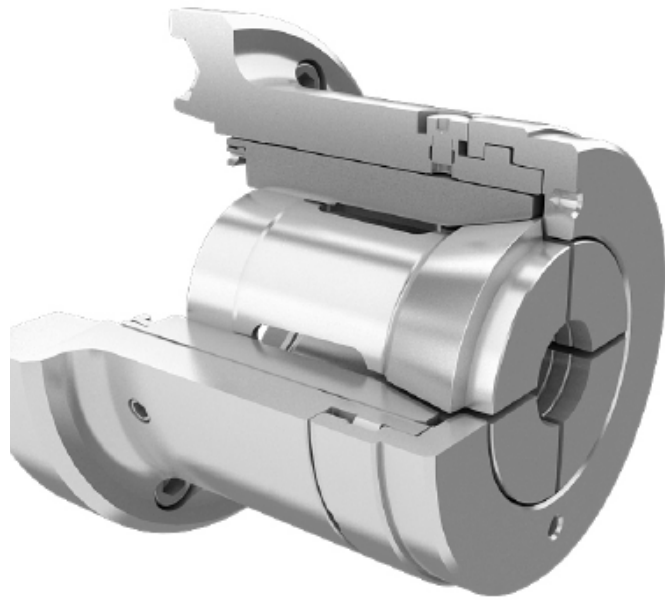


COLLET CHUCKS

Type KSZ-MB

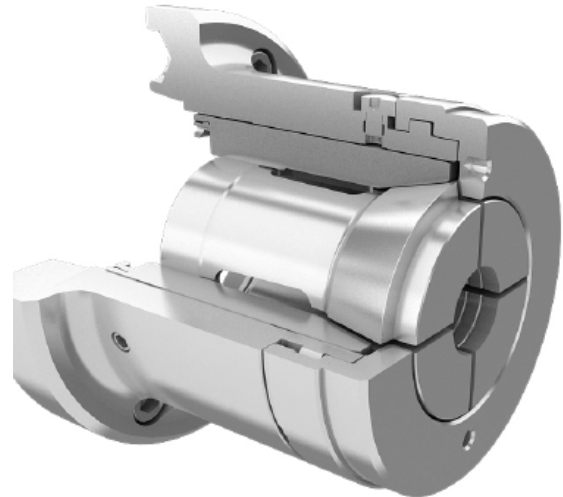
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INSTRUCTION MANUAL

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Instruction manual Collet chucks Type KSZ-MB

Thank you for purchasing an **original SMW-AUTOBLOK Collet Chucks type KSZ-MB**.

This **service manual** contains the installation, the use and the maintenance instructions of the **Collet Chucks type KSZ-MB**.

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

The **service manual is a part of the Collet Chucks type KSZ-MB** and must be passed to the new owner in case of sale.

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



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

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



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

Declaration of incorporation

for a partly completed machinery according to machine directive 2006/42/EC

The Manufacturer: SMW-Autoblok Spannsysteme GmbH
Wiesentalstraße 28
D-88074 Meckenbeuren
Tel.: +49 (0) 7542 - 405 0

declares hereby that the following product:

Component: Collet Chucks
Application: Installation in machine tool
Type: KSZ-MB

is intended to be installed into a machine tool. The partly completed machinery must not be put into service until the final machinery into which it is to be incorporated has been declared in conformity with the relevant provisions of the Machinery Directive (2006/42/EC annex II,B).











Applied harmonized norms: DIN EN 1550

Date: 29.12.2009




Signature of responsible person

General safety instructions

-  **1. Correct use**
SMW-AUTOBLOK power 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. Personnel**
Power chucks must be installed, operated and maintained only by qualified and regularly trained personnel.
-  **3. Safety precautions to the lathe**
- 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.
-  **4. 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 ΣF_{sp} at max. actuating force is engraved on the chuck body.
-  **5. Max. speed**
The max. spindle speed is only valid at max. actuating force using the standard round collets. For special applications the clamping force and the max. speed must be calculated according to VDI 3106 but not exceeding the max. permitted speed.
-  **6. Collets**
Always use original-SMW-AUTOBLOK-collets. Collets of other manufacturers can cause damage to the chuck or accidents. Here the warranty rights will lose.
-  **7. 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.
-  **8. Remaining risks**
The type of components (shape, weight, unbalance, material etc.) has a big influence on the system "machine tool - power 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
-  **9. 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.
-  **For any problems or questions please contact SMW-AUTOBLOK directly or one of our authorized offices.**

Description

General

This manual must be read and well understood by everyone being responsible or in charge, and must be followed in any case.

Especially important are all sections concerning Safety advises, dangers as well as maintenance and cleaning. Use this manual only for your KSZ-MB collet chuck. The manual is subject to technical changes, that will improve the overall quality of the product.

Not observing the instructions in this manual will make any warranty void. SMW-Autoblok refuses any claims for damages or loss of production.



Do not use this product for any other use than the intended one!
Follow the safety and danger instructions!
Only trained personal may use this chuck!

Principle of function

The push tube is pushing the pressure sleeve with it's inclined inner cone forward. This causes the collet to collapse.



Never clamp without having the matching diameter material in the chuck. Clamping without material will damage the collet. The collet will loose it accuracy, and may brake.

