



PRECISKO® HIGH-PRECISION LOCKNUTS

FAST MOUNTED REUSABLE



SMART. SOLID. SECURE.



SMART. CLEVER FASTENING SOLUTIONS

SOLID. STABLE AND DURABLE

SECURE. DECADES OF KNOW-HOW





## PROFESSIONAL QUALITY BY KVT

As a specialist for high-quality fastening equipment, internationally renowned KVT-Fastening Group offers one of the broadest product portfolios in the market. Innovative installation, automation and services supplement the Group's product range throughout the world.

KVT sees itself as a partner to its clients, a claim which it backs up with products of its own brand FASTEKS+<sup>®</sup>. KVT offers a broad range of innovative, high-end fastening components under the brand FASTEKS+<sup>®</sup>.

And KVT also supplies the leading brands in fastening technology. A global network of key accounts and an established distributor network mean optimal customer service and fast availability.

With over 80 years of experience providing solution-oriented know-how and consulting excellence, the KVT-Fastening Group provides reliability, efficiency and value for its customers.

FASTEKS+® SMART. SOLID. SECURE.









## THEY NEVER LET UP

# FASTEKS+® FASTENING TECHNOLOGY

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<sup>®</sup> locknuts are reusable.

#### **KEY BENEFITS**

- ) High runout accuracy
- ) Axial or radial locking
- ) Reusable
- ) Space-saving use

## SMART. SOLID. SECURE.



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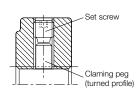
TYPE RS – RADIAL SET SCREW Axial runout accuracy 0.002 Ground version

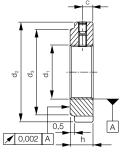
#### Material

- ) Steel Rm 800 950N/mm<sup>2</sup>
- Body black finished

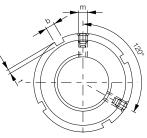
Threaded and face bare, oiled Other Versions are available

upon request.

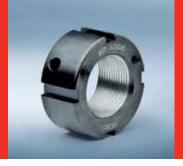




## FASTEKS+ | PRECISKO®



Thread size d <sub>1</sub>	Order reference				Dimensions				Weight
4H		d <sub>2</sub>	h	d <sub>3</sub>	b	t	С	m	g/part
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



TYPE AS – AXIAL SET SCREW Axial runout accuracy 0.002 Ground version

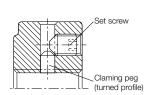
#### Material

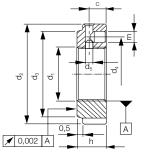
) Steel Rm 800 - 950N/mm<sup>2</sup>

Body black finished

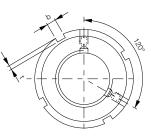
Threaded and face bare, oiled Other Versions are available

upon request.





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Thread airs d	Ouden veference		Dimensions								
Thread size d <sub>1</sub> 4H	Order reference					1					Weight g/part
		d <sub>2</sub>	h	d <sub>3</sub>	b	t	<b>d</b> <sub>4</sub>	<b>d</b> <sub>5</sub>	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

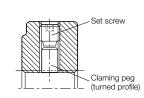


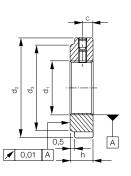
TYPE DRS – RADIAL SET SCREW Axial runout accuracy 0.01 Turned version

#### Material

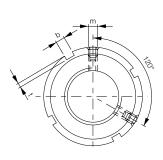
- ) Steel Rm 800 950N/mm<sup>2</sup>
- Body black finished
- > Threaded and face bare, oiled

## Other Versions are available upon request.





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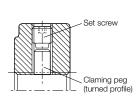
\* Claming peg 180°

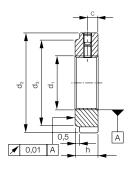
Thread size $d_1$	Order reference				Dimensions				Weight
4H		d <sub>2</sub>	h	d <sub>3</sub>	b	t	С	m	g/part
M6x0,50*	DRS6x0,5	16	8	12	3	2,0	4	M4	8
M8x0,75*	DRS8x0,75	16	8	12	3	2,0	4	M4	9
M10x1,0	DRS10x1	18	8	14	3	2,0	4	M4	12
M12x1,0	DRS12x1	22	8	18	3	2,0	4	M4	17
M15x1,0	DRS15x1	25	8	21	3	2,0	4	M4	25
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



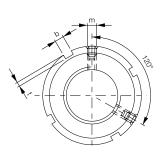
TYPE DRS – RADIAL SET SCREW Axial runout accuracy 0.01 Turned version

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Thread size d <sub>1</sub>	Order reference				Dimensions				Weight
4H		d <sub>2</sub>	h	d <sub>3</sub>	b	t	C	m	g/part
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

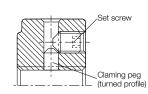


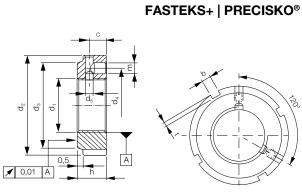
**TYPE DAS - AXIAL SET SCREW** Axial runout accuracy 0.01 **Turned version** 

