



Self-locking nuts

Fast, reliable, versatile

The center of excellence for high-performance fastening technology

KVT-Fastening is an expert for high-quality fastening applications and offers engineering solutions based on the wide product portfolio of the leading manufacturers in the market.



Mechanical engineering | Automotive | Electrical engineering | Energy | Precision engineering | Fluid power | Transportation | Off-shore and Marine | Medical equipment
Aviation and aerospace | Construction industry | Watch manufacturing industry

www.kvt-fastening.com



High-performance solutions from KVT-Fastening are found wherever absolutely safe and secure connections are essential. These small but extremely resilient components play key roles where it matters most – whether in the electronics and energy sector, the automotive and transportation industries, aviation and aerospace, engineering and construction, precision engineering, or medical equipment.

KVT-Fastening does not just supply standard products and individual components, but also provides close and active customer support in the search for ideal solutions, particularly when specific requirements must be fulfilled. This portfolio is complemented by a range of innovative tools and

machines as well as, if needed, the integration into automated serial production workflows.

Ever since 1927, KVT-Fastening has stood for experience, solution-driven know-how, unique expertise in development and consultancy as well as the ultimate in reliability. Since December 2012, KVT-Fastening is a member of the Bossard Group. Bossard is a leading provider of intelligent solutions for industrial fastening technology. The range includes global sales, technical consulting (engineering) and logistics of fastening technology components and bolts. Customers benefit from the extension of competencies in industrial fastening technology and from an optimally enhanced product or service portfolio.



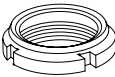

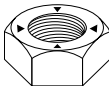
The right solution for every type of load

Self-locking nuts ensure permanent tightness of screw joints in a multitude of designs. Accurate analysis of the types of load and their values is important for selection of the right design. This decides whether a special hexagon nut or a self-locking nut with polyamide ring represents the best solution for the fastening.

- **ELASTIC-STOP®** self- locking nuts with polyamide ring
- **KLOCK®** all-metal nuts with metallic thread-locking, slotted



Content

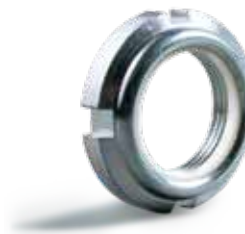
	ELASTIC-STOP®	
	Self-locking nuts with polyamide ring	
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Technical performances, installation recommendations as well as unspecified tolerances regarding the dimensions of the parts have to be requested individual for each application before starting the series production.

All dimensions are specified in mm.

Lock-nuts

ELASTIC-STOP®



Type GUK

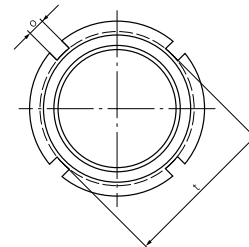
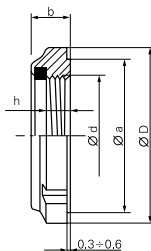
Standard version

Material

Nut: galvanised steel, passivated,
strength = 400 - 700 N/mm²
Locking ring: polyamide (max. 100°C)

Technical data see page 12

Special nuts on request

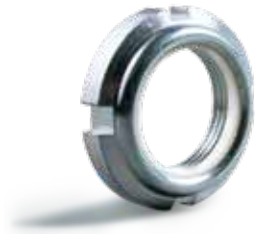


3-D Data: <http://kvt.partcommunity.com>

$\varnothing d$ Thread	Order description	b max.	h min.	$\varnothing D$	$\varnothing a$ t	o	Grooves
M10x0.75	GUK10x0.75	7.6	4.5	18	15	3	4
M12x1	GUK12x1	7.6	4.5	21	18	3	4
M15x1	GUK15x1	8.6	5.5	24	21	4	4
M17x1	GUK17x1	8.7	5.5	28	24	4	4
M20x1	GUK20x1	9.6	6.0	32	27	4	4
M25x1.5	GUK25x1.5	10.5	6.5	38	33	5	4
M30x1.5	GUK30x1.5	10.7	6.6	44	38	5	4
M35x1.5	GUK35x1.5	11.3	7.0	50	44	5	4
M40x1.5	GUK40x1.5	12.3	7.7	56	50	6	4
M45x1.5	GUK45x1.5	12.3	7.8	62	55	6	4
M50x1.5	GUK50x1.5	12.9	8.1	68	61	6	4
M55x2	GUK55x2	13.4	8.2	75	68	7	6
M60x2	GUK60x2	13.4	8.2	80	73	7	6
M65x2	GUK65x2	14.5	9.2	85	77	7	6
M70x2	GUK70x2	14.5	9.2	92	84	8	6
M75x2	GUK75x2	15.5	10.0	98	89	8	6
M80x2	GUK80x2	16.5	11.2	105	96	10	8
M85x2	GUK85x2	17.5	12.1	110	100	10	8
M90x2	GUK90x2	17.7	12.5	120	110	10	8
M95x2	GUK95x2	18.7	13.5	125	115	10	8
M100x2	GUK100x2	19.7	14.5	130	120	10	8

