BÖLLHOFF

RIVKLE®

Blind rivet nuts and studs

PASSION FOR **SUCCESSFUL JOINING**

Contents

An optimized assembly solution for improved performance

RELIABILITY

Controlled setting
The technologies implemented in BÖLLHOFF tools allow you to make sure that 100% of the RIVKLE® fasteners are conforming after setting.

Components comply with the rules applicable to threaded joints
Obtain robust assemblies thanks to components which, after setting, are comparable to class 8 nuts (or even class 10 or 12 for HRT versions) or to class 8.8 screws (stud version).

After setting, RIVKLE® blind rivet nuts comply with the rules applicable to threaded joints. These rules guarantee, among other things, that in the case of over-tightening, the screw will fail, leaving the nut re-usable.

SIMPLICITY

A safe and environmentally-friendly solution
Reduce your environmental costs with this assembly solution which requires no exhaust or cooling.

Minimal equipment and expertise required
You can easily integrate the RIVKLE® solution into your production process, as it does not require your operators to have any particular qualifications or safety equipment.

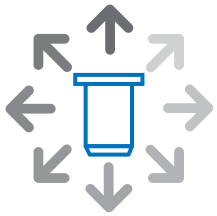
Simple to use
The RIVKLE® technology can be integrated quickly and easily thanks to easy-to-use setting methods and simple tool adjustment procedures.

PERFORMANCE

A repeatable solution
Ensure the reliability of your assemblies by using components with a repeatable setting behavior in combination with setting tools with well-known repeatability (CPk > 1.66).

A competitive global solution
Reduce the costs of your assemblies thanks to a cost per installed RIVKLE® fastener that is usually more competitive than alternative solutions with reduced costs in manpower, energy, maintenance, investment, floor area.

VERSATILITY



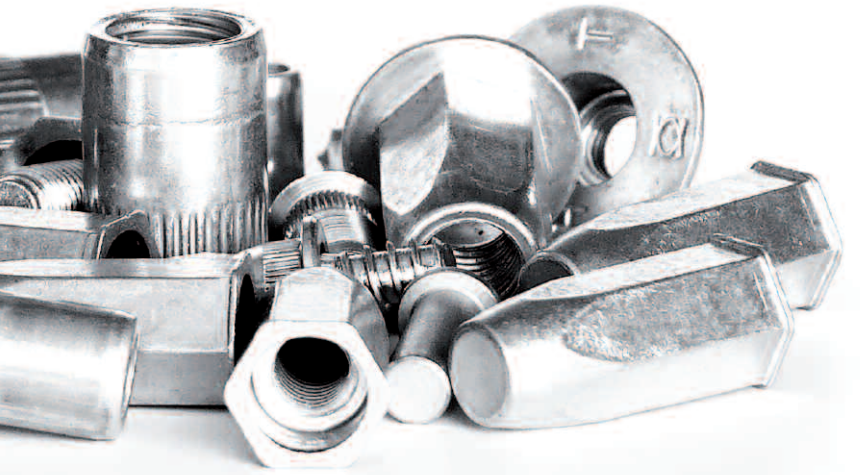
RIVKLE® can be set at every stage of your production process
You can integrate RIVKLE® at any stage of your production process, either before or after surface coating.
In fact, the RIVKLE® components are supplied with a surface treatment which complies with the strictest customer requirements, and the setting operation does not alter the support or the component's surface treatment.

Moreover, as the RIVKLE® components can be set either with hand tools or with automatic setting units on robots, the RIVKLE® technology can fit into all your production environments.

Compatibility with all application materials
The RIVKLE® components are compatible with metal (steel, light alloys) as well as polymers (composites, plastics, etc.).

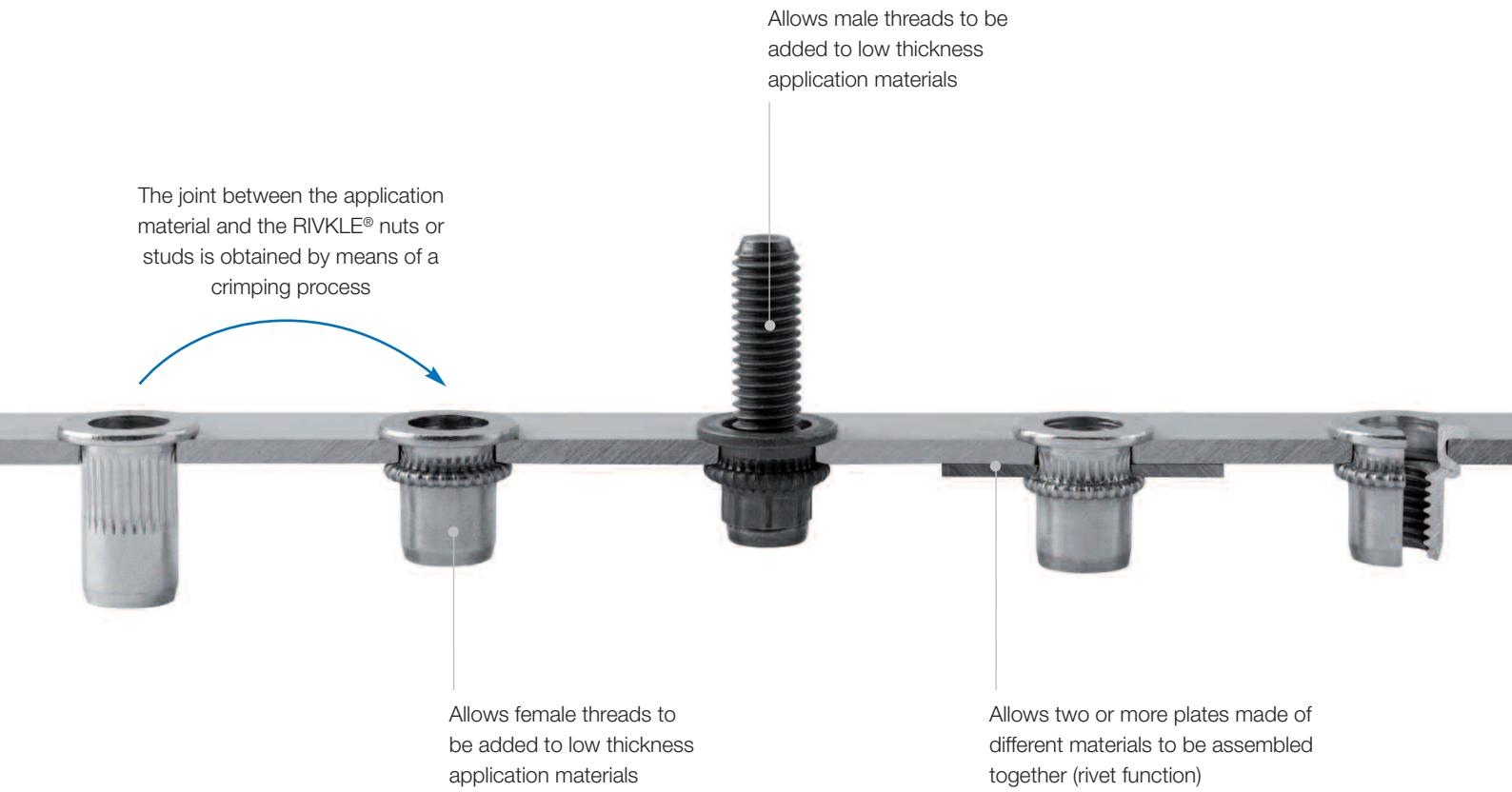
Installation with access from only one side
Simplify your design and integrate RIVKLE® into many of your applications, as these fasteners can be installed with access on only one side.

The dimensions and the accessibility of your parts do not hinder the use of the RIVKLE® solution.

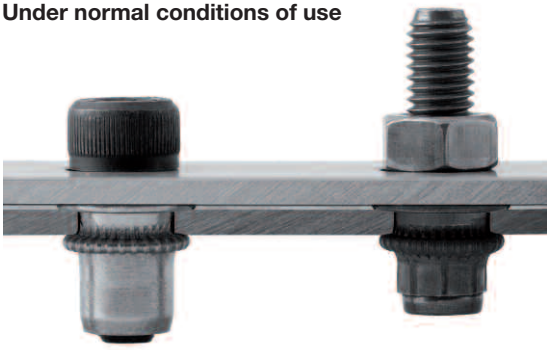


The **RIVKLE®** technology

RIVKLE® blind rivet nuts and studs are the most versatile solutions to add reusable high-strength male or female threads to low thickness application materials.

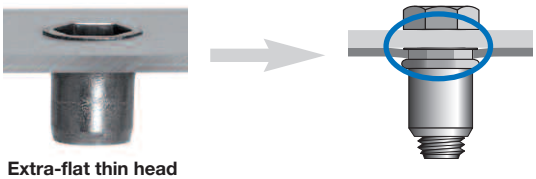


Under normal conditions of use



Thin head

To optimise the protrusion of thin heads after setting and ensure optimum penetration strength, BÖLLHOFF decided to use the extra-flat heads already implemented in most of the steel or stainless steel thin-head fasteners.



Extra-flat thin head

Pull setting method

The BÖLLHOFF setting tools use the pull setting method to set the RIVKLE® assembly components.

This method consists of 4 steps
- 1 (or 2) Spin on
- 2 (or 1) Insertion of the component into the support
- 3 Upset
- 4 Spin off

1 Spin on ⟷ 2 Insertion

3 Upset

4 Spin off

Our pressure setting method

Today, all the BÖLLHOFF setting tools use the pressure setting method. With this setting method, a tension force is applied in order to generate the deformation of the RIVKLE®.

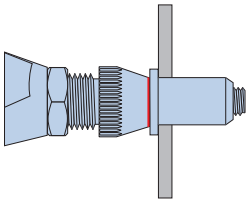
Advantages

- Ensures a constant setting quality, particularly for applications with variable thicknesses.
- Allows the use of preventive controls.
- Quick and simple adjustment of the setting tools.
- Prevents damage to the setting tool or the RIVKLE® in the event of a 2nd setting cycle.
- Increased mandrel life.

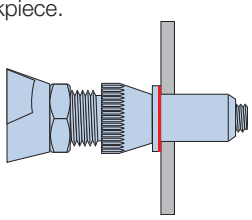
Setting parameters

There are four required conditions for proper adjustment of a RIVKLE® fastener:

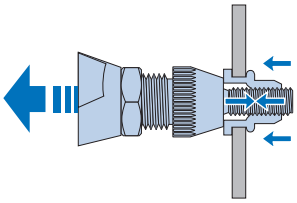
1. Make sure the RIVKLE® fastener touches the anvil: this means that "spin on" has been performed until the head of the RIVKLE® fastener touches the anvil.



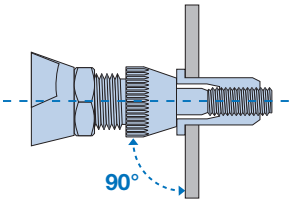
2. Make sure the RIVKLE® fastener touches the workpiece: check that the rear face of the head of the RIVKLE® fastener lies flat against the surface of the workpiece.



3. Apply the recommended setting force: adjustment and check should be done using the force controller specifically designed for our hand setting tools (integrated for automatic adjustment).



4. Make sure the tool is perpendicular to the surface of the workpiece: check that the top of the tool is and remains aligned with the centreline of the thread during the spin on, setting and spin off steps.



Recommended setting force

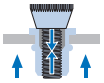
BÖLLHOFF has determined a recommended setting force for every RIVKLE® product.

This recommended setting force is defined to ensure:

- proper installation of the product throughout its entire setting range
- no "re-setting" of the product when the bolt is screwed in

To limit the need for tool adjustment, BÖLLHOFF develops its produts in such a way that a recommended force is achieved for each diameter.

Installation force range per diameter & RIVKLE® material



	Steel Force in kN	Stainless steel Force in kN	Stainless steel A4 Force in kN	Aluminium Force in kN
M3	3,5	3,5	-	1,9
M4	5,5	5,5	9,5	3,0
M5	8,0	8,0	12,0	3,8
M6	12,0	13,0	15,0	5,5
M8	18,0	20,0	20,0	10,0
M10	21,0	22,0	-	12,0
M12	23,0	38,0	-	15,0
M14	50,0	-	-	-

For the ranges of RIVKLE® fasteners with additional functions, you will find the associated setting forces in the relevant product pages.

RIVKLE® – Material and surface treatment

Our standard surface treatment, Zn 8K+; 8 to 15 µm; provides the highest corrosion resistance in the standard market (400 hours to Red Rust according to ISO9227). For the most demanding applications, ZnNi8A/Fe; 8 to 15 µm, can be supplemented with either a lubricant and/or reinforcement to reach 720 or even 1000 hours to Red Rust.

	EN		USA
	Description	Num.	
Steel	C10C	1.0214	C1010
	C4C	1.0303	C1005
	11SMnPb30	1.0718	12L13
	20MnB5	1.5530	10B22
Stainless steel	X6CrNiCu18-9-2	1.4570 (A1)	AISI 303K
	X3CrNiCu18-9-4	1.4567 (A2)	AISI 302 HQ
	X3CrNiCuMo17-11-3-2	1.4578 (A4)	AISI 316 Cu
	X6Cr17*	1.4016*	AISI 430*
Aluminium	AW-AlMg2,5	AW-5052	5052
	EN AW-Al Mg1SiBi/EN	AW-60604	A/6064

*RIVKLE® PN

With the exception of the ranges below, which are suited for both industrial use and automotive use, all the other references are designed for industrial use only.

- RIVKLE® HRT (High Resistance Thread) nuts
- RIVKLE® SFC (Smart For Composite) nuts
- RIVKLE® Seal Ring nuts and studs
- Standard studs: refer to the last column related to coatings ❶ = Zn8K+/Fe; ❷ = ZnNi8A/Fe

Most of the articles in this catalogue are available in automotive variant. Please contact BÖLLHOFF.

RIVKLE® – Selection of the nut or stud

The references provided in the next pages of the catalogue and on our website will help you to select the RIVKLE® nut or stud suited to your application.

The RIVKLE® blind rivet nuts and studs are identified based on different product features:

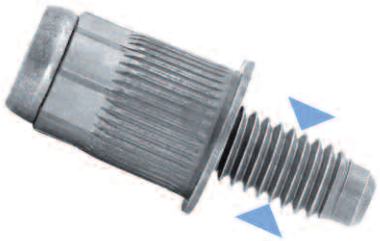
- **BODY** −
- HEAD +
- BODY END +
- MATERIAL +
- DIAMETER +
- GRIP THICKNESS +
- PLATING +
- ADDITIONAL FUNCTIONS +

>

BODY

CYLINDRICAL | **CYLINDRICAL KNURLED** | HEXAGONAL | SEMI-HEXAGONAL | SLOTTED

DIAMETER



M3	M4	**M5**
M6	M8	M10
M12	M14	M16

- \+ BODY ✔
- \+ HEAD ✔
- \+ THREAD ✔
- \+ END ✔
- \+ MATERIAL ✔
- < − **DIAMETER**
- \+ GRIP THICKNESS
- \+ PLATING
- \+ ADDITIONAL FUNCTIONS

CAD

Free-of-charge download of 3D drawings from our ranges. Integrate them directly into your design software.

AVAILABILITY

BÖLLHOFF guarantees the immediate and local availability of all articles on all its European sites, so as to meet our customers' needs.

DESIGN

SHIPPING

AFTER SALES SERVICE

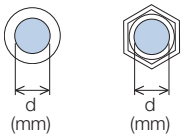
LABORATORY TESTING

BÖLLHOFF offers the services of our own certified laboratory to assess and report on the performance of our products when installed into your components.

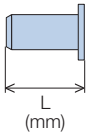
TRAINING

BÖLLHOFF imparts expertise to your Team (production, maintenance, process) to improve your experience when using either our components or tools (theory & practice).

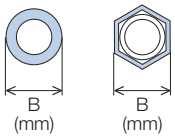
RIVKLE® – Legend



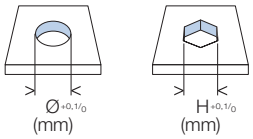
Thread size



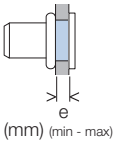
Overall length



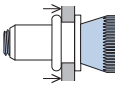
Head diameter
If round –> diameter
If hexagonal –> wigth across flats



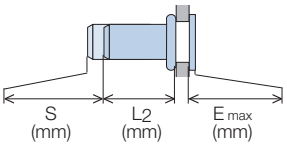
Hole geometry
If round –> diameter
If hexagonal –> wigth across flats



Grip range
Defines the range of total thickness of the customers part (even if it consists of more than one layer)



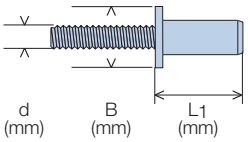
Setting load



Head projection after setting
Variable according to the application (setting load, material substrate, etc.)

