - 5754 [AlMg3] 3 Nm 2600 N

M5	0,3 – 3,0	7,0	11,0	18,5	1,0	15,5	10.854.050.300	500
	3,0 – 4,0			19,5			10.854.050.400	

EN AW - 5754 [AlMg3] 4 Nm 4300 N

M6	0,5 – 3,0	9,0	13,0	22,0	1,5	18,5	10.854.060.300	500
	3,0 – 4,5			23,5			10.854.060.450	

EN AW - 5754 [AlMg3] 6 Nm 6700 N

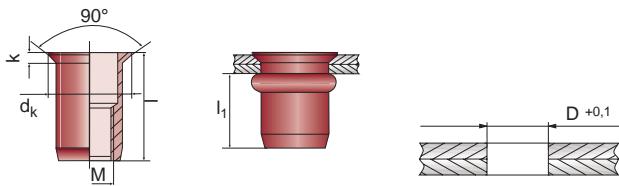
M8	0,3 – 3,0	11,0	16,0	26,5	10.854.080.300	250
	3,0 – 5,5			29,0	10.854.080.550	

EN AW - 5754 [AlMg3] 18 Nm 11000 N

M10	1,0 – 3,0	13,0	19,0	32,5	10.854.100.300	250
	3,0 – 4,5			34,0	10.854.100.450	

EN AW - 5754 [AlMg3] 28 Nm 17500 N

- ! Additional possibilities for sealing on ► page 112



Aluminium Countersunk Head Round Shank -open- ASM

ASM

M		D	d_k	I	k	l_1 max.	No.	
M3	1,5 - 2,5	5,0	7,3	10,0	1,5	7,0	10.851.030.250	500

EN AW - 5754 [AlMg3] 1 Nm 1500 N

M4	1,5 - 3,5 3,5 - 5,0	6,0	8,3 13,0	11,5 13,0	1,5	8,0	10.851.040.350 10.851.040.500	500
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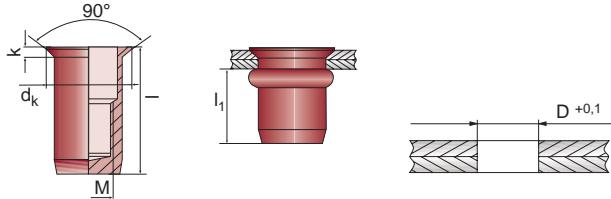
EN AW - 5754 [AlMg3] 3 Nm 2600 N

M5	1,5 - 4,0 4,0 - 5,5 5,5 - 6,5	7,0	9,3	13,0 14,5 15,5	1,5	9,0	10.851.050.400 10.851.050.550 10.851.050.650	500
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EN AW - 5754 [AlMg3] 4 Nm 4300 N

M6	1,5 - 4,5 4,0 - 6,0	9,0	11,3	16,0 17,5	1,5	11,0	10.851.060.450 10.851.060.600	500
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EN AW - 5754 [AlMg3] 6 Nm 6700 N



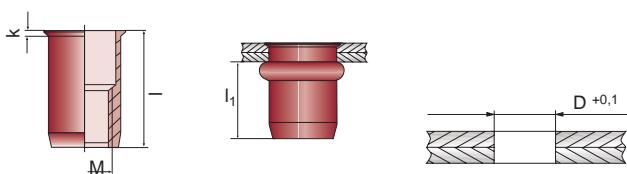
Aluminium Countersunk Head Round Shank -closed- ASM-G

M		D	I	d_k	k	l_1 max.	No.	
M5	1,5 - 4,0	7,0	19,5	9,3	1,5	15,5	10.855.050.400	500

EN AW - 5754 [AlMg3] 4 Nm 4300 N

M6	1,5 - 4,5	9,0	23,5	11,3	1,5	18,5	10.855.060.450	500
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EN AW - 5754 [AlMg3] 6 Nm 6700 N



Aluminium Small Countersunk Head Round Shank -open- ASM-KLSK

M		D	d_k	I	k	l_1 max.	No.	
M4	0,5 - 2,0	6,0	6,8	10,5	0,5	6,5	10.851.040.200/10	500

EN AW - 5754 [AlMg3] 2 Nm 4000 N

M5	0,5 - 3,0	7,0	8,0	11,5	0,5	7,5	10.851.050.300/10	500
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EN AW - 5754 [AlMg3] 4 Nm 5500 N



M		D	d_k	I	k	l_1 max.	No.	
M8	1,5 - 4,5	11,0	13,3	18,5	1,5	13,5	10.851.080.450	500
	3,5 - 6,0						10.851.080.600	

EN AW - 5754 [AlMg3] 18 Nm 11000 N

M10	1,5 - 3,0 3,0 - 4,5 3,5 - 6,5	13,0	14,9	20,5 22,0	1,5	16,5	10.851.100.300	500
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EN AW - 5754 [AlMg3] 28 Nm 17500 N

M12	1,7 - 4,5 4,0 - 7,5 7,0 - 10,5	16,0	19,0	26,0 29,0	1,9	17,5	10.851.120.450	250
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EN AW - 5754 [AlMg3] 45 Nm 28000 N

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

EN AW - 5754 [AlMg3] 18 Nm 11000 N

▼ Discontinued standard line. After sale of warehouse stock new production only with minimum order quantity. Please ask for details!



M		D	d_k	I	k	l_1 max.	No.	
M6	0,5 - 3,0	9,0	10,0	14,5	0,6	9,0	10.851.060.300/10	500

EN AW - 5754 [AlMg3] 6 Nm 8300 N

M8	0,5 - 3,0	11,0	12,0	16,5	0,6	11,0	10.851.080.300/10	500
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EN AW - 5754 [AlMg3] 15 Nm 13000 N

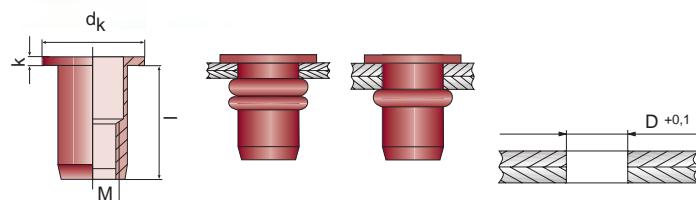
I One blind rivet nut for all grip ranges. The innovative and patented development of the Honsel-Group was in 2007 the first mass-production multigrip blind rivet nut. The product has a lot of advantages over the common standard types:

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

ONE Blind Rivet Nut ...



Aluminium Flat Head Round Shank -open- OPTO-AFM



M		D	d _k	I	k	Nr.	
M4	0,5 – 6,0	6,0	10,0	14,0	0,8	10.894.040.600	500
EN AW - 5754 [AlMg3]				3 Nm	3000 N		

M		D	d _k	I	k	Nr.	
M6	0,5 – 6,0	9,0	13,0	17,5	1,5	10.894.060.600	500
EN AW - 5754 [AlMg3]				6 Nm	6500 N		

M		D	d _k	I	k	Nr.	
M8	0,5 – 7,5	11,0	16,0	21,5	1,5	10.894.080.750	500
EN AW - 5754 [AlMg3]				18 Nm	10500 N		

M		D	d _k	I	k	No.	
M4	1,5 – 6,0	6,0	10,0	14,0	1,5	10.894.400.600	500
EN AW - 5754 [AlMg3]				3 Nm	3000 N		

M		D	d _k	I	k	No.	
M6	1,5 – 6,0	9,0	13,0	17,5	1,5	10.894.600.600	500
EN AW - 5754 [AlMg3]				6 Nm	6500 N		

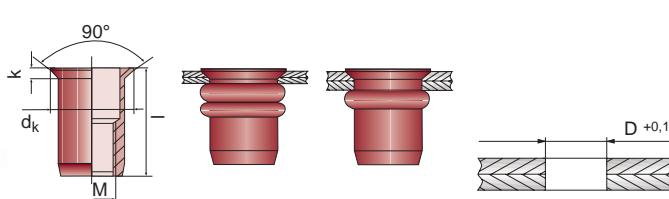
M		D	d _k	I	k	No.	
M8	1,5 – 7,5	11,0	16,0	21,5	1,5	10.894.800.750	500
EN AW - 5754 [AlMg3]				18 Nm	10500 N		

M		D	d _k	I	k	No.	
M4	1,5 – 6,0	6,0	10,0	14,0	1,5	10.894.400.600	500
EN AW - 5754 [AlMg3]				3 Nm	3000 N		

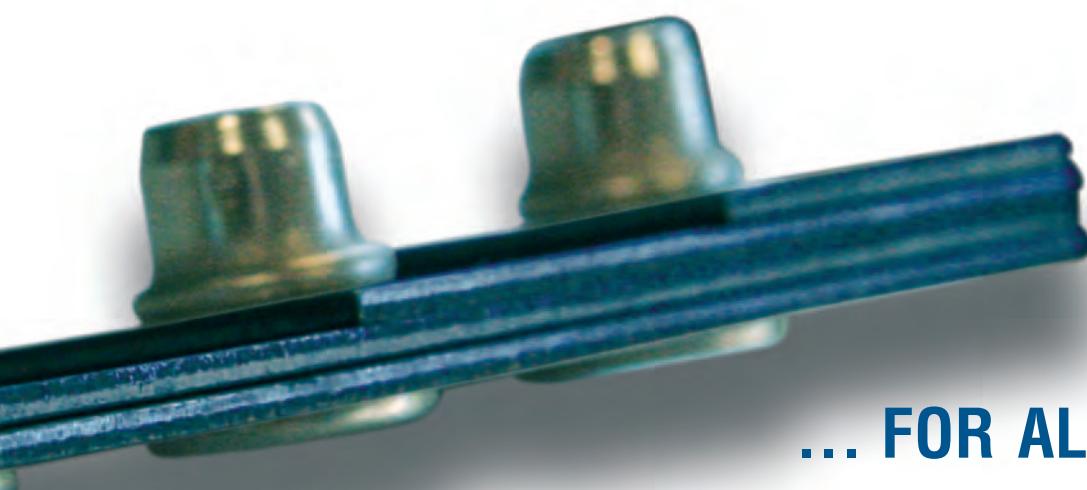
M		D	d _k	I	k	No.	
M6	1,5 – 6,0	9,0	13,0	17,5	1,5	10.894.600.600	500
EN AW - 5754 [AlMg3]				6 Nm	6500 N		

M		D	d _k	I	k	No.	
M8	1,5 – 7,5	11,0	16,0	21,5	1,5	10.894.800.750	500
EN AW - 5754 [AlMg3]				18 Nm	10500 N		

I Size M10, types with serration, hexagon or closed shaft available on request!



M		D	d _k	I	k	N.	
M6	1,5 – 6,0	9,0	13,0	17,5	1,5	10.894.600.600	500
EN AW - 5754 [AlMg3]				6 Nm	6500 N		



... FOR ALL Grip Ranges

NEW!

For the perfect handling of
OPTO® multigrip blind rivet nuts:
The **strength controlled** pneumatic-
hydraulic tool **VNG 703**.
Details on ► page 130!



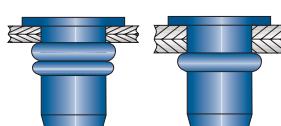
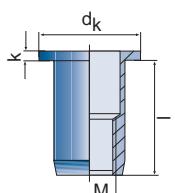
Small grip range



Medium grip range



Large grip range



Steel Flat Head Round Shank -open- OPTO-SFM

M		D	d _k	I	k	No.	
M4	0,5 – 6,0	6,0	10,0	14,0	0,8	10.895.040.600	500

QSt 32-3 [1.0303] 4 Nm 5200 N

M		D	d _k	I	k	No.	
M5	0,5 – 6,0	7,0	11,0	15,0	1,0	10.895.050.600	500

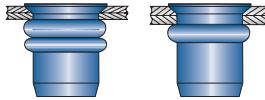
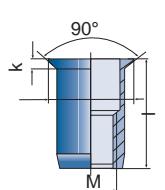
QSt 32-3 [1.0303] 6 Nm 9500 N

M		D	d _k	I	k	No.	
M6	0,5 – 6,0	9,0	13,0	17,5	1,5	10.895.060.600	500

QSt 32-3 [1.0303] 11 Nm 15500 N

M		D	d _k	I	k	No.	
M8	0,5 – 7,5	11,0	16,0	21,5	1,5	10.895.080.750	500

QSt 32-3 [1.0303] 24 Nm 21500 N



Steel Countersunk Head Round Shank -open- OPTO-SSM

M		D	d _k	I	k	No.	
M4	1,5 – 6,0	6,0	10,0	14,0	1,5	10.895.400.600	500

QSt 32-3 [1.0303] 4 Nm 5200 N

M		D	d _k	I	k	No.	
M5	1,5 – 6,0	7,0	11,0	15,0	1,5	10.895.500.600	500

QSt 32-3 [1.0303] 6 Nm 9500 N

M		D	d _k	I	k	No.	
M6	1,5 – 6,0	9,0	13,0	17,5	1,5	10.895.600.600	500

QSt 32-3 [1.0303] 11 Nm 15500 N

M		D	d _k	I	k	No.	
M8	1,5 – 7,5	11,0	16,0	21,5	1,5	10.895.800.750	500

QSt 32-3 [1.0303] 24 Nm 21500 N



2

3

Blind Rivet Nut SFM

Steel Flat Head Round Shank -open- SFM



M		D	d _k	I	k	I ₁ max.	No.	
M3	0,3 – 1,0	5,0	7,0	8,0	0,8	7,0	10.852.030.100	500

QSt 32-3 [1.0303] 1,2 Nm 4000 N

M4	0,5 – 3,0 2,0 – 4,0	6,0	10,0 12,0	11,0 0,8	8,0	10.852.040.300 10.852.040.400	500
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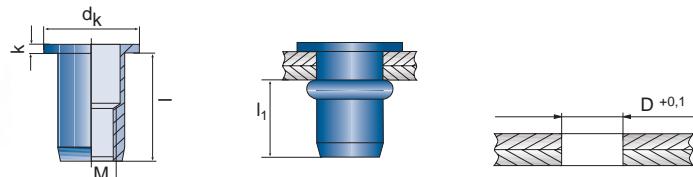
QSt 32-3 [1.0303] 4 Nm 5200 N

M5	0,5 – 3,0 3,0 – 6,0	7,0	11,0 15,0	12,0 1,0	9,0	10.852.050.300 10.852.050.600	500
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QSt 32-3 [1.0303] 6 Nm 9500 N

M6	0,5 – 3,0 3,0 – 6,0	9,0	13,0 17,0	14,5 1,5	11,0	10.852.060.300 10.852.060.600	500
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QSt 32-3 [1.0303] 11 Nm 16500 N



M		D	d _k	I	k	I ₁ max.	No.	
M8	0,5 – 3,0	11,0	16,0	17,0	1,5	13,5	10.852.080.300	250
	3,0 – 5,5			19,5			10.852.080.550	
	5,5 – 7,5			21,5			10.852.080.750	

QSt 32-3 [1.0303] 24 Nm 23500 N

M10	1,0 – 3,0 3,0 – 4,5 4,5 – 6,0	13,0	19,0	20,5 22,0 23,5	2,0	16,5	10.852.100.300 10.852.100.450 10.852.100.600	200
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QSt 32-3 [1.0303] 50 Nm 37000 N

M12	1,0 – 4,0 3,5 – 7,0	16,0	23,0	24,0 27,0	2,0	16,5	10.852.120.400 10.852.120.700	100
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QSt 32-3 [1.0303] 82 Nm 54000 N

Steel Flat Head Round Shank -closed- SFM-G



M		D	d _k	I	k	I ₁ max.	No.	
M4	0,5 – 2,0	6,0	9,0	15,0	0,8	11,0	10.856.040.200	500
	1,5 – 4,0			17,0			10.856.040.400	

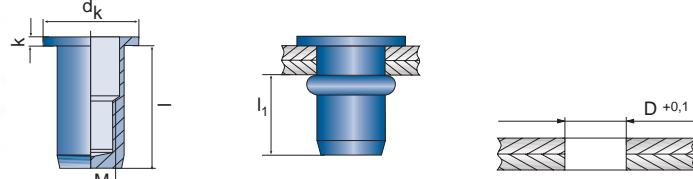
QSt 32-3 [1.0303] 4 Nm 5200 N

M5	0,5 – 3,0 3,0 – 5,5	7,0	11,0	18,5 21,0	1,0	15,5	10.856.050.300 10.856.050.550	500
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QSt 32-3 [1.0303] 6 Nm 9500 N

M6	0,5 – 3,0 2,5 – 5,5	9,0	12,0	22,5 25,0	1,2	16,0	10.856.060.300 10.856.060.550	500
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QSt 32-3 [1.0303] 11 Nm 16500 N



M		D	d _k	I	k	I ₁ max.	No.	
M8	0,5 – 3,5	11,0	14,0	25,0	1,3	17,5	10.856.080.350	200
	3,0 – 6,0			27,5			10.856.080.600	

QSt 32-3 [1.0303] 24 Nm 23500 N

M10	1,0 – 3,0	13,0	19,0	33,0	2,0	28,5	10.856.100.300	250
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QSt 32-3 [1.0303] 50 Nm 37000 N

Steel Flat Head Round Shank -open- knurled SFM-R



M		D	d _k	I	k	I ₁ max.	No.	
M4	0,5 – 2,5	6,0	9,0	9,5	0,8	8,0	10.842.040.250	500

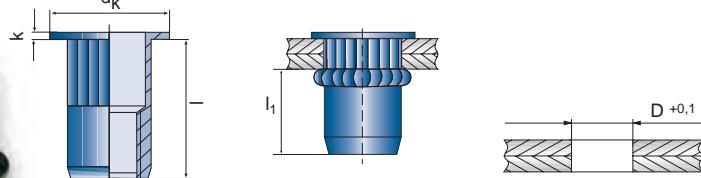
QSt 32-3 [1.0303] 5000 N 15000 N

M5	0,5 – 3,0	7,0	10,0	12,0	1,0	9,0	10.842.050.300	500
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QSt 32-3 [1.0303] 9000 N 13500 N

M6	0,5 – 3,0 3,5 – 6,0	9,0	13,0	14,5 17,0	1,5	11,0	10.842.060.300 10.842.060.600	500
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QSt 32-3 [1.0303] 13500 N 13500 N



M		D	d _k	I	k	I ₁ max.	No.	
M8	0,5 – 3,0	11,0	16,0	16,0	1,5	13,5	10.842.080.300	250
	3,0 – 5,5			18,5			10.842.080.550	

QSt 32-3 [1.0303] 15000 N 28000 N

M10	3,0 – 4,5	13,0	19,0	22,0	2,0	16,5	10.842.100.450	250
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QSt 32-3 [1.0303] 28000 N 28000 N

Folding Blind Rivet Nut SFM-PL



SFM-PL folding blind rivet nuts are constructed for those applications where a **high pull-out strength** is requested.

The slotted shaft makes the rivet nut split into four straps with a wide contact surface that guarantee an **equal distribution of forces** especially on plastics and other vulnerable materials.

Furthermore this type offers a very **big grip range!**

SFM-PL split blind rivet nuts are for example used in all fields of vehicle manufacturing.

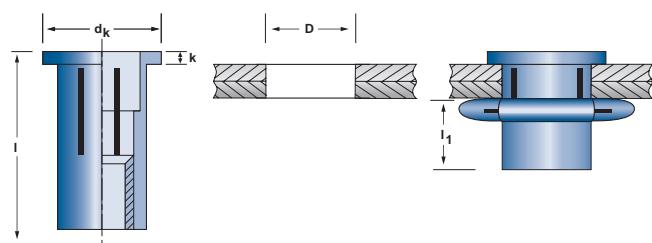
SFM-PL

Folding Blind Rivet Nut SFM-PL

2 3



**Steel
Flat Head
Round Shank -open-
SFM-PL**



M	D	d _k	I	k	I ₁ max.	No.		
M6	0,5 – 7,1 -0,45	9,8	10,0-10,15	16,4 -0,1	25,8 -0,8	1,6 -0,25	11,7	10.816.060.710
								500

↙ 12 Nm ↘ 15000 N

M	D	d _k	I	k	I ₁ max.	No.		
M8	0,5 – 7,1 -0,1	12,6	12,7-12,85	19,6 -0,8	29,6 -1,0	1,7 -0,25	13,6	10.816.080.710
								500

↙ 21 Nm ↘ 27000 N



NEW!

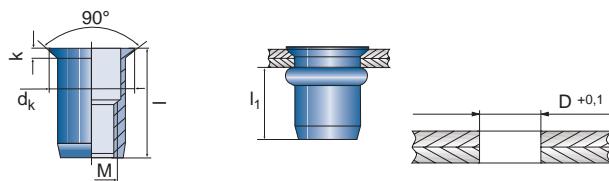
For handling SFM-PL blind rivet nuts a big stroke is necessary.

HONSEL/VVG offer the special pneumatic-hydraulic tool **VNG 753** for this application.

For details as please ask our sales team and take look on
► pages 130/131!







M		D	d_k	I	k	I_1 max.	No.	
M4	1,5 – 3,5	6,0	8,3	11,5	1,5	8,0	10.853.040.350	500

QSt 32-3 [1.0303] 4 Nm 5200 N

M5	1,5 – 4,0 4,0 – 5,5	7,0	9,3 15,5	13,0 15,5	1,5	9,0	10.853.050.400 10.853.050.550	500

QSt 32-3 [1.0303] 6 Nm 9500 N

M6	1,5 – 4,5 4,5 – 6,0	9,0	11,3 17,5	16,0 17,5	1,5	11,0	10.853.060.450 10.853.060.600	500

QSt 32-3 [1.0303] 11 Nm 16500 N



Steel Countersunk Head Round Shank -open- SSM

SSM

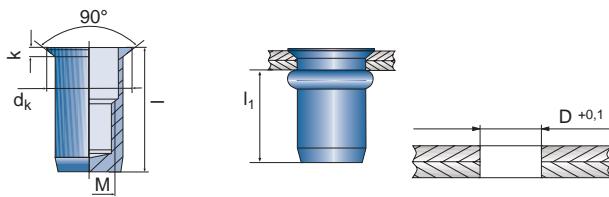
M		D	d_k	I	k	I_1 max.	No.	
M8	1,5 – 4,5 4,5 – 6,0	11,0	13,3	18,5 20,0	1,5	13,5	10.853.080.450	250
							10.853.080.600	

QSt 32-3 [1.0303] 24 Nm 23500 N

M10	1,5 – 4,5 4,5 – 6,0 6,0 – 9,0	13,0	14,9 25,0 15,7	22,0 25,0 28,0		1,5 16,5	10.853.100.450 10.853.100.600 10.853.100.900	250

QSt 32-3 [1.0303] 50 Nm 37000 N

▶ For larger grip ranges take a look at the patented OPTO® multigrip blind rivet nut on the pages 68/69.



