



ROTA-S *plus* 2.0

**Jaw quick-change chuck with
angled serrated base jaw
interface**

Versatile useable manual lathe chuck with jaw quick-change system for jaw change in 60 seconds.

The ROTA-S plus 2.0 manual lathe chuck is specifically designed for storage solutions and conventional lathes without hydraulic or pneumatic cylinders. The jaw quick-change system makes the chucks suitable for flexible production starting from batch size 1. There is no need to rebores the jaws on the chuck. The angled jaw interface makes the manual lathe chucks compatible with the predecessor ROTA-S ROTA-S plus as well as the "F" system (Forkardt).



Advantages – Your benefits

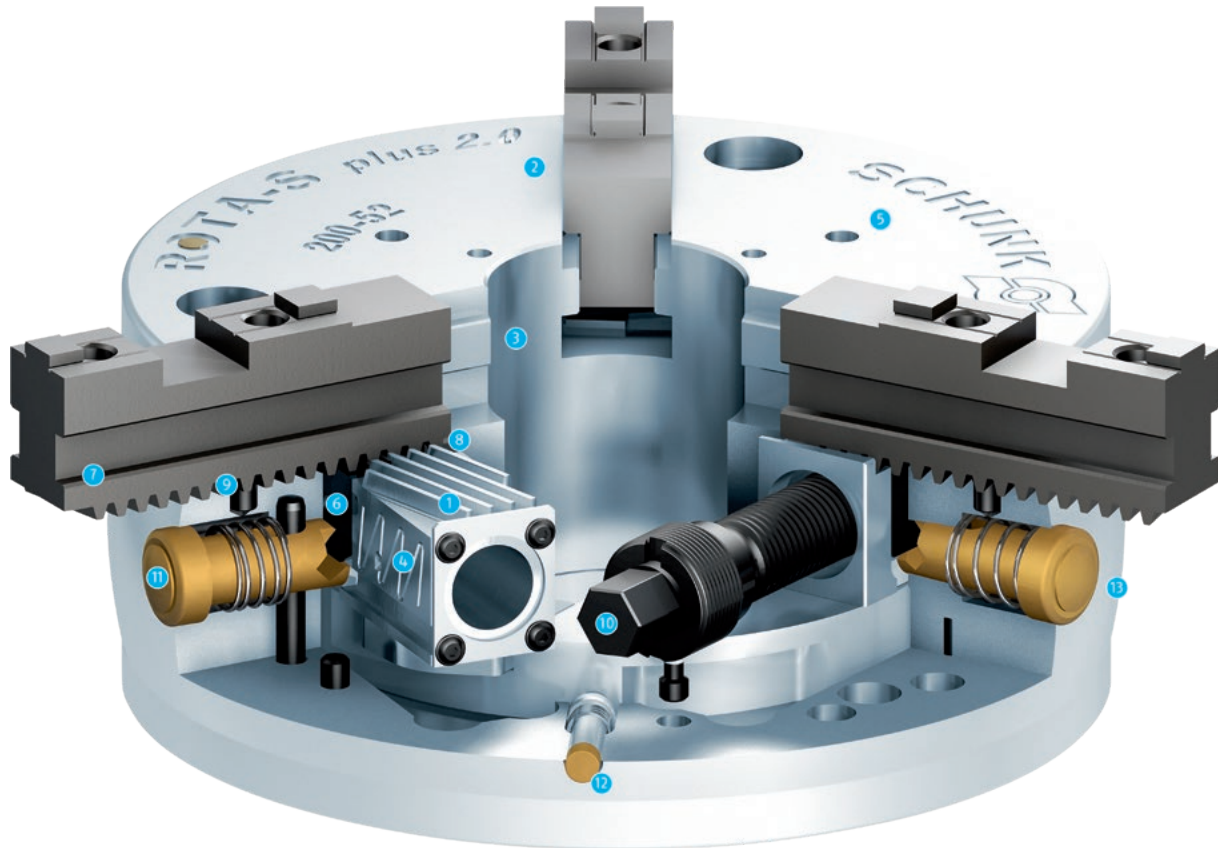
- + Convenient jaw quick-change system**
Minimizing set-up times and costs
- + Large through-hole**
Machining all standard pipe diameters
- + High efficiency of the wedge bar system**
Process-reliable clamping due to high clamping forces
- + High jaw quick-change repeat accuracy**
No reboring of already machined jaws necessary
- + Visual safety devices**
Maximum operating safety
- + Optimized lubrication system**
Consistently high clamping forces ensured
- + Modular center sleeve system**
Optimal adjustment to new clamping tasks thanks to the exchangeable center sleeves
- + Excellent clamping force/torque ratio**
Perfect use of the machine performance
- + Angled serrated base jaws SFG**
Compatible with the ROTA-S plus and "F" system (Forkardt)
- + Ergonomic, light safety spanner wrench**
Ensures easy operation
- + All sides of the functional parts are hardened and ground**
High run-out and jaw change repeat accuracy

