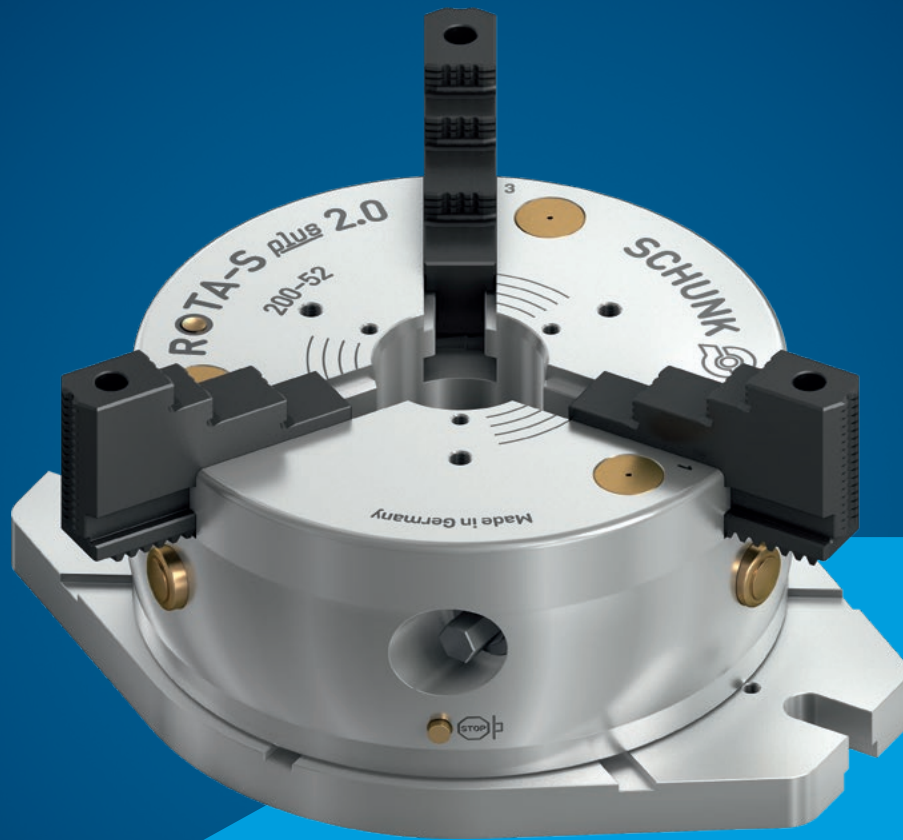


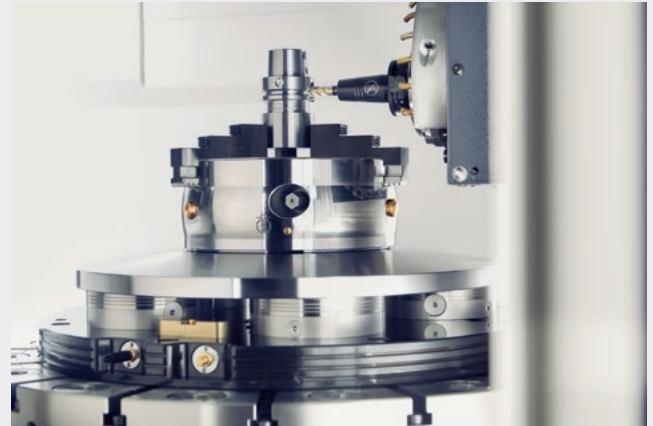


ROTA-S *plus* 2.0

**Jaw quick-change chuck for
stationary use**

Universally applicable manual lathe chucks for stationary applications with jaw quick-change system for jaw change within 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 lathe chucks suitable for flexible manufacturing from batch size 1. The manual lathe chucks can be quickly and easily attached to the machine table using a base plate or, in combination with VERO-S, can also be automatically inserted and removed using a robot.