M		D	d_k	I	k	I_1 max.	No.	
M5	1,5 – 4,0	7,0	9,3	19,5	1,5	15,5	10.857.050.400	500

QSt 32-3 [1.0303] 6 Nm 9500 N

M6	1,5 – 4,5 4,5 – 6,0	9,0	11,3 25,0	23,5 18,5	1,5	18,5	10.857.060.450 10.857.060.600	500

QSt 32-3 [1.0303] 11 Nm 16500 N



Steel Countersunk Head Round Shank -closed- SSM-G

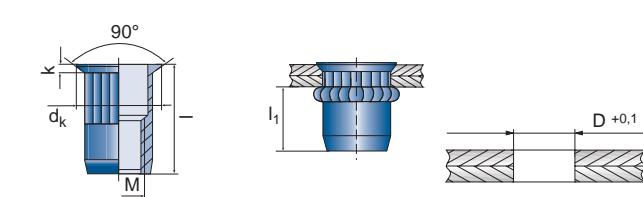
SSM-G

M		D	d_k	I	k	I_1 max.	No.	
M8	1,5 – 4,5 4,5 – 6,0	11,0	13,3	28,0 35,5	1,5	23,0	10.857.080.450	250
							10.857.080.600	

QSt 32-3 [1.0303] 24 Nm 23500 N

M10	1,5 – 3,0	13,0	14,9	32,5	1,5	28,5	10.857.100.300	250

QSt 32-3 [1.0303] 50 Nm 37000 N



M		D	d_k	I	k	I_1 max.	Nr.	
M4	1,5 – 3,5	6,0	8,3	11,5	1,5	8,0	10.845.040.350	500
	3,5 – 5,0						10.845.040.500	

QSt 32-3 [1.0303] 5000 N 5000 N

M5	1,5 – 4,0 4,0 – 6,0	7,0	9,3 10,0	13,5 15,0	1,5	9,0	10.845.050.400 10.845.050.600	500

QSt 32-3 [1.0303] 9000 N 9000 N

M6	1,5 – 4,5 4,5 – 6,5	9,0	11,3 12,0	16,0 19,0	1,5	11,0	10.845.060.450 10.845.060.650	500

QSt 32-3 [1.0303] 13500 N 13500 N



Steel Countersunk Head Round Shank -open- knurled SSM-R

M		D	d_k	I	k	I_1 max.	Nr.	
M8	1,5 – 4,5 3,5 – 6,5	11,0	13,3	19,0 21,0	1,5	13,5	10.845.080.450	500
							10.845.080.650	

QSt 32-3 [1.0303] 15000 N 15000 N

M10	1,5 – 4,0 3,5 – 6,5	13,0	15,7	22,0 25,0	1,6	14,5	10.845.100.400 10.845.100.650	250

QSt 32-3 [1.0303] 37000 N 37000 N

M12	1,7 – 4,5 4,0 – 7,5	16,0	19,0	26,0 29,0	1,9	17,5	10.845.120.450 10.845.120.750	250

QSt 32-3 [1.0303] 56000 N 56000 N



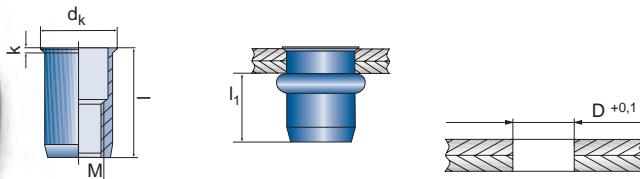
2

3

Blind Rivet Nut SSM

Steel

Small Countersunk Head Round Shank -open- SSM-KLSK



SSM

M		D	d_k	I	k	I_1 max.	No.	
M4	0,3 – 2,0	6,0	7,0	10,5	0,5	6,0	10.841.040.200	500

QSt 32-3 [1.0303] 3 Nm 6800 N

M	0,5 – 3,0	7,0	8,0	11,5	0,5	6,3	No.	
M5	0,5 – 3,0	7,0	8,0	11,5	0,5	6,3	10.841.050.300	500

QSt 32-3 [1.0303] 5 Nm 9000 N

M		D	d_k	I	k	I_1 max.	No.	
M6	0,5 – 3,0	9,0	10,0	14,5	0,5	8,6	10.841.060.300	500

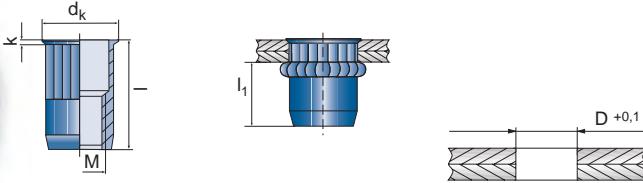
QSt 32-3 [1.0303] 10 Nm 12000 N

M	0,5 – 3,0	11,0	12,0	16,5	0,5	10,0	No.	
M8	0,5 – 3,0	11,0	12,0	16,5	0,5	10,0	10.841.080.300	250

QSt 32-3 [1.0303] 20 Nm 18000 N

Steel

Small Countersunk Head Round Shank -open- *knurled* SSM-R-KLSK



M		D	d_k	I	k	I_1 max.	No.	
M3	0,3 – 1,5	5,0	6,0	8,5	0,4	5,5	10.843.030.150	500

QSt 32-3 [1.0303] 4000 N

M	0,5 – 2,0	6,0	7,0	10,0	0,4	8,0	No.	
M4	0,5 – 2,0	6,0	7,0	10,0	0,4	8,0	10.843.040.200	500

QSt 32-3 [1.0303] 6500 N

M	0,5 – 3,0	7,0	8,0	12,0	0,5	9,0	No.	
	2,5 – 4,5			13,0			10.843.050.450	500

QSt 32-3 [1.0303] 8000 N

M		D	d_k	I	k	I_1 max.	No.	
M6	0,5 – 3,0	9,0	10,0	14,5	0,5	14,5	10.843.060.300	500
	3,5 – 6,0			17,5			10.843.060.600	

QSt 32-3 [1.0303] 15000 N

M	0,7 – 4,0	11,0	12,0	16,0	0,5	16,0	No.	
	3,0 – 6,0			19,5			10.843.080.600	250

QSt 32-3 [1.0303] 17000 N

M	1,0 – 4,5	13,0	14,0	21,5	0,5	13,3	No.	
	3,0 – 6,0			23,0			10.843.100.600	250

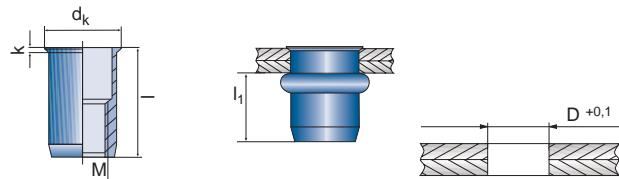
QSt 32-3 [1.0303] 37000 N

M	1,0 – 4,0	16,0	17,0	24,0	0,6	16,0	No.	
M12	1,0 – 4,0	16,0	17,0	24,0	0,6	16,0	10.843.120.400	250

QSt 32-3 [1.0303] 54000 N

► Please note our manifold range of **assortments** and **small packs** on pages 104/105 and 106-108!





**Steel
Small Countersunk Head
Round Shank -open-
UNIVERSAL**

M		D	d _k	I	k	l ₁ max.	No.	
M4	0,5 – 2,5	7,0	8,0	10,5	0,4	7,0	10.870.400.000	500

QSt 32-3 [1.0303] 3 Nm 6500 N

M	D	d _k	I	k	l ₁ max.	No.		
M5	0,5 – 2,5	7,0	8,0	11,5	0,4	8,0	10.870.500.000	500

QSt 32-3 [1.0303] 5 Nm 8000 N

M	D	d _k	I	k	l ₁ max.	No.		
M6	0,5 – 3,0	8,0	9,0	13,0	0,4	10,0	10.870.600.000	500

QSt 32-3 [1.0303] 10 Nm 11500 N



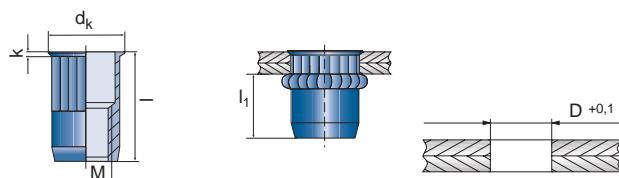
**Steel
Small Countersunk Head
Round Shank -open-
UNIVERSAL**

M		D	d _k	I	k	l ₁ max.	No.	
M8	0,5 – 3,0	10,0	11,0	15,5	0,4	11,5	10.870.800.000	500

QSt 32-3 [1.0303] 20 Nm 14500 N

M		D	d _k	I	k	l ₁ max.	No.	
M10	0,5 – 3,0	12,0	13,0	17,5	0,4	13,0	10.870.100.000	250

QSt 32-3 [1.0303] 40 Nm 22000 N



M		D	d _k	I	k	l ₁ max.	No.	
M4	0,5 – 2,5	7,0	8,0	10,5	0,4	7,0	10.871.400.000	500

QSt 32-3 [1.0303] 6000 N

M	D	d _k	I	k	l ₁ max.	No.		
M5	0,5 – 2,5	7,0	8,0	11,5	0,4	8,0	10.871.500.000	500

QSt 32-3 [1.0303] 7500 N

M	D	d _k	I	k	l ₁ max.	No.		
M6	0,5 – 3,0	8,0	9,0	13,0	0,4	10,0	10.871.600.000	500

QSt 32-3 [1.0303] 10000 N



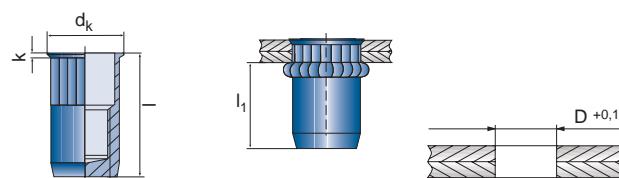
**Steel
Small Countersunk Head
Round Shank -open- knurled
UNIVERSAL-R**

M		D	d _k	I	k	l ₁ max.	No.	
M8	0,5 – 3,0	10,0	11,0	15,5	0,4	11,5	10.871.800.000	500

QSt 32-3 [1.0303] 14000 N

M		D	d _k	I	k	l ₁ max.	No.	
M10	0,5 – 3,0	12,0	13,0	17,5	0,4	13,0	10.871.100.000	250

QSt 32-3 [1.0303] 17500 N



M		D	d _k	I	k	l ₁ max.	No.	
M4	0,5 – 2,5	7,0	8,0	16,5	0,4	13,0	10.872.400.000	500

QSt 32-3 [1.0303] 6000 N

M	D	d _k	I	k	l ₁ max.	No.		
M5	0,5 – 2,5	7,0	8,0	18,5	0,4	14,5	10.871.500.000	500

QSt 32-3 [1.0303] 7500 N



**Steel
Small Countersunk Head
Round Shank -closed- knurled
UNIVERSAL-R-G**

M		D	d _k	I	k	l ₁ max.	No.	
M6	0,5 – 3,0	8,0	9,0	20,5	0,4	16,0	10.872.600.000	500

QSt 32-3 [1.0303] 10000 N

Additional possibilities for sealing on ▶ page 112.



2

3

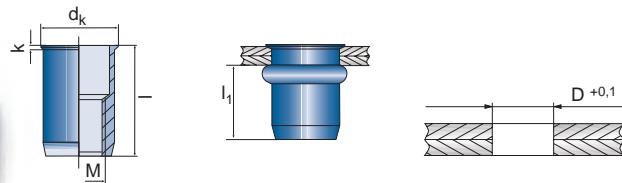
Blind Rivet Nut FLATsert

Steel

Small Countersunk Head

Round Shank -open-

FLATsert

FLATsert /
MICRO

M		D	d _k	I	k	I ₁ max.	No.	
M3	0,5 – 1,5	4,9	5,3	9,0	0,3	6,0	10.874.300.000	500

QSt 32-3 [1.0303] 2 Nm 3000 N

M	0,5 – 2,0	6,4	7,2	10,5	0,4	8,0	10.874.400.000	500
M4	0,5 – 2,0	6,4	7,2	10,5	0,4	8,0	10.874.400.000	500

QSt 32-3 [1.0303] 3 Nm 6000 N

M	0,5 – 3,2	7,2	8,1	12,0	0,5	9,0	10.874.500.000	500
M5	0,5 – 3,2	7,2	8,1	12,0	0,5	9,0	10.874.500.000	500

QSt 32-3 [1.0303] 5 Nm 9500 N

M		D	d _k	I	k	I ₁ max.	No.	
M6	0,8 – 4,0	9,6	10,5	15,0	0,5	11,0	10.874.600.000	500

QSt 32-3 [1.0303] 10 Nm 13000 N

M	1,0 – 4,0	10,6	11,5	16,0	0,6	13,5	10.874.800.000	500
M8	1,0 – 4,0	10,6	11,5	16,0	0,6	13,5	10.874.800.000	500

QSt 32-3 [1.0303] 20 Nm 16000 N

M	1,0 – 5,0	12,7	13,9	22,5	0,6	16,5	10.874.100.000	200
M10	1,0 – 5,0	12,7	13,9	22,5	0,6	16,5	10.874.100.000	200

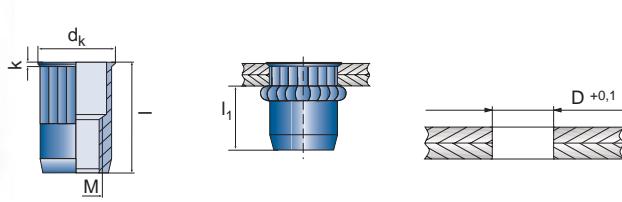
QSt 32-3 [1.0303] 40 Nm 19500 N

Steel

Small Countersunk Head

Round Shank -open- knurled

FLATsert-R



M		D	d _k	I	k	I ₁ max.	No.	
M4	0,5 – 2,0	6,4	7,2	10,5	0,4	8,0	10.844.400.000	500

QSt 32-3 [1.0303] 5500 N

M	0,5 – 3,0	7,2	8,1	12,0	0,5	9,0	10.844.500.000	500
M5	0,5 – 3,0	7,2	8,1	12,0	0,5	9,0	10.844.500.000	500

QSt 32-3 [1.0303] 9000 N

M		D	d _k	I	k	I ₁ max.	No.	
M6	0,7 – 3,2	9,6	10,4	15,0	0,5	11,0	10.844.600.000	500

QSt 32-3 [1.0303] 12000 N

M	0,7 – 4,0	10,6	11,5	16,0	0,5	13,5	10.844.800.000	500
M8	0,7 – 4,0	10,6	11,5	16,0	0,5	13,5	10.844.800.000	500

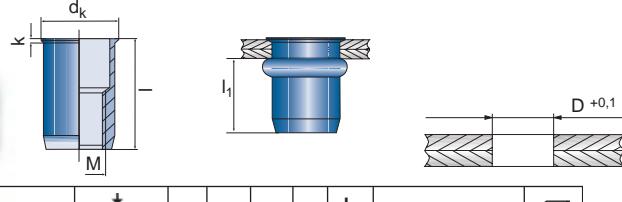
QSt 32-3 [1.0303] 15000 N

Steel

Small Countersunk Head

Round Shank Open

MICRO



M		D	d _k	I	k	I ₁ max.	No.	
M4	0,5 – 1,1	5,5	6,5	7,5	0,4	6,0	10.866.040.110	500

QSt 32-3 [1.0303] 2 Nm 5500 N

M	0,5 – 1,6	6,5	7,5	9,3	0,4	7,0	10.866.050.160	500
M5	0,5 – 1,6	6,5	7,5	9,3	0,4	7,0	10.866.050.160	500

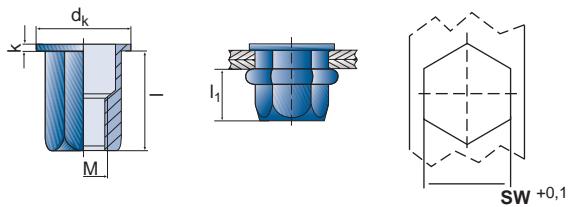
QSt 32-3 [1.0303] 4 Nm 9000 N

M		D	d _k	I	k	I ₁ max.	No.	
M6	0,5 – 2,6	7,9	9,0	11,5	0,4	8,0	10.866.060.260	500

QSt 32-3 [1.0303] 8 Nm 12000 N

M	0,5 – 2,6	9,9	11,0	14,0	0,4	11,0	10.866.080.260	500
M8	0,5 – 2,6	9,9	11,0	14,0	0,4	11,0	10.866.080.260	500

QSt 32-3 [1.0303] 12 Nm 15000 N



M		SW	d _k	I	k	I ₁ max.	No.		
M4		0,5 – 2,0	6,0	9,0	10,0	1,0	7,5	10.868.040.200	500

QSt 32-3 [1.0303] 5 Nm 5200 N

M		SW	d _k	I	k	I ₁ max.	No.		
M5		0,5 – 3,0	7,0	10,0	12,5	1,0	8,5	10.868.500.000	500

QSt 32-3 [1.0303] 7 Nm 9500 N

M		SW	d _k	I	k	I ₁ max.	No.		
M6		0,5 – 3,0	9,0	13,0	14,5	1,5	10,5	10.868.600.000	500

QSt 32-3 [1.0303] 13 Nm 16500 N

Steel
Flat Head
Hexagonal Shank -open-
HEXAFORM FK

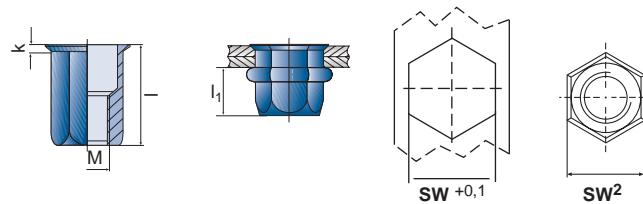


M		SW	d _k	I	k	I ₁ max.	No.	
M8		0,5 – 3,0	15,0	16,0	1,5	13,0	10.868.800.000	
		3,0 – 6,0	11,0	16,0			10.868.080.600	

QSt 32-3 [1.0303] 25 Nm 23500 N

M		SW	d _k	I	k	I ₁ max.	No.		
M10		1,0 – 3,5	13,0	19,0	21,0	2,0	16,5	10.868.100.000	100

QSt 32-3 [1.0303] 55 Nm 37000 N



M		SW	SW ²	I	k	I ₁ max.	No.		
M4		0,5 – 2,0	6,0	6,6	11,0	0,6	7,5	10.892.040.200	500

QSt 32-3 [1.0303] 5 Nm 5200 N

M		SW	SW ²	I	k	I ₁ max.	No.		
M5		0,5 – 3,0	7,0	7,7	13,5	0,7	8,5	10.892.050.300	500

QSt 32-3 [1.0303] 7 Nm 9500 N

Steel
Small Countersunk Head
Hexagonal Shank -open-
HEXAFORM KLSK

M		SW	SW ²	I	k	I ₁ max.	No.	
M6		0,5 – 3,0	9,0	9,8	15,5	10,5	10.892.060.300	
		3,0 – 5,5	18,0	18,0			10.892.060.550	

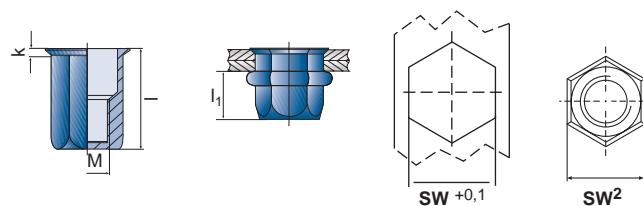
QSt 32-3 [1.0303] 13 Nm 16500 N

M		SW	SW ²	I	k	I ₁ max.	No.		
M8		0,5 – 3,0	11,0	11,8	18,5	0,8	13,0	10.892.080.300	
		3,0 – 6,0	19,0	19,0			10.892.080.600		

QSt 32-3 [1.0303] 25 Nm 23500 N

M		SW	SW ²	I	k	I ₁ max.	No.		
M10		0,5 – 3,5	13,0	14,3	21,0	0,9	16,5	10.892.100.300	250

QSt 32-3 [1.0303] 55 Nm 37500 N



M		SW	SW ²	I	k	I ₁ max.	No.		
M5		0,5 – 2,5	7,0	7,7	18,0	0,6	12,5	10.887.050.250	500

QSt 32-3 [1.0303] 7 Nm 9500 N

M		SW	SW ²	I	k	I ₁ max.	No.		
M6		0,5 – 3,0	9,0	9,8	21,5	0,7	16,0	10.887.060.300	500

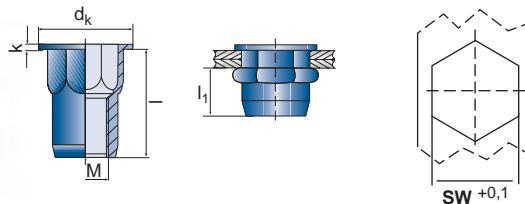
QSt 32-3 [1.0303] 13 Nm 16500 N

M		SW	SW ²	I	k	I ₁ max.	No.		
M8		0,5 – 3,5	11,0	11,8	24,5	0,7	17,5	10.887.080.350	500

QSt 32-3 [1.0303] 25 Nm 23500 N



Steel
Flat Head
Partial Hexagonal Shank -open-
HEXATOP FK



M		SW	d _k	I	k	I ₁ max.	No.	
M4	0,5 – 2,0	6,3	8,0	10,0	0,6	7,5	10.867.400.000	500

QSt 32-3 [1.0303] 4 Nm 3800 N

M	0,5 – 3,0	7,2	9,0	12,5	0,7	9,0	10.867.500.000	500
M5	0,5 – 3,0	7,2	9,0	12,5	0,7	9,0	10.867.500.000	500

QSt 32-3 [1.0303] 6 Nm 6000 N

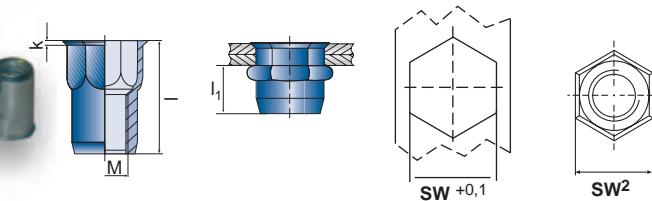
M		SW	d _k	I	k	I ₁ max.	No.	
M6	0,5 – 3,0	9,6	12,0	14,5	0,8	11,5	10.867.600.000	500

QSt 32-3 [1.0303] 11 Nm 9500 N

M	0,5 – 3,0	10,6	13,0	17,5	0,8	14,0	10.867.800.000	250
M8	0,5 – 3,0	10,6	13,0	17,5	0,8	14,0	10.867.800.000	250

QSt 32-3 [1.0303] 24 Nm 12500 N

Steel
Small Countersunk Head
Partial Hexagonal Shank -open-
HEXATOP KLSK



M		SW	SW ²	I	k	I ₁ max.	No.	
M4	0,4 – 2,0	6,3	7,0	10,0	0,4	7,5	10.893.040.200	500

QSt 32-3 [1.0303] 4 Nm 3800 N

M	0,6 – 3,0	7,2	8,0	12,5	0,5	9,0	10.893.050.300	500
M5	0,6 – 3,0	7,2	8,0	12,5	0,5	9,0	10.893.050.300	500

QSt 32-3 [1.0303] 6 Nm 6000 N

M		SW	SW ²	I	k	I ₁ max.	No.	
M6	0,6 – 3,0	9,6	10,5	15,5	0,5	11,5	10.893.060.300	500

QSt 32-3 [1.0303] 11 Nm 9500 N

M	0,6 – 3,0	10,6	11,5	18,0	0,6	14,0	10.893.080.300	250
M8	0,6 – 3,0	10,6	11,5	18,0	0,6	14,0	10.893.080.300	250

QSt 32-3 [1.0303] 24 Nm 12500 N

M	1,0 – 4,0	12,6	14,4	22,5	0,8	14,0	10.893.100.400	250
M10	1,0 – 4,0	12,6	14,4	22,5	0,8	14,0	10.893.100.400	250

QSt 32-3 [1.0303] 50 Nm 37000 N

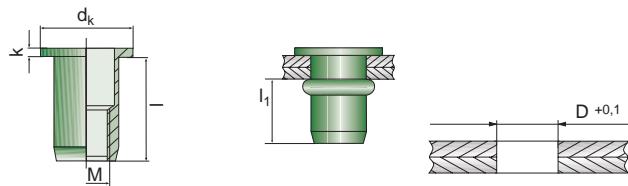


! Blind rivet nuts with larger grip ranges, closed shaft or inch measured threads possible on request.



► For the perfect tool take a look into chapters 8 and 9 on pages 117 and 125!





M		D	d_k	I	k	I_1 max.	No.	
M3	0,5 – 2,0	5,0	8,0	9,0	0,8	7,0	10.858.030.200	500

1.4567 2 Nm 4500 N

M	D	d_k	I	k	I_1 max.	No.		
M4	0,5 – 2,5	6,0	9,0	11,0	1,0	8,0	10.858.040.250	500

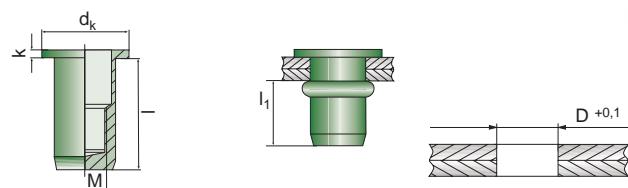
1.4567 4 Nm 7000 N

M	D	d_k	I	k	I_1 max.	No.		
M5	0,5 – 3,0	7,0	10,0	12,0	1,5	8,5	10.858.050.300	500

1.4567 6 Nm 11000 N

M	D	d_k	I	k	I_1 max.	No.		
M6	0,5 – 3,0	9,0	12,0	14,0	1,5	10,0	10.858.060.300	500

1.4567 11 Nm 18000 N

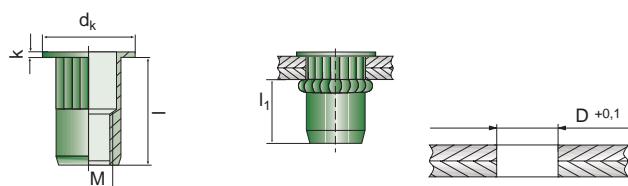


M		D	d_k	I	k	I_1 max.	No.	
M4	0,5 – 2,5	6,0	9,0	16,0	1,0	13,0	10.860.040.250	500

1.4567 4 Nm 7000 N

M	D	d_k	I	k	I_1 max.	No.		
M5	0,5 – 3,0	7,0	10,0	18,0	1,0	14,5	10.860.050.300	500

1.4567 6 Nm 11000 N



M		D	d_k	I	k	I_1 max.	No.	
M3	0,5 – 2,0	5,0	8,0	9,0	0,8	7,0	10.848.030.200	500

1.4567 4000 N

M	D	d_k	I	k	I_1 max.	No.		
M4	0,5 – 2,5	6,0	9,0	11,0	0,8	8,0	10.848.040.250	500

1.4567 6500 N

M	D	d_k	I	k	I_1 max.	No.		
M5	0,5 – 3,0	7,0	10,0	12,0	1,0	8,5	10.848.050.300	500

1.4567 10000 N



Stainless Steel Flat Head Round Shank -open- EFM

EFM

M		D	d_k	I	k	I_1 max.	No.	
M8	0,5 – 3,0	11,0	15,0	16,0	1,5	11,5	10.858.080.300	500
	3,0 – 6,0		16,0	18,5			10.858.080.600	

1.4567 24 Nm 27000 N

M	D	d_k	I	k	I_1 max.	No.		
M10	1,0 – 3,5	13,0	17,0	19,0	2,0	14,0	10.858.100.350	250
	3,0 – 6,0		19,0	26,0			10.858.100.600	

1.4567 50 Nm 40000 N

M	D	d_k	I	k	I_1 max.	No.		
M12	1,0 – 4,0	16,0	23,0	26,0	2,0	16,5	10.858.120.400	250

1.4567 80 Nm 52000 N



Stainless Steel Flat Head Round Shank -closed- EFM-G

EFM-G

M		D	d_k	I	k	I_1 max.	No.	
M6	0,5 – 3,0	9,0	12,0	20,0	1,5	16,0	10.860.060.300	500

1.4567 11 Nm 18000 N

M	D	d_k	I	k	I_1 max.	No.		
M8	0,5 – 3,0	11,0	15,0	23,5	1,5	19,0	10.860.080.300	250

1.4567 24 Nm 27000 N



Stainless Steel Flat Head Round Shank -open-knurled- EFM-R

EFM-R

M		D	d_k	I	k	I_1 max.	No.	
M6	0,5 – 3,0	9,0	12,0	14,0	1,5	10,0	10.848.060.300	500
	3,5 – 6,0		13,0	19,0			10.848.060.600	

1.4567 17000 N

M	D	d_k	I	k	I_1 max.	No.		
M8	0,5 – 3,0	11,0	15,0	16,0	1,5	12,0	10.848.080.300	500
	3,0 – 6,0		16,0	20,0			10.848.080.600	

1.4567 25000 N

M	D	d_k	I	k	I_1 max.	No.		
M10	1,0 – 3,5	13,0	17,0	19,0	1,5	14,0	10.848.100.350	250

