



FASTEKS PRECISKO® high-precision locknuts

Fast mounted reusable

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.



They never let up

Maximum accuracy is shown in relation to the smooth running of the spindles, shafts and axles. For their bearing purpose, axle-, roller- and needle bearings are widely used. FASTEKS PRECISKO® high precision locknuts with maximum axial runout accuracy guarantee the desired preload for these screw joints with highest security against loosening. FASTEKS PRECISKO® can be installed at applications with minimum space conditions.

The face and thread are ground (RS/AS) or turned (DRS/DAS) in a single clamping operation. That results in a runout accuracy of 0.002 mm for the ground version and 0.01 mm for the turned version.

Our locknuts have, depending on type, mechanical radial or axial locking features to prevent loosening. The clamping pegs with turned thread profile ensure an optimum torsion protection to secure the preload values. FASTEKS PRECISKO® locknuts are reusable.

Advantages

- High runout accuracy
- Axial or radial locking
- Reusable

More about FASTEKS®

www.kvt-fastening.de/en/products/brands/fasteks



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All dimensions are specified in mm.

High-precision locknuts



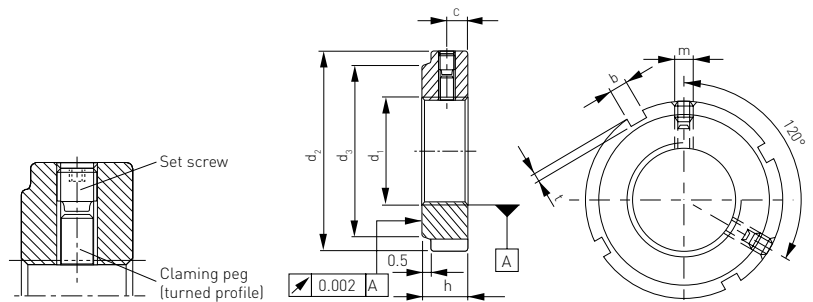
Type RS – radial set screw

Axial runout accuracy 0.002
Ground version

Material

- Steel Rm 800 – 950N/mm²
- Body black finished
- Threaded and face bare, oiled

Other Versions are available upon request.



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

Thread size d_1 4H	Order reference	Dimensions							Weight g/part
		d_2	h	d_3	b	t	c	m	
M12x1.0	RS12x1	22	8	18	3	2.0	4	M4	17
M15x1.0	RS15x1	25	8	21	3	2.0	4	M4	25
M17x1.0	RS17x1	28	10	23	4	2.0	5	M5	30
M20x1.0	RS20x1	32	10	27	4	2.0	5	M5	35
M25x1.5	RS25x1.5	38	12	33	5	2.0	6	M6	56
M30x1.5	RS30x1.5	45	12	40	5	2.0	6	M6	85
M35x1.5	RS35x1.5	52	12	47	5	2.0	6	M6	100
M40x1.5	RS40x1.5	58	14	52	6	2.5	7	M6	140
M45x1.5	RS45x1.5	65	14	59	6	2.5	7	M6	180
M50x1.5	RS50x1.5	70	14	64	6	2.5	7	M6	200
M55x2.0	RS55x2	75	16	68	7	3.0	8	M6	240
M60x2.0	RS60x2	80	16	73	7	3.0	8	M6	260
M65x2.0	RS65x2	85	16	78	7	3.0	8	M6	280
M70x2.0	RS70x2	92	18	85	8	3.5	9	M8	360
M75x2.0	RS75x2	98	18	90	8	3.5	9	M8	410
M80x2.0	RS80x2	105	18	95	8	3.5	9	M8	500
M85x2.0	RS85x2	110	18	102	8	3.5	9	M8	540
M90x2.0	RS90x2	120	20	108	10	4.0	10	M8	750
M95x2.0	RS95x2	125	20	113	10	4.0	10	M8	800
M100x2.0	RS100x2	130	20	120	10	4.0	10	M8	860
M105x2.0	RS105x2	140	22	126	12	5.0	11	M10	1120
M110x2.0	RS110x2	145	22	133	12	5.0	11	M10	1200
M115x2.0	RS115x2	150	22	137	12	5.0	11	M10	1280
M120x2.0	RS120x2	155	24	138	12	5.0	12	M10	1420
M125x2.0	RS125x2	160	24	148	12	5.0	12	M10	1475
M130x2.0	RS130x2	165	24	149	12	5.0	12	M10	1530
M135x2.0	RS135x2	175	26	160	14	6.0	13	M12	1890
M140x2.0	RS140x2	180	26	160	14	6.0	13	M12	2140
M145x2.0	RS145x2	190	26	172	14	6.0	13	M12	2400
M150x2.0	RS150x2	195	26	172	14	6.0	13	M12	2500
M155x3.0	RS155x3	200	28	182	16	7.0	14	M12	2750
M160x3.0	RS160x3	210	28	182	16	7.0	14	M12	2850
M165x3.0	RS165x3	210	28	193	16	7.0	14	M12	2950
M170x3.0	RS170x3	220	28	193	16	7.0	14	M12	3350
M180x3.0	RS180x3	230	30	203	18	8.0	15	M12	3740
M190x3.0	RS190x3	240	30	214	18	8.0	15	M12	3950
M200x3.0	RS200x3	250	32	226	18	8.0	16	M12	4200