Blind side projection after installation
Defines the clearance needed on the blind side (cannot be used for quality control)

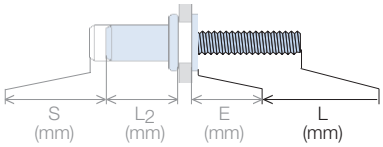
Setting stroke
Difference of total length before and after installation



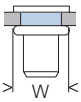
Shank length

Head diameter

Tip diameter



Tip length

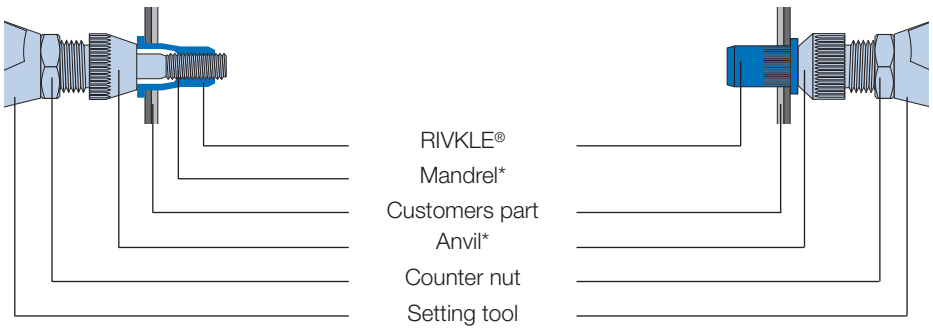


d (mm)	W (mm)
M3	6,8 mm
M4	8,6 mm
M5	10,1 mm
M6	13,0 mm
M8	15,0 mm
M10	18,0 mm
M12	22,4 mm

Maximum bulge diameter

RIVKLE® Nut

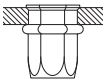
RIVKLE® Stud



*in accordance to chosen RIVKLE®

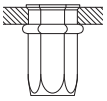
RIVKLE®
THE STANDARD LINE

Contents



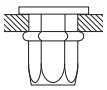
Steel | Thin head | Hexagonal | Open

d (mm)	L (mm)	B (mm)	e (mm) (min - max)	H +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)	
M3	10,25	5,0	1,5 - 2,5	5,0	S=3,8-e	6,0	0,3	**343 41** 030 025
M4	10,8	6,5	0,5 - 3,0	6,0	S=4,5-e	6,2	0,4	**343 41** 040 030
	13,5		3,0 - 5,5		S=7,2-e			**343 41** 040 055
M5	13,8	7,85	0,5 - 3,0	7,0	S=4,5-e	9,0	0,45	**343 41** 050 030
	16,5		3,0 - 5,5		S=7,2-e			**343 41** 050 055
M6	16,2	9,95	0,5 - 3,5	9,0	S=5,5-e	10,2	0,45	**343 41** 060 030
	19,25		3,5 - 6,0		S=8,5-e			**343 41** 060 060
M8	17,8	11,75	0,5 - 3,5	11,0	S=5,5-e	12,5	0,4	**343 41** 080 030
	20,8		3,5 - 6,0		S=8,5-e		0,5	**343 41** 080 060
M10	22,0	14,1	1,0 - 3,5	13,0	S=6,0-e	16,0	0,5	**343 41** 100 035
	25,0		3,0 - 6,0		S=8,6-e			**343 41** 100 060
M12	24,8	17,6	1,0 - 4,0	16,0	S=7,8-e		0,85	**343 41** 120 040
	27,7		4,0 - 8,0		S=13,5-e	14,0		**343 41** 120 080



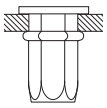
Steel | Thin head | Hexagonal | Closed

d (mm)	L (mm)	B (mm)	e (mm) (min - max)	H +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)	
M4	17,8	6,5	0,5 - 3,0	6,0	S=4,5-e	13,0	0,4	**343 51** 040 030
M5	20,2	7,85	0,5 - 3,0	7,0	S=4,5-e	15,0	0,45	**343 51** 050 030
M6	23,2	9,95	0,5 - 3,5	9,0	S=5,8-e	17,2	0,45	**343 51** 060 030
	25,3	10,03	3,5 - 5,5		S=7,4-e	17,8	0,4	**343 51** 060 055
M8	28,3	11,75	0,5 - 3,5	11,0	S=5,8-e	22,5	0,5	**343 51** 080 030
	30,5	11,75	3,5 - 6,0		S=8,5-e	22,0		**343 51** 080 060
M10	35,05	14,1	3,0 - 6,0	13,0	S=8,2-e	27,0	0,55	**343 51** 100 060



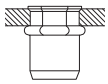
Steel | Flat head | Hexagonal | Open

d (mm)	L (mm)	B (mm)	e (mm) (min - max)	H +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)	
M4	9,8	9,0	0,5 - 2,0	6,0	S=3,5-e	5,8	1,0	**233 41** 040 020
M5	13,7	10,0	0,5 - 3,0	7,0	S=5,0-e	8,0	1,0	**233 41** 050 030
	14,3		2,5 - 4,5		S=6,6-e	6,7		**233 41** 050 045
M6	15,7	12,9	0,5 - 3,0	9,0	S=4,5-e	10,0	1,5	**233 41** 060 030
	18,7		3,0 - 5,5		S=7,5-e			**233 41** 060 055
M8	17,75	16,0	0,5 - 3,0	11,0	S=5,5-e	11,0	1,5	**233 41** 080 030
	20,75		3,0 - 5,5		S=8,5-e			**233 41** 080 055
M10	22,8	19,0	1,0 - 3,5	13,0	S=6,0-e	15,0	2,0	**233 41** 100 035
	25,45		3,5 - 6,0		S=8,7-e			**233 41** 100 060
M12	26,8	23,0	1,0 - 4,0	16,0	S=7,7-e	17,0	2,0	**233 41** 120 030



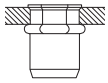
Steel | Flat head | Hexagonal | Closed

d (mm)	L (mm)	B (mm)	e (mm) (min - max)	H +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)	
M4	14,8	9,0	0,5 - 2,0	6,0	S=4,0-e	10,0	1,0	**233 51** 040 020
M5	19,7	10,0	0,5 - 3,0	7,0	S=5,0-e	14,0	1,0	**233 51** 050 030
M6	22,8	12,9	0,5 - 3,0	9,0	S=5,2-e	17,0	1,5	**233 51** 060 030
	25,0	13,0	3,0 - 5,5		S=7,5-e			**233 51** 060 055
M8	25,8	16,0	0,5 - 3,0	11,0	S=5,5-e	19,0	1,5	**233 51** 080 030
	28,7		3,0 - 5,5		S=8,3-e			**233 51** 080 055
M10	32,75	19,0	1,0 - 3,5	13,0	S=6,0-e	25,0	2,0	**233 51** 100 035



Steel | Thin head | Semi-Hexagonal | Open

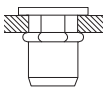
d (mm)	L (mm)	B (mm)	e (mm) (min - max)	H +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)	
M4	10,7	6,7	0,5 - 3,0	6,0	S=4,5-e	6,0	0,3	**343 41** 040 230
M5	13,0	7,9	0,5 - 3,0	7,0	S=5,2-e	7,5	0,3	**343 41** 050 230
M6	13,75	9,8	0,5 - 3,0	9,0	S=5,3-e	8,3	0,4	**343 41** 060 230
M8	17,25	12,0	0,5 - 3,0	11,0	S=5,8-e	11,3	0,4	**343 41** 080 230



Steel | Thin head | Semi-Hexagonal | Open

d (mm)	L (mm)	B (mm)	e (mm) (min - max)	H +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)	
M4	10,3	6,9	0,5 - 2,0	6,4	S=3,0-e	6,8	0,5	**343 21** 040 020
M5	11,45	8,1	0,5 - 3,0	7,3	S=4,8-e	7,0	0,45	**343 21** 050 030
M6	14,35	10,6	0,7 - 3,0	9,7	S=4,8-e	9,0	0,6	**343 21** 060 030
M8	15,8	11,55	0,9 - 3,3	10,7	S=5,9-e	10,2	0,7	**343 21** 080 033

inch For holes with imperial dimensions



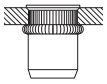
Steel | Flat head | Semi-Hexagonal | Open

d (mm)	L (mm)	B (mm)	e (mm) (min - max)	H +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)	
M4	11,0	9,0	0,5 - 3,0	6,0	S=4,3-e	5,8	1,0	**233 41** 040 230
M5	13,0	10,0	0,5 - 3,0	7,0	S=4,7-e	7,3	1,0	**233 41** 050 230
M6	14,25	13,0	0,5 - 3,0	9,0	S=5,0-e	8,0	1,5	**233 41** 060 230
M8	18,0	16,0	0,5 - 3,0	11,0	S=5,3-e	11,2	1,5	**233 41** 080 230

RIVKLE® - Other concepts

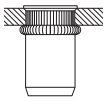
RIVKLE® Star Head

Flush finish with anti-turn - Ideal for wood



Steel | Thin head | Knurled | Open

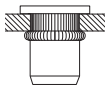
	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)	
M3	9,0	5,7	0,5 - 2,0	5,0	S=3,6-e	5,5	0,4	**343 67** 030 020
	9,8	5,75	1,5 - 3,0		S=3,6-e	5,7		**343 67** 030 030
M4	10,7	6,6	0,5 - 3,0	6,0	S=4,9-e	5,8	0,3	**343 67** 040 230
	11,9		2,5 - 4,0		S=5,6-e	5,9	0,4	**343 67** 040 040
M5	12,75	8,0	0,5 - 3,0	7,0	S=5,3-e	7,4	0,3	**343 67** 050 230
	13,8	7,6	2,5 - 4,0		S=5,8-e	7,6	0,4	**343 67** 050 040
M6	13,8	10,0	0,5 - 3,0	9,0	S=5,1-e	8,5	0,4	**343 67** 060 230
	15,3	9,6	3,0 - 4,5		S=6,6-e		0,3	**343 67** 060 045
	16,9		4,5 - 6,0		S=8,2-e			**343 67** 060 060
M8	17,25	12,0	0,5 - 3,0	11,0	S=6,0-e	11,1	0,4	**343 67** 080 230
	18,9	11,8	3,0 - 4,5		S=6,7-e	11,8		**343 67** 080 045
	20,5		4,5 - 6,0		S=8,3-e			**343 67** 080 060
M10	20,75	14,0	0,7 - 3,5	13,0	S=6,5-e	14,0	0,5	**343 67** 100 235
	21,9	13,8	3,0 - 4,5		S=7,5-e		0,4	**343 67** 100 045
	23,5		4,5 - 6,0		S=9,1-e			**343 67** 100 060
M12	25,8	17,0	3,0 - 4,5	16,0	S=7,5-e	17,8	0,5	**343 67** 120 045
	27,4		4,5 - 6,0		S=9,1-e			**343 67** 120 060



Steel | Thin head | Knurled | Closed

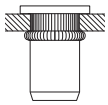
	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)	
M3	12,6	5,8	0,7 - 1,5	5,0	S=2,0-e	10,2	0,3	**343 77** 030 015
	14,2		1,5 - 3,0		S=3,6-e			**343 77** 030 030
M4	17,7	6,7	0,5 - 3,0	6,0	S=4,9-e	12,8	0,3	**343 77** 040 030
	16,9	6,6	2,5 - 4,0		S=5,7-e	10,9		**343 77** 040 040
M5	19,85	8,0	0,5 - 3,0	7,0	S=5,3-e	14,5	0,3	**343 77** 050 030
	19,8	7,6	2,5 - 4,0		S=6,0-e	13,5		**343 77** 050 040
M6	21,3	10,0	0,5 - 3,0	9,0	S=5,0-e	16,0	0,6	**343 77** 060 031
	20,3	9,6	3,0 - 4,5		S=6,6-e	13,5	0,3	**343 77** 060 045
	21,9		4,5 - 6,0		S=7,3-e	13,6		**343 77** 060 060
M8	23,3	11,8	0,8 - 3,0	11,0	S=4,8-e	18,0	0,4	**343 77** 080 030
	26,3	12,0	1,0 - 4,0		S=7,4-e	19,0	0,8	**343 77** 080 040
	24,9	11,8	3,0 - 4,5		S=6,7-e	17,8	0,4	**343 77** 080 045
	26,5		4,5 - 6,0		S=8,3-e			**343 77** 080 060
M10	28,3	13,8	0,8 - 3,0	13,0	S=5,5-e	22,3	0,5	**343 77** 100 030
	29,9		3,0 - 4,5		S=7,1-e			**343 77** 100 045
	31,5		4,5 - 6,0		S=8,7-e			**343 77** 100 060
M12	33,2	16,8	0,8 - 3,0	16,0	S=11,5-e	21,1	0,5	**343 77** 120 030
	34,8	17,0	3,0 - 4,5		S=7,9-e	26,4		**343 77** 120 045
	36,4		4,5 - 6,0		S=9,6-e			**343 77** 120 060

RIVKLE® – Standard blind rivet nuts - Steel



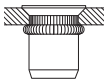
Steel | Flat head | Knurled | Open

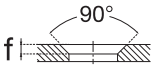
d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)	
M3	8,8	7,0	0,50 - 1,00	5,0	S=2,0-e	5,8	1,0	**233 07** 030 100
	9,6		1,00 - 1,75		S=2,8-e	6,0		**233 07** 030 175
	10,4		1,75 - 2,50		S=3,4-e			**233 07** 030 250
	11,2		2,50 - 3,25		S=4,1-e	6,1		**233 07** 030 325
M4	11,0	9,0	0,50 - 3,00	6,0	S=4,3-e	5,8	1,0	**233 07** 040 230
	11,6	8,0	2,50 - 3,25		S=4,6-e	6,0		**233 07** 040 325
M5	12,75	10,0	0,50 - 3,00	7,0	S=4,7-e	7,3	1,0	**233 07** 050 230
	14,7		3,00 - 4,00		S=6,0-e	8,0		**233 07** 050 040
M6	14,3	13,0	0,50 - 3,00	9,0	S=5,0-e	8,0	1,5	**233 07** 060 230
	16,9		3,00 - 5,50		S=7,5-e	8,2		**233 07** 060 255
M8	17,7	16,0	0,50 - 3,00	11,0	S=5,5-e	11,0	1,5	**233 07** 080 230
	20,4		3,00 - 5,50		S=8,1-e			**233 07** 080 255
M10	21,8	19,0	0,70 - 3,50	13,0	S=6,1-e	13,9	2,0	**233 07** 100 235
	24,0	16,0	3,00 - 4,50		S=7,4-e	14,6		**233 07** 100 450
	25,6		4,50 - 6,00		S=8,9-e	14,5		**233 07** 100 600



Steel | Flat head | Knurled | Closed

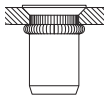
d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)	
M4	15,0	8,0	1,00 - 1,75	6,0	S=3,0-e	11,0	1,0	**233 27** 040 175
	15,8		1,75 - 2,50		S=3,5-e	11,3		**233 27** 040 250
	16,6		2,50 - 3,25		S=4,6-e	11,0		**233 27** 040 325
M5	17,6	9,0	0,50 - 1,00	7,0	S=2,0-e	14,6	1,0	**233 27** 050 100
	18,7		1,00 - 2,00		S=3,1-e			**233 27** 050 200
	19,8		2,00 - 3,00		S=4,2-e			**233 27** 050 300
	21,0		3,00 - 4,00		S=5,3-e	14,7		**233 27** 050 400
M6	21,5	13,0	0,50 - 3,00	9,1	S=4,5-e	15,0	1,5	**233 27** 060 030
	25,2	11,0	3,00 - 4,50	9,0	S=5,3-e	18,4		**233 27** 060 450
M8	26,5	14,0	2,00 - 3,50	11,0	S=5,5-e	19,5	1,5	**233 27** 080 350
	27,8		3,50 - 5,00		S=7,6-e	18,7		**233 27** 080 500
M10	32,3	16,0	1,50 - 3,00	13,0	S=6,0-e	25,0	2,0	**233 27** 100 300

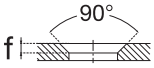




Steel | Countersunk head | Knurled | Open

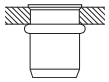
	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	f (mm)	S (mm)	L_2 (mm)	E max (mm)	
M3	8,8	6,6	1,00 - 1,75	5,0	1,0	S=2,8-e	5,9	0,1	**233 17** 030 175
	9,6	7,0	1,75 - 2,50		1,2	S=3,5-e	6,0		**233 17** 030 250
	10,4		2,50 - 3,25			S=4,3-e			**233 17** 030 325
M4	9,2	8,0	1,00 - 1,75	6,0	1,0	S=2,8-e	6,3	0,1	**233 17** 040 175
	10,0		1,75 - 2,50		1,2	S=3,6-e			**233 17** 040 250
	10,8		2,50 - 3,25			S=4,3-e	6,4		**233 17** 040 325
M5	11,6	8,5	1,00 - 2,00	7,0	1,0	S=3,8-e	8,5	0,1	**233 17** 050 200
	12,7	9,0	1,50 - 3,00		1,4	S=3,8-e			**233 17** 050 300
	13,8		3,00 - 4,00			S=5,2-e			**233 17** 050 400
	14,9		4,00 - 5,00			S=6,3-e			**233 17** 050 500
M6	15,0	10,6	1,50 - 3,00	9,0	1,2	S=5,0-e	10,0	0,1	**233 17** 060 300
	16,6		3,00 - 4,50		1,5	S=6,5-e			**233 17** 060 450
	18,2		4,50 - 6,00			S=8,0-e			**233 17** 060 600
	19,8	11,0	6,00 - 7,50			S=9,4-e	10,3		**233 17** 060 750
M8	16,5	12,6	1,50 - 3,00	11,0	1,4	S=6,0-e	11,5	0,1	**233 17** 080 300
	18,1	13,6	3,00 - 4,50		2,0	S=7,5-e			**233 17** 080 450
	19,7	14,0	4,50 - 6,00			S=8,6-e	11,0		**233 17** 080 600
M10	20,4	15,0	1,50 - 3,00	13,0	1,4	S=5,7-e	14,6	0,1	**233 17** 100 300
	22,0	16,0	3,00 - 4,50		2,0	S=7,3-e			**233 17** 100 450
	23,6		4,50 - 6,00			S=8,9-e			**233 17** 100 600