1.4567 38000 N

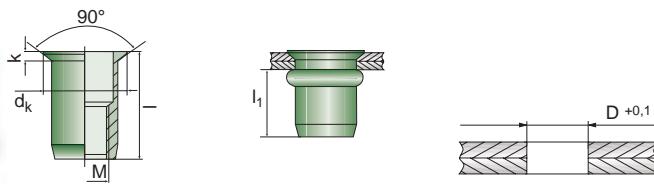


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4

Blind Rivet Nut ESM

**Stainless Steel
Countersunk Head
Round Shank -open-
ESM**



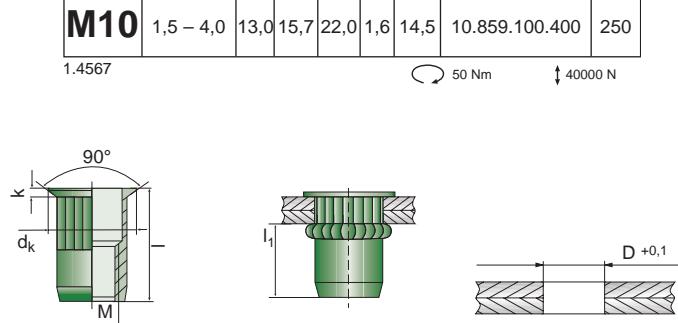
M		D	d _k	I	k	I ₁ max.	No.	
M4	1,5 – 4,0	6,0	8,3	12,0	1,5	8,0	10.859.040.400	500

1.4567 4 Nm 7000 N

M	1,5 – 4,5	7,0	9,3	13,5	1,5	8,5	10.859.050.450	500
M5	1,5 – 4,5	7,0	9,3	13,5	1,5	8,5	10.859.050.450	500

1.4567 6 Nm 11000 N

**Stainless Steel
Countersunk Head
Round Shank -open- knurled
ESM-R**



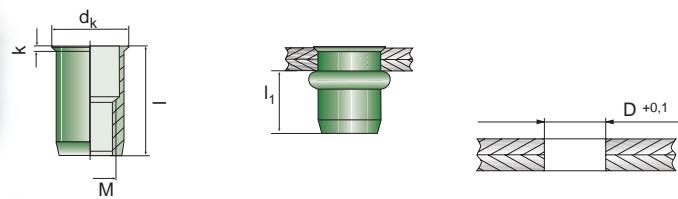
M		D	d _k	I	k	I ₁ max.	No.	
M4	1,5 – 4,0	6,0	8,3	12,0	1,0	8,0	10.865.040.400	500

1.4567 6500 N

M	1,5 – 4,5	7,0	9,3	13,5	1,0	8,5	10.865.050.450	500
M5	1,5 – 4,5	7,0	9,3	13,5	1,0	8,5	10.865.050.450	500

1.4567 10000 N

**Stainless Steel
Small Countersunk Head
Round Shank -open-
ESM-KLSK**



M		D	d _k	I	k	I ₁ max.	No.	
M3	0,5 – 2,0	5,0	6,0	8,5	0,5	7,0	10.802.030.200	500

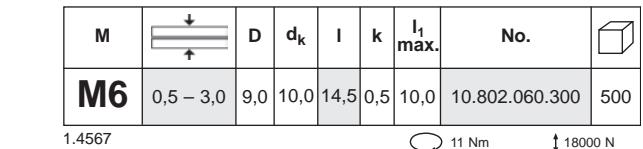
1.4567 2 Nm 4500 N

M	0,5 – 2,5	6,0	7,0	10,5	0,5	8,0	10.802.040.250	500
M4	0,5 – 2,5	6,0	7,0	10,5	0,5	8,0	10.802.040.250	500

1.4567 4 Nm 7000 N

M	0,5 – 3,0	7,0	8,0	12,0	0,5	8,5	10.802.050.300	500
M5	0,5 – 3,0	7,0	8,0	12,0	0,5	8,5	10.802.050.300	500

1.4567 6 Nm 11000 N



M		D	d _k	I	k	I ₁ max.	No.	
M6	0,5 – 3,0	9,0	10,0	14,5	0,5	10,0	10.802.060.300	500

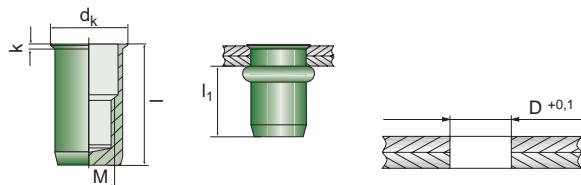
1.4567 11 Nm 18000 N

M		D	d _k	I	k	I ₁ max.	No.	
M8	0,5 – 3,0	11,0	12,0	16,5	0,5	11,5	10.802.080.300	500

1.4567 24 Nm 27000 N

M		D	d _k	I	k	I ₁ max.	No.	
M10	1,5 – 3,5	13,0	14,0	19,5	0,7	14,0	10.802.100.350	250

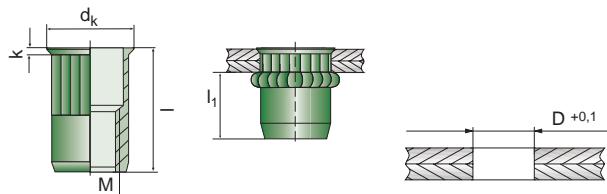
1.4567 50 Nm 40000 N



M		D	d_k	I	k	l_1 max.	No.	
M4	0,5 – 2,5	6,0	7,0	16,0	0,5	13,0	10.840.040.250	500
1.4567							↙ 4 Nm	↑ 7000 N

M5	0,5 – 3,0	7,0	8,0	18,0	0,5	14,5	10.840.050.300	500
1.4567							↙ 6 Nm	↑ 11000 N

M6	0,5 – 3,0	9,0	10,0	20,0	0,5	16,0	10.840.060.300	500
1.4567							↙ 11 Nm	↑ 18000 N



M		D	d_k	I	k	l_1 max.	No.	
M3	0,5 – 2,0	5,0	6,0	9,5	0,4	7,0	10.849.030.200	500
1.4567							↓ 4000 N	

M4	0,5 – 2,5	6,0	7,0	10,5	0,4	8,0	10.849.040.250	500
1.4567							↓ 6500 N	

M5	0,5 – 3,0	7,0	8,0	12,0	0,5	8,5	10.849.050.300	500
1.4567							↓ 10000 N	

● Blind rivet nuts in quality A4 available on request.

● Further dimensions with larger grip ranges available from stock. Please ask for details.

Stainless Steel Small Countersunk Head Round Shank -closed- ESM-KLSK-G



M		D	d_k	I	k	l_1 max.	No.	
M8	0,5 – 3,0	11,0	12,0	23,5	0,5	19,0	10.840.080.300	500
1.4567							↙ 24 Nm	↑ 27000 N

M10	1,0 – 3,5	13,0	14,0	26,5	0,7	22,0	10.840.100.350	200
1.4567							↙ 50 Nm	↑ 40000 N

Stainless Steel Small Countersunk Head Round Shank -open- ESM-KLSK-R

M		D	d_k	I	k	l_1 max.	No.	
M6	0,5 – 3,0	9,0	10,0	14,5	0,5	10,0	10.849.060.300	500
	3,5 – 6,0						10.849.060.600	

1.4567							↓ 17000 N	
1.4567							↓ 25000 N	

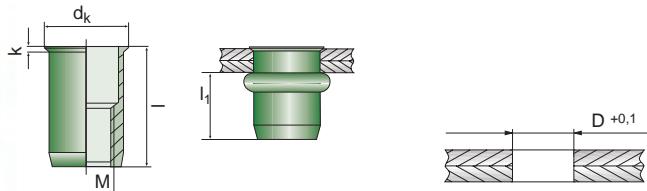
M10	1,0 – 3,5	13,0	14,0	19,5	0,7	14,0	10.849.100.350	250
1.4567							↓ 38000 N	

M12	1,0 – 4,0	16,0	17,2	24,0	0,7	16,0	10.849.120.400	250
1.4567							↓ 50000 N	





**Stainless Steel
Small Countersunk Head
Round Shank -open-
UNIVERSAL**



M		D	d_k	I	k	l_1 max.	No.	
M4	0,5 – 3,0	7,0	8,0	10,5	0,4	8,0	10.873.400.000	500

1.4567 3 Nm 7000 N

M	0,5 – 2,5	D	d_k	I	k	l_1 max.	No.	
M5	0,5 – 2,5	7,0	8,0	11,5	0,4	8,5	10.873.500.000	500

1.4567 5 Nm 11000 N

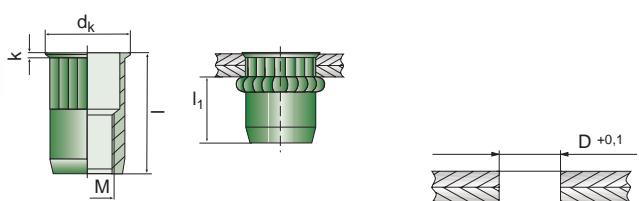
M		D	d_k	I	k	l_1 max.	No.	
M6	0,5 – 3,0	8,0	9,0	13,0	0,4	10,0	10.873.600.000	500

1.4567 10 Nm 18000 N

M	0,5 – 3,0	D	d_k	I	k	l_1 max.	No.	
M8	0,5 – 3,0	10,0	11,0	15,5	0,4	11,5	10.873.800.000	500

1.4567 20 Nm 27000 N

**Stainless Steel
Small Countersunk Head
Round Shank -open- knurled
UNIVERSAL-R**



M		D	d_k	I	k	l_1 max.	No.	
M4	0,5 – 3,0	7,0	8,0	10,5	0,4	8,0	10.891.400.000	500

1.4567 6800 N

M	0,5 – 2,5	D	d_k	I	k	l_1 max.	No.	
M5	0,5 – 2,5	7,0	8,0	11,5	0,4	8,5	10.891.500.000	500

1.4567 10000 N

M	0,5 – 3,0	D	d_k	I	k	l_1 max.	No.	
M6	0,5 – 3,0	8,0	9,0	13,0	0,4	10,0	10.891.600.000	500

1.4567 14000 N

M		D	d_k	I	k	l_1 max.	No.	
M8	0,5 – 3,0	10,0	11,0	15,5	0,4	11,5	10.891.800.000	500

1.4567 25000 N

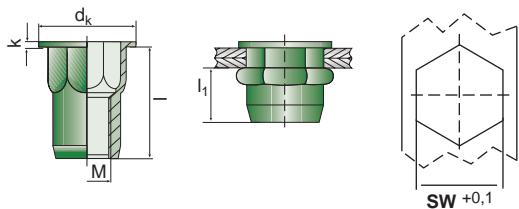
M	0,5 – 3,0	D	d_k	I	k	l_1 max.	No.	
M10	0,5 – 3,0	12,0	13,0	16,5	0,5	14,0	10.891.100.000	250

1.4567 37000 N



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





**Stainless Steel
Flat Head
Partial Hexagonal Shank -open-
HEXATOP-E-FK**

M		SW	d_k	I	k	l_1 max.	No.	
M4	0,5 – 2,5	6,0	9,0	11,0	1,0	8,5	10.877.040.250	500
1.4567							5 Nm	↑ 6500 N

M5	0,5 – 3,0	7,0	10,0	12,0	1,0	9,0	10.877.050.300	500
1.4567							7 Nm	↑ 10000 N

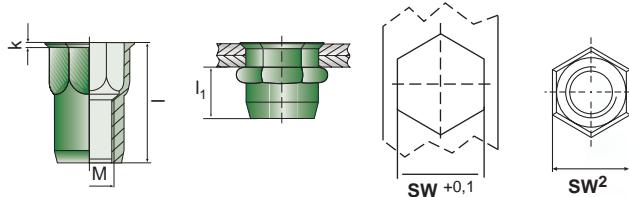
M6	0,5 – 3,0	9,0	12,0	14,0	1,5	10,0	10.877.060.300	500
1.4567							13 Nm	↑ 17000 N



**Stainless Steel
Flat Head
Partial Hexagonal Shank -open-
HEXATOP-E-FK**

M		SW	d_k	I	k	l_1 max.	No.	
M8	0,5 – 3,0	11,0	14,5	16,0	1,5	11,5	10.877.080.300	250
1.4567							25 Nm	↑ 27000 N

M10	1,0 – 3,5	13,0	16,5	19,0	2,0	14,0	10.877.100.350	200
1.4567							55 Nm	↑ 40000 N



**Stainless Steel
Small Countersunk Head
Partial Hexagonal Shank -open-
HEXATOP-E-KLSK**

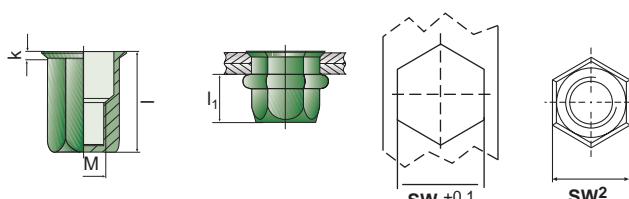
M		SW	SW ²	I	k	l ₁ max.	Nr.	
M4	0,4 – 2,5	6,0	6,8	11,0	0,5	8,5	10.879.040.250	500
1.4567							5 Nm	↑ 6500 N

M5	0,5 – 3,0	7,0	8,0	12,5	0,5	9,0	10.879.050.300	500
1.4567							7 Nm	↑ 10000 N

M6	0,5 – 3,0	9,0	10,0	14,0	0,5	10,0	10.879.060.300	500
1.4567							13 Nm	↑ 17000 N

M		SW	SW ²	I	k	l ₁ max.	Nr.	
M8	0,5 – 3,0	11,0	12,0	16,0	0,5	11,5	10.879.080.300	250
1.4567							25 Nm	↑ 27000 N

M10	1,0 – 3,5	13,0	14,4	19,0	0,7	14,0	10.879.100.350	200
1.4567							55 Nm	↑ 40000 N



**Stainless Steel
Small Countersunk Head
Hexagonal Shank -closed-
HEXAFORM-E-KLSK-G**

M		SW	SW ²	I	k	l ₁ max.	No.	
M5	0,5 – 2,5	7,0	7,8	18,0	0,6	12,5	10.805.050.250	500
1.4567							7 Nm	↑ 10000 N

M6	0,5 – 3,0	9,0	9,8	21,5	0,7	16,0	10.805.060.300	500
1.4567							13 Nm	↑ 17000 N

M		SW	SW ²	I	k	l ₁ max.	No.	
M8	0,5 – 3,5	11,0	11,8	24,5	0,7	17,5	10.805.080.300	250
1.4567							25 Nm	↑ 27000 N

Nylon Blind Nut

Info: NYLON blind nuts are especially suitable for connecting **thin-walled components**. There are no special tools necessary. The connection can be released and the nut can be used again.

Further properties:

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

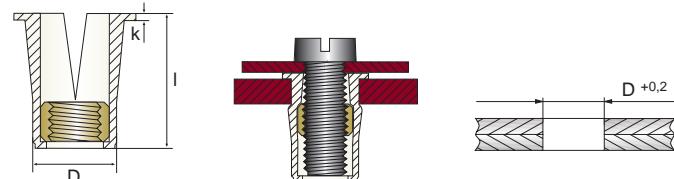


2

5

NYLON Blind Nut

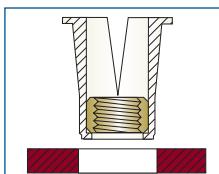
NYLON
with thread insert
made of brass



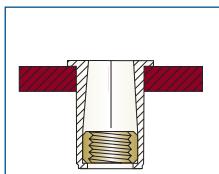
M	D	I	k	No.	
M3	1,3 – 2,0	8,0	9,6	0,75	10.890.030.000 500
M4	2,1 – 2,4	10,2	12,7	0,75	10.890.040.000 500

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

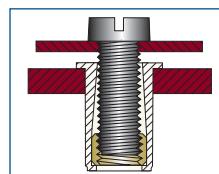
Mode of operation



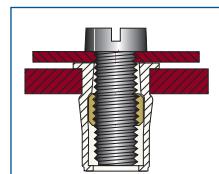
Drill a hole ...



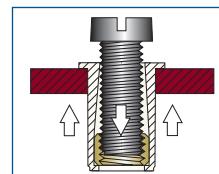
... insert the nut ...



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



... and tighten the screw.



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



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

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

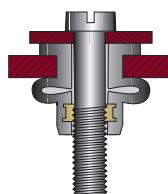
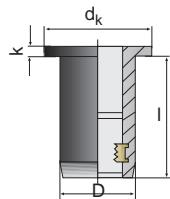
These fasteners are used for example in automotive, furniture or electronic industries in large quantities.

Neopren Blind Nut

2 4



NEOPREN with thread insert made of brass



M		D	dk	I	k	Nm	Shore A	Nr.	
M3	0,4 - 4,0	7,9	11,0	12,6	1,2	0,25 - 0,5	60	10.890.030.400	500
M4	0,4 - 4,0	7,9	11,0	12,6	1,2	0,25 - 0,5	70	10.890.040.400	500

8,0 mm

M5	0,4 - 4,9	9,6	12,7	14,1	0,9	0,35 - 0,5	70	10.890.050.500	500
	4,0 - 11,6		14,0	21,5		0,3 - 0,9		10.890.050.116	
	7,9 - 16,0		14,0	26,5		0,3 - 0,7		10.890.050.160	
	20,5 - 30,0		14,0	39,0		0,6 - 1,0		10.890.050.300	

9,7 mm

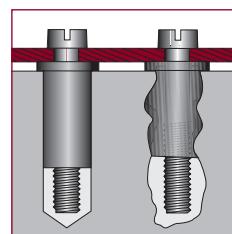
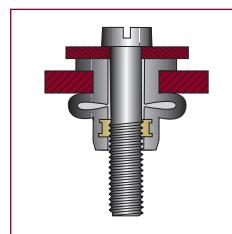
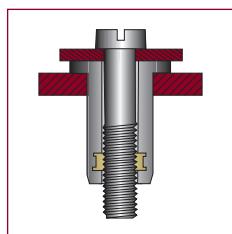
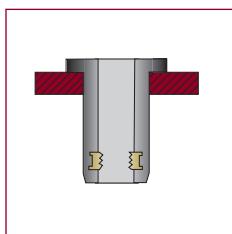
M6	0,4 - 2,8	12,7	16,0	16,0	1,3	0,6 - 1,0	60	10.890.060.300	500
	0,8 - 4,7		19,0	21,1		4,75		10.890.060.500	
	6,4 - 11,5		16,3	26,7		2,0		10.890.060.115	

12,8 mm

M8	0,4 - 4,0	15,9	22,1	18,3	3,2	1,0 - 1,5	60	10.890.080.400	250
	3,9 - 9,5		22,1	27,9		5,7		10.890.080.950	

16,0 mm

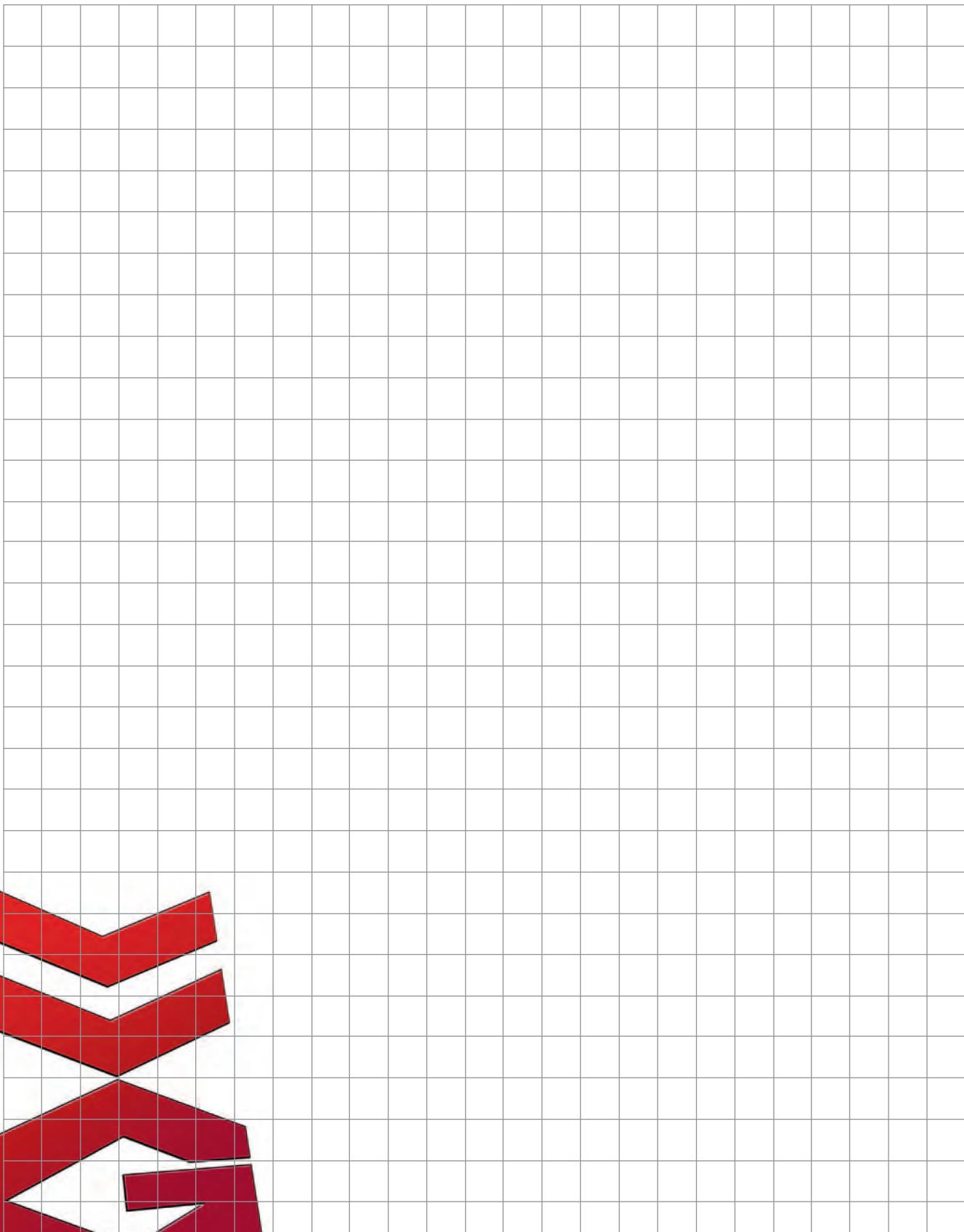
Capabilities

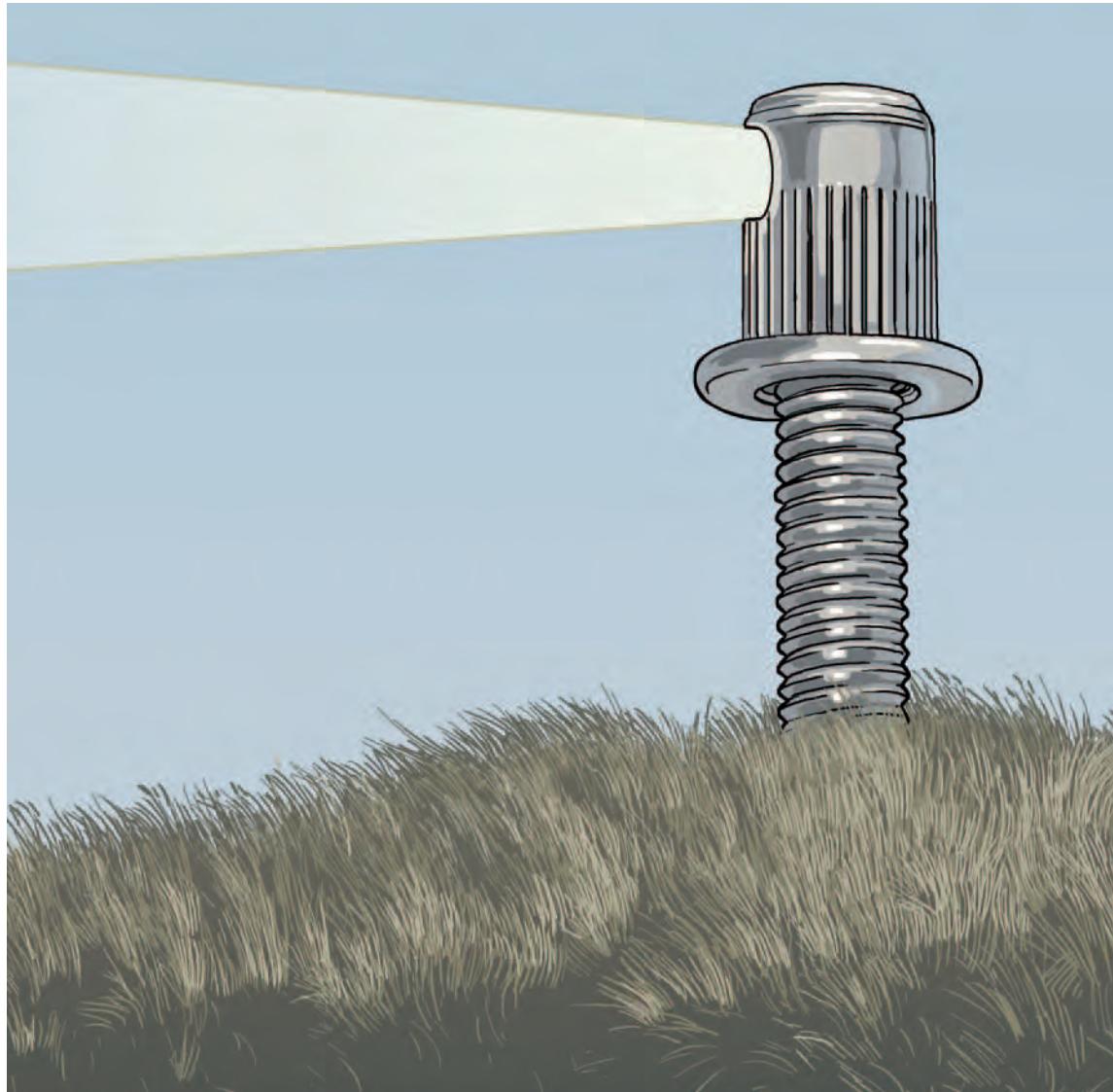


Low-vibration and detachable connections.