Advantages – Your benefits

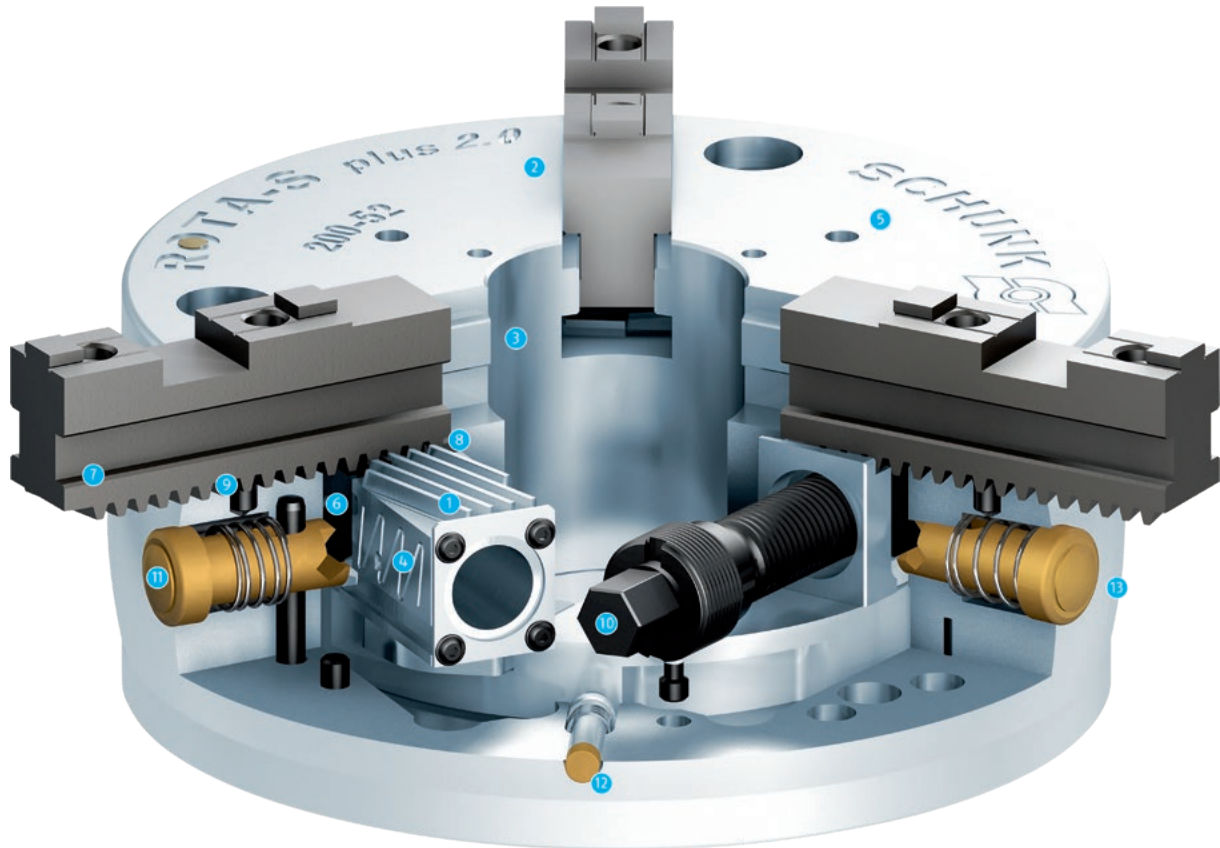
- + Convenient jaw quick-change system**
Minimizing set-up times and costs
- + High efficiency of the wedge bar system**
Process-reliable clamping due to high clamping forces
- + High jaw quick-change repeat accuracy**
No reboring of already machined jaws necessary
- + Visual safety devices**
Maximum operating safety
- + Optimized lubrication system**
Consistently high clamping forces ensured
- + Angled serrated base jaws SFG**
Compatible with the ROTA-S plus and "F" system (Forkardt)
- + All sides of the functional parts are hardened and ground**
Ensures a long service life

Technical data

Description	Max. clamping force [kN]	Max. torque [Nm]	Stroke/jaw [mm]
ROTA-S plus 2.0 160	65	80	6.5
ROTA-S plus 2.0 200	100	120	7
ROTA-S plus 2.0 250	160	210	7.7
ROTA-S plus 2.0 315	180	220	9.9
ROTA-S plus 400	230	280	12
ROTA-S plus 500	270	320	12

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.