Steel | Countersunk head | Knurled | Closed

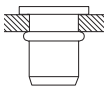
	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	f (mm)	S (mm)	L_2 (mm)	E max (mm)	
M4	14,2	8,0	1,00 - 1,75	6,0	1,0	S=2,8-e	11,3	0,1	**233 37** 040 175
	15,0		1,75 - 2,50		1,2	S=3,6-e			**233 37** 040 250
	15,8		2,50 - 3,25			S=4,7-e	11,5		**233 37** 040 325
M5	17,7	8,5	1,00 - 2,00	7,0	1,0	S=3,0-e	14,6	0,1	**233 37** 050 200
	18,8	9,0	2,00 - 3,00		1,4	S=4,1-e			**233 37** 050 300
	21,0		3,00 - 5,00		1,4	S=6,3-e			**233 37** 050 500
M6	22,0	11,0	1,50 - 3,00	9,0	1,2	S=4,6-e	17,3	0,1	**233 37** 060 300
	23,6		3,00 - 4,50		1,5	S=6,2-e			**233 37** 060 450
	25,2		4,50 - 6,00			S=7,8-e			**233 37** 060 600
	26,8		6,00 - 7,50			S=9,4-e			**233 37** 060 750
M8	24,8	12,6	1,50 - 3,00	11,0	1,4	S=6,0-e	19,8	0,1	**233 37** 080 300
	26,4	14,0	3,00 - 4,50		2,0	S=7,0-e	19,3		**233 37** 080 450
	28,0		4,50 - 6,00			S=8,6-e			**233 37** 080 600
	29,6		6,00 - 7,50			S=10,2-e			**233 37** 080 750
M10	30,3	15,0	1,50 - 3,00	13,0	1,4	S=4,3-e	24,5	0,1	**233 37** 100 300
	31,9	16,0	3,00 - 4,50		2,0	S=5,3-e			**233 37** 100 450
	33,5		4,50 - 6,00			S=8,9-e			**233 37** 100 600



Steel | Thin head | Plain | Open

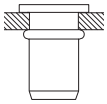
	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)	
M3	8,4	5,2	0,5 - 1,5	4,7	S=2,8-e	5,5	0,4	**343 01** 030 150
M4	10,2	6,9	0,5 - 2,0	6,4	S=3,5-e	7,3	0,5	**343 01** 040 150
M5	11,25	7,6	0,5 - 3,0	7,1	S=4,5-e	7,3	0,6	**343 01** 050 150
M6	14,95	10,35	0,7 - 3,0	9,5	S=5,5-e	9,3	0,6	**343 01** 060 200
M8	16,6	11,5	0,8 - 4,5	10,5	S=7,5-e	9,6	0,7	**343 01** 080 450

inch For holes with imperial dimensions

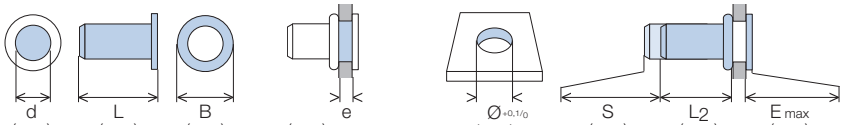


Steel | Flat head | Plain | Open

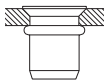
	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)	
M3	8,3	7,5	0,5 - 1,0	5,0	S=2,1-e	5,2	1,0	**233 01** 030 010
	8,7		1,0 - 1,5		S=3,2-e	4,8		**233 01** 030 015
	9,7		1,5 - 3,0		S=4,2-e			**233 01** 030 030
	11,2		3,0 - 4,5		S=5,8-e	4,4		**233 01** 030 045
	12,9	7,4	4,5 - 6,0		S=7,2-e	4,7		**233 01** 030 060
M4	9,7	9,0	0,5 - 1,0	6,0	S=2,6-e	5,4	1,0	**233 01** 040 010
	10,2		1,0 - 2,0		S=3,6-e			**233 01** 040 020
	11,8		2,0 - 4,0		S=5,6-e	5,6		**233 01** 040 040
	13,8		4,0 - 6,0		S=7,5-e	5,3		**233 01** 040 060
M5	13,75	10,0	0,5 - 3,0	7,0	S=5,0-e	8,0	1,0	**233 01** 050 030
	16,7		3,0 - 5,5		S=7,5-e			**233 01** 050 055
	19,8		5,5 - 8,0		S=9,7-e	9,1		**233 01** 050 080
M6	15,8	13,0	0,5 - 3,0	9,0	S=5,2-e	10,0	1,5	**233 01** 060 030
	18,7		3,0 - 5,5		S=7,9-e	9,3		**233 01** 060 055
	21,7		5,5 - 8,0		S=10,2-e	10,0		**233 01** 060 080
M8	17,8	16,0	0,5 - 3,0	11,0	S=5,7-e	11,0	1,5	**233 01** 080 030
	20,8		3,0 - 5,5		S=8,2-e			**233 01** 080 055
	23,8		5,5 - 8,0		S=10,6-e	11,7		**233 01** 080 080
	26,8		8,0 - 10,5		S=13,5-e	11,8		**233 01** 080 105
M10	22,75	19,0	1,0 - 3,5	13,0	S=6,5-e	15,0	2,0	**233 01** 100 035
	25,75		3,5 - 6,0		S=9,0-e			**233 01** 100 060
	27,75		6,0 - 8,5		S=11,5-e			**233 01** 100 085
	31,8		8,5 - 11,0		S=14,0-e			**233 01** 100 110
M12	26,7	23,0	1,0 - 4,0	16,0	S=7,7-e	17,1	2,0	**233 01** 120 040
	29,7		4,0 - 7,0		S=10,7-e	17,5		**233 01** 120 070
	34,8		7,0 - 10,0		S=13,7-e			**233 01** 120 100
M14	35,5	24,0	4,5 - 6,0	18,0	S=9,8-e	23,2	2,5	**233 01** 140 600

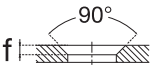


Steel | Flat head | Plain | Closed



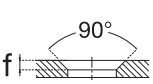
	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	S (mm)	L2 (mm)	E max (mm)	
M3	14,3	7,5	1,5 - 3,0	5,0	S=4,1-e	9,2	1,0	**233 21** 030 030
M4	15,25	9,0	1,0 - 2,0	6,0	S=5,2-e	10,4	1,0	**233 21** 040 020
	16,75		2,0 - 4,0		S=5,6-e			**233 21** 040 040
	18,8		4,0 - 6,0		S=7,6-e	10,3		**233 21** 040 060
M5	19,7	10,0	0,5 - 3,0	7,0	S=5,0-e	14,0	1,0	**233 21** 050 030
	22,7		3,0 - 5,5		S=7,5-e			**233 21** 050 055
	25,7		5,5 - 8,0		S=9,6-e	15,1		**233 21** 050 080
M6	22,7	13,0	0,5 - 3,0	9,0	S=4,9-e	16,3	1,5	**233 21** 060 030
	25,7		3,0 - 5,5		S=7,7-e	17,0		**233 21** 060 055
	28,7		5,5 - 8,0		S=10,2-e			**233 21** 060 080
M8	25,7	16,0	0,5 - 3,0	11,0	S=5,7-e	19,0	1,5	**233 21** 080 030
	28,7		3,0 - 5,5		S=8,2-e			**233 21** 080 055
	31,7		5,5 - 8,0		S=10,7-e			**233 21** 080 080
	34,8		8,0 - 10,5		S=12,9-e	20,4		**233 21** 080 105
M10	32,7	19,0	1,0 - 3,5	13,0	S=6,5-e	25,0	2,0	**233 21** 100 035
	35,8		3,5 - 6,0		S=8,4-e	25,4		**233 21** 100 060
	38,8		6,0 - 8,5		S=11,2-e	25,6		**233 21** 100 085
M12	38,8	23,0	1,0 - 4,0	16,0	S=7,2-e	29,6	2,0	**233 21** 120 040
	41,8		4,0 - 7,0		S=10,4-e	29,4		**233 21** 120 070





Steel | Countersunk head | Plain | Open

d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	f (mm)	S (mm)	L_2 (mm)	E max (mm)	
M3	8,3	6,6	1,0 - 1,5	5,0	0,9	S=2,8-e	5,4	1,0	**233 11** 030 015
	8,8		1,5 - 3,0		1,3	S=4,3-e	4,8	1,4	**233 11** 030 030
	10,3		3,0 - 4,5			S=4,9-e	4,7		**233 11** 030 045
M4	9,8	7,2	1,0 - 2,0	6,0	0,9	S=3,7-e	5,4	0,1	**233 11** 040 020
	10,4	7,8	2,0 - 3,0		1,3	S=4,7-e			**233 11** 040 030
	11,8		3,0 - 5,0			S=6,6-e			**233 11** 040 050
	13,8	8,0	5,0 - 7,0			S=8,4-e	5,3		**233 11** 040 070
M5	13,7	9,2	1,5 - 4,0	7,0	1,5	S=6,5-e	8,0	0,1	**233 11** 050 040
	16,7	9,6	4,0 - 6,5			S=8,1e	8,6		**233 11** 050 065
	19,8		6,5 - 9,0			S=10,7-e	9,0		**233 11** 050 090
M6	17,3	11,3	1,5 - 4,0	9,0	1,5	S=6,2-e	10,0	0,1	**233 11** 060 040
	20,3		4,0 - 6,5			S=8,7-e			**233 11** 060 065
	21,8	11,7	6,5 - 9,0			S=10,4-e	11,4		**233 11** 060 090
M8	17,8	13,1	1,5 - 4,0	11,0	1,5	S=7,0-e	11,0	0,1	**233 11** 080 040
	20,8		4,0 - 6,5			S=9,5-e			**233 11** 080 065
	23,75		6,5 - 9,0			S=12,0-e			**233 11** 080 090
M10	21,8	15,1	1,5 - 4,0	13,0	1,5	S=8,4-e	15,0	0,1	**233 11** 100 040
	24,75		4,0 - 6,5			S=8,4-e			**233 11** 100 065
	28,0	15,5	6,5 - 9,0			S=11,5-e	14,8		**233 11** 100 090
M12	25,9	19,0	1,7 - 4,5	16,0	1,7	S=8,2-e	17,5	0,1	**233 11** 120 045
	29,0		4,5 - 7,5			S=9,7-e			**233 11** 120 075
	31,8		7,5 - 10,5			S=13,7-e	18,0		**233 11** 120 105



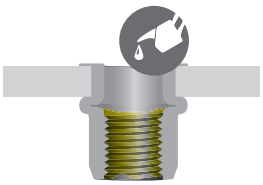
Steel | Countersunk head | Plain | Closed

d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	f (mm)	S (mm)	L_2 (mm)	E max (mm)	
M3	13,5	6,6	1,0 - 1,5	5,0	0,9	S=2,8-e	10,0	0,1	**233 31** 030 015
	14,2	6,6	1,5 - 3,0		1,3	S=4,3-e	8,8		**233 31** 030 030
M4	15,8	7,5	1,0 - 2,0	6,0	0,9	S=2,8-e	11,9	0,1	**233 31** 040 020
	16,7	7,8	2,0 - 3,0		1,3	S=4,7-e	10,1		**233 31** 040 030
	18,2	8,0	3,0 - 5,0			S=6,3-e	10,4		**233 31** 040 050
	20,2		5,0 - 7,0			S=8,4-e	10,3		**233 31** 040 070
M5	21,3	9,2	1,5 - 4,0	7,0	1,5	S=6,5-e	14,0	0,1	**233 31** 050 040
	24,4	9,6	4,0 - 6,5			S=8,1-e	14,6		**233 31** 050 065
	25,9		6,5 - 9,0			S=10,7-e	15,1		**233 31** 050 090
M6	22,7	11,3	1,5 - 4,0	9,0	1,5	S=6,2-e	17,0	0,1	**233 31** 060 040
	27,3		4,0 - 6,5			S=8,7-e			**233 31** 060 065
	28,8	11,7	6,5 - 9,0			S=10,5-e	19,4		**233 31** 060 090
M8	25,7	13,1	1,5 - 4,0	11,0	1,5	S=7,0-e	19,0	0,1	**233 31** 080 040
	28,8		4,0 - 6,5			S=7,0-e			**233 31** 080 065
	31,8	13,5	6,5 - 9,0			S=11,3-e	20,4		**233 31** 080 090
M10	31,8	15,5	1,5 - 4,0	13,0	1,5	S=6,3-e	25,4	0,1	**233 31** 100 040
	34,0		4,0 - 6,5			S=8,9-e	25,8		**233 31** 100 065
	38,0		6,5 - 9,0			S=12,3-e			**233 31** 100 090
M12	37,8	19,0	1,7 - 4,5	16,0	1,7	S=7,2-e	30,5	0,1	**233 31** 120 045
	40,8		4,5 - 7,5			S=10,4e	30,3		**233 31** 120 075
	43,8		7,5 - 10,5			S=13,4-e			**233 31** 120 105

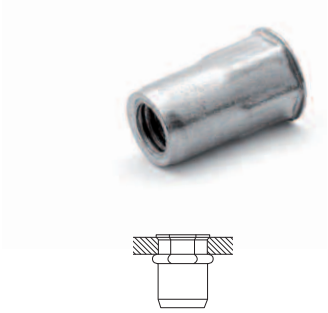
RIVKLE® – Standard blind rivet nuts - Stainless steel

Industrial markets are constantly changing, bringing new applications and new customer needs.
In order to support our customers and answer at best to their needs, BÖLLHOFF has renewed and developed a dedicated stainless steel range.

RIVKLE® Stainless steel - Lubricated range



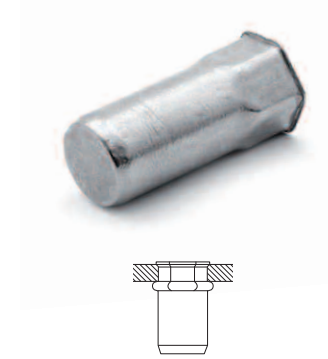
The lubricated range is based on standard products on which a lubricant has been applied to limit galling issues.
Customers don't need anymore to add manually any lubricant product (paste, spray, oil…).



