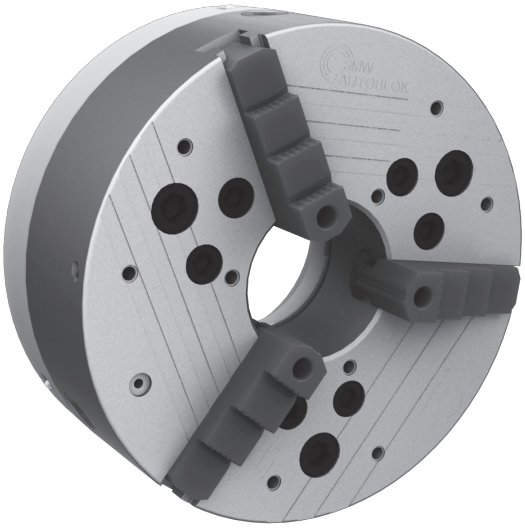
COPY OF THE ORIGINAL

INSTRUCTION MANUAL

QUICK JAW CHANGE POWER CHUCK

Type KNCS-N

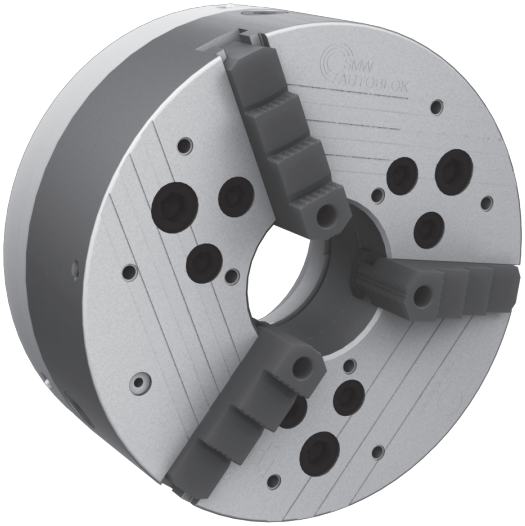


worldwide • weltweit • worldwide

Date: 2017-03
Version: 9
Language: English

SMW® AUTOBLOK

Content



INSTRUCTION MANUAL
Quick Change Jaw Power Chuck Type KNCS-N

Thank you for purchasing an Original-SMW-AUTOBLOK chuck type KNCS-N.

This **instruction manual** contains the installation, the use and the maintenance instructions of the work holding **„KNCS-N“**.

SMW-AUTOBLOK reserves the right to make **changes without notice**.

This **instruction manual is a part of the work holding** and must be passed to the new owner in case of sale.

This **instruction manual may not be** -in whole or in part- **copied** without our written agreement.

Please read the instruction manual carefully before installation and use and always follow the regulations.

Please note especially the sections which are marked with the following signs:

- **Danger of injury or danger to life if instructions are not followed.**
- **Danger of damage to the work holding, the machine or the components.**

Declaration of incorporation
for an incomplete machine
Machinery Directive 2006/42/EC, Annex II, B

The manufacturer:	SMW-AUTOBLOK Spannsysteme GmbH Wiesentalstrasse 28 88074 Meckenbeuren Deutschland / Germany

herby declares, that the following product:

Product description:	Power chuck
Application range:	Installation in machine tool
Type:	KNCS-N

is intended to be installed into a completed machine. It must not be put into service until the final machine into which the partly completed machinery it is to be incorporated has been declared in conformity with the provisions of the EU machine directive (2006/42/EC) Annex II, B.

Applied harmonized norms:

- DIN EN 1550 (2008)
- DIN ISO 13857 (2008)

The following basic requirements of Annex I, 2006/42/EC are complied with:

- No. 1, 1.1, 1.1.1, 1.1.2, 1.1.3
- No. 1.3.2, 1.3.3, 1.3.4, 1.3.7, 1.3.8
- No. 1.5, 1.6.1
- No. 1.7.1, 1.7.3, 1.7.4

The special technical documents have been created in accordance with Annex VII, Part B. These documents will be made available electronically on a reasoned request by the national authorities.

Responsible for documentation:	Schilling Rainer Chief designer
Place:	Meckenbeuren (Germany)
Date:	29.12.2009

Eckhard Maurer
President

General safety instructions


Danger!


Danger to the environment!


General precept sign!


Follow the instructions!


General warning sign!


Warning of risk of crushing!


Warning of hand injuries!


Warning of suspended load!

1. Correct use

SMW-AUTOBLOK chucks work safely and troublefree if they are used according to their specification i.e. to clamp components on turning machines.

Any other use can cause hazards.

2. Demands on operators

SMW-AUTOBLOK chucks must be installed, operated and maintained only by qualified and regularly trained personnel.

3. Visual inspection

Please check the product for visible damage prior to use!

4. Transport

Please use suitable lifting gear for product heavier than 16 kg!

5. Safety precautions to the machine

- Machine spindle may only start if the clamping pressure in the cylinder is fully reached and the component is clamped within the permissible working range.
- Chuck can only be opened when machine spindle is stopped.
- A signal must stop the machine spindle in case of failure in the clamping pressure and workpiece must remain clamped safely until machine spindle stops.
- Repowering after power failure must not change the original clamping mode.
- During machining the power chuck and the clamped component must be protected by safety guards.
- Open machine door only when machine spindle is completely stopped.
- Maintenance and actuation of the power chuck must only be carried out when machine spindle is stopped.

6. Technical details

The max. data, max. actuating force F, max. spindle speed n are engraved on the chuck body. They must not be exceeded. Also the summary of the total static gripping force ΣFsp at max. actuating force is engraved on the chuck body.

7. Maximum speed

The max. spindle speed is only valid at max. actuating force using the standard hard stepped top jaws type GST, which are not exceeding the outer diameter of the chuck. If, for special applications, special top jaws are used clamping force and the max. speed must be calculated according to VDI 3106 but not exceeding the max. permitted speed.

Heavy special top jaws have an especially big influence on the max. speed. During the machining operation the centrifugal force increases or decreases the gripping force.

OD clamping = decreasing

ID clamping = increasing

All theoretically calculated values must be double checked with a suitable dynamic gripmeter. We recommend to use a calibrated dynamic grip force tester.

8. Jaws

Always use original SMW-AUTOBLOK base jaws and monoblock jaws. Jaws of other manufacturers can cause damage to the chuck or accidents. Top jaws must be mounted with head socket screws of the class 12.9 only. Tighten with the specified torque. Always ensure sufficient length of thread engagement (min. 1,25 x thread dia.)!

The mounting bolts must be checked for damage and wear in regular intervals, and have to be replaced if necessary. They have to be replaced not later than after maximum 100000 clamping cycles!

If the jaw height of special jaws exceeds the height of the standard jaws, the max. actuating force of the chuck must be reduced in order to avoid an excessive lever action and thus damage to the power chuck. At reduced actuating force, the max. speed must also be reduced accordingly!

9. Actuating cylinder

The actuation of the power chuck must only be carried out by suitable cylinders in accordance with safety precautions. When installing the power chuck on the machine with an existing cylinder be sure that the actuating force of the cylinder does not exceed the max. permitted actuating force of the chuck.

If necessary reduce the actuating force of the cylinder. Connecting and adapter parts must be specified for permanent load. Adjust and check the proximity switches for the stroke control before starting the production.

10. Remaining risks

The type of components (shape, weight, unbalance, material etc.) has a big influence on the system "machine tool - chuck - component". For that reason there is always a residual risk. These residual risks must be calculated by the user and have to be eliminated by suitable actions.

11. Maintenance

The power chuck must be maintained at regular intervals. Check the conditions by measuring the gripping force with static gripmeter. Replace damaged parts with original SMW-AUTOBLOK spare parts only. Maintenance must only be carried out at safe spindle stop of the machine.

12. Environment protection

Danger for environment when handling incorrect!

Incorrect handling of environment hazardous materials, especially the disposal, may result in environmental damage.

- Always follow below instructions.
- In case environmentally hazardous material polluted the environment always take suitable actions immediately. If in doubt, inform the local authority about the pollution.

The following hazardous materials are used: Lubricants such as oil and grease can contain poisonous agents. They must not pollute the environment. The disposal must be carried out by a suitable waste management company.

For a proper function of the work holding, use original SMW-AUTOBLOK lubricant only.

In case of doubts or questions please ask SMW-AUTOBLOK or one of our authorized offices.

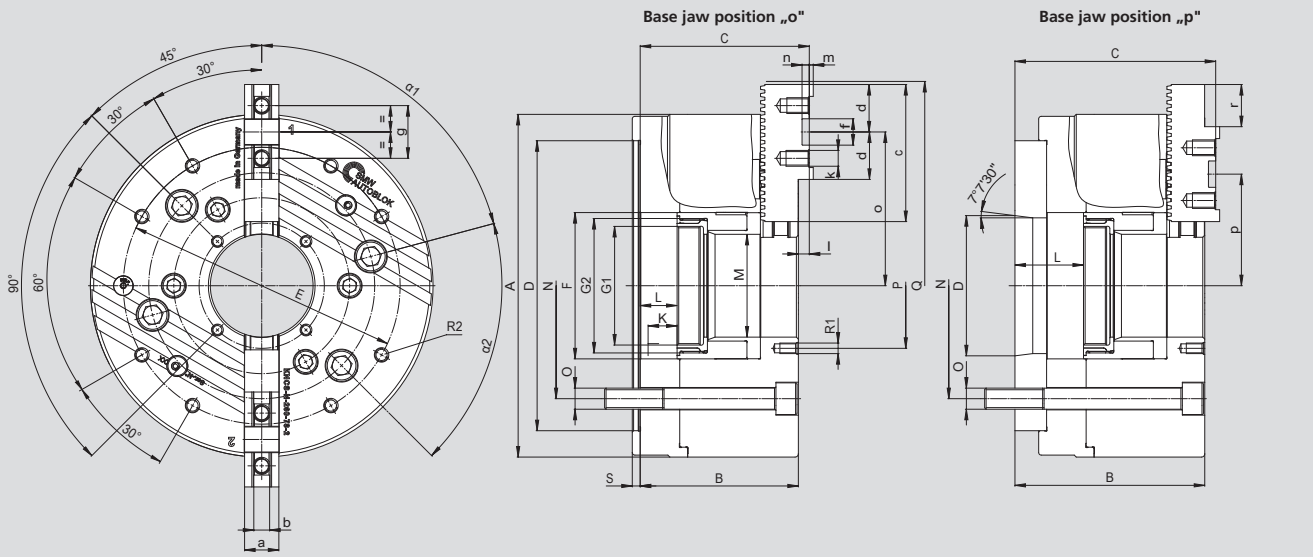
KNCS®-N

QUICK JAW CHANGE
2-JAW-CHUCK

Main dimensions and technical data

Jaw position: open position for external clamping

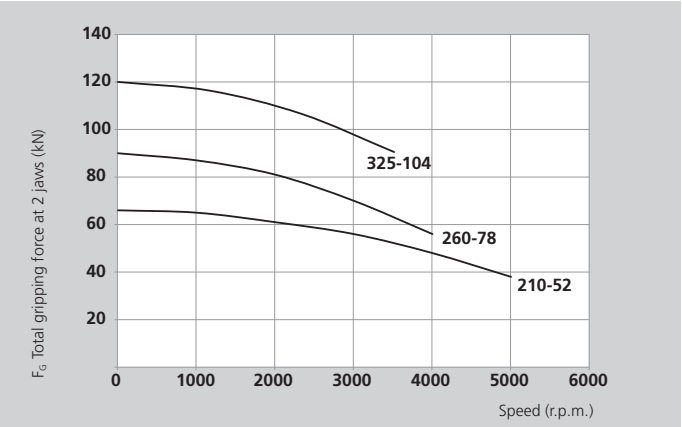
Base jaw position „o" **Base jaw position „p"**



Subject to technical changes.
For more detailed information please ask for customer drawing.

Type KNCS-N		**KNCS-N-210-52-2**			**KNCS-N-260-78-2**				**KNCS-N-325-104-2**			
Mounting		**Z170**	**A06**	**A08**	**Z170**	**Z220**	**A06**	**A08**	**Z220**	**Z300**	**A08**	**A11**
	A	215			260				324			
	B	105	122	124	120	120	137	139	129.9	129.9	148.9	150.9
	C	109.9	126.9	128.9	128.3	128.3	145.3	147.3	139.2	139.2	158.2	160.2
	D H6	170	106.375	139.719	170	220	106.375	139.719	220	300	139.719	196.869
	E	168			210				268			
	F	85			111				144			
Rotating ring nut/depth	**G1**	M60x1.5 / 16			M90x2.0 / 20				M115x2.0 / 22			
Piston thread/depth	**G2**	M75x2.0 / 19			M102x2.0 / 23				M132x2.0 / 25			
Piston stroke	**K**	25			28				28			
max.	**L**	25	42	44	28	28	45	47	28.1	28.1	47.1	49.1
	M	52			78				104			
Fixing bolt circle	**N**	133.4		171.4	133.4	171.4	133.4	171.4	171.4	235.0	171.4	235.0
Fixing bolt	**O**	M12		M16	M12	M16	M12	M16	M16	M20	M16	M20
	P	72			95				130			
max. Ø	**Q**	261			307				385			
Thread / Thread depth	**R1**	M6 / 10			M8 / 14				M10/16			
Thread / Thread depth	**R2**	M10 / 12			M10 / 18				M10/16			
	S	6			6				6			
	a	22			26				32			
	b f7	10			12				12			
	c	85			104				115			
	d	33			36				36			
	f H7	20			20				20			
	g	40			40				40			
Thread / Thread depth	**k**	M8 / 13			M12 / 17				M12 / 17			
	l	4.9			8.3				9.3			
	m	2.5			3				3			
	n	4.5			5.5				6			
max. / min.	**o**	96.72 / 68.45			116.65 / 83.65				155.783 / 106.301			
max. / min.	**p**	77.74 / 49.47			84.66 / 51.66				111.781 / 62.299			
Base jaw tooth pitch	**-**	4.7			5.5				5.5			
Base jaw offset	**r**	28.27			32.988				49.482			
Base jaw offset	teeth	6			6				9			
α1 / α2 (for fixing bolts)	deg.	73.5 / 60			75 / 60				75 / 60			
Stroke per jaw at piston stroke **K**	mm	7 / 25			8 / 28				8 / 28			
max. actuating force	kN	35			47				63			
max. total gripping	kN	66			90				120			
max. speed	r.p.m.	5000			4000				3500			
Weight without jaws	kg	27.8	29.3	30.0	45.1	44.5	46.6	47.3	72.3	77.3	75.2	82.8
Moment of inertia	kg·m²	0.17	0.18	0.19	0.41	0.41	0.43	0.44	1.09	1.17	1.11	1.26
Rec. closed center cylinder	**Type**	**SIN-S 125 / 150**			**SIN-S 150 / 175**				**SIN-S 150 / 175 / 200**			
Rec. open center cylinder	**Type**	**VNK-T2 130-52**			**VNK-T2 170-77**				**VNK-T2 250-110**			

Gripping force diagram



The data in the diagrams refer to 2-jaw-chucks, newly maintained according to their service manuals using SMW-AUTOBLOK K05 grease. The static and dynamic gripping forces have been measured using standard soft top jaws, placed in a position not exceeding the outer diameter of the chuck.

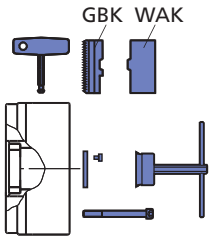
⚠ **Safety advice/danger of damage:**
When using taller / heavier jaws and / or clamping on a bigger diameter reduce draw pull / rotating speed accordingly.

