

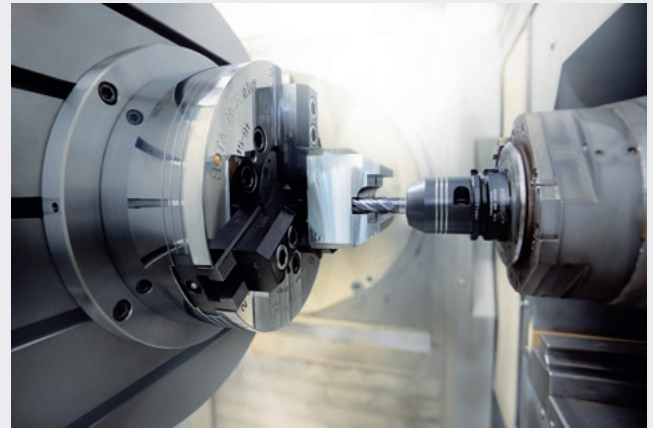


ROTA NCK-S plus

**Hydraulic power lathe chucks
for stationary applications**

Hydraulically actuated power lathe chucks with integrated hydraulic cylinder and a large control range

ROTA NCK-S plus stands for precise clamping of round workpieces on stationary machine tools with hydraulic actuation. The power lathe chucks can be adapted quickly and easily to any machine table by using a console plate. The special feature is the integrated hydraulic cylinder, which allows the chucks to be built very low and thus enables maximum utilization of the machine room. High clamping forces, a one-piece chuck body, long jaw guidances and a long and precise piston guide make the ROTA NCK-S plus the ideal clamping device for everyday use. The chucks also scores for their excellent price-performance ratio.



Advantages – Your benefits

- + Precision wedge-hook power lathe chuck for highest quality requirements**
Allows excellent machining results
- + Excellent price-performance ratio**
Optimal use of the lathe chuck
- + High efficiency of the wedge hook system**
Process-reliable clamping due to high clamping forces
- + Optimized lubrication system**
Consistently high clamping forces ensured
- + Integrated hydraulic cylinders**
Delicate clamping due to large control range
- + Base jaws with fine serration 1.5 mm x 60° and 1/16" x 90° as standard**
High flexibility in the range of top jaws
- + Low height design**
Maximum use of the machine room and maximum rigidity of the system
- + All sides of the functional parts are hardened and ground**
Ensures a long service life

Technical data

Description	Max. clamping force [kN]	Actuation pressure [bar]	Stroke/jaw [mm]
ROTA NCK-S plus 165	57	195	2.75
ROTA NCK-S plus 210	84	195	3.7
ROTA NCK-S plus 250	111	120	4.4
ROTA NCK-S plus 315	144	120	5.3

Function ROTA NCK-S plus

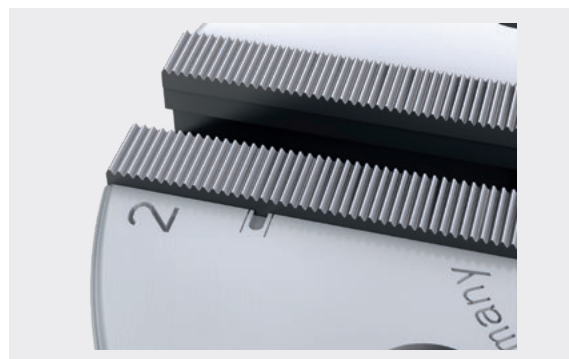
The piston that is positively guided into the power lathe chuck is shifted axially by supplying in hydraulic oil. The wedge hook system converts this axial movement of the chuck piston into a radial movement of the base jaws. Due to the use of a double-acting cylinder means that the workpieces can be clamped externally and internally.



- | | |
|--|--|
| <ul style="list-style-type: none"> ❶ Wedge hook drive
Offers constantly high clamping forces in operation ❷ Hardened and extremely rigid base body
Therefore a longer service life at highest precision. Even with maximum clamping force ❸ Long jaw guidance
Offers optimal support for O.D.- and I.D. clamping ❹ Optimized lubrication system
For a high level of efficiency ❺ Mounting thread
For workpiece stops or cover plates | <ul style="list-style-type: none"> ❻ Base jaw serration
Available in inch or metric sizes ❼ Jaw stroke display
To verify the jaw stroke ❽ Low height design
Expands your machine's workspace ❾ Integrated hydraulic cylinders
No additional backside cylinder is necessary ❿ Hydraulic system
Actuation with up to 195 bar |
|--|--|