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

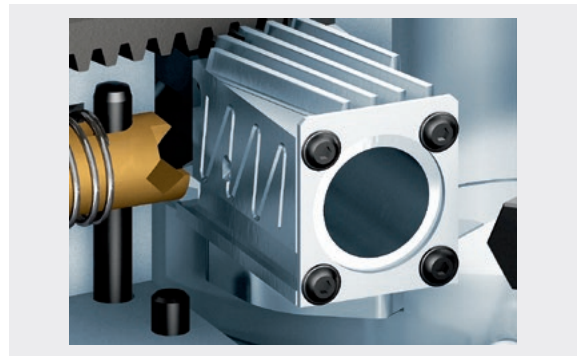
Spindel with hexagon connection

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



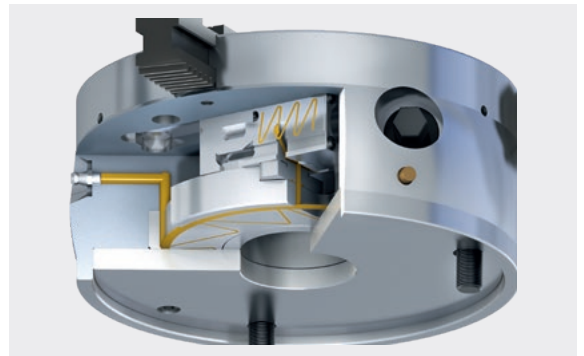
Wedge bar system with wiper

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

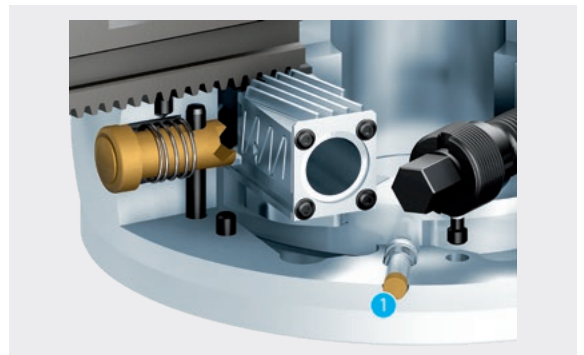
Two lubrication nipples positioned on the chuck body facilitate lubrication of all functional surfaces. The special shape of the grease grooves ensures constant lubrication of the friction surfaces. This improves the clamping behavior during operation.



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.

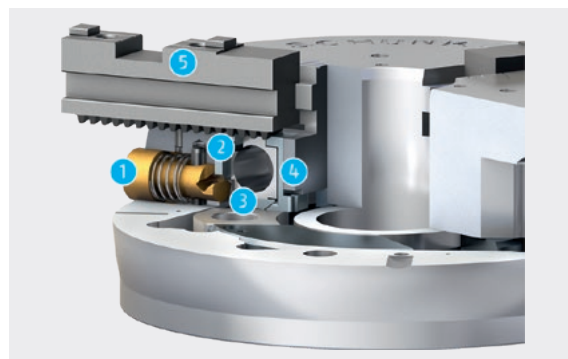
1 Indicator pin



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.

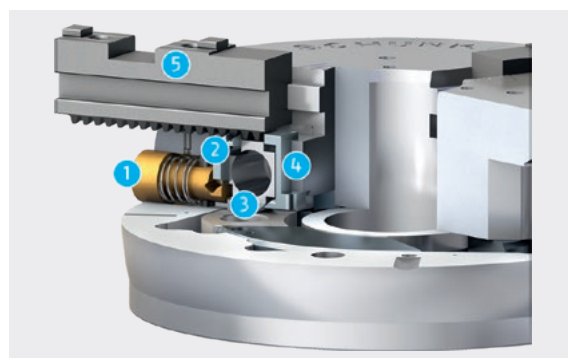
- ① Push button
- ② Slide
- ③ Traverse slide
- ④ Locking slide
- ⑤ Base jaw



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



Stationary 3-jaw chuck, manually actuated

With straight recess mount "Z"