Ordering review

KNCS-N + GBK + WAK

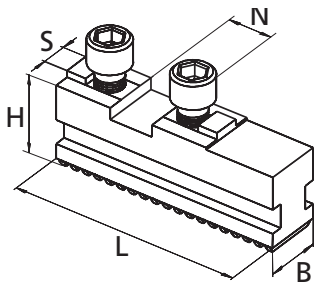
Supply range:
Chuck + key + mounting bolts + mounting key + 1 set hardened base jaws type GBK + 1 set soft top jaws type WAK + set of coverplates

Size / Spindle mounting	KNCS-N 210-52	KNCS-N 260-78	KNCS-N 325-104
Centering rim small	-	Z 170 162014	Z 220 161859
Centering rim large	Z 170 162034	Z 220 162015	Z 300 161860
A 06	162037	162020	-
A 08	162040	162021	161861
A 11	-	-	161862



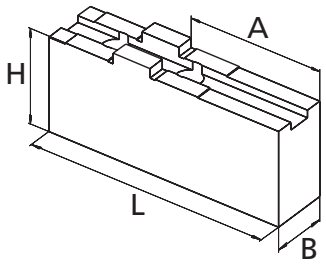
GBK
Hardened base jaws

KNCS-N	210	260	325
Jaw type	GBK 200	GBK 250	GBK 315
Id. No.	012440-2	012441-2	012442-2
B	22	26	32
H	29.5	37	43
L	85	104	115
N	20	20	20
S	10	12	12
kg / set	0.7	1.3	1.9



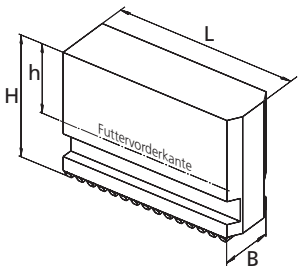
WAK
Soft top jaws

KNCS-N	210	260	325
Jaw type	WAK 200-10	WAK 250-10	WAK 250-10
Id. No.	012492-2	012493-2	012493-2
B	22	30	30
H	42	50	50
L	105	125	125
A	50	70	70
kg / set	1.3	2.5	2.5



UVB
Soft monoblock jaws

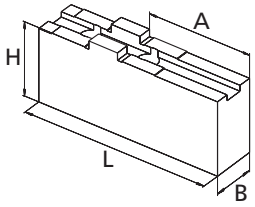
KNCS-N	210	260	325
Jaw type	UVB 200	UVB 250	UVB 315
Id. No.	012448-2	012449-2	012450-2
B	22	26	32
H	70	90	100
h	45	61	66
L	83	108	119
kg / set	1.8	3.7	5.5

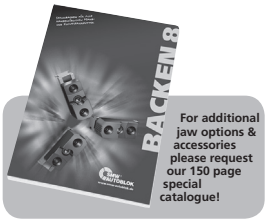


Soft top jaws wide version

WAKS
Soft top jaws wide version

Type	Id. No.	B	H	L	A	kg / set	SMW-AUTOBLOK chuck type
WAKS 200-10	080934-2	30	51	100	57	2.1	
WAKS 200-20	080935-2	30	66	100	45	2.7	
WAKS 200-30	012497-2	40	36	70	27	1.4	KNCS-N 210
WAKS 200-31	080936-2	40	56	90	43	2.7	
WAKS 200-32	036733-2	40	76	95	52	4.1	
WAKS 250-10	080937-2	40	55	125	70	3.8	
WAKS 250-11	080938-2	40	75	125	70	5.1	
WAKS 250-12	080939-2	40	95	125	70	6.5	
WAKS 250-13	080940-2	40	115	125	70	7.9	
WAKS 250-20	012498-2	60	55	90	44	4.2	KNCS-N 260
WAKS 250-21	080942-2	60	55	110	60	3.2	KNCS-N 325
WAKS 250-22	080943-2	60	75	90	44	5.7	
WAKS 250-23	080944-2	60	75	110	60	7.0	
WAKS 250-30	012499-2	80	55	90	44	5.8	
WAKS 250-31	080945-2	80	75	110	60	9.7	





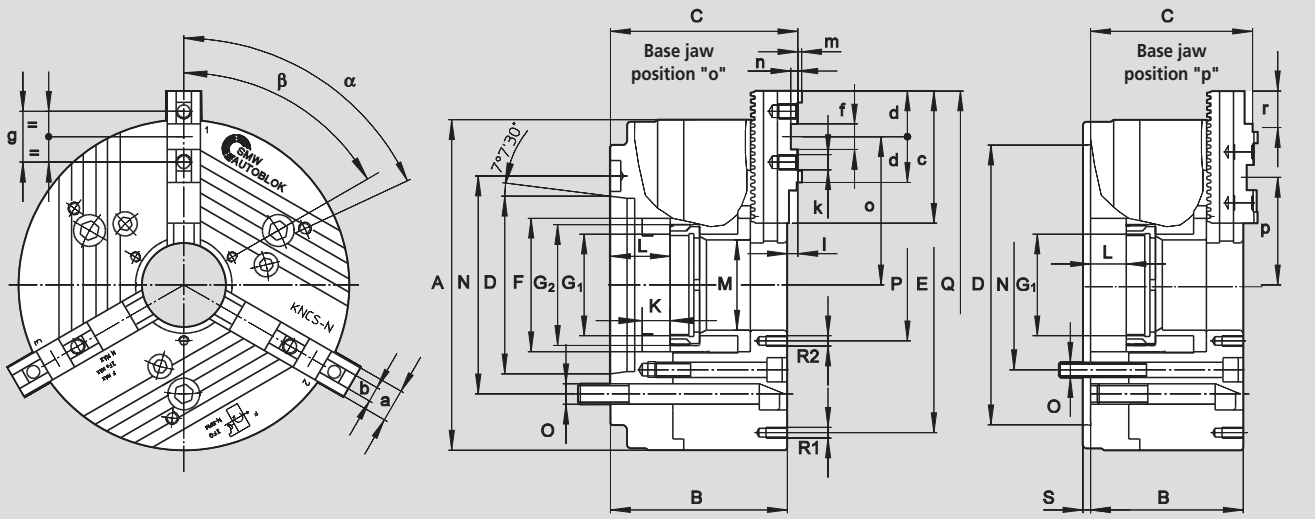
For additional jaw options & accessories please request our 150 page special catalogue!

KNCS®-N

QUICK JAW CHANGE 3-JAW-CHUCK

Main dimensions and technical data

Jaw position: open position for external clamping

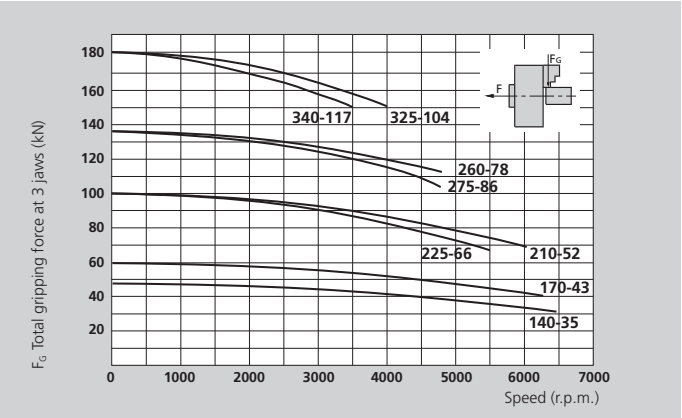


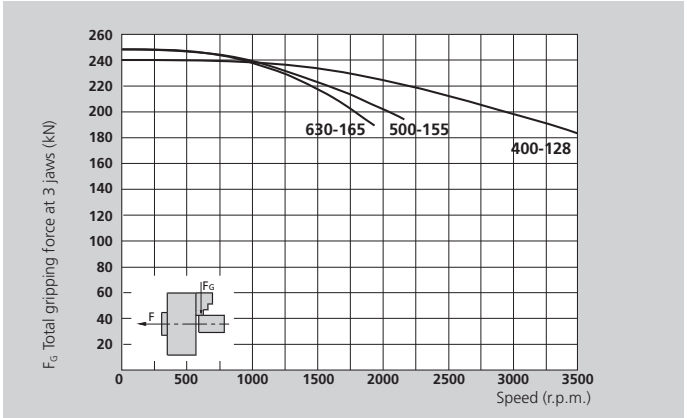
Subject to technical changes.
For more detailed information please ask for customer drawing.

Type KNCS-N		140-35		170-43			210-52			225-66			260-78				275-86		
Mounting	**Size**	**Z120**	**A5**	**Z140**	**A5**	**A6**	**Z170**	**A6**	**A8**	**Z170**	**A6**	**A8**	**Z170**	**Z220**	**A6**	**A8**	**Z220**	**A6***	**A8**
	A	145		175			215			225			260				275		
	B	87	103	98	113	115	105	122	124	105	122	124	120	120	137	139	120	144	139
	C	93.9	109.9	104.9	119.9	121.9	109.9	126.9	128.9	109.9	126.9	128.9	128.3	128.3	145.3	147.3	128.3	152.3	147.3
	D H6	120	82.57	140	82.57	106.39	170	106.39	139.73	170	106.39	139.73	170	220	106.39	139.73	220	106.39	139.73
	E	122		152			168			180			210				210		
	F	52		67			85			95			111				122		
Rotating ring nut/depth	**G1**	-**		M50 x 1.5/18**			M60 x 1.5/16			M75 x 1.5/16			M90 x 2/20				M95 x 2/20		
Piston thread/depth	**G2**	M45 x 1.5/18		M60 x 1.5/18			M75 x 2/19			M85 x 2/19			M102 x 2/23				M110 x 2/23		
Piston stroke	**K**	20		20/25			22/25			22/25			25/28				25/28		
max.	**L**	20	36	25	40	42	25	42	44	25	42	44	28	28	45	47	28	52	47
	M	35		43			52			66			78				86		
Fixing bolt circle	**N**	104.8	104.8	104.8	104.8	133.4	133.4	133.4	171.4	133.4	133.4	171.4	133.4	171.4	133.4	171.4	171.4	133.4	171.4
Fixing bolt	**O**	M10	M10	M10	M10	M12	M12	M12	M16	M12	M12	M16	M12	M16	M12	M16	M16	M12	M16
	P	65		75			72			82			95				105		
	Q	166		195			261			271			307				321		
Thread/Thread depth	**R1**	M8/12		M8/12			M10/12			M10/12			M10/12				M10/18		
Thread/Thread depth	**R2**	M5/10		M5/10			M6/10			M6/10			M8/16				M8/14		
	S	6		6			6			6			6				6		
	a	20		20			22			22			26				26		
	b f7	8		8			10			10			12				12		
	c	56		65			85			85			104				104		
	d	28		28			33			33			36				36		
	f H7	18		18			20			20			20				20		
	g	32		32			40			40			40				40		
Thread/Thread depth	**k**	M8/12		M8/12			M8/13			M8/13			M12/15				M12/15		
	l	6.9		6.9			4.9			4.9			8.3				8.3		
	m	2.5		2.5			2.5			2.5			3				3		
	n	5		5			4.5			4.5			5.5				5.5		
max./min.	**o**	54/39.9		69/50.2			96.6/68.3			102/69			116.6/83.6				124/85.5		
max./min.	**p**	54/39.9		60/41.2			77.6/49.3			83/50			84.6/51.6				92/53.5		
Base jaw tooth pitch	**-**	4.7		4.7			4.7			4.7			5.5				5.5		
Base jaw offset	**r**	14.1		18.8			28.3			33			33				38.5		
Base jaw offset	teeth	3		4			6			7			6				7		
α	deg.	95		90			60			60			60				60		
β	deg.	60		60			60			60			60				60		
Stroke per jaw at piston stroke **K**	mm			5.1		20	6.0		22	6.0		22	7.0			25	7.0		25
Stroke per jaw at piston stroke **K** max.	mm	5.1	20	6.8		25	7.0		25	7.0		25	8.0			28	8.0		28
max. actuating force 3-jaw chuck	kN	25		32			53			53			70				70		
max. total gripping force 3-jaw chuck	kN	47		60			100			100			135				135		
max. speed 3-jaw chuck	r.p.m.	6500		6300			6000			5500			4700				4700		
Weight without jaws	kg	9	9.6	14	15	15	24	26	26	26	29	29	40	40	43	43	48	53	50.7
Moment of inertia	kg·m²	0.024		0.06			0.11			0.2			0.38				0.41		
Rec. closed center cyl. **Rec. open center cyl.**	**Type** **Type**	**SIN-S 100** **VNK-T2 70-32**		**SIN-S 100/125** **VNK-T2 102-46**			**SIN-S 125/150** **VNK-T2 130-52**			**SIN-S 125/150** **VNK-T2 150-67**			**SIN-S 150/175** **VNK-T2 170-77**				**SIN-S 150/175** **VNK-T2 225-95**		

* indirect mounting
** KNCS-N 140-35 and KNCS-N 170-43 are available with fixed ring nut only

For highest speeds: flat gripping force curve



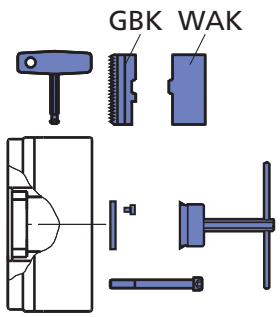


The data in the diagrams refer to 3-jaw-chucks, newly maintained according to their service manuals using SMW-AUTOBLOK K05 grease.The static and dynamic gripping forces have been measured using standard soft top jaws, placed in a position not exceeding the outer diameter of the chuck.

⚠ **Safety advice/danger of damage:**
When using taller/heavier jaws and/or clamping on a bigger diameter reduce draw pull/rotating speed accordingly.

Type KNCS-N		325-104				340-117			400-128				500-155				630-165	
Mounting	**Size**	**Z220**	**Z300**	**A8**	**A11**	**Z300**	**A8***	**A11**	**Z300**	**Z380**	**A11**	**A15**	**Z300**	**Z380**	**A11**	**A15**	**Z380**	**A15**
	A	324				340			400				500				630	
	B	130	130	149	151	130	160	151	140	140	161	163	174	174	195	197	174	197
	C	139.2	139.2	158.2	160.2	139.3	169.3	160.4	149.2	149.2	170.2	172.2	184	184	205	207	184	207
	D H6	220	300	139.73	196.88	300	139.73	196.88	300	380	196.88	285.77	300	380	196.88	285.77	380	285.77
	E	268				270			330				420				585	
	F	144				160			180				207				217	
Rotating ring nut/depth	**G1**	M115 x 2/22				M125 x 2/22			M138 x 2/22				M165 x 2/25				M175 x 2/25	
Piston thread/depth	**G2**	M132 x 2/25				M146 x 2/25			M160 x 2/25				M185 x 2/28				M195 x 2/28	
Piston stroke	**K**	25/28				25/28			32				42				42	
max.	**L**	28	28	47	49	28	58	49	32	32	53	55	42	42	63	65	42	65
	M	104				117			128				155				165	
Fixing bolt circle	**N**	171.4	235	171.4	235	235	171.4	235	235	330.2	235	330.2	235	330.2	235	330.2	330.2	330.2
Fixing bolt	**O**	M16	M20	M16	M20	M20	M16	M20	M20	M24	M20	M24	M20	M24	M20	M24	M24	
	P	130				140			152				180				195	
	Q	385				400			452				552				643	
Thread/Thread depth	**R1**	M10/16				M10/16			M12/18				M16/25				M16/25	
Thread/Thread depth	**R2**	M10/16				M10/16			M12/18				M12/18				M12/18	
	S	6				6			8				8				8	
	a	32				32			32				45				45	
	b f7	12				12			12				18				18	
	c	115				115			125				160				200	
	d	36				36			43				50				50	
	f H7	20				20			26				30				30	
	g	40				40			54				60				60	
Thread/Thread depth	**k**	M12/17				M12/17			M12/17				M16/34				M16/34	
	l	9.3				9.3			9.3				10				10	
	m	3				3			3				4				4	
	n	6				6			7				9				9	
max./min.	**o**	155.7/106.2				163.2/113.7			182.3/121.8				225/141				270.5/179.5	
max./min.	**p**	111.7/62.2				119.2/69.7			143.3/82.2				164/80				170.5/79.5	
Base jaw tooth pitch	**-**	5.5				5.5			5.5				7				7	
Base jaw offset	**r**	49.5				49.5			60.5				84				91	
Base jaw offset	teeth	9				9			11				12				13	
α	deg.	60/35				60/35			20/9x40				20/9x40				20/9 x 40	
β	deg.	60/35				60/35			20/9x40				20/9x40				20/9x40	
Stroke per jaw at piston stroke **K**	mm	7.0 25				7.0 25												
Stroke per jaw at piston stroke **K** max.	mm	8.0 28				8.0 28			8.0 32				10.0 42				10.0 42	
max. actuating force 3-jaw chuck	kN	95				95			115				120				120	
max. total gripping force 3-jaw chuck	kN	180				180			240				250				250	
max. speed 3-jaw chuck	r.p.m.	4000				3500			3500				2200				1700	
Weight without jaws	kg	65	65	68	68	77	88.5	82.5	111	111	116	116	225	225	231	231	390	398
Moment of inertia	kg·m²	1.2				1.24			2.5				6.5				18	
Rec. closed center cyl.	**Type**	**SIN-S 150/175/200**				**SIN-S 150/175/200**			**SIN-S 175/200**				**SIN-S 175/200**				**SIN-S 175/200**	
Rec. open center cyl.	**Type**	**VNK-T2 250-110**				**VNK-T2 320-127**			**VNK-T2 320-127**				**VSG 450-165**				**VSG 450-165**	