Stainless steel | Thin head | Semi-hexagonal | Open

d (mm)	L (mm)	B (mm)	e (mm) (min - max)	H +0,1/0 (mm)	S (mm)	L2 (mm)	E max (mm)		
M3	8,6	5,8	1,0 - 2,3	5,0	S=3,8-e	4,5	0,4	**343 98** 030 590	
	9,5		2,3 - 3,2		S=4,7-e			**343 98** 030 591	
M4	10,4	6,7	0,5 - 2,0	6,0	S=3,1-e	6,8	0,4	**343 48** 040 020*	**343 49** 040 506*
	11,5		0,8 - 3,0		S=4,2-e			**343 48** 040 030*	**343 49** 040 507*
	11,7	7,0	3,0 - 4,2		S=5,8-e	6,0		**343 98** 040 629*	
M5	12,0	7,8	0,5 - 3,0	7,0	S=4,4-e	7,0	0,45	**343 48** 050 020*	**343 49** 050 538*
	12,8	8,9	3,0 - 4,5		S=6,5-e	6,5	0,4	**343 98** 050 629	
M6	14,5	10,2	0,5 - 3,0	9,0	S=4,2-e	9,7	0,45	**343 48** 060 025	
	14,3	9,7					0,3	**343 98** 060 624*	**343 98** 060 637*
	16,5	10,2	3,0 - 5,5		S=7,4-e	8,7	0,45	**343 48** 060 055*	
	16,0	11,1	4,0 - 5,5		S=8,0-e	8,5	0,5	**343 98** 060 630	
M8	15,8	12,5	0,5 - 3,0	11,0	S=4,7-e	10,4		**343 48** 080 030*	**343 98** 080 631*
	17,6		1,5 - 5,0		S=7,0-e	10,2	0,3	**343 98** 080 625*	
M10	19,4	14,2	1,0 - 3,5	13,0	S=7,0-e	12,0	0,7	**343 48** 100 035	**343 49** 100 501
	21,5	14,4	2,5 - 5,5		S=9,1-e	12,5	0,65	**343 98** 100 691	
M12	23,5	17,4	1,0 - 4,5	16,0	S=8,5-e	15,0	0,7	**343 98** 120 501	

*Extra-flat thin head

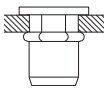


Stainless steel | Thin head | Semi-hexagonal | Closed

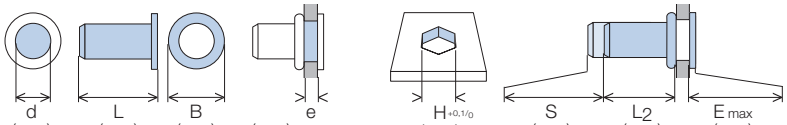
d (mm)	L (mm)	B (mm)	e (mm) (min - max)	H +0,1/0 (mm)	S (mm)	L2 (mm)	E max (mm)		
M3	13,3	5,8	1,0 - 2,3	5,0	S=3,8-e	9,0	0,4	**343 98** 030 592	
	14,2		2,3 - 3,2		S=4,7-e			**343 98** 030 593	
M4	15,4	6,7	0,5 - 2,5	6,0	S=3,8-e	11,5	0,4	**343 58** 040 025*	**343 59** 040 505*
	17,3	7,8	3,0 - 4,2		S=5,8-e			**343 98** 040 630	
M5	17,4	7,8	0,5 - 3,0	7,0	S=4,4-e	12,5	0,45	**343 58** 050 020*	**343 59** 050 505*
	20,3		3,0 - 4,5		S=6,5-e	13,4	0,5	**343 98** 050 683	
M6	20,5	9,8	0,5 - 3,0	9,0	S=4,1-e	15,0	0,6	**343 58** 060 030	
	23,0	10,2	3,0 - 5,5		S=7,4-e	15,2	0,45	**343 58** 060 055*	
M8	26,6	12,5	1,5 - 5,0	11,0	S=7,0-e	19,0	0,3	**343 98** 080 629	
M10	29,3	15,6	1,0 - 3,5	13,0	S=7,0-e	22,0	0,65	**343 98** 100 692	
	31,3		2,5 - 5,5		S=9,0-e			**343 98** 100 693	
M12	34,0	18,9	1,0 - 4,5	16,0	S=8,5-e	26,4	0,7	**343 98** 120 502	

*Extra-flat thin head

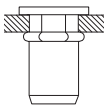
RIVKLE® – Standard blind rivet nuts - Stainless steel



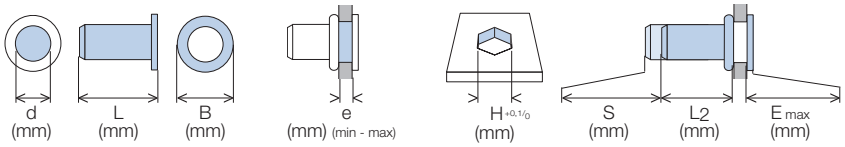
Stainless steel | Flat head | Semi-hexagonal | Open



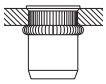
	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	H +0,1/0 (mm)	S (mm)	L2 (mm)	E max (mm)		
M3	9,0	7,0	1,0 - 2,3	5,0	S=3,1-e	5,0	0,7	**233 48** 030 023	
	9,7		2,3 - 3,0		S=4,5-e			**233 48** 030 030	
M4	12,0	9,0	0,5 - 2,0	6,0	S=3,5-e	5,4	1,0	**233 48** 040 020	
	12,1	8,0	2,0 - 3,5		S=5,5-e	6,0	0,7	**233 48** 040 040	
M5	12,5	10,0	0,5 - 3,0	7,0	S=4,7-e	8,0	1,0	**233 48** 050 030	**233 49** 050 531
	14,0	9,0	2,0 - 4,0		S=4,8-e	7,5		**233 48** 050 040	
M6	15,8	12,0	0,5 - 3,0	9,0	S=4,0-e	9,7	1,5	**233 48** 060 001	**233 49** 060 509
	16,0	11,0	3,0 - 4,5		S=7,1-e	9,0	1,4	**233 48** 060 045	
M8	16,5	14,0	0,5 - 3,0	11,0	S=5,4-e	9,6	1,5	**233 48** 080 001	**233 49** 080 546
	18,5		3,0 - 5,5		S=7,4-e			**233 48** 080 002	
M10	21,0	17,0	1,0 - 3,5	13,1	S=6,5-e	13,7	2,0	**233 48** 100 035	
	22,7	16,0	3,5 - 5,5	13,0	S=9,4-e	12,0	1,8	**233 48** 100 055	
M12	24,2	20,0	1,0 - 4,5	16,0	S=8,5-e	15,0	1,8	**233 48** 120 045	



Stainless steel | Flat head | Semi-hexagonal | Closed

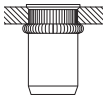


	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	H +0,1/0 (mm)	S (mm)	L2 (mm)	E max (mm)	
M3	12,7	7,0	1,1 - 2,3	5,0	S=3,8-e	9,2	0,7	**233 58** 030 023
	14,3		2,3 - 3,0		S=4,5-e	9,5		**233 58** 030 030
M4	15,5	8,0	0,5 - 2,0	6,0	S=3,8-e	11,5	0,8	**233 58** 040 020
	17,5		2,0 - 3,5		S=5,6-e			**233 58** 040 040
M5	19,6	9,0	0,5 - 3,0	7,0	S=5,0-e	12,5	1,0	**233 58** 050 001
	20,0		2,0 - 4,0		S=6,1-e	13,5	0,8	**233 58** 050 040
M6	22,3	12,0	0,5 - 3,0	9,1	S=4,0-e	15,5	1,5	**233 58** 060 030
	23,7	11,0	3,0 - 4,5	9,0	S=7,1-e		1,4	**233 58** 060 045
M8	26,1	14,0	0,8 - 3,0	11,0	S=5,3-e	19,5	1,5	**233 58** 080 001
	27,0		3,0 - 5,5		S=8,2-e	18,0	1,4	**233 58** 080 055
M10	31,5	16,0	1,0 - 3,5	13,0	S=7,4-e	27,5	1,8	**233 58** 100 035
	33,5		3,5 - 5,5		S=9,4-e			**233 58** 100 055
M12	35,0	20,0	1,0 - 4,5	16,0	S=8,5-e	29,5	1,8	**233 58** 120 045



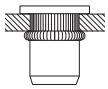
Stainless steel | Thin head | Knurled | Open

d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)	
M3	8,7	6,0	0,7 - 1,5	5,0	S=2,4-e	5,9	0,3	**343 66** 030 015
	7,9		1,5 - 2,5		S=3,5-e			**343 66** 030 025
	10,5		2,0 - 3,2		S=4,6-e			**343 66** 030 032
M4	11,6	7,0	0,7 - 3,0	6,0	S=4,0-e	7,5	0,5	**343 66** 040 230
	12,5		2,5 - 4,2		S=4,6-e	6,6	0,3	**343 66** 040 042
M5	12,3	8,0	0,7 - 3,3	7,0	S=4,4-e	8,0	0,5	**343 66** 050 233
	14,5		3,3 - 4,5		S=6,3-e	8,2	0,3	**343 66** 050 045
M6	14,5	10,0	0,7 - 3,3	9,0	S=5,7-e	8,6	0,6	**343 66** 060 233
	17,5		3,0 - 5,5		S=7,5-e	9,6	0,45	**343 66** 060 055
	17,0		4,5 - 6,0		S=7,9-e	8,7	0,4	**343 66** 060 060
M8	16,1	12,0	0,7 - 3,3	11,0	S=6,5-e	9,5	0,6	**343 66** 080 233
	18,6		3,3 - 5,5		S=9,0-e	10,0		**343 66** 080 255
	19,1		4,5 - 6,0		S=7,9-e	10,7	0,4	**343 66** 080 060
M10	18,3	14,0	0,8 - 1,5	13,0	S=3,9-e	13,9	0,4	**343 66** 100 015
	19,9		1,5 - 3,0		S=5,5-e			**343 66** 100 030
	21,5		3,0 - 4,5		S=7,1-e			**343 66** 100 045
	23,1		4,5 - 6,0		S=8,7-e			**343 66** 100 060
M12	21,5	17,0	0,8 - 1,5	16,0	S=3,8-e	17,2	0,4	**343 66** 120 015
	23,1	17,5	1,5 - 3,0		S=5,4-e			**343 66** 120 030
	24,7		3,0 - 4,5		S=7,0-e			**343 66** 120 045
	26,3		4,5 - 6,0		S=8,6-e			**343 66** 120 060



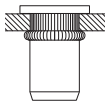
Stainless steel | Thin head | Knurled | Closed

d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)	
M3	13,0	6,0	0,7 - 1,5	5,0	S=2,4-e	10,2	0,3	**343 76** 030 015
	14,1		1,5 - 2,5		S=3,5-e			**343 76** 030 025
	14,8		2,0 - 3,2		S=4,6-e			**343 76** 030 032
M4	15,7	7,0	0,7 - 3,0	6,0	S=3,8-e	12,0	0,5	**343 76** 040 030
	16,7		2,5 - 3,5		S=4,0-e	11,9	0,3	**343 76** 040 035
	17,5		2,5 - 4,2		S=4,7-e			**343 76** 040 042
M5	17,8	8,0	0,8 - 2,0	7,0	S=3,2-e	14,2	0,3	**343 76** 050 020
	18,9		2,0 - 3,0		S=4,3-e			**343 76** 050 030
	20,5		3,0 - 4,5		S=5,4-e			**343 76** 050 045
M6	17,3	10,0	0,8 - 1,5	9,0	S=3,1-e	13,7	0,4	**343 76** 060 015
	18,8		1,5 - 3,0		S=4,7-e	13,6		**343 76** 060 030
	20,4		3,0 - 4,5		S=6,3-e			**343 76** 060 045
	22,0		4,5 - 6,0		S=7,9-e			**343 76** 060 060
M8	20,3	12,0	0,8 - 1,5	11,0	S=3,1-e	16,7	0,4	**343 76** 080 015
	21,9		1,5 - 3,0		S=4,7-e			**343 76** 080 030
	23,5		3,0 - 4,5		S=6,3-e			**343 76** 080 045
	25,1		4,5 - 6,0		S=7,9-e			**343 76** 080 060
M10	26,3	14,0	0,8 - 1,5	13,0	S=3,9-e	21,9	0,4	**343 76** 100 015
	27,9		1,5 - 3,0		S=5,5-e			**343 76** 100 030
	29,5		3,0 - 4,5		S=7,1-e			**343 76** 100 045
	31,1		4,5 - 6,0		S=8,7-e			**343 76** 100 060
M12	30,5	17,0	0,8 - 1,5	16,0	S=3,8-e	26,2	0,4	**343 76** 120 015
	32,1	17,5	1,5 - 3,0		S=3,8-e			**343 76** 120 030
	33,7		3,0 - 4,5		S=7,0-e			**343 76** 120 045
	35,3		4,5 - 6,0		S=8,6-e			**343 76** 120 060



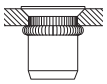
Stainless steel | Flat head | Knurled | Open

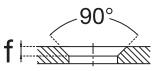
	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)		
M3	9,3	7,0	0,7 - 1,5	5,0	S=2,4-e	5,9	1,0	**233 06** 030 015	
	10,4		1,5 - 2,5		S=3,5-e			**233 06** 030 025	
	11,0		2,0 - 3,2		S=4,4-e			**233 06** 030 032	
M4	11,9	8,0	0,7 - 3,0	6,0	S=4,0-e	6,5	1,0	**233 06** 040 230	
	12,4		2,5 - 4,2		S=4,7-e	6,0		**233 06** 040 042	
M5	12,7	9,0	0,7 - 3,3	7,0	S=5,3-e	7,2	1,0	**233 06** 050 233	**233 09** 050 501
	14,9		3,0 - 4,5		S=5,4-e	7,8		**233 06** 050 045	
M6	15,2	12,0	0,7 - 3,3	9,0	S=5,7-e	8,6	1,5	**233 06** 060 233	**233 09** 060 501
	16,4	11,0	3,0 - 4,5		S=6,3-e			**233 06** 060 045	
	18,2		4,5 - 6,0		S=7,9-e			**233 06** 060 060	
M8	16,9	14,0	0,7 - 3,3	11,0	S=6,5-e	9,5	1,5	**233 06** 080 233	**233 09** 080 501
	19,0		3,0 - 5,5		S=8,5-e			**233 06** 080 255	
	20,0		4,5 - 6,0		S=7,9-e	10,6		**233 06** 080 060	
M10	19,8	16,0	0,8 - 1,5	13,0	S=3,9-e	13,9	2,0	**233 06** 100 015	
	21,4		1,5 - 3,0		S=5,5-e			**233 06** 100 030	
	23,0		3,0 - 4,5		S=7,1-e			**233 06** 100 045	
	24,6		4,5 - 6,0		S=8,7-e			**233 06** 100 060	
M12	23,0	20,0	0,8 - 1,5	16,0	S=3,8-e	17,2	2,0	**233 06** 120 015	
	24,6		1,5 - 3,0		S=5,4-e			**233 06** 120 030	
	26,2		3,0 - 4,5		S=7,0-e			**233 06** 120 045	
	27,8		4,5 - 6,0		S=8,6-e			**233 06** 120 060	



Stainless steel | Flat head | Knurled | Closed

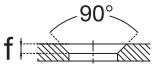
	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)	
M3	13,6	7,0	0,7 - 1,5	5,0	S=2,4-e	10,2	1,0	**233 26** 030 015
	14,7		1,5 - 2,5		S=3,5-e			**233 26** 030 025
	15,4		2,3 - 3,2		S=4,4-e	10,1		**233 26** 030 032
M4	14,8	8,0	0,7 - 1,5	6,0	S=2,6-e	11,2	1,0	**233 26** 040 015
	16,2		0,7 - 3,0		S=4,8-e			**233 26** 040 030
	16,7		2,5 - 3,5		S=4,7-e			**233 26** 040 035
	17,5		2,5 - 4,2		S=5,5-e			**233 26** 040 042
M5	17,8	9,0	0,7 - 1,5	7,0	S=2,8-e	14,0	1,0	**233 26** 050 015
	19,3		1,5 - 3,0		S=4,5-e			**233 26** 050 030
	20,4		3,0 - 4,0		S=5,6-e	13,8		**233 26** 050 040
M6	18,3	11,0	0,8 - 1,5	9,0	S=3,1-e	13,7	1,5	**233 26** 060 015
	19,8		1,5 - 3,0		S=4,7-e			**233 26** 060 030
	21,4		3,0 - 4,5		S=6,3-e			**233 26** 060 045
	23,2		4,5 - 6,0		S=7,9-e			**233 26** 060 060
M8	21,3	14,0	0,8 - 1,5	11,0	S=3,2-e	16,6	1,5	**233 26** 080 015
	22,8		1,5 - 3,0		S=4,7-e			**233 26** 080 030
	24,4		3,0 - 4,5		S=6,3-e			**233 26** 080 045
	26,0		4,5 - 6,0		S=7,9-e			**233 26** 080 060
M10	27,8	16,0	0,8 - 1,5	13,0	S=3,9-e	21,9	2,0	**233 26** 100 015
	29,4		1,5 - 3,0		S=5,5-e			**233 26** 100 030
	31,0		3,0 - 4,5		S=7,1-e			**233 26** 100 045
	32,6		4,5 - 6,0		S=8,7-e			**233 26** 100 060
M12	32,0	20,0	0,8 - 1,5	16,0	S=3,8-e	26,2	2,0	**233 26** 120 015
	33,6		1,5 - 3,0		S=5,4-e			**233 26** 120 030
	35,2		3,0 - 4,5		S=7,0-e			**233 26** 120 045
	36,8		4,5 - 6,0		S=8,6-e			**233 26** 120 060





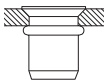
Stainless steel | Countersunk head | Knurled | Open