Lock-nuts

ELASTIC-STOP®



Type GUP

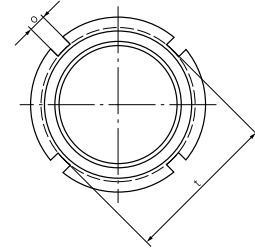
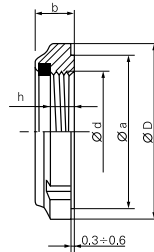
High version

Material

Nut: galvanised steel, passivated,
strength = 400 - 700 N/mm²
Locking ring: polyamide (max. 100°C)

Technical data see page 12

Special nuts on request

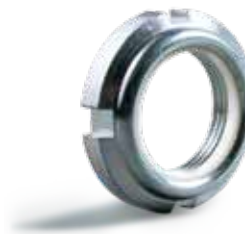


3-D Data: <http://kvt.partcommunity.com>

Ø d Thread	Order description	b max.	h min.	Ø D	Ø a	o	Grooves
M20x1	GUP20x1	13.2	9.6	32	27	4	4
M25x1.5	GUP25x1.5	14.2	10.0	38	33	5	4
M30x1.5	GUP30x1.5	14.2	10.0	44	38	5	4
M35x1.5	GUP35x1.5	15.2	10.6	50	44	5	4
M45x1.5	GUP45x1.5	16.7	11.9	62	55	6	4
M50x1.5	GUP50x1.5	18.7	13.9	68	61	6	4
M55x2	GUP55x2	18.7	12.9	75	68	7	6
M60x2	GUP60x2	18.7	12.9	80	73	7	6
M65x2	GUP65x2	19.7	13.9	85	77	7	6
M70x2	GUP70x2	19.7	13.9	92	84	8	6
M75x2	GUP75x2	20.7	14.9	98	89	8	6
M80x2	GUP80x2	20.7	14.9	105	96	10	8
M85x2	GUP85x2	21.7	15.9	110	100	10	8
M90x2	GUP90x2	21.7	15.9	120	110	10	8

Lock-nuts

ELASTIC-STOP®



Type GUA

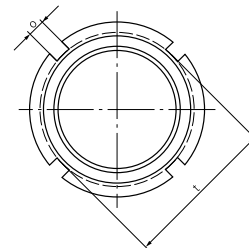
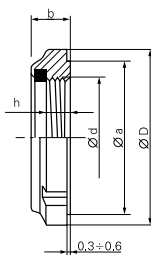
Special sizes

Material

Nut: galvanised steel, passivated,
strength = 400 - 700 N/mm²
Locking ring: polyamide (max. 100°C)

Technical data on request

Special nuts on request



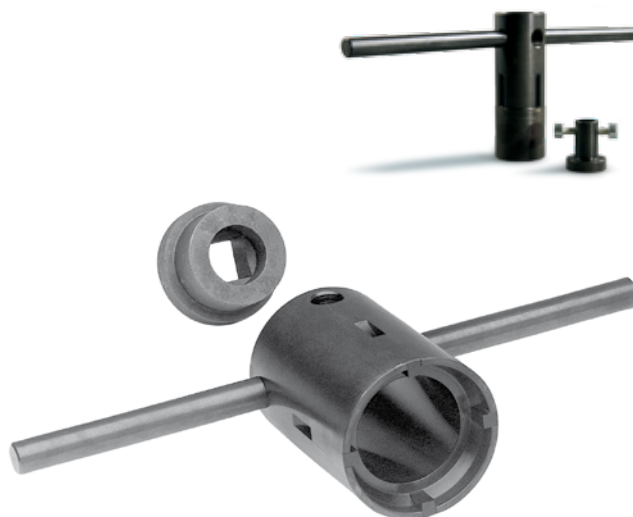
3-D Data: <http://kvt.partcommunity.com>