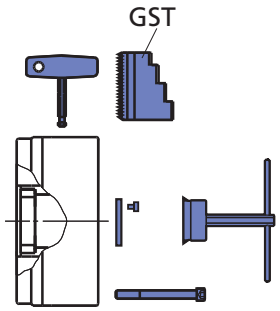
* Indirect mounting



Supply range:

Chuck + key + mounting bolts + mounting key (from diameter 210)
+ 1 set hardened base jaws type GBK + 1 set soft top jaws type WAK
+ set of coverplates

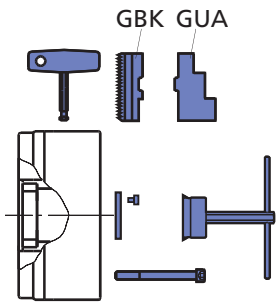
Size / Spindle mounting	KNCS-N 140-35	KNCS-N 170-43	KNCS-N 210-52	KNCS-N 225-66	KNCS-N 260-78	KNCS-N 275-86	KNCS-N 325-104	KNCS-N 340-117	KNCS-N 400-128	KNCS-N 500-155	KNCS-N 630-165
Centering rim small					Z 170 088900		Z 220 088912		Z 300 088822	Z 300 088889	
Centering rim large	Z 120 088800	Z 140 088802	Z 170 088806	Z 170 088809	Z 220 088901	Z 220 067910	Z 300 088913	Z 300 067920	Z 380 088823	Z 380 088826	Z380 088829
A 05	088801	088803									
A 06		088804	088807	088810	088902	067911					
A 08			088808	088811	088903	067912	088914	067921			
A 11							088915	067922	088824	088827	
A 15									088825	088828	088830



Supply range:

Chuck + key + mounting bolts + mounting key (from diameter 210)
+ 1 set hardened, reversible stepped monoblock jaws type GST,
ground on chuck + set of coverplates

Size / Spindle mounting	KNCS-N 140-35	KNCS-N 170-43	KNCS-N 210-52	KNCS-N 225-66	KNCS-N 260-78	KNCS-N 275-86	KNCS-N 325-104	KNCS-N 340-117	KNCS-N 400-128	KNCS-N 500-155	KNCS-N 630-165
Centering rim small					Z 170 088904		Z 220 088916		Z 300 088850	Z 300 088859	
Centering rim large	Z 120 088831	Z 140 088833	Z 170 088836	Z 170 088839	Z 220 088905	Z 220 067913	Z 300 088917	Z 300 067923	Z 380 088851	Z 380 088854	Z380 088857
A 05	088832	088834									
A 06		088835	088837	088840	088906	067914					
A 08			088838	088841	088907	067915	088918	067924			
A 11							088919	067925	088852	088855	
A 15									088853	088856	088858

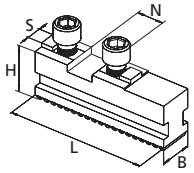


Supply range:

Chuck + key + mounting bolts + mounting key (from diameter 210)
+ 1 set hardened base jaws type GBK
+ 1 set hardened, reversible top jaws type GUA, ground on chuck
+ set of coverplates

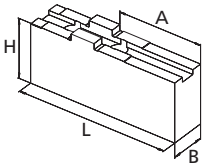
Size / Spindle mounting	KNCS-N 140-35	KNCS-N 170-43	KNCS-N 210-52	KNCS-N 225-66	KNCS-N 260-78	KNCS-N 275-86	KNCS-N 325-104	KNCS-N 340-117	KNCS-N 400-128	KNCS-N 500-155	KNCS-N 630-165
Centering rim small					Z 170 088908		Z 220 088920		Z 300 088879	Z 300 088888	
Centering rim large	Z 120 088860	Z 140 088862	Z 170 088865	Z 170 088868	Z 220 088909	Z 220 067916	Z 300 088921	Z 300 067926	Z 380 088880	Z 380 088883	Z380 088886
A 05	088861	088863									
A 06		088864	088866	088869	088910	067917					
A 08			088867	088870	088911	067918	088922	067927			
A 11							088923	067928	088881	088884	
A 15									088882	088885	088887

GBK
Hardened base jaws



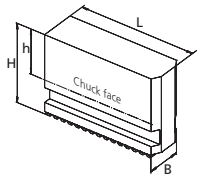
KNCS-N	140	170	210	225	260	275	325	340	400	500	630
Jaw type	GBK 140	GBK 160	GBK 200	GBK 200	GBK 250	GBK 250	GBK 315	GBK 315	GBK 400	GBK 500	GBK 630
Id. No.	012438	012439	012440	012440	012441	012441	012442	012442	012443	012444	012445
B	20	20	22	22	26	26	32	32	32	45	45
H	27.5	27.5	29.5	29.5	37	37	43	43	43	57	57
L	56	65	85	85	104	104	115	115	125	160	200
N	18	18	20	20	20	20	20	20	26	30	30
S	8	8	10	10	12	12	12	12	12	18	18
kg/set	0.6	0.7	1.0	1.0	1.8	1.8	2.7	2.7	3.0	7.1	9.0

WAK
Soft top jaws



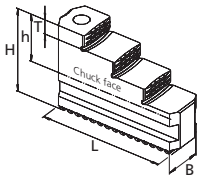
KNCS-N	140	170	210	225	260	275	325	340	400	500	630
Jaw type	WAK 140-10	WAK 160-10	WAK 200-10	WAK 200-10	WAK 250-10	WAK 250-10	WAK 250-10	WAK 250-10	WAK 400-10	WAK 500-10	WAK 500-10
Id. No.	012490	012491	012492	012492	012493	012493	012493	012493	012494	012495	012495
B	20	20	22	22	30	30	30	30	35	50	50
H	35.5	35.5	42	42	50	50	50	50	54	75.5	75.5
L	69	85	105	105	125	125	125	125	145	180	180
A	26	42	50	50	70	70	70	70	74	100	100
kg/set	0.9	1.2	2.0	2.0	3.6	3.6	3.6	3.6	5.8	13.7	13.7

UVB
Soft monoblock jaws

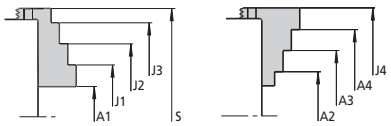


KNCS-N	140	170	210	225	260	275	325	340	400	500	630
Jaw type	UVB 140	UVB 160	UVB 200	UVB 200	UVB 250	UVB 250	UVB 315	UVB 315	UVB 400	UVB 500	UVB 630
Id. No.	012446	012447	012448	012448	012449	012449	012450	012450	012451	012452	012453
B	20	20	22	22	26	26	32	32	32	45	45
H	60	60	70	70	90	90	100	100	100	134	134
h	39.4	39.4	45	45	61	61	66	66	66	87	87
L	59.5	69	83	83	108	108	119	119	146.5	175	230
kg/set	1.5	1.8	2.8	2.8	5.5	5.5	8.2	8.2	10	23	30

GST
Hardened stepped monoblock jaws



Gripping ranges



KNCS-N	140	170	210	225	260	275	325	340	400	500	630
Jaw type	GST 160-2	GST 170	GST 210	GST 210	GST 260	GST 260	GST 315	GST 315	GST 400	GST 500	GST 500
Id. No.	012454	035867	035863	035863	037623	037623	012457	012457	012458	012459	012459
B	20	20	22	22	26	26	32	32	32	45	45
H	43.5	43.5	51	51	60	60	66	66	70	93	93
h	23	23	26	26	31	31	32	32	36	46	46
L	58	65	84	84	100	100	117	117	137	175	175
T	7	7	8	8	10	10	10	10	11	20	20
kg/set	0.6	0.7	1.3	1.3	1.9	1.9	3.4	3.4	4.4	11.7	11.7
A1	5-40	6-59	10-85	12-96	10-98	14-113	37-148	46-141	48-173	70-225	38-220
A2	35-70	42-89	56-121	57-132	62-150	66-165	104-215	111-206	116-238	170-320	133-328
A3	66-101	73-120	96-161	97-172	111-200	115-215	160-271	166-261	184-308	315-470	276-458
A4	97-132	104-151	136-201	137-212	161-250	165-265	217-328	221-316	252-378	-	-
J1	39-72	44-78	60-134	62-144	63-149	67-164	91-202	106-196	118-243	-	-
J2	69-103	74-110	100-174	101-185	112-199	116-214	148-259	161-251	186-310	180-330	149-342
J3	99-134	105-141	140-214	141-225	161-249	165-264	205-316	216-308	253-378	325-475	297-492
J4	131-163	135-182	185-250	186-261	212-300	216-315	272-383	281-376	328-448	425-560	385-581
S	166	198	255	266	303	318	385	376	456	585	-

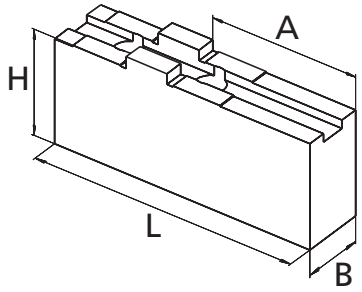
KNCS®-N

QUICK JAW CHANGE
3-JAW-CHUCK

■ SOFT TOP JAWS wide version
■ Accessories

WAKS

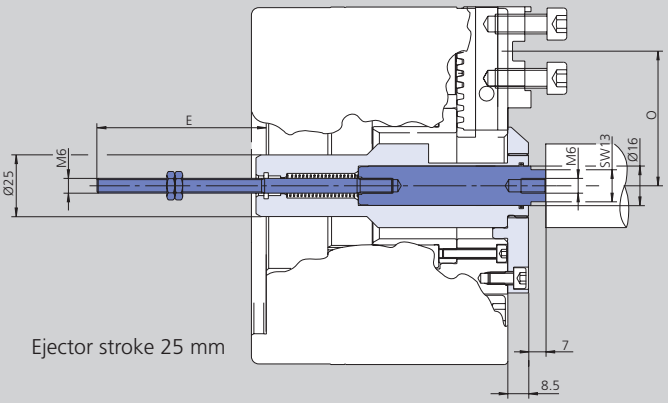
Soft top jaws wide version



Type	Id. No.	B	H	L	A	kg/ set	SMW-AUTOBLOK Chuck type
WAKS 140-10	**012496**	35	35.5	63	25	1.5	KNCS-N 140
WAKS 160-10	**080931**	25	45.5	85	42	1.8	KNCS-N 170
WAKS 160-20	**080932**	30	50.5	75	35	2.2	
WAKS 160-30	**080933**	35	75.5	70	26	3.4	
WAKS 200-10	**080934**	30	51	100	57	2.9	KNCS-N 210
WAKS 200-20	**080935**	30	66	100	45	3.4	KNCS-N 225
WAKS 200-30	**012497**	40	36	70	27	1.9	
WAKS 200-31	**080936**	40	56	90	43	3.9	
WAKS 200-32	**036733**	40	76	95	52	5.8	
WAKS 250-10	**080937**	40	55	125	70	3.9	KNCS-N 260
WAKS 250-11	**080938**	40	75	125	70	7.5	KNCS-N 275
WAKS 250-12	**080939**	40	95	125	70	9.6	KNCS-N 325
WAKS 250-13	**080940**	40	115	125	70	11.5	KNCS-N 340
WAKS 250-20	**012498**	60	55	90	44	6.2	
WAKS 250-21	**080942**	60	55	110	60	7.6	
WAKS 250-22	**080943**	60	75	90	44	9.4	
WAKS 250-23	**080944**	60	75	110	60	11.5	
WAKS 250-30	**012499**	80	55	90	44	8.5	
WAKS 250-31	**080945**	80	75	110	60	14.1	
WAKS 400-10	**080946**	40	54	110	54	4.9	KNCS-N 400
WAKS 400-11	**080947**	40	54	145	89	6.7	
WAKS 400-12	**080948**	40	94	145	89	11.1	
WAKS 400-13	**080949**	40	114	145	89	13.5	
WAKS 400-14	**080950**	40	146	145	89	16.9	
WAKS 400-20	**080951**	60	54	110	54	7.6	
WAKS 400-21	**080952**	60	74	110	54	10.3	
WAKS 400-22	**080953**	60	94	110	54	14.1	
WAKS 400-30	**012500**	80	64	100	44	11.0	
WAKS 500-10	**080954**	60	73	155	90	13.8	KNCS-N 500
WAKS 500-12	**080956**	60	113	155	90	19.5	KNCS-N 630
WAKS 500-20	**080957**	80	73	155	90	15.5	
WAKS 500-21	**080958**	80	93	155	90	26.3	
WAKS 500-30	**012501**	90	73	130	65	16.4	
WAKS 500-31	**012502**	100	73	150	85	20.0	

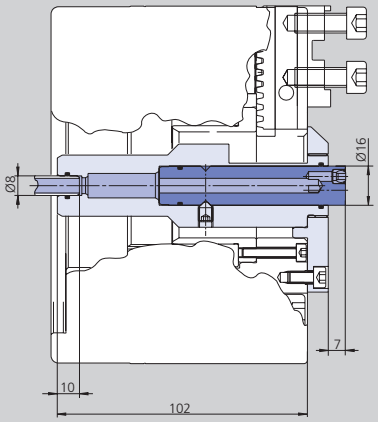
Accessories for KNCS-N / KNCS-NB chucks

Ejector/axial stop



Ejector stroke 25 mm

Coolant flush



Technical data

SMW-AUTOBLOK Type				KNCS-N 170-43	KNCS-N 210-52	KNCS-N 225-66	KNCS-N 260-78	KNCS-N 275-86
					KNCS-NB 210-52	KNCS-NB 225-66	KNCS-NB 260-78	KNCS-NB 275-86
Ejector		**E**	mm	68.5	61.5	61.5	46.5	46.5
Ejector	min./max.	**O**	mm	69	68.3/77.8	73.7/83.1	88.6/105.1	91/113
Ejector/axial flush			Id. No.	174140	174142	273530	274140	175000
Coolant flush basic kit	min./max.	**O**	mm	69	68.3/77.8	73.7/83.1	88.6/105.1	91/113
Coolant flush basic kit			Id. No.	175001	175002	273531	274141	175005
Coolant flush premium kit	min./max.	**O**	mm	59.6/69	68.3/96.6	73.8/120	89.1/116.6	91/124
Coolant flush premium kit			Id. No.	176021	176022	273532	274142	176025