High-precision locknuts



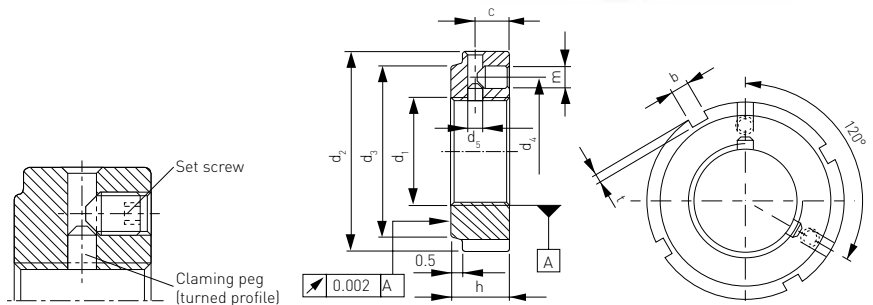
Type AS – axial set screw

Axial runout accuracy 0.002
Ground version

Material

- Steel Rm 800 – 950N/mm²
- Body black finished
- Threaded and face bare, oiled

Other Versions are available upon request.



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

Thread size d ₁ 4H	Order reference	Dimensions										Weight g/part
		d ₂	h	d ₃	b	t	d ₄	d ₅	c	m		
M17x1.0	AS17x1	28	15	23	4	2.0	22.5	3.3	10	M4	40	
M20x1.0	AS20x1	32	15	27	4	2.0	26.0	3.3	10	M4	55	
M25x1.5	AS25x1.5	38	17	33	5	2.0	31.5	4.2	11	M5	70	
M30x1.5	AS30x1.5	45	17	40	5	2.0	37.5	4.2	11	M5	110	
M35x1.5	AS35x1.5	52	17	47	5	2.0	43.5	4.2	11	M5	150	
M40x1.5	AS40x1.5	58	19	52	6	2.5	49.0	5.0	12	M6	230	
M45x1.5	AS45x1.5	65	19	59	6	2.5	55.0	5.0	12	M6	285	
M50x1.5	AS50x1.5	70	19	64	6	2.5	60.0	5.0	12	M6	310	
M55x2.0	AS55x2	75	21	68	7	3.0	65.0	5.0	13	M6	350	
M60x2.0	AS60x2	80	21	73	7	3.0	70.0	5.0	13	M6	380	
M65x2.0	AS65x2	85	21	78	7	3.0	75.0	5.0	13	M6	410	
M70x2.0	AS70x2	92	23	85	8	3.5	81.0	6.2	14	M8	470	
M75x2.0	AS75x2	98	23	90	8	3.5	87.0	6.2	14	M8	620	
M80x2.0	AS80x2	105	23	95	8	3.5	93.0	6.2	14	M8	680	
M85x2.0	AS85x2	110	23	102	8	3.5	98.0	6.2	14	M8	720	
M90x2.0	AS90x2	120	25	108	10	4.0	105.0	6.2	15	M8	930	
M95x2.0	AS95x2	125	25	113	10	4.0	110.0	6.2	15	M8	1050	