Assembly in irregular blind holes.

YOUR NOTES



**i**

The Honsel-Group is one of the **leading developers** of RIFBOLT® blind rivet bolts.

The high strength and laser welded versions is only one example of innovative engineering.

RIFBOLT® blind rivet bolts consist of a sleeve and a screw. The two components are joined together by welding.

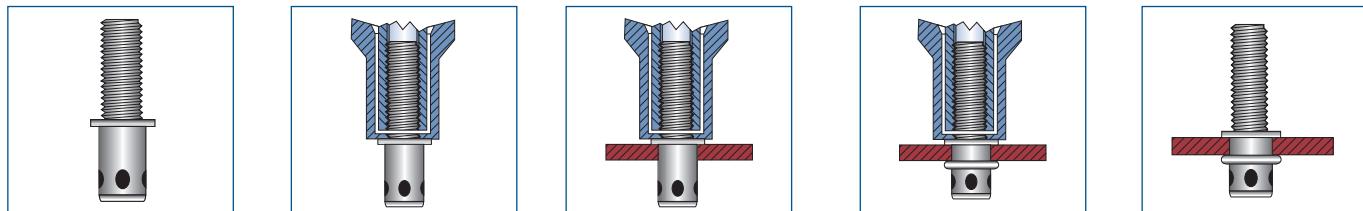
RIFBOLT® blind rivet bolts offer the multiple use of installing a thread into a components for fixing additional parts on it and furthermore joining different components together.

Blind Rivet Bolt

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

The setting device height should be set for this purpose such that the closing bead forms at the welding points. A greater height can lead to breakage of the weld points and thus to failure of the **RIFBOLT®**.

SETTING PROCESS



1. RIFBOLT®-
Blind rivet bolt

2. Screwing into the
device nosepiece

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

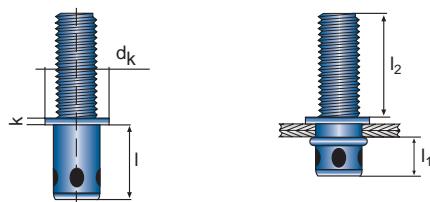
4. Riveting by tightening

5. Lowering the blind
rivet bolt - installed
RIFBOLT®

Special Blind Rivet Bolts

Parameter as the length of the screw or the design and size of the head or the shank can be adapted individually according to minimum quantities.





Steel Flat Head Round Shank



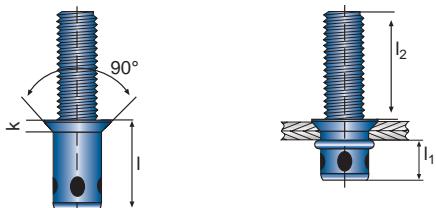
M		D	d _k	I	k	l_1 max.	l_2	No.	
M4	0,3 – 2,0	5,5	8,0	8,5	0,5	5,0	10,0	10.880.042.010	500
	2,0 – 3,0						15,0	10.880.042.015	
							10,0	10.880.043.010	
							15,0	10.880.043.015	

↶ 4 Nm → 7000 N ↓ 5000 N

M5	0,5 – 2,0			9,4		10,0	10.880.052.010		
	6,6	9,0	0,8	6,0		15,0	10.880.052.015	500	
						10,0	10.880.053.510		
						15,0	10.880.053.515		

↶ 6 Nm → 9500 N ↓ 8000 N

l_2 = length of the screw before setting



M		D	I	k	l_1 max.	l_2	No.	
M4	1,5 – 2,4	5,5	9,0	1,1	5,0	10,0	10.881.042.610	500
						15,0	10.881.042.615	

↶ 4 Nm → 7000 N ↓ 5000 N

M5	1,5 – 2,9	6,6	10,5	1,1	6,0	10,0	10.881.053.110		
						15,0	10.881.053.115		

↶ 6 Nm → 9500 N ↓ 8000 N

l_2 = length of the screw before setting

Additional versions on request.

M		D	d _k	I	k	l_1 max.	l_2	No.	
M6	0,5 – 2,5	7,8	10,0	10,9	1,0	7,0	10,0	10.880.062.510	500
	2,5 – 4,0						15,0	10.880.062.515	
							10,0	10.880.064.010	
							15,0	10.880.064.015	

↶ 11 Nm → 12000 N ↓ 9500 N

M8	1,0 – 3,0			14,0			15,0	10.880.083.015	
	3,0 – 5,0	9,9	120	16,0	1,5	9,0	20,0	10.880.083.020	250
							15,0	10.880.085.015	

↶ 24 Nm → 23500 N ↓ 12000 N

M		D	I	k	l_1 max.	l_2	No.	
M6	1,5 – 3,4	7,8	12,0	1,1	7,0	10,0	10.881.063.610	500
						15,0	10.881.063.615	

↶ 11 Nm → 12000 N ↓ 9500 N

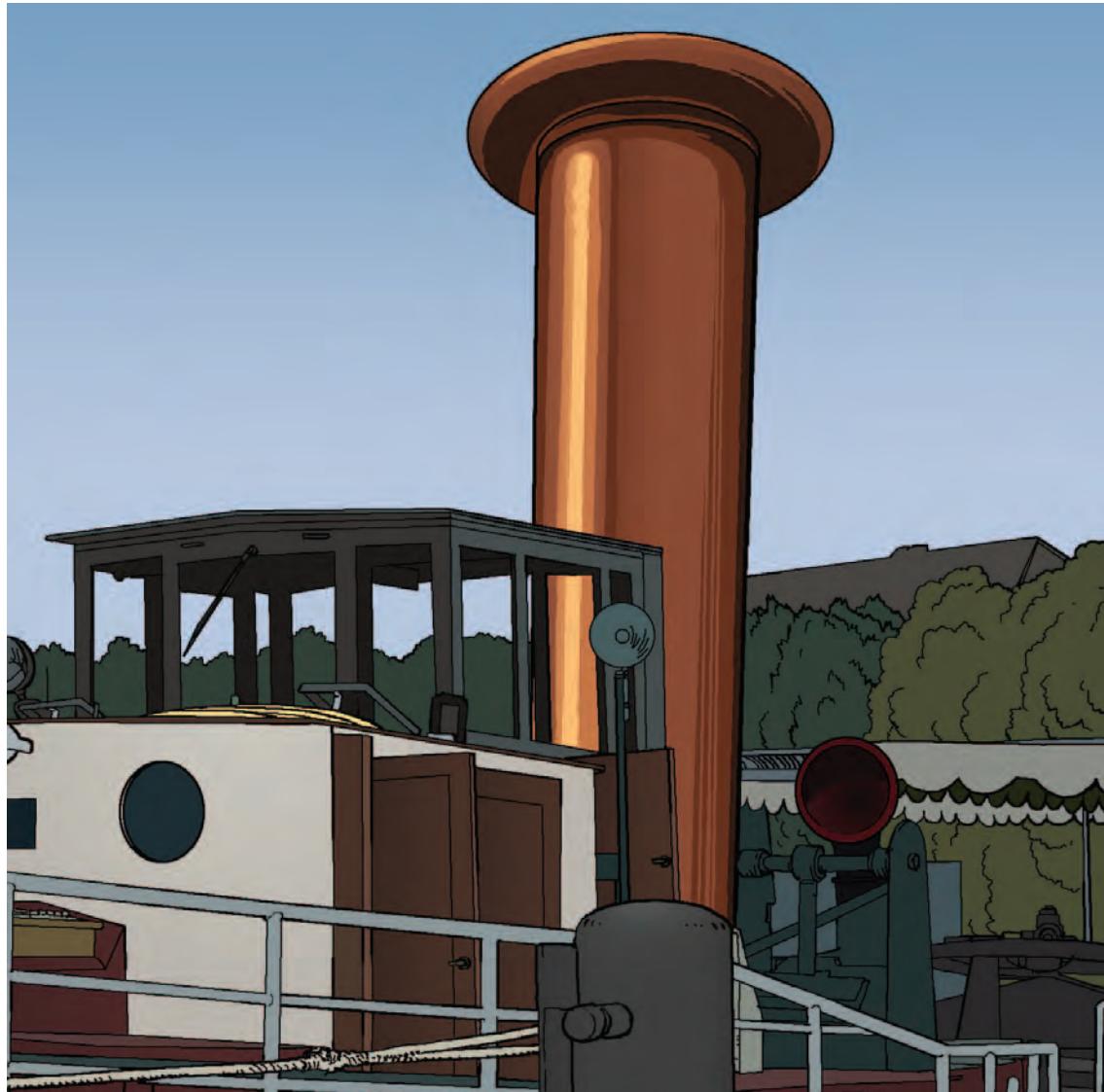
M8	1,5 – 3,9	9,9	15,0	1,2	9,0	15,0	10.881.084.115		
						20,0	10.881.084.120		200

↶ 24 Nm → 23500 N ↓ 12000 N

Property class of the screw: 8.8







i

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

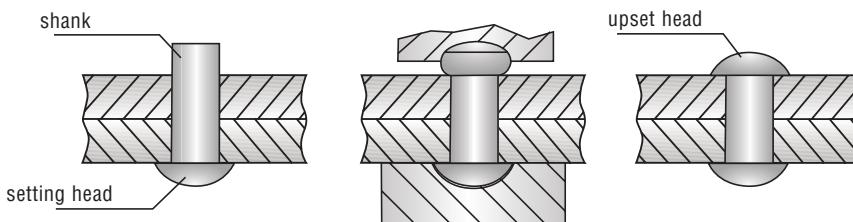
The connection is realised by forming the shank with axial pressure on its end.

The manufacture of all types mentioned on
► page 93 is possible from aluminium, steel,
copper, brass and stainless steel in general.

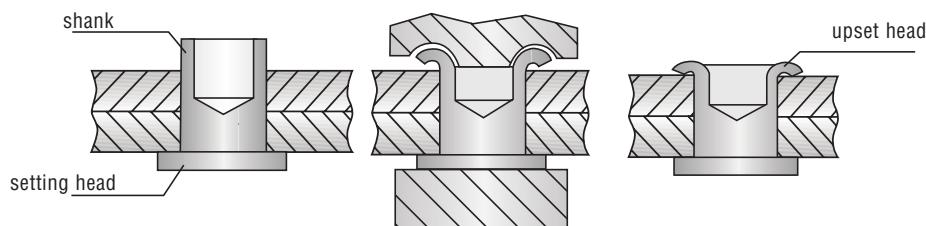
VVG carries a comprehensive stock range
– **even for smaller requirements**.
Please ask for current availabilities or possi-
bilities of individual fabrications.

There are three different basic types:

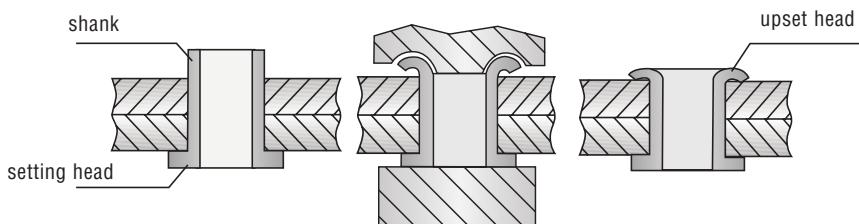
SOLID RIVETS - with solid shank



SEMI-TUBULAR RIVETS - shank with partial bore hole



TUBULAR RIVETS - shank with persistent bore hole

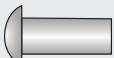
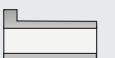


► Rivetting dies for manual handling on [page 124](#).

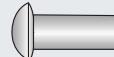
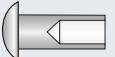
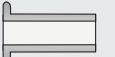
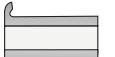
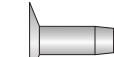
 Please ask for further possibilities of processing methods.



FROM STOCK

Solid Rivets	Semi-Tubular Rivets	Tubular Rivets
DIN 660 Round head rivet Aluminium and steel 	DIN 7338 B Steel and copper 	DIN 7338 C 1 Steel and copper 
DIN 661 Countersunk rivet Aluminium and steel 	 Available from stock / within short time	

ON REQUEST

Solid Rivets	Semi-Tubular Rivets	Tubular Rivets
DIN 662 Raised head rivet 	DIN 6791 	DIN 7340 A 
DIN 7338 A Cylinder head rivet 	DIN 6792 	DIN 7340 B 
DIN 674 Truss head rivet 		
DIN 675 Beltrivet 	 On request with minimum quantity.	

 **Producible sizes**

Shank-ø 1 - 12 mm Shank-ø 2 - 10 mm
 Max. lenght of shank 100 mm Max. lenght of shank 60 mm

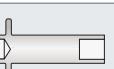
DIN 7338 C 1

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

DIN 7340

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

SPECIAL PARTS

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

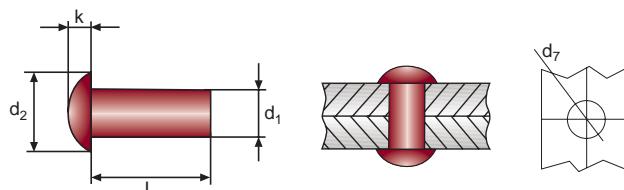
► Information about grip ranges and excess lengths of the shank on [page 98](#).





4 1

Industrial Rivet DIN 660

Aluminium
Solid Rivet
Round Head


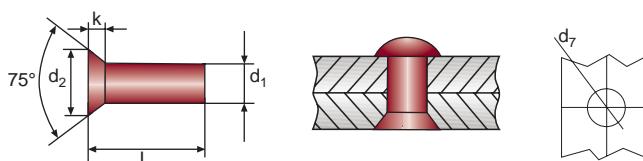
d ₁	L	d ₇	d ₂	k	No.	
3,0	5,0	3,1 + 0,12	5,2	1,8	10.003.030.050	2000
	6,0				10.003.030.060	2000
	8,0				10.003.030.080	2000
	10,0				10.003.030.100	2000
	12,0				10.003.030.120	1000
	16,0				10.003.030.160	1000
	20,0				10.003.030.200	1000
	25,0				10.003.030.250	1000
4,0	6,0	4,2 + 0,12	7,0	2,4	10.003.040.060	1000
	8,0				10.003.040.080	1000
	10,0				10.003.040.100	1000
	12,0				10.003.040.120	1000
	16,0				10.003.040.160	1000
	18,0				10.003.040.180	1000
	20,0				10.003.040.200	1000
	22,0				10.003.040.220	1000
	25,0				10.003.040.250	1000
	30,0				10.003.040.300	1000

DIN 660/661

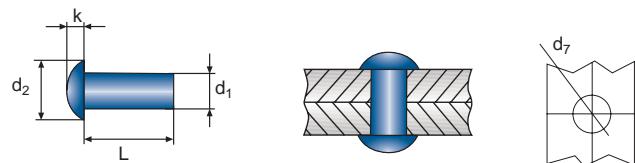


4 1

Industrial Rivet DIN 661

Aluminium
Solid Rivet
Countersunk Head


d ₁	L	d ₇	d ₂	k	No.	
3,0	5,0	3,1 + 0,12	5,2	1,4	10.023.030.050	2000
	6,0				10.023.030.060	2000
	8,0				10.023.030.080	2000
	10,0				10.023.030.100	2000
	12,0				10.023.030.120	1000
	16,0				10.023.030.160	1000
	20,0				10.023.030.200	1000
	25,0				10.023.030.250	1000
4,0	6,0	4,2 + 0,12	7,0	2,0	10.023.040.060	1000
	8,0				10.023.040.080	1000
	10,0				10.023.040.100	1000
	12,0				10.023.040.120	1000
	16,0				10.023.040.160	1000
	20,0				10.023.040.200	1000
	25,0				10.023.040.250	1000



**Steel
Solid Rivet
Round Head**



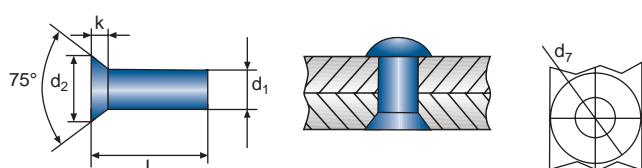
d ₁	L	d ₇	d ₂	k	No.	
3,0	5,0	3,1 + 0,12	5,2	1,8	10.000.030.050	2000
	6,0				10.000.030.060	2000
	8,0				10.000.030.080	2000
	10,0				10.000.030.100	2000
	12,0				10.000.030.120	1000
	16,0				10.000.030.160	1000
	20,0				10.000.030.200	1000
4,0	6,0	4,2 + 0,12	7,0	2,4	10.000.040.060	1000
	8,0				10.000.040.080	1000
	10,0				10.000.040.100	1000
	12,0				10.000.040.120	1000
	16,0				10.000.040.160	1000
	18,0				10.000.040.180	1000
	20,0				10.000.040.200	1000

d ₁	L	d ₇	d ₂	k	No.	
5,0	6,0	5,2 + 0,12	8,8	3,0	10.000.050.060	1000
	8,0				10.000.050.080	1000
	10,0				10.000.050.100	1000
	12,0				10.000.050.120	1000
	16,0				10.000.050.160	1000
	20,0				10.000.050.200	1000
	25,0				10.000.050.250	500

d ₁	L	d ₇	d ₂	k	No.	
6,0	8,0	6,3 + 0,15	10,5	3,6	10.000.060.080	1000
	10,0				10.000.060.100	1000
	12,0				10.000.060.120	500
	16,0				10.000.060.160	500
	20,0				10.000.060.200	500
	25,0				10.000.060.250	500
	30,0				10.000.060.300	250

! 8 mm on request

Industrial Rivet DIN 661



**Steel
Solid Rivet
Countersunk Head**



d ₁	L	d ₇	d ₂	k	No.	
3,0	5,0	3,1 + 0,12	5,2	1,4	10.020.030.050	2000
	6,0				10.020.030.060	2000
	8,0				10.020.030.080	2000
	10,0				10.020.030.100	2000
	12,0				10.020.030.120	1000
	16,0				10.020.030.160	1000
	20,0				10.020.030.200	1000
4,0	6,0	4,2 + 0,12	7,0	2,0	10.020.040.060	1000
	8,0				10.020.040.080	1000
	10,0				10.020.040.100	1000
	12,0				10.020.040.120	1000
	16,0				10.020.040.160	1000
	20,0				10.020.040.200	1000

d ₁	L	d ₇	d ₂	k	No.	
5,0	8,0	5,2 + 0,12	8,8	2,5	10.020.050.080	1000
	10,0				10.020.050.100	1000
	12,0				10.020.050.120	1000
	16,0				10.020.050.160	1000
	20,0				10.020.050.200	1000
	25,0				10.020.050.250	500

d ₁	L	d ₇	d ₂	k	No.	
6,0	10,0	6,3 + 0,15	10,5	3,0	10.020.060.100	1000
	12,0				10.020.060.120	500
	16,0				10.020.060.160	500
	20,0				10.020.060.200	500
	22,0				10.020.060.220	500
	25,0				10.020.060.250	500
	28,0				10.020.060.280	250

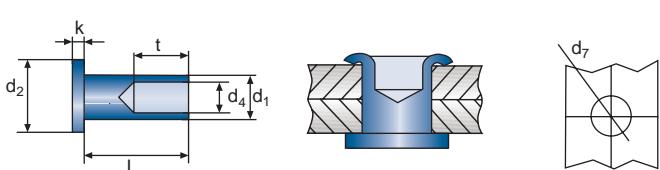
! 8 mm on request.



4 2

Industrial Rivet DIN 7338 B

Steel

Semi-Tubular Rivet
Cylinder Head

d_1	L	d_7	d_4	d_2	k	t	No.	
4,0	7,0	4,2 $+0,12$	2,7	7,5	1,0	4,0	10.160.040.070	1000
	8,0					10,0	10.160.040.080	1000
	10,0					5,0	10.160.040.100	1000
	12,0						10.160.040.120	1000
5,0	10,0	5,2 $+0,12$	3,5	9,5	1,0	6,0	10.160.050.100	1000
	12,0						10.160.050.120	1000

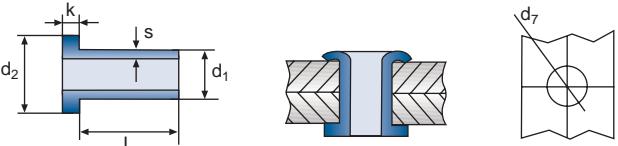
Packed in bags of 100 pcs.

DIN 7338 B
DIN 7338 C 1

4 2

Industrial Rivet 7338 C 1

Steel

Tubular Rivet
Cylinder Head

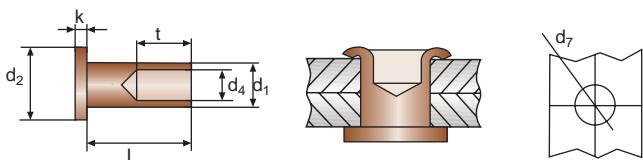
d_1	L	d_7	d_2	s	k	No.	
4,0	6,0	4,2 $+0,12$	7,5	0,5	1,0	10.180.040.060	1000
	8,0					10.180.040.080	1000
	10,0					10.180.040.100	1000
	12,0					10.180.040.120	1000
	15,0					10.180.040.150	1000
	20,0					10.180.040.200	1000
5,0	8,0	5,2 $+0,12$	9,5	0,5	1,0	10.180.050.080	1000
	10,0					10.180.050.100	1000
	12,0					10.180.050.120	1000
	15,0					10.180.050.150	1000

Packed in bags of 100 pcs.

Industrial Rivet DIN 7338 B

4

3



**Copper
Semi-Tubular
Cylinder Head**



d ₁	L	d ₇	d ₄	d ₂	k	t	No.	Box
3,0	4,0	3,1 + 0,12	1,7	5,5	0,8	4,0	10.161.030.040	1000
	5,0						10.161.030.050	1000
	6,0						10.161.030.060	1000
	8,0						10.161.030.080	1000
	10,0						10.161.030.100	1000
	12,0						10.161.030.120	1000
	18,0						10.161.030.180	1000
	4,0						10.161.040.060	1000
4,0	6,0	4,2 + 0,12	2,7	7,5	1,0	5,0	10.161.040.080	1000
	8,0						10.161.040.100	1000
	10,0						10.161.040.120	1000
	12,0						10.161.040.150	1000
	15,0							
5,0	8,0	5,2 + 0,12	3,5	9,5	1,0	6,0	10.161.050.080	1000
	10,0						10.161.050.100	1000
	12,0						10.161.050.120	1000
	15,0						10.161.050.150	1000
	20,0						10.161.050.200	1000

d ₁	L	d ₇	d ₄	d ₂	k	t	No.	Box
6,0	10,0	6,3 + 0,15	4,2	11,5	1,2	10,0	10.161.060.100	1000
	12,0						10.161.060.120	1000
	15,0						10.161.060.150	1000
	18,0						10.161.060.180	1000
	20,0						10.161.060.200	1000
	22,0						10.161.060.220	1000
	25,0						10.161.060.250	1000
	30,0						10.161.060.300	1000
8,0	15,0	8,4 + 0,15	6,0	15,5	1,2	10,0	10.161.080.150	1000
	18,0						10.161.080.180	1000
	20,0						10.161.080.200	1000
	22,0						10.161.080.220	1000
	25,0						10.161.080.250	1000
10,0	16,0	10,5 + 0,15	7,5	18,0	1,2	12,0	10.161.100.160	1000
	18,0						10.161.100.180	1000
	20,0						10.161.100.200	1000

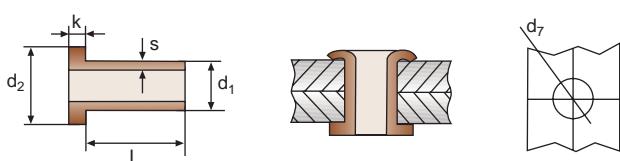
Packed in bags of 100 pcs.

DIN 7338 B
DIN 7338 C 1

Industrial Rivet DIN 7338 C 1

4

3



**Copper
Tubular Rivet
Cylinder Head**

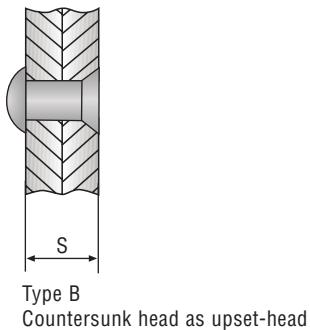
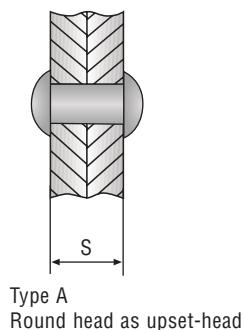
d ₁	L	d ₇	d ₂	s	k	Nr.	Box
3,0	6,0	3,1 + 0,12	5,5	0,5	0,8	10.181.030.060	1000
	8,0					10.181.030.080	1000
	10,0					10.181.030.100	1000
4,0	6,0	4,2 + 0,12	7,5	0,5	1,0	10.181.040.060	1000
	8,0					10.181.040.080	1000
	10,0					10.181.040.100	1000
	12,0					10.181.040.120	1000
	15,0					10.181.040.150	1000
5,0	8,0	5,2 + 0,12	9,5	0,5	1,0	10.181.050.080	1000
	10,0					10.181.050.100	1000
	12,0					10.181.050.120	1000
	15,0					10.181.050.150	1000

d ₁	L	d ₇	d ₂	s	k	No.	Box
6,0	15,0	6,3 + 0,15	11,5	0,75	1,2	10.181.060.150	1000
	18,0					10.181.060.180	1000
	25,0					10.181.060.250	1000
8,0	12,0	8,4 + 0,15	15,5	1,2	1,2	10.181.080.120	1000
	15,0					10.181.080.150	1000
	18,0					10.181.080.180	1000
	20,0					10.181.080.200	1000
	23,0					10.181.080.230	1000
	25,0					10.181.080.250	1000
10,0	18,0	10,5 + 0,12	18,0	1,2	1,2	10.181.100.180	1000
	20,0					10.181.100.200	1000

Packed in bags of 100 pcs.