Technical data

Description	Max. rotational speed [min ⁻¹]	Max. clamping force [kN]	Max. torque [Nm]	Stroke/jaw [mm]	Through-hole [mm]
ROTA-S plus 2.0 160-42	5400	65	80	6.5	42
ROTA-S plus 2.0 200-52	4800	100	120	7	52
ROTA-S plus 2.0 250-62	4200	160	210	7.7	62
ROTA-S plus 2.0 315-92	3400	180	220	9.8	92
ROTA-S plus 400-102	2200	230	280	12	102
ROTA-S plus 500-162	1500	270	320	12	162
ROTA-S plus 630-252	1000	270	350	15	252
ROTA-S plus 800-252	1000	270	350	15	252
ROTA-S plus 1000-402	900	270	350	15	402

Function ROTA-S plus 2.0

The tangentially movable wedge bars in the chuck are driven by turning the thread spindle. The wedge bars transmit the force to the base jaws, generating a jaw movement that is synchronous and radial to the axis of rotation.



- 1 Wedge bar actuation system**
It offers high run-out accuracies even at high speeds
- 2 Hardened and extremely rigid base body**
Therefore a longer service life at highest precision.
Even with maximum clamping force
- 3 Large through-hole**
For machining all conventional bar diameters (optionally: with enlarged through-hole)
- 4 Optimized lubrication system**
For a high level of efficiency
- 5 Mounting thread**
For workpiece stops or cover plates
- 6 Jaw quick-change system**
Shortest set-up times due to individual unlocking of jaws
- 7 Base jaws with diagonal serration (SFG)**
Compatible with the ROTA-S plus and "F" system (Forkardt)
- 8 Locking mechanism**
Ensures secure intermeshing of the base jaw serration with the wedge bar serration
- 9 Plunger pin**
For pre-positioning the base jaw
- 10 Actuation via hexagon connection**
This ensures easy operation
- 11 Push button for jaw change**
For shortest set-up times
- 12 Indicator pin**
For visual stroke monitoring of the manual lathe chuck
- 13 Special shaping with "edge profile for coolant run-off"**
Therefore less coolant is in the spindle bearing or machine spindle

Spindel with hexagon connection

The vise can be easily actuated via a standard hexagon connection using either conventional socket wrenches, extensions or torque wrenches.



Wedge bar system with wiper

Wipers at the end of the wedge bars prevent dirt and fine chips from penetrating into the lathe chuck and the chuck mechanism.



Central lubrication system

Two lubrication nipples positioned on the chuck body facilitate lubrication of all functional surfaces. The special shape of the grease grooves ensures constant lubrication of the friction surfaces. This improves the clamping behavior during operation.



Maximum operating safety

To ensure safe working, an indicator pin shows when the chuck mechanism is close to the stroke end position. As soon as the indicator pin moves outwards, the workpiece is no longer clamped correctly and machining must not be started.

1 Indicator pin



Correct jaw change

When the base jaw is fully inserted into the guideway, the slide positions the base jaw serration for the wedge bar. The base jaw holds the locking slide in the release position. The chuck can now be actuated.