M100x2.0	AS100x2	130	25	120	10	4.0	115.0	6.2	15	M8	1100	
M105x2.0	AS105x2	140	27	126	12	5.0	123.0	7.9	16	M10	1400	
M110x2.0	AS110x2	145	27	133	12	5.0	128.0	7.9	16	M10	1480	
M115x2.0	AS115x2	150	27	137	12	5.0	133.0	7.9	16	M10	1520	
M120x2.0	AS120x2	155	29	138	12	5.0	138.0	7.9	17	M10	1680	
M125x2.0	AS125x2	160	29	148	12	5.0	143.0	7.9	17	M10	1760	
M130x2.0	AS130x2	165	29	149	12	5.0	148.0	7.9	17	M10	1810	
M135x2.0	AS135x2	175	31	160	14	6.0	155.0	9.6	17	M12	2300	
M140x2.0	AS140x2	180	31	160	14	6.0	160.0	9.6	18	M12	2390	
M145x2.0	AS145x2	190	31	172	14	6.0	168.0	9.6	18	M12	2830	
M150x2.0	AS150x2	195	31	172	14	6.0	173.0	9.6	18	M12	2910	
M155x3.0	AS155x3	200	33	182	16	7.0	178.0	9.6	19	M12	3180	
M160x3.0	AS160x3	210	33	182	16	7.0	185.0	9.6	19	M12	3710	
M165x3.0	AS165x3	210	33	193	16	7.0	188.0	9.6	19	M12	3780	
M170x3.0	AS170x3	220	33	193	16	7.0	195.0	9.6	19	M12	3910	
M180x3.0	AS180x3	230	35	203	18	8.0	205.0	9.6	20	M12	4340	
M190x3.0	AS190x3	240	35	214	18	8.0	215.0	9.6	20	M12	4500	
M200x3.0	AS200x3	250	37	226	18	8.0	225.0	9.6	21	M12	5000	

High-precision locknuts



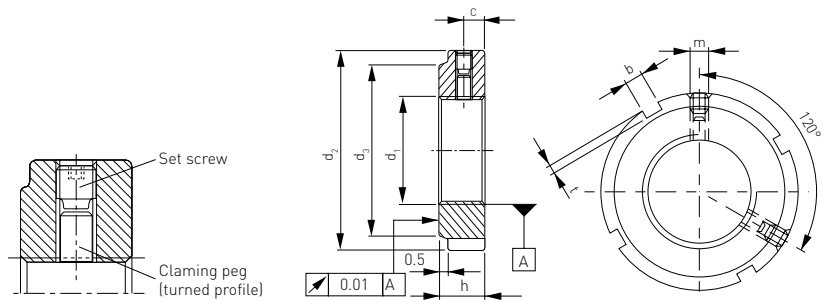
Type DRS – radial set screw

Axial runout accuracy 0.01
Turned version

Material

- Steel Rm 800 – 950N/mm²
- Body black finished
- Threaded and face bare, oiled

Other Versions are available upon request.