DIN 660

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

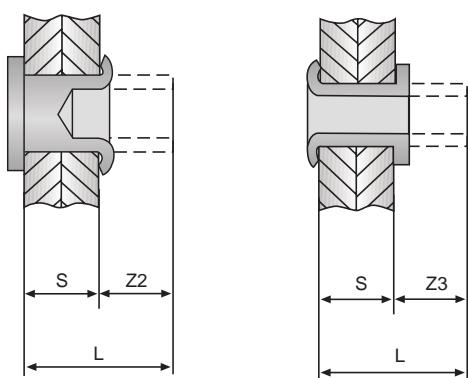


Nominal length (mm)	$\varnothing 3\text{ mm}$		$\varnothing 4\text{ mm}$		$\varnothing 5\text{ mm}$		$\varnothing 6\text{ mm}$		$\varnothing 8\text{ mm}$	
	A	B	A	B	A	B	A	B	A	B
5	1,5	3	-	2	-	1,5	-	-	-	-
6	2	4	1	3	-	2,5	-	2	-	-
8	4	5,5	3	5	2	4,5	0,5	4	-	3
10	5,5	7,5	4,5	7	4	6,5	2,5	6	-	5
12	7,5	9	6	9	5,5	8,5	4,5	8	2,5	7
14	9,5	10,5	7,5	10	7	10	6,5	9,5	4	8,5
16	11	12	9	11	9	11,5	8	11	6	10
18	13	14	11	13	11	13	9,5	13	8	12
20	14	16	13	15	12	15	11	15	9,5	14
22	16	18	15	17	14	17	13	17	11	15
25	18	20	17	19	17	19	16	19	14	18
28	21	23	20	22	19	22	18	22	16	21
30	23	25	22	24	21	24	20	23	18	22
32			23	26	23	26	22	25	20	24
35			26	28	25	28	24	28	22	27
38			29	31	28	31	27	30	25	29
40			30	32	30	32	28	32	27	31

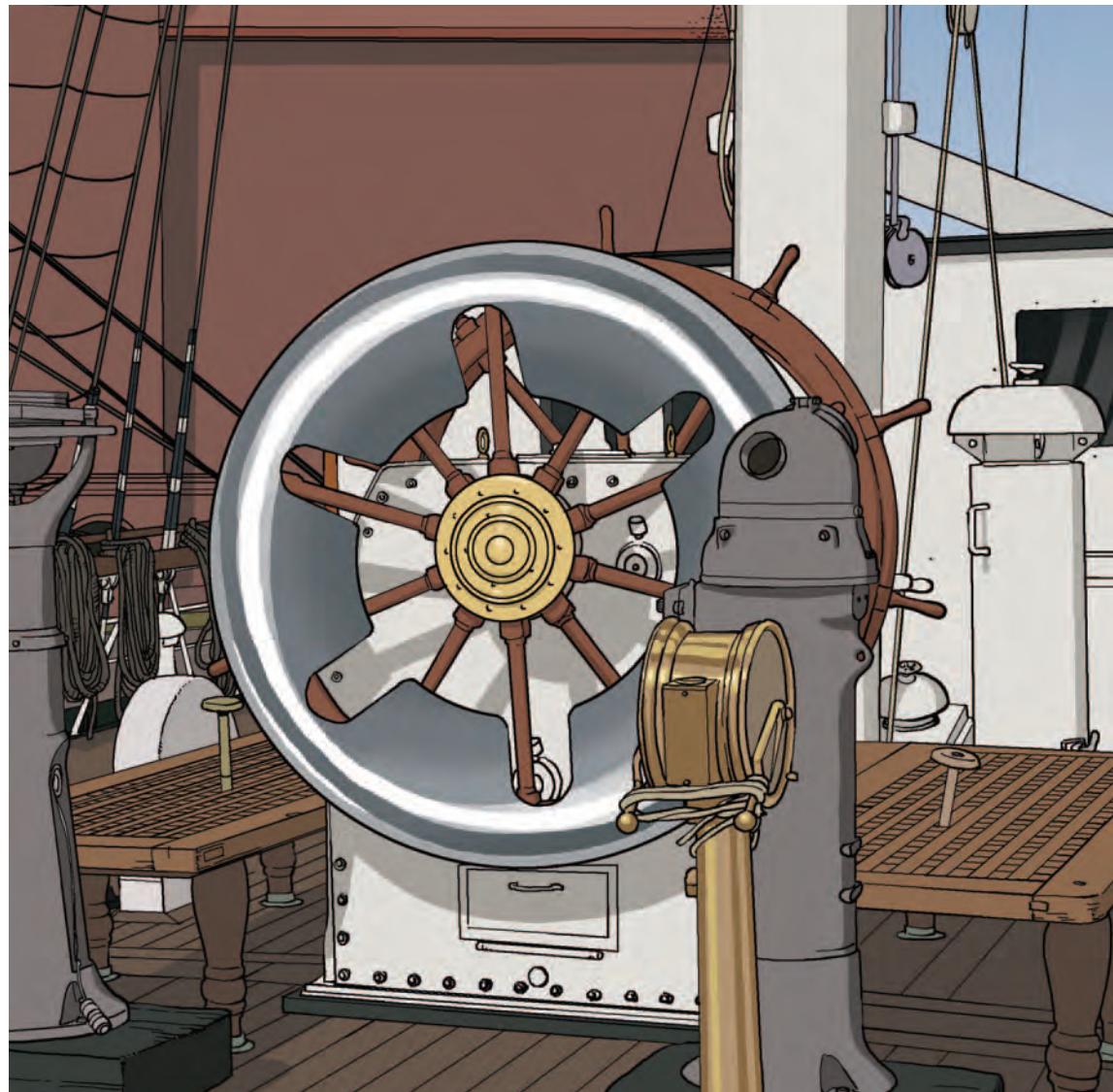
Individual tests recommended!

**DIN 7338**

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



Nominal diameter d1 (mm)	Excess length Z2 (mm)	Excess length Z3 (mm)
3	approx. 2	approx. 2,5
4	approx. 2	approx. 3
5	approx. 2,5	approx. 3,5
6	up to L= 20 mm ca. 3 from L= 22 mm ca. 3,5	approx. 4
8	up to L= 20 mm ca. 4 from L= 22 mm ca. 4,5	approx. 4,5

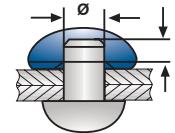
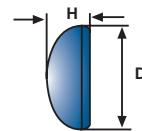


Axial clamps are a simple, safe and fast solution to realize hard to detach axial connections.
They can be used with axials, tubes, wires, cones, rivets, screws or pins.

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



**Steel
Nickel Plated Cap
Zinc Plated Ring**



Ø	D	H	I	No.	
3,0	12,0	4,3	2,5	10.831.030.120	1000
4,0	12,0	4,3	2,5	10.831.040.120	1000
5,0	12,0	4,3	2,5	10.833.050.120	1000
6,0	16,0	5,6	4,0	10.833.060.160	1000
7,0	16,0	5,6	4,0	10.833.070.160	1000

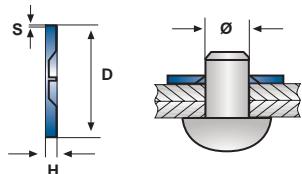
Ø	D	H	I	No.	
8,0	16,0	5,6	4,0	10.833.080.160	1000
9,0	20,0	7,4	4,0	10.836.090.200	1000
10,0	20,0	7,4	4,0	10.836.100.200	500
12,0	27,0	9,4	4,5	10.837.120.270	500
15,0	30,0	9,6	5,0	10.839.150.300	500



- Available on request:
- painted axial clamps (RAL)
 - intermediate sizes up to 25 mm
 - additional external diameters
 - different surfaces (e.g. DELTA-Tone)



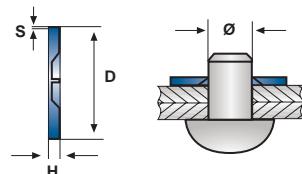
Steel Browned



Ø	D	H	S	No.	
3,0	11,0	1,3	0,2	10.822.030.110/1*	1000
4,0	11,0	1,3	0,2	10.822.040.110/1*	1000
5,0	11,0	1,3	0,2	10.822.050.110/1*	1000
6,0	15,0	1,6	0,25	10.823.060.150/1*	1000
7,0	15,0	1,6	0,25	10.823.070.150/1*	1000
8,0	15,0	1,6	0,25	10.823.080.150/1	1000

Ø	D	H	S	No.	
9,0	18,0	2,1	0,3	10.824.090.180/1	1000
10,0	18,0	2,1	0,3	10.824.100.180/1	1000
12,0	25,0	3,0	0,4	10.826.120.250/1	1000
15,0	28,0	2,8	0,4	10.827.150.280/1	500
20,0	36,0	3,0	0,4	10.829.200.360/1	500

*available in stainless steel

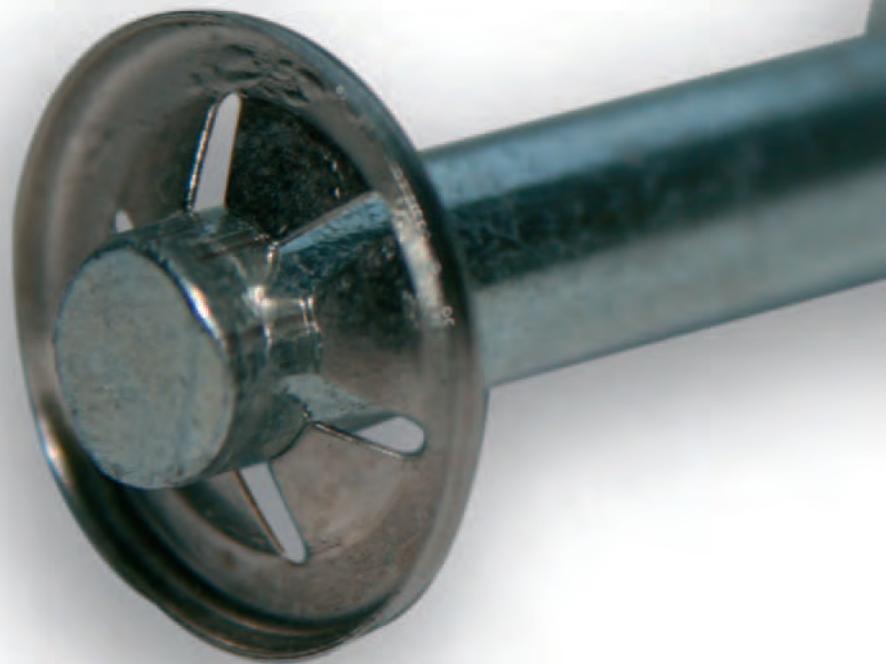


Steel Zinc Plated

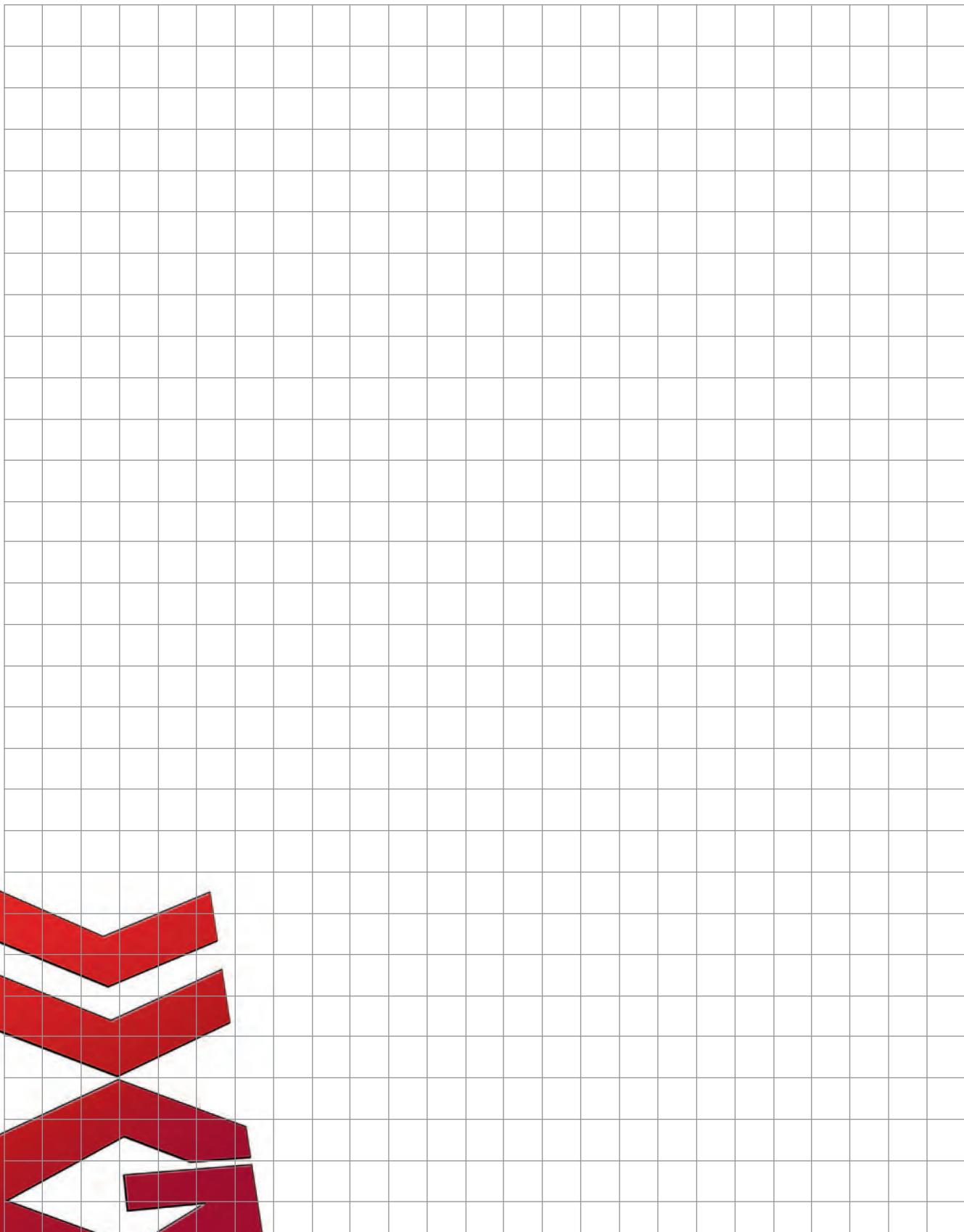
Ø	D	H	S	No.	
3,0	10,9	1,3	0,2	10.822.030.110/2	1000
4,0	10,9	1,3	0,2	10.822.040.110/2	1000
5,0	10,9	1,3	0,2	10.822.050.110/2	1000
6,0	15,0	1,6	0,25	10.823.060.150/2	1000

Ø	D	H	S	No.	
7,0	15,0	1,6	0,25	10.823.070.150/2	1000
8,0	15,0	1,6	0,25	10.823.080.150/2	1000
9,0	18,0	2,1	0,3	10.824.090.180/2	1000
10,0	18,0	2,1	0,3	10.824.100.180/2	1000

- ▶ • manual tool on page 124
- MultiSYS assortment on page 105



YOUR NOTES





i

Our robust **small packs** with perforation and different products from all groups of the VVG range as well as the **flexible and popular Kombi- and MultiSYS assortments** offer a **great variety** of resale activities.

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

No problem – ask our sales team for more details!

6 1 Assortments

6 2 Small Packs -Blind Rivets-

6 3 Small Packs -Blind Rivet Nuts-

DH= Dome Head **CH**=Countersunk Head **LH** =Large Dome Head **SCH**=Small Countersunk Head

KombiSYS with Blind Rivets and Hand Rivet Tool



35.044.700.000 **Blind Rivets Aluminium/Steel DH with BZ 44**

100 pcs.: 3x6 / 3x8 / 3x10 / 3x12 / 4x6 / 4x8 / 4x10 /
4x12;
1 pc. hand tool BZ 44 with additional clamping jaws and
drills 3,1 / 4,1

35.002.708.000 **Blind Rivets Stainless Steel A2 DH with BZ 2**

100 pcs.: 3x6 / 3x8 / 3x10 / 3x12 / 4x6 / 4x8 / 4x10 /
4x12;
1 pc. hand tool BZ 2 with additional clamping jaws and drills
3,1 / 4,1

35.044.906.000 **Blind Rivet Assortment "Roofer" with BZ 44**

CERTO sealed blind rivet **copper/ stainless steel** 200
pcs.: 3,2x6,5; 100 pcs.: 3,2x8 / 3,2x9,5 / 4x8 / 4x10;
PLUMPER **steel/steel** 100 pcs.: 3,2x6,3 / 3,2x8;
1 pc. hand tool BZ 44 with additional clamping jaws and
drills 3,1 / 4,1

35.002.600.000 **OPTO® Multigrip Blind Rivets Aluminium/Steel DH with BZ 2**

100 pcs.: 3,2x6,8 / 3x9,5 / 4x9,5 / 4x12,7 /
4,8x10,3 / 4,8x15,1
1 pc. hand tool BZ 44 with additional clamping jaws and
drills 3,1 / 4,1

35.002.900.000 **CERTO® Sealed Blind Rivets Aluminium/Steel DH with BZ 2**

100 pcs.: 3,2x6,5 / 3,2x8 / 3,2x9,5 / 4x8 / 4x9,5 /
4x11; 50 pcs.: 4,8x8,5 / 4,8x9,5
1 pc. hand tool BZ 2 with additional clamping jaws and
drills 3,1 / 4,1 / 4,9

MultiSYS with Blind Rivets



35.700.760.770 **Blind Rivets Aluminium**

Aluminium/steel
DH 100 pcs.: 3x6 / 3x8 / 3x10 / 4x6 / 4x8 / 4x10, 75
pcs.: 4x12
CH 100 pcs.: 4x6 / 4x8 / 4x10
LH 50 pcs.: 5x8 K14, 25 pcs.: 5x10 K14 /
5x12 K14 / 5x10 K16 / 5x16 K16
drills 3,1 / 4,1 / 5,1

35.701.710.716

CH 100 pcs.: 4x8 / 4x10
LH 50 pcs.: 4x12 K11,5 / 4x14 K11,5 / 4x16 K11,5;
drills 3,1 / 4,1 / 5,1

Blind Rivets "Light Weight Construction"

Aluminium/aluminium DH 100 pcs.: 4x6 / 4x8 / 4x10;
75 pcs.: 4x12
ARCO® body bound blind rivet **aluminium/steel** DH
100 pcs.: 3,2x10; 75 pcs.: 3,2x16 / 3,2x18 / 4x10 /
4x16 / 4x18; 50 pcs.: 4,8x10 / 4,8x15; 25 pcs.: 4,8x21
/ 4,8x26
Split blind rivets "standard" **aluminium/aluminium**
DH 25 pcs.: 4x13,6 / 4x18,8

35.707.000.000 **Blind Rivets Steel**

Steel / steel
DH 100 pcs.: 3x6 / 3x8 / 3x10 / 4x6 / 4x8 / 4x10
75 pcs.: 4x12 / 5x8 / 5x10; 50 pcs.: 5x12 / 5x16;
CH 100 pcs.: 4x6 / 4x8 / 4x10; 75 pcs.: 4x12;
drills 3,1 / 4,1 / 5,1

35.742.762.000

Blind Rivets "Frontage"

Aluminium/stainless steel LH
50 pcs.: 5x8 K11 / 5x10 K11 / 5x12 K11 / 5x14 K11 /
5x16 K11 / 5x18 K11 / 5x10 K14 / 5x12 K14; 25 pcs.:
5x20 K11 / 5x14 K14 / 5x16 K14 / 5x18 K14 / 5x20
K14 / 5x25 K14

35.708.758.000 **Blind Rivets Stainless Steel**

Stainless steel / stainless steel
DH 100 pcs.: 3x6 / 3x8 / 3x10 / 4x6 / 4x8 / 4x10 / 4x12;
75 pcs.: 5x8 / 5x10; 50 pcs.: 5x12

35.720.000.000

Blind Rivets "Maritime"

Nickel-copper/ stainless steel DH
100 pcs.: 3,2x6 / 3,2x8 / 3,2x10 / 4x6 / 4x8 / 4x10 /
4x12; 50 pcs.: 4,8x8 / 4,8x10 / 4,8x12 / 4,8x18; 30
pcs.: 6,4x12 / 6,4x16 / 6,4x18;
drills 3,1 / 4,1 / 4,9 / 6,5

MultiSYS with Blind Rivet Nuts

35.850.851.000 **Blind Rivet Nuts Aluminium**

DH 100 pcs.: M3-20 / M4-30 / M5-30;
50 pcs.: M6-30; 25 pcs.: M8-30 / M10-30
CH 100 pcs.: M4-35 / M5-40; 50 pcs.: M6-45;
25 pcs.: M8-45 / M10-30, 10 pcs.: M12-45
SCH 100 pcs.: M4-20 / M5-30 / M6-30,
50 pcs.: M8-30

35.842.843.845

Blind Rivet Nuts Steel

DH 100 pcs.: M4-30/M5-30/M6-30; 50 pcs.: M8-30
SCH 100 pcs.: M4-20 / M5-30 / M6-30,
50 pcs.: M8-40
CH 100 pcs.: M4-35 / M 5-40; 50 pcs.: M6-45/M8-45



35.848.865.849 **Blind Rivet Nuts Stainless Steel**
DH 100 pcs.: M3-20 / M4-25 / M5-30;
50 pcs.: M6-30 / M8-30;
CH 100 pcs.: M4-40 / M5-45,
50 pcs.: M6-45; 25 pcs.: M8-45;
SCH 100 pcs.: M3-20 / M4-25 / M5-30;
50 pcs.: M6-30 / M8-30

35.850.852.858 **Blind Rivet Nuts Aluminium/Steel/
Stainless Steel**
Aluminium DH 100 pcs.: M4-30 / M5-30 /
M6-30; 50 pcs.: M8-30;
Steel DH 100 pcs.: M4-30 / M5-30 / M6-30;
50 pcs.: M8-30
Stainless steel DH 100 pcs.: M4-25 / M5-30;
50 pcs.: M6-30; 25 pcs.: M8-30

35.894.895.000 **OPTO® Multigrip Blind Rivet Nuts**
Aluminium DH 100 pcs.: M4-60 / M5-60;
50 pcs.: M6-60; 25 pcs.: M8-75
Aluminium CH 100 pcs.: M4-60 / M5-60;
50 pcs.: M6-60; 25 pcs.: M8-75
Steel DH 100 pcs.: M4-60 / M5-60;
50 pcs.: M6-60; 25 pcs.: M8-75
Steel CH 100 pcs.: M4-60 / M5-60;
50 pcs.: M6-60; 25 pcs.: M8-75



Multisys with Blind Rivets, Blind Rivet Nuts and Blind Rivet Bolts

35.702.850.851 **Aluminium-Mix**
Blind rivets **DH**
Aluminium/steel
100 pcs.: 3x8 / 3x10 / 4x6 / 4x8 / 4x10;
Aluminium/stainless steel
100 pcs.: 3,2x6 / 3,2x8 / 3,2x10;
Aluminium/stainless steel
50 pcs.: 4,8x10 / 4,8x12
Blind rivet nuts **aluminium**
DH 100 pcs.: M4-30 / M5-30; 50 pcs.: M6-30;
CH 100 pcs.: M4-35 / M5-40; 50 pcs.: M6-45



35.600.894.895 **OPTO®-Mix (Multigrip)**
Blind rivets **DH**
Aluminium/steel
100 pcs.: 3,2x8 / 3,2x9,5 / 4x6,8 / 4x9,5,
75 pcs.: 4x12,7, 50 pcs.: 4,8x10,3 / 4,8x15,1
Steel/steel DH
100 pcs.: 3,2x9 / 4x11; 50 pcs.: 4,8x10,3
Blind rivet nuts **DH**
Aluminium 100 pcs.: M4-60/M5-60; 50 pcs.: M6-60
Steel 100 pcs.: M4-60/M5-60; 50 pcs.: M6-60

35.900.854.856 **CERTO®-Mix (sealed)**
Blind rivets
Aluminium/steel
DH 100 pcs.: 3,2x6,5 / 3,2x8 / 4x8 / 4x9,5 / 4x11
CH 100 pcs.: 4x9,5 / 4x11
Steel/steel
DH 50 pcs.: 4,8x8 / 4,8x9,5 / 4,8x12
Blind rivet nuts **FK**
Aluminium 100 pcs.: M4-20; 50 pcs.: M5-30;
25 pcs.: M6-30
Steel 100 pcs.: M4-40; 50 pcs.: M5-30;
25 pcs.: M6-30

35.707.842.880 **Steel-Mix**
Blind rivets **steel/steel**
DH 100 pcs.: 4x6 / 4x8 / 4x10; 75 pcs.: 5x8 / 5x10;
CH 100 pcs.: 4x6 / 4x8 / 4x10
Blind rivet nuts **steel**
DH 100 pcs.: M4-30 / M5-30, 50 pcs.: M6-30;
SCH 100 pcs.: M4-20 / M5-30, 50 pcs.: M6-30
Blind rivet bolts **steel**
DH 100 pcs.: M5x2010; 75 pcs.: M6x2510

35.708.858.859 **Stainless Steel-Mix**
Blind rivets **stainless steel/Stainless steel**
DH 100 pcs.: 3x6 / 3x8 / 4x6 / 4x8 / 4x10;
75 pcs.: 5x8 / 5x10
CH 100 pcs.: 4x8 / 4x10, 75 pcs.: 4x12
Blind rivet nuts **stainless steel**
DH 100 pcs.: M4-25 / M5-30; 50 pcs.: M6-30
CH 100 pcs.: M4-40 / M5-45; 50 pcs.: M6-45