Product description

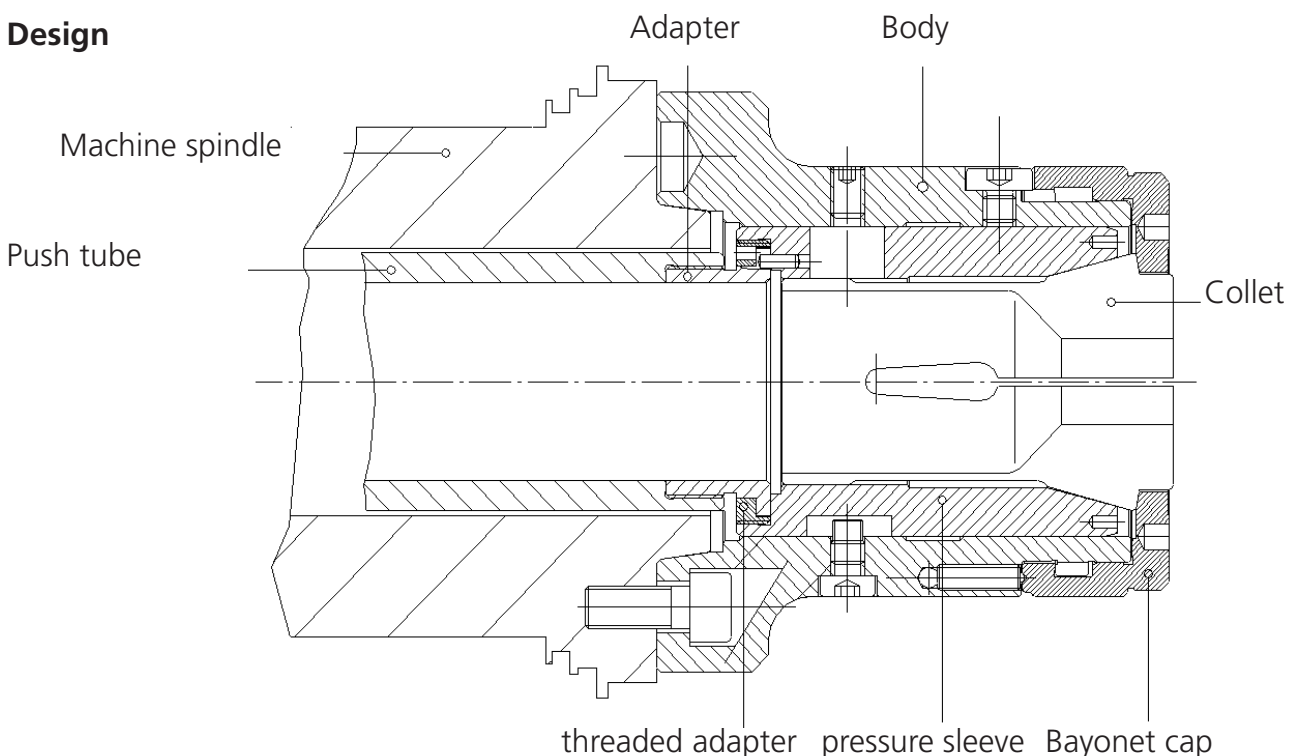
The collet chuck KSZ-MB is intended to be used with:

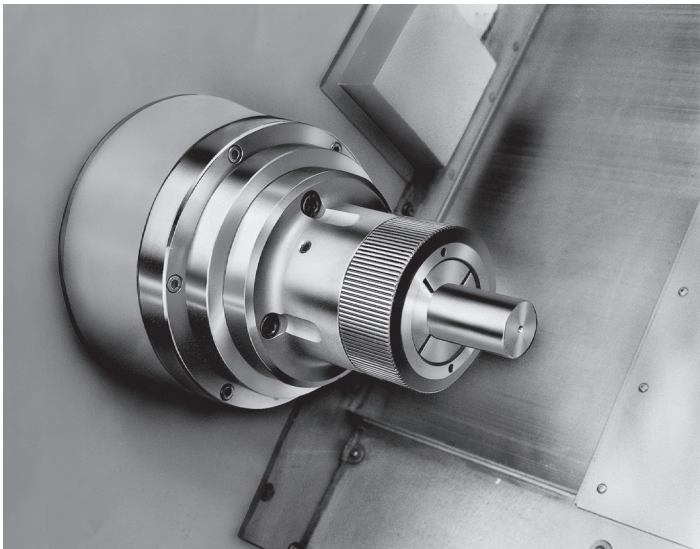
- Collets DIN 6343
- Rubber flex collets

The main use for the KSZ-MB collet chuck is on CNC lathes or special purpose machines.

The actuating force is transmitted from a hydraulic cylinder by a push tube to the pressure sleeve of the chuck, and thus can operate fully automatic.