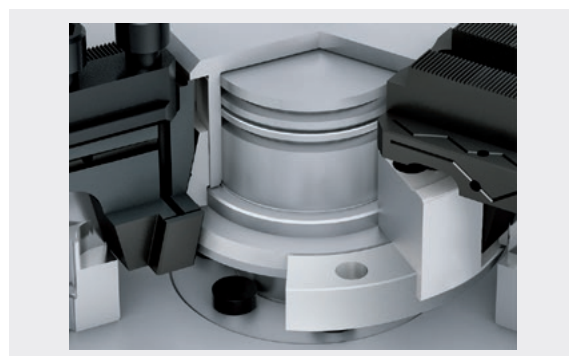
Jaw stroke display

The jaw stroke display is an additional safety feature, which ensures safe workpiece clamping and simplifies the use of the chuck in daily operation.



Long and precise piston guidance

For high clamping repeatability and long service life. All functional components used for force transmission are hardened and ground.



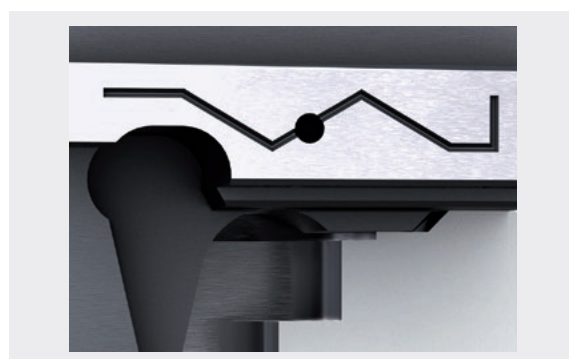
Absolute flexibility of the base jaw

Select between two standard jaw interfaces 1/16" x 90° or 1.5 mm x 60° with the benefit of being able to continue using your existing top jaws on the new SCHUNK lathe chuck.



Base jaw safety feature

The small nose at the base jaw remains on the chuck body. This prevents the ejection of the jaws in case of a crash.



Stationary 3-jaw chuck, hydraulically actuated

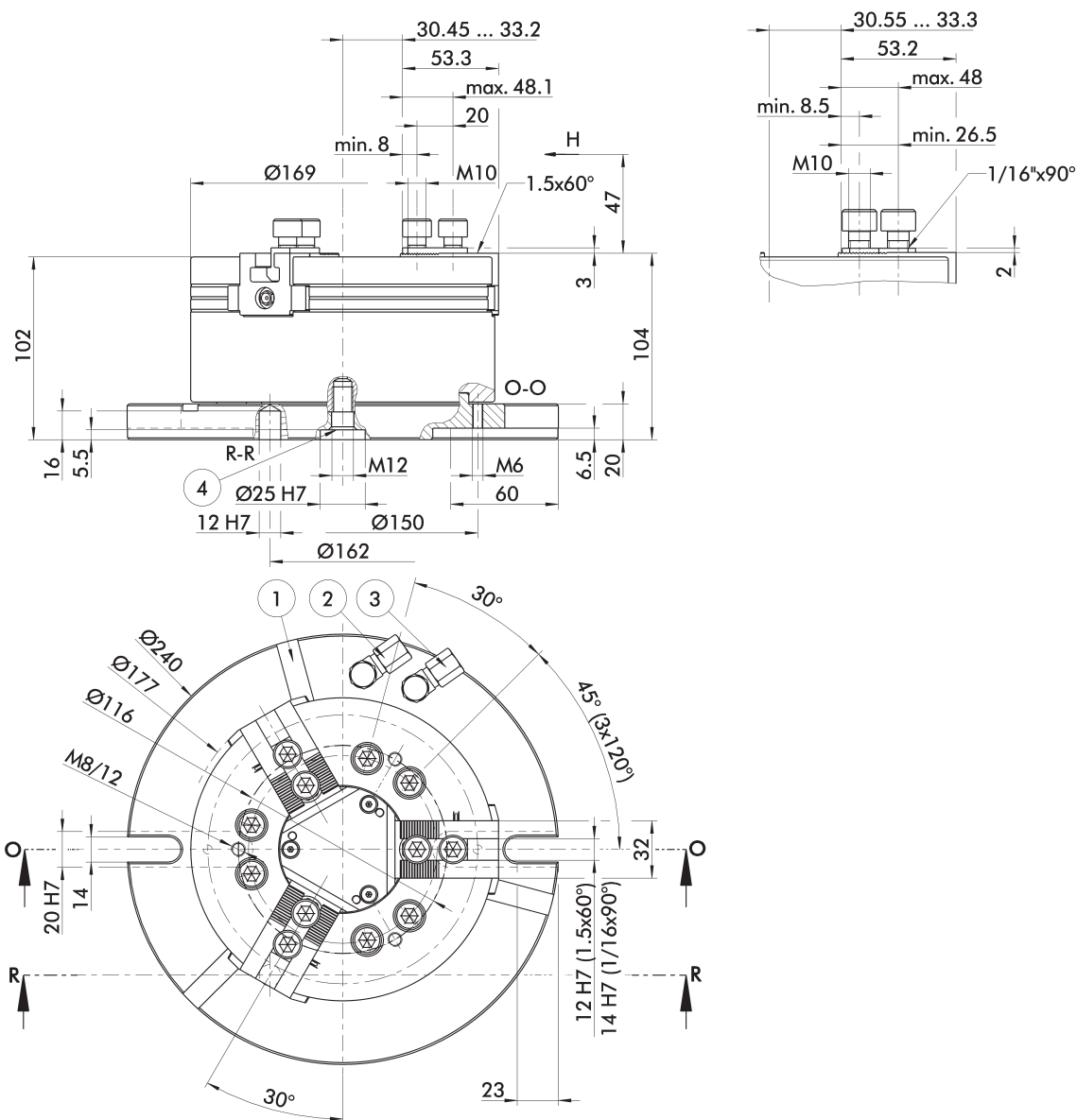
With base plate "K"