Multisys with Axial Clamps



35.822.000.037 Axial clamp caps **steel nickel plated**
100 pcs.: 4-12; 50 pcs.: 10-20; 50 pcs.: 12-27
Axial clamp rings **steel browned**
200 pcs.: 3-11 / 4-11 / 5-11; 100 pcs.: 6-15 /
7-15 / 9-18; 100 pcs.: 6-16 / 8-16 / 15-28
Axial clamp rings **steel zinc plated**
200 pcs.: 4-11; 100 pcs.: 6-15 / 8-15 / 9-18

Standard Blind Rivet ALFO®**Aluminium / Steel****Dome Head -open-**

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

Standard Blind Rivet ALFO®**Aluminium / Steel****Countersunk Head -open-**

3,0	6,0	2,0 – 4,0	10.700.300.060/31	100
	8,0	3,5 – 6,0	10.700.300.080/31	100
	10,0	5,0 – 7,5	10.700.300.100/31	100

d	I +1		No.	
5,0	8,0	2,5 – 5,0	10.700.050.080/31	100
	10,0	4,0 – 6,5	10.700.050.100/31	100
	12,0	6,0 – 8,0	10.700.050.120/42	50

Standard Blind Rivet ALFO®**Aluminium / Steel****Large Dome Head (K 12) -open-**

4,0	6,0	1,0 – 3,5	10.750.040.060/31	100
	8,0	3,0 – 5,5	10.750.040.080/31	100
	10,0	5,0 – 7,0	10.750.040.100/31	100
	12,0	6,5 – 9,0	10.750.040.120/31	100

4,0	6,0	1,5 – 3,5	10.700.400.060/31	100
	8,0	2,0 – 5,5	10.700.400.080/31	100
	10,0	5,0 – 7,0	10.700.400.100/31	100

Standard Blind Rivet ALFO®**Aluminium / Stainless Steel****Large Dome Head (K 14)****-open-**

5,0	10,0	4,0 – 6,5	10.762.050.100/42	50
	12,0	6,0 – 8,0	10.762.050.120/42	50
	14,0	7,5 – 10,0	10.762.050.140/42	50

**Standard Blind Rivet ALFO®****Steel / Steel****Dome Head -open-**

3,0	6,0	0,5 – 3,5	10.707.030.060/31	100
	8,0	3,0 – 5,5	10.707.030.080/31	100
	10,0	5,0 – 7,0	10.707.030.100/31	100

4,0	6,0	1,0 – 2,5	10.707.040.060/31	100
	8,0	2,5 – 4,5	10.707.040.080/31	100
	10,0	4,0 – 6,5	10.707.040.100/31	100
	12,0	6,0 – 8,5	10.707.040.120/31	100

5,0	8,0	2,5 – 4,5	10.707.050.080/31	100
	10,0	4,0 – 6,5	10.707.050.100/31	100
	12,0	6,0 – 8,5	10.707.050.120/31	100



Standard Blind Rivet ALFO® Stainless Steel / Stainless Steel

Dome Head -open-



d	I_{+1}		No.	
3,0	6,0	0,5 – 3,0	10.708.030.060/31	100
	8,0	3,0 – 5,0	10.708.030.080/31	100
	10,0	5,0 – 7,0	10.708.030.100/31	100

4,0	6,0	1,0 – 2,5	10.708.040.060/31	100
	8,0	2,5 – 4,5	10.708.040.080/31	100
	10,0	4,5 – 6,5	10.708.040.100/31	100
	12,0	6,5 – 8,5	10.708.040.120/31	100

d	I_{+1}		No.	
5,0	8,0	2,0 – 4,0	10.708.050.080/31	100
	10,0	4,0 – 6,0	10.708.050.100/31	100
	12,0	6,0 – 8,0	10.708.050.120/42	50

3,0	6,0	2,0 – 3,5	10.709.030.060/31	100
	8,0	3,0 – 5,5	10.709.030.080/31	100
	10,0	5,0 – 7,0	10.709.030.100/31	100

4,0	6,0	2,0 – 3,5	10.709.040.060/31	100
	8,0	3,0 – 5,5	10.709.040.080/31	100
	10,0	5,0 – 7,0	10.709.040.100/31	100

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

Standard Blind Rivet ALFO® Copper / Bronze

Dome Head -open-



Body-Bound Blind Rivet ARCO® Aluminium / Steel

Dome Head



4,0	10,0	1,5 – 5,0	10.710.040.100/31	100
	16,0	4,0 – 11,0	10.710.040.160/31	100

Sealed Blind Rivet CERTO® Aluminium / Steel

Dome Head -closed-



4,0	8,0	0,5 – 3,5	10.900.040.080/31	100
	9,5	3,0 – 5,0	10.900.040.095/31	100
	11,0	4,5 – 6,5	10.900.040.110/31	100

Multigrip Blind Rivet OPTO® Aluminium / Steel

Dome Head



4,0	9,5	1,2 – 6,4	10.600.040.095/31	100
	12,7	4,0 – 9,5	10.600.040.127/31	100



Aluminium**Flat head****Round Shank -open-****AFM**

M		I	Nr.	
M4	0,5 – 3,0	10,0	10.850.040.300/31	100
M5	0,5 – 3,0	12,0	10.850.050.300/31	100

M		I	Nr.	
M6	0,5 – 3,0	14,5	10.850.060.300/31	100
M8	0,5 – 3,0	17,0	10.850.080.300/42	50

Aluminium**Countersunk Head****Round Shank -open-****ASM**

M4	1,5 - 3,5	11,5	10.851.040.350/31	100
M5	1,5 - 4,0	13,0	10.851.050.400/31	100

M6	1,5 - 4,5	16,0	10.851.060.450/31	100
M8	1,5 - 4,5	18,5	10.851.080.450/42	50



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

Steel**Flat Head****Round Shank -open- knurled****SFM-R**

M4	0,5 – 2,5	9,5	10.842.040.250/31	100
M5	0,5 – 3,0	12,0	10.842.050.300/31	100

M6	0,5 – 3,0	14,5	10.842.060.300/31	100
M8	0,5 – 3,0	16,0	10.842.080.300/42	50

Steel**Countersunk Head****Round Shank -open- knurled****SSM-R**

M4	1,5 – 3,5	11,5	10.845.040.350/31	100
M5	1,5 – 4,0	13,5	10.845.050.400/31	100

M6	1,5 – 4,5	16,0	10.845.060.450/31	100
M8	1,5 – 4,5	19,0	10.845.080.450/42	50

Steel**Small Countersunk Head****Round Shank -open-****UNIVERSAL**

M4	0,5 – 3,0	10,5	10.870.400.000/31	100
M5	0,5 – 3,0	11,5	10.870.500.000/31	100
M6	0,5 – 3,0	13,0	10.870.600.000/31	100



**i**

No hole without a drill,
no riveting without a hole...

7 1

Drills

Useful utilities to expand the function of
blind rivet products in an easy way.

7 2

**Covering Caps
Sealing Rings
Flat Washers**



7

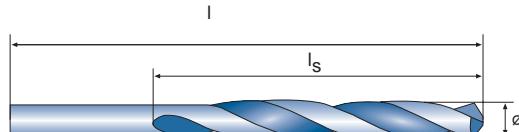
1

Drills

Steel

DIN 338

smoothed



\varnothing	l	l_s	No.	
2,45	57,0	30,0	740.102.050.245	10

3,1	65,0	36,0	740.102.050.310	10
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3,3	65,0	36,0	740.102.050.330	10
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4,1	75,0	43,0	740.102.050.410	10
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4,9	86,0	52,0	740.102.050.490	10
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5,1	86,0	52,0	740.102.050.510	10
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5,5	93,0	57,0	740.102.050.550	10
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6,1	101,0	63,0	740.102.050.610	10
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6,4	101,0	63,0	740.102.050.640	10
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6,5	101,0	63,0	740.102.050.650	10
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7,0	109,0	69,0	740.102.050.700	10
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7,1	109,0	69,0	740.102.050.710	10
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\varnothing	l	l_s	No.	
7,2	109,0	69,0	740.102.050.720	10

8,0	117,0	75,0	740.102.050.800	5
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8,1	117,0	75,0	740.102.050.810	5
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9,1	125,0	81,0	740.102.050.910	5
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9,6	125,0	81,0	740.102.050.960	5
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10,0	133,0	87,0	740.102.051.000	5
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10,6	142,0	94,0	740.102.051.060	5
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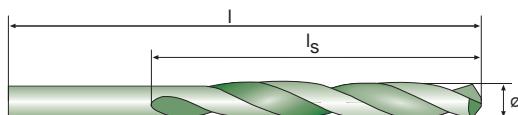
11,1	142,0	94,0	740.102.051.110	5
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12,0	151,0	101,0	740.102.051.200	5
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12,1	151,0	101,0	740.103.051.210	5
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12,7	151,0	101,0	740.102.051.270	5
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13,1	151,0	101,0	740.102.051.310	5
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**Stainless Steel
DIN 338
smoothed**

\varnothing	I	l_s	Nr.	
3,1	65,0	36,0	740.103.050.310	10

3,3	65,0	36,0	740.103.050.330	10
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4,1	75,0	43,0	740.103.050.410	10
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4,9	86,0	52,0	740.103.050.490	10
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5,1	86,0	52,0	740.103.050.510	10
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6,1	101,0	63,0	740.103.050.610	10
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7,0	109,0	69,0	740.103.050.700	10
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\varnothing	I	l_s	Nr.	
7,1	109,0	69,0	740.103.050.710	10

8,0	117,0	75,0	740.103.050.800	5
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9,1	125,0	81,0	740.103.050.910	5
------------	-------	------	-----------------	---

10,0	133,0	87,0	740.103.051.000	5
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11,1	142,0	94,0	740.103.051.110	5
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12,0	151,0	101,0	740.103.051.200	5
-------------	-------	-------	-----------------	---

12,1	151,0	101,0	740.103.051.210	5
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i Order together with your fasteners:
Drills in all current diameters for blind rivets oder blind rivet nuts.

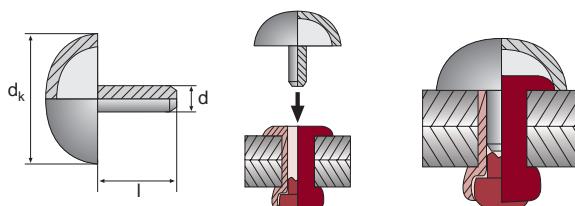
i Smoothed drills guarantee an exact dimensional accuracy for precise drill holes.





Polyethylen

i Unlimited possibilities in terms of colour design for blind rivets.
Especially suitable for blind rivets with large dome head.



dk	d	I	ø rivet	No.	
13,0	3,0	4,0	4,8 - 5,0	19.969.13x.xxx	5000

For blind rivets with head diameter 11 mm

dk	d	I	ø rivet	No.	
15,0	3,0	5,0	4,8 - 5,0	19.969.15x.xxx	5000

For blind rivets with head diameter 14 mm

dk	d	I	ø rivet	No.	
18,0	3,0	7,0	4,8 - 5,0	19.969.18x.xxx	5000

For blind rivets with head diameter 16 mm

i **Minimum order quantity 20.000 pieces.**
Replace the "x" in the item number by the requested RAL number



Flat Washers

Steel Zinc Coated

i Possibility to increase the contact area of the setting head or for demonstration- or test purposes.



outer-ø	thick-ness	inner-ø	No.	
20,0	1,5	3,1	18.001.200.031	4000
	1,5	3,3	18.001.200.033	4000
	1,5	4,1	18.001.200.041	4000
	1,5	4,9	18.001.200.049	4000

outer-ø	thick-ness	inner-ø	No.	
20,0	1,5	5,1	18.001.200.051	4000
	1,5	6,1	18.001.200.061	4000
	1,5	7,1	18.001.200.071	6000
	1,5	9,1	18.001.200.091	6000

i Flat washers with hexagonal holes available from stock on request.



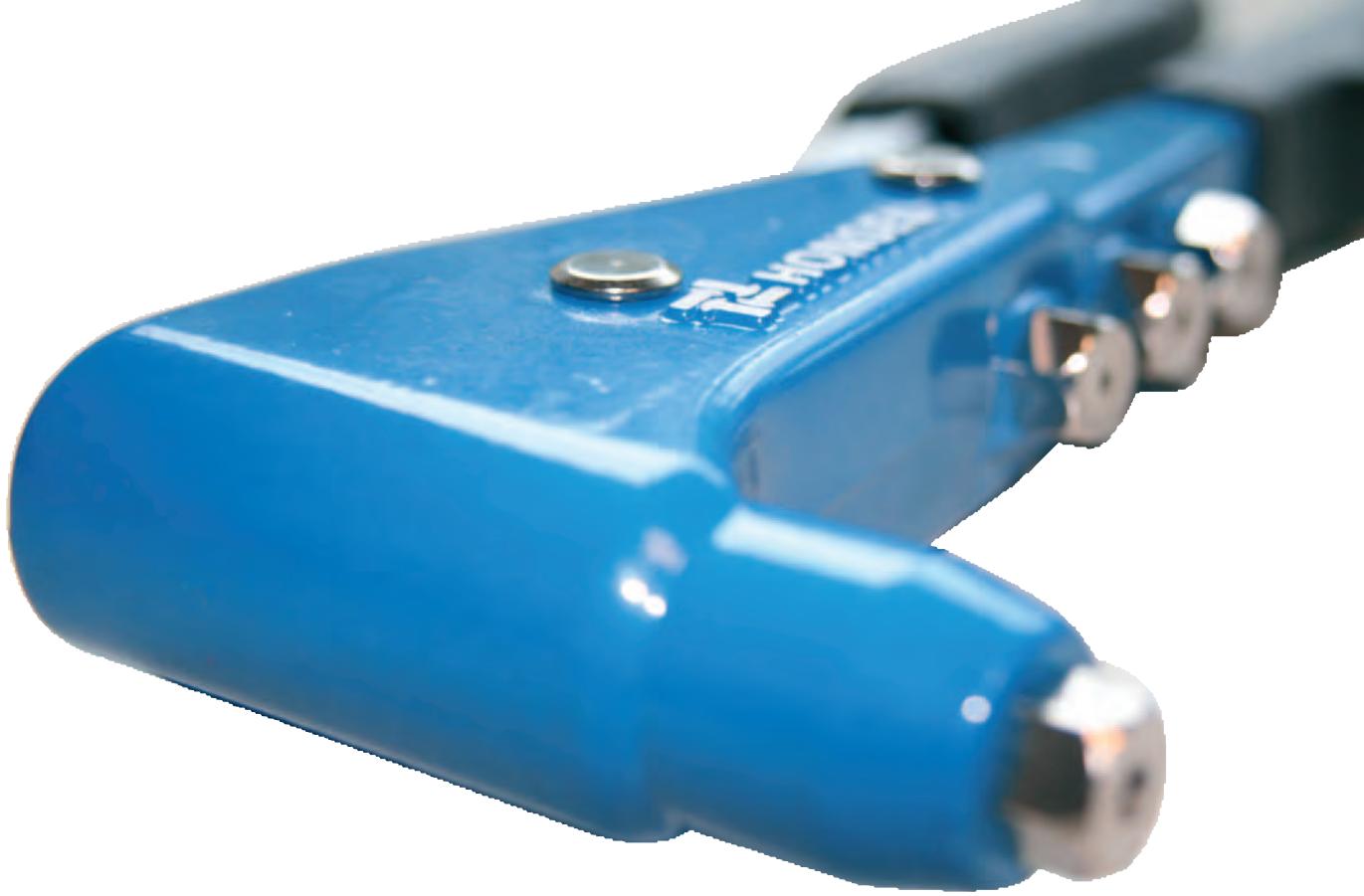
Sealing Rings

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



► More details on page 62.

The correct tool for every application



All from one source.

- robust **Hand Tools**
- perfected and reliable **Pneumatic-Hydraulic Tools**
- **Battery Tools** of the latest generation
- individually constructed **Process Controlled Automations**



OVERVIEW OF TOOLS - BLIND RIVETS -

BZ-HAND TOOLS FOR BLIND RIVETS

Dimension Tool	Blind Rivets										
	2,4	3,0	3,2	4,0	4,8	4,8 high strength	5,0	6,0	6,4	6,4 high strength	8,0
BZ 2	Aluminium										
	Steel										
	Stainless steel										
	Copper alloys										
BZ 44	optional	Aluminium									
	Steel										
	Stainless steel										
	Copper alloys										
BZ 70	Aluminium										
	Steel										
	Stainless steel										
	Copper alloys										
BZ 72				Aluminium							
				Steel							
				Stainless steel							
				Copper alloys							
BZ 58	Aluminium										
	Steel										
	Stainless steel										
	Copper alloys										

MULTI-HAND TOOLS

Dimension Tool	Blind Rivets										
	2,4	3,0	3,2	4,0	4,8	4,8 high strength	5,0	6,0	6,4	6,4 high strength	8,0
Multi 1	Aluminium										
	Steel										
	Stainless steel										
	Copper alloys										
Multi 5	Aluminium										
	Steel										
	Stainless steel										
	Copper alloys										
Multi 151	Aluminium										
	Steel										
	Stainless steel										
	Copper alloys										

BZ-TOOLS FOR BLIND RIVETS (PNEUMATIC-HYDRAULIC)

Dimension Tool	Blind Rivets										
	2,4	3,0	3,2	4,0	4,8	4,8 high strength	5,0	6,0	6,4	6,4 high strength	8,0
BZ 103A	Aluminium										
	Steel										
	Stainless steel										
	Copper alloys										
BZ 123A				Aluminium							
				Steel							
				Stainless steel							
				Copper alloys							

RIVDOM-BATTERY TOOL FOR BLIND RIVETS

Dimension Tool	Blind Rivets										
	2,4	3,0	3,2	4,0	4,8	4,8 high strength	5,0	6,0	6,4	6,4 high strength	8,0
RIVDOM	Aluminium										
	Steel										
	Stainless steel										
	Copper alloys										

OVERVIEW OF TOOLS -BLIND RIVET NUTS/BLIND RIVET BOLTS-

VNG-HAND TOOLS FOR BLIND RIVET NUTS / BLIND RIVET BOLTS

Blind Rivet Nuts							Blind Rivet Bolts				Dimension Tool
M3	M4	M5	M6	M8	M10	M12	M4	M5	M6	M8	
optional	Aluminium										
optional	Steel						Steel				
optional	Stainless steel										
	Aluminium										
	Steel						Steel				
	Stainless steel										
	Aluminium										
	Steel						Steel				
	Stainless steel										
	Aluminium										
	Steel						Steel				
	Stainless steel										

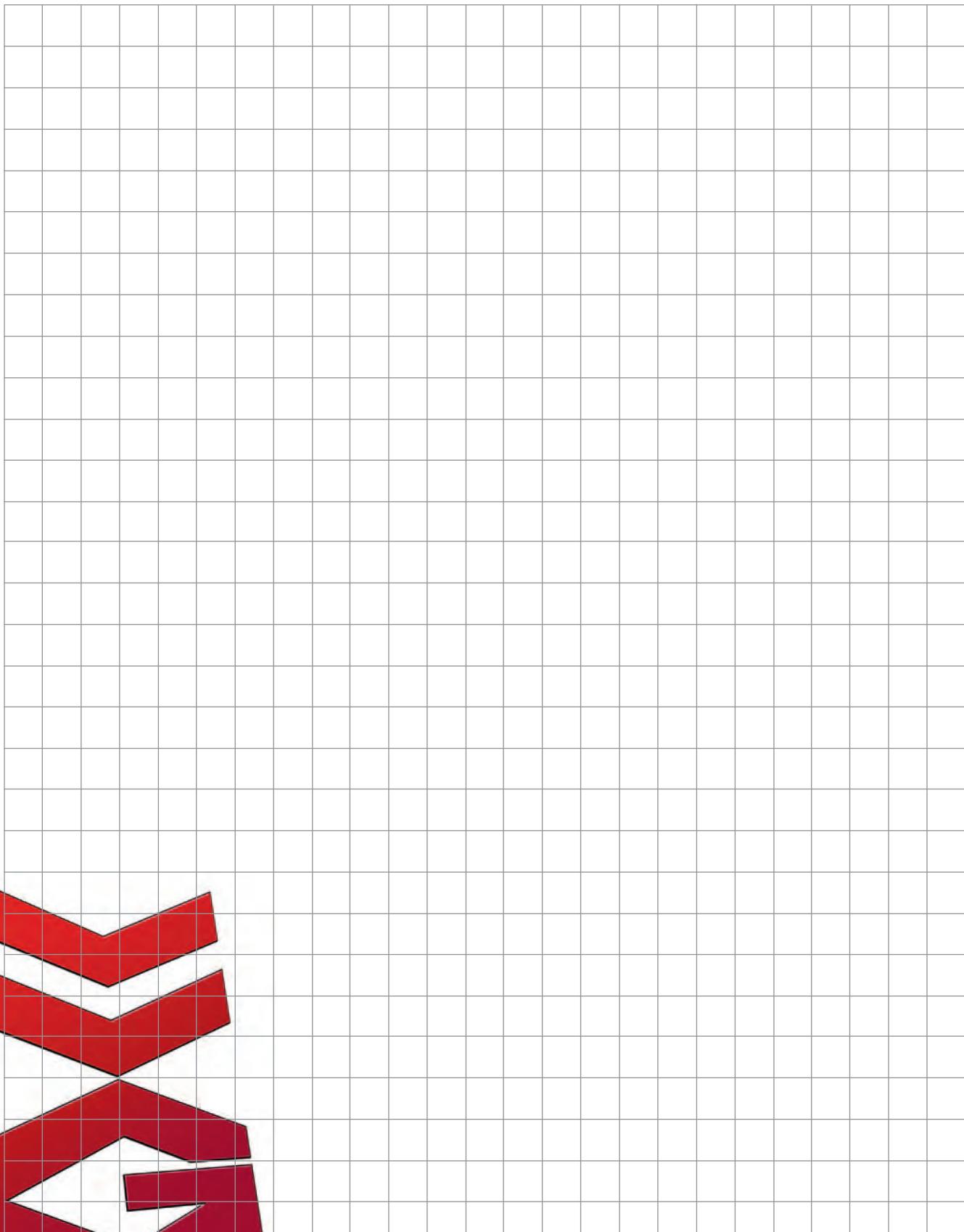
MULTI-HAND TOOLS

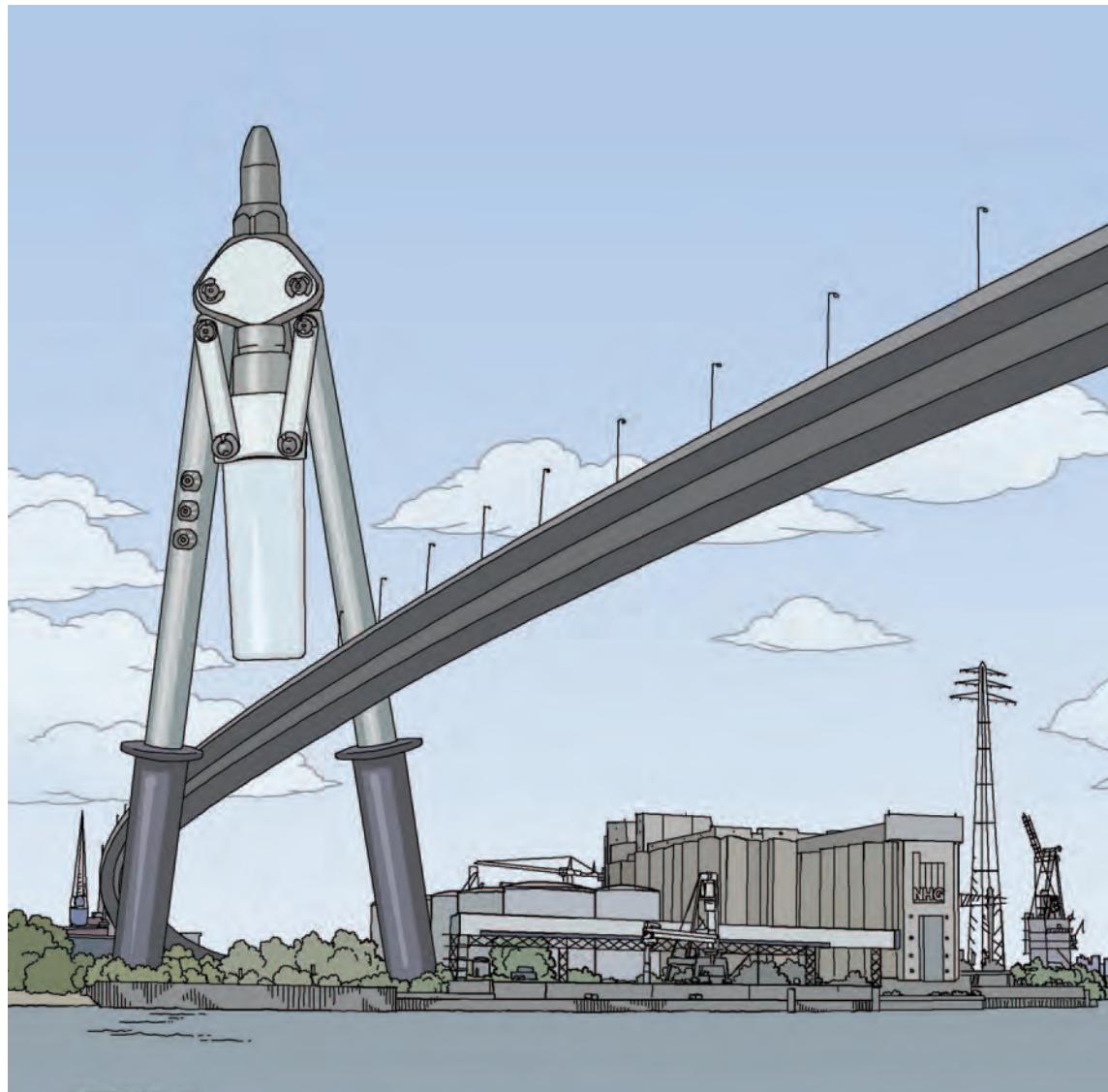
Blind Rivet Nuts							Blind Rivet Bolts				Dimension Tool
M3	M4	M5	M6	M8	M10	M12	M4	M5	M6	M8	
Aluminium											
Steel							Steel				
optional	Aluminium										
optional	Steel						Steel				
	Aluminium										
	Steel						Steel				
	Stainless steel										