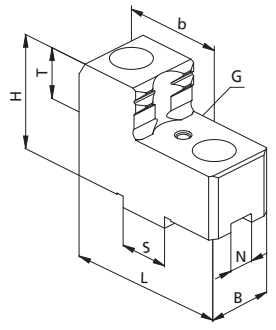
KNCS®-N

■ Hard roughing top jaws
■ Stop pins

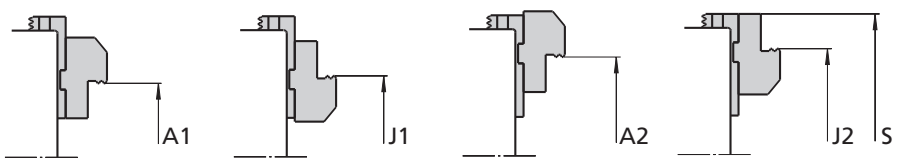
QUICK JAW CHANGE 3-JAW-CHUCK

Type	Id. No.	B	H	T	G	N	S	b	L	kg/ set	SMW-AUTOBLOK chuck type	Clamping range Ø external A_1	Clamping range Ø internal J_1	Clamping range Ø external A_2	Clamping range Ø internal J_2
GGK 1751	**012464**	25	40	16	M5	8	18	32	64	0.9	**KNCS-N 140**	28-53	125-162	-	-
GGK 1752	**012465**								68	1.0		36-56	128-168	-	-
GGK 1753	**012466**								60	1.0		55-81	101-135	-	-
GGK 1754	**012467**								56	0.9		80-105	75-109	-	-
GGK 1751	**012464**	25	40	16	M5	8	18	32	64	0.9	**KNCS-N 170**	25-62	133-171	33-80	155-190
GGK 1752	**012465**								68	1.0		32-61	134-172	42-79	153-181
GGK 1753	**012466**								60	1.0		52-89	107-145	70-107	125-163
GGK 1754	**012467**								56	0.9		77-115	81-118	95-133	99-137
GGK 2001	**012469**	28	45	20	M5	10	20	40	87	1.9	**KNCS-N 210**	29-59	187-252	36-87	-
GGK 2002	**012470**								66	1.3		57-122	121-186	94-150	158-215
GGK 2003	**012471**								66	1.3		93-149	85-140	131-187	122-178
GGK 2004	**012472**								85	1.7		152-208	62-100	189-246	72-137
GGK 2001	**012469**	28	45	20	M5	10	20	40	87	1.9	**KNCS-N 225**	30-69	-	45-106	-
GGK 2002	**012470**								66	1.3		67-132	131-197	105-170	169-235
GGK 2003	**012471**								66	1.3		104-169	95-160	141-207	134-199
GGK 2004	**012472**								85	1.7		-	68-110	-	74-148
GGK 2501	**012473**	40	50	22	M6	12	20	40	94	3.0	**KNCS-N 260**	45-85	197-274	61-148	254-342
GGK 2502	**012474**								72	2.3		78-154	132-208	141-218	195-272
GGK 2503	**012475**								78	2.6		107-184	109-175	159-247	152-238
GGK 2504	**012476**								108	3.2		-	-	-	80-156
GGK 2501	**012473**	40	50	22	M6	12	20	40	94	3.0	**KNCS-N 275**	49-100	201-289	65-163	258-357
GGK 2502	**012474**								72	2.3		82-169	136-223	145-233	199-287
GGK 2503	**012475**								78	2.6		111-199	113-190	163-262	156-253
GGK 2504	**012476**								108	3.2		-	-	-	84-171
GGK 2501	**012473**	40	50	22	M6	12	20	40	94	3.0	**KNCS-N 325**	40-126	207-320	104-214	295-406
GGK 2502	**012474**								72	2.3		86-196	138-248	173-284	225-336
GGK 2503	**012475**								78	2.6		115-226	109-218	203-314	196-306
GGK 2505	**012477**								84	2.8		197-285	78-164	261-371	139-249
GGK 2501	**012473**	40	50	22	M6	12	20	40	94	3.0	**KNCS-N 340**	60-126	236-326	-	326-396
GGK 2502	**012474**								72	2.3		116-201	-	196-288	-
GGK 2503	**012475**								78	2.6		-	136-236	232-318	-
GGK 2504	**012476**								84	2.8		-	108-186	-	-
GGK 4001	**012478**	50	55	25	M8	12	26	54	104	4.8	**KNCS-N 400**	78-188	258-378	143-263	333-453
GGK 4002	**012479**								91	3.5		-	140-263	258-378	-
GGK 4003	**012480**								147	3.6		-	118-243	-	-
GGK 5001	**012481**	60	74	35	M8	18	30	60	125	8.8	**KNCS-N 500**	100-210	280-420	210-350	415-560
GGK 5002	**012482**								108	6.7		-	155-295	330-470	-
GGK 5003	**012483**	50	74	35	M8	18	30	60	130	6.2		-	100-240	-	-
GGK 5001	**012481**	60	74	35	M8	18	30	60	125	8.8	**KNCS-N 630**	80-240	265-450	240-440	460-650
GGK 5002	**012482**								108	6.7		-	140-320	380-560	-

GGK
Hard roughing jaw



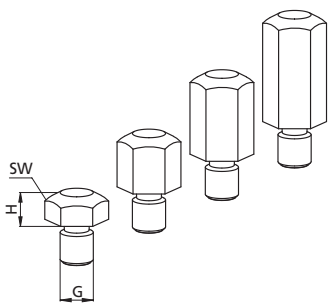
GGK
Clamping ranges



Base jaw position **„p"**

Base jaw position **„o"**

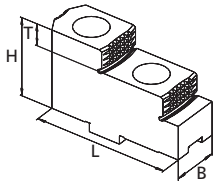
ALB
Stop pins



SMW-AUTOBLOK Type	Id. No.	G	H	SW
ALB 505	**016510**	M5	5	10
ALB 510	**016508**		10	
ALB 515	**016509**		15	
ALB 605	**016513**	M6	5	10
ALB 610	**016511**		10	
ALB 615	**016512**		15	
ALB 620	**017602**		20	
ALB 805	**017603**	M8	5	13
ALB 810	**016514**		10	
ALB 815	**016515**		15	
ALB 820	**016516**		20	
ALB 825	**081191**		25	

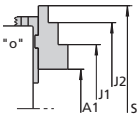
GUA

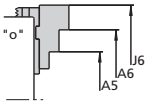
Hardened reversible top jaws



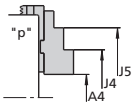
Gripping ranges

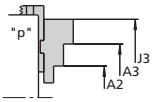
Base jaw position "o"





Base jaw position "p"

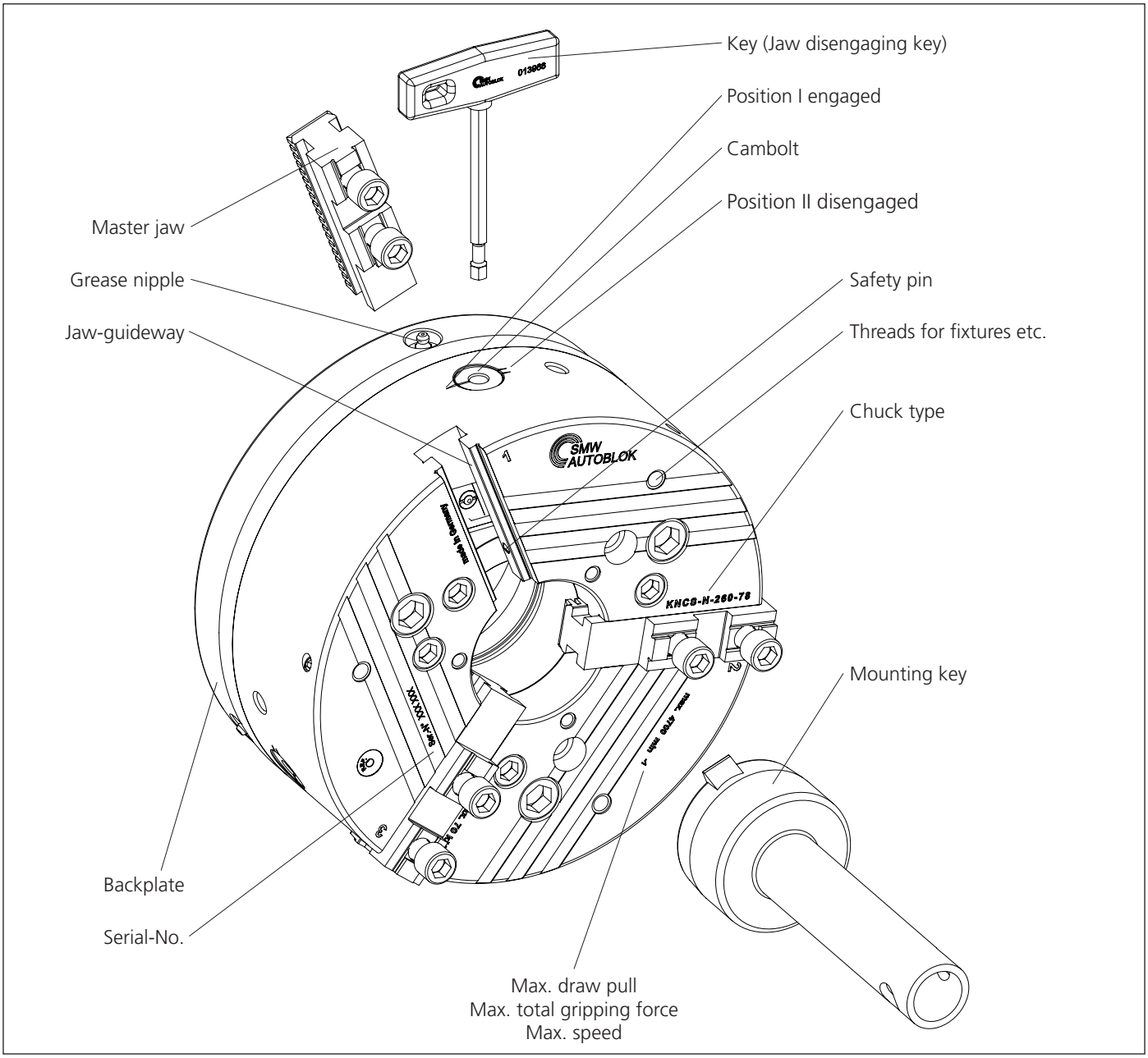




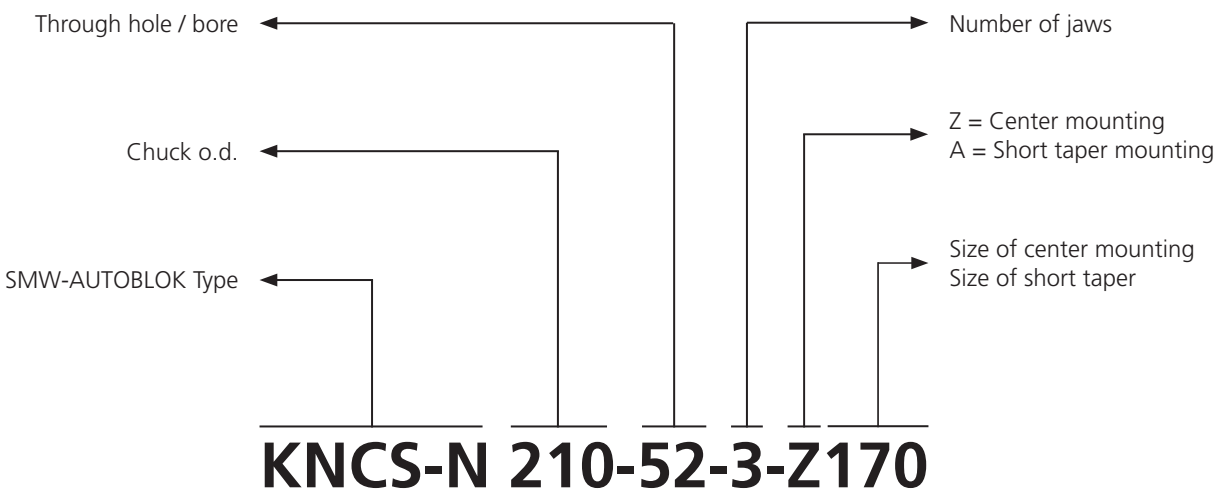
KNCS-N	140	170	210	225	260	275	325	340	400	500	630
Jaw type	GUA 160	GUA 160	GUA 200	GUA 200	GUA 250	GUA 250	GUA 250	GUA 250	GUA 400	GUA 500	GUA 500
Id. No.	012484	012484	012485	012485	012486	012486	012486	012486	012487	012488	012488
B	20	20	22	22	30	30	30	30	36	45	45
H	32.5	32.5	39	38	50	50	50	50	56	73	70
L	63	63	72	72	90	90	90	90	105	130	130
T	7.5	7.5	10	10	14	14	14	14	15	20	20
kg/set	0.6	0.6	0.8	0.8	1.9	1.9	1.9	1.9	3.2	10.8	10.8
A1	17-42	32-69	55-111	65-131	73-150	77-165	118-228	146-231	138-258	153-339	232-430
A2	63-89	60-98	69-125	79-145	45-90	49-105	43-143	74-146	78-188	65-209	68-224
A3	88-115	85-123	96-152	106-172	125-170	129-185	124-223	156-226	186-298	185-329	188-344
A4	17-42	13-51	17-73	27-93	20-86	24-161	30-141	62-214	60-183	31-217	34-323
A5	63-89	78-116	104-163	117-183	76-154	80-169	120-230	146-231	143-268	145-331	224-422
A6	88-115	103-141	131-190	144-210	156-234	160-249	200-310	231-311	253-378	265-451	344-542
J1	77-101	91-129	117-174	128-194	152-229	156-244	198-308	228-311	218-338	258-444	337-535
J2	101-126	116-154	144-201	155-221	233-310	237-325	278-388	306-391	328-448	378-564	457-655
J3	146-172	144-181	158-215	169-235	204-249	208-264	202-302	234-306	263-380	290-434	293-449
J4	77-101	74-111	80-136	90-156	101-166	105-181	111-221	136-226	138-263	136-322	139-337
J5	101-126	99-136	107-163	117-183	180-246	184-261	191-301	224-306	248-373	256-442	259-457
J6	146-172	162-200	193-253	207-273	235-312	239-327	279-389	302-391	333-458	370-556	449-647
S	167	197	264	275	331	347	409	424	481	552	643

For additional jaw options & accessories please request our 150 page special catalogue!

Notes

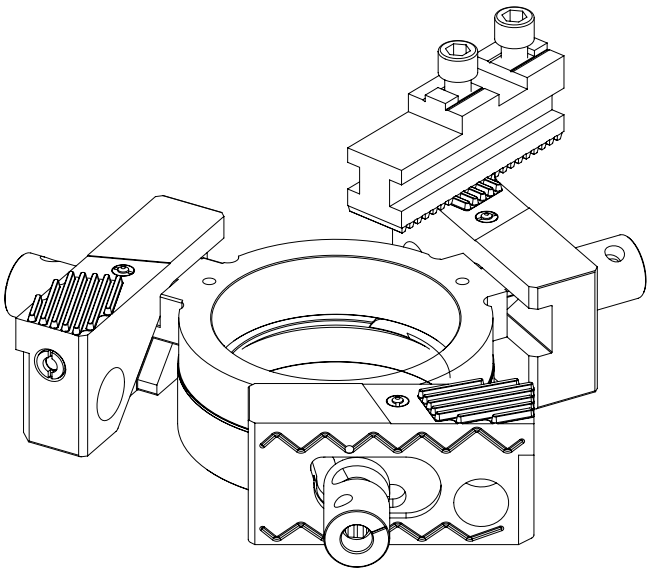


The **codes** on the **description of the type** have the following meaning:



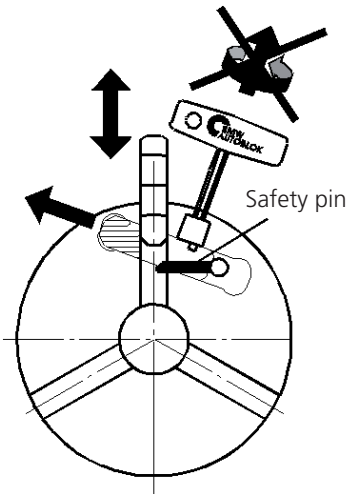
Description of function

- Power transmission by means of the unique and a thousand times proven **wedge bar design**.
- The axial draw / push force of the actuating cylinder is transmitted to the radial jaw grip force by means of **tangential** movement of the **wedge bars**.
- **Suitable** for **very high speed** without centrifugal force compensation due to superb design.
- **Case hardened chuck body**. All function surfaces are hard machined. This guarantees highest **rigidity, precision, repeatability** and **service life**.
- **Patented quick jaw change system**. For changing the jaws the wedge bars are moved tangentially via a key and cambolts.
- **Single disengagement / engagement** of jaws.
- **Patented safety interlock** of the jaws ensures that all serration of the wedge bar/master jaw are fully engaged and the gripping force is transmitted safely.
  If jaws are **not** inserted correctly the jaws **cannot be engaged** and the key **cannot be removed** (see below).

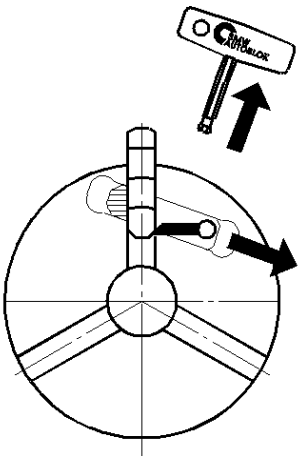


Wedge bar design KNCS-N

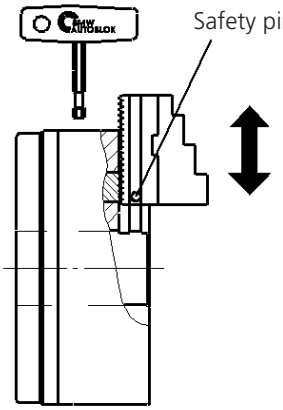
KNCS-N jaw safety interlock

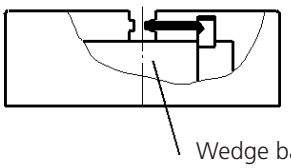


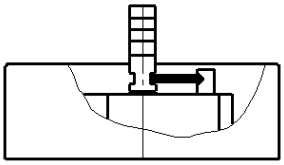
Jaw is inserted incorrectly.
No jaw is in the guideway
Safety pin locks the wedge bar **key cannot** be rotated back / removed.