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

Thread size d_1 4H	Order reference	Dimensions							Weight g/part
		d_2	h	d_3	b	t	c	m	
M6x0.50*	DRS6x0.5	16	8	12	3	2.0	4	M4	8
M8x0.75*	DRS8x0.75	16	8	12	3	2.0	4	M4	9
M10x1.0	DRS10x1	18	8	14	3	2.0	4	M4	12
M12x1.0	DRS12x1	22	8	18	3	2.0	4	M4	17
M15x1.0	DRS15x1	25	8	21	3	2.0	4	M4	25
M17x1.0	DRS17x1	28	10	23	4	2.0	5	M5	30
M20x1.0	DRS20x1	32	10	27	4	2.0	5	M5	35
M25x1.5	DRS25x1.5	38	12	33	5	2.0	6	M6	56
M30x1.5	DRS30x1.5	45	12	40	5	2.0	6	M6	85
M35x1.5	DRS35x1.5	52	12	47	5	2.0	6	M6	100
M40x1.5	DRS40x1.5	58	14	52	6	2.5	7	M6	140
M45x1.5	DRS45x1.5	65	14	59	6	2.5	7	M6	180
M50x1.5	DRS50x1.5	70	14	64	6	2.5	7	M6	200
M55x2.0	DRS55x2	75	16	68	7	3.0	8	M6	240
M60x2.0	DRS60x2	80	16	73	7	3.0	8	M6	260
M65x2.0	DRS65x2	85	16	78	7	3.0	8	M6	280
M70x2.0	DRS70x2	92	18	85	8	3.5	9	M8	360
M75x2.0	DRS75x2	98	18	90	8	3.5	9	M8	410
M80x2.0	DRS80x2	105	18	95	8	3.5	9	M8	500
M85x2.0	DRS85x2	110	18	102	8	3.5	9	M8	540
M90x2.0	DRS90x2	120	20	108	10	4.0	10	M8	750
M95x2.0	DRS95x2	125	20	113	10	4.0	10	M8	800
M100x2.0	DRS100x2	130	20	120	10	4.0	10	M8	860
M105x2.0	DRS105x2	140	22	126	12	5.0	11	M10	1120
M110x2.0	DRS110x2	145	22	133	12	5.0	11	M10	1200
M115x2.0	DRS115x2	150	22	137	12	5.0	11	M10	1280
M120x2.0	DRS120x2	155	24	138	12	5.0	12	M10	1420
M125x2.0	DRS125x2	160	24	148	12	5.0	12	M10	1475
M130x2.0	DRS130x2	165	24	149	12	5.0	12	M10	1530

* Claming peg 180°

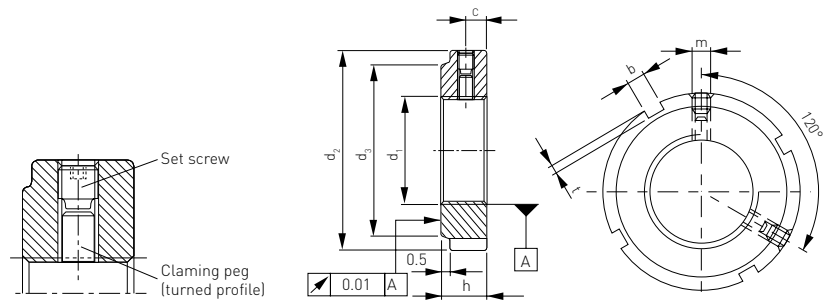
High-precision locknuts



Type DRS – radial set screw

Axial runout accuracy 0.01
Turned version

See page 8



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

Thread size d_1 4H	Order reference	Dimensions							Weight g/part
		d_2	h	d_3	b	t	c	m	
M135x2.0	DRS135x2	175	26	160	14	6.0	13	M12	1890
M140x2.0	DRS140x2	180	26	160	14	6.0	13	M12	2140
M145x2.0	DRS145x2	190	26	172	14	6.0	13	M12	2400
M150x2.0	DRS150x2	195	26	172	14	6.0	13	M12	2500
M155x3.0	DRS155x3	200	28	182	16	7.0	14	M12	2750
M160x3.0	DRS160x3	210	28	182	16	7.0	14	M12	2850
M165x3.0	DRS165x3	210	28	193	16	7.0	14	M12	2950
M170x3.0	DRS170x3	220	28	193	16	7.0	14	M12	3350
M180x3.0	DRS180x3	230	30	203	18	8.0	15	M12	3740
M190x3.0	DRS190x3	240	30	214	18	8.0	15	M12	3950
M200x3.0	DRS200x3	250	32	226	18	8.0	16	M12	4200

