



## **HELICOIL® locknuts**

Special nuts with screw lock

# **BÖLLHOFF**

You sure know the following situation: When under load, screw joints tend to loosen. Load can be e.g. vibration, alternating load or general kinetic energy to be absorbed. In many applications it is absolutely necessary to take precautions against unintentional loosening.

As a specialist in fastening and assembly technology, we offer you HELICOIL® locknuts for those applications.

An efficient combination of two fasteners. Without fail.

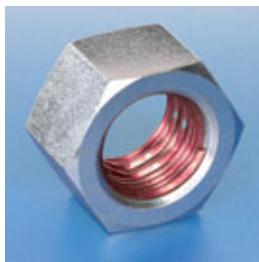
## The functional principle

The locknut consists of a nut (basic body) and the HELICOIL® screwlock coil thread insert. The screw is locked by a polygonal thread of the HELICOIL® screwlock. These threads have a locking effect on the flanks of the screw or bolt to be screwed in. As a result, there is a highly elastically resilient frictional locking so that the screw is locked to prevent self-unscrewing. Depending on the specific application, increased clamping torques can be achieved with several polygonal threads. The resulting clamping torques can be compared to the specifications in the list of standards DIN 267, Part 15, ISO 2320 or adapted to your individual application.

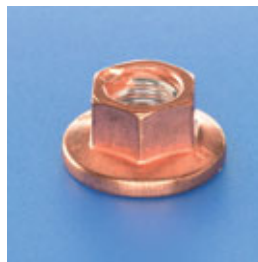
On page 3, you find some guide values for clamping torques as part of the technical information.

## The designs

As a partner for the development and production of fasteners, we are looking forward to developing customer-specific solutions in cooperation with you.



Hexagon nut



Collar nut



Cap nut



Weld nut



Exhaust elbow nut



Nut with integrated washer



Square nut

## Advantages

HELICOIL® locknuts offer the following advantages:

- Clamping effect directly in the thread – elastically resilient
- Even clamping torque in repeated screwings
- Constant thread friction
- Uniform load and stress distribution
- High temperature resistance
- Modular design
  - Profitable
  - Material and surface in higher quality only required for small fastener (HELICOIL® screwlock)

## Technical information

### Materials

Depending on the requirements regarding media resistance as well as thermal and mechanical properties, we offer different materials and surfaces.

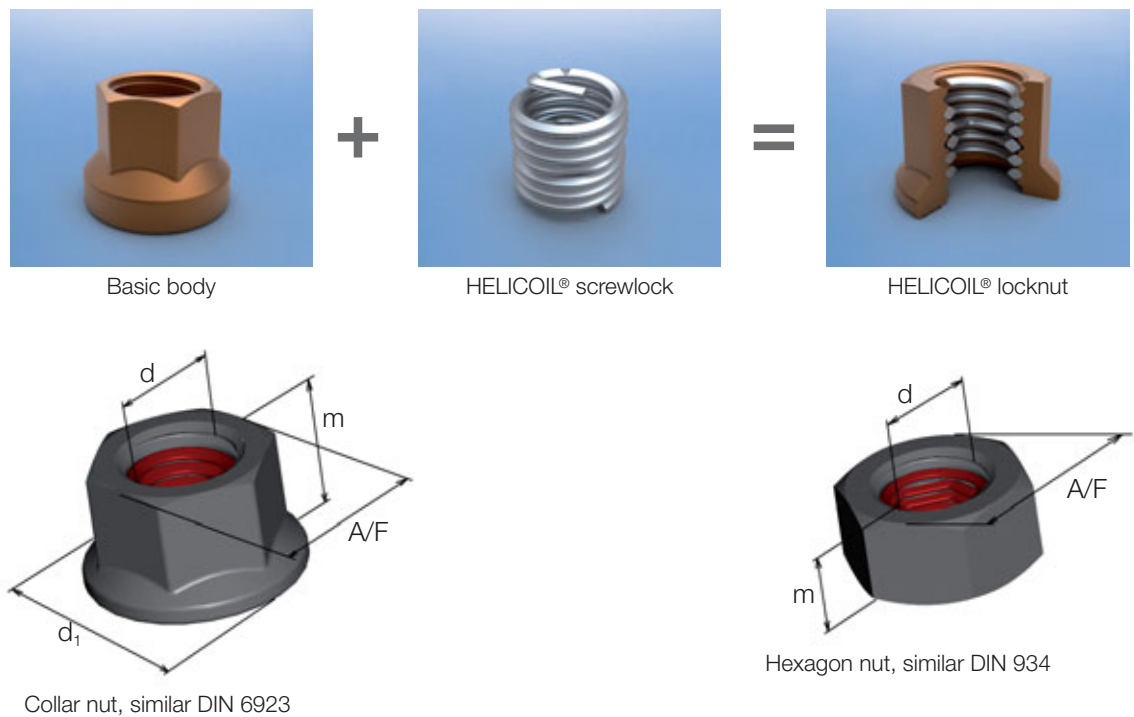
### Guide values for clamping torques according to DIN 267, Part 15 or ISO 2320