Design





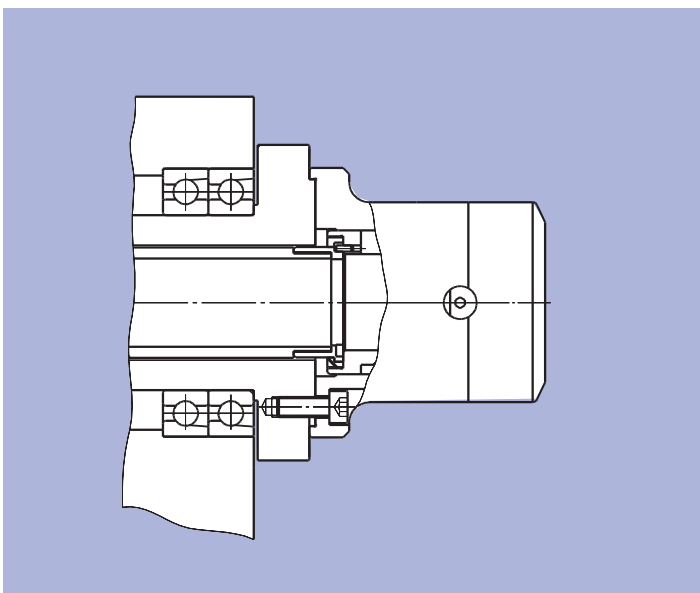
Application/customer benefits

- Efficient machining of bar material on automatic bar machines with bar feed
- Less deformation of thin-walled components during clamping
- Quick set-up by means of bayonet locking cap
- For highest speeds
- Clamping/unclamping of chuck during spindle rotation is possible

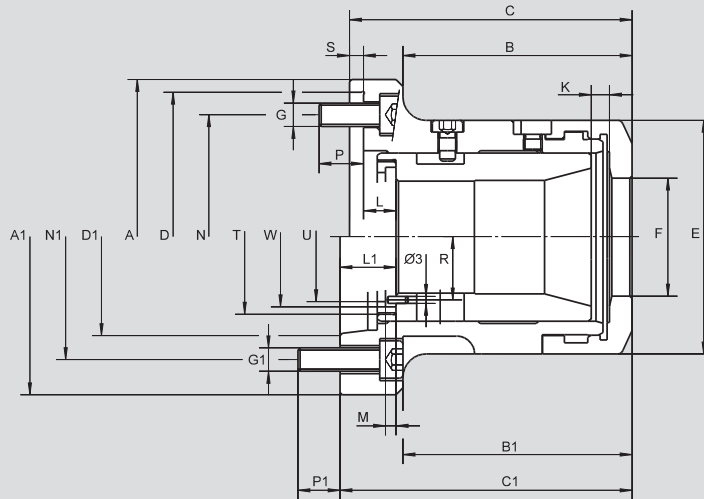


Profitability

- Quick and simple installation to all lathes (alternately with 3-jaw chucks).
- Simply by changing collets, round, square and hexagonal material can be clamped.
- Cost effective by using standard collets DIN 6343 as well as standard Rubberflex and Multirange collets.
- Collets for highest concentricity for special profiles, vulcanized, coated or ground to size are available on request.



- Case hardened and ground chuck parts ensure long service life
- Finish-machining of all parts in one set-up guarantees perfect concentricity
- Direct mounting to the machine spindle ensures high concentricity
- High operating reliability due to a minimum of parts
- High axial positioning accuracy of the components by means of push type collet system



Attention: Chuck position „open“ (left end position) is with end stop in actuating cylinder.
Do not actuate chuck without cap nut mounted!
Remove pin dia. 3 for rotating ring nut for direct connection in thread dimension T.

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

SMW-AUTOBLOK Type		KSZ-MB 40			KSZ-MB 60				KSZ-MB 80	
Mounting		Z140	A5	A6	Z170	Z220	A6	A8	Z/A8	
Id. No.		088174	088180	088179	088175	088176	088178	088177	091209	
	A h6	155	-	-	185	235	-	-	-	
	A1 h6	-	135	170	-	-	170	220	220	
	B	90.9	-	-	108.9	108.9	-	-	-	
	B1	-	96.9	91.9	-	-	117.9	108.4	147	
	C	113.9	-	-	138.9	140.9	-	-	-	
	C1	-	123.9	123.9	-	-	144.9	145.9	176.5	
Center mounting		D	140	-	170	220	-	-	-	
Short taper mounting to DIN 55026		D1	-	A5	A6	-	A6	A8	A8	
	E	102	102	102	130	130	130	130	156	
	F	51	51	51	74	74	74	74	95	
	G	3 x M10	-	-	6 x M12	6 x M16	-	-	-	
	G1	-	4 x M10	4 x M12	-	-	4 x M12	4 x M16	6 x M16	
	Kmax.	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	
	L	8.5	-	-	14.0	16.0	-	-	-	
	L1	-	24.5	24.5	-	-	26.0	27.0	30.5	
	M	4.5	4.5	4.5	4.5	4.5	4.5	4.5	6.0	
	N	104.8	-	-	133.4	171.4	-	-	-	
	N1	-	104.8	133.4	-	-	133.4	171.4	171.4	
	P	18	-	-	14	20	-	-	-	
	P1	-	14	14.5	-	-	16	16	27.5	
	R	28	28	28	39.5	39.5	39.5	39.5	51	
	S	6	-	-	6	6	-	-	-	
Pressure sleeve thread/thread depth		T	M66 x 1.5/8			M90 x 1.5/8				M114 x 2/11
	U		54			77				99
	W		62.5			83				107
max. speed	r.p.m.	6000	6000	6000	5000	5000	5000	4000	4000	
max. actuating force	daN	2500	2500	2500	3000	3000	3000	3500	3500	
max. gripping force	daN	5400	5400	5400	6500	6500	6500	7300	7300	
Weight without collets	kg	6.1	7.7	7.8	13.6	14.2	14.1	18.1	20.8	
rec. actuating cylinders		Type	VNK 102-46			VNK 150-67				VNK 200-86
speed	r.p.m.		7000			5500				4000

Installation

Before installing:



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



Check: All connecting and adaptor parts must be calculated for continuous operation.