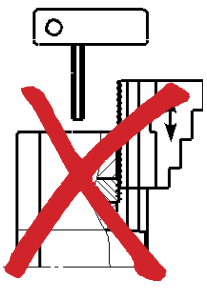


Jaw is inserted correctly.
The jaw is positioned in the guideway min. as far to the center that the safety pin is actuated. This insures that the complete serration of the wedge bar / jaw is engaged and the **key can** be removed.



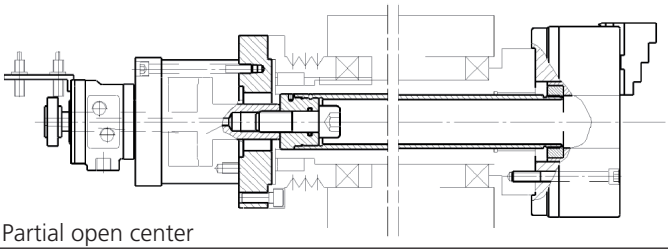


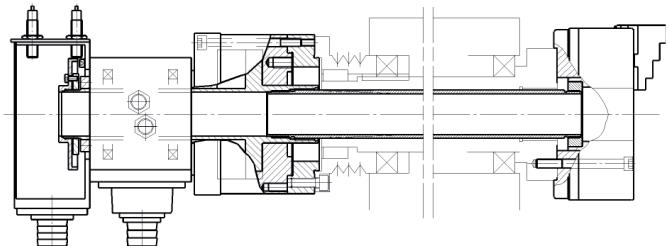




up to now

Examples for installation


Partial open center


Open center

Installation

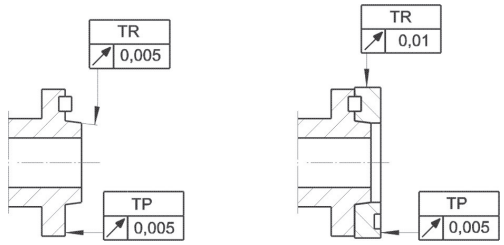
Before installing:

Check: The max. draw pull of the actuating cylinder must not exceed the max. actuating force of the chuck! If necesary limit the pressure and secure the limitation!

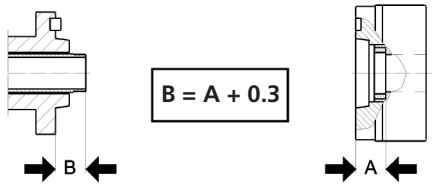
Check: All connecting and adaptor parts must be calculated for continous operation!

Chuck with rotating ring nut:
Important: All rotating ring nut parts are highlyloaded safety parts made of special steel!
When using special threaded rings use only original SWM-AUTOBLOK blanks. Lock retaining ring against loosening with screw in the proper way (see page 24, pic. 5).
Always use SWM-AUTOBLOK special key (included in delivery).

1 Check spindle nose!



2 Check draw bar length with cylinder in frontend position. If necessary correct draw tube / adaptor!



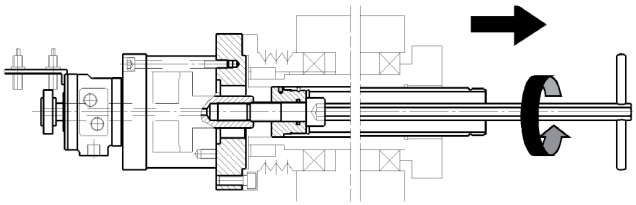
3 Move chuck piston into frontend position (chuck position: **OPEN**). Release jaws by means of key and remove one after another.

If there is no jaw in the guideway the key can only be removed if the safety pin is actuated by means of the dummy pin!

Also see page 19/20 jaw change.

4A Removing draw tube

1 **Chuck without rotating ring nut**
Partial open center



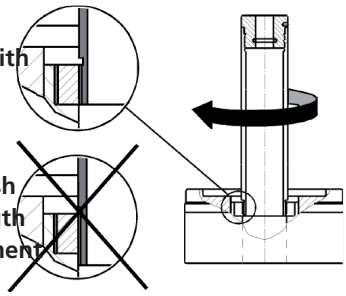
Cylinder in position **"chuck OPEN"**
Unscrew draw bolt and remove the draw tube from the spindle.

Installation of draw tube

2 **Chuck without rotating ring nut**
Partial open center

Correct:
Draw tube flush with adaptor

Wrong:
Draw tube not flush with adaptor. Length of thread engagement too deep

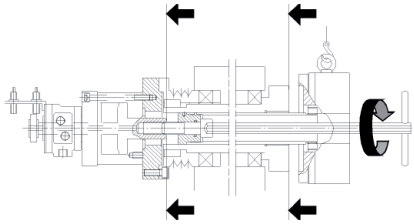


Thread of draw tube / adaptor must be treated with copper paste to avoid rust / seizing. Screw in draw tube into chuck.

Installation of chuck

3 **Chuck without rotating ring nut**
Partial open center

Insert draw tube with chuck into the machine spindle. Use mounting belt or eye screw. KNCS-N chucks carry a transportation thread from size 260 on.

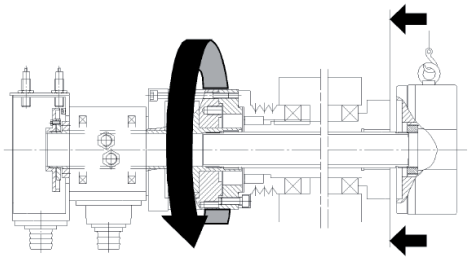


Tighten draw bolt and push chuck onto the centering rim / short taper.

4B Installation of chuck

Chuck without rotating ring nut
Open center

Cylinder in position **"chuck OPEN"**. Thread of draw tube/ adaptor must be treated with copper paste to avoid rust/seizing. Position chuck concentric in front of the machine spindle by means of suitable lifting equipment. Use mounting belt or eye screw. KNCS-N chucks carry a transportation thread from size 260 on.



Rotate spindle by hand at adaptor or drive belt and screw in the draw tube into the chuck to its end position. Push the chuck onto the centering rim / short taper.

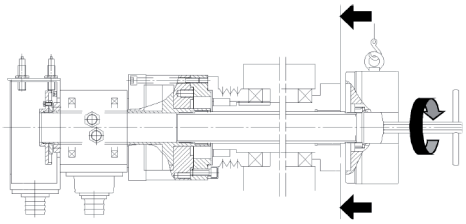
Observe correct length of thread engagement!
Draw tube face flush with adaptor!

- **Danger of damage to the chuck!**
- **Do not tilt thread!**
- **Do not apply force!**
- **Never rotate spindle!**

4C Installation of chuck

Chuck with rotating ring nut
Partial open center / Open center

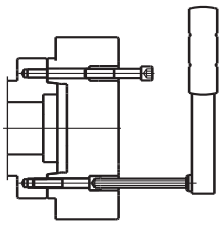
Cylinder in position **"chuck OPEN"**. Thread of draw tube/ adaptor must be treated with copper paste to avoid rust/seizing. Position chuck concentric in front of the machine spindle by means of suitable lifting equipment. Use mounting belt or eye screw. KNCS-N chucks carry a transportation thread from size 260 on.
Insert the chuck key (standard equipment at option rotating nut) through the chuck bore until the cams engage into the slots of the rotating ring nut and screw the ring nut onto the draw tube to its axial stop. Push the chuck onto the centering rim / short taper.



- **Danger of damage to the chuck!**
- **Do not tilt thread!**
- **Do not apply force!**
- **Never rotate spindle!**

5 Mounting of chuck

Insert mounting bolts ISO 4762 10.9 and thighten by hand. Adjust to lowest operating pressure and actuate cylinder: Position **"chuck CLOSED"**.
Tigthen the mounting bolts with a torque wrench gradually one after another. Do not exceed torque!

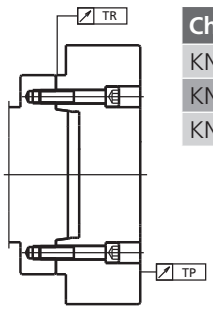


Bolt 10.9 ISO 4762	M10	M12	M16	M20	M24
Md (Nm)	48	70	170	300	500

6 Control

Check easy movement of the chuck. Chuck must open / close easily at lowest clamping pressure.
Adjust the proximity switches on the actuating cylinder for stroke control according to service manual of the cylinder.
Check jaw stroke. Jaw stroke see technical details page 6.
Re-tighten the bolts with a torque wrench in position chuck closed.

7



Chuck type	TR	TP
KNCS-N 140 - 225	0,02	0,02
KNCS-N 260 - 400	0,03	0,03
KNCS-N 500 - 630	0,05	0,05

Check radial and face runout

8 Lubrication

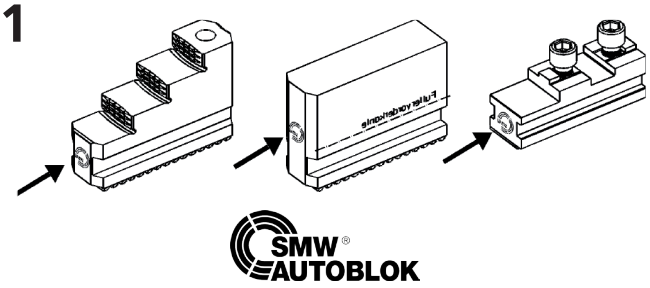
Lubricate chuck at position **"chuck OPEN"**. Always use SMW-AUTOBLOK grease K05.
Lubrication see page 21/22.
Ordering no. 016440 K05 cartridge 500 g.
Ordering no. 011881 K05 can 1000 g.

Insert jaw 1, 2, 3 one after another into the guideways 1, 2, 3. For jaw change please refer to page 19/20.
Check gripping force with gripmeter (GFT-X) at different actuating pressures.

- **Danger of damage!**
- **Never actuate the chuck when key is inserted!**

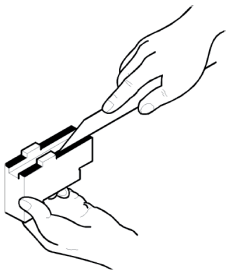
Mounting of top jaws on master jaws GBK

1



Use original SMW-AUTOBLOK master jaws GBK, GST and UVB only! They are marked on their face with the logo.

2

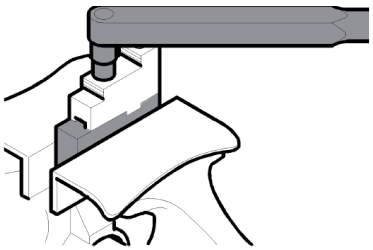


Mounting surfaces of the top jaws must be straight and on the same level. Otherwise the master jaw gets distorted and locks in the guideway.

3

Use mounting bolts 12.9 ISO 4762 only. Always check correct length of thread engagement! Use torque wrench and tighten gradually one after another.
Do not exceed torque (Md) otherwise master jaw gets distorted.

Use new screws every time you change the jaw.
The mounting bolts must be checked for damage and wear in regular intervals, and have to be replaced if necessary. They have to be replaced not later than after maximum 100000 clamping cycles!

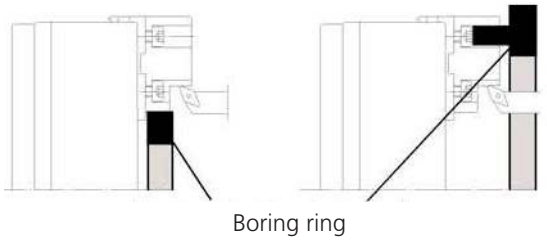


Type KNCS-N	140-35	170-43	210-52	225-66	260-78	275-86	325-104	340-117	400-128	500-155	630-165
Bolt	M8	M8	M8	M8	M12	M12	M12	M12	M12	M16	M16
Md (Nm)	35	35	35	35	65	65	65	65	65	170	170
Length of thread engagement	11^{+1}	11^{+1}	11^{+1}	11^{+1}	15^{+2}	15^{+2}	15^{+2}	15^{+2}	15^{+2}	20^{+2}	20^{+2}

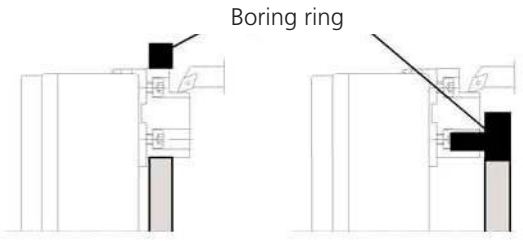
Jaws of other manufacturers:

- **Safety risks due to wrong material or heat treatment**
- **Danger of damage of your KNCS-N chuck due to wrong dimensions / tolerances**
- **No warranty from SMW-AUTOBLOK**

Boring of soft jaws



o.d. clamping



i.d. clamping

Highest repeatability can be achieved if you follow the following points:

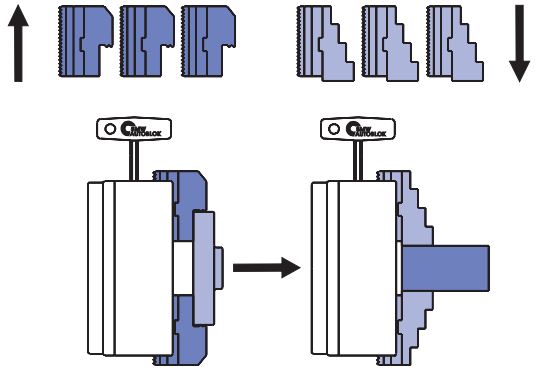
Always machine top jaws under gripping force.
Use rigid boring ring.

For repeating jobs store top jaws with master jaws as one unit.

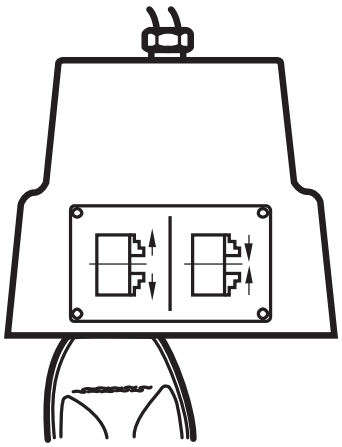
Boring ring must be gripped as close to the gripping area as possible.

Never grip boring ring with master jaw.

Changing or re-positioning of the jaws

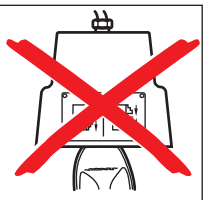


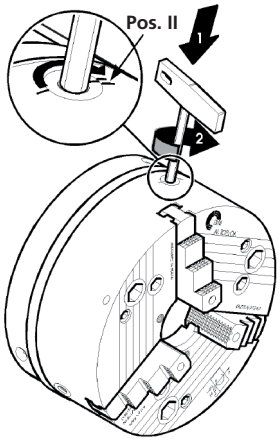
1 **Foot pedal chuck: OPEN**



Changing / repositioning of the jaws is possible only in chuck position **"OPEN"**.

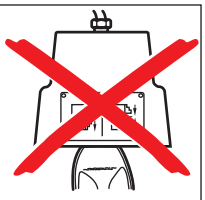
2 Do not actuate foot pedal!
Danger of damage to the chuck!

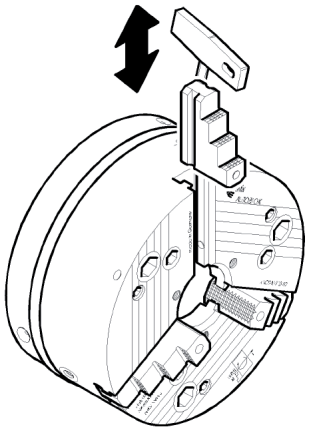




Insert key and rotate against spring tension to pos. II and hold in position.

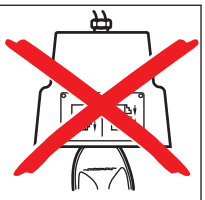
3 Do not actuate foot pedal!
Danger of damage to the chuck!

