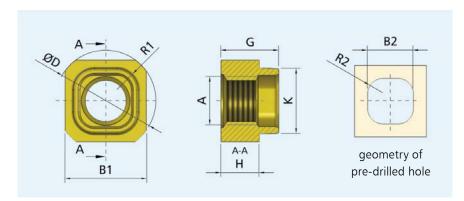


- for fitting ties and springs
- can be processed in many sheet strengths
- fully automated processing possible in the subsequent composite tool
- application as positioning and assembly aid
- www.arnold-fastening.com



# Rivorm® HR rivet nuts – One for every strength and sheet thickness



Technical data	0.4. 2.5 (4.5
Metal thickness	0.4 – 3.5 mm (4.5 mm)
Strength class	8 and 10
Surface	as required

								Dimensions of pre-drilled hole geometry	
Dimension	A	B1	Ø D	G	Н	K	R1	B2	R2
Tolerance		±0.1	min.	+0.1 / -0.3	±0.1	-0.2		-0.1	-0.1
HR 5	M5	12.72	15.60	9.00	5.00	9.70	R3	10.00	R3
HR 6	M6	12.72	15.60	9.00	5.00	9.70	R3	10.00	R3
HR 8	M8	15.52	19.30	10.50	6.50	11.90	R4	12.30	R4
HR 10	M10	16.80	20.60	12.00	8.00	13.60	R4.5	14.00	R4.5
HR 10A	M10	18.80	22.60	12.00	8.00	13.60	R4.5	14.00	R4.5
HR 12	M12	20.80	25.40	14.00	10.00	16.00	R4.7	16.40	R4.7
HR 12A	M12	20.80	25.40	16.50	10.00	16.00	R4.7	16.40	R4.7
HR 12B	M12	23.80	27.00	13.00	7.50	16.00	R4.7	16.40	R4.7
HR 7/16	7/16-20 NF	20.80	25.40	14.00	10.00	16.00	R4.7	16.40	R4.7

## The benefits of the Rivorm® HR rivet nut

- one nut for any thickness of sheet metal up to 4.5 mm
- cost-saving because fewer variants
- high-strength, press-hardened and hot-stamped steels
- very good torsional strength regardless of metal strength
- high pull-out force
- ARNOLD processing technology for process-reliable and cost-optimised production
- existing ARNOLD processing technology for other nut types can be altered at little cost (and permanently) to convert to HR nuts
- also available in stainless steel

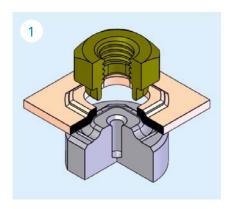
## The solution for almost every material, for example:

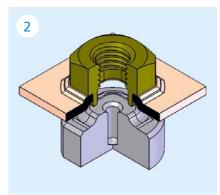
- high-strength sheet metals
- composite materials
- CFRP
- Magnesium

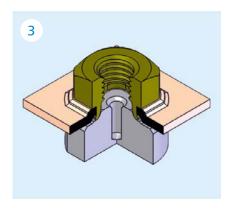


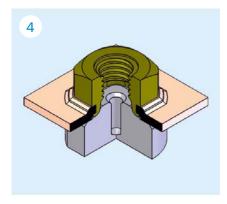
Note: The values stated are examples. The actual values must be determined separately for the application in question.

## **Function sequence**

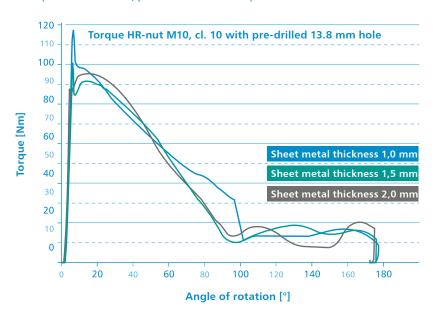


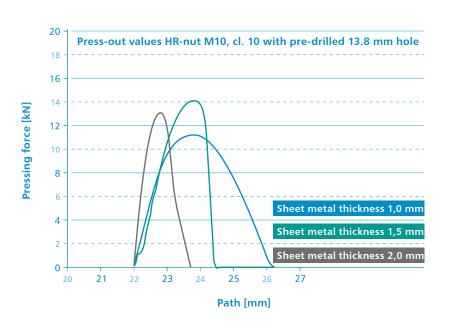






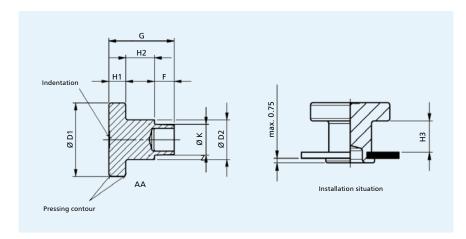
Pull-out and torque values (material 22 MnB5, press-hardened 49HRC)