* Claming peg 180°

High-precision locknuts



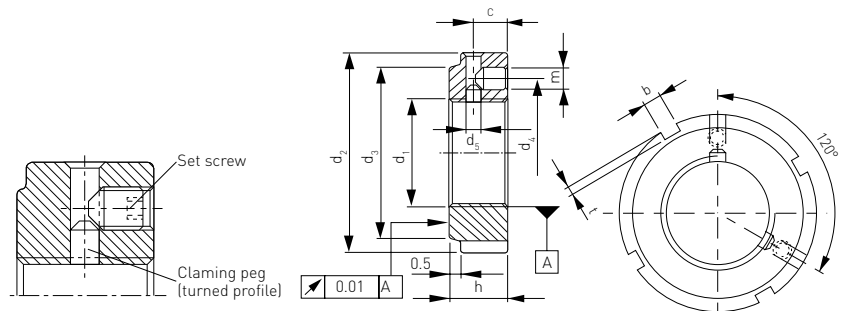
Type DAS – axial set screw

Axial runout accuracy 0.01
Turned version

Material

- Steel Rm 800 – 950N/mm²
- Body black finished
- Threaded and face bare, oiled

Other Versions are available upon request.



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

Thread size d ₁ 4H	Order reference	Dimensions									Weight g/part
		d ₂	h	d ₃	b	t	d ₄	d ₅	c	m	
M17x1.0	DAS17x1	28	15	23	4	2.0	22.5	3.3	10	M4	40
M20x1.0	DAS20x1	32	15	27	4	2.0	26.0	3.3	10	M4	55
M25x1.5	DAS25x1.5	38	17	33	5	2.0	31.5	4.2	11	M5	70
M30x1.5	DAS30x1.5	45	17	40	5	2.0	37.5	4.2	11	M5	110
M35x1.5	DAS35x1.5	52	17	47	5	2.0	43.5	4.2	11	M5	150
M40x1.5	DAS40x1.5	58	19	52	6	2.5	49.0	5.0	12	M6	230
M45x1.5	DAS45x1.5	65	19	59	6	2.5	55.0	5.0	12	M6	285
M50x1.5	DAS50x1.5	70	19	64	6	2.5	60.0	5.0	12	M6	310
M55x2.0	DAS55x2	75	21	68	7	3.0	65.0	5.0	13	M6	350
M60x2.0	DAS60x2	80	21	73	7	3.0	70.0	5.0	13	M6	380
M65x2.0	DAS65x2	85	21	78	7	3.0	75.0	5.0	13	M6	410
M70x2.0	DAS70x2	92	23	85	8	3.5	81.0	6.2	14	M8	470
M75x2.0	DAS75x2	98	23	90	8	3.5	87.0	6.2	14	M8	620
M80x2.0	DAS80x2	105	23	95	8	3.5	93.0	6.2	14	M8	680
M85x2.0	DAS85x2	110	23	102	8	3.5	98.0	6.2	14	M8	720
M90x2.0	DAS90x2	120	25	108	10	4.0	105.0	6.2	15	M8	930
M95x2.0	DAS95x2	125	25	113	10	4.0	110.0	6.2	15	M8	1050
M100x2.0	DAS100x2	130	25	120	10	4.0	115.0	6.2	15	M8	1100
M105x2.0	DAS105x2	140	27	126	12	5.0	123.0	7.9	16	M10	1400
M110x2.0	DAS110x2	145	27	133	12	5.0	128.0	7.9	16	M10	1480
M115x2.0	DAS115x2	150	27	137	12	5.0	133.0	7.9	16	M10	1520
M120x2.0	DAS120x2	155	29	138	12	5.0	138.0	7.9	17	M10	1680