Ø d Thread	Order description	b max.	h min.	Ø D	Ø a	o	Grooves
M10x1	GUA10x1	7.6	4.4	18	15	3	4
M12x1.5	GUA12x1.5	9.2	5.7	21	18	3	4
M14x1.5	GUA14x1.5	10.7	6.0	24	21	4	4
M16x1	GUA16x1	8.6	5.2	28	24	4	4
M16x1.5	GUA16x1.5	10.7	6.0	28	24	4	4
M16x2	GUA16x2	11.7	7.0	28	24	4	4
M18x1.5	GUA18x1.5	10.7	7.3	28	24	4	4
M20x1.5	GUA20x1.5	9.6	6.0	32	27	4	4
M22x1.5	GUA22x1.5	12.7	7.0	38	33	5	4
M24x1.5	GUA24x1.5	10.7	6.2	38	33	5	4
M28x1.5	GUA28x1.5	11.2	6.9	44	38	5	4
M32x1.5	GUA32x1.5	11.2	6.6	50	44	5	4
M38x1.5	GUA38x1.5	12.2	6.6	53	47	5	4
M48x1.5	GUA48x1.5	13.7	9.1	64	57	6	4
M65x1.5	GUA65x1.5	14.5	8.9	85	77	7	6
M105x2	GUA105x2	20.2	14.5	135	124	12	8
M110x2	GUA110x2	20.2	14.5	140	129	12	8
M115x2	GUA115x2	20.2	14.9	145	134	12	8
M120x2	GUA120x2	23.7	18.0	150	139	12	8
M125x2	GUA125x2	23.7	18.0	155	144	12	8
M130x2	GUA130x2	23.7	18.0	160	149	12	8
M140x2	GUA140x2	23.7	18.0	170	159	12	8
M150x2	GUA150x2	26.2	19.0	195	183	14	8
M160x3	GUA160x3	26.2	18.0	205	191	16	8

Box spanners

ELASTIC-STOP®

Box spanners for ELASTIC-STOP® lock-nuts



Basic equipment					Additional equipment		
Box spanner				Handles	Square insert		
Order description	Ø D	L	for ELASTIC-STOP®		Order description = Ø d x L	Order description	SW
			GUK + GUP	GUA			
Nr. 10	25.0	70	M10x0.75	M10x1/M10x1.5	Ø 8x80	Nr. 10x1/4"	6.35
Nr. 12	28.0	70	M12x1	M12x1.5/M12x1.75			
Nr. 15	33.0	70	M15x1	M14			
Nr. 17	36.0	70	M17x1	M16/M18	Ø 10x90	Nr. 15x3/8"	9.50
Nr. 20	39.0	70	M20x1	M20x1.5/M20x2.5			
Nr. 25	45.0	80	M25x1.5	M22 und M24x1.5	Ø 10x100	Nr. 20x1/2"	12.70
Nr. 30	50.0	80	M30x1.5	M24/M27/M28			
Nr. 35	56.0	100	M35x1.5	M32/M34			
Nr. 38	59.0	100	-	M38x1.5	Ø 13x110	Nr. 35x3/4"	19.05
Nr. 40	63.8	100	M40x1.5	-			
Nr. 45	69.0	100	M45x1.5	M42/M45x2			
Nr. 50	75.0	100	M50x1.5	-	Ø 16x120	Nr. 40x3/4"	25.40
Nr. 55	82.0	100	M55x2	-			
Nr. 60	87.0	100	M60x2	M65x1.5			
Nr. 65	91.0	100	M65x2	-	Ø 16x130	Nr. 50x1"	
Nr. 70	100.0	100	M70x2	-			
Nr. 75	105.0	100	M75x2	-			
Nr. 80	112.0	100	M80x2	-	Ø 18x145	Nr. 60x1"	
Nr. 85	117.0	100	M85x2	-			
Nr. 90	127.0	100	M90x2	-			
Nr. 100	137.0	140	M100x2	-	Ø 20x155	Nr. 75x1"	
						Nr. 80x1"	
						Nr. 85x1"	
						Nr. 90x1"	
						Nr. 100x1"	