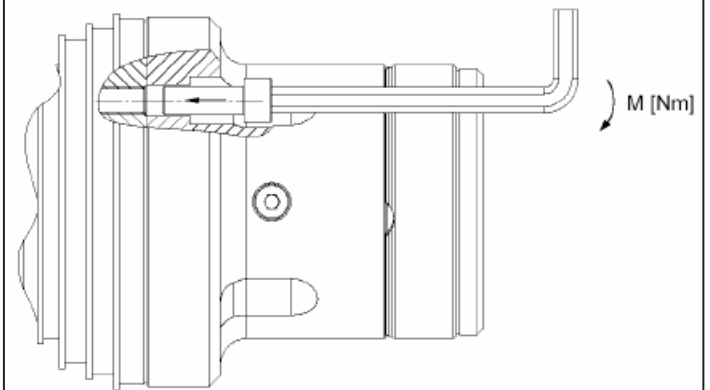
Chuck with rotating ring nut:
Important: All rotating ring nut parts are highly-loaded safety parts made of special steel!
When using special threaded rings use only original SWM-AUTOBLOK blanks. Lock retaining ring against loosening with screw in the proper way.
Always use SWM-AUTOBLOK special key (included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

3

- Mind the proper torque!

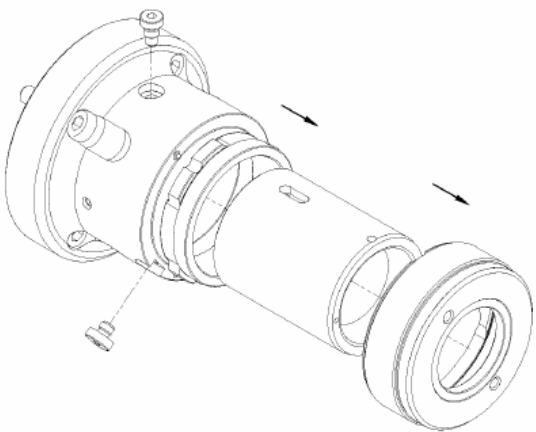
Size	class 8.8		class 12.9	
	F [kN]	M [Nm]	F [kN]	M
M6	10	12	14	16
M8	16	24	28	40
M10	26	45	45	77
M12	38	77	65	135
M14	52	125	90	215
M16	72	190	123	330

- Mount the pressure sleeve with the adaptor to the pressure tube
- Mount the safety screws
- Drive pressure tube in rear position



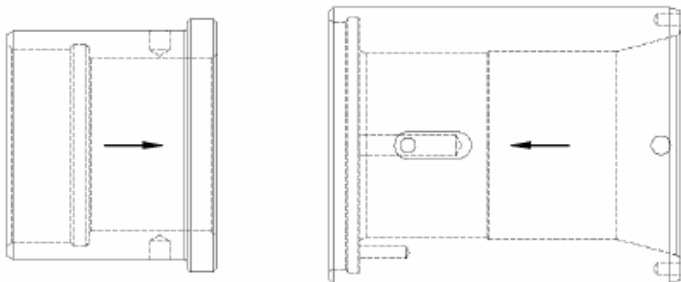
1

- Disassemble the collet chuck



2

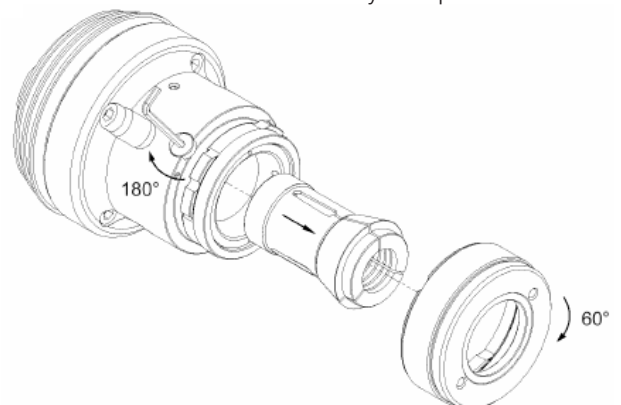
- Mount the adaptor to the pressure sleeve (glue with thread glue)
- Drive pressure tube to the front position
- Mount the chuck body to the machine spindle. See check run-out page 10 (TIR). Adjust, if necessary.



4

- Insert collet
- Attach the bayonet nut and turn it about 60° till it locks
- Tighten the nut-lock screw

→ The chuck is now ready for operation.



Do not operate the chuck without a bayonet nut mounted. The safety screw to prevent rotation to the pressure sleeve might get damaged.

Installation

Check run-out

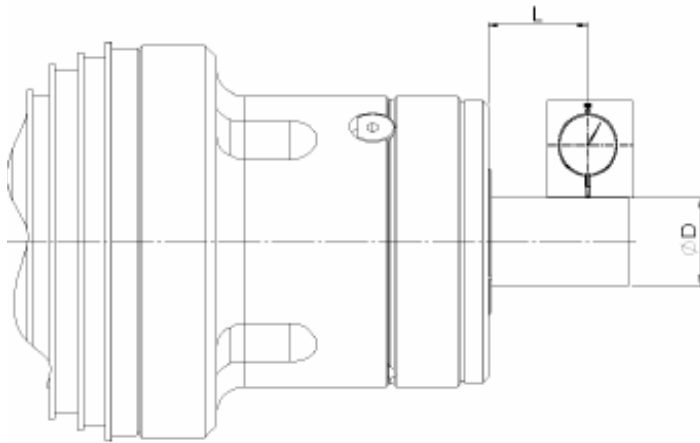
It is necessary to adjust the clamping device in order to provide best possible run-out results.