VNG-TOOLS FOR BLIND RIVET NUTS/BLIND RIVET BOLTS (PNEUMATIC-HYDRAULIC)

Blind Rivet Nuts							Blind Rivet Bolts				Dimension Tool
M3	M4	M5	M6	M8	M10	M12	M4	M5	M6	M8	
	Aluminium										
Steel							Steel				
Stainless steel											
	Aluminium										
	Steel						Steel				
	Stainless steel										

YOUR NOTES





8 1

BZ Hand Tools for Blind Rivets

8 2

VNG Hand Tools for Blind Rivet Nuts and Blind Rivet Bolts

8 3

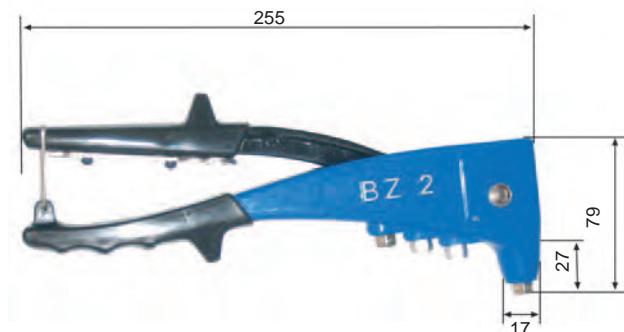
MULTI Hand Tools for Blind Rivets, Blind Rivet Nuts and Blind Rivet Bolts

8 4

Miscellaneous Tools

**BZ 2**

**Hand Tool for Blind Rivets
with opening spring**



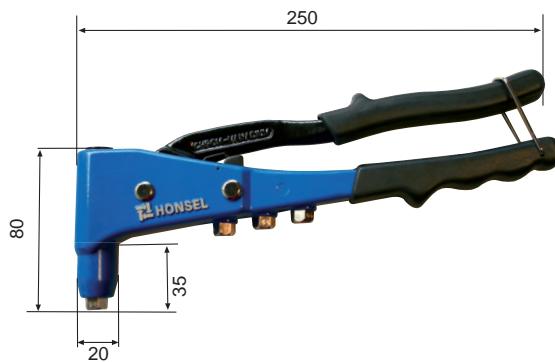
**Good Ergonomics,
Brilliant Transformation**

2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4	8,0
Aluminium								
Steel								
Stainless steel								
Copper alloys								
0,56 kg	STROKE 8 mm	Blister	Incl. 4 nosepieces					
Special nosepieces ► page 138								

No. 310.002.000.000

BZ 44

**Hand Tool for Blind Rivets
with opening spring**



Classic Tool - Robust and Reliable

2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4	8,0
optional Aluminium								
Steel								
Stainless steel								
Copper alloys								
0,63 kg	STROKE 9,5mm	Blister	Incl. 3 nosepieces					
Special nosepieces ► page 138								

No. 310.044.000.000





NEW + OPTIMIZED
Available from ab September 2011

BZ 70 Lever Tool

2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4	8,0
Aluminium								
Steel								
Stainless steel								
Copper alloys								
1,5 kg	STROKE 14,5mm	plastic case	Incl. 4 nosepieces					
Special nosepieces on request								max. mandrel-ø 3,2 mm

No. 310.070.000.000

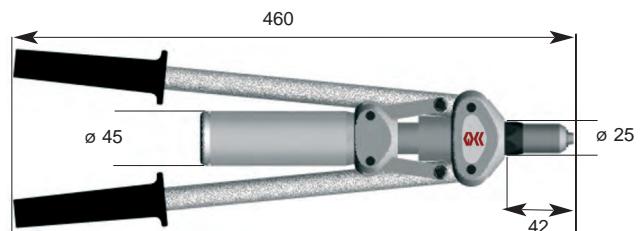


Illustration similar to original product

NEW + OPTIMIZED
Available from ab September 2011

BZ 72 Lever Tool

2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4	8,0
Aluminium								
Steel								
Stainless steel								
Copper alloys								
1,65 kg	STROKE 14,5mm	plastic case	Incl. 5 nosepieces					
Special nosepieces on request								max.mandrel-ø 4,0 mm

No. 310.072.000.000

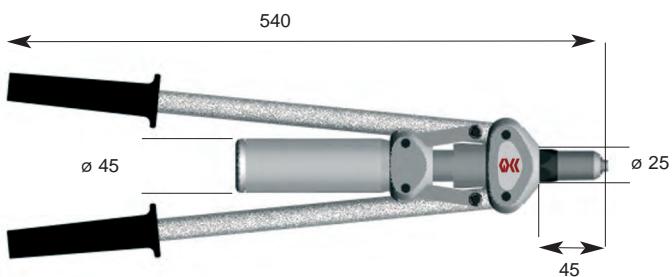
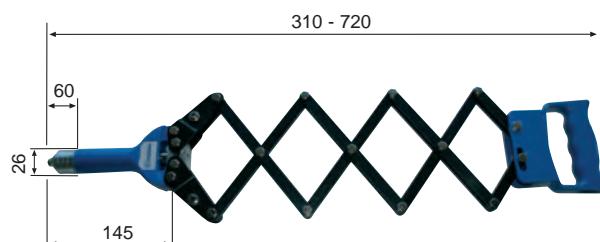


Illustration similar to original product

! Manual handling of high strength rivets on request.

2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4	8,0
Aluminium								
Steel								
Stainless steel								
Copper alloys								
2,0 kg	STROKE 11 mm	carton	Incl. 4 nosepieces					
Special nosepieces on request								max. mandrel ø 3,8 mm

No. 310.058.000.000

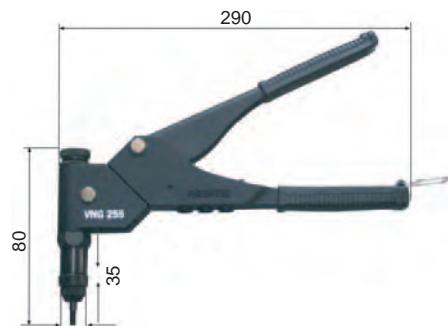


BZ 58 Sheare Tool



VNG 255

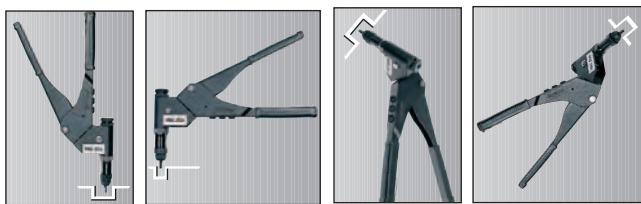
Hand Tool with Assortment



	M3	M4	M5	M6	M8	M10	M12	
			Aluminium					
			Steel					
			Stainless steel					
			Steel					
	0,9 kg		plastic case		case size	325 x 250 x 50 mm		
content					assortment			
					<ul style="list-style-type: none"> each with 1 piece conversion kit for blind rivet nuts M4, M5, M6; each with 1 piece threaded sleeve for blind rivet bolts M4, M5, each with 1 piece jaw wrench AF 22, AF 24, 1 piece hex head wrench AF 6 			
						continuous pivotable about 360°		

No. 310.255.000.000

Possible positions to work



VNG 371

Lever tool



Illustration similar to original product

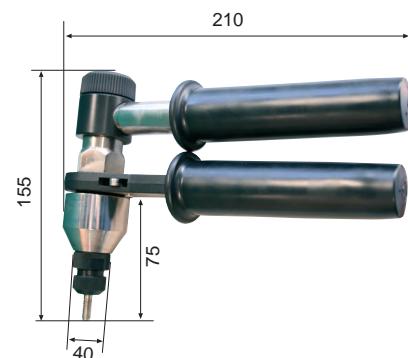
NEW + OPTIMIZED
Available from ab September 2011

	M3	M4	M5	M6	M8	M10	M12	
			Aluminium					
			Steel					
			Stainless steel					
			Steel					
	1,2 kg		plastic case					
content								
					<ul style="list-style-type: none"> each with 1 piece conversion kit for blind rivet nuts M5 - M 10 each with 1 piece threaded sleeve for blind rivet bolts M5 - M8 each with 1 piece jaw wrench AF 10, AF 14, 1 piece hex head wrench AF 6 			

No. 310.371.000.000



	M3	M4	M5	M6	M8	M10	M12						
			optional	Aluminium									
			optional	Steel									
			optional	Stainless steel									
				Steel									
	1,1 kg		case in aluminium optics	Case size 370 x 290 x 70 mm									
content	each with 1 piece conversation kit for blind rivet nuts M6-M12; each with 1 piece threaded sleeve for blind rivet bolts M5- M8,												
	Conversation kit available separately ►page 137)												



No. 310.612.000.000



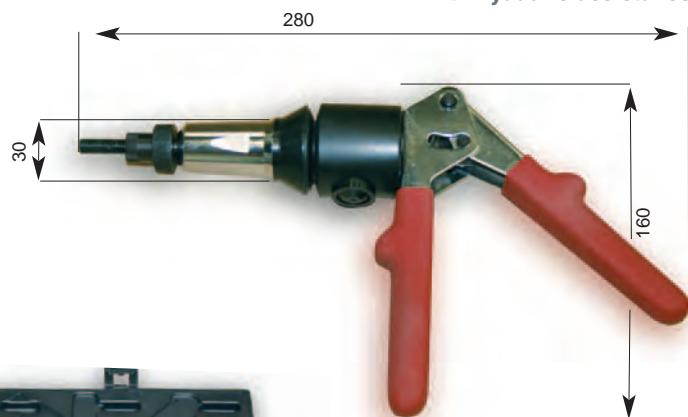
Available from September 2011

	M3	M4	M5	M6	M8	M10	M12	
			Aluminium					
			Steel					
			Stainless steel					
			Steel					
	plastic case		case size 290 x 195 x 54 mm					
	0,6 kg		with hydraulic component					
Content	• each with 1 piece conversation kit for blind rivet nuts M3-M8 • each with 1 piece conversation kit for blind rivet bolts M4-M8,							

No. 310.152.000.000

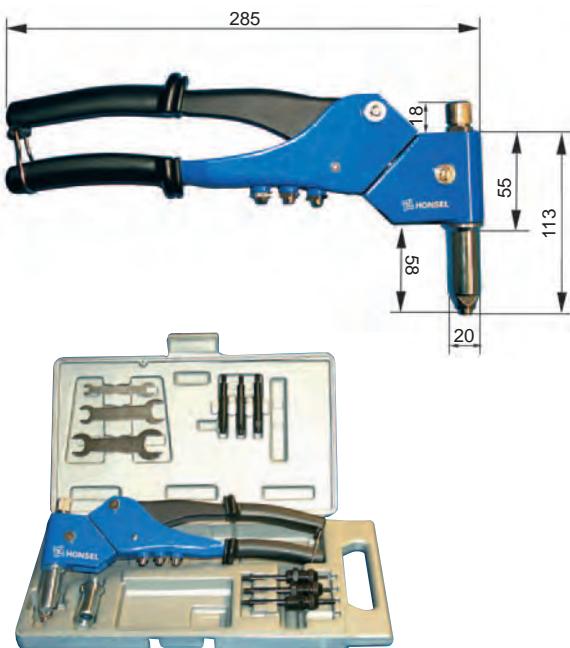


VNG 152
Hand Tool
with hydraulic assistance



**Multi 1**

Hand Tool for Blind Rivets, Blind Rivet Nuts and Blind Rivet Bolts



	2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4
Aluminium								
Steel								
Stainless steel								
Copper alloys								

	M3	M4	M5	M6	M8	M10	M12	
Aluminium								
Steel								
Steel								
plastic case	case size 360 x 185 x 50 mm							
0,56 kg	continuous pivotable about 360°							

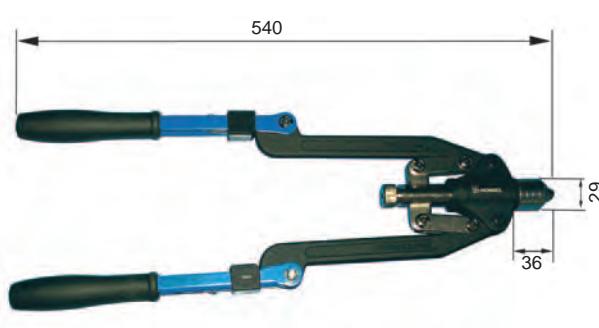
Content

- each with 1 nosepiece for blind rivets 2,4; 3,0/3,2mm; 4,0 mm; 4,8/5,0mm
- each with 1 piece conversation kit for blind rivet nuts M3-M6
- each with 1 piece threaded sleeve for blind rivet bolts M4-M6,
- each with 1 piece jaw wrench AF 15/19, AF 21/17.AF58

No. 310.100.000.000

Multi 5

Lever Tool for Blind Rivets, Blind Rivet Nuts and Blind Rivet Bolts



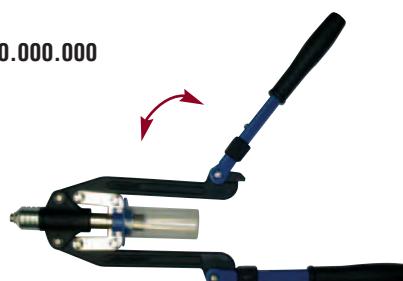
	2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4
Aluminium								
Steel								
Stainless steel								
Copper alloys								

	M3	M4	M5	M6	M8	M10	M12	
Aluminium								
Steel								
Steel								
plastic case	case size 385x 240 x 55 mm							
1,9 kg	fold-away handle bars							

Content

- each with 1 nosepiece for blind rivets 3,0/3,2mm; 4,0mm; 4,8/5,0mm; 6,0mm; 6,4mm
- each with 1 piece conversation kit for blind rivet nuts M4-M10
- each with 1 piece threaded sleeve for blind rivet bolts M4-M8,
- each with 1 piece jaw wrench AF 15/19, AF 21/17.AF58

No. 310.500.000.000





VNG 150 is now MULTI 151.

Besides its outstanding positive properties in setting blind rivet nuts, this tool is able to operate blind rivets as well.

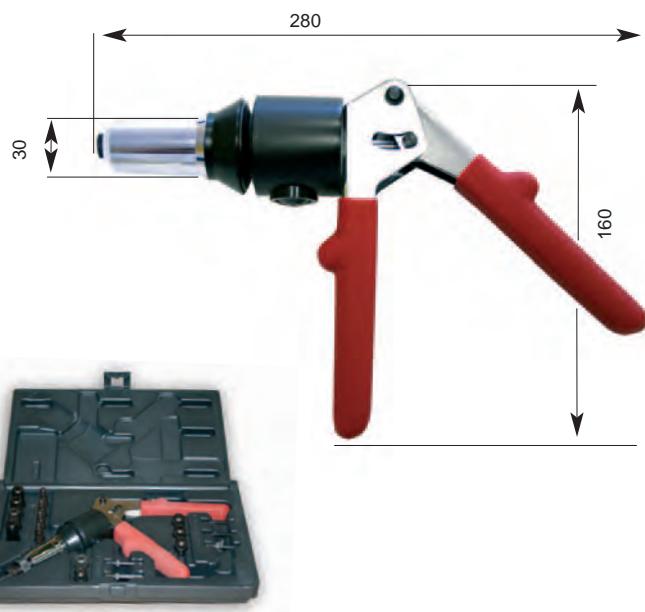
	2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4
Aluminium								
Steel								
Stainless steel								
Copper alloys								

	M3	M4	M5	M6	M8	M10	M12									
Aluminium																
Steel																
Stainless steel																
Steel																
	plastic case		case size 290 x 195 x 54 mm													
	0,6 kg		with hydraulic component													
Content																
<ul style="list-style-type: none"> each with 1 nosepiece for blind rivets 3,0/3,2mm; 4,0mm; 4,8/5,0mm; 6,0mm; 6,4mm each with 1 piece conversation kit for blind rivet nuts M3-M8 each with 1 piece conversation kit for blind rivet bolts M4-M8, 																

No. 310.151.000.000

Multi 151

Hand Tool for Blind Rivet Nuts, Blind Rivet Bolts and Blind Rivets with hydraulic assistance



Rivet Cracker



i Do not try to open rivets by screwing or carving any longer.
This tool "bites" off the rivet heads after removing the mandrel without damaging the component.

	2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4
Aluminium								
Steel								

	M3	M4	M5	M6	M8	M10	M12	
Aluminium								
Steel								

Length 360 mm

i Cutting hardness: 58 Rockwell

	2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4
Aluminium								

	M3	M4	M5	M6	M8	M10	M12	
Aluminium								

Length 200 mm

i Cutting hardness: 58 Rockwell

Removal of Rivet Heads Easy Release of Blind Rivets and Blind Rivet Nuts



No. 310.880.100.000



No. 310.881.300.000



Setting of Industrial Rivets

i There are many different possibilities to handle industrial rivets.

- manual deformation by using riveting dies
- hand tools or toggle presses
- special machines according to customers request



DIN 6435 made from hexagon steel safety tempering, shaft equally hardened; delivered in plastic holder

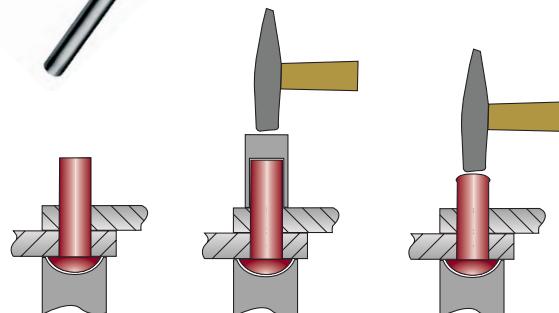


Set for rivet head setting
No. 18.509.000.002



Set for rivet head pulling
No. 18.509.000.001

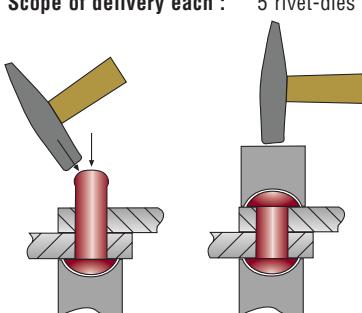
Scope of delivery each : 5 rivet-dies 2,0 - 3,0 - 4,0 - 5,0 and 6,0 mm ø



1.
Joining the component

2.
Positioning and fixing
by rivet head puller

3.
Compressing the shaft /
pre-forming of the closing head



4.
Final forming with rivet head setting-tool



Axial Hand Tool

Setting of Axial Clamps

i Fix our axial clamps with this compatible tool – quick and safe.



FOR AXIAL CLAMP RINGS

outside-ø	No.
15,0 mm	18.509.000.150
18,0 mm	18.509.000.180
25,0 mm	18.509.000.250



FOR AXIAL CLAMP CAPS

Outside-ø	No.
12,0 mm	18.509.000.120
16,0 mm	18.509.000.160
20,0 mm	18.509.000.200
27,0 mm	18.509.000.270
30,0 mm	18.509.000.300





i

The **experience of decades** and **continuous improvement** made the successful HONSEL/VVG tools of the BZ- and VNG-series become reliable utilities for industrial volume productions as well as for specialist shops and handcraft.

The **sturdy construction** and **complete equipment** with all necessary conversion parts plus **comprehensive accessories** up to **process controlled automation systems** leave nothing to be desired.

Latest development “**designed by Honsel**” is the modern type battery tool “**Rivdom**” on ► page 129.

9 1

Pneumatic-Hydraulic Tools for Blind Rivets (BZ-Series)

9 2

Battery Tool for Blind Rivets (Rivdom)

9 3

Pneumatic-Hydraulic tools for Blind Rivet Nuts and Blind Rivet Bolts (VNG-Series)



BZ 103 A

Pneumatic-Hydraulic Tool
with permanent and intervall
mandrel exhaustion



**Thousandfold Approved – the latest
version of the standard tool for
reliable processing of blind rivets**



2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4	8,0
Aluminium								
Steel								
Stainless steel								
Copper alloys								

Content

- 4 nosepieces
- 1 set of clamping jaws
- 1 bottle hydraulic oil / incl. re-fill unit
- 2 mandrel collectors

pressure: 5-7 bar max.mandrel-Ø: 3,8 mm

stroke : 18 mm air consumption: 2,4 L

noise: < 75 dB(A)(68,32) working power at 7 bar: 11700 N

1,8 kg hose connection: G 1/4 inside, installati-

on left or right side

special accessory ► page 138

No. 320.103.000.000



! For useful air pressure accessory take a look on ► page 128.

For an optimized processing of our structural FERO®-BULB blind rivets on [pages 40+41](#) the pneumatic-hydraulic tool **BZ 133A** is available on request.

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



Pneumatic-Hydraulic Tools for Blind Rivets

9

1



The Strong Tool - even suitable for
high strength blind rivets



BZ 123 A

Pneumatic-Hydraulic Tool
with permanent and interval
mandrel exhaustion



- noise reduced
- optimized ergonomics
- new package
- all necessary spare parts included
- new instruction manual



2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4	8,0
			Aluminium					
			Steel					
			Stainless steel					
			Copper alloys					
Content		pressure: 5-7 bar stroke: 25 mm noise: < 75 dB(A)(68,32) weight: 2,34 kg		max.mandrel-Ø: 4,8 mm air consumption: 3,5 L working power at 7 bar: 18700N hose connection: G 1/4" inside, installation left or right side				
special accessory ► page 138								

No. 320.123.000.000



► The BZ 123 A handles **high strength blind rivets** of the Honsel/VVG series FERO-BULB and FERO-BOLT (pages 42-45) perfectly.

BZ-Series



BZ 102 / 103 Axial
Pneumatic-Hydraulic Tool
*with permanent and
 intervall mandrel
 exhaustion*

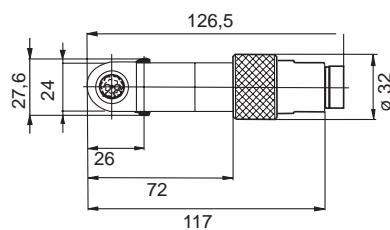


2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4	8,0
Aluminium								
Steel								
Stainless steel								
Copper alloys								
2,1 kg	height	365 mm	stroke	18 mm	max. mandrel-ø	3,8 mm		
tensile force at 7 bar 11700 N	noise	< 75 dB(A)(68,32)	pressure	5-7 bar	air consumption			
content	4 nosepieces	1 set of clamping jaws	1 bottle hydraulic oil					
	1 re-fill unit	1 mandrel collector						
hose connection	ø 1/4"	inside, installation left or right side						
options	• balancer		• mandrel conduction hose					
	• mandrel conduction adapter		• mandrel conduction box					

i The new option for axial handling with the approved pneumatic-hydraulic tools of the Honsel/VVG BZ-series.

No. 320.102.000.000/5

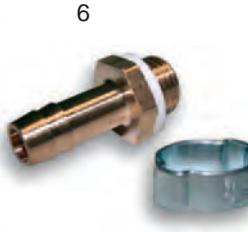
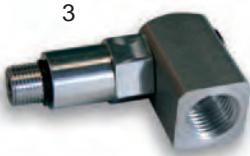
Rivet Angle Head for BZ Blind Rivet Tools



i Rivet angle heads for difficult to reach positions are available on request.

No. 321.102.000.600

For optimized handling we suggest the following accessory for all HONSEL-/VVG-Tools:



4

- Pivoting threaded pipe angle (3), aluminium No.: 321.121.000.053 1-1
- Pivoting threaded pipe angle (3), stainless steel No.: 321.121.000.053 2-1
- Valve extension (1) No.: 321.121.000.052 1-1
- Pressure reducing valve (2) No.: 321.000.141.360 1-1
- Pivoting threaded pipe angle (3) including fabric tube with 1/4" external thread and hose coupling (4) No.: 321.121.000.053 3-1
- Screw-in hose connector -set- G 1/4" 6 mm (5) No.: 321.121.000.057 1-1
- Screw-in hose connector -set- G 1/4" 9 mm (6) No.: 321.101.000.058 1-1



Additional connections for compressed-air available on request



i For undisturbed operation Honsel-/VVG-Tools need a continuous, periodic maintenance.
 Make sure that for BZ-Tools clean and dry, for VNG-Tools clean and lubricated compressed air is available.
 We advise the use of filter pressure reducers (BZ) or compressed-air service units (VNG).