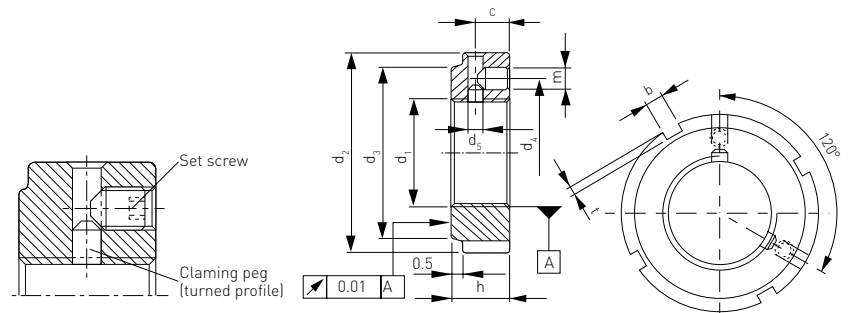
High-precision locknuts



Type DAS – axial set screw

Axial runout accuracy 0.01
Turned version

See page 8



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

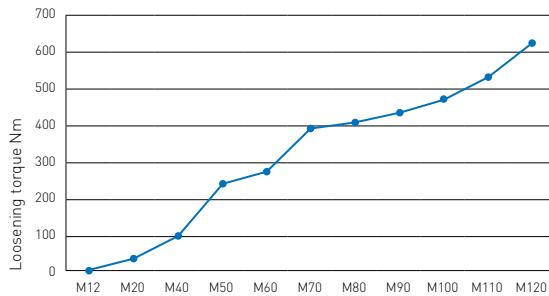
Thread size d ₁ 4H	Order reference	Dimensions									Weight g/part
		d ₂	h	d ₃	b	t	d ₄	d ₅	c	m	
M125x2.0	DAS125x2	160	29	148	12	5.0	143.0	7.9	17	M10	1760
M130x2.0	DAS130x2	165	29	149	12	5.0	148.0	7.9	17	M10	1810
M135x2.0	DAS135x2	175	31	160	14	6.0	155.0	9.6	17	M12	2300
M140x2.0	DAS140x2	180	31	160	14	6.0	160.0	9.6	18	M12	2390
M145x2.0	DAS145x2	190	31	172	14	6.0	168.0	9.6	18	M12	2830
M150x2.0	DAS150x2	195	31	172	14	6.0	173.0	9.6	18	M12	2910
M155x3.0	DAS155x3	200	33	182	16	7.0	178.0	9.6	19	M12	3180
M160x3.0	DAS160x3	210	33	182	16	7.0	185.0	9.6	19	M12	3710
M165x3.0	DAS165x3	210	33	193	16	7.0	188.0	9.6	19	M12	3780
M170x3.0	DAS170x3	220	33	193	16	7.0	195.0	9.6	19	M12	3910
M180x3.0	DAS180x3	230	35	203	18	8.0	205.0	9.6	20	M12	4340
M190x3.0	DAS190x3	240	35	214	18	8.0	215.0	9.6	20	M12	4500
M200x3.0	DAS200x3	250	37	226	18	8.0	225.0	9.6	21	M12	5000

Technical information

Loosening torque

Type RS

Average values depending on axle-shaft tolerance, surface etc.

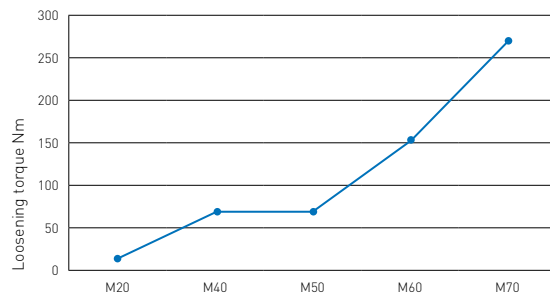


Max. tightening torque of set screws in Precisko locknuts Nm

M4	M5	M6	M8	M10	M12
1.5	1.8	6.0	14.0	44.0	75.0

Type AS

Average values depending on axle-shaft tolerance, surface etc.