Number of screwing processes	M 3	M 4	M 5	M 6	M 8	M 10	M 12	M 14	M 16	M 18	M 20
1 <sup>st</sup> screwing-on, max.	0.43	0.90	1.60	3.00	6.00	10.50	15.50	24.00	32.00	42.00	54.00
1 <sup>st</sup> screwing-off, min.	0.12	0.18	0.29	0.45	0.85	1.50	2.30	3.30	4.50	6.00	7.50
5 <sup>th</sup> screwing-off, min.	0.08	0.12	0.20	0.30	0.60	1.00	1.60	2.30	3.00	4.20	5.30

Valid for coarse threads and fine threads.

Values in Nm for property class 8.

## Standard designs



## Standard designs clustered according to materials

**Nut body:** Steel

**HELICOIL® screwlock:** Stainless steel

Sizes d [mm]	Item code	A/F [mm]	Height m [mm]	Collar diameter d <sub>1</sub> [mm]	Property class*	Nut (basic body)		HELICOIL® screwlock	
						Material	Surface	Material	Surface
M4	0135 204 0010	7	5	–	6	St	–	A2	red
M5	0135 205 0010	8	6	–	6	St	–	A2	red
M6	0135 206 0010	10	6	–	6	St	zinc coated	A2	red
M6	0135 206 0020	10	6	–	6	St	–	A2	red
M10	0135 210 0010	17	11	–	6	St	–	A2	red
M12	0135 212 0010	19	11,5	–	6	St	–	A2	red
M14	0135 214 0010	22	14	–	6	St	–	A2	red
M16	0135 216 0010	24	16	–	6	St	–	A2	red
M18	0135 218 4010	27	16	–	6	St	zinc coated	A2	red
M20	0135 220 0010	30	20	–	6	St	–	A2	red
M24	0135 224 0010	36	23	–	8	St	–	A2	red

\* Nuts meet the requirements for the proof load test according to DIN EN ISO 898-2 and DIN EN ISO 898-6 in the corresponding property class. Delivery times and minimum order quantities on request.

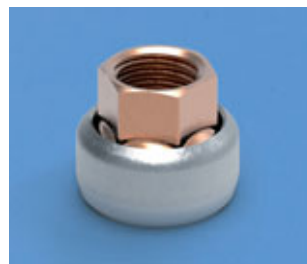
**Nut body:** Stainless steel

**HELICOIL® screwlock:** Stainless steel

Sizes d [mm]	Item code	A/F [mm]	Height m [mm]	Collar diameter d <sub>1</sub> [mm]	Property class*	Nut (basic body)		HELICOIL® screwlock	
						Material	Surface	Material	Surface
M5	0135 205 0060	8	5	–	70	A1	–	A2	red
M6	0135 206 0060	10	6	–	70	A1	–	A2	red
M8	0135 208 0060	13	8	–	70	A1	–	A2	red
M10	0135 210 0060	17	10	–	70	A1	–	A2	red
M12	0135 212 0060	19	12	–	70	A1	–	A2	red

\* Nuts meet the requirements for the proof load test according to DIN EN ISO 3507 in the corresponding property class. Delivery times and minimum order quantities on request.