Scope of delivery

Power lathe chuck, T-nuts, operating manual; without top jaws, without mounting screws

Technical data

Description	ID	Mounting	Max. clamping force [kN]	Actuation pressure [bar]	Stroke per jaw [mm]	Weight [kg]
ROTA NCK-S plus 165 K-SV90°	0450204	Consol plate	57	195	2.75	20.1
ROTA NCK-S plus 165 K-SV60°	0450200	Consol plate	57	195	2.75	20.1

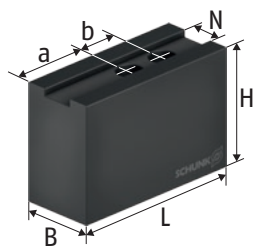


Subject to technical changes.

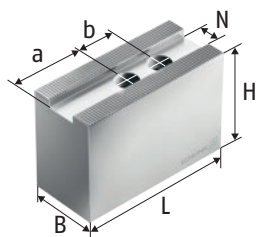
- ① Water drainage grooves
- ② Connection for opening the chuck
- ③ Connection for closing the chuck
- ④ Can be modified to suit the VERO-S interface

Soft top jaws

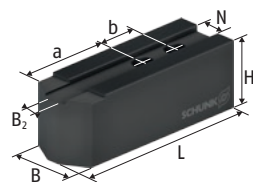
with fine serration 60°



KM-WB
Soft top jaws



KM-WBAL
Soft top jaws



KM-WBL
Soft top jaws

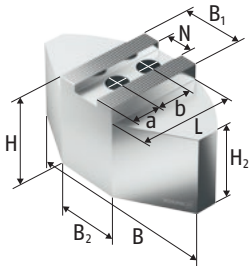
Technical data

Chuck type	Description	ID	N [mm]	B [mm]	H [mm]	L [mm]	a [mm]	b [mm]	Screws	m/SET [kg]
ROTA NCK-S plus 165	KM-WBL 60	0132600	12	32	32	82	47	20	M10	1.5
ROTA NCK-S plus 165	KM-WBL 62	0132606	12	35	60	82	47	20	M10	3.1
ROTA NCK-S plus 165	KM-WB 61	0130128	12	35	60	72	37	20	M10	2.9
ROTA NCK-S plus 165	KM-WB 66	0132138	12	32	32	72	37	20	M10	1.4
ROTA NCK-S plus 165	KM-WBAL 70	0132521	12	35	50	72	37	20	M10	0.9

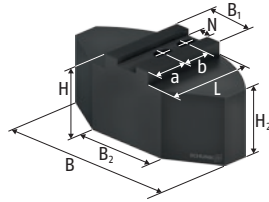
Our complete range of chuck jaws can be found online in our Chuck Jaw Quickfinder and on schunk.com