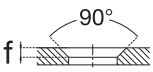
	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	f (mm)	S (mm)	L_2 (mm)	E max (mm)	
M3	8,8	7,0		1,3 - 2,0	5,0	0,9	S=2,9-e	5,9	0,1	**233 16** 030 020
	9,9			2,0 - 3,0			S=4,0-e			**233 16** 030 030
M4	9,3	8,0		1,3 - 2,0	6,0	0,9	S=3,1-e	6,2	0,1	**233 16** 040 020
	10,3			2,0 - 3,0			S=4,1-e			**233 16** 040 030
	11,4			3,0 - 4,0			S=6,5-e			**233 16** 040 040
M5	11,3	9,0		1,5 - 2,0	7,0	0,9	S=3,4-e	7,8	0,1	**233 16** 050 020
	12,3			2,0 - 3,0			S=4,5-e			**233 16** 050 030
	13,4			3,0 - 4,0			S=5,6-e			**233 16** 050 040
M6	14,3	10,6		1,5 - 4,0	9,0	0,9	S=4,7-e	8,6	0,1	**233 16** 060 400
	15,4	11,0		4,0 - 5,0			S=6,9-e			**233 16** 060 050
	16,5			5,0 - 6,0			S=8,0-e			**233 16** 060 060
M8	15,3	14,0		1,5 - 3,0	11,0	1,4	S=4,7-e	10,6	0,1	**233 16** 080 030
	16,3			3,0 - 4,0			S=5,8-e			**233 16** 080 040
	17,4			4,0 - 5,0			S=6,9-e			**233 16** 080 050
	18,5			5,0 - 6,0			S=8,0-e			**233 16** 080 060
M10	19,4	16,0		1,5 - 3,0	13,0	1,4	S=5,5-e	13,9	0,1	**233 16** 100 030
	21,0			3,0 - 4,5			S=7,1-e			**233 16** 100 045
	22,6			4,5 - 6,0			S=8,7-e			**233 16** 100 060
M12	22,6	19,0		1,5 - 3,0	16,0	1,4	S=5,4-e	17,2	0,1	**233 16** 120 030
	24,2			3,0 - 4,5			S=7,0-e			**233 16** 120 045
	25,8			4,5 - 6,0			S=8,6-e			**233 16** 120 060



Stainless steel | Countersunk head | Knurled | Closed

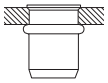
	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	f (mm)	S (mm)	L_2 (mm)	E max (mm)	
M3	13,1	7,0		1,3 - 2,0	5,0	0,9	S=2,9-e	10,2	0,1	**233 36** 030 020
	14,2			2,0 - 3,0			S=4,0-e			**233 36** 030 030
M4	14,3	8,0		1,3 - 2,0	6,0	0,9	S=3,1-e	11,2	0,1	**233 36** 040 020
	15,3			2,0 - 3,0			S=4,1-e			**233 36** 040 030
	16,4			3,0 - 4,0			S=6,5-e			**233 36** 040 040
M5	17,3	9,0		1,5 - 2,0	7,0	0,9	S=3,4-e	13,9	0,1	**233 36** 050 020
	18,3			2,0 - 3,0			S=4,5-e			**233 36** 050 030
	19,4			3,0 - 4,0			S=5,6-e			**233 36** 050 040
M6	18,3	11,0		1,5 - 3,0	9,0	0,9	S=4,7-e	13,6	0,1	**233 36** 060 030
	19,3			3,0 - 4,0			S=5,8-e			**233 36** 060 040
	20,4			4,0 - 5,0			S=6,9-e			**233 36** 060 050
	21,5			5,0 - 6,0			S=8,0-e			**233 36** 060 060
M8	21,3	14,0		1,5 - 3,0	11,0	1,4	S=4,8-e	16,5	0,1	**233 36** 080 030
	22,3			3,0 - 4,0			S=5,8-e			**233 36** 080 040
	23,4			4,0 - 5,0			S=6,9-e			**233 36** 080 050
	24,5			5,0 - 6,0			S=8,0-e			**233 36** 080 060
M10	27,4	16,0		1,5 - 3,0	13,0	1,4	S=5,5-e	21,9	0,1	**233 36** 100 030
	29,0			3,0 - 4,5			S=7,1-e			**233 36** 100 045
	30,6			4,5 - 6,0			S=8,7-e			**233 36** 100 060





Stainless steel | Countersunk head | Plain | Open

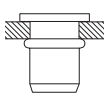
d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	f (mm)	S (mm)	L_2 (mm)	E max (mm)	
M4	11,3	7,6	1,30 - 2,50	6,0	1,3	S=4,4-e	6,8	0,1	**233 18** 040 250
	10,8	8,0	1,75 - 3,25			S=5,3-e	5,4		**233 18** 040 325
M5	12,5	9,2	1,50 - 3,00	7,0	1,5	S=4,0-e	8,5	0,1	**233 18** 050 300
	13,8	9,6	3,00 - 4,00			S=5,4-e	8,4		**233 18** 050 400
M6	14,8	11,3	1,50 - 3,00	9,0	1,5	S=4,9-e	9,5	0,1	**233 18** 060 300
	16,6	11,5	3,00 - 4,50			S=7,1-e	9,4		**233 18** 060 450
	18,0		4,50 - 6,00			S=5,4-e	11,2		**233 18** 060 600
M8	16,3	13,1	1,50 - 3,00	11,0	1,5	S=5,0-e	10,5	0,1	**233 18** 080 300
	18,1	13,5	3,00 - 4,50			S=5,9-e	11,1		**233 18** 080 450
	19,7		4,50 - 6,00			S=8,2-e	11,4		**233 18** 080 600
M10	20,2	15,5	1,50 - 3,00	13,0	1,5	S=5,2-e	14,7	0,1	**233 18** 100 300
	21,8		3,00 - 4,50			S=7,1-e			**233 18** 100 450
	23,4		4,50 - 6,00			S=8,7-e			**233 18** 100 600



Stainless steel | Thin head | Plain | Open

d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)	
M3	8,8	5,3	0,5 - 1,5	4,7	S=2,8-e	5,5	0,4	**343 08** 030 150
M4	10,4	7,0	0,5 - 2,0	6,4	S=3,5-e	7,3	0,5	**343 08** 040 200
M5	11,6	7,7	0,5 - 3,0	7,1	S=5,0-e	7,3	0,6	**343 08** 050 300
M6	14,3	10,2	0,7 - 3,0	9,5	S=5,5-e	9,3	0,6	**343 08** 060 300
M8	16,35	11,3	0,7 - 3,0	10,5	S=6,1-e	10,5	0,7	**343 08** 080 300

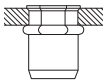
inch For holes with imperial dimensions



Stainless steel | Flat head | Plain | Open

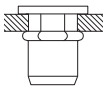
d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)	
M4	12,0	9,0	0,5 - 2,0	6,0	S=3,5-e	7,8	1,0	**233 08** 040 020
	13,5		2,0 - 3,5		S=5,2-e			**233 08** 040 035
M5	12,5	10,0	0,5 - 3,0	7,0	S=4,7-e		1,0	**233 08** 050 030
	14,3	9,0	3,0 - 4,0		S=5,6-e	7,7		**233 08** 050 400
M6	16,0	12,0	0,5 - 3,0	9,0	S=6,0-e	10,0	1,5	**233 08** 060 300
	18,0		3,0 - 5,0		S=7,75-e	7,8		**233 08** 060 450
M8	16,5	14,0	0,8 - 3,0	11,0	S=4,7-e	9,5	1,5	**233 08** 080 300
	19,4		3,0 - 4,5		S=7,0-e	10,9		**233 08** 080 450
M10	22,4	16,0	1,0 - 3,0	13,0	S=5,6-e	14,9	2,0	**233 08** 100 300
	24,0		3,0 - 4,5		S=7,2-e	15,1		**233 08** 100 450
	25,6		4,5 - 6,0		S=8,8-e	14,9		**233 08** 100 600

RIVKLE® – Standard blind rivet nuts - Stainless steel A4



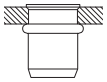
Stainless steel A4 | Thin head | Semi-hexagonal | Open

d (mm)	L (mm)	B (mm)	e (mm) (min - max)	H +0,1/0 (mm)	N	L2 max (mm)	E (mm)	
M4	11,0	6,5	0,5 - 2,0	6,0	9 500	7,5	0,5	**343 44** 040 020
M5	12,0	7,5	0,5 - 3,0	7,0	12 000	7,2		**343 44** 050 030
M6	14,5	9,7		9,0	15 000	9,3		**343 44** 060 030
M8	16,0	11,5		11,0	20 000	11,0		**343 44** 080 030



Stainless steel A4 | Flat head | Semi-hexagonal | Open

d (mm)	L (mm)	B (mm)	e (mm) (min - max)	H +0,1/0 (mm)	N	L2 max (mm)	E (mm)	
M4	11,0	9,0	0,5 - 2,0	6,0	9 500	7,5	1,0	**233 44** 040 020
M5	12,5	10,0	0,5 - 3,0	7,0	12 000	7,2		**233 44** 050 030
M6	16,0	12,0		9,0	15 000	9,3	1,5	**233 44** 060 030
M8	17,5	15,0		11,0	20 000	11,0		**233 44** 080 030



Stainless steel A4 | Thin head | Plain | Open

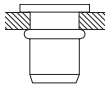
d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	N	L2 max (mm)	E (mm)	
M5	12,0	7,5	0,5 - 3,0	7,0	12 000	7,2	0,4	**343 64** 050 030
M6	14,5	9,5		9,0	15 000	9,4		**343 64** 060 030
M8	16,0	11,5		11,0	20 000	11,2		**343 64** 080 030

Stainless steel A4 | Thin head | Plain | Closed

d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	N	L2 max (mm)	E (mm)	
M4	15,5	6,5	0,5 - 2,0	6,0	9 500	11,6	0,5	**343 74** 040 020
M5	18,0	7,5	0,5 - 3,0	7,0	12 000	13,2		**343 74** 050 030
M6	21,5	9,5		9,0	15 000	16,7		**343 74** 060 030
M8	24,0	11,5		11,0	20 000	19,2		**343 74** 080 030

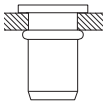
Range dedicated to industry use. In case of non metalic support, please contact us.

RIVKLE® – Standard blind rivet nuts - Stainless steel A4



Stainless steel A4 | Thin head | Plain | Open

d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	N	L2 max (mm)	E (mm)	
M4	12,0	9,0	0,5 - 2,0	6,0	9 500	7,5	1,0	**233 04** 040 020
M5	12,5	10,0	0,5 - 3,0	7,0	12 000	7,5	1,0	**233 04** 050 030
M6	16,0	12,0	0,5 - 3,0	9,0	15 000	10,0	1,5	**233 04** 060 030
M8	17,5	15,0	0,5 - 3,0	11,0	20 000	11,2	1,5	**233 04** 080 030

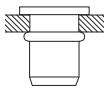


Stainless steel A4 | Thin head | Plain | Closed

d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	N	L2 max (mm)	E (mm)	
M4	16,0	9,0	0,5 - 2,0	6,0	9 500	11,5	1,0	**233 24** 040 020
M5	18,5	10,0	0,5 - 3,0	7,0	12 000	13,2	1,0	**233 24** 050 030
M6	23,0	12,0	0,5 - 3,0	9,0	15 000	17,0	1,5	**233 24** 060 030
M8	25,0	15,0	0,5 - 3,0	11,0	20 000	18,7	1,5	**233 24** 080 030

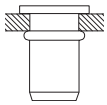
Range dedicated to industry use. In case of non metalic support, please contact us.

RIVKLE® – Standard blind rivet nuts – Aluminium



Aluminium | Thin head | Plain | Open

	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	S (mm)	L_2 (mm)	E (mm)	
M3	10,5	8,0	0,50 - 2,00	5,0	S=3,2-e	5,4	0,75	**233 00** 030 020
	10,75	7,5	2,00 - 3,50		S=4,3-e		1,0	**233 00** 030 035
M4	11,0	9,0	0,25 - 2,50	6,0	S=4,1-e	6,3	1,0	**233 00** 040 025
	13,0	10,0	3,00 - 4,50		S=5,9-e	6,4	0,75	**233 00** 040 046
M5	13,6	10,0	0,50 - 3,00	7,0	S=4,5-e	7,8	1,0	**233 00** 050 030
	16,0	11,0	3,00 - 5,50		S=6,7-e	8,3		**233 00** 050 056
M6	16,6	13,0	0,50 - 3,00	9,0	S=5,0-e	10,4	1,5	**233 00** 060 030
	18,0		3,00 - 5,50		S=6,8-e	9,7		**233 00** 060 056
M8	20,0	16,0	0,50 - 3,00	11,0	S=5,8-e	12,7	1,5	**233 00** 080 030
	20,0		3,00 - 5,50		S=7,2-e	11,3		**233 00** 080 056
M10	25,0	19,0	0,80 - 3,50	13,0	S=6,2-e	16,8	2,0	**233 00** 100 035
	27,7		3,50 - 6,00		S=8,7-e	17,0		**233 00** 100 060

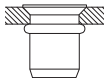


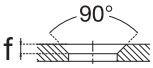
Aluminium | Thin head | Plain | Closed

	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	S (mm)	L_2 (mm)	E (mm)	
M3	13,5	7,5	0,25 - 2,00	5,0	S=3,0-e	9,3	1,0	**233 20** 030 020
	15,1		2,00 - 3,50		S=4,3-e	9,8		**233 20** 030 035
M4	15,5	10,0	0,50 - 3,00	6,0	S=4,0-e	10,8	0,75	**233 20** 040 030
	18,1	9,0	2,50 - 4,50		S=5,6-e	11,5	1,0	**233 20** 040 045
M5	19,0	11,0	0,50 - 3,00	7,0	S=4,5-e	13,5	1,0	**233 20** 050 031
	21,9	10,0	3,00 - 5,50		S=6,9-e	14,0		**233 20** 050 055
M6	23,0	13,0	0,50 - 3,00	9,0	S=4,5-e	17,3	1,5	**233 20** 060 031
	26,3		3,00 - 5,50		S=7,7-e	17,1		**233 20** 060 055
M8	24,0	16,0	0,50 - 3,00	11,0	S=4,5-e	18,0	1,5	**233 20** 080 031
	31,0		3,00 - 5,50		S=8,5-e	21,0		**233 20** 080 055
M10	37,5	19,0	3,50 - 6,00	13,0	S=9,0-e	26,5	2,0	**233 20** 100 060

If you need aluminium nuts with high mechanical strength, a **RIVKLE® HRT** version is available. See page 41.

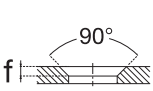
RIVKLE® – Standard blind rivet nuts – Aluminium





Aluminium | Countersunk head | Plain | Open

	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	f (mm)	S (mm)	L_2 (mm)	E max (mm)	
M3	10,2	7,2	1,3 - 3,5	5,0	1,3	S=4,0-e	6,1	0,1	**233 10** 030 035
	11,8		3,5 - 5,0			S=6,0-e	5,7		**233 10** 030 050
M4	11,5	9,0	1,7 - 3,5	6,0	1,5	S=4,4-e	6,7	0,1	**233 10** 040 036
	12,8	8,2	3,5 - 5,0		1,3	S=6,0-e			**233 10** 040 050
M5	13,0	10,0	1,0 - 4,0	7,0	0,9	S=5,5-e	7,8	0,1	**233 10** 050 040
	16,3	9,6	4,0 - 6,5		1,5	S=7,7-e	8,5		**233 10** 050 065
M6	17,0	12,0	1,7 - 4,5	9,0	1,5	S=6,3-e	10,4	0,1	**233 10** 060 046
	18,7	11,7	4,5 - 6,5			S=8,7-e	9,9		**233 10** 060 065
M8	19,0	14,0	1,7 - 4,5	11,0	1,5	S=7,5-e	12,7	0,1	**233 10** 080 046
	22,2	13,5	4,5 - 6,5			S=9,3-e	12,8		**233 10** 080 065
M10	21,0	15,4	1,7 - 4,5	12,5	1,5	S=7,5-e	13,2	0,1	**233 10** 100 046
	26,1	15,5	4,5 - 6,5	13,0		S=10,4-e	17,0		**233 10** 100 065



Aluminium | Countersunk head | Plain | Closed

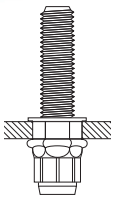
	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	f (mm)	S (mm)	L_2 (mm)	E max (mm)	
M3	14,1	7,2	1,5 - 3,5	5,0	1,3	S=4,0-e	10,0	0,1	**233 30** 030 035
M4	17,7	8,2	1,5 - 3,5	6,0	1,3	S=4,6-e	11,6	0,1	**233 30** 040 035
	19,3		3,5 - 5,0			S=6,0-e	11,8		**233 30** 040 050
M5	19,4	9,6	1,5 - 4,5	7,0	1,5	S=5,7-e	13,6	0,1	**233 30** 050 045
M6	25,2	11,7	1,5 - 4,5	9,0	1,5	S=6,5-e	17,0	0,1	**233 30** 060 045
	27,3		4,5 - 6,5			S=8,6-e			**233 30** 060 065
M8	30,0	13,5	1,5 - 4,5	11,0	1,5	S=6,9-e	21,4	0,1	**233 30** 080 045
	32,1		4,5 - 6,5			S=9,1-e	21,3		**233 30** 080 065
M10	33,9	15,5	1,5 - 4,5	13,0	1,5	S=7,5-e	26,5	0,1	**233 30** 100 045

If you need aluminium nuts with high mechanical strength, a **RIVKLE® HRT** version is available. See page 41.