## Special designs



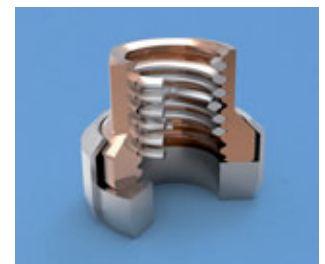
Basic body with washer

+



HELICOIL® screwlock

=



HELICOIL® locknut as collar nut variant with washer

### Special designs with integrated washer

Sizes d [mm]	Item code	Designs	Nut (basic body)				HELICOIL® screwlock		
			A/F [mm]	Height m [mm]	Collar diame- ter d <sub>1</sub> [mm]	Property class	Size [mm]	Material	Surface
M 8	0135 908 0055	Collar nut with integrated washer	11	14.9	17	10	M 8x9.6	A2	silvered
M 8	0135 908 0056	Collar nut with integrated washer	11	14.9	17	10	M 8x9.6	Inconel	silvered
M 8	0135 908 0058	Collar nut with integrated washer	11	14.8	18	10	M 8x9.6	A2	silvered
M 8	0135 908 0059	Collar nut with integrated washer	11	16.8	20	10	M 8x9.6	A2	silvered
M 8	0135 908 0061	Collar nut with integrated washer and internal serration	–	22	17	10	M 8x9.6	A2	silvered

Delivery times and minimum order quantities on request.

### Diverse special designs

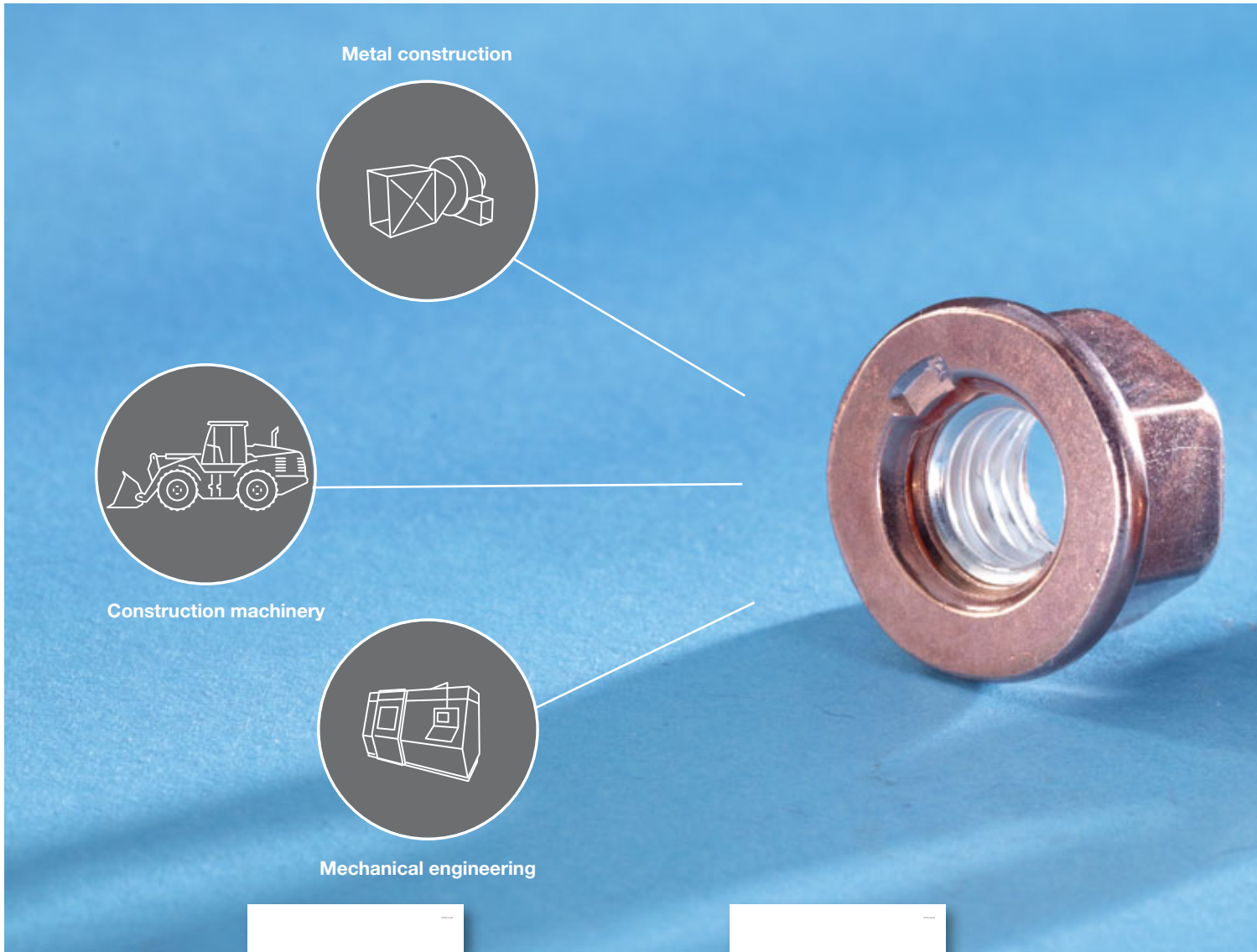
Sizes d [mm]	Item code	Designs	Nut (basic body)				HELICOIL® screwlock		
			A/F [mm]	Height m [mm]	Collar diame- ter d <sub>1</sub> [mm]	Property class	Size [mm]	Material	Surface
M 4	0135 904 0008	Hexagon nut	10	5	–	A1-50	M 4x4.5	A2	bright
M 5	0135 905 0004	Flange nut	8	5	11.8	8	M 5x5	A2	red
M 6	0135 906 0004	Cap nut	10	13	15	6	M 6x6	A2	red
M 6	0135 906 0017	Hexagon nut	10	6	–	8	M 6x5.5	A2	silvered
M 8	0135 908 0030	Square rivet nut	14	8.9	–	10	M 8x7.4	A2	–
M 8	0135 908 0048	Collar nut similar to DIN 6923	13	10	17	8	M 8x8	Inconel	silvered
M 8	0135 908 0053	Collar nut similar to DIN 6923	12	10	19	10	M 8x8	A2	silvered
M 8	0135 908 0054	Collar nut similar to DIN 6923	13	10	17	8	M 8x8.3	A2	silvered, green
M 8	0135 908 0060	Collar nut similar to DIN 6923	11	10.8	15	10	M 8x8	A2	silvered
M 10	0135 910 0001	Hexagon nut	15	11	–	8	M 10x9.5	A2	red
M 10	0135 910 0034	Weld nut with collar	19	12	25	8	M 10x9.3	A2	red
M 10	0135 910 0040	Collar nut similar to DIN 6923	16	10	19	8	M 10x8.5	Inconel	silvered
M 12	0135 912 0013	Collar nut similar to DIN 6923	19	14	27	8	M 12x8.9	A2	bright
M 14	0135 914 0004	Square nut	22	16	–	8	M 14x14	A2	bright
M 16	0135 916 0019	Square weld nut	24	18.4	–	10	M 16x16	A2	red
M 16	0135 916 0021	Square weld nut	28	16	–	8	M 16x14	A2	red
M 16x1,5	0135 916 4005	Hexagon nut	27	10	–	6	M 16x1.5x9	A2	red
M 16x1,5	0135 916 4009	Cap nut	24	28	–	6	M 16x1.5x13.5	bronze	bright
M 20x1,5	0135 920 4007	Hexagon nut	30	15	–	6	M 20x1.5x13	bronze	bright
M 24x2	0135 924 5003	Hexagon nut	36	19	–	A-80	M 24x2x18	A4	silvered
M 30x2	0135 930 5003	Hexagon nut with chamber	46	20	–	6	M 30x2x18.5	A2	red