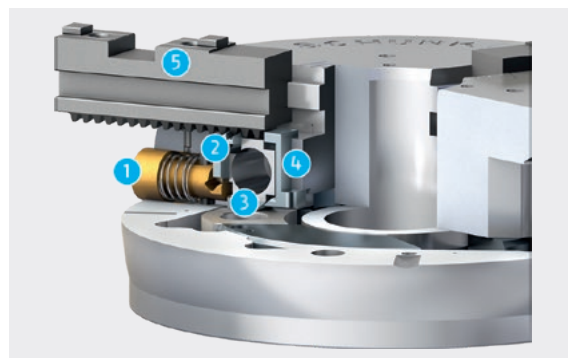
- ① Push button
- ② Slide
- ③ Traverse slide
- ④ Locking slide
- ⑤ Base jaw



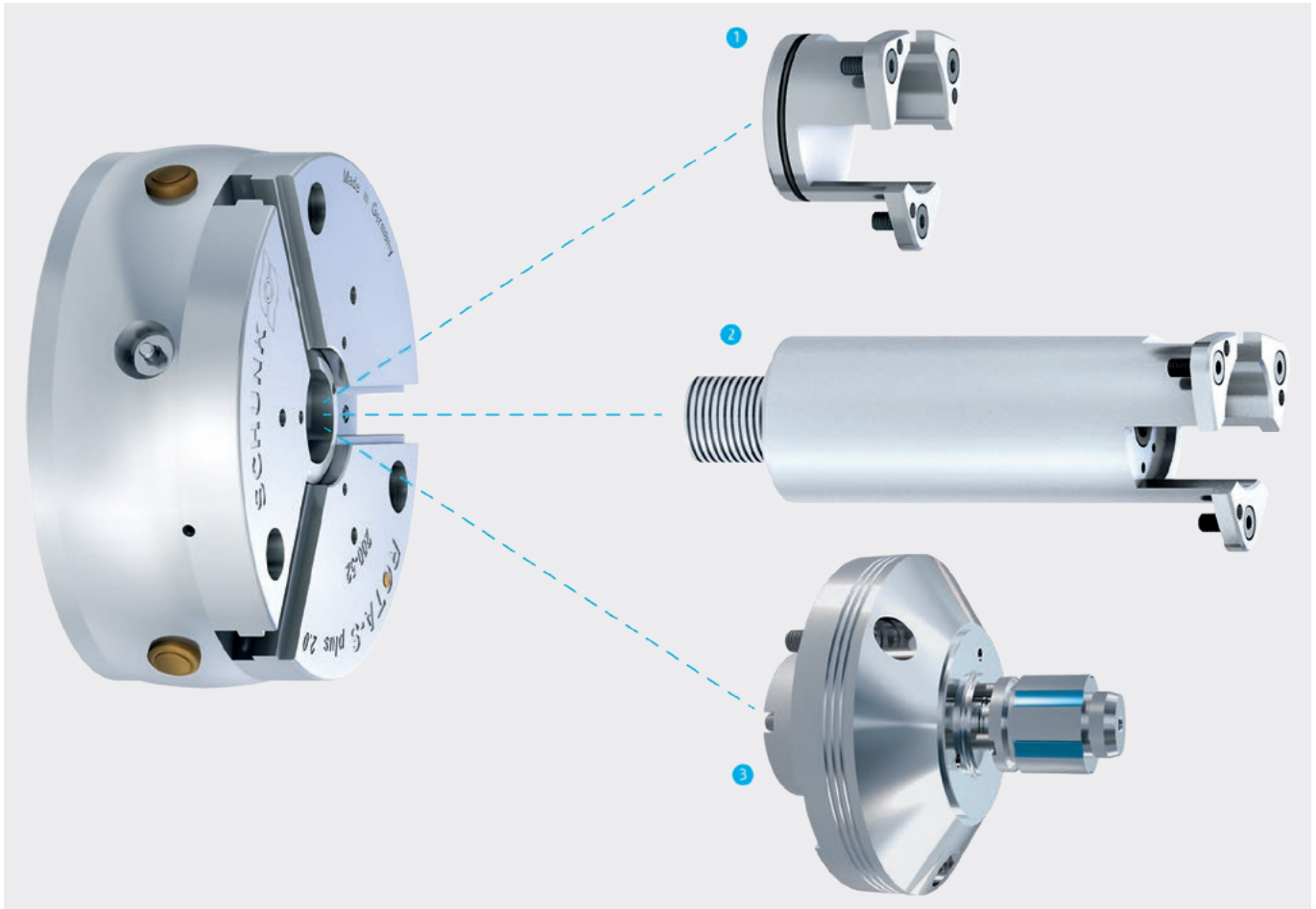
Incorrect jaw change

If the base jaw is not fully inserted into the guideway, the locking slide prevents the chuck being clamped.