Therefore loose the mounting screws between chuck and machine spindle.

Check the TIR with a dial indicator in the taper of the pressure sleeve.

After adjusting the chuck, do not forget to retighten the mounting screws with the proper torque.

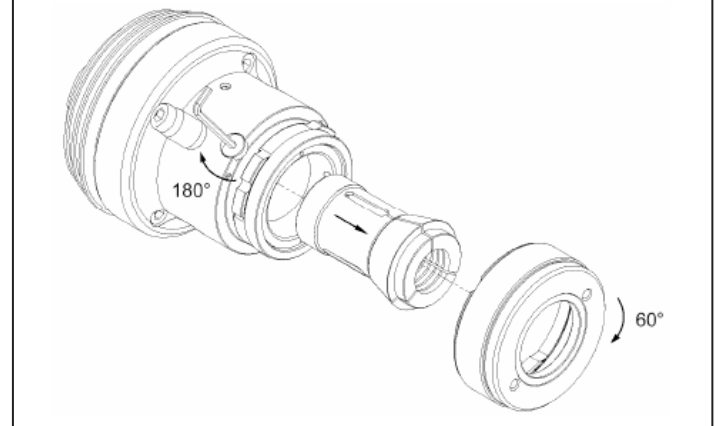
Concentricity of collets according to DIN 6343



Operating

Change the collet

- Loose nut-lock screw about 180°
- Turn bayonet nut about 60°
- Remove collet
- Clean the collet-carrier, regrease slightly
- Insert collet
- Attach the bayonet nut, make sure it locks
- Retighten the nut-lock screw



Important:

Please pay attention to a clean collet-carrier, free of dirt and chips, especially when the collet is changed.

Only use intact, clean and slightly greased collets. Before operation, make sure the nut-lock screw is tightened and the bayonet nut cannot get loose!

Do not operate the chuck without a bayonet nut mounted. The safety screw to prevent rotation to the pressure sleeve might get damaged.

Maintenance

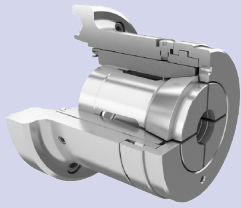
Accurate and regularly maintenance (quarter annually) increases the natural life of the SMW-AUTOBLOK chuck. Please keep the following advices:

- Clean the chuck frequently, especially when changing the collet.
- Make sure the collet-carrier is clean and free of dirt and chips. Dirt reduces the accuracy.
- Do not use aggressive solvents to clean the spindle and the collet chuck. Sealings and the rubber-bonded parts could be damaged.
- Avoid cleaning with compressed-air gun.
- On disassembly, check for cracks and other damages. Renew, if necessary.

- After a crash, a complete check is essential. You will find spare parts on page 14.
- Replace damaged parts only by original spare-parts. Otherwise guarantee is expired. For this we advise to send the chucks to the manufacturer.
- Store the collet chuck clean and protect it from dust or similar influences. Spray it slightly with anti-corrosion agent. Choose a dry place to store.



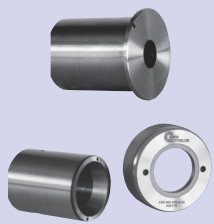
To provide long-term function and accuracy, depending on application conditions, it is necessary to disassemble the chuck and to clean it completely. Check all parts for cracks or damages. Regrease before reassembly.

Supply range: Chuck and mounting bolts


Spindle mounting \ Size	KSZ-MB 40	KSZ-MB 60	KSZ-MB 80 - 193 E
Centering rim standard	Z140 088174	Z170 088175	Z220* 091209*
Centering rim large		Z220 088176	
A 05	088180		
A 06	088179	088178	
A 08		088177	091209*

*Attention: KSZ-MB 80-193E with standard centering rim (Id.-No. 091209) has outside centering 220 mm (and also inside taper A8)

Accessories for KSZ-MB



Spindle mounting \ Size	KSZ-MB 40	KSZ-MB 60	KSZ-MB 80
Blank adapter	0360790	0360810	
Reduction for smaller collets (comprising pressure sleeve and cap nut)	KSZ-MB size 40 to size 26 0360720/0361792	KSZ-MB size 60 to size 40 0360121/0361360	KSZ-MB size 80 to size 40 0362082/0360135 KSZ-MB size 80 to size 60 0362081/0360134