Hexagon nuts

KLOCK®

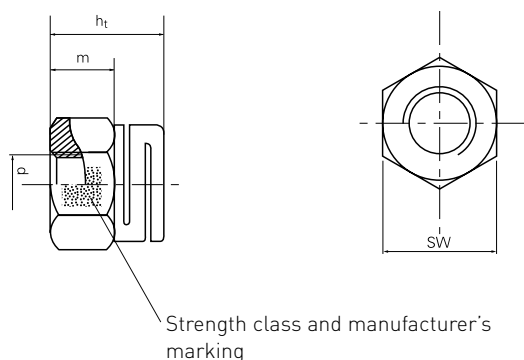


Type ESL

from solid material, slotted

Properties and functional test comply with EN ISO 2320 (DIN 267)

Further materials, finishes and thread sizes (also imperial "inch") on request



Versions

Material	Index	Temperature range
Steel	Strength class 8	Uncoated -50°C to +300°C*
	Strength class 10	
	Strength class 12	
Surface		
Galvanising white	ZO	Treated -50°C to +230°C
Phosphating	TO	
Uncoated	BT	
Material		
Stainless steel	Strength class A2 70	-50°C to +500°C*
	Strength class A4 80	
Surface		
Decontamination + passivation	PA	-50°C to +500°C
Antigalling	ST	-50°C to +230°C
Untreated	BT	-50°C to +500°C

Order example ESL M3x0,50 QV ZO

Steel strength class 8, white galvanised

Ø d Thread	Order description	SW	h _t	m	
M3x0.50	ESL M3x0,50	5.5	4.5	2.5	Available in all versions
M4x0.70	ESL M4x0,70	7.0	5.3	2.6	
M5x0.80	ESL M5x0,80	8.0	6.3	3.0	
M6x1.00	ESL M6x1,00	10.0	7.0	3.6	
M8x1.25	ESL M8x1,25	13.0	8.8	4.8	
M10x1.50	ESL M10x1,50	16.0	11.0	6.0	
M12x1.75	ESL M12x1,75	18.0	13.0	7.2	
M14x2.00	ESL M14x2,00	21.0	15.0	8.0	
M16x2.00	ESL M16x2,00	24.0	17.0	9.5	
M18x2.50	ESL M18x2,50	27.0	19.0	10.5	
M20x2.50	ESL M20x2,50	30.0	21.0	12.0	

* The values given are for information; in special case please enquire.

Hexagon nuts

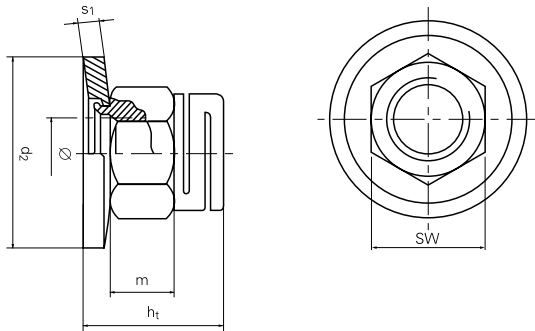
KLOCK®



Type ERM

from solid material, slotted, with rotating captive washer

Properties and functional test comply with EN ISO 2320 (DIN 267)



Versions

Material	Index	Temperature range
Steel	Strength class 8	Uncoated -50°C to +300°C*
	Strength class 10	
	Strength class 12	
Surface		
Galvanising white	ZO	Treated -50°C to +230°C
Phosphating	TO	
Uncoated	BT	
Material		
Stainless steel	Strength class A2 70	-50°C to +500°C*
	Strength class A4 80	
Surface		
Decontamination + passivation	PA	-50°C to +500°C
Antigalling	ST	-50°C to +230°C
Untreated	BT	-50°C to +500°C

Order example ERM M4x0,70 QV ZO

Steel strength class 8, white galvanised

Ø d Thread	Order description	SW	ht	m	d ₂	s ₁
M4x0.70	ERM M4x0,70	7.0	7.0	2.6	12.0	1.1
M5x0.80	ERM M5x0,80	8.0	8.5	3.0	14.0	1.3
M6x1.00	ERM M6x1,00	10.0	9.0	4.5	18.0	1.4
M8x1.25	ERM M8x1,25	13.0	10.8	4.8	22.0	1.6
M10x1.50	ERM M10x1,50	16.0	13.4	6.0	27.0	1.8
M12x1.75	ERM M12x1,75	18.0	15.8	7.2	30.0	2.4
M16x2.00	ERM M16x2,00	24.0	19.8	9.5	40.0	3.2

* The values given are for information; in special case please enquire.

Technical data

ELASTIC-STOP® lock-nuts

Type GUK, GUP

Testing torques

The data quoted are issued as a guide only and are without commitment.