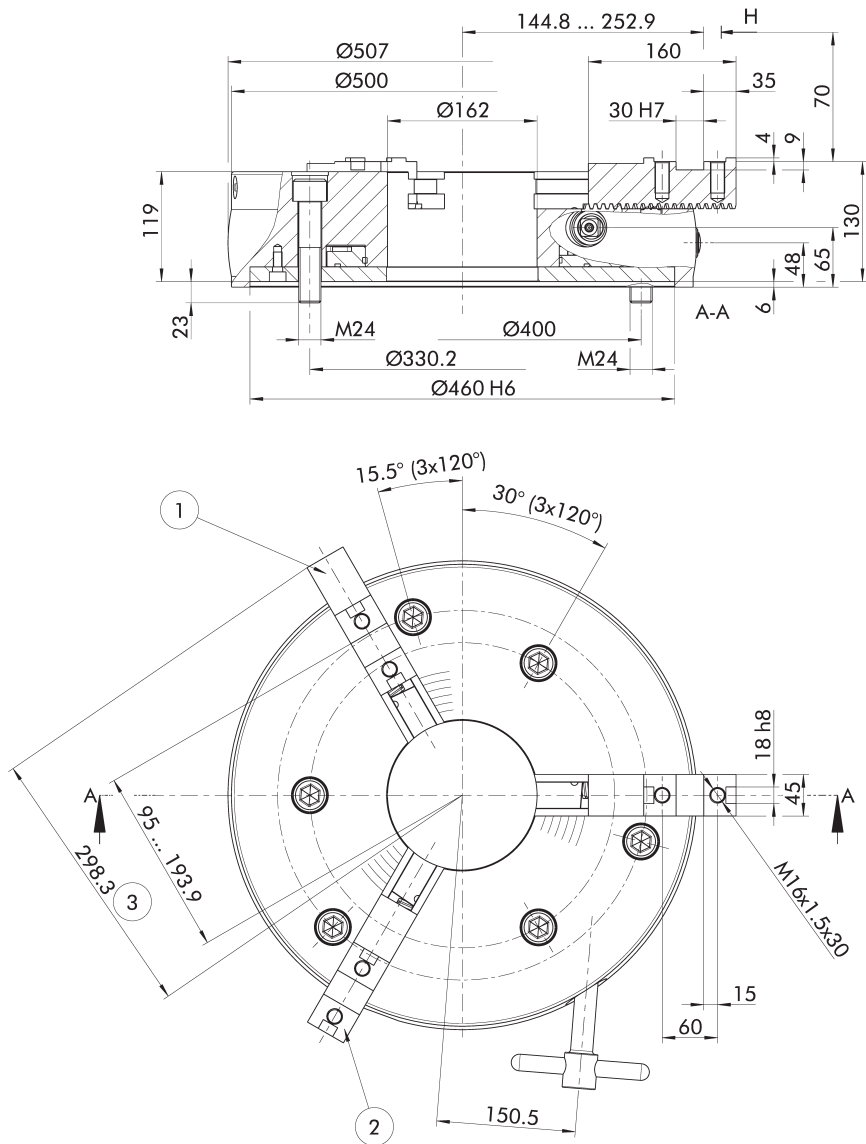
Scope of delivery

Manual lathe chuck, base jaws with tongue and groove, mounting screws, spanner wrench, SCHUNK magnets, quick guide, operating manual; without top jaws

Technical data

Description	ID	Mounting	Max. clamping force [kN]	Max. torque [Nm]	Stroke per jaw [mm]	Tooth pitch [mm]	Weight [kg]
ROTA-S plus 500 Z460-SFG	0410016	Centering recess	270	320	12	8.5	152

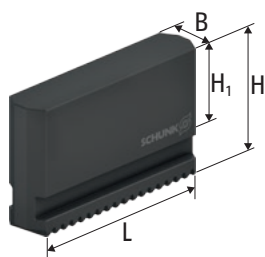
2-jaw chuck available upon request



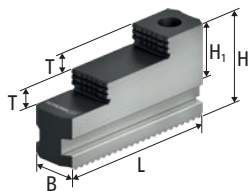
Subject to technical changes.

- ① Position of base jaws I
- ② Position of base jaws II
- ③ Swing diameter radius

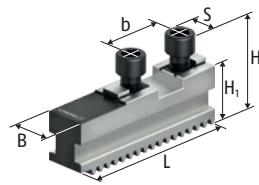
Base jaws, Hard stepped block jaws, Soft monoblock jaws with angled serration