Collets for KSZ-MB 40

Steel collets DIN 6343 series 173 E
ROUND*

∅	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9
Id. No.	012961	012962	012963	012964	012965	012966	012967	012968	012969	012970	012971	012972	012973
∅	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5
Id. No.	012974	012975	012976	012977	012978	012979	012980	012981	012982	012983	012984	012985	012986
∅	16	16.5	17	17.5	18	18.5	19	19.5	20	20.5	21	21.5	22
Id. No.	012987	012988	012989	012990	012991	012992	012993	012994	012995	012996	012997	012998	012999
∅	22.5	23	23.5	24	24.5	25	25.5	26	26.5	27	27.5	28	28.5
Id. No.	013000	013001	013002	013003	013004	013005	013006	013007	013008	013009	013010	013011	013012
∅	29	29.5	30	30.5	31	31.5	32	32.5	33	33.5	34	34.5	35
Id. No.	013013	013014	013015	013016	013017	013018	013019	013020	013021	013022	013023	013024	013025
∅	35.5	36	36.5	37	37.5	38	38.5	39	39.5	40	40.5	41	41.5
Id. No.	013026	013027	013028	013029	013030	013031	013032	013033	013034	013035	013036	013037	013038
∅	42												
Id. No.	013039												

HEXAGONAL**

∅	6	7	8	9	10	11	12	13	14	15	16	17	19
Id. No.	013040	013041	013042	013043	013044	013045	013046	013047	013048	013049	013050	013051	013052
∅	22	24	27	30	32	36							
Id. No.	013053	013054	013055	013056	013057	013058							

SQUARE**

∅	6	7	8	9	10	11	12	13	14	15	16	18	20
Id. No.	013059	013060	013061	013062	013063	013064	013065	013066	013067	013068	013069	013070	013071
∅	22	25	28										
Id. No.	013072	013073	013074										

Rubberflex collets series 36 (recommended for raw part clamping)
ROUND

∅	7-9	9-11	11-13	13-15	15-17	17-19	19-21	21-23	23-25	25-27	27-29	29-31	31-33
Id. No.	013076	013077	013078	013079	013080	013081	013082	013093	013083	013084	013085	013086	013087
∅	33-35	35-37	37-39	39-41	41-43								
Id. No.	013088	013089	013090	013091	013092								

* concentricity according to DIN 6343

** concentricity has to be agreed

Collets for KSZ-MB 60

Steel collets DIN 6343 series 185 E

ROUND*

∅	4	5	6	7	8	9	10	11	12	13	14	15	16
Id. No.	013112	013113	013114	013115	013116	013117	013118	013119	013120	013121	013122	013123	013124
∅	17	18	19	20	21	22	23	24	25	26	27	28	29
Id. No.	013125	013126	013127	013128	013129	013130	013131	013132	013133	016434	013134	013135	013136
∅	30	31	32	33	34	35	36	37	38	39	40	41	42
Id. No.	013137	013138	013139	013140	013141	013142	013143	013144	016435	013145	013146	013147	013148
∅	43	44	45	46	47	48	49	50	51	52	53	54	55
Id. No.	013149	013150	013151	013152	013153	013154	013155	013156	013157	013158	013159	013160	013161
∅	56	57	58	59	60								
Id. No.	013162	013163	013164	013165	013166								

HEXAGONAL**

Id. No.	8	9	10	11	12	13	14	15	16	17	19	22	24
	013167	013168	013169	013170	013171	013172	013173	013174	013175	013176	013177	013178	013179
Id. No.	27	30	32	36	41	50							
	013180	013181	013182	013183	019312	019592							

SQUARE**

Id. No.	7	8	9	10	11	12	13	14	15	16	17	18	20
	013184	013185	013186	013187	013188	013189	013190	013191	013192	013193	019110	013194	013195
Id. No.	22	25	28	30	32	35	36	40					
	013196	013197	013198	013199	013200	019111	013201	017800					

Rubberflex collets series 52 (recommended for raw part clamping)

ROUND

∅	35-37	37-39	39-41	41-43	43-45	45-47	47-49	49-51	51-53	53-55	55-57	57-59	59-61
Id. No.	013203	013204	013205	013206	013207	013208	013209	013210	013211	013212	013213	013214	013215