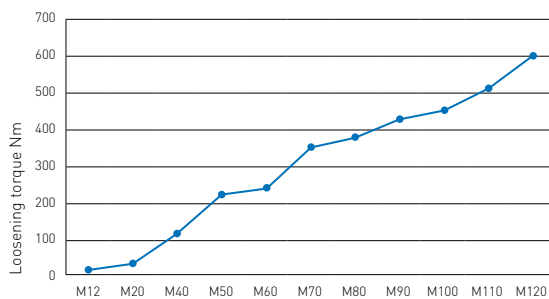


Max. tightening torque of set screws in Precisko locknuts Nm

M4	M5	M6	M8	M10	M12
1.5	1.8	6.3	14.0	30.0	50.0

Type DRS

Average values depending on axle-shaft tolerance, surface etc.

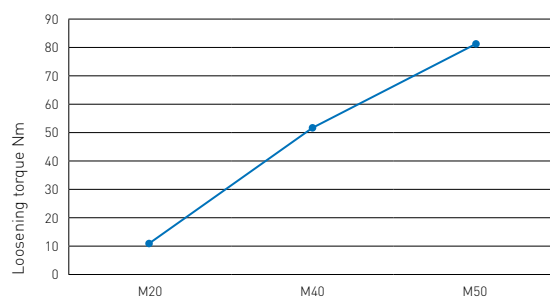


Max. tightening torque of set screws in Precisko locknuts Nm

M4	M5	M6	M8	M10	M12
1.5	1.8	6.0	14.0	44.0	75.0

Type DAS

Average values depending on axle-shaft tolerance, surface etc.



Max. tightening torque of set screws in Precisko locknuts Nm

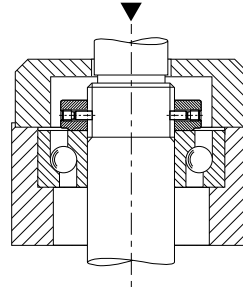
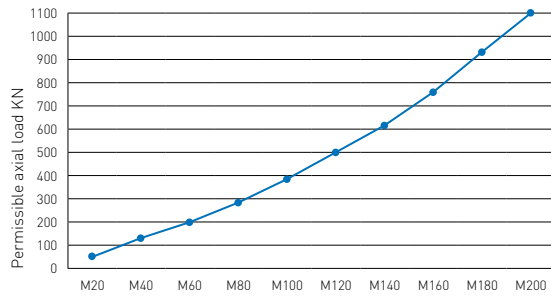
M4	M5	M6	M8	M10	M12
1.5	1.8	6.3	14.0	30.0	50.0

Technical information

Permissible axial load

Type RS, AS, DRS and DAS

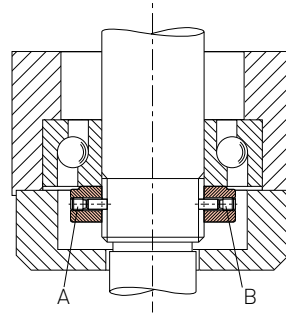
Initial stressing force + operational load



Installation instructions

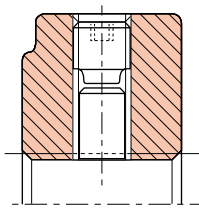
Installation instructions

1. Set screw A tighten to base
2. Set screw B tighten completely
3. Set screw A tighten completely

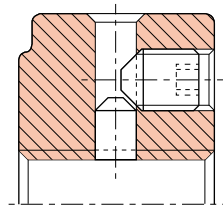


Locking

Radial - Type RS and DRS

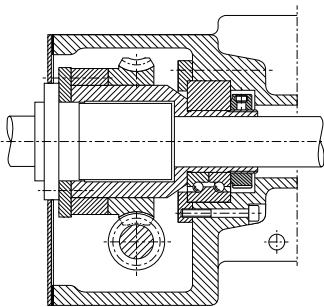


Axial - Type AS and DAS

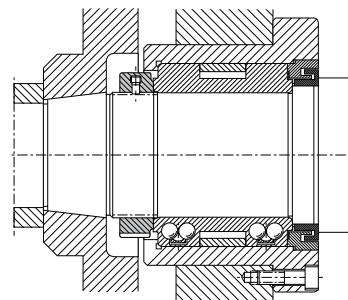


Examples of application

Bearing of a ball roller spindle



Bearing of a rotating table



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⁾

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

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