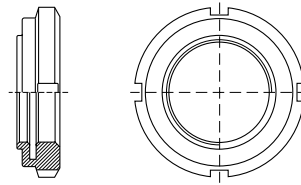
The values may vary upwards or downwards according to production batch.

Ø d Thread	Pitch	Tightening torque (Nm)	
		1° Assembly max.	5° Assembly min.
M20	1.00	14	4.0
M25	1.50	22	6.0
M30	1.50	34	9.0
M35	1.50	54	12.0
M40	1.50	70	15.0
M45	1.50	94	24.0
M50	1.50	120	32.0
M55	2.00	140	40.0
M60	2.00	160	48.0
M65	2.00	190	58.0
M70	2.00	210	66.0
M75	2.00	230	75.0
M80	2.00	260	84.0
M85	2.00	280	92.0
M90	2.00	300	100.0
M95	2.00	320	110.0
M100	2.00	346	118.0

Special nuts

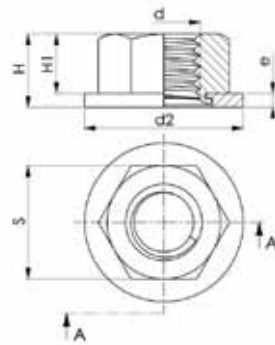
Self-locking nuts

All-metal

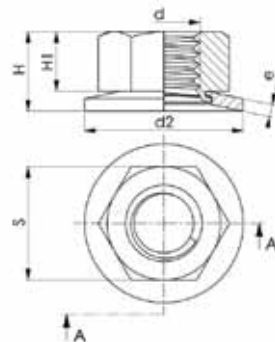


Locking nuts with washer

■ flat washer

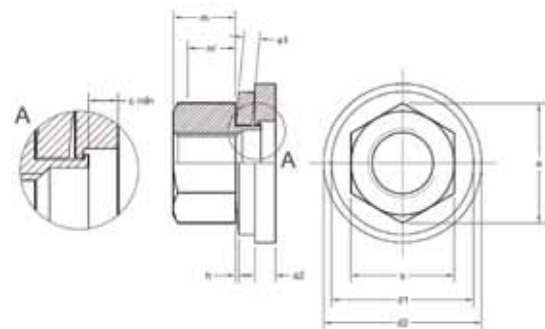


■ conical washer

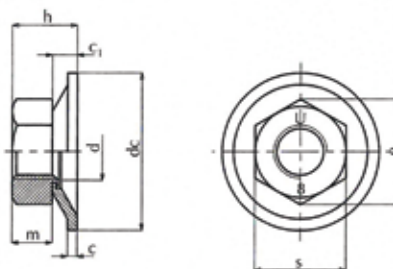


■ ecosyn®-KEPS

Constant securing effect even
vat high operating temperatures.



Locking nuts with rotatable, captive conical spring washer



These and other special nuts only on request.

KVT-Fastening – Fastening technology



Blind rivet nuts



Blind rivet technology



Thread inserts



Self-clinching fasteners



Stud welding systems¹⁾



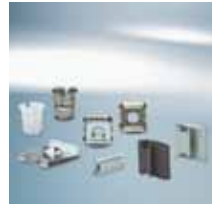
Lock nuts



Bonding fasteners



Access solutions



Quick fastening elements and clips



Quick release pins and spring plungers



Adhesives and sealants¹⁾



Construction fasteners²⁾



Special processes²⁾



Plugs



Pressure intensifiers³⁾



Installation technology



Quick connectors⁴⁾

Fastening, sealing and flow control solutions for complex applications

The extensive KVT-Fastening portfolio offers optimal solutions for your most challenging applications. The products included in this catalog represent only a selection from our entire product portfolio. Upon request, we will be pleased to provide additional information or an individual consultation to you.

Intelligent logistic systems

Bossard SmartBin and SmartLabel are intelligent logistics systems which monitor stock with total reliability and ensure stock replenishment automatically. An online system transmits the data to our server, and this – if necessary – triggers an order. These systems ensure quick and easy availability of C-parts while production is running.



Logistic systems

Competent analysis for efficient solutions

KVT-Fastening's highly qualified experts analyze the given task at hand. Based on this sound understanding of the project, they then develop ideal solutions that are economical, efficient, and safe.



Solutioneering

For more information about our range of products and order at our E-shop, please visit www.kvt-fastening.com

¹⁾ Not available in Germany. ²⁾ Only available in Switzerland. ³⁾ Not available in Switzerland. ⁴⁾ Not available in Austria.

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