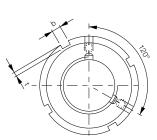
#### Material

- ) Steel Rm 800 950N/mm<sup>2</sup>
- Body black finished
- > Threaded and face bare, oiled

#### Other Versions are available upon request.





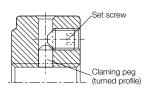


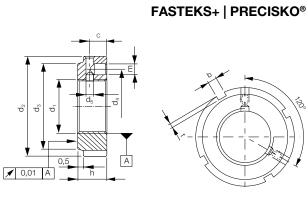
Thread size $d_1$	Order reference					Dimensions					Weight g/part 40 55 70
4Н		d <sub>2</sub>	h	d <sub>3</sub>	b	t	d <sub>4</sub>	<b>d</b> <sub>5</sub>	C	m	g/part
M17x1,0	DAS17x1	28	15	23	4	2,0	22,5	3,3	10	M4	40
M20x1,0	DAS20x1	32	15	27	4	2,0	26,0	3,3	10	M4	55
M25x1,5	DAS25x1,5	38	17	33	5	2,0	31,5	4,2	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

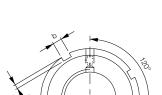


**TYPE DAS – AXIAL SET SCREW** Axial runout accuracy 0.01 **Turned version** 

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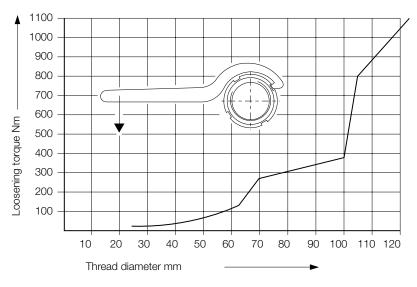


Thread size d <sub>1</sub>	Order reference					Dimensions					Weight
4H		d <sub>2</sub>	h	<b>d</b> <sub>3</sub>	b	t	d <sub>4</sub>	<b>d</b> <sub>5</sub>	C	m	g/part
M125x2,0	DAS125x2	160	29	148	12	5,0	143,0	7,9	17	M10	1760
M130x2,0	DAS130x2	165	29	149	12	5,0	148,0	7,9	17	M10	1810
M135x2,0	DAS135x2	175	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

- > Average values depending on axle-shaft tolerance, surface etc.
- > Specific values for Type RS and DRS, Type AS and DAS reduced values tests are recommended.

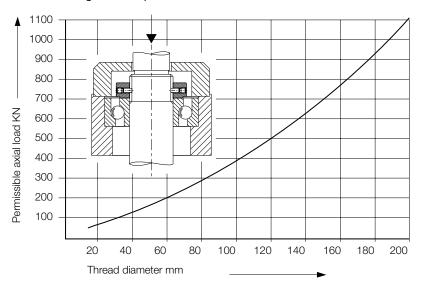


Max. tightening torque of set screws in Precisko locknuts Nm

	M4	M5	M6	M8	M10	M12
Type RS/DRS	2,6	5,0	9,0	22,0	44,0	75,0
Type AS/DAS	1,8	3,5	6,3	15,0	30,0	50,0

#### PERMISSIBLE AXIAL LOAD

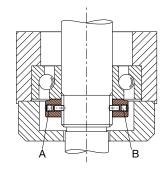
Initial stressing force + operational load



## **INSTALLATION INSTRUCTIONS**

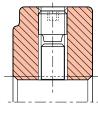
#### INSTALLATION INSTRUCTIONS

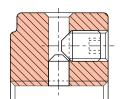
- **1.** Set screw A tighten to base
- 2. Set screw B tighten completely
- 3. Set screw A tighten completely



#### LOCKING

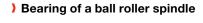
Radial - Type RS and DRS

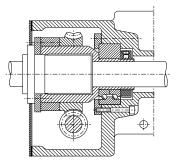




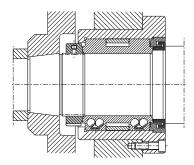
> Axial - Type AS and DAS

#### **EXAMPLES OF APPLICATION**





#### > Bearing of a rotating table



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) KOENIG-EXPANDER® Plugs



) Blind rivet nuts



Blind rivet technology



) Thread inserts



> Self-clinching fasteners



) Stud welding systems



) Lock nuts



) Bonding fasteners



) Access solutions



> Quick fastening elements and clips



) Quick release pins and spring plungers



) Adhesives and sealants<sup>1)</sup>



) Screw technology



) Special processes 1)



) Installation technology



) Quick connectors 4)

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- 1) Not available in Germany
- 2) Only available in Switzerland
- 3) Not available in Switzerland
- 4) Only available in Germany









> Electrical engineering



) Energy technology



Construction industry



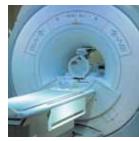
) Precision engineering



) Automotive



Aviation and aerospace



Medical technology



) Hydraulics and industry

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) Mechanical engineering

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