



Special nuts with screw lock

**BOLLHOFF** 



#### HELICOIL ® locknuts

Surely you are familiar with this situation: When under load, screwings 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 these applications. An efficient combination of two fasteners. Rely on it.

#### The system

HELICOIL® locknuts are a combination of high-strength nuts and HELICOIL® screwlock coil thread inserts. These fasteners with optimum design and which perfectly match provide you with considerable benefits for screwed connections with high requirements.



## The functional principle

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

On page 4, you find some guide values for clamping torques and torques as part of the technical information.

#### The versions

As a partner for development and production of fasteners, we would be glad to develop customer-specific solutions for you.





#### **Customer benefits**

HELICOIL® locknuts bear the following advantages:

- Clamping effect directly in the thread engagement springy
- Even clamping torque in repeated screwings
- Constant thread friction
- Uniform load and stress distribution
- High temperature resistance
- Modular construction
  - Reduced costs
  - Material and surface in higher-quality design only required for the smaller fastener (HELICOIL® screwlock)

# Fields of application

In the following, we show you a few of the many possible fields of application for fastening

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













#### Technical information

#### Selection of material

Depending on the requirements regarding thermal and mechanical properties as well as media resistance, different materials and surfaces can be realised. See technical information on this page and on page 5.

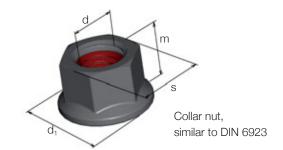
# Guide values for clamping torques according to DIN 267 Part 15 or ISO 2320

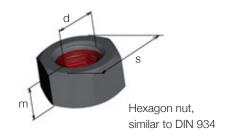
Number of screwing processes	М 3	M 4	M 5	M 6	M 8	M 10	M 12	M 14	M 16	M 18	M 20
1st screwing-on, max.	0.43	0.90	1.60	3.00	6.00	10.50	15.50	24.00	32.00	42.00	54.00
1st screwing-off, min.	0.12	0.18	0.29	0.45	0.85	1.50	2.30	3.30	4.50	6.00	7.50
5 <sup>th</sup> screwing-off, min.	0.08	0.12	0.20	0.30	0.60	1.00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





Nut body: steel

**HELICOIL®** screwlock: stainless steel

Dimension  d [mm]  Article no.		width across flats	Height m	Collar diameter	Property class*	Nut (basic body)		HELICOIL® screwlock	
u [IIIII]		s [mm]	[11111]	d₁ [mm]	Ciass	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
M8	0135 208 0010	13	7.5	_	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
M20	0135 220 0010	30	20	_	6	St	_	A2	red
M24	0135 224 0010	36	23	_	8	St	_	A2	red

<sup>\*</sup>Nuts meet the requirements of 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.

TEL : (02) 2511-8900 ° FAX : (02) 2511-8902 ° E-MAIL : Hai.ju@msa.hinet.net

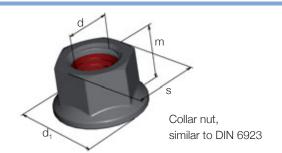
Nut body: stainless steel HELICOIL® screwlock: stainless steel

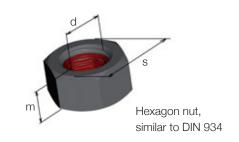
Dimension d [mm]	Article no.	width across flats s [mm]	Height m [mm]	Collar diameter d₁ [mm]	Property class*	Nut (bas	sic body) Surface	HELICOIL®	screwlock Surface
M5	0135 205 0060	8	5	_	70	A1	_	A2	red
M6	0135 206 0060	10	6	-	70	A1	_	A2	red
M8	0135 208 0060	13	8	_	70	A1	_	A2	red
M10	0135 210 0060	17	10	-	70	A1	_	A2	red
M12	0135 212 0060	19	12	-	70	A1	-	A2	red

<sup>\*</sup>Nuts meet the requirements of 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





			Nut (ba	sic body)			HELICO	OIL® screwlo	ck
Dimension	Article no.	Design	width	Height	Collar-Ø	Property	Dimension	Material	Surface
d [mm]			across flats s [mm]	m [mm]	d₁ [mm]	class	[mm]		
M 4	0135 904 0008	Hexagon	10	5	_	A1-50	M 4×4.5	A2	bright
M 5	0135 905 0004	Flange nut	8	5	11.8	8	M 5×5	A2	red
M 6	0135 906 0004	Cap nut	10	13	15	6	M 6x6	A2	red
M 6	0135 906 0017	Hexagon	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	13	10	17	8	M 8 x 8	Inconel	silvered
M 8	0135 908 0053	Collar nut	12	10	19.0	10	M 8x8	A2	silvered
M 8	0135 908 0054	Collar nut	13	10	17	8	M 8x8.3	A2	silvered, green
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 8×9.6	A2	silvered
M 8	0135 908 0060	Collar nut with integrated washer	11	10.8	15	10	M 8x8	A2	silvered
M 8	0135 908 0061	Collar nut with integrated washer and internal serration	-	22	17	10	M 8x8	A2	silvered
M 10	0135 910 0001	Hexagon	15	11	_	8	M 10×9.5	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	16	10	19	8	M 10×8.5	Inconel	silvered
M 12	0135 912 0013	Collar nut	19	14	27	8	M 12x8.9	A2	bright
M 14	0135 914 0004	Square	22	16	_	8	M 14×14	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 16×14	A2	red
M 16x1.5	0135 916 4005	Hexagon	27	10	-	6	M 16x1.5x9	A2	red
M 16x1.5	0135 916 4009	Cap nut	24	28		6	M 16 x 1.5 x 13.5		bright
M 20x1.5	0135 920 4007	Hexagon	30	15	-	6	M 20 x 1.5 x 13	bronze	bright
M 24x2	0135 924 5003	Hexagon	36	19	_	A-80	M 24x2x18	A4	silvered
M 30×2	0135 930 5003	Hexagon with chamfer	46	20	-	6	M 30x2x18.5	A2	red

Delivery times and minimum order quantities on request.

## Böllhoff International with companies in:

Argentina Austria Brazil Canada China Czech Republic France Germany Hungary India Italy Japan Mexico Poland Romania Russia Slovakia South Africa Spain Turkey United Kingdom USA

Apart from these 22 countries, Böllhoff supports its international customers in other important industrial markets in close partnership with agents and dealers.



Subject to technical change. Reprinting, even in extract form, only permitted with express consent. Observe protective note according to DIN 34.

# OCEANUS HAI JU TRADING CO.,LTD.

# 海聚貿易有限公司

台北市中山區中山北路二段62巷36號

TEL: (02) 2511-8900 FAX: (02) 2511-8902

P.C.: 10448

E-MAIL: Hai.ju@msa.hinet.net HTTP: www.oceanus.com.tw