- ① Push button
- ② Slide
- ③ Traverse slide
- ④ Locking slide
- ⑤ Base jaw



Modular center sleeve system



The modular center sleeve system increases flexibility for the most various applications in everyday life.

1 Closed center sleeve

The closed center sleeve prevents penetration of chips and coolant into the through-hole.

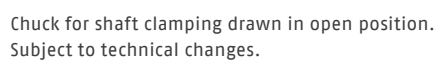
2 Adjustable stop in the center sleeve

The adjustable stop ensures that all workpieces are stopped with high repeat accuracy in the same selectable position. This makes handling quick and easy.

3 Expansion arbor

To clamp small inner clamping diameters, the ROTA-S plus 2.0 in sizes $\varnothing$ 200 mm and $\varnothing$ 250 mm can be retrofitted with an expansion arbor. However, a taper must be ground into the chuck body in order to do this.

① Modular center sleeve system up to size 315 possible.



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Technical data

Spindle type	Spindle size	ID	Max. rotational speed [min ⁻¹]	Max. clamping force [kN]	Max. torque [Nm]	Weight [kg]
-	Z750	0814280	1000	270	350	465
ISO 702-1	Nr. 15	0814284	1000	270	350	465

Scope of delivery

Chuck, 1 set of base jaws with screws, chuck mounting screws, actuation key, eye bolt and operating manual

Note

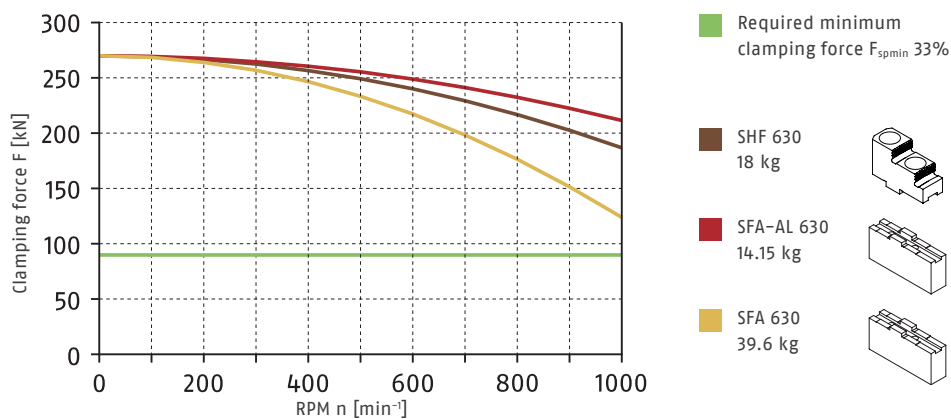
Enlargement of the through-hole

Enlargement of the through-hole to a maximum $\varnothing$ 270 mm available upon request.

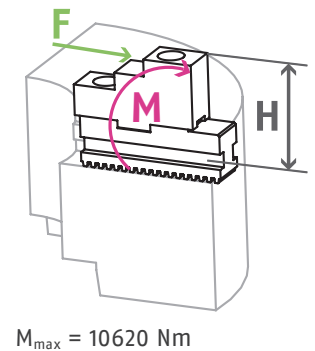
Further technical data

Chuck type	Through-hole [mm]	Stroke/jaw [mm]	Tooth pitch [mm]	Center jaw height [mm]
ROTA-S plus 800-252	252	15	8.5	118