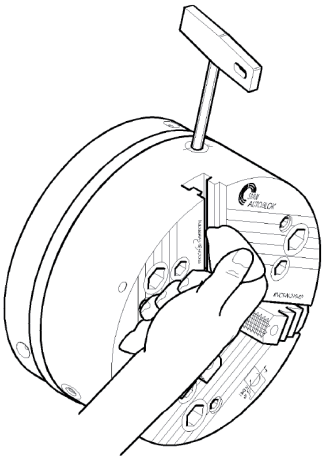




Remove / reposition jaw 1.

4 Do not actuate foot pedal!
Danger of damage to the chuck!





Clean guideway and lubricate. Lubricate new jaw set in the guideway and in the serration.

Jaw safety interlock:

- **Key can only be removed in pos. I.**
- **Key can only be rotated back from pos. II into pos. I if a jaw is inserted correctly into the chuck and the safety pin is actuated via the jaw.**

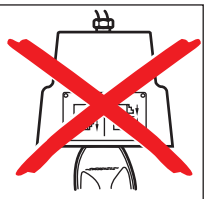
For installation and maintenance the key can be removed in pos. I if the safety pin is actuated via the dummy pin.

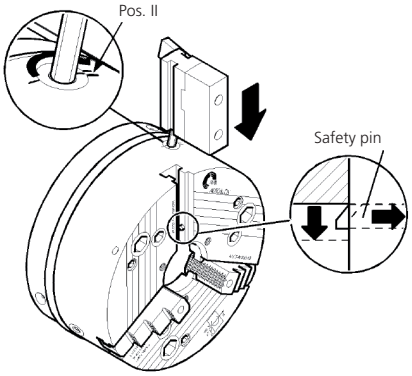
- **Danger of damage to the chuck!**
- **Never actuate foot pedal (chuck) when key is engaged for jaw change.**

- **Never apply force!**
- **Danger of damage to the chuck and actuating cylinder!**

5

Do not actuate foot pedal!
Danger of damage to the chuck!





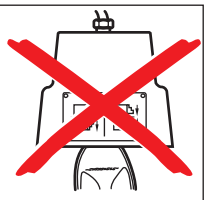
Rotate key against spring tension to pos. II and hold in position. Insert new jaw at least as far as necessary for the jaw to actuate the safety pin.

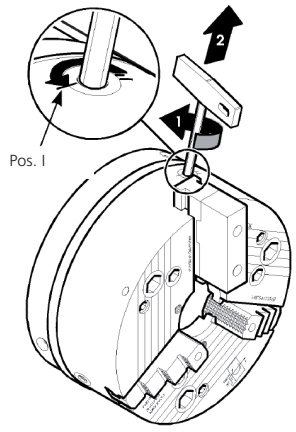
7

For changing / re-positioning jaw No. 2 and jaw No. 3 repeat steps 2-6

6

Do not actuate foot pedal!
Danger of damage to the chuck!





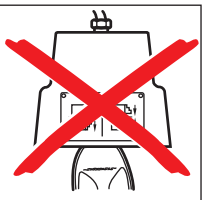
Safety interlock: Key can only be removed in pos. I!

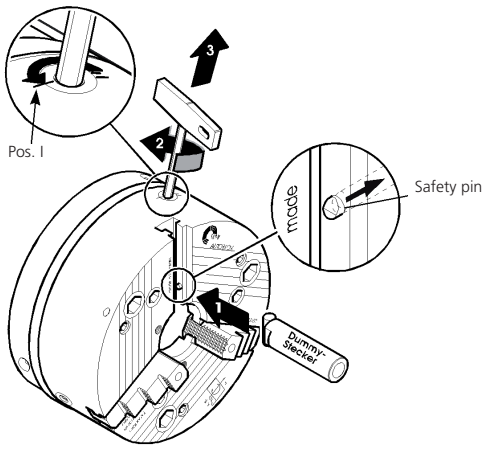
Rotate key back to pos. I and remove. Jaw change of jaw 1 is finished.

8

Maintenance / disassembling / installation

Do not actuate foot pedal!
Danger of damage to the chuck!





If no jaw is inserted, as example for maintenance or disassembling the chuck from the machine spindle, the key can be rotated back to pos. I and removed if the safety pin is actuated via the dummy pin.

Maintenance / Lubrication

Regular maintenance is the basis for correct function, high service life, precision and clamping force of the clamping chuck.

Check gripping force regularly with gripmeter (GFT-X)!

Never use coolants which dissolve the grease!

Maintenance intervals at normal conditions / using coolant		
Measurement	Lubricate with K05 grease	Disassemble + clean
after operating hours	20	1000

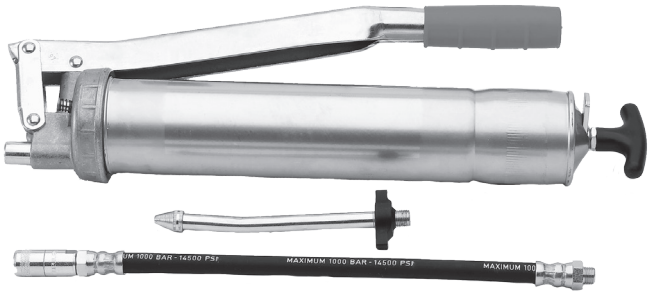
Maintenance intervals at rough conditions / using coolant		
Measurement	Lubricate with K05 grease	Disassemble + clean
after operating hours	8	600

Cartridge 500 g
Id.No. 016440

Can 1000 g
Id.No. 011881

Use original SMW-AUTOBLOK K05 grease!
The use of unsuitable lubricants can cause considerable losses in clamping force or damage to the clamping chuck.

Lubrication set
Id.No. 083726



Grease gun for 14 Oz. cartridges to DIN 1284.
(also refillable from grease can 1000 g.)

IMPORTANT:
Important advise for operator and service staff!
Certain coolants (mainly synthetic coolants) can affect or destroy the grease type K05 and/or the sealings of the chuck.
This can cause damage of the chuck and loss of clamping force!
This causes danger for the operator! The operation of the chuck under these conditions is not permitted.

It is under the responsibility of the operator and/or service staff to check this and if necessary to use a different type of coolant or grease.

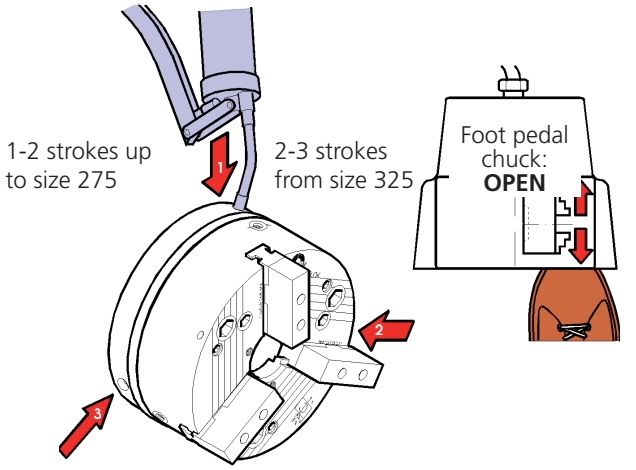
ATTENTION:
Environment protection
Danger for environment when handling incorrect!
Incorrect handling of environment hazardous materials, especially the disposal, may result in environmental damage.

- Always follow below instructions.
- In case environmentally hazardous material polluted the environment always take suitable actions immediately. If in doubt, inform the local authority about the pollution.

The following hazardous materials are used:
Lubricants such as oil and grease can contain poisonous agents. They must not pollute the environment. The disposal must be carried out by a suitable waste management company.
For a proper function of the work holding, use original SMW-AUTOBLOK lubricant only.

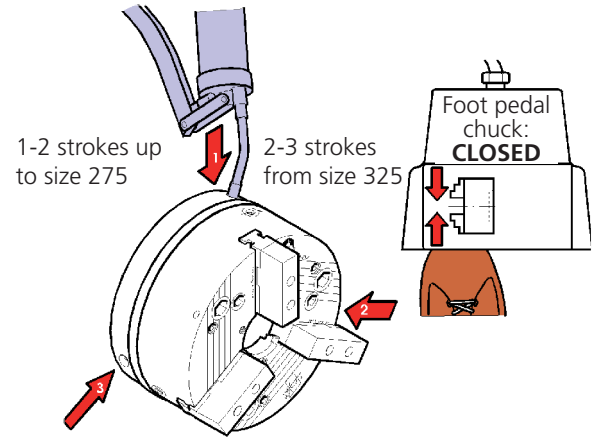
Lubrication of the chuck

1 First lubricate in chuck positon **"OPEN"**...



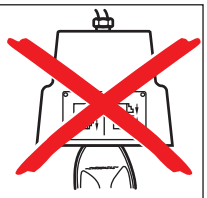
Lubrication via 3 ball type grease nipples DIN 71412.

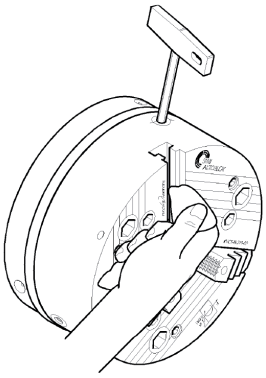
2 ... then lubricate in chuck position **"CLOSED"**



For optimal distribution of the grease do multiple jaw strokes opening and closing.

3 Do not actuate foot pedal!
Danger of damage to the chuck!



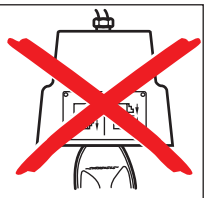


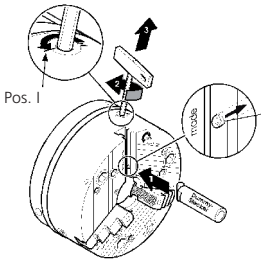
At jaw change always clean and grease the guideway and the serration.

Removal of the chuck from the machine spindle

1

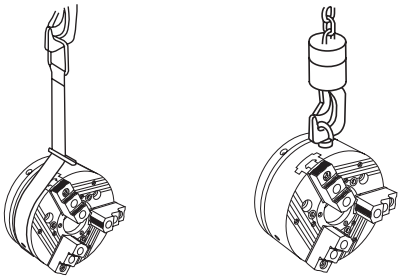
Do not actuate foot pedal! Danger of damage to the chuck!





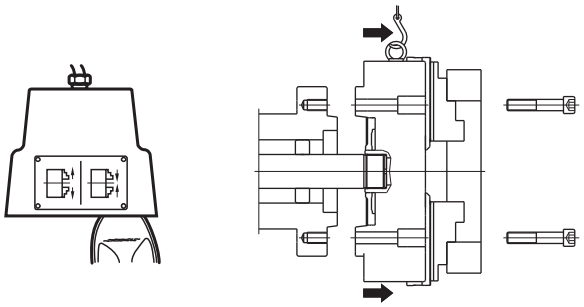
Remove jaw 1 to 3. Key can be removed by actuating the safety pin via dummy pin.

2



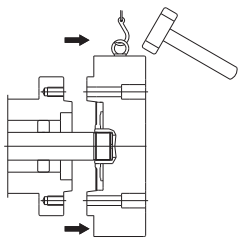
Use mounting belt to lift chuck. From size 260 mm on the chucks carry a transportation thread for an eye bolt.

3



Close the chuck and remove the mounting bolts.

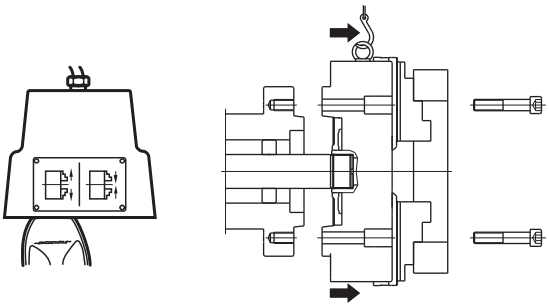
3A



Open the chuck and release from centering rim dia./short taper by means of light hit with a plastic hammer.

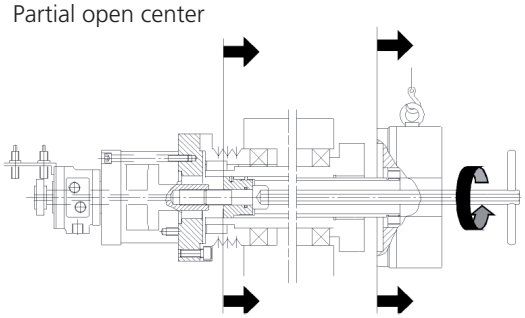
- **Never apply force!**
- **Danger of damage to the chuck and actuating cylinder!**

3B



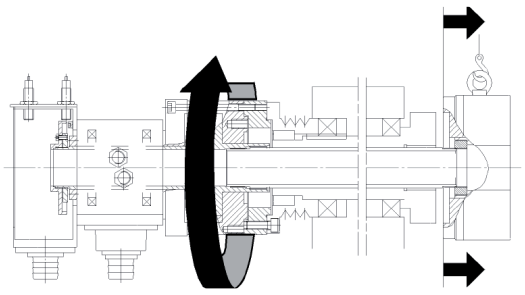
If the chuck does not release from the spindle:
Insert jaws again and do I.D. gripping on a solid ring or component. The chuck is pushed off the spindle by means of the actuation cylinder.

4 Partial open center



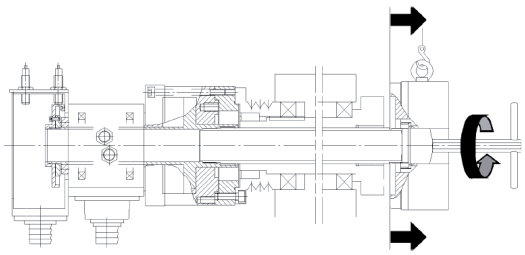
Unscrew draw bolt and remove chuck with draw tube from the machine spindle.

5A Open center



Chuck without rotating ring nut:
Rotate spindle by hand at the flange or drive belt and screw out the draw tube.

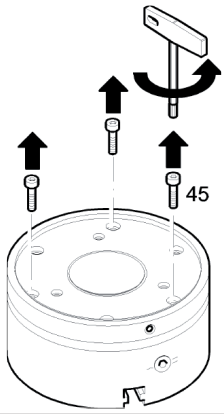
5B Open center



Chuck with rotating ring nut:
Insert key (standard equipment) through the chuck bore until the cams engage into the slots and unscrew the threaded ring.

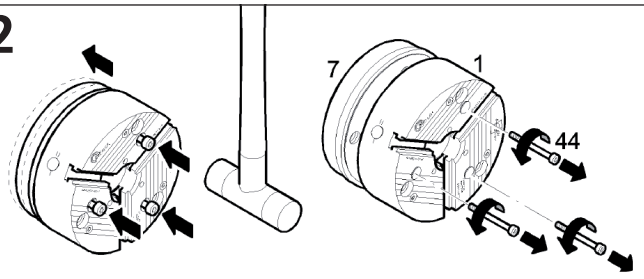
Disassembling (Part numbers refer to spare parts list on page 26/27)

1



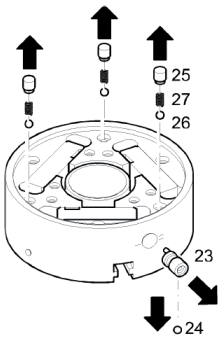
Remove screws (45).

2



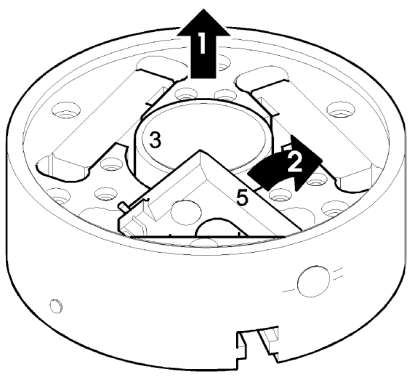
Open screws (44) some rotations. By hitting the screw heads one after another with a plastic hammer the backplate (7) is released from the chuck body (1).

3



Remove safety pins (25) by means of disassembling the thread and remove spring (27) and ball (26). Remove cam bolts (23) with ball (24).

4

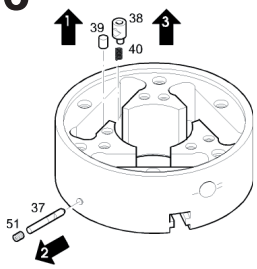


Lift chuck piston (3) and remove wedge bars (5).