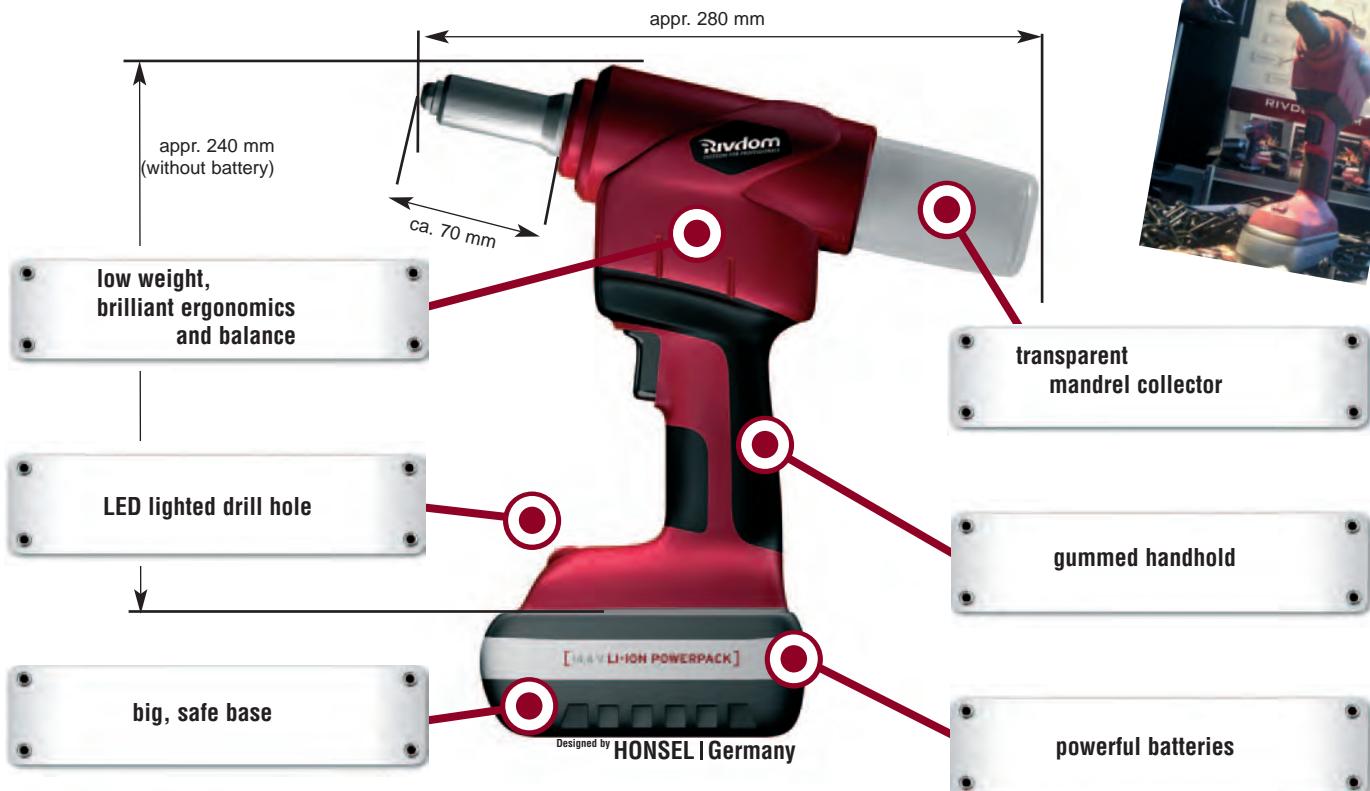
- Compressed-air service unit (Pressure reducer/oil fog lubricator (VNG-Serie)) No.: 320 847 000 000
- Pressure reducer (BZ-Series) No.: 320 848 000 000

i Additional accessory as for example balancer, spiral coiled tubes or compressors are available on request.
 Spare parts, special nosepieces or useful special attachments are shown in ► chapter 10, pages 135 et sqq.



RIVDOM
Battery Tool for Blind Rivets

THE NEW DIMENSION OF INDEPENDENT BLIND RIVET HANDLING



Note: Picture above shows Rivdom with LI-ION battery -large- (321.400.000.021)



Battery -large-
14,4V / 3,0 Ah



Battery -standard-
14,4V / 1,5 Ah



Premium, compact
quick-charger



- LI-ION battery -standard- (14,4V / 1,5 Ah)
No. 321.400.000.020
- LI-ION battery -large- (14,4V / 3,0 Ah)
No. 321.400.000.021
- Rivdom quick-charger
No. 321.400.000.001

2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4	8,0	
Aluminium									
Steel									
Stainless steel									
Copper alloys									
content					1,54 kg	max. mandrel-ø: 3,4 mm			
<ul style="list-style-type: none"> • 4 nosepieces • 1 mandrel collector • 1 battery 14,4V / 1,5 Ah • 1 quick-charger 14,4V 					0,33 kg	working power: 9000 N			
optional					0,53 kg	stroke: 21 mm			
<ul style="list-style-type: none"> • battery 14,4V / 3,0 Ah 					3,0 Ah	charging time 1,5 Ah: < 1 hour			



No. 320.400.000.000



Pneumatic-Hydraulic Tools for Blind Rivet Nuts and Blind Rivet Bolts

VNG 703

Pneumatic-Hydraulic Tool
force controlled



**New Version - Force controlled
User-friendly design - easy handling**

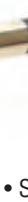


- the control by the adjustment of the necessary power guarantees an optimal and gentle setting of the blind rivet nut
- fast processing
- automatic screwing of the blind rivet nut by a slight push on the trigger
- automatic remove of the blind rivet nut after operating
- perfectly suited for the treatment of **OPTO-multigrip blind rivet nuts** (► pages 64/65)



	M3	M4	M5	M6	M8	M10	M12
			Aluminium				
		Steel					
			Stainless steel				
				Steel			
Content		pressure: 5-7 bar	air consumption: 4,4 l				
		stroke: 9 mm	revolutions per minute: screwing 1800 removing 2500				
		noise: < 75 dB(A)(68,32)	working power at 7 bar: 20000 N				
		2,5 kg	hose connection: G 1/4 inside, installation left or right side				
special accessory ► page 139							

No. 320.703.000.000



- Special tool with extra big stroke for processing of **SFM-PL folding blind rivet nuts** (► page 71)

For details about this tool and the handling please contact our country representations or the VVG sales team.



Pneumatic-Hydraulic Tools for Blind Rivet Nuts and Blind Rivet Bolts

9

The Powerful Solution. Well engineered - perfect stroke adjustment



VNG 903

Pneumatic-Hydraulic Tool *stroke controlled*



	M3	M4	M5	M6	M8	M10	M12	
		Aluminium				optional		
		Steel				optional		
		Stainless steel				optional		
		Steel						
Content		pressure: 5-7 bar	air consumption: 7,5 l					
<ul style="list-style-type: none"> conversation kits for blind rivet nuts 1 bottle hydraulic oil / incl. re-fill unit 		stroke: 9 mm	revolutions per minute: screwing 1800 removing 2500					
		noise: < 75 dB(A) _(68,32)	working power at 7 bar: 29000 N					
 special accessory  page 139			hose connection: G 1/4 inside, installation left or right side					

No. 320 903 000 000

- automatic screwing of the blind rivet nut by pushing on the mandrel
 - adjustable removing time
 - automatic screwing-stop



For useful air pressure accessory take a look on ► page 128.

Big Stroke Tool for Folding Blind Rivet Nuts

	M3	M4	M5	M6	M8	M10	M12
				Steel			
hose connection: G 1/4" inside, installation on left or right side			pressure: 5-7 bar	air consumption:			
			stroke: 8-15mm	revolutions per minute: screwing 1800 U/min. removing 2500 U/min.			
			 2,9 kg	working power (7 bar): 19000 N			

No. 320.753.000.000



Honsel Umformtechnik GmbH is a manufacturer of joining elements and delivers also, in its capacity as system supplier, riveting equipment and units.

The spectrum covers manually operated riveting units, partly automated solutions and fully automatic riveting systems.

On request, the riveting equipment can also be equipped with "DMSD" process monitoring or with the "Poka-Yoke" system.

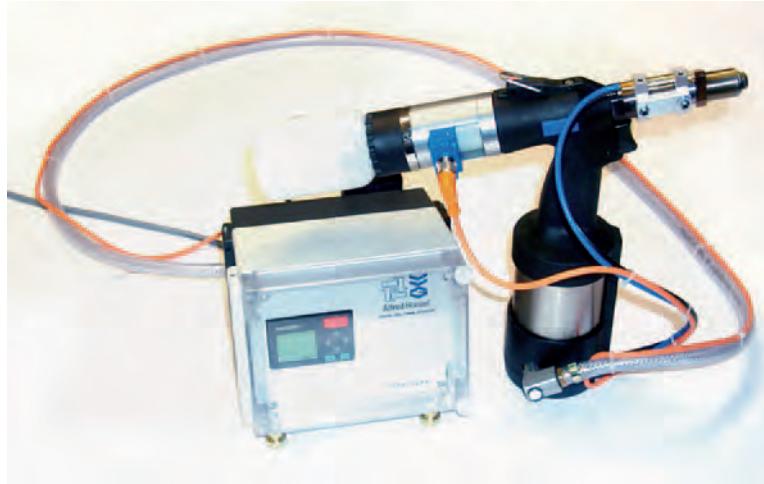
Not only ready solutions are taken from the kit in order to meet the customer requests.

Also special machines are developed completely after customers' need.

On base of tested systems, customized solutions are developed. Also modernizations and expansions of existing installations are among the special performances.



Partly automated feeding system ALFOMATIC BZ 101 A



Rivet tool BZ 101 A Poka-Yoke

An integrated strain gauge measuring strip (DMS) for the force measurement and an integrated distance measuring system make it possible to record and check the entire force-distance curve of the setting process and if the correct number of rivets has been placed.

The process result of DMSD USB process monitoring is equipped with a Honsel control and will be displayed on a two-colored LED at the rivet tool.

A PC with the DMSD PC program is required to visualize the force-distance curves and adept them to the setting process.

The current version of DMSD process monitoring is equipped with an Siemens PLC S7 313C and a touch panel TP277.

The force-distance curves have already been visualized by the touch panel.

Further possibilities are: switches on/of, the profi-bus, processing of a barcode, printing of labels and storage of the process data.



Tool for rivet nuts VNG 802 DMSD



Rivet tool BZ 101 A DMSD USB

RivSys VNG 802 DMSD
at the robot



Rivet component Riwo BZ 121 A



Rivet tool BZ 101 A DMSD WNK

Special nose pieces, extended front sleeves and different angular heads are prepared for badly accessible prefabricated parts.

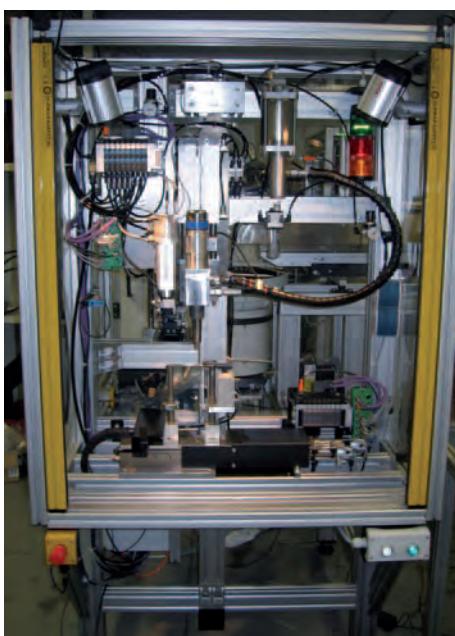
For the industrial application, the torn-off mandrel will be suctioned off automatically in a big mandrel container after the riveting process.

The fully automatic rivet feeding system, the process automation and the process monitoring are important components for the full automatic processing of blind rivets, special rivets, blind rivet nuts, blind rivet bolts and expander plugs.

Besides the component delivery, also complete rivet machines are realized after customized requests.



Double riveting machine



Rivet nuts component Riwo VNG 802 DMSD



Work on the rivet appliance in standing



HONSEL-SERVICE-CENTER

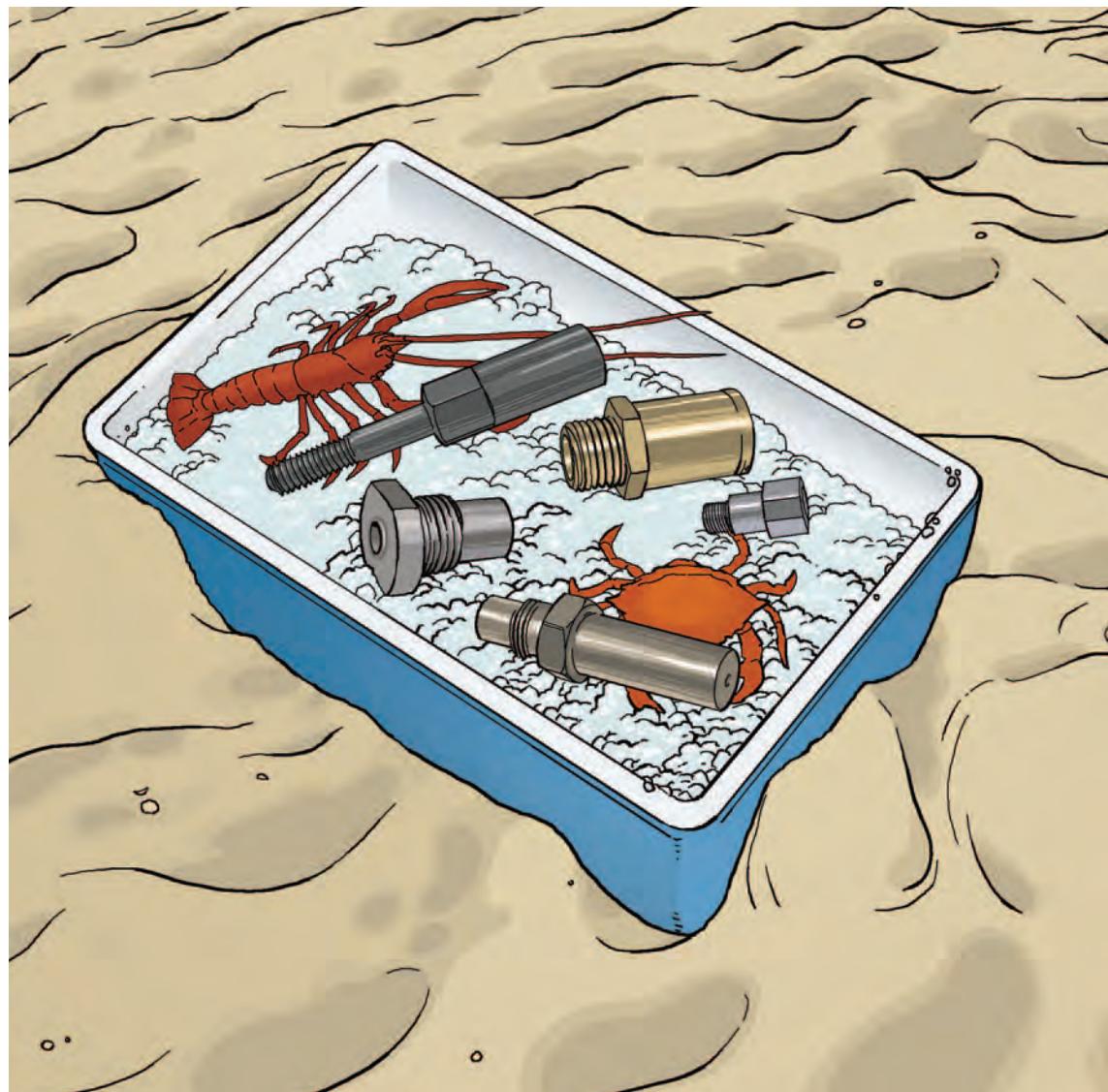
Besides development and production of pneumatic-hydraulic tools or custom machines as shown on the pages before, HONSEL-VVG provides a fast, professional and comprehensive service by well trained and experienced maintenance and repair specialists.

In addition we support our customers covering all questions for a smooth, long-standing operation with

- spare parts
- repair tools
- repair and handling trainings (on request)
- rental machines
- videos
- spare part lists and drawings
- repair instruction and manuals

to keep your HONSEL-VVG-tool running!



**i**

HONSEL/VVG-tools are constructed for long running periods with many years of daily use.

We provide the whole range of spare parts and accessory.

Our specialized service-center is able to customize all parts individually to optimize every case of application.

10
1

Snare Parts and Accessory for Blind Rivets

Tools	BZ 2	BZ 44	BZ 50/70	BZ 52/72	BZ 58	Multi 151	Multi 1	Multi 5	BZ 103 A	BZ 123 A	Rivdom
Spare Parts											
Clamping stew	311.002.000.008	311.044.000.007					311.100.000.023	311.150.000.008			
Pressure spring	311.002.000.007	311.044.000.006	311.045.000.013	311.045.000.013	311.500.000.007	311.151.000.010	311.100.000.022	311.150.000.007	311.045.000.013	311.045.000.013	321.300.100.021
Vacuum nozzle											
Guide sleeve	311.002.000.006	311.044.000.005	311.055.000.020		321.120.000.010	311.500.000.006	311.151.000.005	311.100.000.021	311.500.000.006	311.055.000.020	321.120.000.010
Clamping jaws	311.002.000.132	311.002.000.132	321.070.000.241		321.120.000.011	311.500.000.005	311.151.000.006	311.100.000.026	311.500.000.005	321.070.000.241	321.120.000.011
Clamping sleeve	311.002.000.040	311.044.000.003	311.025.000.010	311.052.000.007	311.500.000.004	311.100.000.025	311.150.000.004	311.045.000.010	321.120.000.012	321.300.100.016	
Nosepiece											
2,4	311.002.000.024	311.002.000.024					311.100.000.240		321.070.000.240		321.300.100.022
3,0 / 3,2	311.002.000.123	311.002.000.123	321.085.000.123		311.100.000.123	311.151.001.030	311.100.000.123		321.085.000.123		321.300.100.023
4,0	311.002.000.124	311.002.000.124	321.085.000.124	321.120.000.124	311.100.000.124	311.151.001.040	311.100.000.124	311.100.000.124	321.085.000.124	321.120.000.124	321.300.100.024
4,8 / 5,0	311.002.000.125	311.002.000.125	321.085.000.125	321.120.000.125	311.100.000.125	311.151.001.050	311.100.000.125	311.100.000.125	321.085.000.125	321.120.000.125	321.300.100.025
6,0					321.082.000.126	321.120.000.126	311.500.000.126	311.151.001.060		321.120.000.126	
6,4 (8,0)					321.120.000.127	311.500.000.127	311.151.001.064		321.120.000.127		
Front sleeve					311.050.000.015	311.052.000.001	311.058.002.006	311.151.000.001	311.100.000.019	311.500.000.003	321.101.000.016
Mandrel container						311.047.000.019	311.047.000.019			321.082.000.010	321.082.000.010
Drawing tube						311.050.000.004	311.050.000.004	311.058.002.007			
Lock nut						311.050.000.026	311.050.000.026				
Connecting piece											
Cheese head bolt with o-ring									321.101.000.027	321.101.000.027	
Covering											



Spare parts	Tools	VNG 255	VNG 361	VNG 612	Multi 151	Multi 1	Multi 5	VNG 701	VNG 802	VNG 703	VNG 903
Nosepiece blind rivet nuts	M3	311.800.000.203	311.800.000.203		311.151.002.003	311.100.002.003	311.800.000.203	311.800.000.203	311.800.000.204	311.800.000.204	311.800.000.204
	M4	311.800.000.204	311.800.000.204	311.800.000.204	311.151.002.004	311.100.002.004	311.800.000.204	311.800.000.204	311.800.000.205	311.800.000.205	311.800.000.205
	M5	311.800.000.205	311.800.000.205	311.800.000.205	311.151.002.005	311.100.002.005	311.800.000.205	311.800.000.205	311.800.000.205	311.800.000.205	311.800.000.205
	M6	311.800.000.206	311.800.000.206	311.800.000.206	311.151.002.006	311.100.002.006	311.800.000.206	311.800.000.206	311.800.000.206	311.800.000.206	311.800.000.206
	M8	311.800.000.208	311.800.000.208	311.800.000.208	311.151.002.008	311.500.002.008	311.800.000.208	311.800.000.208	311.800.000.208	311.800.000.208	311.800.000.208
	M10	311.800.000.210	311.800.000.210	311.800.000.210		311.500.002.010	311.800.000.210	311.800.000.210	311.800.000.210	311.800.000.210	311.800.000.210
	M12	311.800.000.212	311.800.000.212	311.800.000.212			311.800.000.212	311.800.000.212	311.800.000.212	311.800.000.212	311.800.000.212
Mandrel	M3	311.800.000.030	311.800.000.030	311.151.003.003	311.100.003.003	311.800.000.030	311.800.000.030	311.800.000.030	311.800.000.030	311.800.000.030	311.800.000.030
	M4	311.800.000.040	311.800.000.040	311.612.000.040	311.151.003.004	311.100.003.004	311.800.000.040	311.800.000.040	311.800.000.040	311.800.000.040	311.800.000.040
	M5	311.800.000.050	311.800.000.050	311.612.000.050	311.151.003.005	311.100.003.005	311.800.000.050	311.800.000.050	311.800.000.050	311.800.000.050	311.800.000.050
	M6	311.800.000.060	311.800.000.060	311.612.000.060	311.151.003.006	311.100.003.006	311.800.000.060	311.800.000.060	311.800.000.060	311.800.000.060	311.800.000.060
	M8	311.800.000.080	311.800.000.080	311.612.000.080	311.151.003.008	311.500.003.008	311.800.000.080	311.800.000.080	311.800.000.080	311.800.000.080	311.800.000.080
	M10	311.800.000.100	311.800.000.100	311.612.000.100		311.500.003.010	311.800.000.100	311.800.000.100	311.800.000.100	311.800.000.100	311.800.000.100
	M12	311.612.000.120	311.612.000.120	311.612.000.120			311.800.000.120	311.800.000.120	311.800.000.120	311.800.000.120	311.800.000.120
Nosepiece Rivbolt	M4	311.800.000.204	311.800.000.204	311.151.007.004	311.100.002.004	311.800.000.204	311.800.000.204	311.800.000.204	311.800.000.204	311.800.000.204	311.800.000.204
	M5	311.800.000.205	311.800.000.205	311.151.007.005	311.100.002.005	311.100.002.005	311.800.000.205	311.800.000.205	311.800.000.205	311.800.000.205	311.800.000.205
	M6	311.800.000.206	311.800.000.206	311.151.007.006	311.100.002.006	311.100.002.006	311.800.000.206	311.800.000.206	311.800.000.206	311.800.000.206	311.800.000.206
	M8	311.800.000.208	311.800.000.208	311.151.007.008	311.100.002.008	311.500.002.008	311.800.000.208	311.800.000.208	311.800.000.208	311.800.000.208	311.800.000.208
Threaded sleeve Rivbolt	M4	321.800.001.004	321.800.001.004	311.151.004.004	311.100.004.004	311.100.004.004	321.800.001.004	321.800.001.004	321.800.001.004	321.800.001.004	321.800.001.004
	M5	321.800.001.005	321.800.001.005	311.151.004.005	311.100.004.005	311.100.004.005	321.800.001.005	321.800.001.005	321.800.001.005	321.800.001.005	321.800.001.005
	M6	321.800.001.006	321.800.001.006	311.151.004.006	311.100.004.006	311.100.004.006	321.800.001.006	321.800.001.006	321.800.001.006	321.800.001.006	321.800.001.006
	M8	321.800.001.008	321.800.001.008	311.151.004.008	311.100.004.008	311.500.004.008	321.800.001.008	321.800.001.008	321.800.001.008	321.800.001.008	321.800.001.008
Front sleeve		311.361.000.005	Front sleeve blind rivet nut	311.151.000.001	311.100.000.119	311.500.000.025	321.701.000.024	321.701.000.024	321.703.000.024	321.903.000.016	
Drilling rod		311.361.001.000	Adapter for mandrel	311.151.000.007		Cheese head bolt with o-ring	321.101.000.027	321.101.000.027	321.101.000.027	321.101.000.027	
Drilling ball		311.350.000.383	Nosepiece holder			Lock nut M8	321.801.000.075	321.801.000.075	321.802.191.075	321.802.191.075	
Drilling screw		311.300.000.312	Covering			Lock nut M9					
Knurled screw		311.361.001.001	Pressure spring			Lock nut M18x1	321.801.000.074	321.801.000.074	321.801.000.074	321.801.000.074	



i Nosepieces FERO®-BOLT Rivet

ø 4,8 mm 361.121.008.401
ø 6,4 mm 361.121.008.601



i Extended Nosepieces (17 mm)

BZ 103 A (and forerunner)

ø 3,2 321.085.000.323
ø 4,0 321.085.000.324
ø 4,8/5,0 321.085.000.325



BZ 123 A (and forerunner)

ø 4,0 321.120.000.324
ø 4,8/5,0 321.120.000.325
ø 6,0 321.120.000.326
ø 6,4 321.120.000.327



i Facade Nosepieces for 5 mm Blind Rivets

Head 11	BZ 103 A (102 A, 101, 101 A, 11 A)	321.085.000.511
Head 14	BZ 103 A (102 A, 101, 101 A, 11 A)	321.085.000.514
Head 11	BZ 123 A (122A, 121 A)	321.120.000.511
Head 14	BZ 123 A (122A, 121 A)	321.120.000.514

Special Nosepieces



It is possible to develop and produce special nosepieces for every blind rivet type and dimension.

Due to our big warehouse stock we can realize special demands within short terms.

i CERTO® Nosepieces

ø 3,2 321.070.000.240
ø 4,0 321.085.009.124
ø 4,8/5,0 321.085.009.125



General Accessory

Wind Deflector

Deflecting the exhaustion air in a special direction.
For all BZ-tools with standard mandrel collector.

No. 321.101.000.091



Oil Re-fill Unit

Adapter, bottle of hydraulic oil and syringe for re-fill of hydraulic oil in all pneumatic-hydraulic BZ- and VNG tools.

No. 321.101.006.467



Extended Mandrel Collector

For the use of long blind rivets or blind rivets with longer mandrel.

No. 321 221 000 065



Stroke Locking Ring

To avoid unintentional shifting of the stroke.



VNG 701: No. 321 701 000 080

VNG 801/802/903: No. 321 801 000 080



i Perfect achievement of difficult to access rivet positions.
Individually adapted frontsleeves according to customers demand.

Extended Front Sleeves



Comparison of
extended (330 mm),
standard and
shortened front sleeves.



Adjustable Front Sleeves

For optimal adjustment of clampig jaws with
special blind rivets or blind rivets with big
mandrel diameter.



Front Sleeves for the Assembly of Hand Tools into Stationary Installations

The tool can be installed for example in a table to with
the help of two counter nuts on this front sleeve.



i HONSEL-VVG supplies different possibilities to optimize the discharge
of mandrels at a higher rivet emergence. Please ask for details.



Adapter for
mandrel discharge



Checking device for
identification of mandrels



Trigger for
foot control



Big size mandrel container



Boost of discharge

Special Accessory VNG-Series



Special Nosepieces and Mandrels

Unlimited possibilities.
We produce individual special nose pieces, special
mandrels and bushes on customers demand for
example as extended version, for coarse threads,
UNC/UNF or internal riveting positions.



Extended Front Sleeves

Perfect achievement of difficult to access rivet
positions. Available for all VVG-tools on request.