Clamping force-RPM-diagram

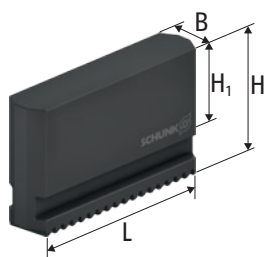


Load of base jaw guidance

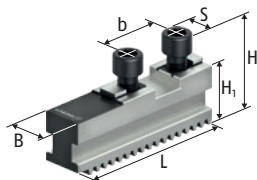


Base jaws, Soft monoblock jaws

with angled serration



SMB
Soft monoblock jaws



SFG
Base jaws

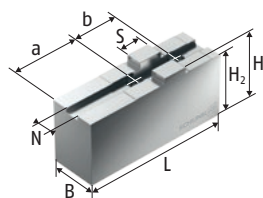
Technical data

Chuck type	Description	ID	N [mm]	S [mm]	B [mm]	H [mm]	H1 [mm]	L [mm]	b [mm]	Screws	m/SET [kg]
ROTA-S plus 800-252	SMB 630-800	0163106			65	130	88	230			40.2
ROTA-S plus 800-252	SFG 630-400	0157109	30	18	65	62	58	230	60	M16x1.5	16.2
ROTA-S plus 800-252	SFG 800	0157107	40	24	65	62	58	264	82	M20	18.7

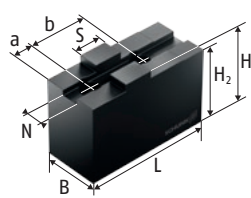
Our complete range of chuck jaws can be found online in our Chuck Jaw Quickfinder and on schunk.com

Soft top jaws

with tongue and groove



SFA-AL
Soft top jaws



SFA
Soft top jaws

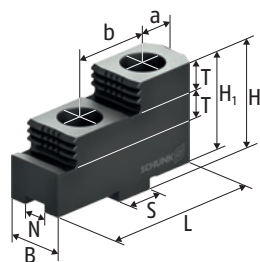
Technical data

Chuck type	Description	ID	N [mm]	S [mm]	B [mm]	H [mm]	H2 [mm]	L [mm]	a [mm]	b [mm]	Screws	m/SET [kg]
ROTA-S plus 800-252	SFA 630	0153106	24	40	65	118	110	260	129	82	M20	39.6
ROTA-S plus 800-252	SFA-AL 630	0172106	24	40	65	118	110	260	129	82	M20	14.2

Our complete range of chuck jaws can be found online in our Chuck Jaw Quickfinder and on [schunk.com](https://www.schunk.com)

Hard stepped top jaws

with tongue and groove



SHF
Hard stepped top jaws

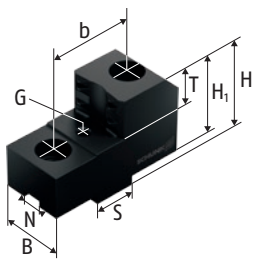
Technical data

Chuck type	Description	ID	N [mm]	S [mm]	B [mm]	H [mm]	H1 [mm]	L [mm]	T [mm]	a [mm]	b [mm]	Screws	m/SET [kg]
ROTA-S plus 800-252	SHF 630	0155106	24	40	65	105	97	185	30	41	82	M20	18.0

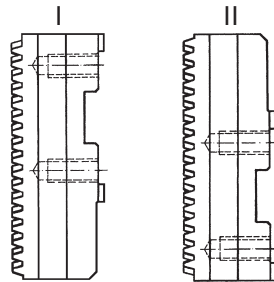
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Claw jaws