5

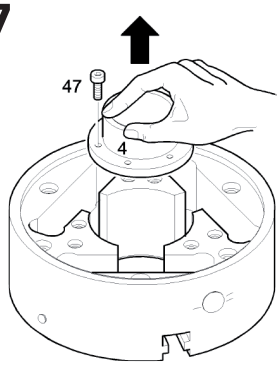
Chuck with rotating ring nut:
Retaining ring (18) is locked with a set screw (17) against loosening. Do not disassemble when disassembling/cleaning the chuck. When using special threaded rings (19) the retaining ring (18) has to be disassembled and afterwards secured against loosening in a proper way (new bore + thread for set screw. Special key for disassembling retaining ring as well as drilling fixture is available).
Attention: All parts are highly-loaded safety parts! Never use parts from other manufacturers! Replace damaged parts!

6



Disassemble cylindric pin (39) by means of disassembling thread.
Remove set screw (51) and safety pin (37). Disassemble locking pin (38) and spring (40) by means of disassembling thread.

7



Remove screws (47) and remove guide bushing.

8

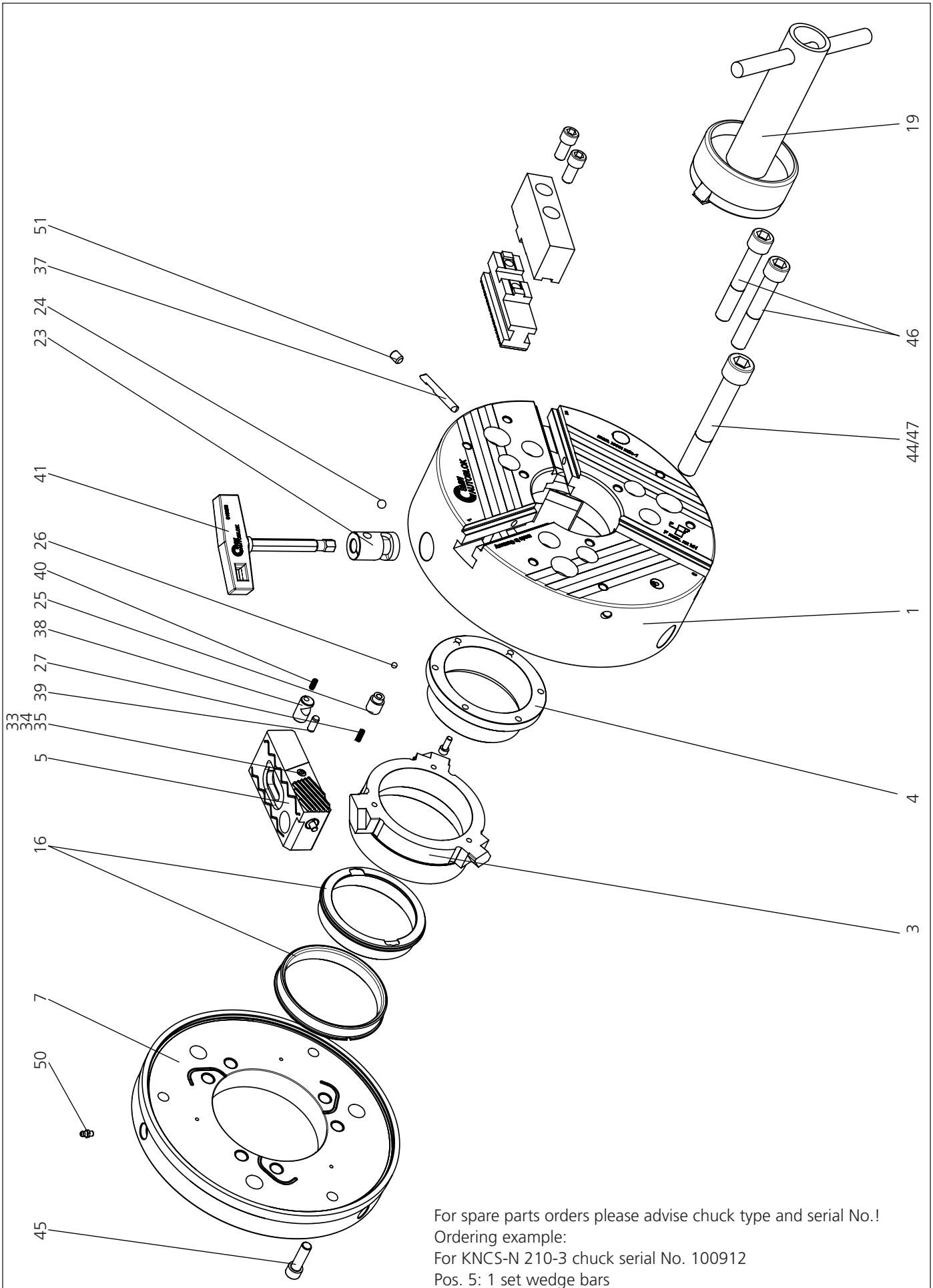
Clean all parts with approved solvents. Dispose of cleaning liquid according to regulations. Replace damaged parts by original SMW-AUTOBLOK spare parts.

Assembling in reverse sequence. Lubricate parts with K05 grease.

Ordering no. 016440	**K05 cartridge 500 g.**
Ordering no. 011881	**K05 can 1000 g.**

- **Note position of chuck body, wedge bars, piston!**
- **Danger of damage to the chuck!**

Notes



For spare parts orders please advise chuck type and serial No.!
Ordering example:
For KNCS-N 210-3 chuck serial No. 100912
Pos. 5: 1 set wedge bars

Spare part list

Spare part list KNCS-N „2-jaw-chuck“				
SMW-AUTOBLOK Type / Size		KNCS-N 210-52	KNCS-N 260-78	KNCS-N 325-104
Pos.	Description	Qty.	Qty.	Qty.
1	Chuck body	1	1	1
3	Piston	1	1	1
4	Guide bushing	1	1	1
5	Wedge bar	1 set	1 set	1 set
7	Backplate	1	1	1
19	Mounting key	1	1	1
23	Cam bolt	2	2	2
24	Ball	2	2	2
25	Retaining bolt	2	2	2
26	Ball	2	2	2
27	Spring	2	2	2
37	Safety pin	2	2	2
38	Locking pin	2	2	2
39	Cylindrical pin	2	2	2
40	Spring	2	2	2
41	Key	1	1	1
42	Dummy pin	1	1	1
44	Screw	4	-	-
45	Screw	-	4	3
46	Screw	-	4	4
47	Screw	6	6	6
50	Grease nipple	2	2	2
51	Set screw	2	2	2
60	Chuck cover set	1	1	1
80	Sign chuck height	-	1	1

Spare part list KNCS-N „3-jaw-chuck“											
SMW-AUTOBLOK Type / Size		KNCS-N 140-35	KNCS-N 170-43	KNCS-N 210-52	KNCS-N 225-66	KNCS-N 260-78	KNCS-N 275-86	KNCS-N 325-104	KNCS-N 340-117	KNCS-N 400-128	KNCS-N 500-155	KNCS-N 630-165
Pos.	Description	Qty.	Qty.	Qty.	Qty.	Qty.	Qty.	Qty.	Qty.	Qty.	Qty.	Qty.
1	Chuck body	1	1	1	1	1	1	1	1	1	1	1
3	Piston	1	1	1	1	1	1	1	1	1	1	1
4	Guide bushing	1	1	1	1	1	1	1	1	1	1	1
5	Wedge bar	1 set	1 set	1 set	1 set	1 set	1 set	1 set	1 set	1 set	1 set	1 set
7	Backplate	1	1	1	1	1	1	1	1	1	1	1
16	Adapter	-	1	-	-	-	-	-	-	-	-	-
19	Mounting key	-	-	1	1	1	1	1	1	1	1	1
23	Cam bolt	3	3	3	3	3	3	3	3	3	3	3
24	Safety pin	3	3	3	3	3	3	3	3	3	3	3
25	Retaining bolt	3	3	3	3	3	3	3	3	3	3	3
26	Ball	3	3	3	3	3	3	3	3	3	3	3
27	Spring	3	3	3	3	3	3	3	3	3	3	3
33	Positioning pin	-	3	-	-	-	-	-	-	-	-	-
34	Positioning pin guide	-	3	-	-	-	-	-	-	-	-	-
35	Druckfeder	-	3	-	-	-	-	-	-	-	-	-
37	Spring	3	3	3	3	3	3	3	3	3	3	3
38	Locking pin	3	3	3	3	3	3	3	3	3	3	3
39	Cylindrical pin	3	3	3	3	3	3	3	3	3	3	3
40	Spring	3	3	3	3	3	3	3	3	3	3	3
41	Key	1	1	1	1	1	1	1	1	1	1	1
42	Dummy pin	1	1	1	1	1	1	1	1	1	1	1
44	Screw	3	3	3	3	-	-	-	-	-	-	3
45	Screw	-	-	-	-	3	3	3	3	3	6	12
46	Screw	-	-	-	-	6	3	6	6	6	6	6
47	Screw	3	3	6	6	6	6	6	6	6	6	3
50	Grease nipple	3	3	3	3	3	3	3	3	3	3	3
51	Set screw	3	3	3	3	3	3	3	3	3	3	12
60	Chuck cover set	-	1	1	1	1	1	1	1	1	1	1
80	Sign chuck height	-	-	-	-	1	1	1	1	1	1	1

Calculation formulas for practical use

F_{sp}	=	req. static chuck grip force	N	F_s	=	main cutting force	N
F_{spd}	=	dyn. chuck grip force	N	F_c	=	centrifugal force of jaws	N
M_{dz}	=	machining torque	Nm	M_{dsp}	=	chuck clamping torque	Nm
a	=	depth of cut	mm	d_{sp}	=	clamping diameter	m
d_z	=	machining diameter	m	f	=	feed	mm/rev.
k_s	=	specific cutting force (see diagram)	N/mm²	m_B	=	mass jaws per set	kg
n	=	speed	min^{-1}	r_S	=	cent. of gravity radius jaw	m
μ_{sp}	=	coefficient of friction (see diagram)		S	=	safety factor (1.5 - 2)	

req. static chuck grip force:

$$F_{sp} = \frac{F_s \bullet S}{\mu_{sp}} \bullet \frac{d_z}{d_{sp}} \text{ [N]}$$

centrifugal force of jaws:

$$F_c = \Sigma(m_B \bullet r_S) \bullet \left(\frac{\pi \bullet n}{30}\right)^2 \text{ [N]}$$

machining torque:

$$M_{dz} = \frac{F_s \bullet d_z}{2} \text{ [Nm]}$$

main cutting force:

$$F_s = f \bullet a \bullet k_s \text{ [N]}$$

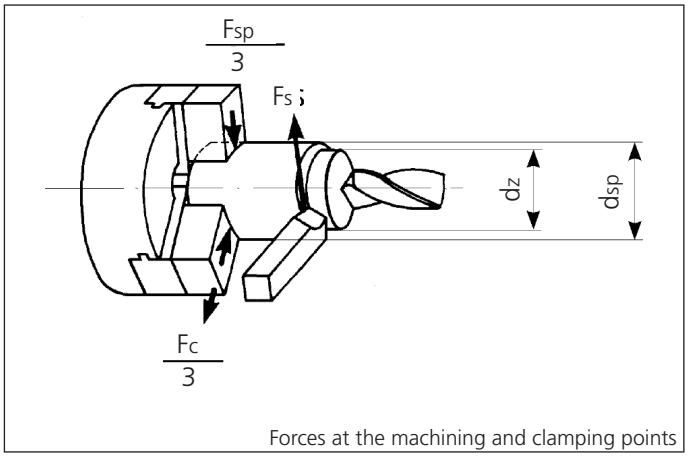
dyn. chuck grip force:

$$F_{spd} = F_{sp} - F_c \text{ [N]}$$

chuck clamping torque:

$$M_{dsp} = \frac{F_{sp} \bullet \mu_{sp} \bullet d_{sp}}{2} \text{ [Nm]}$$

The dynamic grip force **F_{spd}** is calculated from the static grip force **F_{sp}** less total centrifugal force of jaws **F_c**.



Forces at the machining and clamping points

Tolerance classes

The axial and radial runout tolerances are according to the Technical Terms of Delivery for power operated lathe chucks **DIN 6386** of tolerance class 1.

Permissible unbalance

The max. permissible unbalance for lathe chucks is according the Technical Terms of Delivery for power operated lathe chucks **DIN 6386** of tolerance class 1.

Determination of the permissible speed of lathe chucks (jaw chucks) has to be carried out according to VDI 3106!

Specific cutting forces k_s N/mm²

Specific cutting force k_s at feed s and setting angle of 45°

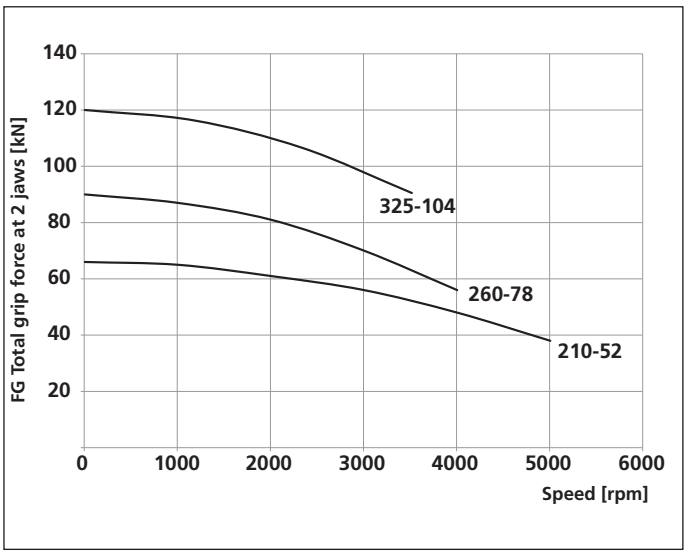
Material		Strength	Feed s (mm)					
		N/mm²	0.16	0.25	0.40	0.63	1.00	1.60
Steels	St42	... - 500	2600	2400	2200	2050	1900	1800
	St50	520	3500	3100	2750	2450	2150	1950
	St60	620	3050	2800	2600	2400	2200	2050
	C45	670	3050	2800	2600	2400	2200	2050
	C60	770	3050	2800	2600	2400	2200	2050
	St70	720	4350	3800	3300	2900	2500	2200
	18CrNi6	630	4350	3800	3300	2900	2500	2200
	42CrMo4	730	4350	3900	3450	3100	2750	2450
	16MnCr5	770	3750	3300	2950	2600	2300	2050
	Mn, CrNi	850 - 1000	3700	3400	3100	2800	2550	2350
	Mn-harded		5400	4900	4400	4000	3600	3300
Cast iron materials	GS45	300 - 500	2300	2100	1950	1800	1700	1600
	GS52	500 - 700	2550	2350	2200	2050	1900	1800
	GG16	HB 2000	1500	1350	1200	1100	1000	900
	GG25	HB 2000 - 2500	2050	1800	1600	1450	1300	1150
Non ferrous metals	Cast bronze		2550	2350	2200	2050	1900	1800
	Gunmetal		1100	1000	900	800	700	650
	Brass	HB 800 - 1200	1200	1100	1000	900	800	750
	Cast alu.	300 - 420	1100	1000	900	800	700	650

Coefficient of friction μ_{sp} for steel parts

Surface of workpiece	Gripping surface of jaws		
	smooth	diamond style	serrated
smooth mach. finish ground	0.07	0.12	0.20
rough to med. machined	0.10	0.20	0.35
unmachined	0.15	0.30	0.45
Correction factors	Aluminium alloy = 0.95 Brass = 0.90 Grey cast iron = 0.80		

Gripping force / speed diagram

KNCS-N 2-jaw-chuck

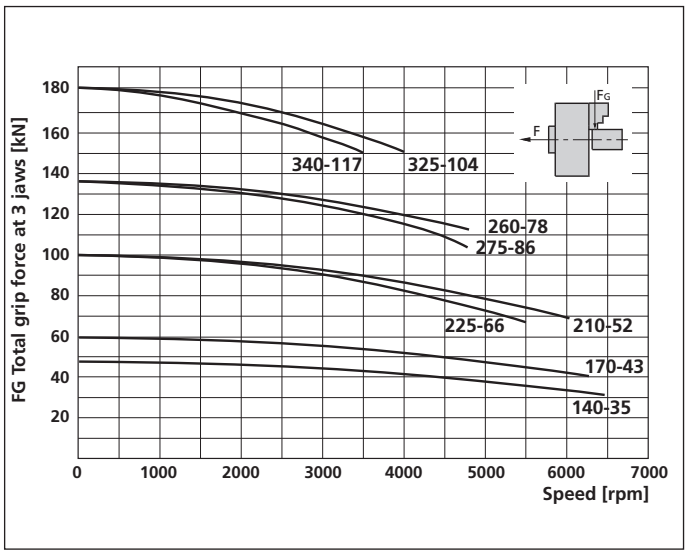


The data in the diagrams refer to 2-jaw-chucks, newly maintained according to their service manuals using SMW-AUTOBLOK K05 grease.The static and dynamic gripping forces have been measured using standard soft top jaws, placed in a position not exceeding the outer diameter of the chuck.