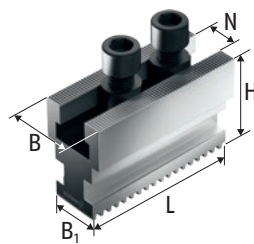
SMB
Soft monoblock jaws



STF
Hard stepped block jaws



SFG
Base jaws



STB
Base jaws

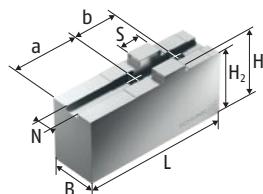
Technical data

Chuck type	Description	ID	N [mm]	S [mm]	B [mm]	B1 [mm]	H [mm]	H1 [mm]	L [mm]	T [mm]	b [mm]	Screws	m/SET [kg]
ROTA-S plus 500	SMB 400	0163104			45		93	53	176				15.0
ROTA-S plus 500	SMB 500	0163105			45		130	90	176				21.6
ROTA-S plus 500	SFG 400	0157104	30	18	45		55	51	160		60	M16x1.5	6.4
ROTA-S plus 500	SFGL 400	0157124	30	18	45		55	51	200		60	M16x1.5	8.1
ROTA-S plus 500	SFG-V 400	0157154	30	18	45		55	51	165		60	M16x1.5	6.6
ROTA-S plus 500	STB 400-1	0156104	21		54	45	80		160			M16	12.0
ROTA-S plus 500	STB 400-2	0156105	25.5		64	45	82		160			M20	12.2
ROTA-S plus 500	STF 400	0161104			45		93	52	167.1	20			10.8

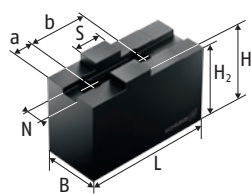
Our complete range of chuck jaws can be found online in our Chuck Jaw Quickfinder and on schunk.com

Soft top jaws

with tongue and groove



SFA-AL
Soft top jaws



SFA
Soft top jaws

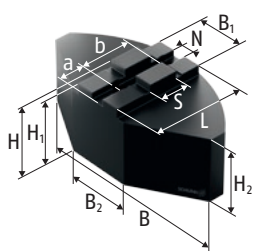
Technical data

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 500	SFA 400	0153104	18	30	50	80	73	180	85	60	M16	13.7
ROTA-S plus 500	SFA-AL 400	0172105	18	30	50	80	73	180	85	60	M16	6.3
ROTA-S plus 500	SFA 400-C1	0154116	18	30	60	80	73	130	50	60	M16	11.8
ROTA-S plus 500	SFA 400-C3	0154118	18	30	60	100	93	155	75	60	M16	18.2
ROTA-S plus 500	SFA 400-C4	0154119	18	30	60	120	113	155	75	60	M16	22.1
ROTA-S plus 500	SFA 400-C5	0154120	18	30	80	80	73	130	50	60	M16	16.0
ROTA-S plus 500	SFA 400-C6	0154125	18	30	58	180	173	160	80	60	M16	33.6
ROTA-S plus 500	SFA 400-C7	0154135	18	30	96	115	108	115	35	60	M16	25.2

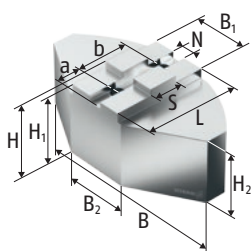
Our complete range of chuck jaws can be found online in our Chuck Jaw Quickfinder and on [schunk.com](https://www.schunk.com)

Hard stepped top jaws, Full grip jaws

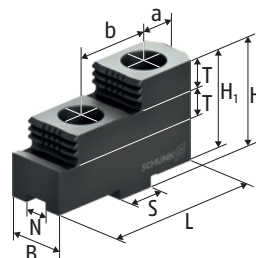
with tongue and groove



SFA-SM
Full grip jaws



SFA-SA
Full grip jaws



SHF
Hard stepped top jaws

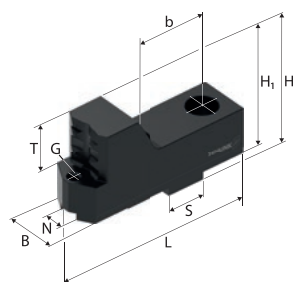
Technical data

Chuck type	Description	ID	N [mm]	S [mm]	B [mm]	B1 [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	T [mm]	a [mm]	b [mm]	Screws	m/SET [kg]
ROTA-S plus 500	SFA-SA 400	0174104	18	30	330	60	90	83	60	160		81	60	M16	16.3
ROTA-S plus 500	SFA-SM 400	0173104	18	30	330	45	85	78	55	160		81	60	M16	55.2
ROTA-S plus 500	SHF 400	0155104	18	30	45		82	75		130	20	27.05	60	M16	6.8

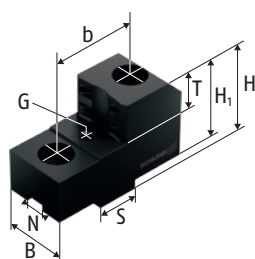
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Claw jaws