Delivery times and minimum order quantities on request.

## Fields of application

HELICOIL® locknuts are used in applications such as the following:

- Exhaust manifolds
- Axles and engines
- Stamping and support posts
- Exhaust elbows



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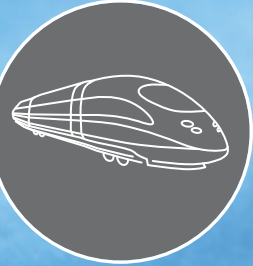
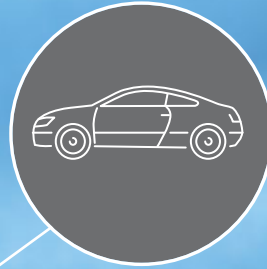


[www.boellhoff.de/en/helicoil-plus](http://www.boellhoff.de/en/helicoil-plus)

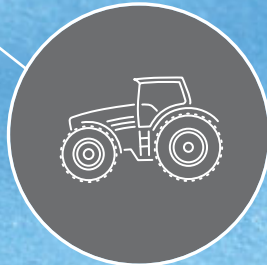


<http://www.boellhoff.de/en/helicoil-plus-imperial>

Automotive



Rail cars



Agricultural machinery



**HELICOIL® tangfree**  
The tangfree coil thread insert for a high-strength thread  
Catalogue No 0150



<http://www.boellhoff.de/en/helicoil-tangfree>

**HELICOIL® plus**  
Repairing of damaged threads  
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<http://www.boellhoff.de/en/thread-repair>

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