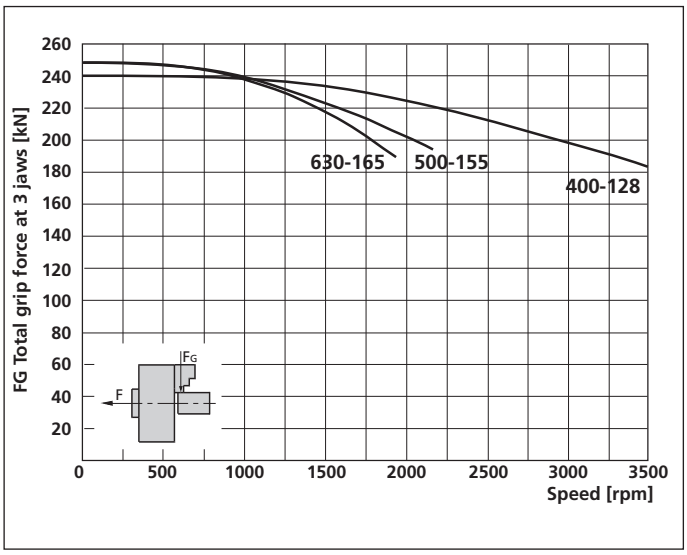
Safety advice/danger of damage:
When using taller/heavier jaws and/or clamping on a bigger diameter reduce draw pull/rotating speed accordingly.

KNCS-N 3-jaw-chuck

KNCS-N 140-35 - KNCS-N 325-104



KNCS-N 400-128 - KNCS-N 630-165



The data in the diagrams refer to 3-jaw-chucks, newly maintained according to their service manuals using SMW-AUTOBLOK K05 grease.The static and dynamic gripping forces have been measured using standard soft top jaws, placed in a position not exceeding the outer diameter of the chuck.

Safety advice/danger of damage:
When using taller/heavier jaws and/or clamping on a bigger diameter reduce draw pull/rotating speed accordingly.

Trouble	Caused by		Action
Heavy vibrations on the machine spindle	**A**	Inbalance due to component or top jaws	Change shape of top jaws or balance with counterweights on the chuck body
	B	Inbalance on the parts: • machine spindle • drive • actuating cylinder • cylinder adapter • chuck adapter • draw tube	Actuating cylinder defect one after another. Center, balance or replace the parts
	C	Inbalance due to collision	Send chuck back to **SMW-AUTOBLOK** for inspection
Gripping force is reduced	**A**	Lubrication is not sufficient; Chuck is contaminated by dirt.	Lubricate or clean the chuck; check type of grease, see page 21/22
	B	Malfunction of the chuck	Check all chuck parts; replace damaged parts by original **SMW-AUTOBLOK** spare parts
	C	Actuating cylinder defect	Check draw pull of the cylinder at different pressures
Radial runout or insufficient repeatability	**A**	Top jaws are not bored or ground properly	Rebore or regrind top jaws; see page 18
	B	Jaws are inserted into wrong guideway	Insert jaw 1 in guideway 1, jaw 2 in guideway 2 etc.
	C	Master jaw contaminated with dirt; Master jaw damaged	Clean serration of the master jaws; replace master jaws
	D	Mounting bolts for the top jaws too short or too long, overloaded	Check length of thread engagement, replace screw; check torque! See page 18
	E	Jaws are too high	Change top jaws, method of gripping
	F	Chuck is damaged or worn out	Send chuck back to **SMW-AUTOBLOK** for inspection
Insufficient jaw stroke	**A**	Wrong draw tube length	Check draw tube length, see page 16
	B	Cylinder stroke is too short	Check cylinder stroke
	C	Draw tube adapter has become loose	Check draw tube adapter
	D	Chuck is contaminated or filled with too much grease	Disassemble the chuck, clean and relubricate, see page 21/22
Jaw cannot be disengaged	**A**	At first installation: Draw tube is too short, complete frontend position of the piston/jaw change position cannot be reached	Check draw tube length; see installation page 16
	B	Chuck is heavily contaminated with dirt or filled with too much grease	Disassemble chuck and clean; see page 21/22
	C	Chuck was actuated during jaw change	Disassemble chuck, replace cambolts; refer to page 19/20 for jaw change!
	D	Wrong key is used	Use **original SMW-AUTOBLOK key**
Jaw is locked in the guideway	**A**	Jaw of other manufacturers which does not correspond to SMW-AUTOBLOK specifications	Use **original SMW-AUTOBLOK jaws**; see page 18
	B	Master jaw is deflected; Mounting surface of top jaws not on same level, contaminated or damaged	Check top jaws and replace if necessary; see page 18
	C	Master jaw is deflected; Torque of the mounting bolts too high	Correct torque must be kept; see page 18

Notes

12 months warranty

Product: Power chuck

SMW-AUTOBLOK provides a warranty on the purchased product for 12 months from the date of purchase as stipulated in our General Terms of Sale in the following cases:

- The defect was not known to the customer at the time of purchase.
- The defect is not due to wear as a result of use.
- The customer has not been negligent by improperly operating or incorrectly maintaining of our product. Refer to the enclosed instruction manual for operation and maintenance information.
- It is not a wear part such as seals, rollers or valves.
- Especially work piece touching parts such as jaws, locators, inserts, rollers and face drivers are excluded from warranty.
- Only original SMW-Autoblok parts have been used such as spare parts, seals, rollers, valves, jaws, locators, inserts and face drivers.
- There is evidence that the maintenance intervals in the operating instructions have been followed. The customer must provide maintenance documentation for this purpose. The maintenance performed must be documented in the maintenance section of the operating instructions and signed by a properly authorized person.

Please note that, if the above requirements are not met, the warranty is only invalid if the defect already existed at the time of transfer of risk, which is usually upon delivery of the product, unless the customer was aware of the defect at the time of transfer of risk.

24-months warranty
-optional-

Product: Power chuck

Against additional fee, SMW-AUTOBLOK offers a warranty on the purchased product for 24 months from date of purchase as a modification to the 12-month limitation period stipulated in our General Terms of Sale if the following conditions are met:

- An extension of the warranty from 12 to 24 months has been agreed upon in writing with SMW-AUTOBLOK.
- There is no defect due to wear as a result of use.
- The defect was not known to the customer at the time of purchase.
- The customer has not been negligent by improperly operating or incorrectly maintaining of our product. Refer to the enclosed instruction manual for operation and maintenance information.
- It is not a wear part such as seals, rollers or valves.
- Especially work piece touching parts such as jaws, locators, inserts, rollers and face drivers are excluded from warranty.
- Only original SMW-Autoblok parts have been used such as spare parts, seals, rollers, valves, jaws, locators, inserts and face drivers.
- There is evidence that the maintenance intervals in the operating instructions have been followed. The customer must provide maintenance documentation for this purpose. The maintenance performed must be documented in the maintenance section of the operating instructions and signed by a properly authorized person.
- Paid inspection by or at SMW-AUTOBLOK is mandatory.
  Minimum interval with maintenance documentation by SMW-AUTOBLOK.

Single shift operation	once in 24 months
2- and 3-shift operation	once in 12 months

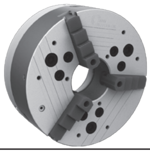
  The customer is responsible for having inspections performed on time.
- The delivery location and machine location are within Germany.

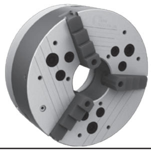
Documentation of maintenance

Product: ______________________________

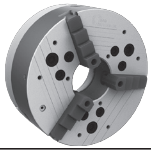
Serialno.: ______________________________

Regular and documented maintenance conserves the value of your work holding, and ensures warranty!

Maintained according to instruction manual	YES ☐ 
Operating hours	
Name	
Date	
Signature	
Remarks	

Maintained according to instruction manual	YES ☐ 
Operating hours	
Name	
Date	
Signature	
Remarks	

Maintained according to instruction manual	YES ☐ 
Operating hours	
Name	
Date	
Signature	
Remarks	

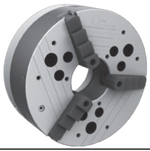
Maintained according to instruction manual	YES ☐ 
Operating hours	
Name	
Date	
Signature	
Remarks	

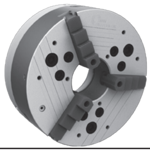
Documentation of maintenance

Product: ______________________

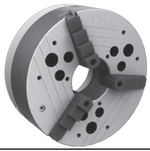
Serialno.: ______________________

Regular and documented maintenance conserves the value of your work holding, and ensures warranty!

Maintained according to instruction manual	YES ☐ 
Operating hours	
Name	
Date	
Signature	
Remarks	

Maintained according to instruction manual	YES ☐ 
Operating hours	
Name	
Date	
Signature	
Remarks	

Maintained according to instruction manual	YES ☐ 
Operating hours	
Name	
Date	
Signature	
Remarks	

Maintained according to instruction manual	YES ☐ 
Operating hours	
Name	
Date	
Signature	
Remarks	

Empfangsbestätigung für die Betriebsanleitung
Confirmation of receipt of the instruction manual

Hiermit bestätigt die vom Betreiber/ Anwender beauftragte Person

This certifies the operator assigned by the operating company

Herr / Frau

Mr. / Mrs.

den Erhalt der Betriebsanleitung sowie deren Inhalte, insbesondere das Kapitel Sicherheit gelesen und verstanden zu haben.

hereby confirms to have received the instruction manual and to have read and understood the content, especially the chapters concerning safety.

Bediener	Datum	Operator	Date
Betreiber / Sachbeauftragter	Datum	Operating Company / Authorised person	Date

Id.Nr. / Id. No. :

Artikelbez. / Item :

Gewicht / Weight :

Seriennr. / Serialno. :

Bitte ausgefüllt zurückschicken an:

SMW-AUTOBLOK
Spannsysteme GmbH
Wiesentalstraße 28
D-88074 Meckenbeuren
Fax: +49 (0) 7542 - 3886
Mail: vertrieb@smw-autoblok.de

Please send the filled in form back to:

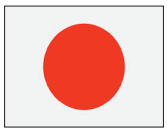
SMW-AUTOBLOK
Spannsysteme GmbH
Wiesentalstraße 28
D-88074 Meckenbeuren
Fax: +49 (0) 7542 - 405 181
Mail: sales@smw-autoblok.de

Id. No.	:	
Item	:	
Weight	:	
Serialno.	:	

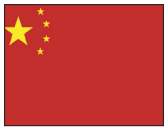
SMW-AUTOBLOK Spannsysteme GmbH
Postfach 1151 • D-88070 Meckenbeuren
Wiesentalstraße 28 • D-88074 Meckenbeuren
Tel.: +49 (0) 7542 - 405 - 0

Vertrieb Inland ➢ vertrieb@smw-autoblok.de
Fax: +49 (0) 7542 - 3886
Sales International ➢ sales@smw-autoblok.de
Fax: +49 (0) 7542 - 405 - 181

U.S.A.
SMW-AUTOBLOK Corporation
285 Egidi Drive - Wheeling, IL 60090
Tel. +1 847 - 215 - 0591
Fax +1 847 - 215 - 0594
E-mail ➢ autoblok@smwautoblok.com



Japan
SMW-AUTOBLOK Japan Inc.
1-56 Hira, Nishi-Ku
461-Nagoya
Tel. +81 (0) 52 - 504 - 0203
Fax +81 (0) 52 - 504 - 0205
E-mail ➢ japan@smwautoblok.co.jp



China
SMW-AUTOBLOK (Shanghai) Work Holding Co.,Ltd.
Building 6, No.72, JinWen Road, KongGang
Industrial Zone, ZhuQiao Town, Pudong District
201323, Shanghai P.R. China
Tel. +86 21 - 5810 - 6396
Fax +86 21 - 5810 - 6395
E-mail ➢ china@smwautoblok.cn

Mexico
SMW-AUTOBLOK Mexico, S.A. de C.V.
Pirineos No. 515-B, Nave 16
Col. Industrial Benito Juarez
Micro Parque Industrial Santiago
Queretaro, Qro. C.P. 76130
Tel. +52 (442) 209 - 5118
Fax +52 (442) 209 - 5121
E-mail ➢ smwmex@smwautoblok.mx

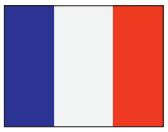
India
SMW-AUTOBLOK Workholding Pvt. Ltd.,
Plot No. 4, Weikfield Industrial Estate,
Gat No. 1251, Sanaswadi, Tal – Shirur,
Dist – Pune. 412 208
Tel. +91 2137 - 616 974
Fax +91 2137 - 616 972
E-mail ➢ info@smwautoblok.in

Brazil
SYSTEC METALÚRGICA LTDA
R. Luiz Brisque, 980
13280-000 - Vinhedo - SP
Tel. +55 (0) 193 886 - 6900
Fax +55 (0) 193 886 - 6970
E-mail ➢ systec@systecmetal.com.br

Argentina
SMW-AUTOBLOK Argentina
Rio Pilcomay 1121 - Bella Vista
RA - 1661 Bella Vista Buenos Aires
Tel. +54 (0) 1146 - 660 603
Fax +54 (0) 1146 - 660 603
E-mail ➢ autoblok@ciudad.com.ar

SMW® AUTOBLOK
www.smw-autoblok.de

AUTOBLOK s.p.a.
Via Duca D'Aosta n.24
Fraz. Novaretto
I-10040 Caprie - Torino
Tel. +39 011 - 9638411
Tel. +39 011 - 9632020
Fax +39 011 - 9632288
E-mail ➢ info@smwautoblok.it



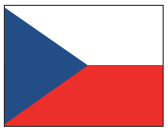
France
SMW-AUTOBLOK
17, Avenue des Frères Montgolfier - Z.I. Mi-Plaine
F-69680 Chassieu
Tel. +33 (0) 4 - 727 - 918 18
Fax +33 (0) 4 - 727 - 918 19
E-mail ➢ autoblok@smwautoblok.fr

Great Britain
SMW-AUTOBLOK Workholding Ltd.
8, The Metro Centre
GB-Peterborough, PE2 7UH
Tel. +44 (0) 1733 - 394 394
Fax +44 (0) 1733 - 394 395
E-mail ➢ sales@smwautoblok.co.uk

Spain
SMW-AUTOBLOK IBERICA, S.L.
Ursalto 10 - Nave 2, Pol. 27 - Mateo Gaina
20014 San Sebastián (Guipúzcoa) (Spain)
Tel.: +34 943 - 225 079
Fax: +34 943 - 225 074
E-mail ➢ info@smwautoblok.es

Russia
SMW-AUTOBLOK Russia
B.Tulskaya str., 10, bld.3,off.3203,
115191 Moscow (Russia)
Tel. +7 495 -231-1011
Fax +7 495 -231-1011
E-mail ➢ info@smw-autoblok.ru

Taiwan
AUTOBLOK Company Ltd.
NO.6, SHUYI RD., SOUTH DIST.,
TAICHUNG, TAIWAN
Tel. +886 4-226 10826
Fax +886 4-226 12109
E-mail ➢ taiwan@smwautoblok.tw



Czech Republic / Slovakia
SMW-AUTOBLOK s.r.o.
Merhautova 20
CZ - 613 00 BRNO
Tel. +420 513 034 157
Fax +420 513 034 158
E-mail ➢ info@smw-autoblok.cz

Sweden / Norway
SMW-AUTOBLOK Scandinavia AB
Kasernvägen 2
SE - 281 35 Hässleholm
Tel. +46 (0) 761 420 111
E-mail ➢ info@smw-autoblok.se

Korea
SMW-AUTOBLOK KOREA CO., LTD.
1108 ho, Baeksang Startower 1st,
65, Digital-ro 9-gil, Geumcheon-gu
Seoul, ROK-08511, Korea
Tel. +82 2 6267 9505
Fax +82 2 6267 9507
E-mail ➢ info-korea@smw-autoblok.net