Collets for KSZ-MB 80

Steel collets DIN 6343 series 193 E

ROUND*

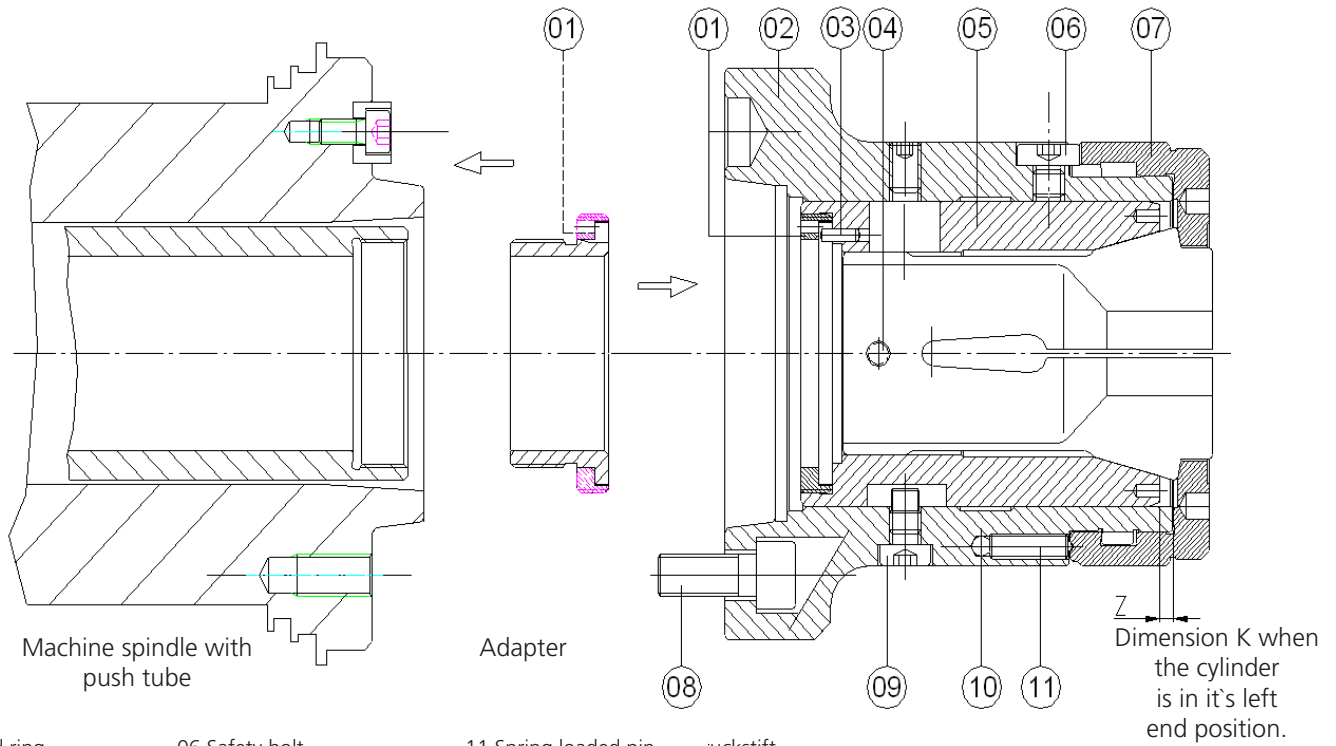
∅	20	21	22	23	24	25	26	27	28	29	30	31	32
Id. No.	013237	013238	013239	013240	013241	013242	013243	013244	013245	013246	013247	013248	013249
∅	33	34	35	36	37	38	39	40	41	42	43	44	45
Id. No.	013250	013251	013252	013253	013254	013255	013256	013257	013258	013259	013260	013261	013262
∅	46	47	48	49	50	51	52	53	54	55	56	57	58
Id. No.	013263	013264	013265	013266	013267	013268	013269	013270	013271	013272	013273	013274	013275
∅	59	60	61	62	63	64	65	66	67	68	69	70	71
Id. No.	013276	013277	013278	013279	013280	013281	013282	013283	013284	013285	013286	013287	013288
∅	72	73	74	75	76	77	78	79	80				
Id. No.	013289	013290	013291	013292	013293	013294	013295	013296	013297				

Further collets are available on request.

* concentricity according to DIN 6343

** concentricity has to be agreed

Spare parts



- 01 Threaded ring
- 02 Body
- 03 Pin
- 04 Plug
- 05 Pressure sleeve

- 06 Safety bolt
- 07 Bayonet cap
- 08 Mounting bolts
- 09 Safety bolt
- 10 Ball

- 11 Spring loaded pin

uckstift
Dimension K when the cylinder is in its left end position.

Id. Nr.	Type	01	02	03	04	05	06
088181	30 A4	036.094/0	036.117/1	DIN 7343 - 3x10	-	036.092/0	036.118/1
088180	40 A5	036.018/0	036.170/1	DIN 7343 - 3x10	036.022/0	036.065/0	036.118/1
088179	40 A6	036.018/0	036.171/1	DIN 7343 - 3x10	036.022/0	036.065/0	036.118/1
088178	60 A6	036.018/1	036.134/0	DIN 7343 - 3x10	036.022/1	036.066/0	036.118/1
088177	60 A8	036.018/1	036.172/1	DIN 7343 - 3x10	036.022/1	036.118/1	036.172/1
088174	40 Z140	036.018/0	036.174/1	DIN 7343 - 3x10	036.022/0	036.065/0	036.118/1
088175	40 Z170	036.018/1	036.175/1	DIN 7343 - 3x10	036.022/1	036.118/1	036.175/1
088176	60 Z220	036.018/1	036.182/1	DIN 7343 - 3x10	036.022/1	036.066/0	036.118/1

Id. Nr.	Type	07	08	09	10	11
088181	30 A4	036.110/2	DIN 912 - M10x30	036.118/0	DIN 5401 - Ø 5 Kl. 3	Nr. 304-06
088180	40 A5	036.179/0	DIN 912 - M10x30	036.020/0	DIN 5401 - Ø 5 Kl. 3	Nr. 304-06
088179	40 A6	036.179/1	DIN 912 - M12x30	036.020/0	DIN 5401 - Ø 5 Kl. 3	Nr. 304-06
088178	60 A6	036.135/0	DIN 912 - M12x30	036.020/1	DIN 5401 - Ø 5 Kl. 3	Nr. 304-06
088177	60 A8	036.135/0	DIN 912 - M16x35	036.020/1	DIN 5401 - Ø 5 Kl. 3	Nr. 304-06
088174	40 Z140	036.179/0	DIN 912 - M10x20	036.020/0	DIN 5401 - Ø 5 Kl. 3	Nr. 304-06
088175	40 Z170	036.135/0	DIN 912 - M12x25	036.020/1	DIN 5401 - Ø 5 Kl. 3	Nr. 304-06
088176	60 Z220	036.135/0	DIN 912 - M16x35	036.020/1	DIN 5401 - Ø 5 Kl. 3	Nr. 304-06