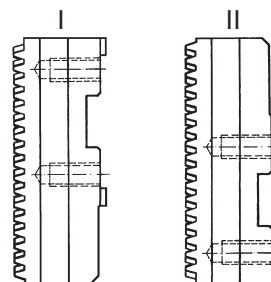
with tongue and groove



SZKA
Claw jaws



SZKA
Claw jaws



Position of base jaws

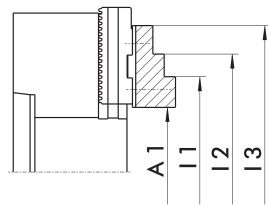
Technical data

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 500	132 - 356	579	I	SZKA 409	0139170	18	30	50	78	71	126	33	M8	60	M16	6.0
ROTA-S plus 500	233 - 458	579	I	SZKA 412	0139173	18	30	50	78	71	103	33	M8	60	M16	5.1
ROTA-S plus 500	50 - 238	580	II	SZKA 409	0139170	18	30	50	78	71	126	33	M8	60	M16	6.0
ROTA-S plus 500	123 - 340	580	II	SZKA 412	0139173	18	30	50	78	71	103	33	M8	60	M16	5.1

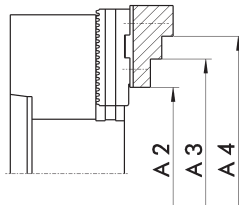
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Hard stepped top jaws

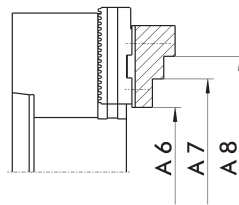
with tongue and groove



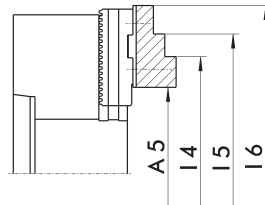
Position of base jaws II



Position of base jaws I



Position of base jaws II



Position of base jaws I

O.D. clamping

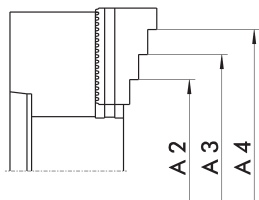
Chuck type	Description	ID	A1 [mm]	A3 [mm]	A4 [mm]	A5 [mm]	A7 [mm]	A8 [mm]
ROTA-S plus 500	SHF 400	0155104	29 - 244	144 - 357	264 - 478	148 - 362	70 - 239	190 - 361

I.D. clamping

Chuck type	Description	ID	I1 [mm]	I2 [mm]	I4 [mm]
ROTA-S plus 500	SHF 400	0155104	150 - 355	266 - 476	258 - 472

Hard stepped block jaws

with tongue and groove



Jaw position II

O.D. clamping

Chuck type	Description	ID	A1 [mm]	A2 [mm]	A4 [mm]
ROTA-S plus 500	STF 400	0161104	19 - 243	140 - 365	262 - 488

I.D. clamping

Chuck type	Description	ID	I1 [mm]	I3 [mm]
ROTA-S plus 500	STF 400	0161104	124 - 345	244 - 468

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 500	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 500	IFT adapter set	1498512

Maintenance kit

Consisting of a grease gun, LINOMAX plus grease cartridge, chip protection, and sealing plug.



Suitable for	Description	ID
ROTA-S plus 500	WTS-S 500	0899019

Torque wrench

Torque wrench for actuation of SCHUNK manual lathe chucks.



Suitable for	Description	ID
ROTA-S plus 500	SSH-D-3/4" 80-400	1301023

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

Ratchets

Ratchet for fast actuation of SCHUNK manual lathe chucks.



Suitable for	Description	ID
ROTA-S plus 500	SSH-K 3/4"-620	9987241

Square spanner wrench adapter with ejector

For use as an attachment for a torque wrench and ratchet for actuating SCHUNK manual lathe chucks with hexagonal connection.



Suitable for	Description	ID
ROTA-S plus 500	SAV-I 3/4"-SW19	8705470

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 500	VST Ø162	8702871

Chip protection

For better protection against the penetration of chips for the manual lathe chucks ROTA-S plus 2.0, ROTA-S plus and ROTA-G.



Suitable for	Description	ID
ROTA-S plus 500	SPS 400/500	9966642

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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Spanntechnik KG**

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