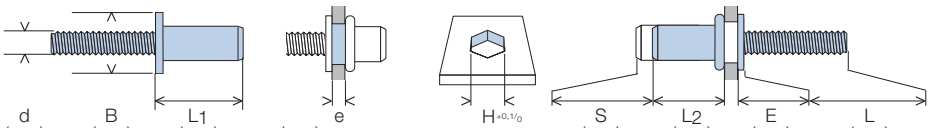
RIVKLE® – Standard blind rivet studs - Steel

Advantages

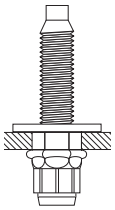
- Allows you to hold the part to be screwed onto the stud in position (vertical installation, heavy or bulky part, etc.)
- Creates a reusable thread equivalent to a Class 8.8 bolt
- Keep enjoying the advantages of a simple and quick installation process with access from only one side



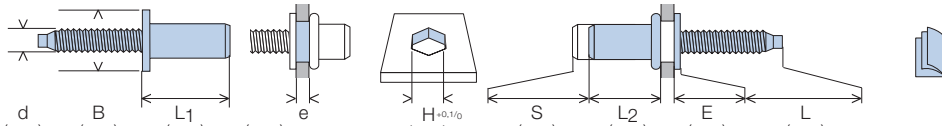
Steel | Thin head | Hexagonal



	d (mm)	B (mm)	L1 (mm)	e (mm) (min - max)	H +0,1/0 (mm)	S (mm)	L2 (mm)	E (mm)	L (mm)	
M8	10,0	15,8	0,5 - 3,0	9,0	S=5,5-e	8,0	0,45	21,0 - 25,5	**372 91** 080 527
	13,5	20,2	3,0 - 5,5	11,0	S=8,0-e	11,7	0,5	28,0 - 32,0	**372 91** 080 504



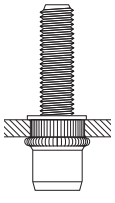
Steel | Flat head | Hexagonal



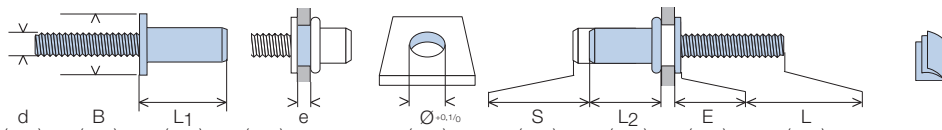
	d (mm)	B (mm)	L1 (mm)	e (mm) (min - max)	H +0,1/0 (mm)	S (mm)	L2 (mm)	E (mm)	L (mm)		❶	❷
M5	10,0	12,0	0,5 - 3,0	7,0	S=4,4-e	7,0	1,0	11,5 - 16,0	**372 59** 050 501*		✓
M6	13,0	14,3	0,5 - 3,0	9,0	S=4,8-e	8,0	1,5	16,5 - 21,0	**372 91** 060 506		✓
								12,5 - 17,0	**372 91** 060 517*		✓
								18,5 - 23,0	**372 91** 060 509		✓
								27,5 - 32,0	**372 91** 060 502		✓
M8	16,0	15,5	0,5 - 3,0	11,0	S=5,8-e	9,0	1,5	19,0 - 23,0	**372 91** 080 502		✓
								28,5 - 33,0	**372 91** 080 507		✓
	21,0	22,3	3,0 - 5,5		S=8,5-e	11,6	2,2	37,2 - 41,6	**372 91** 080 510	✓	

* references without dog point

Coating: ❶ = Zn8K+/Fe ; ❷ = ZnNi8A/Fe



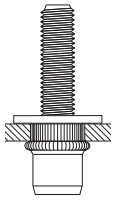
Steel | Thin head | Knurled



	d (mm)	B (mm)	L1 (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	S (mm)	L2 (mm)	E (mm)	L (mm)		❶	❷
M6	10,0	15,3	1,0 - 4,0	9,0	S=5,7-e	8,95	0,6	15,4 - 20,4	**372 97** 060 518		✓
								11,4 - 16,4	**372 97** 060 519		✓
M8	12,0	17,5	1,0 - 4,0	11,0	S=7,0-e	9,5	0,6	14,5 - 19,5	**372 97** 080 505		✓
								22,0 - 27,0	**372 97** 080 507		✓
								22,4 - 27,4	**372 97** 080 510		✓

Coating: ❶ = Zn8K+/Fe ; ❷ = ZnNi8A/Fe

RIVKLE® – Standard blind rivet studs - Steel



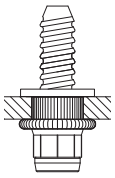
Steel | Flat head | Knurled

d (mm)	B (mm)	L_1 (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	S (mm)	L_2 (mm)	E (mm)	L (mm)	❶	❷
M5	10,0	11,2	0,5 - 3,0	7,0	S=5,0-e	5,0	1,0	7,5 - 12,0	**372 27** 050 110	✓	
								12,5 - 17,0	**372 27** 050 115[s]	✓	
								17,5 - 22,0	**372 27** 050 120[s]	✓	
								22,5 - 27,0	**372 27** 050 125	✓	
M6	13,0	14,2	0,5 - 3,0	9,0	S=5,2-e	8,5	1,5	14,0 - 18,5	**372 27** 060 115[s]	✓	
		16,9	3,0 - 5,5		S=7,7-e			14,0 - 18,5	**372 29** 060 504		✓
		14,2	0,5 - 3,0		S=5,2-e			19,0 - 23,5	**372 27** 060 120[s]	✓	
		14,2	0,5 - 3,0		S=5,2-e			24,0 - 28,5	**372 27** 060 125	✓	
M8	16,0	15,6	0,5 - 3,0	11,0	S=5,7-e	8,5	1,5	13,5 - 18,0	**372 27** 080 115	✓	
		15,6	0,5 - 3,0		S=5,7-e	8,5		18,5 - 23,0	**372 27** 080 120	✓	
		18,3	3,0 - 5,5		S=7,6-e	9,0		18,0 - 22,5	**372 29** 080 506[s]		✓
		15,6	0,5 - 3,0		S=5,7-e	8,5		23,5 - 28,0	**372 27** 080 125	✓	

s : parts available from stock, package quantity 250 pieces.

Revêtement ❶ = Zn8K+/Fe ; ❷ = ZnNi8A/Fe

With their inclined thread, the RIVKLE® studs allow you to attach snap-on clips without tools.

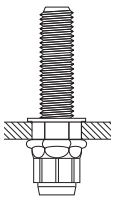


Steel | Flat head | Fir Tree studs

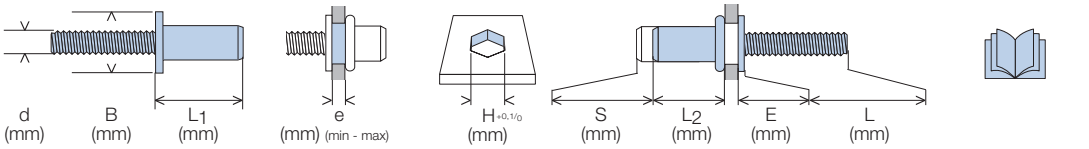
d (mm)	B (mm)	L_1 (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	S (mm)	L_2 (mm)	E (mm)	L (mm)	❶	❷
D5	10,0	10,2	0,5 - 3,0	7,0	S=4,8-e	5,5	1,0	12,0 - 16,5	**372 97** 059 505		✓
		10,2	0,5 - 3,0		S=4,8-e	5,5		14,5 - 19,0	**372 97** 059 507		✓
		11,6	1,5 - 4,0		S=5,7-e	6,0		14,0 - 18,5	**372 97** 059 508		✓
D6	13,0	12,7	0,5 - 3,0	9,0	S=4,8-e	8,0	1,5	19,0 - 23,5	**372 97** 069 501		✓
		12,7	0,5 - 3,0		S=4,8-e			14,0 - 18,5	**372 97** 069 502		✓
		12,7	0,5 - 3,0		S=4,8-e			11,5 - 16,0	**372 97** 069 503		✓
		12,7	0,5 - 3,0		S=4,8-e			21,5 - 26,0	**372 97** 069 507		✓
		15,4	3,0 - 5,5		S=7,7-e			11,5 - 16,0	**372 97** 069 504		✓
		15,4	3,0 - 5,5		S=7,7-e			14,0 - 18,5	**372 97** 069 505		✓
		15,4	3,0 - 5,5		S=7,7-e			19,0 - 23,5	**372 97** 069 506		✓

Revêtement ❶ = Zn8K+/Fe ; ❷ = ZnNi8A/Fe

RIVKLE® – Standard blind rivet studs - Stainless steel



Stainless steel | Thin head | Hexagonal



M5	10,0	13,35	0,5 - 3,0	7,0	S=4,4-e	8,5	0,5	15,5 - 18,0	**372 98** 050 502
								20,5 - 23,0	**372 98** 050 503
								25,5 - 28,0	**372 98** 050 504
M6	13,0	15,65	0,5 - 3,0	9,0	S=4,4-e	10,8	0,5	15,5 - 18,0	**372 98** 060 506
								20,5 - 23,0	**372 98** 060 507
								25,5 - 28,0	**372 98** 060 508

All RIVKLE® stainless steel studs are lubricated.

RIVKLE®
PRODUCT VARIANTS

Contents

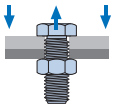
For absolute robustness

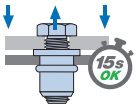
High strength and reduced dimensions for your structural assemblies.
This blind rivet nut was designed to provide high-strength female threads after setting while retaining optimum dimensions.

Advantages

- Extend the use of blind rivet nuts to applications involving high mechanical stresses.
- Add high-strength female threads to complex parts allowing access from only one side.
- In its aluminium version, this rivet nut provides full compatibility with class 8.8 screws.

Permissible loads

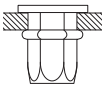




HRT

		10.9 (ISO 898-1)	10 (ISO 898-2)		HRT
Steel 10.9	**M6**	16 700 N	20 900 N	◀ ▶	20 900 N
	M8	30 400 N	38 100 N	◀ ▶	38 100 N
	M10	48 100 N	60 300 N	◀ ▶	60 300 N
	M12	70 000 N	88 500 N	◀ ▶	88 500 N
		12.9 (ISO 898-1)	12 (ISO 898-2)		
Steel 12.9	**M6**	19 500 N	23 100 N	◀ ▶	23 100 N
	M8	35 500 N	42 500 N	◀ ▶	42 500 N
	M10	56 300 N	67 300 N	◀ ▶	67 300 N
	M12	81 800 N	100 300 N	◀ ▶	100 300 N
		8.8 (ISO 898-1)	8 (ISO 898-2)		
Aluminium	**M5**	8 230 N	12 140 N	◀ ▶	12 140 N
	M6	11 600 N	17 200 N	◀ ▶	17 200 N
	M8	21 200 N	31 800 N	◀ ▶	31 800 N

RIVKLE® HRT - Steel

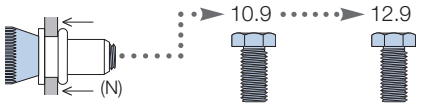


Steel HRT | Flat head | Hexagonal | Open

	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	H +0,1/0 (mm)	S (mm)	L2 (mm)	E (mm)		10.9	12.9
M6	20,0	14,0	1,0 - 3,0	9,0	S=6,5-e	13,0	1,5	**232 91** 060 502	✓	-
M8	23,6	17,0	1,0 - 3,0	11,0	S=6,3-e	16,0	1,5	**232 91** 080 504	✓	-
	26,6		3,0 - 6,0		S=9,6-e			**232 49** 080 502	✓	✓
M10	27,0	20,0	1,0 - 3,5	13,0	S=8,7-e	17,5	2,0	**232 91** 100 503	✓	✓
	28,5	24,0	2,0 - 5,0		S=9,5-e	18,0		**232 91** 100 501	✓	✓
M12x1,5	33,0	27,0	1,0 - 4,0	16,0	S=10,5-e	22,0	2,0	**232 91** 124 501	✓	✓

A wide range of plating finishes are available. Other configurations are available upon request.

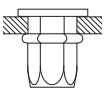
Setting forces*



M6	**232 91** 060 502	14 000	–
M8	**232 91** 080 504	24 000	–
	232 49 080 502	24 000	27 000
M10	**232 91** 100 503	38 000	42 000
	232 91 100 501	38 000	42 000
M12x1,5	**232 91** 124 501	55 000	61 000

*The recommended setting force depends on the characteristics of the assembly.
To prevent any re-setting of the RIVKLE® HRT fastener during the installation of the bolt, we recommend to apply a setting load in accordance with the tension applied to the bolt.
In certain cases, it is possible to reduce these loads, contact BÖLLHOFF to obtain further information.

RIVKLE® HRT - Aluminum

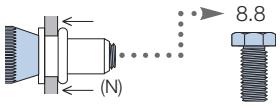


Aluminium HRT | Flat head | Hexagonal | Open

	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	H +0,1/0 (mm)	S (mm)	L2 (mm)	E (mm)		8.8
M5	18,1	14,0	0,5 - 3,0	7,0	S=6,5-e	11,0	1,0	**232 90** 050 501	✓
M6	18,6	14,0	0,5 - 3,0	9,0	S=6,8-e	11,5	1,5	**232 40** 060 030	✓
M8	23,6	17,0	0,5 - 3,5	11,0	S=7,0-e	15,5	1,5	**232 40** 080 030	✓

Optimized for aluminium and magnesium workpieces.
Weight saving and corrosion resistant solutions for external applications.

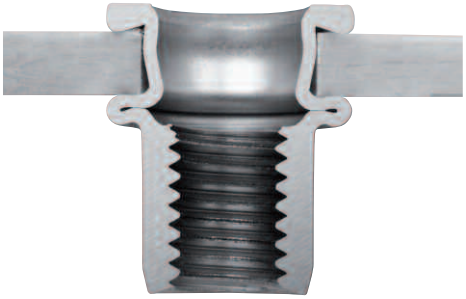
Setting forces*



M5	**232 90** 050 501	12 000
M6	**232 40** 060 030	12 000
M8	**232 40** 080 030	18 000

The key to light assemblies

An advantage for weight saving in vehicles
This rivet nut adds a high-strength female thread in polymer materials without causing damage to the application material. RIVKLE® SFC is suitable for flexible and brittle materials and can be integrated into any plastic parts without the need for particular precautions. After setting, thanks to its specific deformation, the bulge ensures uniform distribution of the grip forces.



Advantages

- Make simpler designs without worrying about the edge distances of your parts
- Use wider tolerances when drilling the holes (relief angle, etc.)
- No more constraints regarding the compatibility between the materials and the assembly components

Permissible loads

M6	12 000 N	RIVKLE® reusable*	15 000 N
M8	18 000 N	RIVKLE® reusable*	27 000 N
Similar performance to standard **RIVKLE®**			

*__RIVKLE®__ is more resistant than screw property class 8.8

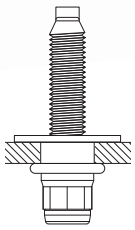
RIVKLE® SFC - Steel

Steel | Flat head | Open

	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	N	L2 max (mm)	E (mm)	
M5	16,1	16,0	2,0 - 3,5	8,1	8 000	8,0	1,0	**233 91** 050 795
	17,6		3,5 - 5,0					**233 91** 050 796
M6	20,7	13,0	2,0 - 3,5	9,1	12 000	11,0	1,5	**233 91** 060 968
	22,2	13,0	3,5 - 5,0					**233 91** 060 971
	20,7	18,0	2,0 - 3,5					**233 91** 060 969
	22,2	18,0	3,5 - 5,0					**233 91** 060 970
M8	22,0	20,0	2,0 - 3,5	11,1	18 000	12,0		**233 91** 080 848
	23,5		3,5 - 5,0					**233 91** 080 849

Steel | Elliptic head | Open

	d (mm)	L (mm)	B1 - B2 (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	N	L2 max (mm)	E (mm)	
M6	20,9	17	13	2,2 - 3,7	9,2	12 000	11,5	1,7	**233 91** 060 995



Steel | Flat head | Knurled

	d (mm)	B (mm)	L1 (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	N	L2 (mm)	E (mm)	L (mm)		❶	❷
M6	18,0	19,8	2,0 - 3,5	9,1	11 600	13,0	1,5	25,0 - 28,0	**372 91** 060 522		✓
		18,3						16,5 - 19,5	**372 91** 060 525		✓

Coating: ❶ = Zn8K+/Fe ; ❷ = ZnNi8A/Fe

RIVKLE® SFC is fully compatible with the whole BÖLLHOFF RIVKLE® setting tool range (including fully automatic installation for mass production).
Available in alternative configurations upon request (stud, underhead seal, etc.).
Grip range could be increased in certain specific conditions when associated with substrate material in these cases a prototype validation will be necessary. (Please contact us).