Id. Nr.	Type	force on push tube (daN)	Speed (min ⁻¹)	Z (mm)
088181	30 A4	max. 2000	max. 8000	4 - 5
088180	40 A5	max. 2500	max. 6000	5 - 6
088179	40 A6	max. 2500	max. 6000	5 - 6
088178	60 A6	max. 3000	max. 5000	6 - 7
088177	60 A8	max. 3000	max. 5000	6 - 7
088174	40 Z140	max. 2500	max. 6000	5 - 6
088175	40 Z170	max. 3000	max. 5000	6 - 7
088176	60 Z220	max. 3000	max. 4000	6 - 7

Trouble shooting

Problem	Possible cause	Remedy
Radial run-out fault to the workpiece	Chuck is not adjusted properly or soiled	Adjust the chuck with a dial indicator. Mind to tighten the mounting screws after adjusting
Axial run-out fault to the workpiece	Dirt on the front plane to the spindle	Unmount the chuck, clean, mount and readjust
Shape-fault to the workpiece	Workpiece is elastic deformed during clamping	Reduce clamping force, pay attention to cutting force
Markings on the clamping surface	Punctual or linear workpiece clamping	Wide difference between clamping diameter and collet bore. Eventually rework or regrind the collet bore
Too low clamping force	Wrong clamping head	Mount suitable collet
	Contaminated	Disassemble the chuck, clean parts and check for damages. Reassemble and regrease.
	Low hydraulic pressure	Check the pressure to your operating cylinder. Check for leaks. Increase pressure
	Damaged operation cylinder	Check operating cylinder for leaks and damages. Replace sealings.
Workpiece not clamped properly	Wrong switching position	Dead-Length: Clamping happens on pushing. Switch machine control to: „I.D. clamping“ End-Stop and Through-hole chucks operate on pulling: „O.D. clamping“
	Clamping sleeve got loose, relocation of clamping position	Make sure, the safety screw is mounted and not damaged.

12-months warranty

Product: Collet 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 item such as jaws, clamping inserts, locators, center points and complete mechanical or hydraulic centering inserts.
- Part touching details are not covered by the warranty.
- Only original SMW- Autoblok parts have been used such as jaws, clamping inserts, locators, center points and complete mechanical or hydraulic centering inserts.
- 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.

Status as of Oct. 28, 2004

24-months warranty -optional-

Product: Collet Chuck

For an 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 item such as jaws, clamping inserts, locators, center points and complete mechanical or hydraulic centering inserts.
- Part touching details are not covered by the warranty.
- Only original SMW- Autoblok parts have been used such as jaws, clamping inserts, locators, center points and complete mechanical or hydraulic centering inserts.
- 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.


Status as of Oct. 28, 2004


Product : _____
Serialno. : _____

 Documented regular maintenance is the basis for warranty and long service life!

Maintained according to instruction manual	 <input type="checkbox"/> Yes
Operating hours	
Name	
Date	
Signature	
Remarks	

Maintained according to instruction manual	 <input type="checkbox"/> Yes
Operating hours	
Name	
Date	
Signature	
Remarks	

Maintained according to instruction manual	 <input type="checkbox"/> Yes
Operating hours	
Name	
Date	
Signature	
Remarks	

Maintained according to instruction manual	 <input type="checkbox"/> Yes
Operating hours	
Name	
Date	
Signature	
Remarks	

Product : _____

Serialno. : _____

Documented regular maintenance is the basis for warranty and long service life!


Maintained according to instruction manual	<input type="checkbox"/> Yes
Operating hours	
Name	
Date	
Signature	
Remarks	


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Operating hours	
Name	
Date	
Signature	
Remarks	


Maintained according to instruction manual	<input type="checkbox"/> Yes
Operating hours	
Name	
Date	
Signature	
Remarks	


Maintained according to instruction manual	<input type="checkbox"/> Yes
Operating hours	
Name	
Date	
Signature	
Remarks	


Product : _____
Serialno. : _____

 Documented regular maintenance is the basis for warranty and long service life!

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Operating hours	
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Date	
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Remarks	


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Date	
Signature	
Remarks	


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Operating hours	
Name	
Date	
Signature	
Remarks	


Product : _____


Serialno. : _____

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Signature	
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Date	
Signature	
Remarks	


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Operating hours	
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Remarks	


Product : _____
Serialno. : _____

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Signature	
Remarks	


Maintained according to instruction manual	 <input type="checkbox"/> Yes
Operating hours	
Name	
Date	
Signature	
Remarks	


Product : _____


Serialno. : _____

 Documented regular maintenance is the basis for warranty and long service life!

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Remarks	

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Operating hours	
Name	
Date	
Signature	
Remarks	

Maintained according to instruction manual	 <input type="checkbox"/> Yes
Operating hours	
Name	
Date	
Signature	
Remarks	

Hiermit bestätigt die vom Betreiber/ Anwender
beauftragte Person

This certifies the operator assigned by the opera-
ting 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./ S.N. :

Bitte ausgefüllt zurückschicken an:

Please send the filled in back to:

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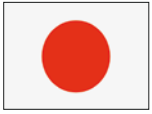
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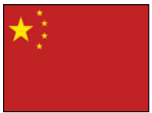
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