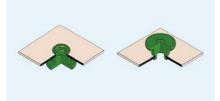


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# Rivorm<sup>®</sup> TR rivets – Suitable for many applications



Technical data	
Dimensions	10 x 6 bis 16 x 8
Strength class	8
Surface	as required



Dimensions of RIVORM® TR rivets										
	Ø D1	Ø D2	ØΚ	H1	H2	F	G	Hole Ø in plate	Н3	Thickness of metal in mm
	± 0.1	± 0.1	- 0.15		± 0.1	- 0.2	- 0.2	+ 0.1		
TR 10 x 6	10.0	6.0	4.9	(1.5)	3.0	2.0	6.5	5.0		0.4-1.5
	± 0.2	± 0.1	-0.15	± 0.2	+0.2	± 0.1		+0.1	+0.2	
TR 11 x 6	11.0	6.0	4.5	3.0	5.1	3.5	(11.6)	4.6	5.0	0.4-2.5
TR 13 x 7	13.0	7.0	5.5	3.0	5.1	3.5	(11.6)	5.6	5.0	0.4-2.5
TR 16 x 8	16.0	8.0	6.0	3.0	7.6	3.5	(14.1)	6.1	7.5	0.4-2.5

Other dimensions available on request.

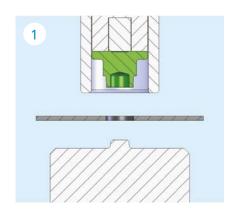
## The benefits of the Rivorm® TR rivet

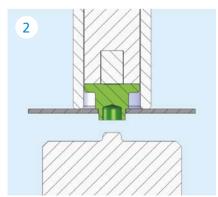
- for fitting ties and springs
- fully automated processing possible in the subsequent composite tool
- can be applied universally for different assembly jobs, such as fastening electrical control units, or other plastic parts, simply by clipping them in
- can be processed in all metal strengths
- application as positioning and assembly aid

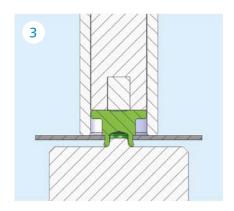


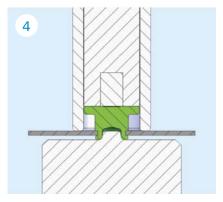
Note: The values stated are examples. The actual values must be determined separately for the application in question.

## Function sequence



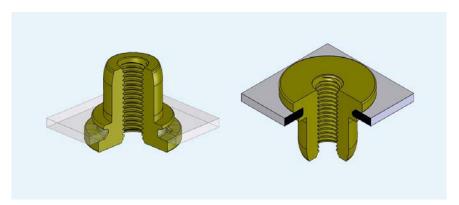






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# Rivorm® AX rivet – our rivet with additional function

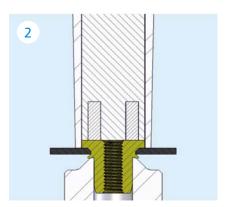


## By patenting the innovative fastening method into metals,

with the Rivorm® AX rivet, ARNOLD & SHINJO is providing another customised fastening solution. In applications with integral functionality, such as bearing seating, assembly aid or spacer, the new product line from Dörzbach has already proved itself in several series applications. Depending on the geometrical design of the rivet, the Rivorm® AX rivet is setting new standards of strength between fastener and sheet metal. Moreover, it can be used to fasten a wide range of metal thicknesses.

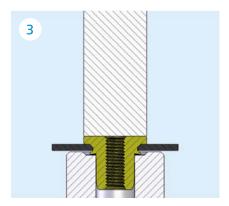
# 

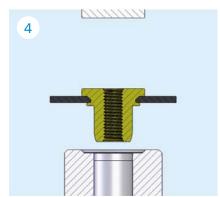
Function sequence



## How the fastener functions

The material is peeled and a collar formed so that a flush and positive fit of the fastener is created with the sheet metal material. This can either transfer very high forces (e.g. AX 20x14) or with the version that is flush with the sheet, the fastener can be used to directly mount connected parts (e.g. AX 16x4). This principle can be applied to almost every material.







## **Notes**

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## The ARNOLD GROUP

Wherever customers need us.

## The ARNOLD GROUP

With a foundation of many years of expertise in the production of intelligent fastening systems and very complex extruded parts, the ARNOLD GROUP has developed over a number of years into a comprehensive supplier and development partner for complex fastening systems. With our new positioning of "BlueFastening Systems" this development process will now continue under a united and harmonised structure. Engineering, fastenings, and functional parts, together with feeder processing systems, all from a single source – efficient, sustained and international.





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