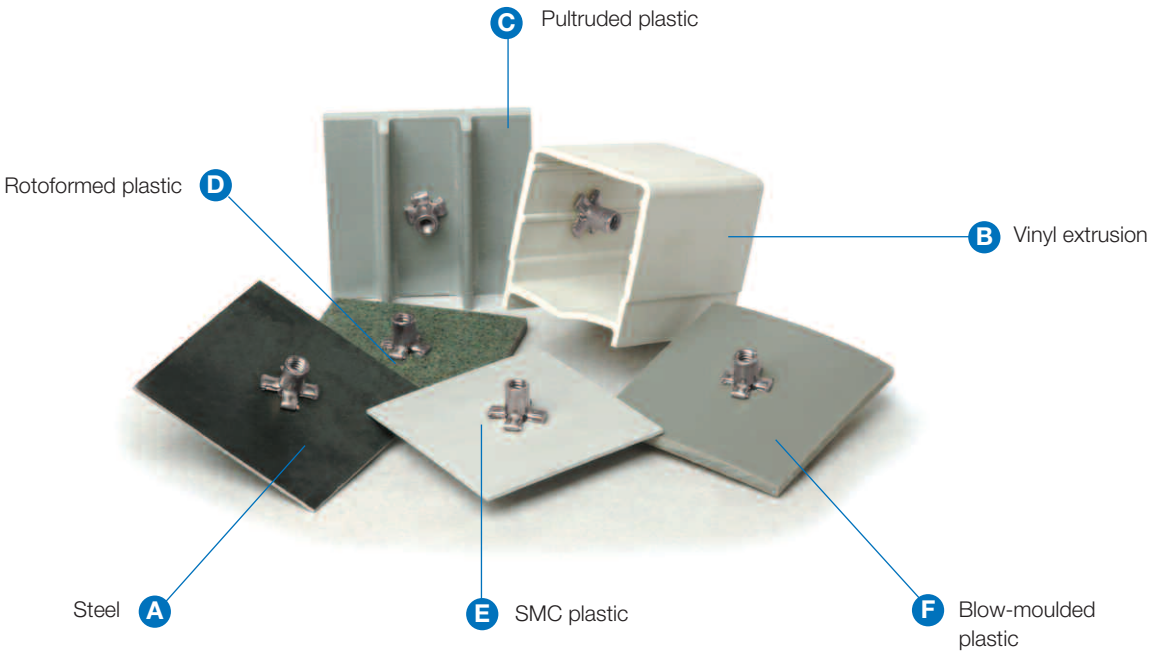
The universal solution for supports with extreme variations

Extreme versatility in terms of thickness and diameter

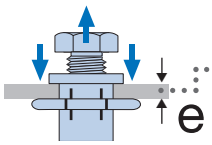
The main difference of this RIVKLE® fastener is its slotted body which allows a petal-shaped deformation during the setting operation, thereby forming a large-size abutment. Its specific design allows it to accept large variations of the thickness of the support and/or variations of the diameter of the hole.

Advantages

- A great number of applications can be covered with a single product.
- You can counterbalance the variations of thickness and hole diameter which result from your process (plastic parts, plies, etc.).
- Secure your assemblies on thin plates or soft materials thanks to a large-size abutment.



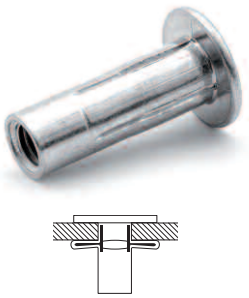
Mechanical performance



	A	B	C	D	E	F
	e = 0,76 mm	e = 2,92 mm	e = 6,29 mm	e = 3,04 mm	e = 1,65 mm	e = 4,69 mm
RIVKLE® M6	2 130 N	900 N	6 760 N	100 N	600 N	1 250 N
RIVKLE® PN M6	5 400 N	2 750 N	8 400 N	700 N	1 620 N	3 220 N

Test according to BÖLLHOFF specifications.

RIVKLE® PNP



Steel | Flat head | Slotted | Open

d (mm)	L (mm)	B (mm)	e (mm) (min - max)	D (mm)	Ø MIN (mm)	Ø MAX (mm)	$L_{2\ max}$ (mm)	E (mm)	
M5	22,0	12,7	0,5 - 3,0	7,47	7,48	7,62	9,9	1,0	**668 70** 511 030
M6	26,9	15,9	0,5 - 5,0	8,79	8,80	8,93	12,8	1,5	**668 70** 611 050
M8	30,5	19,0	0,5 - 5,0	11,10	11,11	11,50	14,5	1,5	**668 70** 811 050

RIVKLE® PNC - Extended Grip Range

Steel | Flat head | Slotted | Open

d (mm)	L (mm)	B (mm)	e (mm) (min - max)	D (mm)	Ø MIN (mm)	Ø MAX (mm)	$L_{2\ max}$ (mm)	E (mm)	
M4	17,6	11,15	0,50 - 3,80	6,12	6,13	6,25	8,6	0,95	**668 30** 411 038
M5	21,95	12,7	0,50 - 4,45	7,47	7,48	7,58	9,9	0,95	**668 30** 511 044
	23,8		4,45 - 8,10	7,97					**668 30** 511 081
M6	26,9	15,9	0,50 - 7,10	8,79	8,80	8,90	12,8	1,50	**668 30** 611 071
	32,8		7,10 - 12,7						**668 30** 611 127
M8	30,5	19,0	0,50 - 7,10	11,10	11,11	11,50	14,5	1,57	**668 30** 811 071
M10	33,2	22,25	0,50 - 7,10	13,06	13,07	13,26	15,8	2,25	**668 31** 011 071

RIVKLE® PN - Stainless steel

Stainless steel | Flat head | Slotted | Open

d (mm)	L (mm)	B (mm)	e (mm) (min - max)	D (mm)	Ø MIN (mm)	Ø MAX (mm)	$L_{2\ max}$ (mm)	E (mm)	
M4	17,6	11,1	0,50 - 3,80	6,12	6,13	6,25	8,6	0,96	**668 30** 488 038
M5	22,0	12,7	0,50 - 4,45	7,47	7,48	7,58	9,9	0,95	**668 30** 588 044
	23,8		4,45 - 8,10	7,97					**668 30** 588 081*
M6	26,9	15,9	0,50 - 7,10	8,79	8,80	8,90	12,8	1,50	**668 30** 688 071
	32,8		7,10 - 12,7						**668 30** 688 127*
M8	30,5	19,0	0,50 - 7,10	11,10	11,11	11,50	14,5	1,50	**668 30** 888 071
M10	33,2	22,2	0,50 - 7,10	13,06	13,07	13,26	15,8	2,24	**668 31** 088 071*

*Item not in stock – please contact BÖLLHOFF for availability

RIVKLE® PN - Tooling

Please use dedicated tooling, see page 58.

Tightness in all circumstances

Preserve your assemblies from external influences.
This insert leaves no room for compromise and ensures sealing against all fluids while retaining the performance of RIVKLE® over time (metal-to-metal contact). All our products are proof tested with air pressure in accordance with stringent process (ATEQ) and comply with the highest demands from automotive industry.

Advantages

- Simplify your sealed assemblies with a solution directly integrated into your RIVKLE® nuts or studs.
- Ensure systematic and repeatable sealing and preserve the mechanical performance of your assemblies.
- Keep enjoying the advantages of a simple and quick installation process with access from only one side. Compatible with all BÖLLHOFF setting tools, including for automatic blow-feed installation*.

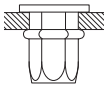
*The fluid tightness properties of the product require compliance with the specified setting conditions, both in terms of equipment and support.
(For more information about the setting conditions, refer to page 8 and/or contact BÖLLHOFF).

New

RIVKLE® Seal Ring - Steel

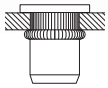
The **RIVKLE® Seal Ring** range is available with NBR seals for temperature stability from –30°C to +100°C.

The **RIVKLE® Seal Ring** range is also available with FKM seals for a temperature stability from –15°C to +220°C (cataphoresis passage).
On request, please contact BÖLLHOFF.



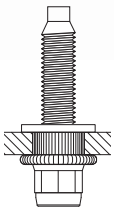
Steel | Flat head | Hexagonal | Closed

	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	H +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)	
M5	19,2 21,4	13,0	0,8 - 3,0 2,5 - 5,0	7,0	S=5,0-e S=7,1-e	13,0	1,5	**233 91** 050 807 **233 91** 050 808
M6	22,0 24,2	15,0	0,8 - 3,0 2,5 - 5,0	9,0	S=4,6-e S=6,9-e	16,5	1,5	**233 91** 060 026 **233 91** 060 027
M8	26,5 28,7	18,0	0,8 - 3,0 2,5 - 5,0	11,0	S=5,5-e S=7,7-e	19,8	1,5	**233 91** 080 875 **233 91** 080 876



Steel | Flat head | Knurled | Closed

	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)	
M5	19,3 21,5	12,0	0,5 - 3,0 2,5 - 5,0	8,0	S=4,1-e S=6,2-e	14,8	1,5	**233 97** 050 693 **233 97** 050 694
M6	22,3 24,5	13,0	0,8 - 3,0 2,5 - 5,0	9,0	S=4,3-e S=6,5-e	16,5	1,5	**233 97** 060 813 **233 97** 060 814
M8	26,6 28,5	16,0	0,8 - 3,0 2,5 - 5,0	11,0	S=4,8-e S=7,1-e	19,8 19,9	1,5	**233 97** 080 757 **233 97** 080 758

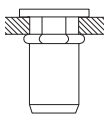


Steel | Flat head | Knurled

	d (mm)	B (mm)	L_1 (mm)	e (mm) (min - max)	Ø +0,1/0 (mm)	S (mm)	L_2 (mm)	E (mm)	L (mm)	
M6	13,0	13,0	0,8 - 3,0	9,0	S=4,8-e	9,0	1,5	16,3 - 20,8	**372 97** 060 537

Sealed **RIVKLE®** - Stainless steel

For applications in the industrial sector, BÖLLHOFF also offers a new range of sealed stainless steel fasteners with O-ring seals.



Stainless steel | Flat head | Semi-hexagonal | Closed

	d (mm)	L (mm)	B (mm)	e (mm) (min - max)	H +0,1/0 (mm)	S (mm)	L_2 (mm)	E max (mm)	
M5	19,0 20,5	13,5	0,5 - 3,0 3,0 - 4,5	7,0	4,6-e 5,9-e	14,4 14,6	1,5	**233 94** 050 504 **233 94** 050 505
M6	21,5 24,4	16,0	0,5 - 3,0 2,0 - 4,5	9,0	5,5-e 7,26-e	16,0 15,6	1,5	**233 94** 060 599 **233 94** 060 600
M8	25,0 27,5	21,0	0,5 - 3,0 3,0 - 5,5	11,0	5,7-e 8,7-e	19,3 18,8	1,5	**233 94** 080 501 **233 94** 080 502

Depending on the type and volume of your applications, BÖLLHOFF also offers RIVKLE® fasteners with an injected seal under the head.

RIVKLE®
SETTING TOOLS

Contents

RIVKLE® BRK 01 - Manual assembly tool

	Ø RIVKLE®							
	M3	M4	M5	M6	M8	M10	M12	M14
Steel	■	■	■	■				
Stainless steel	■	■	■					
Aluminium	■	■	■	■				

Kg 600 g

235 119 00000
Tooling included (M3 - M6)

RIVKLE® BRK01 Kit

		M3	M4	M5	M6	M8	M10	M4	M5	M6	M8	M10
235 119 00501	x1	x50	x50	x50	x50							
235 119 00502	x1							x50	x50	x50		

RIVKLE® M2007 - Manual assembly tool

	Ø RIVKLE®							
	M3	M4	M5	M6	M8	M10	M12	M14
Steel			■	■	■	■	■	
Stainless steel			■	■	■	■	■	
Aluminium			■	■	■	■	■	

Kg 1200 g

235 302 01000
Tooling included (M5 - M12)

RIVKLE® M2007 Kit

		M5	M6	M8	M10	M12	M6	M8	M10	M6	M8	M10
235 302 01000	x1	x1	x1	x1	x1	x1						
235 302 01001	x1		x1	x1	x1					x50	x25	x25
235 302 01002	x1		x1	x1	x1		x50	x25	x25			

		UNC			UNF		
		10-24	1/4-20	5/16-18	10-32	1/4-28	5/16-24
235 302 01003	x1	x1	x1	x1	x1	x1	x1

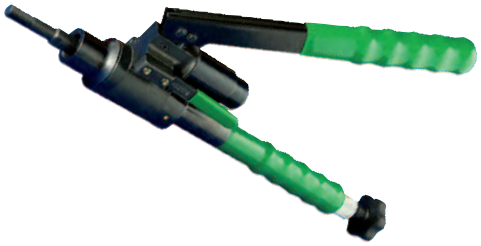
RIVKLE® BRK 10 - Lever type assembly tool

	Ø RIVKLE®							
	M3	M4	M5	M6	M8	M10	M12	M14
Steel			■	■	■	■		
Stainless steel			■	■	■			
Aluminium			■	■	■	■		

Kg 1900 g **235 120** 00000

Tooling included (M5 - M10)

RIVKLE® ES 51 - Hydraulic manual assembly tool



	Ø RIVKLE®							
	M3	M4	M5	M6	M8	M10	M12	M14
Steel				■	■	■	■	■
Stainless steel				■	■	■	■	■
Aluminium				■	■	■	■	■

Kg 2700 g **235 118** 00000

Tooling not included

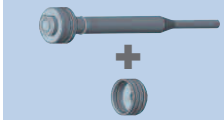
RIVKLE® OPTEX - Hexagonal punching and assembly tool

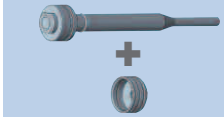
		Ø RIVKLE®		
		M5	M6	M8
Steel	0,5 - 2,5 mm	■	■	■
Aluminium		■	■	■

Kg 2100 g **235 110** 00000

Tooling included (M5 - M8)

Tooling equipment

RIVKLE® BRK 01			Ø RIVKLE®			
			M3	M4	M5	M6
Mandrel + Anvil		**235 119** XX 001	03	04	05	06

RIVKLE® BRK 10			Ø RIVKLE®			
			M5	M6	M8	M10
Mandrel + Anvil		**235 120** XX 001	05	06	08	10

RIVKLE® M2007			Ø RIVKLE®				
			M5	M6	M8	M10	M12
Mandrel		**235 302** XX 020	05	06	08	10	12
Anvil		**235 302** XX 030	05	06	08	10	12

RIVKLE® ES 51			Ø RIVKLE®				
			M6	M8	M10	M12	M14
Mandrel		**235 108** XX 020	06	08	10	12	14
Anvil		**235 108** XX 030	06	08	10	12	14
Nut		**235 108** 00 001	✓	✓	✓	✓	✓

RIVKLE® OPTEX			Ø RIVKLE®		
			M5	M6	M8
Mandrel		**235 110** XX 020	05	06	08
Nut		**235 110** 67 006	✓	✓	✓
Anvil		**235 110** XX 030	05	06	08
Punch		**235 110** XX 021	05	06	08
Matrix		**235 110** XX 031	05	06	08

RIVKLE® P2005

Stroke setting hand tool

	Ø RIVKLE®							
	M3	M4	M5	M6	M8	M10	M12	M14
Steel	■	■	■	■	■	■	■	
Stainless steel	■	■	■	■	■	■		
Aluminium	■	■	■	■	■	■	■	

236 155 01000

Tooling not included (see page 57)

Maximum stroke	7.0 mm
Maximum setting force	26 kN
Operating air pressure	5.5 bar min to 7 max
Weight without tooling	2.6 kg
Noise level	< 70 dB (A)
Production rate	35 RIVKLE® /min

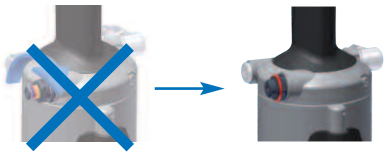
RIVKLE® P2007

A versatile tool, suitable for a wide range of applications

	Ø RIVKLE®							
	M3	M4	M5	M6	M8	M10	M12	M14
Steel		■	■	■	■	■		
Stainless steel	■	■	■	■	■			
Aluminium			■	■	■	■	■	

236 156 01000

Tooling not included (see page 57)



Generic code for a tool with unique force cartridge: **282 520** 00 005.

It is also possible to get mono cartridge alone. Please contact BÖLLHOFF.

Maximum stroke	7.0 mm
Maximum setting force	21 kN (from M4 to M10 steel)
Operating air pressure	5.5 bar min to 7 max
Weight without tooling	2.2 kg
Noise level	< 70 dB (A)
Production rate	32 RIVKLE® /min

RIVKLE® B2007

Maximum stroke	8.0 mm
Maximum setting force	22 kN (from M3 to M10 steel)
Battery	Li-Ion / 14.4 V / 2,6 Ah
Weight without tooling	2.1 kg + 0.3 kg (tooling + battery)
Noise level	< 70 dB (A)
Production rate	24 RIVKLE® /min

Battery-powered tool

	Ø RIVKLE®							
	M3	M4	M5	M6	M8	M10	M12	M14
Steel	■	■	■	■	■	■		
Stainless steel	■	■	■	■	■	■		
Aluminium		■	■	■	■	■		

Package with 1 battery **236 166** 01000
Package with 2 batteries **236 167** 01000

Tooling not included (see page 57)

Comparable weight to the RIVKLE® P2007 when fitted with hose

RIVKLE® B2007	RIVKLE® P2007
	 Pneumatique
Tool + Tooling + Battery	Tool + Tooling + Pneumatic
2.12 + 0.07 +0.30	2.20 + 0.07 +0.33
Total weight = **2.49 kg**	Total weight = **2.60 kg**

A dedicated brochure has been created for this product, please contact BÖLLHOFF.