Hard stepped top jaws, Full grip jaws

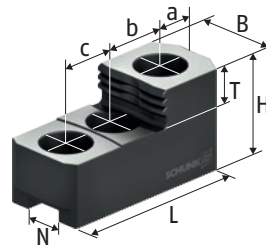
with fine serration 60°



KMWB-SA
Full grip jaws



KMWB-SM
Full grip jaws



SHB-J
Hard stepped top jaws

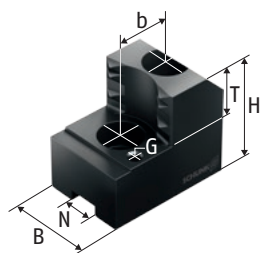
Technical data

Chuck type	Description	ID	N [mm]	B [mm]	B1 [mm]	H [mm]	H2 [mm]	L [mm]	T [mm]	a [mm]	b [mm]	c [mm]	Screws	m/SET [kg]
ROTA NCK-S plus 165	KMWB-SA 165	0132800	12	120	32	58	48	59.5		25	20		M10	2.2
ROTA NCK-S plus 165	KMWB-SM 165	0132700	12	120	32	50	40	60		24	20		M10	4.9
ROTA NCK-S plus 165	SHB-J 60	0133100	12	28		36		67	12	14	20	20	M10	0.8

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Claw jaws

with fine serration 60°



SZAJ
Claw jaws

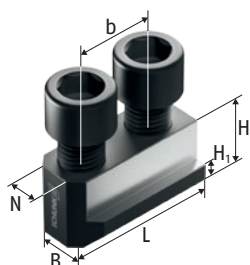
Technical data

Chuck type	Clamping range ØD	Swing diameter SDmax	Description	ID	N	B	H	L	T	G	b	Screws	m/SET
	[mm]	[mm]			[mm]	[mm]	[mm]	[mm]	[mm]		[mm]		[kg]
ROTA NCK-S plus 165	27 - 64	185	SZAJ 16-6	0176100	12	30	47	71	20	M6	20	M10	1.2
ROTA NCK-S plus 165	41 - 80	185	SZAJ 16-7	0176101	12	30	47	62.5	20	M6	20	M10	1.0
ROTA NCK-S plus 165	57 - 96	185	SZAJ 16-8	0176102	12	30	47	54	20	M6	20	M10	1.1
ROTA NCK-S plus 165	71 - 110	185	SZAJ 16-9	0176103	12	30	47	52.5	20	M6	20	M10	1.1
ROTA NCK-S plus 165	87 - 126	185	SZAJ 16-10	0176104	12	40	47	52.5	20	M6	20	M10	1.2

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T-nut

with fine serration 60°



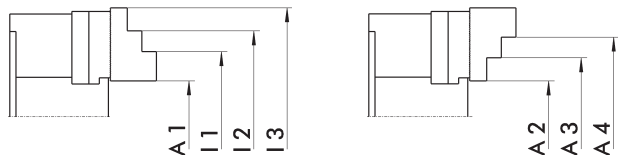
NJ
T-nut

Chuck type	Description	ID	N	B	H	H1	L	b	Cyl.-screw	Max. adm. tightening torque
			[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[Nm]
ROTA NCK-S plus 165	NJ 62	0146133	12	17.3	18.5	7.5	35.7	20	M10 x 25	50

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Hard stepped top jaws

with fine serration 60°



Jaw position I

Jaw position II

O.D. clamping

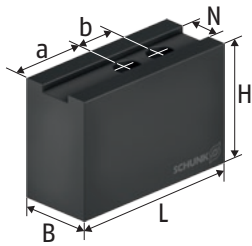
Chuck type	Description	ID	A1 [mm]	A4 [mm]
ROTA NCK-S plus 165	SHB-J 60	0133100	12 - 86	90 - 169

I.D. clamping

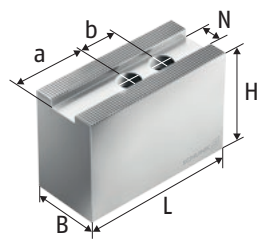
Chuck type	Description	ID	I1 [mm]
ROTA NCK-S plus 165	SHB-J 60	0133100	68 - 144

Soft top jaws

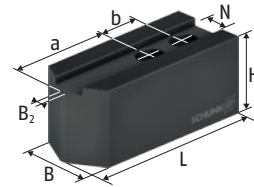
with fine serration 90°



SWB
Soft top jaws



SWB-AL
Soft top jaws



SWBL
Soft top jaws

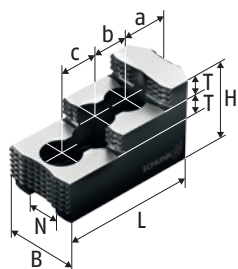
Technical data

Chuck type	Description	ID	N [mm]	B [mm]	H [mm]	L [mm]	a [mm]	b [mm]	Screws	m/SET [kg]
ROTA NCK-S plus 165	SWBL 165	0120152	14	35	40	80	45	20	M10	2.1
ROTA NCK-S plus 165	SWB 165	0120101	14	35	60	68	33	20	M10	2.5
ROTA NCK-S plus 165	SWB-AL 165	0168105	14	35	60	80	45	20	M10	1.2