with tongue and groove



SZKA
Claw jaws



Position of base jaws

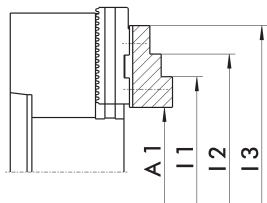
Technical data

Chuck type	Clamping range ØD	Swing diameter SDmax	Position of base jaws	Description	ID	N	S	B	H	H1	L	T	G	b	Screws	m/SET
	[mm]	[mm]				[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[kg]
ROTA-S plus 800-252	281 – 578	800	I	SZKA 409	0139170	18	30	50	78	71	126	33	M8	60	M16	6.0
ROTA-S plus 800-252	383 – 680	800	I	SZKA 412	0139173	18	30	50	78	71	103	33	M8	60	M16	5.1
ROTA-S plus 800-252	269 – 569	872	I	SZKA 631	0139200	24	40	65	97	89	173	42	M8	82	M20	13.5
ROTA-S plus 800-252	430 – 729	872	I	SZKA 632	0139201	24	40	65	97	89	145	42	M8	82	M20	11.8
ROTA-S plus 800-252	50 – 324	807	II	SZKA 409	0139170	18	30	50	78	71	126	33	M8	60	M16	6.0
ROTA-S plus 800-252	125 – 425	807	II	SZKA 412	0139173	18	30	50	78	71	103	33	M8	60	M16	5.1
ROTA-S plus 800-252	81 – 331	873	II	SZKA 631	0139200	24	40	65	97	89	173	42	M8	82	M20	13.5
ROTA-S plus 800-252	194 – 491	873	II	SZKA 632	0139201	24	40	65	97	89	145	42	M8	82	M20	11.8

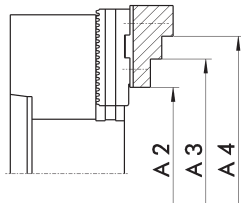
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Hard stepped top jaws

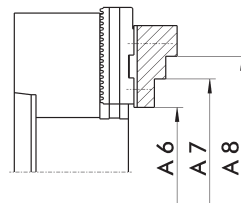
with tongue and groove



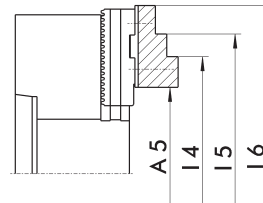
Position of base jaws II



Position of base jaws I



Position of base jaws II



Position of base jaws I

O.D. clamping

Chuck type	Description	ID	A1 [mm]	A3 [mm]	A4 [mm]	A5 [mm]	A7 [mm]	A8 [mm]
ROTA-S plus 800-252	SHF 630	0155106	24 - 323	268 - 566	427 - 726	262 - 561	28 - 329	187 - 489

I.D. clamping

Chuck type	Description	ID	I1 [mm]	I2 [mm]	I4 [mm]
ROTA-S plus 800-252	SHF 630	0155106	189 - 485	346 - 646	424 - 723

Accessories

Clamping force tester

For measuring the jaw clamping force of 2, 3 and 6-jaw chucks up to 6,000 RPM.



Suitable for	Description	ID
ROTA-S plus 800-252	IFT Set	1404235

Extension set for large chucks

For use as an extension of the IFT measuring head for measuring the jaw clamping force of large chucks of Ø 400 mm and more.



Suitable for	Description	ID
ROTA-S plus 800-252	IFT adapter set	1498512

Torque wrench

Torque wrench for actuation of SCHUNK manual lathe chucks.



Suitable for	Description	ID
ROTA-S plus 800-252	SSH-D-3/4" 80-400	1301023

Square actuation wrench

Spanner wrench for manual actuation of the SCHUNK ROTA-S plus and ROTA-G manual lathe chucks.



Suitable for	Description	ID
ROTA-S plus 800-252	SSH-VK SW24-420	8700132

Long square actuation wrench

Spanner wrench for manual actuation of the SCHUNK ROTA-S plus and ROTA-G manual lathe chucks.



Suitable for	Description	ID
ROTA-S plus 800-252	SSH-VL SW24-600	88004486

Square connection for torque wrench

Extension for torque wrench for actuation of SCHUNK ROTA-S plus and ROTA-G manual chucks.



Suitable for	Description	ID
ROTA-S plus 800-252	SAV-I 3/4"-SW24	8705087

Sealing plug

For closing the through-hole on manual lathe chucks ROTA-S plus 2.0, ROTA-S plus and ROTA-G.



Suitable for	Description	ID
ROTA-S plus 800-252	VST Ø252	8702872

Grease

LINOMAX plus

High-performance grease as standard for regularly lubricating SCHUNK manual and power lathe chucks and steady rests.



Bundle	Description	ID
Cartridge	LINOMAX plus cartridge	1342585
Can	LINOMAX plus can	1342586
Bucket	LINOMAX plus bucket	1342587

Grease gun

Auxiliary tools for lubrication of all kinds of SCHUNK products. The grease gun can be used for cartridges of all types of SCHUNK grease.



Bundle	Description	ID
Cartridge	Grease gun	9900543



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