RIVKLE® P3007

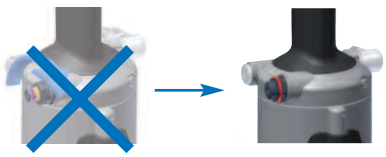
Maximum stroke	8.0 mm
Maximum setting force	40 kN (from M8 to M14 steel)
Operating air pressure	5.5 bar min to 7 max
Weight without tooling	3.4 kg
Noise level	< 70 dB (A)
Production rate	14 RIVKLE® /min

Power

	Ø RIVKLE®							
	M4	M5	M6	M8	M10	M12	M14	M16
Steel				■	■	■	■	
Stainless steel				■	■	■		
Aluminium				■	■	■	■	■

236 159 01000

Tooling not included (see page 57)



Generic code for a tool with unique force cartridge:
282 520 00 005.
It is also possible to get mono cartridge alone.
Please contact BÖLLHOFF.

RIVKLE® P2007 PN

	Ø RIVKLE® PN							
	M3	M4	M5	M6	M8	M10	M12	M14
Steel		■	■	■	■			

236 158 01000

Tooling not included (see page 57)

Maximum stroke	14.0 mm
Maximum setting force	14.5 kN
Operating air pressure	5.5 bar min to 7 bar max
Weight without tooling	2.4 kg
Noise level	< 70 dB (A)
Production rate	10 to 15 RIVKLE® /min

RIVKLE® P3007 PN

	Ø RIVKLE® PN							
	M3	M4	M5	M6	M8	M10	M12	M14
Steel					■	■		

236 160 01000

Tooling not included (see page 57)

Maximum stroke	14.0 mm
Maximum setting force	25 kN
Operating air pressure	5.5 bar min to 7 bar max
Weight without tooling	3.1 kg
Noise level	< 70 dB (A)
Production rate	14 RIVKLE® /min

A dedicated brochure has been created for this product, please contact BÖLLHOFF.

RIVKLE® – Force Controller

The RIVKLE® technology guarantees that each fastener will be properly set during the process.

This non-destructive test is carried out as a background task during the setting process.
This validation of the setting parameters and conditions is available on the hand setting tools and the automatic setting tools as well.

Hand setting tools

The **RIVKLE® FC340 Force Controller** is the most reliable solution to allow you to check that your hand setting tools are correctly adjusted and deliver the suitable setting forces for your application.
This controller ensures compliance with the 3rd condition of the RIVKLE® setting parameters.

Digital display
Instant reading of the setting force applied by the tool

Hydraulic pressure sensor
Measurement accuracy: +/-3%

Enclosed hydraulic module
High capacity (–> 40 kN) and repeatability over time

Checking tools
Suitable for the setting of studs and nuts.
Suitable for the setting of M3 to M16 fasteners.

This tool is available with or without calibration certificate.

	282 522 14 000
+	**282 522** 14 800
	282 522 14 900

TOOLING KIT				Ø RIVKLE®								
				M3	M4	M5	M6	M8	M10	M12	M14	M16
Washer + Nut		+	**282 522** 14 1XX	03	04	05	06	08	10	12	14	16
		+		-	M4	M5	D5	M6	D6	M8	D8	M10
			282 522 14 XXX	-	204	205	505	206	506	208	508	210

Tooling for RIVKLE® UNC and RIVKLE® UNF available on demand. Select the kit according to the diameter you use.

Tooling

RIVKLE® P2005 / P2007			Ø RIVKLE®								
			M3	M4	M5	M6	M8	M10	M12	M14	M16
Mandrel		**236 113** XX 020	03	04	05	06	08	10	*(1)	–	–
		**376 113** XX 020	–	04	05	06	08	*(3)	–	–	–
Anvil		**236 113** XX 030	03	04	05	06	08	10	*(2)	–	–
		**376 113** XX 030	–	04	05	06	08	*(4)	–	–	–
RIVKLE® P3007											
Mandrel		**236 159** XX 020	–	–	–	–	08	10	12	14	16
Anvil		**236 159** XX 030	–	–	–	–	08	10	12	14	16

RIVKLE® B2007			3 → 18 kN					18 → 22 kN	
			M3	M4	M5	M6	M8	M8	M10
Mandrel		**236 113** XX 020	03	04	05	06	08	**236 913** 08 110	**236 913** 10 019
		**376 113** XX 020	–	04	05	06	08	–	
Anvil		**236 113** XX 030	03	04	05	06	08	08	10
		**376 113** XX 030	–	04	05	06	08	–	
Nose for studs & force >18 kN (M8 & M10)		**236 166** 00 303						✓	✓
Fork for studs & force >18 kN (M8 & M10)		**236 166** 00 304							

RIVKLE® P2005 / P2007			Ø RIVKLE® - UNC					Ø RIVKLE® - UNF			
			4-40	6-32	8-32	10-24	1/4-20	10-32	1/4-28	7/16-20	3/8-24
Mandrel		**236 113** XX XXX	65 620	67 620	68 620	69 620	74 620	69 720	74 720	78 720	77 720
Anvil		**236 113** XX XXX	03 030	67 030	68 030	69 030	74 030	69 030	74 030	*(6)	77 030

*(1) = **236 153** 12 020 *(2) = **236 153** 12 030 *(3) = **376 913** 10 020 *(4) = **376 913** 10 030 *(6) = **236 923** 78 030

RIVKLE® P2005 / P2007			Ø RIVKLE® - Fir tree stud	
			D5	D6
Mandrel			05 401	*(7)
Anvil			05 030	06 030

*(7) = **563 500** 50 010

RIVKLE® P2007 PN			Ø RIVKLE®								
			M3	M4	M5	M6	M8	M10	M12	M14	M16
Mandrel			–	04 094	05 094	06 127	08 101	*(5)	–	–	–
Anvil			–	04 086	05 095	06 128	08 087	10 010	–	–	–
RIVKLE® P3007 PN											
Mandrel			–	–	–	–	08 101	*(5)	–	–	–
Anvil			–	–	–	–	08 087	10 010	–	–	–

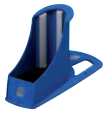
*(5) = **236 913** 10 006

RIVKLE® TOOLING BOX				Ø RIVKLE®								
				M3	M4	M5	M6	M8	M10	M12	M14	M16
			**236 113** 00 001	✓	✓	✓	✓	✓	✓	✓	–	–
				–	✓	✓	✓	✓	–	–	–	–
			**236 113** 00 002	✓	✓	✓	✓	✓	–	–	–	–

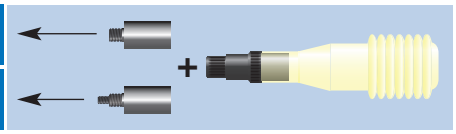
Accessories

Ring		**236 803** 00 008
Pin		**236 803** 00 009
Staubli compressed air coupling kit		**282 590** 10 988 (D6)
		282 590 10 988 (D8)
Staubli hose, length 5 m, with D6 coupling		**236 003** 01 000

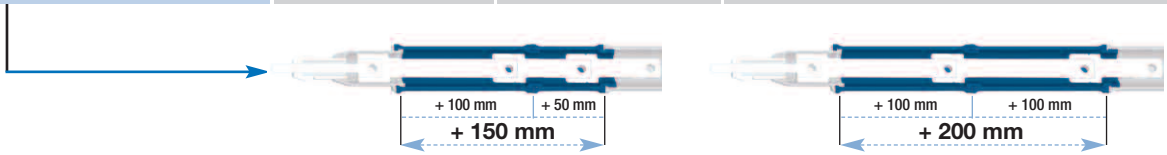
	KIT				
					
RIVKLE® P2005	**236 155** 00 305	**236 155** 01 001	2 - 3 Kg **282 590** 10 820	2,2 - 4 Kg **282 590** 10 665	2,2 - 4 Kg **282 590** 10 664
RIVKLE® P2007	**236 156** 00 301	**236 156** 01 001			
RIVKLE® P2007 PN		–			
RIVKLE® P3007 PN			4 - 6 Kg **282 590** 10 152	–	–
RIVKLE® P3007	**236 159** 00 301	–			

	 Standard battery 14,4V 2,6AH - Li-Ion	 Battery with higher capacity 14,4V 4,0AH - Li-Ion	 Standard charger	 Multicharger 4 positions	 Cord power supply	 Tool support	 Screw kit adaptator
RIVKLE® B2007	**282 590** 30 350	**282 590** 30 351	**282 590** 30 352	**282 590** 30 354	**282 590** 30 356	**236 166** 00 308	See page 60

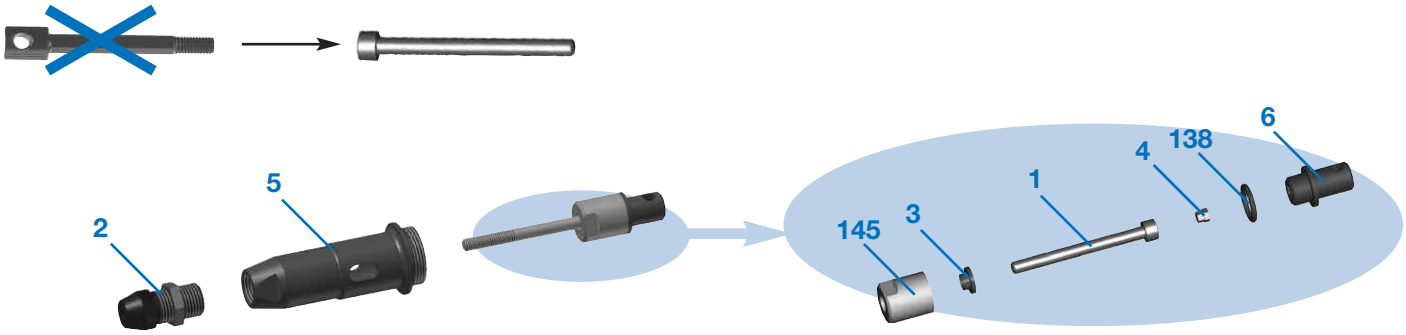
Refill & purge accessory

RIVKLE® P2007 / P2005		**236 114** 00 970
RIVKLE® B2007		**236 166** 00 309

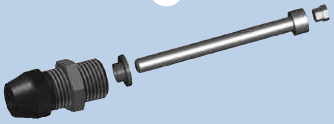
		RIVKLE® P2005	RIVKLE® P2007/P2007PN/P3007PN
	+ 50 mm		**282 590** 10 984
	+ 100 mm		**282 590** 10 985
	+ 150 mm		**282 590** 10 986
	+ 50 mm	**282 590** 10 789	**282 590** 10 791
	+ 100 mm	**282 590** 10 790	**282 590** 10 792

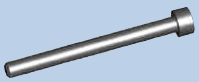


RIVKLE® – Hydropneumatic and battery-powered setting tools



KIT = A + B + C

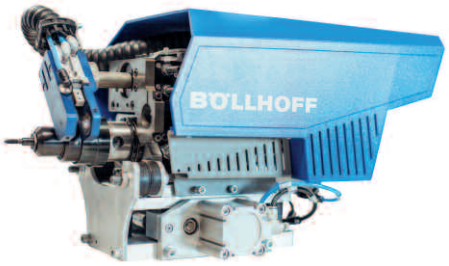
	A  5 B2007 = original nose		B  145 + 138 + 6		C  1 + 2 + 3 + 4
	RIVKLE® P2005	RIVKLE® P2007	P2007 + P2005	RIVKLE® B2007	
M3	236 153 00 043	236 803 00 005	236 803 00 216	236 803 00 216	236 803 03 000
M4					236 803 04 000
M5					236 803 05 000
M6					236 803 06 000
M8					236 803 08 000

	 ISO4762 DIN912	 2	 3	 4
M3	M3 x 60 236 803 03 020	236 113 03 030	236 803 03 040	236 803 03 010
M4	M4 x 60 236 803 04 020	236 113 04 030	236 803 04 040	236 803 04 010
M5	M5 x 65 236 803 05 020	236 113 05 030	236 803 05 040	236 803 05 010
M6	M6 x 65 236 803 06 020	236 113 06 030	236 803 06 040	236 803 06 010
M8	M8 x 70 236 803 08 020	236 113 08 030	-	236 803 08 010

RIVKLE® – Special installation machines

RIVKLE® EPK C / RIVKLE® EPK HP

Hydraulic pneumatic tool with process control



RIVKLE® Automation

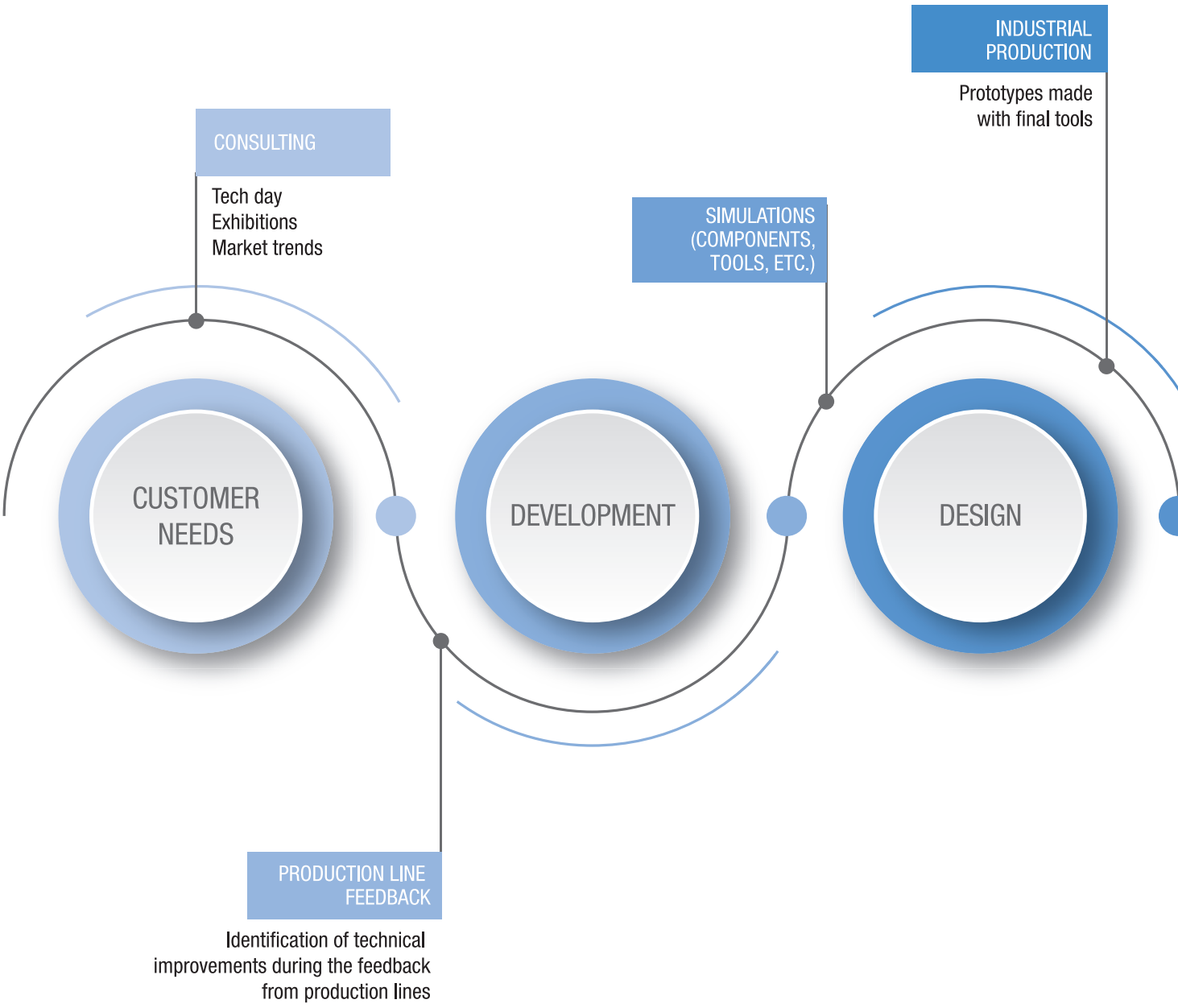
Setting head with automatic loading system

A dedicated brochure has been created for those products, please contact BÖLLHOFF.

BÖLLHOFF is the only supplier for your assembly components and associated tools

BÖLLHOFF provides you with comprehensive assistance. Thanks to our fully in-house expertise, we will support and guide you, from the stages before your design to the industrial production stage and including to provide you with training in the setting methods.

We have the expertise for each step related to your project: consulting, development, design, prototyping.



START OF SERIES PRODUCTION

TRAINING

Training in the maintenance and use of our tools

PRODUCTION

TESTING UNDER REAL CONDITIONS

AFTER-SALE SERVICE

TESTING

Validation of the product dimensions and performance

RIVKLE® – Part number index

BÖLLHOFF

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Passion for successful joining.

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