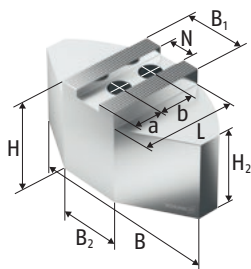
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Hard stepped top jaws, Full grip jaws

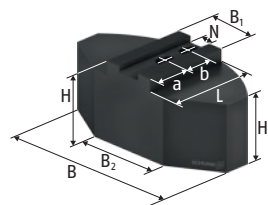
with fine serration 90°



SHB
Hard stepped top jaws



SWB-SA
Full grip jaws



SWB-SM
Full grip jaws

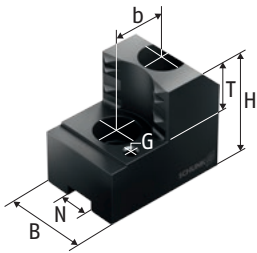
Technical data

Chuck type	Description	ID	N [mm]	B [mm]	B1 [mm]	H [mm]	H2 [mm]	L [mm]	T [mm]	a [mm]	b [mm]	c [mm]	Screws	m/SET [kg]
ROTA NCK-S plus 165	SWB-SA 165	0170099	14	120	40	58	48	59.5		25	20		M10	2.2
ROTA NCK-S plus 165	SWB-SM 165	0169099	14	120	40	60	50	59.5		24.5	20		M10	6.0
ROTA NCK-S plus 165	SHB 165	0121101	14	30		46		79.7	11	16.6	22	22	M10	1.3

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Claw jaws

with fine serration 90°



SZA
Claw jaws

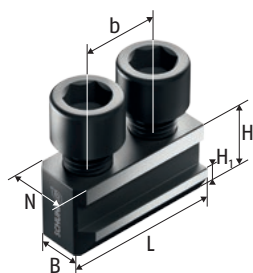
Technical data

Chuck type	Clamping range ØD	Swing diameter SDmax	Description	ID	N	B	H	L	T	G	b	Screws	m/SET
	[mm]	[mm]			[mm]	[mm]	[mm]	[mm]	[mm]		[mm]		[kg]
ROTA NCK-S plus 165	29 – 63	185	SZA 17-1	0122260	14	30	47	71.5	20	M6	20	M10	1.2
ROTA NCK-S plus 165	47 – 86	187	SZA 17-2	0122261	14	30	47	61.9	20	M6	20	M10	1.0
ROTA NCK-S plus 165	73 – 112	188	SZA 17-3	0122262	14	30	47	58.7	20	M6	20	M10	1.0
ROTA NCK-S plus 165	99 – 138	196	SZA 17-4	0122263	14	35	47	60.3	20	M6	20	M10	1.2

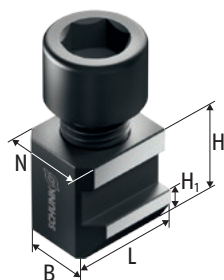
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T-nut

with fine serration 90°



NKA
T-nut



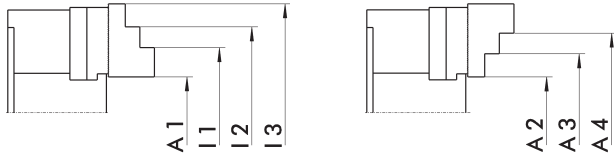
NKS
T-nut

Chuck type	Description	ID	N	B	H	H1	L	b	Cyl.-screw	Max. adm. tightening torque
			[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[Nm]
ROTA NCK-S plus 165	NKA 1	0145103	14	17	18.5	6.5	36	20	M10 x 25	50
ROTA NCK-S plus 165	NKS 1	0143104	14	17	18.5	6.5	16		M10 x 25	50

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Hard stepped top jaws

with fine serration 90°



Jaw position I

Jaw position II

O.D. clamping

Chuck type	Description	ID	A1 [mm]	A2 [mm]	A3 [mm]	A4 [mm]
ROTA NCK-S plus 165	SHB 165	0121101	8 - 59	22 - 63	71 - 113	115 - 157

I.D. clamping

Chuck type	Description	ID	I1 [mm]	I2 [mm]	I3 [mm]
ROTA NCK-S plus 165	SHB 165	0121101	72 - 120	116 - 169	166 - 210

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 NCK-S plus 165	IFT Set	1404235

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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